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G.A.L. MANUFACTURING CORP.

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Catalog

Version 2.0

G.A.L.

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GAL
Door Equipment

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- **MODL** – Master Operator DC, with "L" drive arm linkage
- **MOHL** – Master Operator DC, High Speed, with "L" drive arm Linkage
- **MODCTL** – Master Operator DC Car Top Controlled, with "L" drive arm linkage for AC power supply
- **MOHCTL** – Master Operator DC, High Speed Car Top Controlled, with "L" drive arm linkage, for AC power supply
- **MOD** – Master Operator DC, with drive shoe
- **MODCT** – Master Operator DC Car Top Controlled, with drive shoe, for AC power supply
- **MODCTA** – Master Operator DC Car Top Controlled, with drive shoe, for 3 wire AC power supply
- **MODCTAL** – Master Operator DC Car Top Controlled, with "L" drive arm Linkage for 3 wire AC power supply

WATER RESISTANT

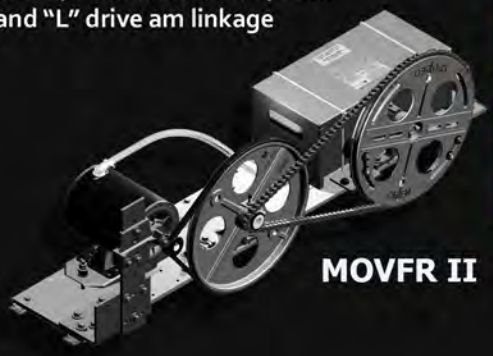
- **MOVFRW II** – Master Operator Variable Frequency, Water Resistant, with "L" drive arm linkage

DUST/EXPLOSION RESISTANT

- **MOXL** – Master Operator DC, Dust/Explosion Resistant, with "L" drive arm linkage

VANDAL RESISTANT

- **MODHFL** – Master Operator DC, Vandal Resistant, with Fault Monitor and "L" drive am linkage
- **MODLNYC** – Master Operator DC, Vandal Resistant, with Fault Monitor and "L" drive am linkage



MOVFR II

OPERATOR ASSEMBLIES 1-70

DOOR DRIVE ARM 71-101

MOTORS & PARTS 102-106

LIMIT CONTROL 107-112

BOARDS & DRIVE 112-114

- RECTIFIER KITS
- FUSES
- MICRO SWITCHES
- PARAMETER UNITS
- TERMINAL CONNECTORS
- CONNECTORS
- TERMINAL BLOCKS
- CONDUITS
- CABLES, WIRES JUMPERS

114-120

RESISTORS & TERMINAL BOXES 112-114

- PULLEYS
- BEARING BLOCKS
- BELT TENSIONERS
- SPROCKETS & SHAFTS

125-133

- POWER FAILURE UNLOCKING DEVICE
- STOP ROLLERS
- RETIRING CAM PICK-UP ROLLERS

133-135

- BELT, CHAIN & PARTS
- BUSHING & NYLON PINS
- SPACER & SUPPRESSORS

135-138

HOW TO CHOOSE AN OPERATOR FROM TABLES

1) Choose Equipment Type :
- Conventional
- Vandal Resistant
- Dust/Explosion Resistant
- Water Resistant

2) Choose Operator Models. (Example: MOVFRII, MODL, MOHL,...ETC.)

3) Door Style :
- Single Speed
- Two Speed
- Three Speed
- Center Parting
- Two Speed Center
- Three Speed Center Parting

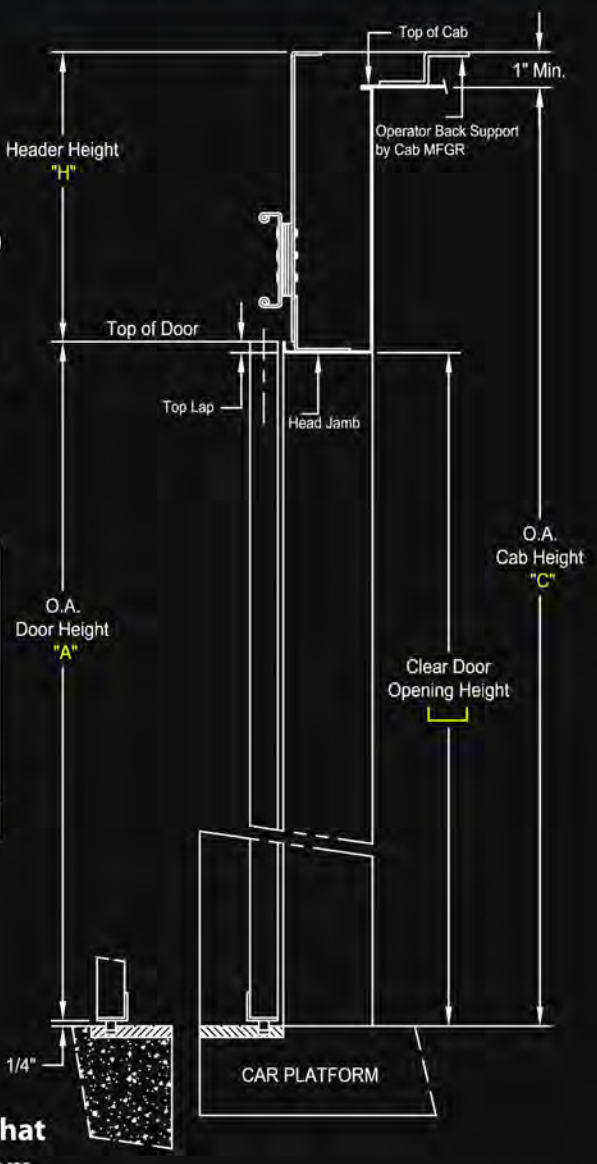
4) Voltage Supply : Standard - 200 - 230 V AC for MOVFR Operators
200 - 230 V DC for DC Operators
200 - 230 V AC/DC for CT Operators
Contact G.A.L. for 100 - 115 V AC/DC

5) Header Height:

How to CHOOSE Header Height

Method 1: Measure the existing Operator Header
When choosing a header size from tables, use the exact size or the next largest size. EXAMPLE: 14" existing header for single speed, use 15" header from tables.

Method 2: Formula: 'C' + 1" - 'A' = 'H'
Measure O.A. cab height 'C', the door opening O.A. height 'A'. Use the difference between 'C' + 1" and 'A' to determine header height from tables. Header height must match with or be greater than this difference 'H'.



6) Door Opening Size, Width & Height



7) Specify Hand



Door hand determined by what side the strike jamb is on from corridor or hall looking into elevator

Corridor or Hall Side
Strike Jamb

NOTE:

"L" Type Operators are supplied with aluminum drive arm assemblies.
Shoe Type Operators are supplied with crank arm w/ roller bearing & drive shoe.
Gate Switch, mandatory & included with all operators, is charged separately.

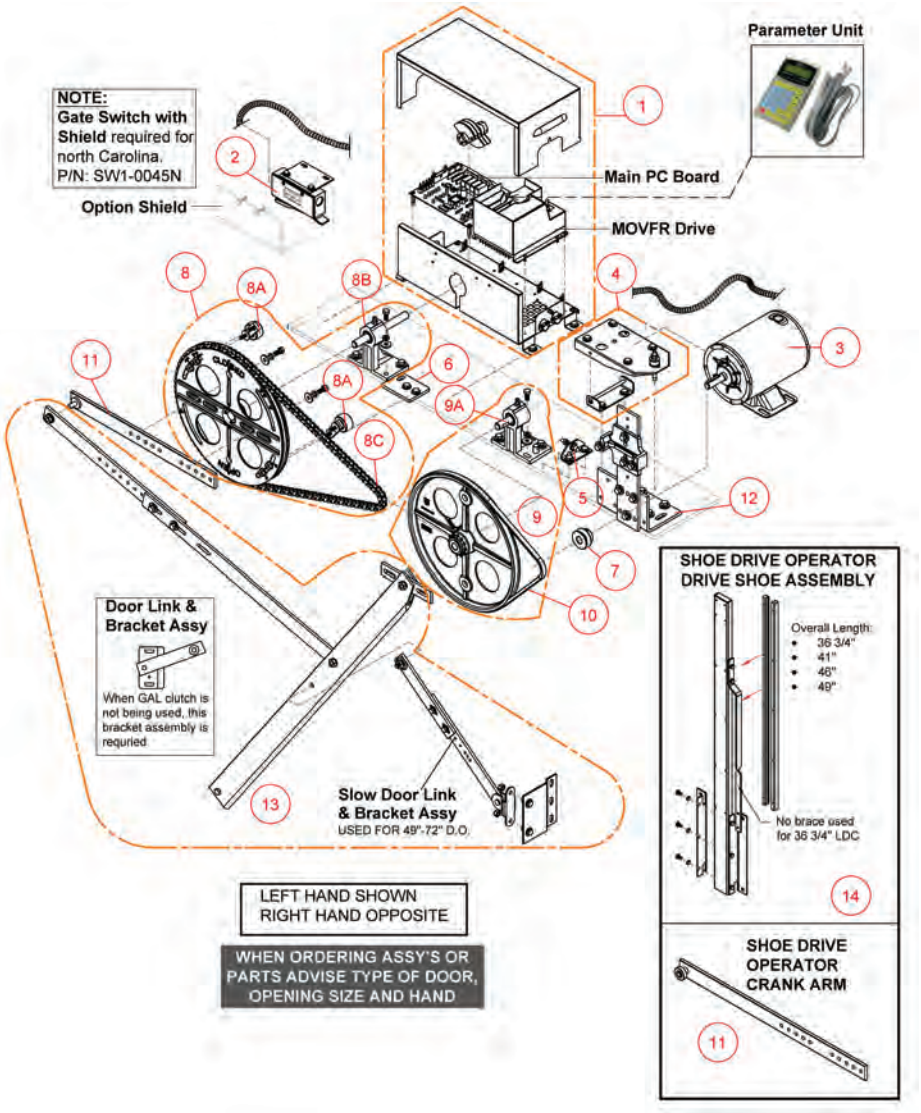
Door Link & Bracket is needed if **NO** G.A.L. clutch is being used.

If **Center Parting Operator** is ordered and not being used with a G.A.L. hanger, **(2)** drive arm support brackets **(OP25-0001N** or **OP25-0002N)** are required for mounting drive arm to existing header.

Operator Isometric Drawing

MOVFR II Operator

Single Speed 22”-48” D.O./Two Speed 30”-72” D.O.



Item No	Description
1	MOVFR II Limit Control Assembly (**Page#** 104)
2	Gate Switch Assembly (**Page#** 407)
3	1/2 HP 230 VAC Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Crank Arm Assembly (**Page#** 83-84)
12	Drive Arm Support Assembly (**Page#** 97-98)
13	Drive Arm Assembly (**Page#** 73-76)
14	Drive Shoe Assembly (**Page#** 84)

Mounting hardware included with this operator assembly (Page# 139)

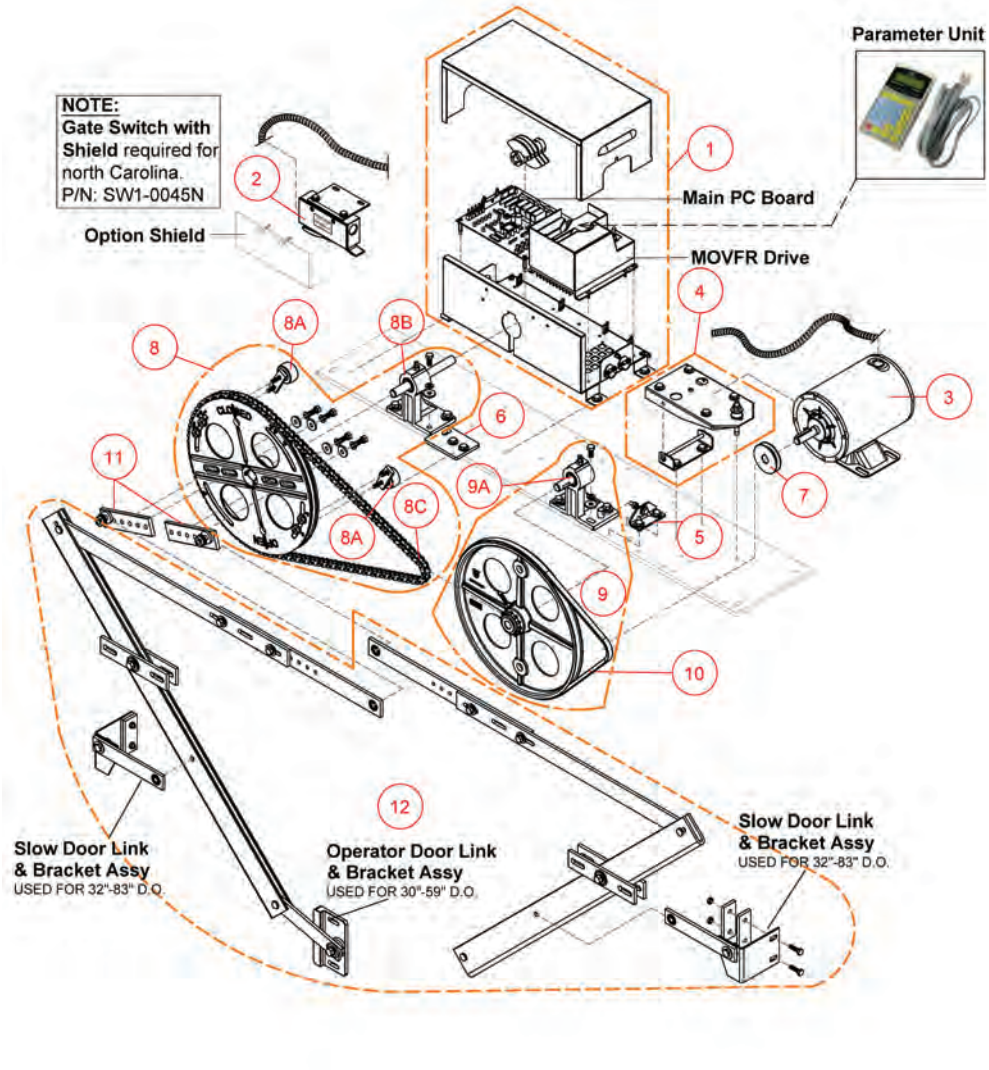
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MOVFR II Operator

Center Parting 30"-83" D.O./Two Speed Center Parting 32"-83" D.O.



Item No	Description
1	MOVFR II Limit Control Assembly (**Page#** 104)
2	Gate Switch Assembly (**Page#** 407)
3	1/2 HP 230 VAC Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Assemblies (**Page#** 125-126)

Item No	Description
8A	Drive Bearing Block Assembly (**Page#** 130-131)
8B	Drive Pulley Chain (**Page#** 136)
8C	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9	Intermediate Bearing Block Assembly (**Page#** 130-131)
9A	Intermediate Bearing Block Assembly
10	2450 "V" Belt (**Page#** 135)
11	Crank Arm Assembly (**Page#** 83-84)
12	Drive Arm Assembly (**Page#** 78-79)

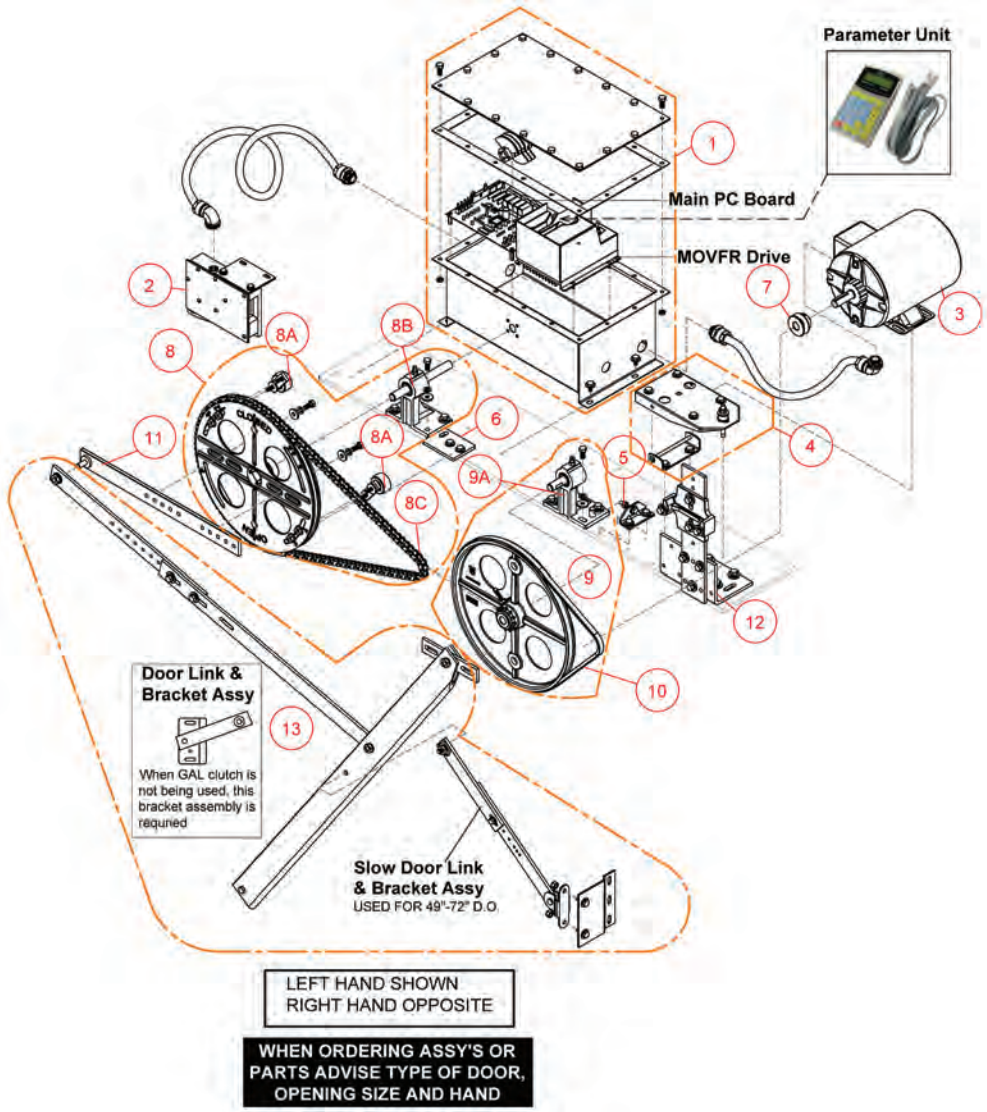
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MOVFRW II Operator

Single Speed 22”-48” D.O./Two Speed 30”-72” D.O.



Item No	Description
1	MOVFRW II Limit Control Assembly (**Page#** 106)
2	Gate Switch Assembly (**Page#** 409)
3	1/2 HP 230 VAC Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130
8	Drive Pulley & Bearing Assemblies (**Page#** 127)
8A	Stop Roller Assembly (**Page#** 134)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 130-131)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Crank Arm Assembly (**Page#** 83-84)
12	Drive Arm Support Assembly (**Page#** 97-98)
13	Drive Arm Assembly (**Page#** 73-76)

Mounting hardware included with this operator assembly (Page# 139)

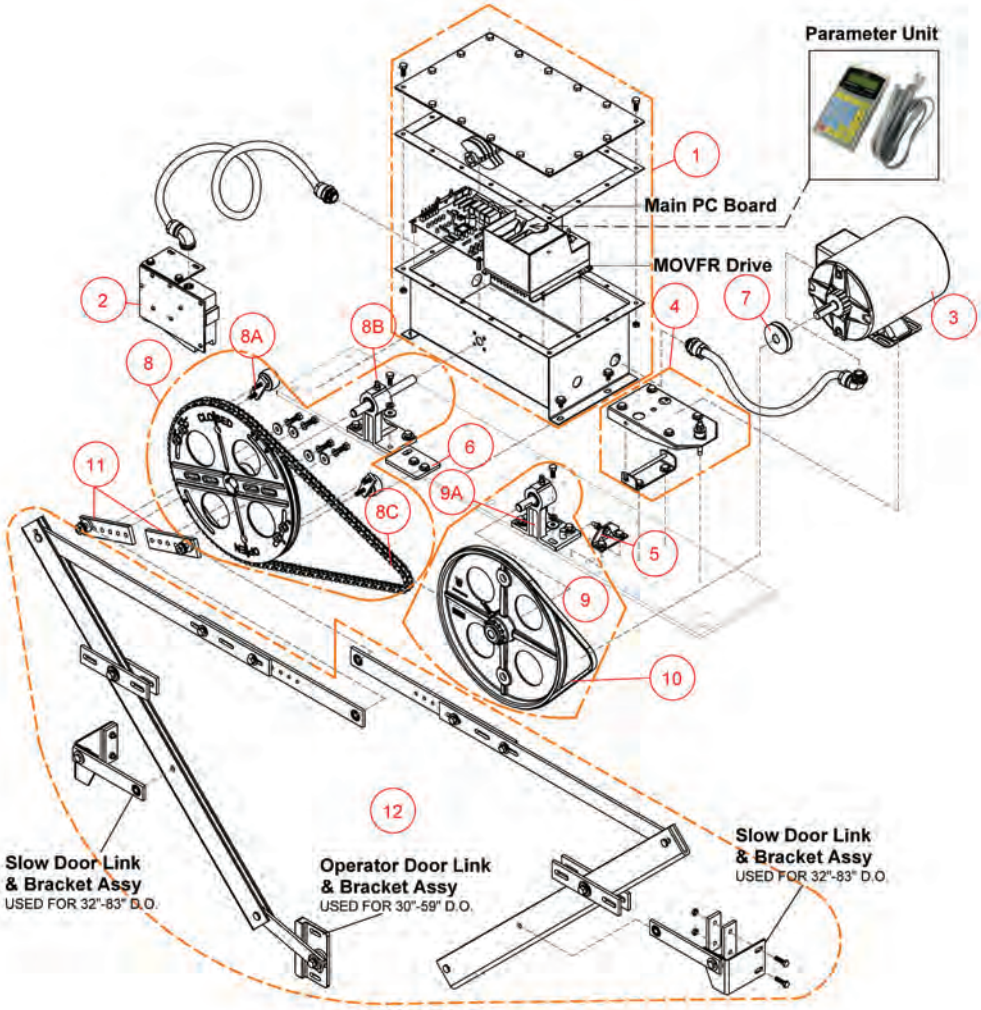
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MOVFRW II Operator

Center Parting 30"-59" D.O./Two Speed Center Parting 30"-83" D.O.



Item No	Description
1	MOVFRW II Limit Control Assembly (**Page#** 106)
2	Gate Switch Assembly (**Page#** 409)
3	1/2 HP 230 VAC Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130
8	Drive Pulley & Bearing Assemblies (**Page#** 127)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 130-131)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2450 "V" Belt (**Page#** 135)
11	Crank Arm Assembly (**Page#** 83-84)
12	Drive Arm Assembly (**Page#** 78-79)

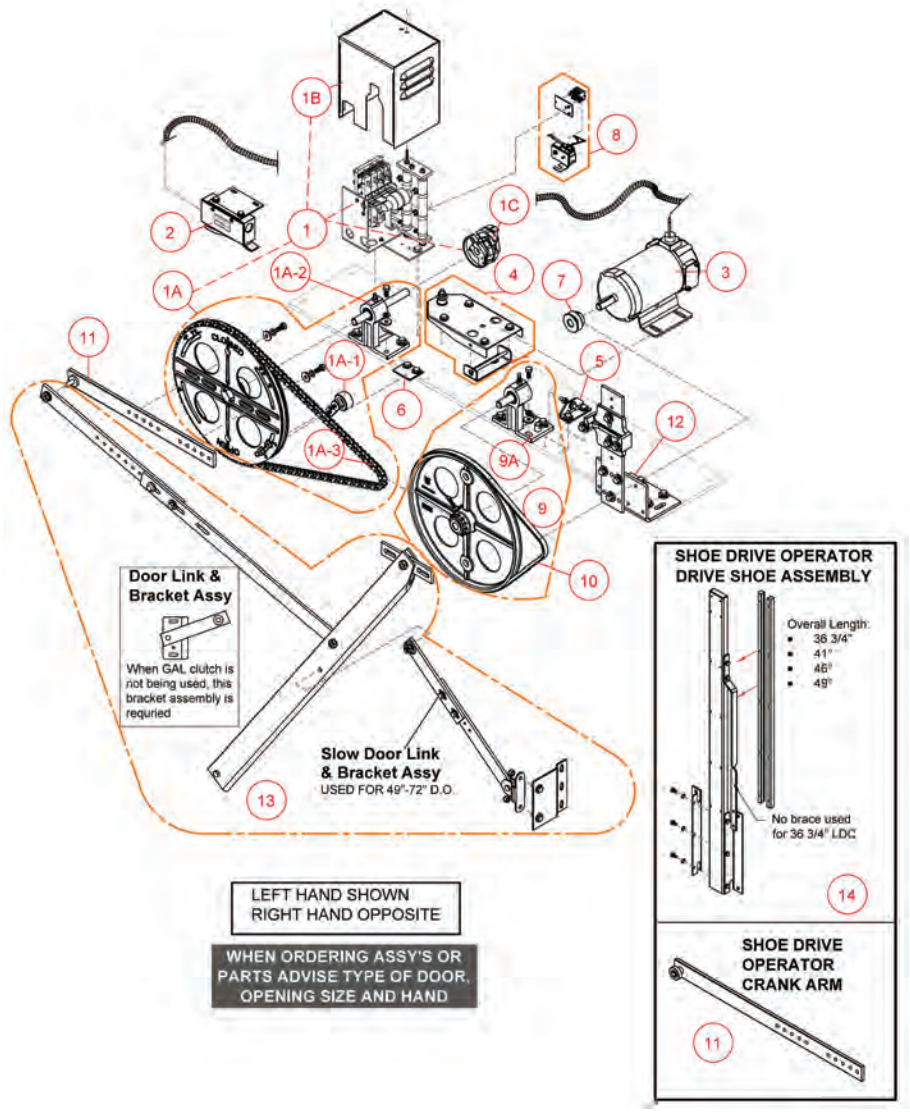
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MODL Operator

Single Speed 22”-48” D.O./Two Speed 30”-59” D.O.



Item No	Description
1	MOD Limit Control Assembly (**Page#** 105)
1A	MOD Drive Pulley & Bearing Assemblies (**Page#** 125-126)
1A-1	Stop Roller Assembly (**Page#** 134)
1A-2	Drive Bearing Block Assembly (**Page#** 130-131)
1A-3	Drive Pulley Chain (**Page#** 136)
1B	Limit Control Box Cover (**Page#** 107-108)
1C	Limit Control Cam Set (**Page#** 110)
2	Gate Switch Assembly (**Page#** 407)
3	1/6 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)

Item No	Description
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Microswitch Kit (**Page#** 115-116)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Crank Arm Assembly (**Page#** 83-84)
12	Drive Arm Support Assembly (**Page#** 97-98)
13	Drive Arm Assembly (**Page#** 73-76)
14	Drive Shoe Assembly (**Page#** 84)

Mounting hardware included with this operator assembly (Page# 139)

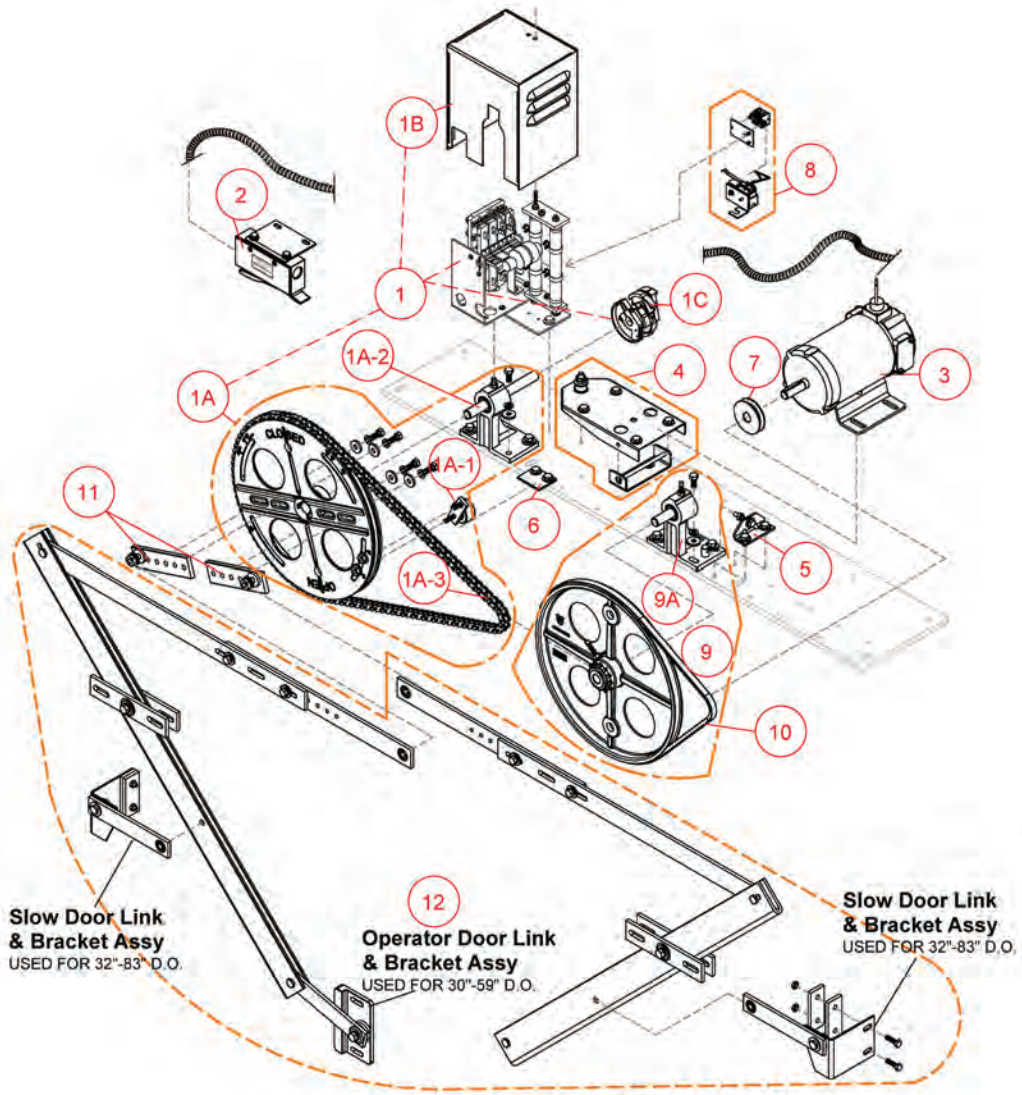
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MODL Operator

Center Parting 30”-59” D.O./Two Speed Center Parting 30”-59” D.O.



Item No	Description
1	MOD Limit Control Assembly (**Page#** 105)
1A	MOD Drive Pulley & Bearing Assemblies (**Page#** 125-126)
1A-1	Stop Roller Assembly (**Page#** 134)
1A-2	Drive Bearing Block Assembly (**Page#** 130-131)
1A-3	Drive Pulley Chain (**Page#** 136)
1B	Limit Control Box Cover (See 107-108)
1C	Limit Control Cam Set (**Page#** 110)
2	Gate Switch Assembly (**Page#** 407)
3	1/6 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)

Item No	Description
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Rooler Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Microswitch Kit (**Page#** 115-116)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2450 “V” Belt (**Page#** 135)
11	Crank Arm Assembly (**Page#** 83-84)
12	Drive Arm Assembly (**Page#** 78-79

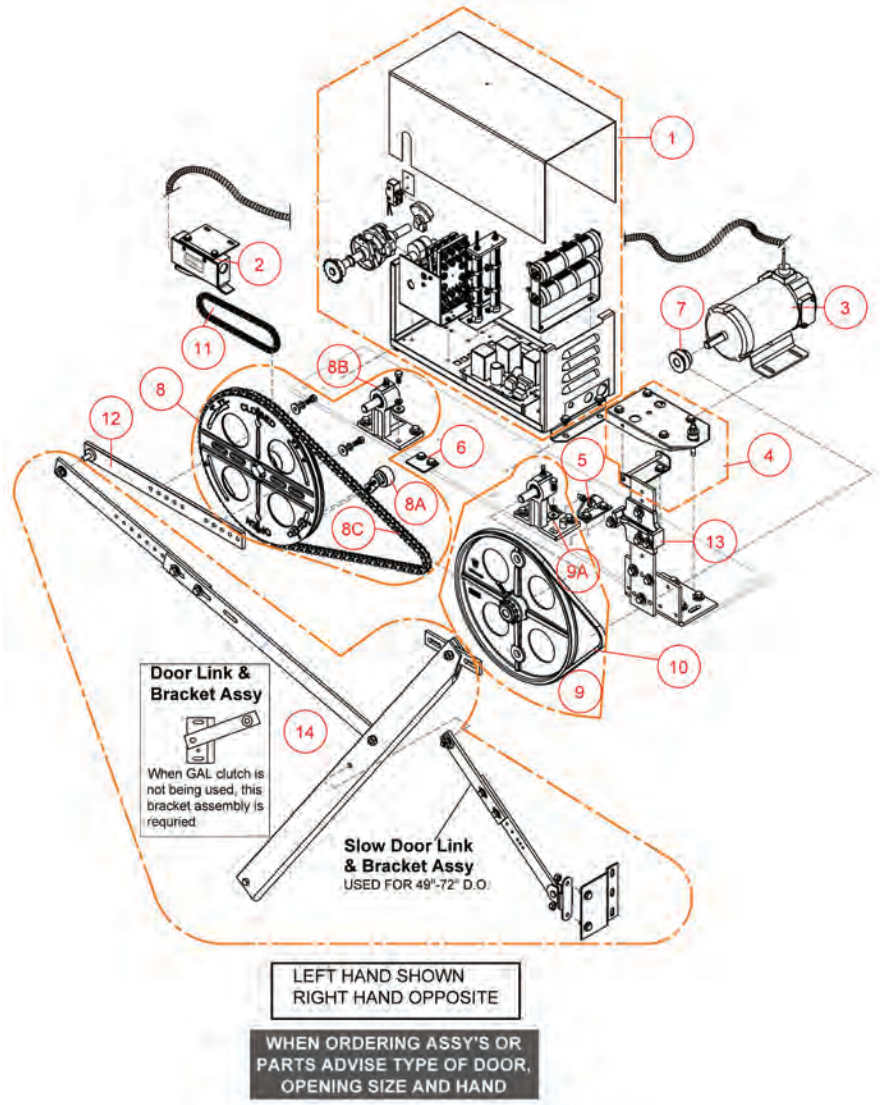
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MODCTL Operator

Single Speed 22”-48” D.O./Two Speed 30”-72” D.O.



Item No	Description
1	Limit Control Assembly (**Page#** 105)
2	Gate Switch Assembly (**Page#** 407)
3	1/6 HP 230 VDC PM Motor (**Page#** 102-103
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Block Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Cam Drive Chain (**Page#** 136)
12	Crank Arm Assembly (**Page#** 83-84)
13	Drive Arm Support Assembly (**Page#** 97-98)
14	Drive Arm Assembly (**Page#** 73-76)

Mounting hardware included with this operator assembly (Page# 139)

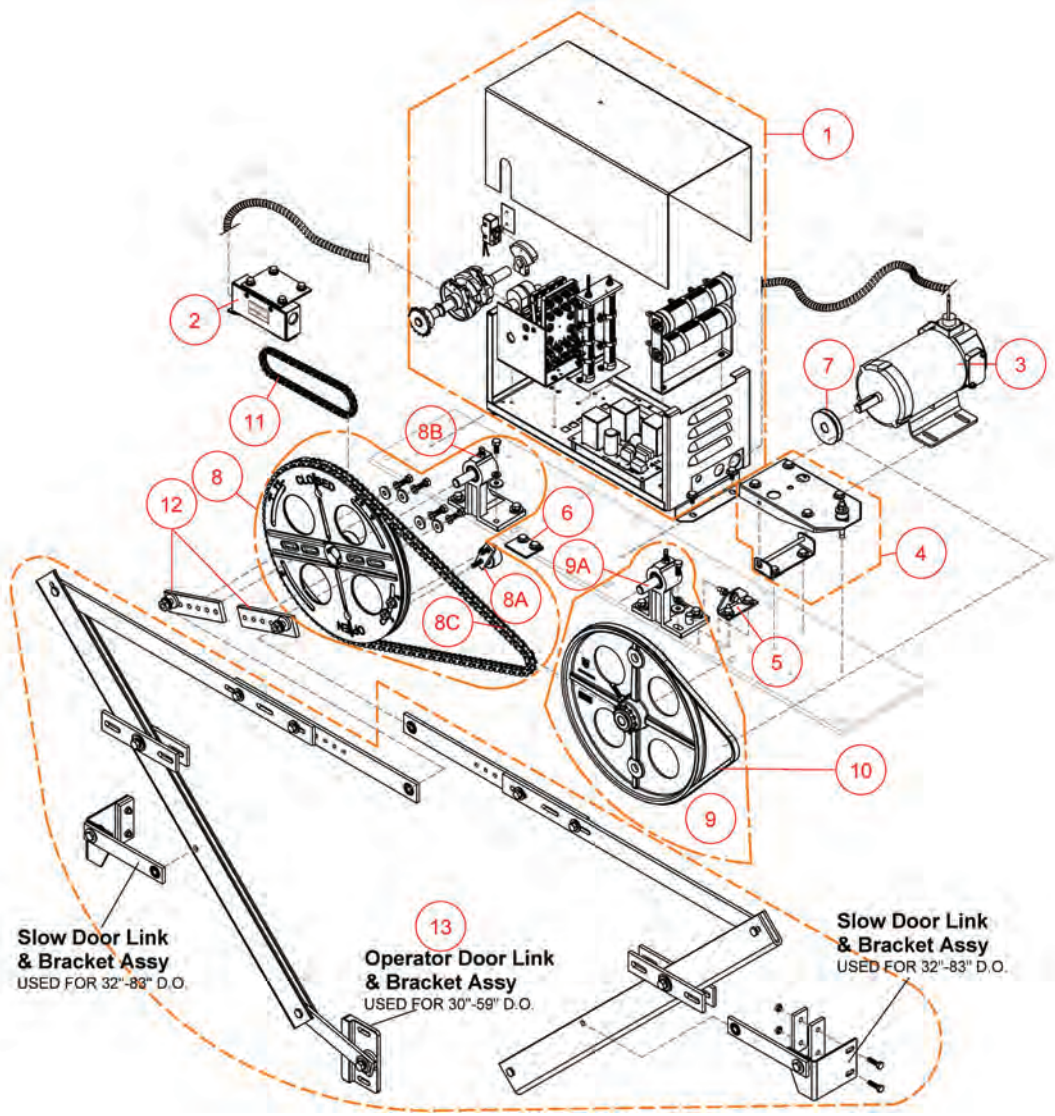
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MODCTL Operator

Center Parting 30"-59" D.O./Two Speed Center Parting 30"-59" D.O.



Item No	Description
1	Limit Control Assembly (**Page#** 105)
2	Gate Switch Assembly (**Page#** 407)
3	1/6 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Block Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2450 "V" Belt (**Page#** 135)
11	Cam Drive Chain **See page** 136)
12	Crank Arm Assembly (**Page#** 83-84)
13	Drive Arm Assembly (**Page#** 78-79)

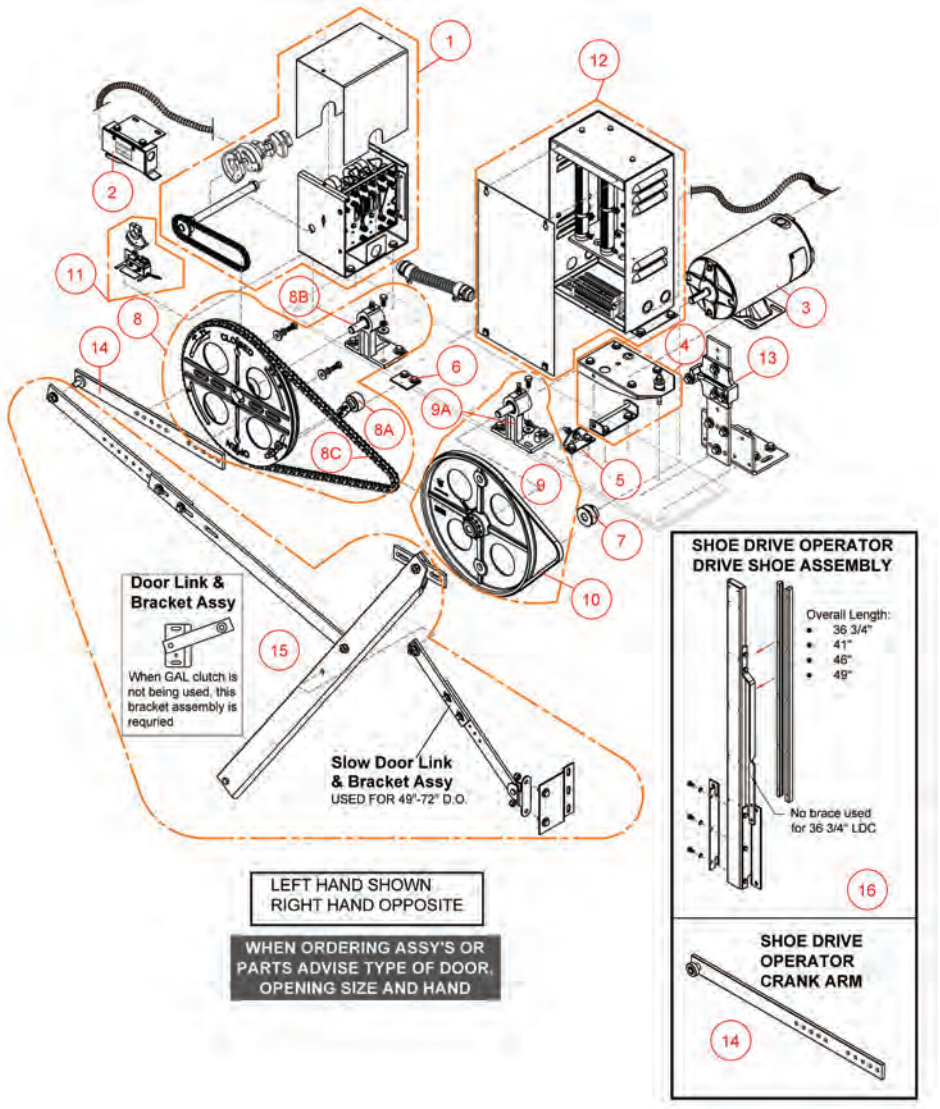
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MOHL/MOML Operator

Single Speed 22”-48” D.O./Two Speed 30”-59” D.O.



Item No	Description
1	MOH/MOM Limit Control Assembly (**Page#** 104)
2	Gate Switch Assembly (**Page#** 407)
3	1/2 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Block Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)
8B	Drive Bearing Block Assembly (**Page#** 130-131)

Item No	Description
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 83-84)
11	Microswitch Kit (**Page#** 115-116)
12	Resistor & Terminal Box Assembly (**Page#** 121)
13	Crank Arm Assembly (**Page#** 83-84)
14	Drive Arm Support Assembly (**Page#** 97-98)
15	Drive Arm Assembly (**Page#** 73-76)
16	Drive Shoe Assembly (**Page#** 84)

Mounting hardware included with this operator assembly (**Page#** 139)

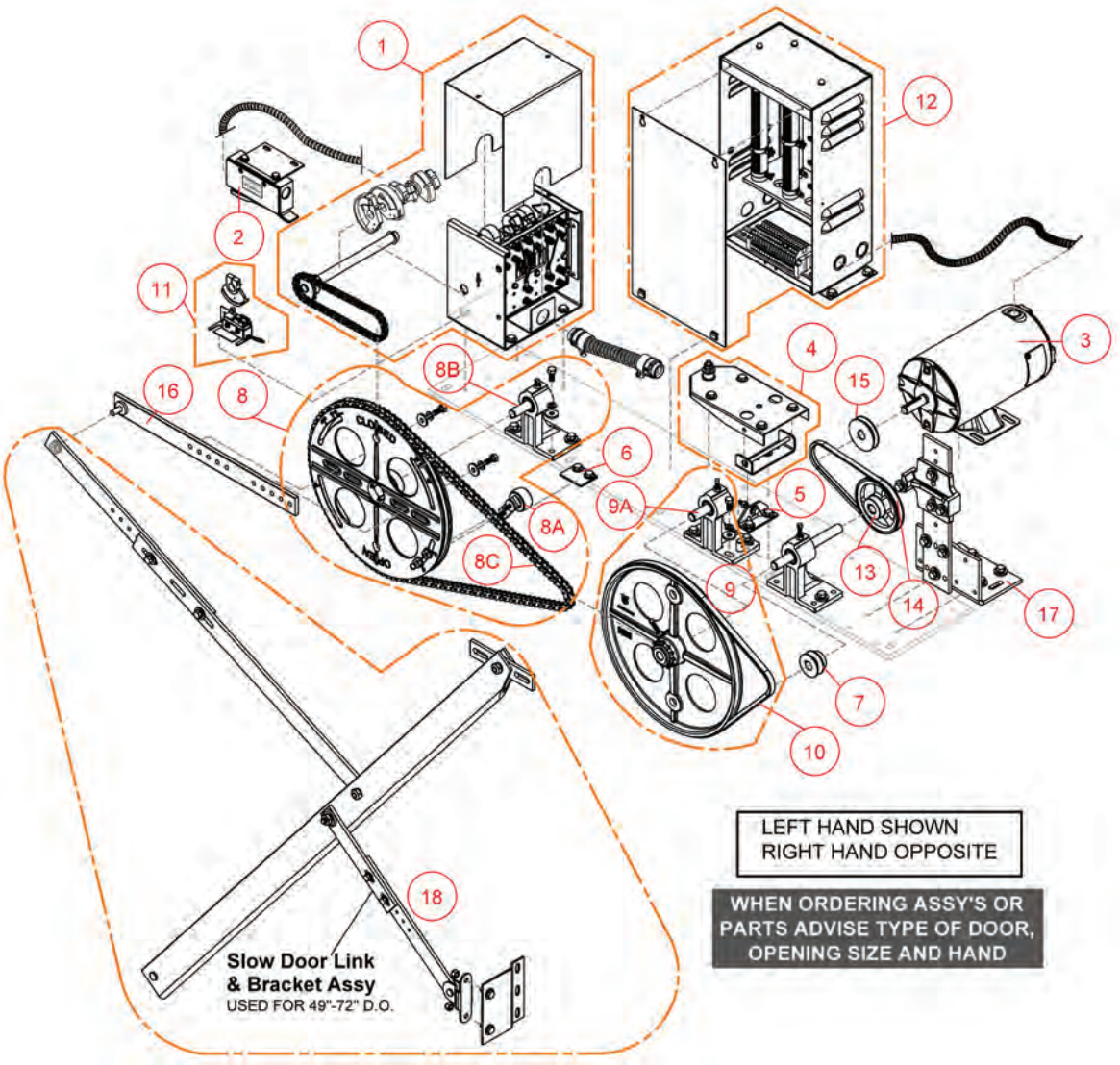
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MOHL/MOML Operator

Two Speed 60"-72" D.O.



Item No	Description
1	MOH/MOM Limit Control Assembly (**Page#** 104)
2	Gate Switch Assembly (**Page#** 407)
3	1/2 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Block Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)

Item No	Description
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 "V" Belt (**Page#** 83-84)
11	Microswitch Kit (**Page#** 115-116)
12	Resistor & Terminal Box Assembly (**Page#** 121)
13	Reduction Pulley (**Page#** 130-131)
14	Reduction Belt (**Page#** 135)
15	Motor Pulley (**Page#** 128-130
16	Crank Arm Assembly (**Page#** 83-84)
17	Drive Arm Support Assembly (**Page#** 97-98
18	Drive Arm Assembly (**Page#** 73-76)

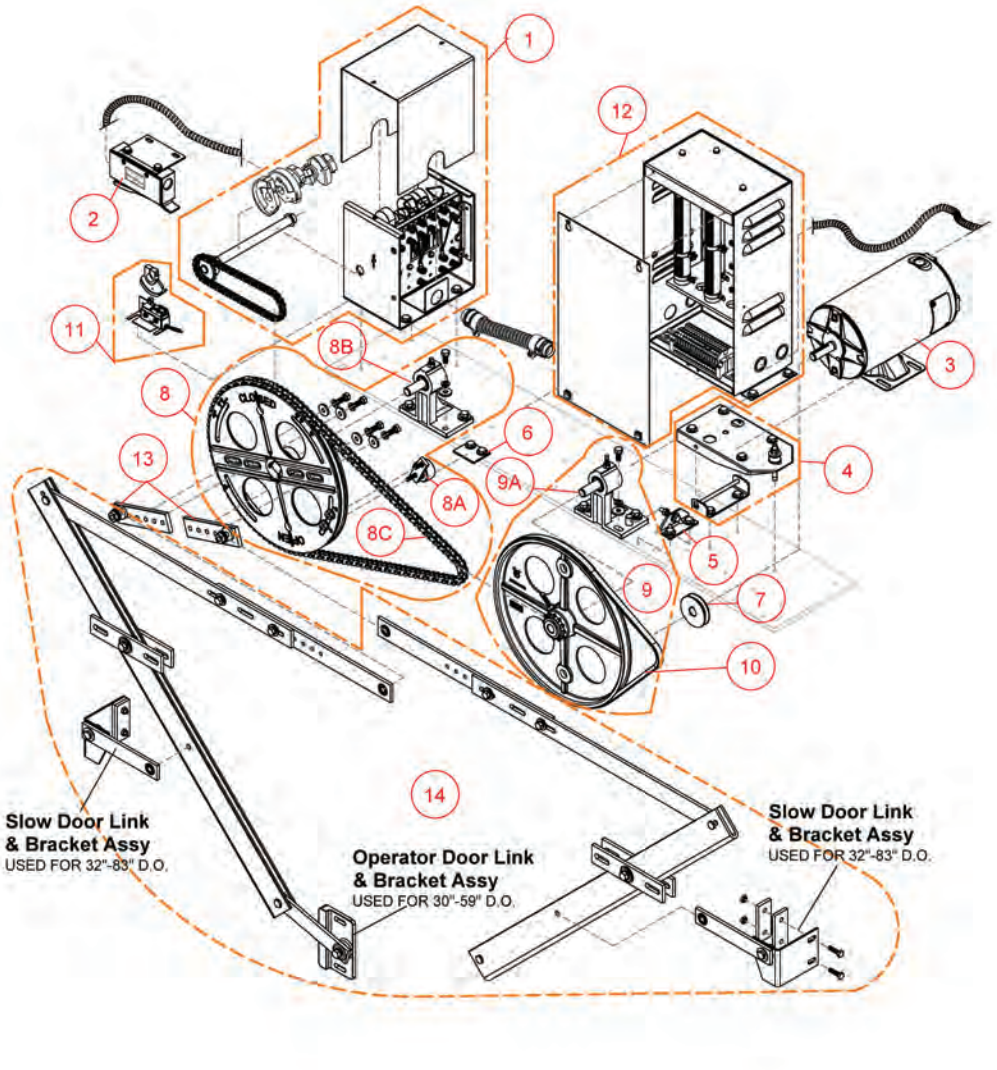
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MOHL/MOML Operator

Center Parting 30”-59” D.O./Two Speed Center Parting 30”-83” D.O.



Item No	Description
1	MOH/MOM Limit Control Assembly (**Page#** 104)
2	Gate Switch Assembly (**Page#** 407)
3	1/2 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Block Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2450 “V” Belt (**Page#** 135)
11	Microswitch Kit (**Page#** 115-116)
12	Resistor & Terminal Box Assembly (**Page#** 121)
13	Crank Arm Assembly (**Page#** 83-84)
14	Drive Arm Assembly (**Page#** 78-79)

Mounting hardware included with this operator assembly (Page# 139)

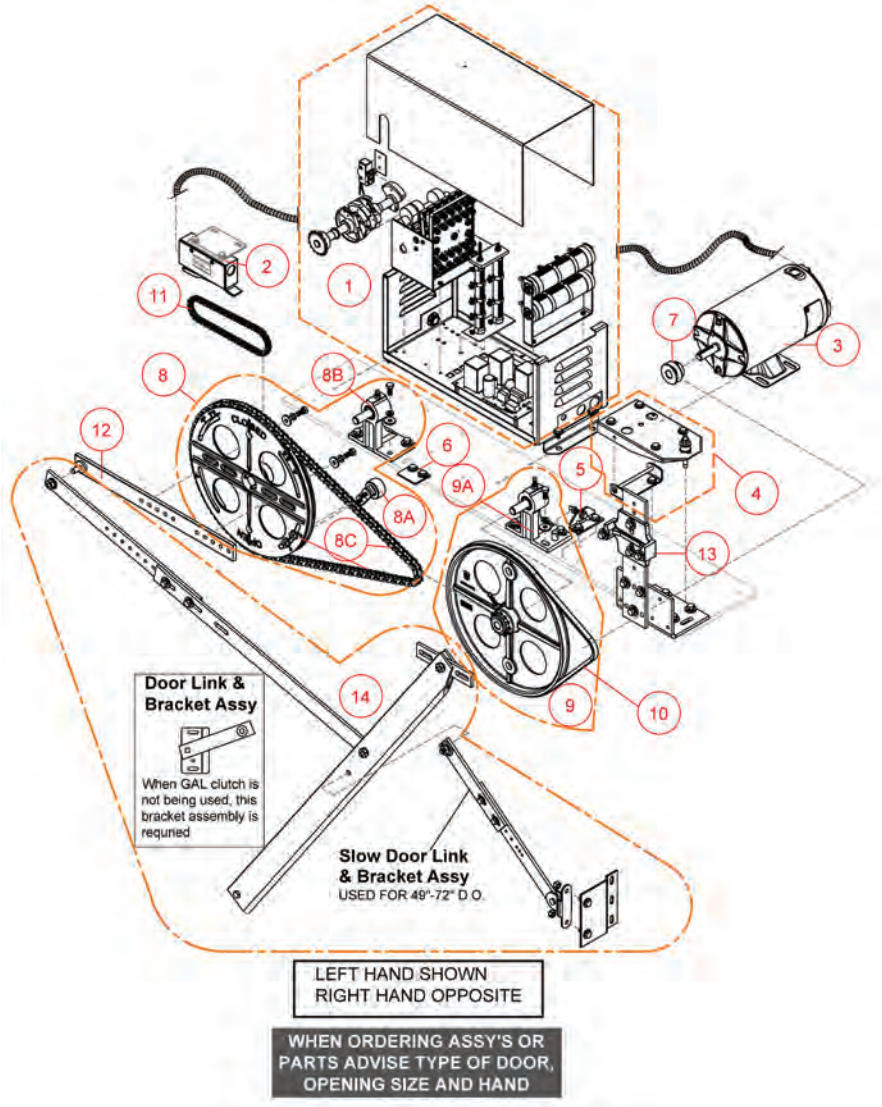
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MOHCTL Operator

Single Speed 22”-48” D.O./Two Speed 30”-72” D.O.



Item No	Description
1	Limit Control Assembly (**Page#** 105)
2	Gate Switch Assembly (**Page#** 407)
3	1/2 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Block Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Cam Drive Chain (**Page#** 136)
12	Crank Arm Assembly (**Page#** 83-84)
13	Drive Arm Support Assembly (**Page#** 97-98)
14	Drive Arm Assembly (**Page#** 73-76)

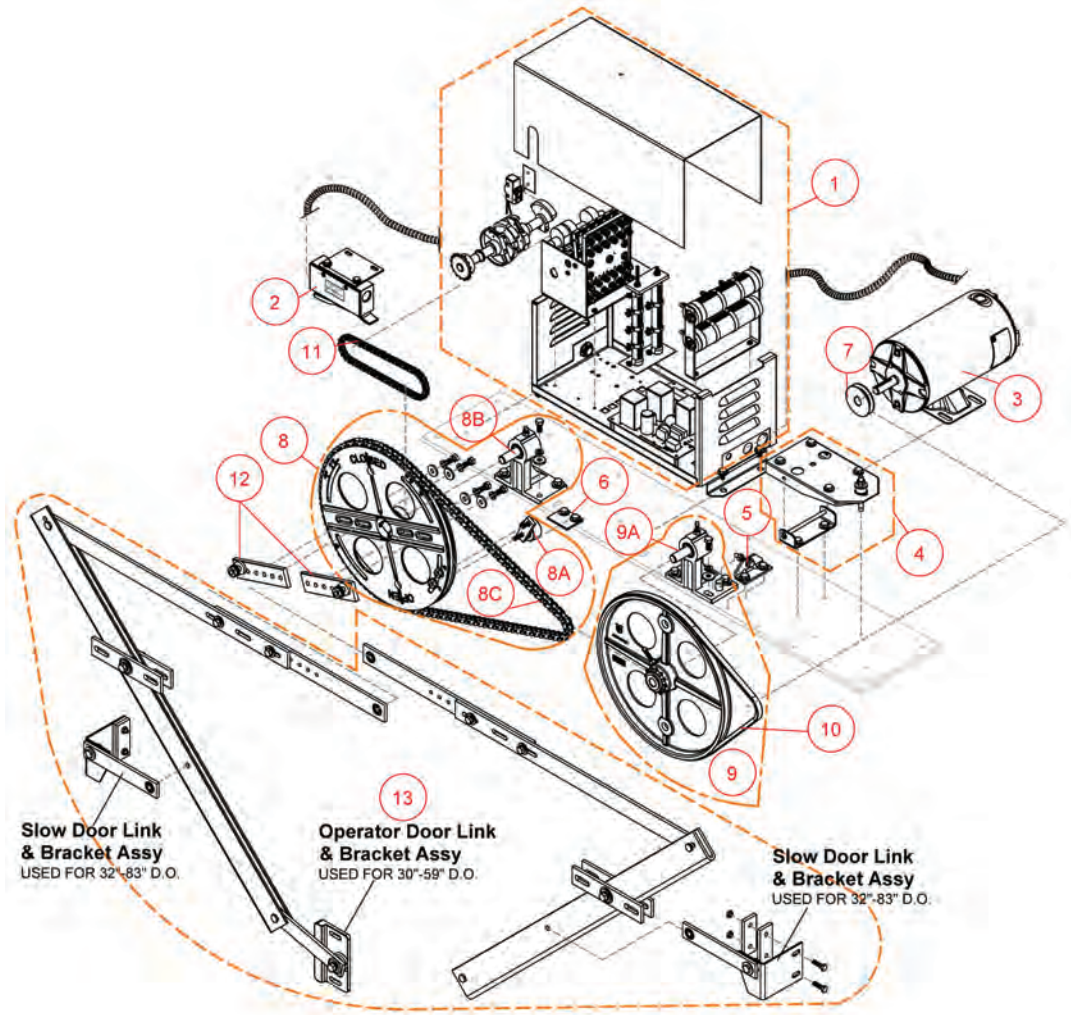
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MOHCTL Operator

Center Parting 30”-59” D.O./Two Speed Center Parting 30”-59” D.O.



Item No	Description
1	Limit Control Assembly (**Page#** 105)
2	Gate Switch Assembly (**Page#** 407)
3	1/2 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Drive Pulley & Bearing Block Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)

Item No	Description
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2450 “V” Belt (**Page#** 135)
11	Cam Drive Chain (**Page#** 136)
12	Crank Arm Assembly (**Page#** 83-84)
13	Drive Arm Assembly (**Page#** 78-79)

Mounting hardware included with this operator assembly (Page# 139)

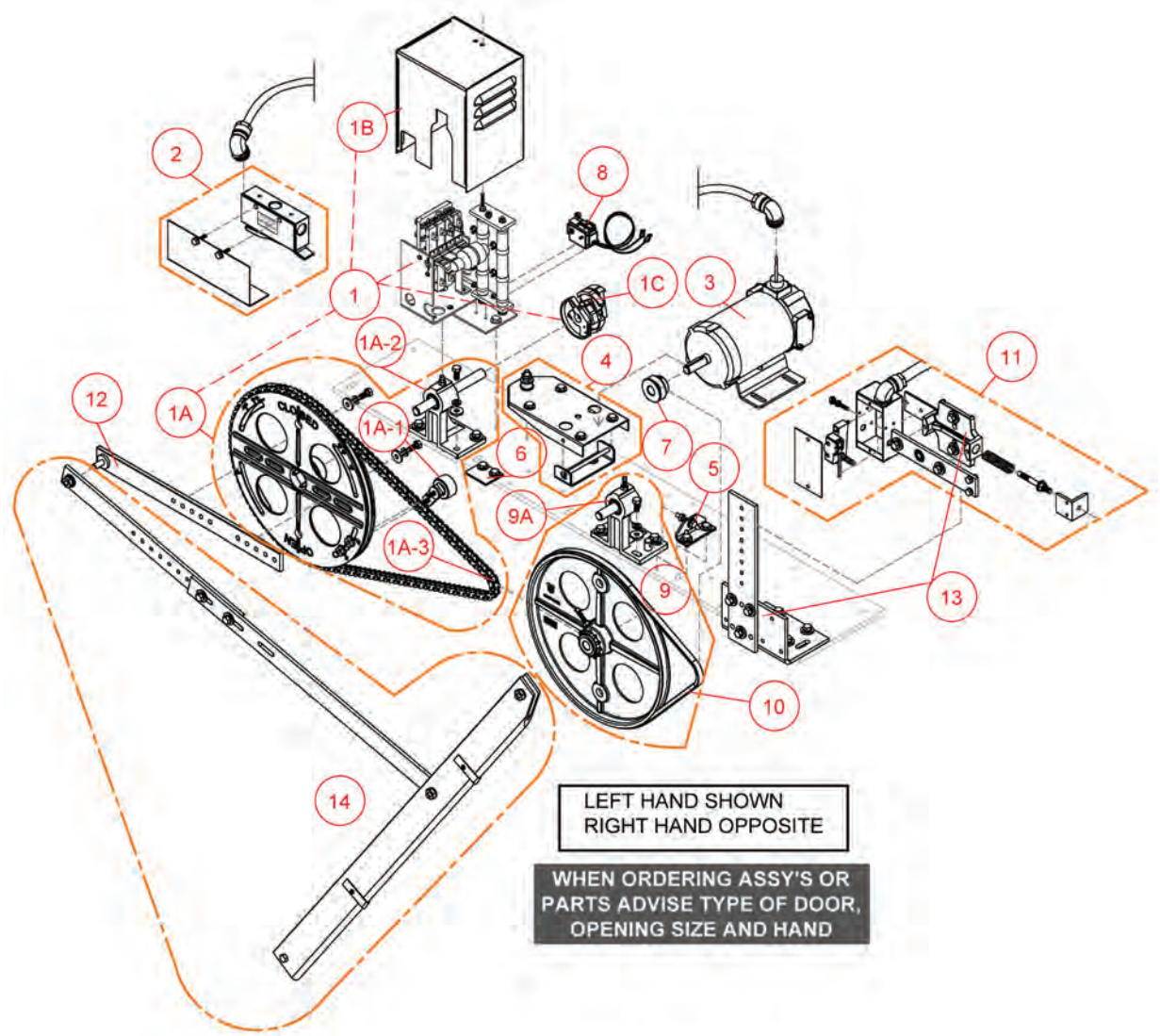
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MODLNYC Operator

Single Speed 30”-42” D.O./Two Speed 30”-42” D.O.



Item No	Description
1	MOD Limit Control Assembly (**Page#** 106)
1A	MOD Drive Pulley & Bearing Assemblies (**Page#** 125-126)
1A-1	Stop Roller Assembly (**Page#** 134)
1A-2	Drive Bearing Block Assembly (**Page#** 130-131)
1A-3	Drive Pulley Chain (**Page#** 136)
1B	Limit Control Box Cover (**Page#** 107-108)
1C	Limit Control Cam Set (**Page#** 110)
2	Gate Switch Assembly (**Page#** 407)
3	1/6 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 104)
5	Bearing Block Adjustable Angle (**Page#** 131)

Item No	Description
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Microswitch Kit (**Page#** 115-116)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Reversing Device Assembly (**Page#** 95)
12	Crank Arm Assembly (**Page#** 83-84)
13	Drive Arm Support Assembly (**Page#** 97-98)
14	Drive Arm Assembly (**Page#** 84)

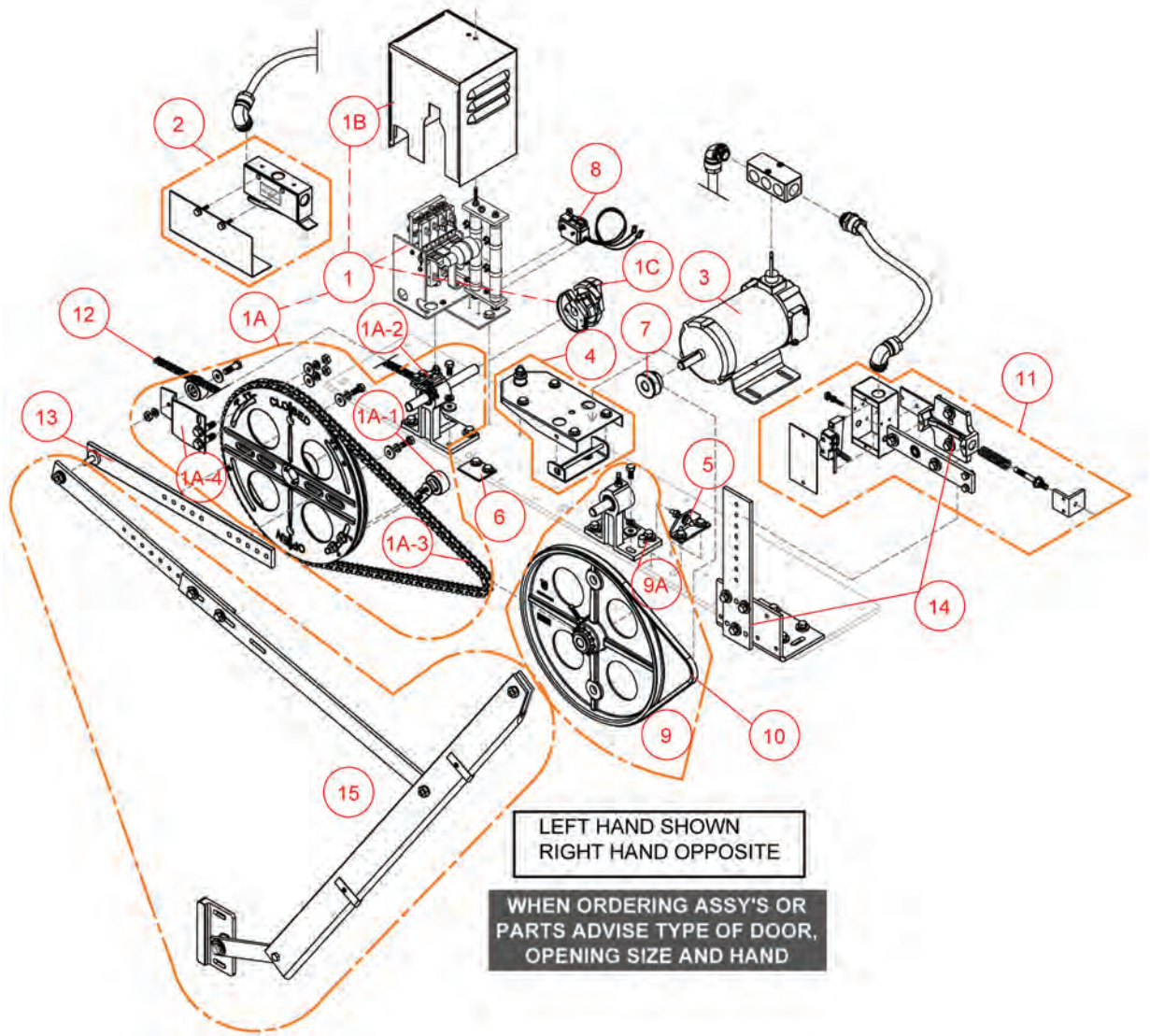
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MODPLNYC Operator

Single Speed 30”-42” D.O./Two Speed 30”-42” D.O.



Item No	Description
1	MOD Limit Control Assembly (**Page#** 106)
1A	MOD Drive Pulley & Bearing Assemblies (**Page#** 125-126)
1A-1	Stop Roller Assembly (**Page#** 134)
1A-2	Drive Bearing Block Assembly (**Page#** 130-131)
1A-3	Drive Pulley Chain (**Page#** 130-131)
1A-4	Retiring Cam Pick-Up Roller Assembly (**Page#** 135)
1B	Limit Control Box Cover (**Page#** 107-108)
1C	Limit Control Cam Set (**Page#** 110)
2	Gate Switch Assembly (**Page#** 407)
3	1/6 HP 230 VDC PM Motor (**Page#** 102-103)
4	Motor Base Assembly (**Page#** 131)
5	Bearing Block Adjustable Angle (**Page#** 131)

Item No	Description
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Microswitch Kit (**Page#** 115-116)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Reversing Device Assembly (**Page#** 95)
12	Chain & Cable
13	Crank Arm Assembly (**Page#** 83-84)
14	Drive Arm Support Assembly (**Page#** 97-98)
15	Drive Arm Assembly (**Page#** 84)

Mounting hardware included with this operator assembly (Page# 139)

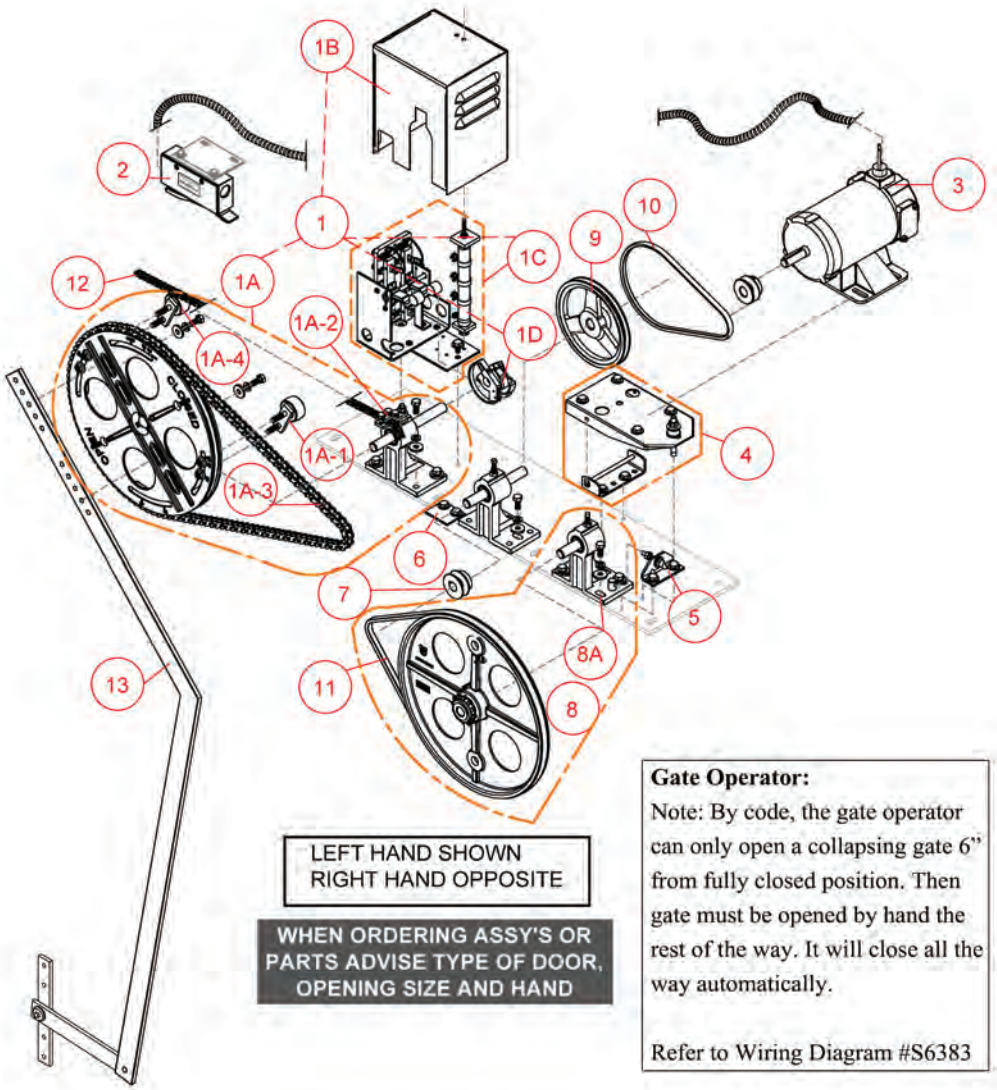
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MODG (Gate) Operator

Single Speed 26”-30” D.O./Two Speed 26”-30” D.O.



Item No	Description
1	MOD Limit Control Assembly
1A	MOD Drive Pulley & Bearing Assemblies (**Page#** 125-126)
1A-1	Stop Roller Assembly (**Page#** 134)
1A-2	Drive Bearing Block Assembly (**Page#** 130-131)
1A-3	Drive Pulley Chain (**Page#** 130-131)
1A-4	Retiring Cam Pick-Up Roller Assembly (**Page#** 135)
1B	Limit Control Box Cover (**Page#** 107-108)
1C	Limit Switch Assembly
1D	Limit Control Cam Set (**Page#** 110)
2	Gate Switch Assembly (**Page#** 407)
3	1/6 HP 230 VDC PM Motor (**Page#** 102-103)

Item No	Description
4	Motor Base Assembly (**Page#** 131)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)
8	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
8A	Intermediate Bearing Block Assembly (**Page#** 130-131)
9	Reduction Pulley (**Page#** 129-130)
10	Reduction Belt (**Page#** 135)
11	2440 “V” Belt (**Page#** 135)
12	Chain & Cable
13	Crank Arm Assembly

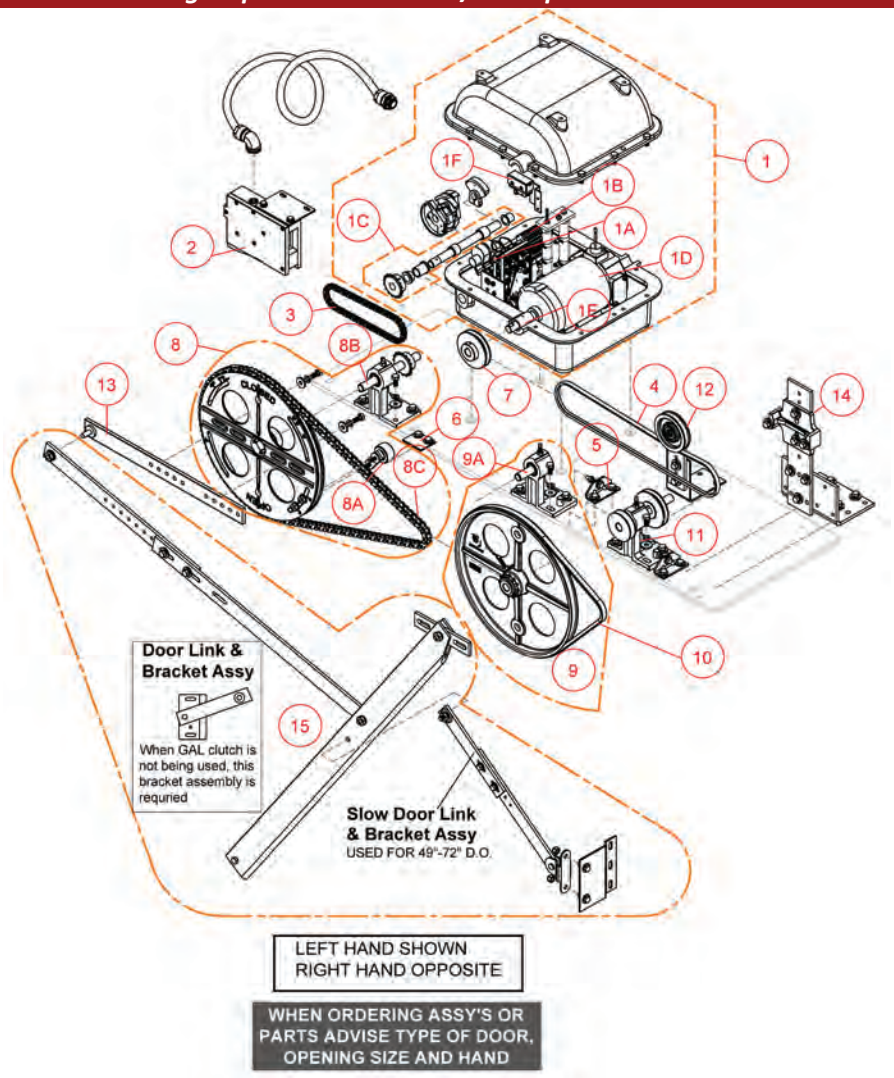
Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Operator Isometric Drawing

MOXL Operator

Single Speed 22”-48” D.O./Two Speed 30”-72” D.O.



Item No	Description
1	MOXL Limit Control Assembly (**Page#** 106)
1A	Limit Switch Assembly (**Page#** 108)
1B	Terminal Block Assembly (**Page#** 119)
1C	Sprocket & Shaft Kit (**Page#** 132-133)
1D	1/2 HP 230 VDC PM Motor (**Page#** 102-103)
1E	Motor Coupling Kit (**Page#** 107)
1F	Microswitch Kit (**Page#** 115-116)
2	Gate Switch Assembly (**Page#** 409)
3	Cam Drive Chain (**Page#** 136)
4	Reduction Belt (**Page#** 135)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)
7	Motor Pulley (**Page#** 128-130)

Item No	Description
8	MOD Drive Pulley & Bearing Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2440 “V” Belt (**Page#** 135)
11	Idler Pulley Bearing Block Assembly (**Page#** 131)
12	Tensioner Assembly (**Page#** 131)
13	Crank Arm Assembly (**Page#** 83-84)
14	Drive Arm Support Assembly (**Page#** 97-98)
15	Drive Arm Assembly (**Page#** 83-84)

Mounting hardware included with this operator assembly (Page# 139)

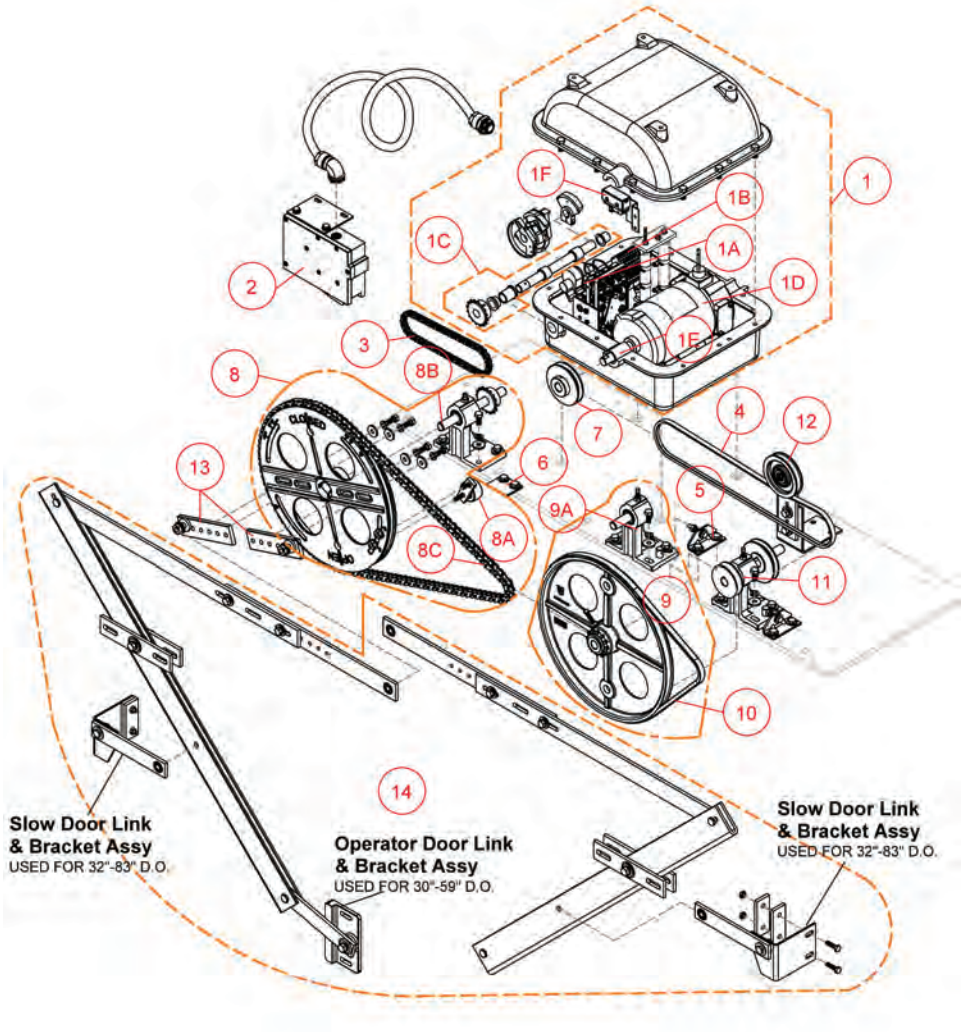
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Operator Isometric Drawing

MOXL Operator

Center Parting 30"-59" D.O./Two Speed Center Parting 32"-72" D.O.



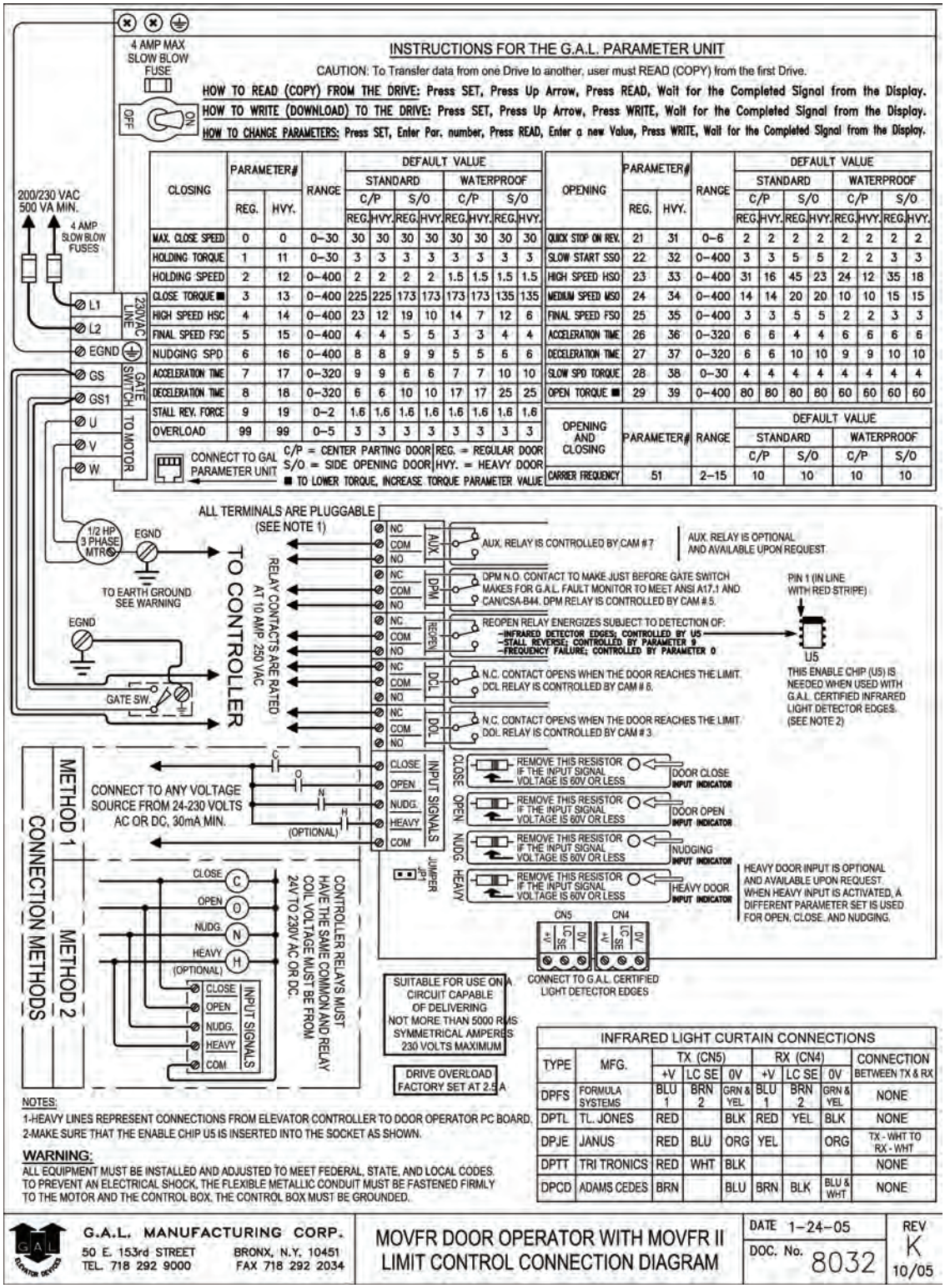
Item No	Description
1	MOXL Limit Control Assembly (**Page#** 106)
1A	Limit Switch Assembly (**Page#** 108)
1B	Terminal Block Assembly (**Page#** 119)
1C	Sprocket & Shaft Kit (**Page#** 132-133)
1D	1/2 HP 230 VDC PM Motor (**Page#** 102-103)
1E	Motor Coupling Kit (**Page#** 107)
1F	Microswitch Kit (**Page#** 115-116)
2	Gate Switch Assembly (**Page#** 409)
3	Cam Drive Chain (**Page#** 136)
4	Reduction Belt (**Page#** 135)
5	Bearing Block Adjustable Angle (**Page#** 131)
6	Stop Roller Plate (**Page#** 134)

Item No	Description
7	Motor Pulley (**Page#** 128-130)
8	MOD Drive Pulley & Bearing Assemblies (**Page#** 125-126)
8A	Stop Roller Assembly (**Page#** 134)
8B	Drive Bearing Block Assembly (**Page#** 130-131)
8C	Drive Pulley Chain (**Page#** 136)
9	Intermediate Pulley & Bearing Block Assemblies (**Page#** 127)
9A	Intermediate Bearing Block Assembly (**Page#** 130-131)
10	2450 "V" Belt (**Page#** 135)
11	Idler Pulley Bearing Block Assembly (**Page#** 131)
12	Tensioner Assembly (**Page#** 131)
13	Crank Arm Assembly (**Page#** 83-84)
14	Drive Arm Assembly (**Page#** 78-79)

Mounting hardware included with this operator assembly (Page# 139)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

MOVFR II - Wiring Diagram



CLOSING	PARAMETER# REG.	PARAMETER# HVY.	RANGE	DEFAULT VALUE STANDARD C/P REG.	STANDARD C/P HVY.	STANDARD S/O REG.	STANDARD S/O HVY.	WATERPROOF C/P REG.	WATERPROOF C/P HVY.	WATERPROOF S/O REG.	WATERPROOF S/O HVY.
MAX. CLOSE SPEED	0	0	0–30	30	30	30	30	30	30	30	30
HOLDING TORQUE	1	11	0–30	3	3	3	3	3	3	3	3
HOLDING SPEED	2	12	0–400	2	2	2	2	1.5	1.5	1.5	1.5
CLOSE TORQUE ■	3	13	0–400	225	225	173	173	173	173	135	135
HIGH SPEED HSC	4	14	0–400	23	12	19	10	14	7	12	6
FINAL SPEED FSC	5	15	0–400	4	4	5	5	3	3	4	4
NUDGING SPD	6	16	0–400	8	8	9	9	5	5	6	6
ACCELERATION TIME	7	17	0–320	9	9	6	6	7	7	10	10
DECELERATION TIME	8	18	0–320	6	6	10	10	17	17	25	25
STALL REV. FORCE	9	19	0–2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
OVERLOAD	99	99	0–5	3	3	3	3	3	3	3	3

OPENING	PARAMETER# REG.	PARAMETER# HVY.	RANGE	DEFAULT VALUE STANDARD C/P REG.	STANDARD C/P HVY.	STANDARD S/O REG.	STANDARD S/O HVY.	WATERPROOF C/P REG.	WATERPROOF C/P HVY.	WATERPROOF S/O REG.	WATERPROOF S/O HVY.
QUICK STOP ON REV.	21	31	0–6	2	2	2	2	2	2	2	2
SLOW START SSO	22	32	0–400	3	3	5	5	2	2	3	3
HIGH SPEED HSO	23	33	0–400	31	16	45	23	24	12	35	18
MEDIUM SPEED MSO	24	34	0–400	14	14	20	20	10	10	15	15
FINAL SPEED FSO	25	35	0–400	3	3	5	5	2	2	3	3
ACCELERATION TIME	26	36	0–320	6	6	4	4	6	6	6	6
DECELERATION TIME	27	37	0–320	6	6	10	10	9	9	10	10
SLOW SPD TORQUE	28	38	0–30	4	4	4	4	4	4	4	4
OPEN TORQUE ■	29	39	0–400	80	80	80	80	60	60	60	60

OPENING AND CLOSING	PARAMETER#	RANGE	DEFAULT VALUE STANDARD C/P	STANDARD S/O	WATERPROOF C/P	WATERPROOF S/O
CARRIER FREQUENCY	51	2–15	10	10	10	10

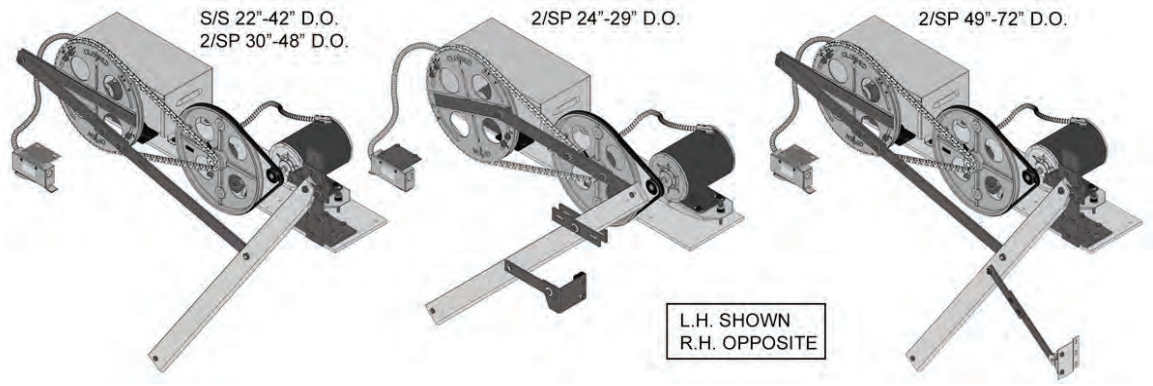
INFRARED LIGHT CURTAIN CONNECTIONS									
TYPE	MFG.	TX (CN5) +V	TX (CN5) LC SE	TX (CN5) 0V	RX (CN4) +V	RX (CN4) LC SE	RX (CN4) 0V	CONNECTION BETWEEN TX & RX
DPFS	FORMULA SYSTEMS	BLU 1	BRN 2	GRN & YEL	BLU 1	BRN 2	GRN & YEL	NONE
DPTL	TL. JONES	RED		BLK	RED	YEL	BLK	NONE
DPJE	JANUS	RED	BLU	ORG	YEL		ORG	TX - WHT TO RX - WHT
DPTT	TRI TRONICS	RED	WHT	BLK				NONE
DPCD	ADAMS CEDES	BRN		BLU	BRN	BLK	BLU & WHT	NONE

DOOR EQUIPMENT

Operator Assemblies

MOVFR II - Conventional

Single & Two Speed



- "MOVFR II" operator includes: door drive arm, nudging & gate switch
- Basic operator requires (4-6) wires excluding door limits, gate switch, fault monitor micro-switch and re-opening circuit
- Refer to wiring diagram 8032 for connections
- Mounting hardware Part No. OP2-0050N

Special Note:
- Gate switch **(extra charge)**
- Parameter unit **(extra charge)**

Features:
- Door Control with built-in diagnostics
- Optional 'heavy door' input
- Plug & Play Door Protection
- Closed Loop regulated speed via motor performance feedback
- Keypad Programming allows complete control for all speeds, torques, acceleration, and deceleration
- LED indication of all inputs and outputs
- Test Switches for open, close, nudging and heavy door
- Three Inputs supplied: Door Open, Door Close and Nudging. Option available: Heavy Door
- Universal Voltage Inputs will accept 24 to 300 volts, AC or DC
- Heavy Duty 1/2 HP motor
- Non Contact optical couplers
- Water Resistant model available
- Revised Box Design affords more room for wiring
- Drives Available: 220 V.A.C. or 115 V.A.C. (Specify when ordering)

Single & Two Speed - 220 V.A.C. - Standard

13" Header Height

Part No.	S/S	2/SP
OP99-0001L/R	22"-24"	
OP99-0002L/R	25"-29"	
OP99-0003L/R	30"-34"	30"-34"
OP99-0004L/R	35"-39"	35"-39"
OP99-0005L/R	40"-44"	40"-44"
OP99-0006L/R	45"-48"	45"-48"

Part No.	S/S	2/SP
OP99-0007L/R		24"
OP99-0008L/R		25"
OP99-0009L/R		26"
OP99-0010L/R		27"
OP99-0011L/R		28"
OP99-0012L/R		29"

Single & Two Speed - 220 V.A.C. - High Cab

17" Header Height

Part No.	S/S	2/SP
OP99-0013L/R	30"-34"	30"-34"
OP99-0014L/R	35"-39"	35"-39"
OP99-0015L/R	40"-44"	40"-44"
OP99-0016L/R	45"-48"	45"-48"

21" Header Height

Part No.	S/S	2/SP
OP99-0017L/R	30"-34"	30"-34"
OP99-0018L/R	35"-39"	35"-39"
OP99-0019L/R	40"-44"	40"-44"
OP99-0020L/R	45"-48"	45"-48"

(*) Special Engineering Required

Operator Assemblies

MOVFR II - Conventional

Single & Two Speed - 220 V.A.C. - High Cab

25" Header Height

Part No.	S/S	2/SP
OP99-0021L/R	30"-34"	30"-34"
OP99-0022L/R	35"-39"	35"-39"
OP99-0023L/R	40"-44"	40"-44"
OP99-0024L/R	45"-48"	45"-48"

29" Header Height

Part No.	S/S	2/SP
OP99-0025L/R	30"-34"	30"-34"
OP99-0026L/R	35"-39"	35"-39"
OP99-0027L/R	40"-44"	40"-44"
OP99-0028L/R	45"-48"	45"-48"

33" Header Height

Part No.	S/S	2/SP
OP99-0029L/R	30"-34"	30"-34"
OP99-0030L/R	35"-39"	35"-39"
OP99-0031L/R	40"-44"	40"-44"
OP99-0032L/R	45"-48"	45"-48"

37" Header Height

Part No.	S/S	2/SP
OP99-0033L/R	30"-34"	30"-34"
OP99-0034L/R	35"-39"	35"-39"
OP99-0035L/R	40"-44"	40"-44"
OP99-0036L/R	45"-48"	45"-48"

41" Header Height

Part No.	S/S	2/SP
OP99-0037L/R	30"-34"	30"-34"
OP99-0038L/R	35"-39"	35"-39"
OP99-0039L/R	40"-44"	40"-44"
OP99-0040L/R	45"-48"	45"-48"

Two Speed Large Opening - 220 V.A.C.

15" Header Height

Part No.	2/SP
OP102-0001L/R	49"-52"
OP102-0002L/R	53"-56"

17" Header Height

Part No.	2/SP
OP102-0003L/R	57"-60"
OP102-0004L/R	61"-64"

19" Header Height

Part No.	2/SP
OP102-0005L/R	65"-68"
OP102-0006L/R	69"-72"

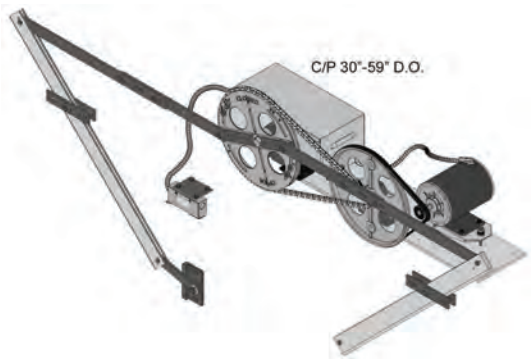
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MOVFR II - Conventional

Center Parting



- "MOVFR II" operator includes: door drive arm, nudging & gate switch
- Basic operator requires (4-6) wires excluding door limits, gate switch, fault monitor micro-switch and re-opening circuit
- Refer to wiring diagram 8032 for connections
- Mounting hardware Part No. OP2-0050N

Special Note:
- Gate switch **(extra charge)**
- Parameter unit **(extra charge)**
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- Door Control with built-in diagnostics
- Optional 'heavy door' input
- Plug & Play Door Protection
- Closed Loop regulated speed via motor performance feedback
- Keypad Programming allows complete control for all speeds, torques, acceleration, and deceleration
- LED indication of all inputs and outputs
- Test Switches for open, close, nudging and heavy door

Features:
- Three Inputs supplied: Door Open, Door Close and Nudging. Option available: Heavy Door
- Universal Voltage Inputs will accept 24 to 300 volts, AC or DC
- Heavy Duty 1/2 HP motor
- Non Contact optical couplers
- Water Resistant model available
- Revised Box Design affords more room for wiring
- Drives Available: 220 V.A.C. or 115 V.A.C. (Specify when ordering)

Center Parting - 220 V.A.C. - Standard

15" Header Height

Part No.	C/P
OP100-0001N	30"-33"
OP100-0002N	34"-39"
OP100-0003N	40"-49"

17" Header Height

Part No.	C/P
OP100-0004N	50"-54"
OP100-0005N	55"-59"

Center Parting - 220 V.A.C. - High Cab

19" Header Height

Part No.	C/P
OP100-0006N	30"-33"
OP100-0007N	34"-39"
OP100-0008N	40"-44"
OP100-0009N	45"-49"
OP100-0010N	50"-54"

23" Header Height

Part No.	C/P
OP100-0011N	30"-33"
OP100-0012N	34"-39"
OP100-0013N	40"-44"
OP100-0014N	45"-49"
OP100-0015N	50"-54"

27" Header Height

Part No.	C/P
OP100-0016N	30"-33"
OP100-0017N	40"-44"
OP100-0018N	45"-49"
OP100-0019N	50"-54"

31" Header Height

Part No.	C/P
OP100-0020N	30"-33"
OP100-0021N	34"-39"
OP100-0022N	40"-44"
OP100-0023N	45"-49"
OP100-0024N	50"-54"

35" Header Height

Part No.	C/P
OP100-0025N	30"-33"
OP100-0026N	34"-39"
OP100-0027N	40"-44"
OP100-0028N	45"-49"
OP100-0029N	50"-54"

39" Header Height

Part No.	C/P
OP100-0030N	30"-33"
OP100-0031N	34"-39"
OP100-0032N	40"-44"
OP100-0033N	45"-49"
OP100-0034N	50"-54"

43" Header Height

Part No.	C/P
OP100-0035N	30"-33"
OP100-0036N	34"-39"
OP100-0037N	40"-44"
OP100-0038N	45"-49"
OP100-0039N	50"-54"

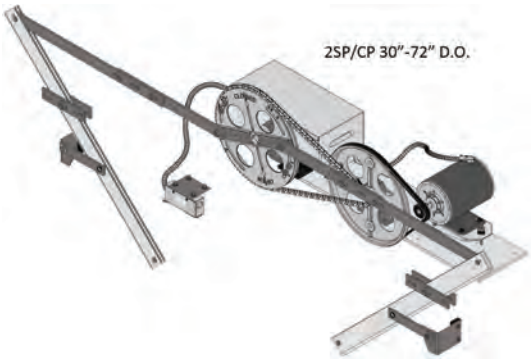
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MOVFR II - Conventional

Two Speed Center Parting



- "MOVFR II" operator includes: door drive arm, nudging & gate switch
- Basic operator requires (4-6) wires excluding door limits, gate switch, fault monitor micro-switch and re-opening circuit
- Refer to wiring diagram 8032 for connections
- Mounting hardware Part No. OP2-0050N

Special Note:

- Gate switch **(extra charge)**
- Parameter unit **(extra charge)**
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- Door Control with built-in diagnostics
- Optional 'heavy door' input
- Plug & Play Door Protection
- Closed Loop regulated speed via motor performance feedback
- Keypad Programming allows complete control for all speeds, torques, acceleration, and deceleration
- LED indication of all inputs and outputs
- Test Switches for open, close, nudging and heavy door

Features:

- Three Inputs supplied: Door Open, Door Close and Nudging. Option available: Heavy Door
- Universal Voltage Inputs will accept 24 to 300 volts, AC or DC
- Heavy Duty 1/2 HP motor
- Non Contact optical couplers
- Water Resistant model available
- Revised Box Design affords more room for wiring
- Drives Available: 220 V.A.C. or 115 V.A.C. (Specify when ordering)

Two Speed Center Parting - 220 V.A.C. - Standard

15" Header Height

Part No.	2SP/CP
OP101-0001N	32"-33"
OP101-0002N	34"
OP101-0003N	35"-37"
OP101-0004N	38"-39"
OP101-0005N	40"-41"
OP101-0006N	42"-44"
OP101-0007N	45"-46"
OP101-0008N	47"-48"
OP101-0009N	49"

17" Header Height

Part No.	2SP/CP
OP101-0010N	50"-51"
OP101-0011N	52"-53"
OP101-0012N	54"
OP101-0013N	55"-56"
OP101-0014N	57"-58"
OP101-0015N	59"
OP101-0016N	60"
OP101-0017N	61"-62"
OP101-0018N	63"
OP101-0019N	64"

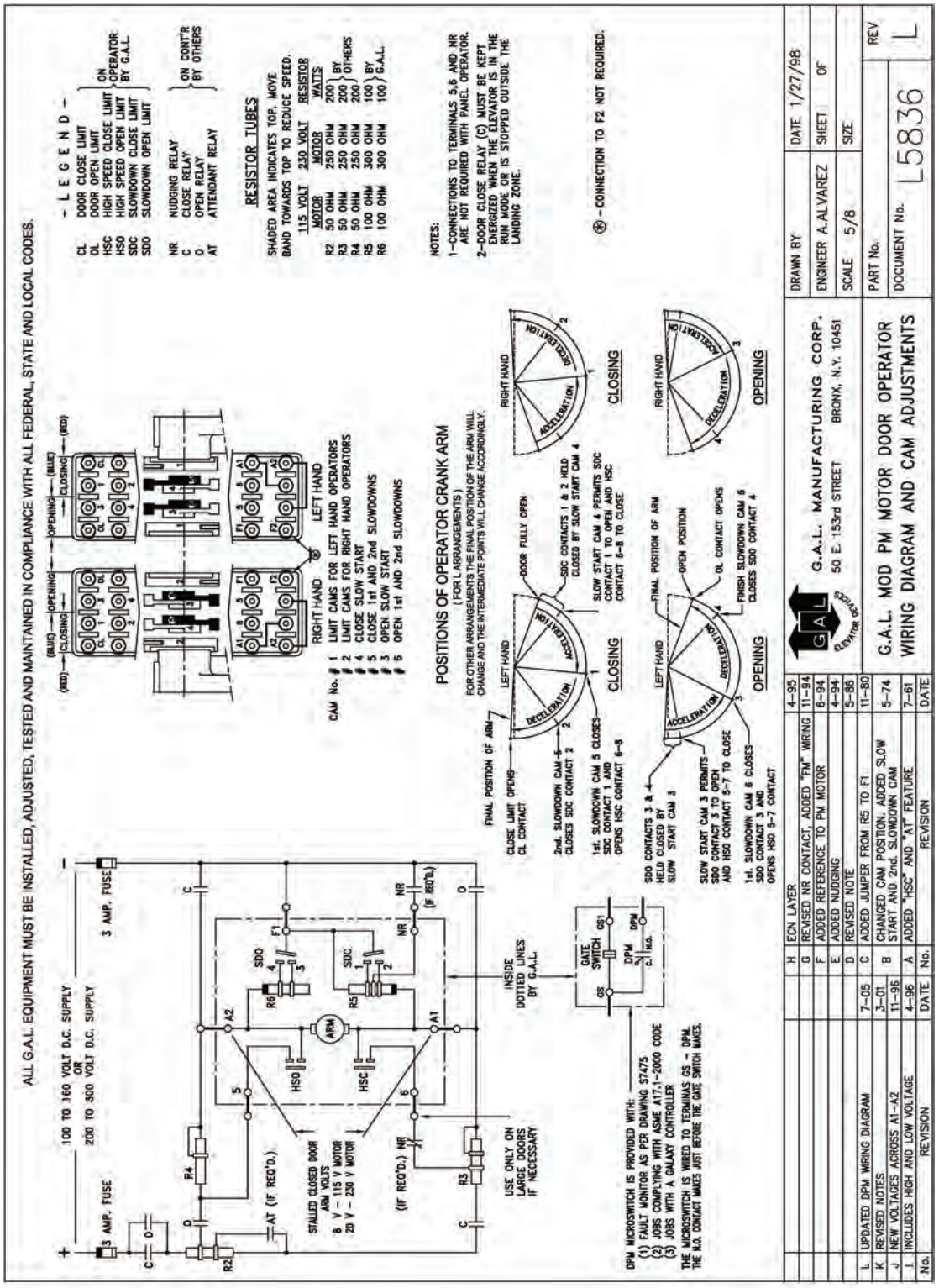
19" Header Height

Part No.	2SP/CP
OP101-0020N	65"
OP101-0021N	66"-67"
OP101-0022N	68"
OP101-0023N	69"
OP101-0024N	70"-71"
OP101-0025N	72"-73"

(*) Special Engineering Required

Operator Assemblies

MODL - Wiring Diagram

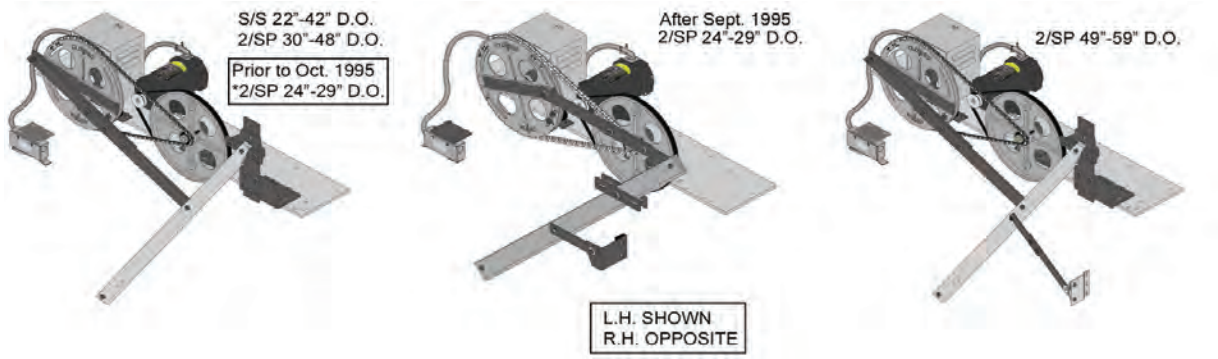


(*) Special Engineering Required

Operator Assemblies

MODL - Conventional

Single & Two Speed



- "MODL" operator includes: door drive arm assembly, nudging & gate switch
- P.M. motor: 1/6 HP 1140 RPM
- Up to 1 1/2 foot per second opening
- Basic operator requires (5) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Operator wiring diagram L-5836 Rev. L
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Special Note:
- Gate switch **(extra charge)**

Single & Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	S/S	2/SP
OP1-0001L/R	22"-24"	
OP1-0002L/R	25"-29"	
OP1-0003L/R*		24"-29"
OP1-0004L/R	30"-34"	30"-34"
OP1-0005L/R	35"-39"	35"-39"
OP1-0006L/R	40"-42"	40"-44"
OP1-0007L/R		45"-48"

Part No.	S/S	2/SP
OP1-0018L/R		24"
OP1-0019L/R		25"
OP1-0020L/R		26"
OP1-0021L/R		27"
OP1-0022L/R		28"
OP1-0023L/R		29"

15" Header Height

Part No.	2/SP
OP35-0001L/R	49"-52"
OP35-0002L/R	53"-56"

17" Header Height

Part No.	2/SP
OP35-0003L/R	57"-59"

Single & Two Speed - 220 V.D.C. - High Cab

17" Header Height

Part No.	S/S	2/SP
OP1-0030L/R	30"-34"	30"-34"
OP1-0031L/R	35"-39"	35"-39"
OP1-0032L/R	40"-42"	40"-44"
OP1-0033L/R		45"-48"

21" Header Height

Part No.	S/S	2/SP
OP1-0038L/R	30"-34"	30"-34"
OP1-0039L/R	35"-39"	35"-39"
OP1-0041L/R	40"-42"	40"-44"
OP1-0042L/R		45"-48"

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODL - Conventional

Single & Two Speed - 220 V.D.C. - High Cab

25" Header Height

Part No.	S/S	2/SP
OP1-0047L/R	30"-34"	30"-34"
OP1-0048L/R	35"-39"	35"-39"
OP1-0049L/R	40"-42"	40"-44"
OP1-0050L/R		45"-48"

29" Header Height

Part No.	S/S	2/SP
OP1-0055L/R	30"-34"	30"-34"
OP1-0056L/R	35"-39"	35"-39"
OP1-0057L/R	40"-42"	40"-44"
OP1-0058L/R		45"-48"

33" Header Height

Part No.	S/S	2/SP
OP1-0063L/R	30"-34"	30"-34"
OP1-0064L/R	35"-39"	35"-39"
OP1-0065L/R	40"-42"	40"-44"
OP1-0066L/R		45"-48"

37" Header Height

Part No.	S/S	2/SP
OP1-0071L/R	30"-34"	30"-34"
OP1-0072L/R	35"-39"	35"-39"
OP1-0073L/R	40"-42"	40"-44"
OP1-0074L/R		45"-48"

41" Header Height

Part No.	S/S	2/SP
OP1-0079L/R	30"-34"	30"-34"
OP1-0080L/R	35"-39"	35"-39"
OP1-0081L/R	40"-42"	40"-44"
OP1-0082L/R		45"-48"

Single & Two Speed - 115 V.D.C. - Standard

13" Header Height

Part No.	S/S	2/SP
OP1-0010L/R	22"-24"	
OP1-0011L/R	25"-29"	
OP1-0012L/R	30"-34"	30"-34"
OP1-0013L/R	35"-39"	35"-39"
OP1-0014L/R	40"-42"	40"-44"
OP1-0017L/R		45"-48"

Part No.	S/S	2/SP
OP1-0024L/R		24"
OP1-0025L/R		25"
OP1-0026L/R		26"
OP1-0027L/R		27"
OP1-0028L/R		28"
OP1-0029L/R		29"

15" Header Height

Part No.	2/SP
OP35-0008L/R	49"-52"
OP35-0009L/R	53"-56"

17" Header Height

Part No.	2/SP
OP35-0011L/R	57"-59"

Single & Two Speed - 115 V.D.C. - High Cab

17" Header Height

Part No.	S/S	2/SP
OP1-0034L/R	30"-34"	30"-34"
OP1-0035L/R	35"-39"	35"-39"
OP1-0036L/R	40"-42"	40"-44"
OP1-0037L/R		45"-48"

21" Header Height

Part No.	S/S	2/SP
OP1-0043L/R	30"-34"	30"-34"
OP1-0044L/R	35"-39"	35"-39"
OP1-0045L/R	40"-42"	40"-44"
OP1-0046L/R		45"-48"

(*) Special Engineering Required

Operator Assemblies

MODL - Conventional

Single & Two Speed - 115 V.D.C. - High Cab

25" Header Height

Part No.	S/S	2/SP
OP1-0051L/R	30"-34"	30"-34"
OP1-0052L/R	35"-39"	35"-39"
OP1-0053L/R	40"-42"	40"-44"
OP1-0054L/R		45"-48"

29" Header Height

Part No.	S/S	2/SP
OP1-0059L/R	30"-34"	30"-34"
OP1-0060L/R	35"-39"	35"-39"
OP1-0061L/R	40"-42"	40"-44"
OP1-0062L/R		45"-48"

33" Header Height

Part No.	S/S	2/SP
OP1-0067L/R	30"-34"	30"-34"
OP1-0068L/R	35"-39"	35"-39"
OP1-0069L/R	40"-42"	40"-44"
OP1-0070L/R		45"-48"

37" Header Height

Part No.	S/S	2/SP
OP1-0075L/R	30"-34"	30"-34"
OP1-0076L/R	35"-39"	35"-39"
OP1-0077L/R	40"-42"	40"-44"
OP1-0078L/R		45"-48"

41" Header Height

Part No.	S/S	2/SP
OP1-0083L/R	30"-34"	30"-34"
OP1-0084L/R	35"-39"	35"-39"
OP1-0085L/R	40"-42"	40"-44"
OP1-0086L/R		45"-48"

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODL - Conventional

Center Parting





Special Note:

- Gate switch **(extra charge)**
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MODL" operator includes: door drive arm assembly, nudging & gate switch
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Up to 1 1/2 foot per second opening
- Basic operator requires (5) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram L-5836 Rev. L
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	C/P
OP2-0084N	25"-29"
OP2-0001N	30"-33"

Part No.	C/P
OP2-0002N	34"-39"
OP2-0003N	40"-49"

Part No.	C/P
OP2-0004N	50"-54"
OP2-0005N	55"-59"

Center Parting - 220 V.D.C. - High Cab

19" Header Height

Part No.	C/P
OP2-0011N	30"-33"
OP2-0012N	34"-39"
OP2-0013N	40"-44"
OP2-0014N	45"-49"
OP2-0015N	50"-53"

23" Header Height

Part No.	C/P
OP2-0021N	30"-33"
OP2-0022N	34"-39"
OP2-0023N	40"-44"
OP2-0024N	45"-49"
OP2-0025N	50"-53"

27" Header Height

Part No.	C/P
OP2-0031N	30"-33"
OP2-0033N	40"-44"
OP2-0034N	45"-49"
OP2-0035N	50"-53"

31" Header Height

Part No.	C/P
OP2-0041N	30"-33"
OP2-0042N	34"-39"
OP2-0043N	40"-44"
OP2-0044N	45"-49"
OP2-0045N	50"-53"

35" Header Height

Part No.	C/P
OP2-0052N	30"-33"
OP2-0053N	34"-39"
OP2-0054N	40"-44"
OP2-0055N	45"-49"
OP2-0056N	50"-53"

39" Header Height

Part No.	C/P
OP2-0062N	30"-33"
OP2-0063N	34"-39"
OP2-0064N	40"-44"
OP2-0065N	45"-49"
OP2-0066N	50"-53"

43" Header Height

Part No.	C/P
OP2-0072N	30"-33"
OP2-0073N	34"-39"
OP2-0074N	40"-44"
OP2-0075N	45"-49"
OP2-0076N	50"-53"

(*) Special Engineering Required

Operator Assemblies

MODL - Conventional

Center Parting - 115 V.D.C. - Standard

15" Header Height

Part No.	C/P
OP2-0085N*	25"-29"
OP2-0006N	30"-33"

Part No.	C/P
OP2-0007N	34"-39"
OP2-0008N	40"-49"

Part No.	C/P
OP2-0009N	50"-54"
OP2-0010N	55"-59"

Center Parting - 115 V.D.C. - High Cab

19" Header Height

Part No.	C/P
OP2-0016N	30"-33"
OP2-0017N	34"-39"
OP2-0018N	40"-44"
OP2-0019N	45"-49"
OP2-0020N	50"-53"

23" Header Height

Part No.	C/P
OP2-0026N	30"-33"
OP2-0027N	34"-39"
OP2-0028N	40"-44"
OP2-0029N	45"-49"
OP2-0030N	50"-53"

27" Header Height

Part No.	C/P
OP2-0036N	30"-33"
OP2-0038N	40"-44"
OP2-0039N	45"-49"
OP2-0040N	50"-53"

31" Header Height

Part No.	C/P
OP2-0046N	30"-33"
OP2-0047N	34"-39"
OP2-0048N	40"-44"
OP2-0049N	45"-49"
OP2-0051N	50"-53"

35" Header Height

Part No.	C/P
OP2-0057N	30"-33"
OP2-0058N	34"-39"
OP2-0059N	40"-44"
OP2-0060N	45"-49"
OP2-0061N	50"-53"

39" Header Height

Part No.	C/P
OP2-0067N	30"-33"
OP2-0068N	34"-39"
OP2-0069N	40"-44"
OP2-0070N	45"-49"
OP2-0071N	50"-53"

43" Header Height

Part No.	C/P
OP2-0077N	30"-33"
OP2-0078N	34"-39"
OP2-0079N	40"-44"
OP2-0080N	45"-49"
OP2-0081N	50"-53"

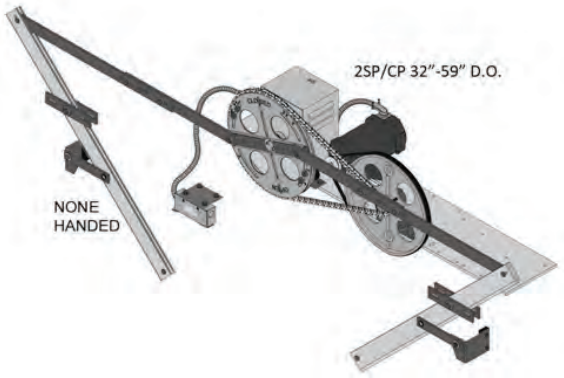
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODL - Conventional

Two Speed Center Parting



Special Note:
- Gate switch **(extra charge)**
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MODL" operator includes: door drive arm assembly, nudging & gate switch
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Up to 1 1/2 foot per second opening
- Basic operator requires (5) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram L-5836 Rev. L
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Two Speed Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	2SP/CP
OP37-0001N	32"-33"
OP37-0002N	34"
OP37-0003N	35"-37"
OP37-0004N	38"-39"
OP37-0005N	40"-41"
OP37-0006N	42"-44"
OP37-0007N	45"-46"
OP37-0008N	47"-48"
OP37-0009N	49"

17" Header Height

Part No.	2SP/CP
OP37-0010N	50"-51"
OP37-0011N	52"-53"
OP37-0012N	54"
OP37-0013N	55"-56"
OP37-0014N	57"-58"
OP37-0015N	59"

Two Speed Center Parting - 115 V.D.C. - Standard

15" Header Height

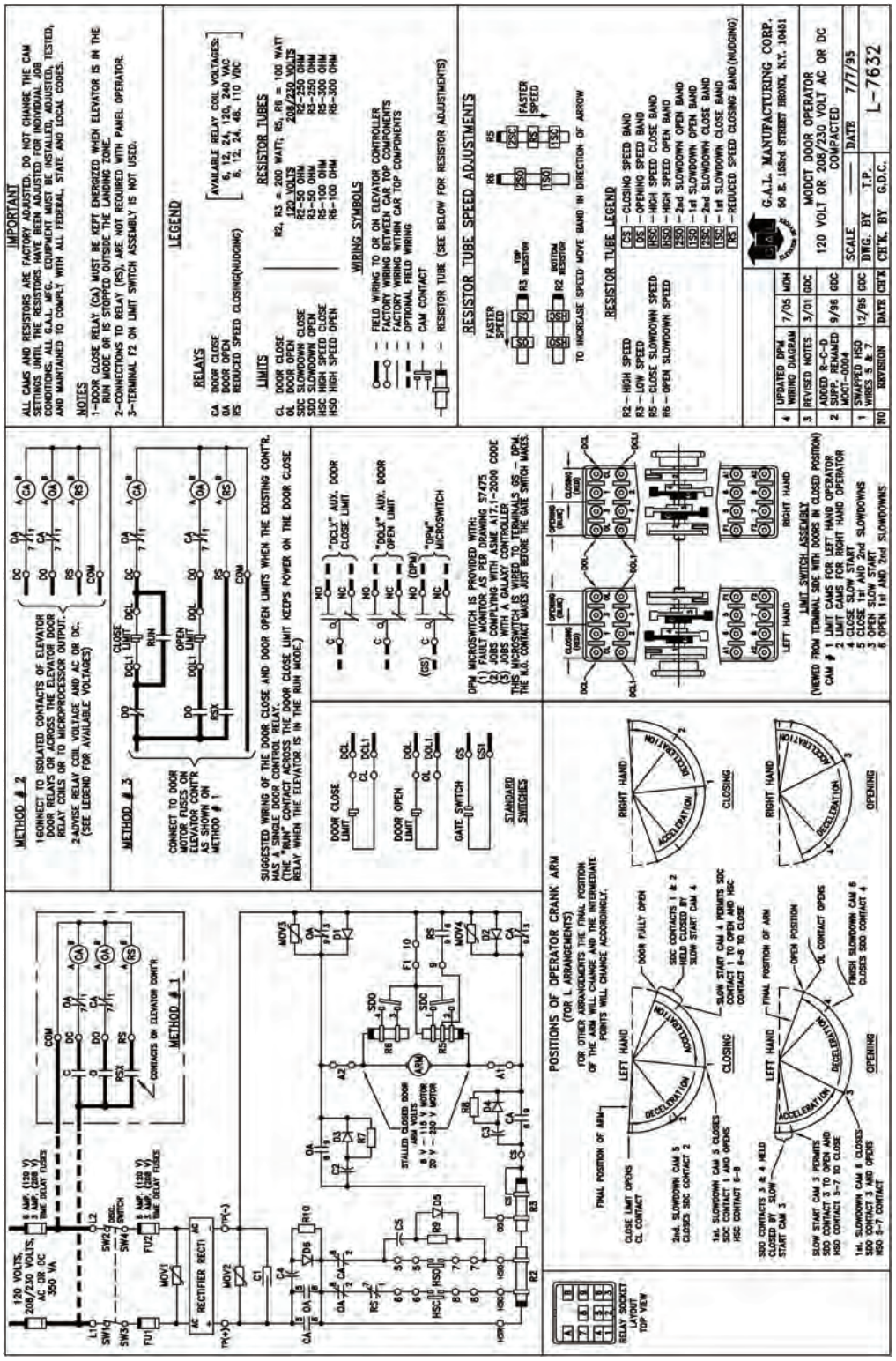
Part No.	2SP/CP
OP37-0036N	32"-33"
OP37-0037N	34"
OP37-0038N	35"-37"
OP37-0039N	38"-39"
OP37-0040N	40"-41"
OP37-0041N	42"-44"
OP37-0042N	45"-46"
OP37-0043N	47"-48"
OP37-0044N	49"

17" Header Height

Part No.	2SP/CP
OP37-0045N	50"-51"
OP37-0046N	52"-53"
OP37-0047N	54"
OP37-0048N	55"-56"
OP37-0049N	57"-58"
OP37-0050N	59"

(*) Special Engineering Required

MODCTL - Wiring Diagram



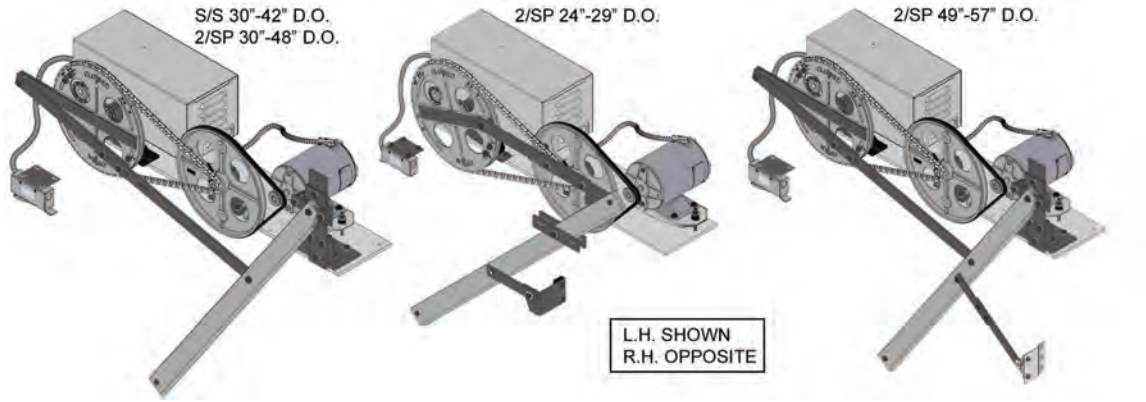
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODCTL - Conventional

Single & Two Speed



- "MODCTL" operator includes: door drive arm assembly, nudging & gate switch
- Up to 1 1/2 foot per second opening
- Center parting geared car doors replacement for OTIS operators (6970, 7660, 7300, 7770.....) includes drive arm and door link and bracket "OP113"
- Basic operator requires (4) wires excluding open and close relays, open and close limits and gate switch. Nudging requires (1) additional wire
- Mounting hardware Part No. OP1-0040N
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 208 to 230 V.A.C./D.C. or 120 V.A.C./D.C.
- Operator wiring diagram L-7632
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Special Note:
- Gate switch **(extra charge)**
- 120 V.A.C./D.C. is available upon request. Contact G.A.L. sales department.

Single & Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0253L/R	22"-24"		24 V.A.C.
OP51-0259L/R	22"-24"		24 V.D.C.
OP51-0265L/R	22"-24"		48 V.D.C.
OP51-0017L/R	22"-24"		110 V.D.C.
OP51-0009L/R	22"-24"		120 V.A.C.
OP51-0001L/R	22"-24"		240 V.A.C.
OP51-0254L/R	25"-29"		24 V.A.C.
OP51-0260L/R	25"-29"		24 V.D.C.
OP51-0266L/R	25"-29"		48 V.D.C.
OP51-0018L/R	25"-29"		110 V.D.C.
OP51-0010L/R	25"-29"		120 V.A.C.
OP51-0002L/R	25"-29"		240 V.A.C.
OP51-0255L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0261L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0267L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0019L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0011L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0003L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0256L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0262L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0268L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0020L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0012L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0004L/R	35"-39"	35"-39"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0257L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0263L/R	40"-42"	40"-44"	24 V.D.C.
OP51-0269L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0021L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0013L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0005L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0289L/R		24"	24 V.A.C.
OP51-0295L/R		24"	24 V.D.C.
OP51-0301L/R		24"	48 V.D.C.
OP51-0061L/R		24"	110 V.D.C.
OP51-0055L/R		24"	120 V.A.C.
OP51-0049L/R		24"	240 V.A.C.
OP51-0290L/R		25"	24 V.A.C.
OP51-0296L/R		25"	24 V.D.C.
OP51-0302L/R		25"	48 V.D.C.
OP51-0062L/R		25"	110 V.D.C.
OP51-0056L/R		25"	120 V.A.C.
OP51-0050L/R		25"	240 V.A.C.
OP51-0291L/R		26"	24 V.A.C.
OP51-0297L/R		26"	24 V.D.C.
OP51-0303L/R		26"	48 V.D.C.
OP51-0063L/R		26"	110 V.D.C.
OP51-0057L/R		26"	120 V.A.C.
OP51-0051L/R		26"	240 V.A.C.

(*) Special Engineering Required

Operator Assemblies

MODCTL - Conventional

Single & Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0292L/R		27"	24 V.A.C.
OP51-0298L/R		27"	24 V.D.C.
OP51-0304L/R		27"	48 V.D.C.
OP51-0064L/R		27"	110 V.D.C.
OP51-0058L/R		27"	120 V.A.C.
OP51-0052L/R		27"	240 V.A.C.
OP51-0293L/R		28"	24 V.A.C.
OP51-0299L/R		28"	24 V.D.C.
OP51-0305L/R		28"	48 V.D.C.
OP51-0065L/R		28"	110 V.D.C.
OP51-0059L/R		28"	120 V.A.C.
OP51-0053L/R		28"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0294L/R		29"	24 V.A.C.
OP51-0300L/R		29"	24 V.D.C.
OP51-0306L/R		29"	48 V.D.C.
OP51-0066L/R		29"	110 V.D.C.
OP51-0060L/R		29"	120 V.A.C.
OP51-0054L/R		29"	240 V.A.C.
OP51-0258L/R		45"-48"	24 V.A.C.
OP51-0264L/R		45"-48"	24 V.D.C.
OP51-0270L/R		45"-48"	48 V.D.C.
OP51-0024L/R		45"-48"	110 V.D.C.
OP51-0016L/R		45"-48"	120 V.A.C.
OP51-0008L/R		45"-48"	240 V.A.C.

15" Header Height

Part No.	2/SP	Relay Voltage
OP55-0015L/R	49"-52"	110 V.D.C.
OP55-0008L/R	49"-52"	120 V.A.C.
OP55-0001L/R	49"-52"	240 V.A.C.

Part No.	2/SP	Relay Voltage
OP55-0016L/R	53"-56"	110 V.D.C.
OP55-0009L/R	53"-56"	120 V.A.C.
OP55-0002L/R	53"-56"	240 V.A.C.

Single & Two Speed - 220 V.D.C. - High Cab

17" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0325L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0329L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0333L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0093L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0089L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0085L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0326L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0330L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0334L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0094L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0090L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0086L/R	35"-39"	35"-39"	240 V.A.C.
OP51-0327L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0331L/R	40"-42"	40"-44"	24 V.D.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0335L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0095L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0091L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0087L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0328L/R		45"-48"	24 V.A.C.
OP51-0332L/R		45"-48"	24 V.D.C.
OP51-0336L/R		45"-48"	48 V.D.C.
OP51-0096L/R		45"-48"	110 V.D.C.
OP51-0092L/R		45"-48"	120 V.A.C.
OP51-0088L/R		45"-48"	240 V.A.C.
OP55-0017L/R		57"-59"	110 V.D.C.
OP55-0010L/R		57"-59"	120 V.A.C.
OP55-0003L/R		57"-59"	240 V.A.C.

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODCTL - Conventional

Single & Two Speed - 220 V.D.C. - High Cab

21" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0337L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0341L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0345L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0105L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0101L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0097L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0338L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0342L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0346L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0106L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0102L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0098L/R	35"-39"	35"-39"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0339L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0343L/R	40"-42"	40"-44"	24 V.D.C.
OP51-0347L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0107L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0103L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0099L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0340L/R		45"-48"	24 V.A.C.
OP51-0344L/R		45"-48"	24 V.D.C.
OP51-0348L/R		45"-48"	48 V.D.C.
OP51-0108L/R		45"-48"	110 V.D.C.
OP51-0104L/R		45"-48"	120 V.A.C.
OP51-0100L/R		45"-48"	240 V.A.C.

25" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0349L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0353L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0357L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0117L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0113L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0109L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0350L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0354L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0358L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0118L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0114L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0110L/R	35"-39"	35"-39"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0351L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0355L/R	40"-42"	40"-44"	24 V.D.C.
OP51-0359L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0119L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0115L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0111L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0352L/R		45"-48"	24 V.A.C.
OP51-0356L/R		45"-48"	24 V.D.C.
OP51-0360L/R		45"-48"	48 V.D.C.
OP51-0120L/R		45"-48"	110 V.D.C.
OP51-0116L/R		45"-48"	120 V.A.C.
OP51-0112L/R		45"-48"	240 V.A.C.

29" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0361L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0365L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0369L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0129L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0125L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0121L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0362L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0366L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0370L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0130L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0126L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0122L/R	35"-39"	35"-39"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0363L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0367L/R	40"-42"	40"-44"	24 V.D.C.
OP51-0371L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0131L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0127L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0123L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0364L/R		45"-48"	24 V.A.C.
OP51-0368L/R		45"-48"	24 V.D.C.
OP51-0372L/R		45"-48"	48 V.D.C.
OP51-0132L/R		45"-48"	110 V.D.C.
OP51-0128L/R		45"-48"	120 V.A.C.
OP51-0124L/R		45"-48"	240 V.A.C.

(*) Special Engineering Required

Operator Assemblies

MODCTL - Conventional

Single & Two Speed - 220 V.D.C. - High Cab

33" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0373L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0377L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0381L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0141L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0137L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0133L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0374L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0378L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0382L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0142L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0138L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0134L/R	35"-39"	35"-39"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0375L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0379L/R	40"-42"	40"-44"	24 V.D.C.
OP51-0383L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0143L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0139L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0135L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0376L/R		45"-48"	24 V.A.C.
OP51-0380L/R		45"-48"	24 V.D.C.
OP51-0384L/R		45"-48"	48 V.D.C.
OP51-0144L/R		45"-48"	110 V.D.C.
OP51-0140L/R		45"-48"	120 V.A.C.
OP51-0136L/R		45"-48"	240 V.A.C.

37" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0385L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0389L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0393L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0153L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0149L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0145L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0386L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0390L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0394L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0154L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0150L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0146L/R	35"-39"	35"-39"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0387L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0391L/R	40"-42"	40"-44"	24 V.D.C.
OP51-0395L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0155L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0151L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0147L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0388L/R		45"-48"	24 V.A.C.
OP51-0392L/R		45"-48"	24 V.D.C.
OP51-0396L/R		45"-48"	48 V.D.C.
OP51-0156L/R		45"-48"	110 V.D.C.
OP51-0152L/R		45"-48"	120 V.A.C.
OP51-0148L/R		45"-48"	240 V.A.C.

41" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP51-0397L/R	30"-34"	30"-34"	24 V.A.C.
OP51-0401L/R	30"-34"	30"-34"	24 V.D.C.
OP51-0405L/R	30"-34"	30"-34"	48 V.D.C.
OP51-0165L/R	30"-34"	30"-34"	110 V.D.C.
OP51-0161L/R	30"-34"	30"-34"	120 V.A.C.
OP51-0157L/R	30"-34"	30"-34"	240 V.A.C.
OP51-0398L/R	35"-39"	35"-39"	24 V.A.C.
OP51-0402L/R	35"-39"	35"-39"	24 V.D.C.
OP51-0406L/R	35"-39"	35"-39"	48 V.D.C.
OP51-0166L/R	35"-39"	35"-39"	110 V.D.C.
OP51-0162L/R	35"-39"	35"-39"	120 V.A.C.
OP51-0158L/R	35"-39"	35"-39"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP51-0399L/R	40"-42"	40"-44"	24 V.A.C.
OP51-0403L/R	40"-42"	40"-44"	24 V.D.C.
OP51-0407L/R	40"-42"	40"-44"	48 V.D.C.
OP51-0167L/R	40"-42"	40"-44"	110 V.D.C.
OP51-0163L/R	40"-42"	40"-44"	120 V.A.C.
OP51-0159L/R	40"-42"	40"-44"	240 V.A.C.
OP51-0400L/R		45"-48"	24 V.A.C.
OP51-0404L/R		45"-48"	24 V.D.C.
OP51-0408L/R		45"-48"	48 V.D.C.
OP51-0168L/R		45"-48"	110 V.D.C.
OP51-0164L/R		45"-48"	120 V.A.C.
OP51-0160L/R		45"-48"	240 V.A.C.

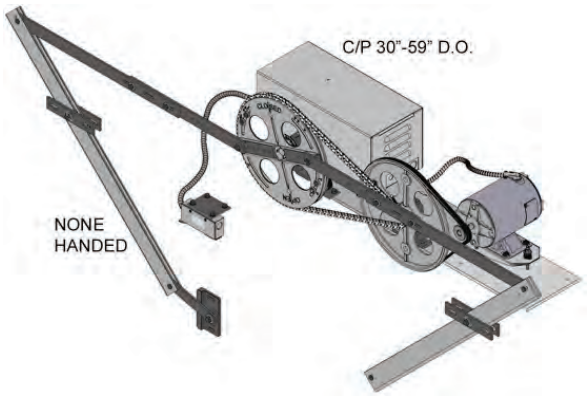
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODCTL - Conventional

Center Parting



Special Note:
- Gate switch **(extra charge)**
- 120 V.A.C./D.C. is available upon request. Contact G.A.L. sales department.
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MODCTL" operator includes: door drive arm assembly, nudging & gate switch
- Center parting geared car doors replacement for OTIS operators (6970, 7660, 7300, 7770.....) includes drive arm and door link and bracket "OP113"
- Basic operator requires (4) wires excluding open and close relays, open and close limits and gate switch. Nudging requires (1) additional wire
- Up to 1 1/2 foot per second opening
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 208 to 230 V.A.C./D.C. or 120 V.A.C./D.C.
- Operator wiring diagram L-7632
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5
- Mounting hardware Part No. OP1-0040N

Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	C/P	Relay Voltage
OP52-0237N	30"-33"	24 V.A.C.
OP52-0242N	30"-33"	24 V.D.C.
OP52-0247N	30"-33"	48 V.D.C.
OP52-0011N	30"-33"	110 V.D.C.
OP52-0006N	30"-33"	120 V.A.C.
OP52-0001N	30"-33"	240 V.A.C.
OP52-0238N	34"-39"	24 V.A.C.
OP52-0243N	34"-39"	24 V.D.C.
OP52-0248N	34"-39"	48 V.D.C.
OP52-0012N	34"-39"	110 V.D.C.

Part No.	C/P	Relay Voltage
OP52-0007N	34"-39"	120 V.A.C.
OP52-0002N	34"-39"	240 V.A.C.
OP52-0239N	40"-49"	24 V.A.C.
OP52-0244N	40"-49"	24 V.D.C.
OP52-0249N	40"-49"	48 V.D.C.
OP52-0013N	40"-49"	110 V.D.C.
OP52-0008N	40"-49"	120 V.A.C.
OP52-0003N	40"-49"	240 V.A.C.
OP57-0079N	49"	110 V.D.C.

17" Header Height

Part No.	C/P	Relay Voltage
OP57-0080N	50"-51"	110 V.D.C.
OP52-0240N	50"-54"	24 V.A.C.
OP52-0245N	50"-54"	24 V.D.C.
OP52-0250N	50"-54"	48 V.D.C.
OP52-0014N	50"-54"	110 V.D.C.
OP52-0009N	50"-54"	120 V.A.C.
OP52-0004N	50"-54"	240 V.A.C.

Part No.	C/P	Relay Voltage
OP52-0241N	55"-59"	24 V.A.C.
OP52-0246N	55"-59"	24 V.D.C.
OP52-0251N	55"-59"	48 V.D.C.
OP52-0015N	55"-59"	110 V.D.C.
OP52-0010N	55"-59"	120 V.A.C.
OP52-0005N	55"-59"	240 V.A.C.

(*) Special Engineering Required

Operator Assemblies

MODCTL - Conventional

Center Parting - 220 V.D.C. - High Cab

19" Header Height

Part No.	C/P	Relay Voltage	Part No.	C/P	Relay Voltage
OP52-0267N	30"-33"	24 V.A.C.	OP52-0043N	40"-44"	110 V.D.C.
OP52-0272N	30"-33"	24 V.D.C.	OP52-0038N	40"-44"	120 V.A.C.
OP52-0277N	30"-33"	48 V.D.C.	OP52-0033N	40"-44"	240 V.A.C.
OP52-0041N	30"-33"	110 V.D.C.	OP52-0270N	45"-49"	24 V.A.C.
OP52-0036N	30"-33"	120 V.A.C.	OP52-0275N	45"-49"	24 V.D.C.
OP52-0031N	30"-33"	240 V.A.C.	OP52-0280N	45"-49"	48 V.D.C.
OP52-0268N	34"-39"	24 V.A.C.	OP52-0044N	45"-49"	110 V.D.C.
OP52-0273N	34"-39"	24 V.D.C.	OP52-0039N	45"-49"	120 V.A.C.
OP52-0278N	34"-39"	48 V.D.C.	OP52-0034N	45"-49"	240 V.A.C.
OP52-0042N	34"-39"	110 V.D.C.	OP52-0271N	50"-53"	24 V.A.C.
OP52-0037N	34"-39"	120 V.A.C.	OP52-0276N	50"-53"	24 V.D.C.
OP52-0032N	34"-39"	240 V.A.C.	OP52-0281N	50"-53"	48 V.D.C.
OP52-0269N	40"-44"	24 V.A.C.	OP52-0045N	50"-53"	110 V.D.C.
OP52-0274N	40"-44"	24 V.D.C.	OP52-0040N	50"-53"	120 V.A.C.
OP52-0279N	40"-44"	48 V.D.C.	OP52-0035N	50"-53"	240 V.A.C.

23" Header Height

Part No.	C/P	Relay Voltage	Part No.	C/P	Relay Voltage
OP52-0282N	30"-33"	24 V.A.C.	OP52-0058N	40"-44"	110 V.D.C.
OP52-0287N	30"-33"	24 V.D.C.	OP52-0053N	40"-44"	120 V.A.C.
OP52-0292N	30"-33"	48 V.D.C.	OP52-0048N	40"-44"	240 V.A.C.
OP52-0056N	30"-33"	110 V.D.C.	OP52-0285N	45"-49"	24 V.A.C.
OP52-0051N	30"-33"	120 V.A.C.	OP52-0290N	45"-49"	24 V.D.C.
OP52-0046N	30"-33"	240 V.A.C.	OP52-0295N	45"-49"	48 V.D.C.
OP52-0283N	34"-39"	24 V.A.C.	OP52-0059N	45"-49"	110 V.D.C.
OP52-0288N	34"-39"	24 V.D.C.	OP52-0054N	45"-49"	120 V.A.C.
OP52-0293N	34"-39"	48 V.D.C.	OP52-0049N	45"-49"	240 V.A.C.
OP52-0057N	34"-39"	110 V.D.C.	OP52-0286N	50"-53"	24 V.A.C.
OP52-0052N	34"-39"	120 V.A.C.	OP52-0291N	50"-53"	24 V.D.C.
OP52-0047N	34"-39"	240 V.A.C.	OP52-0296N	50"-53"	48 V.D.C.
OP52-0284N	40"-44"	24 V.A.C.	OP52-0060N	50"-53"	110 V.D.C.
OP52-0289N	40"-44"	24 V.D.C.	OP52-0055N	50"-53"	120 V.A.C.
OP52-0294N	40"-44"	48 V.D.C.	OP52-0050N	50"-53"	240 V.A.C.

27" Header Height

Part No.	C/P	Relay Voltage	Part No.	C/P	Relay Voltage
OP52-0297N	30"-33"	24 V.A.C.	OP52-0299N	45"-49"	24 V.A.C.
OP52-0301N	30"-33"	24 V.D.C.	OP52-0303N	45"-49"	24 V.D.C.
OP52-0305N	30"-33"	48 V.D.C.	OP52-0307N	45"-49"	48 V.D.C.
OP52-0069N	30"-33"	110 V.D.C.	OP52-0071N	45"-49"	110 V.D.C.
OP52-0065N	30"-33"	120 V.A.C.	OP52-0067N	45"-49"	120 V.A.C.
OP52-0061N	30"-33"	240 V.A.C.	OP52-0063N	45"-49"	240 V.A.C.
OP52-0298N	40"-44"	24 V.A.C.	OP52-0300N	50"-53"	24 V.A.C.
OP52-0302N	40"-44"	24 V.D.C.	OP52-0304N	50"-53"	24 V.D.C.
OP52-0306N	40"-44"	48 V.D.C.	OP52-0308N	50"-53"	48 V.D.C.
OP52-0070N	40"-44"	110 V.D.C.	OP52-0072N	50"-53"	110 V.D.C.
OP52-0066N	40"-44"	120 V.A.C.	OP52-0068N	50"-53"	120 V.A.C.
OP52-0062N	40"-44"	240 V.A.C.	OP52-0064N	50"-53"	240 V.A.C.

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODCTL - Conventional

Center Parting - 220 V.D.C. - High Cab

31" Header Height

Part No.	C/P	Relay Voltage	Part No.	C/P	Relay Voltage
OP52-0309N	30"-33"	24 V.A.C.	OP52-0085N	40"-44"	110 V.D.C.
OP52-0314N	30"-33"	24 V.D.C.	OP52-0080N	40"-44"	120 V.A.C.
OP52-0319N	30"-33"	48 V.D.C.	OP52-0075N	40"-44"	240 V.A.C.
OP52-0078N	30"-33"	120 V.A.C.	OP52-0312N	45"-49"	24 V.A.C.
OP52-0073N	30"-33"	240 V.A.C.	OP52-0317N	45"-49"	24 V.D.C.
OP52-0083N	30"-34"	110 V.D.C.	OP52-0322N	45"-49"	48 V.D.C.
OP52-0310N	34"-39"	24 V.A.C.	OP52-0086N	45"-49"	110 V.D.C.
OP52-0315N	34"-39"	24 V.D.C.	OP52-0081N	45"-49"	120 V.A.C.
OP52-0320N	34"-39"	48 V.D.C.	OP52-0076N	45"-49"	240 V.A.C.
OP52-0084N	34"-39"	110 V.D.C.	OP52-0313N	50"-53"	24 V.A.C.
OP52-0079N	34"-39"	120 V.A.C.	OP52-0318N	50"-53"	24 V.D.C.
OP52-0074N	34"-39"	240 V.A.C.	OP52-0323N	50"-53"	48 V.D.C.
OP52-0311N	40"-44"	24 V.A.C.	OP52-0087N	50"-53"	110 V.D.C.
OP52-0316N	40"-44"	24 V.D.C.	OP52-0082N	50"-53"	120 V.A.C.
OP52-0321N	40"-44"	48 V.D.C.	OP52-0077N	50"-53"	240 V.A.C.

35" Header Height

Part No.	C/P	Relay Voltage	Part No.	C/P	Relay Voltage
OP52-0324N	30"-33"	24 V.A.C.	OP52-0100N	40"-44"	110 V.D.C.
OP52-0329N	30"-33"	24 V.D.C.	OP52-0095N	40"-44"	120 V.A.C.
OP52-0334N	30"-33"	48 V.D.C.	OP52-0090N	40"-44"	240 V.A.C.
OP52-0098N	30"-33"	110 V.D.C.	OP52-0327N	45"-49"	24 V.A.C.
OP52-0093N	30"-33"	120 V.A.C.	OP52-0332N	45"-49"	24 V.D.C.
OP52-0088N	30"-33"	240 V.A.C.	OP52-0337N	45"-49"	48 V.D.C.
OP52-0325N	34"-39"	24 V.A.C.	OP52-0101N	45"-49"	110 V.D.C.
OP52-0330N	34"-39"	24 V.D.C.	OP52-0096N	45"-49"	120 V.A.C.
OP52-0335N	34"-39"	48 V.D.C.	OP52-0091N	45"-49"	240 V.A.C.
OP52-0099N	34"-39"	110 V.D.C.	OP52-0328N	50"-53"	24 V.A.C.
OP52-0094N	34"-39"	120 V.A.C.	OP52-0333N	50"-53"	24 V.D.C.
OP52-0089N	34"-39"	240 V.A.C.	OP52-0338N	50"-53"	48 V.D.C.
OP52-0326N	40"-44"	24 V.A.C.	OP52-0102N	50"-53"	110 V.D.C.
OP52-0331N	40"-44"	24 V.D.C.	OP52-0097N	50"-53"	120 V.A.C.
OP52-0336N	40"-44"	48 V.D.C.	OP52-0092N	50"-53"	240 V.A.C.

39" Header Height

Part No.	C/P	Relay Voltage	Part No.	C/P	Relay Voltage
OP52-0339N	30"-33"	24 V.A.C.	OP52-0115N	40"-44"	110 V.D.C.
OP52-0344N	30"-33"	24 V.D.C.	OP52-0110N	40"-44"	120 V.A.C.
OP52-0349N	30"-33"	48 V.D.C.	OP52-0105N	40"-44"	240 V.A.C.
OP52-0113N	30"-33"	110 V.D.C.	OP52-0342N	45"-49"	24 V.A.C.
OP52-0108N	30"-33"	120 V.A.C.	OP52-0347N	45"-49"	24 V.D.C.
OP52-0103N	30"-33"	240 V.A.C.	OP52-0352N	45"-49"	48 V.D.C.
OP52-0340N	34"-39"	24 V.A.C.	OP52-0116N	45"-49"	110 V.D.C.
OP52-0345N	34"-39"	24 V.D.C.	OP52-0111N	45"-49"	120 V.A.C.
OP52-0350N	34"-39"	48 V.D.C.	OP52-0106N	45"-49"	240 V.A.C.
OP52-0114N	34"-39"	110 V.D.C.	OP52-0343N	50"-53"	24 V.A.C.
OP52-0109N	34"-39"	120 V.A.C.	OP52-0348N	50"-53"	24 V.D.C.
OP52-0104N	34"-39"	240 V.A.C.	OP52-0353N	50"-53"	48 V.D.C.
OP52-0341N	40"-44"	24 V.A.C.	OP52-0117N	50"-53"	110 V.D.C.
OP52-0346N	40"-44"	24 V.D.C.	OP52-0112N	50"-53"	120 V.A.C.
OP52-0351N	40"-44"	48 V.D.C.	OP52-0107N	50"-53"	240 V.A.C.

(*) Special Engineering Required

Operator Assemblies

MODCTL - Conventional

Center Parting - 220 V.D.C. - High Cab

43” Header Height

Part No.	C/P	Relay Voltage
OP52-0354N	30”-33”	24 V.A.C.
OP52-0359N	30”-33”	24 V.D.C.
OP52-0364N	30”-33”	48 V.D.C.
OP52-0128N	30”-33”	110 V.D.C.
OP52-0123N	30”-33”	120 V.A.C.
OP52-0118N	30”-33”	240 V.A.C.
OP52-0355N	34”-39”	24 V.A.C.
OP52-0360N	34”-39”	24 V.D.C.
OP52-0365N	34”-39”	48 V.D.C.
OP52-0129N	34”-39”	110 V.D.C.
OP52-0124N	34”-39”	120 V.A.C.
OP52-0119N	34”-39”	240 V.A.C.
OP52-0356N	40”-44”	24 V.A.C.
OP52-0361N	40”-44”	24 V.D.C.
OP52-0366N	40”-44”	48 V.D.C.

Part No.	C/P	Relay Voltage
OP52-0130N	40”-44”	110 V.D.C.
OP52-0125N	40”-44”	120 V.A.C.
OP52-0120N	40”-44”	240 V.A.C.
OP52-0357N	45”-49”	24 V.A.C.
OP52-0362N	45”-49”	24 V.D.C.
OP52-0367N	45”-49”	48 V.D.C.
OP52-0131N	45”-49”	110 V.D.C.
OP52-0126N	45”-49”	120 V.A.C.
OP52-0121N	45”-49”	240 V.A.C.
OP52-0358N	50”-53”	24 V.A.C.
OP52-0363N	50”-53”	24 V.D.C.
OP52-0368N	50”-53”	48 V.D.C.
OP52-0132N	50”-53”	110 V.D.C.
OP52-0127N	50”-53”	120 V.A.C.
OP52-0122N	50”-53”	240 V.A.C.

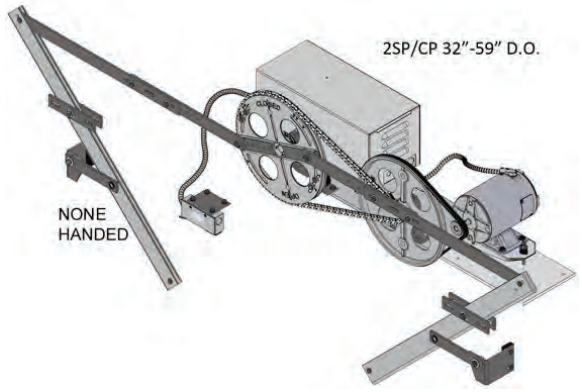
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODCTL - Conventional

Two Speed Center Parting



Special Note:
- Gate switch **(extra charge)**
- 120 V.A.C./D.C. is available upon request. Contact G.A.L. sales department.
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)*

  doors are sold separately

- "MODCTL" operator includes: door drive arm assembly, nudging & gate switch
- Center parting geared car doors replacement for OTIS operators (6970, 7660, 7300, 7770.....) includes drive arm and door link and bracket "OP113"
- Basic operator requires (4) wires excluding open and close relays, open and close limits and gate switch. Nudging requires (1) additional wire
- Up to 1 1/2 foot per second opening
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 208 to 230 V.A.C./D.C. or 120 V.A.C./D.C.
- Operator wiring diagram L-7632
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5
- Mounting hardware Part No. OP1-0040N

Two Speed Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	2SP/CP	Relay Voltage
OP57-0071N	32"-33"	110 V.D.C.
OP57-0036N	32"-33"	120 V.A.C.
OP57-0001N	32"-33"	240 V.A.C.
OP57-0072N	34"	110 V.D.C.
OP57-0037N	34"	120 V.A.C.
OP57-0002N	34"	240 V.A.C.
OP57-0073N	35"-37"	110 V.D.C.
OP57-0038N	35"-37"	120 V.A.C.
OP57-0003N	35"-37"	240 V.A.C.
OP57-0074N	38"-39"	110 V.D.C.
OP57-0039N	38"-39"	120 V.A.C.
OP57-0004N	38"-39"	240 V.A.C.
OP57-0075N	40"-41"	110 V.D.C.

Part No.	2SP/CP	Relay Voltage
OP57-0040N	40"-41"	120 V.A.C.
OP57-0005N	40"-41"	240 V.A.C.
OP57-0076N	42"-44"	110 V.D.C.
OP57-0041N	42"-44"	120 V.A.C.
OP57-0006N	42"-44"	240 V.A.C.
OP57-0077N	45"-46"	110 V.D.C.
OP57-0042N	45"-46"	120 V.A.C.
OP57-0007N	45"-46"	240 V.A.C.
OP57-0078N	47"-48"	110 V.D.C.
OP57-0043N	47"-48"	120 V.A.C.
OP57-0008N	47"-48"	240 V.A.C.
OP57-0044N	49"	120 V.A.C.
OP57-0009N	49"	240 V.A.C.

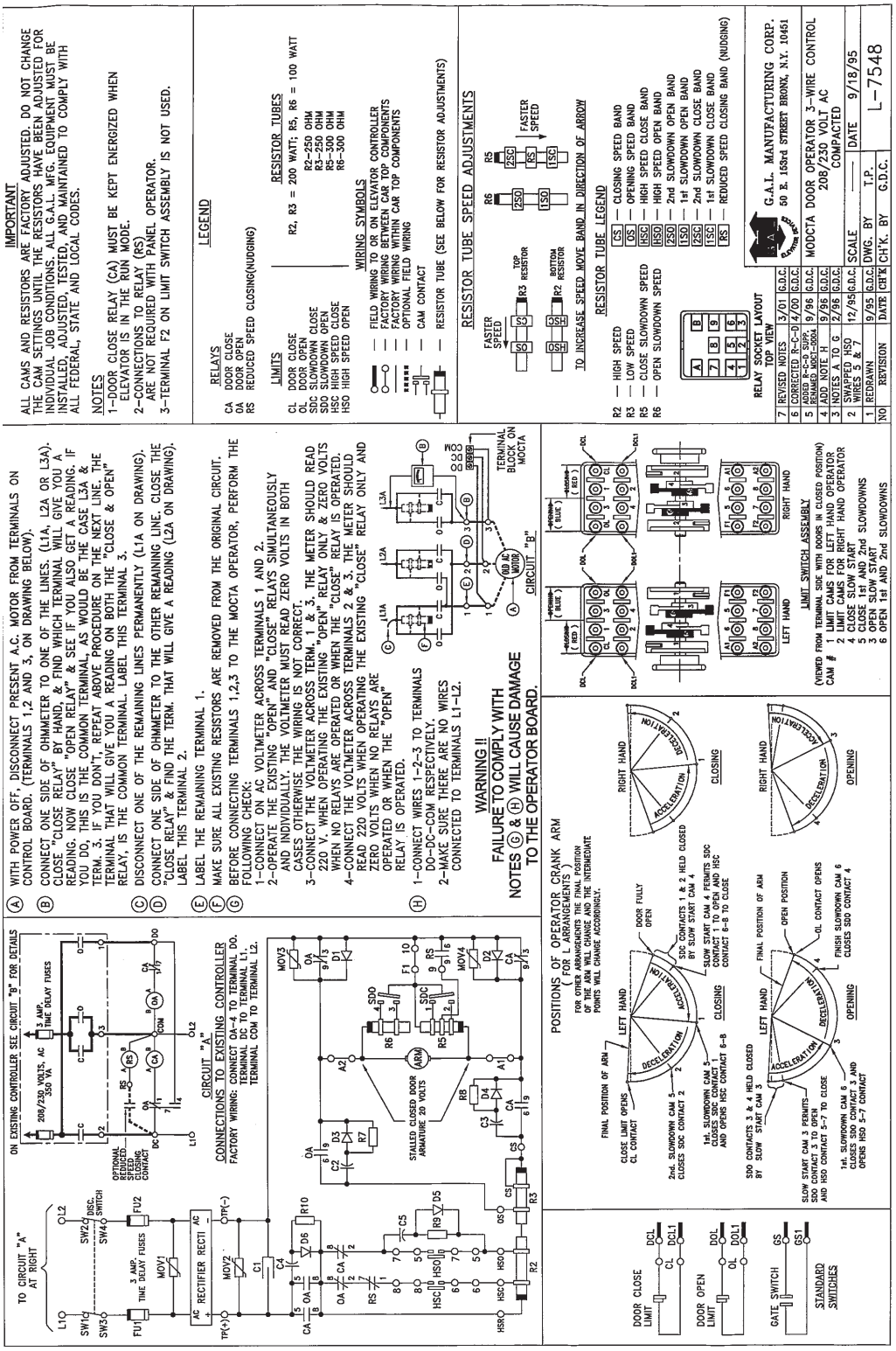
17" Header Height

Part No.	2SP/CP	Relay Voltage
OP57-0045N	50"-51"	120 V.A.C.
OP57-0010N	50"-51"	240 V.A.C.
OP57-0046N	52"-53"	120 V.A.C.
OP57-0011N	52"-53"	240 V.A.C.
OP57-0082N	54"	110 V.D.C.
OP57-0047N	54"	120 V.A.C.
OP57-0012N	54"	240 V.A.C.
OP57-0083N	55"-56"	110 V.D.C.

Part No.	2SP/CP	Relay Voltage
OP57-0048N	55"-56"	120 V.A.C.
OP57-0013N	55"-56"	240 V.A.C.
OP57-0084N	57"-58"	110 V.D.C.
OP57-0049N	57"-58"	120 V.A.C.
OP57-0014N	57"-58"	240 V.A.C.
OP57-0085N	59"	110 V.D.C.
OP57-0050N	59"	120 V.A.C.
OP57-0015N	59"	240 V.A.C.

(*) Special Engineering Required

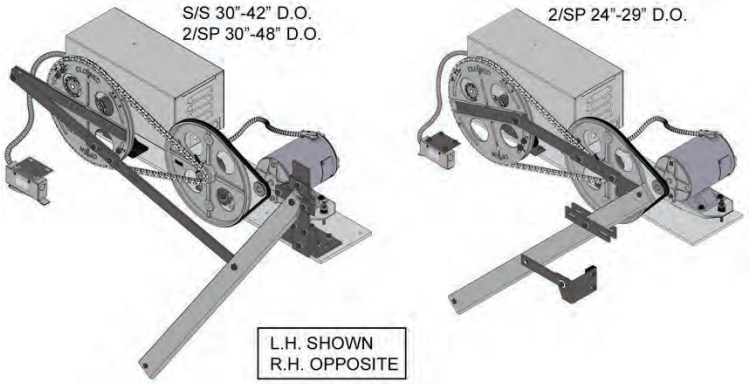
MODCTAL - Wiring Diagram



DOOR EQUIPMENT

Operator Assemblies

MODCTAL - Conventional



Special Note:
- "MODCTAL" operator is used to replace existing A.C. operator and controller that have only 3 wires for control
- Gate switch **(extra charge)**
- 120 V.A.C./D.C. is available upon request. Contact G.A.L. sales department.

- Operator includes: door drive arm assembly, nudging & gate switch
- Two speed small openings 24"-29" includes door drive arm assembly and slow door link & bracket
- Basic operator requires (3) wires excluding open and close relays, open and close limits and gate switch. Nudging requires (1) additional wire
- Up to 1 1/2 foot per second opening
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 208 to 230 V.A.C./D.C. or 120 V.A.C./D.C.
- Operator wiring diagram L-7548
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5
- Mounting hardware Part No. OP1-0040N

Single & Two Speed - 220 V.D.C. - Standard

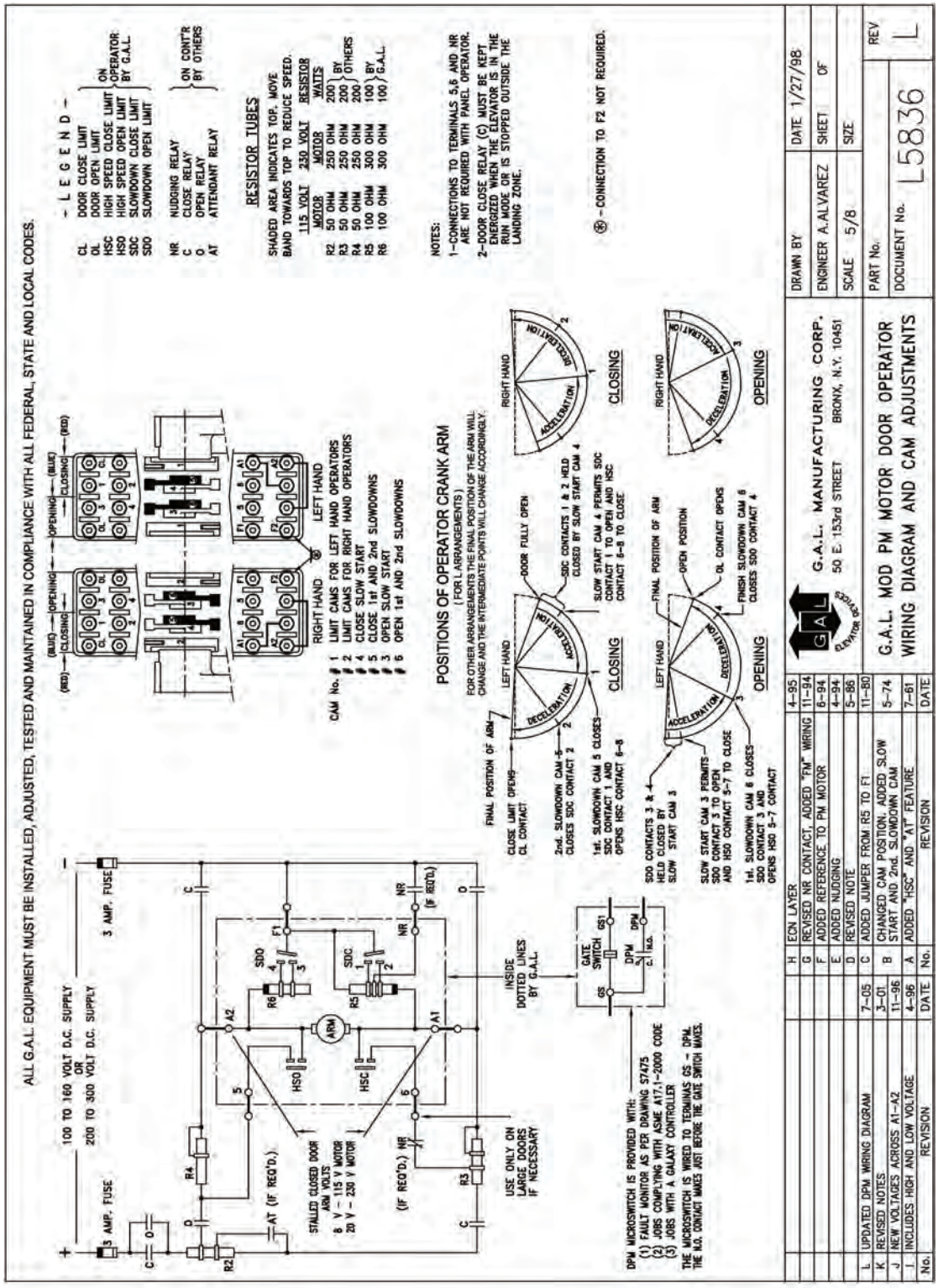
13" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP78-0001L/R	22"-24"		240 V.A.C.
OP78-0002L/R	25"-29"		240 V.A.C.
OP78-0003L/R	30"-34"	30"-34"	240 V.A.C.
OP78-0004L/R	35"-39"	35"-39"	240 V.A.C.
OP78-0005L/R	40"-42"	40"-44"	240 V.A.C.
OP78-0006L/R		45"-48"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP78-0007L/R*		24"	240 V.A.C.
OP78-0008L/R*		25"	240 V.A.C.
OP78-0009L/R*		26"	240 V.A.C.
OP78-0010L/R*		27"	240 V.A.C.
OP78-0011L/R*		28"	240 V.A.C.
OP78-0012L/R*		29"	240 V.A.C.

(*) Special Engineering Required

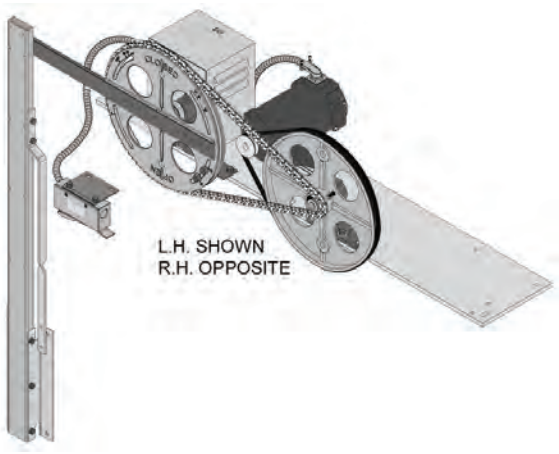
MOD - Wiring Diagram



DOOR EQUIPMENT

Operator Assemblies

MOD-LDC Shoe Drive



- "MOD" Operator includes: crank arm, nudging, gate switch & "LDC" Shoe
- Up to 1 1/2 foot per second opening
- Basic operator requires (5) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Operator wiring diagram L-5836 Rev. L
- CSA Certificate No. LR-1304-27 comply with CAN/CSA-B44.1-M91/ ASME-A17.5
- Mounting Hardware PART No. OP1-0040N

Special Note:
- LDC Shoe 36 3/4" Overall. For 41", 46", 49" overall shoe contact G.A.L. sales for order detail
- Gate switch **(extra charge)**

Single, Two, & Three Speed - 220 V.D.C.

Part No.	S/S	2/SP	3/SP
OP42-0001L/R	26"-31"		
OP42-0002L/R	32"-37"		
OP42-0003L/R	38"-43"		
OP42-0004L/R	44"-49"		
OP42-0009L/R		26"-31"	

Part No.	S/S	2/SP	3/SP
OP42-0010L/R		32"-37"	
OP42-0011L/R		38"-43"	
OP42-0012L/R		44"-50"	
OP81-0001L/R*			30"-69"

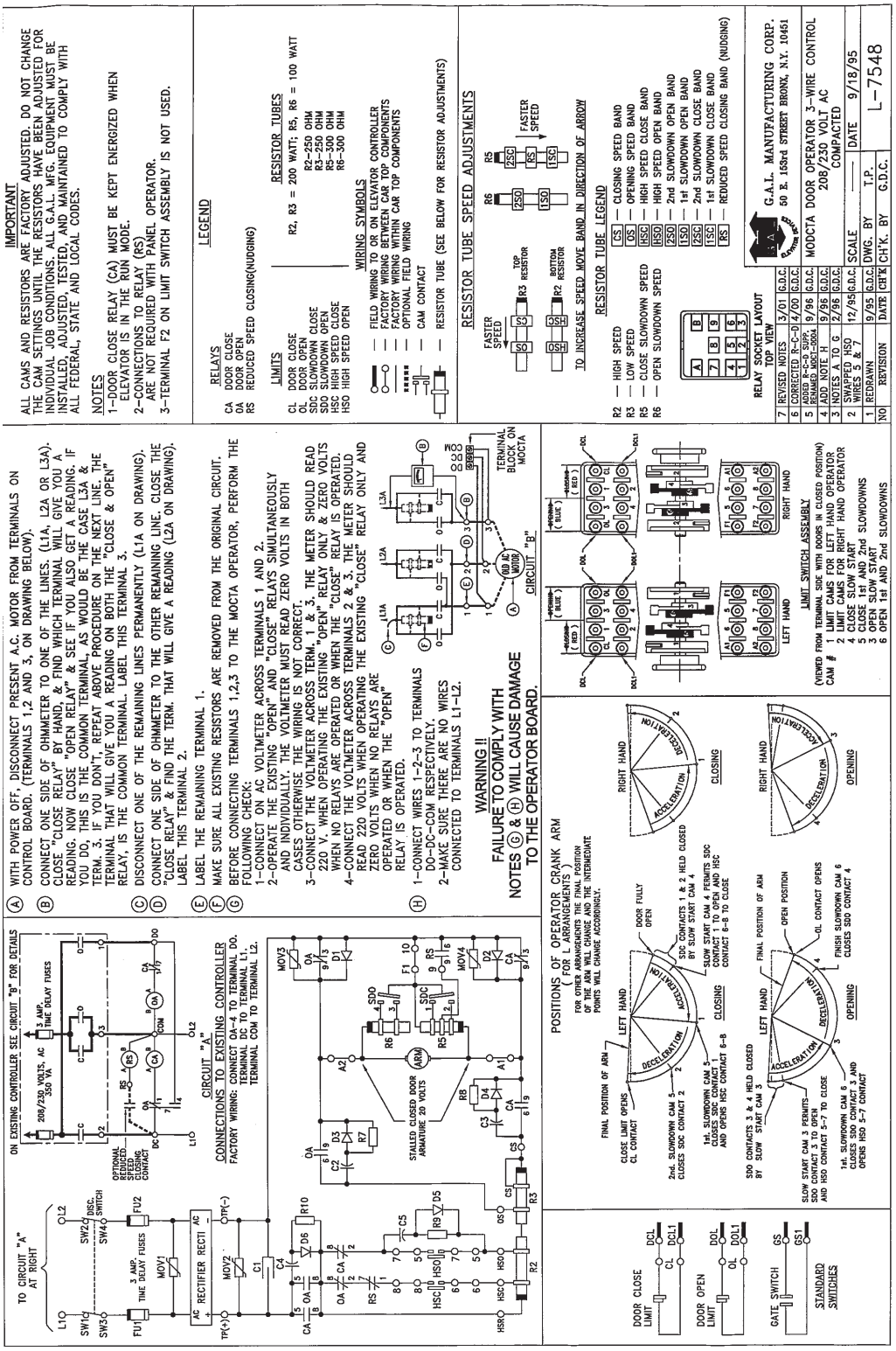
Single, Two, & Three Speed - 115 V.D.C.

Part No.	S/S	2/SP	3/SP
OP42-0005L/R	26"-31"		
OP42-0006L/R	32"-37"		
OP42-0007L/R	38"-43"		
OP42-0008L/R	44"-49"		
OP42-0013L/R		26"-31"	

Part No.	S/S	2/SP	3/SP
OP42-0014L/R		32"-37"	
OP42-0015L/R		38"-43"	
OP42-0016L/R		44"-50"	
OP81-0002L/R*			30"-69"

(*) Special Engineering Required

MODCT & MODCTA - Wiring Diagram

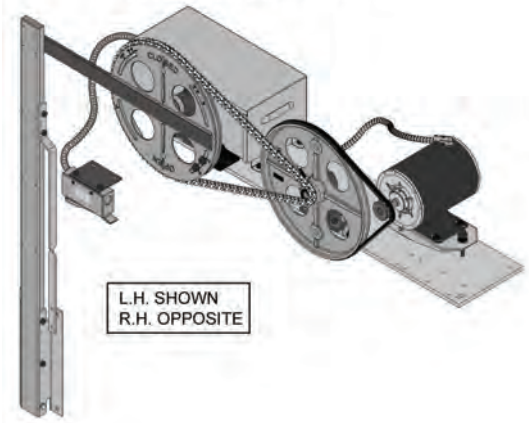


(*) Special Engineering Required

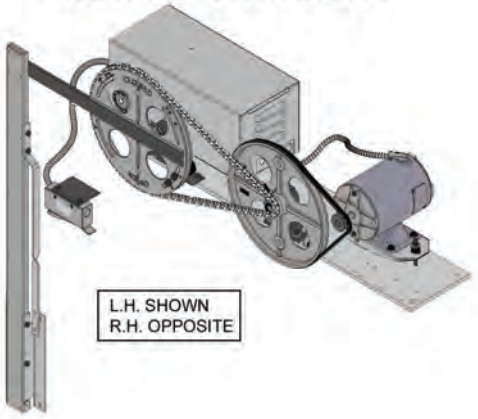
DOOR EQUIPMENT

Operator Assemblies

MOVFR-LDC II



MODCT & MODCTA



MOVFR-LDC II Shoe Drive

Single Speed - 208 V.A.C. - 1/2 HP Motor

Part No.	S/S
OP117-0001L/R	26”-49”

Two & Three Speed - 208 V.A.C. - 1/2 HP Motor

Part No.	2/SP	3/SP
OP117-0002L/R	26”-72”	26”-72”

MODCT LDC Shoe Drive

Single Speed - 220 V.D.C. - 1/6 HP Motor

Part No.	S/S	Relay Voltage
OP112-0001L/R*	26”-49”	240 V.A.C.

Two Speed - 220 V.D.C. - 1/6 HP Motor

Part No.	2/SP	Relay Voltage
OP112-0003L/R*	26”-49”	240 V.A.C.

MODCTA LDC Shoe Drive

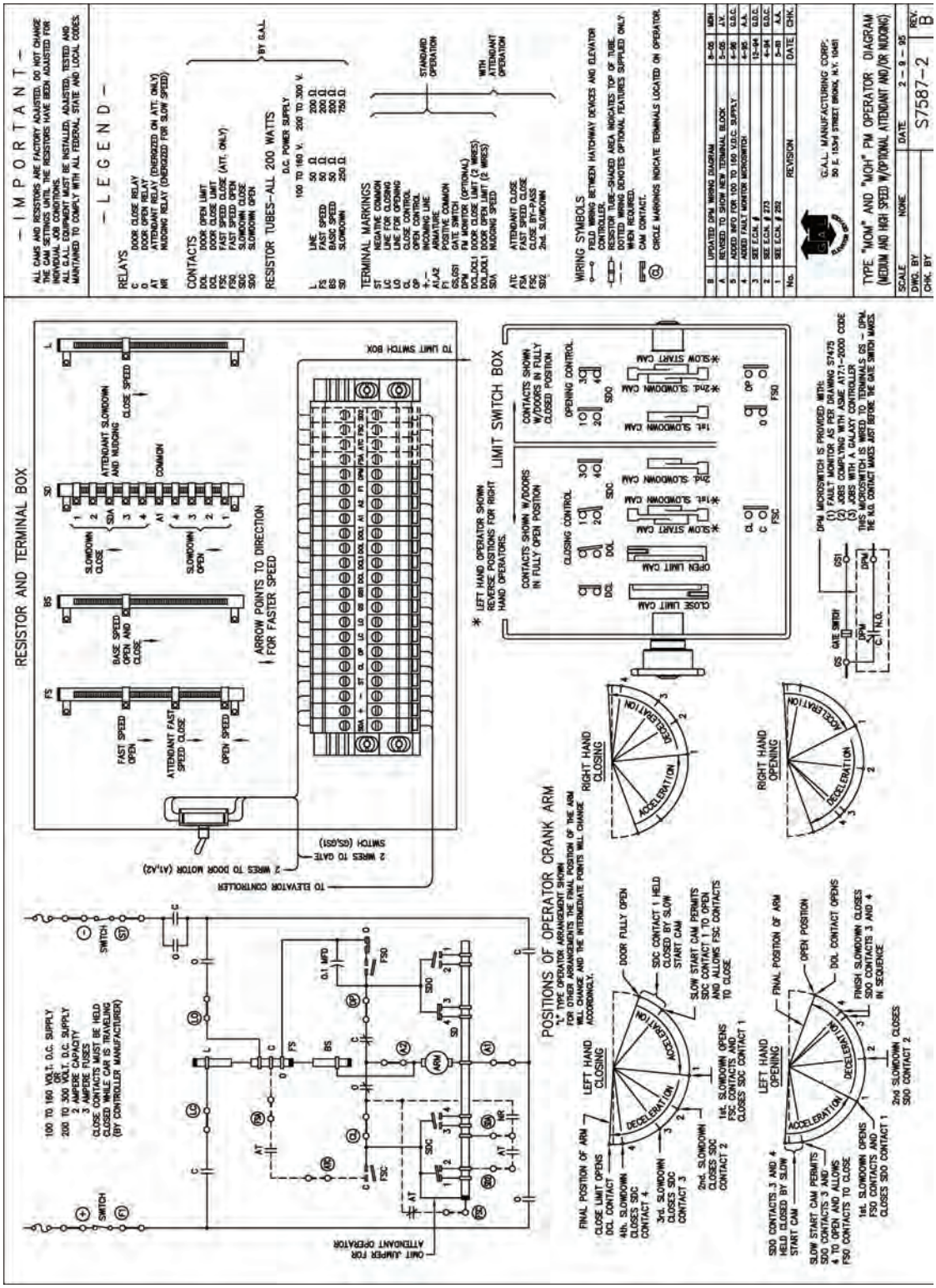
Single & Two Speed - 220 V.D.C. - 1/6 HP Motor

Part No.	S/S	2/SP	Relay Voltage
OP79-0001L/R*	26”-31”	26”-31”	240 V.A.C.
OP79-0002L/R*	32”-37”	32”-37”	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP79-0003L/R*	38”-43”	38”-43”	240 V.A.C.
OP79-0004L/R*	44”-49”	44”-49”	240 V.A.C.

(*) Special Engineering Required

MOHL - Wiring Diagram

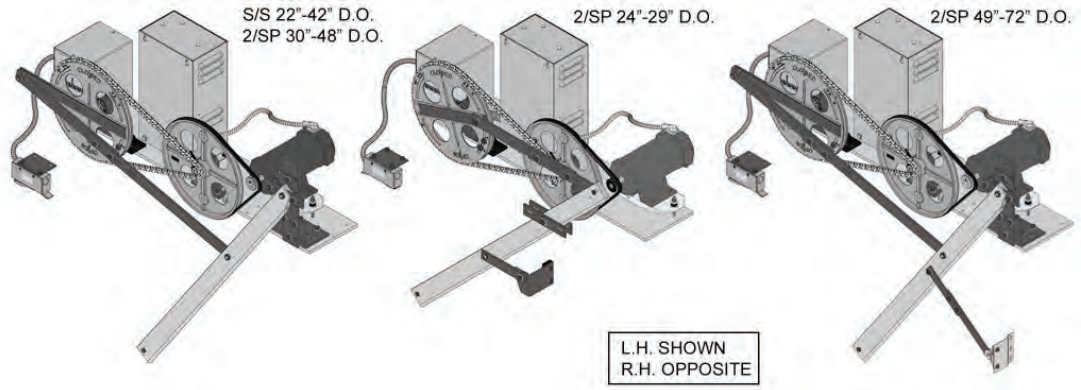


DOOR EQUIPMENT

Operator Assemblies

MOHL - Conventional

Single & Two Speed



- "MOHL" operator includes: door drive arm assembly, nudging & gate switch
- Up to 3 foot per second opening
- P.M. motor: 1/2 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Basic operator requires (10) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram S7587-2 Rev. B
- CSA Certificate NO. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5
- Mounting hardware Part No. OP1-0040N_

Special Note:

- Gate switch **(extra charge)**
- For 22"-29" D.O. contact G.A.L. sales or engineering department for details.
- 100 to 160 V.D.C. is available upon request. Contact G.A.L. sales department.

Single & Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	S/S	2/SP
OP3-0011L/R	30"-34"	30"-34"
OP3-0012L/R	35"-39"	35"-39"
OP3-0013L/R	40"-42"	40"-44"
OP3-0016L/R	43"-44"	
OP3-0010L/R	45"-48"	
OP3-0014L/R		45"-48"

15" Header Height

Part No.	2/SP
OP36-0008L/R	49"-52"
OP36-0009L/R	53"-56"

17" Header Height

Part No.	2/SP
OP36-0010L/R	57"-59"
OP36-0011L/R	60"
OP36-0012L/R	61"-64"

19" Header Height

Part No.	2/SP
OP36-0013L/R	65"-68"
OP36-0014L/R	69"-72"

(*) Special Engineering Required

Operator Assemblies

MOHL - Conventional

Single & Two Speed - 220 V.D.C. - High Cab

17" Header Height

Part No.	S/S	2/SP
OP3-0141L/R	30"-34"	30"-34"
OP3-0142L/R	35"-39"	35"-39"
OP3-0143L/R	40"-42"	40"-44"
OP3-0144L/R	43"-44"	
OP3-0145L/R	45"-48"	
OP3-0146L/R		45"-48"

21" Header Height

Part No.	S/S	2/SP
OP3-0153L/R	30"-34"	30"-34"
OP3-0154L/R	35"-39"	35"-39"
OP3-0155L/R	40"-42"	40"-44"
OP3-0156L/R	43"-44"	
OP3-0157L/R	45"-48"	
OP3-0158L/R		45"-48"

25" Header Height

Part No.	S/S	2/SP
OP3-0165L/R	30"-34"	30"-34"
OP3-0166L/R	35"-39"	35"-39"
OP3-0167L/R	40"-42"	40"-44"
OP3-0168L/R	43"-44"	
OP3-0169L/R	45"-48"	
OP3-0170L/R		45"-48"

29" Header Height

Part No.	S/S	2/SP
OP3-0177L/R	30"-34"	30"-34"
OP3-0178L/R	35"-39"	35"-39"
OP3-0179L/R	40"-42"	40"-42"
OP3-0180L/R	43"-44"	
OP3-0181L/R	45"-48"	
OP3-0182L/R		45"-48"

33" Header Height

Part No.	S/S	2/SP
OP3-0189L/R	30"-34"	30"-34"
OP3-0190L/R	35"-39"	35"-39"
OP3-0191L/R	40"-42"	40"-44"
OP3-0192L/R	43"-44"	
OP3-0193L/R	45"-48"	
OP3-0194L/R		45"-48"

37" Header Height

Part No.	S/S	2/SP
OP3-0201L/R	30"-34"	30"-34"
OP3-0202L/R	35"-39"	35"-39"
OP3-0203L/R	40"-42"	40"-44"
OP3-0204L/R	43"-44"	
OP3-0205L/R	45"-48"	
OP3-0206L/R		45"-48"

41" Header Height

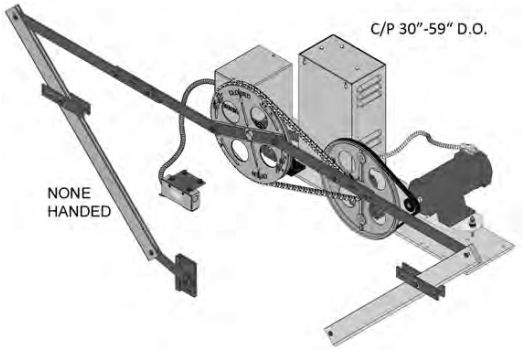
Part No.	S/S	2/SP
OP3-0213L/R	30"-34"	30"-34"
OP3-0214L/R	35"-39"	35"-39"
OP3-0215L/R	40"-42"	40"-44"
OP3-0216L/R	43"-44"	
OP3-0217L/R	45"-48"	
OP3-0218L/R		45"-48"

DOOR EQUIPMENT

Operator Assemblies

MOHL - Conventional ("MOML" Replacement)

Center Parting



MOML Operator with 1/4 HP motor has been discontinued. Use MOHL Operator with 1/2 HP motor as replacement.

Special Note:
- Gate switch **(extra charge)**
- 100 to 160 V.D.C. is available upon request. Contact G.A.L. sales department.
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MOHL" operator includes: door drive arm assembly, nudging & gate switch
- Up to 3 foot per second opening
- Basic operator requires (10) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- P.M. motor: 1/2 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Operator wiring diagram S7587-2 Rev. B
- CSA Certificate NO. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5
- Mounting hardware Part No. OP1-0040N

Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	C/P
OP4-0005N	30"-33"
OP4-0006N	34"-39"

Part No.	C/P
OP4-0007N	40"-49"

17" Header Height

Part No.	C/P
OP4-0008N	50"-54"

Part No.	C/P
OP4-0010N	55"-59"

Center Parting - 220 V.D.C. - High Cab

19" Header Height

Part No.	C/P
OP4-0089N	30"-33"
OP4-0090N	34"-39"
OP4-0091N	40"-44"
OP4-0092N	45"-49"
OP4-0093N	50"-53"

23" Header Height

Part No.	C/P
OP4-0099N	30"-33"
OP4-0100N	34"-39"
OP4-0101N	40"-44"
OP4-0102N	45"-49"
OP4-0103N	50"-53"

27" Header Height

Part No.	C/P
OP4-0109N	30"-33"
OP4-0110N	40"-44"
OP4-0111N	45"-49"
OP4-0112N	50"-53"

31" Header Height

Part No.	C/P
OP4-0117N	30"-33"
OP4-0118N	34"-39"
OP4-0119N	40"-44"
OP4-0120N	45"-49"
OP4-0121N	50"-53"

35" Header Height

Part No.	C/P
OP4-0127N	30"-33"
OP4-0128N	34"-39"
OP4-0129N	40"-44"
OP4-0130N	45"-49"
OP4-0131N	50"-53"

39" Header Height

Part No.	C/P
OP4-0137N	30"-33"
OP4-0138N	34"-39"
OP4-0139N	40"-44"
OP4-0140N	45"-49"
OP4-0141N	50"-53"

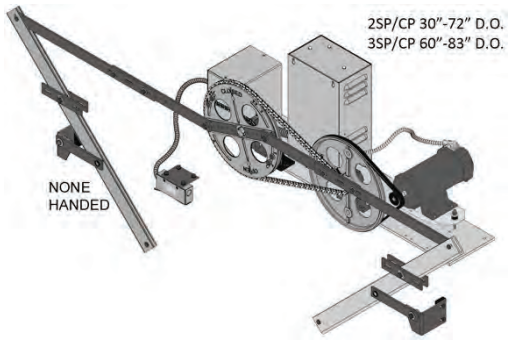
43" Header Height

Part No.	C/P
OP4-0147N	30"-33"
OP4-0148N	34"-39"
OP4-0149N	40"-44"
OP4-0150N	45"-49"
OP4-0151N	50"-53"

(*) Special Engineering Required

MOHL - Conventional ("MOML" Replacement)

Two and Three Speed Center Parting



Special Note:
- Gate switch **(extra charge)**
- 100 to 160 V.D.C. is available upon request. Contact G.A.L. sales department.
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MOHL" operator includes: door drive arm assembly, nudging & gate switch
- Up to 3 foot per second opening
- Basic operator requires (10) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- P.M. motor: 1/2 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Operator wiring diagram S7587-2 Rev. B
- CSA Certificate NO. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5
- Mounting hardware Part No. OP1-0040N

Two Speed Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	2SP/CP
OP38-0026N	32"-33"
OP38-0027N	34"
OP38-0028N	35"-37"
OP38-0029N	38"-39"
OP38-0030N	40"-41"
OP38-0031N	42"-44"
OP38-0032N	45"-46"
OP38-0033N	47"-48"
OP38-0034N	49"

17" Header Height

Part No.	2SP/CP
OP38-0035N	50"-51"
OP38-0036N	52"-53"
OP38-0037N	54"
OP38-0038N	55"-56"
OP38-0039N	57"-58"
OP38-0040N	59"
OP38-0041N	60"
OP38-0042N	61"-62"
OP38-0043N	63"
OP38-0044N	64"

19" Header Height

Part No.	2SP/CP
OP38-0045N	65"
OP38-0046N	66"-67"
OP38-0047N	68"
OP38-0048N	69"
OP38-0049N	70"-71"
OP38-0050N	72"

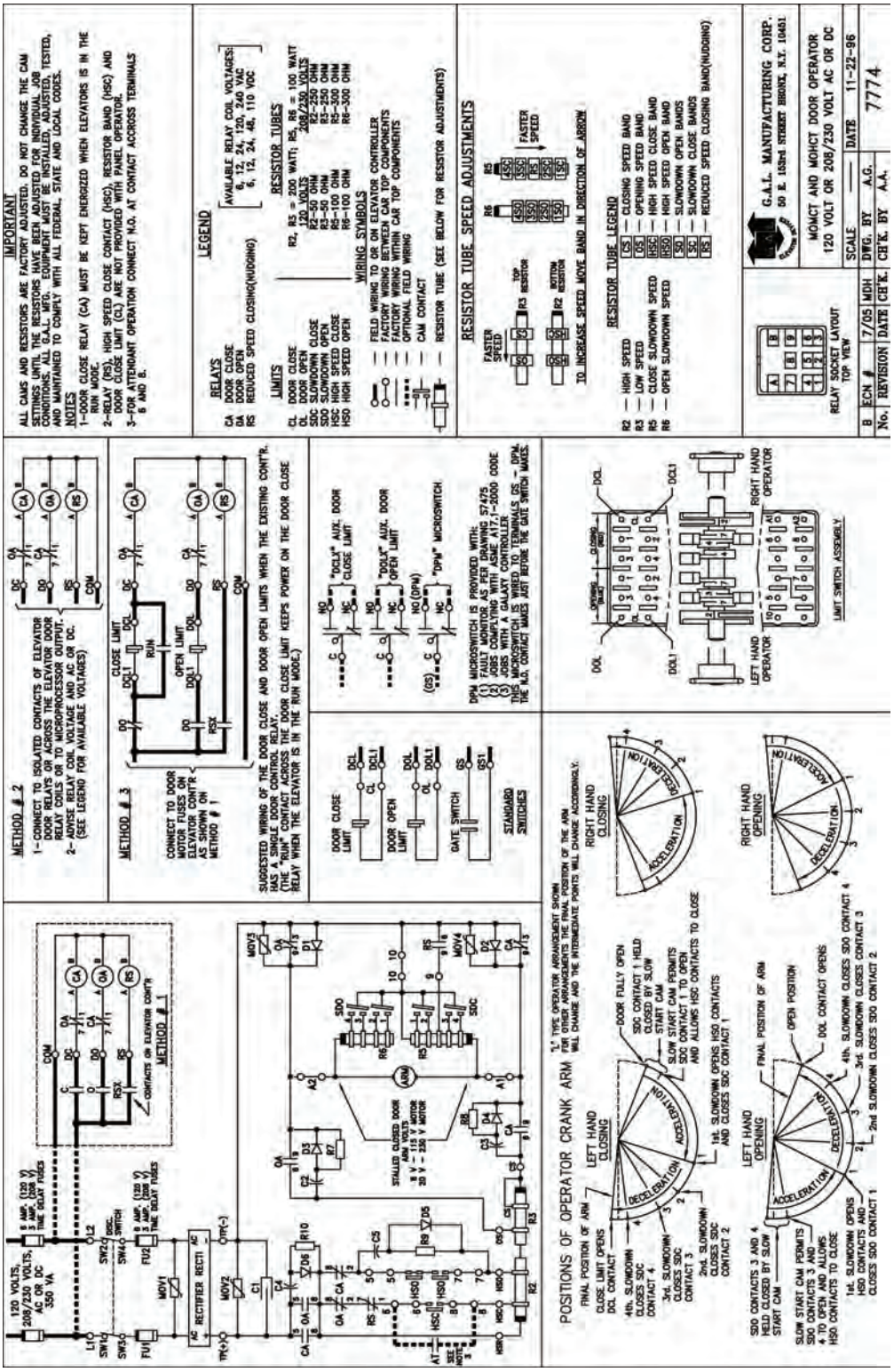
Three Speed Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	3SP/CP
OP109-0002N*	60"-83"

Operator Assemblies

MOHCTL - Wiring Diagram

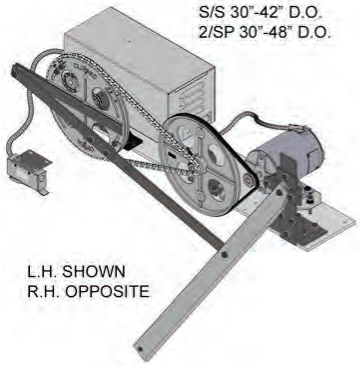


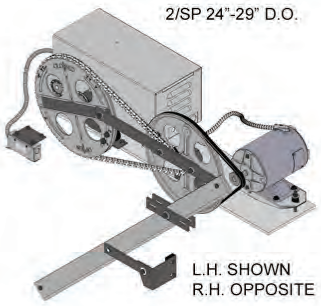
(*) Special Engineering Required

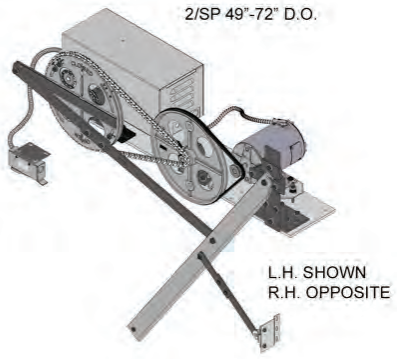
Operator Assemblies

MOHCTL - Conventional

Single & Two Speed







- "MOHCTL" operator includes: door drive arm assembly, nudging & gate switch
- Up to 3 foot per second opening
- P.M. motor: 1/2 HP 1140 RPM
- Power supply of 208 to 230 V.A.C./D.C. or 120 V.A.C./D.C.
- Basic operator requires (4) wires excluding open and close relays, open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram 7774
- CSA Certificate NO. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Special Note:
- Gate switch **(extra charge)**
- For 22"-29" D.O. contact G.A.L. sales or engineering department for details.
- 120 V.A.C./D.C. is available upon request. Contact G.A.L. sales department.

Single & Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0067L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0059L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0051L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0068L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0060L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0052L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0069L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0061L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0053L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0070L/R	43"-44"		110 V.D.C.
OP53-0062L/R	43"-44"		120 V.A.C.
OP53-0054L/R	43"-44"		240 V.A.C.
OP53-0071L/R	45"-48"		110 V.D.C.
OP53-0063L/R	45"-48"		120 V.A.C.
OP53-0055L/R	45"-48"		240 V.A.C.
OP53-0072L/R		45"-48"	110 V.D.C.
OP53-0064L/R		45"-48"	120 V.A.C.
OP53-0056L/R		45"-48"	240 V.A.C.

15" Header Height

Part No.	2/SP	Relay Voltage
OP56-0057L/R	49"-52"	110 V.D.C.
OP56-0050L/R	49"-52"	120 V.A.C.
OP56-0043L/R	49"-52"	240 V.A.C.

Part No.	2/SP	Relay Voltage
OP56-0058L/R	53"-56"	110 V.D.C.
OP56-0051L/R	53"-56"	120 V.A.C.
OP56-0044L/R	53"-56"	240 V.A.C.

17" Header Height

Part No.	2/SP	Relay Voltage
OP56-0059L/R	57"-59"	110 V.D.C.
OP56-0052L/R	57"-59"	120 V.A.C.
OP56-0045L/R	57"-59"	240 V.A.C.
OP56-0060L/R	60"	110 V.D.C.
OP56-0053L/R	60"	120 V.A.C.

Part No.	2/SP	Relay Voltage
OP56-0046L/R	60"	240 V.A.C.
OP56-0061L/R	61"-64"	110 V.D.C.
OP56-0054L/R	61"-64"	120 V.A.C.
OP56-0047L/R	61"-64"	240 V.A.C.

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MOHCTL - Conventional

Single & Two Speed - 220 V.D.C. - Standard

19" Header Height

Part No.	2/SP	Relay Voltage
OP56-0062L/R	65"-68"	110 V.D.C.
OP56-0055L/R	65"-68"	120 V.A.C.
OP56-0048L/R	65"-68"	240 V.A.C.

Part No.	2/SP	Relay Voltage
OP56-0063L/R	69"-72"	110 V.D.C.
OP56-0056L/R	69"-72"	120 V.A.C.
OP56-0049L/R	69"-72"	240 V.A.C.

Single & Two Speed - 220 V.D.C. - High Cab

17" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0433L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0427L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0421L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0434L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0428L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0422L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0435L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0429L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0423L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0436L/R	43"-44"		110 V.D.C.
OP53-0430L/R	43"-44"		120 V.A.C.
OP53-0424L/R	43"-44"		240 V.A.C.
OP53-0437L/R	45"-48"		110 V.D.C.
OP53-0431L/R	45"-48"		120 V.A.C.
OP53-0425L/R	45"-48"		240 V.A.C.
OP53-0438L/R		45"-48"	110 V.D.C.
OP53-0432L/R		45"-48"	120 V.A.C.
OP53-0426L/R		45"-48"	240 V.A.C.

21" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0451L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0445L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0439L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0452L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0446L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0440L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0453L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0447L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0441L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0454L/R	43"-44"		110 V.D.C.
OP53-0448L/R	43"-44"		120 V.A.C.
OP53-0442L/R	43"-44"		240 V.A.C.
OP53-0455L/R	45"-48"		110 V.D.C.
OP53-0449L/R	45"-48"		120 V.A.C.
OP53-0443L/R	45"-48"		240 V.A.C.
OP53-0456L/R		45"-48"	110 V.D.C.
OP53-0450L/R		45"-48"	120 V.A.C.
OP53-0444L/R		45"-48"	240 V.A.C.

25" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0469L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0463L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0457L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0470L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0464L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0458L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0471L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0465L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0459L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0472L/R	43"-44"		110 V.D.C.
OP53-0466L/R	43"-44"		120 V.A.C.
OP53-0460L/R	43"-44"		240 V.A.C.
OP53-0473L/R	45"-48"		110 V.D.C.
OP53-0467L/R	45"-48"		120 V.A.C.
OP53-0461L/R	45"-48"		240 V.A.C.
OP53-0474L/R		45"-48"	110 V.D.C.
OP53-0468L/R		45"-48"	120 V.A.C.
OP53-0462L/R		45"-48"	240 V.A.C.

(*) Special Engineering Required

Operator Assemblies

MOHCTL - Conventional

Single & Two Speed - 220 V.D.C. - High Cab

29" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0487L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0481L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0475L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0488L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0482L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0476L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0489L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0483L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0477L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0490L/R	43"-44"		110 V.D.C.
OP53-0484L/R	43"-44"		120 V.A.C.
OP53-0478L/R	43"-44"		240 V.A.C.
OP53-0491L/R	45"-48"		110 V.D.C.
OP53-0485L/R	45"-48"		120 V.A.C.
OP53-0479L/R	45"-48"		240 V.A.C.
OP53-0492L/R		45"-48"	110 V.D.C.
OP53-0486L/R		45"-48"	120 V.A.C.
OP53-0480L/R		45"-48"	240 V.A.C.

33" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0505L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0499L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0493L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0506L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0500L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0494L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0507L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0501L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0495L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0508L/R	43"-44"		110 V.D.C.
OP53-0502L/R	43"-44"		120 V.A.C.
OP53-0496L/R	43"-44"		240 V.A.C.
OP53-0509L/R	45"-48"		110 V.D.C.
OP53-0503L/R	45"-48"		120 V.A.C.
OP53-0497L/R	45"-48"		240 V.A.C.
OP53-0510L/R		45"-48"	110 V.D.C.
OP53-0504L/R		45"-48"	120 V.A.C.
OP53-0498L/R		45"-48"	240 V.A.C.

37" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0523L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0517L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0511L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0524L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0518L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0512L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0525L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0519L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0513L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0526L/R	43"-44"		110 V.D.C.
OP53-0520L/R	43"-44"		120 V.A.C.
OP53-0514L/R	43"-44"		240 V.A.C.
OP53-0527L/R	45"-48"		110 V.D.C.
OP53-0521L/R	45"-48"		120 V.A.C.
OP53-0515L/R	45"-48"		240 V.A.C.
OP53-0528L/R		45"-48"	110 V.D.C.
OP53-0522L/R		45"-48"	120 V.A.C.
OP53-0516L/R		45"-48"	240 V.A.C.

41" Header Height

Part No.	S/S	2/SP	Relay Voltage
OP53-0541L/R	30"-34"	30"-34"	110 V.D.C.
OP53-0535L/R	30"-34"	30"-34"	120 V.A.C.
OP53-0529L/R	30"-34"	30"-34"	240 V.A.C.
OP53-0542L/R	35"-39"	35"-39"	110 V.D.C.
OP53-0536L/R	35"-39"	35"-39"	120 V.A.C.
OP53-0530L/R	35"-39"	35"-39"	240 V.A.C.
OP53-0543L/R	40"-42"	40"-44"	110 V.D.C.
OP53-0537L/R	40"-42"	40"-44"	120 V.A.C.
OP53-0531L/R	40"-42"	40"-44"	240 V.A.C.

Part No.	S/S	2/SP	Relay Voltage
OP53-0544L/R	43"-44"		110 V.D.C.
OP53-0538L/R	43"-44"		120 V.A.C.
OP53-0532L/R	43"-44"		240 V.A.C.
OP53-0545L/R	45"-48"		110 V.D.C.
OP53-0539L/R	45"-48"		120 V.A.C.
OP53-0533L/R	45"-48"		240 V.A.C.
OP53-0546L/R		45"-48"	110 V.D.C.
OP53-0540L/R		45"-48"	120 V.A.C.
OP53-0534L/R		45"-48"	240 V.A.C.

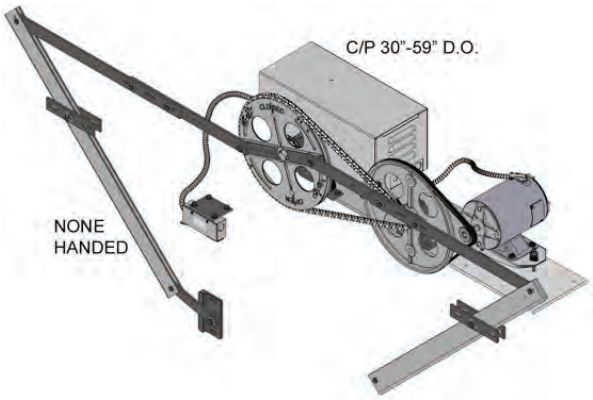
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MOHCTL - Conventional

Center Parting



Special Note:
- Gate switch **(extra charge)**
- 120 V.A.C./D.C.. is available upon request. Contact G.A.L. sales department.
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MOHCTL" operator includes: door drive arm assembly, nudging & gate switch
- Up to 3 foot per second opening
- P.M. motor: 1/2 HP 1140 RPM
- Power supply of 208 to 230 V.A.C./D.C. or 120 V.A.C./D.C.
- Basic operator requires (4) wires excluding open and close relays, open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram 7774
- CSA Certificate NO. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	C/P	Relay Voltage
OP54-0041N	30"-33"	110 V.D.C.
OP54-0036N	30"-33"	120 V.A.C.
OP54-0031N	30"-33"	240 V.A.C.
OP54-0042N	34"-39"	110 V.D.C.
OP54-0037N	34"-39"	120 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0032N	34"-39"	240 V.A.C.
OP54-0043N	40"-49"	110 V.D.C.
OP54-0038N	40"-49"	120 V.A.C.
OP54-0033N	40"-49"	240 V.A.C.

17" Header Height

Part No.	C/P	Relay Voltage
OP54-0044N	50"-54"	110 V.D.C.
OP54-0039N	50"-54"	120 V.A.C.
OP54-0034N	50"-54"	240 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0045N	55"-59"	110 V.D.C.
OP54-0040N	55"-59"	120 V.A.C.
OP54-0035N	55"-59"	240 V.A.C.

Center Parting - 220 V.D.C. - High Cab

19" Header Height

Part No.	C/P	Relay Voltage
OP54-0275N	30"-33"	110 V.D.C.
OP54-0270N	30"-33"	120 V.A.C.
OP54-0265N	30"-33"	240 V.A.C.
OP54-0276N	34"-39"	110 V.D.C.
OP54-0271N	34"-39"	120 V.A.C.
OP54-0266N	34"-39"	240 V.A.C.
OP54-0277N	40"-44"	110 V.D.C.
OP54-0272N	40"-44"	120 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0267N	40"-44"	240 V.A.C.
OP54-0278N	45"-49"	110 V.D.C.
OP54-0273N	45"-49"	120 V.A.C.
OP54-0268N	45"-49"	240 V.A.C.
OP54-0279N	50"-53"	110 V.D.C.
OP54-0274N	50"-53"	120 V.A.C.
OP54-0269N	50"-53"	240 V.A.C.

(*) Special Engineering Required

Operator Assemblies

MOHCTL - Conventional

Center Parting - 220 V.D.C. - High Cab

23" Header Height

Part No.	C/P	Relay Voltage
OP54-0290N	30"-33"	110 V.D.C.
OP54-0285N	30"-33"	120 V.A.C.
OP54-0280N	30"-33"	240 V.A.C.
OP54-0291N	34"-39"	110 V.D.C.
OP54-0286N	34"-39"	120 V.A.C.
OP54-0281N	34"-39"	240 V.A.C.
OP54-0292N	40"-44"	110 V.D.C.
OP54-0287N	40"-44"	120 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0282N	40"-44"	240 V.A.C.
OP54-0293N	45"-49"	110 V.D.C.
OP54-0288N	45"-49"	120 V.A.C.
OP54-0283N	45"-49"	240 V.A.C.
OP54-0294N	50"-53"	110 V.D.C.
OP54-0289N	50"-53"	120 V.A.C.
OP54-0284N	50"-53"	240 V.A.C.

27" Header Height

Part No.	C/P	Relay Voltage
OP54-0303N	30"-33"	110 V.D.C.
OP54-0299N	30"-33"	120 V.A.C.
OP54-0295N	30"-33"	240 V.A.C.
OP54-0304N	40"-44"	110 V.D.C.
OP54-0300N	40"-44"	120 V.A.C.
OP54-0296N	40"-44"	240 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0305N	45"-49"	110 V.D.C.
OP54-0301N	45"-49"	120 V.A.C.
OP54-0297N	45"-49"	240 V.A.C.
OP54-0306N	50"-53"	110 V.D.C.
OP54-0302N	50"-53"	120 V.A.C.
OP54-0298N	50"-53"	240 V.A.C.

31" Header Height

Part No.	C/P	Relay Voltage
OP54-0317N	30"-33"	110 V.D.C.
OP54-0312N	30"-33"	120 V.A.C.
OP54-0307N	30"-33"	240 V.A.C.
OP54-0318N	34"-39"	110 V.D.C.
OP54-0313N	34"-39"	120 V.A.C.
OP54-0308N	34"-39"	240 V.A.C.
OP54-0319N	40"-44"	110 V.D.C.
OP54-0314N	40"-44"	120 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0309N	40"-44"	240 V.A.C.
OP54-0320N	45"-49"	110 V.D.C.
OP54-0315N	45"-49"	120 V.A.C.
OP54-0310N	45"-49"	240 V.A.C.
OP54-0321N	50"-53"	110 V.D.C.
OP54-0316N	50"-53"	120 V.A.C.
OP54-0311N	50"-53"	240 V.A.C.

35" Header Height

Part No.	C/P	Relay Voltage
OP54-0332N	30"-33"	110 V.D.C.
OP54-0327N	30"-33"	120 V.A.C.
OP54-0322N	30"-33"	240 V.A.C.
OP54-0333N	34"-39"	110 V.D.C.
OP54-0328N	34"-39"	120 V.A.C.
OP54-0323N	34"-39"	240 V.A.C.
OP54-0334N	40"-44"	110 V.D.C.
OP54-0329N	40"-44"	120 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0324N	40"-44"	240 V.A.C.
OP54-0335N	45"-49"	110 V.D.C.
OP54-0330N	45"-49"	120 V.A.C.
OP54-0325N	45"-49"	240 V.A.C.
OP54-0336N	50"-53"	110 V.D.C.
OP54-0331N	50"-53"	120 V.A.C.
OP54-0326N	50"-53"	240 V.A.C.

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MOHCTL - Conventional

Center Parting - 220 V.D.C. - High Cab

39" Header Height

Part No.	C/P	Relay Voltage
OP54-0347N	30"-33"	110 V.D.C.
OP54-0342N	30"-33"	120 V.A.C.
OP54-0337N	30"-33"	240 V.A.C.
OP54-0348N	34"-39"	110 V.D.C.
OP54-0343N	34"-39"	120 V.A.C.
OP54-0338N	34"-39"	240 V.A.C.
OP54-0349N	40"-44"	110 V.D.C.
OP54-0344N	40"-44"	120 V.A.C.

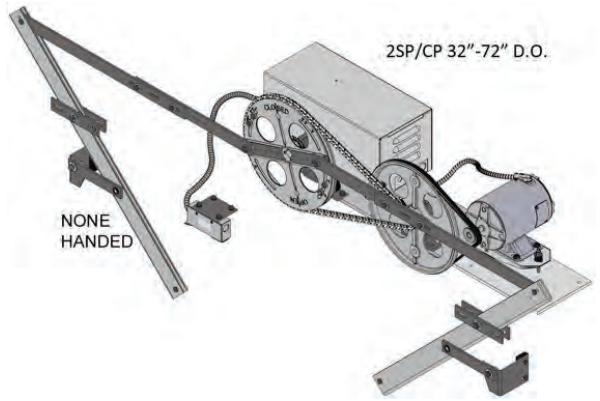
Part No.	C/P	Relay Voltage
OP54-0339N	40"-44"	240 V.A.C.
OP54-0350N	45"-49"	110 V.D.C.
OP54-0345N	45"-49"	120 V.A.C.
OP54-0340N	45"-49"	240 V.A.C.
OP54-0351N	50"-53"	110 V.D.C.
OP54-0346N	50"-53"	120 V.A.C.
OP54-0341N	50"-53"	240 V.A.C.

43" Header Height

Part No.	C/P	Relay Voltage
OP54-0362N	30"-33"	110 V.D.C.
OP54-0357N	30"-33"	120 V.A.C.
OP54-0352N	30"-33"	240 V.A.C.
OP54-0363N	34"-39"	110 V.D.C.
OP54-0358N	34"-39"	120 V.A.C.
OP54-0353N	34"-39"	240 V.A.C.
OP54-0364N	40"-44"	110 V.D.C.
OP54-0359N	40"-44"	120 V.A.C.

Part No.	C/P	Relay Voltage
OP54-0354N	40"-44"	240 V.A.C.
OP54-0365N	45"-49"	110 V.D.C.
OP54-0360N	45"-49"	120 V.A.C.
OP54-0355N	45"-49"	240 V.A.C.
OP54-0366N	50"-53"	110 V.D.C.
OP54-0361N	50"-53"	120 V.A.C.
OP54-0356N	50"-53"	240 V.A.C.

Two Speed Center Parting



Special Note:
- Gate switch **(extra charge)**
- 120 V.A.C./D.C. is available upon request. Contact G.A.L. sales department.
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MOHCTL" operator includes: door drive arm assembly, nudging & gate switch
- Up to 3 foot per second opening
- P.M. motor: 1/2 HP 1140 RPM
- Power supply of 208 to 230 V.A.C./D.C. or 120 V.A.C./D.C.
- Basic operator requires (4) wires excluding open and close relays, open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram 7774
- CSA Certificate NO. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Two Speed Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	2SP/CP	Relay Voltage
OP58-0281N	32"-33"	110 V.D.C.
OP58-0246N	32"-33"	120 V.A.C.
OP58-0211N	32"-33"	240 V.A.C.

Part No.	2SP/CP	Relay Voltage
OP58-0282N	34"	110 V.D.C.
OP58-0247N	34"	120 V.A.C.
OP58-0212N	34"	240 V.A.C.

(*) Special Engineering Required

Operator Assemblies

MOHCTL - Conventional

Two Speed Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	2SP/CP	Relay Voltage
OP58-0283N	35"-37"	110 V.D.C.
OP58-0248N	35"-37"	120 V.A.C.
OP58-0213N	35"-37"	240 V.A.C.
OP58-0284N	38"-39"	110 V.D.C.
OP58-0249N	38"-39"	120 V.A.C.
OP58-0214N	38"-39"	240 V.A.C.
OP58-0285N	40"-41"	110 V.D.C.
OP58-0250N	40"-41"	120 V.A.C.
OP58-0215N	40"-41"	240 V.A.C.
OP58-0286N	42"-44"	110 V.D.C.
OP58-0251N	42"-44"	120 V.A.C.

Part No.	2SP/CP	Relay Voltage
OP58-0216N	42"-44"	240 V.A.C.
OP58-0287N	45"-46"	110 V.D.C.
OP58-0252N	45"-46"	120 V.A.C.
OP58-0217N	45"-46"	240 V.A.C.
OP58-0288N	47"-48"	110 V.D.C.
OP58-0253N	47"-48"	120 V.A.C.
OP58-0218N	47"-48"	240 V.A.C.
OP58-0289N	49"	110 V.D.C.
OP58-0254N	49"	120 V.A.C.
OP58-0219N	49"	240 V.A.C.

17" Header Height

Part No.	2SP/CP	Relay Voltage
OP58-0290N	50"-51"	110 V.D.C.
OP58-0255N	50"-51"	120 V.A.C.
OP58-0220N	50"-51"	240 V.A.C.
OP58-0291N	52"-53"	110 V.D.C.
OP58-0256N	52"-53"	120 V.A.C.
OP58-0221N	52"-53"	240 V.A.C.
OP58-0292N	54"	110 V.D.C.
OP58-0257N	54"	120 V.A.C.
OP58-0222N	54"	240 V.A.C.
OP58-0293N	55"-56"	110 V.D.C.
OP58-0258N	55"-56"	120 V.A.C.
OP58-0223N	55"-56"	240 V.A.C.
OP58-0294N	57"-58"	110 V.D.C.
OP58-0259N	57"-58"	120 V.A.C.
OP58-0224N	57"-58"	240 V.A.C.

Part No.	2SP/CP	Relay Voltage
OP58-0295N	59"	110 V.D.C.
OP58-0260N	59"	120 V.A.C.
OP58-0225N	59"	240 V.A.C.
OP58-0296N	60"	110 V.D.C.
OP58-0261N	60"	120 V.A.C.
OP58-0226N	60"	240 V.A.C.
OP58-0297N	61"-62"	110 V.D.C.
OP58-0262N	61"-62"	120 V.A.C.
OP58-0227N	61"-62"	240 V.A.C.
OP58-0298N	63"	110 V.D.C.
OP58-0263N	63"	120 V.A.C.
OP58-0228N	63"	240 V.A.C.
OP58-0299N	64"	110 V.D.C.
OP58-0264N	64"	120 V.A.C.
OP58-0229N	64"	240 V.A.C.

19" Header Height

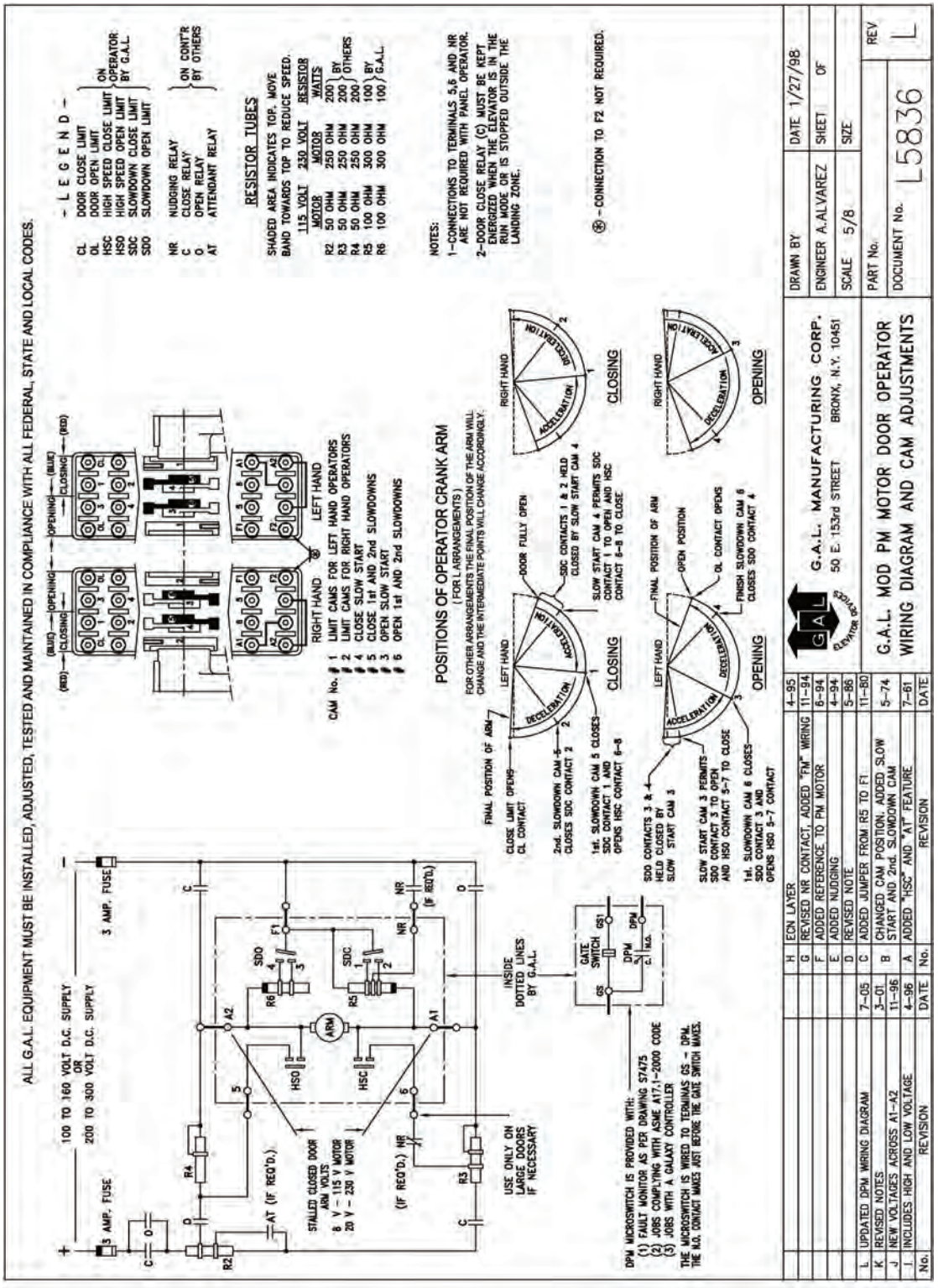
Part No.	2SP/CP	Relay Voltage
OP58-0300N	65"	110 V.D.C.
OP58-0265N	65"	120 V.A.C.
OP58-0230N	65"	240 V.A.C.
OP58-0301N	66"-67"	110 V.D.C.
OP58-0266N	66"-67"	120 V.A.C.
OP58-0231N	66"-67"	240 V.A.C.
OP58-0302N	68"	110 V.D.C.
OP58-0267N	68"	120 V.A.C.
OP58-0232N	68"	240 V.A.C.

Part No.	2SP/CP	Relay Voltage
OP58-0303N	69"	110 V.D.C.
OP58-0268N	69"	120 V.A.C.
OP58-0233N	69"	240 V.A.C.
OP58-0304N	70"-71"	110 V.D.C.
OP58-0269N	70"-71"	120 V.A.C.
OP58-0234N	70"-71"	240 V.A.C.
OP58-0305N	72"	110 V.D.C.
OP58-0270N	72"	120 V.A.C.
OP58-0235N	72"	240 V.A.C.

(*) Special Engineering Required

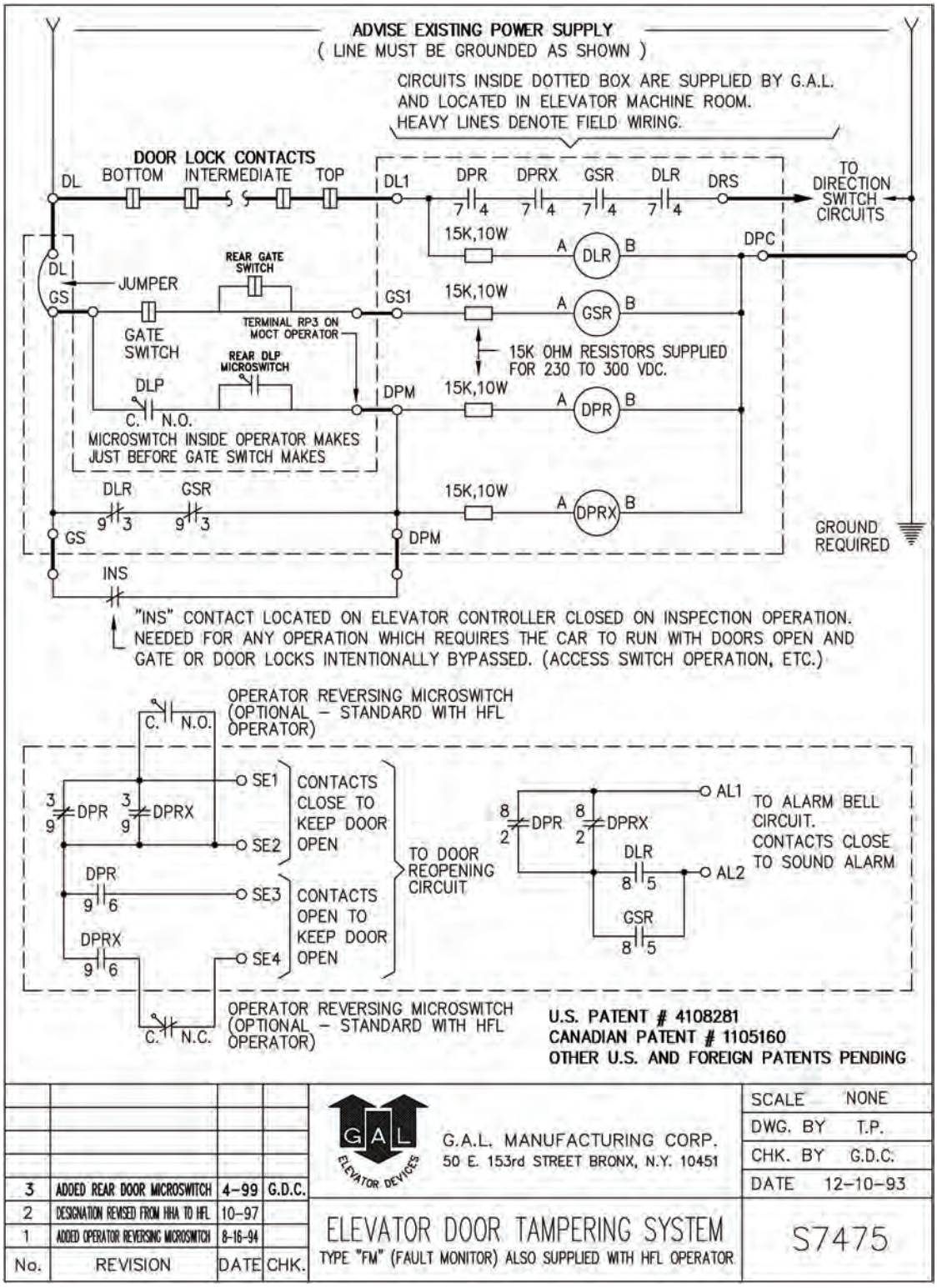
Operator Assemblies

MODHFL - Wiring Diagram



(*) Special Engineering Required

MODHFL - Wiring Diagram



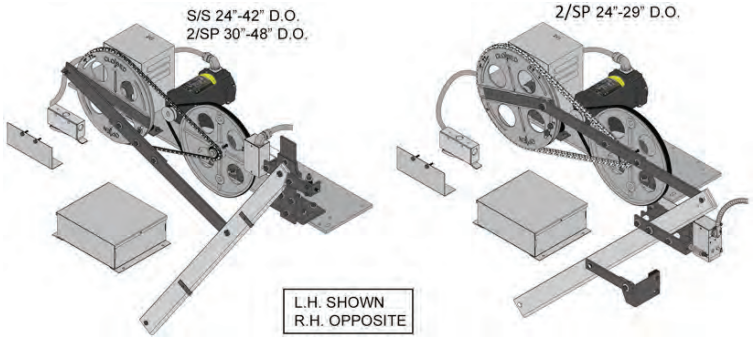
(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODHFL - Vandal Resistant

Single & Two Speed



Special Note:
- Standard Gate switch **(extra charge)**
- 100 to 160 V.D.C. is available upon request. Contact G.A.L. sales department.
- For 22"-29" D.O. contact G.A.L. sales or engineering department for details.

- "MODHFL" operator includes: door drive arm assembly, nudging, Standard gate switch & LRD-1 reversing device
- MOD limit control box with "FM" micro-switch and terminal block
- "FM" fault monitor anti-tampering system (located in control room) includes:
  - Gate switch protection relay
  - Door lock protection relay
  - Door position relays (2)
- Up to 1 1/2 foot per second opening
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Basic operator requires (6) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram L-5836 and S-7475
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Single Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	S/S	Relay Voltage	Part No.	S/S	Relay Voltage
OP48-0003L/R	30"-32"	120 V.A.C.	**OP48-0012L/R**	35"-37"	120 V.D.C.
OP48-0010L/R	30"-32"	120 V.D.C.	**OP48-0019L/R**	35"-37"	220 V.A.C.
OP48-0017L/R	30"-32"	220 V.A.C.	**OP48-0006L/R**	38"-39"	120 V.A.C.
OP48-0024L/R	30"-32"	220 V.D.C.	**OP48-0013L/R**	38"-39"	120 V.D.C.
OP48-0004L/R	33"-34"	120 V.A.C.	**OP48-0020L/R**	38"-39"	220 V.A.C.
OP48-0011L/R	33"-34"	120 V.D.C.	**OP48-0027L/R**	38"-39"	220 V.D.C.
OP48-0018L/R	33"-34"	220 V.A.C.	**OP48-0007L/R**	40"-42"	120 V.A.C.
OP48-0025L/R	33"-34"	220 V.D.C.	**OP48-0014L/R**	40"-42"	120 V.D.C.
OP48-0026L/R	33"-34"	220 V.D.C.	**OP48-0021L/R**	40"-42"	220 V.A.C.
OP48-0005L/R	35"-37"	120 V.A.C.	**OP48-0028L/R**	40"-42"	220 V.D.C.

Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	2/SP	Relay Voltage	Part No.	2/SP	Relay Voltage
OP49-0065L/R	24"	120 V.A.C.	**OP49-0068L/R**	27"	120 V.A.C.
OP49-0071L/R	24"	120 V.D.C.	**OP49-0074L/R**	27"	120 V.D.C.
OP49-0077L/R	24"	220 V.A.C.	**OP49-0080L/R**	27"	220 V.A.C.
OP49-0083L/R	24"	220 V.D.C.	**OP49-0086L/R**	27"	220 V.D.C.
OP49-0066L/R	25"	120 V.A.C.	**OP49-0069L/R**	28"	120 V.A.C.
OP49-0072L/R	25"	120 V.D.C.	**OP49-0075L/R**	28"	120 V.D.C.
OP49-0078L/R	25"	220 V.A.C.	**OP49-0081L/R**	28"	220 V.A.C.
OP49-0084L/R	25"	220 V.D.C.	**OP49-0087L/R**	28"	220 V.D.C.
OP49-0067L/R	26"	120 V.A.C.	**OP49-0070L/R**	29"	120 V.A.C.
OP49-0073L/R	26"	120 V.D.C.	**OP49-0076L/R**	29"	120 V.D.C.
OP49-0079L/R	26"	220 V.A.C.	**OP49-0082L/R**	29"	220 V.A.C.
OP49-0085L/R	26"	220 V.D.C.	**OP49-0088L/R**	29"	220 V.D.C.

(*) Special Engineering Required

Operator Assemblies

MODHFL - Vandal Resistant

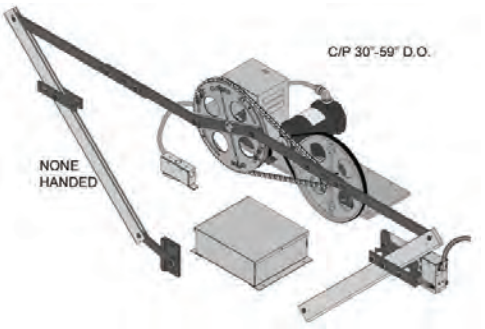
Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	2/SP	Relay Voltage
OP49-0001L/R	30"-34"	120 V.A.C.
OP49-0005L/R	30"-34"	120 V.D.C.
OP49-0009L/R	30"-34"	220 V.A.C.
OP49-0013L/R	30"-34"	220 V.D.C.
OP49-0002L/R	35"-39"	120 V.A.C.
OP49-0006L/R	35"-39"	120 V.D.C.
OP49-0010L/R	35"-39"	220 V.A.C.
OP49-0014L/R	35"-39"	220 V.D.C.

Part No.	2/SP	Relay Voltage
OP49-0003L/R	40"-44"	120 V.A.C.
OP49-0007L/R	40"-44"	120 V.D.C.
OP49-0011L/R	40"-44"	220 V.A.C.
OP49-0015L/R	40"-44"	220 V.D.C.
OP49-0004L/R	45"-48"	120 V.A.C.
OP49-0008L/R	45"-48"	120 V.D.C.
OP49-0012L/R	45"-48"	220 V.A.C.
OP49-0016L/R	45"-48"	220 V.D.C.

Center Parting



Special Note:

- Standard Gate switch **(extra charge)**
- 100 to 160 V.D.C. is available upon request. Contact G.A.L. sales department.
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately

- "MODHFL" operator includes: door drive arm assembly, nudging, Standard gate switch & LRD-1 reversing device
- MOD limit control box with "FM" micro-switch and terminal block
- "FM" fault monitor anti-tampering system (located in control room) includes:
  - Gate switch protection relay
  - Door lock protection relay
  - Door position relays (2)
- Up to 1 1/2 foot per second opening
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Basic operator requires (6) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- Operator wiring diagram L-5836 and S-7475
- CSA Certificate No. LR-1304-27 complies with CAN/CSA-B44.1-M91/ASME-A17.5

Center Parting - 220 V.D.C. - Standard

15" Header Height

Part No.	C/P	Relay Voltage
OP50-0001N	30"-33"	120 V.A.C.
OP50-0005N	30"-33"	120 V.D.C.
OP50-0009N	30"-33"	220 V.A.C.
OP50-0013N	30"-33"	220 V.D.C.
OP50-0002N	34"-39"	120 V.A.C.
OP50-0006N	34"-39"	120 V.D.C.
OP50-0010N	34"-39"	220 V.A.C.

Part No.	C/P	Relay Voltage
OP50-0014N	34"-39"	220 V.D.C.
OP50-0003N	40"-49"	120 V.A.C.
OP50-0007N	40"-49"	120 V.D.C.
OP50-0011N	40"-49"	220 V.A.C.
OP50-0015N	40"-49"	220 V.D.C.
OP50-0004N	50"-54"	120 V.A.C.
OP50-0012N	50"-54"	220 V.A.C.

17" Header Height

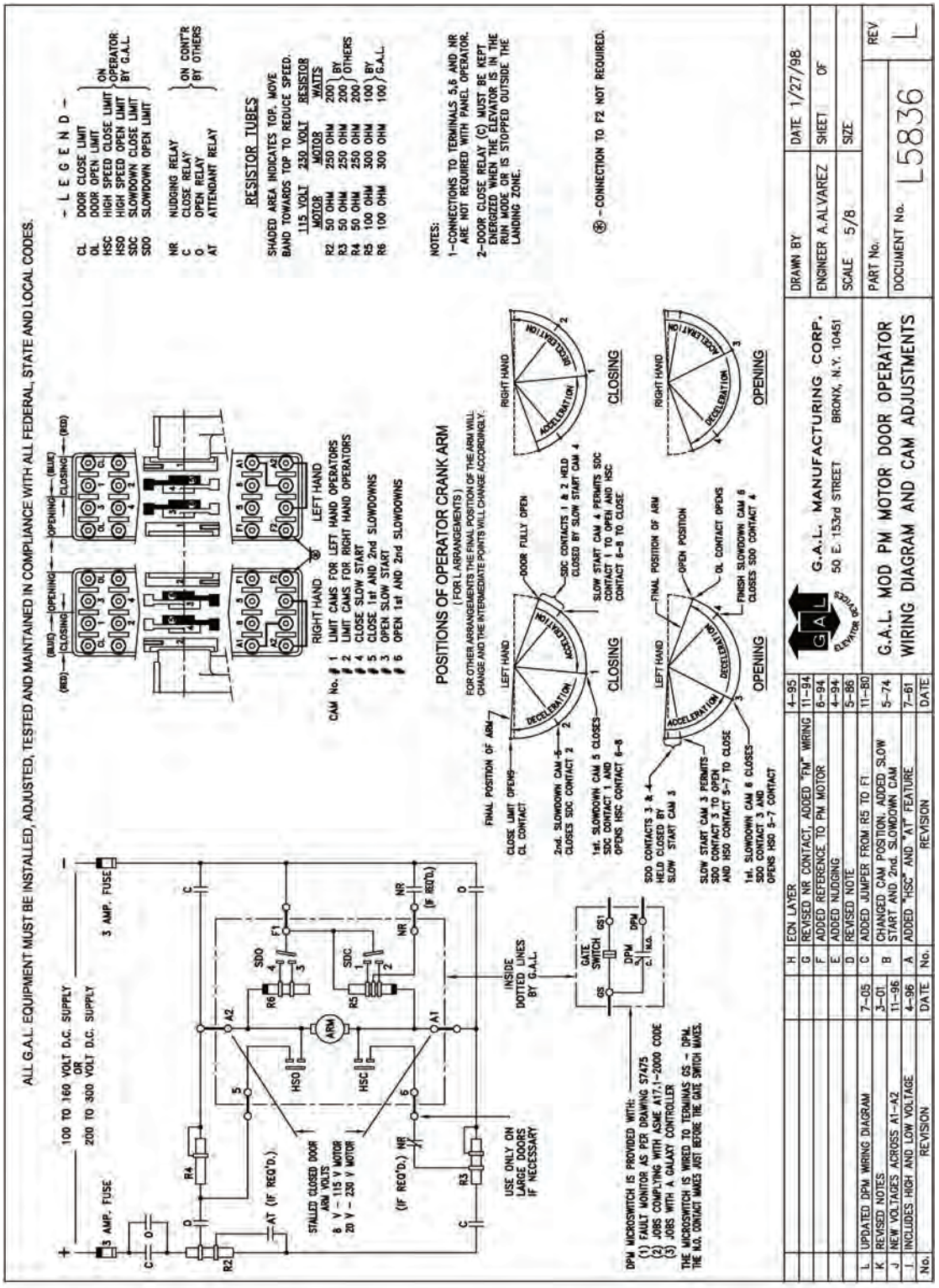
Part No.	C/P	Relay Voltage
OP50-0008N	50"-54"	120 V.D.C.
OP50-0016N	50"-54"	220 V.D.C.
OP50-0033N	55"-59"	120 V.A.C.

Part No.	C/P	Relay Voltage
OP50-0034N	55"-59"	120 V.D.C.
OP50-0035N	55"-59"	220 V.A.C.
OP50-0036N	55"-59"	220 V.D.C.

(*) Special Engineering Required

Operator Assemblies

MODLNYC - Wiring Diagram

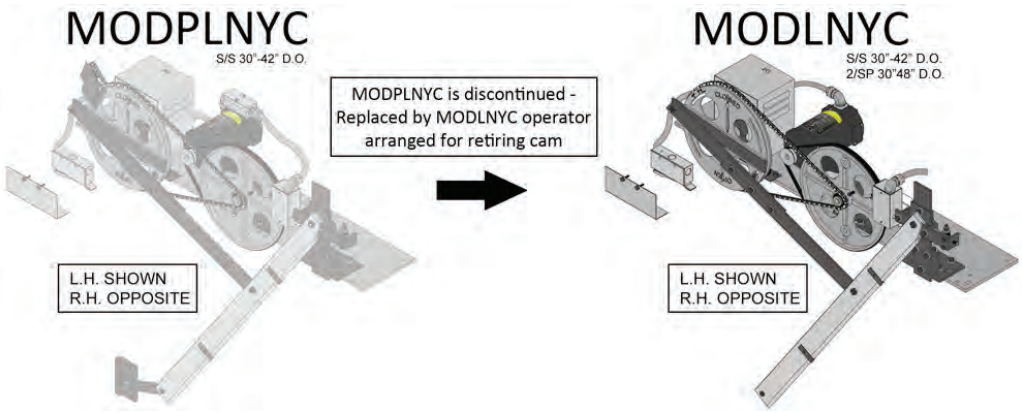


(*) Special Engineering Required

Operator Assemblies

MODLNYC - Vandal Resistant

Single & Two Speed



- "MODLNYC" operator includes: door drive arm assembly, shielded gate switch, nudging, & LRD-1 reversing device.
- Up to 1 1/2 foot per second opening
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Water tight flexible electrical conduits.
- Basic operator requires (5) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire.
- Operator wiring diagram L-5836 Rev. L
- CSA Certificate No. LR-1304-27, complies with CAN/CSA-B44.1-M91/ASME-A17.5

Special Features:

- Shielded gate switch **(extra charge)**
- Extra micro switch & terminal block
- Watertight flexible conduit
- LRD-1 Reversing Device

Special Note:

- Retiring Cam Arrangement upon request **(extra charge)**
- 100 to 160 V.D.C. is available upon request. Contact G.A.L. sales department.

Single & Two Speed - 220 V.D.C. - Standard

13" Header Height

Part No.	S/S	2/SP
OP28-0001L/R	30"-34"	30"-34"
OP28-0002L/R	35"-39"	35"-39"
OP28-0003L/R	40"-42"	40"-42"
OP28-0015L/R		40"-44"
OP28-0016L/R		45"-48"

Single & Two Speed - 220 V.D.C. - High Cab

17" Header Height

Part No.	S/S	2/SP
OP28-0009L/R	30"-34"	30"-34"
OP28-0010L/R	35"-39"	35"-39"
OP28-0011L/R	40"-42"	40"-42"

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Assemblies

MODG - Gate Operator



Gate Operator:

Note: By code, the gate operator can only open a collapsing gate 6" from fully closed position. Then gate must be opened by hand the rest of the way. It will close all the way automatically.

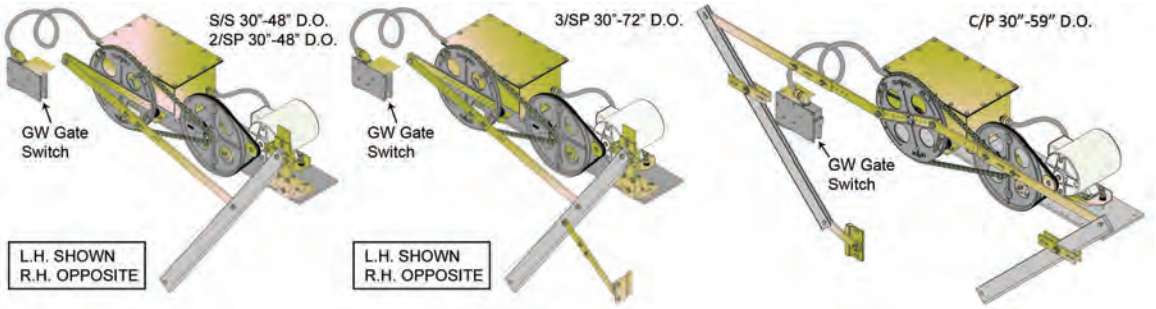
Includes gate switch at additional charge.
Refer to Wiring Diagram #S6383

All Size Door Style - 220 V.D.C. - Standard
Part No.
OP98-0002L/R

All Size Door Style - 115 V.D.C. - Standard
Part No.
OP98-0001L/R

MOVFRW II - Water Resistant

Single & Two Speed



Note: CSA Certified. All ferrous material are yellow zinc dichromate plated. Includes "GW" gate switch and optional fault monitor supplied at additional charge. (If controller or job does not have a fault monitor, it is required with operator.)

Single & Two Speed - 220 V.A.C. - Standard

13" Header Height

Part No.	S/S	2/SP
OP106-0003L/R*	30"-34"	30"-34"
OP106-0004L/R*	35"-39"	35"-39"
OP106-0005L/R*	40"-44"	40"-44"
OP106-0006L/R*	45"-48"	45"-48"

Three Speed - 220 V.A.C. - Standard

13" Header Height

Part No.	3/SP
OP128-0001L/R*	30"-72"

Center Parting - 220 V.A.C. - Standard

15" Header Height

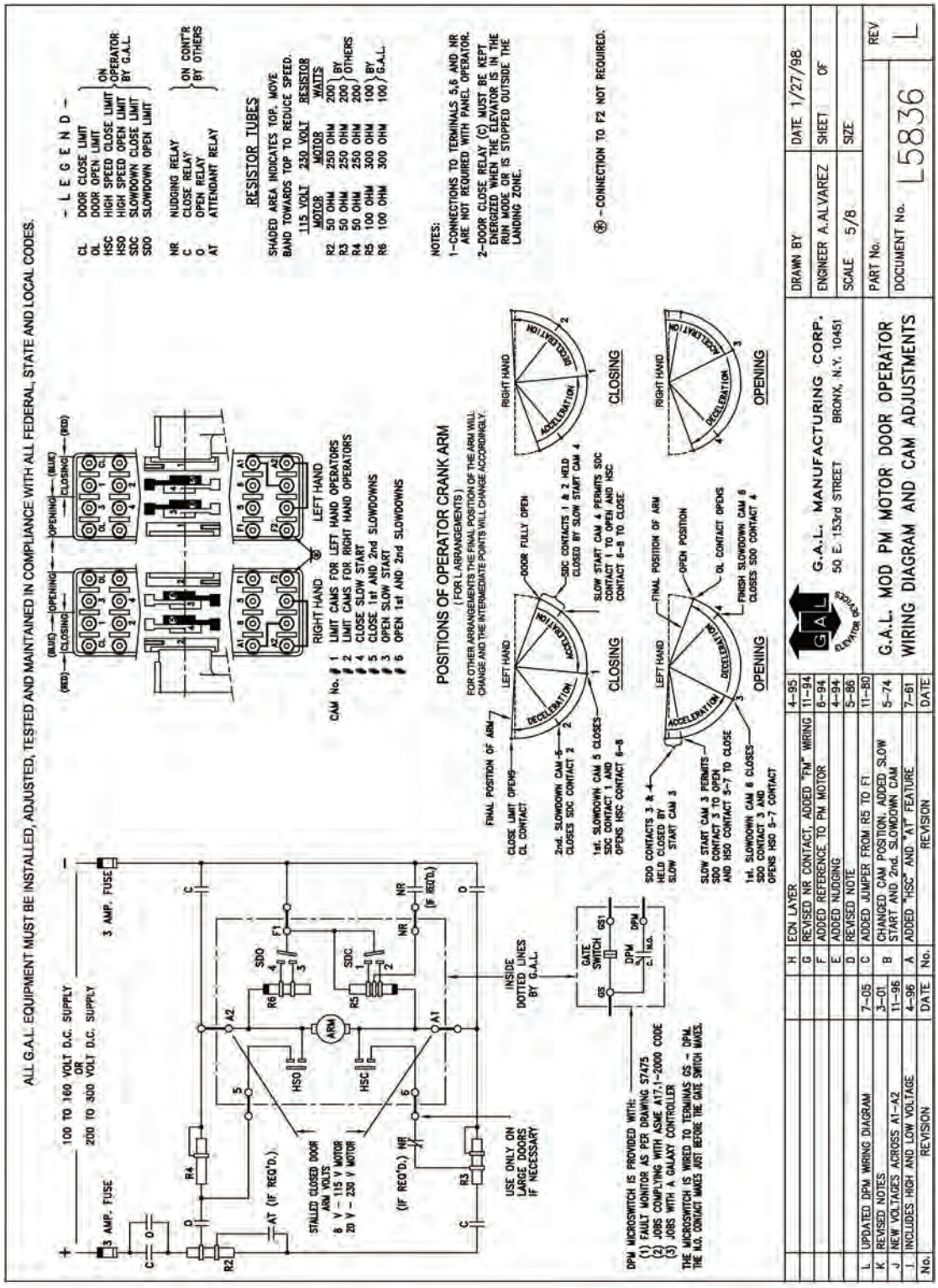
Part No.	C/P
OP108-0001N*	30"-33"
OP108-0002N*	34"-39"
OP108-0003N*	40"-49"

17" Header Height

Part No.	C/P
OP108-0004N*	50"-54"
OP108-0005N*	55"-59"

(*) Special Engineering Required

MOXL - Wiring Diagram



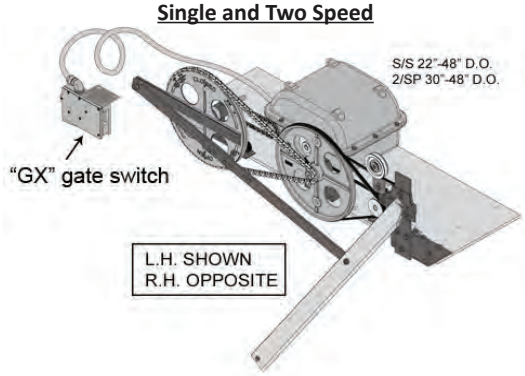
DOOR EQUIPMENT

Operator Assemblies

MOXL - Dust/Explosion Resistant

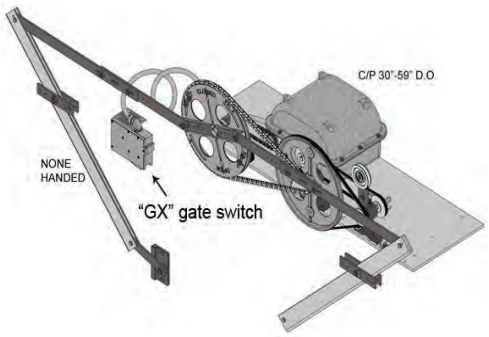
Single, Two Speed, & Center Parting

Single and Two Speed



Special Note:
- For 22”-29” D.O. contact G.A.L. sales or engineering department for details.

Center Parting



Special Note:
- Drive arm pivot support brackets for C/P *(Part No. OP25-0001N)* or 2SP/CP *(Part No. OP25-0002N)* doors are sold separately.

Features:
- Not CSA, UL Listed or NEMA Rated
- “MOXL” operator includes: drive arm assembly, nudging, & GX gate switch.
  - **Note:** “GX” gate switch and optional fault monitor supplied at additional charge. (If controller or job does not have a fault monitor, it is required with operator.)
- Basic operator requires (5) wires excluding open and close limits and gate switch. Nudging requires (1) additional wire
- Up to 1 1/2 foot per second opening
- P.M. motor: 1/6 HP 1140 RPM
- Power supply of 200 to 300 V.D.C. or 100 to 160 V.D.C.
- Mounting hardware OP1-0040N

Single & Two Speed - 220 V.D.C. - Standard

13” Header Height

Part No.	S/S	2/SP
OP91-0001L/R	30”-34”	30”-34”
OP91-0002L/R	35”-39”	35”-39”
OP91-0003L/R	40”-42”	40”-44”
OP91-0004L/R	43”-44”	
OP91-0005L/R	45”-48”	
OP91-0006L/R		45”-48”

Single & Two Speed - 115 V.D.C. - Standard

13” Header Height

Part No.	S/S	2/SP
OP91-0007L/R	30”-34”	30”-34”
OP91-0008L/R	35”-39”	35”-39”
OP91-0009L/R	40”-42”	
OP91-0010L/R	43”-44”	
OP91-0011L/R	45”-48”	
OP91-0012L/R		45”-48”

Center Parting - 220 V.D.C. - Standard

15” Header Height

Part No.	C/P
OP93-0001N	30”-33”
OP93-0002N	34”-39”
OP93-0003N	40”-49”

17” Header Height

Part No.	C/P
OP93-0004N	50”-54”
OP93-0005N	55”-59”

Center Parting - 115 V.D.C. - Standard

15” Header Height

Part No.	C/P
OP93-0006N	30”-33”
OP93-0007N	34”-39”
OP93-0008N	40”-49”

17” Header Height

Part No.	C/P
OP93-0009N	50”-54”
OP93-0010N	55”-59”

(*) Special Engineering Required

Operator Accessories

Auxiliary Control Panels

An auxiliary control panel is used to convert A.C. power to D.C. power from an old controller when necessary. The D.C. power can then be used to power a new MODL, MOD, or MOHL replacement operator.
An auxiliary control panel is not required if a MODCTL, MOHCTL, or MOVFR operator is used as a replacement.

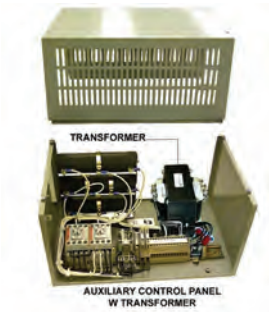
MOD Series

OP10-0047N



Description
Panel, MOD Auxiliary 220V Control, w/o Transformer Wiring Diagram L-10026-IMOD
Where Used: MOD, MODL

OP10-0051N



Description
Panel, MOD Auxiliar 440-575V Control, w/ Transformer Wiring Diagram L-10026-IMOD
Where Used: MOD, MODL

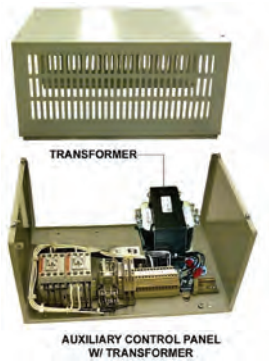
MOM & MOH Series

OP13-0029N



Description
Panel, MOM/MOH Auxiliar 220V Control, w/o Transformer Wiring Diagram L-10026-IMOM
Where Used: MOH, MOHL, MOM, MOML

OP13-0030N



Description
Panel, MOM/MOH Auxiliar 440-575V Control, w/ Transformer Wiring Diagram L-10026-IMOM
Where Used: MOH, MOHL, MOM, MOML

MOPM Convertor Panels

OP11-0024N



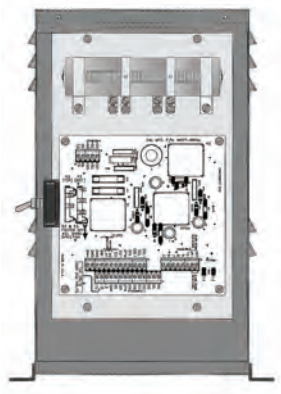
Description
Panel, MOPM Converter, 240 V.A.C.-10A
Where Used: MOPMP, MOPMPL

DOOR EQUIPMENT

Operator Accessories

MOCT Conversion Kits

MOD to MODCT Control Board Conversion Kit



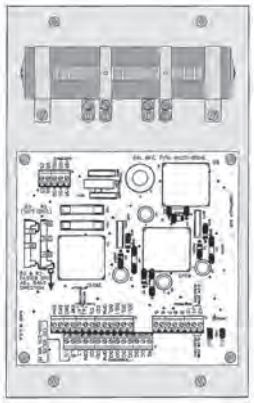
Operator conversion kit is used to convert "MOD" operators with PM motors ONLY, and older "MOCT" operators that used the 10201 control board. It also replaces some foreign solid state Interphase control boards when proper wiring diagrams can be supplied.

- G.A.L Wiring Diagram No. L-7632
- For installation instructions refer to Document No. "CONV TO MODCT"

Part No.	Motor Voltage	Relay Voltage
OP16-0032N	115 V.D.C	12 V.D.C
OP16-0033N	115 V.D.C	24 V.D.C
OP16-0034N	115 V.D.C	48 V.D.C
OP16-0035N	115 V.D.C	110 V.D.C
OP16-0036N	115 V.D.C	120 V.A.C
OP16-0037N	115 V.D.C	240 V.A.C

Part No.	Motor Voltage	Relay Voltage
OP16-0038N	220 V.D.C	12 V.D.C
OP16-0039N	220 V.D.C	24 V.D.C
OP16-0040N	220 V.D.C	48 V.D.C
OP16-0041N	220 V.D.C	110 V.D.C
OP16-0042N	220 V.D.C	120 V.A.C
OP16-0043N	220 V.D.C	240 V.A.C

MOCT to MODCT Control Board Conversion Kit



Operator conversion kit is used to convert "MOD" operators with PM motors ONLY, and older "MOCT" operators that used the 10201 control board. It also replaces some foreign solid state Interphase control boards when proper wiring diagrams can be supplied.

- G.A.L Wiring Diagram No. L-7632
- For installation instructions refer to Document No. "CONV TO MODCT"

Part No.	Motor Voltage	Relay Voltage
OP16-0044N	115 V.D.C	12 V.D.C
OP16-0045N	115 V.D.C	24 V.D.C
OP16-0046N	115 V.D.C	48 V.D.C
OP16-0047N	115 V.D.C	110 V.D.C
OP16-0048N	115 V.D.C	120 V.A.C
OP16-0049N	115 V.D.C	240 V.A.C

Part No.	Motor Voltage	Relay Voltage
OP16-0050N	220 V.D.C	12 V.D.C
OP16-0051N	220 V.D.C	24 V.D.C
OP16-0052N	220 V.D.C	48 V.D.C
OP16-0053N	220 V.D.C	110 V.D.C
OP16-0054N	220 V.D.C	120 V.A.C
OP16-0055N	220 V.D.C	240 V.A.C



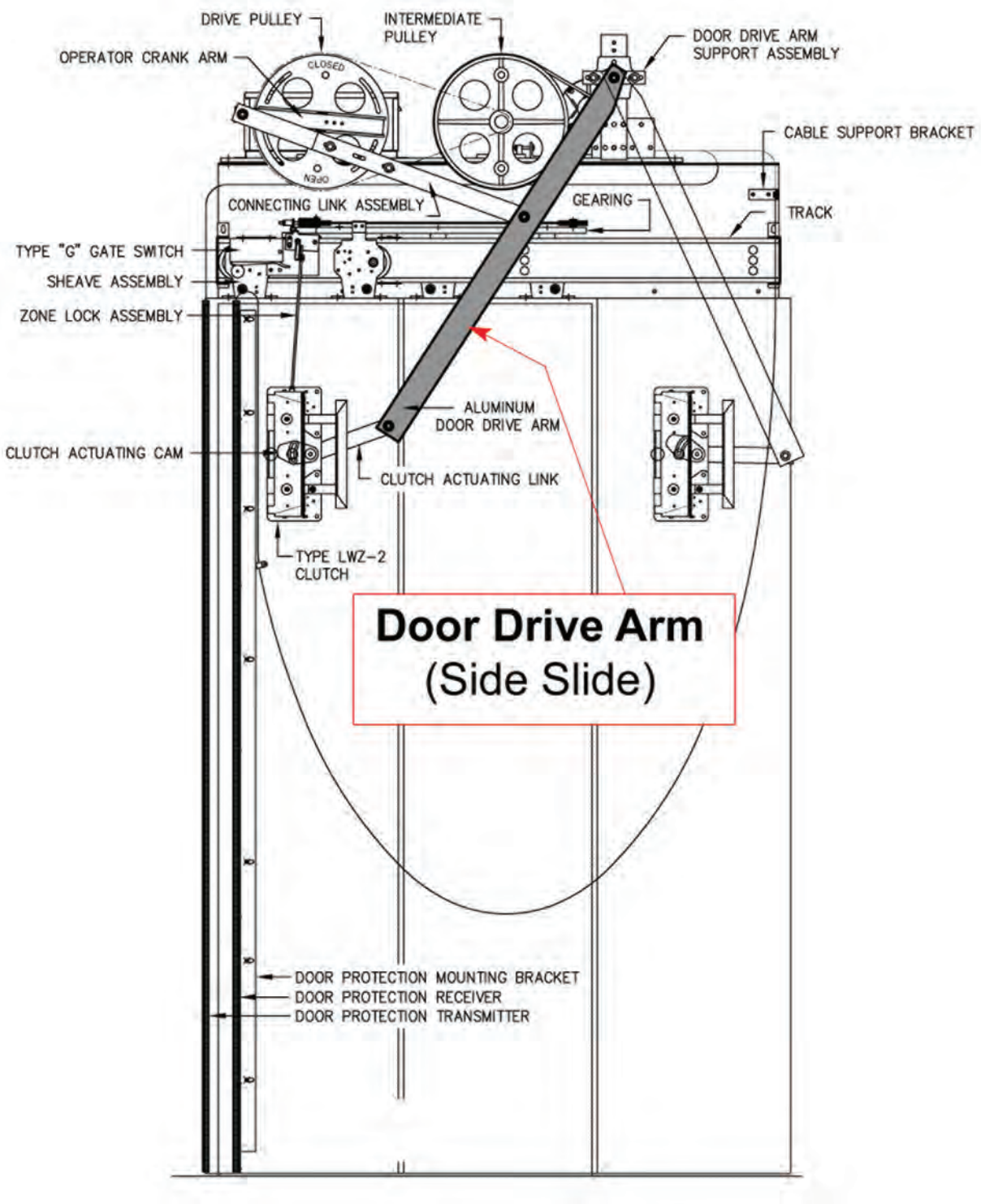
"MOCT" 10201 Board

Discontinued Part Numbers: MOCT-0007N to MOCT-0019N
Replaced by Part Numbers: OP16-0044N to OP16-0055N

(*) Special Engineering Required

Operator Parts

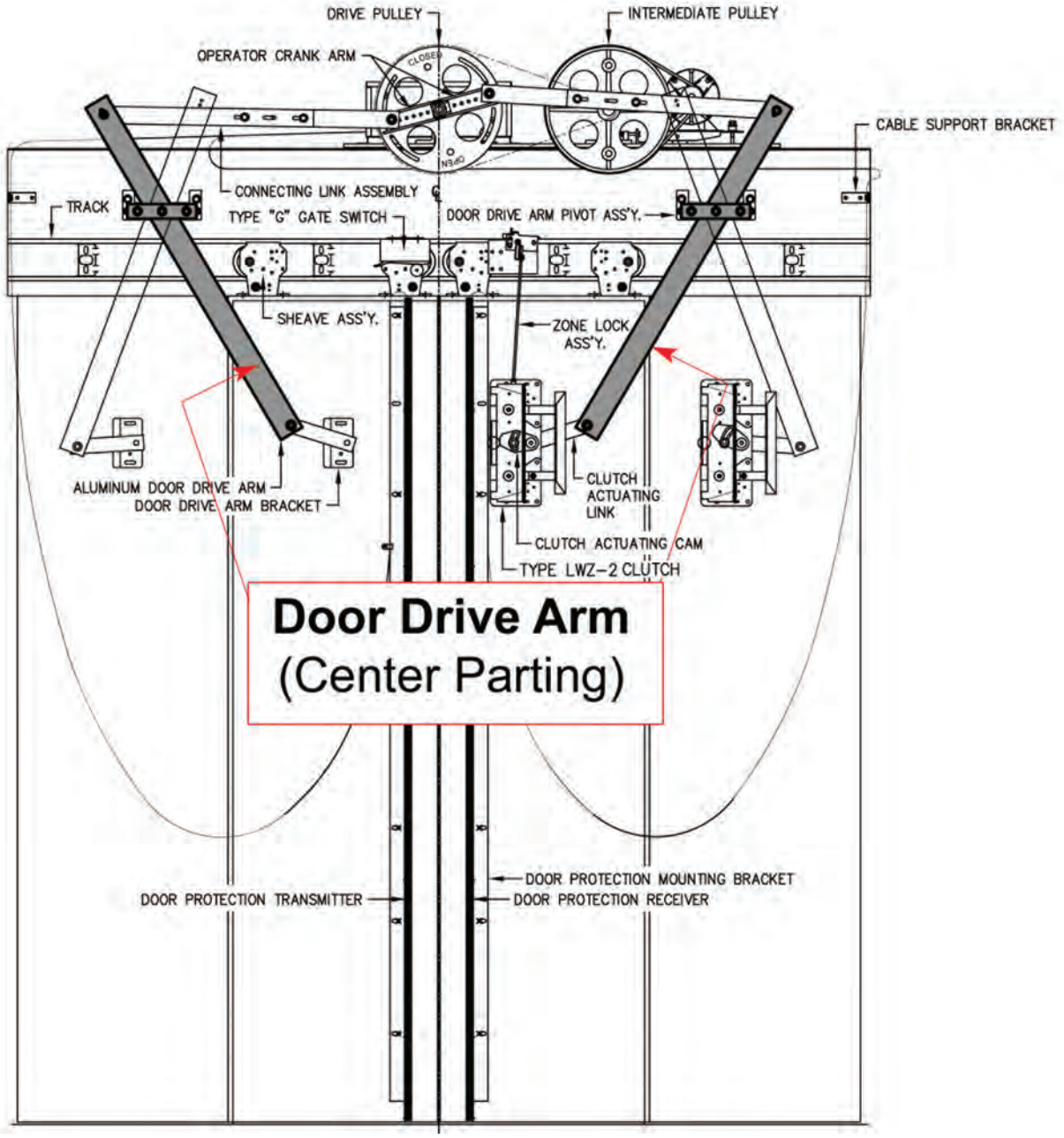
Drive Arm Drawings



DOOR EQUIPMENT

Operator Parts

Drive Arm Drawings



(*) Special Engineering Required

Single & Two Speed Door Opening



Note:

- Standard door drive arms are those used for 8'-0" high cabs with 7'-0" high opening as a rule. **(See 13" Header Table)**
- Door drive arms that exceed 72" O.A. Dim in length comes with a reinforced aluminum arm.
- Special door drive arms are for high cabs over 8'-0", and/or headers more than 13" high for S/S, 2/SP, 3/SP, and 15" high for C/P and 2SP/CP opening. **A field survey must be done and submitted before fabrication can begin.**

13" Header Height

- Prior to October 1995, OP22-0001R/L & OP22-0002R/L (22"-29" D.O.) were used.
- After October 1995, refer to the 2/SP small door opening table.

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0001L/R	22"-24"		25" - 25 3/8"	18"	14"	33 3/4''
OP22-0002L/R	25"-29"		25 3/8" - 26 3/8"	19"	15"	35 3/4''
OP22-0003L/R	30"-34"	30"-34"	23 7/8" - 25 3/16"	25"	15"	41 3/4''
OP22-0004L/R	35"-39"	35"-39"	28 5/8" - 29 3/8"	24"	16"	41 3/4''
OP22-0005L/R	40"-44"	40"-44"	34" - 34 3/4"	26"	20"	47 3/4''
OP22-0006L/R	45"-48"	45"-48"	33 3/4" - 34 5/16"	31"	21"	53 3/4''

17" Header Height

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0112L/R*	30"-34"	30"-34"	23 3/4" - 25 1/8"	25"	15"	45 3/4''
OP22-0113L/R*	35"-39"	35"-39"	28 5/8" - 29 1/4"	24"	16"	45 3/4''
OP22-0114L/R*	40"-44"	40"-44"	34 1/4" - 34 7/8"	26"	20"	50 3/4''
OP22-0115L/R*	45"-48"	45"-48"	33 7/8" - 34 3/8"	31"	21"	56 3/4''

21" Header Height

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0116L/R*	30"-34"	30"-34"	24 1/4" - 25 3/8"	32"	15"	48 3/4''
OP22-0117L/R*	35"-39"	35"-39"	29 1/2" - 30 1/8"	29"	18"	48 3/4''
OP22-0118L/R*	40"-44"	40"-44"	35 1/2" - 36"	30"	21"	52 3/4''
OP22-0119L/R*	45"-48"	45"-48"	33 3/4" - 34 1/2"	338"	21"	60 3/4''

25" Header Height

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0120L/R*	30"-34"	30"-34"	24 1/8" - 25 3/8"	36"	15"	52 3/4''
OP22-0121L/R*	35"-39"	35"-39"	29 5/8" - 30 1/8"	33"	18"	52 3/4''
OP22-0122L/R*	40"-44"	40"-44"	35 1/2" - 36 1/8"	34"	21"	56 3/4''
OP22-0123L/R*	45"-48"	45"-48"	34 1/4" - 34 3/4"	41"	21"	63 3/4''

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Arm Assemblies

Single & Two Speed Door Opening

29" Header Height

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0124L/R*	30"-34"	30"-34"	24 7/8" - 26"	38"	17"	56 3/4''
OP22-0125L/R*	35"-39"	35"-39"	29 7/8" - 30 3/8"	36"	18"	55 3/4''
OP22-0126L/R*	40"-44"	40"-44"	35 3/4" - 36 1/4"	37"	21"	59 3/4''
OP22-0127L/R*	45"-48"	45"-48"	34 1/4" - 34 3/4"	45"	21"	67 3/4''

33" Header Height

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0128L/R*	30"-34"	30"-34"	24 7/8" - 26"	42"	17"	60 3/4''
OP22-0129L/R*	35"-39"	35"-39"	30" - 30 1/2"	40"	18"	59 3/4''
OP22-0130L/R*	40"-44"	40"-44"	35 7/8" - 36 3/8"	41"	21"	63 3/4''
OP22-0131L/R*	45"-48"	45"-48"	34 1/2" - 35"	48"	21"	70 3/4''

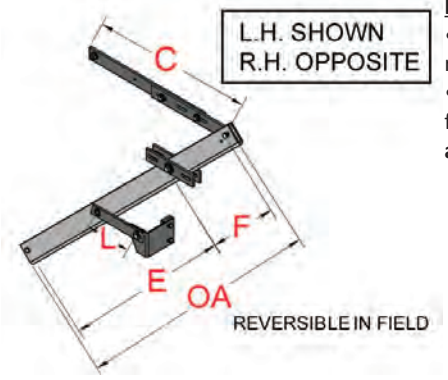
37" Header Height

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0132L/R*	30"-34"	30"-34"	25 5/8" - 26 3/4"	44"	19"	64 3/4''
OP22-0133L/R*	35"-39"	35"-39"	30 1/4" - 30 3/4"	43"	18"	62 3/4''
OP22-0134L/R*	40"-44"	40"-44"	36 1/8" -36 5/8"	44"	22"	67 3/4''
OP22-0135L/R*	45"-48"	45"-48"	34 1/2" - 35"	52"	21"	74 3/4''

41" Header Height

Part No.	S/S	2/SP	"C" DIM	"E" DIM	"F" DIM	"OA" DIM
OP22-0136L/R*	30"-34"	30"-34"	25 1/2" - 26 3/4"	48"	19"	68 3/4''
OP22-0137L/R*	35"-39"	35"-39"	30 3/8" - 30 3/4"	47"	18"	66 3/4''
OP22-0138L/R*	40"-44"	40"-44"	36 5/8" - 37 1/8"	47"	22"	70 3/4''
OP22-0139L/R*	45"-48"	45"-48"	34 1/2" - 35"	56"	21"	78 3/4''

Two Speed Small Door Opening



Note:

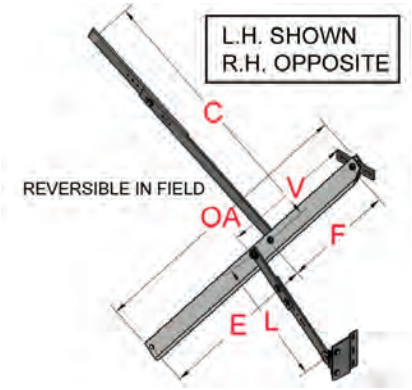
- Standard door drive arms are those used for 8'-0" high cabs with 7'-0" high opening as a rule. **(See 13" Header Table)**
- Special door drive arms are for high cabs over 8'-0", and/or headers more than 13" high for S/S, 2/SP, 3/SP, and 15" high for C/P and 2SP/CP opening. **A field survey must be done and submitted before fabrication can begin.**

13" Header Height

Part No.	2/SP	"C" DIM	"E" DIM	"F" DIM	"L" DIM	"OA" DIM
OP22-0054L/R*	24"-24"	17 3/4"	30"	11"	4 1/2"	42 3/4''
OP22-0055L/R*	25"-25"	17 5/8"	30"	11"	5 1/2"	42 3/4''
OP22-0056L/R*	26"-26"	17 3/8"	30"	11"	6 1/2"	42 3/4''
OP22-0058L/R*	27"-27"	20 7/16"	30"	12"	5 3/4"	43 3/4''
OP22-0059L/R*	28"-28"	20 1/4"	30"	12"	6 3/4"	43 3/4''
OP22-0060L/R*	29"-29"	20"	30"	12"	7 3/4"	43 3/4''

(*) Special Engineering Required

Two Speed Large Door Opening



Note:

- Tables shown here are for elevator cabs 8’ 0” high.
- Door drive arms that exceed 72” O.A. Dim in length comes with a reinforced aluminum arm.
- Special door drive arms are for high cabs over 8’-0”, and/or headers more than 13” high for S/S, 2/SP, 3/SP, and 15” high for C/P and 2SP/CP opening. **A field survey must be done and submitted before fabrication can begin.**

15” Header Height

Part No.	2/SP	“C” DIM	“E” DIM	“F” DIM	“L” DIM	“OA” DIM	“V” DIM
OP22-0012L/R	49”-52”	34 1/8” - 34 3/4”	32”	22”	14 1/2” - 17 1/4”	55 3/4’’	26”
OP22-0013L/R	53”-56”	34 3/8” - 35 1/8”	35”	23”	16 1/2” - 19 1/2”	59 3/4’’	28 1/2”

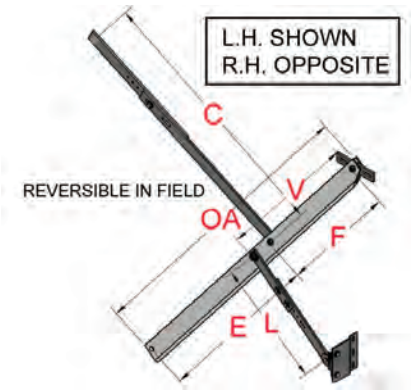
17” Header Height

Part No.	2/SP	“C” DIM	“E” DIM	“F” DIM	“L” DIM	“OA” DIM	“V” DIM
OP22-0014L/R	57”-60”	35” - 35 1/2”	36”	24”	17 3/4” - 20 3/4”	61 3/4’’	29”
OP22-0015L/R	61”-64”	35 1/2” - 36”	40”	25”	20 3/8” - 23 3/8”	66 3/4’’	32”

19” Header Height

Part No.	2/SP	“C” DIM	“E” DIM	“F” DIM	“L” DIM	“OA” DIM	“V” DIM
OP22-0016L/R	65”-68”	35 7/8” - 36 3/8”	41”	26”	21 9/16” - 24 9/16”	68 3/4’’	33”
OP22-0017L/R	69”-72”	36 1/8” -36 5/8”	45”	27”	24 1/4” - 27 1/4”	73 3/4’’	35 1/2”

Three Speed Door Opening



Note:

- Tables shown here are for elevator cabs 8’ 0” high.
- Elevator cabs over 8’-0” high, contact G.A.L. Sales or Engineering Department.
- **A field survey must be done and submitted before fabrication can begin.**

13” Header Height

Part No.	3/SP	“C” DIM	“E” DIM	“F” DIM	“L” DIM	“OA” DIM	“V” DIM
OP22-0072L/R*	30”-30”	24 15/16”	32”	16”	3 5/8”	49 3/4’’	31”
OP22-0073L/R*	31”-31”	25 1/8”	32”	16”	3 15/16”	49 3/4’’	31 1/8”
OP22-0074L/R*	32”-32”	25 1/4”	32”	16”	4 1/4”	49 3/4’’	31 1/4”
OP22-0075L/R*	33”-33”	25 3/8”	32”	16”	4 9/16”	49 3/4’’	31 3/8”
OP22-0076L/R*	34”-34”	25 1/2”	32”	16”	4 7/8”	49 3/4’’	31 1/2”

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Arm Assemblies

Three Speed Door Opening

13" Header Height

Part No.	3/SP	"C" DIM	"E" DIM	"F" DIM	"L" DIM	"OA" DIM	"V" DIM
OP22-0077L/R*	35"-35"	25 5/8"	32"	18"	3 5/8"	51 3/4''	32 1/4"
OP22-0078L/R*	36"-36"	25 3/4"	32"	18"	4 1/4"	51 3/4''	32 3/8"
OP22-0079L/R*	37"-37"	25 15/16"	32"	18"	4 7/8"	51 3/4''	32 1/2"
OP22-0080L/R*	38"-38"	26 1/8"	32"	18"	5 1/2"	51 3/4''	32 5/8"
OP22-0081L/R*	39"-39"	26 1/4"	32"	18"	6 1/8"	51 3/4''	32 3/4"
OP22-0082L/R*	40"-40"	30 3/8"	31"	20"	4 1/8"	52 3/4''	32 1/4"
OP22-0083L/R*	41"-41"	30 9/16"	31"	20"	4 3/4"	52 3/4''	32 1/2"
OP22-0084L/R*	42"-42"	30 3/4"	31"	20"	5 3/8"	52 3/4''	32 3/4"
OP22-0085L/R*	43"-43"	30 15/16"	31"	20"	6"	52 3/4''	33"
OP22-0086L/R*	44"-44"	30 1/8"	31"	20"	6 1/2"	52 3/4''	33 1/4"

17" Header Height

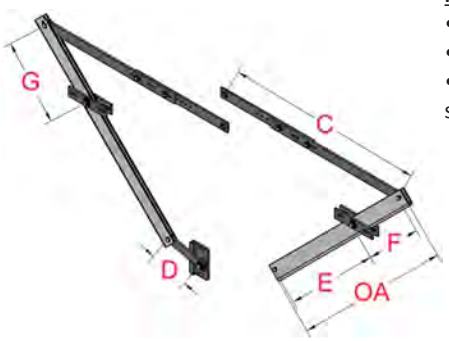
Part No.	3/SP	"C" DIM	"E" DIM	"F" DIM	"L" DIM	"OA" DIM	"V" DIM
OP22-0087L/R*	45"-45"	28 3/4"	36"	20"	5 3/4"	57 3/4''	35 3/4"
OP22-0088L/R*	46"-46"	28 7/8"	36"	20"	6 3/8"	57 3/4''	35 7/8"
OP22-0089L/R*	47"-47"	29 1/16"	36"	20"	7"	57 3/4''	36 1/8"
OP22-0090L/R*	48"-48"	29 1/4"	36"	20"	7 5/8"	57 3/4''	36 7/8"
OP22-0091L/R*	49"-49"	29 3/8"	36"	20"	8 1/4"	57 3/4''	36 1/2"
OP22-0092L/R*	50"-50"	33 7/8"	35"	22"	6 1/4"	58 3/4''	35 7/8"
OP22-0093L/R*	51"-51"	34 0/1"	35"	22"	6 13/16"	58 3/4''	36 1/8"
OP22-0094L/R*	52"-52"	34 3/16"	35"	22"	7 3/8"	58 3/4''	36 3/8"
OP22-0095L/R*	53"-53"	34 3/8"	35"	22"	7 15/16"	58 3/4''	36 5/8"
OP22-0096L/R*	54"-54"	34 1/2"	35"	22"	8 1/2"	58 3/4''	36 7/8"
OP22-0097L/R*	55"-55"	34 1/4"	39"	22"	7 3/4"	62 3/4''	38 7/8"
OP22-0098L/R*	56"-56"	34 3/8"	39"	22"	8 3/8"	62 3/4''	39"
OP22-0099L/R*	57"-57"	34 9/16"	39"	22"	9"	62 3/4''	39 1/4"
OP22-0100L/R*	58"-58"	34 3/4"	39"	22"	9 5/8"	62 3/4''	39 1/2"
OP22-0101L/R*	59"-59"	34 7/8"	39"	22"	10 1/4"	62 3/4''	39 5/8"
OP22-0102L/R*	60"-60"	34 1/8"	39"	23"	8 1/2"	63 3/4''	39"
OP22-0103L/R*	61"-61"	34 1/4"	39"	23"	9 1/16"	63 3/4''	39 1/4"
OP22-0104L/R*	62"-62"	34 1/2"	39"	23"	9 5/8"	63 3/4''	39 1/2"
OP22-0105L/R*	63"-63"	34 5/8"	39"	23"	10 3/16"	63 3/4''	39 3/4"
OP22-0106L/R*	64"-64"	34 3/4"	39"	23"	10 3/4"	63 3/4''	40"
OP22-0107L/R*	65"-65"	34 5/8"	42"	24"	9"	67 3/4''	41 3/8"
OP22-0108L/R*	66"-66"	34 3/4"	42"	24"	9 9/16"	67 3/4''	41 5/8"
OP22-0109L/R*	67"-67"	34 15/16"	42"	24"	10 1/8"	67 3/4''	42"
OP22-0110L/R*	68"-68"	35 1/8"	42"	24"	10 11/16"	67 3/4''	42 3/8"
OP22-0111L/R*	69"-69"	35 1/4"	42"	24"	11 1/4"	67 3/4''	42 5/8"

(*) Special Engineering Required

Operator Parts

Drive Arm Assemblies

Center Parting Door Opening



Note:

- The 15” & 17” header tables below are for elevator cabs 8’ 0” high.
- Center Parting Drive Arm Assemblies are arranged for left hand clutches only.
- For cab heights over 8’-0” with 7’-0” door opening, a field survey must be done and submitted before fabrication can begin.

15” Header Height

Part No.	C/P	“C” DIM	“D” DIM	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0007N	30”-33”	25 1/16” - 25 1/2”	5”	19 3/4”	12”	11 1/2”	33 1/4’’
OP22-0008N	34”-39”	27 1/2” - 28 1/8”	6”	21”	12”	11 1/2”	34 1/2’’
OP22-0009N	40”-49”	29 1/8” - 30 1/8”	6”	25 1/2”	12”	11 1/2”	39’’

17” Header Height

Part No.	C/P	“C” DIM	“D” DIM	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0010N	50”-54”	34” - 34 9/16”	8”	29 1/2”	15”	13”	46’’
OP22-0011N	55”-59”	35” - 35 1/2”	8”	29 1/2”	15”	14 1/2”	46’’

19” Header Height

Part No.	C/P	“C” DIM	“D” DIM	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0140N*	30”-33”	25 3/4” - 26 1/8”	5”	23”	14”	13”	38 3/4’’
OP22-0141N*	34”-39”	28 1/4” - 28 7/8”	6”	25”	12”	11”	38 3/4’’
OP22-0142N*	40”-44”	29 1/2” - 30”	6”	39”	12”	11”	42 3/4’’
OP22-0143N*	45”-49”	30 1/4” - 30 3/4”	6”	28”	14”	13”	43 3/4’’
OP22-0144N*	50”-53”	34 1/2” - 34 7/8”	8”	31”	15”	13”	47 3/4’’

23” Header Height

Part No.	C/P	“C” DIM	“D” DIM	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0145N*	30”-33”	26 1/8” - 26 1/2”	5”	25”	15”	14”	41 3/4’’
OP22-0146N*	34”-39”	29 1/8” - 29 3/4”	6”	28 1/2”	14”	13”	44 1/4’’
OP22-0147N*	40”-44”	29 7/8” - 30 3/8”	6”	31 1/2”	14”	13”	47 1/4’’
OP22-0148N*	45”-49”	30 5/8” - 31 1/8”	6”	30”	15”	14”	46 3/4’’
OP22-0149N*	50”-53”	34 7/8” - 35 1/4”	8”	34”	16”	14”	51 3/4’’

27” Header Height

Part No.	C/P	“C” DIM	“D” DIM	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0150N*	30”-33”	26 1/2” - 26 7/8”	5”	29”	15”	14”	45 3/4’’
OP22-0152N*	40”-44”	30 3/8” - 30 7/8”	6”	34”	15”	14”	50 3/4’’
OP22-0148N*	34”-39”	29 1/2” - 30”	6”	30”	15”	14”	46 3/4’’
OP22-0153N*	45”-49”	30 7/8” - 31 3/8”	6”	33”	16”	15”	50 3/4’’
OP22-0154N*	50”-53”	35 1/2” - 35 7/8”	8”	37”	17”	15”	55 3/4’’

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Arm Assemblies

Center Parting Door Opening

31" Header Height

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0155N*	30"-33"	27" - 27 3/8"	5"	30"	18"	17"	49 3/4''
OP22-0156N*	34"-39"	30 1/8" - 30 3/4"	6"	33"	17"	16"	51 3/4''
OP22-0157N*	40"-44"	30 5/8" - 31 1/8"	6"	35 1/2"	18"	16 1/2"	55 1/4''
OP22-0158N*	45"-49"	31 1/4" - 31 3/4"	6"	34"	18"	17"	53 3/4''
OP22-0159N*	50"-53"	35 3/4" - 36 1/8"	8"	40"	17"	15"	58 3/4''

35" Header Height

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0160N*	30"-33"	27 1/2" - 27 7/8"	5"	34"	18"	16"	53 3/4''
OP22-0161N*	34"-39"	30 5/8" - 31 1/4"	6"	36"	17"	16"	54 3/4''
OP22-0162N*	40"-44"	31 1/8" - 31 5/8"	6"	38"	19"	17 1/2"	58 3/4''
OP22-0163N*	45"-49"	31 3/4" - 32 1/4"	6"	37"	20"	19"	58 3/4''
OP22-0164N*	50"-53"	36 1/4" - 36 5/8"	8"	42"	19"	17"	62 3/4''

39" Header Height

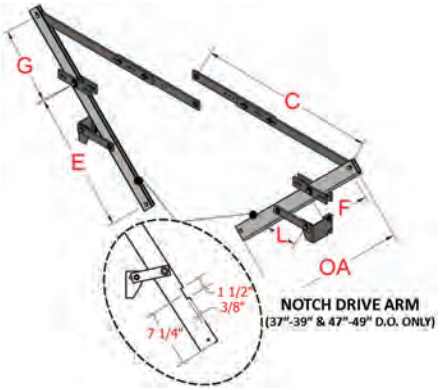
Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0165N*	30"-33"	27 7/8" - 28 1/4"	5"	36"	20"	18"	57 3/4''
OP22-0166N*	34"-39"	31 1/2" - 32 1/8"	6"	38"	20"	19"	59 3/4''
OP22-0167N*	40"-44"	31 1/2" - 32"	6"	40"	22"	19 3/4"	63 3/4''
OP22-0168N*	45"-49"	32 1/2" - 32 5/8"	6"	40"	20"	19"	61 3/4''
OP22-0169N*	50"-53"	36 3/4" - 37 1/8"	8"	44"	21"	19"	66 3/4''

43" Header Height

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0170N*	30"-33"	28 3/8" - 28 3/4"	5"	39"	21"	19"	61 3/4''
OP22-0171N*	34"-39"	31 5/8"- 32 3/8"	6"	42"	18"	17"	61 3/4''
OP22-0172N*	40"-44"	31 7/8" - 32 1/8"	6"	43"	22"	20 1/2"	66 3/4''
OP22-0173N*	45"-49"	32 1/2" - 33"	6"	44"	20"	19"	65 3/4''
OP22-0174N*	50"-53"	37 1/4" - 37 5/8"	8"	47"	22"	20"	70 3/4''

(*) Special Engineering Required

Two Speed Center Parting Door Opening



Note:

- The tables shown here are for standard 8' 0" high cabs.
- Door links & brackets not included. Refer to *Door Link & Bracket Assemblies* (page 91) to purchase it as an additional part.
- Cabs over 8' 0" high, contact G.A.L. Sales or Engineering department. A field survey must be done and submitted.

15" Header Height (Used With Type "A" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0018N	32"-32"	22 5/8" - 22 3/4"	20"	13"	11"	3"	34 3/4''
OP22-0644N	33"-33"	22 5/8"	20"	13"	11"	3 1/2"	34 3/4''
OP22-0019N	34"-34"	22 5/8"	20"	13"	11"	4"	34 3/4''
OP22-0020N	35"-36"	24 3/8" - 24 5/8"	20 1/2"	13"	11"	3 1/2"	35 1/4''
OP22-0021N	37"-38"	24" - 24 1/8"	20 1/2"	13"	11"	4"	35 1/4''
OP22-0645N	39"-39"	24"	20 1/2"	13"	11"	4 1/2"	35 1/4''
OP22-0022N	40"-41"	25 3/4" - 25 7/8"	24 1/2"	13"	11"	4"	39 1/4''
OP22-0023N	42"-43"	25 3/8" - 25 1/2"	24 1/2"	13"	11"	4 1/2"	39 1/4''
OP22-0646N	44"-44"	25 3/8"	24 1/2"	13"	11"	5"	39 1/4''
OP22-0024N	45"-45"	26 15/16" - 27 1/16"	26"	13"	11"	4 1/2"	40 3/4''
OP22-0025N	46"-48"	26 11/16"	26"	13"	11"	5"	40 3/4''
OP22-0026N	49"-49"	26 9/16"	26"	13"	11"	5 1/2"	40 3/4''

15" Header Height (Used With Type "C" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0043N	32"-32"	22 5/8" - 22 3/4"	20"	13"	11"	4 1/2"	34 3/4''
OP22-0655N	33"-33"	22 5/8"	20"	13"	11"	4 1/2"	34 3/4''
OP22-0044N	34"-34"	22 5/8"	20"	13"	11"	5"	34 3/4''
OP22-0045N	35"-36"	24 3/8" - 24 5/8"	20 1/2"	13"	11"	4 1/2"	35 1/4''
OP22-0046N	37"-38"	24" - 24 1/8"	20 1/2"	13"	11"	4 1/2"-5"	35 1/4''
OP22-0656N	39"-39"	24"	20 1/2"	13"	11"	5"	35 1/4''
OP22-0047N	40"-41"	25 3/4" - 25 7/8"	24 1/2"	13"	11"	5"	39 1/4''
OP22-0048N	42"-43"	25 3/8" - 25 1/2"	24 1/2"	13"	11"	5 1/2"	39 1/4''
OP22-0657N	44"-44"	25 38"	24 1/2"	13"	11"	5 1/2"	39 1/4''
OP22-0049N	45"-45"	26 15/16" - 27 1/16"	26"	13"	11"	5 1/2"	40 3/4''
OP22-0050N	46"-48"	26 11/16"	26"	13"	11"	5 1/2"-6"	40 3/4''
OP22-0051N	49"-49"	26 9/16"	26"	13"	11"	6"	40 3/4''

17" Header Height (Used With Type "A" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0027N	50"-50"	29 5/16" - 29 7/16"	29 1/2"	15"	13"	4 1/2"	46 1/4''
OP22-0647N	51"-51"	29 5/16"	29 1/2"	15"	13"	5"	46 1/4''
OP22-0028N	52"-52"	29 1/16" - 29 3/16"	29 1/2"	15"	13"	5 1/2"	46 1/4''

DOOR EQUIPMENT

Operator Parts

Drive Arm Assemblies

Two Speed Center Parting Door Opening

17" Header Height (Used With Type "C" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0052N	50"-50"	29 5/16" - 29 7/16"	29 1/2"	15"	13"	4 1/2"	46 1/4''
OP22-0658N	51"-51"	29 5/16"	29 1/2"	15"	13"	65"	46 1/4''
OP22-0053N	52"-52"	29 5/16" - 29 7/16"	29 1/2"	15"	13"	5 1/2"	46 1/4''

17" Header Height (Used With Type "A" & "C" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0648N	53"-53"	29 1/16"	29 1/2"	15"	13"	6"	46 1/4''
OP22-0029N	54"-54"	28 15/16"	29 1/2"	15"	13"	6 1/2"	46 1/4''
OP22-0030N	55"-55"	30 3/4" - 30 7/8"	31 1/2"	14"	12"	6 1/2"	47 1/4''
OP22-0649N	56"-56"	30 3/4"	31 1/2"	14"	12"	7"	47 1/4''
OP22-0031N	57"-57"	30 1/2" - 30 5/8"	31 1/2"	14"	12"	7 1/2"	47 1/4''
OP22-0650N	58"-58"	30 1/2"	31 1/2"	14"	12"	8"	47 1/4''
OP22-0032N	59"-59"	30 3/8"	31 1/2"	14"	12"	8 1/2"	47 1/4''
OP22-0033N	60"-60"	35 1/4"	34"	16"	14"	5"	51 3/4''
OP22-0034N	61"-61"	35" - 35 1/8"	34"	16"	14"	5 1/2"	51 3/4''
OP22-0651N	62"-62"	35"	34"	16"	14"	6"	51 3/4''
OP22-0035N	63"-63"	34 7/8"	34"	16"	14"	6 1/2"	51 3/4''
OP22-0036N	64"-64"	34 3/4"	34"	16"	14"	7"	51 3/4''

19" Header Height (Used With Type "A" & "C" Hanger)

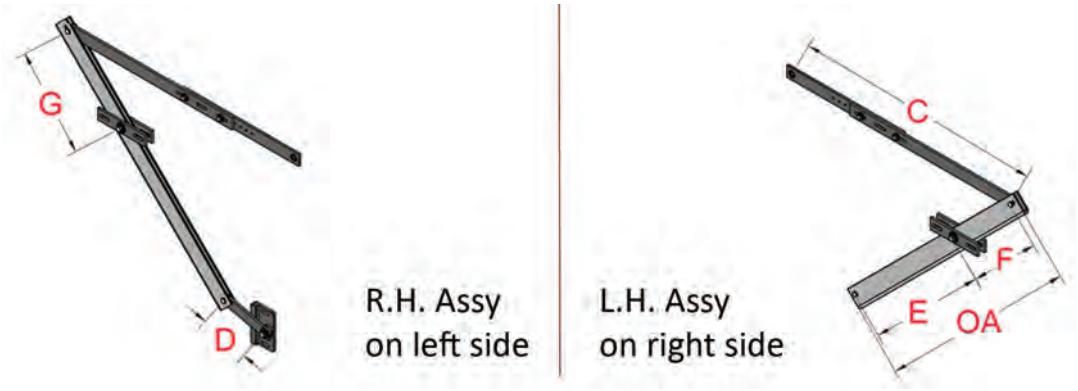
Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0037N	65"-65"	36 1/16"	35"	18 1/2"	14 1/2"	7"	55 1/4''
OP22-0038N	66"-66"	35 13/16" - 35 15/16"	35"	18 1/2"	14 1/2"	7 1/2"	55 1/4''
OP22-0652N	67"-67"	35 13/16"	35"	18 1/2"	14 1/2"	8"	55 1/4''
OP22-0039N	68"-68"	35 11/16"	35"	18 1/2"	14 1/2"	8 1/2"	55 1/4''
OP22-0040N	69"-69"	35 9/16"	35"	18 1/2"	14 1/2"	9"	55 1/4''
OP22-0041N	70"-70"	38 5/16" - 38 7/16"	35"	19 1/2"	15 1/2"	8"	56 1/4''
OP22-0653N	71"-71"	38 5/16"	35"	19 1/2"	15 1/2"	8 1/2"	55 1/4''
OP22-0042N	72"-72"	38 3/16"	35"	19 1/2"	15 1/2"	9"	56 1/4''
OP22-0654N	73"-73"	38 1/16"	35"	19 1/2"	15 1/2"	9 1/2"	55 1/4''

(*) Special Engineering Required

Operator Parts

Drive Arm Sub-Assemblies

Center Parting Doors



Note: Link & bracket with "D" Dim ONLY applies to the right hand arm (Left Side) from corridor hall.

15" Headers - Conventional

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0411L/R	30"-33"	25 1/16"-25 1/2"	5"	19 3/4"	12"	11 1/2"	33 1/2"
OP22-0412L/R	34"-39"	27 1/2"-28 1/8"	6"	21"	12"	11 1/2"	34 3/4"
OP22-0413L/R	40"-49"	29 1/8"-30 1/8"	6"	25 1/2"	12"	11 1/2"	39 1/4"

17" Headers - Conventional

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0414L/R	50"-54"	34"-34 9/16"	8"	29 1/2"	15"	13"	46 1/4"
OP22-0415L/R	55"-59"	35"-35 1/2"	8"	29 1/2"	15"	14 1/2"	46 1/4"

19" Headers - High Cab

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0416L/R*	30"-33"	25 3/4"-26 1/8"	5"	23"	14"	13"	38 3/4"
OP22-0417L/R*	34"-39"	28 1/4"-28 7/8"	6"	25"	12"	11"	38 3/4"
OP22-0418L/R*	40"-49"	29 1/2"-30"	6"	29"	12"	11"	42 3/4"
OP22-0419L/R*	45"-49"	30 1/4"-30 3/4"	6"	28"	14"	13"	43 3/4"
OP22-0420L/R*	50"-53"	34 1/2"-34 7/8"	8"	31"	15"	13"	47 3/4"

23" Headers - High Cab

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0421L/R*	30"-33"	26 1/8"-26 1/2"	5"	25"	15"	14"	41 3/4"
OP22-0422L/R*	34"-39"	29 1/8"-29 3/4"	6"	28 1/2"	14"	13"	44 1/4"
OP22-0423L/R*	40"-44"	29 7/8"-30 3/8"	6"	31 1/2"	14"	13"	47 1/4"
OP22-0424L/R*	45"-49"	30 5/8"-31 1/8"	6"	30"	15"	14"	46 3/4"
OP22-0425L/R*	50"-53"	34 7/8"-35 1/4"	8"	34"	16"	14"	51 3/4"

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Arm Sub-Assemblies

Center Parting Doors

27" Headers - High Cab

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0426L/R*	30"-33"	26 1/2"-26 7/8"	5"	29"	15"	14"	45 3/4"
OP22-0424L/R*	34"-39"	29 3/8"-30"	6"	30"	15"	14"	46 3/4"
OP22-0428L/R*	40"-44"	30 3/8"-30 7/8"	6"	34"	15"	14"	50 3/4"
OP22-0429L/R*	45"-49"	30 7/8"-31 3/8"	6"	33"	16"	15"	50 3/4"
OP22-0430L/R*	50"-53"	35 1/2"-35 7/8"	8"	37"	17"	15"	55 3/4"

31" Headers - High Cab

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0431L/R*	30"-33"	27"-27 3/8"	5"	30"	18"	17"	49 3/4"
OP22-0432L/R*	34"-39"	30 1/8"-30 3/4"	6"	33"	17"	16"	51 3/4"
OP22-0433L/R*	40"-44"	30 5/8"-31 1/8"	6"	35 1/2"	18"	16 1/2"	55 1/4"
OP22-0434L/R*	45"-49"	31 1/4"-31 3/4"	6"	34"	18"	17"	53 3/4"
OP22-0435L/R*	50"-53"	35 3/4"-36 1/8"	8"	40"	17"	15"	58 3/4"

35" Headers - High Cab

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0436L/R*	30"-33"	27 1/2"-27 7/8"	5"	34"	18"	16"	53 3/4"
OP22-0437L/R*	34"-39"	30 5/8"-31 1/4"	6"	36"	17"	16"	54 3/4"
OP22-0438L/R*	40"-44"	31 1/8"-31 5/8"	6"	38"	19"	17 1/2"	58 3/4"
OP22-0439L/R*	45"-49"	31 3/4"-32 1/4"	6"	37"	20"	19"	58 3/4"
OP22-0440L/R*	50"-53"	36 1/4"-36 5/8"	8"	42"	19"	17"	62 3/4"

39" Headers - High Cab

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0441L/R*	30"-33"	27 7/8"-28 1/4"	5"	36"	20"	18"	57 3/4"
OP22-0442L/R*	34"-39"	31 1/2"-32 1/8"	6"	38"	20"	19"	59 3/4"
OP22-0443L/R*	40"-44"	31 1/2"-32"	6"	40"	22"	19 3/4"	63 3/4"
OP22-0444L/R*	45"-49"	32 1/2"-32 5/8"	6"	40"	20"	19"	61 3/4"
OP22-0445L/R*	50"-53"	36 3/4"-37 1/8"	8"	44"	21"	19"	66 3/4"

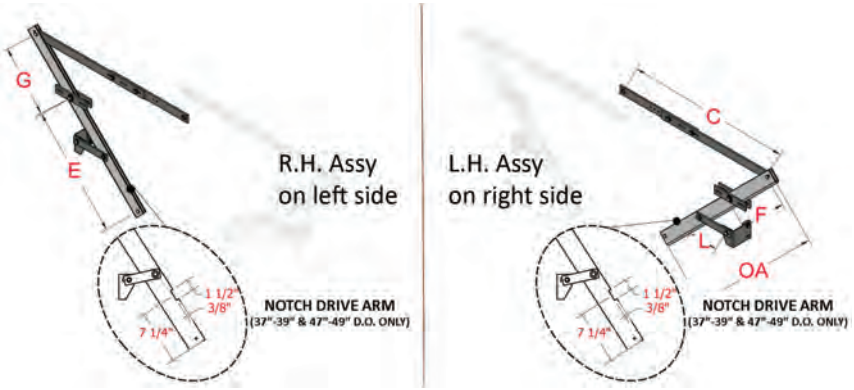
43" Headers - High Cab

Part No.	C/P	"C" DIM	"D" DIM	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0446L/R*	30"-33"	28 3/8"-28 3/4"	5"	39"	21"	19"	61 3/4"
OP22-0447L/R*	34"-39"	31 5/8"-32 3/8"	6"	42"	18"	17"	61 3/4"
OP22-0448L/R*	40"-44"	31 7/8"-32 1/8"	6"	43"	22"	20 1/2"	66 3/4"
OP22-0449L/R*	45"-49"	32 1/2"-33"	6"	44"	20"	19"	65 3/4"
OP22-0450L/R*	50"-53"	37 1/4"-37 5/8"	8"	47"	22"	20"	70 3/4"

(*) Special Engineering Required

Drive Arm Sub-Assemblies

Two Speed Center Parting Doors



Note: Door link & bracket not included. Refer to *Door Link & Bracket Assemblies* (Page 91) to purchase it as an additional part.

15" Headers - Conventional (Used With Type "A" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0451L/R	32"	22 3/4"	20"	13"	11"	3"	34 3/4"
OP22-0660L/R	33"	22 5/8"	20"	13"	11"	3 1/2"	34 3/4"
OP22-0452L/R	34"	22 5/8"	20"	13"	11"	4"	34 3/4"
OP22-0453L/R	35"-36"	24 1/2"-24 5/8"	20 1/2"	13"	11"	3 1/2"	35 1/4"
OP22-0454L/R	37"-38"	24 1/8"-24 3/8"	20 1/2"	13"	11"	4"	35 1/4"
OP22-0661L/R	39"	24"	20 1/2"	13"	11"	4 1/2"	35 1/4"
OP22-0455L/R	40"-41"	25 3/4"-25 7/8"	24 1/2"	13"	11"	4"	39 1/4"
OP22-0456L/R	42"-43"	25 1/2"-25 5/8"	24 1/2"	13"	11"	4 1/2"	39 1/4"
OP22-0662L/R	44"	25 3/8"	24 1/2"	13"	11"	5"	39 1/4"
OP22-0457L/R	45"	27 1/16"	26"	13"	11"	4 1/2"	40 3/4"
OP22-0458L/R	46"-48"	26 11/16"-26 15/16"	26"	13"	11"	5"	40 3/4"
OP22-0459L/R	49"	26 9/16"	26"	13"	11"	5 1/2"	40 3/4"

17" Headers - Conventional (Used With Type "A" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0460L/R	50"	29 7/16"	29 1/2"	15"	13"	4 1/2"	46 1/4"
OP22-0663L/R	51"	29 5/16"	29 1/2"	15"	13"	5"	46 1/4"
OP22-0461L/R	52"	29 3/16"	29 1/2"	15"	13"	5 1/2"	46 1/4"
OP22-0664L/R	53"	29 1/16"	29 1/2"	15"	13"	6"	46 1/4"

17" Headers - Conventional (Used With Type "A" & "C" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0462L/R	54"	28 15/16"	29 1/2"	15"	13"	6 1/2"	46 1/4"
OP22-0463L/R	55"	30 7/8"	31 1/2"	14"	12"	6 1/2"	47 1/4"
OP22-0665L/R	56"	30 3/4"	31 1/2"	14"	12"	7"	47 1/4"
OP22-0464L/R	57"	30 5/8"	31 1/2"	14"	12"	7 1/2"	47 1/4"
OP22-0666L/R	58"	30 1/2"	31 1/2"	14"	12"	8"	47 1/4"
OP22-0465L/R	59"	30 3/8"	31 1/2"	14"	12"	8 1/2"	47 1/4"
OP22-0466L/R	60"	35 1/4"	34"	16"	14"	5"	51 3/4"
OP22-0467L/R	61"	35 1/8"	34"	16"	14"	5 1/2"	51 3/4"
OP22-0667L/R	62"	35"	34"	16"	14"	6"	51 3/4"
OP22-0468L/R	63"	34 7/8"	34"	16"	14"	6 1/2"	51 3/4"
OP22-0469L/R	64"	34 3/4"	34"	16"	14"	7"	51 3/4"

DOOR EQUIPMENT

Operator Parts

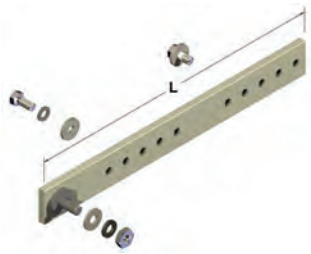
Drive Arm Sub-Assemblies

Two Speed Center Parting Doors

19" Headers - Conventional (Used With Type "A" & "C" Hanger)

Part No.	2SP/CP	"C" DIM	"E" DIM	"F" DIM	"G" DIM	"L" DIM	"OA" DIM
OP22-0470L/R	65"	36 1/16"	35"	18 1/2"	14 1/2"	7"	55 1/4"
OP22-0471L/R	66"	35 15/16"	35"	18 1/2"	14 1/2"	7 1/2"	55 1/4"
OP22-0668L/R	67"	35 13/16"	35"	18 1/2"	14 1/2"	8"	55 1/4"
OP22-0472L/R	68"	35 11/16"	35"	18 1/2"	14 1/2"	8 1/2"	55 1/4"
OP22-0473L/R	69"	35 9/16"	35"	18 1/2"	14 1/2"	9"	55 1/4"
OP22-0474L/R	70"	38 7/16"	35"	19 1/2"	15 1/2"	8"	56 1/4"
OP22-0669L/R	71"	38 5/16"	35"	19 1/2"	15 1/2"	8 1/2"	56 1/4"
OP22-0475L/R	72"	38 3/16"	35"	19 1/2"	15 1/2"	9"	56 1/4"
OP22-0670L/R	73"	38 1/16"	35"	19 1/2"	15 1/2"	9 1/2"	56 1/4"

Crank Arm Assemblies



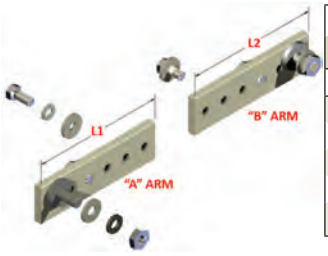
****Discontinued "L" Operator Crank Arms (S/S - 2/SP - 3/SP)****
Discontinued August 2009

Part No.	"L" DIM	Size Range	S/S	2/SP	3/SP	Replaced With
OP22-0492N	13"	4" – 5 7/8"		24"-26"	30"-31"	OP22-0740N
OP22-0493N	15"	5 5/16" – 8 1/2"	22"-39"	27"-39"	32"-39"	
OP22-0494N	17"	8 9/16" – 10 1/2"	40"-48"	40"-49"	40"-52"	
OP22-0495N	19"	10 9/16" – 12 7/8"		50"-64"	53"-67"	OP22-0741N
OP22-0496N	22 5/8"	12 15/16" – 15 3/8"		65"-72"	68"69"	

Current crank arm used – as of August 2009

Part No.	S/S	2/SP	3/SP	"L" DIM
OP22-0740N	22"-48"	24"-48"	30"-49"	13 7/16"
OP22-0741N		49"-72"	50"-69"	17 7/16"

Crank Arm Assemblies - Center Parting



****Discontinued "L" Operator Crank Arms (C/P – 2SP/CP)****
Discontinued August 2009

Part No.	C/P	2SP/SP	"A" Arm	"B" Arm	Replacement Note
OP22-0497N	30"-49"	32"-37" | 40"-46"	5"	5"	See table below for part No. replacement
OP22-0498N	50"-53"	38"-39" | 47"-53" | 55"-60"	5"	6 3/4"	
OP22-0499N	54"-58"	54" | 60"-63"	6 3/4"	6 3/4"	
OP22-0500N	59"	64"-69"	6 3/4"	8 1/2"	
OP22-0501N		70"-72"	8 1/2"	10"	

Current crank arm used – as of August 2009

Part No.	C/P	2SP/CP	"L1" DIM "A" Arm	"L2" DIM "B" Arm	Size Range "A" Arm	Size Range "B" Arm
OP22-0742N	30"-49"	32"-49"	5 3/8"	5 3/8"	4 3/8" - 6 3/4"	4 3/8" - 6 3/4"
OP22-0743N	50"-54"	50"-59"	5 3/8"	7 1/8"	4 3/8" - 6 3/4"	6 1/4" - 8 5/8"
OP22-0744N	55"-64"		7 1/8"	7 1/8"	6 1/4" - 8 5/8"	6 1/4" - 8 5/8"
OP22-0745N	65"-83"		7 1/8"	9 3/8"	6 1/4" - 8 5/8"	8 1/2" - 10 7/8"
OP22-0746N		60"-64"	7 1/8"	7 1/8"	6 1/4" - 8 5/8"	6 1/4" - 8 5/8"
OP22-0747N		65"-83"	7 1/8"	9 3/8"	6 1/4" - 8 5/8"	8 1/2" - 10 7/8"

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Shoe and Crank Arm Assemblies

Drive Shoe Assemblies



Part No.	Description
OP22-0506N	LDC Shoe, 36 3/4" OA Length Assembly, with MTG Angles
OP22-0507N	Shoe, 41" OA Length Assembly, with MTG Angles and Brace
OP22-0508N	Shoe, 46" OA Length Assembly, with MTG Angles and Brace
OP22-0509N	Shoe, 49" OA Length Assembly, with MTG Angles and Brace

Crank Arm With Roller Bearing (Shoe Drive)



Discontinued Shoe Drive Crank Arms				
Part No.	**"L" DIM**	**Size Range**	**S/S & 2/SP**	**Replaced With**
OP22-0502N	22 5/8"	13 5/8" – 16 1/8"	26"-31"	**OP22-0748N**
OP22-0503N	25 5/8"	16 5/8" – 19 1/8"	32"-37"	
OP22-0504N	28 5/8"	19 5/8" – 22 1/8"	38-"43"	**OP22-0749N**
OP22-0505N	31 5/8"	22 5/8" – 25 1/8"	44"-49"	

Current crank arm used – as of August 2009

Part No.	S/S & 2/SP	"L" DIM	Size Range
OP22-0748N	26"-37"	22 1/2"	13 5/16" - 19 9/16"
OP22-0749N	38"-49"	28 1/4"	13 5/16" - 19 9/16"
OP22-0752N*	49" & UP	Special Size	Special Size

Drive Shoe Parts

OP22-0510N



Bumper, LDC Shoe

OP22-0511N



Angle, LDC Drive Shoe

OP22-0512N



Brace, LDC Drive Shoe

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Aluminum Drive Arm

Single & Two Speed D.O.

Note For 2/SP 24”-29” Door Openings:

Part No. OP22-0184N was used up to June 1994 for 24”-29” D.O.

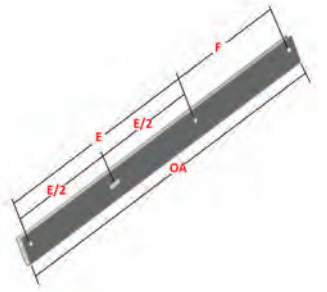
Part No. OP22-0405N & OP22-0406N are the current arms being used from June 1994 and on.

13” Headers - Conventional



Part No.	S/S	2/SP	“E” DIM	“F” DIM	“OA” DIM
OP22-0182N	22”-24”		18”	14”	33 3/4”
OP22-0183N	25”-29”		19”	15”	35 3/4”
OP22-0184N	30”-34”	30”-34” 24”-29”	25”	15”	41 3/4”
OP22-0185N	35”-39”	35”-39”	24”	16”	41 3/4”
OP22-0186N	40”-44”	40”-44”	26”	20”	47 3/4”
OP22-0187N	45”-48”	45”-48”	31”	21”	53 3/4”

13” Headers - Conventional



Part No.	2/SP	“E” DIM	“F” DIM	“OA” DIM
OP22-0405N*	24”-26”	30”	11”	42 3/4”
OP22-0406N*	27”-29”	30”	12”	43 3/4”



15” Headers - Conventional

Part No.	2/SP	“E” DIM	“F” DIM	“OA” DIM	“V” DIM
OP22-0286N	49”-52”	32”	22”	55 3/4”	26”
OP22-0287N	53”-56”	35”	23”	59 3/4”	28 1/2”

17” Headers - Conventional

Part No.	2/SP	“E” DIM	“F” DIM	“OA” DIM	“V” DIM
OP22-0288N	57”-60”	36”	24”	61 3/4”	29”
OP22-0289N	61”-64”	40”	25”	66 3/4”	32”

19” Headers - Conventional

Part No.	2/SP	“E” DIM	“F” DIM	“OA” DIM	“V” DIM
OP22-0290N	65”-68”	41”	26”	68 3/4”	33”
OP22-0291N	69”-72”	45”	27”	73 3/4”	35 1/2”

17” Headers - (High Cab)

Part No.	S/S	2/SP	“E” DIM	“F” DIM	“OA” DIM
OP22-0188N*	30”-34”	30”-34”	29”	15”	45 3/4”
OP22-0189N*	35”-39”	35”-39”	28”	16”	45 3/4”
OP22-0190N*	40”-44”	40”-44”	29”	20”	50 3/4”
OP22-0191N*	45”-48”	45”-48”	34”	21”	56 3/4”

(*) Special Engineering Required

Operator Parts

Aluminum Drive Arm

Single & Two Speed D.O.

21" Headers - (High Cab)

Part No.	S/S	2/SP	"E" DIM	"F" DIM	"OA" DIM
OP22-0192N*	30"-34"	30"-34"	32"	15"	48 3/4"
OP22-0193N*	35"-39"	35"-39"	29"	18"	48 3/4"
OP22-0194N*	40"-44"	40"-44"	30"	21"	52 3/4"
OP22-0195N*	45"-48"	45"-48"	38"	21"	60 3/4"

25" Headers - (High Cab)

Part No.	S/S	2/SP	"E" DIM	"F" DIM	"OA" DIM
OP22-0196N*	30"-34"	30"-34"	36"	15"	52 3/4"
OP22-0197N*	35"-39"	35"-39"	33"	18"	52 3/4"
OP22-0191N*	40"-44"	40"-44"	34"	21"	56 3/4"
OP22-0198N*	45"-48"	45"-48"	41"	21"	63 3/4"

29" Headers - (High Cab)

Part No.	S/S	2/SP	"E" DIM	"F" DIM	"OA" DIM
OP22-0199N*	30"-34"	30"-34"	38"	17"	56 3/4"
OP22-0200N*	35"-39"	35"-39"	36"	18"	55 3/4"
OP22-0201N*	40"-44"	40"-44"	37"	21"	59 3/4"
OP22-0202N*	45"-48"	45"-48"	45"	21"	67 3/4"

33" Headers - (High Cab)

Part No.	S/S	2/SP	"E" DIM	"F" DIM	"OA" DIM
OP22-0203N*	30"-34"	30"-34"	42"	17"	60 3/4"
OP22-0204N*	35"-39"	35"-39"	40"	18"	59 3/4"
OP22-0198N*	40"-44"	40"-44"	41"	21"	63 3/4"
OP22-0205N*	45"-48"	45"-48"	48"	21"	70 3/4"

37" Headers - (High Cab)

Part No.	S/S	2/SP	"E" DIM	"F" DIM	"OA" DIM
OP22-0206N*	30"-34"	30"-34"	44"	19"	64 3/4"
OP22-0207N*	35"-39"	35"-39"	43"	18"	62 3/4"
OP22-0208N*	40"-44"	40"-44"	44"	22"	67 3/4"
OP22-0209N*	45"-48"	45"-48"	52"	21"	74 3/4"

41" Headers - (High Cab)

Part No.	S/S	2/SP	"E" DIM	"F" DIM	"OA" DIM
OP22-0210N*	30"-34"	30"-34"	48"	19"	68 3/4"
OP22-0211N*	35"-39"	35"-39"	47"	18"	66 3/4"
OP22-0212N*	40"-44"	40"-44"	47"	22"	70 3/4"
OP22-0213N*	45"-48"	45"-48"	56"	21"	78 3/4"

Note: Part No. OP22-0209N and OP22-0213N are reinforced arms.

Three Speed: 30"-69" D.O.



15" Headers - Conventional

Part No.	3/SP	"E" DIM	"F" DIM	"OA" DIM	"V" DIM
OP22-0303N*	30"	32"	16"	49 3/4"	31"
OP22-0304N*	31"	32"	16"	49 3/4"	31 1/8"
OP22-0305N*	32"	32"	16"	49 3/4"	31 1/4"
OP22-0306N*	33"	32"	16"	49 3/4"	31 3/8"
OP22-0307N*	34"	32"	16"	49 3/4"	31 1/2"
OP22-0308N*	35"	32"	18"	51 3/4"	32 1/4"
OP22-0309N*	36"	32"	18"	51 3/4"	32 3/8"
OP22-0310N*	37"	32"	18"	51 3/4"	32 1/2"

Part No.	3/SP	"E" DIM	"F" DIM	"OA" DIM	"V" DIM
OP22-0311N*	38"	32"	18"	51 3/4"	32 5/8"
OP22-0312N*	39"	32"	18"	51 3/4"	32 3/4"
OP22-0313N*	40"	31"	20"	52 3/4"	32 1/4"
OP22-0314N*	41"	31"	20"	52 3/4"	32 1/2"
OP22-0315N*	42"	31"	20"	52 3/4"	32 3/4"
OP22-0316N*	43"	31"	20"	52 3/4"	33"
OP22-0317N*	44"	31"	20"	52 3/4"	33 1/4"

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Aluminum Drive Arm

Three Speed: 30”-69” D.O.

17” Headers - Conventional

Part No.	3/SP	“E” DIM	“F” DIM	“OA” DIM	“V” DIM
OP22-0318N*	45”	36”	20”	57 3/4”	35 3/4”
OP22-0319N*	46”	36”	20”	57 3/4”	35 7/8”
OP22-0320N*	47”	36”	20”	57 3/4”	36 1/8”
OP22-0321N*	48”	36”	20”	57 3/4”	36 3/8”
OP22-0322N*	49”	36”	20”	57 3/4”	36 1/2”
OP22-0323N*	50”	35”	22”	58 3/4”	35 7/8”
OP22-0324N*	51”	35”	22”	58 3/4”	36 1/8”
OP22-0325N*	52”	35”	22”	58 3/4”	36 3/8”
OP22-0326N*	53”	35”	22”	58 3/4”	36 5/8”
OP22-0327N*	54”	35”	22”	58 3/4”	36 7/8”
OP22-0328N*	55”	39”	22”	62 3/4”	38 7/8”
OP22-0329N*	56”	39”	22”	62 3/4”	39”
OP22-0330N*	57”	39”	22”	62 3/4”	39 1/4”

Part No.	3/SP	“E” DIM	“F” DIM	“OA” DIM	“V” DIM
OP22-0331N*	58”	39”	22”	62 3/4”	39 1/2”
OP22-0332N*	59”	39”	22”	62 3/4”	39 5/8”
OP22-0333N*	60”	39”	23”	63 3/4”	39”
OP22-0334N*	61”	39”	23”	63 3/4”	39 1/4”
OP22-0335N*	62”	39”	23”	63 3/4”	39 1/2”
OP22-0336N*	63”	39”	23”	63 3/4”	39 3/4”
OP22-0337N*	64”	39”	23”	63 3/4”	40”
OP22-0338N*	65”	42”	24”	67 3/4”	41 3/8”
OP22-0339N*	66”	42”	24”	67 3/4”	41 5/8”
OP22-0340N*	67”	42”	24”	67 3/4”	42”
OP22-0341N*	68”	42”	24”	67 3/4”	42 3/8”
OP22-0342N*	69”	42”	24”	67 3/4”	42 5/8”

Center Parting D.O.



15” Headers - Conventional

Part No.	C/P	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0214N	30”-33”	19 3/4”	12”	11 1/2”	33 1/2”
OP22-0215N	34”-39”	21”	12”	11 1/2”	34 3/4”
OP22-0216N	40”-49”	25 1/2”	12”	11 1/2”	39 1/4”

17” Headers - Conventional

Part No.	C/P	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0217N	50”-54”	29 1/2”	15”	13”	46 1/4”
OP22-0218N	55”-59”	29 1/2”	15”	14 1/2”	46 1/4”

19” Headers - (High Cab)

Part No.	C/P	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0219N*	30”-33”	23”	14”	13”	38 3/4”
OP22-0220N*	34”-39”	25”	12”	11”	38 3/4”
OP22-0221N*	40”-44”	29”	12”	11”	42 3/4”
OP22-0222N*	45”-49”	28”	14”	13”	43 3/4”
OP22-0223N*	50”-53”	31”	15”	13”	47 3/4”

23” Headers - (High Cab)

Part No.	C/P	“E” DIM	“F” DIM	“G” DIM	“OA” DIM
OP22-0224N*	30”-33”	25”	15”	14”	41 3/4”
OP22-0225N*	34”-39”	28 1/2”	14”	13”	44 1/4”
OP22-0226N*	40”-44”	31 1/2”	14”	13”	47 1/4”
OP22-0227N*	45”-49”	30”	15”	14”	46 3/4”
OP22-0228N*	50”-53”	34”	16”	14”	51 3/4”

(*) Special Engineering Required

Operator Parts

Aluminum Drive Arm

Center Parting D.O.

27" Headers - (High Cab)

Part No.	C/P	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0229N*	30"-33"	29"	15"	14"	45 3/4"
OP22-0227N*	34"-39"	30"	15"	14"	46 3/4"
OP22-0230N*	40"-44"	34"	15"	14"	50 3/4"
OP22-0231N*	45"-49"	33"	16"	15"	50 3/4"
OP22-0232N*	50"-53"	37"	17"	15"	55 3/4"

31" Headers - (High Cab)

Part No.	C/P	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0233N*	30"-33"	30"	18"	17"	49 3/4"
OP22-0234N*	34"-39"	33"	17"	16"	51 3/4"
OP22-0235N*	40"-44"	35 1/2"	18"	16 1/2"	55 1/4"
OP22-0236N*	45"-49"	34"	18"	17"	53 3/4"
OP22-0237N*	50"-53"	40"	17"	15"	58 3/4"

35" Headers - (High Cab)

Part No.	C/P	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0238N*	30"-33"	34"	18"	16"	53 3/4"
OP22-0239N*	34"-39"	36"	17"	16"	54 3/4"
OP22-0240N*	40"-44"	38"	19"	17 1/2"	58 3/4"
OP22-0241N*	45"-49"	37"	20"	19"	58 3/4"
OP22-0242N*	50"-53"	42"	19"	17"	62 3/4"

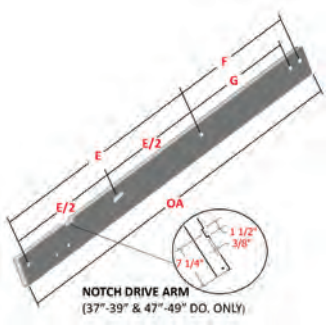
39" Headers - (High Cab)

Part No.	C/P	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0243N*	30"-33"	36"	20"	18"	57 3/4"
OP22-0244N*	34"-39"	38"	20"	19"	59 3/4"
OP22-0245N*	40"-44"	40"	22"	19 3/4"	63 3/4"
OP22-0246N*	45"-49"	40"	20"	19"	61 3/4"
OP22-0247N*	50"-53"	44"	21"	19"	66 3/4"

43" Headers - (High Cab)

Part No.	C/P	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0248N*	30"-33"	39"	21"	19"	61 3/4"
OP22-0249N*	34"-39"	42"	18"	17"	61 3/4"
OP22-0250N*	40"-44"	43"	22"	20 1/2"	66 3/4"
OP22-0251N*	45"-49"	44"	20"	19"	65 3/4"
OP22-0252N*	50"-53"	47"	22"	20"	70 3/4"

Two Speed Center Parting D.O.



15" Headers - Conventional

Part No.	2SP/CP	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0253N	32"-34"	20"	13"	11"	34 3/4"
OP22-0254N	35"-39"	20 1/2"	13"	11"	35 1/4"
OP22-0255N	40"-44"	24 1/2"	13"	11"	39 1/4"
OP22-0256N	45"-46"	26"	13"	11"	40 3/4"
OP22-0151N	47"-49"	26"	13"	11"	40 3/4"

17" Headers - Conventional

Part No.	2SP/CP	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0257N	50"-54"	29 1/2"	15"	13"	34 3/4"
OP22-0258N	55"-59"	31 1/2"	14"	12"	47 3/4"
OP22-0259N	60"-64"	34"	16"	14"	51 3/4"

19" Headers - Conventional

Part No.	2SP/CP	"E" DIM	"F" DIM	"G" DIM	"OA" DIM
OP22-0260N	65"-69"	35"	18 1/2"	14 1/2"	55 1/4"
OP22-0261N	70"-73"	35"	19 1/2"	15 1/2"	56 1/4"

(*) Special Engineering Required

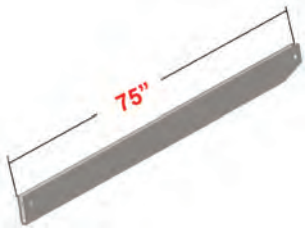
DOOR EQUIPMENT

Operator Parts

Aluminum Drive Arm

Universal Drive Arm

OP22-0531N*



Part No.	Description
OP22-0531N*	Universal Drive Arm 75" O.A. Length

Clutch Transfer Linkage Arm

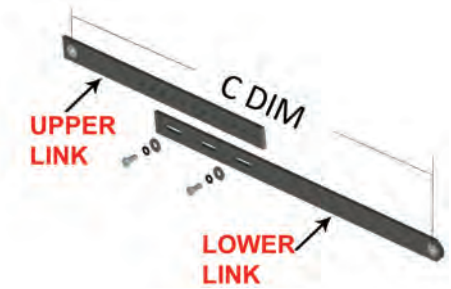
OP22-0699N*



Part No.	Description
OP22-0699N*	Arm, Clutch Transfer Linkage Aluminum

Drive Arm Connecting Links

Type "L" Operator Connecting Link



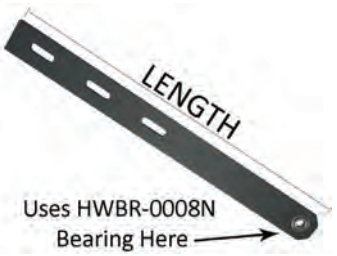
Part No.	S/S	2/SP	3/SP	C/P	2SP/CP	"C" DIM	Description
OP22-0175N	22"-34"	24"-34"	30"-39"	30"-33"	32"-49"	17 1/4"-27 1/4"	Link, Type I, 16 1/2" Lg. Operator Connecting Assembly
OP22-0176N	35"-48"	35"-59"	40"-51"	34"-59"	50"-59"	25 1/2"-35 1/2"	Link, Type II 24 3/4" Lg. Operator Connecting Assembly
OP22-0177N		60"-72"	52"-69"		60"-72"	33 3/4"-40 3/4"	Link, Type III 31" Lg. Operator Connecting Assembly, Link Connecting

Tapped Connecting Link (Upper)



Part No.	Description
OP22-0178N	Link, 17 1/4" Lg. Operator Connecting

Slotted Connecting Link (Lower)



Part No.	Description
OP22-0179N	Link, 16 1/2" Lg. Type I Slotted Connecting
OP22-0180N	Link, 24 3/4" Lg. Type II Slotted Connecting
OP22-0181N	Link, 31" Lg. Type III Slotted Connecting

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Arm Link & Brackets

Link & Bracket Assemblies



Note: All Ferrous Material Yellow Zinc Dichromate Plated

Conventional Part No	Water Resistant Part No	S/S	2/SP	3/SP	C/P	2SP/CP	"D" DIM
OP22-0064N	OP22-0520N		24"-26"	30"-34"	30"-33"	32"-49"	5"
OP22-0065N	OP22-0522N	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"	6"
OP22-0061N	OP22-0523N				60"-67"	60"-67"	7"
OP22-0066N	OP22-0524N	35"-39"	35"-39"	40"-44"	50"-59"	68"-74"	8"
OP22-0071N	OP22-0525N			45"-49"	75"-79"	75"-79"	9"
OP22-0067N	OP22-0526N	22"-29" 40"-44"	40"-44"			80"-83"	10"
OP22-0427N	OP22-0527N			50"-54"			11"
OP22-0068N	OP22-0528N	45"-48"	45"-56"	55"-59"			12"
OP22-0069N	OP22-0529N		57"-64"	60"-64"		118"	14"
OP22-0070N	OP22-0530N		65"-72"	65"-69"			16"
OP22-0698N*							

Door Link Replacement



Note: All Ferrous Material Yellow Zinc Dichromate Plated

Conventional Part No	Water Resistant Part No	S/S	2/SP	3/SP	C/P	2SP/CP	"L" DIM
OP22-0278N	OP22-0677N		24"-26"	30"-34"	30"-33"	32"-49"	5"
OP22-0280N	OP22-0678N	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"	6"
OP22-0282N	OP22-0679N				60"-67"	60"-67"	7"
OP22-0283N	OP22-0680N	35"-39"	35"-39"	40"-44"	50"-59"	68"-74"	8"
OP22-0285N	OP22-0681N			45"-49"	75"-79"	75"-79"	9"
OP22-0513N	OP22-0682N	22"-29" 40"-44"	40"-44"			80"-83"	10"
OP22-0517N	OP22-0683N			50"-54"			11"
OP22-0514N	OP22-0684N	45"-48"	45"-56"	55"-59"			12"
OP22-0515N	OP22-0685N		57"-64"	60"-64"			14"
OP22-0516N	OP22-0686N		65"-72"	65"-69"			16"

(*) Special Engineering Required

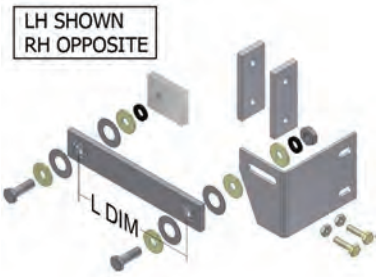
DOOR EQUIPMENT

Operator Parts

Slow Door Link & Brackets

Two Speed: 24”-29” D.O.

Link & Bracket Assemblies



Part No.	2/SP	“L” DIM
OP22-0265L/R	24”	4 1/2”
OP22-0267L/R	25”	5 1/2”
OP22-0269L/R	26”	6 1/2”
OP22-0407L/R	27”	5 3/4”
OP22-0408L/R	28”	6 3/4”
OP22-0409L/R	29”	7 3/4”

Links



Part No.	2/SP	“L” DIM
OP22-0277N	24”	4 1/2”
OP22-0279N	25”	5 1/2”
OP22-0281N	26”	6 1/2”
OP22-0386N	27”	5 3/4”
OP22-0410N	28”	6 3/4”
OP22-0394N	29”	7 3/4”

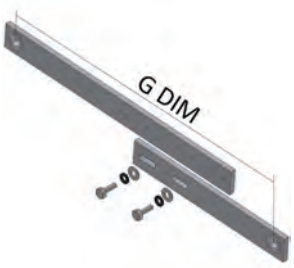
Two Speed: 49”-72” Large D.O.

Link & Bracket Assemblies



Part No.	2/SP	“G” DIM
OP22-0292N	49”-52”	14 1/2”- 17 1/4”
OP22-0293N	53”-56”	16 1/2”- 19 1/2”
OP22-0294N	57”-60”	17 3/4”- 20 3/4”
OP22-0295N	61”-64”	20 3/8”- 23 3/8”
OP22-0296N	65”-68”	21 9/16”- 24 9/16”
OP22-0297N	69”-72”	24 1/4”- 27 1/4”

Links



Part No.	2/SP	“G” DIM
OP22-0298N	49”-52”	14 1/2”- 17 1/4”
OP22-0299N	53”-56”	16 1/2”- 19 1/2”
OP22-0300N	57”-60”	17 3/4”- 20 3/4”
OP22-0301N	61”-64”	20 3/8”- 23 3/8”
OP22-0302N	65”-68”	21 9/16”- 24 9/16”
OP22-0175N	69”-72”	24 1/4” - 27 1/4”

(*) Special Engineering Required

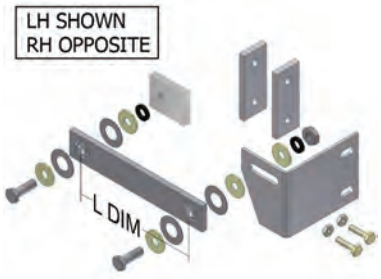
DOOR EQUIPMENT

Operator Parts

Slow Door Link & Brackets

Two Speed Center Parting: 32”-73” D.O.

Link & Bracket Assemblies



Part No.	2SP/CP	“L” DIM
OP22-0262L/R	32”	3”
OP22-0263L/R	33”, 35”-36”	3 1/2”
OP22-0264L/R	34”, 37”-38”, 40”-41”	4”
OP22-0265L/R	39”, 42”-43”, 45” 50”	4 1/2”
OP22-0266L/R	44”, 46”-48”, 51”, 60”	5”
OP22-0267L/R	49”, 52”, 61”	5 1/2”
OP22-0268L/R	53”, 62”	6”
OP22-0269L/R	54”-55”, 63”	6 1/2”
OP22-0270L/R	56”, 64”-65”	7”
OP22-0642L/R	57”, 66”	7 1/2”
OP22-0271L/R	58”, 67”, 70”	8”
OP22-0272L/R	59”, 68”, 71”	8 1/2”
OP22-0273L/R	69”, 72”	9”
OP22-0643L/R	73”	9 1/2”

Links



Part No.	2SP/CP	“L” DIM
OP22-0274N	32”	3”
OP22-0275N	33”, 35”-36”	3 1/2”
OP22-0276N	34”, 37”-38”, 40”-41”	4”
OP22-0535N	39”, 42”-43”, 45” 50”	4 1/2”
OP22-0278N	44”, 46”-48”, 51”, 60”	5”
OP22-0279N	49”, 52”, 61”	5 1/2”
OP22-0280N	53”, 62”	6”
OP22-0281N	54”-55”, 63”	6 1/2”
OP22-0282N	56”, 64”-65”	7”
OP22-0536N	57” 66”	7 1/2”
OP22-0283N	58”, 67”, 70”	8”
OP22-0284N	59”, 68”, 71”	8 1/2”
OP22-0285N	69”, 72”	9”
OP22-0537N	73”	9 1/2”

Link & Bracket Assemblies

OP22-0487L/R



Bracket, Slow Door Link, 2SP/CP 32-73 D.O. & 2/SP 24-29 D.O.

OP22-0581L/R



Bracket, 2SP/CP 33-39 D.O. Slow Door Link (Only Used If Adaptor Channel Supplied)

OP22-0488N



Bracket, 2/SP 49-72 D.O. Slow Door Link, & 3/SP 30-69 D.O. For Intermediate Door

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Intermediate Door Link & Brackets

Three Speed: 30”-69” D.O.

Link & Bracket Assemblies



Part No.	3/SP	“G” DIM
OP22-0343N	30”, 35”	3 5/8”
OP22-0344N	31”	3 15/16”
OP22-0345N	32”, 36”	4 1/4”
OP22-0346N	33”	4 9/16”
OP22-0347N	34”, 37”	4 7/8”
OP22-0348N	38”	5 1/2”
OP22-0349N	39”	6 1/8”
OP22-0350N	40”	4 1/8”
OP22-0351N	41”	4 3/4”
OP22-0352N	42”	5 3/8”
OP22-0353N	43”	6”
OP22-0354N	44”	6 1/2”
OP22-0355N	45”	5 3/4”
OP22-0356N	46”	6 3/8”
OP22-0357N	47”	7”
OP22-0358N	48”	7 5/8”
OP22-0359N	49”	8 1/4”
OP22-0360N	50”	6 1/4”
OP22-0361N	51”	6 13/16”
OP22-0362N	52”	7 3/8”
OP22-0363N	53”	7 15/16”
OP22-0364N	54”, 60”	8 1/2”
OP22-0365N	55”	7 3/4”
OP22-0366N	56”	8 3/8”
OP22-0367N	57”, 65”	9”
OP22-0368N	58”, 62”	9 5/8”
OP22-0369N	59”	10 1/4”
OP22-0370N	61”	9 1/16”
OP22-0371N	63”	10 3/16”
OP22-0372N	64”	10 3/4”
OP22-0373N	66”	9 9/16”
OP22-0374N	67”	10 1/8”
OP22-0375N	68”	10 11/16”
OP22-0376N	69”	11 1/4”

Links



Note: Links with “L” dimension 5 3/8” and above are adjustable. Links below 5 3/8” are fixed links.

Part No.	3/SP	“L” DIM
OP22-0377N	30”, 35”	3 5/8”
OP22-0378N	31”	3 15/16”
OP22-0379N	32”, 36”	4 1/4”
OP22-0380N	33”	4 9/16”
OP22-0381N	34”, 37”	4 7/8”
OP22-0279N	38”	5 1/2”
OP22-0382N	39”	6 1/8”
OP22-0383N	40”	4 1/8”
OP22-0384N	41”	4 3/4”
OP22-0385N	42”	5 3/8”
OP22-0280N	43”	6”
OP22-0281N	44”	6 1/2”
OP22-0386N	45”	5 3/4”
OP22-0387N	46”	6 3/8”
OP22-0282N	47”	7”
OP22-0388N	48”	7 5/8”
OP22-0389N	49”	8 1/4”
OP22-0390N	50”	6 1/4”
OP22-0391N	51”	6 13/16”
OP22-0392N	52”	7 3/8”
OP22-0393N	53”	7 15/16”
OP22-0284N	54”, 60”	8 1/2”
OP22-0394N	55”	7 3/4”
OP22-0395N	56”	8 3/8”
OP22-0285N	57”, 65”	9”
OP22-0396N	58”, 62”	9 5/8”
OP22-0397N	59”	10 1/4”
OP22-0398N	61”	9 1/16”
OP22-0399N	63”	10 3/16”
OP22-0400N	64”	10 3/4”
OP22-0401N	66”	9 9/16”
OP22-0402N	67”	10 1/8”
OP22-0403N	68”	10 11/16”
OP22-0404N	69”	11 1/4”

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Reversing Device Assemblies

Conventional

OP24-0019L/R



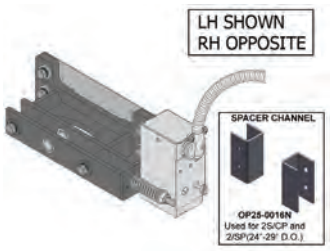
Reversing Device, LRD-1
D.O. - S/S: 24”-48”, 2/SP: 30”-72”, 3/SP: 30”-69”

OP24-0027L/R



Reversing Device Assembly, LRD-1, For “ MODLNYC” Operators
D.O. - S/S: 30”-42”, 2/SP: 30”-48”

OP25-0004L/R



Reversing Device, LRD-2 With Spacers
D.O. - 2/SP: 24”-29”, C/P: 24”-83”, 2SP/CP: 30”-83”

Explosion Resistant

OP24-0042N



Reversing Device, S/S-2/SP LRD-1X, Dust/Explosion Resistant
D.O. - S/S: 30”-48”, 2/SP: 30”-72”, 3/SP: 30”-69”

OP25-0010L/R



Reversing Device, C/P LRD-2X Dust/Explosion Resistant
D.O. - 2/SP: 24”-29”, 2SP/CP: 30”-83”

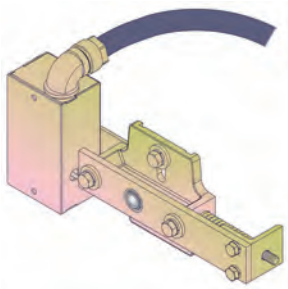
OP25-0028L/R



Reversing Device, 2SP/CP LRD-2X, Dust/Explosion Resistant With Spacers

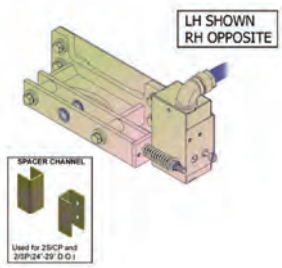
Water Resistant

OP24-0043N



Reversing Device, S/S-2/SP LRD-1W Water Resistant
D.O. - 2/SP: 30” and UP

OP25-0025L/R



Reversing Device, C/P LRD-2W Water Resistant
D.O. - 2/SP: 24”-29”, C/P: 24”-83”, 2SP/CP: 30”-83”

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Reversing Device Parts

Switch - "LRD-1" Assemblies and Parts

OP24-0024L/R	*OP24-0029L/R*	*OP24-0025N*	*OP24-0026N*
			
Switch Assembly, LRD-1/LRD-2	Switch Assembly, LRD1 Reversing Device, For " MODLNYC" Operators D.O. - S/S: 30"-42", 2/SP: 30"-48"	Cover Assembly, LRD-1/LRD-2 Switch	Micro Switch Kit, LRD-1/LRD-2

Connector

HWEL-0006N	*HWEL-0008N*	*HWEL-0022N*	*HWEL-0025N*
			
Connector, 3/8 BX Flex 45 Deg, 45 Deg-1/2 Ko Center Stopped With 2-Screw Clamp & Locknut-390	Connector, 3/8 Liquid Tight 90 Deg-1/2 Ko, 90 Deg-1/2 Ko With Insulated Throat & Locknut-4Q 938T	Connector, 3/8 Liquid Tight 1/2" Ko, Str-1/2" Ko Seg Ring-Locknut	Connector, 3/8 Liquid Tight-45 Deg, 45 Deg-1/2Ko With Locknut

Plate

OP24-0021N	*OP24-0022N*	*OP25-0007L/R*	*OP25-0008N*
			
Plate, LRD-1 Switch Mounting D.O. - S/S: 24"-48", 2/SP: 24"-72", 3/SP: 30"-69"	Plate, LRD-1 Arm Support D.O. - S/S: 24"-48", 2/SP: 24"-72", 3/SP: 30"-69"	Plate, LRD-2 Switch Mounting, Includes Hardware D.O. - 2/SP: 24"-29", C/P: 24"-83", 2SP/CP: 30"-83"	Plate, LRD-2 Arm Support Assembly D.O. - 2/SP: 24"-29", C/P: 24"-83", 2SP/CP: 30"-83"

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Reversing Device Parts

Bracket



Part No.	Description
OP25-0029N*	Bracket, Door Drive Arm Offset Pivot

Spring & Stud Assembly



Part No.	S/S	2/SP	3/SP	Description
OP24-0023N	24”-48”	24”-72”	30”-69”	Spring & Stud Assembly, LRD-1

Conduit

HWEL-0005N



Description
Conduit, 3/8” X 3’ Lg. Electric, Green Field Flexible Steel

OP27-0005N



Description
Conduit, “MODLNYC” 3/8 Liquid Tight, Flex Cable 23” Lg.- (2) 3/8 Connectors (1) 90 Deg-1/2” Ko & (1) 45 Deg-1/2” Ko & Electric Wires For LRD-1 Rev. Device

Drive Arm Support Assembly



Part No.	S/S	2/SP	3/SP	Description
OP24-0001N	35”-44”	35”-44”	60”-69” 40”-44”	Support Assembly, Drive Arm, With 12” Lg. Plate
OP24-0002N	45”-48”	45”-72”	45”-59”	Support Assembly, Drive Arm, With 14” Lg. Plate
OP24-0013N	35”-44”	49”-72” 35”-44”		Support Assembly, Ha Drive Arm, With 12” Lg. Plate
OP24-0014N	45”-48” 24”-42”	49”-72” 45”-48”		Support Assembly, Ha Drive Arm, With 14” Lg. Plate

(*) Special Engineering Required

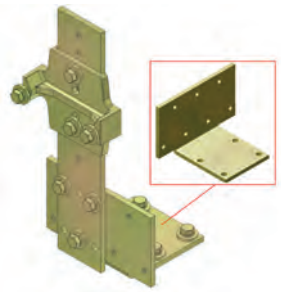
DOOR EQUIPMENT

Operator Parts

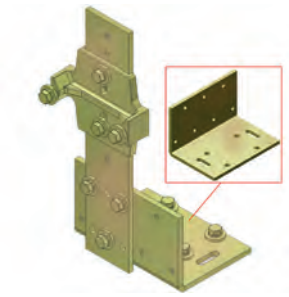
Drive Arm Support Assembly



Part No.	S/S	2/SP	3/SP	Description
OP24-0031N	24”-34”	30”-34”	30”-39”	Support Assembly, Drive Arm With 12” Lg. Plate (Replacement For 2/SP 24-29 D.O. Jobs Before October 1995)
OP24-0033N	24”-34”	24”-34”		Support Assembly, “HA” Drive Arm, With 12” Lg. Plate



Part No.	S/S	2/SP	3/SP	Description
OP24-0041N	24”-34”	30”-34”	30”-39”	Support Assembly, Water Resistant Drive Arm. Replacement For 2/SP 24-29 D.O. Jobs Before October 1995 (Yellow Zinc Dichromate)



Part No.	S/S	2/SP	3/SP	Description
OP24-0035N	35”-44”	35”-44”	60”-69” 40”-44”	Support Assembly, Drive Arm, With 12” Lg. Plate. (Yellow Zinc Dichromate)
OP24-0038N	45”-48”	45”-72”	45”-59”	Support Assembly, Water Resistant Drive Arm, With 14” Lg. Plate. (Yellow Zinc Dichromate)

Drive Arm Support Parts

Angle

OP24-0032N



Angle, Operator Drive Arm Support, S/S 24-34, 2/SP 30-34 & 3/SP 30-39 D.O. Replacement For 2/SP 24-29 D.O. Jobs Before October 1995.

OP24-0034N



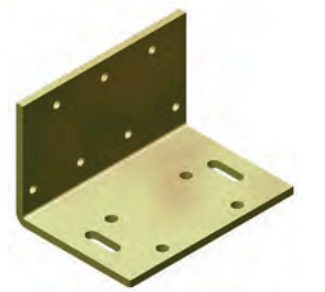
Angle, Water Resistant Drive Arm Support, S/S 27-34, 2/SP 30-34, & 3/SP 30-39 D.O. Replacement For 2/SP 24-29 D.O. Jobs Before October 1995. (Yellow Zinc Dichromate)

OP24-0009N



Angle, Operator Drive Arm Support, S/S 35-48, 2/SP 35-72 & 3S 40-69 D.O.

OP24-0036N



Angle, Water Resistant Drive Arm Support, S/S 35-48, 2/SP 35-72 & 3/SP 40-69 D.O. (Yellow Zinc Dichromate)

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Arm Support Parts

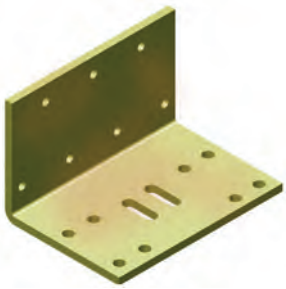
Angle

OP24-0047N



Angle, MOX Operator Drive Arm Support, S/S-2/SP 40-48 & 3/SP 45-69 D.O.

OP24-0049N



Angle, Water Resistant Drive Arm Support, S/S-2/SP 40-48 & 3/SP 45-69 D.O. (Yellow Zinc Dichromate)

OP24-0048N



Angle, MOX Operator Drive Arm Support, S/S-2/SP 30-39 & 3/SP 30-44 D.O.

OP24-0050N



Angle, Water Resistant Drive Arm Support, S/S-2/SP 30-39 & 3/SP 30-44 D.O. (Yellow Zinc Dichromate)

Bracket

OP24-0006N



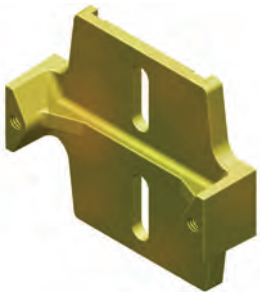
Bracket, Support, S/S 24-48, 2/SP 24-72, 3/SP 30-69 D.O.

OP24-0020N



Bracket, LRD-1 Support, S/S 24-48, 2/SP 24-72, 3/SP 30-69 D.O.

OP24-0037N



Bracket, Support S/S-2/SP-3/SP All Door Opening Size, C/P-2SP/CP 84-144 D.O. (Yellow Zinc Dichromate)

OP25-0001N



Bracket, C/P 22-83 D.O. Arm Support

OP25-0002N



Bracket, 2SP/CP 22-83 D.O. Arm Support, & 2/SP 24-29 D.O.

OP25-0011N



Bracket, C/P Water Resistant Arm Support (Yellow Zinc Dichromate)

OP25-0012N



Bracket, 2SP/CP Water Resistant Arm Support

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Drive Arm Support Parts

Plate

OP24-0007N



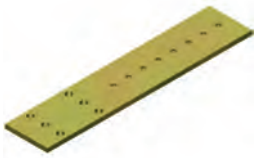
Plate, 12” Lg. Arm Support
D.O. - S/S-2/SP 24”-44”

OP24-0008N



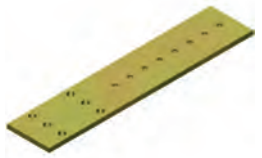
Plate, 14 5/8” Lg. Arm Support
D.O. - S/S 45”-48”, 2/SP 45”-72”

OP24-0039N



Plate, 12” Lg. Water Resistant Support (Yellow Zinc Dichromate)
D.O. - S/S-2SP 35”-44”, 3/SP 60”-69” & 40”-44”

OP24-0040N



Plate, 14” Lg. Water Resistant Support (Yellow Zinc Dichromate)
D.O. - CP-2SP/CP 84”-144”

Drive Arm Hardware

HWBR-0009N



Bearing Kit, 7/8 With Retainer (Note: Used On Crank Arm Pivot Point) (Old# 8179)

HWBR-0008N



Bearing Kit, 7/8 Shoulder, with HWWS-0092N washers. (Note: Used on All Pivot Points Except Crank Arm) (Old# 269-1)

HWBR-0019N



Bearing Kit, 7/8 Shoulder, Yellow Zinc Dichromate (Note: Used on All Pivot Points Except Crank Arm) (Old# 269-1)

OP22-0062N



Bolt/Bearing Kit, Drive Arm, With HWBR-0008N Bearing

OP22-0547N



Bolt/Bearing Kit, Drive Arm (Yellow Zinc Dichromate) With HWBR-0008N Bearing

OP22-0518N



Bolt/Link, Drive Arm

OP22-0489N



Hardware, 2/SP 49-72 D.O. Slow Door Link With HWBR-0008N Bearing

OP25-0003N



Hardware, 2/SP 24”-29” D.O., C/P 22”-83” D.O., 2SP/CP 22”-83” D.O., Pivot, With HWBR-0008N Bearing

(*) Special Engineering Required

Operator Parts

Drive Arm Hardware

OP25-0009N



Spring & Stud Assembly, LRD-2. 2/SP 24”-29” D.O., C/P 24”-83” D.O., 2SP/CP 30”-83” D.O.

OP22-0057N



Plate Assembly, S/S 22”-48”, 2/SP 30”-72”, & 3/SP. 4” C.L. Arm Support, Includes Hardware

OP22-0546N



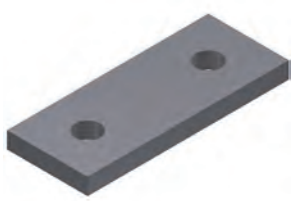
Plate Assembly, S/S-2/SP-3/SP. 4” C.L. Arm Support Includes Hardware (Yellow Zinc Dichromate)

OP34-0079N



Plate Assembly, 2/SP 24”-29” D.O., C/P 22”-83” D.O., 2SP/CP 22”-83” D.O. 5” C.L. Arm Support

OP22-0490N



Spacer, 2/SP 24-29 D.O. & 2SP/CP 32-73 D.O. Slow Door Bracket

OP22-0491N



Spacer, Slow Door Bracket, 2/SP 49-72 D.O. & 3/SP 30-69 D.O. For Intermediate Door

OP34-0084N

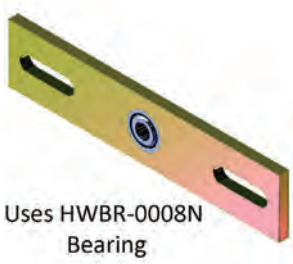


Plate Assembly, C/P-2SP/CP 5”Arm Support (Yellow Zinc Dichromate)

HWSC-0050N



Screw, 3/8-16 x 1 1/8” Hex Low Head

HWSC-0237N



Screw, 3/8-16 x 1 3/4” Hex HD Steel Cap

CL5-0050N



Pin, Spring Arm Closer, With (2) HWRC-0004N Clips

HWWS-0062N



Washer, Flat, 5/16” ID, 5/8 OD x 0.063 Thick, brass.

HWWS-0092N



Washer, 21/32” ID, 1-1/4” OD Flat Steel (Note: This Washer used with HWBR-0008N Bearing Kit)

(*) Special Engineering Required

Operator Parts

Motor & Motor Parts

Motor Specifications

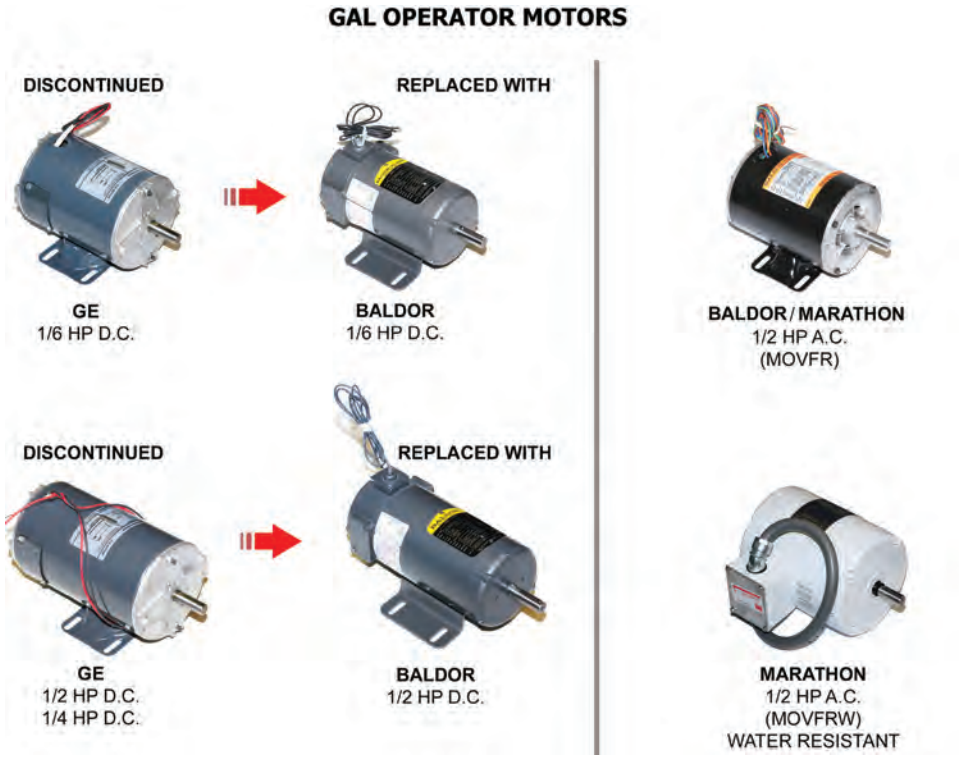
(PM) Permanent Magnet Operator Motor

This motor has only two wires

Important Note: When replacing an existing four wire shunt wound motor, leave all existing wiring in place & connect the two armature wires as follows. This will make the operator compatible with both motor types (shunt wound & PM).

A-	MOD, MOCT, MOSVCL (left hand & C/P) MOM, MOH (right hand)	Red wire - **A1** Black wire - **A2**
B-	MOD, MOCT, MOSVCL (right hand) MOM, MOH (left hand & C/P)	Red wire - **A2** Black wire - **A1**

- Although the PM motor does not require the field resistor & connection to terminal **F2**, it is imperative that terminal **F1** be connected, otherwise the operator will not function properly. The only exceptions to this are the MODP & MODG operators. On these two operators, field connections **F1** & **F2** may be omitted.
- The performance of the PM motor is the same as the shunt wound motor. If there is an unsatisfactory door operation with the PM motor, most likely the motor has not been properly installed and/or adjusted. If problem persists contract G.A.L. tech support.
- G.A.L. from time to time has used motors made by various suppliers, **Baldor, Reliance, Marathon, GE, "GAL" Westinghouse, Ohio, Peerless**, the electrical characteristics and mounting pattern may be the same or adaptable. Dimensionally they may be different.



(*) Special Engineering Required

Motor Specifications

Refer to the chart below to find the right motor for your operator & retiring cam. When ordering, specify motor characteristics for identification.

MTR-0004N ("MOM" Shunt Wound)	
Horse Power:	1/4
RPM:	1140
Voltage:	115 D.C. Shunt
Armature AMPS:	2.2
Armature Resistance:	6
AMB. Temp:	40° C
Frame Size:	56

MTR-0014N (MOXL & MOWL) (MTR-0008N mounting base cut to fit in Alum. Tank)	
Horse Power:	1/6
RPM:	1140
Voltage:	230 D.C. PM
Armature AMPS:	1.2
Armature Resistance:	50
AMB. Temp:	40° C
Frame Size:	56

MTR-0010N (MOH & MOM)	
Horse Power:	1/2
RPM:	1140
Voltage:	230 D.C. PM
Armature AMPS:	2.4
Armature Resistance:	20
AMB. Temp:	40° C
Frame Size:	56

MTR-0021N (MOVFR & MOVFR II)	
Horse Power:	1/2
RPM:	1140
Voltage:	115 A.C. or 230 A.C.
Armature AMPS:	2
AMB. Temp:	40° C
Phase:	3
Frame Size:	56

MTR-0011N (MOD)	
Horse Power:	1/6
RPM:	1140
Voltage:	115 D.C. PM
Armature AMPS:	1.6
Armature Resistance:	12.5
AMB. Temp:	40° C
Frame Size:	56

MTR-0023N (MOVFRW)	
Horse Power:	1/2
RPM:	1725/1425
Voltage:	208-230/460 AC
Armature AMPS:	3
AMB. Temp:	65° C
Frame Size:	56
Phase:	3

MTR-0013N (MOH & MOM)	
HORSE POWER:	1/2
RPM:	1140
Voltage:	115 D.C. PM
Armature AMPS:	4.4
Armature Resistance:	6
AMB. Temp:	40° C
Frame Size:	56

Replacement For Discontinued Motors
MTR-0009N (230 V.D.C ¼ HP) – **Use MTR-0010N**
MTR-0012N (115 V.D.C ¼ HP) – **Use MTR-0013N**
MTR-0024N (115/230 V.A.C ½ HP) – **Use MTR-0021N**

DOOR EQUIPMENT

Operator Parts

Motor & Motor Parts

Brushes (Shunt Wound Motor)

MTR-0018N



Description
Brush, PM/Shunt Wound Motor, Set Of (2) 1/4" x 5/16" x 1" No. 625-A-698 AA002

MTR-0020N



Description
Brush, 1/4 HP Shunt Wound, 1/4" x 3/8" x 5/8" No. 625-A-61-FA-003 (2 Pcs)

Motor Base Assembly

OP23-0008N



Base Assembly, Operator Motor (Used On All Operators)

OP23-0003N



Stud Kit, Motor Base Mounting

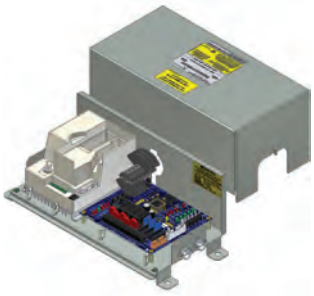
MTR-0034N



Key, 3/16" Square Motor Shaft, 1 3/8" Long (Used For Looking Motor Pulley To Operator Motor Shaft (These Are Attached To All Motors Supplied By G.A.L.)

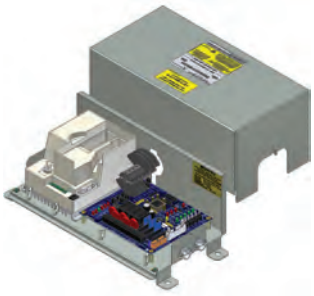
Limit Control Assemblies

MOVFR-0109N



Limit Control Box, MOVFR II Operator, 115 V.A.C.,

MOVFR-0071N



Limit Control Box, MOVFR II Operator, 220 V.A.C.,

OP12-0001L/R



Limit Control, MOM/MOH. Includes Cam Chain

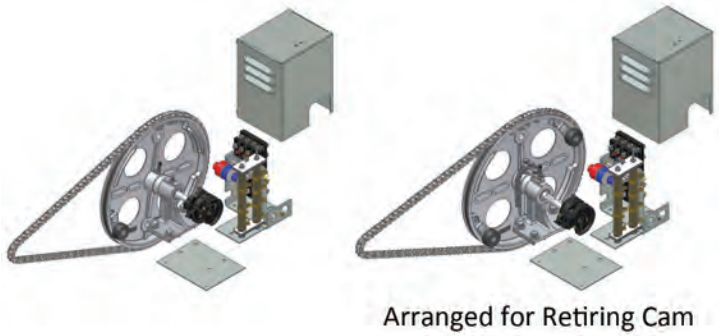
OP43-0028L/R



Limit Control, 110 V.D.C, 115 V MOMSVL/MOHSVL. Includes Cam Chain

(*) Special Engineering Required

MOD Series, "L" & Shoe Type



Arranged for Retiring Cam

Note:

- **Before 5-1-2006:** all MOD series operators were supplied with #35 chains.
- **After 4-30-2006:** the MOD operator driving pulley was revised, and a #40 chain replaced the old #35 chain, causing the sprocket on the intermediate pulley to change from a 15 to 12 teeth sprocket. In addition, the stop rollers on the pulley also changed.

Before 5-1-2006	After 4-30-2006	Description
OP10-0001L/R	OP10-0077L/R	Limit Control, 220V MOD, With Drive Pulley Assembly
OP10-0002L/R	OP10-0078L/R	Limit Control, 115V MOD, With Drive Pulley Assembly
OP10-0061L/R	OP10-0081L/R	Limit Control, 220V MOD, With Drive Pulley Assembly and Retiring Cam Pick-Up
OP10-0062L/R	OP10-0082L/R	Limit Control, 115V MOD, With Drive Pulley Assembly and Retiring Cam

MOCT Series & MODCT "L" & Shoe Type



MODCTA 3 Wire A.C. Power Supply		
Part No.	Motor Voltage	Relay Voltage
OP16-0015L/R	220 DC	240 AC

Part No.	Motor Voltage	Relay Voltage
OP16-0003L/R	220 DC	12 DC
OP16-0005L/R	220 DC	24 DC
OP16-0007L/R	220 DC	48 DC
OP16-0009L/R	220 DC	110 DC
OP16-0011L/R	220 DC	120 AC
OP16-0013L/R	220 DC	240 AC

Part No.	Motor Voltage	Relay Voltage
OP16-0004L/R	115 DC	12 DC
OP16-0006L/R	115 DC	24 DC
OP16-0008L/R	115 DC	48 DC
OP16-0010L/R	115 DC	110 DC
OP16-0012L/R	115 DC	120 AC
OP16-0014L/R	115 DC	240 AC

MOMCT & MOHCT Series "L" & Shoe Type



Part No.	Motor Voltage	Relay Voltage
OP17-0001L/R	220 DC	12 DC
OP17-0003L/R	220 DC	24 DC
OP17-0005L/R	220 DC	48 DC
OP17-0007L/R	220 DC	110 DC
OP17-0009L/R	220 DC	120 AC
OP17-0011L/R	220 DC	240 AC

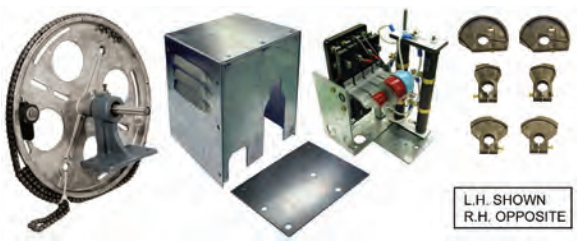
Part No.	Motor Voltage	Relay Voltage
OP17-0002L/R	115 DC	12 DC
OP17-0004L/R	115 DC	24 DC
OP17-0006L/R	115 DC	48 DC
OP17-0008L/R	115 DC	110 DC
OP17-0010L/R	115 DC	120 AC
OP17-0012L/R	115 DC	240 AC

DOOR EQUIPMENT

Operator Parts

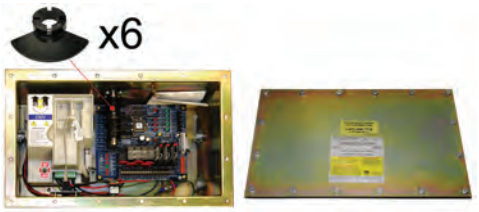
Limit Control Assemblies

MODLNYC (NYCHA)



Part No.	Motor Voltage
OP27-0001L/R	220 DC
OP27-0002L/R	115 DC

MOVFRW II Limit Control Box (Water Resistant)



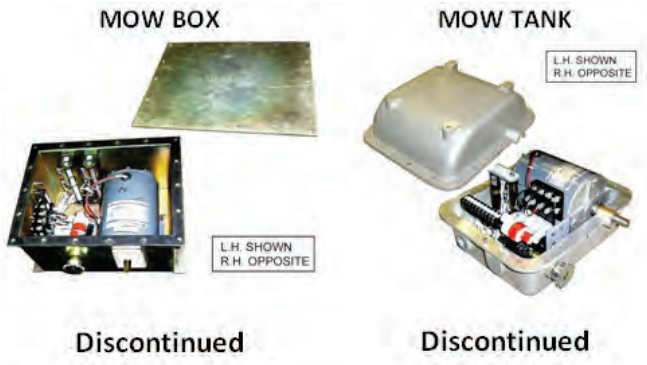
Part No.	Description
MOVFR-0097N	Limit Control Box, MOVFRW II 220 V Operator, Water Resistant

MOXL (Explosion Resistant)



Part No.	Description
OP71-0001L/R	Limit Control Box, 115 V.D.C. MOX Operator
OP71-0002L/R	Limit Control Box, 220 V.D.C. MOX Operator

MOW Limit Control Box (Water Resistant)



"MOW" limit control assemblies have been discontinued. Interior parts are sellable and can be replaced. Complete assembly must be replaced by our "MOVFRW" operator. Contact G.A.L. sales for details.

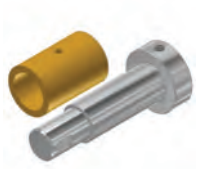
(*) Special Engineering Required

Operator Parts

Limit Control Parts

MOW/MOX Motor Coupling Kits

OP71-0010N



Coupling Kit, MOX Operator Motor
Where Used: MOXL

OP70-0009N



Coupling Kit, MOW & MOX Operator Motor, For Old Style Enclosures
Where Used: MOWL

OP70-0008N



Coupling, Old MOW Operator Motor
Where Used: MOWL

Limit Control Box Accessories

HDW-0340N



Description
Gasket, MOVFRW Cover Rubber Where Used: MOVFRW, MOVFRW II

OP70-0022N



Description
Plate, MOW/ RCWP Motor Shaft Seal Assembly, (For Steel Box, 2 1/2 x 2 1/2 x 1/4" With Hardware) Where Used: MOWL & Water Resistant Box for Retiring Cam

Limit Control Covers

MOVFR-0104N



Cover, MOVFR & MOVFR II Operator Limit Control Box Assembly, Galvanized Finished, Used Prior to 7/2012, (1) Louver On (1) Side - Small Cover

MOVFR-0105N



Cover, MOVFR II Operator Limit Control Box Assembly, Galvanized Finished, Used After 7/2012, (1) Louver On Each Side - Large Cover

OP10-0003L/R



Cover, MOD Operator Limit Control
Where Used: MOD, MODL, MODLNYC, MODP, MODPL, MODPLNYC

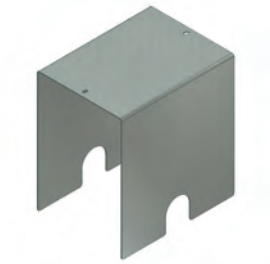
DOOR EQUIPMENT

Operator Parts

Limit Control Parts

Limit Control Covers

OP12-0002N



Cover, MOM/MOH Operator Limit Control
Where Used: MOH, MOHL, MOHSVL, MOM, MOML, MOMSVL

OP16-0002L/R



Cover, MOCT Limit Control Assembly, 7 3/4" x 17 1/2" x 7 1/2"
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

Limit Switch Assemblies

OP10-0004L/R



Switch Assembly, MOD Limit

OP16-0017L/R



Switch Assembly, MODCT Limit

OP17-0013L/R



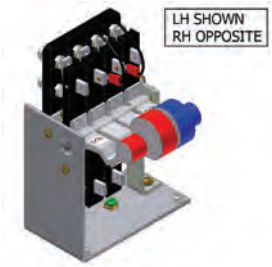
Switch Assembly, MOMCT/MOHCT

OP27-0009L/R



Switch Assembly, MODPLNYC Limit, For New York City Housing Jobs

OP71-0003L/R



Switch Assembly, MOX/MOW Limit

(*) Special Engineering Required

Operator Parts

Limit Control Parts

Bridging Cam Assemblies

OP10-0008N



Cam, MOD Small Bridging

OP10-0009N



Cam, MOD Large Bridging

OP10-0007N



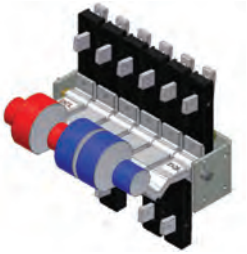
Cams Assembly, MOD Limit Bridging

OP12-0004N



Cams Assembly, MOM/MOH Limit Bridging

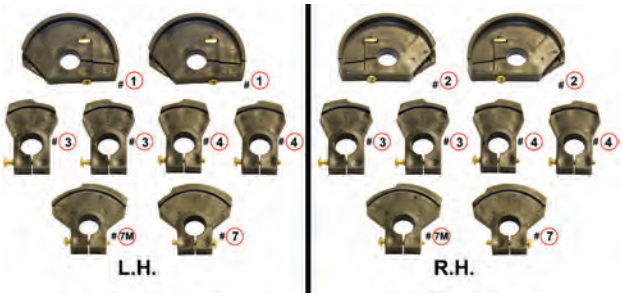
OP17-0014N



Cams Assembly, MOMCT/MOHCT Bridging

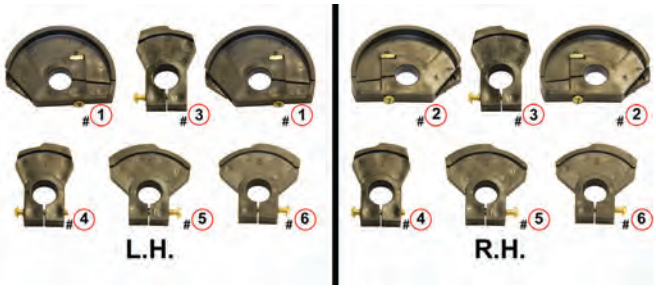
Cam Sets

OP12-0006L/R



Cams, MOM/MOH Limit Control Set

OP10-0015L/R



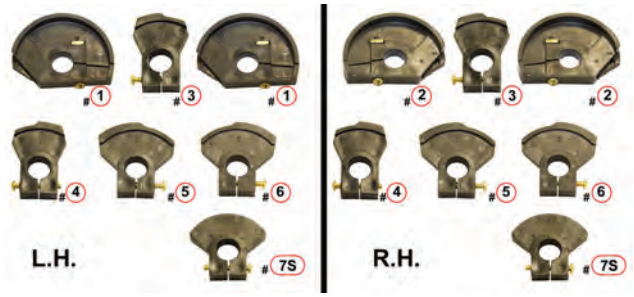
Cams, MOD Limit Control Set

OP17-0020N



Cams, MOM/MOHCT Limit Control

OP27-0003L/R



Cams, MODLNYC Limit Control, For New York City Housing Jobs

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Limit Control Parts

Cam Sets

MOVFR-0005N



Cams, MOVFR & MOVFR II Limit Control Set Of Seven

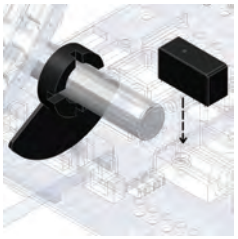
Cams

MOVFR-0064N



Cam, Cut Down, for MOVFR Microswitch
Where Used: MOVFR

MOVFR-0074N



Relay/Cam Kit, MOVFR II AUX Output Signal
Where Used: MOVFR II, MOVFR-RND II, MOVFRW II

PMDG-0150N



Cam, MOVFR II Operator Limit, Control Actuating
Where Used: MOE, MOVFR, MOVFR II, MOVFRW, MOVFRW II

OP10-0016N



Cam, No.1 Operator Limit Control

OP10-0017N



Cam, No.2 Operator Limit Control

OP16-0062N



Cam, No.1S Operator Limit Control, Easy Replacement L.H Split Cam (This Cam Is Designed To Replace An Existing Cam Without Removing Any Of The Other Existing Cams)

OP16-0063N



Cam, No.2S Operator Limit Control, Easy Replacement R.H Split Cam (This Cam Is Designed To Replace An Existing Cam Without Removing Any Of The Other Existing Cams)

OP10-0018N



Cam, No.3 Operator Limit Control

(*) Special Engineering Required

Operator Parts

Limit Control Parts

Cams

OP10-0019N	*OP10-0020N*	*OP10-0021N*	*OP12-0007N*
			
Cam, No.4 Operator Limit Control	Cam, No.5 Operator Limit Control	Cam, No.6 Operator Limit Control	Cam, No.7 Operator Limit Control

OP12-0008N	*OP16-0056N*	*OP16-0057N*	*OP12-0016N*
			
Cam, No.7M Operator Limit Control	Cam, No.7S Operator Limit Control, Modified Cam For Microswitch Kit Standard 5/8” Diameter	Cam, No.7SC Operator Limit Control, Modified Cam For MODCT Microswitch Kit Used With Coupling Shaft-11/16” Diameter	Cam, No.7S Operator Limit Control, Easy Replacement, Snap In Cam For Microswitch Kit (This Cam Is Designed To Snap On Existing Shaft When Supplied With Micro-Switch Kit.)

DOOR EQUIPMENT

Operator Parts

Limit Control Parts

Bridging Contacts And Contact Screw

OP10-0010N



Contact, Operator Upper Bridging, With Spring & Pin

OP10-0011N



Contact, Operator Lower Bridging With Pin

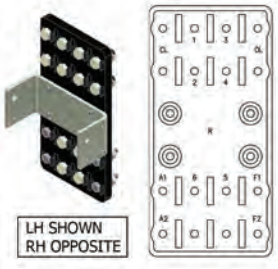
OP10-0006N



Contact Screw, Operator Limit Silver Plated 3/8" Dia. x 3/4" Lg.
Where Used: All Analog Operators

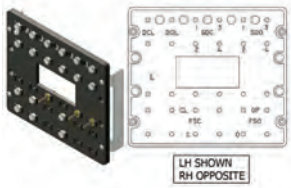
Contact Bases

OP10-0005L/R



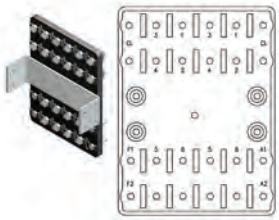
Base, MOD Limit Contact
Where Used: MOD, MODCT, MODCTL, MODL, MODLNYC, MODP, MODPL, MODPLNYC, MOWL, MOXL

OP12-0003L/R



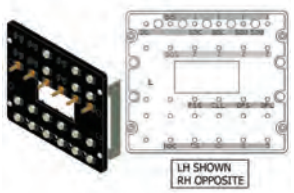
Base, MOM/MOH Limit Control
Where Used: MOH, MOHL, MOM, MOML

OP17-0015N



Base, MOMCT/MOHCT Limit Control
Where Used: MOHCT, MOHCTL, MOMCT, MOMCTL

OP43-0030L/R

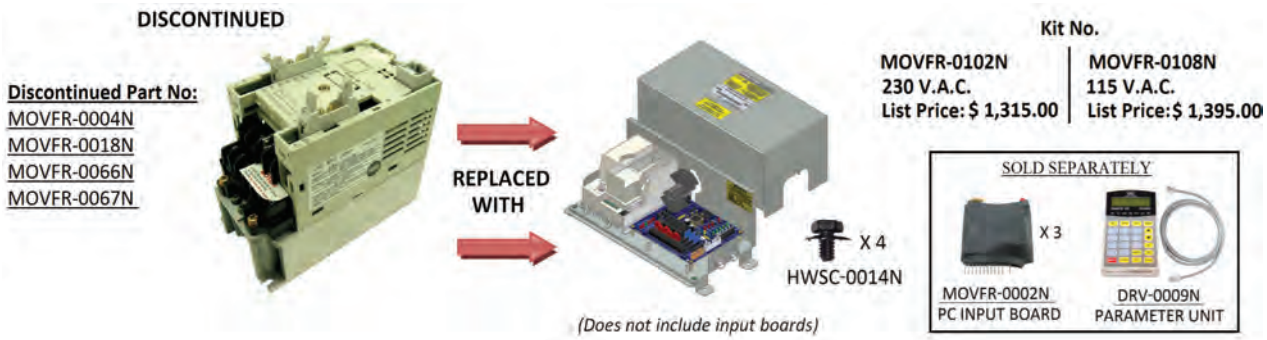


Base, MOMSV/MOHSV Contact
Where Used: MOHSVL, MOMSVL

Boards & Drives

MOVFR-I Operator Frequency Drive Replacement Kit

The MOVFR I door operator drive is no longer available from G.A.L.'s supplier and will not be sold by G.A.L. anymore.
Note: For "MOVFRW" water resistant operators contact G.A.L. sales or engineering department for information.



(*) Special Engineering Required

Operator Parts

Boards & Drives

MOVFR, MOVFR II, MOVFRW II Main P.C. Boards

MOVFR-0001N



Board, MOVFR Main PC, Without Input PC Boards

MOVFR-0011N



Board, MOVFRW Main PC, Without Input PC Boards

MOVFR-0012N



Board, MOVFR Main PC, With (3) Input PC Boards

MOVFR-0013N



Board, MOVFRW Main PC, With (3) Input PC Boards

MOVFR-0069N



Board, MOVFR II & MOVFRW II Main PC, Without Input PC Boards (With 4 Input Sockets)

MOVFR-0070N



Board, MOVFR II & MOVFRW II Main PC, With (3) Input PC Boards (With 4 Input Sockets)

MOVFR-0002N



Board, MOVFR & MOVFR II Input PC

MOVFR-0500AN



Board, MOVFR II Canbus Serial Link Interface (For G.A.L. GALaxy Serial Linked Controllers Only)

MOR Board



Part No.	Where Used	Description
MOR-0062N	MOR	Board, Residential Door Operator Assembly

MODCT Boards Without Relays and Fuses



Note: Relay and fuse sold separately. See relay and fuse table for Part No. on next page.

Part No.	Description
MOCT-0004L/R	Board, MOCT Enhanced, Does Not Include Relays And Fuses
MOCT-0005L/R	Board, MOCTA Enhanced, Does Not Include Relays And Fuses

"MOCT" 10201 Board Replacement, See Conversion Kit And Board on Page 70.

DOOR EQUIPMENT

Operator Parts

Boards & Drives

MOSVCL, MOMSVL Limit Control Board



Part No.	Where Used	Description
OP43-0008N	MOSVCL, MOHSVL, MOMSVL	Board, Solid State Limit Control MOSVCL Operator P.C., Includes Wiring Diagrams L-7912 (Virginia Control)

MOVFR II Drives



Part No.	Description
MOVFR-0072N	Drive, 220 V.A.C. MOVFR II Operator Frequency, Includes Drive Ribbon Cable (MOVFR-0073N)
MOVFR-0099N	Drive, 115 V.A.C. MOVFR II Operator Frequency, Includes Drive Ribbon Cable (MOVFR-0073N)

Rectifier Kits



Part No.	Where Used	Description
OP11-0025N	MOPMP, MOPMPL	Rectifier Kit, MOPM Panel, DIOD-0015N/MOV-0003N

Fuses



Part No.	Description
FUSE-0006N	Fuse, 6 AMP (MOCT 115V Motor), Time Delay 250V
FUSE-0007N	Fuse, 3 AMP (MOCT 220V Motor), Time Delay 250V
FUSE-0027N	Fuse, 4 AMP (MOCT 250V Motor & MOVFR II) 250V

Relays



Part No.	Description
RELY-0003N	Relay, 12 V.D.C. 3PDT Plug-In Light & Button, With Light & Button-157-23B2LC (Used In All MOCT Series Operators)
RELY-0005N	Relay, 24 V.D.C. 3PDT With Light Button, 157-23C2LC Plug-In 3 Pole (Used In All MOCT Series Operators)
RELY-0006N	Relay, 48 V.D.C. 3PDT With Light Button, 157-23D2CO Plug-In 3 Pole (Used In All MOCT Series Operators)

(*) Special Engineering Required

Operator Parts

Relays



Part No.	Description
RELY-0007N	Relay, 110 V.D.C. 3 Pole With Light & Button, KUP-14D45F Plug-In 3 Pole (Used In All MOCT Series Operators)
RELY-0008N	Relay, 240 V.A.C. 3 Pole With Light & Button, 157-23U2LC Plug-In 3 Pole (Used In All MOCT Series Operators Including MOPMP)
RELY-0009N	Relay, 120 V.A.C. 3 Pole With Light & Button, 157-23T2LC Plug-In 3 Pole (Used In All MOCT Series Operators)



Part No.	Description
RELY-0049N	Relay, SPDT 12A/440 V.A.C./24 V.D.C./1440 OHM Coil, 24 V.D.C. 1440 OHM Coil (Used In MOVFR & MOVFR II)

Switches

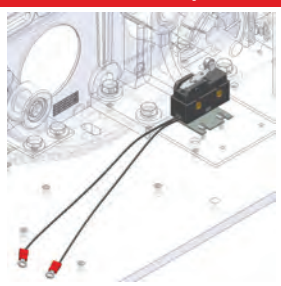
Micro Switch Kits

MOVFR-0063N



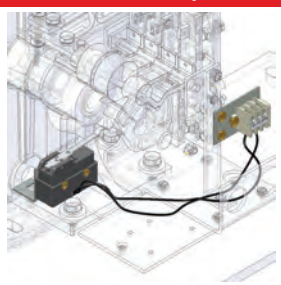
Kit, MOVFR Microswitch
Where Used: MOVFR, MOVFRW

OP10-0050L/R



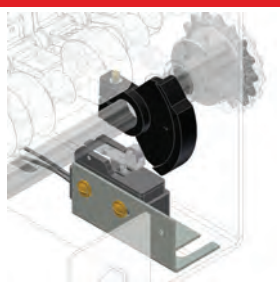
Kit, MOD Operator Additional Microswitch
Where Used: MODL, MODLNYC

OP10-0058L/R



Kit, Fault Monitor (FM)-MODL Operator Microswitch
Where Used: MODL

OP12-0012N



Kit, MOM & MOH Microswitch
Where Used: MOH, MOHL, MOM, MOML

OP12-0013N



Kit, MOM & MOH Double Micros-witch
Where Used: MOH, MOHL, MOM, MOML

OP12-0014N



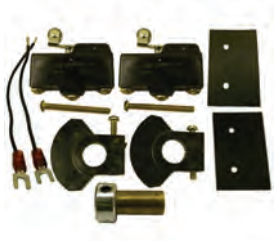
Kit, MOM & MOH Microswitch, For Existing Installation
Where Used: MOH, MOHL, MOM, MOML

OP12-0015N



Kit, MOM & MOH Double Micros-witch, For Existing Installation
Where Used: MOH, MOHL, MOM, MOML

OP16-0058N



Kit, MODCT Double Microswitch, With Extension Coupling
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Switches

Micro Switch Kits

OP16-0059N



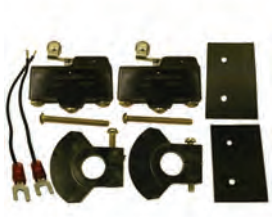
Kit, MODCT Microswitch
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

OP16-0060N



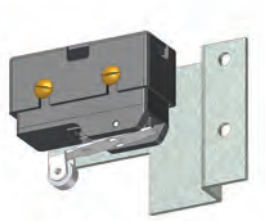
Kit, MOCT Microswitch
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

OP16-0061N



Kit, MOCT Double Microswitch
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

OP71-0021L/R



Kit, MOX Operator Microswitch
Where Used: MOXL

Micro Switches

MICS-0004N



Microswitch, BZ-2RW822-A2
Where Used: MODCTL, MOHCTL, MOMCTL

SEL-0089N



Microswitch, Short Lever

SEL-0090N



Microswitch, Long Lever

SE4-0028N



Microswitch, Type “HA” Safety Edge Reference # MICS-0003N

SE12-0016N



Microswitch, Type “HT” Safety Edge

SE15-0006N



Microswitch, Type “RALW” Safety Edge

(*) Special Engineering Required

Operator Parts

Switches

Toggle Switches

MOVFR-0095N



Switch, MOVFRW Power With Rubber Cap
Where Used: MOVFRW

OP13-0021N



Switch, Power Toggle
Where Used: MOH, MOHL, MOHSVL, MOM, MOML, MOMSVL, MOSVCL

OP16-0030N



Switch, MOCT Power
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

Parameter Units

MOVFR Series

DRV-0002N



Parameter Unit, MOVFR Operator Mounted, FR-PA02

DRV-0003N



Parameter Unit, MOVFR Hand Held, With 7 Ft. Cable, FR-PU04-7
Where Used: MOVFR, MOVFRW

DRV-0006N



Parameter Unit, MOVFR Hand Held, With 25 Ft. Cable, FR-PU04-25
Where Used: MOVFR, MOVFRW

DRV-0009N



Note: When used for operator mounted a 1 foot cable (DRV-0013N) is supplied.

Parameter Unit, MOVFR II Hand Held, With 7 Ft. Cable
Where Used: MOVFR II, MOVFRW II

Cables



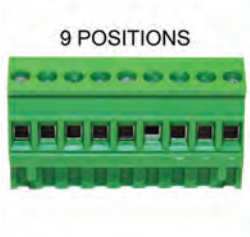
Part No.	Where Used	Description
DRV-0007N	MOVFR, MOVFRW	Cable, MOVFR, MOVFRW Parameter Unit 25 Ft.
DRV-0008N	MOVFR, MOVFRW	Cable, MOVFR, MOVFRW Parameter Unit 7 Ft.
DRV-0012N	MOVFR II, MOVFR-RND II, MOVFRW II	Cable, MOVFR II Parameter 7 Ft.
DRV-0013N	MOVFR II, MOVFR-RND II, MOVFRW II	Cable, MOVFR II Parameter 1 Ft. Used for Operator MTD Parameter Unit
DRV-0014N	MOVFR II, MOVFR-RND II, MOVFRW II	Cable, MOVFR II Parameter 25 Ft.
DRV-0076N	MOVFRW II	Cable, MOVFR II Waterproof 1 Ft.

DOOR EQUIPMENT

Operator Parts

Terminal Connectors

CONN-0063N



Connector, Plug 9-POS 0.2" Center, Mates With CONN-0064N
Where Used: MOVFR, MOVFRW

CONN-0144N



Connector, Plug 8-POS 5.08 MM Centered Front Insert
Where Used: MOVFR II, MOV-FR-RND II, MOVFRW II

CONN-0079N



Connector, Plug 16 POS. 0.197"
Where Used: MOVFR, MOVFRW

CONN-0142N



Connector, Plug 20-POS 5 MM Centered Front, Insert Block
Where Used: MOVFR II, MOV-FR-RND II, MOVFRW II

Terminal Blocks

OP11-0026N



Terminal Block, MOPM Operator
Where Used: MOPMP, MOPMPL

OP13-0024N



Terminal Block & Mounting Plate, Controller
Where Used: MOH, MOHL, MOM, MOML

OP13-0025N



Terminal Block, Old Box Motor Armature, & Field Connection/ Includes Resistor
Where Used: MOH, MOHL, MOM, MOML

OP13-0026N



Terminal Block, Attendant Feature
Where Used: MOH, MOHL, MOM, MOML

OP13-0033N



Terminal Block, Motor Armature, & Field Connection
Where Used: MOHL, MOML

OP13-0034N



Terminal Block, Microswitch Contact
Where Used: MOHL, MOML

OP13-0035N



Terminal Block, Attendant Feature
Where Used: MOHL, MOML

OP71-0007N

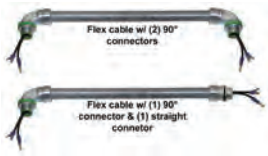


Terminal Block, MOX And MOW Operator Limit
Where Used: MOWL, MOXL

(*) Special Engineering Required

Operator Parts

Conduits



Part No.	Where Used	Description
OP27-0004N	MODLNYC	Conduit, 3/8 Liquid Tight, Flex Cable 32” Lg. (2) 3/8 Connectors (1) 90 Deg-1/2” KO & Electric Wires For Gate Switch
OP27-0012N	MODPLNYC	Conduit, 3/8 Liquid Tight, Flex Cable 50” Lg. (2) 3/8 Connectors 90 Deg 1/2” KO & Electric Wires For Gate Switch
OP27-0006N	MODLNYC	Conduit, 3/8 Liquid Tight, Flex Cable 12 1/2” Lg. (2) 3/8 Connectors 90 Deg 1/2” KO from Motor to Limit Control Box
OP27-0014N	MODPLNYC	Conduit, 1/2 Liquid Tight, Flex Cable 12” Lg. (2) 1/2 Connectors (1) 90 Deg-1/2” KO & (1) Str-1/2” KO from Motor To Limit Control Box



Part No.	Where Used	Description
OP70-0024L/R	MOVFRW II	Conduit, 3/8 Liquid Tight Water Resistant, Flex Cable 15” Lg. (1) 3/8 Connectors (1) 90 Deg-1/2” KO & Electric Wires

Cables

MOVFR-0003N



Cable, MOVFR Operator Drive Ribbon, With Terminal Assembly (USED BEFORE 2-28-2003)
Where Used: MOVFR, MOVFRW

MOVFR-0019N



Cable, MOVFR Operator Drive Ribbon (USED AFTER 3-2-2003)
Where Used: MOVFR

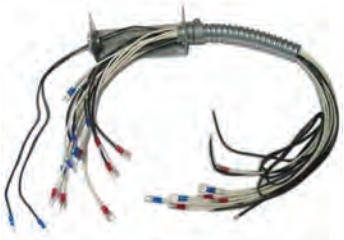
MOVFR-0073N



Cable, MOVFR II Operator Drive Ribbon
Where Used: MOVFR II, MOVFR-RND II, MOV-FRW II

Wires

OP12-0020N



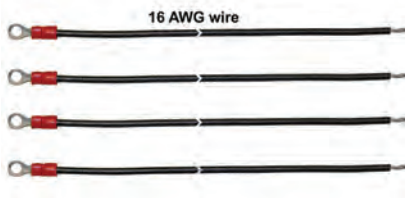
Wiring Harness, MOM/MOH Limit Control
Where Used: MOHL, MOML

OP10-0028N



Wires, Operator Limit Control
Where Used: MOD, MODL, MODLNYC, MODP, MODPL, MODPLNYC

OP13-0022N



Wires, Power Switch
Where Used: MOH, MOHL, MOHSVL, MOM, MOML, MOMSVL

DOOR EQUIPMENT

Operator Parts

Wires

OP13-0018N



Wires, MOH & MOM Resistor
Where Used: MOH, MOHL, MOM, MOML

OP70-0005N



Wires, MOWL Resistor Assembly
Where Used: MOWL

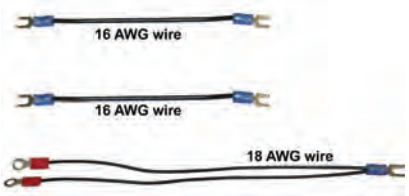
OP71-0008N



Wires, MOXL Resistor Assembly
Where Used: MOXL

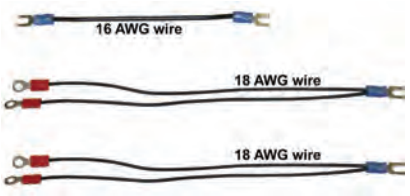
Jumpers

OP10-0022N



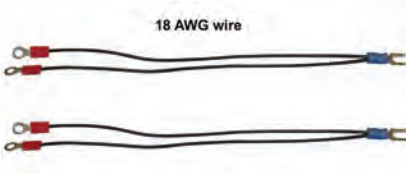
Jumpers, Operator Limit Control
Where Used: MOD, MODL, MODLNYC, MODP, MODPL, MODPLNYC

OP12-0005N



Jumpers, Operator Limit Control
Where Used: MOH, MOHL, MOM, MOML

OP43-0031N



Jumpers, Operator Limit Control
Where Used: MOHSVL, MOMSVL

(*) Special Engineering Required

Operator Parts

Resistors & Terminal Box Assemblies

MOH & MOM Series



Part No.	Motor Voltage	Description
OP13-0001N	220 DC	Resistor & Terminal Box Assembly, 220V Shunt Wound Motor
OP13-0002N	115 DC	Resistor & Terminal Box Assembly, 115V Shunt Wound Motor
OP13-0003N	220 DC	Resistor & Terminal Box Assembly, 220V PM Motor
OP13-0004N	115 DC	Resistor & Terminal Box Assembly, 115V PM Motor



Part No.	Description
OP13-0009N	Cover, MOM/MOH Operator Resistor Control Box

MOH & MOM Series 5 Resistors (Shunt Wound Motor)



Part No.	Motor Voltage	Description
OP13-0005N	220 DC	Resistor Assembly, MOM/MOH, 220V (750 OHMS 200 Watts [2]) For Shunt Wound Motor 220V (200 OHMS 200 Watts [3])
OP13-0006N	115 DC	Resistor Assembly, MOM/MOH, For Shunt Wound Motor 115V (50 OHMS 200 Watts [3]) 115V (250 OHMS 200 Watts [2])

MOH & MOM Series 4 Resistors (PM Motor)



Part No.	Motor Voltage	Description
OP13-0007N	220 DC	Resistor Assembly, MOM/MOH, For PM Motor 220V (200 OHMS 200 Watts [3]) 220V (750 OHMS 200 Watts [1])
OP13-0008N	115 DC	Resistor Assembly, MOM/MOH, For PM Motor 115V (50 OHMS 200 Watts [3]) 115V (250 OHMS 200 Watts [1])

Resistor Assemblies and Parts

MOD Series



Part No.	Motor Voltage	Description
OP10-0023N	220 DC	Resistor Assembly, MOD 230V, 300 OHMS 100 Watts
OP10-0024N	115 DC	Resistor Assembly, MOD 115V, 100 OHMS 100 Watts

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Resistor Assemblies and Parts

MOCT & MOM/MOH Slow Down Resistor Assembly



Part No.	Motor Voltage	Description
OP16-0019N	220 DC	Resistor Assembly, MOCT 220V Slow Down, 300 OHMS 100 Watts
OP16-0020N	115 DC	Resistor Assembly, MOCT 115V Slow Down, 100 OHMS 100 Watts



Part No.	Motor Voltage	Description
OP17-0017N	220 DC	Resistor Assembly, MOMCT/MOHCT 220V, Slow Down 300 OHMS 100 Watts
OP17-0016N	115 DC	Resistor Assembly, MOMCT/MOHCT 115V, Slow Down 100 OHMS 100 Watts

MOCT Speed Resistor Assembly



Part No.	Motor Voltage	Description
OP16-0024N	220 DC	Resistor Assembly, MOCT 220V Speed, 250 OHMS 200 Watts
OP16-0025N	115 DC	Resistor Assembly, MOCT 115V Speed, 50 OHMS 200 Watts

MOD Auxiliary Control Panel Resistor Assembly



Part No.	Description
OP16-0081N	Resistor Assembly, Auxiliary Control Panel, 250 OHMS 200 Watts

Resistors

RES-0076N	*RES-0097N*	*RES-0098N*	*RES-0099N*
			
Resistor, 1500 OHM 50 Watt With (1) Adjustable Band	Resistor, 100 OHM 100 Watt With (2) Adjustable Bands, 115 VDC, 6 1/2" Lg.	Resistor, 175 OHM 100 Watt With (2) Adjustable Bands, 6 1/2" Lg.	Resistor, 300 OHM 100 Watt With (2) Adjustable Bands, 220 VDC, 6 1/2" Lg.

(*) Special Engineering Required

Operator Parts

Resistor Assemblies and Parts

Resistors

RES-0104N



Resistor, 50 OHM 200 Watt With (2) Adjustable Bands, 10” Lg.

RES-0107N



Resistor, 200 OHM 200 Watt With (2) Adjustable Bands, 10” Lg.

RES-0108N



Resistor, 250 OHM 200 Watt With (2) Adjustable Bands, 10” Lg.

RES-0110N



Resistor, 750 OHM 200 Watt With (2) Adjustable Bands, 10” Lg.

RES-0115N



Resistor, 50 OHM 200 Watt With (2) Adjustable Bands, 115 VDC, Short 6 1/2” Lg.

RES-0116N



Resistor, 250 OHM 200 Watt With (2) Adjustable Bands, 220 VDC, Short 6 1/2” Lg.

Resistor Bands

HWEL-0001N



Resistor Band, 100 Watts Resistor
Where Used: MOD, MOH, MOM, MOWL, & MOXL

HWEL-0003N



Resistor Band, 200 Watt MOH & MOM Resistor
Where Used: MOH & MOM

HWEL-0004N



Resistor Band, 200 Watt MOCT, (For 1 5/8 x 6 1/2 Res.)
Where Used: MODCT, MOHCT, & MOMCT

DOOR EQUIPMENT

Operator Parts

Resistor Assemblies and Parts

Resistor Rods

OP13-0028N



Rod Assembly, 11 3/4" Lg. Resistor Mounting, 200 Watt
Where Used: MOH, MOHL, MOM, MOML

OP16-0031N



Rod Assembly, 6 3/4" Lg. Resistor Mounting, 200 Watt Short
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

OP10-0042N



Rod Assembly, 9" Lg. Resistor Mounting, 100 Watt
Where Used: MOD, MODCT, MODCTA, MODCTAL, MODCTL, MODL, MODLNYC, MODP, MODPL, MODPLNYC, MOHCT, MOHCTL, MOMCT, MOMCTL

OP10-0043N



Rod Assembly, 8" Lg. Resistor Mounting, 100 Watt
Where Used: MOD, MODCT, MODCTA, MODCTAL, MODCTL, MODL, MODLNYC, MODP, MODPL, MODPLNYC, MOHCT, MOHCTL, MOMCT, MOMCTL

OP70-0006N



Rod Assembly, 7 1/8" Lg. Resistor Mounting, 100 Watt, Yellow Zinc Dichromate
Where Used: MOWL

OP71-0012N



Rod Assembly, 7-1/2" Lg. Resistor Mounting, 100 Watt, Yellow Zinc Dichromate
Where Used: MOXL

Insulator Kits

OP10-0055N



Insulator Nudging Kit, MOD Operator
Where Used: MOD, MODL

OP10-0059N



Insulator Kit, MODHFI Spring Unlocking Device
Where Used: MODHFL

(*) Special Engineering Required

Operator Parts

Resistor Assemblies and Parts

Insulators

OP13-0019N



Insulator, 3 3/4" x 7 1/2" x 1/4" top
Where Used: MOH, MOHL, MOM, MOML

OP13-0020N



Insulator, 3 3/4" x 7 1/2" x 1/4" bottom
Where Used: MOH, MOHL, MOM, MOML

OP10-0041N



Insulator, Operator Resistor Bottom, 3" x 1" x 1/4" With 2 Holes
Where Used: MOD, MODL, MODLNYC, MODP, MODPL, MODPLNYC

OP10-0027N



Insulator, Operator Resistor Top Assembly, 3" x 1 3/8" x 1/4" With Nudging
Where Used: MOD, MODL, MODP, MODPL

OP70-0007N



Insulator, MOW Box Top & Bottom, 1 1/2" x 3 3/4" x .017"
Where Used: MOWL

OP71-0009N



Insulator, MOX Operator Box Bottom, 1 11/16" x 3 1/4" x .030" Natural C.E. Canvas Bakelite
Where Used: MOXL

OP16-0028N

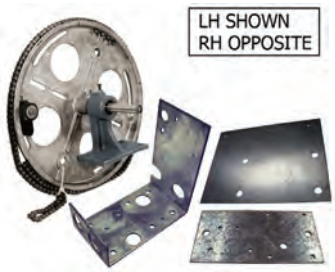


Insulator, MOCT Resistor Top & Bottom, 3" x 1 3/8" x 1/4" With 2 Holes
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

Pulley Assemblies & Pulleys

Drive Pulley Assemblies

MOD Series Before 4-1-1978



Part No: OP10-0030L/R
Pulley Assembly, Drive MOD Old Style/ Used For #35 Chain Jobs Before 4-1-1978
Where Used: MOD, MODL

MOD Series Before 5-1-2006



Part No: OP10-0029N
Pulley Assembly, Drive MOD, Use For #35 Chain Jobs Between 4-1-1978 And 5-1-2006
Where Used: MOD, MODL, MODLNYC

MOD Series Before 5-1-2006



Part No: OP10-0063N
Pulley Assembly, Drive MOD, With Retiring Cam Pick-Up/Use For #35 Chain Jobs Before 5-1-2006
Where Used: MOD, MODL, MODP, MODPL

(*) Special Engineering Required

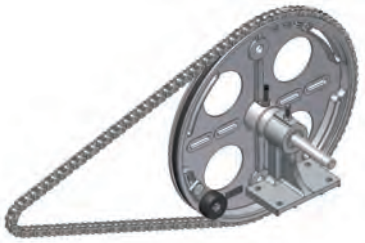
DOOR EQUIPMENT

Operator Parts

Pulley Assemblies & Pulleys

Drive Pulley Assemblies

MOD Series After 4-30-2006



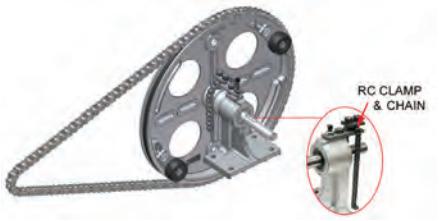
Part No: OP10-0079N
Pulley Assembly, Drive MOD, Use For #40 Chain Jobs After April 30 2006
Where Used: MOD, MODL, MODLNYC

MOD Series After 4-30-2006



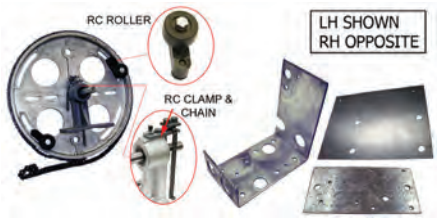
Part No: OP10-0080N
Pulley, MOD Operator Drive, Use For #40 Chain Jobs After April 30 2006
Where Used: MOD, MODL, MODLNYC

MOD Series After 4-30-2006



Part No: OP10-0083N
Pulley Assembly, Drive MOD, With Retiring Cam Pick-Up/Use For #40 Chain Jobs After 4-30-2006
Where Used: MODL, MODPLNYC

MODP Series Before 4-1-1978



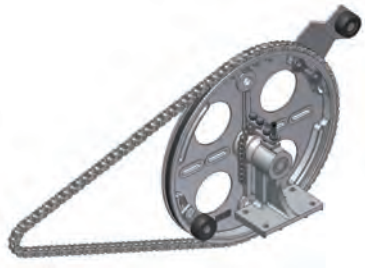
Part No: OP11-0005L/R
Pulley Assembly, Drive MODP Old Style/Used For #35 Chain Jobs Before 4-1-1978
Where Used: MODP, MODPL

MODCT, MOH & MOM Series



Part No: OP21-0001N
Pulley Assembly, MODCT, MOM & MOH Operator Drive
Where Used: MODCTAL, MODCTL, MOH, MOHCTL, MOHL, MOM, MOMCTL, MOML

CT (Car Top) Operators



Part No: OP21-0007N
Pulley Assembly, CT Drive, For "L & Shoe" Type Panel Operator.
Where Used: MODCT, MODCTA, MODCTAL, MODCTAP, MODCTL, MODCTP, MODCTPL, MOHCT, MOHCTL, MOHCTP, MOHCTPL, MOMCT, MOMCTL, MOMCTP, MOMCTPL

MOML & MOHL Series



Part No: OP21-0009L/R
Pulley Assembly, MOM/MOH Drive, For "L" Type Panel Operator, With Retiring Cam Pick Up
Where Used: MOHL, MOML

MOCT & MOVFR Series



Part No: OP21-0017N
Pulley Assembly, MOVFR, MOVFR II and MOCT (old) Operator Drive
Where Used: MOCT, MOVFR, MOVFR II, MOVFR-RND II

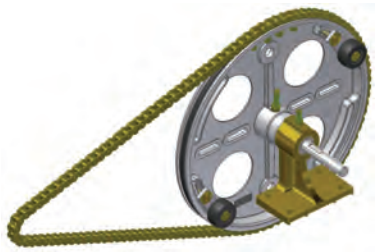
(*) Special Engineering Required

Operator Parts

Pulley Assemblies & Pulleys

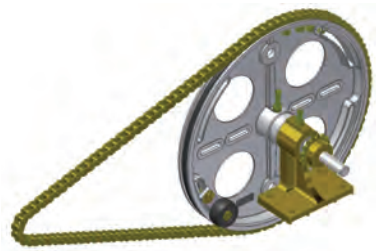
Drive Pulley Assemblies (Water/Explosion Resistant)

OP21-0024N



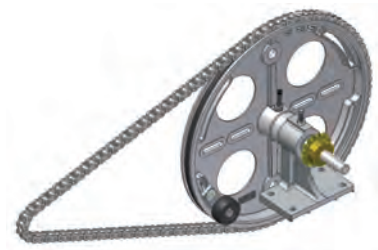
Pulley Assembly, MOVFRW II Drive
Where Used: MOVFRW II

OP70-0020N



Pulley Assembly, MOW Zinc Plated With Sprocket Drive
Where Used: MOWL

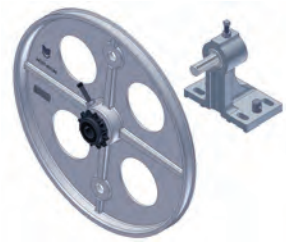
OP71-0022N



Pulley Assembly, MOX With Sprocket Drive
Where Used: MOXL

Intermediate Pulley Assemblies

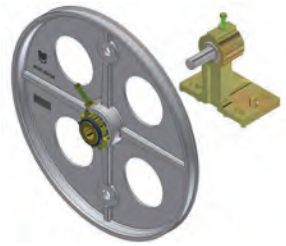
MOD, MOM, MOH & MOVFR Series



Part No.	Description
OP20-0001N	Pulley Assembly, MOD Intermediate, with 15 Tooth Sprocket, (Before 5-1-2006)
OP20-0002N	Pulley Assembly, MOD, MOM, MOH & MOVFR Intermediate, with 12 Tooth Sprocket. (MOD Series After 4-30-2006)
OP20-0003N	Pulley only, MOD Intermediate, with 15 Tooth Sprocket. (Before 5-1-2006)
OP20-0004N	Pulley only, MOD/MOM/MOH/MOVFR II Intermediate, with 12 Tooth Sprocket. (MOD Series After 4-30-2006)

Intermediate Pulley Assemblies (Water Resistant)

MOVFRW II & MOWL



Part No.	Description
OP20-0008N	Pulley Assembly, MOVFRW II Intermediate, With 12 Tooth Sprocket Yellow Zinc Dichromate

DOOR EQUIPMENT

Operator Parts

Pulley Assemblies & Pulleys

Motor Pulley

HWPL-0009N



Pulley, AS17 x 1/2 With Hub
Where Used: MOA, MOPMP

HWPL-0001N



Pulley, AS17 x 5/8" With Hub & Set Screw
D.O. - S/S: 22"-42", 2/SP: 24"-59", C/P: 73"-83"
Where Used: MOD, MODCT, MODCTA, MODCTAL, MODCTL, MODCTLVF, MODHFL, MODL, MODLNYC, MODPLNYC, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML, MOVFR II, MOVFR-RND II, MOXL

HWPL-0004N



Pulley, OK22 x 5/8" With Socket Set Screw
D.O. - S/S: 43"-48", 2/SP: 60"-72"
Where Used: MODCTAL, MODCTL, MODHFL, MODL, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML

HWPL-0006N



Pulley, AS22 x 5/8", Standard Gearing Motor Pulley
D.O. - C/P & 2SP/CP: 50"-59"
Where Used: MOD, MODCT, MODCTA, MODCTAL, MODCTL, MODCTLVF, MODHFL, MODL, MODLNYC, MODPLNYC, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML, MOXL

HWPL-0011N



Pulley, AS25 x 5/8" With Set Screw
D.O. - C/P: 24"-83", 2SP/CP: 32"-83"
Where Used: MOVFR II, MOVFR-RND II, MOXL

HWPL-0012N



Pulley, AK30 x 5/8" With Hub
D.O. - S/S: 22"-42", C/P & 2SP/CP: 30"-83"
Where Used: MOXL

HWPL-0015N



Pulley, AK26 x 5/8" With Hub
D.O. - S/S: 43"-48", 2/SP & 3/SP: 61"-83"
Where Used: MOXL

Motor Pulley (Water Resistant)

HWPL-0017N



Pulley, AK26 x 5/8" With Hub Zinc Plated, Zinc Plated
D.O. - S/S: 43"-48", 2/SP & 3/SP: 61"-83"
Where Used: MOVFRW, MOWL

HWPL-0018N



Pulley, AK30 x 5/8" With Hub Zinc Plated, Zinc Plated
D.O. - 2/SP: 24"-60", 3/SP: 30"-60", C/P: 24"-83", 2SP/CP: 32"-83"
Where Used: MOVFRW, MOWL

HWPL-0023N



Pulley, OK30 x 5/8" With Hub Zinc Dichromate
D.O. - 2/SP: 24"-60", 3/SP: 30"-60", C/P: 24"-83", 2SP/CP: 32"-83"
Where Used: MOWL

(*) Special Engineering Required

Motor Pulley (Water Resistant)

HWPL-0028N



Pulley, AS25 x 5/8" MOVFRW II Plated, Yellow Zinc Dichromate
D.O. - C/P: 24"-83", 2SP/CP: 32"-83"
Where Used: MOVFRW II

HWPL-0029N



Pulley, AS17 x 5/8" MOVFRW II Plated, Yellow Zinc Dichromate
D.O. - S/S: 22"-60", 2/SP & 3/SP: 28"-83"
Where Used: MOVFRW II

Reduction Pulley

HWPL-0003N



Pulley, OK20 x 5/8", Reduction Unit Motor
Where Used: MOD, MOH, MOM

HWPL-0005N



Pulley, AS20 x 5/8", Reduction Unit Motor Pulley
D.O. - C/P: 60"-72", 2SP/CP: 60"-83"
Where Used: MOD, MODCT, MODCTA, MODCTAL, MODCTL, MODCTLVF, MODHFL, MODL, MODLNYC, MODPLNYC, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML, MOXL

HWPL-0021N



Pulley, AS22 x 5/8", Reduction Unit Front Pulley
D.O. - S/S: 43"-48", 2/SP: 60"-72"
Where Used: MODCTAL, MODCTL, MODHFL, MODL, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML, MOXL

HWPL-0007N



Pulley, OK40 x 5/8", Reduction Unit Rear Pulley
D.O. - S/S: 43"-48", 2/SP: 60"-72"
Where Used: MODCTAL, MODCTL, MODHFL, MODL, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML, MOXL

HWPL-0008N



Pulley, OK60 x 5/8", Reduction Unit Rear Pulley
D.O. - 3SP/SP: 84"-144"
Where Used: MOHSVL, MOMSVL

HWPL-0014N



Pulley, OK35 x 5/8" With Hub, Reduction Unit Rear Pulley
D.O. - S/S: 22"-42", 2/SP & 3/SP: 61"-83", C/P & 2SP/CP: "30"-83"
Where Used: MOXL

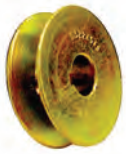
DOOR EQUIPMENT

Operator Parts

Pulley Assemblies & Pulleys

Reduction Pulley (Water Resistant)

HWPL-0016N



Pulley, AS22 x 5/8", Reduction Unit Front Pulley, Yellow Zinc Dichromate
D.O. - C/P: 24"-59", 2SP/CP: 32"-48"
Where Used: MOWL

HWPL-0022N



Pulley, OK30 x 5/8" With Hub, Zinc Plated Reduction Unit Rear Pulley
D.O. - S/S: 22"-42", 2/SP & 3/SP: 61"-83", C/P: 24"-83", 2SP/CP: 32"-83"
Where Used: MOWL

HWPL-0019N



Pulley, OK35 x 5/8" With Hub Zinc Plated, Reduction Unit Rear Pulley
D.O. - S/S: 22"-42", 2/SP & 3/SP: 61"-83", C/P & 2SP/CP: "30"-83"
Where Used: MOVFRW II, MOWL

HWPL-0020N



Pulley, OK40 x 5/8" With Hub Zinc Plated, Reduction Unit Rear Pulley
D.O. - S/S: 43"-48", 2/SP: 24"-60", 3/SP: 30"-60"
Where Used: MOVFRW II, MOWL

Bearing Blocks & Parts

Drive, Intermediate, and Reduction Pulleys

OP10-0033L/R



Block Kit, Drive Pulley Bearing (Replacement Of Old Style Before April 1978)
Where Used: MOD, MODL, MO

OP10-0034N



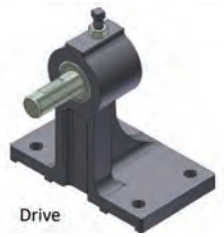
Block, Drive Pulley Bearing (6 3/8" O.A. Shaft)
Where Used: MOD, MODL, Early MOCT

OP71-0013N



Block, Drive Pulley Bearing (6 3/8" O.A. Shaft, 2 Flats)
Where Used: MOX

OP21-0003N



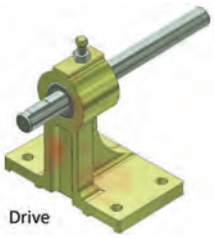
Block, MOM-MOH Drive Pulley Bearing
Where Used: MOM, MOH, MODCT, MOMCT, & MOHCT Series

OP21-0013N



Block, Drive Pulley Bearing, With Retiring Cam Pick Up (All Operators)
Where Used: MOM, MOH, MOCT Series

OP21-0020N



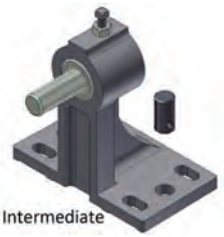
Block, MOVFRW II, Yellow Zinc Dichromate Drive Pulley Bearing (7 1/2" O.A. Shaft)
Where Used: MOVFRW II

OP21-0026N



Block, Drive Pulley Bearing (7 1/2" O.A. Shaft)
Where Used: MOVFR, MOVFR II, MOVFR-RND II

OP20-0005N



Block, Intermediate Pulley Bearing
Where Used: All MOD, MOM & MOH Series Operators and MODH-FL, MODLNYC, MOVFR II, & MOXL

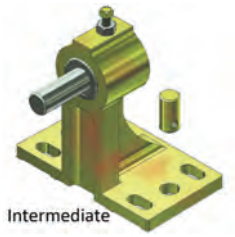
(*) Special Engineering Required

Operator Parts

Bearing Blocks & Parts

Drive, Intermediate, and Reduction Pulleys

OP20-0012N



Block, MOVFRW II Intermediate Pulley Bearing, Yellow Zinc Dichromate
Where Used: MOVFRW II, MOWL

OP20-0007N



Block, Reduction Unit Bearing (5 3/4" O.A. Shaft)
Where Used: MODCTAL, MODCTL, MODHFL, MODL, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML, MOXL

OP70-0014N



Block, Reduction Pulleys And Bearing, Yellow Zinc Dichromate
Where Used: MOWL

OP71-0018N



Block, MOX Idler Pulley Bearing
Where Used: MOXL

Operator Retiring Cam Clamp Kits



Part No.	Where Used	Description
RC1-0017N	All Operators	Clamp Kit, Retiring Cam Pick-Up

Adjustable Angles

OP20-0006N



Description
Angle, Bearing Block Adjustable Where Used: All Operators

OP20-0014N



Description
Angle, Bearing Block Adjustable Plated, Yellow Zinc Dichromate Where Used: MOVFRW II

Belt Tensioner Assemblies & Parts

Tensioner Assemblies

OP70-0011N



Description
Tensioner Assembly, MOW Belt, Yellow Zinc Dichromate Where Used: MOWL, MOWL-2

OP71-0014N



Description
Tensioner Assembly, MOX Belt Where Used: MOXL

DOOR EQUIPMENT

Operator Parts

Belt Tensioner Assemblies & Parts

Angles, Plates, and Roller

OP70-0012N



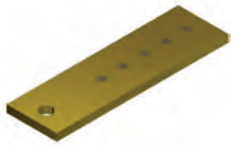
Angle, Yellow Zinc Dichromate Tensioner, 2 1/2" x 3 7/8" x 10 Gauge
Where Used: MOWL

OP71-0015N



Angle, MOX Tensioner, 2 1/2" x 3 7/8" x 10 Gauge
Where Used: MOXL

OP70-0018N



Plate, MOW Yellow Zinc Plated Tensioner
Where Used: MOWL

OP71-0016N



Plate, MOX Tensioner
Where Used: MOXL

OP70-0017N



Roller, MOW Yellow Zinc Plated Belt Tension, Modify In House From ROL-0001N
Where Used: MOWL

Sprocket & Shafts

Sprocket & Shaft Kits

OP70-0004N



Description
Shaft Kit, MOW Yellow Zinc Plated Limit Control, With 16 Tooth Sprocket & 6 1/2" Lg. Shaft
Where Used: MOWL

OP71-0005N



Description
Shaft Kit, MOX Operator Limit Control, 7 1/2" Lg.
Where Used: MOXL

(*) Special Engineering Required

Operator Parts

Sprocket & Shafts

Shaft Assemblies & Parts

OP12-0009N



Shaft, MOM/MOH Limit Control, 8 3/4" Lg. (For Jobs Before 11/2001)
Where Used: MOH, MOHL, MOHSVL, MOM, MOML, MOMSVL

OP12-0010N



Shaft, MOM/MOH Limit Control, 10 3/4" Lg. (For Jobs Before 3/2000)
Where Used: MOH, MOHL, MOM, MOML

OP12-0017N



Shaft Assembly, MOM/MOH Limit Control, 8 7/8" Lg. Includes (2) Nylon Bushings (Blue) /16 Tooth Sprocket (For Jobs After 11/2001)
Where Used: MOHL, MOML

OP16-0029N



Shaft, MOCT Limit Control With Bushings, 8 1/2" Lg-16 Tooth Sprocket
Where Used: MODCT, MODCTL

OP17-0021N



Shaft, MOMCT/MOHCT, 10" Lg-16 Tooth Sprocket
Where Used: MOHCT, MOHCTL, MOMCT, MOMCTL

HDW-0030N



Collar, 1 1/8" OD x 5/8" ID # SC62, 1/4-20 S. Steel Set Shaft for Limit Control
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL, MOWL, MOXL

Power Failure Unlocking Device & Parts

OP26-0004L/R



Description
Unlocking Device, PFU-3 Spring Assembly, With Roller Assembly. For Power Supply Failure (Used In England & Some Parts Of Europe)
Where Used: MODCTAL, MODCTL, MODH-FL, MODL, MOHCTL, MOHL, MOMCTL, MOMHFL, MOML, MOVFR II

OP26-0003N



Description
Stop Assembly, PFU1, PFU2 Power Failure Unlocking Device (Used In England & Some Parts Of Europe)
Where Used: MODCTAL, MODCTL, MODCT-PL, MODHFL, MODL, MODPL, MOHCTL, MOHCTPL, MOHL, MOHSVL, MOMCTL, MOMCTPL, MOMHFL, MOML, MOMSVL

(*) Special Engineering Required

DOOR EQUIPMENT

Operator Parts

Power Failure Unlocking Device & Parts

SPG-0002N



Spring, 7/16" Lg. x 9/32" OD-0.018 Wire- 9 Turns-Music

SPG-0079N



Spring, 3" Lg. x 5/8" OD-0.105 Wire- 14 Turns-Music, 1/2" Cut From SPG-0044N For PFU-3 Power Failure Emergency Unlocking Device

SPG-0062N



Spring, 10 1/2" Lg. x 21/32" OD-0.105 Wire- 55 Turns, Cut From SPG-0046N For PFU-1 Power Failure Emergency Unlocking Device, 2/SP 30"-UP D.O.

SPG-0063N



Spring, 12" Lg. x 9/16" OD-0.076 Wire- 61 Turns, Cut From SPG-0041N For PFU-2 Power Failure Emergency Unlocking Device, 2/SP 24"-29" D.O.

Stop Roller Assemblies and Plates

OP21-0025N

REPLACES #OP10-0072N



Stop Roller Assembly, Operator Pulley, (flush screw head) all Jobs and Operators After 4-30-2006
Where Used: MOVFR/MOVFR-II MOD Series, MOM/MOH , etc.

OP10-0032N



Stop Roller Assembly, MOD/MOH Operator Pulley, Used For Jobs Before 5-1-2006
Where Used: All MOD Series , MOM/MOHL, MOXL

OP21-0018N



Stop Roller Assembly, MOVFR Operator Pulley, (flush screw head) Jobs Before 5-1-2006
Where Used: MOVFR/MOVFR II, MOVFR-RND II, MOVFRW II

OP10-0040N



Roller & Bolt, Operator Stop Used for All Operators

OP10-0044N



Plate, Operator Stop

OP21-0021N



Plate, MOVFRW II Operator Stop, Yellow Zinc Dichromate

OP21-0023N



Plate, MOW Operator Stop, Yellow Zinc Dichromate

(*) Special Engineering Required

Operator Parts

Retiring Cam Pick-up Roller Assemblies

OP11-0015N



Roller Assembly, Retiring Cam Pick-Up, Use For Operators Before 5-1-2006.
Where Used: MOD Series, MODPLNYC, MOVFR

OP11-0031N



Roller Assembly, Retiring Cam Pick-Up, Use For Operators With #40 Chain After 4-30-2006
Where Used: MOD Series, MODPLNYC, MOVFR

OP21-0014N



Roller Plate, Retiring Cam Pick Up, For CT Operators

OP21-0015N



Roller Plate, Retiring Cam Pick Up, For MOM/ MOH Operators

OP21-0016N



Roller & Bolt, Retiring Cam Pick Up, For CT/ MOM/MOH Operators.

Belts, Chains, & Chain Parts

Drive Belt



Part No.	Where Used	Description
HWBL-0001N	All Operators Except MOV-FRW-II, MOXL, MOWL	Belt, 2440 Operator Truflex, " V" Belt 15Y05, 4L440 (D.O. - S/S 22"-48", 2/SP 24"-72", 3/SP 30"-72")
HWBL-0006N	All Operators	Belt, Operator 2450 Truflex, " V" Belts 15Y06 (D.O. - CP-2SP/CP 24"-83", 3SP/CP 32"-88")
HWBL-0003N	MOX-L, Old Style MOWL (Aluminum Tank)	Belt, 2480 Operator (D.O. - All Opening Sizes)

Reduction Belt



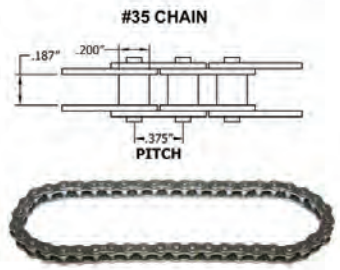
Part No.	Where Used	Description
HWBL-0002N	MOML, MOHL, CT Series	Belt, 1220 Operator Reduction (D.O. - S/S 43"-48", 2/SP 60"-72", CP 60"-72", 3SP/CP 61"-88")
HWBL-0004N	MOXL	Belt, 1400 Operator Reduction
HWBL-0005N	MODG	Belt, 1260 Operator Reduction
HWBL-0007N	MOWL	Belt, 1380 Operator Reduction

DOOR EQUIPMENT

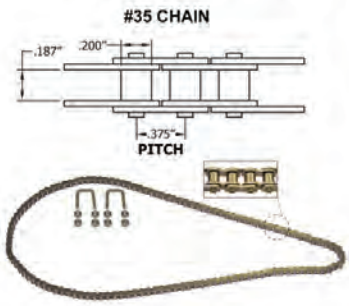
Operator Parts

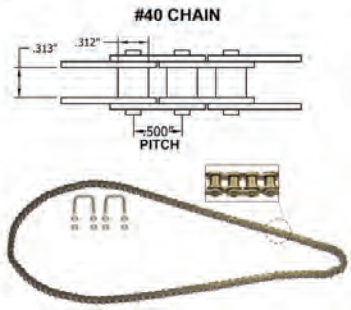
Belts, Chains, & Chain Parts

Cam Drive Chain



Drive Pulley Chain





Chain Application Chart		
Part No.	Where Used	Chain Type
CHN-0003N	MODCT, MODCTA, MODCTAL, MODCTAP, MODCTL, MODCTLVF, MOHCT, MOHCTL, MOMCT, MOMCTL	Cam Chain
CHN-0004N	MOH, MOHL, MOHSVL, MOM, MOML, MOMSVL	
CHN-0010N	MOVFRW II, MOWL	
CHN-0019N	MOXL	
OP10-0036N	MOD, MODL, MODLNYC, MODP, MODPL, MODPLNYC (Before 5-1-2006)	Drive Pulley Chain
OP21-0005N	MODCT, MODCTA, MODCTAL, MODCTAP, MODCTL, MODCTLVF, MODCTP, MODCTPL, MODL, MOH, MOHCT, MOHCTL, MOHCTP, MOHCTPL, MOHL, MOM, MOMCT, MOMCTL, MOMCTP, MOMCTPL, MOML, MOVFR II, MOVFR-RND II, MOXL (All MOD series after 4-30-2006)	
OP70-0010N	MOVFRW II, MOWL	

Cam Drive Chain

Part No.	Description
CHN-0003N	Chain, MOCT #35 Cam Drive, 3/8" Pitch x 3/16" Width x 17 1/4" Lg.
CHN-0004N	Chain, MOM/MOH #35 Cam Drive, 3/8" Pitch x 3/16" Width x 19 1/2" Lg. Located From Drive Pulley-Limit Control
CHN-0010N	Chain, MOW/ MOVFRW #35 Cam Drive, 3/8" Pitch x 3/16" Width x 19 1/2" Lg. Plated
CHN-0019N	Chain, MOX #35 Cam Drive, 3/8" Pitch x 3/16" Width x 18 5/8" Lg.

Drive Pulley Chain

Part No.	Description
OP10-0036N	Chain, MOD #35 Drive Pulley With Clamps (Use For Operators Built Before 5-1-2006, After Use OP21-0005N)
OP21-0005N	Chain, MOM/MOH #40 Drive Pulley With Clamps (All MOD & MOCT Series After 4-30-2006)
OP70-0010N	Chain, MOW-MOVFRW Drive Pulley Plated

Chain Connecting Master Link



Part No.	Description
CHN-0011N	Link, #40 Connecting Master Nickel Plated

(*) Special Engineering Required

Operator Parts

Belts, Chains, & Chain Parts

Chain Clamps

OP10-0037N



Clamps, MOD #35 Drive Chain (For Jobs Before 5-1-2006)
Where Used: MOD, MODL, MODLNYC, MODP, MODPL, MODPLNYC

OP21-0006N



Clamps, MOM/MOH/MOCT #40 Drive Chain, (MOD Jobs After 4-30-2006)
Where Used: All Operators

OP70-0019N



Clamps, MOW Yellow Zinc Plated Drive Chain
Where Used: MOVFRW II, MOWL

Bushings & Nylon Pins

Bushings

HWBS-0043N



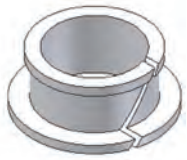
Bushing, Flanged Bronze 11/16" OD x 3/8" ID, Flanged 3/32" & 1/4" Tale
Where Used: MOR

HWBS-0035N



Bushing, Sleeve Bronze 1" OD x 1 1/2" ID, Special # 31 Drill
Where Used: MOWL, MOXL

HWBS-0022N



Bushing, Nyliner 5/16 ID Type 7, 5L2-Ff Snap-In Type 7
Where Used: MODCTAL, MODCTL, MODCTPL, MODHFL, MODL, MODPL, MOHCTL, MOHCTPL, MOHL, MOHSVL, MOMCTL, MOMCTPL, MOMHFL, MOML, MOMSVL

HWBS-0040N



Bushing, Sleeve Bronze 1" Lg. 5/8" OD-5/16" ID, For MOX Operator
Where Used: MOXL

HWBS-0004N



Bushing, Nyliner 5/8 ID Type 5, 10L10-F Flanged Type 5
Where Used: MOH, MOHL, MOHSVL, MOM, MOML, MOMSVL, MOXL

HWBS-0038N



Bushing, Nyliner Plus 5/8, 10L5-1/2Fk-642 Type 6 For MOCT Cam Shaft
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

DOOR EQUIPMENT

Operator Parts

Bushings & Nylon Pins

Bushing Replacement Kit For MOCT Limit Cam Shaft

OP16-0065N



Description
Kit, MOCT Bushing Replacement
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

OP16-0064N



Description
Angle, Shaft Support Mounting, MODCTL/ MOMCTL/MOHCT Limit Switch and Hard-ware Kit
Where Used: MODCT, MODCTL, MOHCT, MOHCTL, MOMCT, MOMCTL

Nylon Pins For Bridging Cams

PIN-0044N



Description
Pin, 5/32" x 5/8" Black Nylon
Where Used: Bridging Cam on All Operators except for MOVFR

PIN-0045N



Description
Pin, 1/8" x 5/8" Clear Nylon (Old Style)
Where Used: Bridging Cam on All Operators except for MOVFR

Spacers & Suppressors

Spacers (MOHL & MOML)

HDW-0404N



Description
Spacer, 7/8" OD x .635" ID x 7/8" Lg. Brass, Use For MOM/MOH Limit Control
Where Used: MOHL, MOML

HDW-0405N



Description
Spacer, 7/8" OD x .635" ID x 19/32" Lg. Brass, Use For MOM/MOH Limit Control
Where Used: MOHL, MOML

Suppressors



Part No.	Description
OP21-0004N	Suppressor, Rubber Pulley, With 2 1/16 x 9/16 Brass Nails/Use For Jobs After 4-30-2006 (Used In All Operators With #40 Chain)
OP10-0035N	Suppressor, Rubber Pulley, With 2 1/16 x 9/16 Brass Nails. Use For Jobs Before 5-1-2006 (Used In All MOD Operator Series With #35 Chain)

(*) Special Engineering Required

Operator Parts

Spacers & Suppressors

Suppressors



Part No.	Where Used	Description
HDW-0025N	MODL, MOHL, MOVFR II	Ring, Sprocket Neoprene Cushion, 1 1/4 ID x 1.515 OD x 0.156 Thick (Used On Intermediate Pulley Sprocket)

Oil Checks

Note: G.A.L. uses Mobil DTE#10 hydraulic oil in all oil checks.

OC-0003N



Oil Check,OC-501 2/SP AC Operator (Old & New Style) S/S & C/P (New Style) With Short Damping Valve

OC-0004N



Oil Check,OC-502-A C/P AC Operator (Old Style) With Out Damping Valve

OC-0007N



Oil Check,OC-504 S/S & C/P AC Operator (Old Style)

OC-0008N



Seals, O-Rings, Oil Check Replacement Kit

Operator Mounting Hardware

OP1-0040N



Hardware, Operator S/S-2S/P 24”-48” D.O.

OP2-0050N



Hardware, Operator Center Parting

OP35-0010N



Hardware, Operator 2/SP-2SP/CP 49”-72” D.O.

DOOR EQUIPMENT

Operator Parts

Operator Mounting Hardware

HDW-0211N	***HWSC-0345N***
	
Spacer, Cork Insulator For Operator Base, 4” x 1 1/4” x 1/8”	Screw,5/16-18 X 1/2” Hex Tap-Sems, Yellow Zinc Dichromate
Where Used: All Operators	Where Used: All Operators

(*) Special Engineering Required

GAL Hangers

DOOR EQUIPMENT

CAR / HATCH DOOR HANGERS

S/S, 2/SP, C/P, 2SP/CP, 3/SP
(Geared/Ungeared)

- **A** – Conventional Hanger (Standard)
- **AW** – Water Resistant Hanger
- **AX** – Dust/Explosion Resistant Hanger
- **C** – "Discontinued", Use "A" Hangers for Replacement
- **HA** – Housing Authority Hanger (Vandal Resistant)
- **NYCHA** – New York City Housing Authority Hanger (Vandal Resistant)
- **HAW** – Housing Authority Hanger (Water Resistant)
- **I** – Round Door Hanger
- **OTIS I** – Otis Elevator Hanger
- **OS** – 2 1/4" Old Style Hanger (Hatch Door Hanger only)
- **Westinghouse Type I, II, III, IV, V**
  (Replacement for Westinghouse Hatch Door Hangers only)

CAR & HATCH DOOR HANGER ASSEMBLIES PAGE 141-191

OLD STYLE HANGERS PAGE 192-200

WESTINGHOUSE REPLACEMENT PAGE 210-209

CABLE GEARING PAGE 210-213

HEADERS & HI-CAB KITS PAGE 214-217

- **SHEAVE ASSEMBLIES & PARTS**
- **SECONDARY MECHANICAL INTERCONNECTING DEVICES**

PAGE 217-226

CAR & HATCH TRACKS PAGE 226-234

HARDWARE PAGE 235-244



CAR DOOR HANGER



HATCH DOOR HANGER

SPECIAL HANGER SHEAVE ASSEMBLY NOTE

Besides the standard 4 1/8" center line with 3/8"-16 pendent bolts for sheave assemblies, G. A. L. can supply sheaves with various other center lines and bolt configurations (Non-G. A. L.)

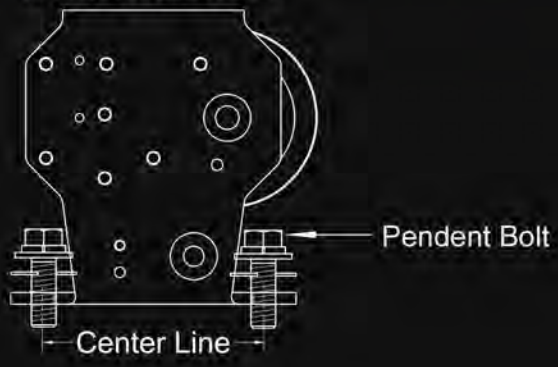
Non-G. A. L. Sheave Center Lines Available:

- 4", 41/8", 4 1/4", 4 5/8", 4 3/4" with 1/2"-13 Pendent Bolts
- 3 3/4", 4", 4 1/4", 4 1/2", 4 3/4" with 3/8"-16 Pendent Bolts

G. A. L. can also supply unistruts (adaptor channels) for car door hangers as well as hatch door hangers in order to accommodate non-G. A. L. center lines & pendent bolts

A field survey is required and special engineering involved at additional cost, contact sales for info.

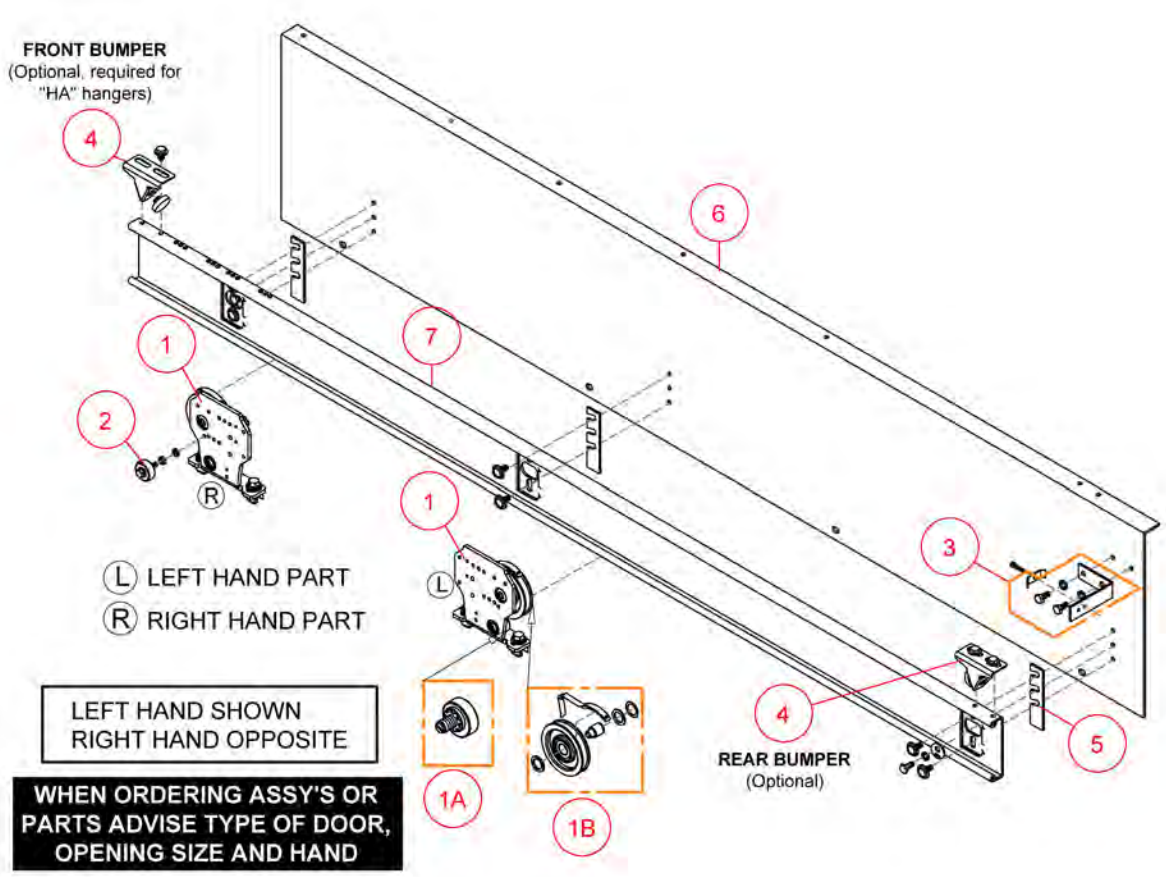
SHEAVE ASSEMBLY



Car Door Hanger Isometric Drawing

Single Speed - Type "A"

22"-48" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)
CDH1-0020N	3	Clamp, S/S-C/P Hanger Safety Edge Cable (**Page#** 226)

Part No.	Item No	Description
HH4-0055N	4	Bumper, "A" CP Assembly Stop (**Page#** 226)
HH1-0032N	5	Spacer, 1/8" Track (**Page#** 237)
CDH1-0144L/R	6	Header, A-Hanger S/S 22"-48" D.O. Car (**Page#** 214)
CDH1-XXXXX	7	Track, S/S Car Door (**Page#** 226)

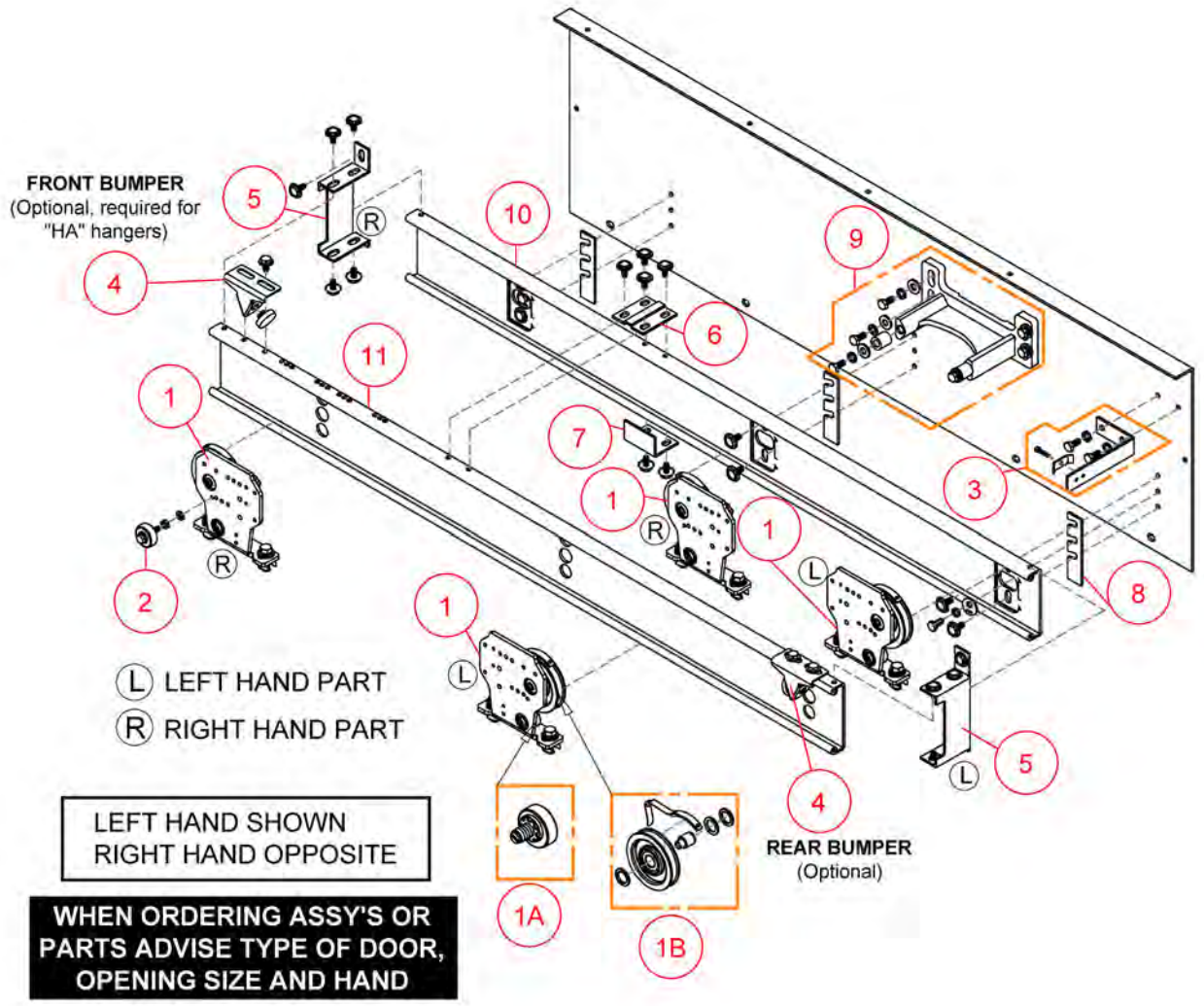
Mounting hardware included with this hanger assembly (Page# 242-244)

DOOR EQUIPMENT

Car Door Hanger Isometric Drawing

Two Speed (Ungeared) - Type "A"

24"-29" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)
CDH2-0083N	3	Clamp, 2/SP-2SP/CP Safety Edge Cable (**Page#** 226)
HH4-0055N	4	Bumper, "A" CP Assembly Stop (**Page#** 226)

Part No.	Item No	Description
HH2-0052L/R	5	Bracket, Track End 1 1/2" (**Page#** 236)
HH2-0053N	6	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	7	Angle, Track Bottom 1 1/2" (**Page#** 235)
HH1-0032N	8	Spacer, 1/8" Track (**Page#** 237)
OP25-0002N	9	Bracket, 2SP/CP & 2/SP 24"-29" D.O. Drive Arm Support (**Page#** 99-Operator Section)
CDH2-XXXXX	10	Track, Slow Car Door (**Page#** 228)
CDH2-XXXXX	11	Track, Fast Car Door (**Page#** 228)

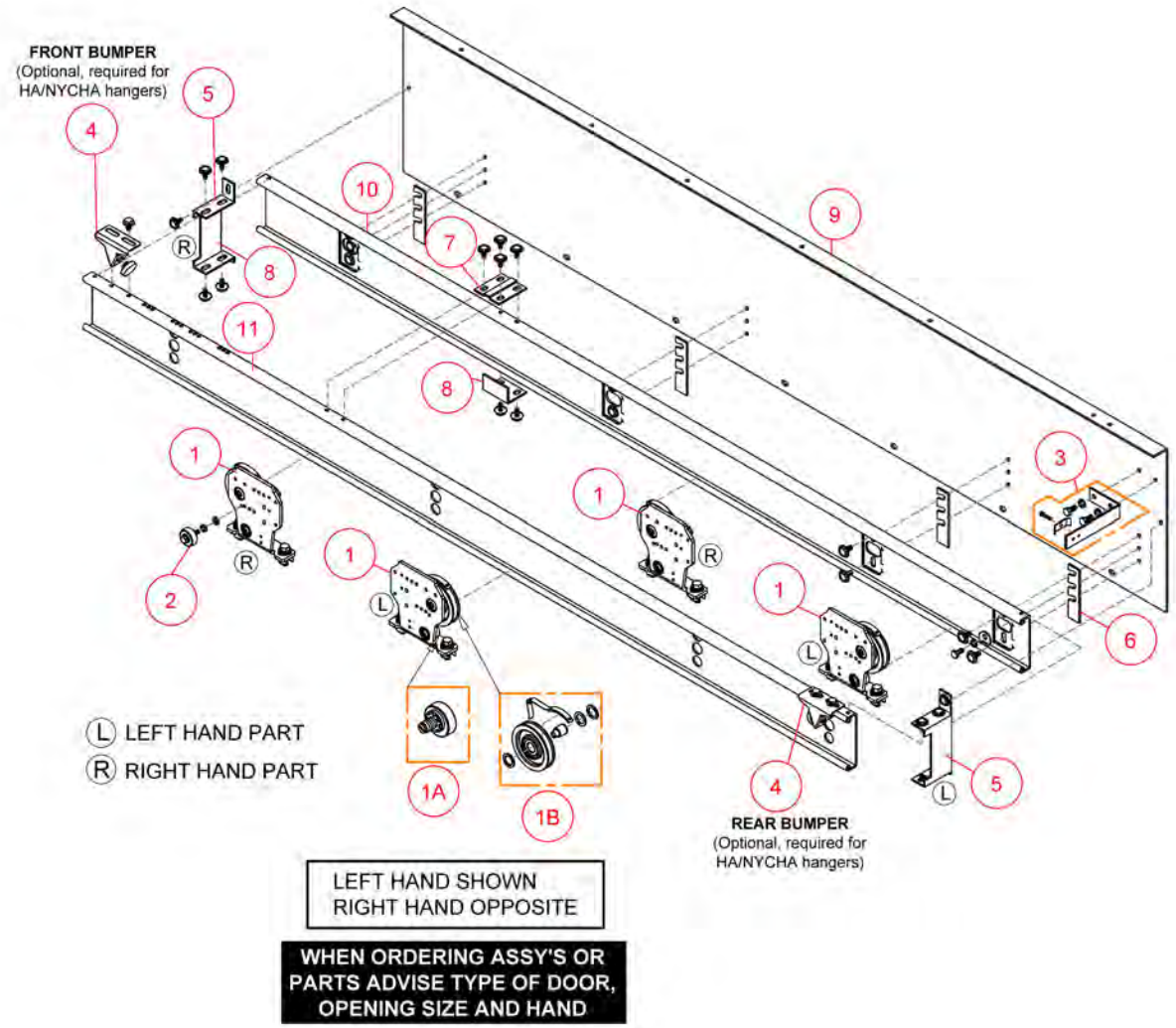
Mounting hardware included with this hanger assembly (Page# 242-244)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Car Door Hanger Isometric Drawing

Two Speed (Ungeared) - Type "A"

49"-72" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)
CDH2-0083N	3	Clamp, 2/SP-2SP/CP Safety Edge Cable (**Page#** 226)
HH4-0055N	4	Bumper, "A" CP Assembly Stop (**Page#** 226)

Part No.	Item No	Description
HH2-0052L/R	5	Bracket, Track End 1 1/2" (**Page#** 236)
HH1-0032N	6	Spacer, 1/8" Track (**Page#** 237)
HH2-0053N	7	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	8	Angle, Track Bottom 1 1/2" (**Page#** 235)
CDH2-0158L/R	9	Header, A-Hanger 2/SP 30"-72" D.O. Car (**Page#** 214)
CDH2-XXXXX	10	Track, Slow Car Door (**Page#** 228)
CDH2-XXXXX	11	Track, Fast Car Door (**Page#** 228)

Mounting hardware included with this hanger assembly (Page# 242-244)

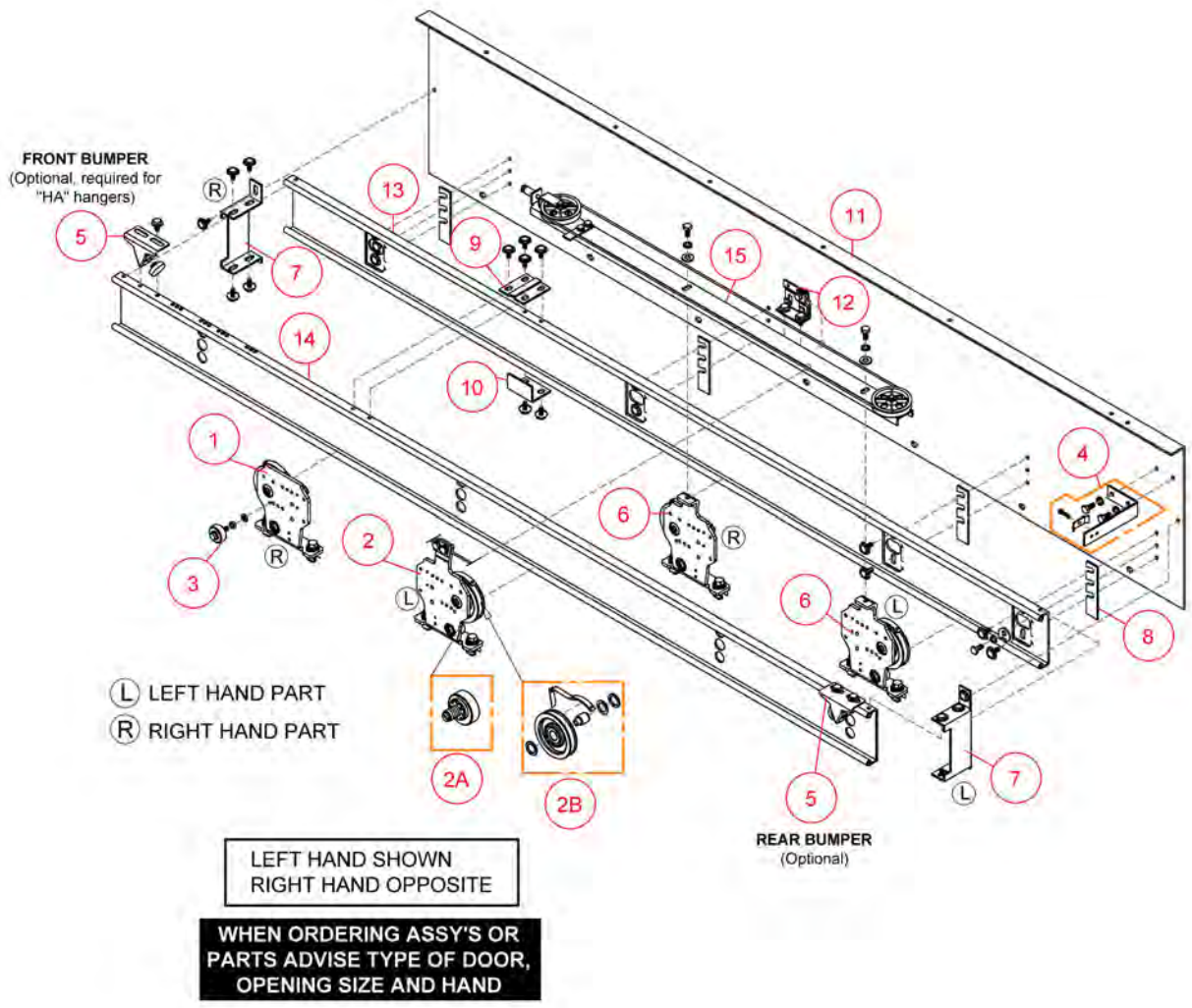
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Car Door Hanger Isometric Drawing

Two Speed (Geared) - Type "A"

30"-48" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
CDH2-0065L/R	2	Sheave, 2/SP Cable Gear Bar, Fast Door (**Page#** 221)
HH1-0024N	2A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	2B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	3	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)
CDH2-0083N	4	Clamp, 2/SP-2SP/CP Safety Edge Cable (**Page#** 226)
HH4-0055N	5	Bumper, "A" CP Assembly Stop (**Page#** 226)

Part No.	Item No	Description
CDH2-0067L/R	6	Sheave, 2/SP Cable Gear Bar, Slow Door (**Page#** 221)
HH2-0052L/R	7	Bracket, Track End 1 1/2" (**Page#** 236)
HH1-0032N	8	Spacer, 1/8" Track (**Page#** 237)
HH2-0053N	9	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	10	Angle, Track Bottom 1 1/2" (**Page#** 235)
CDH2-0158L/R	11	Header, A-Hanger 2/SP 30"-72" D.O. Car (**Page#** 214)
CDH2-0082N	12	Clamp, 2/SP Cable Anchor (**Page#** 213)
CDH2-XXXXX	13	Track, 2/SP Slow Car Door (**Page#** 228)
CDH2-XXXXX	14	Track, 2/SP Fast Car Door (**Page#** 228)
CDH2-XXXXX	15	Bar Assembly, Cable Gearing (**Page#** 210)

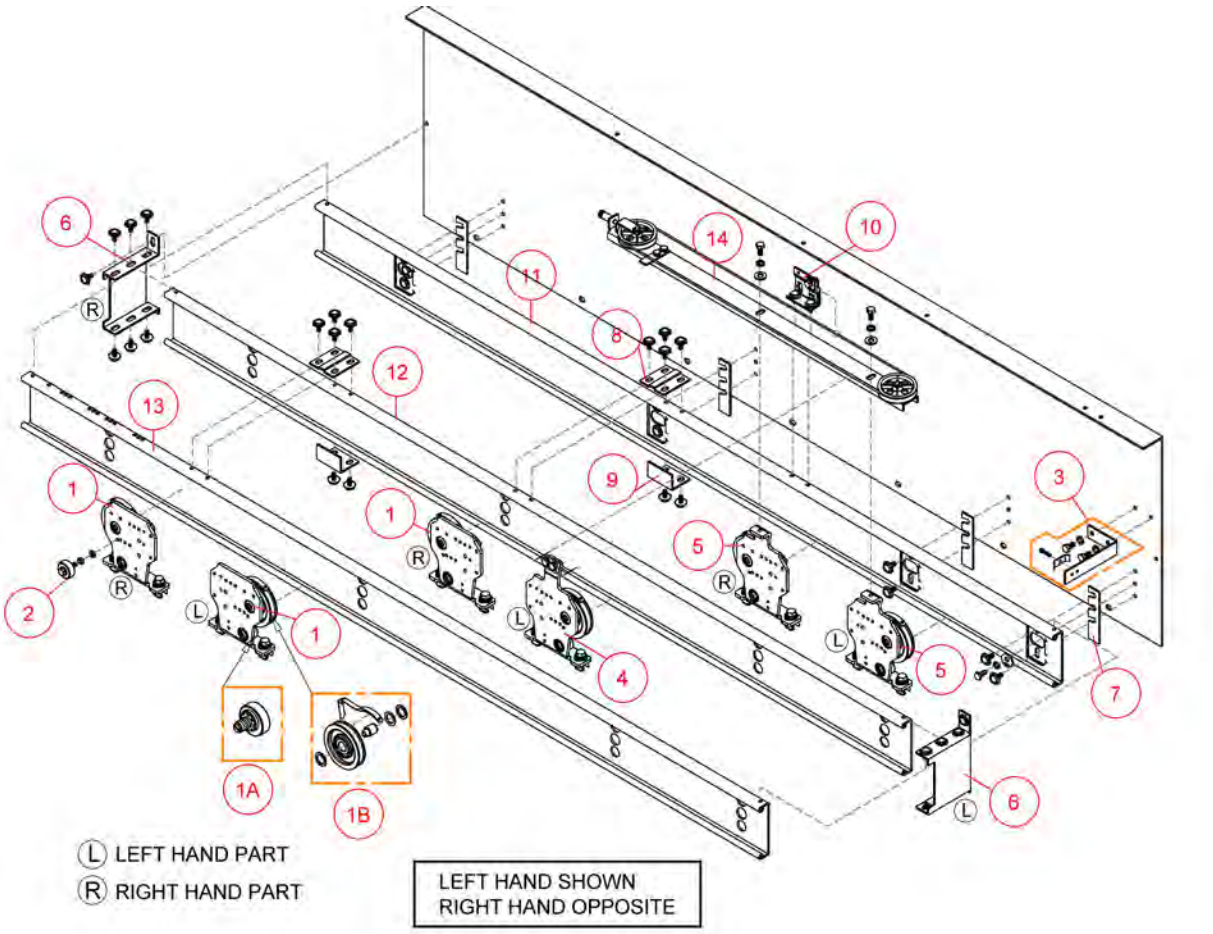
Mounting hardware included with this hanger assembly (Page# 242-244)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Car Door Hanger Isometric Drawing

Three Speed (Geared) - Type "A"

30"-69" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)
CDH2-0083N	3	Clamp, 2/SP-2SP/CP Safety Edge Cable (**Page#** 226)
CDH2-0065L/R	4	Sheave, 2/SP Cable Gear Bar, Fast Door (**Page#** 221)
CDH2-0067L/R	5	Sheave, 2/SP Cable Gear Bar, Slow Door (**Page#** 221)

Part No.	Item No	Description
HH9-0163L/R	6	Bracket, 4 1/4" Track-3/SP End (**Page#** 236)
HH1-0032N	7	Spacer, 1/8" Track (**Page#** 237)
HH2-0053N	8	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	9	Angle, Track Bottom 1 1/2" (**Page#** 235)
CDH2-0082N	10	Clamp, 2/SP Cable Anchor (**Page#** 213)
CDH9-XXXXX	11	Track, 3/SP Slow Car Door (**Page#** 229)
CDH9-XXXXX	12	Track, 3/SP Intermediate Car Door (**Page#** 229)
CDH9-XXXXX	13	Track, 3/SP Fast Car Door (**Page#** 229)
CDH2-XXXXX	14	Bar Assembly, Cable Gearing (**Page#** 210)

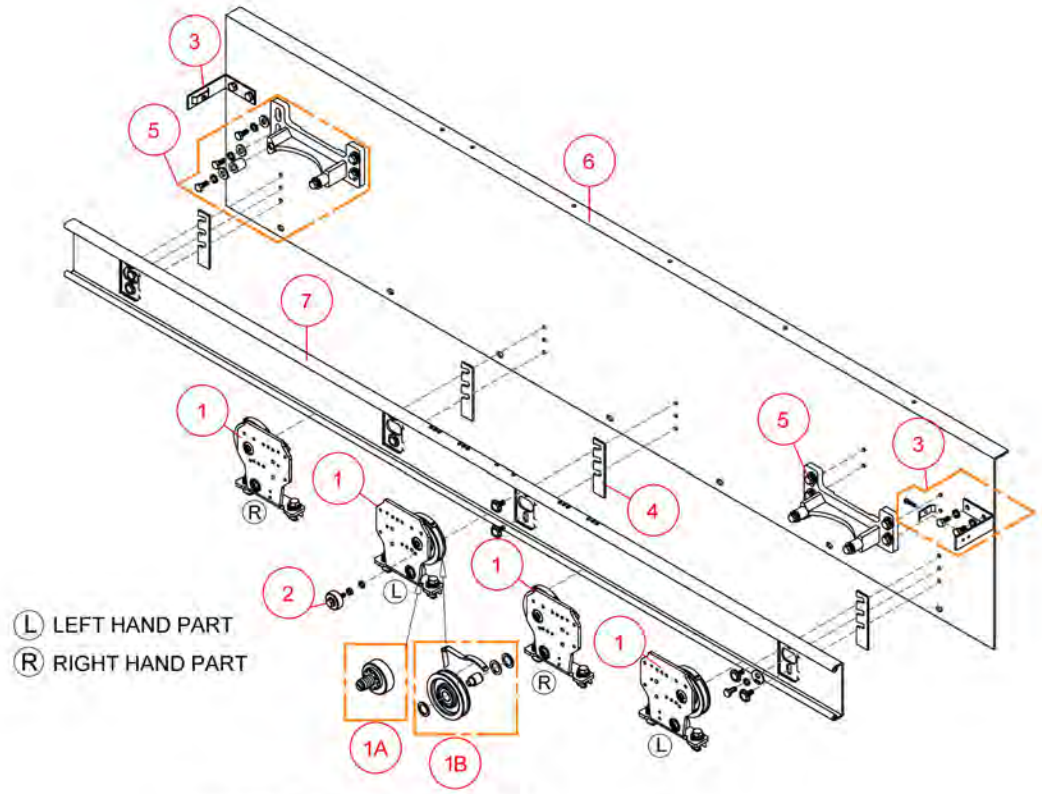
Mounting hardware included with this hanger assembly (Page# 242-244)

DOOR EQUIPMENT

Car Door Hanger Isometric Drawing

Center Parting - Type "A"

30"-59" Door Opening



WHEN ORDERING ASSY'S OR PARTS ADVISE TYPE OF DOOR, OPENING SIZE AND HAND

Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)
CDH1-0020N	3	Clamp, S/S-C/P Hanger Safety Edge Cable (**Page#** 226)

Part No.	Item No	Description
HH1-0032N	4	Spacer, 1/8" Track (**Page#** 237)
OP25-0001N	5	Bracket, C/P Arm Support (**Page#** 99)
CDH3-0290N	6	Header, A-Hanger CP 24"-59" D.O. Car (**Page#** 214)
CDH3-XXXXX	7	Track, C/P Car Door (**Page#** 230)

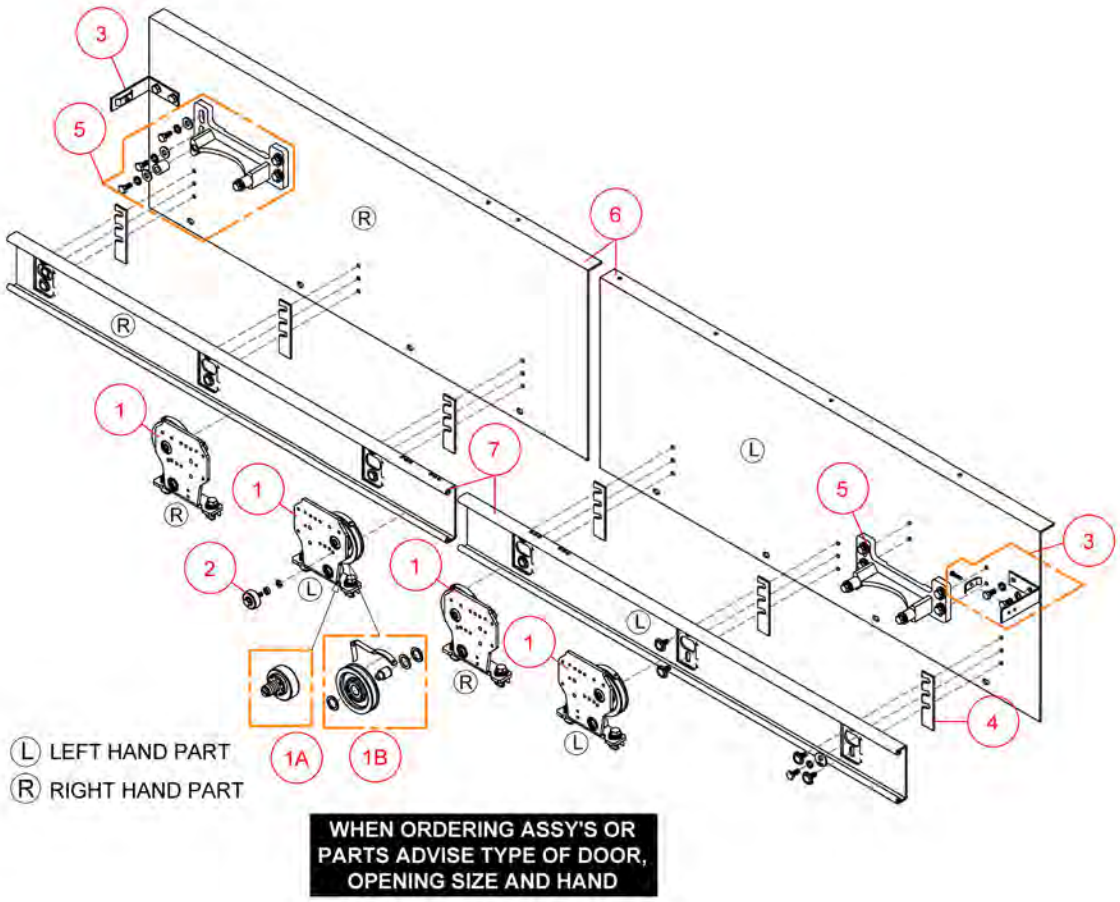
Mounting hardware included with this hanger assembly (Page# 242-244)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Car Door Hanger Isometric Drawing

Center Parting (Split Track) - Type "A"

60"-83" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)

Part No.	Item No	Description
CDH1-0020N	3	Clamp, S/S-C/P Hanger Safety Edge Cable (**Page#** 226)
HH1-0032N	4	Spacer, 1/8" Track (**Page#** 237)
OP25-0001N	5	Bracket, C/P Arm Support (**Page#** 99)
CDH1-XXXXX	6	Header, S/S Car Door (**Call G.A.L**)
CDH1-XXXXX	7	Track, S/S Car Door (**Call G.A.L**)

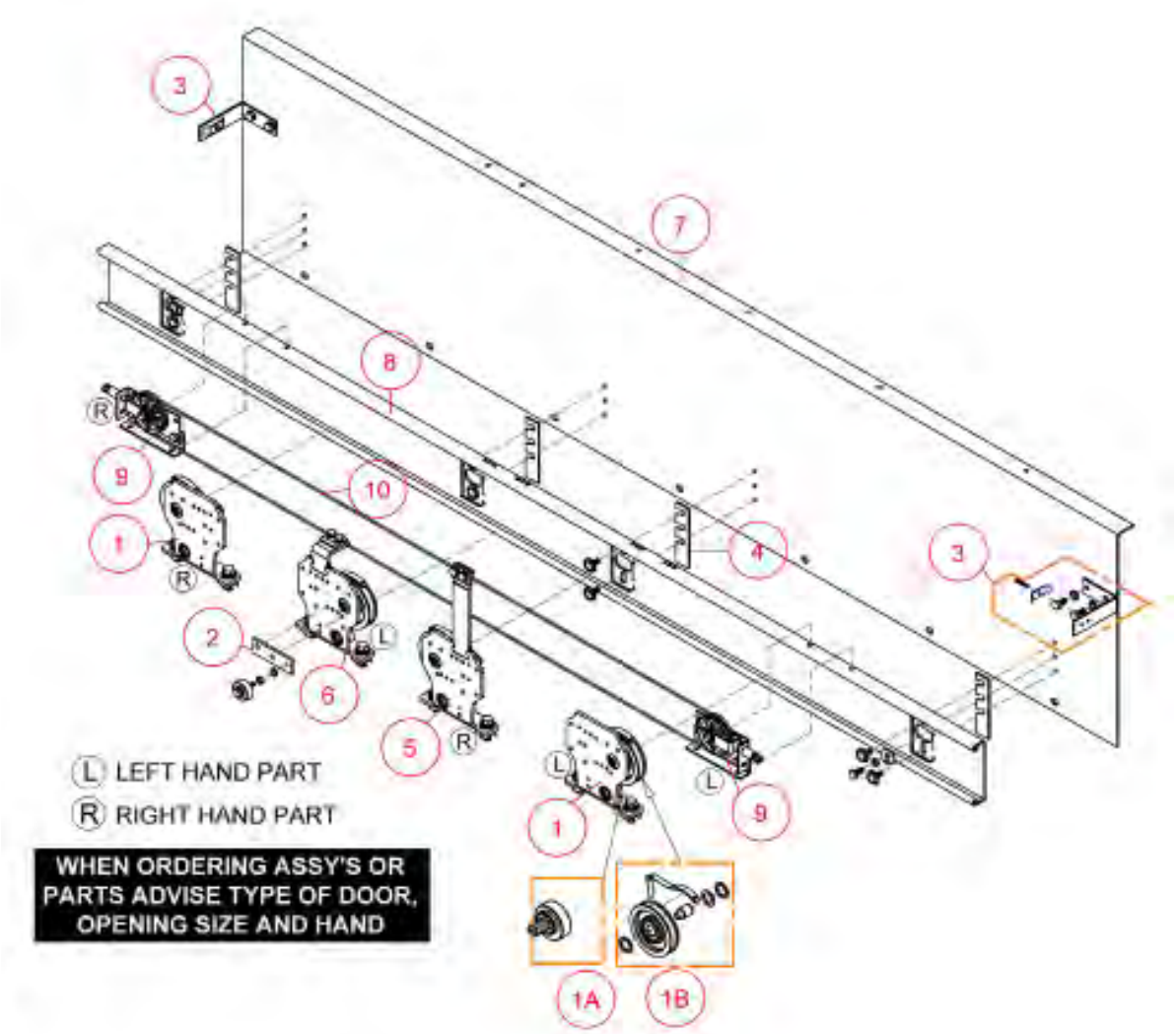
Mounting Hardware Included with This Hanger Assembly

DOOR EQUIPMENT

Car Door Hanger Isometric Drawing

Center Parting (Vertically Geared) - Type "A"

30"-59" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0006N	2	Roller & Arm, Gate Switch (**Page#** 417-Switch Section)
CDH1-0020N	3	Clamp, S/S-C/P Hanger Safety Edge Cable (**Page#** 226)
HH1-0032N	4	Spacer, 1/8" Track (**Page#** 237)

Part No.	Item No	Description
CDH3-0269L/R	5	Sheave, C/P Vertical Gear 4 1/8" CL 3/8-16 Bolt With Bent & Notched Bracket (**Page#** 223)
CDH3-0270L/R	6	Sheave, C/P Vertical Gear 4 1/8" CL 3/8-16 Bolt With Clamp (**Page#** 223)
CDH3-0290N	7	Header, A-Hanger CP 24"-59" D.O. Car (**Page#** 214)
CDH3-XXXXX	8	Track, C/P Car Door (**Page#** 230)
CDH3-0267L/R	9	Pulley Assembly, C/P Vertical Gearing Tension (**Page#** 211)
HH3-XXXXX	10	Gearing Cable (**Page#** 212)

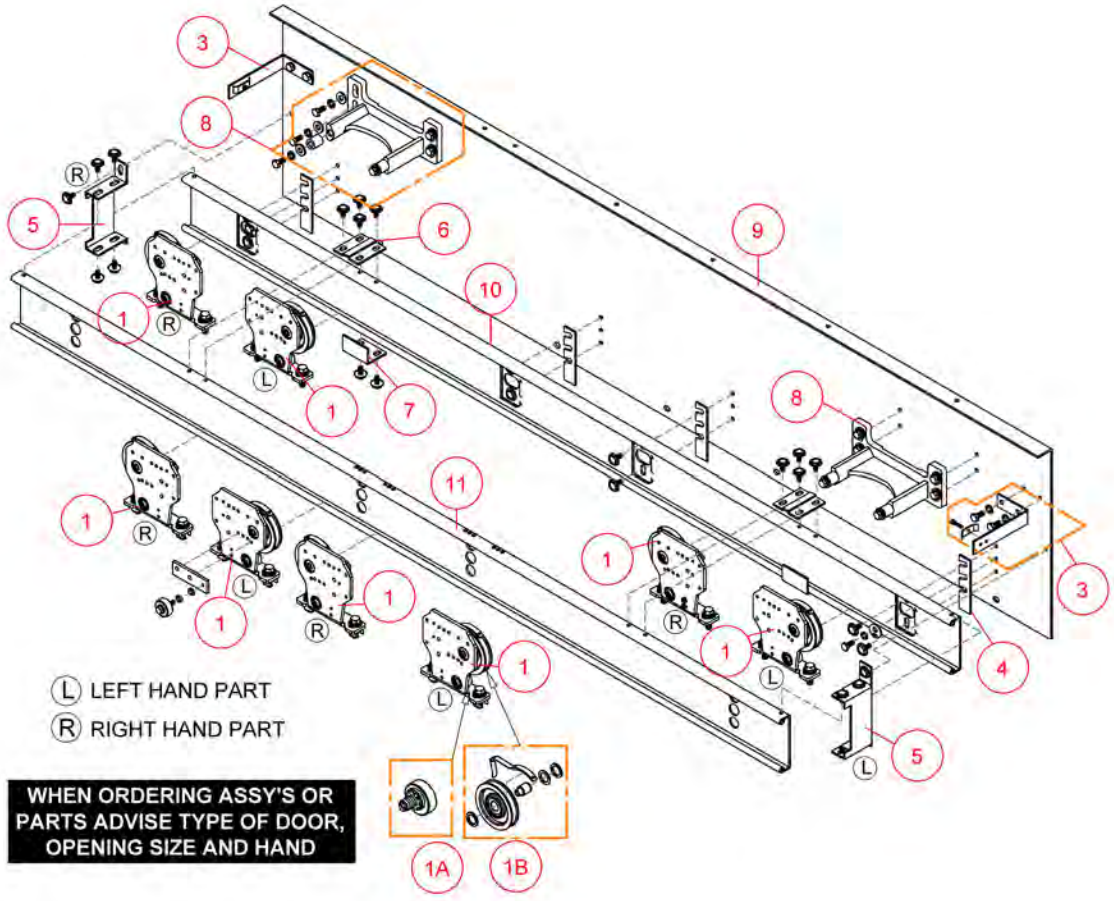
Mounting hardware included with this hanger assembly (Page# 242-244)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Car Door Hanger Isometric Drawing

Two Speed Center Parting (Ungeared) - Type "A"

33"-72" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0006N	2	Roller & Arm, Gate Switch 2SP/CP (**Page#** 417-Switch Section)
CDH2-0083N	3	Clamp, 2/SP-2SP/CP Safety Edge Cable (**Page#** 226)
HH1-0032N	4	Spacer, 1/8" Track (**Page#** 237)
HH2-0052L/R	5	Bracket, Track End 1 1/2" (**Page#** 236)

Part No.	Item No	Description
HH2-0053N	6	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	7	Angle, Track Bottom 1 1/2" (**Page#** 235)
OP25-0002N	8	Bracket, 2SP/CP & 2/SP 24"-29" D.O. Drive Arm Support (**Page#** 99-Operator Section)
CDH4-0153N	9	Header, A-Hanger 2SP/CP 32"-73" D.O. Car (**Page#** 214)
CDH4-XXXXX	10	Track, 2SP/CP Slow Car Door (**Page#** 230)
CDH4-XXXXX	11	Track, 2SP/CP Fast Car Door (**Page#** 230)

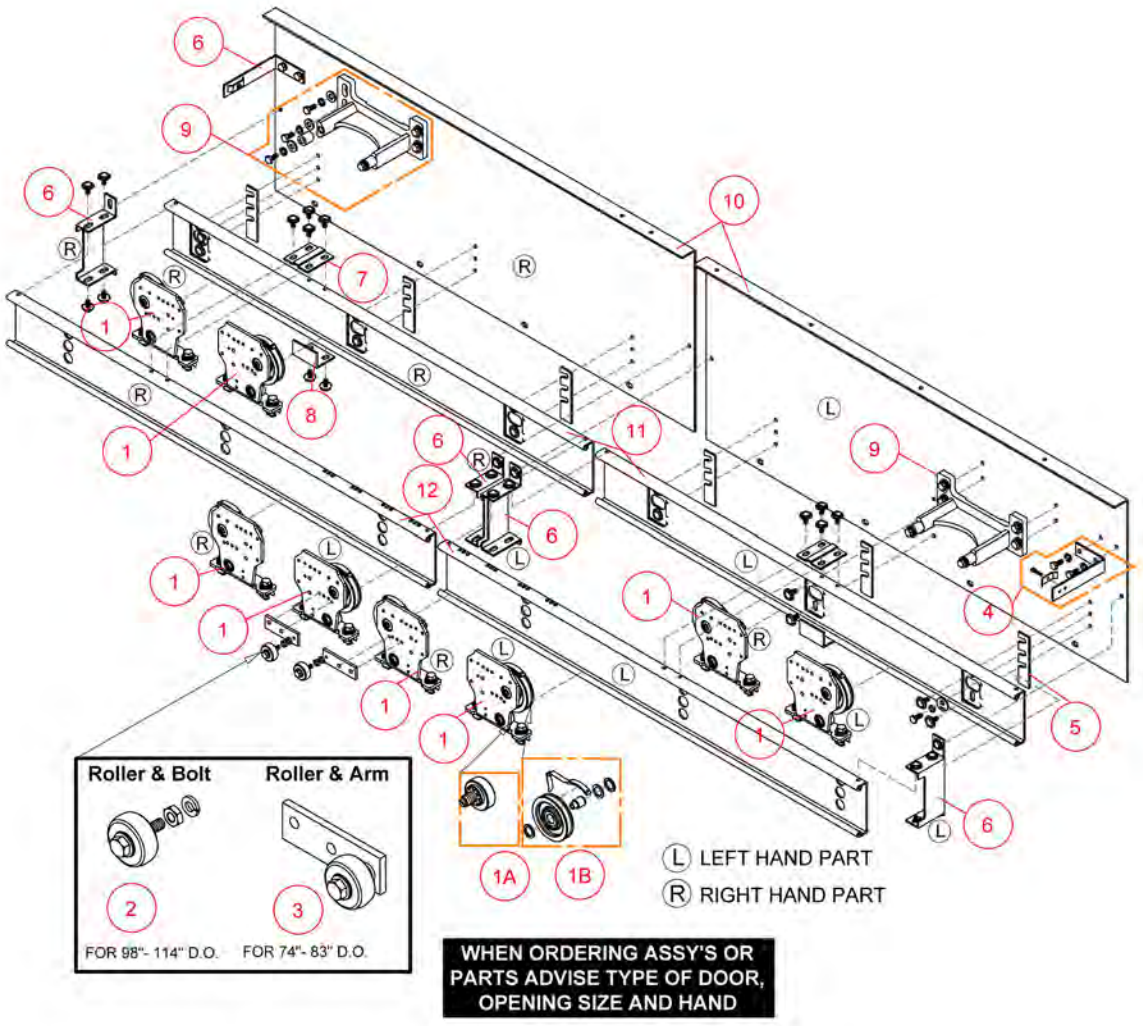
Mounting hardware included with this hanger assembly (Page# 242-244)

DOOR EQUIPMENT

Car Door Hanger Isometric Drawing

Two Speed Center Parting (Ungeared, Split Track) - Type "A"

74"-83" & 98"-114" Door Opening



Part No.	Item No	Description
HH1-0022L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417-Switch Section)
SW1-0006N	3	Roller & Arm, Gate Switch 2SP/CP (**Page#** 417-Switch Section)
CDH2-0083N	4	Clamp, 2/SP-2SP/CP Safety Edge Cable (**Page#** 226)
HH1-0032N	5	Spacer, 1/8" Track (**Page#** 237)

Part No.	Item No	Description
HH2-0052L/R	6	Bracket, Track End 1 1/2" (**Page#** 236)
HH2-0053N	7	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	8	Angle, Track Bottom 1 1/2" (**Page#** 235)
OP25-0002N	9	Bracket, 2SP/CP & 2/SP 24"-29" D.O. Drive Arm Support (**Page#** 99-Operator Section)
CDH2-XXXXX	10	Header, 2/SP Car Door (**Call G.A.L.**)
CDH2-XXXXX	11	Track, 2/SP Slow Car Door (**Call G.A.L.**)
CDH2-XXXXX	12	Track, 2/SP Fast Car Door (**Call G.A.L.**)

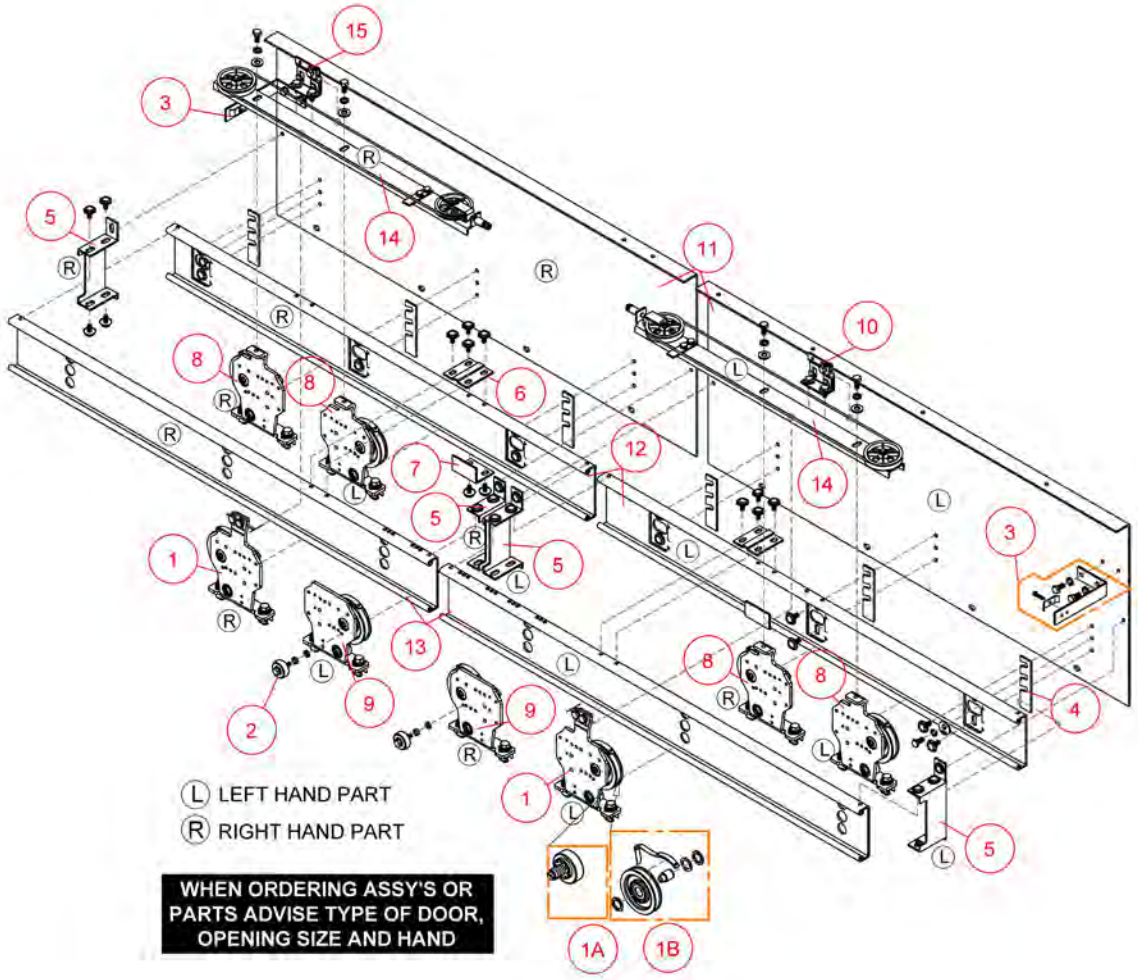
Mounting Hardware Included with This Hanger Assembly

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Car Door Hanger Isometric Drawing

Two Speed Center Parting (Geared, Split Track) - Type "A"

84"-97" Door Opening



Part No.	Item No	Description
CDH2-0065L/R	1	Sheave, 2/SP Cable Gear, Fast Door (**Page#** 221)
HH1-0024N	1A	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1B	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
SW1-0007N	2	Roller & Bolt, Gate Switch (**Page#** 417, Switch Section)
CDH2-0083N	3	Clamp, 2/SP-2SP/CP Safety Edge Cable (**Page#** 226)
HH1-0032N	4	Spacer, 1/8" Track (**Page#** 237)
HH2-0055L/R	5	Bracket, Track End 2" (**Page#** 236)
HH2-0053N	6	Bracket, Track Top 1 1/2" (**Page#** 235)

Part No.	Item No	Description
HH2-0054N	7	Angle, Track Bottom 1 1/2" (**Page#** 235)
CDH2-0067L/R	8	Sheave, 2/SP Cable Gear Bar, Slow Door (**Page#** 221)
HH1-0022L/R	9	Sheave, 4-1/8 CL With 3/8-16 Bolts (**Page#** 221)
CDH2-0082N	10	Clamp, 2SP Cable Anchor (**Page#** 213)
CDH2-XXXXX	11	Header, 2/SP Car Door (**Call G.A.L**)
CDH2-XXXXX	12	Track, 2/SP Slow Car Door (**Call G.A.L**)
CDH2-XXXXX	13	Track, 2/SP Fast Car Door (**Call G.A.L**)
CDH2-XXXXX	14	Bar Assembly, Cable Gearing (**Page#** 210)

Mounting Hardware Included with This Hanger Assembly

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

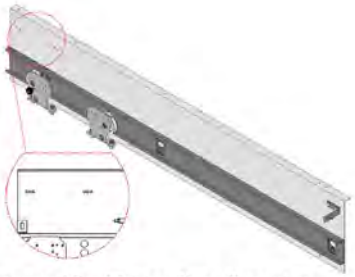
Car Door Hanger Assemblies

Single Speed - Conventional - Type "A"

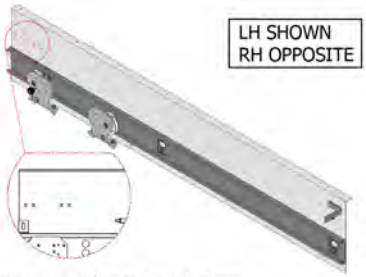
13" Header



Arranged for Master "L" Operator



Arranged for Master Shoe Operator



Arranged for Retiring Cam

Arranged For Master "L" Operator

Part No.	S/S	Track Length
CDH1-0001L/R	22''-24''	46"
CDH1-0002L/R	25''-27''	52"
CDH1-0003L/R	28''-30''	58"
CDH1-0004L/R	31''-33''	64"
CDH1-0005L/R	34''-36''	70"

Part No.	S/S	Track Length
CDH1-0006L/R	37''-39''	76"
CDH1-0007L/R	40''-42''	82"
CDH1-0008L/R*	43''-44''	88"
CDH1-0010L/R*	45''	88"
CDH1-0009L/R*	46''-48''	94"

Arranged For Master Shoe Operator

Part No.	S/S	Track Length
CDH25-0001L/R*	25''-27''	52"
CDH25-0002L/R*	28''-30''	58"
CDH25-0003L/R*	31''-33''	64"

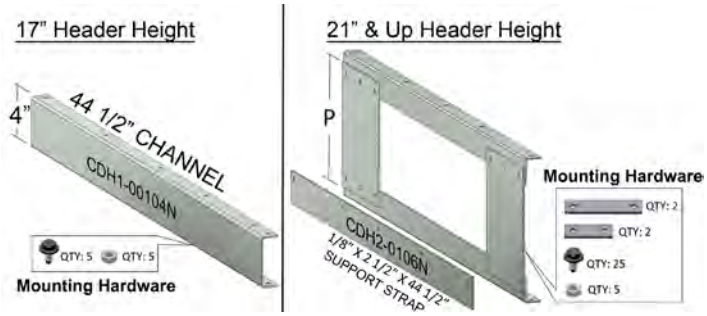
Part No.	S/S	Track Length
CDH25-0004L/R*	34''-36''	70"
CDH25-0005L/R*	37''-39''	76"
CDH25-0006L/R*	40''-42''	82"

Arranged For Retiring Cam - "L" and Shoe Operator

Part No.	S/S	Track Length
CDH15-0001L/R*	22''-24''	46"
CDH15-0002L/R*	25''-27''	52"
CDH15-0003L/R*	28''-30''	58"
CDH15-0004L/R*	31''-33''	64"
CDH15-0005L/R*	34''-36''	70"

Part No.	S/S	Track Length
CDH15-0006L/R*	37''-39''	76"
CDH15-0007L/R*	40''-42''	82"
CDH15-0008L/R*	43''-45''	88"
CDH15-0009L/R*	46''-48''	94"

Hi-Cab Kit



Part No.	Header Height	Plate "P" DIM
CDH1-0104N	17"	-
CDH1-0105N	21"	6 1/2"
CDH1-0106N	25"	10 1/2"
CDH1-0107N	29"	14 1/2"
CDH1-0108N	33"	18 1/2"
CDH1-0109N	37"	22 1/2"
CDH1-0110N	41"	26 1/2"

(*) Special Engineering Required

DOOR EQUIPMENT

Car Door Hanger Assemblies

Single Speed - Conventional - Type "A"

Less Header



Part No.	S/S	Track Length
CDH1-0120N	22''-24''	46"
CDH1-0121N	25''-27''	52"
CDH1-0122N	28''-30''	58"
CDH1-0123N	31''-33''	64"
CDH1-0124N	34''-36''	70"
CDH1-0125N	37''-39''	76"
CDH1-0126N	40''-42''	82"
CDH1-0127N*	43''-45''	88"
CDH1-0128N*	46''-48''	94"

Single Speed - Vandal Resistant - Type "HA"

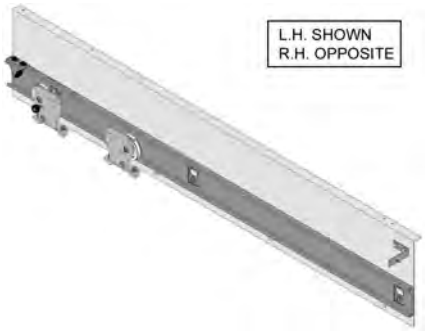
13" Header

Without Bumper



Part No.	S/S	Track Length
CDH13-0001L/R*	24''	48"
CDH13-0002L/R*	25''	52"
CDH13-0003L/R*	26''	52"
CDH13-0004L/R*	27''	54"
CDH13-0005L/R*	28''	58"
CDH13-0006L/R*	29''	58"
CDH13-0007L/R*	30''	60"
CDH13-0008L/R*	31''	64"
CDH13-0009L/R*	32''	64"
CDH13-0010L/R*	33''	66"
CDH13-0011L/R*	34''	70"
CDH13-0012L/R*	35''	70"
CDH13-0013L/R*	36''	70"
CDH13-0014L/R*	37''	72"
CDH13-0015L/R*	38''	76"
CDH13-0016L/R*	39''	76"
CDH13-0017L/R*	40''	82"
CDH13-0018L/R*	41''	82"
CDH13-0019L/R*	42''	82"

With Front Bumper



Part No.	S/S	Track Length
CDH13-0096L/R*	24''	48"
CDH13-0097L/R*	25''	52"
CDH13-0098L/R*	26''	52"
CDH13-0099L/R*	27''	54"
CDH13-0100L/R*	28''	58"
CDH13-0101L/R*	29''	58"
CDH13-0102L/R*	30''	60"
CDH13-0103L/R*	31''	64"
CDH13-0104L/R*	32''	64"
CDH13-0105L/R*	33''	66"
CDH13-0106L/R*	34''	70"
CDH13-0107L/R*	35''	70"
CDH13-0108L/R*	36''	70"
CDH13-0109L/R*	37''	72"
CDH13-0110L/R*	38''	76"
CDH13-0111L/R*	39''	76"
CDH13-0112L/R*	40''	82"
CDH13-0113L/R*	41''	82"
CDH13-0114L/R*	42''	82"

(*) Special Engineering Required

DOOR EQUIPMENT

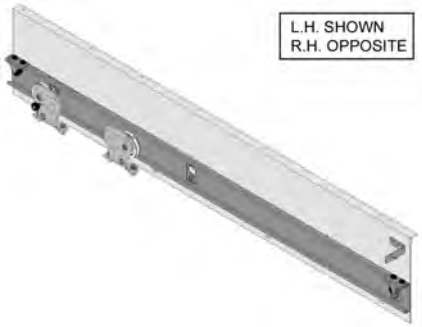
Car Door Hanger Assemblies

Single Speed - Vandal Resistant - Type "NYC HA"

Note: All NYC HA hangers come with top safety retainers

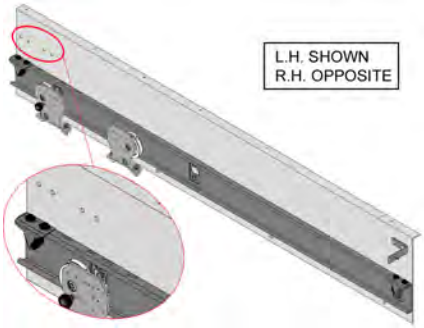
13" Header

With Front & Rear Bumpers



Part No.	S/S	Track Length
CDH13-0039L/R*	24''	48"
CDH13-0040L/R*	25''	52"
CDH13-0041L/R*	26''	52"
CDH13-0042L/R*	27''	54"
CDH13-0043L/R*	28''	58"
CDH13-0044L/R*	29''	58"
CDH13-0045L/R*	30''	60"
CDH13-0046L/R*	31''	64"
CDH13-0047L/R*	32''	64"
CDH13-0048L/R*	33''	66"
CDH13-0049L/R*	34''	70"
CDH13-0050L/R*	35''	70"
CDH13-0051L/R*	36''	70"
CDH13-0052L/R*	37''	72"
CDH13-0053L/R*	38''	76"
CDH13-0054L/R*	39''	76"
CDH13-0055L/R*	40''	82"
CDH13-0056L/R*	41''	82"
CDH13-0057L/R*	42''	82"

With Front & Rear Bumpers (Arranged for Retiring Cam)



Part No.	S/S	Track Length
CDH13-0152L/R*	30''	60"
CDH13-0153L/R*	31''	64"
CDH13-0154L/R*	32''	64"
CDH13-0155L/R*	33''	66"
CDH13-0156L/R*	34''	70"
CDH13-0157L/R*	35''	70"
CDH13-0158L/R*	36''	70"
CDH13-0159L/R*	37''	72"
CDH13-0160L/R*	38''	76"
CDH13-0161L/R*	39''	76"
CDH13-0162L/R*	40''	82"
CDH13-0163L/R*	41''	82"
CDH13-0164L/R*	42''	82"

Single Speed - Dust/Explosion Resistant - Type "AX"

13" Header



Part No.	S/S	Track Length
CDH1-0136L/R*	28''-30''	58"
CDH1-0137L/R*	31''-33''	64"
CDH1-0138L/R*	34''-36''	70"
CDH1-0139L/R*	37''-39''	76"
CDH1-0140L/R*	40''-42''	82"
CDH1-0141L/R*	43''-44''	88"
CDH1-0142L/R*	45''	88"
CDH1-0143L/R*	46''-48''	94"

(*) Special Engineering Required

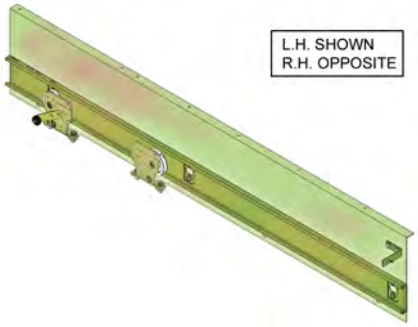
Car Door Hanger Assemblies

Single Speed - Water Resistant - Type "AW"

Note: All ferrous material are yellow zinc dichromate plated

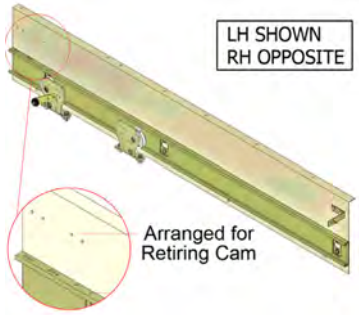
13" Header

Arranged For Master "L" Operator



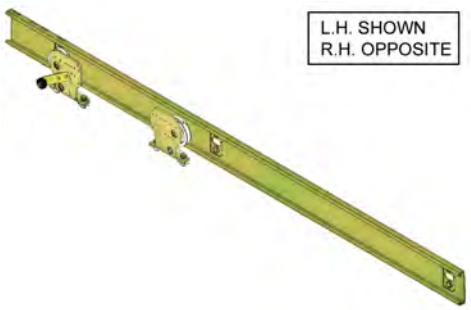
Part No.	S/S	Track Length
CDH19-0001L/R*	22''-24''	46"
CDH19-0002L/R*	25''-27''	52"
CDH19-0003L/R*	28''-30''	58"
CDH19-0004L/R*	31''-33''	64"
CDH19-0005L/R*	34''-36''	70"
CDH19-0006L/R*	37''-39''	76"
CDH19-0007L/R*	40''-42''	82"
CDH19-0008L/R*	43''-44''	88"
CDH19-0009L/R*	45''	88"
CDH19-0010L/R*	46''-48''	94"

Arranged for Retiring Cam



Part No.	S/S	Track Length
CDH24-0001L/R*	22''-24''	46"
CDH24-0002L/R*	25''-27''	52"
CDH24-0003L/R*	28''-30''	58"
CDH24-0004L/R*	31''-33''	64"
CDH24-0005L/R*	34''-36''	70"
CDH24-0006L/R*	37''-39''	76"
CDH24-0007L/R*	40''-42''	82"
CDH24-0008L/R*	43''-44''	88"
CDH24-0009L/R*	45''	88"
CDH24-0010L/R*	46''-48''	94"

Less Header



Note: Advise Opening Size and Hand

Part No.	S/S
CDH19-0034L/R*	22''-42''

(*) Special Engineering Required

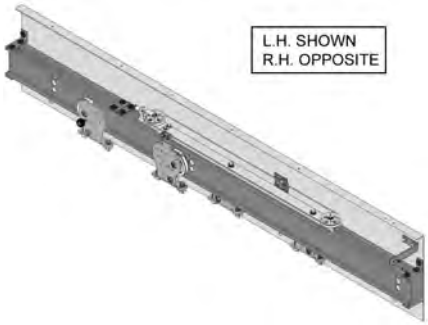
DOOR EQUIPMENT

Car Door Hanger Assemblies

Two Speed - Conventional - Type "A"

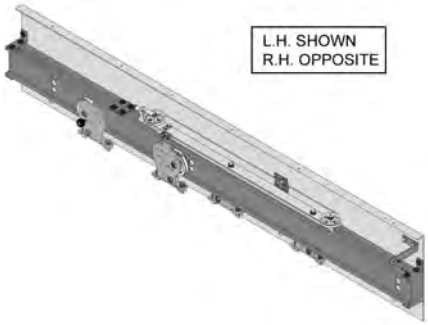
13" Header (Geared)

Arranged For Master "L" Operator



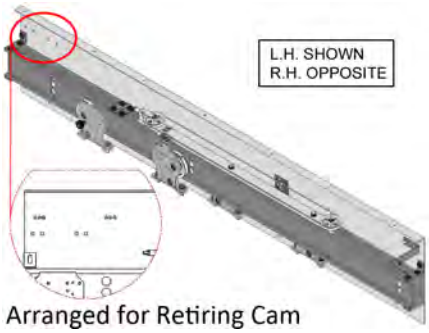
Part No.	2/SP	Track Length
CDH2-0001L/R	30''	46"
CDH2-0002L/R	31''-32''	48"
CDH2-0003L/R	33"-34"	52"
CDH2-0004L/R	35''-36''	54"
CDH2-0005L/R	37''-38''	58"
CDH2-0006L/R	39''-40''	60"
CDH2-0007L/R	41''-42''	64"
CDH2-0008L/R	43''-44''	66"
CDH2-0009L/R	45''-46''	70"
CDH2-0010L/R	47''-48''	72"

Arranged For Master Shoe Operator



Part No.	2/SP
CDH26-0001L/R*	30''-32''
CDH26-0002L/R*	33''-36''
CDH26-0003L/R*	37''-40''
CDH26-0004L/R*	41''-44''
CDH26-0005L/R*	45''-48''

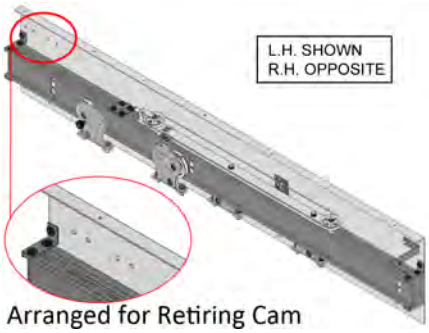
Arranged For Retiring Cam - Shoe Type Operator



Arranged for Retiring Cam

Part No.	2/SP	Track Length
CDH16-0001L/R*	30''	46"
CDH16-0002L/R*	31''-32''	48"
CDH16-0003L/R*	33''-34''	52"
CDH16-0004L/R*	35''-36''	54"
CDH16-0005L/R*	37''-38''	58"
CDH16-0006L/R*	39''-40''	60"
CDH16-0007L/R*	41''-42''	64"
CDH16-0008L/R*	43''-44''	66"
CDH16-0009L/R*	45''-46''	70"
CDH16-0010L/R*	47''-48''	72"

Arranged For Retiring Cam - "L" Operator



Arranged for Retiring Cam

Part No.	2/SP	Track Length
CDH16-0011L/R*	30''	46"
CDH16-0012L/R*	31''-32''	48"
CDH16-0013L/R*	33''-34''	52"
CDH16-0014L/R*	35''-36''	54"
CDH16-0015L/R*	37''-38''	58"
CDH16-0016L/R*	39''-40''	60"
CDH16-0017L/R*	41''-42''	64"
CDH16-0018L/R*	43''-44''	66"
CDH16-0019L/R*	45''-46''	70"
CDH16-0020L/R*	47''-48''	72"

(*) Special Engineering Required

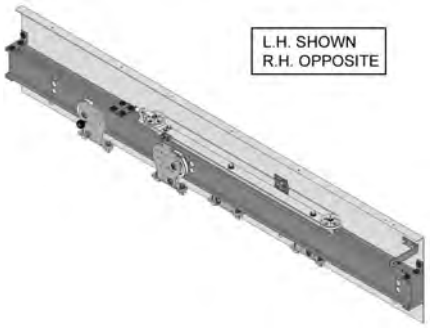
DOOR EQUIPMENT

Car Door Hanger Assemblies

Two Speed - Conventional - Type "A"

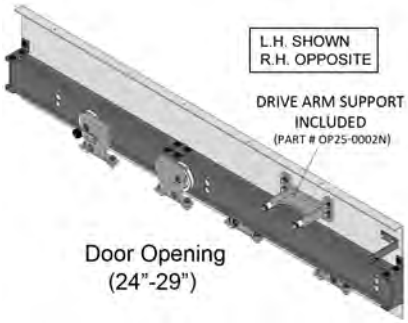
13" Header (Geared)

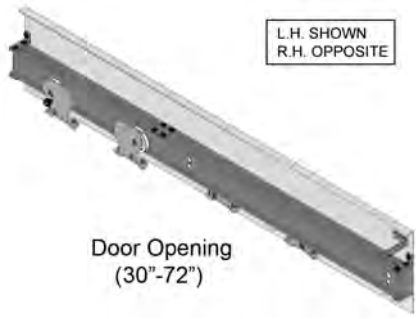
Arranged For CWZ-2 Clutch



Part No.	2/SP	Track Length
CDH29-0001L/R*	30''	46"
CDH29-0002L/R*	31''-32''	48"
CDH29-0003L/R*	33''-34''	52"
CDH29-0004L/R*	35''-36''	54"
CDH29-0005L/R*	37''-38''	58"
CDH29-0006L/R*	39''-40''	60"
CDH29-0007L/R*	41''-42''	64"
CDH29-0008L/R*	43''-44''	66"
CDH29-0009L/R*	45''-46''	70"
CDH29-0010L/R*	47''-48''	72"

13", 15", 17", & 19" Header (Ungeared)





13" Header (Ungeared)

Part No.	2/SP	Track Length
CDH2-0017L/R*	24''	40"
CDH2-0018L/R*	25''	41"
CDH2-0019L/R*	26''	42"
CDH2-0020L/R*	27''	44"
CDH2-0021L/R*	28''	45"
CDH2-0022L/R*	29''	46"
CDH2-0123L/R*	30''	46"
CDH2-0124L/R*	31''-32''	48"

Part No.	2/SP	Track Length
CDH2-0125L/R*	33''-34''	52"
CDH2-0126L/R*	35''-36''	54"
CDH2-0127L/R*	37''-38''	58"
CDH2-0128L/R*	39''-40''	60"
CDH2-0129L/R*	41''-42''	64"
CDH2-0130L/R*	43''-44''	66"
CDH2-0131L/R*	45''-46''	70"
CDH2-0132L/R*	47''-48''	72"

15", 17", & 19" Header (Ungeared)

Part No.	2/SP	Header Height	Track Length
CDH2-0011L/R	49''-52''	15"	76"
CDH2-0012L/R	53''-56''	15"	82"
CDH2-0013L/R	57''-60''	17"	88"

Part No.	2/SP	Header Height	Track Length
CDH2-0014L/R	61''-64''	17"	94"
CDH2-0015L/R	65''-68''	19"	100"
CDH2-0016L/R	69''-72''	19"	106"

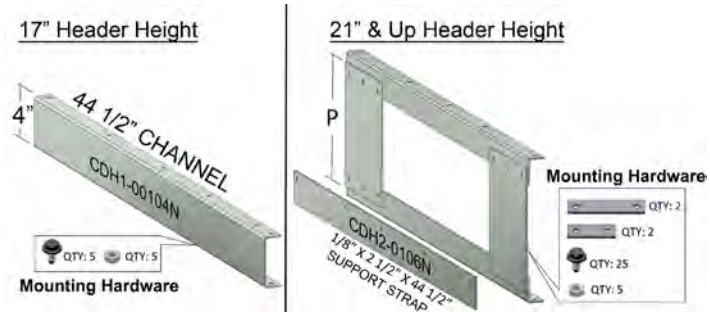
(*) Special Engineering Required

DOOR EQUIPMENT

Car Door Hanger Assemblies

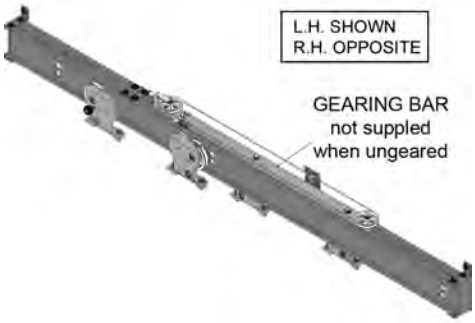
Two Speed - Conventional - Type "A"

Hi-Cab Kit



Part No.	Header Height	Plate "P" DIM
CDH1-0104N	17"	-
CDH2-0100N	21"	6 1/2"
CDH2-0101N	25"	10 1/2"
CDH2-0102N	29"	14 1/2"
CDH2-0103N	33"	18 1/2"
CDH2-0104N	37"	22 1/2"
CDH2-0105N	41"	26 1/2"

Less Header (Geared)



Part No.	2/SP	Track Length
CDH2-0023L/R	30''	46"
CDH2-0024L/R	31''-32''	48"
CDH2-0025L/R	33''-34''	52"
CDH2-0026L/R	35''-36''	54"
CDH2-0027L/R	37''-38''	58"
CDH2-0028L/R	39''-40''	60"
CDH2-0029L/R	41''-42''	64"
CDH2-0030L/R	43''-44''	66"
CDH2-0031L/R	45''-46''	70"
CDH2-0032L/R	47''-48''	72"

Less Header (Ungeared)

Small Openings

Part No.	2/SP	Track Length
CDH2-0090L/R*	24''	40"
CDH2-0091L/R*	25''	41"
CDH2-0092L/R*	26''	42"
CDH2-0093L/R*	27''	44"
CDH2-0108L/R*	28''	45"
CDH2-0109L/R*	29''	46"

Large Openings

Part No.	2/SP	Track Length
CDH2-0084L/R	49''-52''	76"
CDH2-0085L/R	53''-56''	82"
CDH2-0086L/R	57''-60''	88"
CDH2-0087L/R	61''-64''	94"
CDH2-0088L/R	65''-68''	100"
CDH2-0089L/R	69''-72''	106"

Two Speed - Dust/Explosion Resistant - Type "AX"

13" Header (Geared)



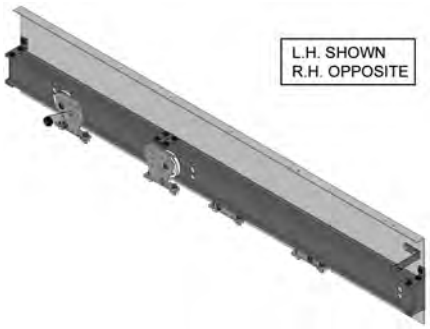
Part No.	2/SP	Track Length
CDH2-0140L/R*	30''	46"
CDH2-0141L/R*	31''-32''	48"
CDH2-0142L/R*	33''-34''	52"
CDH2-0143L/R*	35''-36''	54"
CDH2-0144L/R*	37''-38''	58"
CDH2-0145L/R*	39''-40''	60"
CDH2-0146L/R*	41''-42''	64"
CDH2-0147L/R*	43''-44''	66"
CDH2-0148L/R*	45''-46''	70"
CDH2-0149L/R*	47''-48''	72"

(*) Special Engineering Required

Car Door Hanger Assemblies

Two Speed - Dust/Explosion Resistant - Type "AX"

13" Header (Ungeared)



Part No.	2/SP	Track Length
CDH2-0152L/R*	24''	40"
CDH2-0153L/R*	25''	41"
CDH2-0154L/R*	26''	42"
CDH2-0155L/R*	27''	44"
CDH2-0156L/R*	28''	45"
CDH2-0157L/R*	29''	46"

Two Speed - Vandal Resistant - Type "HA"

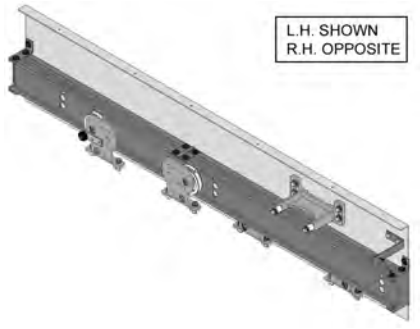
13" Header (Geared)



Part No.	2/SP	Track Length
CDH14-0025L/R*	30''	46"
CDH14-0026L/R*	31''-32''	48"
CDH14-0027L/R*	33''-34''	52"
CDH14-0028L/R*	35''-36''	54"
CDH14-0029L/R*	37''-38''	58"
CDH14-0030L/R*	39''	60"
CDH14-0031L/R*	40''	60"
CDH14-0032L/R*	41''-42''	62"
CDH14-0033L/R*	43''-44''	66"
CDH14-0034L/R*	45''-46''	70"
CDH14-0035L/R*	47''-48''	72"

13" Header (Ungeared)

Without Bumper



Part No.	2/SP	Track Length
CDH14-0001L/R*	24''	40"
CDH14-0002L/R*	25''	41"
CDH14-0003L/R*	26''	42"
CDH14-0004L/R*	27''	44"
CDH14-0005L/R*	28''	45"
CDH14-0006L/R*	29''	46"

(*) Special Engineering Required

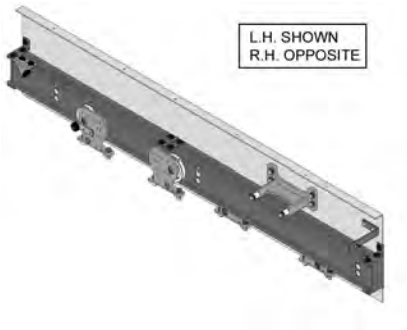
DOOR EQUIPMENT

Car Door Hanger Assemblies

Two Speed - Vandal Resistant - Type "HA"

13" Header (Ungeared)

With Front Bumper

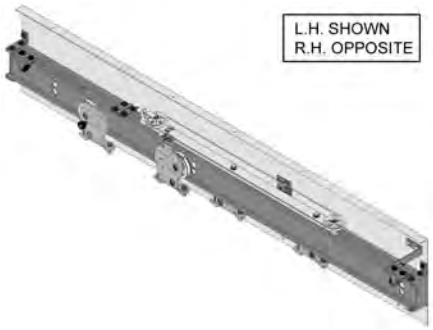


Part No.	2/SP	Track Length
CDH14-0013L/R*	24''	42"
CDH14-0014L/R*	25''	43"
CDH14-0015L/R*	26''	44"
CDH14-0016L/R*	27''	46"
CDH14-0017L/R*	28''	47"
CDH14-0018L/R*	29''	48"
CDH14-0047L/R*	30''	50"
CDH14-0048L/R*	31''-32''	52"
CDH14-0049L/R*	33''-34''	56"
CDH14-0050L/R*	35''-36''	58"
CDH14-0051L/R*	37''-38''	62"
CDH14-0052L/R*	39''	64"
CDH14-0053L/R*	40''	64"
CDH14-0054L/R*	41''-42''	68"
CDH14-0055L/R*	43''-44''	70"
CDH14-0056L/R*	45''-46''	74"
CDH14-0057L/R*	47''-48''	76"

Two Speed - Vandal Resistant - Type "NYC HA"

13" Header (Geared)

With Front & Rear Bumpers



Note: All NYC HA hangers come with top safety retainers

Part No.	2/SP	Track Length
CDH14-0069L/R*	30''	50"
CDH14-0070L/R*	31''	52"
CDH14-0071L/R*	32''	52"
CDH14-0072L/R*	33''	56"
CDH14-0073L/R*	34''	56"
CDH14-0074L/R*	35''	58"
CDH14-0075L/R*	36''	58"
CDH14-0076L/R*	37''	62"
CDH14-0077L/R*	38''	62"
CDH14-0078L/R*	39''	64"
CDH14-0079L/R*	40''	64"
CDH14-0080L/R*	41''	68"
CDH14-0081L/R*	42''	68"
CDH14-0082L/R*	43''	70"
CDH14-0083L/R*	44''	70"
CDH14-0084L/R*	45''	74"
CDH14-0085L/R*	46''	74"
CDH14-0086L/R*	47''	76"
CDH14-0087L/R*	48''	76"

(*) Special Engineering Required

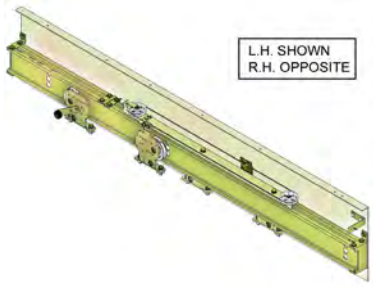
DOOR EQUIPMENT

Car Door Hanger Assemblies

Two Speed - Water Resistant - Type "AW"

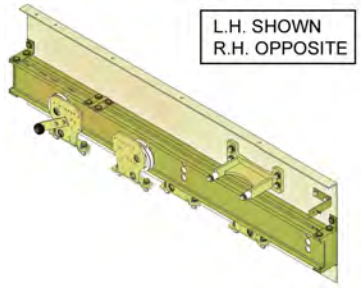
Note: All ferrous material are yellow zinc dichromate plated

13" Header (Geared)



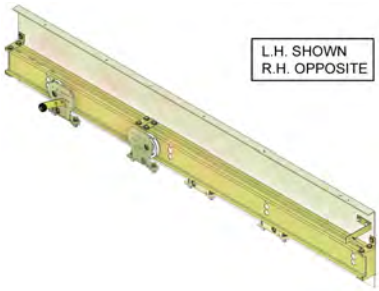
Part No.	2/SP	Track Length
CDH20-0001L/R*	30''	46"
CDH20-0002L/R*	31''-32''	48"
CDH20-0003L/R*	33''-34''	52"
CDH20-0004L/R*	35''-36''	54"
CDH20-0005L/R*	37''-38''	58"
CDH20-0006L/R*	39''-40''	60"
CDH20-0007L/R*	41''-42''	64"
CDH20-0008L/R*	43''-44''	66"
CDH20-0009L/R*	45''-46''	70"
CDH20-0010L/R*	47''-48''	72"

13" Header (Ungeared)



Part No.	2/SP	Track Length
CDH20-0017L/R*	24''	40"
CDH20-0018L/R*	25''	41"
CDH20-0019L/R*	26''	42"
CDH20-0020L/R*	27''	44"
CDH20-0021L/R*	28''	45"
CDH20-0022L/R*	29''	46"

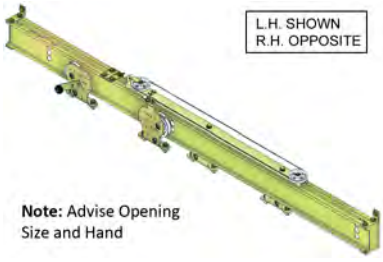
15", 17", 19" Header (Ungeared)



Part No.	2/SP	Header Height	Track Length
CDH20-0011L/R*	49''-52''	15"	76"
CDH20-0012L/R*	53''-56''	15"	82"
CDH20-0013L/R*	57''-60''	17"	88"
CDH20-0014L/R*	61''-64''	17"	94"
CDH20-0015L/R*	65''-68''	19"	100"
CDH20-0016L/R*	69''-72''	19"	106"

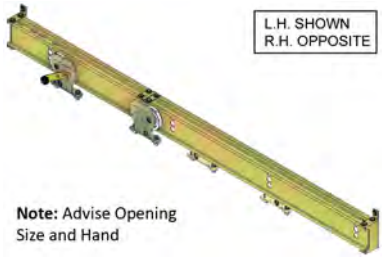
Note: All ferrous material are yellow zinc dichromate plated

Less Header (Geared)



Part No.	2/SP
CDH20-0076L/R*	30''-48''

Less Header (Ungeared)



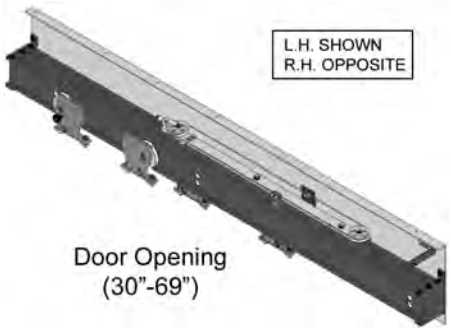
Part No.	2/SP
CDH20-0077L/R*	49''-64''
CDH20-0078L/R*	65''-72''

(*) Special Engineering Required

DOOR EQUIPMENT

Car Door Hanger Assemblies

Three Speed - Conventional - Type "A"



13" Header (Geared)

Part No.	3/SP	Track Length
CDH9-0001L/R*	30''	45"
CDH9-0002L/R*	31''	46"
CDH9-0003L/R*	32''	47"
CDH9-0004L/R*	33''	48"
CDH9-0005L/R*	34''	49"
CDH9-0006L/R*	35''	50"
CDH9-0007L/R*	36''	51"
CDH9-0008L/R*	37''	52"

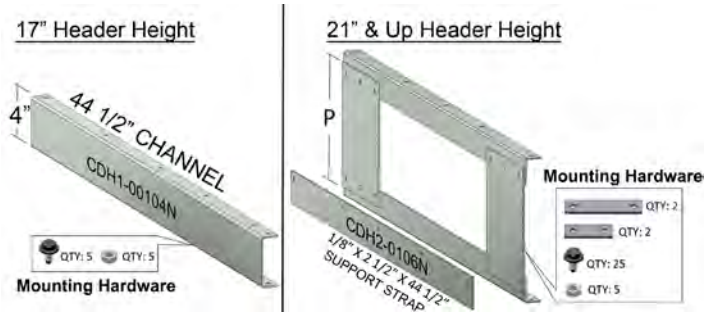
Part No.	3/SP	Track Length
CDH9-0009L/R*	38''	53"
CDH9-0010L/R*	39''	54"
CDH9-0011L/R*	40''	55"
CDH9-0012L/R*	41''	58"
CDH9-0013L/R*	42''	59"
CDH9-0014L/R*	43''	60"
CDH9-0015L/R*	44''	61"

17" Header (Geared)

Part No.	3/SP	Track Length
CDH9-0016L/R*	45''	62"
CDH9-0017L/R*	46''	63"
CDH9-0018L/R*	47''	66"
CDH9-0019L/R*	48''	67"
CDH9-0020L/R*	49''	68"
CDH9-0021L/R*	50''	69"
CDH9-0022L/R*	51''	70"
CDH9-0023L/R*	52''	71"
CDH9-0024L/R*	53''	74"
CDH9-0025L/R*	54''	75"
CDH9-0026L/R*	55''	76"
CDH9-0027L/R*	56''	77"
CDH9-0028L/R*	57''	78"

Part No.	3/SP	Track Length
CDH9-0029L/R*	58''	79"
CDH9-0030L/R*	59''	82"
CDH9-0031L/R*	60''	83"
CDH9-0032L/R*	61''	84"
CDH9-0033L/R*	62''	85"
CDH9-0034L/R*	63''	86"
CDH9-0035L/R*	64''	87"
CDH9-0036L/R*	65''	90"
CDH9-0037L/R*	66''	91"
CDH9-0038L/R*	67''	92"
CDH9-0039L/R*	68''	93"
CDH9-0040L/R*	69''	94"

Hi-Cab Kit



Contact G.A.L. For Special Order

Part No.	3/SP	Header Height
CDH1-0104N	30"-96"	17"
CDH9-0124N*	30"-96"	19" & UP

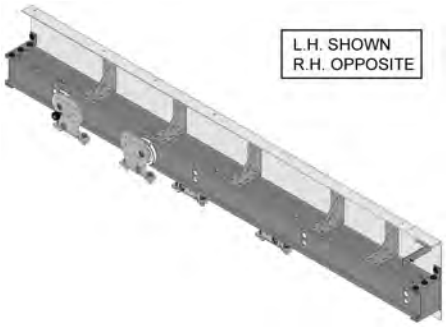
(*) Special Engineering Required

Car Door Hanger Assemblies

Three Speed - Conventional - Type "A"

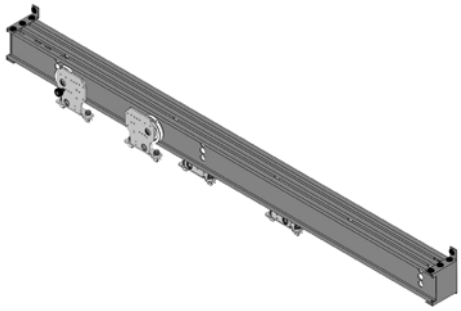
Ungeared

Heavy Doors or Large Opening 70" & Above



Note: For three speed ungeared heavy doors or large 70" & above openings, contact G.A.L Sales or Engineering for assistance. Advise opening size, hand, cab height, and type of operator arm arrangement.

Less Header

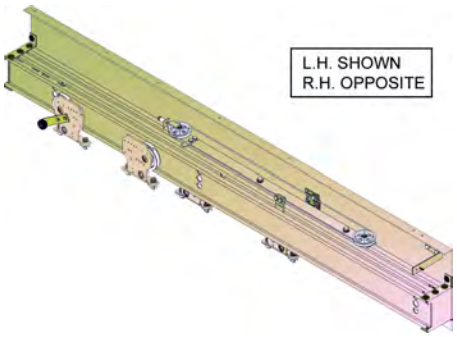


Note: Advise Opening Size and Hand

Part No.	3/SP
CDH9-0130L/R*	30''-48''
CDH9-0131L/R*	49''-59''
CDH9-0132L/R*	60''-69''

Three Speed - Water Resistant - Type "AW"

Geared



Note:

A) All ferrous material yellow zinc dichromate plated

B) Contact G.A.L Sales or Engineering Department for three speed geared hangers.

Center Parting - Conventional - Type "A"

15", 17" Header (Ungeared)



Note: Contact G.A.L Engineering Department for 15" header ungeared 33" D.O. hanger assembly.

Part No.	C/P	Header Height	Track Length
CDH3-0001N	30''-32''	15"	64"
CDH3-0002N	34''-35''	15"	70"
CDH3-0003N	36''-38''	15"	76"
CDH3-0004N	39''-41''	15"	82"
CDH3-0005N	42''-44''	15"	88"
CDH3-0006N	45''-47''	15"	94"
CDH3-0007N	48''-49''	15"	100"
CDH3-0009N*	50''	17"	100"
CDH3-0008N*	51''-54''	17"	106"
CDH3-0020N*	55''-56''	17"	106"
CDH3-0021N*	57''-59''	17"	112"

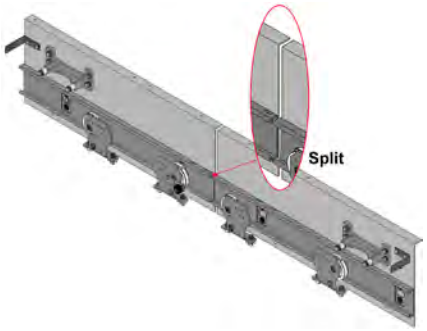
(*) Special Engineering Required

DOOR EQUIPMENT

Car Door Hanger Assemblies

Center Parting - Conventional - Type "A"

17", 19" Header (Ungeared) - Split Hangers



Part No.	C/P	Header Height	Track Length
CDH3-0242N*	60''-62''	17"	117"
CDH3-0243N*	63''-64''	17"	129"
CDH3-0244N*	65''-68''	19"	129"
CDH3-0245N*	69''-74''	19"	141"
CDH3-0246N*	75''-80''	19"	153"
CDH3-0247N*	81''-83''	19"	165"

15" Header (Ungeared) - Arranged for High Cab



Note:

A) Drive arm supports are included with hanger but may or may not be mounted to header.

B) High-Cab Kit not included. Refer to Hi-Cab Kit for appropriate part #.

Part No.	C/P	Hi-Cab Header	Track Length
CDH3-0153N*	30''-32''	19"	64"
CDH3-0154N*	33''	19"	70"
CDH3-0155N*	34''-35''	19"	70"
CDH3-0156N*	36''-38''	19"	76"
CDH3-0157N*	39''	19"	82"
CDH3-0158N*	40''-41''	19"	82"
CDH3-0159N*	42''-44''	19"	88"
CDH3-0160N*	45''-47''	19"	94"
CDH3-0161N*	48''-49''	19"	100"
CDH3-0162N*	50''	19"	100"
CDH3-0163N*	51''-54''	19"	106"
CDH3-0164N*	30''-32''	23"	64"
CDH3-0165N*	33''	23"	70"
CDH3-0166N*	40''-41''	23"	82"
CDH3-0167N*	42''-44''	23"	88"
CDH3-0168N*	45''-47''	23"	94"
CDH3-0169N*	48''-49''	23"	100"
CDH3-0170N*	50''	23"	100"
CDH3-0171N*	51''-54''	23"	106"
CDH3-0172N*	34''-35''	23"	70"
CDH3-0173N*	36''-38''	23"	76"
CDH3-0174N*	39''	23"	82"
CDH3-0175N*	30''-32''	27"	64"
CDH3-0176N*	33''	27"	70"
CDH3-0177N*	34''-35''	27"	70"

Part No.	C/P	Hi-Cab Header	Track Length
CDH3-0178N*	36''-38''	27"	76"
CDH3-0179N*	39''	27"	82"
CDH3-0180N*	40''-41''	27"	82"
CDH3-0181N*	42''-44''	27"	88"
CDH3-0182N*	45''-47''	27"	94"
CDH3-0183N*	48''-49''	27"	100"
CDH3-0184N*	50''	27"	100"
CDH3-0185N*	51''-54''	27"	106"
CDH3-0186N*	30''-32''	31"	64"
CDH3-0187N*	33''	31"	70"
CDH3-0188N*	34''-35''	31"	70"
CDH3-0189N*	36''-38''	31"	76"
CDH3-0190N*	39''	31"	82"
CDH3-0191N*	40''-41''	31"	82"
CDH3-0192N*	42''-44''	31"	88"
CDH3-0193N*	45''-47''	31"	94"
CDH3-0194N*	48''-49''	31"	100"
CDH3-0195N*	50''	31"	100"
CDH3-0196N*	51''-54''	31"	106"
CDH3-0197N*	30''-32''	35"	64"
CDH3-0198N*	33''	35"	70"
CDH3-0199N*	34''-35''	35"	70"
CDH3-0200N*	36''-38''	35"	76"
CDH3-0201N*	39''	35"	82"
CDH3-0202N*	40''-41''	35"	82"

(*) Special Engineering Required

Car Door Hanger Assemblies

Center Parting - Conventional - Type "A"

15" Header (Ungeared) - Arranged for High Cab

Part No.	C/P	Hi-Cab Header	Track Length
CDH3-0203N*	42''-44''	35"	88"
CDH3-0204N*	45''-47''	35"	94"
CDH3-0205N*	48''-49''	35"	100"
CDH3-0206N*	50''	35"	100"
CDH3-0207N*	51''-54''	35"	106"
CDH3-0208N*	30''-32''	39"	64"
CDH3-0209N*	33''	39"	70"
CDH3-0210N*	34''-35''	39"	70"
CDH3-0211N*	36''-38''	39"	76"
CDH3-0212N*	39''	39"	82"
CDH3-0213N*	40''-41''	39"	82"
CDH3-0214N*	42''-44''	39"	88"
CDH3-0215N*	45''-47''	39"	94"
CDH3-0216N*	48''-49''	39"	100"

Part No.	C/P	Hi-Cab Header	Track Length
CDH3-0217N*	50''	39"	100"
CDH3-0218N*	51''-54''	39"	106"
CDH3-0219N*	30''-32''	43"	64"
CDH3-0220N*	33''	43"	70"
CDH3-0221N*	34''-35''	43"	70"
CDH3-0222N*	36''-38''	43"	76"
CDH3-0223N*	39''	43"	82"
CDH3-0224N*	40''-41''	43"	82"
CDH3-0225N*	42''-44''	43"	88"
CDH3-0226N*	45''-47''	43"	94"
CDH3-0227N*	48''-49''	43"	100"
CDH3-0228N*	50''	43"	100"
CDH3-0229N*	51''-54''	43"	106"

15", 17" Header (Vertical Geared)



Part No.	C/P	Header Height	Track Length
CDH3-0248N*	30"-32"	15"	64"
CDH3-0249N*	33''-35''	15"	70"
CDH3-0250N*	36''-38''	15"	76"
CDH3-0251N*	39''-41''	15"	82"
CDH3-0252N*	42''-44''	15"	88"
CDH3-0253N*	45''-47''	15"	97"
CDH3-0254N*	48''-49''	15"	100"
CDH3-0257N*	50''	17"	100"
CDH3-0255N*	51''-56''	17"	106"
CDH3-0256N*	57''-59''	17"	112"

(*) Special Engineering Required

DOOR EQUIPMENT

Car Door Hanger Assemblies

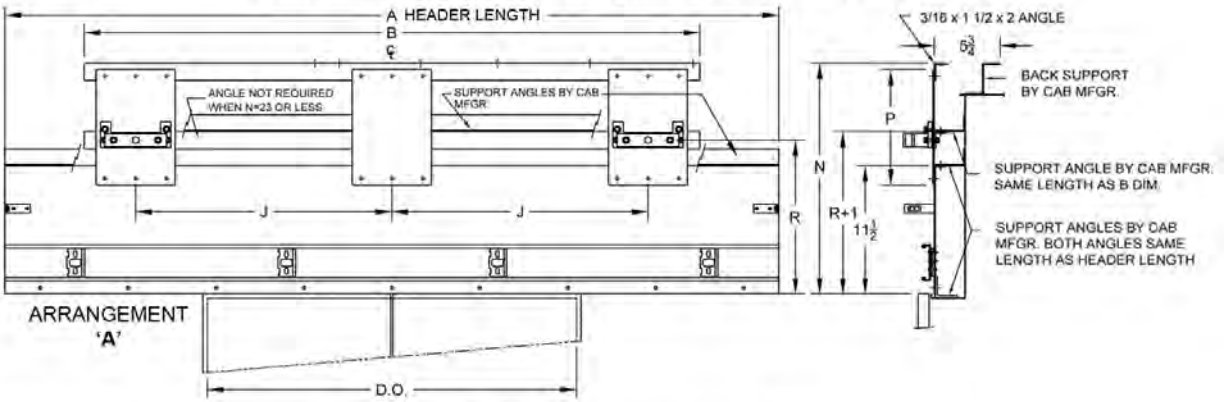
Center Parting - Conventional - Type "A"

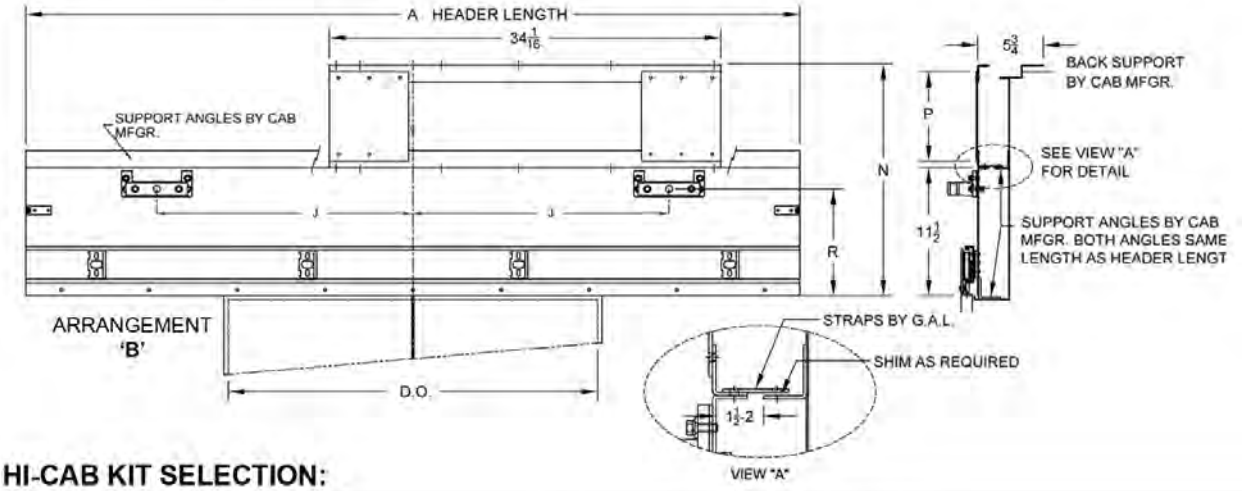
Hi-Cab Kit

WHEN ORDERING HI-CAB KIT, ADVISE G.A.L. OF THE FOLLOWING:

Type of Doors | Clear Opening Width | O.A. Cab Height or The Distance from Top of the Door to Top of the Cab

Based on the information above, our engineering department determines one of the arrangements shown below.





HI-CAB KIT SELECTION:

19" Header Height



23" & Up Header Height



(*) Special Engineering Required

Car Door Hanger Assemblies

Center Parting - Conventional - Type "A"

Hi-Cab Kit

Note: CDH1-0104N is a HI-Cab kit, 4" channel

Part No.	C/P	Header Height	Plate "P" DIM
CDH1-0104N*	32"-73"	19"	-
CDH3-0023N*	30"-32"	23"	9 1/2"
CDH3-0024N*	33"-33"	23"	9 1/2"
CDH3-0027N*	34"-39"	23"	9 1/2"
CDH3-0028N*	40"-44"	23"	9 1/2"
CDH3-0029N*	45"-49"	23"	9 1/2"
CDH3-0030N*	50"-54"	23"	9 1/2"
CDH3-0031N*	30"-32"	27"	13 1/2"
CDH3-0032N*	33"-33"	27"	13 1/2"
CDH3-0033N*	34"-39"	27"	13 1/2"
CDH3-0034N*	40"-44"	27"	13 1/2"
CDH3-0035N*	45"-49"	27"	13 1/2"
CDH3-0036N*	50"-54"	27"	13 1/2"
CDH3-0037N*	30"-32"	31"	17 1/2"
CDH3-0038N*	33"-33"	31"	17 1/2"
CDH3-0039N*	34"-39"	31"	17 1/2"
CDH3-0040N*	40"-44"	31"	17 1/2"
CDH3-0041N*	45"-49"	31"	17 1/2"
CDH3-0042N*	50"-54"	31"	17 1/2"

Part No.	C/P	Header Height	Plate "P" DIM
CDH3-0043N*	30"-32"	35"	21 1/2"
CDH3-0044N*	33"-33"	35"	21 1/2"
CDH3-0045N*	34"-39"	35"	21 1/2"
CDH3-0046N*	40"-44"	35"	21 1/2"
CDH3-0047N*	45"-49"	35"	21 1/2"
CDH3-0048N*	50"-54"	35"	21 1/2"
CDH3-0049N*	30"-32"	39"	25 1/2"
CDH3-0050N*	33"-33"	39"	25 1/2"
CDH3-0051N*	34"-39"	39"	25 1/2"
CDH3-0052N*	40"-44"	39"	25 1/2"
CDH3-0053N*	45"-49"	39"	25 1/2"
CDH3-0054N*	50"-54"	39"	25 1/2"
CDH3-0055N*	30"-32"	43"	29 1/2"
CDH3-0056N*	33"-33"	43"	29 1/2"
CDH3-0057N*	34"-39"	43"	29 1/2"
CDH3-0058N*	40"-44"	43"	29 1/2"
CDH3-0059N*	45"-49"	43"	29 1/2"
CDH3-0060N*	50"-54"	43"	29 1/2"

Less Header (Ungeared)

Part No.	C/P	Track Length
CDH3-0231N	30''-32''	64"
CDH3-0232N	33''-35''	70"
CDH3-0233N	36''-38''	76"
CDH3-0234N	39''-41''	82"
CDH3-0235N	42''-44''	88"

Part No.	C/P	Track Length
CDH3-0236N	45''-47''	94"
CDH3-0237N	48''-50''	100"
CDH3-0238N	51''-56''	106"
CDH3-0239N	57''-59''	112"

Center Parting - Dust/Explosion Resistant - Type "AX"

15", 17" Header (Ungeared)



Part No.	C/P	Header Height	Track Length
CDH3-0271N*	30''-32''	15"	64"
CDH3-0272N*	33''-35''	15"	70"
CDH3-0273N*	36''-38''	15"	76"
CDH3-0274N*	39''-41''	15"	82"
CDH3-0275N*	42''-44''	15"	88"
CDH3-0276N*	45''-47''	15"	94"
CDH3-0277N*	48''-49''	15"	100"
CDH3-0278N*	50''	17"	100"
CDH3-0279N*	51''-54''	17"	106"
CDH3-0280N*	55''-56''	17"	106"
CDH3-0281N*	57''-59''	17"	112"

Ungeared - Arranged for High Cab

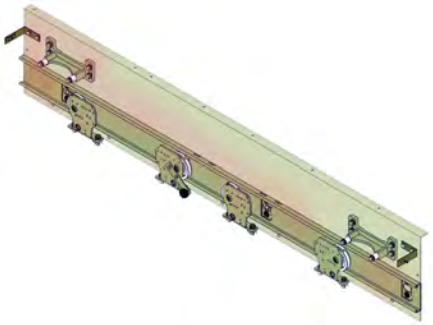
Note: Dust/explosion resistant C/P car door hangers are the same as conventional C/P car door hangers arranged for high cab kit. Refer to Conventional- Center Parting - Arranged for High Cab – Type "A" table

DOOR EQUIPMENT

Car Door Hanger Assemblies

Center Parting - Water Resistant - Type "AW"

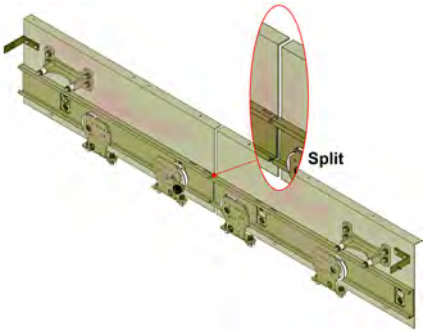
15", 17" Header (Ungeared)



Note: All ferrous material are yellow zinc dichromate plated

Part No.	C/P	Header Height	Track Length
CDH21-0001N*	30''-32''	15"	64"
CDH21-0002N*	33''	15"	70"
CDH21-0004N*	36''-38''	15"	76"
CDH21-0005N*	39''	15"	82"
CDH21-0007N*	42''-44''	15"	88"
CDH21-0008N*	45''-47''	15"	94"
CDH21-0009N*	48''-49''	15"	100"
CDH21-0010N*	50''	17"	100"
CDH21-0011N*	51''-54''	17"	106"
CDH21-0012N*	55''-56''	17"	106"
CDH21-0013N*	57''-59''	17"	112"

17", 19" Header (Ungeared) - Split Hangers



Note: All ferrous material are yellow zinc dichromate plated

Part No.	C/P	Header Height	Track Length
CDH21-0014N*	60''-62''	17"	117"
CDH21-0015N*	63''-64''	17"	129"
CDH21-0016N*	65''-68''	19"	129"
CDH21-0017N*	69''-74''	19"	141"
CDH21-0018N*	75''-80''	19"	153"
CDH21-0019N*	81''-83''	19"	165"

Less Header (Ungeared)

Note: Contact G.A.L Sales or Engineering Department for center parting ungeared hangers.

Center Parting - Vandal Resistant - Type "A"

Ungeared

Note: Vandal resistant C/P ungeared car door hangers are the same as conventional C/P car door hangers ungeared – type "A"
Refer to Conventional-Center Parting - Ungeared - 15", 17" Header - Type "A" table

Ungeared - Split Hangers

Note: Vandal resistant C/P ungeared – split car door hangers are the same as conventional C/P car door hangers ungeared – split hangers - type "A"
Refer to Conventional - Center Parting - Ungeared – Split Hangers – Type "A" for **17" header D.O 60"-64"**, and **19" header D.O 65"-83"** table

Vertical Geared

Note: Vandal resistant C/P vertical geared car door hangers are the same as conventional C/P car door hangers vertical geared – type "A"
Refer to Conventional- Center Parting – Vertical Geared -15", 17" Header Geared – Type "A" table

Arranged for High Cab

Note:
Refer to *Conventional- Center Parting (Arranged for High Cab - Type "A")* for **HI-Cab Kit arrangement hangers** for vandal resistant purpose.

(*) Special Engineering Required

Car Door Hanger Assemblies

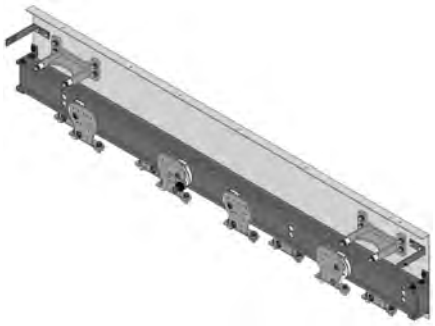
Center Parting - Vandal Resistant - Type "A"

Less Header (Ungeared)

Note: Vandal resistant C/P less header car door hangers are the same as conventional C/P less header car door hangers – type "A"
Refer to Conventional - Center Parting - Ungeared - Less Header – Type "A" table

Two Speed Center Parting - Conventional - Type "A"

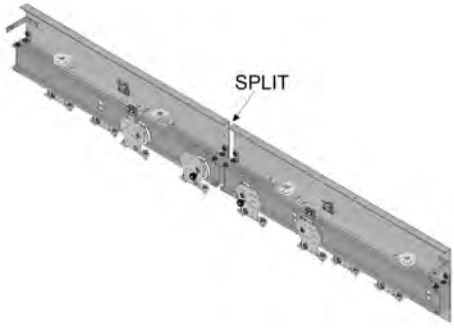
15", 17", 19" Header (Ungeared)



Part No.	2SP/CP	Header Height	Track Length
CDH4-0138N*	32''	15"	61"
CDH4-0001N*	33''-34''	15"	61"
CDH4-0002N*	35''	15"	61"
CDH4-0003N*	36''-38''	15"	64"
CDH4-0004N*	39''	15"	67"
CDH4-0005N*	40''-41''	15"	67"
CDH4-0006N*	42''-44''	15"	70"
CDH4-0007N*	45''-47''	15"	73"
CDH4-0008N*	48''-49''	15"	76"
CDH4-0009N*	50''-51''	17"	79"
CDH4-0010N*	52''-53''	17"	82"
CDH4-0011N*	54''	17"	85"
CDH4-0012N*	55''	17"	85"
CDH4-0013N*	56''-57''	17"	88"
CDH4-0014N*	58''-59''	17"	91"
CDH4-0015N*	60''-61''	17"	94"
CDH4-0016N*	62''-63''	17"	97"
CDH4-0017N*	64''	17"	100"
CDH4-0018N*	65''	19"	100"
CDH4-0019N*	66''-67''	19"	103"
CDH4-0020N*	68''-69''	19"	106"
CDH4-0021N*	70''-71''	19"	109"
CDH4-0022N*	72''-73''	19"	112"

Geared - Split Hangers

19" Header



Note: Geared fast to slow car doors

Part No.	2SP/CP	Track Length
CDH4-0108N*	74''-83''	116 1/2"
CDH4-0113N*	84''-89''	120 1/2"
CDH4-0114N*	90''-98''	128 1/2"

Hi-Cab Kit

Note: Contact G.A.L Sales or Engineering Department for two speed center parting high cab kits.
Advise opening size, and cab height

DOOR EQUIPMENT

Car Door Hanger Assemblies

Two Speed Center Parting - Conventional - Type "A"

Less Header (Ungeared)

Less Header



Part No.	2SP/CP	Track Length
CDH4-0115N*	33''-35''	61"
CDH4-0116N*	36''-38''	64"
CDH4-0117N*	39''-41''	67"
CDH4-0118N*	42''-44''	70"
CDH4-0119N*	45''-47''	73"
CDH4-0120N*	48''-49''	76"
CDH4-0121N*	50''-51''	79"
CDH4-0122N*	52''-53''	82"
CDH4-0123N*	54''-55''	85"
CDH4-0124N*	56''-57''	88"
CDH4-0125N*	58''-59''	91"
CDH4-0126N*	60''-61''	94"
CDH4-0127N*	62''-63''	97"
CDH4-0128N*	64''-65''	100"
CDH4-0129N*	66''-67''	103"
CDH4-0130N*	68''-69''	106"
CDH4-0131N*	70''-71''	109"
CDH4-0132N*	72''-73''	112"

Two Speed Center Parting - Dust/Explosion Resistant - Type "AX"

Ungeared

Note: Contact G.A.L Sales or Engineering Department for two speed center parting ungeared hangers.

Two Speed Center Parting - Water & Vandal Resistant - Type "AW" & "HA"

Geared - Split Hangers

Note: All Ferrous Material Yellow Zinc Dichromate Plated
Contact G.A.L Sales or Engineering Department for two speed center parting ungeared, geared, geared-split, and vandal & water resistant hangers.

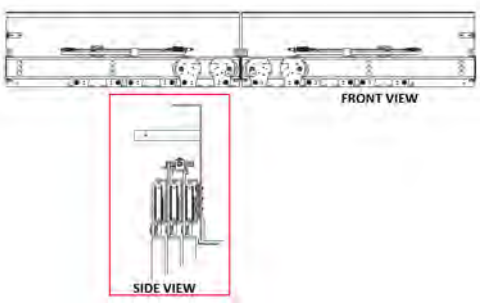
Three Speed Center Parting - Conventional - Type "A"

Geared



Note: Contact G.A.L Sales or Engineering Department for three speed center parting geared hangers.

Geared - Split Hangers



Note: Contact G.A.L Sales or Engineering Department for three speed center parting geared –split hangers.

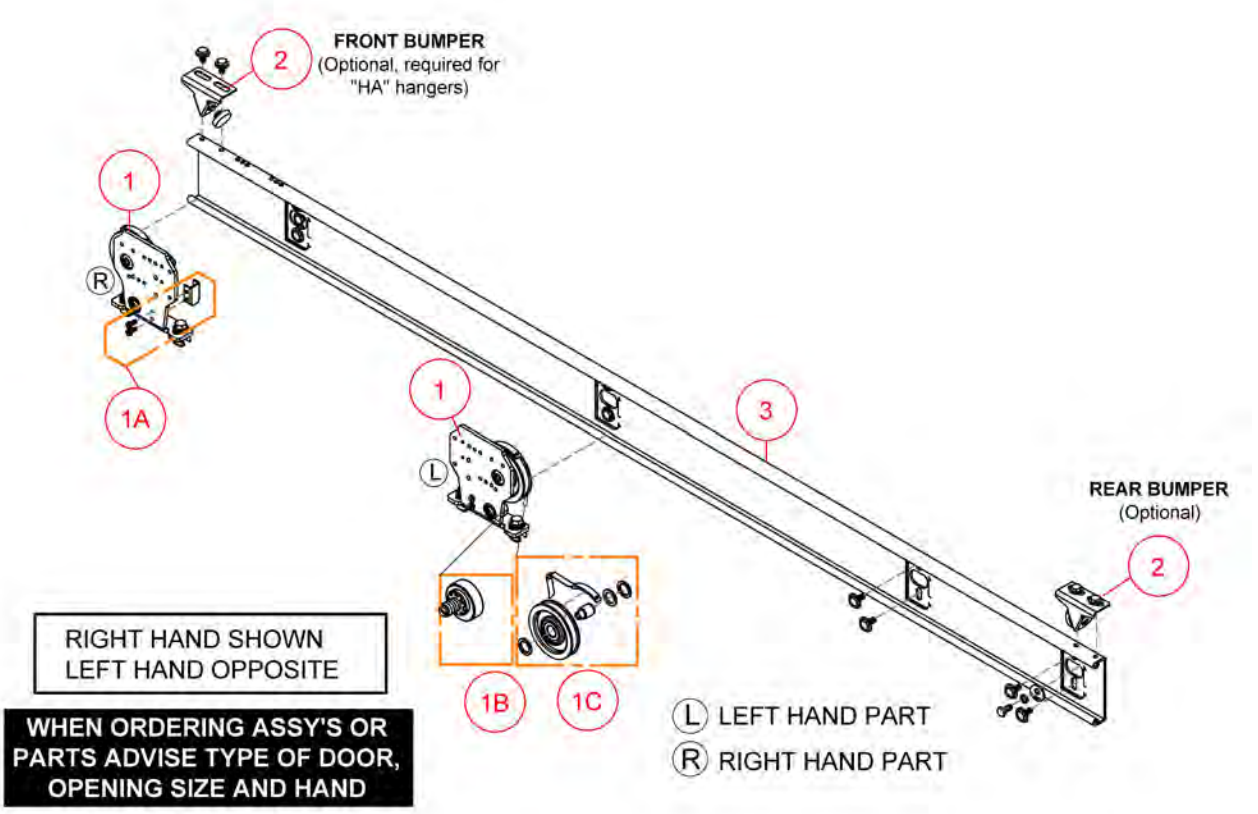
(*) Special Engineering Required

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Single Speed - Type "A"

22"-48" Door Opening



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)

Part No.	Item No	Description
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH4-0055N	2	Bumper, "A" CP Stop (**Page#** 236)
HH1-XXXXX	3	Track, S/S Hatch Door (**Page#** 231)

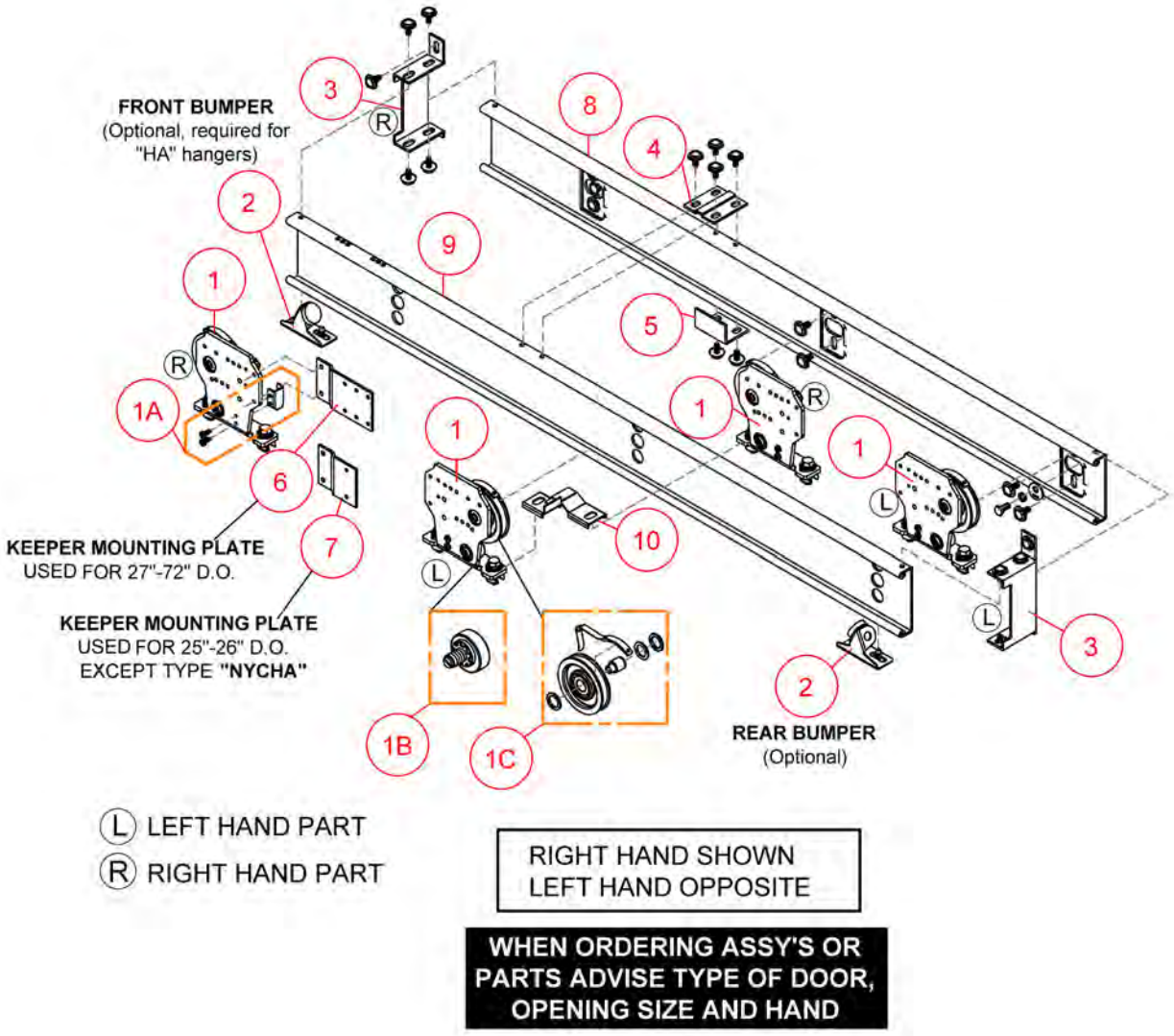
Mounting hardware included with this operator assembly (Page# 242-244)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Two Speed (Ungeared) - Type "A"

24"-72" Door Opening



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH4-0055N	2	Bumper, "A" CP Stop (**Page#** 236)
HH2-0052L/R	3	Bracket, Track End 1 1/2" (**Page#** 236)
HH2-0053N	4	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	5	Angle, Track Bottom 1 1/2" (**Page#** 235)

Part No.	Item No	Description
INT1H-0037N	6	Plate, MO Keeper Mounting 2SP & 2/SP HA 30-72 D.O. 3/SP 41-69 D.O. 2SP/CP 58-83 D.O. (**Page#** 371-Interlock Section)
INT1H-0040N	7	Plate, MO Keeper Mounting, 2SP/CP 54-57 D.O. (**Page#** 371-Interlock Section)
HH2-XXXXX	8	Track, Slow Hatch Door (**Page#** 232)
HH2-XXXXX	9	Track, Fast Hatch Door (**Page#** 232)
HH2-XXXXX	10	Mechanical Interconnecting Device Set (**Page#** 217)

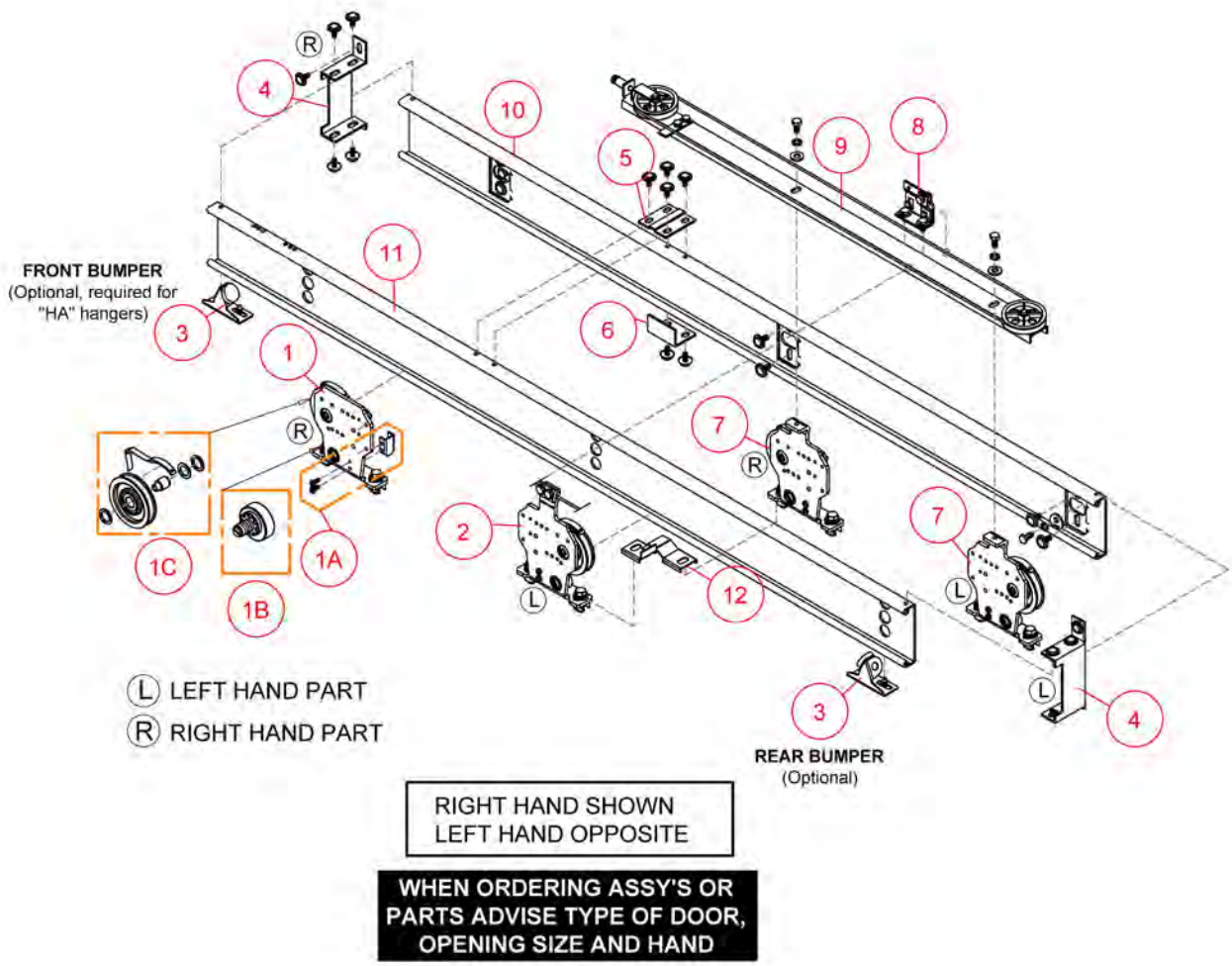
Mounting hardware included with this operator assembly (Page# 242-244)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Hatch Hanger Isometric Drawing

Two Speed (Geared) - Type "A"

22"-48" Door Opening



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH2-0206L/R	2	Sheave, 2SP Cable Gear and Top Safety Retainers (**Page#** 223)
HH4-0055N	3	Bumper, "A" CP Stop (**Page#** 236)
HH2-0052L/R	4	Bracket, Track End 1 1/2" (**Page#** 236)
HH2-0053N	5	Bracket, Track Top 1 1/2" (**Page#** 235)

Part No.	Item No	Description
HH2-0054N	6	Angle, Track Bottom 1 1/2" (**Page#** 235)
HH2-0208L/R	7	Sheave, 2SP Cable Gearing Bar and Top Safety Retainers (**Page#** 223)
CDH2-0082N	8	Clamp, 2SP Cable Anchor (**Page#** 213)
CDH2-XXXXX	9	Bar Assembly, Cable Gearing (**Page#** 210)
HH2-XXXXX	10	Track, Slow Hatch Door (**Page#** 232)
HH2-XXXXX	11	Track, Fast Hatch Door (**Page#** 232)
HH2-XXXXX	12	Mechanical Interconnecting Device Set (**Page#** 217)

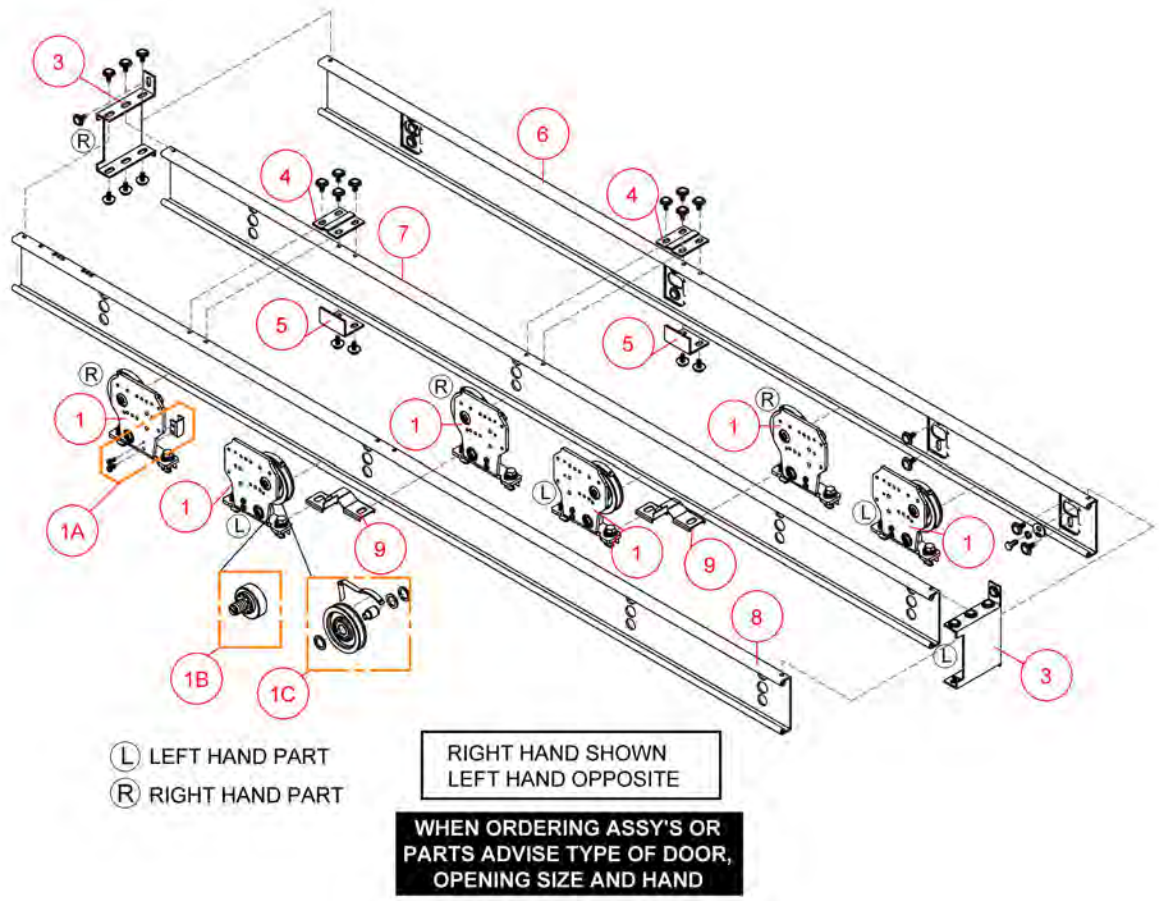
Mounting hardware included with this operator assembly (Page# 242-244)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Three Speed (Ungeared) - Type "A"

30"-69" Door Opening



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH2-0052L/R	3	Bracket, Track End 1 1/2" (**Page#** 236)
HH2-0053N	4	Bracket, Track Top 1 1/2" (**Page#** 235)

Part No.	Item No	Description
HH2-0054N	5	Angle, Track Bottom 1 1/2" (**Page#** 235)
HH9-XXXXX	6	Track, Slow Hatch Door (**Page#** 233)
HH9-XXXXX	7	Track, Intermediate Hatch Door (**Page#** 233)
HH9-XXXXX	8	Track, Fast Hatch Door (**Page#** 233)
HH2-XXXXX	9	Mechanical Interconnecting Device Set (**Page#** 217)

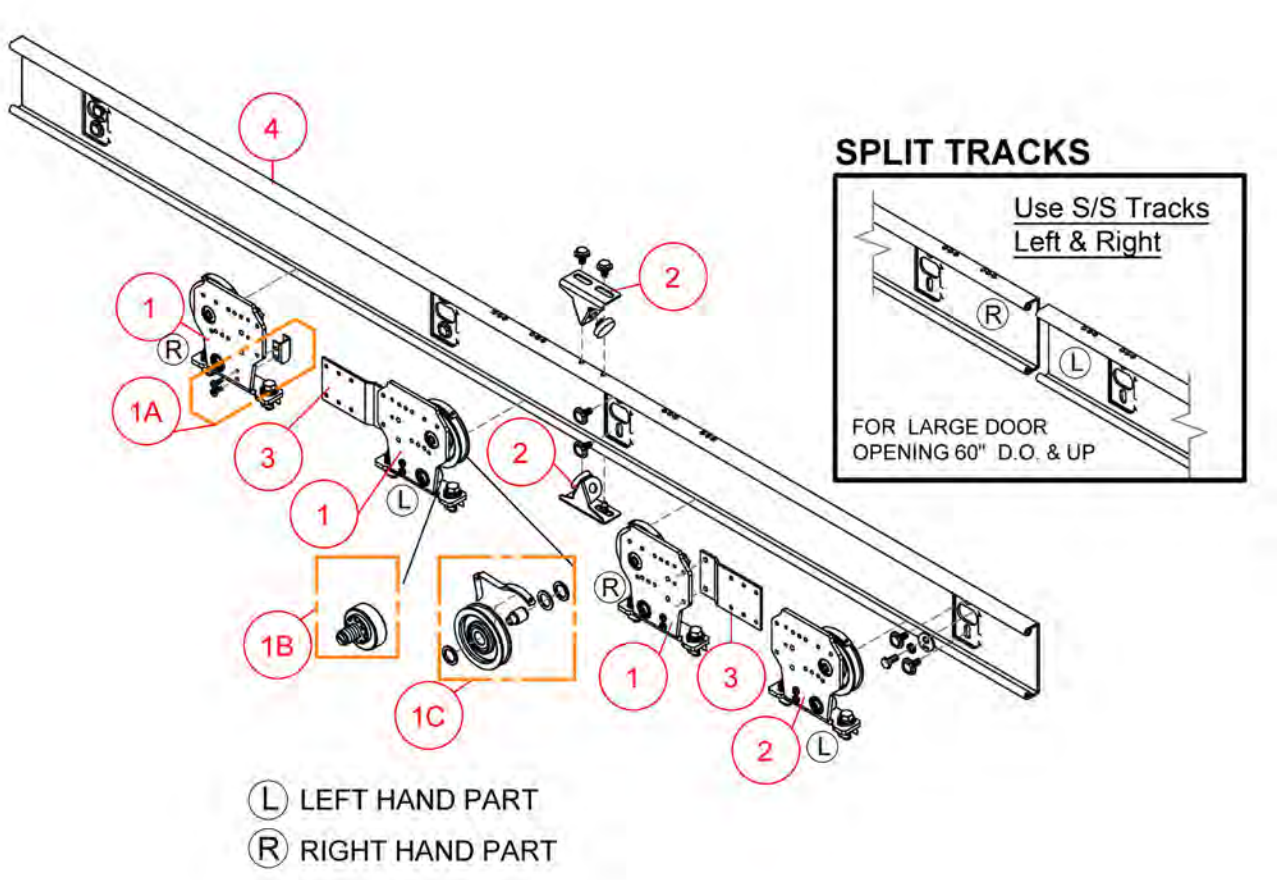
Mounting hardware included with this operator assembly (Page# 242-244)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Hatch Hanger Isometric Drawing

Center Parting - Type "A"

30" & Up Door Opening



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)

Part No.	Item No	Description
HH4-0055N	2	Bumper, "A" CP Stop (**Page#** 236)
INT1H-0037N	3	Plate, MO Keeper Mounting 2SP & 2/SP HA 30-72 D.O. 3/SP 41-69 D.O. 2SP/CP 58-83 D.O. (**Page#** 371-Interlock Section)
HH3-XXXXX	4	Track, C/P Hatch Door (**Page#** 234)

Mounting hardware included with this operator assembly (Page# 242-244)

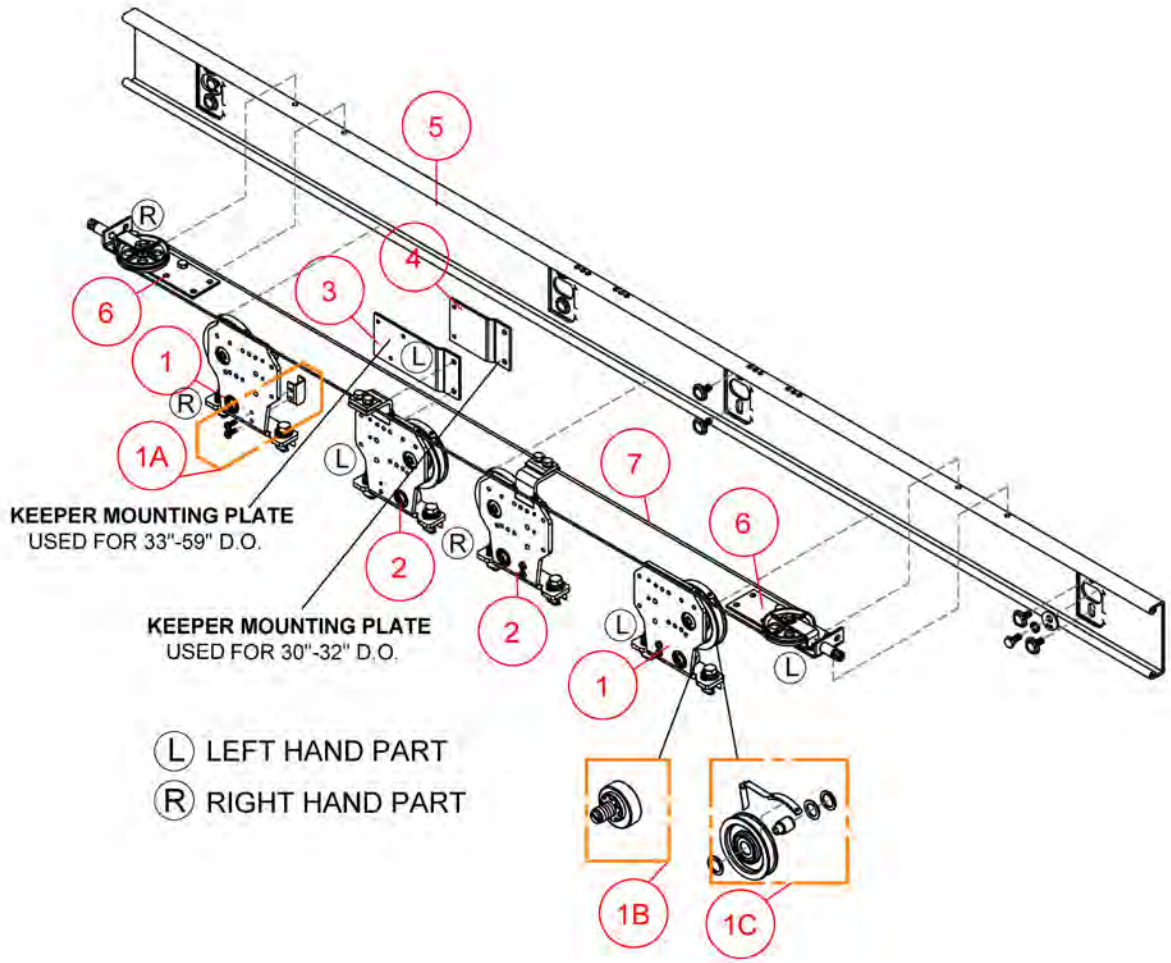
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Center Parting (Geared) - Type "A"

30"-59" Door Opening



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH3-0034L/R	2	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)

Mounting hardware included with this operator assembly (Page# 242-244)

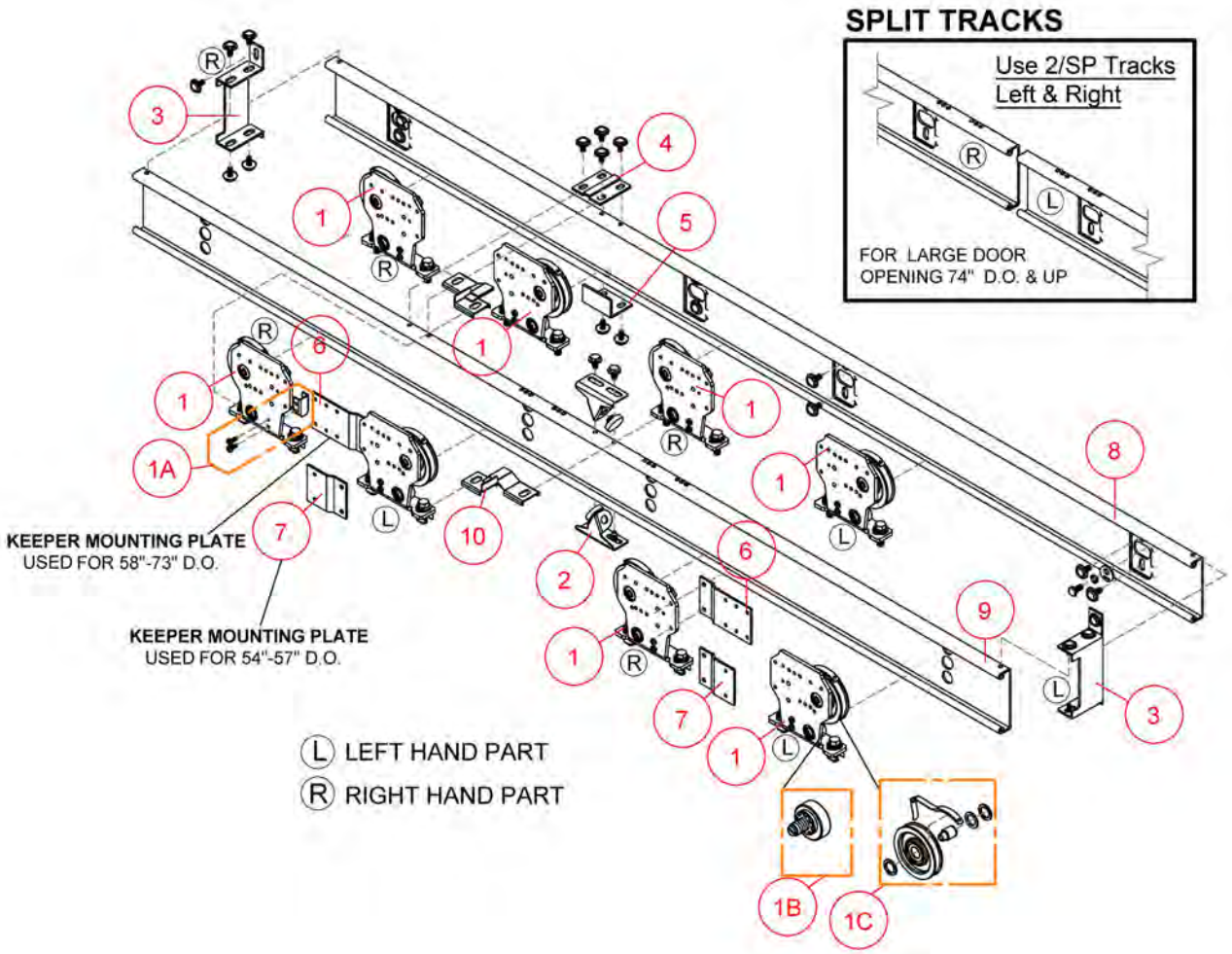
Part No.	Item No	Description
INT1H-0038L/R	3	Plate, MO Keeper Mounting, 2/SP HA 37-72 D.O. C/P 33-59 D.O. (**Page#** 371-Interlock Section)
INT1H-0039N	4	Plate, MO Keeper Mounting, For C/P 30-32 D.O. (**Page#** 371-Interlock Section)
HH3-XXXXX	5	Track, C/P Hatch Door (**Page#** 234)
HH3-0042L/R	6	Pulley Assembly, CP Nylon Tension (Replacement) (**Page#** 211)
HH3-XXXXX	7	Gearing Cable (**Page#** 212)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Hatch Hanger Isometric Drawing

Two Speed Center Parting (Ungeared) - Type "A"

30" & Up Door Opening



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH4-0055N	2	Bumper, "A" CP Stop (**Page#** 236)
HH2-0052L/R	3	Bracket, Track End 1 1/2" (**Page#** 236)
HH2-0053N	4	Bracket, Track Top 1 1/2" (**Page#** 235)
HH2-0054N	5	Angle, Track Bottom 1 1/2" (**Page#** 235)

Part No.	Item No	Description
INT1H-0037N	6	Plate, MO Keeper Mounting 2SP & 2/SP HA 30-72 D.O. 3/SP 41-69 D.O. 2SP/CP 58-83 D.O. (**Page#** 371-Interlock Section)
INT1H-0040N	7	Plate, MO Keeper Mounting, 2SP/CP 54-57 D.O. (**Page#** 371-Interlock Section)
HH4-XXXXX	8	Track, 2SP/CP Slow Hatch Door (**Page#** 234)
HH4-XXXXX	9	Track, 2SP/CP Fast Hatch Door (**Page#** 234)
HH2-XXXXX	10	Mechanical Interconnecting Device (**Page#** 217)

Mounting hardware included with this operator assembly (Page# 242-244)

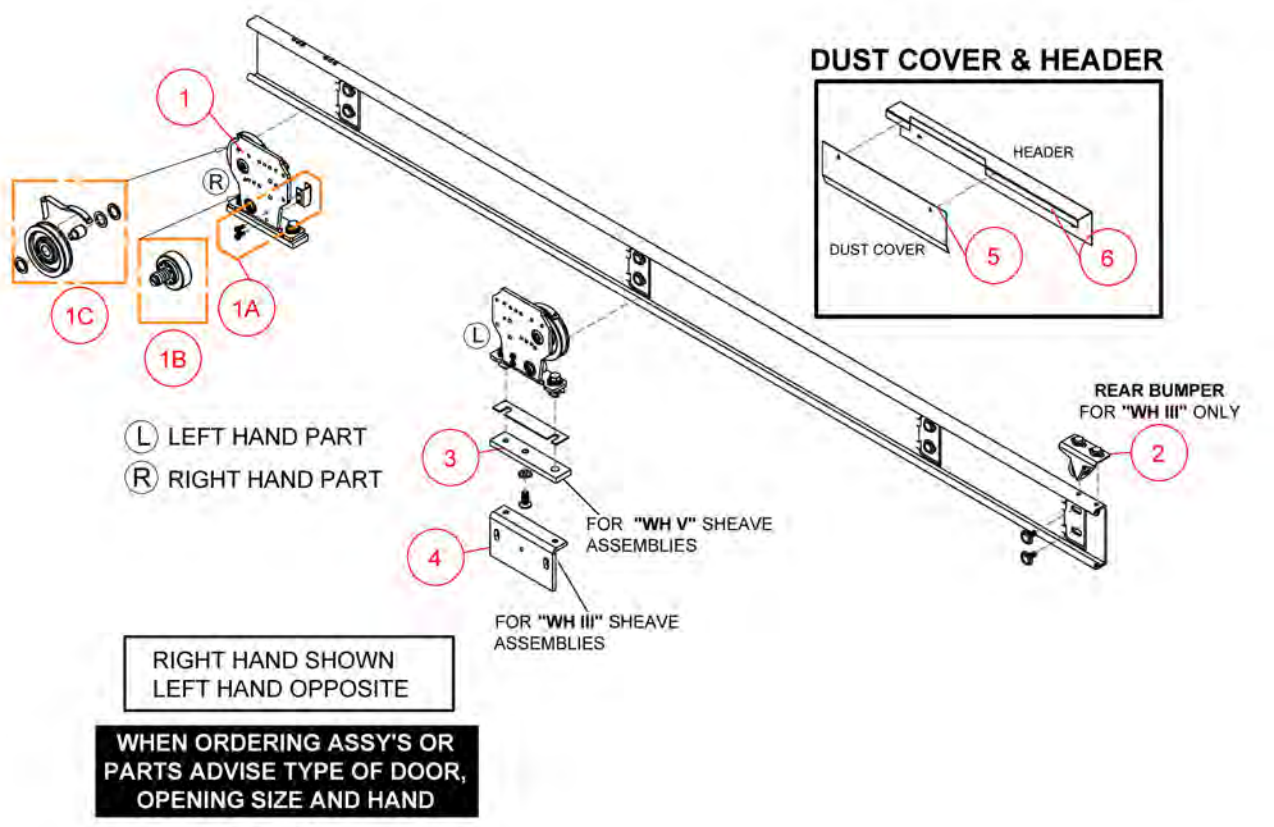
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Westinghouse III, V

Single Speed 22"-48" D.O.



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH4-0055N	2	Bumper, "A" CP Stop (**Page#** 236)

Mounting Hardware Included with This Hanger Assembly (Page# 204-205)

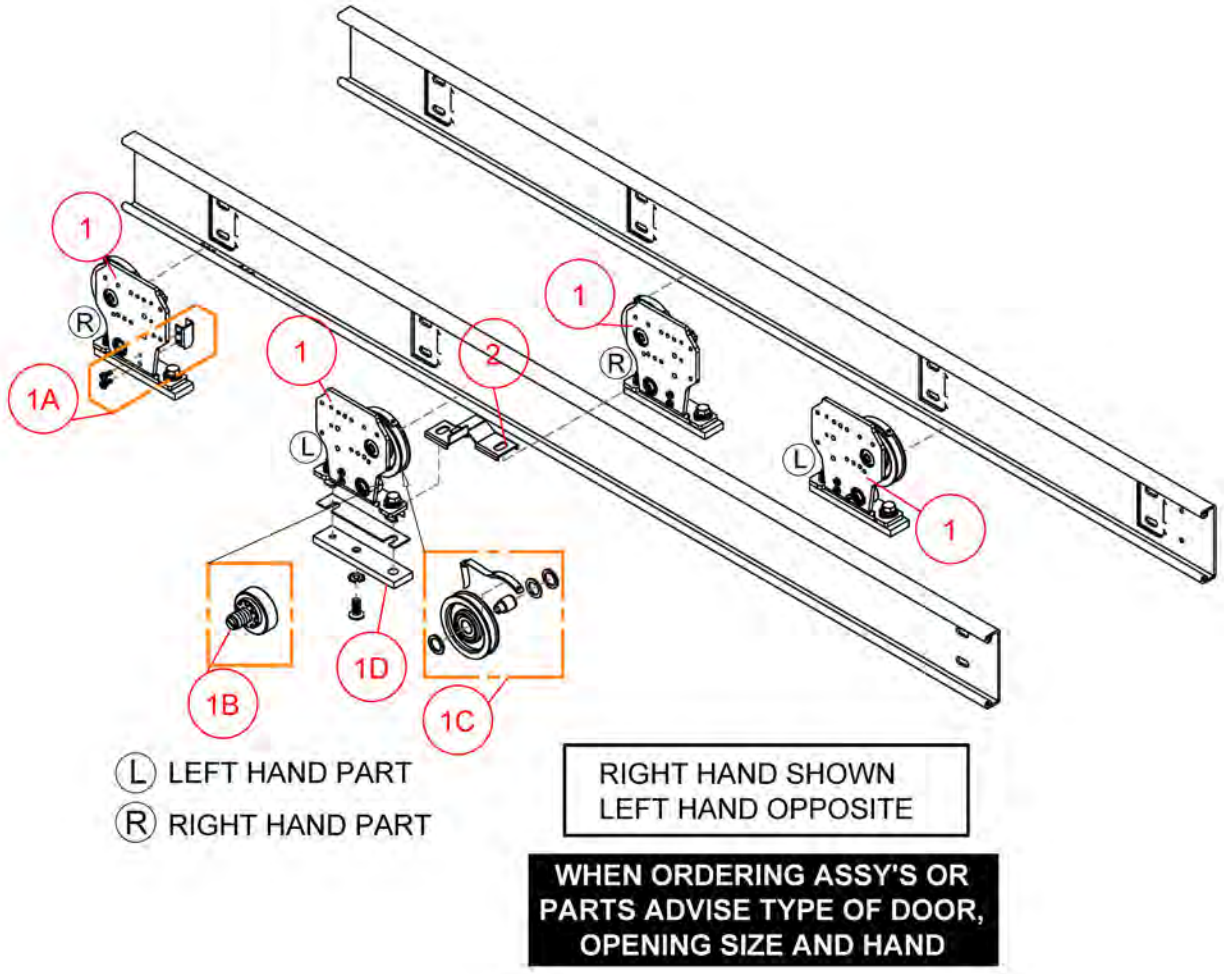
Part No.	Item No	Description
HH17-0041N	3	Bar, Westinghouse I-IV Sheave Adaptor Kit, With Countersink For 3/8-16 Flat Head Screw (**Page#** 203)
HH17-0014N	4	Bracket, Integral Westinghouse Sheave Mounting (**Page#** 203)
HH17-0061N	5	Dust Cover, Westinghouse Type III & V (**Page#** 204)
HH17-0064L/R	6	Header, SS Westinghouse Type III (**Page#** 204)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Hatch Hanger Isometric Drawing

Westinghouse IV

Two Speed (Ungeared) 30"-48" D.O.



Part No.	Item No	Description
HH17-0046L/R	1	Sheave, CP 4-1/8" CL Westinghouse IV & V (**Page#** 223)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)

Mounting Hardware Included with This Hanger Assembly (Page# 204-205)

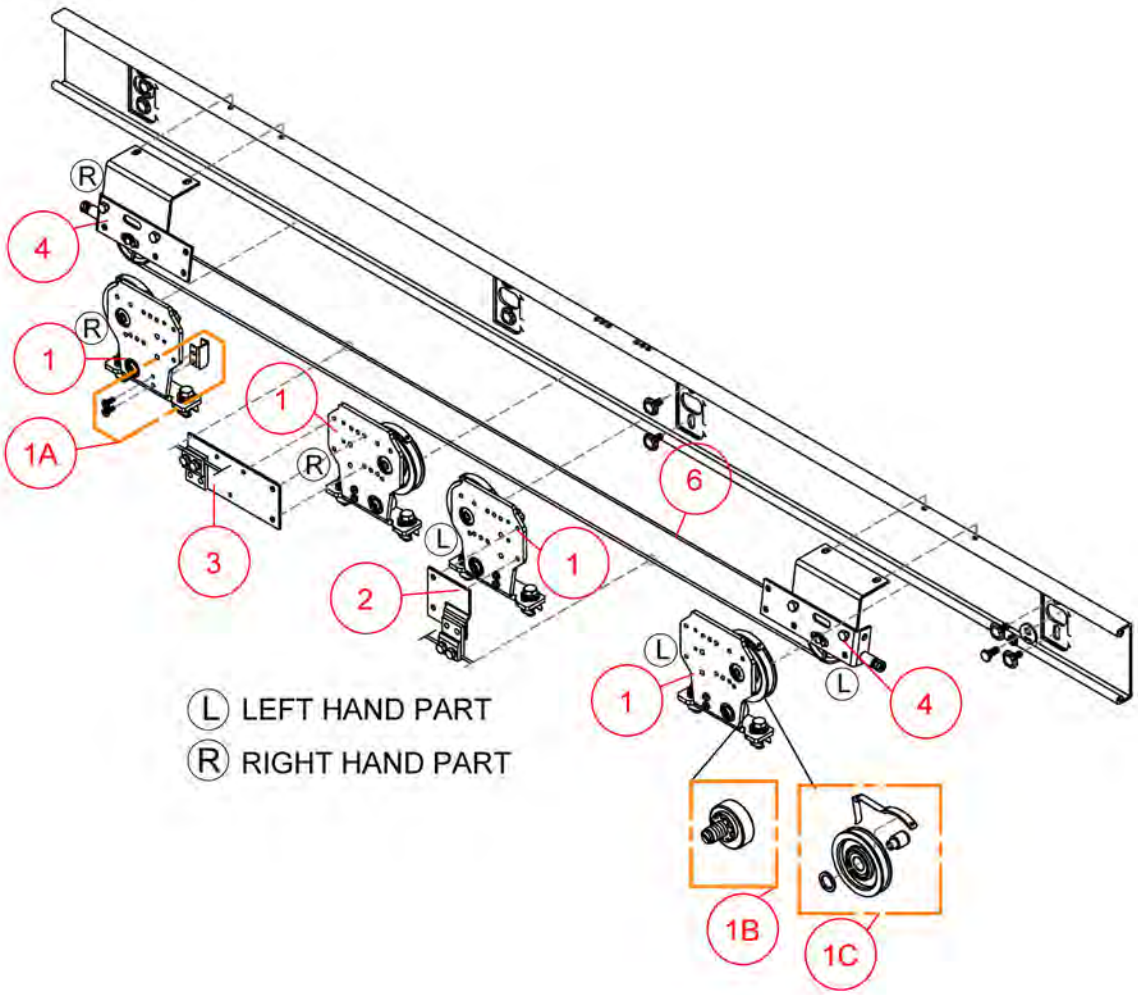
Part No.	Item No	Description
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH17-0041N	1D	Bar, Westinghouse I-IV Sheave Adaptor Kit, With Countersink For 3/8-16 Flat Head Screw (**Page#** 203)
HH2-XXXXX	2	Mechanical Interconnecting Device (**Page#** 217)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Westinghouse II

Center Parting (Geared) 36”-48” D.O.



Part No.	Item No	Description
HH1-0106L/R	1	Sheave, 3 3/4” CL with 3/8-16 Bolts and Top Safety Retainer (Call G.A.L.)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, “A” Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4” Dia “A” (**Page#** 224)
HH17-0013N	2	Plate & Clamp, Gearing Kit Mounting (**Page#** 203)

Part No.	Item No	Description
HH17-0037N	3	Plate & Clamp, CP Mounting-3 3/4 MO Keeper Kit With Lower & Upper Gearing Cable Clamp. Use With 3 3/4” CL Of Sheaves (**Page#** 237)
HH3-0042L/R	4	Pulley Assembly, CP Nylon Tension (Replacement) (**Page#** 211)
HH3-XXXXX	6	Gearing Cable (**Page#** 212)

Mounting Hardware Included with This Hanger Assembly (Page# 204-205)

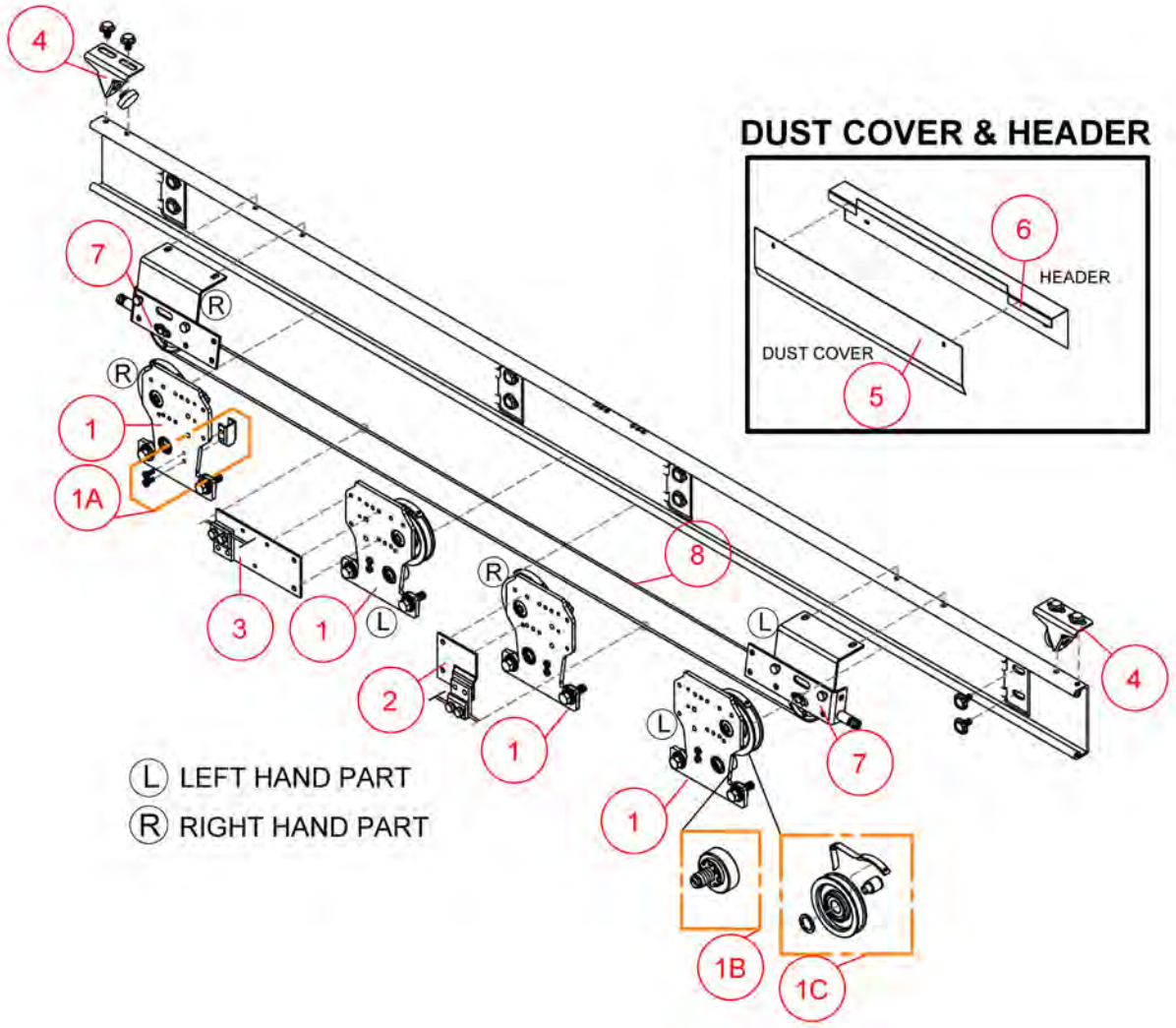
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Westinghouse III-LOW

Center Parting (Geared) 36"-48" D.O.



Part No.	Item No	Description
HH17-0018L/R	1	Sheave, 4-1/8" CL 3/8-16 Bolts Flat For Westinghouse III-Low & OTIS I Integral (**Page#** 203)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH17-0043N	2	Plate & Clamp, Gearing Kit Mounting (**Page#** 203)
HH17-0036N	3	Plate & Clamp, CP Mounting-4 1/8 MO Keeper Kit With Lower & Upper Gearing Cable Clamp. Use With 4 1/8" CL Of Sheaves (**Page#** 237)

Part No.	Item No	Description
HH4-0055N	4	Bumper, "A" CP Stop(**Page#** 236)
HH17-0061N	5	Dust Cover, Westinghouse Type III & V (**Page#** 204)
HH17-0056N	6	Header, CP Westinghouse Type III & V (**Page#** 204)
HH3-0042L/R	7	Pulley Assembly, CP Nylon Tension (Replacement) (**Page#** 211)
HH3-XXXXX	8	Gearing Cable (**Page#** 212)

Mounting Hardware Included with This Hanger Assembly (Page# 204-205)

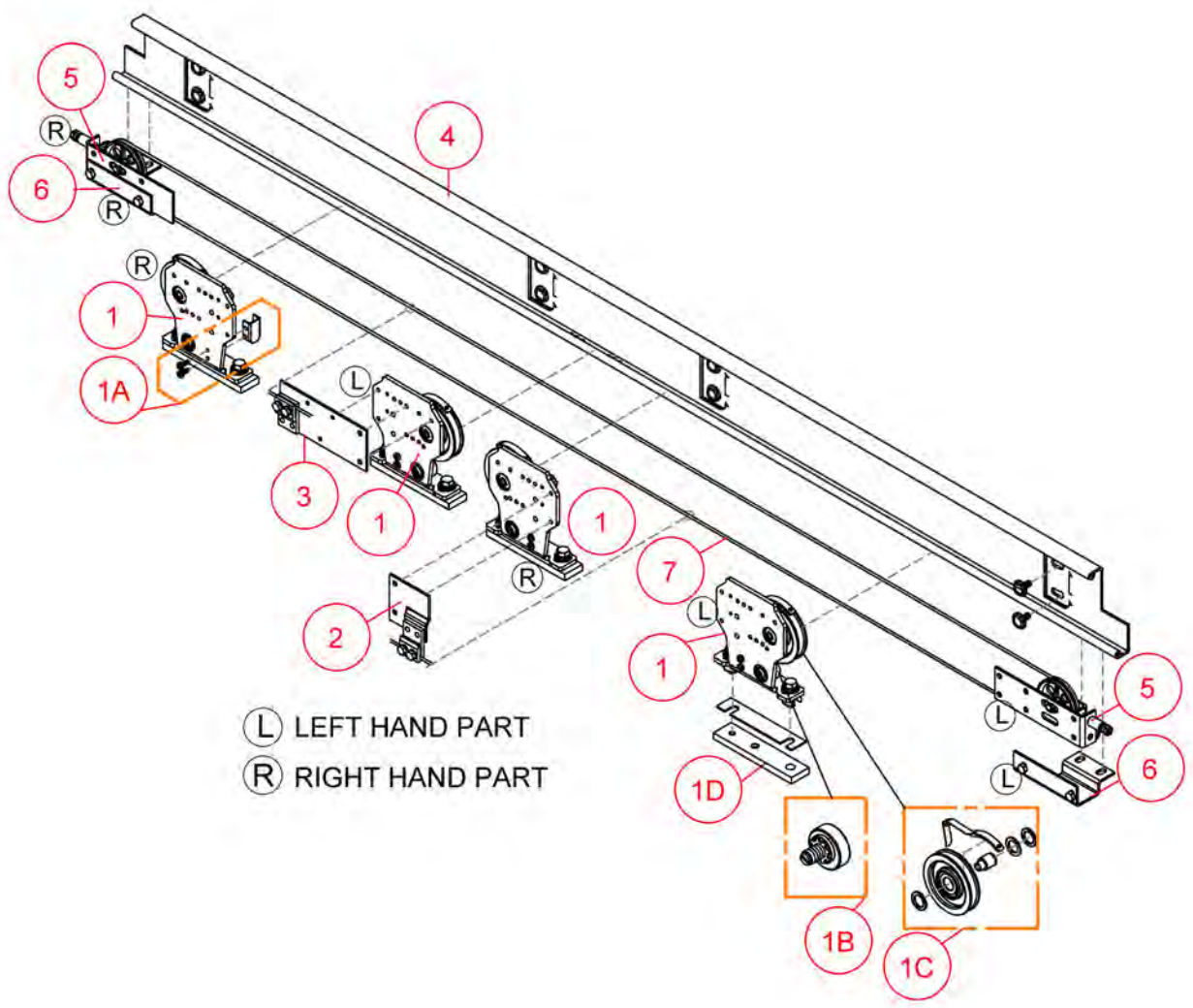
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Westinghouse IV

Center Parting (Geared) 36”-48” D.O.



Part No.	Item No	Description
HH17-0046L/R	1	Sheave, CP 4-1/8” CL Westinghouse IV & V (**Page#** 223)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, “A” Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4” Dia “A” (**Page#** 224)
HH17-0041N	1D	Bar, Westinghouse I-IV Sheave Adaptor Kit, With Countersink For 3/8-16 Flat Head Screw (**Page#** 203)
HH17-0043N	2	Plate & Clamp, Gearing Kit Mounting (**Page#** 203)

Part No.	Item No	Description
HH17-0038N	3	Plate & Clamp, C/P Hatch Gearing Kit, With Lower & Upper Gearing Cable Clamp. Use With Westinghouse IV (**Page#** 203)
HH17-0062N	4	Track, CP Westinghouse type IV (**Page#** 204)
HH3-0042L/R	5	Pulley Assembly, CP Nylon Tension (Replacement) (**Page#** 211)
HH17-0045L/R	6	Bracket, Gearing Cable Mounting (Westinghouse Type “IV” Replacement) (**Page#** 203)
HH3-XXXXX	7	Gearing Cable (**Page#** 212)

Mounting Hardware Included with This Hanger Assembly (Page# 204-205)

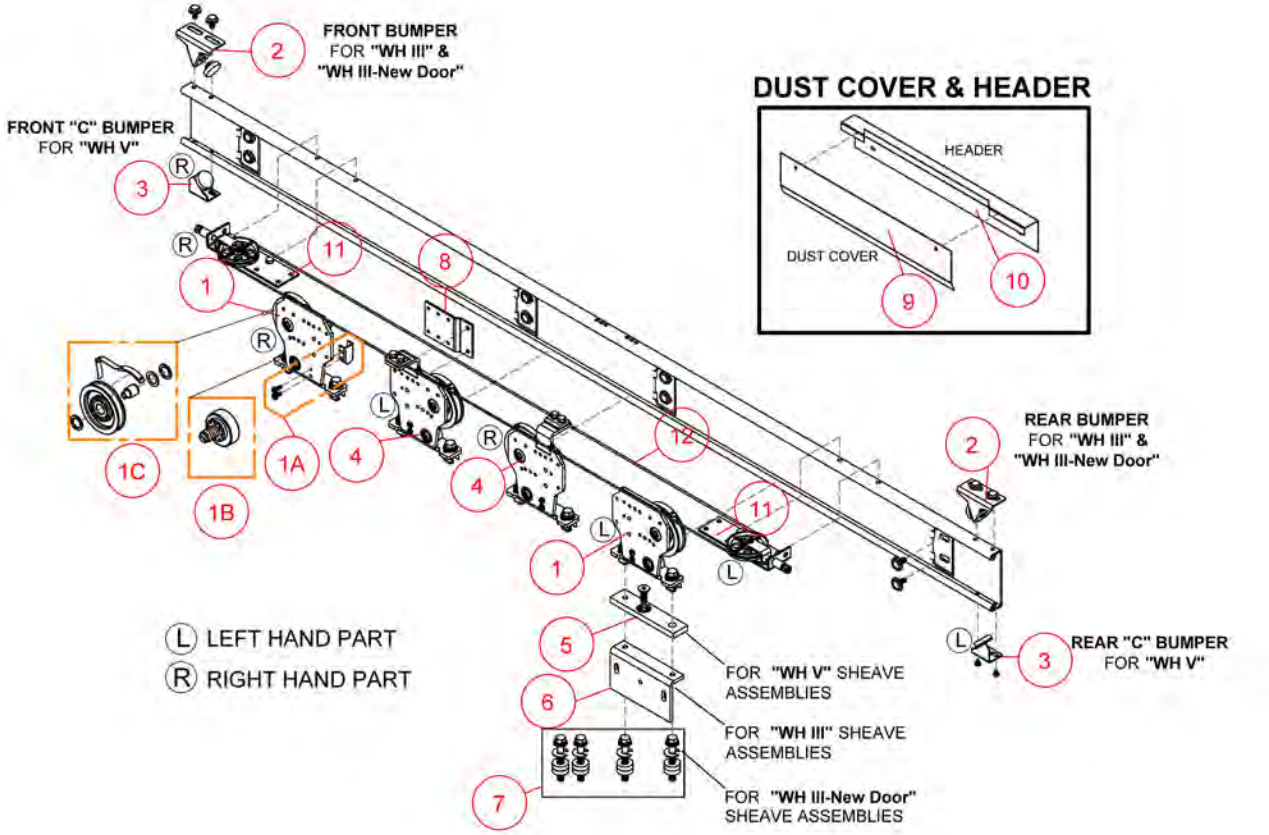
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Westinghouse III, III-LOW, V

Center Parting (Geared) 36"-54" D.O.



Part No.	Item No	Description
HH1-0105L/R	1	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH1-0112N	1A	Retainer, Hanger Top Safety (**Page#** 225)
HH1-0024N	1B	Eccentric, "A" Sheave (**Page#** 225)
HH1-0025N	1C	Roller Kit, 3 1/4" Dia "A" (**Page#** 224)
HH4-0055N	2	Bumper, "A" CP Stop (**Page#** 236)
HH8-0080L/R	3	Bumper, "C" C/P Stop
HH3-0034L/R	4	Sheave, 4-1/8 CL With 3/8-16 Bolts and Top Safety Retainer (**Page#** 221)
HH17-0041N	5	Bar, Westinghouse I-IV Sheave Adaptor Kit, With Countersink For 3/8-16 Flat Head Screw (**Page#** 203)

Mounting Hardware Included with This Hanger Assembly (Page# 204-205)

Part No.	Item No	Description
HH17-0014N	6	Bracket, Integral Westinghouse Sheave Mounting (**Page#** 203)
HH17-0010N	7	Hardware, C/P Westinghouse III Mounting Sheave New Doors (**Page#** 203)
INT1H-0037N	8	Plate, MO Keeper Mounting 2/SP & 2/SP HA 30-72 D.O. 3/SP 41-69 D.O. 2SP/CP 58-83 D.O. (**Page#** 371-Interlock Section)
HH17-0061N	9	Dust Cover, Westinghouse Type III & V (**Page#** 204)
HH17-0056N	10	Header, CP Westinghouse Type III & V (**Page#** 204)
HH17-0045L/R	11	Bracket, Gearing Cable Mounting (Westinghouse Type "IV" Replacement) (**Page#** 203)
HH3-XXXXX	12	Gearing Cable (**Page#** 212)

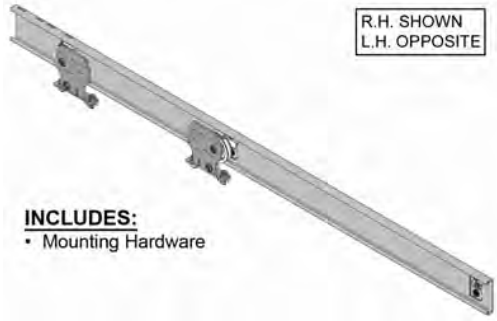
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Single Speed

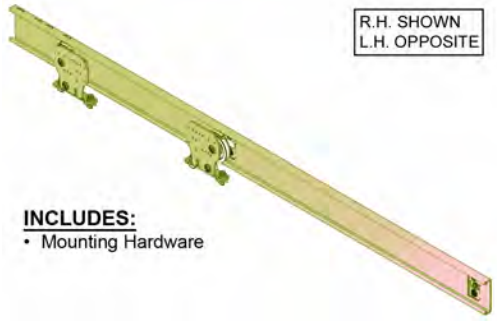
Conventional - Type "A"



All hatch hangers come with top safety retainers
Minimum header pocket height: 7" (Standard)
Header pocket height: 6 1/2" – 6 7/8" (Preinstall Lock)

Part No.	S/S	Track Length
HH1-0096N	22''-24''	46''
HH1-0097N	25''-27''	52''
HH1-0098N	28''-30''	58''
HH1-0099N	31''-33''	64''
HH1-0100N	34''-36''	70''
HH1-0101N	37''-39''	76''
HH1-0102N	40''-42''	82''
HH1-0103N	43''-45''	88''
HH1-0104N	46''-48''	94''

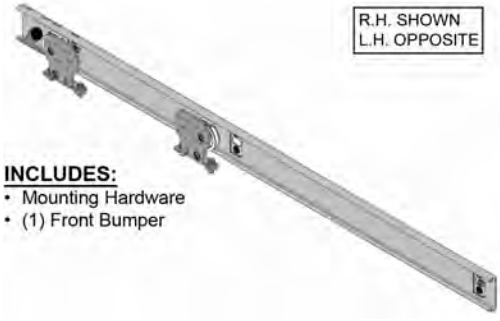
Water Resistant - Type "AW"



All hatch hangers come with top safety retainers
Water resistant hatch hangers are yellow zinc dichromate plated
Minimum header pocket height: 6 1/2" (Standard)

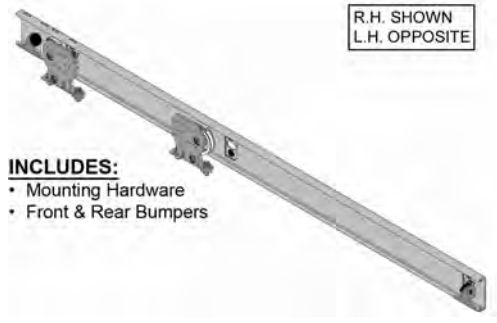
Part No.	S/S	Track Length
HH19-0001N*	22''-24''	46''
HH19-0002N*	25''-27''	52''
HH19-0003N*	28''-30''	58''
HH19-0004N*	31''-33''	64''
HH19-0005N*	34''-36''	70''
HH19-0006N*	37''-39''	76''
HH19-0007N*	40''-42''	82''
HH19-0008N*	43''-45''	88''
HH19-0009N*	46''-48''	94''

Vandal Resistant - Type "HA"



All hatch hangers come with top safety retainers
• Minimum header pocket height: 6 1/2" (Standard)

Vandal Resistant - Type "NYC HA"



All hatch hangers come with top safety retainers
• Minimum header pocket height: 6 1/2" (Standard)

Vandal Resistant - Type "HA"

Part No.	S/S	Track Length
HH13-0001L/R*	24''	48''
HH13-0002L/R*	25''	52''
HH13-0003L/R*	26''	52''
HH13-0004L/R*	27''	54''
HH13-0005L/R*	28''	58''
HH13-0006L/R*	29''	58''
HH13-0007L/R*	30''	60''
HH13-0008L/R*	31''	64''
HH13-0009L/R*	32''	64''

Part No.	S/S	Track Length
HH13-0010L/R*	33''	65''
HH13-0012L/R*	35''	70''
HH13-0011L/R*	36''	70''
HH13-0013L/R*	37''	72''
HH13-0014L/R*	38''	76''
HH13-0015L/R*	39''	76''
HH13-0016L/R*	40''	82''
HH13-0017L/R*	41''	82''
HH13-0018L/R*	42''	82''

(*) Special Engineering Required

Hatch Door Hanger Assemblies

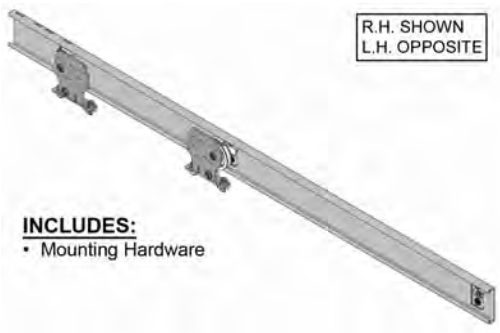
Single Speed

Vandal Resistant - Type "NYC HA"

Part No.	S/S	Track Length
HH13-0025L/R*	30''	60''
HH13-0026L/R*	31''	64''
HH13-0027L/R*	32''	64''
HH13-0028L/R*	33''	66''
HH13-0029L/R*	34''	70''
HH13-0030L/R*	35''	70''
HH13-0031L/R*	36''	70''

Part No.	S/S	Track Length
HH13-0032L/R*	37''	72''
HH13-0033L/R*	38''	76''
HH13-0034L/R*	39''	76''
HH13-0035L/R*	40''	82''
HH13-0036L/R*	41''	82''
HH13-0037L/R*	42''	82''

Dust/Explosion Resistant - Type "AX"



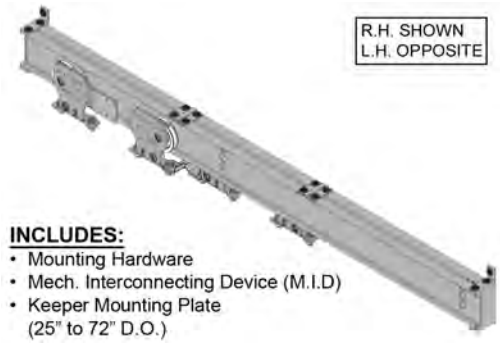
All hatch hangers come with top safety retainers

Note: Dust/Explosion single speed hatch hangers are the same as the conventional type "A" hanger.

Refer to Conventional Type "A" Single Speed Table.

Two Speed (Ungeared)

Conventional - Type "A"



All hatch hangers come with top safety retainers

- Minimum header pocket height: 7 1/2" (Standard)
- Works with 2/SP spring closer

Part No.	2/SP	Track Length	MID* Set
HH2-0180L/R*	24''	40''	"C"
HH2-0181L/R*	25''	41''	"C"
HH2-0182L/R*	26''	42''	"C"
HH2-0183L/R*	27''	44''	"C"
HH2-0184L/R*	28''	45''	"C"
HH2-0185L/R*	29''	46''	"B"
HH2-0156L/R	30''	46''	"B"
HH2-0157L/R	31''-32''	48''	"A"
HH2-0158L/R	33''-34''	52''	"B"
HH2-0159L/R	35''-36''	54''	"A"
HH2-0160L/R	37''-38''	58''	"B"
HH2-0161L/R	39''-40''	60''	"A"
HH2-0162L/R	41''-42''	64''	"B"
HH2-0163L/R	43''-44''	66''	"A"
HH2-0164L/R	45''-46''	70''	"B"
HH2-0165L/R	47''-48''	72''	"A"
HH2-0166L/R	49''-52''	76''	"D"
HH2-0167L/R	53''-56''	82''	"D"
HH2-0168L/R	57''-60''	88''	"D"
HH2-0169L/R	61''-64''	94''	"D"
HH2-0170L/R	65''-68''	100''	"D"
HH2-0171L/R	69''-72''	106''	"D"

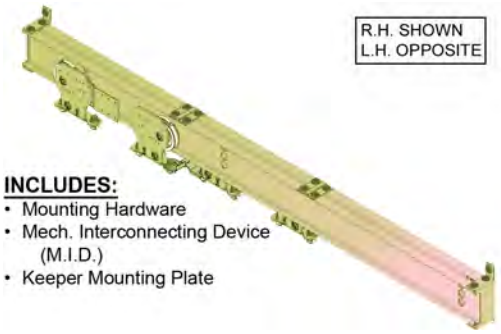
(*) Special Engineering Required

DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Two Speed (Ungeared)

Water Resistant - Type "AW"



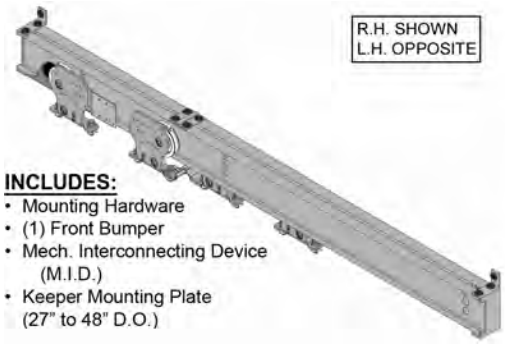
INCLUDES:
- Mounting Hardware
- Mech. Interconnecting Device (M.I.D.)
- Keeper Mounting Plate

All hatch hangers come with top safety retainers

Water resistant hatch hangers are yellow zinc dichromate plated
Minimum header pocket height: 7 1/2" (Standard)
Works with 2/SP spring closer or manual door closer

Part No.	2/SP	Track Length	MID* Set
HH20-0001L/R*	24''	40''	"C"
HH20-0002L/R*	25''	41''	"C"
HH20-0003L/R*	26''	42''	"C"
HH20-0004L/R*	27''	44''	"C"
HH20-0005L/R*	28''	45''	"C"
HH20-0006L/R*	29''	46''	"B"
HH20-0007L/R*	30''	46''	"B"
HH20-0008L/R*	31''-32''	48''	"A"
HH20-0009L/R*	33''-34''	52''	"B"
HH20-0010L/R*	35''-36''	54''	"A"
HH20-0011L/R*	37''-38''	58''	"B"
HH20-0012L/R*	39''-40''	60''	"A"
HH20-0013L/R*	41''-42''	64''	"B"
HH20-0014L/R*	43''-44''	66''	"A"
HH20-0015L/R*	45''-46''	70''	"B"
HH20-0016L/R*	47''-48''	70''	"A"
HH20-0017L/R*	49''-52''	76''	"D"
HH20-0018L/R*	53''-56''	82''	"D"
HH20-0019L/R*	57''-60''	82''	"D"
HH20-0020L/R*	61''-64''	94''	"D"
HH20-0021L/R*	65''-68''	100''	"D"
HH20-0022L/R*	69''-72''	106''	"D"

Vandal Resistant - Type "HA"



INCLUDES:
- Mounting Hardware
- (1) Front Bumper
- Mech. Interconnecting Device (M.I.D.)
- Keeper Mounting Plate (27" to 48" D.O.)

All hatch hangers come with top safety retainers

- **Minimum header pocket height: 7 1/2" (Standard)**
- **Works with 2/SP spring closers**

Part No.	2/SP	Track Length	MID* Set
HH14-0001L/R*	24''	41''	"C"
HH14-0002L/R*	25''	42''	"C"
HH14-0003L/R*	26''	43''	"C"
HH14-0004L/R*	27''	45''	"C"
HH14-0005L/R*	28''	46''	"C"
HH14-0006L/R*	29''	47''	"B"
HH14-0007L/R*	30''	46''	"B"
HH14-0008L/R*	31''-32''	48''	"A"
HH14-0009L/R*	33''-34''	52''	"B"
HH14-0010L/R*	35''-36''	54''	"A"
HH14-0011L/R*	37''-38''	58''	"B"
HH14-0012L/R*	39''-40''	60''	"A"
HH14-0013L/R*	41''-42''	64''	"B"
HH14-0014L/R*	43''-44''	66''	"A"
HH14-0015L/R*	45''-46''	70''	"B"
HH14-0016L/R*	47''-48''	72''	"A"

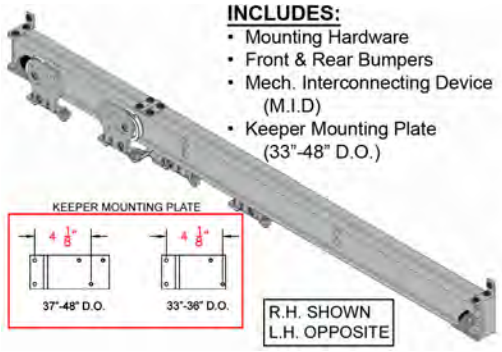
(*) Special Engineering Required

DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Two Speed (Ungeared)

Vandal Resistant - Type "NYC HA"

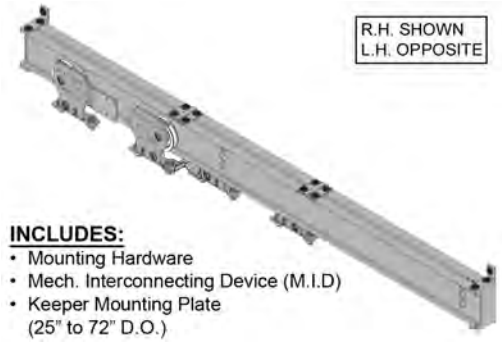


All hatch hangers come with top safety retainers

- Minimum header pocket height: 7 1/2" (Standard)
- Works with 2/SP spring closer

Part No.	2/SP	Track Length	MID* Set
HH14-0017L/R*	30''	60''	"B"
HH14-0018L/R*	31''	47''	"A"
HH14-0019L/R*	32''	49''	"A"
HH14-0020L/R*	33''	53''	"B"
HH14-0021L/R*	34''	53''	"B"
HH14-0022L/R*	35''	55''	"A"
HH14-0023L/R*	36''	55''	"A"
HH14-0024L/R*	37''	59''	"B"
HH14-0025L/R*	38''	59''	"B"
HH14-0026L/R*	39''	61''	"A"
HH14-0027L/R*	40''	61''	"A"
HH14-0028L/R*	41''	65''	"B"
HH14-0029L/R*	42''	65''	"B"
HH14-0030L/R*	43''	67''	"A"
HH14-0031L/R*	44''	67''	"A"
HH14-0032L/R*	45''	71''	"B"
HH14-0033L/R*	46''	71''	"B"
HH14-0034L/R*	47''	73''	"A"
HH14-0035L/R*	48''	73''	"A"

Dust/Explosion Resistant - Type "A"



All hatch hangers come with top safety retainers

Note: Dust/Explosion two speed (ungeared) hatch hangers are the same as the conventional type "A" hanger.
Refer to Conventional Type "A" Two Speed (Ungeared) Table.

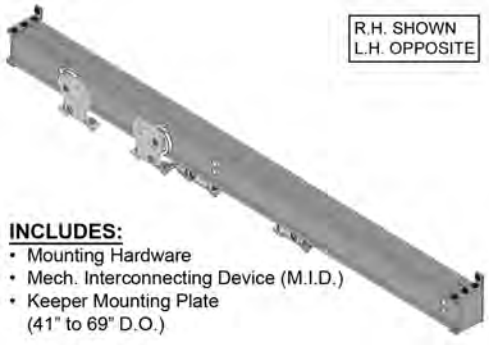
(*) Special Engineering Required

DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Three Speed (Ungeared)

Conventional - Type "A"



INCLUDES:
- Mounting Hardware
- Mech. Interconnecting Device (M.I.D.)
- Keeper Mounting Plate (41" to 69" D.O.)

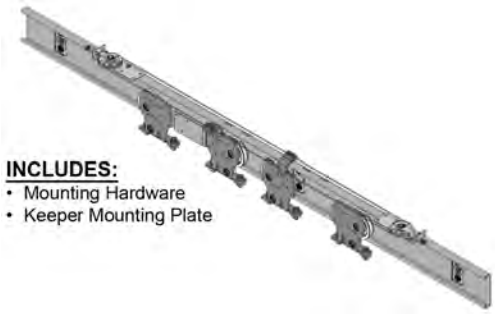
All hatch hangers come with top safety retainers
Minimum header pocket height: 7 1/2" (Standard)
Works with 3/SP spring closer or manual door closer
Header pocket height: 6 1/2" – 7 7/16" (*End bracket ears cut off* and preinstall lock)

Part No.	3/SP	Track Length	MID* Set
HH9-0001L/R*	30''	45''	"D"
HH9-0002L/R*	31''	46''	"D"
HH9-0003L/R*	32''	47''	"D"
HH9-0004L/R*	33''	48''	"D"
HH9-0005L/R*	34''	49''	"D"
HH9-0006L/R*	35''	50''	"D"
HH9-0007L/R*	36''	51''	"D"
HH9-0008L/R*	37''	52''	"D"
HH9-0009L/R*	38''	53''	"D"
HH9-0010L/R*	39''	54''	"D"
HH9-0011L/R*	40''	55''	"D"
HH9-0012L/R*	41''	58''	"D"
HH9-0013L/R*	42''	59''	"D"
HH9-0014L/R*	43''	60''	"D"
HH9-0015L/R*	44''	61''	"D"
HH9-0016L/R*	45''	62''	"D"
HH9-0017L/R*	46''	63''	"D"
HH9-0018L/R*	47''	66''	"D"
HH9-0019L/R*	48''	67''	"D"
HH9-0020L/R*	49''	68''	"D"

Part No.	3/SP	Track Length	MID* Set
HH9-0021L/R*	50''	69''	"D"
HH9-0022L/R*	51''	70''	"D"
HH9-0023L/R*	52''	71''	"D"
HH9-0024L/R*	53''	74''	"D"
HH9-0025L/R*	54''	75''	"D"
HH9-0026L/R*	55''	76''	"D"
HH9-0027L/R*	56''	77''	"D"
HH9-0028L/R*	57''	78''	"D"
HH9-0029L/R*	58''	79''	"D"
HH9-0030L/R*	59''	82''	"D"
HH9-0031L/R*	60''	83''	"D"
HH9-0032L/R*	61''	84''	"D"
HH9-0033L/R*	62''	85''	"D"
HH9-0034L/R*	63''	86''	"D"
HH9-0035L/R*	64''	87''	"D"
HH9-0036L/R*	65''	90''	"D"
HH9-0037L/R*	66''	91''	"D"
HH9-0038L/R*	67''	92''	"D"
HH9-0039L/R*	68''	93''	"D"
HH9-0040L/R*	69''	94''	"D"

Center Parting (Geared)

Conventional - Type "A"



INCLUDES:
- Mounting Hardware
- Keeper Mounting Plate

All hatch hangers come with top safety retainers
Minimum header pocket height: 7 1/4" (Standard)

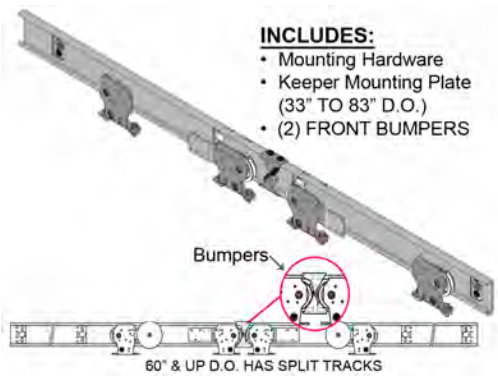
Part No.	C/P	Track Length
HH3-0049N	30''-32''	64''
HH3-0050N	33''-35''	70''
HH3-0051N	36''-38''	76''
HH3-0052N	39''-41''	82''
HH3-0053N	42''-44''	88''
HH3-0054N	45''-47''	94''
HH3-0055N	48''-50''	100''
HH3-0056N	51''-56''	106''
HH3-0057N	57''-59''	112''

(*) Special Engineering Required

Hatch Door Hanger Assemblies

Center Parting (Ungeared)

Conventional - Type "A"



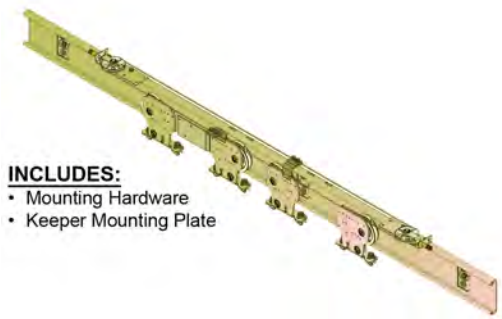
All hatch hangers come with top safety retainers

- Minimum header pocket height: 6 7/8" (Standard)
- Header pocket height: 6 3/4" (Preinstalled Lock)

Part No.	C/P	Track Length
HH3-0106N*	30''-32''	64''
HH3-0107N*	33''-35''	70''
HH3-0108N*	36''-38''	76''
HH3-0109N*	39''-41''	82''
HH3-0110N*	42''-44''	88''
HH3-0111N*	45''-47''	94''
HH3-0112N*	48''-50''	100''
HH3-0113N*	51''-53''	106''
HH3-0114N*	54''-56''	106''
HH3-0115N*	57''-59''	112''
HH3-0116N*	60''-62''	116.5'' (Split)
HH3-0117N*	63''-68''	128.5'' (Split)
HH3-0118N*	69''-74''	140.5'' (Split)
HH3-0119N*	75''-80''	152.5'' (Split)
HH3-0120N*	81''-83''	164.5'' (Split)

Center Parting (Geared)

Water Resistant - Type "AW"



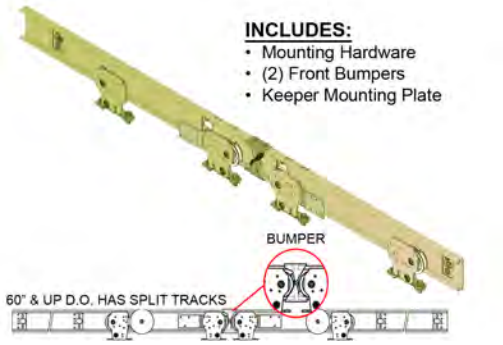
All hatch hangers come with top safety retainers

- Water resistant hatch hangers are yellow zinc dichromate plated
- Minimum header pocket height: 7 1/4" (Standard)

Part No.	C/P	Track Length
HH21-0015N*	30''-32''	64''
HH21-0016N*	33''-35''	70''
HH21-0017N*	36''-38''	76''
HH21-0018N*	39''-41''	82''
HH21-0019N*	42''-44''	88''
HH21-0020N*	45''-47''	94''
HH21-0021N*	48''-50''	100''
HH21-0022N*	51''-56''	106''
HH21-0023N*	57''-59''	112''

Center Parting (Ungeared)

Water Resistant - Type "AW"



All hatch hangers come with top safety retainers

- Minimum header pocket height: 6 7/8" (Standard)
- Header pocket height: 6 3/4" (Preinstalled Lock)

Part No.	C/P	Track Length
HH21-0001N*	30''-32''	64''
HH21-0002N*	33''-35''	70''
HH21-0003N*	36''-38''	76''
HH21-0004N*	39''-41''	82''
HH21-0005N*	42''-44''	88''
HH21-0006N*	45''-47''	94''
HH21-0007N*	48''-50''	100''
HH21-0008N*	51''-56''	106''
HH21-0009N*	57''-59''	112''
HH21-0010N*	60''-62''	116.5'' (Split)
HH21-0011N*	63''-68''	128.5'' (Split)
HH21-0012N*	69''-74''	140.5'' (Split)
HH21-0013N*	75''-80''	152.5'' (Split)
HH21-0014N*	81''-83''	164.5'' (Split)

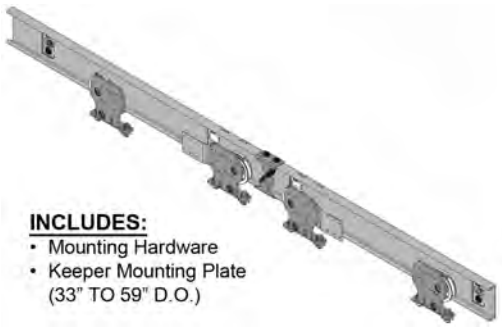
(*) Special Engineering Required

DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Center Parting (Ungeared)

Dust/Explosion Resistant - Type "AX"



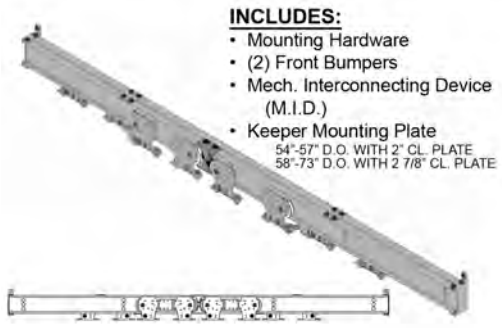
All hatch hangers come with top safety retainers

- Minimum header pocket height: 6 7/8" (Standard)
- Header pocket height: 6 3/4" (Preinstalled Lock)

Part No.	C/P	Track Length
HH3-0157N*	30''-32''	64''
HH3-0158N*	33''-35''	70''
HH3-0159N*	36''-38''	76''
HH3-0160N*	39''-41''	82''
HH3-0161N*	42''-44''	88''
HH3-0162N*	45''-47''	94''
HH3-0163N*	48''-50''	100''
HH3-0164N*	51''-56''	106''
HH3-0165N*	57''-59''	112''

Two Speed Center Parting (Ungeared)

Conventional - Type "A"



All hatch hangers come with top safety retainers

- **Minimum header pocket height: 7 1/2" (Standard)**
- **Works with 2/SP spring closers**

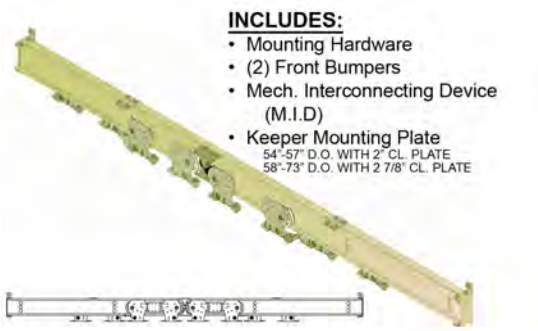
Part No.	2SP/CP	Track Length	MID* Set
HH4-0120N*	32''	58''	"C"
HH4-0019N*	33''-35''	61''	"C"
HH4-0020N*	36''-38''	64''	"C"
HH4-0021N*	39''-41''	67''	"C"
HH4-0022N*	42''-44''	70''	"C"
HH4-0023N*	45''-47''	73''	"C"
HH4-0024N*	48''-49''	76''	"C"
HH4-0025N*	50''-51''	79''	"C"
HH4-0026N*	52''-53''	82''	"C"
HH4-0027N*	54''-55''	85''	"C"
HH4-0028N*	56''-57''	88''	"C"
HH4-0029N*	58''-59''	91''	"C"
HH4-0030N*	60''-61''	94''	"C"
HH4-0031N*	62''-63''	97''	"C"
HH4-0032N*	64''-65''	100''	"C"
HH4-0033N*	66''-67''	103''	"C"
HH4-0034N*	68''-69''	106''	"C"
HH4-0035N*	70''-71''	109''	"C"
HH4-0036N*	72''-73''	112''	"C"

(*) Special Engineering Required

Hatch Door Hanger Assemblies

Two Speed Center Parting (Ungeared)

Water Resistant - Type "AW"



All hatch hangers come with top safety retainers

Water resistant hatch hangers are yellow zinc dichromate plated
Minimum header pocket height: 7 1/2" (Standard)
Works with 2/SP spring closer or manual door closer

Part No.	2SP/CP	Track Length	MID* Set
HH22-0019N*	33''-35''	61''	"C"
HH22-0020N*	36''-38''	64''	"C"
HH22-0021N*	39''-41''	67''	"C"
HH22-0022N*	42''-44''	70''	"C"
HH22-0023N*	45''-47''	73''	"C"
HH22-0024N*	48''-49''	76''	"C"
HH22-0025N*	50''-51''	79''	"C"
HH22-0026N*	52''-53''	82''	"C"
HH22-0027N*	54''-55''	85''	"C"
HH22-0028N*	56''-57''	88''	"C"
HH22-0029N*	58''-59''	91''	"C"
HH22-0030N*	60''-61''	94''	"C"
HH22-0031N*	62''-63''	97''	"C"
HH22-0032N*	64''-65''	100''	"C"
HH22-0033N*	66''-67''	103''	"C"
HH22-0034N*	68''-69''	106''	"C"
HH22-0035N*	70''-71''	109''	"C"
HH22-0036N*	72''-73''	112''	"C"

Part No.	2SP/CP	Track Length	MID* Set
HH22-0001N*	33''-35''	61''	"C"
HH22-0002N*	36''-38''	64''	"C"
HH22-0003N*	39''-41''	67''	"C"
HH22-0004N*	42''-44''	70''	"C"
HH22-0005N*	45''-47''	73''	"C"
HH22-0006N*	48''-49''	76''	"C"
HH22-0007N*	50''-51''	79''	"C"
HH22-0008N*	52''-53''	82''	"C"
HH22-0009N*	54''-55''	85''	"C"
HH22-0010N*	56''-57''	88''	"C"
HH22-0011N*	58''-59''	91''	"C"
HH22-0012N*	60''-61''	94''	"C"
HH22-0013N*	62''-63''	97''	"C"
HH22-0014N*	64''-65''	100''	"C"
HH22-0015N*	66''-67''	103''	"C"
HH22-0016N*	68''-69''	106''	"C"
HH22-0017N*	70''-71''	109''	"C"
HH22-0018N*	72''-73''	112''	"C"

(*) Special Engineering Required

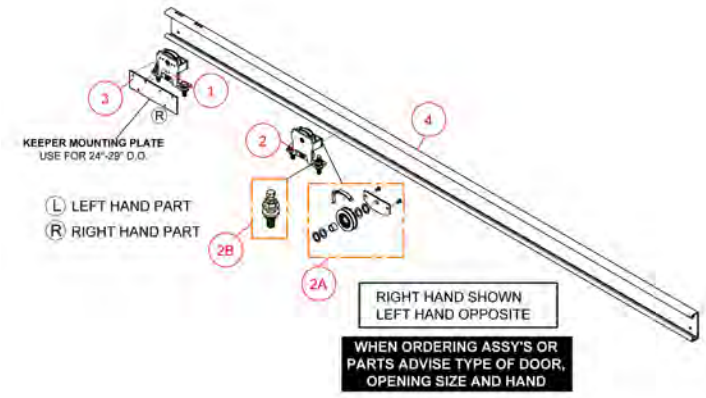
DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Old Style

Single Speed

24"-44" Door Opening

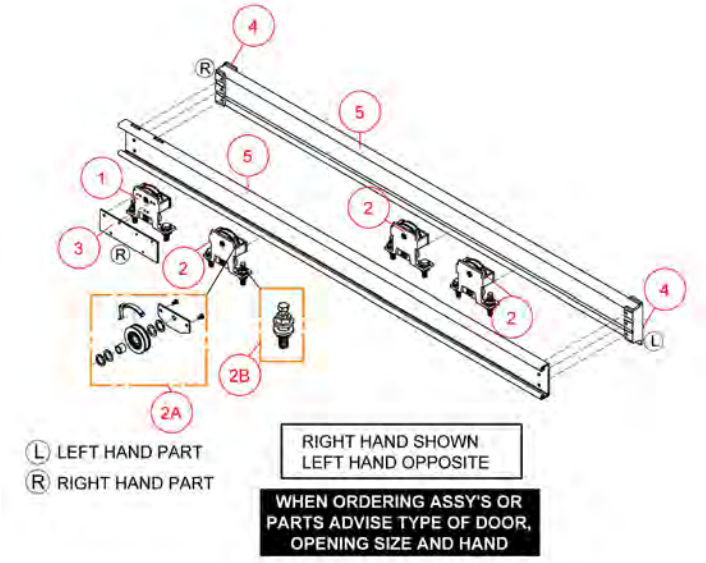


Part No.	Item No	Description
HH10-0035N	1	Sheave, Type "OS" 2 1/4 Roller w/ Top Safety Retainers Arranged For Reel Closer & MO Drillings (**Page#** 223)
HH10-0036N	2	Sheave, Type "OS" 2 1/4 Roller w/ Top Safety Retainers (**Page#** 223)
HH10-0041N	2A	Roller Kit, 2-1/4 Dia Type "OS" (**Page#** 224)
HH10-0045N	2B	Retainer Assembly, Type "OS" Top Safety, 3/8-16 X 1 1/2" Lg Bolt-With 10-32 Screw (**Page#** 225)
INT1H-0132L/R	3	Plate, MO Keeper Mounting "OS" (**Page#** 371-Interlock Section)
HH10-XXXXX	4	Track, Old Style (**Page#** 232)

Mounting hardware included with this hanger assembly (Page# 244-245)

Two Speed

24"-29" Door Opening



Part No.	Item No	Description
HH10-0035N	1	Sheave, Type "OS" 2 1/4 Roller w/ Top Safety Retainers Arranged For Reel Closer & MO Drillings (**Page#** 223)
HH10-0036N	2	Sheave, Type "OS" 2 1/4 Roller w/ Top Safety Retainers (**Page#** 223)
HH10-0041N	2A	Roller Kit, 2-1/4 Dia Type "OS" (**Page#** 224)
HH10-0045N	2B	Retainer Assembly, Type "OS" Top Safety, 3/8-16 X 1 1/2" Lg Bolt-With 10-32 (**Page#** 225)
INT1H-0132L/R	3	Plate, MO Keeper Mounting "OS" (**Page#** 371-Interlock Section)
HH11-0061L/R	4	Bracket, Type "OS" Track End, Ear Cut Off (**Page#** 236)
HH10-XXXXX	5	Track, Old Style (**Page#** 232)

Mounting hardware included with this hanger assembly (Page# 244-245)

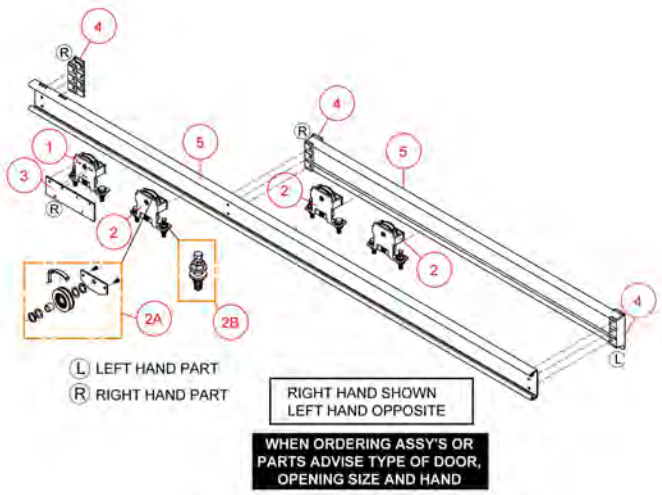
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Hatch Hanger Isometric Drawing

Old Style

Two Speed

30"-48" Door Opening

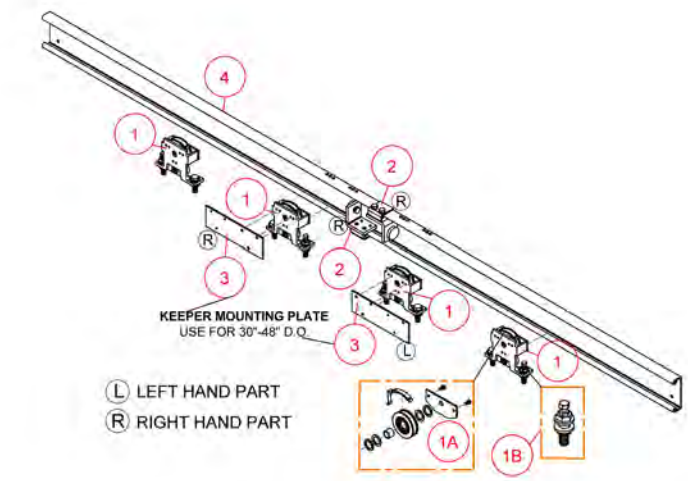


Part No.	Item No	Description
HH10-0035N	1	Sheave, Type "OS" 2 1/4 Roller With Top Safety Retainers Arranged For Reel Closer & MO Drillings (**Page#** 223)
HH10-0036N	2	Sheave, Type "OS" 2 1/4 Roller With Top Safety Retainers (**Page#** 223)
HH10-0041N	2A	Roller Kit, 2-1/4 Dia Type "OS" (**Page#** 224)
HH10-0045N	2B	Retainer Assembly, Type "OS" Top Safety, 3/8-16 X 1 1/2" Lg Bolt-With 10-32 Screw (**Page#** 225)
INT1H-0132L/R	3	Plate, MO Keeper Mounting "OS" (**Page#** 371-Interlock Section)
HH11-0061L/R	4	Bracket, Type "OS" Track End, Ear Cut Off (**Page#** 236)
HH10-XXXXX	5	Track, Old Style (**Page#** 232)

Mounting hardware included with this hanger assembly (Page# 244-245)

Center Parting

30"-59" Door Opening



Part No.	Item No	Description
HH10-0035N	1	Sheave, Type "OS" 2 1/4 Roller With Top Safety Retainers Arranged For Reel Closer & MO Drillings (**Page#** 223)
HH10-0041N	1A	Roller Kit, 2-1/4 Dia Type "OS" (**Page#** 224)
HH10-0045N	1B	Retainer Assembly, Type "OS" Top Safety, 3/8-16 X 1 1/2" Lg Bolt-With 10-32 Screw (**Page#** 225)
HH12-0094L/R	2	Bumper, Type "OS" CP Stop (**Page#** 236)
INT1H-0132L/R	3	Plate, MO Keeper Mounting "OS" (**Page#** 371-Interlock Section)
HH10-XXXXX	4	Track, Old Style (**Page#** 232)

Mounting hardware included with this hanger assembly (Page# 244-245)

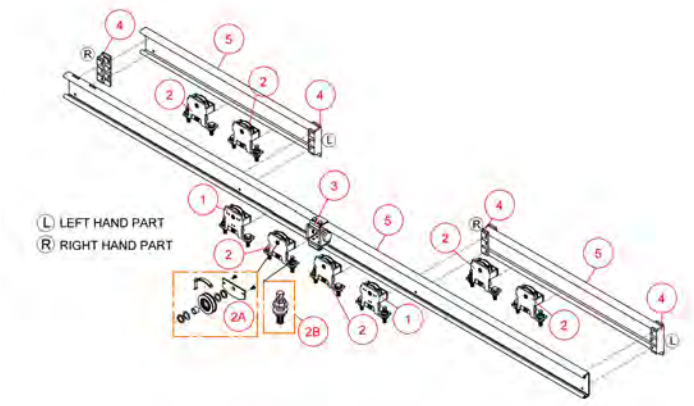
DOOR EQUIPMENT

Hatch Hanger Isometric Drawing

Old Style

Two Speed Center Parting (Ungeared)

30"-109" Door Opening

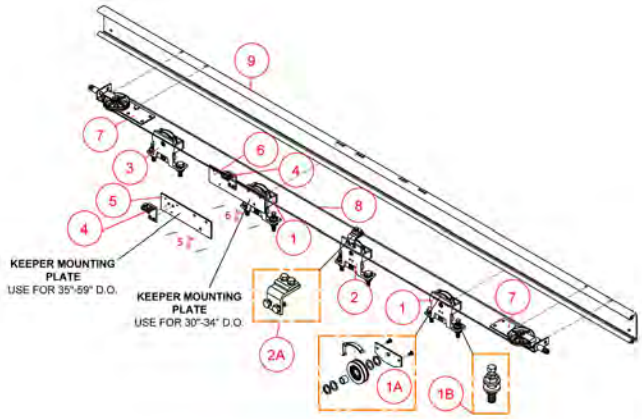


Part No.	Item No	Description
HH10-0035N	1	Sheave, Type "OS" 2 1/4 Roller With Top Safety Retainers Arranged For Reel Closer & MO Drillings (**Page#** 223)
HH10-0036N	2	Sheave, Type "OS" 2 1/4 Roller With Top Safety Retainers (**Page#** 223)
HH10-0041N	2A	Roller Kit, 2-1/4 Dia Type "OS" (**Page#** 224)
HH10-0045N	2B	Retainer Assembly, Type "OS" Top Safety, 3/8-16 X 1 1/2" Lg Bolt-With 10-32 Screw (**Page#** 225)
HH12-0094L/R	3	Bumper, Type "OS" CP Stop (**Page#** 236)
HH11-0061L/R	4	Bracket, Type "OS" Track End, Ear Cut Off (**Page#** 236)
HH10-XXXXX	5	Track, Old Style (**Page#** 232)

Mounting hardware included with this hanger assembly (Page# 244-245)

Center Parting (Geared)

30"-59" Door Opening



Part No.	Item No	Description
HH10-0035N	1	Sheave, Type "OS" 2 1/4 Roller With Top Safety Retainers Arranged For Reel Closer & MO Drillings (**Page#** 223)
HH10-0041N	1A	Roller Kit, 2-1/4 Dia Type "OS" (**Page#** 224)
HH10-0045N	1B	Retainer Assembly, Type "OS" Top Safety, 3/8-16 X 1 1/2" Lg Bolt-With 10-32 Screw (**Page#** 225)
HH12-0091N	2	Sheave, "OS" 2 1/4" Roller Geared Hanger With Top Safety Retainers (**Page#** 223)
HH12-0093N	2A	Clamp, Type "OS" Sheave Cable Assembly (**Page#** 213)
HH10-0036N	3	Sheave, Type "OS" 2 1/4 Roller With Top Safety Retainers (**Page#** 223)

Part No.	Item No	Description
HH12-0092N	4	Clamp, Type "OS" Gearing Cable Assembly (**Page#** 213)
INT2H-0030N	5	Plate, MO Keeper Mounting "OS", 8 3/16" X 2 1/2" X #11 Gauge C/P Hatch - 35-59 D.O. (**Page#** 371-Interlock Section)
INT2H-0029N	6	Plate, MO Keeper Mounting "OS" , 9 3/16" X 2 1/2" X #11 Gauge C/P Hatch - 30-34 D.O. (**Page#** 371-Interlock Section)
HH3-0042L/R	7	Pulley Assembly, CP Nylon Tension (Replacement) (**Page#** 211)
HH3-XXXXX	8	Gearing Cable (**Page#** 212)
HH10-XXXXX	9	Track, Old Style (**Page#** 232)

Mounting hardware included with this hanger assembly (Page# 244-245)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Hatch Door Hanger Assemblies

Type: 2 1/4" Old Style Hangers

2 ¼" Old Style Hatch Door Hangers

Important notes:

- When ordering *Old Style Hatch Hangers*, a field survey is required. G.A.L. must be advised of the existing header pocket above door, door opening width, if spring or reel closers are used or needed.
- All *Old Style Hatch Hangers* include, top safety retainers, mechanical interconnecting devices, keeper mounting plates when required, and mounting hardware.
- *Old Style Hatch Hangers* have 3 ¼" high tracks and sheave assembly with 2 ¼" Dia. Rollers. Standard sheave assemblies have 4 1/8" C.L., 3/8" - 16 x 1 ½" Lg. or 3/8" - 16 x 2" Lg. pendent bolts. 4" and 4 ¼" C.L. sheaves with ½" - 13 x 1 ½" Lg. or ½" - 13 x 2" Lg. pendent bolts can be supplied for an additional charge.

- **Single Speed Doors (SS), (S/SP), (S/SL)**
  Depending on field survey indicating header height, hatch hangers will be supplied with various arrangements. Interlocks mounted on top or bottom of track may have to be pre-mounted before installing track, and top of door may have to be recessed. Pendent bolts could be: 3/8" - 16 x 1 ½" or 2" Lg.; or ½"-13 x 1 ½" or 2" Lg.

- **Two Speed Doors (2SP), (2/SP), (2S)**
  The same situation that applied to single speed doors also applies to 2/SP doors. In addition on Two Speed hatch hangers, end bracket ears may be cut off. Our Engineering Department will determine this from your field survey. Interlocks are only top mounted.

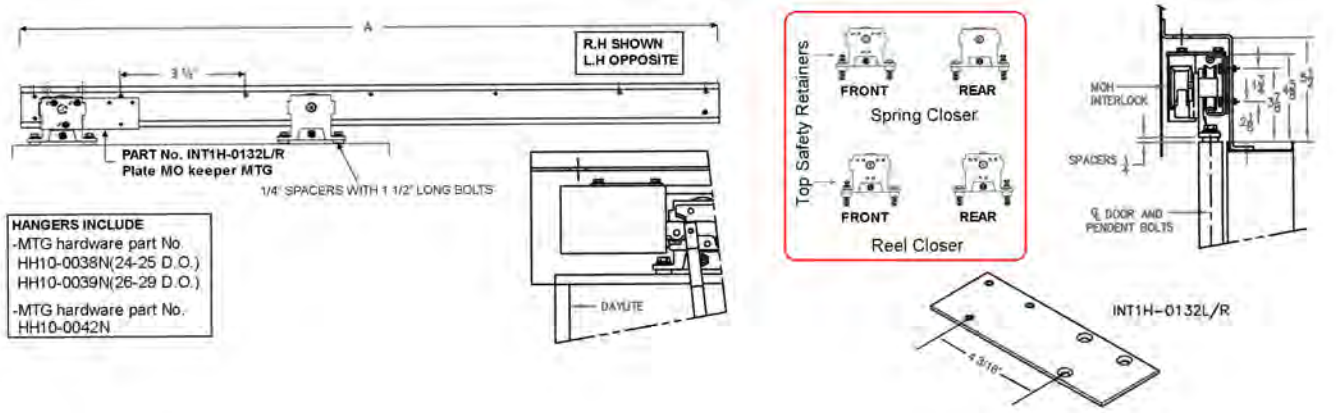
- *Ungeared 2/SP hatch hangers* supplied with mechanical interconnecting devices must use 2/SP spring closer linkage.

- **Center Parting Doors (CP), (C/P), (Center Opening)**
  The same situation that applied to single speed doors also applies to C/P doors.
  Two speed center parting and three speed doors: Contact G.A.L Engineering or Sales.

- *Geared C/P hatch hangers* may have "MOCP' interlock with (1) reel closer or spring closer arrangement.
- *Ungeared C/P hatch hangers* may have (2) "MOH" interlocks and (2) reel closer or spring closer arrangements.

Single Speed - Interlock Top Mounted

24"-29" Door Opening



Used with Spring Closer	Used with Reel Closer	S/S	Track Length
HH10-0001L/R*	HH10-0004L/R*	24''-25''	49''
HH10-0002L/R*	HH10-0005L/R*	26''-27''	53''
HH10-0003L/R*	HH10-0006L/R*	28''-29''	57''

(*) Special Engineering Required

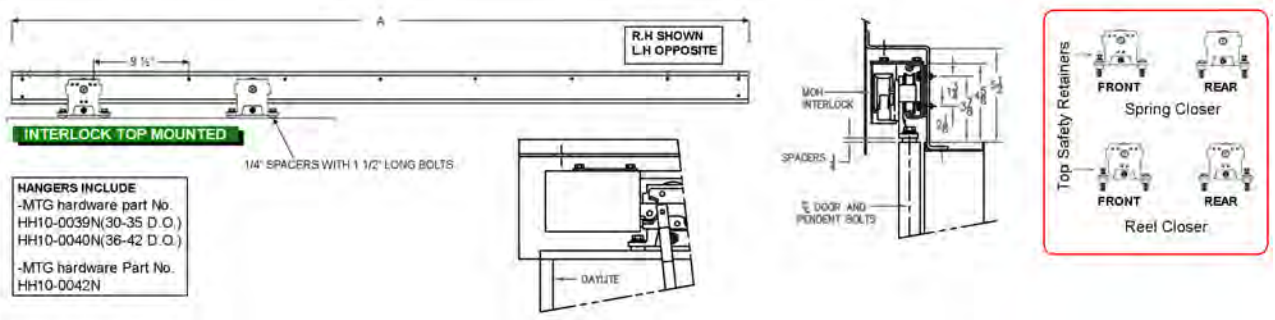
DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Type: 2 1/4" Old Style Hangers

Single Speed - 5 1/2" Min. Header Pocket

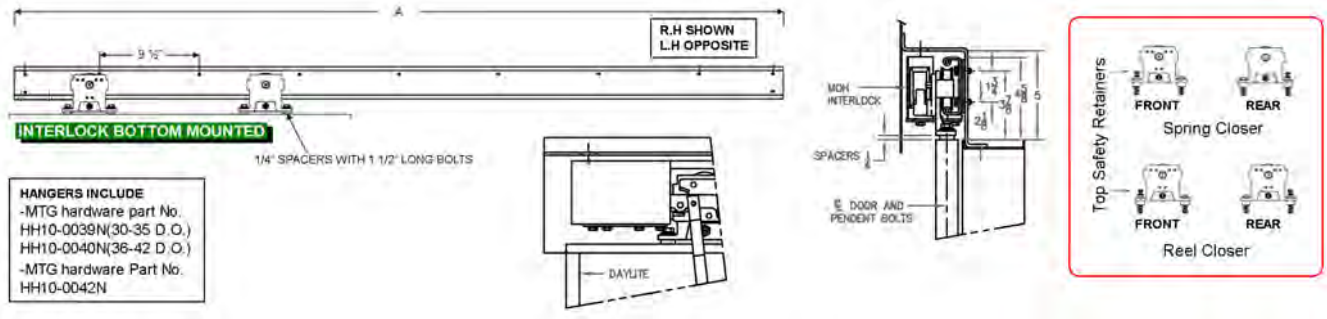
30"-42" Door Opening (Interlock Top Mounted)



Used with Spring Closer	Used with Reel Closer	S/S	Track Length
HH10-0007L/R*	HH10-0014L/R*	30''-31''	61''
HH10-0008L/R*	HH10-0015L/R*	32''-33''	65''
HH10-0009L/R*	HH10-0016L/R*	34''-35''	69''
HH10-0010L/R*	HH10-0017L/R*	36''-37''	73''
HH10-0011L/R*	HH10-0018L/R*	38''-39''	77''
HH10-0012L/R*	HH10-0019L/R*	40''-41''	81''
HH10-0013L/R*	HH10-0020L/R*	42''	85''

Single Speed - 5" Min. Header Pocket

30"-42" Door Opening (Interlock Bottom Mounted)



Used with Spring Closer	Used with Reel Closer	S/S	Track Length
HH10-0021L/R*	HH10-0028L/R*	30''-31''	61''
HH10-0022L/R*	HH10-0029L/R*	32''-33''	65''
HH10-0023L/R*	HH10-0030L/R*	34''-35''	69''
HH10-0024L/R*	HH10-0031L/R*	36''-37''	73''
HH10-0025L/R*	HH10-0032L/R*	38''-39''	77''
HH10-0026L/R*	HH10-0033L/R*	40''-41''	81''
HH10-0027L/R*	HH10-0034L/R*	42''	85''

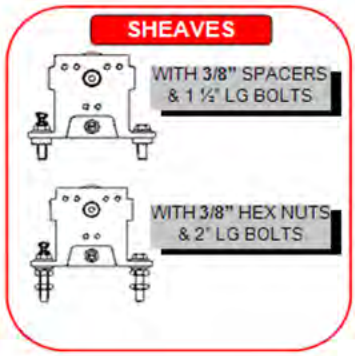
(*) Special Engineering Required

DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Type: 2 1/4" Old Style Hangers

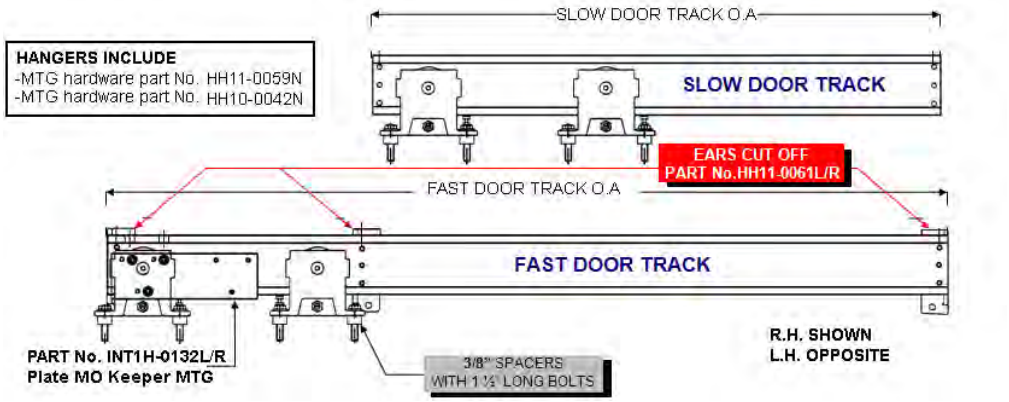
Two Speed -5 1/2" - 5 15/16" Header Pocket



Note:

- Sheaves are supplied with standard 4 1/8" C.L. pendent bolt 3/8"-16. (Also available with ½"-13 bolts: EXTRA charge)
- 1 ½" LG. pendent bolts are supplied for 5 ½"-5 15/16" header pocket.
- 2" LG. pendent bolts are supplied for 6" header pocket and above.
- 2/SP hatch hangers supplied with mechanical interconnecting devices must use spring closer linkage.

30"-48" Door Opening



All hatch hangers come with top safety retainers

M.I.D. Set: Mechanical Interconnecting Device Set

Part No.	2/SP	Fast Track	Slow Track	M.I.D. Set
HH11-0001L/R*	30''	46"	31 1/4"	"C"
HH11-0002L/R*	31''	47 1/2"	32 1/4"	"C"
HH11-0003L/R*	32''	49"	33 1/4"	"C"
HH11-0004L/R*	33''	50 1/2"	34 1/4"	"C"
HH11-0005L/R*	34''	52"	35 1/4"	"B"
HH11-0006L/R*	35''	53 1/2"	36 1/4"	"B"
HH11-0007L/R*	36''	55"	37 1/4"	"B"
HH11-0008L/R*	37''	56 1/2"	38 1/4"	"B"
HH11-0009L/R*	38''	58"	39 1/4"	"B"
HH11-0010L/R*	39''	59 1/2"	40 1/4"	"B"
HH11-0011L/R*	40''	61"	41 1/4"	"B"
HH11-0012L/R*	41''	62 1/2"	42 1/4"	"B"
HH11-0013L/R*	42''	64"	43 1/4"	"B"
HH11-0014L/R*	43''	65 1/2"	44 1/4"	"B"
HH11-0015L/R*	44''	67"	45 1/4"	"B"
HH11-0016L/R*	45''	68 1/2"	46 1/4"	"B"
HH11-0017L/R*	46''	70"	47 1/4"	"B"
HH11-0018L/R*	47''	71 1/2"	48 1/4"	"B"
HH11-0019L/R*	48''	73"	49 1/4"	"B"

(*) Special Engineering Required

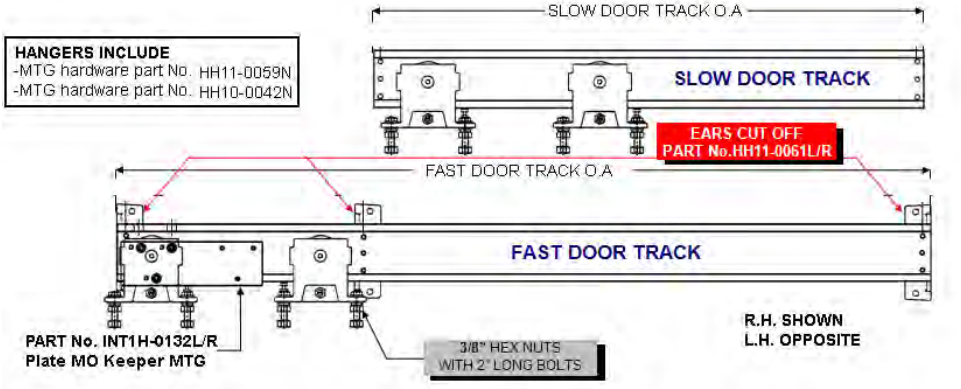
DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Type: 2 1/4" Old Style Hangers

Two Speed - 6" - 6 13/16" Header Pocket

30"-48" Door Opening



All hatch hangers come with top safety retainers

M.I.D. Set: Mechanical Interconnecting Device Set

Part No.	2/SP	Fast Track	Slow Track	M.I.D. Set
HH11-0020L/R*	30''	46"	31 1/4"	"C"
HH11-0021L/R*	31''	47 1/2"	32 1/4"	"C"
HH11-0022L/R*	32''	49"	33 1/4"	"C"
HH11-0023L/R*	33''	50 1/2"	34 1/4"	"C"
HH11-0024L/R*	34''	52"	35 1/4"	"B"
HH11-0025L/R*	35''	53 1/2"	36 1/4"	"B"
HH11-0026L/R*	36''	55"	37 1/4"	"B"
HH11-0027L/R*	37''	56 1/2"	38 1/4"	"B"
HH11-0028L/R*	38''	58"	39 1/4"	"B"
HH11-0029L/R*	39''	59 1/2"	40 1/4"	"B"
HH11-0030L/R*	40''	61"	41 1/4"	"B"
HH11-0031L/R*	41''	62 1/2"	42 1/4"	"B"
HH11-0032L/R*	42''	64"	43 1/4"	"B"
HH11-0033L/R*	43''	65 1/2"	44 1/4"	"B"
HH11-0034L/R*	44''	67"	45 1/4"	"B"
HH11-0035L/R*	45''	68 1/2"	46 1/4"	"B"
HH11-0036L/R*	46''	70"	40 1/4"	"B"
HH11-0037L/R*	47''	71 1/2"	48 1/4"	"B"
HH11-0038L/R*	48''	73"	49 1/4"	"B"

(*) Special Engineering Required

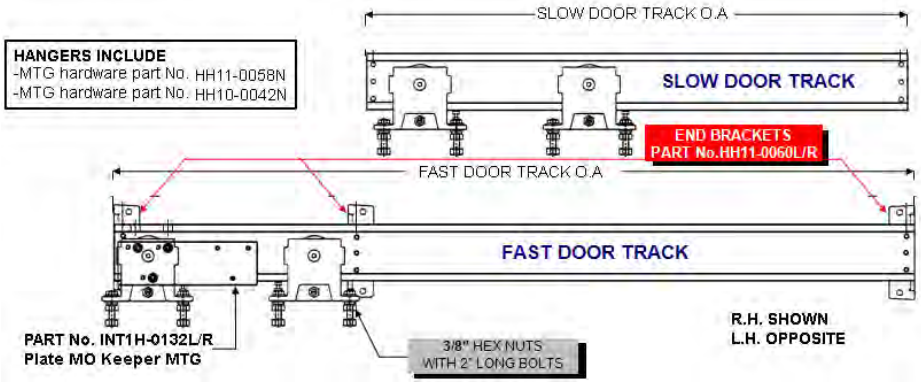
DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Type: 2 1/4" Old Style Hangers

Two Speed (6 7/8" & UP Header Pocket)

30"-48" Door Opening



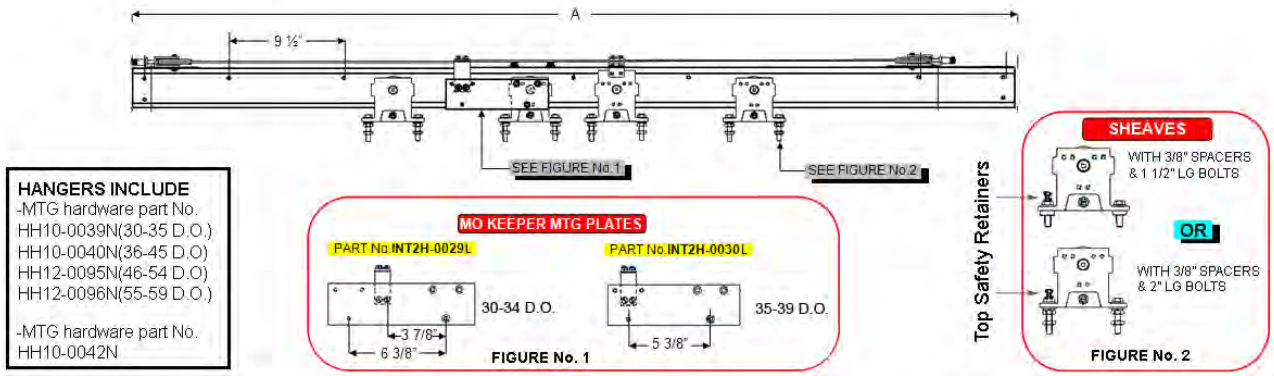
All hatch hangers come with top safety retainers

M.I.D. Set: Mechanical Interconnecting Device Set

Part No.	2/SP	Fast Track	Slow Track	M.I.D. Set
HH11-0039L/R*	30''	46''	31 1/4"	"C"
HH11-0051L/R*	42''	64''	43 1/4"	"B"
HH11-0057L/R*	48''	73''	49 1/4"	"B"

Center Parting (Geared)

30"-59" Door Opening



4 7/8" - 6 15/16" Header With 1 1/2" LG Bolts	7" and UP Header With 2" LG Bolts	C/P	Track Length
HH12-0001N*	HH12-0031N*	30''	61''
HH12-0002N*	HH12-0032N*	31''	63''
HH12-0003N*	HH12-0033N*	32''	65''
HH12-0004N*	HH12-0034N*	33''	67''
HH12-0005N*	HH12-0035N*	34''	69''
HH12-0006N*	HH12-0036N*	35''	71''
HH12-0007N*	HH12-0037N*	36''	73''
HH12-0008N*	HH12-0038N*	37''	75''
HH12-0009N*	HH12-0039N*	38''	77''
HH12-0010N*	HH12-0040N*	39''	79''
HH12-0011N*	HH12-0041N*	40''	81''
HH12-0012N*	HH12-0042N*	41''	83''
HH12-0013N*	HH12-0043N*	42''	85''

(*) Special Engineering Required

DOOR EQUIPMENT

Hatch Door Hanger Assemblies

Type: 2 1/4" Old Style Hangers

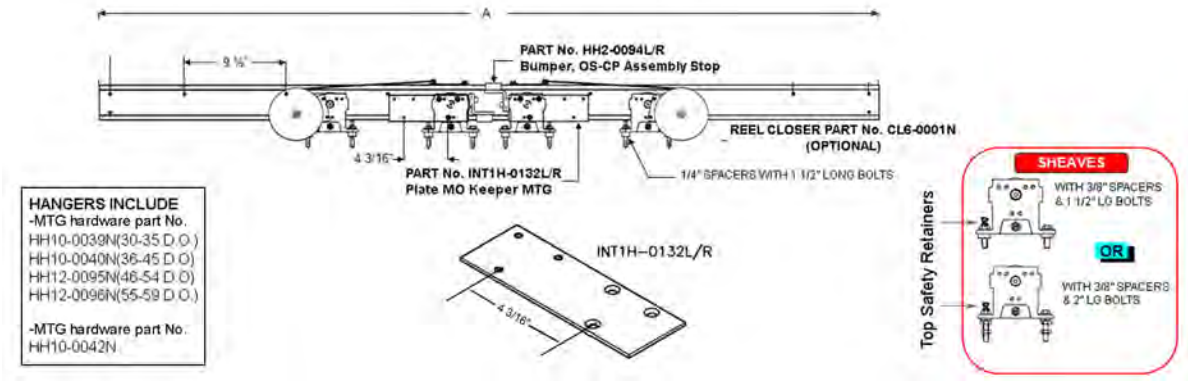
Center Parting (Geared)

30"-59" Door Opening

4 7/8" - 6 15/16" Header With 1 1/2" LG Bolts	7" and UP Header With 2" LG Bolts	C/P	Track Length
HH12-0014N*	HH12-0044N*	43''	87''
HH12-0015N*	HH12-0045N*	44''	89''
HH12-0016N*	HH12-0046N*	45''	91''
HH12-0017N*	HH12-0047N*	46''	93''
HH12-0018N*	HH12-0048N*	47''	95''
HH12-0019N*	HH12-0049N*	48''	97''
HH12-0020N*	HH12-0050N*	49''	99''
HH12-0021N*	HH12-0051N*	50''	101''
HH12-0022N*	HH12-0052N*	51''	103''
HH12-0023N*	HH12-0053N*	52''	105''
HH12-0024N*	HH12-0054N*	53''	107''
HH12-0025N*	HH12-0055N*	54''	109''
HH12-0026N*	HH12-0056N*	55''	111''
HH12-0027N*	HH12-0057N*	56''	113''
HH12-0028N*	HH12-0058N*	57''	115''
HH12-0029N*	HH12-0059N*	58''	117''
HH12-0030N*	HH12-0060N*	59''	119''

Center Parting (Ungeared) - Header Height: 4 1/8" & UP

30"-59" Door Opening



Part No.	C/P	Track Length
HH12-0061N*	30''	61''
HH12-0062N*	31''	63''
HH12-0063N*	32''	65''
HH12-0064N*	33''	67''
HH12-0065N*	34''	69''
HH12-0066N*	35''	71''
HH12-0067N*	36''	73''
HH12-0068N*	37''	75''
HH12-0069N*	38''	77''
HH12-0070N*	39''	79''
HH12-0071N*	40''	81''
HH12-0072N*	41''	83''
HH12-0073N*	42''	85''
HH12-0074N*	43''	87''
HH12-0075N*	44''	89''

Part No.	C/P	Track Length
HH12-0076N*	45''	91''
HH12-0077N*	46''	93''
HH12-0078N*	47''	95''
HH12-0079N*	48''	97''
HH12-0080N*	49''	99''
HH12-0081N*	50''	101''
HH12-0082N*	51''	103''
HH12-0083N*	52''	105''
HH12-0084N*	53''	107''
HH12-0085N*	54''	109''
HH12-0086N*	55''	111''
HH12-0087N*	56''	113''
HH12-0088N*	57''	115''
HH12-0089N*	58''	117''
HH12-0090N*	59''	119''

(*) Special Engineering Required

Westinghouse & Otis Retro Fit Equipment

Hatch Door Hanger Assemblies

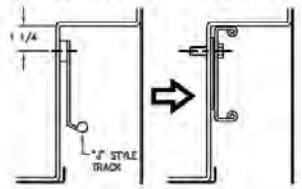
Westinghouse & Otis Hatch Hanger Replacement

Due to the complexity of Westinghouse and Otis elevator installations, it is necessary to contact G.A.L. Engineering or Estimating Departments for specific information and quotes.

The following chart, along with a field survey from you, can be used to give G.A.L. Engineers or Estimators some basic information in determining the correct equipment and pricing that you need.

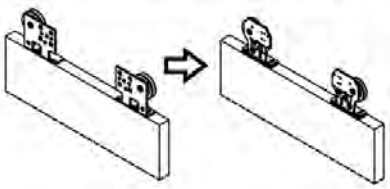
All hatch hangers in this series have galvanized tracks, and come with top safety retainers and mechanical interconnecting devices (M.I.D. sets), on 2S/P doors.

① WESTINGHOUSE STANDARD TRACK



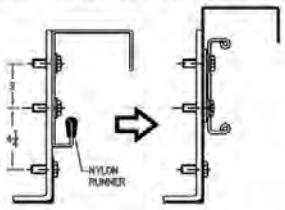
-REMOVE EXISTING "J" STYLE TRACK
-REUSE HEADER, DUST COVER AND OLD TRACK MOUNTING DRILLINGS

WESTINGHOUSE STANDARD DOORS



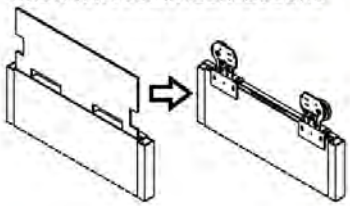
(EITHER 2-1/2 OR 3-3/4 INCH CENTERLINES)
-ADAPTOR BARS OR 3-3/4 SHEAVES PROVIDED BY G.A.L.

② WESTINGHOUSE INTEGRAL TRACK



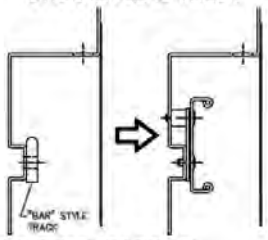
-REMOVE EXISTING TRACK AND DUST COVER
-NEW FASCIA / DUST COVER SUPPORT BY G.A.L.
-REUSE OLD TRACK MOUNTING DRILLINGS

WESTINGHOUSE INTEGRAL DOORS



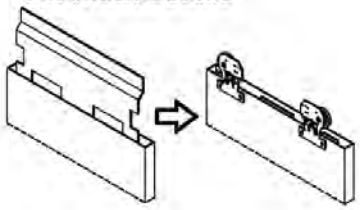
-EXISTING DOOR MUST BE CUT
-SHEAVE MOUNTING BRACKETS BY G.A.L.

③ OTIS STANDARD TRACK



-REMOVE OTIS "BAR" STYLE TRACK
-REUSE EXISTING HEADER AND DUST COVER
-HEADER MUST BE REDRILLED FOR G.A.L. EQUIPMENT

OTIS INTEGRAL DOORS



-EXISTING DOOR MUST BE CUT
-DRILL AND TAP SIDE OF DOORS TO MOUNT FLAT SHEAVES OF G.A.L.

SELECTING YOUR REPLACEMENT PACKAGE:

TYPE OF DOOR	TYPE OF TRACK: WESTINGHOUSE STANDARD	WESTINGHOUSE INTEGRAL	OTIS STANDARD
WESTINGHOUSE STANDARD 2-1/2 SHEAVES	WESTINGHOUSE TYPE "IV"	WESTINGHOUSE TYPE "V"	n/a
WESTINGHOUSE STANDARD 3-3/4 SHEAVES	WESTINGHOUSE TYPE "II"	n/a	n/a
WESTINGHOUSE INTEGRAL	n/a	WESTINGHOUSE TYPE "III"	n/a
OTIS INTEGRAL	n/a	n/a	OTIS TYPE "I"

④ OTIS INTEGRAL TRACK



-G.A.L. OFFER NO REPLACEMENT PKG.
-NEW HEADER REQ'D

(*) Special Engineering Required

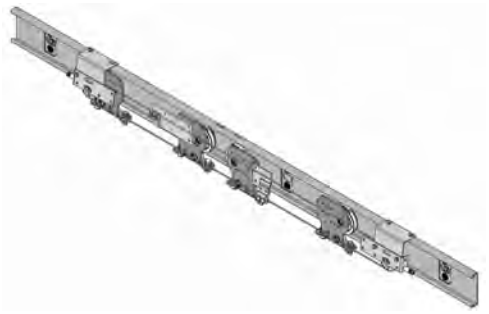
DOOR EQUIPMENT

Westinghouse & Otis Retro Fit Equipment

Hatch Door Hanger Assemblies

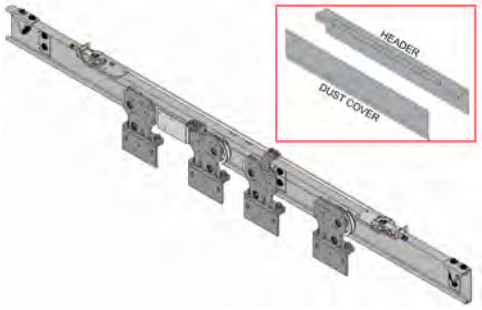
Center Parting (Geared)

HH17-0003N*



Type: Westinghouse II
Hanger Assembly, A-C/P Westinghouse II Hatch

HH17-0004N*



Type: Westinghouse III
Hanger Assembly, A-C/P Westinghouse III Hatch, With Dust Cover* With Header & Brackets*

HH17-0005N*



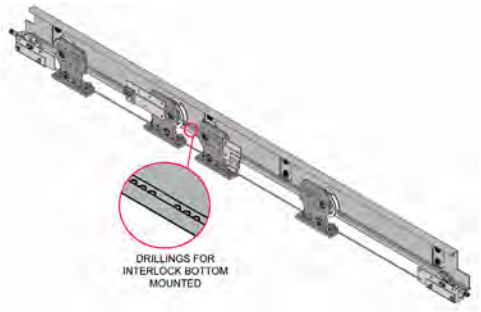
Type: Westinghouse III-LOW
Hanger Assembly, A-C/P Westinghouse III Hatch, With Dust Cover* With Header-LOW Pocket*

HH17-0050N*



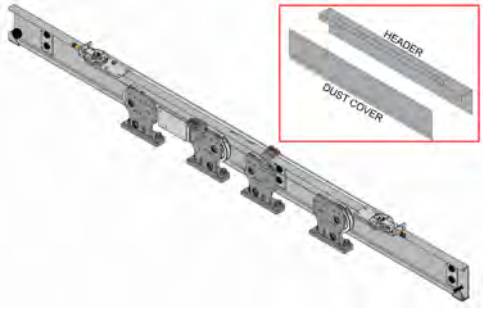
Type: Westinghouse III-NEW DOORS
Hanger Assembly, A-C/P Westinghouse III Hatch, With Dust Cover* With Header* Use For New Doors 30''-59'' D.O.

HH17-0008N*



Type: Westinghouse IV
Hanger Assembly, A-C/P Westinghouse IV Hatch, With Countersunk Adaptor Bars

HH17-0009N*



Type: Westinghouse V
Hanger, A-CP Westinghouse V Hatch*, With Adaptor Bars* With Dust Cover* With Header*

(*) Special Engineering Required

DOOR EQUIPMENT

Westinghouse & Otis Retro Fit Equipment

Hatch Door Hanger Parts

Sheaves

HH17-0018L/R



Sheave, 4-1/8" CL 3/8-16 Bolts Flat, For Westinghouse III-LOW &Otis I Integral

HH17-0031L/R



Sheave, 4-1/8" CL 3/8-16 Bolts Flat, For Westinghouse III-LOW &Otis I Integral

HH17-0046L/R



Sheave, C/P 4-1/8" CL Westinghouse IV & V, With Sheave Mounting Bar & Spacer

Gearing Cable Assembly Parts

HH17-0013N



Plate & Clamp, Gearing Kit Mounting, Westinghouse II & III

HH17-0038N



Plate & Clamp, C/P Hatch Gearing Kit, With Lower & Upper Gearing Cable Clamp. Use With Westinghouse IV

HH17-0043N



Plate & Clamp, C/P Mounting Hatch Gearing Kit, With Lower & Upper Gearing Cable Clamp. Use With Westinghouse III & IV

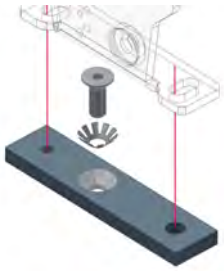
HH17-0049L/R



Pulley Assembly, C/P WECO III/IV Steel Tension

Adaptor Bar & Bracket

HH17-0041N



Bar, Westinghouse I-IV Sheave Adaptor Kit, With Countersink For 3/8-16 Flat Head Screw

HH17-0014N



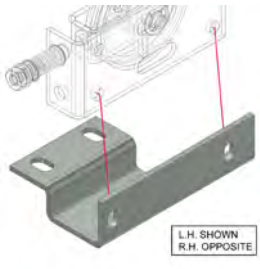
Bracket, Standard Westinghouse III Sheave Mounting,
5 1/4" x 3 7/8" x 1 3/16",
1 3/4" C.L. Bottom To Slots

HH17-0063N



Bracket, Special Westinghouse III Sheave Mounting,
5 1/4" x 3 7/8" x 1 3/16",
1" C.L. Bottom To Slots

HH17-0045L/R



Bracket, Gearing Cable Mounting, Westinghouse Type " IV" Replacement

(*) Special Engineering Required

DOOR EQUIPMENT

Westinghouse & Otis Retro Fit Equipment

Hatch Door Hanger Parts

Hatch Header & Dust Cover

HH17-0056N*



Header, C/P 36"-54" D.O. Westinghouse Type III & V

HH17-0064L/R*



Header, S/S 24"-48" D.O. Westinghouse Type III

HH17-0061N*



Dust Cover, Westinghouse Type III & V

CDH17-0005N



Plate, Westinghouse IV C/P-2SP/ CP Arm Support, Replacement 1/2" Offset Header

Tracks



Part No.	Description
HH17-0062N*	Track, CP Westinghouse Type IV

Hardware

HH17-0010N



Hardware, C/P Westinghouse III Sheave Mounting New Doors, A=6 1/16"; B=2 13/16" Mounting - C/P - 4 1/8 CL

HH17-0024N



Hardware, S/S-C/P Westinghouse III Track/Header/Dust Cover Mounting

HH17-0026N



Hardware, S/S Westinghouse III Sheave Mounting

HH17-0030N



Hardware, C/P Westinghouse III-LOW Track Mounting

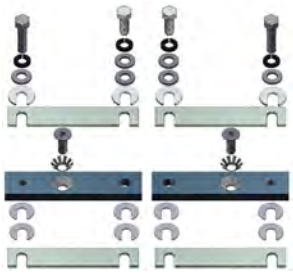
(*) Special Engineering Required

Westinghouse & Otis Retro Fit Equipment

Hatch Door Hanger Parts

Hardware

HH17-0039N



Hardware, Westinghouse IV Sheave Mounting, for 2-1/2 CL

HH17-0057N



Hardware, Westinghouse III-New Door Mounting

HH17-0058N



Plate, Clamp Base, Westinghouse IV

HH17-0059N



Angle Support Bracket, Westinghouse IV

Car Door Hanger Assemblies and Parts

CDH17-0001N*



Hanger Assembly, A-C/P 30”-59” D.O. Car Ungeared Use With Flat Header

HH17-0018L/R



Sheave, 4-1/8” CL 3/8-16 Bolts Flat, For Westinghouse III-LOW & Otis I Integral

HH17-0031L/R



Sheave, 4-1/8” CL 3/8-16 Bolts Flat, For Westinghouse III-LOW & Otis I Integral

HH17-0027N



Hardware, S/S & C/P Westinghouse IV Sheave Mounting

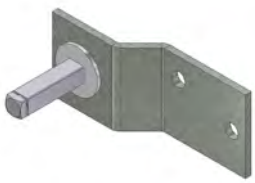
Reel Closer Assemblies and Parts

CL6-0009N



Closer Assembly, Reel, Westinghouse IV With Special Offset Bracket Mounting

CL6-0012N



Bracket, Westinghouse IV & V Reel Closer

(*) Special Engineering Required

DOOR EQUIPMENT

Westinghouse & Otis Retro Fit Equipment

Door Drive Arm Support Bracket

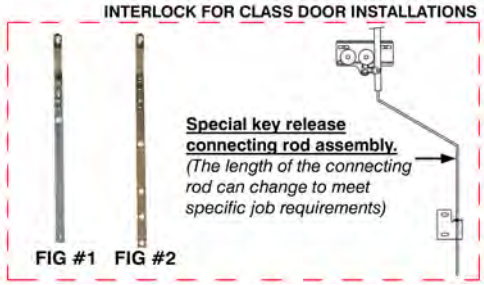


Part No.	Description
CDH17-0004N*	Bracket, Westinghouse IV C/P Arm Support, Replacement 1/2" Offset Header

Interlock Assemblies

Conventional





Part No.	Description
INT2H-0197N*	Interlock, Westinghouse IV MOCPH-SEF, Side Mounted Electrical Fitting, Bottom Mounted
INT2H-0039N*	Interlock, C/P 40"-49" D.O., MOCPH B LK Westinghouse I-II, & III-LOW
INT2H-0043N*	Interlock, Westinghouse IV MOCPH, Bottom Mounted
INT2H-0038N*	Interlock, C/P 30"-39" D.O., MOCPH A LK Westinghouse I-II

N Interlock

Conventional



Existing Westinghouse Lock

With special WECO keeper, shaft pointing to side wall. Use M/N key

Part No.	Description
INT22-0008L/R	Interlock, "N" Swing Door, Existing Westinghouse SW-1 Lock Cutouts, With 4 1/2" CL Roller Arm & Special WECO Keeper, Shaft Pointing To Side Wall

NHA Interlock

Vandal Resistant



Part No.	Description
INT22-0033L/R	Interlock, NHA Westinghouse Swing Door, With 4 1/2 CL Roller Arm, St. St'L. Shafts & Surface Keeper For Existing Westinghouse SW-1 Lock Cutouts, Shaft Pointing To Side Wall

(*) Special Engineering Required

Westinghouse & Otis Retro Fit Equipment

Interlock Parts

Switch Assemblies & Keeper

INT2H-0051N



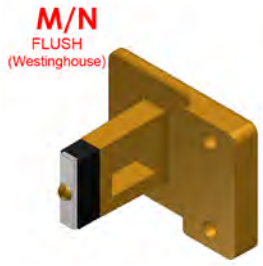
Switch, MOCP Interlock Westinghouse IV & V, Spanner Head Screw
Where Used: MOCPH

INT22-0013L/R



Switch Assembly, "N" Interlock Swing Door, Existing Westinghouse SW-1 Lock Cutouts
Where Used: N

INT4-0005N



Keeper, M/N Interlock Westinghouse Swing, For Existing Westinghouse
Where Used: M, N

Switch Mounting Adaptor - Angles/Brackets/Plates

INT1H-0075L/R



Angle, MO Interlock S/S, Existing Westinghouse
Where Used: MOH

INT1H-0133N



Angle, MOH Interlock S/S, Existing Westinghouse
Where Used: MOH

INT2H-0199N



Angle, Westinghouse III MOCP Interlock Mounting
Where Used: MOCPH

INT2H-0206N



Angle, Westinghouse III MOCP Interlock Mounting
Where Used: MOCPH

INT1H-0074L/R



Bracket, MO Interlock 2/SP, Existing Westinghouse
Where Used: MOH

INT1H-0134N



Bracket, MOH Interlock 2/SP, Existing Westinghouse 5 1/4" x 3 3/4" x 11 Ga. (Flat)
Where Used: MOH

INT1H-0356L/R



Bracket, MO Interlock 2/SP, Existing Westinghouse Bottom Mounted Lock
Where Used: MOH (bottom mounted)

INT2H-0037N



Plate, MOCPH Interlock Westinghouse I-II Mounting
Where Used: MOCPH

(*) Special Engineering Required

DOOR EQUIPMENT

Westinghouse & Otis Retro Fit Equipment

Interlock Parts

Switch Mounting Adaptor - Angles/Brackets/Plates

INT2H-0200N



Plate, MOCP Interlock Westinghouse Mounting
Where Used: MOCPH

INT2H-0203N



Plate, MOCP Interlock Westinghouse Integral Mounting
Where Used: MOCPH

Keeper Mounting Brackets/Plates

INT1H-0076N



Bracket, MO Keeper Mounting S/S-2/SP, Existing Westinghouse 6” x 3 1/4” x #11 Gauge
Where Used: MOH

INT2H-0052N



Bracket, MOCP/MOH Keeper Mounting, Existing Westinghouse & Otis 8 5/32” x 3 1/4” x #10 Gauge
Where Used: MOCPH

INT2H-0048N



Plate, MO Keeper And Clamp Mounting, Westinghouse Type “IV” Replacement
Where Used: MOCPH

INT2H-0049N



Plate, MO Keeper And Clamp Mounting, Westinghouse Type “II” Replacement With 3 3/4” CL Of Sheaves
Where Used: MOCPH

INT2H-0050N



Plate MO Keeper And Clamp Mounting, Westinghouse Type “III-LOW” Replacement With 4 1/8” CL Of Sheaves
Where Used: MOCPH

INT2H-0198L/R



Plate, MOH/MOCP Keeper Mounting - 5/8 Offset, Use For Existing Westinghouse Or OTIS C/P Geared Hangers (3 1/4” x 10 3/4”)
Where Used: MOCPH, MOH

(*) Special Engineering Required

Westinghouse & Otis Retro Fit Equipment

Interlock Parts

Hardware

INT22-0025N



Hardware, “N” Interlock Mounting Westinghouse
Where Used: N

INT2H-0036N



Hardware, MOCPH Interlock Westinghouse I-II-IV
Where Used: MOCPH

HDW-0274N

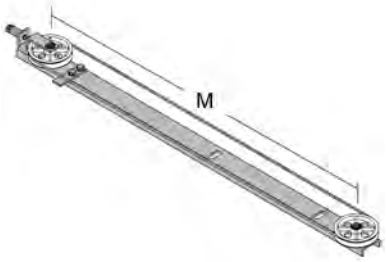


Spacer, MOCP Interlock Westinghouse
Where Used: MOCPH

DOOR EQUIPMENT

Hanger Parts

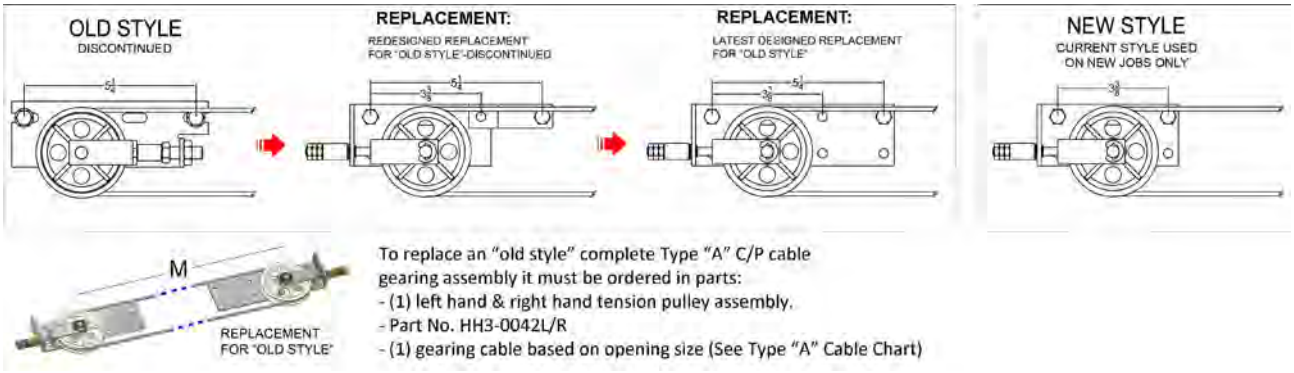
Cable Gearing Bar Assemblies



Note: For 3/SP installations, contact G.A.L. sales or engineering department for further details or an order placement.*

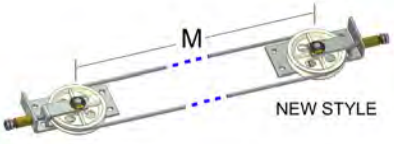
Part No.	Description	Where Used
CDH2-0161N*	Bar, 5 5/8" CL Slot Gearing 2/SP-2SP/CP Assembly, 2/SP 24" D.O. "M" DIM = 19 7/8" CL Pulley & 2SP/CP 32"-47" D.O. "M" DIM = 14 7/8" - 18 7/8" CL Pulley	A
CDH2-0121N	Bar, 6 1/2" CL Slot Gearing 2SP-Assembly, 28"-29" D.O. "M" DIM = 20 3/4" CL Pulley	A
CDH2-0069N	Bar, 8 1/2" CL Slot Gearing 2SP-Assembly, 30"-32" D.O. "M" DIM = 22 3/4" CL Pulley	A, HA, NYCHA
CDH2-0070N	Bar, 10 1/2" CL Slot Gearing 2SP-Assembly, 33"-36" D.O. "M" DIM = 24 3/4" CL Pulley	A, HA, NYCHA
CDH2-0071N	Bar, 12 1/2" CL Slot Gearing 2SP-Assembly, 37"-40" D.O. "M" DIM = 26 3/4" CL Pulley	A, HA, NYCHA
CDH2-0072N	Bar, 14 1/2" CL Slot Gearing 2SP-Assembly, 41"-44" D.O. "M" DIM = 28 3/4" CL Pulley	A, HA, NYCHA
CDH2-0073N	Bar, 16 1/2" CL Slot Gearing 2SP-Assembly, 45"-48" D.O. "M" DIM = 30 3/4" CL Pulley	A, HA, NYCHA

Cable Gearing Assemblies (Type "A")



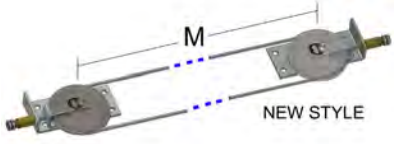
To replace an "old style" complete Type "A" C/P cable gearing assembly it must be ordered in parts:
- (1) left hand & right hand tension pulley assembly.
- Part No. HH3-0042L/R
- (1) gearing cable based on opening size (See Type "A" Cable Chart)

Nylon Pulley Assembly



Part No.	C/P	Track Length	"M" DIM
HH3-0075N	24"-26"	52"	44"
HH3-0076N	27"-29"	58"	50"
HH3-0024N	30"-32"	64"	56"
HH3-0067N	33"-35"	70"	62"
HH3-0068N	36"-38"	76"	65"
HH3-0069N	39"-41"	82"	68"
HH3-0070N	42"-44"	88"	71"
HH3-0071N	45"-47"	94"	74"
HH3-0072N	48"-50"	100"	77"
HH3-0073N	51"-56"	106"	80"
HH3-0074N	57"-59"	112"	83"

Steel Pulley Assembly



Part No.	C/P	Track Length	"M" DIM
HH3-0077N	24"-26"	52"	44"
HH3-0078N	27"-29"	58"	50"
HH3-0079N	30"-32"	64"	56"
HH3-0080N	33"-35"	70"	62"
HH3-0081N	36"-38"	76"	65"
HH3-0082N	39"-41"	82"	68"
HH3-0083N	42"-44"	88"	71"
HH3-0084N	45"-47"	94"	74"
HH3-0085N	48"-50"	100"	77"
HH3-0086N	51"-56"	106"	80"
HH3-0087N	57"-59"	112"	83"

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Cable Gearing Assembly Parts

Pulley Assemblies and Pulleys

HH3-0025L/R



Pulley Assembly, C/P 24”-59” D.O. New Nylon Tension
Where Used: A

HH3-0041L/R



Pulley Assembly, C/P 24”-59” D.O. New Steel Tension (For Westinghouse installations see Westinghouse Section)
Where Used: A

HH3-0042L/R



Pulley Assembly, C/P 24”-59” D.O. Nylon Tension
Where Used: A

CDH3-0267L/R



Pulley Assembly, C/P Vertical Gearing Tension
Where Used: A

CDH3-0268N



Angle, C/P Vertical Gearing Tension Pulley
Where Used: A

CDH2-0079N



Pulley Assembly, 2/SP 30”-48” D.O., C/P 24”-59” D.O. Gearing With Bolt, Use For Jobs After Mid Nov. 1991
Where Used: A, HA, NYCHA

CDH2-0080N



Pulley Assembly, 2/SP 30”-48” D.O., C/P 24”-59” D.O., Gearing With Pin, Use For Jobs Before Mid Nov.1991
Where Used: A, HA, NYCHA

CDH2-0098N



Pulley Assembly, 2/SP, C/P 24”-59” D.O., Gearing Rod, Use For Jobs After Mid Nov. 1991
Where Used: A

CDH2-0099N



Pulley Assembly, 2/SP, C/P 24”-59” D.O., Gearing Bolt, Use For Jobs Before Mid Nov.1991
Where Used: A

HWPL-0010N



Pulley, 2 3/4 Diameter Nylon
Where Used: A, HA, NYCHA

HWPL-0013N



Pulley, C/P 24”-59” D.O., 2-3/4 Diameter Steel
Where Used: A

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Cable Gearing Assembly Parts

Gearing Cables (Type "A") - Two Speed



Note: See Gearing Cable Assembly Bars Section for "M" DIM

Part No.	2/SP	"M" DIM	C.L. Slots	Where Used
CDH2-0122N	24"-29"	20 3/4"	6 1/2"	A
CDH2-0074N	30"-32"	22 3/4"	8 1/2"	A, HA, NYCHA
CDH2-0075N	33"-36"	24 3/4"	10 1/2"	A, HA, NYCHA
CDH2-0076N	37"-40"	26 3/4"	12 1/2"	A, HA, NYCHA
CDH2-0077N	41"-44"	28 3/4"	14 1/2"	A, HA, NYCHA
CDH2-0078N	45"-48"	30 3/4"	16 1/2"	A, HA, NYCHA

Gearing Cables (Type "A") - Center Parting



Part No.	C/P	Track Length	"M" DIM
HH3-0044N	24"-26"	52"	44"
HH3-0045N	27"-29"	58"	50"
HH3-0026N	30"-32"	64"	56"
HH3-0027N	33"-35"	70"	62"
HH3-0028N	36"-38"	76"	65"
HH3-0029N	39"-41"	82"	68"
HH3-0030N	42"-44"	88"	71"
HH3-0031N	45"-47"	94"	74"
HH3-0032N	48"-50"	100"	77"
HH3-0033N	51"-56"	106"	80"
HH3-0091N	57"-59"	112"	83"

Gearing Cables (Old Style Type "A") - Center Parting



Part No.	C/P	Track Length	"M" DIM
HH3-0046N	24"-26"	52"	47"
HH3-0047N	27"-29"	58"	53"
HH3-0048N	30"-32"	64"	59"

Clamps

HH2-0127N



Clamp Assembly, 2SP/CP Two Way Geared Bend, 8 7/8" x 1 1/4" x 3/16" Flat
Where Used: A

HH2-0128N



Clamp Assembly, 2SP/CP Two Way Geared, 6 3/4" x 1 1/4" x 3/16"
Where Used: A

HH2-0130N



Clamp Assembly, 3/SP Shoe Type Geared 7 3/8"
Where Used: A

(*) Special Engineering Required

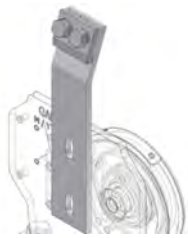
DOOR EQUIPMENT

Hanger Parts

Cable Gearing Assembly Parts

Clamps

HH3-0189N



Clamp Assembly, 2/SP Geared "C" Hanger 4 3/4" Bent
Where Used: A

HH3-0190N



Clamp Assembly, C/P Vertical Geared 7 1/4" Bent
Where Used: A

HH3-0088N



Clamp, C/P Sheave Gearing Cable Lower
Where Used: A

HH12-0092N



Clamp, Type "OS" Gearing Cable Long
Where Used: 2 1/4 "OS" Hanger

HH12-0093N



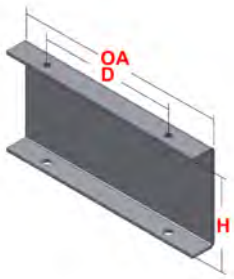
Clamp, Type "OS" Sheave Cable Short
Where Used: 2 1/4 "OS" Hanger

CDH2-0082N



Clamp, 2/SP 30"-48" D.O. Cable Anchor
Where Used: A, HA, NYCHA

Spacers



Spacer, 3/SP Cable Gearing Channel

Part No.	3/SP	"D" DIM	"H" DIM	"OA" DIM
CDH9-0146N	28"	5 5/8"	4"	8 5/8"
CDH9-0147N	28"	5 5/8"	2"	8 5/8"
CDH9-0141N	30"-40"	6 1/2"	2"	9 1/2"
CDH9-0140N	41"-46"	8 1/2"	2"	11 1/2"
CDH9-0139N	47"-52"	10 1/2"	2"	13 1/2"
CDH9-0138N	53"-58"	12 1/2"	2"	15 1/2"
CDH9-0137N	59"-64"	14 1/2"	2"	17 1/2"
CDH9-0136N	65"-69"	16 1/2"	2"	19 1/2"



Part No.	Description
HH2-0243N	Spacer, 2SP/CP Gearing Tension Pulley Channel, 2 3/8" High (OTIS)

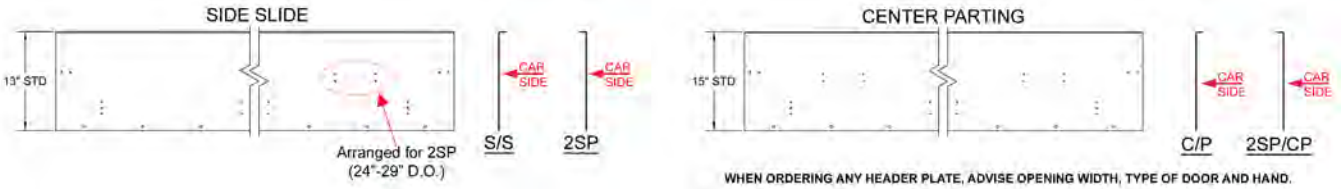
(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Car Header (Type "A" & "HA")

Headers



Part No.	Description
CDH1-0144L/R*	Header, Type "A" Hanger S/S 22"-48" D.O. Car
CDH2-0158L/R*	Header, Type "A" Hanger 2/SP 30"-72" D.O. Car
CDH3-0290N*	Header, Type "A" Hanger C/P 24"-59" D.O. Car
CDH4-0153N*	Header, Type "A" Hanger 2SP/CP 32"-73" D.O. Car
CDH13-0165L/R*	Header, Type "HA" S/S 24"-42" D.O. Car

Hi-Cab Kit Parts

Operator Support Angle (Set)

CDH1-0117N



Angle, S/S 22"-48" D.O., 2/SP 30"-48" D.O. Operator Support Extension Set
Where Used: A, AX, HA
Header Height: 17" & UP

Header Strap

CDH2-0106N



Strap, 2/SP 30"-48" D.O., 44 1/2" Lg. Header
Where Used: A
Header Height: 17" & UP

Channels

CDH1-0104N



Hi-Cab Kit, 4" Channel. 17" Header Height With 44 1/2" Track Length
Where Used: A

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Hi-Cab Kit Parts

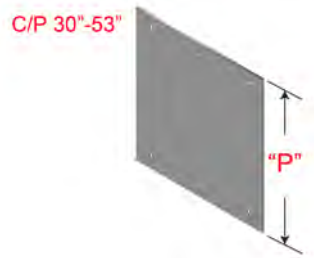
Extension Plates

Single & Two Speed (Type "A", "AX", & "HA")



Part No.	"P" DIM	Header Height
CDH1-0111N	6 1/2"	21"
CDH1-0112N	10 1/2"	25"
CDH1-0113N	14 1/2"	29"
CDH1-0114N	18 1/2"	33"
CDH1-0115N	22 1/2"	37"
CDH1-0116N	26 1/2"	41"

Center Parting (Type "A")



Part No.	"P" DIM	Header Height
CDH3-0061N*	9 1/2"	23"
CDH3-0062N*	13 1/2"	27"
CDH3-0063N*	17 1/2"	31"
CDH3-0064N*	21 1/2"	35"
CDH3-0065N*	25 1/2"	39"
CDH3-0066N*	29 1/2"	43"

Center Parting w/ Pivot Support Bracket Drillings (Type "A")



Part No.	"P" DIM	Header Height	C/P
CDH3-0067N*	9 1/2"	23"	34"-39"
CDH3-0289N*	9 1/2"	23"	40"-44"
CDH3-0068N*	13 1/2"	27"	30"-33"
CDH3-0069N*	13 1/2"	27"	34"-39"
CDH3-0070N*	13 1/2"	27"	40"-44"
CDH3-0071N*	13 1/2"	27"	45"-49"
CDH3-0072N*	13 1/2"	27"	50"-53"
CDH3-0073N*	17 1/2"	31"	30"-33"
CDH3-0074N*	17 1/2"	31"	34"-39"
CDH3-0075N*	17 1/2"	31"	40"-44"
CDH3-0076N*	17 1/2"	31"	45"-49"
CDH3-0077N*	17 1/2"	31"	50"-53"
CDH3-0078N*	21 1/2"	35"	30"-33"

Part No.	"P" DIM	Header Height	C/P
CDH3-0079N*	21 1/2"	35"	34"-39"
CDH3-0080N*	21 1/2"	35"	40"-44"
CDH3-0081N*	21 1/2"	35"	45"-49"
CDH3-0082N*	21 1/2"	35"	50"-53"
CDH3-0083N*	25 1/2"	39"	30"-33"
CDH3-0084N*	25 1/2"	39"	34"-39"
CDH3-0085N*	25 1/2"	39"	40"-44"
CDH3-0086N*	25 1/2"	39"	45"-53"
CDH3-0087N*	29 1/2"	43"	30"-33"
CDH3-0088N*	29 1/2"	43"	34"-39"
CDH3-0089N*	29 1/2"	43"	40"-44"
CDH3-0090N*	29 1/2"	43"	45"-49"
CDH3-0091N*	29 1/2"	43"	50"-53"

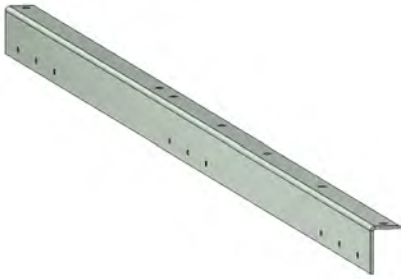
(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

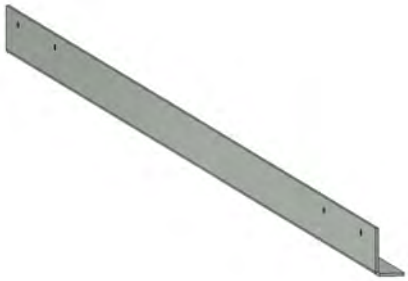
Hi-Cab Kit Parts

Operator Support Angles (Type "A")



Part No.	Header Height	C/P
CDH3-0092N*	23"	30"-32"
CDH3-0093N*	23"	33"
CDH3-0094N*	23"	34"-39"
CDH3-0095N*	23"	40"-44"
CDH3-0096N*	23"	45"-49"
CDH3-0097N*	23"	50"-53"
CDH3-0098N*	27"	30"-32"
CDH3-0099N*	27"	33"
CDH3-0100N*	27"	34"-39"
CDH3-0101N*	27"	40"-44"
CDH3-0102N*	27"	45"-49"
CDH3-0103N*	27"	50"-53"
CDH3-0104N*	31"	30"-32"
CDH3-0105N*	31"	33"
CDH3-0106N*	31"	34"-39"
CDH3-0107N*	31"	40"-44"
CDH3-0108N*	31"	45"-49"
CDH3-0109N*	31"	50"-53"
CDH3-0110N*	35"	30"-32"
CDH3-0111N*	35"	33"
CDH3-0095N*	35"	34"-39"
CDH3-0112N*	35"	40"-44"
CDH3-0113N*	35"	45"-49"
CDH3-0114N*	35"	50"-53"
CDH3-0115N*	39"	30"-32"
CDH3-0116N*	39"	33"
CDH3-0101N*	39"	34"-39"
CDH3-0117N*	39"	40"-44"
CDH3-0118N*	39"	45"-49"
CDH3-0119N*	39"	50"-53"
CDH3-0120N*	43"	30"-32"
CDH3-0121N*	43"	33"
CDH3-0117N*	43"	34"-39"
CDH3-0122N*	43"	40"-44"
CDH3-0123N*	43"	45"-49"
CDH3-0124N*	43"	50"-53"

Pivot Support Bracket Angles (Type "A")



Part No.	Header Height	C/P
CDH3-0125N*	27"	30"-32"
CDH3-0126N*	27"	33"
CDH3-0127N*	27"	34"-39"
CDH3-0128N*	27"	40"-44"
CDH3-0129N*	27"	45"-49"
CDH3-0130N*	27"	50"-53"
CDH3-0131N*	31"	30"-32"
CDH3-0132N*	31"	33"
CDH3-0133N*	31"	34"-39"
CDH3-0134N*	31"	40"-44"
CDH3-0135N*	31"	45"-49"
CDH3-0136N*	31"	50"-53"
CDH3-0137N*	35"	30"-32"
CDH3-0138N*	35"	33"
CDH3-0139N*	35"	34"-39"
CDH3-0140N*	35"	40"-44"
CDH3-0141N*	35"	45"-49"
CDH3-0142N*	35"	50"-53"
CDH3-0143N*	39"	30"-32"
CDH3-0144N*	39"	33"
CDH3-0128N*	39"	34"-39"
CDH3-0145N*	39"	40"-44"
CDH3-0146N*	39"	45"-49"
CDH3-0147N*	39"	50"-53"
CDH3-0148N*	43"	30"-32"
CDH3-0149N*	43"	33"
CDH3-0145N*	43"	34"-39"
CDH3-0150N*	43"	40"-44"
CDH3-0151N*	43"	45"-49"
CDH3-0152N*	43"	50"-53"

(*) Special Engineering Required

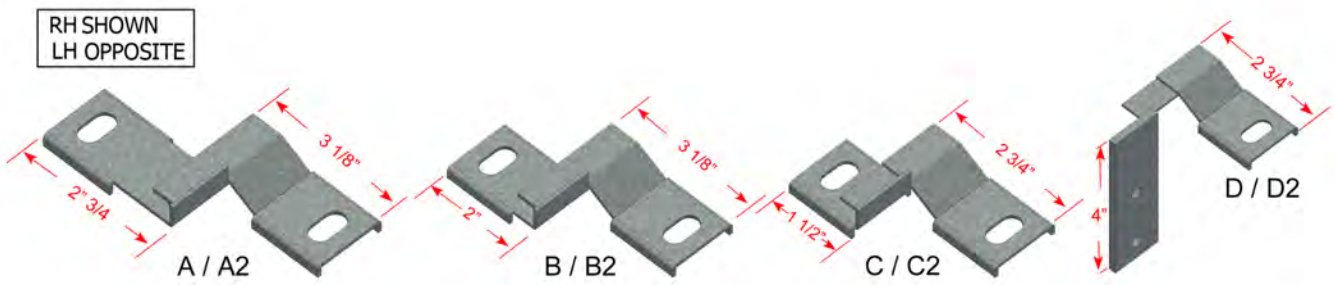
Hi-Cab Kit Parts

Hi-Cab Kit Hardware

CDH2-0107N	CDH3-0230N	CDH1-0119N	CDH1-0118N
			
Hardware, 2/SP Hi-Cab Kit Header Height: 17" & UP Where Used: A	Hardware, C/P Hi-Cab Kit Header Height: 19" & UP Where Used: A	Hardware, S/S - 2/SP, 4" Channel Extension Header Height: 17" & 19" Where Used: A, AX, HA	Hardware, S/S - 2/SP, Hi-Cab Kit Header Height: 17" & UP Where Used: A, AX, HA

Mechanical Interconnecting Devices

Type "A" Hanger



(A): **Conventional**
(B): **Water Resistant**

Note: All Ferrous Material Yellow Zinc Dichromate Plated

Part No (A)	Part No (B)	Description
HH2-0172L/R	**HH20-0077L/R**	"A" Set, 1 1/2" C.L. Track, 3/8" Mounting Bolts 2/SP D.O: 31"-32", 35"-36", 39"-40", 43"-44", 47"-48"
HH2-0176L/R	**HH20-0081L/R**	"A2" Set, 1 1/2" C.L. Track, 1/2" Mounting Bolts 2/SP D.O: 31"-32", 35"-36", 39"-40", 43"-44", 47"-48"
HH2-0173L/R	**HH20-0078L/R**	"B" Set, 1 1/2" C.L. Track, 3/8" Mounting Bolts 2/SP D.O: 29"-30", 33"-34", 37"-38", 41"-42", 45"-46"
HH2-0177L/R	**HH20-0082L/R**	"B2" Set, 1 1/2" C.L. Track, 1/2" Mounting Bolts 2/SP D.O: 29"-30", 33"-34", 37"-38", 41"-42", 45"-46"
HH2-0174L/R	**HH20-0079L/R**	"C" Set, 1 1/2" C.L. Track, 3/8" Mounting Bolts 2/SP: 24"-28" D.O., 2SP/CP: 33"-73" D.O.
HH2-0178L/R	**HH20-0083L/R**	"C2" Set, 1 1/2" C.L. Track, 1/2" Mounting Bolts 2/SP: 24"-28" D.O., 2SP/CP: 33"-73" D.O.
HH2-0175L/R	**HH20-0080L/R**	"D" Set, 1 1/2" C.L. Track, 3/8" Mounting Bolts 2/SP: 49"-72" D.O., 3/SP: 30"-69" D.O.
HH2-0179L/R	**HH20-0084L/R**	"D2" Set, 1 1/2" C.L. Track, 1/2" Mounting Bolts 2/SP: 49"-72" D.O., 3/SP: 30"-69" D.O.

DOOR EQUIPMENT

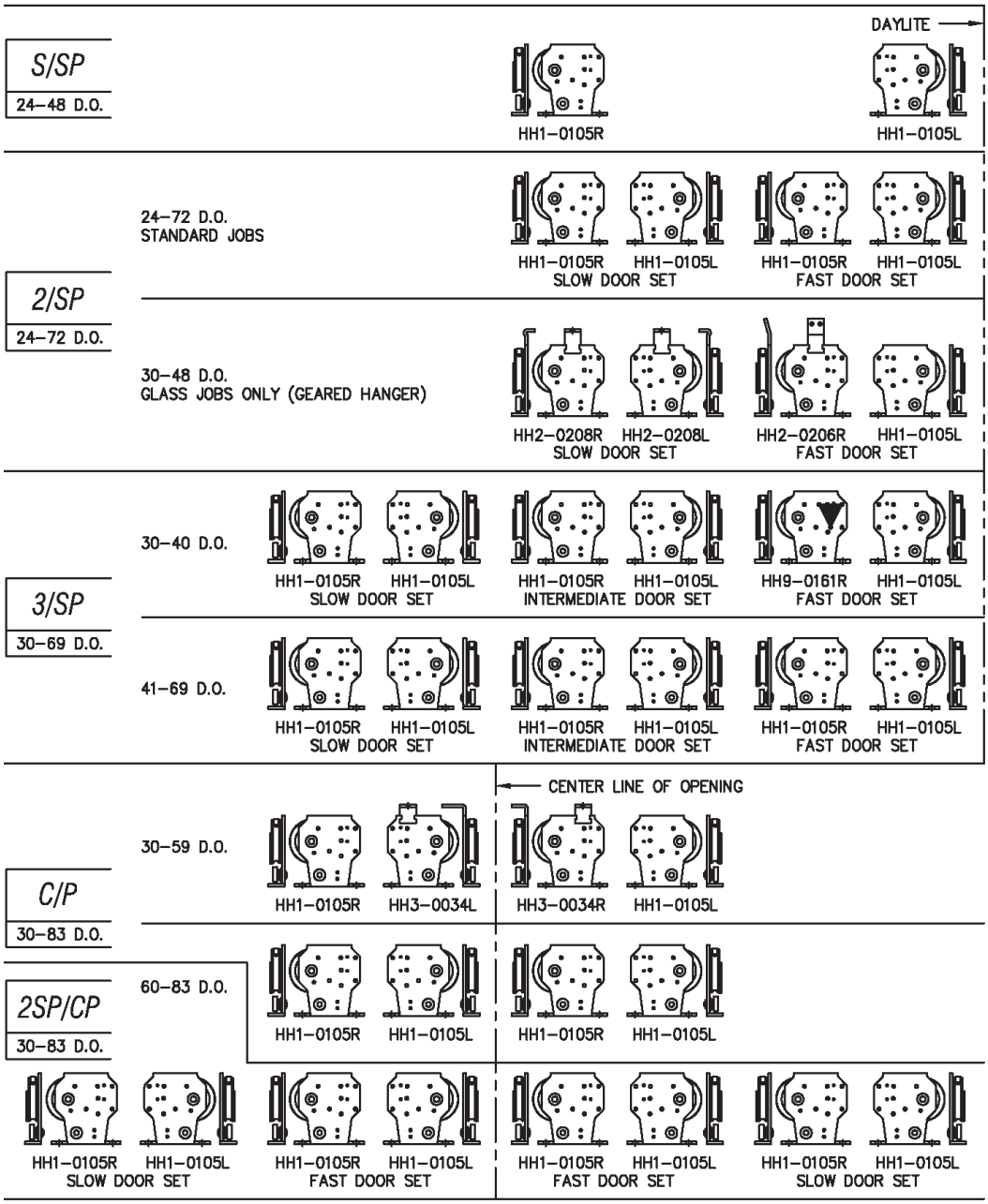
Hanger Parts

Sheave Assemblies (Type "A")

Conventional Sheaves Chart

- HATCH DOORS -

(SHEAVES INCLUDE SAFETY RETAINERS)



SIDE SLIDE DOORS { LEFT HAND SHOWN / RIGHT HAND OPPOSITE

NOTE:
PART NUMBERS ARE FOR COMPLETE SHEAVE ASSEMBLIES.

(*) Special Engineering Required

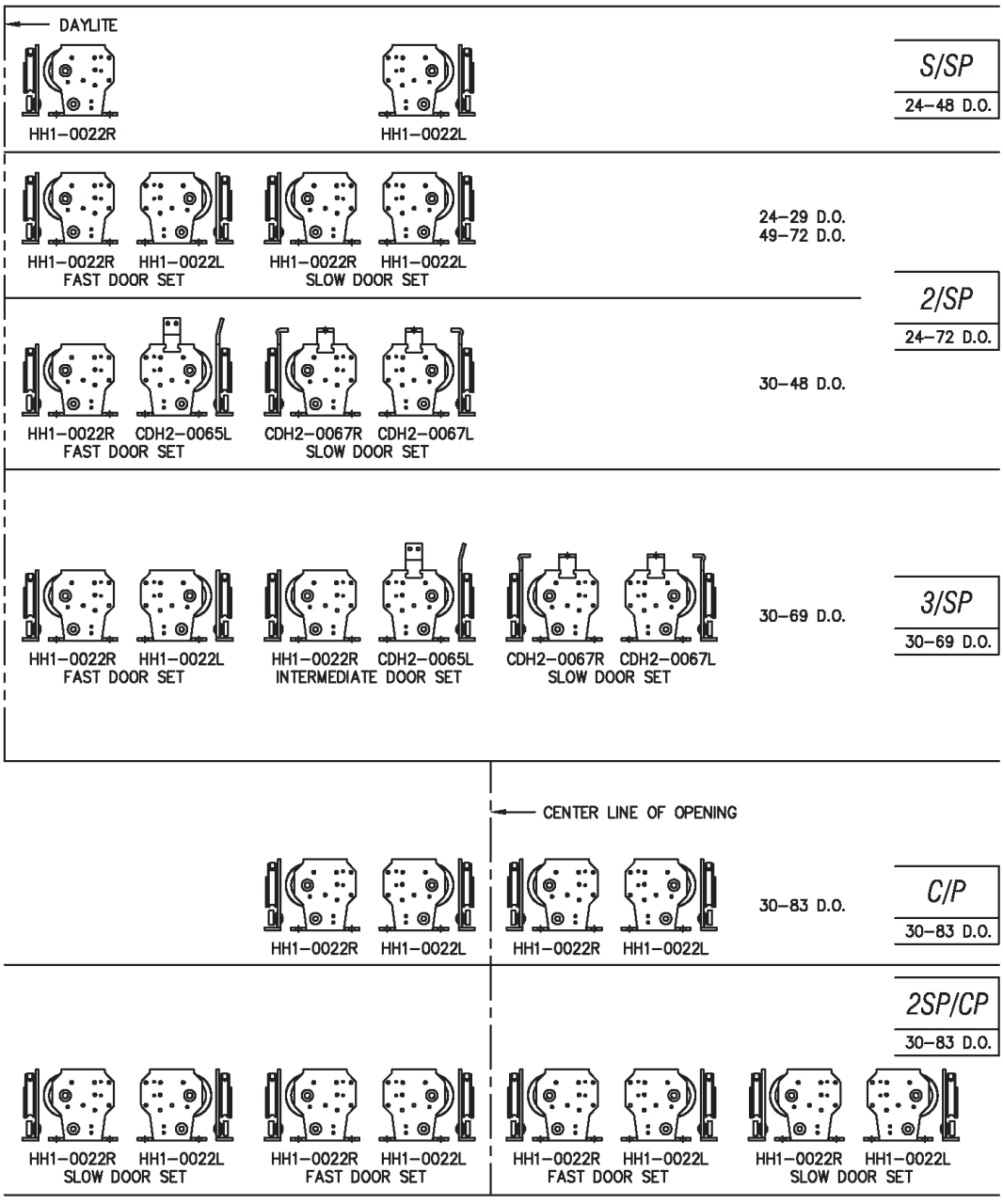
DOOR EQUIPMENT

Hanger Parts

Sheave Assemblies (Type "A")

Conventional Sheaves Chart

- CAR DOORS -



SIDE SLIDE DOORS { LEFT HAND SHOWN / RIGHT HAND OPPOSITE

NOTE:
PART NUMBERS ARE FOR COMPLETE SHEAVE ASSEMBLIES.

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Sheave Assemblies (Type "A")

Water & Vandal Resistant Sheaves Chart

Single Speed (30"-42" D.O.)				
Type	**Sheave Location**	**Hatch Part No.**		**Car Part No.**
AW	Front & Rear	HH19-0030L/R		CDH19-0040L/R
HA	Front	HH1-0105L/R		HH1-0022L/R
	Rear	HH13-0075L/R		CDH13-0094L/R
HA NYC	Front	HH1-0105L/R		HH1-0105L/R
	Rear	HH13-0075L/R		CDH13-0095L/R

Two Speed (30"-48" D.O.)				
Type	**Sheave Location**	**Hatch Part No.**		**Car Part No.**
AW	Fast Door (Front)	HH19-0030L/R		CDH19-0040L/R
	Fast Door (Rear)			CDH20-0079L/R
	Slow Door (Front)			CDH20-0080L/R
	Slow Door (Rear)			CDH20-0080L/R
HA	Fast Door (Front)	HH1-0105L/R **		HH1-0022L/R
	Fast Door (Rear)			CDH2-0065L/R
	Slow Door (Front)			CDH2-0067L/R
	Slow Door (Rear)			
HA NYC	Fast Door (Front)	HH1-0105L/R **		HH1-0105L/R
	Fast Door (Rear)			HH2-0206L/R
	Slow Door (Front)			HH2-0208L/R
	Slow Door (Rear)			

****HA and HA NYC Note:** For 2/SP 30"-32" D.O. hatch hangers rear fast door sheave use HH14-0073L/R.

Special Center Line Sheave Assemblies Available

Beside the standard 4 1/8" center line with 3/8"-16 pendent bolts for sheave assemblies, G.A.L. can supply other center line and bolt configurations upon request for additional cost:
4", 41/8", 4 1/4", 4 5/8", 4 3/4" center line with 1/2"-13 Pendent Bolts
3 3/4", 4", 4 1/4", 4 1/2", 4 3/4" center line with 3/8"-16 Pendent Bolts

Conventional, 4 1/8" C.L. with 1/2-13 Bolts

CDH2-0195L/R



Sheave, 4 1/8 CL With 1/2" Bolts Gear, Fast Door
Where Used: A (Car Hanger)

CDH2-0196L/R



Sheave, 4 1/8 CL With 1/2" Bolts Gear, Slow Door
Where Used: A (Car Hanger)

HH1-0114L/R



Sheave, 4 1/8" CL With 1/2-13 Bolts For All Door Style
Where Used: A (Hatch & Car Hanger)

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Sheave Assemblies (Type "A")

Conventional, 4 1/8" C.L. with 1/2-13 Bolts

HH1-0115L/R



Sheave, 4 1/8" CL With 1/2-13 Bolts, With Top Safety Retainer
Where Used: A (Hatch Hanger)

HH3-0121L/R



Sheave, C/P 4-1/8" CL With 1/2-13 Bolts, With Top Safety Retainers
Where Used: A (Hatch Hanger)

HH9-0162L/R



Sheave, 4-1/8" CL 1/2"-13 Bolts, With Top Safety Retainers & Special "MO" Drillings, 3/SP 30"-40" D.O.
Where Used: A (Hatch Hanger)

Conventional, 4 1/8" C.L. with 3/8-16 Bolts

HH3-0034L/R



Sheave, C/P 4 1/8" CL Sheave With 3/8"-16 Bolts, With Top Safety Retainers
Where Used: A (Hatch Hanger)

HH9-0161L/R



Sheave, 4 1/8" CL 3/8-16 Bolts Fast Rear, With Top Safety Retainers & Special "MO" Drillings, 3/SP 30"-40" D.O.
Where Used: A (Hatch Hanger)

CDH2-0065L/R



Sheave, 4 1/8" CL Sheave With 3/8"-16 Bolts, 2/SP Cable Gear, Fast Door
Where Used: A, HA (Car Hanger)

CDH2-0067L/R



Sheave, 4 1/8" CL Sheave With 3/8"-16 Bolts, 2/SP Cable Gear Bar, Slow Door
Where Used: A, HA (Car Hanger)

HH1-0022L/R



Sheave, 4 1/8" CL With 3/8-16 Bolts
Where Used: A, HA (Car Hanger)

HH1-0105L/R



Sheave, 4-1/8 CL With 3/8-16 Bolts, With Top Safety Retainer
Where Used: A, NYCHA (Car & Hatch Hangers)

CDH13-0094L/R



Sheave, 4 1/8" CL With 3/8-16 Bolts, "HA" Hanger, Rear
Where Used: HA (Car Hanger)

CDH13-0095L/R



Sheave, 4 1/8" CL With 3/8 Bolt NYC HA Hanger, Rear Sheave With Top Safety Retainers
Where Used: NYCHA (Car Hanger)

DOOR EQUIPMENT

Hanger Parts

Sheave Assemblies (Type "A")

Conventional, 4 1/8" C.L. with 3/8-16 Bolts

HH13-0075L/R



Sheave, 4 1/8" CL 3/8-16 Bolts "MO" Rear, With Top Safety Retainers
Where Used: HA (Hatch Hanger)

HH14-0073L/R



Sheave, 4 1/8" CL 3/8-16 Bolts "MO" Rear, With Top Safety Retainer
Where Used: HA (Hatch Hanger)

Water Resistant

Note: All ferrous material are yellow zinc dichromate plated

CDH19-0040L/R



Sheave, 4 1/8" CL W 3/8-16 Bolts, Yellow Zinc Dichromate
Where Used: AW (Car Hanger)

CDH20-0079L/R



Sheave, 4 1/8" CL With 3/8-16 Bolts Gear Fast Door-Intermediate Door Sheave Yellow Zinc Dichromate
Where Used: AW (Car Hanger)

CDH20-0080L/R



Sheave, 4 1/8" CL With 3/8-16 Bolts Gear Slow Door Sheave-Yellow Zinc Dichromate
Where Used: AW (Car Hanger)

HH19-0030L/R



Sheave, 4 1/8" CL With 3/8-16 Bolts, With Top Safety Retainer Yellow Zinc Dichromate
Where Used: AW (Hatch Hanger)

HH20-0088L/R



Sheave, 4 1/8" CL With 3/8-16 Bolts Gear Fast Door Sheave With Top Safety Retainer Yellow Zinc Dichromate
Where Used: AW (Hatch Hanger)

HH20-0089L/R



Sheave, 4 1/8" CL With 3/8-16 Bolts Gear Slow Door-Intermediate Door Sheave With Top Safety Retainer/Yellow Zinc Dichromate
Where Used: AW (Hatch Hanger)

HH19-0031L/R



Sheave, 4 1/8" CL With 1/2-13 Bolts, With Top Safety Retainer Yellow Zinc Dichromate
Where Used: AW (Hatch Hanger)

(*) Special Engineering Required

Hanger Parts

Specialty Sheave Assemblies (Type A")

CDH3-0269L/R



Sheave, C/P Vertical Gear 4 1/8" CL 3/8-16 Bolt, With Bent & Notched Bracket With Clamp
Where Used: A (Car Hanger)

CDH3-0270L



Sheave, C/P Vertical Gear 4 1/8" CL 3/8-16 Bolt, With Clamp
Where Used: A (Car Hanger)

CDH3-0295L



Sheave, C/P Vertical Gear 4 1/8" CL 3/8-16 Bolt, Used When LWZ-2 Clutches Required
Where Used: A (Car Hanger)

HH2-0206L/R



Sheave, 2/SP Cable Gear, With Top Safety Retainers (Glass Doors)
Where Used: A, NYCHA (Car & Hatch Hangers)

HH2-0208L/R



Sheave, 2/SP Cable Gearing Bar, With Top Safety Retainers (Glass Doors)
Where Used: A, NYCHA (Car & Hatch Hangers)

HH17-0018L/R



Sheave, 4 1/8" CL 3/8-16 Bolts Flat, For Westinghouse III-LOW & Otis I Integral

HH17-0031L/R



Sheave, 4 1/8" CL 3/8-16 Bolts Flat, For Westinghouse III-LOW & Otis I Integral

HH17-0046L/R



Sheave, C/P 4 1/8" CL Westinghouse IV & V, With Sheave Mounting Bar & Spacer

Old Style Sheaves

Type "OS" (2 1/4" Roller)

HH10-0035N



Sheave, Type "OS" 2 1/4 Roller, With Top Safety Retainers Arranged For Reel Closer & MO Drillings

HH10-0036N



Sheave, Type "OS" 2 1/4 Roller, With Top Safety Retainers

HH12-0091N



Sheave, "OS" 2 1/4" Roller Geared Hanger, With Top Safety Retainers

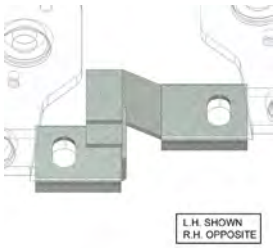
DOOR EQUIPMENT

Hanger Parts

Mechanical Interconnecting Device (Two Speed)

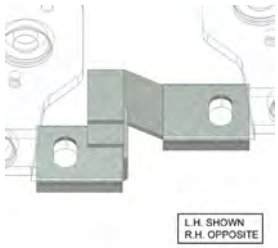
Type "OS" (2 1/4" Roller)

HH2-0173L/R



Description
Mechanical Interconnecting Device "B" Set, 1 1/2" C.L., 3/8" Mounting Bolts

HH2-0174L/R



Description
Mechanical Interconnecting Device "C" Set, 1 1/2" C.L., 3/8" Mounting Bolts

Sheave Assembly Parts

Roller Kits

HH10-0041N



Description
Roller Kit, 2-1/4 Diameter Type "OS"
Where Used: 2 1/4 "OS" Hanger

HH1-0025N



Description
Roller Kit, 3 1/4" Diameter "A"
Where Used: A, AW, AX, HA, I (round doors)

Oiler/ Cleaners

HH1-0149N



Oiler Package, 3-1/4 Type A Hanger Roller, Package Contains 30 Units
Where Used: A, AW, AX, HA, I (round doors)

HH1-0026N



Oiler/Cleaner, 3 1/4" Diameter "A"
Where Used: A, AW, AX, HA, I (round doors)

HH10-0044N



Oiler/Cleaner, 2 1/4 Type "OS"
Where Used: 2 1/4 "OS" Hanger

HH5-0029N



Oiler, Type "C" Hanger 3-1/4" Roller
Where Used: Type "C" Carrier

(*) Special Engineering Required

Hanger Parts

Top Safety Retainers - 2 1/4 Old Style

HH10-0045N



Description
Retainer Assembly, Type “OS” Top Safety, 3/8-16 x 1 1/2” Lg. Bolt-w/ 10-32
Where Used: 2 1/4 “OS” Hanger

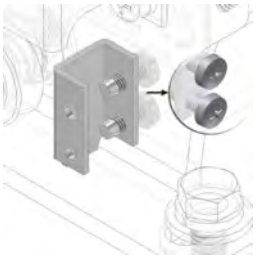
HH10-0046N



Description
Retainer Assembly, Type “OS” Top Safety, 3/8-16 x 2” Lg. Bolt-w/ 10-32 x 5/8
Where Used: 2 1/4 “OS” Hanger

Top Safety Retainers & Jig (Type “A”)

HH1-0112N



Description
Retainer, Type “A” Hanger Top Safety
Where Used: A, HA, NYCHA

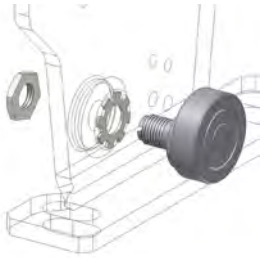
HH1-0133N



Description
Jig, Top Safety Retainer
Where Used: A

Sheave Eccentric Rollers

HH1-0024N



Eccentric, “A” & “OS” Sheave
Where Used: A, “OS”

HH5-0030N



Roller, “C” Hanger Up-Thrust Eccentric, & Clip Type “C”
Where Used: Type “C” Carrier

HH5-0031N



Roller, “C” Hanger Up-Thrust Eccentric, & Screw Type “C”
Where Used: Type “C” Carrier

DOOR EQUIPMENT

Hanger Parts

Cable Clamps (Car Header)

Conventional



Part No.	Description	Where Used
CDH1-0020N	Clamp, SS-CP Hanger Safety Edge Cable	A, HA, NYCHA
CDH2-0083N	Clamp, 2SP-2SP/CP Hanger Safety Edge Cable	A, HA, NYCHA
CDH9-0123N	Clamp, 3/SP Hanger Safety Edge Cable	A

Water Resistant

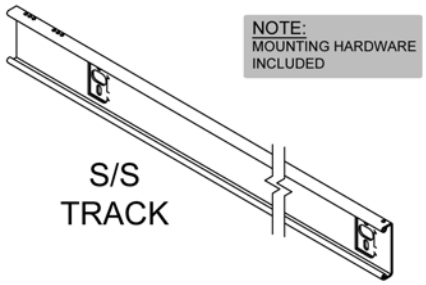
Note: All ferrous material are yellow zinc dichromate plated



Part No.	Description	Where Used
CDH21-0035N	Clamp, SS-CP Hanger SE Cable, Yellow Zinc Dichromate	AW
CDH20-0029N	Clamp, 2S-2SP/CP Hanger Safety Edge Cable, Yellow Zinc Dichromate	AW

Car Door Tracks

Single Speed



Conventional & Water Resistant

(A): **Conventional**
(B): **Water Resistant**

Note: All Ferrous Material Yellow Zinc Dichromate Plated

Part No (A)	Part No (B)	S/S	Track Length
CDH1-0095N	**CDH19-0029N**	22”-24”	46”
CDH1-0096N	**CDH19-0030N**	25”-27”	52”
CDH1-0097N	**CDH19-0031N**	28”-30”	58”
CDH1-0098N	**CDH19-0032N**	31”-33”	64”
CDH1-0099N	**CDH19-0033N**	34”-36”	70”
CDH1-0100N	**CDH19-0035N**	37”-39”	76”
CDH1-0101N	**CDH19-0036N**	40”-42”	82”
CDH1-0102N	**CDH19-0037N**	43”-45”	88”
CDH1-0103N	**CDH19-0038N**	46”-48”	94”

(*) Special Engineering Required

Single Speed

Vandal Resistant (HA)

(A): **Without** Bumper Drillings
(B): **With** Bumper Drillings

Part No (A)	Part No (B)	S/S	Track Length
CDH13-0058N*	CDH13-0134N	24”	48”
CDH13-0059N*	CDH13-0135N	25”	52”
CDH13-0060N*	CDH13-0136N	26”	52”
CDH13-0061N*	CDH13-0137N	27”	54”
CDH13-0062N*	CDH13-0138N	28”	58”
CDH13-0063N*	CDH13-0139N	29”	58”
CDH13-0064N*	CDH13-0140N	30”	60”
CDH13-0065N*	CDH13-0141N	31”	64”
CDH13-0066N*	CDH13-0142N	32”	64”
CDH13-0067N*	CDH13-0143N	33”	66”
CDH13-0068N*	CDH13-0144N	34”	70”
CDH13-0069N*	CDH13-0145N	35”	70”
CDH13-0070N*	CDH13-0146N	37”	72”
CDH13-0071N*	CDH13-0147N	38”	76”
CDH13-0072N*	CDH13-0148N	39”	76”
CDH13-0073N*	CDH13-0149N	40”	82”
CDH13-0074N*	CDH13-0150N	41”	82”
CDH13-0075N*	CDH13-0151N	42”	82”

Vandal Resistant (NYC HA)

Note: Single speed (NYC Housing Authority) tracks are arranged for front & rear bumpers.

Part No.	S/S	Track Length
CDH13-0076N	24”	48”
CDH13-0077N	25”	52”
CDH13-0078N	26”	52”
CDH13-0079N	27”	54”
CDH13-0080N	28”	58”
CDH13-0081N	29”	58”
CDH13-0082N	30”	60”
CDH13-0083N	31”	64”
CDH13-0084N	32”	64”

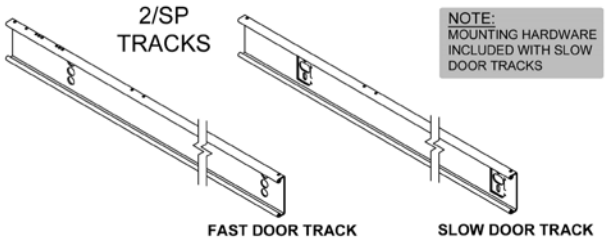
Part No.	S/S	Track Length
CDH13-0085N	33”	66”
CDH13-0086N	34”	70”
CDH13-0087N	35”	70”
CDH13-0088N	37”	72”
CDH13-0089N	38”	76”
CDH13-0090N	39”	76”
CDH13-0091N	40”	82”
CDH13-0092N	41”	82”
CDH13-0093N	42”	82”

DOOR EQUIPMENT

Hanger Parts

Car Door Tracks

Two Speed



(A): **Fast Door Track**
(B): **Slow Door Track**

Conventional

Part No (A)	Part No (B)	2/SP	Track Length
CDH2-0110N	CDH2-0116N	24″	40″
CDH2-0111N	CDH2-0117N	25″	41″
CDH2-0112N	CDH2-0118N	26″	42″
CDH2-0113N	CDH2-0119N	27″	44″
CDH2-0114N	CDH2-0120N	28″	45″
CDH2-0033N	CDH2-0049N	29″-30″	46″
CDH2-0034N	CDH2-0050N	31″-32″	48″
CDH2-0035N	CDH2-0051N	33″-34″	52″
CDH2-0036N	CDH2-0052N	35″-36″	54″
CDH2-0037N	CDH2-0053N	37″-38″	58″
CDH2-0038N	CDH2-0054N	39″-40″	60″
CDH2-0039N	CDH2-0055N	41″-42″	64″
CDH2-0040N	CDH2-0056N	43″-44″	66″
CDH2-0041N	CDH2-0057N	45″-46″	70″
CDH2-0042N	CDH2-0058N	47″-48″	72″
CDH2-0043N	HH2-0043N	49″-52″	76″
CDH2-0044N	HH2-0044N	53″-56″	82″
CDH2-0045N	HH2-0045N	57″-60″	88″
CDH2-0046N	HH2-0046N	61″-64″	94″
CDH2-0047N	HH2-0047N	65″-68″	100″
CDH2-0048N	HH2-0048N	69″-72″	106″

Water Resistant

Note: All ferrous material are yellow zinc dichromate plated

Part No (A)	Part No (B)	2/SP	Track Length
CDH20-0041N	CDH20-0057N	30″	46″
CDH20-0042N	CDH20-0058N	31″-32″	48″
CDH20-0043N	CDH20-0059N	33″-34″	52″
CDH20-0044N	CDH20-0060N	35″-36″	54″
CDH20-0045N	CDH20-0061N	37″-38″	58″
CDH20-0046N	CDH20-0062N	39″-40″	60″
CDH20-0047N	CDH20-0063N	41″-42″	64″
CDH20-0048N	CDH20-0064N	43″-44″	66″
CDH20-0049N	CDH20-0065N	45″-46″	70″
CDH20-0050N	CDH20-0066N	47″-48″	72″
CDH20-0051N	CDH20-0067N	49″-52″	76″
CDH20-0052N	CDH20-0068N	53″-56″	82″
CDH20-0053N	CDH20-0069N	57″-60″	88″
CDH20-0054N	CDH20-0070N	61″-64″	94″
CDH20-0055N	CDH20-0071N	65″-68″	100″
CDH20-0056N	CDH20-0072N	69″-72″	106″

Vandal Resistant

Note: Contact G.A.L. Sales or Engineering for two speed-vandal resistant (HA) & (NYCHA) car door fast and slow tracks

(*) Special Engineering Required

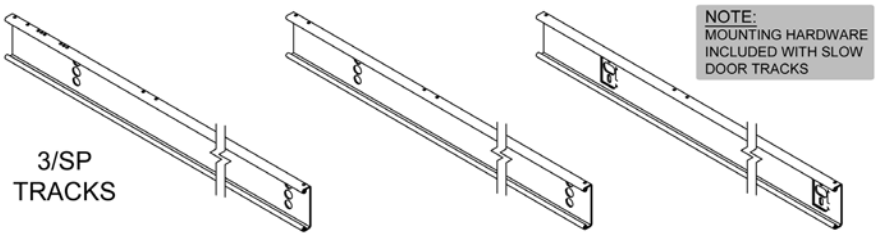
DOOR EQUIPMENT

Hanger Parts

Car Door Tracks

Three Speed

Conventional



NOTE:
MOUNTING HARDWARE INCLUDED WITH SLOW DOOR TRACKS

(A): **Fast Door Track**
(B): **Intermediate Door Track**
(C): **Slow Door Track**

Part No (A)	Part No (B)	Part No (C)	3/SP	Track Length
CDH9-0041L/R	HH9-0081N	CDH9-0081N	30″	45″
CDH9-0042L/R	HH9-0082N	CDH9-0082N	31″	46″
CDH9-0043L/R	HH9-0083N	CDH9-0083N	32″	47″
CDH9-0044L/R	HH9-0084N	CDH9-0084N	33″	48″
CDH9-0045L/R	HH9-0085N	CDH9-0085N	34″	49″
CDH9-0046L/R	HH9-0086N	CDH9-0086N	35″	50″
CDH9-0047L/R	HH9-0087N	CDH9-0087N	36″	51″
CDH9-0048L/R	HH9-0088N	CDH9-0088N	37″	52″
CDH9-0049L/R	HH9-0089N	CDH9-0089N	38″	53″
CDH9-0050L/R	HH9-0090N	CDH9-0090N	39″	54″
CDH9-0051L/R	HH9-0091N	CDH9-0091N	40″	55″
CDH9-0052L/R	HH9-0092N	CDH9-0092N	41″	58″
CDH9-0053L/R	HH9-0093N	CDH9-0093N	42″	59″
CDH9-0054L/R	HH9-0094N	CDH9-0094N	43″	60″
CDH9-0055L/R	HH9-0095N	CDH9-0095N	44″	61″
CDH9-0056L/R	HH9-0096N	CDH9-0096N	45″	62″
CDH9-0057L/R	HH9-0097N	CDH9-0097N	46″	63″
CDH9-0058L/R	HH9-0098N	CDH9-0098N	47″	66″
CDH9-0059L/R	HH9-0099N	CDH9-0099N	48″	67″
CDH9-0060L/R	HH9-0100N	CDH9-0100N	49″	68″
CDH9-0061L/R	HH9-0101N	CDH9-0101N	50″	69″
CDH9-0062L/R	HH9-0102N	CDH9-0102N	51″	70″
CDH9-0063L/R	HH9-0103N	CDH9-0103N	52″	71″
CDH9-0064L/R	HH9-0104N	CDH9-0104N	53″	74″
CDH9-0065L/R	HH9-0105N	CDH9-0105N	54″	75″
CDH9-0066L/R	HH9-0106N	CDH9-0106N	55″	76″
CDH9-0067L/R	HH9-0107N	CDH9-0107N	56″	77″
CDH9-0068L/R	HH9-0108N	CDH9-0108N	57″	78″
CDH9-0069L/R	HH9-0109N	CDH9-0109N	58″	79″
CDH9-0070L/R	HH9-0110N	CDH9-0110N	59″	82″
CDH9-0071L/R	HH9-0111N	CDH9-0111N	60″	83″
CDH9-0072L/R	HH9-0112N	CDH9-0112N	61″	84″
CDH9-0073L/R	HH9-0113N	CDH9-0113N	62″	85″
CDH9-0074L/R	HH9-0114N	CDH9-0114N	63″	86″
CDH9-0075L/R	HH9-0115N	CDH9-0115N	64″	87″
CDH9-0076L/R	HH9-0116N	CDH9-0116N	65″	90″
CDH9-0077L/R	HH9-0117N	CDH9-0117N	66″	91″
CDH9-0078L/R	HH9-0118N	CDH9-0118N	67″	92″
CDH9-0079L/R	HH9-0119N	CDH9-0119N	68″	93″
CDH9-0080L/R	HH9-0120N	CDH9-0120N	69″	94″

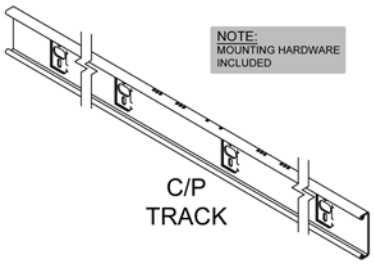
(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Car Door Tracks

Center Parting



Conventional

Part No.	C/P	Track Length
CDH3-0010N	30″-32″	64″
CDH3-0011N	33″-35″	70″
CDH3-0012N	36″-38″	76″
CDH3-0013N	39″-41″	82″
CDH3-0014N	42″-44″	88″

Part No.	C/P	Track Length
CDH3-0015N	45″-47″	94″
CDH3-0016N	48″-50″	100″
CDH3-0017N	51″-56″	106″
CDH3-0240N	57″-59″	112″

Water Resistant

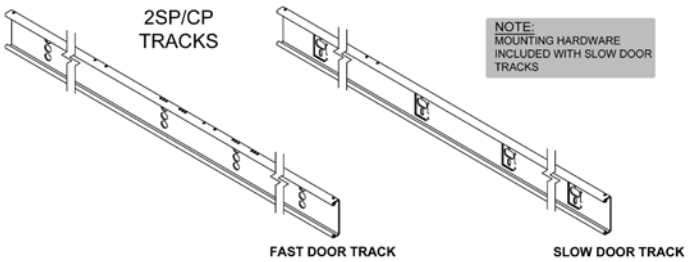
Note: All ferrous material are yellow zinc dichromate plated

Part No.	C/P	Track Length
CDH21-0020N	30″-32″	64″
CDH21-0021N	33″-35″	70″
CDH21-0023N	36″-38″	76″
CDH21-0024N	39″-41″	82″
CDH21-0026N	42″-44″	88″
CDH21-0027N	45″-47″	94″

Part No.	C/P	Track Length
CDH21-0028N	48″-49″	100″
CDH21-0029N	50″	100″
CDH21-0030N	51″-54″	106″
CDH21-0031N	55″-56″	106″
CDH21-0032N	57″-59″	112″

Two Speed Center Parting

Conventional



(A): **Fast Door Track**
(B): **Slow Door Track**

Part No (A)	Part No (B)	2SP/CP	Track Length
CDH4-0023N	CDH4-0041N	33″-35″	61″
CDH4-0024N	CDH4-0042N	36″-38″	64″
CDH4-0025N	CDH4-0043N	39″-41″	67″
CDH4-0026N	CDH4-0044N	42″-44″	70″
CDH4-0027N	CDH4-0045N	45″-47″	73″
CDH4-0028N	CDH4-0046N	48″-49″	76″
CDH4-0029N	CDH4-0047N	50″-51″	79″
CDH4-0030N	CDH4-0048N	52″-53″	82″
CDH4-0031N	CDH4-0049N	54″-55″	85″

Part No (A)	Part No (B)	2SP/CP	Track Length
CDH4-0032N	CDH4-0050N	56″-57″	88″
CDH4-0033N	CDH4-0051N	58″-59″	91″
CDH4-0034N	CDH4-0052N	60″-61″	94″
CDH4-0035N	CDH4-0053N	62″-63″	97″
CDH4-0036N	CDH4-0054N	64″-65″	100″
CDH4-0037N	CDH4-0055N	66″-67″	103″
CDH4-0038N	CDH4-0056N	68″-69″	106″
CDH4-0039N	CDH4-0057N	70″-71″	109″
CDH4-0040N	CDH4-0058N	72″-72″	112″

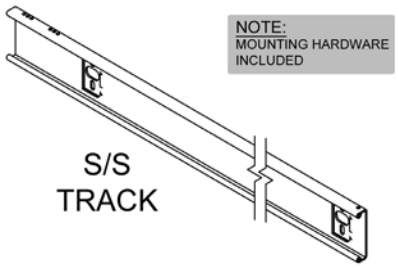
(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Hatch Door Tracks

Single Speed



Conventional & Water Resistant

(A): **Conventional**
(B): **Water Resistant**

Note: All Ferrous Material Yellow Zinc Dichromate Plated

Part No (A)	Part No (B)	S/S	Track Length
HH1-0011N	**HH19-0019N***	22”-24”	46”
HH1-0012N	**HH19-0020N***	25”-27”	52”
HH1-0013N	**HH19-0021N***	28”-30”	58”
HH1-0014N	**HH19-0022N***	31”-33”	64”
HH1-0015N	**HH19-0023N***	34”-36”	70”
HH1-0016N	**HH19-0025N***	37”-39”	76”
HH1-0017N	**HH19-0026N***	40”-42”	82”
HH1-0018N	**HH19-0027N***	43”-45”	88”
HH1-0019N	**HH19-0028N***	46”-48”	94”

Vandal Resistant (HA)

Part No.	S/S	Track Length
HH13-0038N*	24”	48”
HH13-0039N*	25”	52”
HH13-0040N*	26”	52”
HH13-0041N*	27”	54”
HH13-0042N*	28”	58”
HH13-0043N*	29”	58”
HH13-0044N*	30”	60”
HH13-0045N*	31”	64”
HH13-0046N*	32”	64”

Part No.	S/S	Track Length
HH13-0047N*	33”	65”
HH13-0048N*	34”, 36”	70”
HH13-0049N*	35”	70”
HH13-0050N*	37”	72”
HH13-0051N*	38”	76”
HH13-0052N*	39”	76”
HH13-0053N*	40”	82”
HH13-0054N*	41”	82”
HH13-0055N*	42”	82”

Vandal Resistant (NYC HA)

Note: Single speed (NYC Housing Authority) tracks are arranged for front & rear bumpers.

Part No.	S/S	Track Length
HH13-0056N*	24”	48”
HH13-0057N*	25”	52”
HH13-0058N*	26”	52”
HH13-0059N*	27”	54”
HH13-0060N*	28”	58”
HH13-0061N*	29”	58”
HH13-0062N*	30”	60”
HH13-0063N*	31”	64”
HH13-0064N*	32”	64”
HH13-0065N*	33”	65”

Part No.	S/S	Track Length
HH13-0066N*	34”, 36”	70”
HH13-0067N*	35”	70”
HH13-0068N*	34”, 36”	70”
HH13-0069N*	37”	72”
HH13-0070N*	38”	76”
HH13-0071N*	39”	76”
HH13-0072N*	40”	82”
HH13-0073N*	41”	82”
HH13-0074N*	42”	82”

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Hatch Door Tracks

Single Speed - (Old Style)

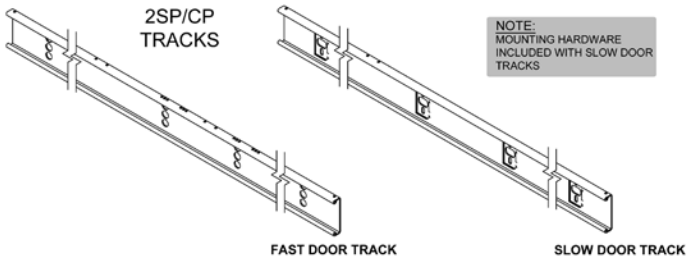
Conventional



Note: Not available in water resistant

Part No.	Track Length
HH10-0037N	90″
HH10-0047N	180″

Two Speed



Conventional

(A): **Fast Door Track**
(B): **Slow Door Track**

Part No (A)	Part No (B)	2/SP	Track Length
HH2-0196N	HH2-0201N	24″	40″
HH2-0197N	HH2-0202N	25″	41″
HH2-0198N	HH2-0203N	26″	42″
HH2-0199N	HH2-0204N	27″	44″
HH2-0200N	HH2-0205N	28″	45″
HH2-0017N	HH2-0033N	29″-30″	46″
HH2-0018N	HH2-0034N	31″-32″	48″
HH2-0019N	HH2-0035N	33″-34″	52″
HH2-0020N	HH2-0036N	35″-36″	54″
HH2-0021N	HH2-0037N	37″-38″	58″
HH2-0022N	HH2-0038N	39″-40″	60″

Part No (A)	Part No (B)	2/SP	Track Length
HH2-0023N	HH2-0039N	41″-42″	64″
HH2-0024N	HH2-0040N	43″-44″	66″
HH2-0025N	HH2-0041N	45″-46″	70″
HH2-0026N	HH2-0042N	47″-48″	72″
HH2-0027N	HH2-0043N	49″-52″	76″
HH2-0028N	HH2-0044N	53″-56″	82″
HH2-0029N	HH2-0045N	57″-60″	88″
HH2-0030N	HH2-0046N	61″-64″	94″
HH2-0031N	HH2-0047N	65″-68″	100″
HH2-0032N	HH2-0048N	69″-72″	106″

Water Resistant

(A): **Fast Door Track**
(B): **Slow Door Track**

Part No (A)	Part No (B)	2/SP	Track Length
HH20-0043N	HH20-0059N	30″	46″
HH20-0044N	HH20-0060N	31″-32″	48″
HH20-0045N	HH20-0061N	33″-34″	52″
HH20-0046N	HH20-0062N	35″-36″	54″
HH20-0047N	HH20-0063N	37″-38″	58″
HH20-0048N	HH20-0064N	39″-40″	60″
HH20-0049N	HH20-0065N	41″-42″	64″
HH20-0050N	HH20-0066N	43″-44″	66″

Part No (A)	Part No (B)	2/SP	Track Length
HH20-0051N	HH20-0067N	45″-46″	70″
HH20-0052N	HH20-0068N	47″-48″	72″
HH20-0053N	HH20-0069N	49″-52″	76″
HH20-0054N	HH20-0070N	53″-56″	82″
HH20-0055N	HH20-0071N	57″-60″	88″
HH20-0056N	HH20-0072N	61″-64″	94″
HH20-0057N	HH20-0073N	65″-68″	100″
HH20-0058N	HH20-0074N	69″-72″	106″

Vandal Resistant

A) Contact G.A.L Engineering for two speed-vandal resistant (HA) hatch door fast and slow tracks
B) Contact G.A.L Engineering for two speed-vandal resistant (NYC HA) hatch door fast and slow tracks

(*) Special Engineering Required

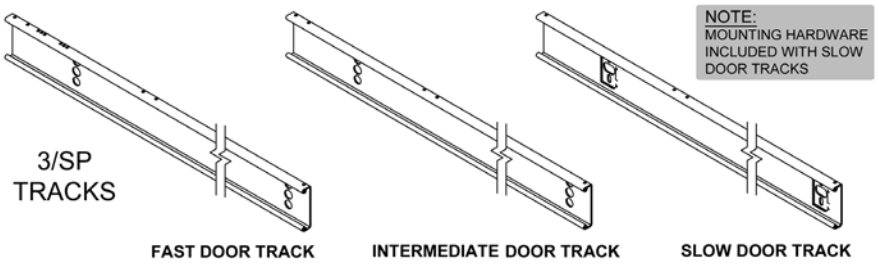
DOOR EQUIPMENT

Hanger Parts

Hatch Door Tracks

Three Speed

Conventional



NOTE:
MOUNTING HARDWARE INCLUDED WITH SLOW DOOR TRACKS

(A): **Fast Door Track**
(B): **Intermediate Door Track**
(C): **Slow Door Track**

Part No (A)	Part No (B)	Part No (C)	3/SP	Track Length
HH9-0041L/R	HH9-0081L/R	HH9-0121N	30″	45″
HH9-0042L/R	HH9-0082L/R	HH9-0122N	31″	46″
HH9-0043L/R	HH9-0083L/R	HH9-0123N	32″	47″
HH9-0044L/R	HH9-0084L/R	HH9-0124N	33″	48″
HH9-0045L/R	HH9-0085L/R	HH9-0125N	34″	49″
HH9-0046L/R	HH9-0086L/R	HH9-0126N	35″	50″
HH9-0047L/R	HH9-0087L/R	HH9-0127N	36″	51″
HH9-0048L/R	HH9-0088L/R	HH9-0128N	37″	52″
HH9-0049L/R	HH9-0089L/R	HH9-0129N	38″	53″
HH9-0050L/R	HH9-0090L/R	HH9-0130N	39″	54″
HH9-0051L/R	HH9-0091L/R	HH9-0131N	40″	55″
HH9-0052L/R	HH9-0092L/R	HH9-0132N	41″	58″
HH9-0053L/R	HH9-0093L/R	HH9-0133N	42″	59″
HH9-0054L/R	HH9-0094L/R	HH9-0134N	43″	60″
HH9-0055L/R	HH9-0095L/R	HH9-0135N	44″	61″
HH9-0056L/R	HH9-0096L/R	HH9-0136N	45″	62″
HH9-0057L/R	HH9-0097L/R	HH9-0137N	46″	63″
HH9-0058L/R	HH9-0098L/R	HH9-0138N	47″	66″
HH9-0059L/R	HH9-0099L/R	HH9-0139N	48″	67″
HH9-0060L/R	HH9-0100L/R	HH9-0140N	49″	68″
HH9-0061L/R	HH9-0101L/R	HH9-0141N	50″	69″
HH9-0062L/R	HH9-0102L/R	HH9-0142N	51″	70″
HH9-0063L/R	HH9-0103L/R	HH9-0143N	52″	71″
HH9-0064L/R	HH9-0104L/R	HH9-0144N	53″	74″
HH9-0065L/R	HH9-0105L/R	HH9-0145N	54″	75″
HH9-0066L/R	HH9-0106L/R	HH9-0146N	55″	76″
HH9-0067L/R	HH9-0107L/R	HH9-0147N	56″	77″
HH9-0068L/R	HH9-0108L/R	HH9-0148N	57″	78″
HH9-0069L/R	HH9-0109L/R	HH9-0149N	58″	79″
HH9-0070L/R	HH9-0110L/R	HH9-0150N	59″	82″
HH9-0071L/R	HH9-0111L/R	HH9-0151N	60″	83″
HH9-0072L/R	HH9-0112L/R	HH9-0152N	61″	84″
HH9-0073L/R	HH9-0113L/R	HH9-0153N	62″	85″
HH9-0074L/R	HH9-0114L/R	HH9-0154N	63″	86″
HH9-0075L/R	HH9-0115L/R	HH9-0155N	64″	87″
HH9-0076L/R	HH9-0116L/R	HH9-0156N	65″	90″
HH9-0077L/R	HH9-0117L/R	HH9-0157N	66″	91″
HH9-0078L/R	HH9-0118L/R	HH9-0158N	67″	92″
HH9-0079L/R	HH9-0119L/R	HH9-0159N	68″	93″
HH9-0080L/R	HH9-0120L/R	HH9-0160N	69″	94″

(*) Special Engineering Required

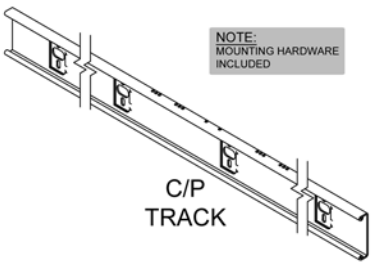
DOOR EQUIPMENT

Hanger Parts

Hatch Door Tracks

Center Parting

Conventional



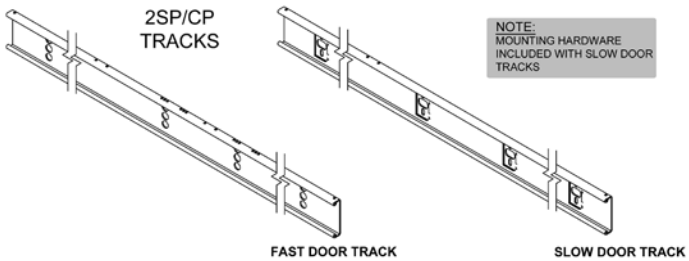
Note: Contact G.A.L. sales or engineering for order details and pricing for center parting water resistant tracks.

Part No.	C/P	Track Length
HH3-0170N	24″-26″	52″
HH3-0171N	27″-29″	58″
HH3-0009N	30″-32″	64″
HH3-0010N	33″-35″	70″
HH3-0011N	36″-38″	76″
HH3-0012N	39″-41″	82″

Part No.	C/P	Track Length
HH3-0013N	42″-44″	88″
HH3-0014N	45″-47″	94″
HH3-0015N	48″-50″	100″
HH3-0016N	51″-56″	106″
HH3-0017N	57″-59″	112″

Two Speed Center Parting

Conventional



(A): **Fast Door Track**
(B): **Slow Door Track**

Part No (A)	Part No (B)	2SP/CP	Track Length
HH4-0037N	**HH4-0062N**	33″-35″	61″
HH4-0038N	**HH4-0063N**	36″-38″	64″
HH4-0039N	**HH4-0064N**	39″-41″	67″
HH4-0040N	**HH4-0065N**	42″-44″	70″
HH4-0041N	**HH4-0066N**	45″-47″	73″
HH4-0042N	**HH4-0067N**	48″-49″	76″
HH4-0043N	**HH4-0068N**	50″-51″	79″
HH4-0044N	**HH4-0069N**	52″-53″	82″
HH4-0045N	**HH4-0070N**	54″-55″	85″

Part No (A)	Part No (B)	2SP/CP	Track Length
HH4-0046N	**HH4-0071N**	56″-57″	88″
HH4-0047N	**HH4-0072N**	58″-59″	91″
HH4-0048N	**HH4-0073N**	60″-61″	94″
HH4-0049N	**HH4-0074N**	62″-63″	97″
HH4-0050N	**HH4-0075N**	64″-65″	100″
HH4-0051N	**HH4-0076N**	66″-67″	103″
HH4-0052N	**HH4-0077N**	68″-69″	106″
HH4-0053N	**HH4-0078N**	70″-71″	109″
HH4-0054N	**HH4-0079N**	72″-73″	112″

(*) Special Engineering Required

Hanger Parts

Track Angles

CDH9-0133N



Angle, 3/SP Gear Cable 3 7/8" Anchor, 4 5/8" x 1 1/4" x 3/16" (2) 9/32" Punch(1).203 Punch 1/4-20 Tap
Where Used: A

HH3-0191N



Angle, C/P Cable Geared 2 3/4" x 3/4" , 11 Gauge
Where Used: A

HH17-0011N



Angle, C/P Westinghouse III Hatch Gearing
Where Used: A

HH2-0054N



Angle, Track Bottom 1 1/2" C.L.
Where Used: A, HA, NYCHA

HH2-0057N



Angle, Track Bottom 2" C.L.
Where Used: A

Track Brackets

HH4-0057N



Bracket, 2/SP Center Support, 2 1/2" x 2 5/16" x Gauge #11 & 1 1/2" C.L.
Where Used: A

HH4-0109N



Bracket, 2/SP Center Support, 2 3/4" x 2 5/16 x Gauge #11 & 1 3/4" C.L.
Where Used: A

HH2-0053N



Bracket, Track Top 1 1/2" C.L.
Where Used: A, HA, NYCHA

HH2-0056N



Bracket, Track Top 2" C.L.
Where Used: A

DOOR EQUIPMENT

Hanger Parts

Track Brackets

HH2-0245N



Bracket, 2/SP Track Special Mounting, (6) Slots 11/32 x 3/4 Special Support 2 9/16”
Where Used: A

HH9-0171N*



Bracket, 3/SP Track Special Mounting, (8) Slots 11/32 x 3/4 Special Support 4 1/16”
Where Used: A

HH9-0169N



Bracket, 3/SP Track Special Mounting, 2 1/2” x 4 3/8” x 10 Gauge (Bend)
Where Used: A

HH2-0052L/R



Bracket, Track End 1 1/2” C.L., 2/SP
Where Used: A, HA, NYCHA

HH2-0055L/R



Bracket, Track End 2” C.L., 2/SP
Where Used: A

HH9-0163L/R



Bracket, 4 1/4” Track-3/SP End, Support 1 5/8 To 1 3/4 CL
Where Used: A

HH11-0060N



Bracket, Type “OS” Track End
Where Used: 2 1/4 “OS” Hanger

HH11-0061L/R



Bracket, Type “OS” Track End, Ear Cut Off
Where Used: 2 1/4 “OS” Hanger

Track Bumpers

HH4-0055N



Bumper, “A” C/P Assembly Stop
Where Used: A, AX, HA, NYCHA

HH12-0094L/R



Bumper, Type “OS” C/P Assembly Stop
Where Used: 2 1/4 “OS” Hanger

HH21-0031L/R



Bumper, Type “OS” C/P Assembly Stop, Yellow Zinc Dichromate
Where Used: AW

HDW-0031N



Bumper, 1 1/8” x 1/4” Stop Rubber, 1/2” Lg. x 15/32” Diameter Threaded Base
Where Used: A, HA, NYCHA

(*) Special Engineering Required

Hanger Parts

Plates & Clamps

CDH2-0139N



Plate, 2/SP Gearing Bar Guide, # 11 Gauge 2 1/4" x 5/8"-(2) 9/32" Diameter
Where Used: A

HH3-0192N



Plate, C/P Cable Geared 4 3/16" x 1" , 3/16" H.R.S.
Where Used: A

HH17-0037N



Plate & Clamp, C/P Mounting-3 3/4 MO Keeper Kit, With Lower & Upper Gearing Cable Clamp. Use With 3 3/4" CL Of Sheaves
Where Used: A

HH17-0036N



Plate & Clamp, C/P Mounting-4 1/8 MO Keeper Kit, With Lower & Upper Gearing Cable Clamp. Use With 4 1/8" CL Of Sheaves
Where Used: A

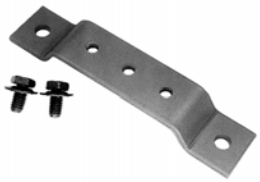
Spacers

HH1-0032N



Spacer, 1/8" Track
Where Used: A, AX, C, HA, NYCHA

HH1-0033N



Spacer, 3/4" Track-Type A With Bolts
Where Used: A

HH1-0034N



Spacer, 1 3/8" Track
Where Used: A

HH1-0113N



Spacer, 4 1/8" CL.3/8-16 Bolt Sheave 1/8"
Where Used: A

HH1-0151N



Spacer, Sheave 3/8" Thick, 1 1/4" x 3/8" x 5 9/16" (2) .531 Diameter Punch
Where Used: A

HH1-0157N



Spacer, Spring Loaded Sheave 1 1/4" x 5/16 x 5 9/16" .406 Diameter Punch
Where Used: A

HH1-0159N



Spacer, Sheave 3/8" Thick, 1 1/4" x 3/8" x 5 9/16" (2) .406 Diameter Punch
Where Used: A

*HH1-0160N**



Spacer Set, Adjust 2"- 2 5/8" Mounting Track, Includes Mounting Hardware
Where Used: A

DOOR EQUIPMENT

Hanger Parts

Spacers

HH1-0161N



Spacer Set, Adjust 1 1/2"- 2" Mounting Track, Includes Mounting Hardware
Where Used: A

HH4-0143N*



Spacer, Unistrut Channel Sheave Special
Where Used: A

Spacers (Type "OS")

HH11-0062N



Spacer, 3 1/4" x 7/8" x 1/4" 2/SP "OS" Track, For 1 3/4" Or 2" CL Of Doors
Where Used: 2 1/4 "OS" Hanger

HH11-0063N



Spacer, 4 5/8" x 1 1/2" x 1/4" 2/SP "OS" Track, For 2" CL Of Doors With Ears Cut Off
Where Used: 2 1/4 "OS" Hanger

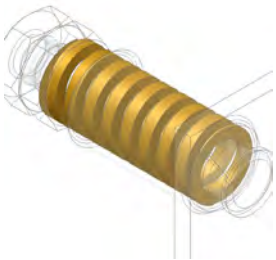
HH10-0048N



Spacer, Type "OS" 3 1/4 Track, 3" x 1" x 1/4"
Where Used: 2 1/4 "OS" Hanger

Springs

SPG-0064N



Spring, 1" Lg. x 13/32" OD-0.062 Wire, .062 Wire- 8 Turns High Carbon Steel
Where Used: A, HA, NYCHA

(*) Special Engineering Required

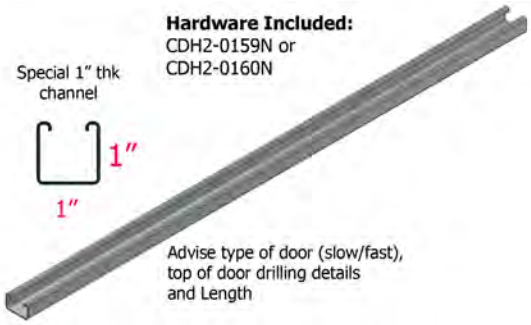
DOOR EQUIPMENT

Hanger Parts

Unistrut

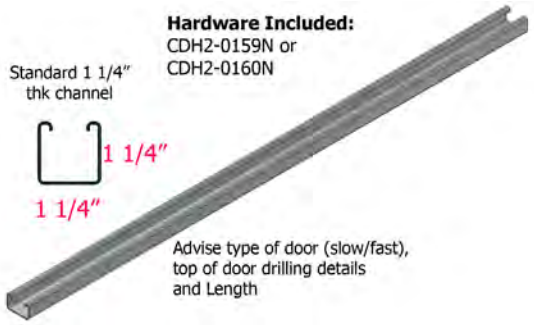
Adaptor Channel

*CDH1-0161N**



Channel, Type Unistrut Adaptor 1" Thick, Use For 1" Thick Door Panel: 2/ SP-2SP/CP
Where Used: Car & Hatch Hanger

*CDH1-0146N**



Channel, Type Unistrut Adaptor
Where Used: Car & Hatch Hanger

Adaptor Channel Hardware

CDH2-0159N



Hardware, 1/2-13 Unistrut Adaptor Channel
Where Used: A, 2 1/4 "OS" Hanger

CDH2-0160N



Hardware, 3/8-16 Unistrut Adaptor Channel
Where Used: A, 2 1/4 "OS" Hanger

HH1-0155N



Spacer, Unistrut Channel Sheave , Use With Less Than 1-1/4" Thick Door Panels
Where Used: A, HA

HWNT-0048N



Nut, 3/8-16 x SQ Sliding Plated-Unistrut
Where Used: A

HWSC-0239N



Screw, 3/8-16 x 1" Flat Socket Head Cap, Head Treated Alloy Steel 3/8"-16 Uncap Thread 7/32" Key
Where Used: A

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Hardware

Track Hardware - Screws, Nut, & Washers

Note: All mounting screw hardware for car & hatch hangers tracks & sheaves are yellow zinc dichromate

HWSC-0001N



Screw, 5/16-18 X 7/8" Hex Sems
Where Used: All Tracks

HWSC-0002N



Screw, 5/16-18 X 5/8" Hex Sems
Where Used: All Tracks

HWSC-0072N



Screw, 1/4-20 x 3/8" Hex Lower Head Steel, Tap Steel Bolt Special
Where Used: A

HWSC-0237N



Screw, 3/8-16 x 1 3/4" Hex Head Steel Cap
Where Used: A

HWSC-0186N



Screw, 3/8-16 x 3/4" Hex Head Steel Plated, Tap Steel Plated Bolt
Where Used: A

HWSC-0022N



Screw, 5/16-18 x 5/8" Hex Lower Head Tap Stainless Steel
Where Used: A

HWNT-0030N



Nut, 3/8-24 x 9/16" With Acr, Hex Steel Finished Nuts
Where Used: A

HWWS-0047N



Washer, 1/4" I.D. External Star-Lock .030 Thick, 1/2" O.D. x .030 Thick Steel
Where Used: A

HWWS-0049N



Washer, 3/8" I.D. External Star-Lock, 11/16" O.D. x .040 Thick Steel
Where Used: A

HWWS-0076N



Washer, 1/2" I.D. Fl Dichromated 3/32" Thick, 7/8" O.D. x 3/32" Thick
Where Used: A

HWWS-0043N



Washer, 3/8" I.D. x 7/8" O.D. Flat Steel , x 0.090 Thick
Where Used: A

HWWS-0065N



Washer, 5/16" I.D. Belleville 3/4" OD- Sems Special
Where Used: All Tracks

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Hardware

Track Hardware - Screws, Nut, & Washers

HH11-0058N



Hardware, Type “OS” Track Assembly, Used On Tracks With End Bracket
Where Used: 2 1/4” “OS” Hanger

HH17-0025N



Hardware, SS/CP OTIS Mounting Track
Where Used: A

HH19-0041N



Hardware, S/S-C/P Water Resistant Track
Where Used: AW

HH1-0021N



Eccentric & Screw, Track
Where Used: A

Sheave Shims (Horseshoe Washers)

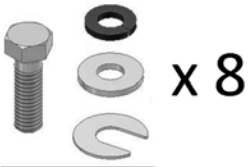


Part No.	Description	Where Used
HH1-0030N	Shim, 1/32”, Sheave 1/2” Bolts	A, HA, NYCHA
HH1-0027N	Shim, 1/32”, Sheave 3/8” Bolts	A, HA, NYCHA
HH1-0031N	Shim, 1/8”, Sheave 3/8” Bolts	A, HA, NYCHA

Sheave Hardware - Pendent Bolts

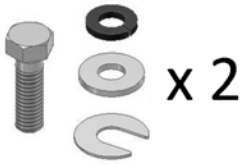
Note: All mounting screw hardware for car & hatch hangers tracks & sheaves are yellow zinc dichromate

HH1-0174N



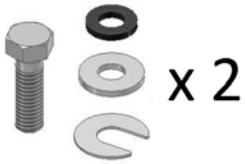
Hardware, “A” Hanger Sheave 3/8” Bolts
Where Used: A

HH1-0023N



Hardware, “A” Sheave 3/8” Bolts
Where Used: A, HA, NYCHA

HH1-0029N



Hardware, “A” Sheave 1/2” Bolts
Where Used: A, HA, NYCHA

HH10-0042N



Hardware, Type “OS” Sheave With Top Safety Retainers, With (2) 3/8-16 x 1 1/2” Bolts. (6) 3/8” Flat Washers. (2) 3/8” Lock Washers
Where Used: 2 1/4 “OS” Hanger

HH10-0043N



Hardware, Type “OS” Sheave With Top Safety Retainers, With (2) 3/8-16 x 2” Bolts. (6) 3/8” Flat Washers. (2) 3/8” Lock Washers
Where Used: 2 1/4 “OS” Hanger

HH17-0028N



Hardware, SS/CP OTIS Mounting Sheave
Where Used: A

Car Hanger Hardware

Note: All mounting screw hardware for car & hatch hangers tracks & sheaves are yellow zinc dichromate

DOOR EQUIPMENT

Hanger Parts

Hardware

Car Hanger Hardware

CDH1-0021N



Hardware, S/S Car Hanger 3/8" Bolts
Where Used: A, HA, NYCHA

CDH1-0022N



Hardware, S/S Car Hanger 1/2" Bolts
Where Used: A

CDH2-0094N



Hardware, 2/SP 30"-48" D.O. Car With 3/8 Bolts, Use For Tracks Up To 72" Lg.
Where Used: A, HA, NYCHA

CDH2-0096N



Hardware, 2/SP 30"-48" D.O. Car With 1/2 Bolts, Use For Tracks Up To 72" Lg.
Where Used: A

CDH2-0095N



Hardware, 2/SP 49"-72" D.O. Car With 3/8 Bolts, Use For Tracks Up To 106" Lg.
Where Used: A, HA, NYCHA

CDH2-0097N



Hardware, 2/SP 49"-72" D.O. Car With 1/2 Bolts, Use For Tracks Up To 106" Lg.
Where Used: A

CDH9-0121N



Hardware, 3/SP Car 3/8" Bolts
Where Used: A

CDH9-0122N



Hardware, 3/SP Car 1/2" Bolts
Where Used: A

CDH3-0025N



Hardware, C/P Car Hanger 3/8" Bolts
Where Used: A

CDH3-0026N



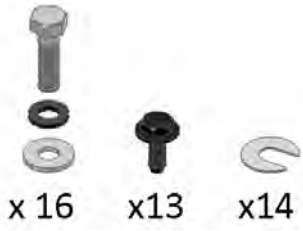
Hardware, C/P Car Hanger 1/2" Bolts
Where Used: A

CDH4-0059N



Hardware, 2SP/CP 33"-49" D.O. Car 3/8" Bolts
Where Used: A

CDH4-0060N



Hardware, 2SP/CP 33"-49" D.O. Car 1/2" Bolts
Where Used: A

(*) Special Engineering Required

DOOR EQUIPMENT

Hanger Parts

Hardware

Car Hanger Hardware

CDH4-0061N



Hardware, 2SP/CP 50”-72” D.O. Car
3/8” Bolts
Where Used: A

CDH4-0062N



Hardware, 2SP/CP 50”-72” D.O. Car
1/2” Bolts
Where Used: A

Hatch Hanger Hardware

Note: All mounting screw hardware for car & hatch hangers tracks & sheaves are yellow zinc dichromate

HH1-0020N



Hardware Bag, SS-CP Track
Where Used: A, HA, NYCHA

HH2-0049N



Hardware, 2/SP 30”-48” D.O. Hatch
With 3/8 Bolts, Up To 72” Lg. Track
Where Used: A

HH2-0154N



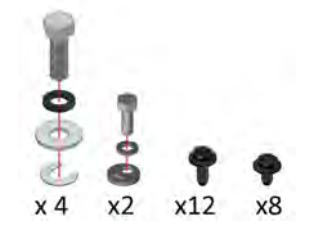
Hardware, 2/SP 30”-48” D.O. Hatch
With 1/2 Bolts, Up To 72” Lg. Track
Where Used: A

HH2-0050N



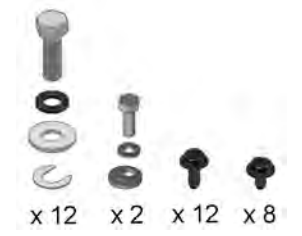
Hardware, 2/SP 49”-72” D.O. Hatch
With 3/8 Bolts, Up To 106” Lg.
Track
Where Used: A

HH2-0155N



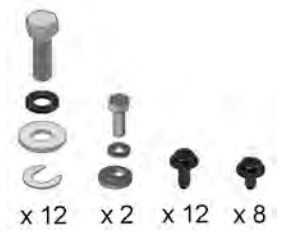
Hardware, 2/SP 49”-72” D.O. Hatch
With 1/2 Bolts, Up To 106” Lg.
Track
Where Used: A

HH9-0165N



Hardware, 3/SP 30”-69” D.O. Hatch
3/8” Bolts
Where Used: A

HH9-0164N



Hardware, 3/SP 30”-69” D.O. Hatch
1/2” Bolts
Where Used: A

HH3-0090N



Hardware, C/P Hatch 3/8-16 Bolts
Where Used: A

DOOR EQUIPMENT

Hanger Parts

Hardware

Hatch Hanger Hardware

HH3-0089N



Hardware, C/P Hatch 1/2-13 Bolts
Where Used: A

HH4-0058N



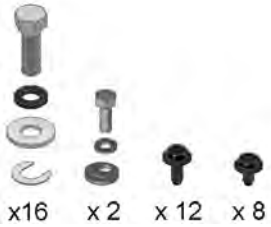
Hardware, 2SP/CP 33”-57” Hatch 3/8” Bolts
Where Used: A

HH4-0059N



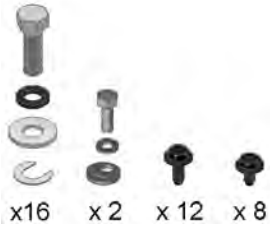
Hardware, 2SP/CP 33”-57” Hatch 1/2” Bolts
Where Used: A

HH4-0060N



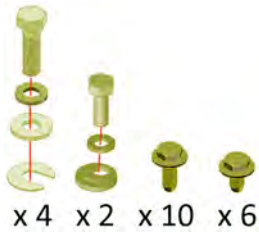
Hardware, 2SP/CP 58”-73” Hatch 3/8” Bolts
Where Used: A

HH4-0061N



Hardware, 2SP/CP 58”-73” Hatch 1/2” Bolts
Where Used: A

HH20-0087N



Hardware, 2/SP 30”-48” D.O. Hatch Water Resistant, With 3/8” Lg. Bolts/Up To 72” Lg. Track Yellow Zinc Dichromate
Where Used: AW

Hatch Hanger Hardware (2 1/4” Old Style)

Note: All mounting screw hardware for car & hatch hangers tracks & sheaves are yellow zinc dichromate

HH10-0038N



Hardware, S/S 24”-25” D.O. Type “OS” Track, With (5) 3” x 1” x 1/4” Spacers & (7) 1/4-20 x 1” Hex Head Screw
Where Used: 2 1/4” “OS” Hanger

HH10-0039N



Hardware, S/S 26”-35” D.O., C/P 30”-35” D.O., Type “OS” Track, With (7) 3” x 1” x 1/4” Spacers & (9) 1/4-20 x 1” Hex Head Screw
Where Used: 2 1/4” “OS” Hanger

HH10-0040N



Hardware, S/S 36”-42” D.O., C/P 36”-45” D.O., Type “OS” Track, With (9) 3” x 1” x 1/4” Spacers & (11) 1/4-20 x 1” Hex Head Screw
Where Used: 2 1/4” “OS” Hanger

(*) Special Engineering Required

Hanger Parts

Hardware

Hatch Hanger Hardware (2 1/4" Old Style)

HH12-0095N	*HH12-0096N*	*HH11-0059N*
		
Hardware, C/P 46"-54" D.O. Type "OS" Track Where Used: 2 1/4" "OS" Hanger	Hardware, C/P 55"-59" D.O. Type "OS" Track Where Used: 2 1/4" "OS" Hanger	Hardware, Type "OS" 2/SP Track Assembly, Used On Tracks With Ears Cut Off Bracket Where Used: 2 1/4" "OS" Hanger

GAL
Door Protection

INFRARED CURTAIN
246-247

SAFETY EDGES
247-251

PRODUCT TYPE

InfraRed Curtain

- **FORMULA SYSTEM**
  - **FCU-47 Safe Screen**
  - **FCU-3D**
  - **Vision 3, 3D**
- **TRI-TRONICS**
  - **Conventional** (Magic Edge 3)
  - **Water Resistant**

Safety Edge

- **RALX** (Dust/Explosion Resistant)
- **RALW** (Water Resistant)

FORMULA SYSTEMS

FCU[47] SAFESCREEN

WHEN SAFETY IS THE MAIN CONSIDERATION

Formula Systems provide the answers, with a comprehensive range of safety edges suitable for any door arrangement.

Safescreen aperture monitoring is available for standard or customized heights and widths, and is ideal for both new and existing elevator installations.

FIELD FRIENDLY INSTALLATION

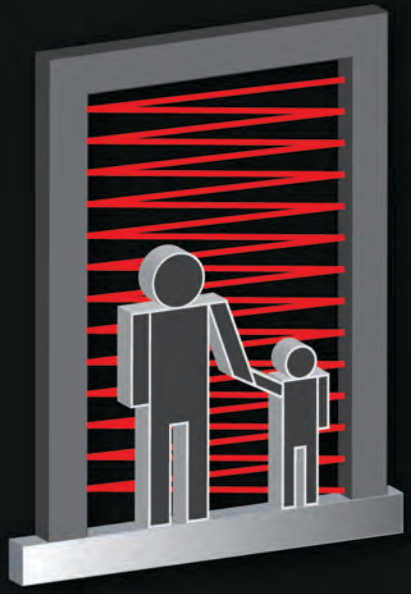
- **No electrical or mechanical site adjustment necessary**
- **Does not require critical alignment**
- **Uses standard 3 core trailing cable**
- **Designed for rapid installation**

OPTIONS

- **Two independent optical systems combined in one product**
- **Separate relay outputs**
- **Automatic time out if one system is damaged**
- **Fail-safe operation if both systems are damaged**
- **System fault monitor, with door delay and audible warning indicator**
- **Conforms with safety codes that insist on two different protection systems**

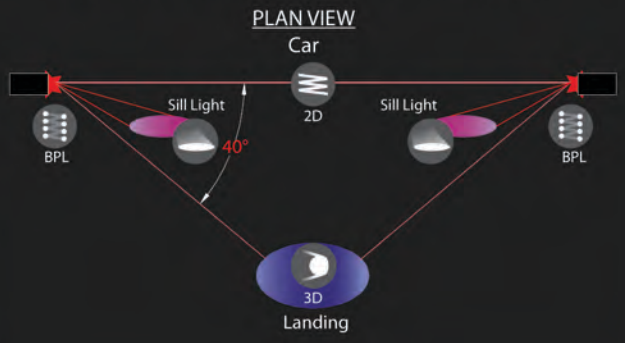
FEATURES AND BENEFITS

- 47 staggered beams provide increased protection as the door closes
- Tolerant of strong sunlight, dust and moisture
- Rapid system scan rate
- Fail-safe electronics ensure the doors park in an open position



VISION 3 "3D" EDGE KIT

An advanced 3D version of the standard 2D beam technology of Formula System FCU 47 is available from GAL. It is a Forward-Facing proximity sensor system, optimized for both simplicity and effectiveness. It provides high performance detection capability suitable for all traffic applications, plus integral with GAL MOVFR-2 operator or universal power supply.



TRI-TRONIC

LEADING EDGE

Unique Feature and Benefits:

- Totally immune to any ambient light, including strobes, fluorescent and direct sunlight!
- All edges are "Weatherproof". Optional "Waterproof" model is available, used for wash-down environments, outdoor elevators, parking garages, or any extreme or wet conditions. Ratings: NEMA 4, IP67
- All models can be installed in either center parting or side sliding configuration.
- Unique installation and test procedures can be easily performed by one person
- 64 redundant IR LED's
- Completely integral with GAL MOVFR-2 operator or universal power supply.

DOOR EQUIPMENT

Door Protection

InfraRed Curtain (Formula Systems)

Conventional



Notes: Customer can cut edges down to 79" high.

Part No.	Description
DPFS-0002N	Edge Kit, Formula Systems FCU 47, For "MOVFR" Operator With Integrated Power Supply
DPFS-0003N	Edge Kit, Formula Systems FCU 47, With Operator Mounted Universal Power Supply
DPFS-0011N	Edge Kit, 34-Package Formula Systems FCU 47, Includes GAL Universal Power Supply
DPFS-0014N	Edge Kit, 38-Package Formula Systems FCU 47 Without Power Supply
DPFS-0015N	Edge Kit, Formula System Vision 3, "3D" For "MOVFR" Integrated Power Supply
DPFS-0016N	Edge Kit Cable Assembly, Vision 3, 3D
DPFS-0017N	Edge Kit, Formula Systems Vision 3, "3D" With Universal Operator Mounted Power Supply
DPPC-0002N	Power Supply, Light Curtain Universal, 220 V/120VAC or DC to 24VDC

InfraRed Curtain (Tri-Tronics)

Notes: Fixed height; unit cannot be cut.

Conventional

Part No.	Description
DPTT-0004N	Edge Kit, TRI-TRONICS Infra-Red Curtain, For "MOVFR" Operator With Integrated Power Supply
DPTT-0005N	Edge Kit, TRI-TRONICS Infra-Red Curtain, With Operator Mounted Universal Power Supply

Water Resistant

Part No.	Description
DPTT-0007N	Edge Kit, TRI-TRONICS Water Resistant, For "MOVFRW II" Operator Integrated Power Supply, 80" FIXED Height (UNIT CANNOT BE CUT)

Note: All ferrous material are yellow zinc dichromate plated

InfraRed Curtain Parts

Cables (Tri-Tronics / Formula Systems)

DPTT-0008N



Cables, Tri-Tronics Replacement Set, Set Of LA-02 Cable [1] & RA-02 Cable [1]

DPTT-0009N



Connector, Tri-Tronics "Y" Cable Interface, To MOVFR (Model #19532)

DPFS-0016N



Cable Assembly, Formula Systems Vision 3, 3D Edge Kit, FS #FEXT0032

(*) Special Engineering Required

DOOR EQUIPMENT

Door Protection

InfraRed Curtain Parts

Chip

DPPC-0001N



Description
Chip, Door Protection Enabling
Where Used: Door Protection, MOVFR II Door Operator

DPPC-0003N



Description
Chip, 25-Package Door Protection Enabling
Where Used: Door Protection, MOVFR II Door Operator

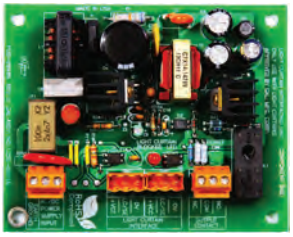
Universal Power Supplies

DPPC-0002N



Description
Power Supply, Light Curtain Universal, 220 V/120VAC or DC to 24VDC
Where Used: TRI-TRONICS, Formula System FCU47 & FZU47 Vision 3D

LCSE-0001N



Description
Board Assembly, Light Curtain P.C., For Universal Power Supply (DPPC-0002N), 220 V/120VAC or DC to 24VDC
Where Used: Universal Power Supply (DPPC-0002N)

Safety Edge Assemblies

RALX - Dust/Explosion Resistant



Part No.	S/S	2/SP	C/P	"A" Dim	Height
SE7-0001L/R*	24"-29"		30"-39"	46 1/2"	84"
SE7-0002L/R*	30"-39"	30"-39"	40"-49"	42 1/2"	84"
SE7-0003L/R*	40"-44"	24"-29"	50"-59"	38 1/2"	84"
SE7-0004L/R*	45"-48"	45"-52"		34 1/2"	84"
SE7-0005L/R*		53"-60"		30 1/2"	84"
SE7-0006L/R*		61"-68"		26 1/2"	84"
SE7-0007L/R*		69"-72"		22 1/2"	84"

(*) Special Engineering Required

DOOR EQUIPMENT

Door Protection

Safety Edge Parts

RALX

SE7-0008N



Switch Assembly, "RALX" Safety Edge EX-Q, With Wire & Connector

SE7-0009N



Cable, Type "RALX" Safety Edge 3 Wire, With Sealing Connector

SE7-0010L/R



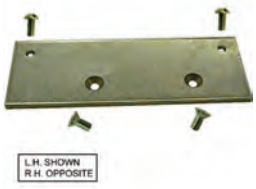
Pivot Assembly, Type "RALX" Retracting

SE7-0011L/R



Angle, Type "RALX" Pivot Bumper

SE7-0012L/R



Plate, Type "RALX" Switch Mounting

SE7-0013N



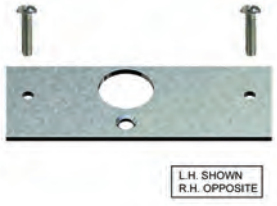
Pin Assembly, Pivot Arm

SE7-0014N



Screw Assembly, Type "RALX" Pick-Up

SE7-0015L/R



Plate, Type "RALX" Pick-Up

RAL

HDW-0001N



Bumper, 7/16 DIA Nylon

SE2-0001L/R



Switch Assembly, RAL Safety Edge

SE2-0002L/R



Switch Assembly, RAL Safety Edge With Electric Eye

SE2-0003N



Cover, RAL Safety Edge Switch

(*) Special Engineering Required

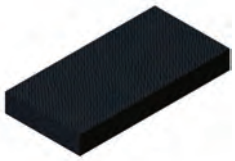
DOOR EQUIPMENT

Door Protection

Safety Edge Parts

RAL

SE2-0004N



Stop, RAL Safety Edge Rubber

SE2-0005N



Roller, RAL Safety Edge Retracting

SE2-0006N



Microswitch, RAL Safety Edge

SE2-0007N



Washers, RAL Switch Friction

SE2-0008N



Rod, RAL Safety Edge Retracting

SE2-0009N



Cable, RAL Safety Edge 3 Wire

SE2-0010N



Cable, RAL Safety Edge 5 Wire

SE5-0015N



Nose, Safety Edge 84" HT Brown

SE5-0016N



Angle, Safety Edge Nose Retracting

SE5-0017L/R



Base & Arms, Safety Edge

SE5-0018N



Arm & Spring Assembly, Upper

SE5-0019N



Spring, Safety Edge Upper Arm

SE5-0020N



Arm & Spring Assembly, Lower

SE5-0021N



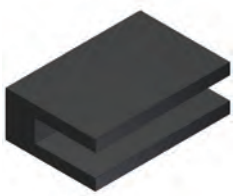
Spring, Safety Edge Lower Arm

SE5-0023N



Cam, Safety Edge Close, For Clutch With 5" & 6" Link

SE5-0024N



Bumper, Safety Edge Pivot Arm, 7/8" Lg.

(*) Special Engineering Required

DOOR EQUIPMENT

Door Protection

Safety Edge Parts

RAL

SE5-0025N



Block, Safety Edge Spring Tension

SE5-0026N



Bracket, Safety Edge Pivot Support

SE5-0027L/R



Retracting/Friction Assembly

SE5-0028L/R



Cam, Safety Edge Open

SE5-0029N



Friction Assembly, Open Hold

SE5-0030N



Bolt Assembly, Retractable Rod

SE5-0031N



Hardware, Safety Edge Mounting

SE5-0032N



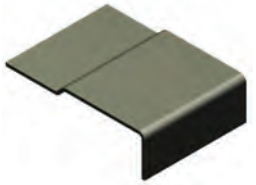
Washers, Safety Edge Friction, For New Connecting Link

SE5-0044N



Angle, Safety Edge Fig #1 Nose Retractable

SE5-0095N



Angle, Safety Edge Nose Retracting Upper

SE5-0096N



Angle, Safety Edge Nose Retracting Lower

(*) Special Engineering Required

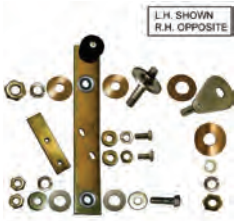
DOOR EQUIPMENT

Door Protection

Safety Edge Parts

RALW (Water Resistant)

SE13-0025L/R



Retracting/Friction Assembly, Yellow Zinc Dichromate

SE15-0001L/R



Switch Assembly, Type "RALW" Safety Edge

SE15-0004N



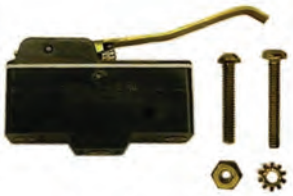
Cover, Type "RALW" Safety Edge Switch

SE15-0005N



Roller, "RALW" Safety Edge Retracting

SE15-0006N



Microswitch, Type "RALW" Safety Edge

SE8-0071N



Rod, Type "RHAL" Plated Retractable

RASS-RDL & HA

SE3-0021N



Description
Cable, Type "RASS-RDL" Retracting

SE4-0028N



Description
Microswitch, Type "HA" Safety Edge, Reference # MICS-0003N

HT & HTE

SE12-0019N



Cable, Type "HTE" Safety Edge 6 Wire

SE12-0020N



Switch, Type "HTE" Safety Edge On-Off

SE12-0021N



Cable, Type "HT" Safety Edge 3 Wire

SE12-0016N



Microswitch, Type "HT" Safety Edge

(*) Special Engineering Required

GAL
Clutches

CLUTCH ASSEMBLIES 252-275

LWZ-1 CAR ZONE LOCK 276-277

CLUTCH PARTS (LWZ-1 SERIES)

LWZ-2 CAR ZONE LOCK 282

CLUTCH PARTS (LWZ-2, LW-2, L-2 SERIES) 282-283

CLUTCH PARTS (CWZ-2, C-2, CW-2 SERIES) 284-285

CLUTCH VANES 286-288

CLUTCH SPRINGS 288

HARDWARE 289



LWZ-2

"S" clutch is a fixed vane clutch used on old shoe type operators with 'MO" single roller release assemblies on hall doors.

"L-2" clutch works with "MOM" vertical roller release assemblies on hall doors. The clutch attaches to the lower part of drive arm on "L" type operators.

"C-2", **"CW-2"** and **"CWZ-2"** clutches are cable activated by a cam and roller arm mounted on or above car door hangers. They are used for non-GAL operators, old shoe type operators and other special applications chosen by GAL engineering dept.

"C-2" type clutch works with "MOM" vertical roller release assemblies on hall doors

"CW-2" and **"CWZ-2"** clutches work with "MOH" horizontal roller release assemblies on hall doors.

"CWZ-2" clutch is arranged for zone locking assemblies (restrictor device).

"LW-2" clutch works with "MOH" horizontal roller release assemblies on hall doors. The clutch attaches to the lower part of drive arm on "L" type operators.

"LWZ-2" clutch is same as **"LW-2"** clutch except they are arranged for zone locking assemblies (restrictor device)

"HA" vandal resistant clutch is arranged with a 3rd fixed vane built into clutch to prevent disengagement of hall doors.

"W" clutch is made water resistant by plating all ferrous material with yellow zinc dichromate.

"LOW" clutch is cut down to fit in a running clearance and sill space range from (2 11/16" to 3 3/16") with a (1" to 1 1/2") running clearance.

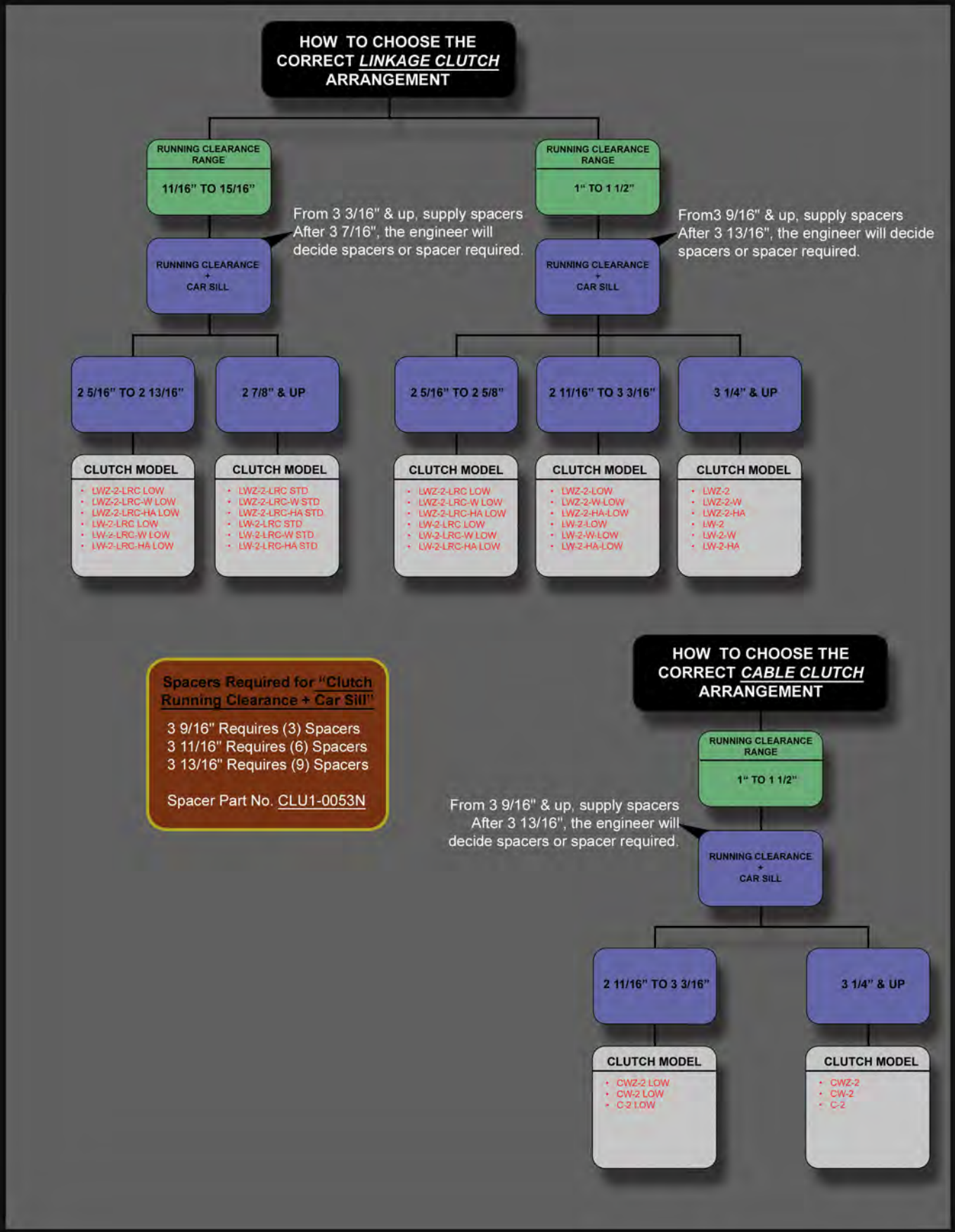
"LRC STD" limited running clearance clutch is cut down to fit in a running clearance and sill space range from (2 7/8" to 3 7/6") with a (11/16" to 15/16") running clearance.

"LRC-LOW" limited running clearance clutch is cut down to fit in a running clearance and sill space range from (2 5/16" to 2 13/16") with a (1 5/16" to 11/16") running clearance.

CLUCH MODELS

- L-2
- L-2-LOW
- LW-2
- LW-2-HA
- LW-2-HA-LOW
- LW-2-HA-LRC LOW
- LW-2-HA-LRC STD
- LW-2-LOW
- LW-2-LOW-W
- LW-2-LRC LOW
- LW-2-LRC STD
- LW-2-LRC-W LOW
- LW-2-LRC-W STD
- LW-2-W
- LWZ-2
- LWZ-2-HA
- LWZ-2-HA-LOW
- LWZ-2-HA-LRC LOW
- LWZ-2-HA-LRC STD
- LWZ-2-LOW
- LWZ-2-LOW-W
- LWZ-2-LRC LOW
- LWZ-2-LRC STD
- LWZ-2-LRC-W LOW
- LWZ-2-LRC-W STD
- C-2
- C-2-LOW
- C-2-LOW
- CWZ-2
- CWZ-2-LOW
- CW-2
- CW-2-LOW
- S

DOOR EQUIPMENT

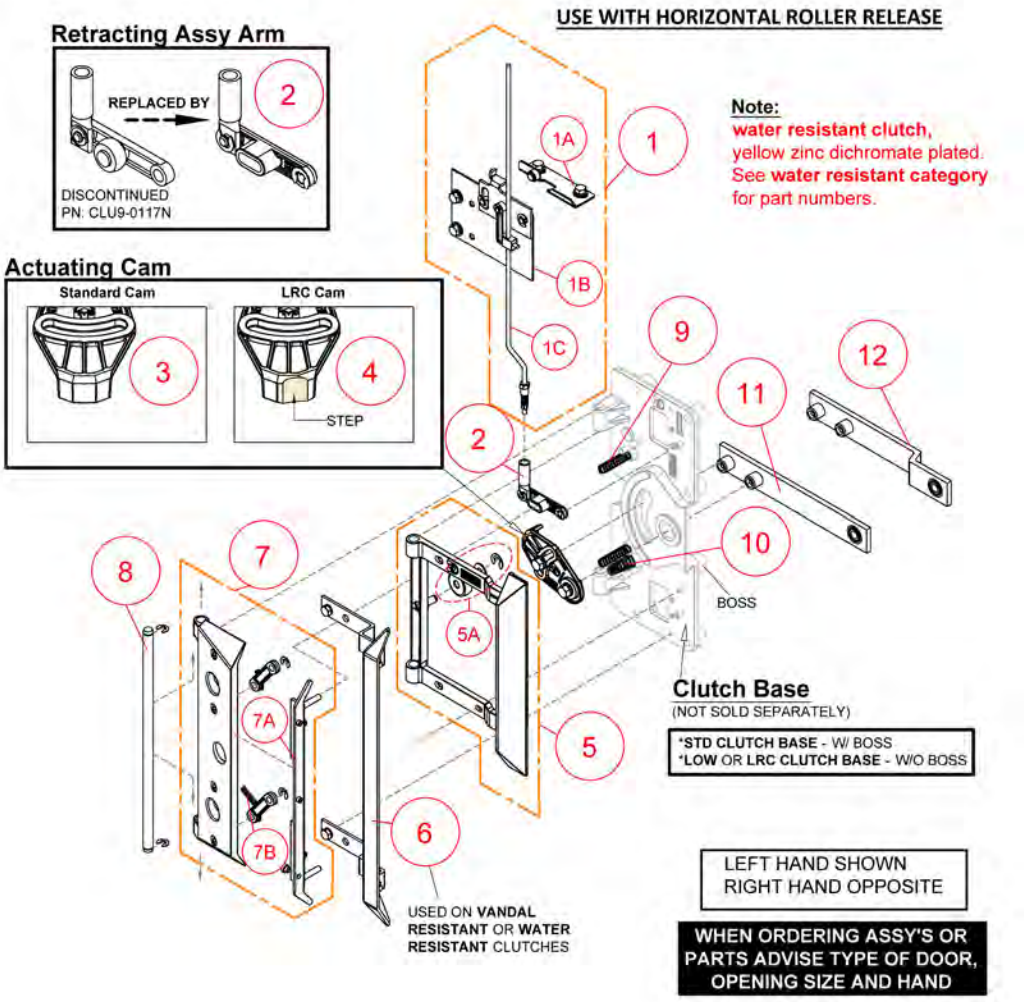

HOW TO CHOOSE THE CORRECT LINKAGE CLUTCH ARRANGEMENT
RUNNING CLEARANCE RANGE
11/16" TO 15/16"
From 3 3/16" & up, supply spacers After 3 7/16", the engineer will decide spacers or spacer required.
RUNNING CLEARANCE + CAR SILL
2 5/16" TO 2 13/16"
2 7/8" & UP
CLUTCH MODEL
LWZ-2-LRC LOW
LWZ-2-LRC-W LOW
LWZ-2-LRC-HA LOW
LW-2-LRC LOW
LW-2-LRC-W LOW
LW-2-LRC-HA LOW
CLUTCH MODEL
LWZ-2-LRC STD
LWZ-2-LRC-W STD
LWZ-2-LRC-HA STD
LW-2-LRC STD
LW-2-LRC-W STD
LW-2-LRC-HA STD
RUNNING CLEARANCE RANGE
1" TO 1 1/2"
From3 9/16" & up, supply spacers After 3 13/16", the engineer will decide spacers or spacer required.
RUNNING CLEARANCE + CAR SILL
2 5/16" TO 2 5/8"
2 11/16" TO 3 3/16"
3 1/4" & UP
CLUTCH MODEL
LWZ-2-LRC LOW
LWZ-2-LRC-W LOW
LWZ-2-LRC-HA LOW
LW-2-LRC LOW
LW-2-LRC-W LOW
LW-2-LRC-HA LOW
CLUTCH MODEL
LWZ-2-LOW
LWZ-2-W-LOW
LWZ-2-HA-LOW
LW-2-LOW
LW-2-W-LOW
LW-2-HA-LOW
CLUTCH MODEL
LWZ-2
LWZ-2-W
LWZ-2-HA
LW-2
LW-2-W
LW-2-HA
Spacers Required for "Clutch Running Clearance + Car Sill"
3 9/16" Requires (3) Spacers
3 11/16" Requires (6) Spacers
3 13/16" Requires (9) Spacers
Spacer Part No. CLU1-0053N
HOW TO CHOOSE THE CORRECT CABLE CLUTCH ARRANGEMENT
RUNNING CLEARANCE RANGE
1" TO 1 1/2"
From 3 9/16" & up, supply spacers After 3 13/16", the engineer will decide spacers or spacer required.
RUNNING CLEARANCE + CAR SILL
2 11/16" TO 3 3/16"
3 1/4" & UP
CLUTCH MODEL
CWZ-2 LOW
CW-2 LOW
C-2 LOW
CLUTCH MODEL
CWZ-2
CW-2
C-2

DOOR EQUIPMENT

Clutch Isometric Drawing

LWZ-2 Series w/ Car Zone Locking Assembly

Drive Arm Actuated Clutch



Part No.	Item No	Description
CLU9-0115L/R	1	Zone Locking Assembly, LWZ-2 Clutch 36" Rod (**Page#** 282)
CLU9-0049L/R	1A	Cam, LWZ-2 Standard Locking, Includes Hardware (**Page#** 282)
CLU9-0101L/R	1B	Guide, LWZ-2 Clutch Locking (**Page#** 282)
***CLU9-XXXXX**	1C	Rod, 24"/36" LWZ-2 Clutch Zone Locking- (**See page** 283)
CLU9-0256N	2	Arm, LWZ-2 Retracting Assembly (**Page#** 283)
CLU9-0111N	3	Cam, Clutch Actuating, LWZ-2 & LWZ-2-Low , Standard (**Page#** 282)
CLU9-0238L/R	4	Cam, LW-2-LRC/LWZ-2-LRC Clutch Actuating
CLU9-0116N	5	Vane, Door Close LWZ-2 (**Page#** 282)
CLU9-0113N	5A	Roller, 1 1/4" DIA LWZ-2/LZ-2 Clutch (**Page#** 284)

Part No.	Item No	Description
CLU9-0103N	6	Vane, LWZ-2-HA Clutch Fixed (**Page#** 288)
CLU9-0257L/R	7	Vane, LWZ-2 Door Open (**Page#** 287)
CLU9-0255N	7A	Sensing Bar & Pivot, LWZ-2 Zone Lock, With (2) 1 9/32" Long Pins (**Page#** 282)
SPG-0081N	7B	Spring, 7/8" LG x 1/4" OD. (.024 Wire-9 Turns) (**Page#** 288)
SHF-0065N	8	Shaft,7/16" X 11 7/8" LG LWZ-2 Open Vane
SPG-0019N	9	Spring, 1 5/8" LG x 3/8" OD. (.037 Wire-14 Turns) (**Page#** 288)
SPG-0036N	10	Spring, 1 1/4" LG x 7/8" OD. (.063 Wire-7 1/2 Turns) (**Page#** 288)
CLU9-XXXXX	11	Link, Standard Clutch- (**See page** 283)
CLU9-XXXXX	12	Link, Low & LRC Clutch- (**See page** 283)

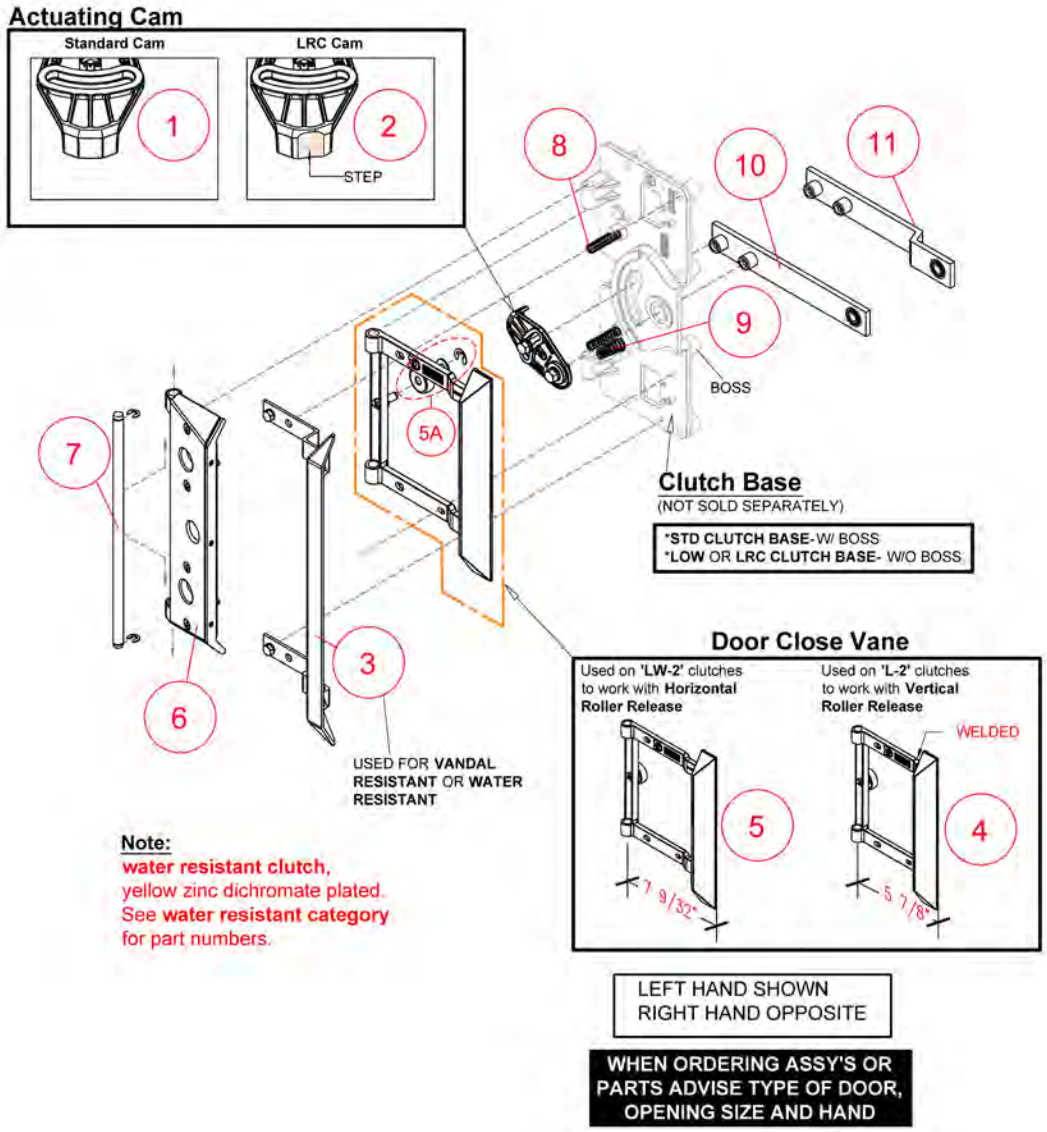
Mounting hardware included with clutch assemblies

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Clutch Isometric Drawing

LW-2 & L-2 Series

Drive Arm Actuated Clutch



Part No.	Item No	Description
CLU9-0111N	1	Cam, Clutch Actuating, Standard (**Page#** 282)
CLU9-0238L/R	2	Cam, LRC Clutch Actuating (**Page#** 282)
CLU9-0103N	3	Vane, LWZ-2-HA Clutch Fixed
CLU15-0021N	4	Vane, L-2 Clutch Door Close (**Page#** 288)
CLU9-0116N	5	Vane, Door Close (**Page#** 288)
CLU9-0113N	5A	Roller, 1 1/4" DIA LWZ-2/LZ-2 Clutch (**Page#** 284)

Part No.	Item No	Description
CLU9-0257L/R	6	Vane, LWZ-2 Door Open (**Page#** 287)
SHF-0065N	7	Shaft,7/16" X 11 7/8" LG LWZ-2 Open Vane
SPG-0019N	8	Spring, 1 5/8" LG x 3/8" OD. (.037 Wire-14 Turns) (**Page#** 288)
SPG-0036N	9	Spring, 1 1/4" LG x 7/8" OD. (.063 Wire-7 1/2 Turns) (**Page#** 288)
CLU9-XXXXX	10	Link, Standard Clutch- (**See page** 283)
CLU9-XXXXX	11	Link, Low & LRC Clutch- (**See page** 283)

Mounting hardware included with clutch assemblies

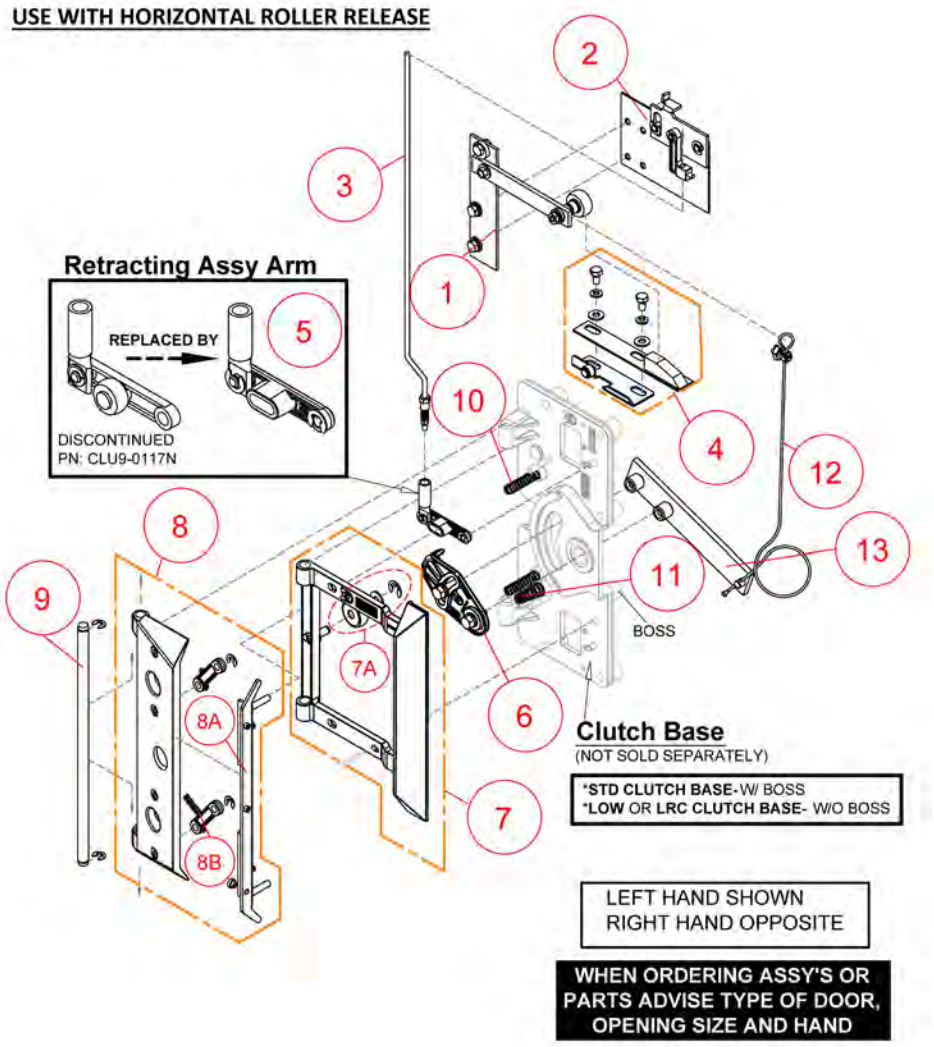
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Clutch Isometric Drawing

CWZ-2 Series w/ Car Zone Locking Assembly

Cable Actuated Clutch



Part No.	Item No	Description
CLU16-0025L/R	1	Linkage, CW-2/CWZ-2 Clutch Activation, Without Cam Assembly (**Page#** 284)
CLU9-0101L/R	2	Guide, Clutch Locking (**Page#** 282)
CLU9-XXXXX	3	Rod, 24"/36" LWZ-2 Clutch Zone Locking (**See page** 282)
CLU16-0032L/R	4	Cam Assembly, CWZ-2 Clutch Cable Locking
CLU9-0256N	5	Arm, LWZ-2 Retracting Assembly (**Page#** 283)
CLU9-0111N	6	Cam, Clutch Actuating, Standard (**Page#** 282)
CLU16-0023N	7	Vane, Door Close (**Page#** 287)
CLU9-0113N	7A	Roller, 1 1/4" DIA LWZ-2/LZ-2 Clutch (**Page#** 284)
CLU9-0257L/R	8	Vane, Door Open (**Page#** 287)

Part No.	Item No	Description
CLU9-0255N	8A	Sensing Bar & Pivot, LWZ-2 Zone Lock, With (2) 1 9/32" Long Pins (**Page#** 282)
SPG-0081N	8B	Spring, 7/8" LG x 1/4" OD. (.024 Wire-9 Turns) (**Page#** 288)
SHF-0065N	9	Shaft,7/16" X 11 7/8" LG LWZ-2 Open Vane
SPG-0019N	10	Spring, 1 5/8" LG x 3/8" OD. (.037 Wire-14 Turns) (**Page#** 288)
SPG-0036N	11	Spring, 1 1/4" LG x 7/8" OD. (.063 Wire-7 1/2 Turns) (**Page#** 288)
CLU4-0025N	12	Cable, Type "C", "CW", "CW-2", "CWZ-2" Clutch, 32" Lg (1/16" Air Craft Preform Clear Nylon) (**Page#** 285)
CLU16-0013N	13	Link Assembly, CW-2/CWZ-2 Clutch (**Page#** 286)

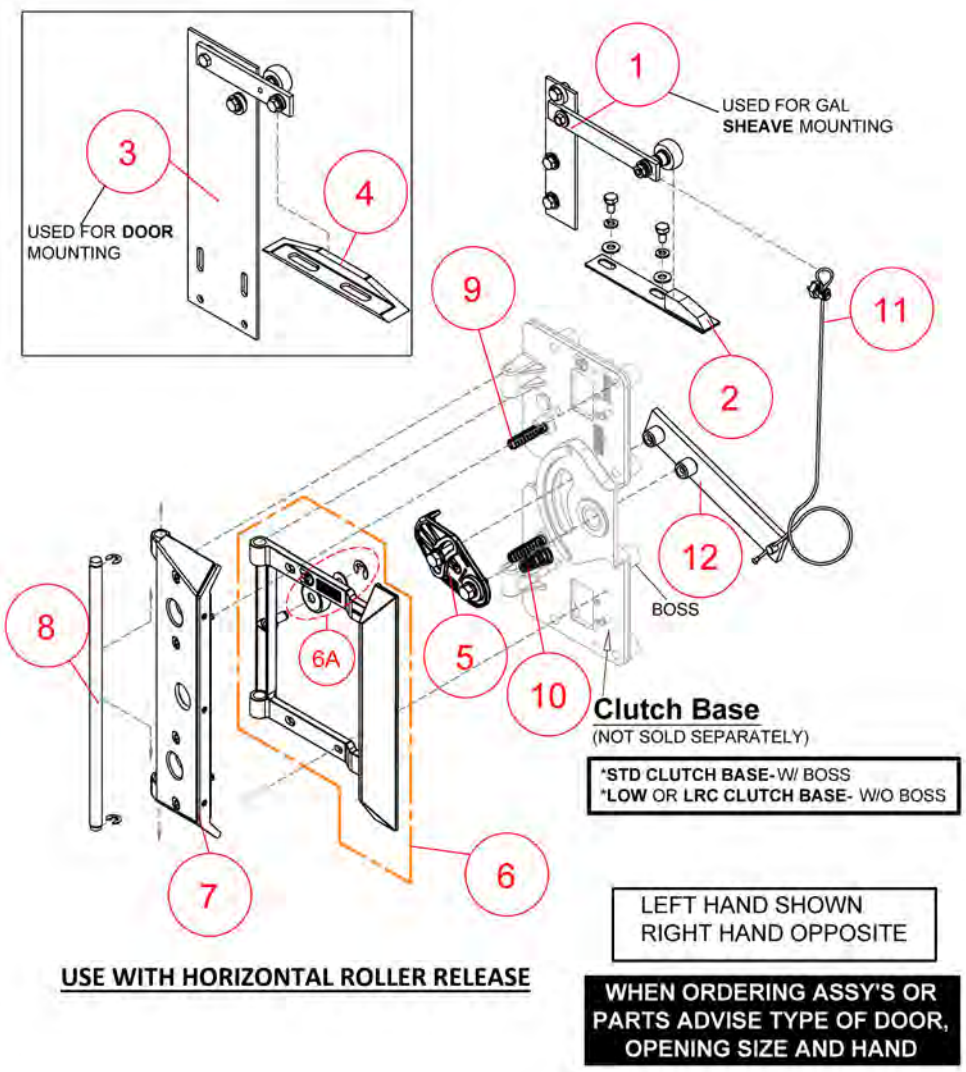
Mounting hardware included with clutch assemblies

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Clutch Isometric Drawing

CW-2 Series

Cable Actuated Clutch



Part No.	Item No	Description
CLU16-0025L/R	1	Linkage, CW-2/CWZ-2 Clutch Activation, Without Cam Ass'y (**Page#** 284)
CLU16-0019L/R	2	Cam Assembly, CWZ-2 Clutch Cable Locking (**Page#** 285)
CLU4-0017N	3	12" Plate & Roller Assembly. (**Page#** 284)
BCST-0045N	4	Cam, C/CW Clutch (**Page#** 285)
CLU9-0111N	5	Cam, Clutch Actuating, Standard (**Page#** 282)
CLU16-0023N	6	Vane, CW-2/CWZ-2 Door Close (**Page#** 287)
CLU9-0113N	6A	Roller, 1 1/4" DIA LWZ-2/LZ-2 Clutch (**Page#** 284)

Part No.	Item No	Description
CLU9-0255N	7	Vane, Door Open (**Page#** 282)
SHF-0065N	8	Shaft,7/16" X 11 7/8" LG LWZ-2 Open Vane
SPG-0019N	9	Spring, 1 5/8" LG x 3/8" OD. (.037 Wire-14 Turns) (**Page#** 288)
SPG-0036N	10	Spring, 1 1/4" LG x 7/8" OD. (.063 Wire-7 1/2 Turns) (**Page#** 288)
CLU4-0025N	11	Cable, Type "C/CW/CW-2/CWZ-2" Clutch , 32"Lg (1/16" Air Craft Preform Clear Nylon) (**Page#** 285)
CLU16-0013N	12	Link Assembly, CW-2/CWZ-2 Clutch (**Page#** 286

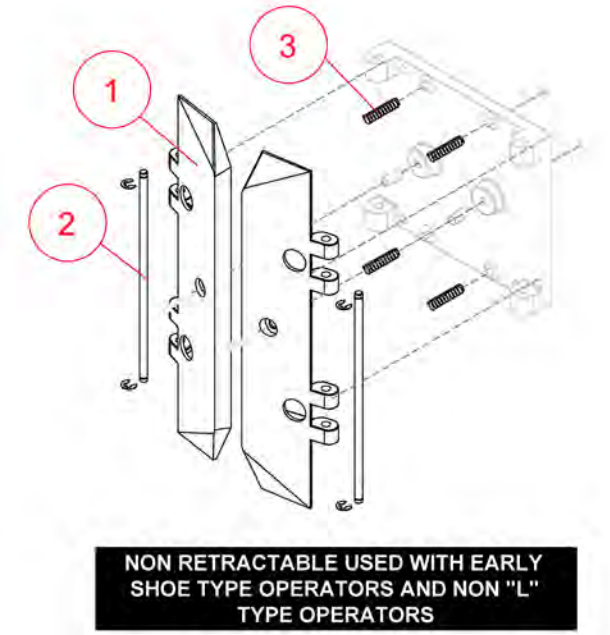
Mounting hardware included with clutch assemblies

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Clutch Isometric Drawing

S Clutch

Standard Clutch (use for single roller release)



Part No.	Item No	Description
CLU8-0002N	1	Vane, Type “S” Clutch (**Page#** 287)
CLU8-0003N	2	Shaft, 9 3/4” Lg Type “S” Clutch Hinge (**Call G.A.L.**)

Part No.	Item No	Description
SPG-0019N	3	Spring, 1 5/8” LG x 3/8” OD. (.037 Wire-14 Turns) (**Page#** 288)

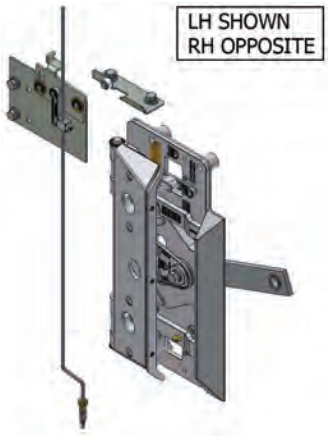
Mounting hardware included with clutch assemblies

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Link Actuated Clutch Assemblies

Conventional

LWZ-2



Mounting Hardware Included:

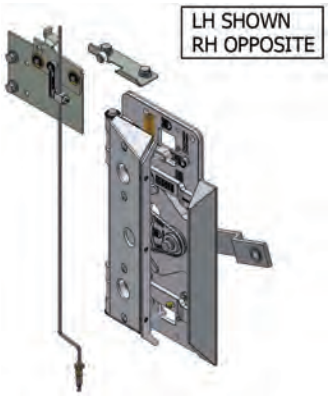
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex cap 1" bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU9-0005L/R	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU9-0002L/R	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU9-0009L/R	7"				60"-67"	60"-69"
CLU9-0003L/R	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU9-0010L/R	9"			45"-49"	75"-79"	75"-79"
CLU9-0001L/R	10"	22"-29" 40"-44"	40"-44"		80"-83"	84"-89"
CLU9-0011L	10"					80"-83"
CLU9-0012L/R	11"			50"-54"		
CLU9-0004L/R	12"	45"-48"	45"-52"			90"-106"
CLU9-0006L/R	12"		53"-56"	55"-59"		107"-114"
CLU9-0007L/R	14"		57"-64"	60"-64"		115"-130"
CLU9-0008L/R	16"		65"-72"	65"-69"		131"-144"
CLU9-0051L/R*						

LWZ-2-LOW



Mounting Hardware Included:

- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16"OD x 0.093" thick lock washer
- (10) 1/4-20 x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20 x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16" - 3 3/16" (LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU9-0017L/R	5 1/4"		24"-26"	30"-34"	24"-33"	32"-39" 40"-49"
CLU9-0014L/R	6"	30"-34"	27"-34"	35"-39"	34"-39" 40"-49"	50"-59"
CLU9-0021L	7"				60"-67"	60"-69"
CLU9-0015L/R	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU9-0022L/R	9"			45"-49"	75"-79"	75"-79"
CLU9-0013L/R	10"	22"-29" 40"-44"	40"-44"		80"-83"	84"-89"
CLU9-0023L	10"					80"-83"
CLU9-0024L/R	11"			50"-54"		
CLU9-0016L/R	12"	45"-48"	45"-52"			90"-106"
CLU9-0018L/R	12"		53"-56"	55"-59"		107"-114"
CLU9-0019L/R	14"		57"-64"	60"-64"		115"-130"
CLU9-0020L/R	16"		65"-72"	65"-69"		131"-144"
CLU9-0052L/R*						

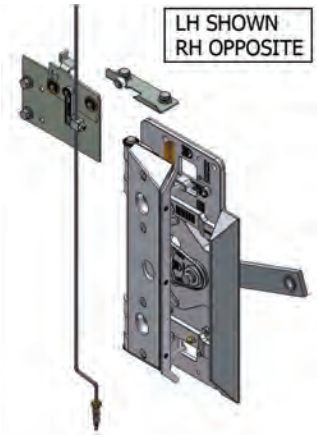
(*) Special Engineering Required

DOOR EQUIPMENT

Link Actuated Clutch Assemblies

Conventional

LWZ-2-LRC STD



Mounting Hardware Included:

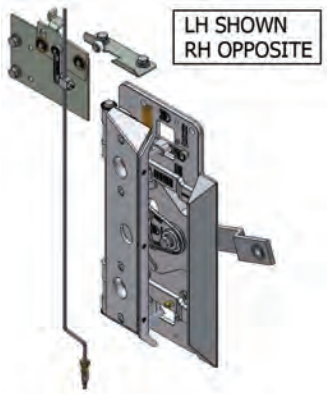
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
11/16"-15/16" (LRC STD)

Running Clearance + Car Sill (Range):
2 7/8" - 3 7/16" (LRC STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU9-0197L/R	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU9-0194L/R	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU9-0201L/R	7"				60"-67"	60"-67"
CLU9-0195L/R	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU9-0202L/R	9"			45"-49"	75"-79"	75"-79"
CLU9-0193L/R	10"	22"-29" 40"-44"	40"-44"		80"-83"	84"-89"
CLU9-0203L/R	10"					80"-83"
CLU9-0204L/R	11"			50"-54"		
CLU9-0196L/R	12"	45"-48"	45"-52"			90"-106"
CLU9-0198L/R	12"		53"-56"	55"-59"		107"-114"
CLU9-0199L/R	14"		57"-64"	60"-64"		115"-130"
CLU9-0200L/R	16"		65"-72"	65"-69"		131"-144"
CLU9-0247L/R*						

LWZ-2-LRC LOW



Mounting Hardware Included:

- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4"Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range
11/16"-15/16" (LRC LOW)

Running Clearance + Car Sill (Range)
2 5/16" - 2 13/16" (LRC LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU9-0209L/R	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU9-0206L/R	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU9-0213L/R	7"				60"-67"	60"-67"
CLU9-0207L/R	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU9-0214L/R	9"			45"-49"	75"-79"	75"-79"
CLU9-0205L/R	10"	22"-29" 40"-44"	40"-44"		80"-83"	84"-89"
CLU9-0215L/R	10"				80"-83"	
CLU9-0216L/R	11"			50"-54"		
CLU9-0208L/R	12"	45"-48"	45"-52"			90"-106"
CLU9-0210L/R	12"		53"-56"	55"-59"		107"-114"
CLU9-0211L/R	14"		57"-64"	60"-64"		115"-130"
CLU9-0212L/R	16"		65"-72"	65"-69"		131"-144"
CLU9-0261L/R*						

(*) Special Engineering Required

Link Actuated Clutch Assemblies

Conventional

LW-2



Mounting Hardware Included:
- (6) 1/16” & (3) 1/8” spacers
- (6) 5/16-18” x 1 3/4” Lg hex bolts
- (6) 5/16-18” x 1 3/4” Lg carriage bolts
- (6) 5/16” ID x 9/16” OD x 0.093” thick lock washer
- (10) 1/4-20” x 7/16” W.A.C. hex steel plated nut

Running Clearance Range:
1”-1 1/2” (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4” - 3 13/16” (STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU11-0001N	5 1/4”		24”-26”	30”-34”	24”-33”	32”-49”
CLU11-0002N	6”	30”-34”	27”-34”	35”-39”	34”-49”	50”-59”
CLU11-0003N	7”				60”-67”	60”-69”
CLU11-0004N	8”	35”-39”	35”-39”	40”-44”	50”-59” 68”-74”	70”-74”
CLU11-0005N	9”			45”-49”	75”-79”	75”-79”
CLU11-0006N	10”	24”-29” 40”-44”	40”-44”		80”-83”	80”-83”
CLU11-0007N	11”			50”-54”		
CLU11-0008N	12”	45”-48”	45”-56”	55”-59”		
CLU11-0009N	14”		57”-64”	60”-64”		
CLU11-0010N	16”		65”-72”	65”-69”		
CLU11-0086N*						

LW-2-LOW



Mounting Hardware Included:
- (6) 1/16” & (9) 1/8” spacers
- (6) 5/16-18” x 1 1/4” Lg hex bolts
- (6) 5/16-18” x 1 3/4” Lg carriage bolts
- (6) 5/16” ID x 9/16” OD x 0.093” thick lock washer
- (10) 1/4-20” x 7/16” W.A.C. hex steel plated nut

Running Clearance Range:
1”-1 1/2” (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16” - 3 3/16” (LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU11-0011N	5 1/4”		24”-26”	30”-34”	24”-33”	32”-49”
CLU11-0012N	6”	30”-34”	27”-34”	35”-39”	34”-49”	50”-59”
CLU11-0013N	7”				60”-67”	60”-69”
CLU11-0014N	8”	35”-39”	35”-39”	40”-44”	50”-59” 68”-74”	70”-74”
CLU11-0015N	9”			45”-49”	75”-79”	75”-79”
CLU11-0016N	10”	24”-29” 40”-44”	40”-44”		80”-83”	80”-83”
CLU11-0017N	10”			50”-54”		
CLU11-0018N	12”	45”-48”	45”-56”	55”-59”		
CLU11-0019N	14”		57”-64”	60”-64”		
CLU11-0020N	16”		65”-72”	65”-69”		

(*) Special Engineering Required

DOOR EQUIPMENT

Link Actuated Clutch Assemblies

Conventional

LW-2-LRC STD



Mounting Hardware Included:
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
11/16"-15/16" (LRC STD)

Running Clearance + Car Sill (Range):
2 7/8" - 3 7/16" (LRC STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU11-0021L/R	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU11-0022L/R	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU11-0023L/R	7"				60"-67"	60"-69"
CLU11-0024L/R	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU11-0025L/R	9"			45"-49"	75"-79"	
CLU11-0026L/R	10"	24"-29" 40"-44"	40"-44"		80"-83"	
CLU11-0027L/R	11"			50"-54"		
CLU11-0028L/R	12"	45"-48"	45"-56"	55"-59"		
CLU11-0029L/R	14"		57"-64"	60"-64"		
CLU11-0030L/R	16"		65"-72"	65"-69"		
CLU11-0087L/R*						

LW-2-LRC LOW



Mounting Hardware Included:
- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
11/16"-15/16" (LRC LOW)

Running Clearance + Car Sill (Range):
2 5/16" - 2 13/16" (LRC LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU11-0031L/R	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU11-0032L/R	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU11-0033L/R	7"				60"-67"	60"-69"
CLU11-0034L/R	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU11-0035L/R	9"			45"-49"	75"-79"	
CLU11-0036L/R	10"	24"-29" 40"-44"	40"-44"		80"-83"	
CLU11-0037L/R	11"			50"-54"		
CLU11-0038L/R	12"	45"-48"	45"-48"	55"-59"		
CLU11-0039L/R	14"		57"-64"	60"-64"		
CLU11-0040L/R	16"		65"-72"	65"-69"		

(*) Special Engineering Required

Link Actuated Clutch Assemblies

Conventional

L-2



Mounting Hardware Included:
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU15-0001N	5 1/4"		24"-26"	30"-34"	30"-33"	32"-49"
CLU15-0002N	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU15-0003N	7"				60"-67"	60"-69"
CLU15-0004N	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU15-0005N	9"			45"-49"	75"-79"	75"-79"
CLU15-0006N	10"	24"-29" 40"-44"	40"-44"		80"-83"	80"-83"
CLU15-0007N	11"			50"-54"		
CLU15-0008N	12"	45"-48"	45"-56"	55"-59"		
CLU15-0009N	14"		57"-64"	60"-64"		
CLU15-0010N	16"		65"-72"	65"-69"		

L-2-LOW



Mounting Hardware Included:
- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16" - 3 3/16" (LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU15-0011N	5 1/4"		24"-26"	30"-34"	30"-33"	32"-49"
CLU15-0012N	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU15-0013N	7"				60"-67"	60"-69"
CLU15-0014N	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU15-0015N	9"			45"-49"	75"-79"	75"-79"
CLU15-0016N	10"	24"-29" 40"-44"	40"-44"		80"-83"	80"-83"
CLU15-0017N	11"			50"-54"		
CLU15-0018N	12"	45"-48"	45"-56"	55"-59"		
CLU15-0019N	14"		57"-64"	60"-64"		
CLU15-0020N	16"		65"-72"	65"-69"		

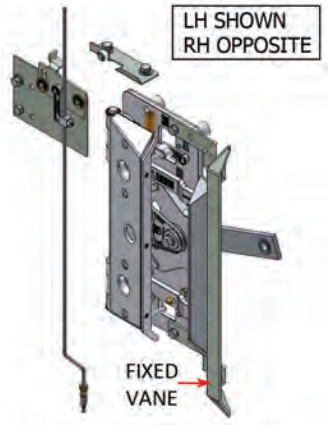
(*) Special Engineering Required

DOOR EQUIPMENT

Link Actuated Clutch Assemblies

Vandal Resistant

LWZ-2-HA



Mounting Hardware Included:

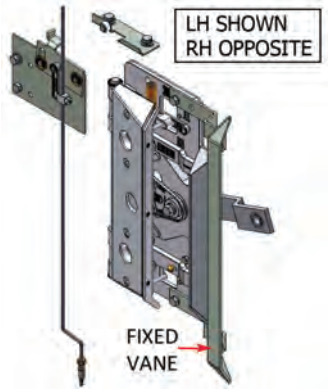
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex cap 1" bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

Part No.	Link Size	S/S	2/SP	C/P
CLU9-0142L/R*	5 1/4"		24"-26"	30"-33"
CLU9-0140L/R*	6"	25"-34"	27"-34"	34"-49"
CLU9-0141L/R*	8"	35"-42"	35"-39"	50"-59"
CLU9-0143L/R*	10"		40"-44"	
CLU9-0144L/R*	12"		45"-52"	
CLU9-0145L/R*	12"		53"-56"	
CLU9-0146L/R*	14"		57"-64"	
CLU9-0147L/R*	16"		65"-72"	
CLU9-0248L/R*				

LWZ-2-HA-LOW



Mounting Hardware Included:

- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16"OD x 0.093" thick lock washer
- (10) 1/4-20 x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20 x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16" - 3 3/16" (LOW)

Part No.	Link Size	S/S	2/SP	C/P
CLU9-0150L/R*	5 1/4"		24"-26"	30"-33"
CLU9-0148L/R*	6"	25"-34"	27"-34"	34"-49"
CLU9-0149L/R*	8"	35"-42"	35"-39"	50"-59"
CLU9-0151L/R*	10"		40"-44"	
CLU9-0152L/R*	12"		45"-52"	
CLU9-0153L/R*	12"		53"-56"	
CLU9-0154L/R*	14"		57"-64"	
CLU9-0155L/R*	16"		65"-72"	

(*) Special Engineering Required

Link Actuated Clutch Assemblies

Vandal Resistant

LWZ-2-HA-LRC STD



Mounting Hardware Included:

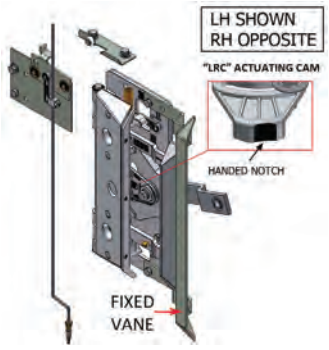
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
11/16"-15/16" (LRC STD)

Running Clearance + Car Sill (Range):
2 7/8" - 3 7/16" (LRC STD)

Part No.	Link Size	S/S	2/SP	C/P
CLU9-0158L/R*	5 1/4"		24"-26"	30"-33"
CLU9-0156L/R*	6"	25"-34"	27"-34"	34"-49"
CLU9-0157L/R*	8"	35"-42"	35"-39"	50"-59"
CLU9-0159L/R*	10"		40"-44"	
CLU9-0160L/R*	12"		45"-52"	
CLU9-0161L/R*	12"		53"-56"	
CLU9-0162L/R*	14"		57"-64"	
CLU9-0163L/R*	16"		65"-72"	
CLU9-0249L/R*				

LWZ-2-HA-LRC LOW



Mounting Hardware Included:

- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4"Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range
11/16"-15/16" (LRC LOW)

Running Clearance + Car Sill (Range)
2 5/16" - 2 13/16" (LRC LOW)

Part No.	Link Size	S/S	2/SP	C/P
CLU9-0166L/R*	5 1/4"		24"-26"	30"-33"
CLU9-0164L/R*	6"	25"-34"	27"-34"	34"-49"
CLU9-0165L/R*	8"	35"-42"	35"-39"	50"-59"
CLU9-0167L/R*	10"		40"-44"	
CLU9-0168L/R*	12"		45"-52"	
CLU9-0169L/R*	12"		53"-56"	
CLU9-0170L/R*	14"		57"-64"	
CLU9-0171L/R*	16"		65"-72"	

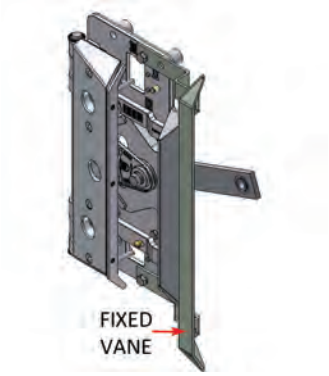
(*) Special Engineering Required

DOOR EQUIPMENT

Link Actuated Clutch Assemblies

Vandal Resistant

LW-2-HA



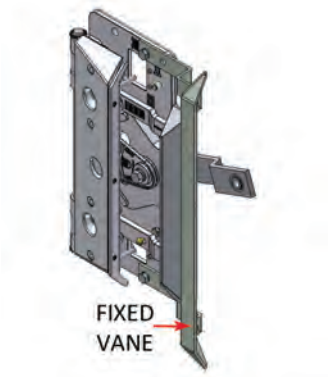
Mounting Hardware Included:
- (6) 1/16” & (3) 1/8” spacers
- (6) 5/16-18” x 1 3/4” Lg hex bolts
- (6) 5/16-18” x 1 3/4” Lg carriage bolts
- (6) 5/16” ID x 9/16” OD x 0.093” thick lock washer
- (10) 1/4-20” x 7/16” W.A.C. hex steel plated nut

Running Clearance Range:
1”-1 1/2” (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4” - 3 13/16” (STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P
CLU11-0041N*	5 1/4”		24”-26”		30”-33”
CLU11-0042N*	6”	24”-34”	27”-34”		34”-49”
CLU11-0043N*	7”				60”-67”
CLU11-0044N*	8”	35”-42”	35”-39”		50”-59”
CLU11-0045N*	9”				75”-79”
CLU11-0046N*	10”		40”-44”		
CLU11-0047N*	11”			50”-54”	
CLU11-0048N*	12”		45”-56”		
CLU11-0049N*	14”		57”-64”		
CLU11-0050N*	16”		65”-72”		

LW-2-HA-LOW



Mounting Hardware Included:
- (6) 1/16” & (9) 1/8” spacers
- (6) 5/16-18” x 1 1/4” Lg hex bolts
- (6) 5/16-18” x 1 3/4” Lg carriage bolts
- (6) 5/16” ID x 9/16” OD x 0.093” thick lock washer
- (10) 1/4-20” x 7/16” W.A.C. hex steel plated nut

Running Clearance Range:
1”-1 1/2” (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16” - 3 3/16” (LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P
CLU11-0051N*	5 1/4”		24”-26”		30”-33”
CLU11-0052N*	6”	24”-34”	27”-34”		34”-49”
CLU11-0053N*	7”				60”-67”
CLU11-0054N*	8”	35”-42”	35”-39”		50”-59”
CLU11-0055N*	9”				75”-79”
CLU11-0056N*	10”		40”-44”		
CLU11-0057N*	11”			50”-54”	
CLU11-0058N*	12”		45”-56”		
CLU11-0059N*	14”		57”-64”		
CLU11-0060N*	16”		65”-72”		

(*) Special Engineering Required

Link Actuated Clutch Assemblies

Vandal Resistant

LW-2-HA-LRC STD



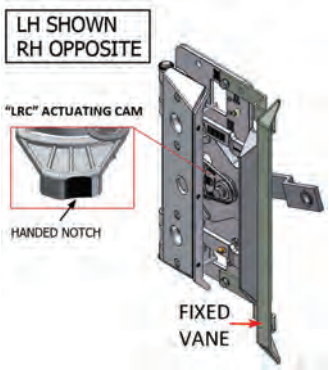
Mounting Hardware Included:
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
11/16"-15/16" (LRC STD)

Running Clearance + Car Sill (Range):
2 7/8" - 3 7/16" (LRC STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P
CLU11-0061L/R*	5 1/4"		24"-26"		30"-33"
CLU11-0062L/R*	6"	24"-34"	27"-34"		34"-49"
CLU11-0063L/R*	7"				60"-67"
CLU11-0064L/R*	8"	35"-42"	35"-39"		50"-59"
CLU11-0065L/R*	9"				75"-79"
CLU11-0066L/R*	10"		40"-44"		
CLU11-0067L/R*	11"			50"-54"	
CLU11-0068L/R*	12"		45"-56"		
CLU11-0069L/R*	14"		57"-64"		
CLU11-0070L/R*	16"		65"-72"		
CLU11-0089L/R*					

LW-2-HA-LRC LOW



Mounting Hardware Included:
- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
11/16"-15/16" (LRC LOW)

Running Clearance + Car Sill (Range):
2 5/16" - 2 13/16" (LRC LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P
CLU11-0071L/R*	5 1/4"		24"-26"		30"-33"
CLU11-0072L/R*	6"	24"-34"	27"-34"		34"-49"
CLU11-0073L/R*	7"				60"-67"
CLU11-0074L/R*	8"	35"-42"	35"-39"		50"-59"
CLU11-0075L/R*	9"				75"-79"
CLU11-0076L/R*	10"		40"-44"		
CLU11-0077L/R*	11"			50"-54"	
CLU11-0078L/R*	12"		45"-56"		
CLU11-0079L/R*	14"		57"-64"		
CLU11-0080L/R*	16"		65"-72"		

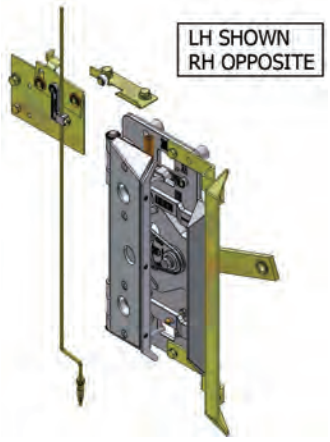
(*) Special Engineering Required

DOOR EQUIPMENT

Link Actuated Clutch Assemblies

Water Resistant

LWZ-2-W



Mounting Hardware Included:

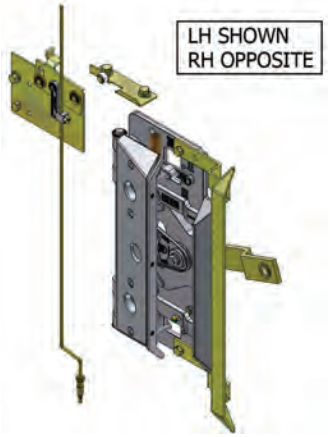
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex cap 1" bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU12-0005L/R*	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU12-0002L/R*	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU12-0009L/R*	7"				60"-67"	60"-69"
CLU12-0003L/R*	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU12-0010L/R*	9"			45"-49"	75"-79"	75"-79"
CLU12-0001L/R*	10"	22"-29" 40"-44"	40"-44"		80"-83"	
CLU12-0011L/R*	10"					80"-83"
CLU12-0012L/R*	11"			50"-54"		
CLU12-0004L/R*	12"	45"-48"	45"-52"			
CLU12-0006L/R*	12"		53"-56"	55"-59"		
CLU12-0007L/R*	14"		57"-64"	60"-64"		
CLU12-0008L/R*	16"		65"-72"	65"-69"		

LWZ-2-LOW-W



Mounting Hardware Included:

- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16" - 3 3/16" (LOW)

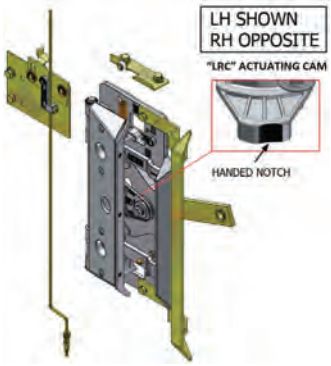
Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU12-0045L/R*	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU12-0042L/R*	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU12-0049L/R*	7"				60"-67"	60"-69"
CLU12-0043L/R*	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU12-0050L/R*	9"			45"-49"	75"-79"	75"-79"
CLU12-0013L/R*	10"	22"-29" 40"-44"	40"-44"		80"-83"	
CLU12-0051L/R*	10"					80"-83"
CLU12-0052L/R*	11"			50"-54"		
CLU12-0044L/R*	12"	45"-48"	45"-52"			
CLU12-0046L/R*	12"		53"-56"	55"-59"		
CLU12-0047L/R*	14"		57"-64"	60"-64"		
CLU12-0048L/R*	16"		65"-72"	65"-69"		

(*) Special Engineering Required

Link Actuated Clutch Assemblies

Water Resistant

LWZ-2-LRC-W STD



Mounting Hardware Included:

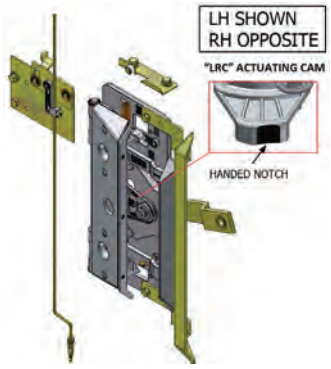
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range:
11/16"-15/16" (LRC STD)

Running Clearance + Car Sill (Range):
2 7/8" - 3 7/16" (LRC STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU12-0076L/R*	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU12-0073L/R*	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU12-0080L/R*	7"				60"-67"	60"-69"
CLU12-0074L/R*	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	
CLU12-0081L/R*	9"			45"-49"	75"-79"	75"-79"
CLU12-0041L/R*	10"	22"-29" 40"-44"	40"-44"		80"-83"	
CLU12-0082L/R*	10"					80"-83"
CLU12-0083L/R*	11"			50"-54"		
CLU12-0075L/R*	12"	45"-48"	45"-52"			
CLU12-0077L/R*	12"		53"-56"	55"-59"		
CLU12-0078L/R*	14"		57"-64"	60"-64"		
CLU12-0079L/R*	16"		65"-72"			

LWZ-2-LRC-W LOW



Mounting Hardware Included:

- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4"Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

Running Clearance Range
11/16"-15/16" (LRC LOW)

Running Clearance + Car Sill (Range)
2 5/16" - 2 13/16" (LRC LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU12-0087L/R*	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU12-0084L/R*	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU12-0091L/R*	7"				60"-67"	60"-69"
CLU12-0085L/R*	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU12-0092L/R*	9"			45"-49"	75"-79"	75"-79"
CLU12-0040L/R*	10"	22"-29" 40"-44"	40"-44"		80"-83"	
CLU12-0093L/R*	10"					80"-83"
CLU12-0094L/R*	11"			50"-54"		
CLU12-0086L/R*	12"	45"-48"	45"-52"			
CLU12-0088L/R*	12"		53"-56"	55"-59"		
CLU12-0089L/R*	14"		57"-64"	60"-64"		
CLU12-0090L/R*	16"		65"-72"	65"-69"		

(*) Special Engineering Required

DOOR EQUIPMENT

Link Actuated Clutch Assemblies

Water Resistant

LW-2-W



Mounting Hardware Included:
- (6) 1/16” & (3) 1/8” spacers
- (6) 5/16-18” x 1 3/4” Lg hex bolts
- (6) 5/16-18” x 1 3/4” Lg carriage bolts
- (6) 5/16” ID x 9/16” OD x 0.093” thick lock washer
- (10) 1/4-20” x 7/16” W.A.C. hex steel plated nut

Running Clearance Range:
1”-1 1/2” (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4” - 3 13/16” (STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU13-0001N*	5 1/4”		24”-26”	30”-34”	24”-33”	32”-49”
CLU13-0002N*	6”	30”-34”	27”-34”	35”-39”	34”-49”	50”-59”
CLU13-0003N*	7”				60”-67”	60”-69”
CLU13-0004N*	8”	35”-39”	35”-39”	40”-44”	50”-59” 68”-74”	70”-74”
CLU13-0005N*	9”			45”-49”	75”-79”	75”-79”
CLU13-0006N*	10”	24”-29” 40”-44”	40”-44”		80”-83”	80”-83”
CLU13-0007N*	11”			50”-54”		
CLU13-0008N*	12”	45”-48”	45”-56”	55”-59”		
CLU13-0009N*	14”		57”-64”	60”-64”		
CLU13-0010N*	16”		65”-72”	65”-69”		

LW-2-LOW-W



Mounting Hardware Included:
- (6) 1/16” & (9) 1/8” spacers
- (6) 5/16-18” x 1 1/4” Lg hex bolts
- (6) 5/16-18” x 1 3/4” Lg carriage bolts
- (6) 5/16” ID x 9/16” OD x 0.093” thick lock washer
- (10) 1/4-20” x 7/16” W.A.C. hex steel plated nut

Running Clearance Range:
1”-1 1/2” (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16” - 3 3/16” (LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU13-0011N*	5 1/4”		24”-26”	30”-34”	24”-33”	32”-49”
CLU13-0012N*	6”	30”-34”	27”-34”	35”-39”	34”-49”	50”-59”
CLU13-0013N*	7”				60”-67”	60”-69”
CLU13-0014N*	8”	35”-39”	35”-39”	40”-44”	50”-59” 68”-74”	70”-74”
CLU13-0015N*	9”			45”-49”	75”-79”	75”-79”
CLU13-0016N*	10”	24”-29” 40”-44”	40”-44”		80”-83”	80”-83”
CLU13-0017N*	11”			50”-54”		
CLU13-0018N*	12”	45”-48”	45”-56”	55”-59”		
CLU13-0019N*	14”		57”-64”	60”-64”		
CLU13-0020N*	16”		65”-72”	65”-69”		

(*) Special Engineering Required

Link Actuated Clutch Assemblies

Water Resistant

LW-2-LRC-W STD



Mounting Hardware Included:
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
11/16"-15/16" (LRC STD)

Running Clearance + Car Sill (Range):
2 7/8" - 3 7/16" (LRC STD)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU13-0021L/R*	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU13-0022L/R*	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU13-0023L/R*	7"				60"-67"	60"-69"
CLU13-0024L/R*	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU13-0025L/R*	9"			45"-49"	75"-79"	75"-79"
CLU13-0026L/R*	10"	24"-29" 40"-44"	40"-44"		80"-83"	80"-83"
CLU13-0027L/R*	11"			50"-54"		
CLU13-0028L/R*	12"	45"-48"	45"-56"	55"-59"		
CLU13-0029L/R*	14"		57"-64"	60"-64"		
CLU13-0030L/R*	16"		65"-72"	65"-69"		

LW-2-LRC-W LOW



Mounting Hardware Included:
- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
11/16"-15/16" (LRC LOW)

Running Clearance + Car Sill (Range):
2 5/16" - 2 13/16" (LRC LOW)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU13-0031L/R*	5 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU13-0032L/R*	6"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU13-0033L/R*	7"				60"-67"	60"-69"
CLU13-0034L/R*	8"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	70"-74"
CLU13-0035L/R*	9"			45"-49"	75"-79"	75"-79"
CLU13-0036L/R*	10"	24"-29" 40"-44"	40"-44"		80"-83"	80"-83"
CLU13-0037L/R*	11"			50"-54"		
CLU13-0038L/R*	12"	45"-48"	45"-56"	55"-59"		
CLU13-0039L/R*	14"		57"-64"	60"-64"		
CLU13-0040L/R*	16"		65"-72"	65"-69"		

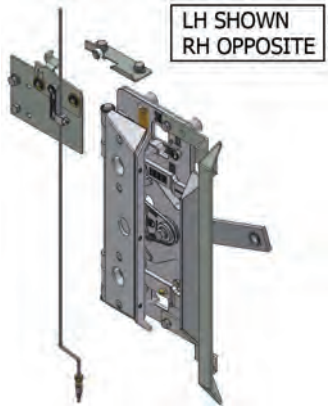
(*) Special Engineering Required

DOOR EQUIPMENT

Link Actuated Clutch Assemblies

Dust/Explosion Resistant

LWZ-2-HA



Mounting Hardware Included:

- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex cap 1" bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut
- (2) 1/4-20" x 1/2" hex head steel screw
- (2) 1/4" ID flat steel .060" thick washer
- (2) 1/4" ID x .075" thick spring lock washer

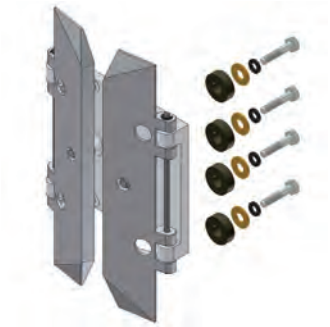
Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

Part No.	Link Size	S/S
CLU9-0140L/R*	6"	30"-34"
CLU9-0141L/R*	8"	35"-39"
CLU9-0143L/R*	10"	22"-29" 40"-44"

Conventional

"S" Standard Clutch



"S" standard clutch used with "MO" single roller release assembly and early shoe type operators and non-"L" type operators before 1964.

Mounting Hardware Included:

- (4) 5/16-18" x 1 1/4" Lg hex bolt
- (4) 5/16" ID x 9/16" OD x 0.075" thick lock washer
- (4) 3/8" ID x 7/8" OD x 0.100" thick washer
- (4) 3/8" ID x 1" OD x 0.307" thick spacer

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

Part No.	S/S	2/SP
CLU8-0001N	24"-48"	24"-72"

(*) Special Engineering Required

Cable Actuated Clutch Assemblies

Conventional

CW-2

Mounting Hardware Included:
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

CLU17-0002L/R



Clutch, CW-2 Cable, Without Roller Arm & Cam

CLU17-0006L/R



Clutch, CW-2 Cable, With Sheave Mounting Plate, Roller Arm Assembly, & Cam

CLU17-0010L/R



Clutch, CW-2 Cable, With 12" Plate, Roller Arm Assembly, & Cam

CLU17-0014L/R



Clutch, CW-2 Cable, With "2 1/2C" Plate, Roller Arm Assembly, & Cam

CLU17-0018L/R



Clutch, CW-2 Cable, With "1C" Plate, Roller Arm Assembly, & Cam

DOOR EQUIPMENT

Cable Actuated Clutch Assemblies

Conventional

CW-2-LOW

Mounting Hardware Included:
- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16" - 3 3/16" (LOW)

CLU17-0004L/R



Clutch, CW-2-LOW Cable, Without Roller Arm & Cam

CLU17-0008L/R



Clutch, CW-2-LOW Cable, With Sheave Mounting Plate, Roller Arm Assembly, & Cam

CLU17-0012L/R



Clutch, CW-2-LOW Cable, With 12" Door Plate, Roller Arm Assembly, & Cam

CLU17-0016L/R



Clutch, CW-2-LOW Cable, With "2 1/2C" Plate, Roller Arm Assembly, & Cam

CLU17-0020L/R



Clutch, CW-2-LOW Cable, With "1C" Plate, Roller Arm Assembly, & Cam

(*) Special Engineering Required

Cable Actuated Clutch Assemblies

Conventional

CWZ-2

Mounting Hardware Included:
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

*CLU16-0001L/R**



Clutch, CWZ-2 Cable, With Roller Arm Assembly, Zone Lock, & Cams

*CLU16-0003L/R**



Clutch, CWZ-2 Cable, With Door Mounting Plate, Roller Arm Assembly, Zone Lock, & Cams

CWZ-2-LOW

Mounting Hardware Included:
- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16" - 3 3/16" (LOW)

*CLU16-0002L/R**



Clutch, CWZ-2-LOW Cable, With Roller Arm Assembly, Zone Lock, & Cams

*CLU16-0004L/R**



Clutch, CWZ-2-LOW Cable, With Door Mounting Plate, Roller Arm Assembly, Zone Lock, & Cams

(*) Special Engineering Required

DOOR EQUIPMENT

Cable Actuated Clutch Assemblies

Conventional

C-2

Mounting Hardware Included:
- (6) 1/16" & (3) 1/8" spacers
- (6) 5/16-18" x 1 3/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
3 1/4" - 3 13/16" (STD)

CLU17-0001L/R



Clutch, C-2 Cable, Without Roller Arm & Cam

CLU17-0005L/R



Clutch, C-2 Cable, With Sheave Mounting Plate, Roller Arm Assembly, & Cam

CLU17-0009L/R



Clutch, C-2 Cable, With 12" Plate, Roller Arm Assembly, & Cam

CLU17-0013L/R



Clutch, C-2 Cable, With "2 1/2C" Plate, Roller Arm Assembly, & Cam

CLU17-0017L/R



Clutch, C-2 Cable, With "1C" Plate, Roller Arm Assembly, & Cam

(*) Special Engineering Required

Cable Actuated Clutch Assemblies

Conventional

C-2-LOW

Mounting Hardware Included:
- (6) 1/16" & (9) 1/8" spacers
- (6) 5/16-18" x 1 1/4" Lg hex bolts
- (6) 5/16-18" x 1 3/4" Lg carriage bolts
- (6) 5/16" ID x 9/16" OD x 0.093" thick lock washer
- (10) 1/4-20" x 7/16" W.A.C. hex steel plated nut

Running Clearance Range:
1"-1 1/2" (LOW and STD)

Running Clearance + Car Sill (Range):
2 11/16" - 3 3/16" (LOW)

CLU17-0003L/R



Clutch, C-2-LOW Cable, Without Roller Arm & Cam

CLU17-0007L/R



Clutch, C-2-LOW Cable, With Sheave Mounting Plate, Roller Arm Assembly, & Cam

CLU17-0011L/R



Clutch, C-2-LOW Cable, With 12" Plate, Roller Arm Assembly, & Cam

CLU17-0015L/R



Clutch, C-2-LOW Cable, "2 1/2C" Plate, Roller Arm Assembly, & Cam

CLU17-0019L/R



Clutch, C-2-LOW Cable, "1C" Plate, Roller Arm Assembly, & Cam

Clutch Accessory

Conventional

Reinforcement Plate



Part No.	Description
CLU3-0358N	Plate, Standard Clutch Reinforcement W/Studs, With (6) 5/16-18 x 1 1/2" Lg Self-Clinching Zinc Studs

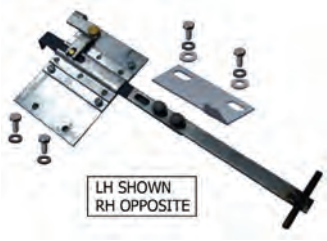
(*) Special Engineering Required

DOOR EQUIPMENT

Clutch Parts

LWZ-1 Car Zone Locking Assemblies

Type "A" Hanger (Conventional)

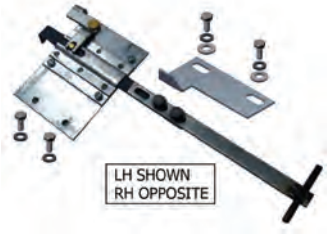


Mounting Plate Size:
5 1/8" (S/S: 22"-48" D.O. | 2/SP: 24"-72" D.O. | C/P: 30-83" D.O. | 2SP/CP: 60"-83" D.O.)
4 1/4" (C/P: 24"-29" D.O. | 2SP/CP: 32"-59" D.O.)

Connecting Link Rod Size: 2 1/2" x 1/4"

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU3-0254L/R	3 15/16"	22"-29"			30"-39"	
CLU3-0255L/R	3 15/16"				24"-29"	32"-39"
CLU3-0256L/R	7 15/16"					40"-49"
CLU3-0257L/R	7 15/16"	30"-39"	30"-39"		40"-49"	
CLU3-0258L/R	11 15/16"					50"-59"
CLU3-0259L/R	11 15/16"	40"-44"	24"-29" 40"-44"		50"-59"	
CLU3-0260L/R	15 15/16"	45"-48"	45"-52"		60"-83"	60"-79"
CLU3-0261L/R	19 15/16"		53"-60"			80"-83"
CLU3-0262L/R	23 15/16"		61"-68"			
CLU3-0263L/R	27 15/16"		69"-72"			
CLU3-0314L/R	15 15/16"			30"-54"		
CLU3-0315L/R	19 15/16"			55"-64"		
CLU3-0316L/R	23 15/16"			65"-69"		

With Replacement Cam



Mounting Plate Size:
5 1/8" (C/P: 30"-83" D.O. and 2SP/CP: 60"-83" D.O.)
4 1/4" (C/P: 24"-29" D.O. and 2SP/CP: 32"-59" D.O.)

Connecting Link Rod Size:
2 1/2" x 1/4" (S/S, 2/SP, C/P, and 2SP/CP)
5 1/2" x 1/4" (3/SP)

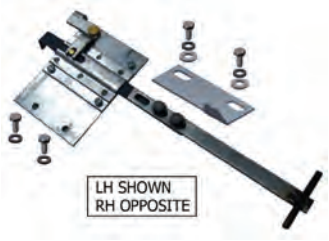
Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU3-0285L/R	3 15/16"	22"-29"				
CLU3-0286L/R	7 15/16"	30"-39"	30"-39"			
CLU3-0287L/R	11 15/16"	40"-44"	40"-44"			
CLU3-0288L/R	15 15/16"			30"-54"		
CLU3-0289L/R	15 15/16"	45"-48"	45"-52"			
CLU3-0290L/R	19 15/16"			55"-64"		
CLU3-0291L/R	19 15/16"		53"-60"			
CLU3-0292L/R	23 15/16"			65"-69"		
CLU3-0293L/R	23 15/16"		61"-68"			
CLU3-0294L/R	27 15/16"		69"-72"			
CLU3-0295L	3 15/16"				24"-29"	32"-39"
CLU3-0296L	3 15/16"				30"-39"	
CLU3-0297L	7 15/16"				40"-49"	
CLU3-0298L	7 15/16"					40"-49"
CLU3-0299L	11 15/16"					50"-59"
CLU3-0300L	11 15/16"				50"-59"	
CLU3-0301L	15 15/16"				60"-83"	60"-79"
CLU3-0302L	19 15/16"					80"-83"

(*) Special Engineering Required

Clutch Parts

LWZ-1 Car Zone Locking Assemblies

Type "A" Hanger (Vandal Resistant)



Mounting Plate Size:
5 1/8" (2/SP: 24"-32" & 49"-72" D.O., and CP: 30"-53" D.O.)
7" (2/SP: 33"-48" D.O.)

Connecting Link Rod Size:
2 1/2" x 1/4" (2/SP: 24"-29" & 33"-72" D.O. | C/P: 30"-53" D.O.)
5 1/2" x 1/4" (2/SP: 30"-32" D.O.)

Part No.	Link Size	S/S	2/SP	C/P
CLU3-0254L/R	3 15/16"			30"-39"
CLU3-0257L/R	7 15/16"			40"-49"
CLU3-0259L/R	11 15/16"		24"-29"	50"-53"
CLU3-0260L/R	15 15/16"		49"-52"	
CLU3-0261L/R	19 15/16"		53"-60"	
CLU3-0262L/R	23 15/16"		61"-68"	
CLU3-0263L/R	27 15/16"		69"-72"	
CLU3-0320L/R	3 15/16"	24"-29"		
CLU3-0321L/R	7 15/16"	30"-39"		
CLU3-0322L/R	7 15/16"		30"-32"	
CLU3-0323L/R	7 15/16"		33"-39"	
CLU3-0324L/R	11 15/16"		40"-44"	
CLU3-0325L/R	15 15/16"		45"-48"	
CLU3-0360L/R	11 15/16"	40"-42"		

Glass Doors (Special)



Part No.	Description
CLU3-0399L/R	Locking Assembly, LWZ-1 Clutch 4 1/4". Used In LWZ-1 (7" Center Line-Glass Calif.), LWZ-1 (7" Center Line-Glass)
CLU3-0400L/R	Locking Assembly, LWZ-1 Clutch 5 1/8". Used In LWZ-1 (7" Center Line-Glass Calif.), LWZ-1 (7" Center Line-Glass)

LWZ-1 Clutch Lower Connecting Link

Car Zone Locking Parts

Conventional/Vandal Resistant



Connecting Link Rod Size:
2 1/2" x 1/4" (S/S, 2/SP, C/P, & 2SP/CP)
5 1/2" x 1/4" (3/SP)

Part No.	Link Size	S/S	2/SP	3/SP	C/P	2SP/CP
CLU3-0336N	3 15/16"	22"-29"			24"-39"	32"-39"
CLU3-0337N	7 15/16"		30"-39"		40"-49"	40"-49"
CLU3-0338N	11 15/16"	40"-44"	24"-29" 40"-44"		50"-59"	50"-59"
CLU3-0339N	15 15/16"	45"-48"	45"-52"		60"-83"	60"-79"
CLU3-0340N	19 15/16"		53"-60"			80"-83"
CLU3-0341N	23 15/16"		61"-68"			
CLU3-0342N	27 15/16"		69"-72"			
CLU3-0343N	7 15/16"		30"-32"			
CLU3-0344N	15 15/16"			30"-54"		
CLU3-0345N	19 15/16"			55"-64"		
CLU3-0346N	23 15/16"			65"-69"		

(*) Special Engineering Required

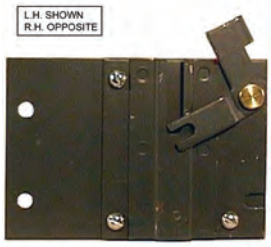
DOOR EQUIPMENT

Clutch Parts

LWZ-1 Clutch Series - Parts

Locking Bar Guides (Conventional)

CLU3-0326L/R



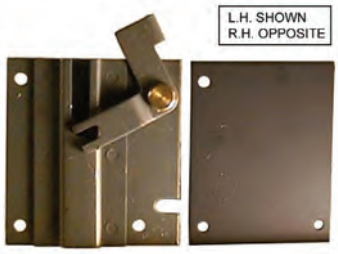
Guide, LWZ-1 Clutch Locking Bar, S/S 22-48 D.O. 2/SP 24-72 D.O. 3/SP 30-69 D.O. C/P 30-83 D.O. 2SP/CP 60-83 D.O.
Guide Plate Size: 5 1/8”

CLU3-0327L/R



Guide, LWZ-1 Clutch Locking Bar, C/P 24-29 D.O. 2SP/CP 32-59 D.O.
Guide Plate Size: 4 1/4”

CLU3-0328L/R



Guide, LWZ-1 Clutch “C” Hanger Locking Bar, S/S 22-48 D.O. 2/SP 30-72 D.O. 3/SP 30-69 D.O. C/P 30-33 D.O. 2SP/CP 32-72 D.O.
Guide Plate Size: 3 1/4”

Locking Bar Guides (Vandal Resistant)

CLU3-0329L/R



Description
Guide, LWZ-1 Clutch Locking Bar, S/S 24-42 D.O.
Guide Plate Size: 3 1/4”

CLU3-0330L/R



Description
Guide, LWZ-1 Clutch Locking Bar, 2/SP 33-48 D.O.
Guide Plate Size: 7”

Locking Bar Guides (Special)

CLU3-0397L/R



Description
Guide, LWZ-1 Clutch 4 1/4” Locking Bar. Used In LWZ-1 (7” Center Line-Glass Calif.), LWZ-1 (7” Center Line-Glass)

CLU3-0398L/R



Description
Guide, LWZ-1 Clutch 5 1/8” Locking Bar. Used In LWZ-1 (7” Center Line-Glass Calif.), LWZ-1 (7” Center Line-Glass)

(*) Special Engineering Required

DOOR EQUIPMENT

Clutch Parts

LWZ-1 Clutch Series - Parts

Arms

CLU3-0354N



Arm, Sensing Bar Pivot, With (2) HWBS-0003N
Where Used: CWZ-R, LWZ-1, LWZ-1-LOW, LWZ-1-LRC

CLU3-0355L/R



Arm, Retractable Roller Assembly
Where Used: LWZ-1, LWZ-1-LOW, LWZ-1-LRC

CLU5-0006L/R



Arm, Retractable Roller Assembly
Where Used: CWZ-R

Bars

CLU3-0335N



Bar, Type “LWZ-1” Clutch Locking Assembly
Where Used: LWZ-1, LWZ-1-LOW, LWZ-1-LRC

CLU3-0350N



Bar, LWZ-1-LOW Clutch 1 3/4” Sill Sensing, 23” Long
Where Used: LWZ-1-HA-LOW, LWZ-1-HA-LRC, LWZ-1-LOW, LWZ-1-LRC

CLU3-0351N



Bar, LWZ-1 Clutch 2 1/4” Sill Sensing, 25” Long
Where Used: CWZ-R, LWZ-1, LWZ-1-HA

CLU3-0352L/R



Bar, 5” Clutch Link Sensing, 1 3/4” & 2 1/4” Car Sill 27 1/2” Long
Where Used: LWZ-1, LWZ-1-HA, LWZ-1-HA-LOW, LWZ-1-HA-LRC, LWZ-1-LOW, LWZ-1-LRC

CLU3-0394N



Bar, 5 1/2”Lg. Type “LWZ-1” Clutch Locking Assembly
Where Used: LWZ-1 (7” Center Line-Glass Calif.), LWZ-1 (7” Center Line-Glass)

DOOR EQUIPMENT

Clutch Parts

LWZ-1 Clutch Series - Parts

Cams



Part No: CLU1-0038N: Cam, L & LW Clutch Actuating *(Discontinued)*

CLU3-0353L/R: Cam, LWZ-1-LRC Actuating *(Discontinued)*

Note:
The following cams (Part No. CLU1-0038N & CLU3-0353L/R) are no longer available. There is no replacement for these 2 parts. A new LWZ-2, LW-2, or L-2 series clutch must be purchased. See clutch assemblies section for these replacements.

CLU3-0331L/R



Cam, 3 3/4"Lg. LWZ-1 Standard Locking Assembly
Where Used: LWZ-1, LWZ-1-LOW, LWZ-1-LRC

CLU3-0333L/R



Cam, 4 1/4"Lg. LWZ-1 Replacement Locking, For S/S & 2/SP Jobs Prior To June 1994
Where Used: LWZ-1, LWZ-1-LOW, LWZ-1-LRC

CLU3-0334L



Cam, 3 3/4"Lg. LWZ-1 Replacement Locking, For C/P & 2/SP/ C/P Jobs Prior To June 1994
Where Used: LWZ-1, LWZ-1-LOW, LWZ-1-LRC

Links

CLU3-0395N



Link, 2 3/8" Long. Type "LWZ-1" Clutch, 2 5/16" x 2 1/2" x 1/4" Rod
Where Used: LWZ-1 (7" Center Line-Glass)

CLU3-0396N



Link, Type "LWZ-1" Clutch Retracting
Where Used: LWZ-1 (7" Center Line-Glass)

PMDG-0144N



Link, Type "LWZ-1" Retracting
Where Used: LWZ-1, LWZ-1-LOW, LWZ-1-LRC

(*) Special Engineering Required

Clutch Parts

LWZ-1 Clutch Series - Parts

Miscellaneous Parts

CLU3-0361N



Channel, Sensing Bar Retractable
Where Used: CWZ-R, LWZ-1, LWZ-1-HA, LWZ-1-HA-LOW, LWZ-1-HA-LRC, LWZ-1-LOW, LWZ-1-LRC

CLU3-0373N



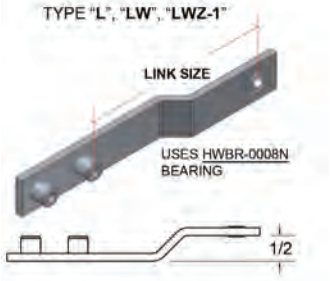
Shaft, 7/16 Dia. x 18 3/8, LWZ-1 Clutch Hinge, Includes (1) CLU3-0370N & (4) HWBS-0003N
Where Used: CWZ-R, LWZ-1, LWZ-1-LOW, LWZ-1-LRC

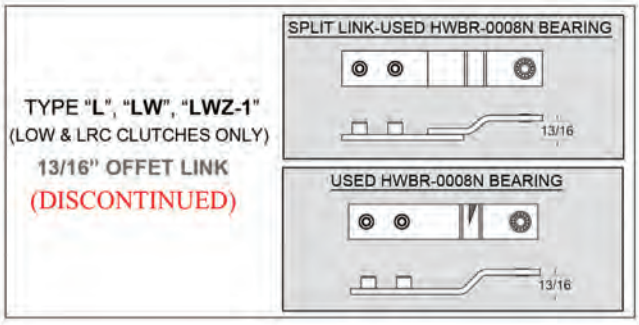
CLU3-0422N



Spacer, LWZ-1 Guide Mounting Plate, 2 3/4" x 3 1/2" x 11 Ga.
Where Used: LWZ-1, LWZ-1-LOW, LWZ-1-LRC

L-1, LW-1, LWZ-1 Clutch Series - Links





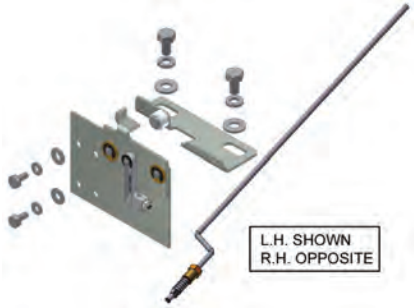
Part No.	Link Size	"C" DIM	S/S	2/SP	3/SP	C/P
CLU1-0040N	5"	1 1/2"	24"-26"		24"-33"	32"-49"
CLU1-0041N	6"	1 1/2"	27"-34"		34"-49"	50"-59"
CLU1-0042N	7"	1 1/2"			60"-67"	60"-67"
CLU1-0043N	8"	1 1/2"	35"-39"		50"-59"	68"-74"
CLU1-0066N	9"	1 1/2"			75"-79"	75"-79"
CLU1-0044N	10"	1 1/2"	40"-44"			80"-83"
CLU1-0067N	11"	1 1/2"		50"-54"		
CLU1-0045N	12"	1 1/2"	45"-56"			
CLU1-0046N	14"	1 1/2"	57"-64"			
CLU1-0047N	16"	1 1/2"	65"-72"			

DOOR EQUIPMENT

Clutch Parts

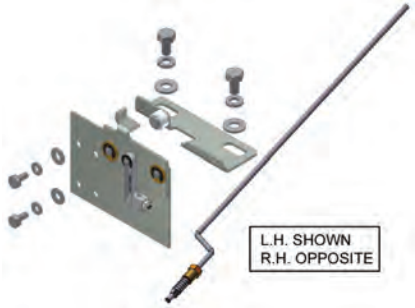
LWZ-2 Car Zone Locking Assemblies

CLU9-0115L/R



Locking Assembly, LWZ-2 Clutch 36" Rod Lg.
Where Used: LWZ-2, LWZ-2-HA, LWZ-2-HA-LOW, LWZ-2-HA-LRC LOW, LWZ-2-HA-LRC STD, LWZ-2-LOW, LWZ-2-LRC LOW, LWZ-2-LRC STD

CLU12-0116L/R



Locking Assembly, LWZ-2-W Clutch 36" Lg. Rod, Yellow Zinc Dichromate
Where Used: LWZ-2-LOW-W, LWZ-2-W

LWZ-2 Clutch Series - Parts

Miscellaneous Parts

CLU9-0049L/R



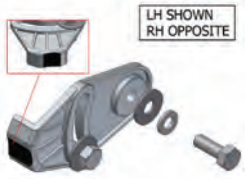
Cam, LWZ-2 Standard Locking, Includes Hardware
Where Used: LWZ-2, LWZ-2-LOW

CLU9-0111N



Cam, LW-2 & LWZ-2 Clutch Actuating, LW2-LOW & LWZ-2-LOW
Where Used: LWZ-2

CLU9-0238L/R



Cam, LW-2-LRC/LWZ-2-LRC Clutch Actuating
Where Used: LW-2-LRC LOW, LW-2-LRC STD, LWZ-2-LRC LOW, LWZ-2-LRC STD

CLU9-0101L/R



Guide, LWZ-2 Clutch Locking
Where Used: LWZ-2, LWZ-2-LOW

CLU9-0108N



Rod, 36" Lg. LWZ-2 Clutch Zone Locking
Where Used: LWZ-2, LWZ-2-LOW

CLU12-0034N



Rod, 36" LWZ-2 Clutch Zone Locking, Water Resistant
Where Used: LWZ-2-W

CLU9-0260N*



Rod, Special _____" LWZ-2 Zone Locking

CLU12-0020N



Shaft, 7/16" x 11 7/8" LWZ-2 Open Vane-WP
Where Used: LW-2

(*) Special Engineering Required

Clutch Parts

LWZ-2 Clutch Series - Parts

Miscellaneous Parts

CLU12-0115N



Sensing Bar & Pivot, LWZ-2-W Zone Lock, With (2) 1 9/32" Long Pins, Yellow Zinc Dichromated
Where Used: LWZ-2-W

CLU9-0255N



Sensing Bar & Pivot, LWZ-2 Zone Lock, With (2) 1 9/32" Long Pins
Where Used: LWZ-2 Series

CLU9-0117N



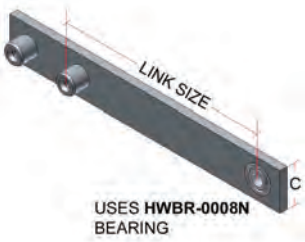
Used For Jobs Before 08-01-2006. Need To Replace Sensing Bar With CLU9-0255N At The Same Time (Or CLU9-0257L/R Door Open Vane Assembly)
Replaced By CLU9-0256N
DISCONTINUED

CLU9-0256N



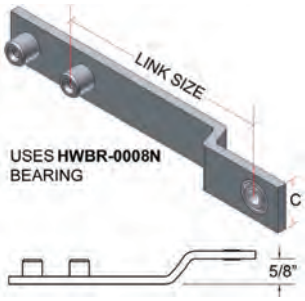
Arm, LWZ-2 Retracting Assembly, Replacement For Jobs After 07-31-2006
Where Used: LWZ-2 Series

L-2, LW-2, LWZ-2 Clutch Series - Links



Part No.	Link Size	"C" DIM	S/S	2/SP	3/SP	C/P	2SP/CP
CLU9-0083N	5 1/4"	1 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU9-0084N	6"	1 1/4"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU9-0085N	7"	1 1/4"				60"-67"	60"-67"
CLU9-0086N	8"	1 1/4"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	68"-74"
CLU9-0087N	9"	1 1/4"			45"-49"	75"-79"	75"-79"
CLU9-0088N	10"	1 1/2"	22"-29" 40"-44"	40"-44"		80"-83"	80"-83"
CLU9-0089N	11"	1 1/2"			50"-54"		
CLU9-0090N	12"	1 1/2"	45"-48"	45"-56"	55"-59"		
CLU9-0091N	14"	1 1/2"		57"-64"	60"-64"		
CLU9-0092N	16"	1 1/2"		65"-72"	65"-69"		

Low/LRC Clutches



Part No.	Link Size	"C" DIM	S/S	2/SP	3/SP	C/P	2SP/CP
CLU9-0063N	5 1/4"	1 1/4"		24"-26"	30"-34"	24"-33"	32"-49"
CLU9-0064N	6"	1 1/4"	30"-34"	27"-34"	35"-39"	34"-49"	50"-59"
CLU9-0065N	7"	1 1/4"				60"-67"	60"-67"
CLU9-0066N	8"	1 1/4"	35"-39"	35"-39"	40"-44"	50"-59" 68"-74"	68"-74"
CLU9-0067N	9"	1 1/4"			45"-49"	75"-79"	75"-79"
CLU9-0068N	10"	1 1/2"	22"-29" 40"-44"	40"-44"		80"-83"	80"-83"
CLU9-0069N	11"	1 1/2"			50"-54"		
CLU9-0070N	12"	1 1/2"	45"-48"	45"-56"	55"-59"		
CLU9-0071N	14"	1 1/2"		57"-64"			
CLU9-0072N	16"	N/A		65"-72"	65"-69"		

DOOR EQUIPMENT

Clutch Parts

C-2, CW-2, CWZ-2 Clutch Series - Parts

Activation Plates & Roller Assemblies

CLU16-0016L/R



Linkage, CWZ-2 Clutch Activation
Where Used: CW-2, CWZ-2

CLU16-0025L/R



Linkage, CW-2/CWZ-2 Clutch Activation, Without Cam Assembly
Where Used: CW-2, CWZ-2

CLU16-0031L/R



Linkage, CWZ-2-RND Clutch Activation, For Round Doors
Where Used: CWZ-2-RND

CLU4-0017N



12" Plate And Roller Assembly
Where Used: C, C-LOW, CW, CW-LOW

CLU4-0018N



"2-1/2C" Plate And Roller Assembly
Where Used: C, C-LOW, CW, CW-LOW

CLU4-0019N



"1C" Plate And Roller Assembly
Where Used: C, C-LOW, CW, CW-LOW

Cams & Cables

CLU16-0032L/R



Cam Assembly, CWZ-2 Clutch Cable Locking
Where Used: CWZ-2 Series

CLU16-0019L/R



Cam, C-2/CW-2/CWZ-2 Clutch Cable Locking
Where Used: CW-2, CWZ-2

CLU5-0003L/R



Cam, Type "CWZ" Clutch Assembly Locking
Where Used: CWZ-R

BCST-0045N



Cam, "C/CW/C-2/CW-2" Cable Clutch
Where Used: C, C-LOW, CW, CW-LOW

(*) Special Engineering Required

Clutch Parts

C-2, CW-2, CWZ-2 Clutch Series - Parts

Cams & Cables

CLU4-0023N



Cable & Cam, Type "C & CW" Clutch, (1/16" Air Craft Cable w/ Clear Nylon Coating)
Where Used: C, CW

CLU4-0024N



Cable & Cam, Type "C-LOW & CW-LOW" Clutch, (1/16" Air Craft Cable w/ Clear Nylon Coating)
Where Used: C-LOW, CW-LOW

CLU4-0025N



Cable, Type "C/CW/CW-2/CWZ-2" Clutch, 32" Long (1/16" Air Craft Cable w/ Clear Nylon Coating)
Where Used: C, C-LOW, CW, CW-2, CW-LOW, CWZ-2

HDW-0188N



Cable, 1/16" Air Craft Cable w/ Clear Nylon Coating
Where Used: C, CW, CW-2, CWZ, CWZ-2

Miscellaneous Parts

CLU4-0021N



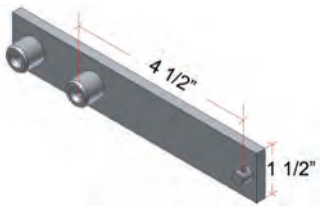
Eccentric, Type "C & CW" Clutch Stop
Where Used: C, C-LOW, CW, CW-LOW

CLU10-0003N



Angle, Round Door Locking Cam Mounting
Where Used: CWZ-R

CLU16-0013N



Link Assembly,CW-2/CWZ-2 Clutch
Where Used: CW-2, CWZ-2

CLU3-0370N



Spacers Bushings, LWZ-1, (2) Bushings & (2) Retaining Rings
Where Used: CWZ-R

CLU5-0004N



Locking Bar, Type "CWZ" Clutch
Where Used: CWZ-R

CLU10-0002L/R*



Locking Assembly, RND Door Type "CWZ-R"
Where Used: CWZ-R

(*) Special Engineering Required

DOOR EQUIPMENT

Clutch Parts

Clutch Vanes

Door Open Vanes

CLU1-0033N



Vane, Open Clutch
Where Used: LW, L, LW-HA

CLU3-0347L/R



Vane, LWZ-1 Door Open
Where Used: CWZ-R, LWZ-2

CLU1-0055N



Vane, Open LOW Clutch
Where Used: LW-LOW, L-LOW, LW-HA-LOW, LW-LRC, LW-HA-LRC

CLU11-0081N



Vane, LW-2 Door Open
Where Used: LW-2

CLU14-0021N



Vane, LWP-2 Clutch Open
Where Used: LWP-2

CLU3-0375L/R



Vane, "LWZ-1-HA-LRC" Clutch Door Open
Where Used: LWZ-1-HA-LRC

CLU3-0348L/R



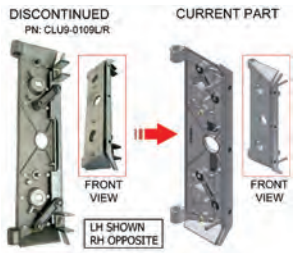
Vane, LWZ-1 LOW Door Open
Where Used: LWZ-1-LOW

CLU3-0359L/R



Vane, LWZ-1-LRC Door Open
Where Used: LWZ-1-LRC

CLU9-0257L/R



Vane, LWZ-2 Door Open Assembly (Replaced Part No. CLU9-0109L/R As Of July 2006)
Where Used: LWZ-2 Series

CLU8-0002N



Vane, Type "S" Clutch
Where Used: S

(*) Special Engineering Required

Clutch Parts

Clutch Vanes

Door Close Vanes

Discontinued



CLU4-0026N CLU3-0371N CLU3-0372N

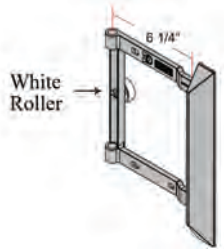
The following vanes are no longer available from G.A.L. If needed, a new current style clutch must be ordered.

Specify the following information to do so:

- Type of clutch
- Type of doors
- Door opening width
- Hand
- If "LOW" or "LRC" clutch is required

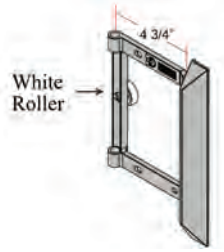
Clutch Series Affected: CW, CW-LOW, CWZ-R, LW, LW-HA, LW-HA-LOW, LW-LOW, LWZ-1, LWZ-1-LOW, LW-LRC, LWZ-1-LRC

CLU9-0116N



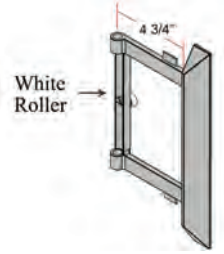
Vane, LWZ-2 & LW-2 Clutch Door Close With White 1 1/4" Dia. Roller (6 1/4" Width)
Where Used: LW-2, LWZ-2 Series

CLU15-0021N



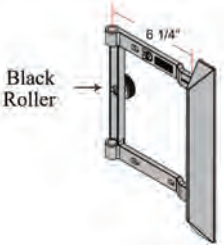
Vane, L-2 & L-2 LOW Clutch Door Close With White 1 1/4" Dia. Roller (4 3/4" Width)
Where Used: L-2, L-2 LOW

CLU1-0035N



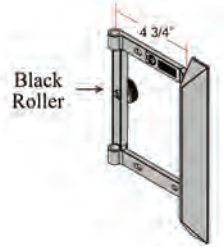
Vane, L & L-LOW Clutch Door Close With White 1 5/16" Dia. Roller (4 3/4" Width)
Where Used: L, L-LOW

CLU16-0023N



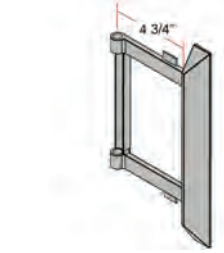
Vane, CW-2 & CWZ-2 Clutch Door Close With Black 1 5/16" Dia. Roller (6 1/4" Width)
Where Used: CW-2, CWZ-2 Series

CLU16-0024N



Vane C-2 & C-2 LOW Clutch Door Close With Black 1 5/16" Dia. Roller (4 3/4" Width)
Where Used: C-2, C-2 LOW

CLU4-0027N



Vane, C & C-LOW Clutch Door Close Without Roller (4 3/4" Width)
Where Used: C, C-LOW

DOOR EQUIPMENT

Clutch Parts

Clutch Vanes

Fixed Vanes

CLU3-0356N



Vane, LWZ-1-HA Clutch Fixed
Where Used: LWZ-1-HA

CLU3-0374N



Vane, LWZ-1-HA-LRC Clutch Fixed
Where Used: LWZ-1-HA-LRC

CLU9-0103N



Vane, LWZ-2-HA Clutch Rear Assembly
Where Used: LWZ-2-HA

Clutch Rollers

CLU1-0036N



Roller, 13/16" Dia. LW Clutch
Where Used: LW, LWZ-1, CWZ

CLU1-0037N



Roller, 15/16" Dia. L & L-LOW Clutch
Where Used: L, L-LOW

CLU9-0113N



Roller, 1 1/4" Dia. LWZ-2, LW-2 & L-2 White, For Clutch Vane
Where Used: LWZ-2

CLU16-0033N



Roller, 1 5/16"+ Dia. CW-2 & CWZ-2 Black, For Clutch Vane
Where Used: CW-2 & CWZ-2

Clutch Springs

SPG-0019N



Spring, 1 5/8" Lg x 3/8" OD -0.037 Wire, .037 Wire- 14 Turns, Open Vane
Where Used: All Clutches

SPG-0036N



Spring, 1 1/4" Lg x .750 OD -0.063 Wire- 7 1/2 Turns-Music, Close Vane
Where Used: LW-2, LWZ-2, LWZ-2-LOW

SPG-0081N



Spring, 7/8" Lg x .240 OD -0.024 Wire, .024 Wire-9 Turns-Music, Sensing Bar
Where Used: LWZ-2

(*) Special Engineering Required

Clutch Parts

Clutch Hardware

CLU1-0050N



Stops, Clutch Vane, 2 1/4" Car Sill
Where Used: C, C-LOW, CW, CW-LOW, CWZ-R, L, LW

CLU1-0064N



Stops, Clutch Vane LOW, Type "LW-LOW/L-LOW/LW-LRC" (1 3/4" Car Sill)
Where Used: L-LOW

CLU4-0028N



Stops, Type "C-LOW & CW-LOW" Clutch Vane
Where Used: C-LOW, CW-LOW

CLU1-0039N



Shaft, 7/16 Dia. x 15, Clutch Hinge
Where Used: C, C-LOW, CW, CW-LOW, L, L-LOW

CLU1-0051N



Bumper, 1/8", Clutch Vane, 2 1/4" Car Sill
Where Used: C, C-LOW, CW, CW-LOW, CWZ-R, L, LW

CLU1-0052N



Hardware, Clutch Mounting
Where Used: C, C-LOW, CW, CW-LOW, CWZ-R, L, L-LOW, LW

CLU1-0053N



Spacer, Clutch 1/8 Thick
Where Used: C, C-LOW, CW, CW-LOW, CWZ-R, L, LW, LW-2

CLU1-0054N



Spacer, Clutch 1/16 Thick
Where Used: C, C-LOW, CW, CW-LOW, CWZ-R, L, LW, LW-2

HWBS-0002N



Bushing, Nyliner 5/8 Id Type 4, 2955-A Sleeve Type 4
Where Used: L, L-LOW, LW

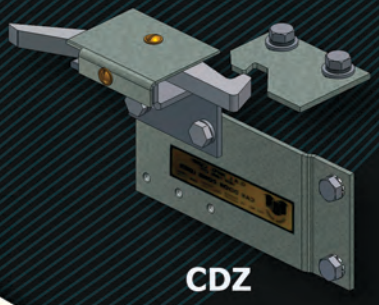
GAL
Car Door Zone Locks

CAR ZONE LOCK ASSEMBLIES 292

CAR ZONE LOCK PARTS 293

CAR DOOR ZONE LOCK MODELS

- **CDZ** - Swing Door Car Zone Lock
- **SN-Z** - Sliding Door Car Zone Lock



CDZ

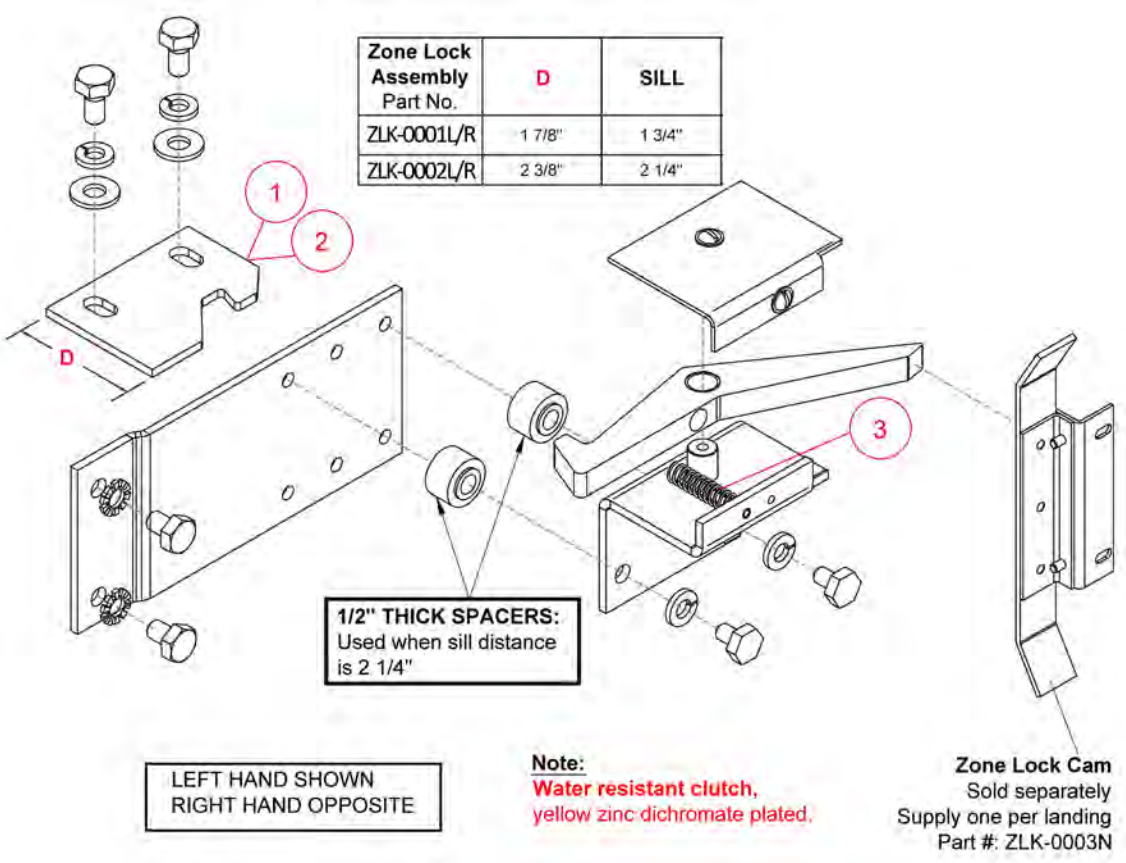


SN-Z

DOOR EQUIPMENT

Car Zone Lock Isometric Drawing

Type "CDZ" - Swing Door

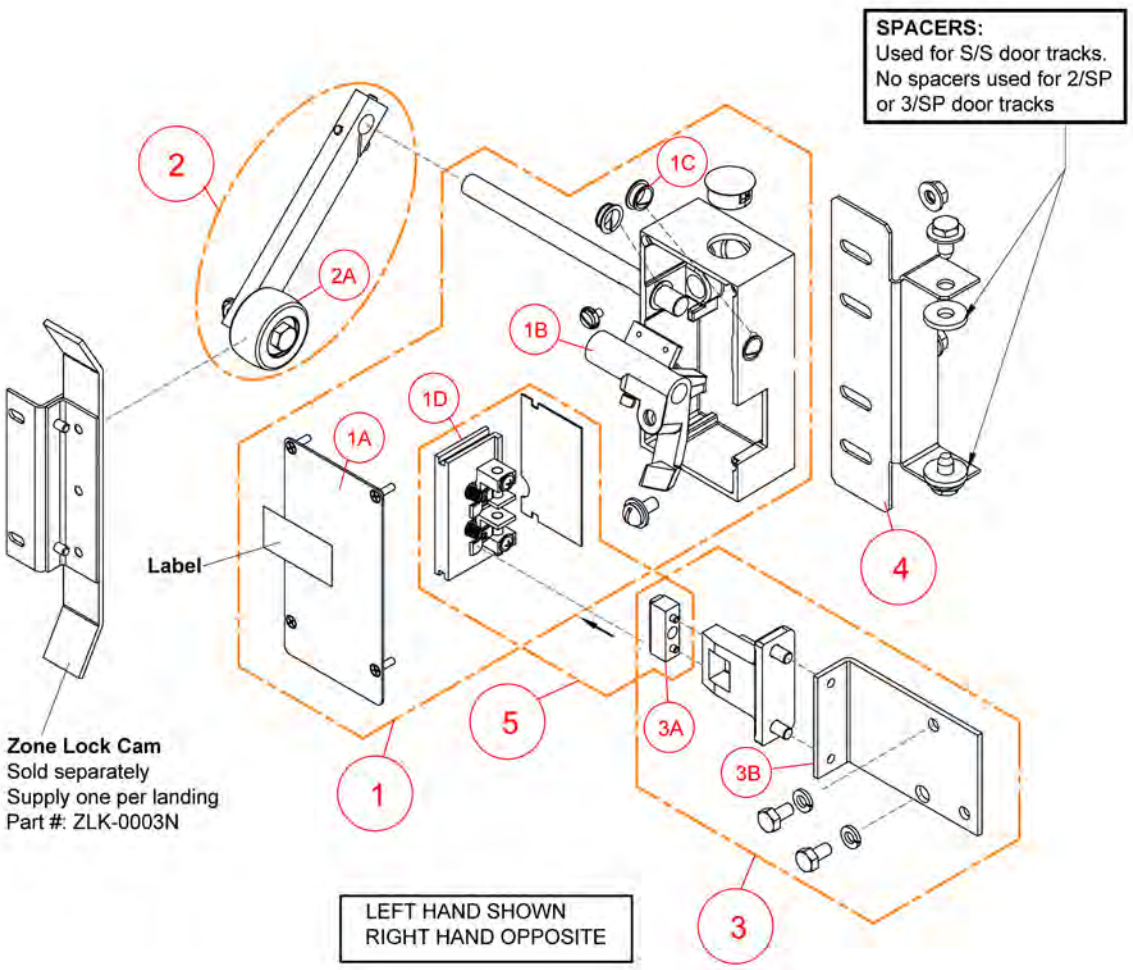


Part No.	Item No	Description
ZLK-0004N	1	Latch, CDZ Zone Lock 1 3/4" Sill (**Page#** 293)
ZLK-0005N	2	Latch, CDZ Zone Lock 2 1/4" Sill (**Page#** 293)

Part No.	Item No	Description
SPG-0024N	3	Spring, 1 1/4 Lg X 3/8 OD (**Page#** 418)

Car Zone Lock Isometric Drawing

Type "SN-Z" - Sliding Door



Part No.	Item No	Description
SW21-1000L/R	1	Switch Assembly, Type "SN-Z" Zone Lock (**Page#** 292)
SW21-9001N	1A	Cover, SN/SN-Z/SN-C Lock And Contact (**Page#** 415-Lock & Contact Section)
ZLK1-0004L/R	1B	Cam Locking, Type "CDZ3"/"SN-Z" Zone Lock (**Page#** 293)
HWBS-0012N	1C	Bushing, Type 7 Snap In Nyliner 7/16" ID
INT22-0022N	1D	Contact Base, "N/NHA" Interlock Lower (**Page#** 377-Interlock Section)
INT5-0025N	2	Arm & Roller, 4 1/2" C.L. (**Page#** 386-Interlock Section)

Part No.	Item No	Description
INT5-0027N	2A	Roller & Bolt, Roller Arm (**Page#** 386-Interlock Section)
SW21-9006L/R	3	Keeper, SN-Z Zone Lock Car Door (**Page#** 293)
INT5-0019N	3A	Bridging Contact, M/N Keeper (**Page#** 276 or 413-Lock & Contact Section)
ZLK1-0006L/R	3B	Angle, Type "SN-Z" / "CDZ3" Keeper Mounting (**Page#** 293)
SW21-9005N	4	Bracket, SN-Z Mounting Angle (**Page#** 293)
INT22-0020N	5	Contact Kit, "N" Interlock Lower (**Page#** 293 or 375-Interlock Section)

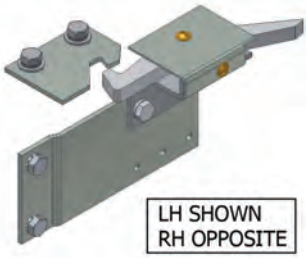
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Car Zone Lock Assemblies

Type "CDZ" - Swing Door

Conventional



Part No.	Description
ZLK-0001L/R	Lock, Type "CDZ" 1 3/4" Sill Zone, For Swing Doors
ZLK-0002L/R	Lock, Type "CDZ" 2 1/4" Sill Zone, For Swing Doors

Water Resistant

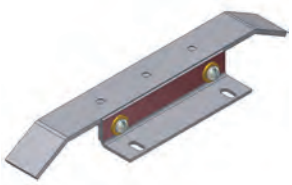


Part No.	Description
ZLK-0007L/R	Lock, Type "CDZ" 1 3/4" Sill Zone, For Swing Doors, Water Resistant
ZLK-0008L/R	Lock, Type "CDZ" 2 1/4" Sill Zone, For Swing Doors, Water Resistant

Type "CDZ" and "SN-Z"

Cams

ZLK-0003N



Description
Cam, Type "CDZ"/"SN-Z" Zone Lock Assembly
Where Used: CDZ

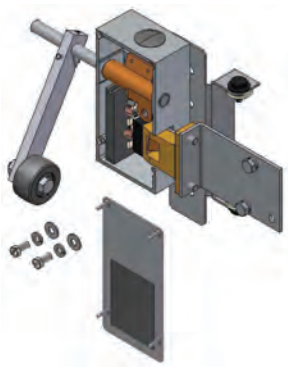
ZLK-0009N



Description
Cam, Type "CDZ"/"SN-Z" Zone Lock, Water Resistant/Yellow Zinc Dichromate
Where Used: CDZ

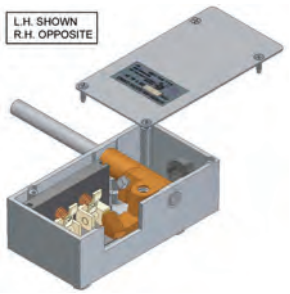
Type "SN-Z" - Sliding Door (S/S, 2/SP, 3/SP)

*SW21-1001L/R**



Description
Lock, "SN-Z" Car Zone, For Swing Doors

SW21-1000L/R



Description
Switch Assembly, Type "SN-Z" Zone Lock

(*) Special Engineering Required

DOOR EQUIPMENT

Car Zone Lock Parts

Type "CDZ"

Latches

ZLK-0004N



Description
Latch, Type "CDZ" Zone Lock 1 3/4" Sill, For Swing Doors
Where Used: CDZ

ZLK-0005N



Description
Latch, Type "CDZ" Zone Lock 2 1/4" Sill, For Swing Doors
Where Used: CDZ

Type "SN-Z"

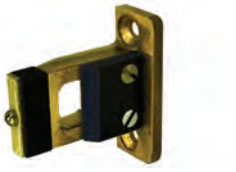
Keepers

SW21-9006L/R



Description
Keeper, "SN-Z" Zone Lock Car Door
Where Used: SN-Z
Contact G.A.L. For Pricing

ZLK1-0005N



Description
Keeper, Type "CDZ3" Zone Lock
Where Used: CDZ3

Mounting Angles

ZLK1-0006L/R



Description
Angle, Type "SN-Z" & "CDZ3" Keeper Mounting
Where Used: CDZ3

SW21-9005N



Description
Bracket, SN-Z Mounting Angle
Where Used: CDZ3

Conventional Parts

INT22-0020N



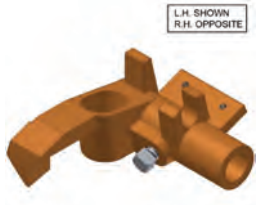
Contact Kit, "N" Interlock Lower
Where Used: SN-Z Switch

INT5-0025N



Arm & Roller, 4 1/2" C.L.
Where Used: SN & SN-Z Lock & Contact

ZLK1-0004L/R



Cam Locking, Type "CDZ3"/"SN-Z" Zone Lock
Where Used: CDZ3 & SN-Z Switch

(*) Special Engineering Required

GAL
Retiring Cams

DOOR EQUIPMENT

- **Retiring Cam Basic** consists of the cam, cable and mounting base only. Also available in water resistant zinc dichromate plating.
- **Extended Retiring Cam** includes mounting brackets that allow the basic retiring cam to be mounted to the sill and a header at top. Also available in water resistant zinc dichromate plating.
- **Motorized Retiring Cam** includes basic retiring cam, 115 or 220 volt AC/DC power pack, and a 230 volt 1/6 HP motor.
- **Water Resistant Motorized Retiring Cam** consists of the basic retiring cam with zinc dichromate plating, and sealed water resistant steel box containing 115 or 220 volt AC/DC power supply with a 230 volt 1/6 HP motor.
- **Explosion Resistant Motorized Retiring Cam** consists of the basic retiring cam, and sealed aluminum tank containing 115 or 220 volt AC/DC power supply with a 230 volt 1/6 HP motor.

RETIRING CAM ASSEMBLIES 294-296

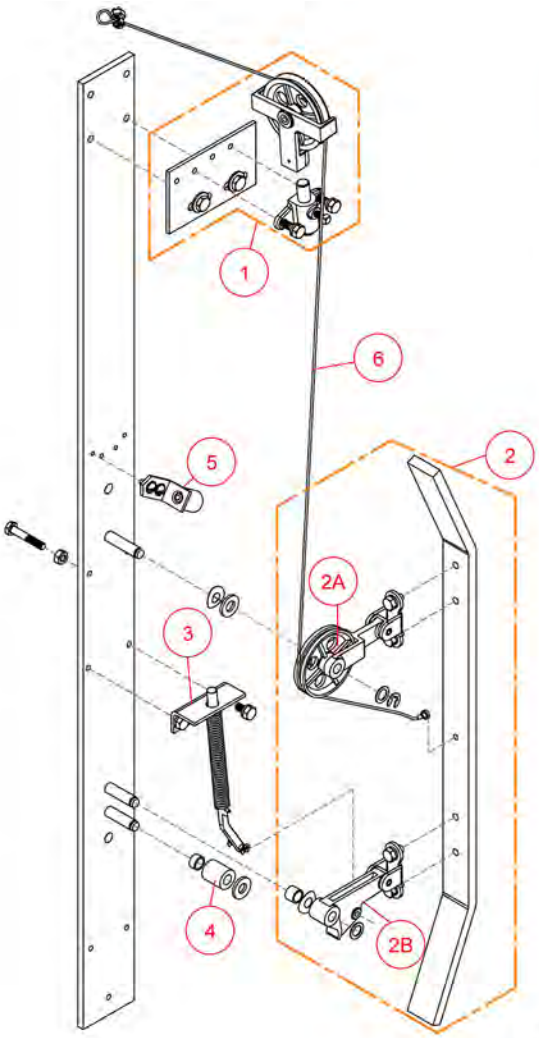
RETRING CAM PARTS 297-301



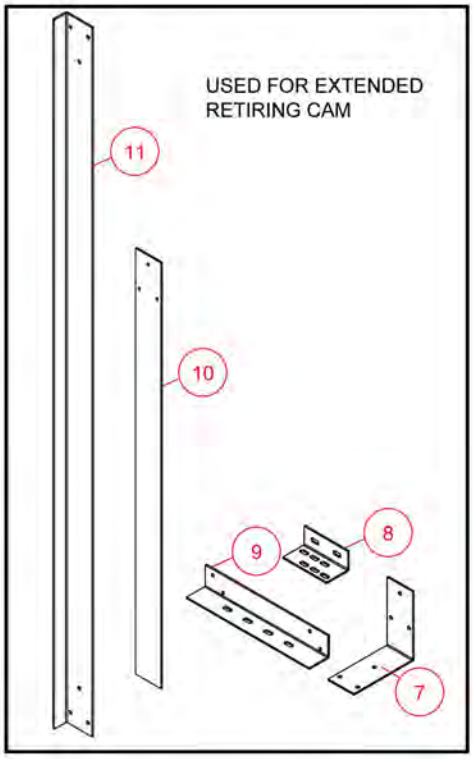
MOTORIZED RETIRING CAM

Retiring Cam Isometric Drawing

Standard



Note:
Water resistant retiring cam,
yellow zinc dichromate plated.
See **water resistant category**
for part numbers.



LEFT HAND SHOWN
RIGHT HAND OPPOSITE

WHEN ORDERING ASSY'S OR PARTS ADVISE TYPE OF DOOR, OPENING SIZE AND HAND

Part No.	Item No	Description
RC1-0021N	1	Pulley Assembly, Retiring Cam Deflector (**Page#** 300)
RC1-0080N	2	Cam Assembly, With Upper & Lower Brackets (**Page#** 298)
RC1-0024N	2A	Arm, Retiring Cam Upper Pivot Assembly (**Page#** 298)
RC1-0023N	2B	Arm, Retiring Cam Lower Pivot Assembly (**Page#** 298)
RC1-0026N	3	Spring/Rod, Replacement Guide (**Page#** 301)
RC1-0031N	4	Bumper, Retiring Cam Lower (**Page#** 299)

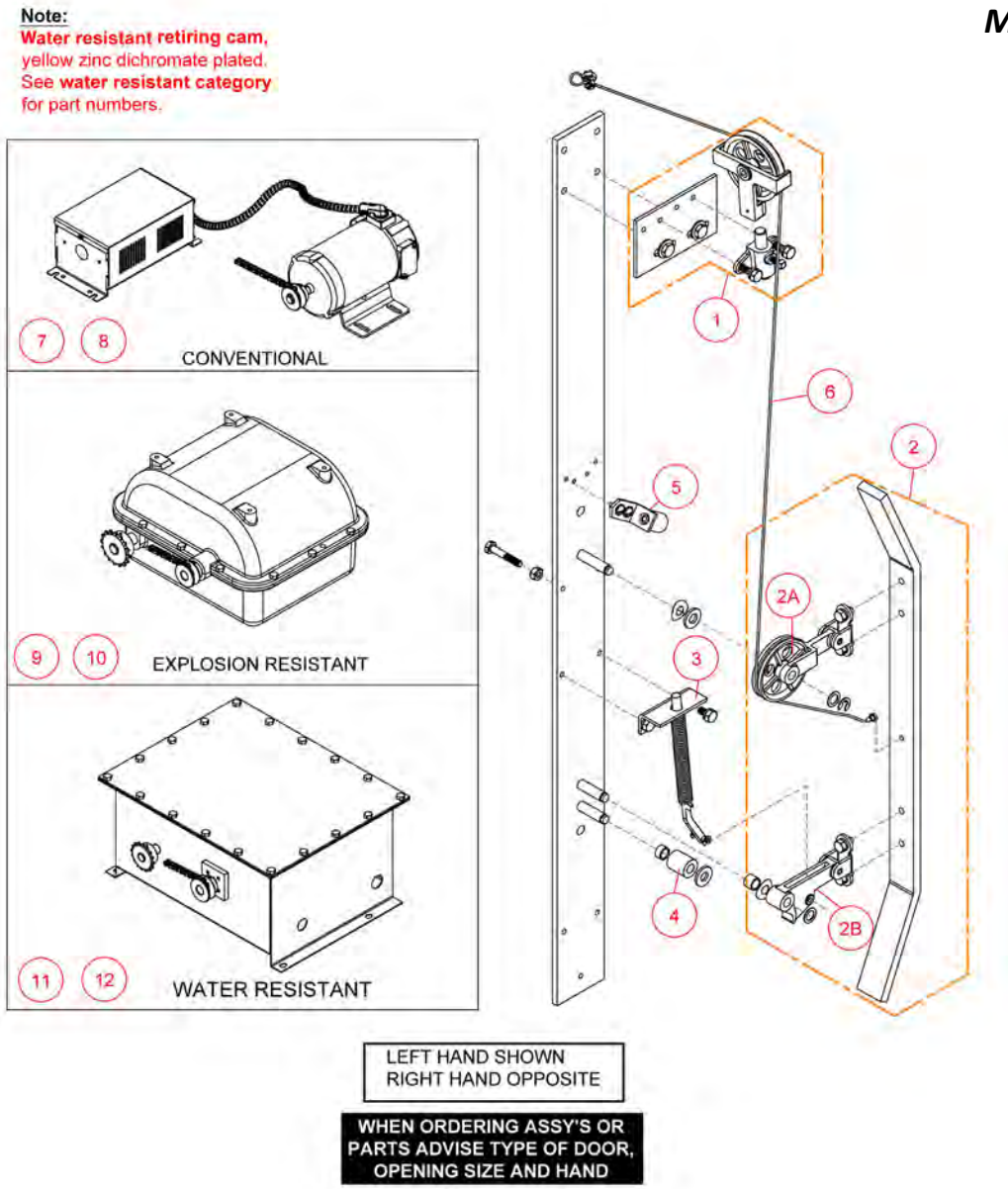
Part No.	Item No	Description
RC1-0030L/R	5	Bumper, Retiring Cam Upper (**Page#** 299)
RC1-0037N	6	Cable, Retiring Cam (**Page#** 301)
RC1-0019N	7	Angle, Retiring Cam Bottom (**Page#** 299)
RC1-0018N	8	Angle, Retiring Cam Top Support (**Page#** 299)
RC1-0014N	9	Angle, Retiring Cam Header Support (**Page#** 299)
RC1-0012N	10	Plate, Retiring Cam Extension (**Page#** 299)
RC1-0013N	11	Angle, Retiring Long Extension (**Page#** 299)

Mounting hardware included with retiring cam assemblies (Page# 301)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Retiring Cam Isometric Drawing

Motorized



Part No.	Item No	Description
RC1-0021N	1	Pulley Assembly, Retiring Cam Deflector (**Page#** 300)
RC1-0080N	2	Cam Assembly, With Upper & Lower Brackets (**Page#** 298)
RC1-0024N	2A	Arm, Retiring Cam Upper Pivot Assembly (**Page#** 298)
RC1-0023N	2B	Arm, Retiring Cam Lower Pivot Assembly (**Page#** 298)
RC1-0026N	3	Spring/Rod, Replacement Guide (**Page#** 301)
RC1-0031N	4	Bumper, Retiring Cam Lower (**Page#** 299)
RC1-0030L/R	5	Bumper, Retiring Cam Upper (**Page#** 299)

Part No.	Item No	Description
RC1-0037N	6	Cable, Retiring Cam (**Page#** 301)
RC1-0032N	7	Motor & Power Pack 115V (**Page#** 297)
RC1-0033N	8	Motor & Power Pack 220V (**Page#** 297)
RC1-0034N	9	Tank, Explosion Retiring Cam 115V (**Page#** 297)
RC1-0035N	10	Tank, Explosion Retiring Cam 225V (**Page#** 297)
RC1-0041N	11	Tank, Moisture Retiring Cam 115V (**Page#** 297)
RC1-0042N	12	Tank, Moisture Retiring Cam 225V (**Page#** 297)

Mounting hardware included with retiring cam assemblies (Page# 301)

DOOR EQUIPMENT

Retiring Cam Assemblies

Conventional



Part No.	Description
RC1-0001L/R	Cam, Retiring
RC1-0002L/R	Cam, Extended Retiring

Water Resistant



Part No.	Description
RC1-0009L/R	Cam, Water Resistant Retiring
RC1-0010L/R*	Cam, Extended Water Resistant Retiring

Motorized



Part No.	Description
RC1-0003L/R	Cam, 115V Motorized Retiring
RC1-0004L/R	Cam, 220V Motorized Retiring

Motorized (Water Resistant)



Part No.	Description
RC1-0007L/R*	Cam, 115 PM Water Resistant Retiring
RC1-0008L/R*	Cam, 220 PM Water Resistant Retiring

Motorized (Explosion Resistant)



Part No.	Description
RC1-0005L/R	Cam, 115 PM Explosion Resistant Retiring
RC1-0006L/R	Cam, 220 PM Explosion Resistant Retiring

(*) Special Engineering Required

Retiring Cam Parts

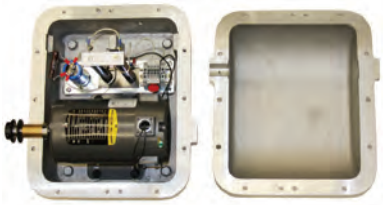
Motors & Power Packs



Note: All motorized retiring cams utilize the G.A.L. 1/6 HP 220 V.D.C. motor, Part No. MTR-0008N

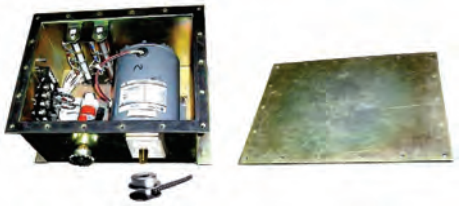
Part No.	Description
RC1-0032N	Motor & Power Pack 115V
RC1-0033N	Motor & Power Pack 220V

Tank



Part No.	Description
RC1-0034N	Tank, Explosion Retiring Cam 115V
RC1-0035N	Tank, Explosion Retiring Cam 220V

Steel Box



Part No.	Description
RC1-0041N	Steel Box, Moisture Retiring Cam 115V
RC1-0042N	Steel Box, Moisture Retiring Cam 220V

Power Pack & Parts

RC1-0038N



Power Pack, Retiring Cam 115V

RC1-0039N



Power Pack, Retiring Cam 220V

RC1-0075N



Power Supply, Explosion Proof Ret Cam, 220VDC

RC1-0076N



Power Supply, Explosion Proof Ret Cam, 115VDC

RES-0097N



Resistor, 100 OHM 100 Watt With (2) Adjustable Bands, 115 VDC, 6 1/2" Lg.

RES-0098N



Resistor, 175 OHM 100 Watt With (2) Adjustable Bands, 115 VDC, 6 1/2" Lg.

RES-0099N



Resistor, 300 OHM 100 Watt With (2) Adjustable Bands, 220 VDC, 6 1/2" Lg.

RC1-0061N



Rod Assembly, Resistor Mounting

DOOR EQUIPMENT

Retiring Cam Parts

Power Pack & Parts

RES-0074N



Resistor, 400 OHM 20 Watt, 220 VDC

RES-0075N



Resistor, 1000 OHM 20 Watt, 115 VDC

RC1-0040N



Terminal Block, Motor Retiring Cam, Includes Diod & Suppressor

MOV-0003N



Mov, Suppressor 250/330V

DIOD-0004N



Diod Bridge, 4 Pin

OP70-0022N



Plate, MOW/ RCWP Motor Shaft Seal Assembly, (For Steel Box, 2 1/2 x 2 1/2 x 1/4" w/ Hardware.)

CAP-0029N



Cap, 260UF/350VDC, Electrolytic Can-Type

Arms & Cam

RC1-0023N



Arm, Retiring Cam Lower Pivot Assembly

RC1-0024N



Arm, Retiring Cam Upper Pivot Assembly With Pulley

RC1-0051N



Arm, Retiring Cam Lower Pivot, Yellow Zinc Dichromate

RC1-0052N



Arm, Retiring Cam Upper Pivot With Pulley, Yellow Zinc Dichromate

RC1-0080N



Cam Assembly, With Upper & Lower Brackets

(*) Special Engineering Required

DOOR EQUIPMENT

Retiring Cam Parts

Bumpers

RC1-0030L/R



Bumper, Retiring Cam Upper Stop

RC1-0031N



Bumper, Retiring Cam Lower Stop

RC1-0057L/R



Bumper, Retiring Cam Upper Stop, Yellow Zinc Dichromate

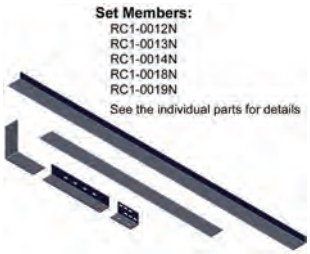
RC1-0058N



Bumper, Retiring Cam Lower Stop, Yellow Zinc Dichromate

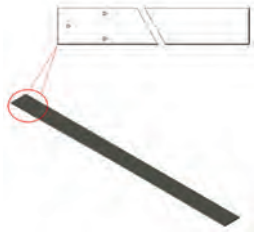
Extension Angles and Plates

RC1-0011N



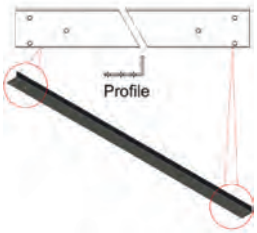
Angles, Retiring Cam Extension Set

RC1-0012N



Plate, Retiring Cam Extension

RC1-0013N



Angle, Retiring Cam Long Extension

RC1-0014N



Angle, Retiring Cam Header Support

RC1-0018N



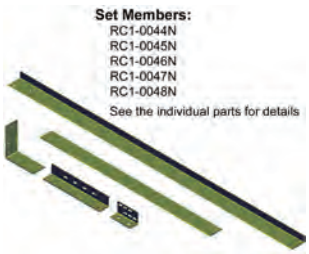
Angle, Retiring Cam Top Support

RC1-0019N



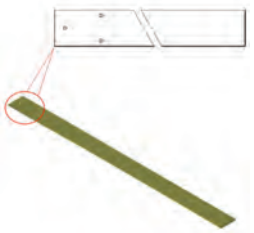
Angle, Retiring Cam Bottom

RC1-0043N



Angles, Retiring Cam Set Extension, Yellow Zinc Dichromate

RC1-0044N



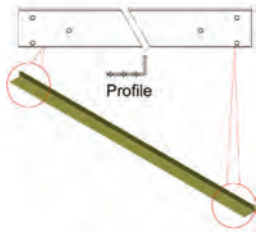
Plate, Retiring Cam Extension, Yellow Zinc Dichromate

DOOR EQUIPMENT

Retiring Cam Parts

Extension Angles and Plates

RC1-0045N



Angle, Retiring Long Cam Extension, Yellow Zinc Dichromate

RC1-0046N



Angle, Retiring Cam Header Support, Yellow Zinc Dichromate

RC1-0047N



Angle, Retiring Cam Bottom, Yellow Zinc Dichromate

RC1-0048N



Angle, Retiring Cam Top Support, Yellow Zinc Dichromate

RC1-0078N



Plate, Retiring Cam Pulley Mounting, 17" (Special)

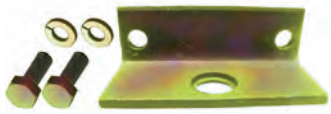
Guide Plate

RC1-0028N



Description
Guide Plate, Retiring Cam Spring

RC1-0054N



Description
Guide Plate, Ret Cam Spring, Yellow Zinc Dichromate

Pulley Assemblies and Parts

RC1-0015N



Pulley, AS17 X 5/8" I.D. Chain, With Chain

RC1-0016N



Pulley, AS17 X 1/2" I.D. Chain, With Chain

RC1-0021N



Pulley Assembly, Retiring Cam Deflector

RC1-0050N



Pulley Assembly, Retiring Cam Deflector, Yellow Zinc Dichromate

(*) Special Engineering Required

DOOR EQUIPMENT

Retiring Cam Parts

Pulley Assemblies and Parts

RC1-0064N



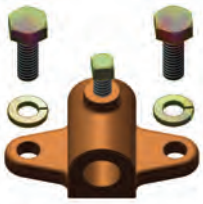
Pulley, Retiring Cam Deflector

RC1-0025N



Pulley, 2 5/8" Diameter Nylon, For Upper Arm Assembly

RC1-0022N



Shaft Support, Retiring Cam With Set Screws For Retiring Cam Deflector Pulley Assembly

Spring And Rod Assemblies

RC1-0026N



Spring And Rod Assembly, Replacement Guide

RC1-0027N



Spring And Rod Assembly

RC1-0053N



Spring And Rod, Replacement Guide, Yellow Zinc Dichromate

RC1-0055N



Spring And Rod Assembly, Yellow Zinc Dichromate

Hardware

RC1-0029N



Pin, Spring Rod

RC1-0056N



Pin, Spring Rod Plated, Yellow Zinc Dichromate

RC1-0036N



Hardware, Plated Mounting, Yellow Zinc Dichromate

RC1-0037N



Cable, Retiring Cam

RC1-0059N



Hardware Kit, Upper Arm

SPG-0037N



Spring, 4 1/2" Lg X 1/2" Od-0.059 Wire, .059 Wire- 40 Turns

(*) Special Engineering Required

GAL
Door Closers

SPRING, REEL & LINKAGE CLOSER ASSEMBLIES 302-312

SPRING, REEL & LINKAGE CLOSER PARTS 313-317

MANUAL HATCH DOOR SAC & BAC ASSEMBLIES 318-322

SAC & BAC ARMS & BRACKET 323

SAC & BAC HOUSING ASSEMBLIES & PARTS 323

SAC & BAC SPRINGS & HARDWARE 324-325

MANUAL CAR DOOR & COLLAPSIBLE GATE CLOSER ASSEMBLIES 325-326

MANUAL CAR DOOR & COLLAPSIBLE GATE CLOSER PARTS 326-327

MANUAL CLOSER OIL CHECK 327

DOOR CLOSER TYPE

- **SPRING** – Spring Closer, consists of linkage and spring, used on S/S, 2/SP, 3/SP, C/P & 2S/CP hatch doors
- **SPRING-W** – Water Resistant Spring Closer, yellow zinc dichromate plated used on S/S, 2/SP, 3/SP, C/P & 2S/CP hatch doors
- **REEL** – * Reel Closer (Spirator), used on S/S & C/P only
- **REEL-W** – Water Resistant Reel Closer (Spirator), with yellow zinc dichromate plated MT'G plate, used on S/S & CP doors only
- **CAR DOOR LINKAGE** – Conventional or Water Resistant Car Door Linkage, used on 2/SP car door when cable gearing is not used on hangers, or drive arm linkage is not used

MANUAL DOOR CLOSER TYPE

MANUAL HATCH DOOR

- **SAC** – Straight Arm Closer, used on S/S, 2/SP & 3/SP doors for car switch operation
- **BAC** – Broken Arm Closer, used on S/S, 2/SP & 3/SP doors for automatic operation (water resistant closers also available)

MANUAL CAR DOOR OR GATE

- **Car Door Closer** – Used on S/S & 2/SP door, with or without solenoid release (water resistant closers without solenoid release also available)
- **Collapsible Gate Closer** – Used on collapsible car gates, with or without solenoid release



BROKEN ARM CLOSER



STRAIGHT ARM CLOSER



REEL CLOSER

* GAL does not recommend the use of a reel closer on 2/SP or 2SP/CP doors

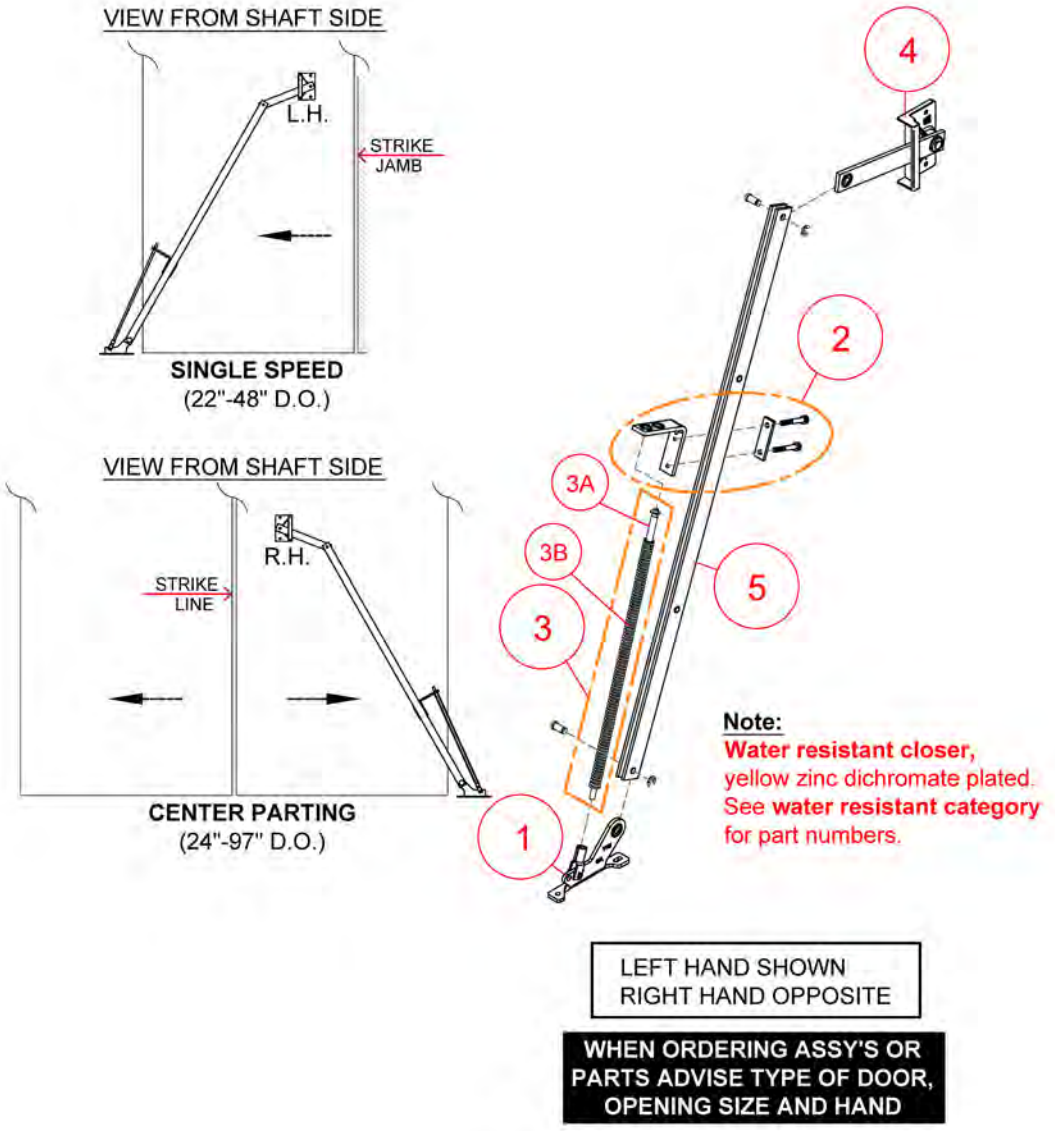


SPRING CLOSER

DOOR EQUIPMENT

Spring Closer Isometric Drawing

Single Speed & Center Parting



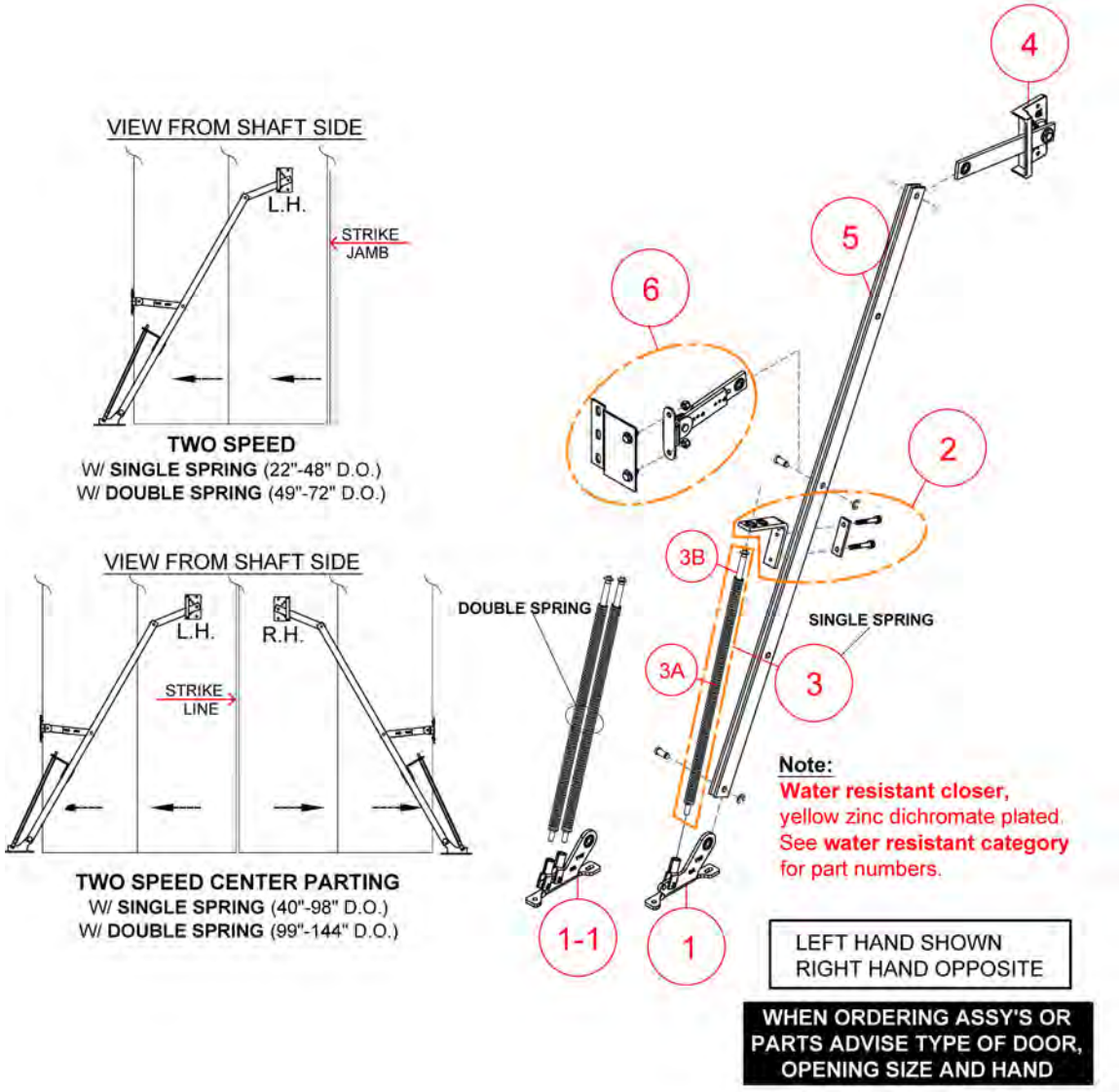
Part No.	Item No	Description
CL5-0056N	1	Base, Single Spring Closer (**Page#** 316)
CL5-0059N	2	Guide, Double Spring Closer (**Page#** 316)
CL5-0051N	3	Spring Rod Assembly (**Page#** 316)
HWNR-0001N	3A	Sleeve, 3/8" OD X 5/16" ID X 17.75 Nylon, Used For Spring Closers (**Page#** 316)

Part No.	Item No	Description
SPG-0046N	3B	Spring, 18 1/2" Lg X 21/32" OD (**Page#** 316)
CL5-XXXXX	4	Link & Bracket, Fast Door (**Page#** 313)
CL5-XXXXX	5	Arm, Spring Closer (**Page#** 313)

Mounting hardware included (Page# 317)

Spring Closer Isometric Drawing

Two Speed & Two Speed Center Parting



Part No.	Item No	Description
CL5-0056N	1	Base, Single Spring Closer (**Page#** 316)
CL5-0057N	1-1	Base, Double Spring Closer (**Page#** 316)
CL5-0059N	2	Guide, Double Spring Closer (**Page#** 316)
CL5-0051N	3	Spring Rod Assembly (**Page#** 316)
HWNR-0001N	3A	Sleeve, 3/8" OD X 5/16" ID X 17.75 Nylon, Used For Spring Closers (**Page#** 316)

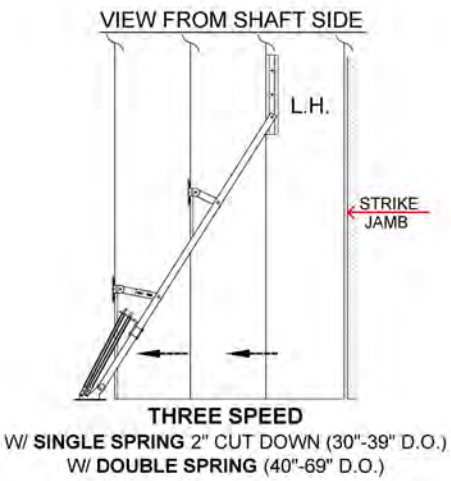
Mounting hardware included (Page# 317)

Part No.	Item No	Description
SPG-0046N	3B	Spring, 18 1/2" Lg X 21/32" OD (**Page#** 316)
CL5-XXXXX	4	Link & Bracket, Fast Door (**Page#** 313)
CL5-XXXXX	5	Arm, Spring Closer (**Page#** 313)
CL5-XXXXX	6	Link & Bracket, Slow Door (**Page#** 313-314)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

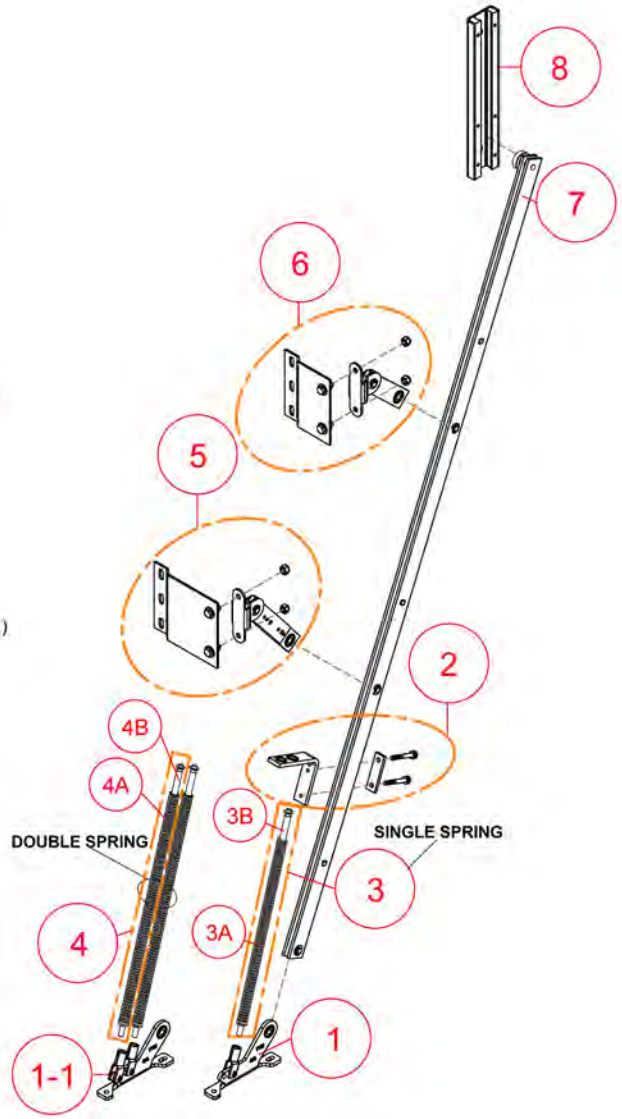
Spring Closer Isometric Drawing

Three Speed



LEFT HAND SHOWN
RIGHT HAND OPPOSITE

WHEN ORDERING ASSY'S OR PARTS ADVISE TYPE OF DOOR, OPENING SIZE AND HAND



Part No.	Item No	Description
CL5-0056N	1	Base, Single Spring Closer (**Page#** 316)
CL5-0057N	1-1	Base, Double Spring Closer (**Page#** 316)
CL5-0059N	2	Guide, Double Spring Closer (**Page#** 316)
CL5-0163N	3	Spring Rod Assembly, Cut Down 2" (**Page#** 316)
HWNR-0001N	3A	Sleeve, 3/8" OD X 5/16" ID X 17.75 Nylon, Used For Spring Closers (**Page#** 316)
SPG-0078N	3B	Spring, 16 1/2" Lg X 21/32" OD (Cut Down From "SPG-0046N") (**Page#** 316)
CL5-0051N	4	Spring Rod Assembly (**Page#** 316)

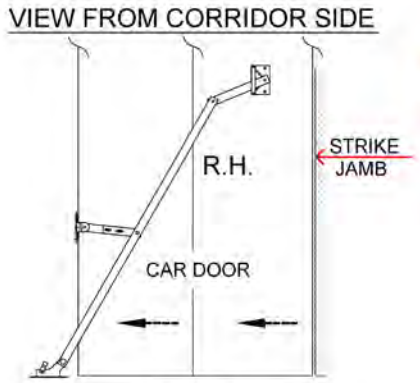
Part No.	Item No	Description
HWNR-0001N	4A	Sleeve, 3/8" OD X 5/16" ID X 17.75 Nylon, Used For Spring Closers (**Page#** 316)
SPG-0046N	4B	Spring, 18 1/2" Lg X 21/32" OD (**Page#** 316)
CL5-XXXXX	5	Link & Bracket, Slow Door (**Page#** 313-314)
CL5-XXXXX	6	Link & Bracket, Intermediate Door (**Page#** 314)
CL5-XXXXX	7	Arm, Spring Closer (**Page#** 313)
CL5-XXXXX	8	Shoe Assembly, 3Sp Spring Closer (**Page#** 315)

Mounting hardware included (Page# 317)

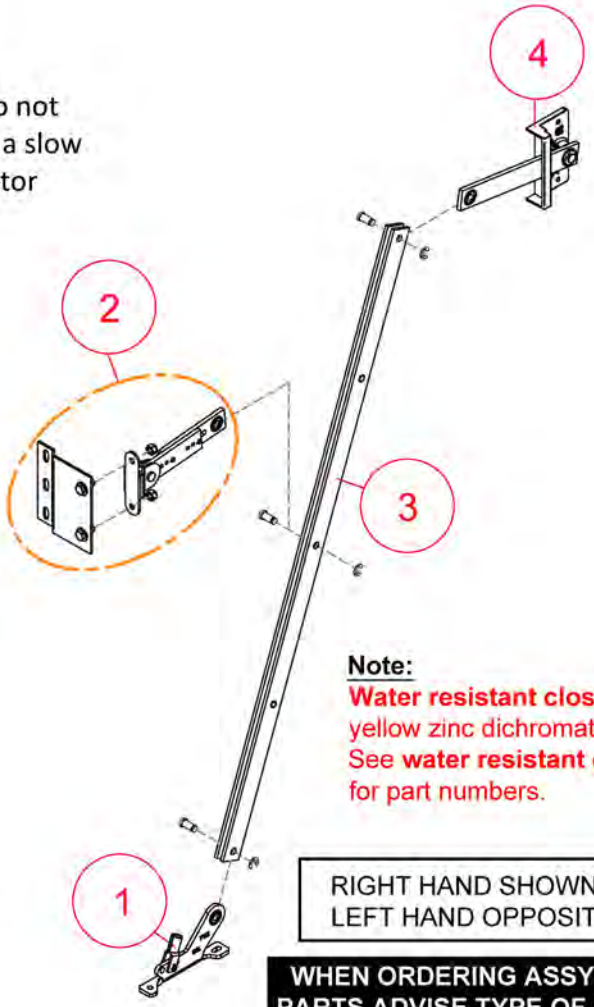
Car Door Linkage Isometric Drawing

Two Speed

NOTE:
Use for 2/SP car doors that do not have cable geared hanger, or a slow door connection to the operator drive arms.



TWO SPEED
W/O **SPRING** (30"-54" D.O.)



Note:
Water resistant closer,
yellow zinc dichromate plated.
See **water resistant category** for part numbers.

RIGHT HAND SHOWN
LEFT HAND OPPOSITE

WHEN ORDERING ASSY'S OR PARTS ADVISE TYPE OF DOOR, OPENING SIZE AND HAND

Part No.	Item No	Description
CL5-0056N	1	Base, Single Spring Closer (**Page#** 316)
CL5-XXXXX	2	Link & Bracket, Slow Door (**Page#** 313)

Part No.	Item No	Description
CL5-XXXXX	3	Arm, Spring Closer (**Page#** 313)
CL5-XXXXX	4	Link & Bracket, Fast Door (**Page#** 313)

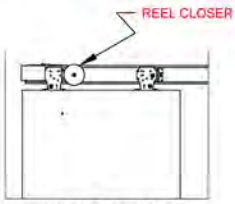
Mounting hardware included (Page# 317)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

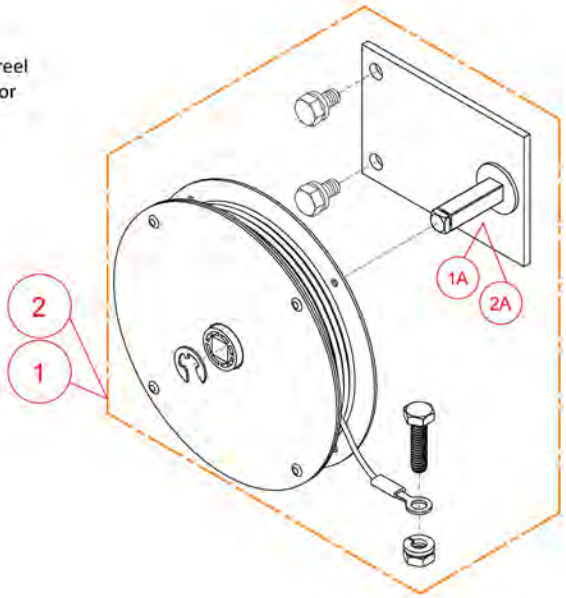
Reel Closer Isometric Drawing

Standard & Water Resistant

NOTE:
G.A.L. does not recommend the use of reel closers for two 2/SP, 3/SP or 2SP/CP door arrangements, use a spring closer.



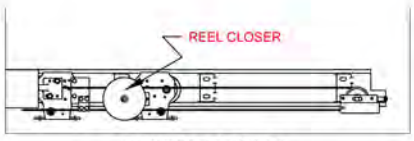
SINGLE SPEED
CENTER PARTING
(ALL DOOR OPENINGS)



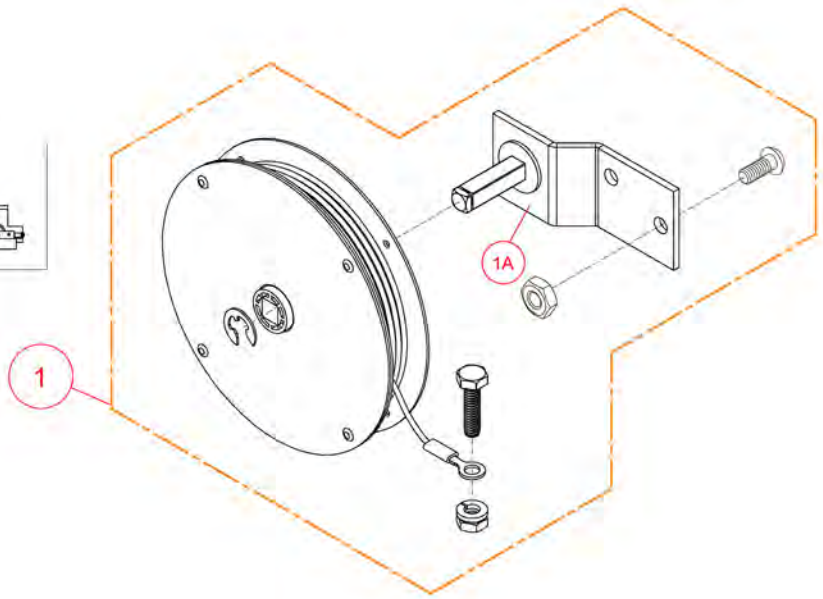
Part No.	Item No	Description
CL6-0001N	1	Closer Assembly, Reel (**Page#** 312)
CL6-0003N	1A	Bracket, Reel Closer Mounting (**Page#** 313)

Part No.	Item No	Description
CL6-0005N	2	Closer Assembly, Water Resistant Reel (**Page#** 312)
CL6-0014N	2A	Bracket, Reel Closer Mounting, Yellow Zinc Dichromate (**Page#** 313)

CP - Westinghouse IV & V



CENTER PARTING
(ALL DOOR OPENINGS)



Part No.	Item No	Description
CL6-0009N	1	Closer Assembly, Westinghouse IV & V Reel (With Special Offset Mounting Bracket) (**Page#** 205)

Part No.	Item No	Description
CL6-0012N	1A	Bracket, Westinghouse IV & V Reel Closer (**Page#** 205)

DOOR EQUIPMENT

Door Closer Assemblies

Spring Closers

Conventional - Dust/Explosion Resistant - Vandal Resistant

Single Speed & Center Parting

SINGLE SPRING - S/S & C/P



Note: Closer hand can be reversed in field for S/P & C/P door openings.

Part No.	S/S	C/P	Arm Length	Fast Door Link
CL5-0001L/R	22”-27”	24”-55”	36”	7 1/2”
CL5-0002L/R	28”-35”	56”-71”	42”	9”
CL5-0003L/R	36”-40”	72”-81”	48”	9”
CL5-0004L/R	41”-44”	82”-89”	48”	10 1/2”
CL5-0005L/R	45”-48”	90”-97”	52”	12”

Two Speed (Single Spring)

SINGLE SPRING - 2/SP & 2SP/CP



Part No.	2/SP	Arm Length	Fast Door Link	Slow Door Link
CL5-0006L/R	24”	42”	7 1/2”	5 3/8”
CL5-0007L/R	25”	42”	7 1/2”	5 3/4”
CL5-0009L/R	26”-27”	42”	7 1/2”	7 1/4”
CL5-0011L/R	28”-35”	42”	9”	7”
CL5-0012L/R	36”-40”	48”	9”	8 1/4”
CL5-0013L/R	41”-44”	48”	10 1/2”	9 1/4”
CL5-0014L/R	45”-48”	52”	12”	10 1/4”

Two Speed (Double Spring)

DOUBLE SPRING - 2/SP & 2SP/CP



Part No.	2/SP	Arm Length	Fast Door Link	Slow Door Link
CL5-0251L/R*	41”-44”	48”	10 1/2”	9 1/4”
CL5-0252L/R*	45”-48”	52”	12”	10 1/4”
CL5-0015L/R	49”-51”	60”	11”	9 3/4”
CL5-0016L/R	52”-54”	72”	11”	11”
CL5-0017L/R	55”-60”	72”	14”	12 1/2”
CL5-0018L/R	61”-66”	72”	16”	14”
CL5-0019L/R	67”-72”	76”	17”	15 1/2”

(*) Special Engineering Required

Door Closer Assemblies

Spring Closers

Conventional - Dust/Explosion Resistant - Vandal Resistant

Two Speed Center Parting (Single Spring)

SINGLE SPRING - 2/SP & 2SP/CP



Part No.	2SP/CP	Arm Length	Fast Door Link	Slow Door Link
CL5-0006L/R	40”, 44”, 48”-49”	42”	7 1/2”	5 3/8”
CL5-0007L/R	41”, 45”, 47”, 50”	42”	7 1/2”	5 3/4”
CL5-0008L/R	32”-39”, 42”-43”, 46”, 51”	42”	7 1/2”	6 1/8”
CL5-0009L/R	52”-54”	42”	7 1/2”	7 1/4”
CL5-0010L/R	55”	42”	7 1/2”	8 1/4”
CL5-0011L/R	56”-70”	42”	9”	7”
CL5-0012L/R	71”-82”	48”	9”	8 1/4”
CL5-0013L/R	83”-90”	48”	10 1/2”	9 1/4”
CL5-0014L/R	91”-98”	52”	12”	10 1/4”

Two Speed Center Parting (Double Spring)

DOUBLE SPRING - 2/SP & 2SP/CP



Part No.	2SP/CP	Arm Length	Fast Door Link	Slow Door Link
CL5-0015L/R	99”-104”	60”	11”	9 3/4”
CL5-0016L/R	105”-110”	72”	11”	11”
CL5-0017L/R	111”-122”	72”	14”	12 1/2”
CL5-0018L/R	123”-134”	72”	16”	14”
CL5-0019L/R	135”-144”	76”	17”	15 1/2”

*Three Speed (Shoe Type - Single Spring)***

SINGLE SPRING - 3/SP & 3SP/CP



****Note:** Spring & Rod cut down 2” (30”-39” door opening)

Part No.	3/SP	Arm Length	Intermediate Door Link	Slow Door Link	Shoe Length
CL5-0088L/R*	30”	54”	3 3/16”	5 5/8”	12”
CL5-0089L/R*	31”	54”	3 1/4”	5 5/8”	12”
CL5-0090L/R*	32”	54”	3 3/8”	5 11/16”	12”
CL5-0091L/R*	33”	54”	3 7/16”	5 11/16”	12”
CL5-0092L/R*	34”	54”	3 9/16”	5 11/16”	12”
CL5-0093L/R*	35”	54”	3 11/16”	5 13/16”	15”
CL5-0094L/R*	36”	54”	3 7/8”	6 1/16”	15”
CL5-0095L/R*	37”	54”	4”	6 1/4”	15”
CL5-0096L/R*	38”	54”	4 3/16”	6 1/2”	15”
CL5-0097L/R*	39”	54”	4 5/16”	6 3/4”	15”

DOOR EQUIPMENT

Door Closer Assemblies

Spring Closers

Conventional - Dust/Explosion Resistant - Vandal Resistant

*Three Speed (Shoe Type - Double Spring)***

DOUBLE SPRING - 3/SP & 3SP/CP



****Note:** Spring & Rod cut down 2" (40"-49" door opening)

Part No.	3/SP	Arm Length	Intermediate Door Link	Slow Door Link	Shoe Length
CL5-0098L/R*	40"	60"	4 5/16"	6 15/16"	15"
CL5-0099L/R*	41"	60"	4 7/16"	7 1/8"	15"
CL5-0100L/R*	42"	60"	4 5/8"	7 3/8"	15"
CL5-0101L/R*	43"	60"	4 3/4"	7 5/8"	15"
CL5-0102L/R*	44"	60"	4 15/16"	7 13/16"	15"
CL5-0103L/R*	45"	60"	5 1/8"	8 1/16"	18"
CL5-0104L/R*	46"	60"	5 1/4"	8 5/16"	18"
CL5-0105L/R*	47"	60"	5 7/16"	8 9/16"	18"
CL5-0106L/R*	48"	60"	5 5/8"	8 3/4"	18"
CL5-0107L/R*	49"	60"	5 13/16"	9"	18"

Three Speed (Shoe Type - Double Spring)

Part No.	3/SP	Arm Length	Intermediate Door Link	Slow Door Link	Shoe Length
CL5-0108L/R*	50"	72"	5 1/2"	9 3/16"	18"
CL5-0109L/R*	51"-53"	72"	5 11/16" - 6"	9 3/8" - 9 7/8"	18"
CL5-0110L/R*	54"	72"	6 1/8"	10 1/6"	18"
CL5-0111L/R*	55"-57"	72"	6 5/16" - 6 5/8"	10 5/16" - 10 3/4"	20"
CL5-0112L/R*	58"	72"	6 13/16"	11"	20"
CL5-0113L/R*	59"	72"	7"	11 1/4"	20"
CL5-0114L/R*	60"-61"	78"	6 15/16" - 7 1/16"	11 7/16" - 11 5/8"	20"
CL5-0115L/R*	62"	78"	7 1/4"	11 7/8"	20"
CL5-0116L/R*	63"-64"	78"	7 7/16" - 7 9/16"	12 1/8" - 12 5/16"	20"
CL5-0117L/R*	65"-66"	78"	7 3/4" - 7 15/16"	12 9/16" - 12 13/16"	22"
CL5-0118L/R*	67"	78"	8 1/8"	13 1/16"	22"
CL5-0119L/R*	68"-69"	78"	8 3/16" - 8 1/2"	13 1/8" - 13 1/2"	22"

*Three Speed Center Parting (Shoe Type - Double Spring)***

Note: Three speed center parting (3SP/CP) shoe type with a single or double spring (spring & rod cut down 2") is available to order. Contact G.A.L. Sales or Engineering for information.

Water Resistant

Single Speed & Center Parting

SINGLE SPRING - S/S & C/P



Note: All Ferrous Material Yellow Zinc Dichromate Plated

Part No.	S/S	C/P	Arm Length	Fast Door Link
CL7-0001L/R*	22"-27"	24"-55"	36"	7 1/2"
CL7-0002L/R*	28"-35"	56"-71"	42"	9"
CL7-0003L/R*	36"-40"	72"-81"	48"	9"
CL7-0004L/R*	41"-44"		48"	10 1/2"
CL7-0005L/R*	45"-48"		52"	12"

(*) Special Engineering Required

Door Closer Assemblies

Spring Closers

Water Resistant

Two Speed (Single Spring)



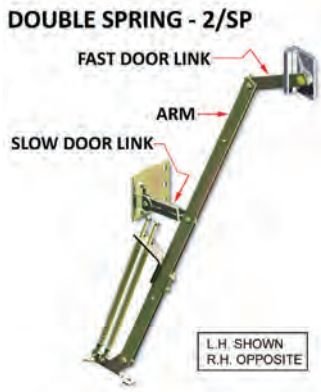
Part No.	2/SP	Arm Length	Fast Door Link	Slow Door Link
CL7-0006L/R*	24”	42”	7 1/2”	5 3/8”
CL7-0007L/R*	25”	42”	7 1/2”	5 3/4”
CL7-0009L/R*	26”-27”	42”	7 1/2”	7 1/4”
CL7-0011L/R*	28”-35”	42”	9”	7”
CL7-0012L/R*	36”-40”	48”	9”	8 1/4”
CL7-0013L/R*	41”-44”	48”	10 1/2”	9 1/4”
CL7-0014L/R*	45”-48”	52”	12”	10 1/4”

Two Speed Center Parting (Single Spring)



Part No.	2SP/CP	Arm Length	Fast Door Link	Slow Door Link
CL7-0006L/R*	40”, 44” 48”, 49”	42”	7 1/2”	5 3/8”
CL7-0007L/R*	41”, 45” 47”, 50”	42”	7 1/2”	5 3/4”
CL7-0008L/R*	32”-39”, 42” 43”, 46”, 51”	42”	7 1/2”	6 1/8”
CL7-0009L/R*	52”-54”	42”	7 1/2”	7 1/4”
CL7-0010L/R*	55”	42”	7 1/2”	8 1/4”
CL7-0011L/R*	56”-70”	42”	9”	7”
CL7-0012L/R*	71”-82”	48”	9”	8 1/4”
CL7-0013L/R*	83”-90”	48”	10 1/2”	9 1/4”
CL7-0014L/R*	91”-98”	52”	12”	10 1/4”

Two Speed (Double Spring)



Part No.	2/SP	Arm Length	Fast Door Link	Slow Door Link
CL7-0015L/R*	49”-51”	60”	11”	9 3/4”
CL7-0016L/R*	52”-54”	72”	11”	11”
CL7-0017L/R*	55”-60”	72”	14”	12 1/2”
CL7-0018L/R*	61”-66”	72”	16”	14”
CL7-0019L/R*	67”-72”	76”	17”	15 1/2”

DOOR EQUIPMENT

Door Closer Assemblies

Spring Closers

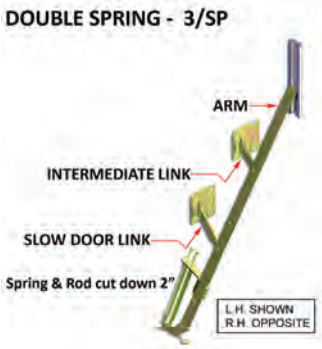
Water Resistant

*Three Speed (Shoe Type - Single Spring)***



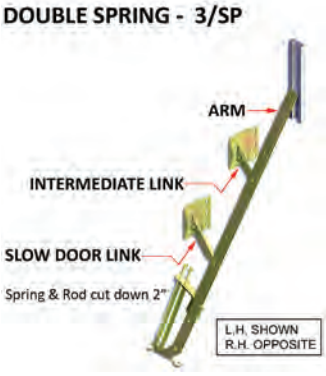
Part No.	3/SP	Arm Length	Intermediate Door Link	Slow Door Link	Shoe Length
CL7-0020L/R*	30"	54"	3 3/16"	5 5/8"	12"
CL7-0021L/R*	31"	54"	3 1/4"	5 5/8"	12"
CL7-0022L/R*	32"	54"	3 3/8"	5 11/16"	12"
CL7-0023L/R*	33"	54"	3 7/16"	5 11/16"	12"
CL7-0024L/R*	34"	54"	3 9/16"	5 11/16"	12"
CL7-0025L/R*	35"	54"	3 11/16"	5 13/16"	15"
CL7-0026L/R*	36"	54"	3 7/8"	6 1/16"	15"
CL7-0027L/R*	37"	54"	4"	6 1/4"	15"
CL7-0028L/R*	38"	54"	4 3/16"	6 1/2"	15"
CL7-0029L/R*	39"	54"	4 5/16"	6 3/4"	15"

*Three Speed (Shoe Type - Double Spring)***



Part No.	3/SP	Arm Length	Intermediate Door Link	Slow Door Link	Shoe Length
CL7-0030L/R*	40"	60"	4 5/16"	6 15/16"	15"
CL7-0031L/R*	41"	60"	4 7/16"	7 1/8"	15"
CL7-0032L/R*	42"	60"	4 5/8"	7 3/8"	15"
CL7-0033L/R*	43"	60"	4 3/4"	7 5/8"	15"
CL7-0034L/R*	44"	60"	4 15/16"	7 13/16"	15"
CL7-0035L/R*	45"	60"	5 1/8"	8 1/16"	18"
CL7-0036L/R*	46"	60"	5 1/4"	8 5/16"	18"
CL7-0037L/R*	47"	60"	5 7/16"	8 9/16"	18"
CL7-0038L/R*	48"	60"	5 5/8"	8 3/4"	18"
CL7-0039L/R*	49"	60"	5 13/16"	9"	18"

Three Speed (Shoe Type - Double Spring)



Part No.	3/SP	Arm Length	Intermediate Door Link	Slow Door Link	Shoe Length
CL7-0040L/R*	50"	72"	5 1/2"	9 3/16"	18"
CL7-0041L/R*	51"	72"	5 11/16"	9 3/8"	18"
CL7-0042L/R*	52"	72"	5 13/16"	9 5/8"	18"
CL7-0043L/R*	53"	72"	6"	9 7/8"	18"
CL7-0044L/R*	54"	72"	6 1/8"	10 1/16"	18"
CL7-0045L/R*	55"	72"	6 5/16"	10 5/16"	20"
CL7-0046L/R*	56"	72"	6 1/2"	10 9/16"	20"
CL7-0047L/R*	57"	72"	6 5/8"	10 3/4"	20"
CL7-0048L/R*	58"	72"	6 13/16"	11"	20"
CL7-0049L/R*	59"	72"	7"	11 1/4"	20"
CL7-0050L/R*	60"	78"	6 15/16"	11 7/16"	20"
CL7-0051L/R*	61"	78"	7 1/16"	11 5/8"	20"
CL7-0052L/R*	62"	78"	7 1/4"	11 7/8"	20"
CL7-0053L/R*	63"	78"	7 7/16"	12 1/8"	20"
CL7-0054L/R*	64"	78"	7 9/16"	12 5/16"	20"
CL7-0055L/R*	65"	78"	7 3/4"	12 9/16"	22"
CL7-0056L/R*	66"	78"	7 15/16"	12 13/16"	22"
CL7-0057L/R*	67"	78"	8 1/8"	13 1/16"	22"
CL7-0058L/R*	68"	78"	8 3/16"	13 1/8"	22"
CL7-0059L/R*	69"	78"	8 1/2"	13 1/2"	22"

(*) Special Engineering Required

Door Closer Assemblies

Car Door Linkage

Conventional

Two Speed



Part No.	2/SP	Arm Length	Fast Door Link	Slow Door Link
CL5-0073L/R	30”	42”	9”	7”
CL5-0074L/R	31”	42”	9”	7”
CL5-0075L/R	32”	42”	9”	7”
CL5-0076L/R	33”	42”	9”	7”
CL5-0077L/R	34”	42”	9”	7”
CL5-0078L/R	35”	42”	9”	7”
CL5-0079L/R	36”	48”	9”	8 1/4”
CL5-0080L/R	37”	48”	9”	8 1/4”
CL5-0081L/R	38”	48”	9”	8 1/4”
CL5-0082L/R	39”-40”	48”	9”	8 1/4”
CL5-0083L/R	41”-44”	48”	10 1/2”	9 1/4”
CL5-0084L/R	45”-48”	52”	12”	10 1/4”
CL5-0085L/R	49”-51”	60”	11”	9 3/4”
CL5-0086L/R	52”-54”	72”	11”	11”

Reel Closers

Note: Reel closers are not recommended or used for 2SP, 2SP/CP or 3SP doors. Use spring closers instead.

Conventional

CL6-0001N



Closer Assembly, Reel. Conventional, Dust/Explosion Resistant, and Vandal Resistant

Water Resistant

CL6-0005N

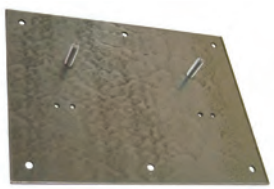


Closer Assembly, Reel. Water Resistant Yellow Zinc Dichromate

Spring Closer Accessories

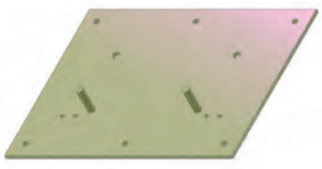
Spring Closer Reinforcement Plate

CL5-0259N



Plate, Closer Reinforcement w/ Studs, w/ (2) 1/4”-20 x 1” LG Self-Clinching Zinc Studs

CL7-0127N



Plate, Closer Reinforcement w/ Studs, Yellow Zinc Dichromate w/ (2) 1/4”-20 x 1” LG Self-Clinching Zinc Studs

DOOR EQUIPMENT

Door Closer Parts

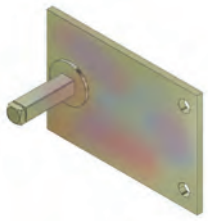
Reel Closer Brackets

CL6-0003N



Description
Bracket, Reel Closer Mounting

CL6-0014N



Description
Bracket, Reel Closer Mounting, Yellow Zinc Dichromate

Spring Closer Arms

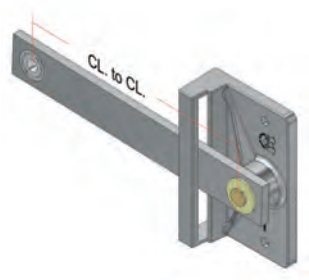


Part No.	S/S	2/SP	C/P	2SP/CP	Arm CL to CL
CL5-0020N	22”-27”		24”-55”		36”
CL5-0021N	28”-35”		56”-71”		42”
CL5-0023N	36”-44”		72”-89”		48”
CL5-0025N	45”-48”		90”-97”		52”
CL5-0022N		24”-35”		32”-70”	42”
CL5-0024N		36”-44”		71”-72”	48”
CL5-0026N		45”-48”			52”
CL5-0027N		49”-51”			60”
CL5-0028N		52”-66”			72”
CL5-0029N		67”-72”			76”

Link & Brackets

Conventional

Fast Door Link & Bracket



Part No.	S/S	2/SP	C/P	2SP/CP	Link CL To CL
CL5-0030N	22”-27”	24”-27”	24”-55”	33”-55”	7 1/2”
CL5-0031N	28”-40”	28”-40”	56”-81”	56”-72”	9”
CL5-0032N	41”-44”	41”-44”	82”-89”	83”-90”	10 1/2”
CL5-0033N		49”-54”		99”-110”	11”
CL5-0034N	45”-48”	45”-48”	90”-97”	91”-98”	12”
CL5-0035N		55”-60”		111”-122”	14”
CL5-0036N		61”-66”		123”-134”	16”
CL5-0037N		67”-72”		135”-144”	17”

Slow Door Link & Bracket (3/SP)



Part No.	3/SP	Link CL To CL
CL5-0141N	30”-31”	5 5/8”
CL5-0142N	32”-39”	5 11/16” - 6 3/4”
CL5-0143N	40”-44”	6 15/16” - 7 13/16”
CL5-0144N	45”-49”	8 1/16” - 9”
CL5-0145N	50”-53”	9 3/16” - 9 7/8”
CL5-0146N	54”-57”	10 1/16” - 10 3/4”
CL5-0147N	58”-61”	11” - 11 5/8”
CL5-0148N	62”-66”	11 7/8” - 12 13/16”
CL5-0149N	67”-68”	13 1/16” - 13 1/8”
CL5-0150N	69”	13 1/2”

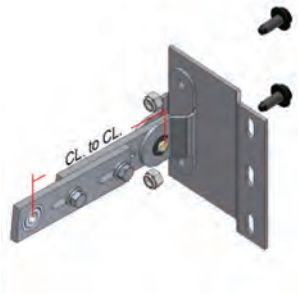
(*) Special Engineering Required

Door Closer Parts

Link & Brackets

Conventional

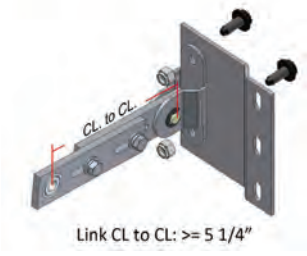
Slow Door Link & Bracket (2/SP & 2SP/CP)



Part No.	2/SP	2SP/CP	Link CL To CL
CL5-0038N	24”	40”, 44” 48”-49”	5 3/8”
CL5-0039N	25”	41”, 45” 47”, 50”	5 3/4”
CL5-0040N		32”-39” 42”-43” 46”, 51”	6 1/8”
CL5-0041N	26”-35”	52”-54” 56”-70”	7” - 7 1/4”
CL5-0042N	36”-40”	55”, 71”-82”	8 1/4”
CL5-0043N	41”-44” 49”-51”	83”-90”	9 1/4” - 9 3/4”
CL5-0044N	45”-48”	91”-98”	10 1/4”
CL5-0045N	52”-54”		11”
CL5-0046N	55”-60”		12 1/2”
CL5-0047N	61”-66”		14”
CL5-0048N	67”-72”		15 1/2”

Intermediate Door Link & Bracket (3/SP)





Note: Part # CL5-0136N through CL5-0140N Link & Bracket are adjustable.

Part No.	3/SP	Link CL To CL
CL5-0120N	30”	3 3/16”
CL5-0121N	31”	3 1/4”
CL5-0122N	32”	3 3/8”
CL5-0123N	33”	3 7/16”
CL5-0124N	34”	3 9/16”
CL5-0125N	35”	3 11/16”
CL5-0126N	36”	3 7/8”
CL5-0127N	37”	4”
CL5-0128N	38”	4 3/16”
CL5-0129N	39”-40”	4 5/16”
CL5-0130N	41”	4 7/16”
CL5-0131N	42”	4 5/8”
CL5-0132N	43”	4 3/4”
CL5-0133N	44”	4 15/16”
CL5-0134N	45”	5 1/8”
CL5-0135N	46”	5 1/4”
CL5-0136N	47”, 50”	5 7/16” - 5 1/2”
CL5-0138N	49”, 52”-57”	5 13/16” - 6 5/8”
CL5-0139N	58”-66”	6 13/16” - 7 15/16”
CL5-0140N	67”-69”	8 1/8” - 8 1/2”

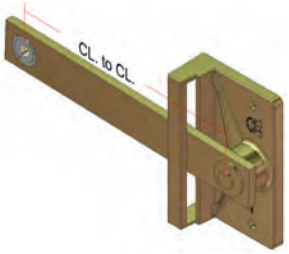
DOOR EQUIPMENT

Door Closer Parts

Link & Brackets

Water Resistant

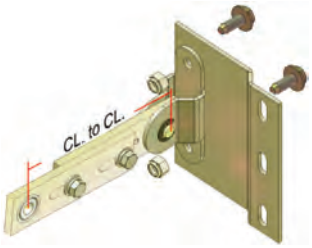
Fast Door Link & Bracket



Note: All ferrous material are yellow zinc dichromate plated

Part No.	S/S	2/SP	C/P	2SP/CP	Link CL To CL
CL7-0083N	22”-27”	24”-27”	24”-55”	33”-55”	7 1/2”

Slow Door Link & Bracket



Note: All ferrous material are yellow zinc dichromate plated

Part No.	2/SP	2SP/CP	Link CL To CL
CL7-0112N	24”	40”, 44”, 48”-49”	5 3/8”
CL7-0131N	25”	41”, 45”, 47”, 50”	5 3/4”
CL7-0132N		32”-39”, 42”-43” 46”, 51”	6 1/8”
CL7-0133N	26”-35”	52”-54”, 56”-70”	7” - 7 1/4”
CL7-0134N	41”-44”, 49”-51”		9 1/4” - 9 3/4”
CL7-0135N	45”-48”		10 1/4”
CL7-0136N	52”-54”		11”
CL7-0137N	55”-60”		12 1/2”
CL7-0138N	61”-66”		14”
CL7-0139N	67”-72”		15 1/2”

Spring Closer Shoes



Part No.	3/SP	Shoe Length
CL5-0155N*	30”-34”	12”
CL5-0156N*	35”-44”	15”
CL5-0157N*	45”-54”	18”
CL5-0158N*	55”-64”	20”
CL5-0159N*	65”-69”	22”
CL5-0260N		26”

Spring Closer Brackets

CL5-0072N



Bracket, 2/SP & 2SP/CP Slow Door Closer Assembly, 3” C.L.

CL5-0160N



Bracket, 3/SP Intermediate Door Closer Assembly, 3 3/8” C.L.

CL5-0161N



Bracket, 3/SP Slow Door Closer Assembly, 4 3/4” C.L.

(*) Special Engineering Required

Door Closer Parts

Spring Closer Bases

CL5-0056N



Description
Base, Single Spring Closer, S/S 22”-48”, 2/SP 24”-48”, C/P 30”-54”, 2SP/CP 32”-72” D.O.

CL5-0057N



Description
Base, Double Spring Closer, 2/SP 49”-72” D.O.

Spring Closer Guides

CL5-0447N



Description
Guide, Double Reinforced Spring Closer, 2/SP & 3/SP Large D.O.

CL5-0059N



Description
Guide, Double Spring Closer

Spring Rod Assemblies & Parts

CL5-0051N



Spring Rod Assembly

CL5-0163N



Spring Rod Assembly, Cut Down 2”

CL7-0109N



Spring Rod Assembly, Yellow Zinc Dichromate

SPG-0046N



Spring, 18 1/2” LG X 21/32” OD. Used For Standard Spring Rod Assembly

SPG-0078N



Spring, 16 1/2” LG x 21/32” OD. Cut Down 2” From SPG-0046N

SPG-0047N



Spring, 18 1/2” LG x 21/32” OD. Stainless Steel

HWNR-0001N



Sleeve, 3/8” OD X 5/16” ID X 17.75 Nylon, Used For Spring Closers

DOOR EQUIPMENT

Door Closer Parts

Spring Closer Hardware

CL5-0053N



Hardware, S/S-C/P Closer, Yellow Zinc Dichromate

CL5-0054N



Hardware, 2/SP-2SP/CP Closer, Yellow Zinc Dichromate

CL5-0162N



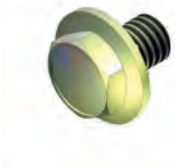
Hardware, 3/SP Spring Door Closer, Yellow Zinc Dichromate

CL5-0179N



Hardware, 2/SP-2SP/CP Special Boxed Schindler Closer Mounting, Yellow Zinc Dichromate

HWSC-0345N



Screw, 5/16-18 X 1/2" Hex Tap-Sems, Yellow Zinc Dichromate

HWSC-0347N



Screw, 5/16-18 X 5/8" Hex Tap-Sems, Yellow Zinc Dichromate

HWSC-0346N



Screw, 5/16-18 X 7/8" Sems, Yellow Zinc Dichromate

HWSC-0193N



Screw, 1/4-20 X 2" LG Hex Head Cap, Cap 3/4 Thread Steel Bolt For Spring Support

CL5-0050N



Pin, Spring Arm Closer Pivot, With (2) HWRC-0004N Clips

HWRC-0003N



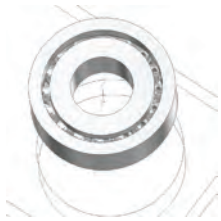
Clip, Re-31 .025" Thick External Retaining, For Spring Rod Assembly

HWRC-0004N



Clip, Re-37 External Retaining, Use For Spring Closer Pivot Pin, Reel Closer

HWBR-0001N



Bearing, 7/8 OD X 3/8 ID No Shoulder

CL5-0258N*



Channel, Spring CL Sill Bracket Offset Mounting

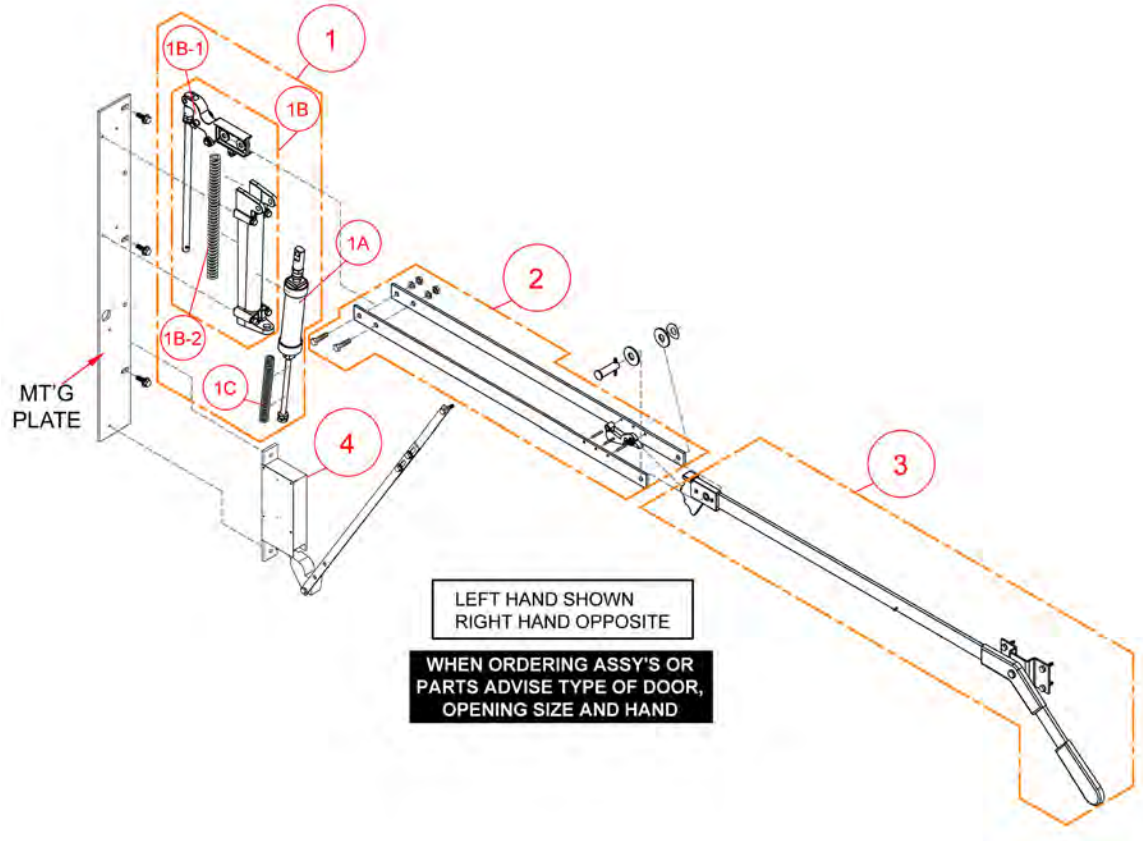
(*) Special Engineering Required

DOOR EQUIPMENT

Manual Equipment Isometric Drawing

Straight Arm Closer

Single Speed (22”-120” D.O.)



Part No.	Item No	Description
CL3-0005N	1	Arm & Housing Assembly, S/S SAC (**Page#** 323)
OC-0002N	1A	Oil Check, OC-500-C S/S & 2/SP Straight Arm Closer (**Page#** 327)
CL3-0006N	1B	Housing Assembly, S/S Straight Arm Closer Rocker (**Page#** 323)
CL1-0007N	1B-1	Rocker Arm Assembly, BAC & SAC (**Page#** 324)
SPG-0055N	1B-2	Spring, 11” Lg X 13/16” OD-0.148 Wire- 36 Turns (**Page#** 324)

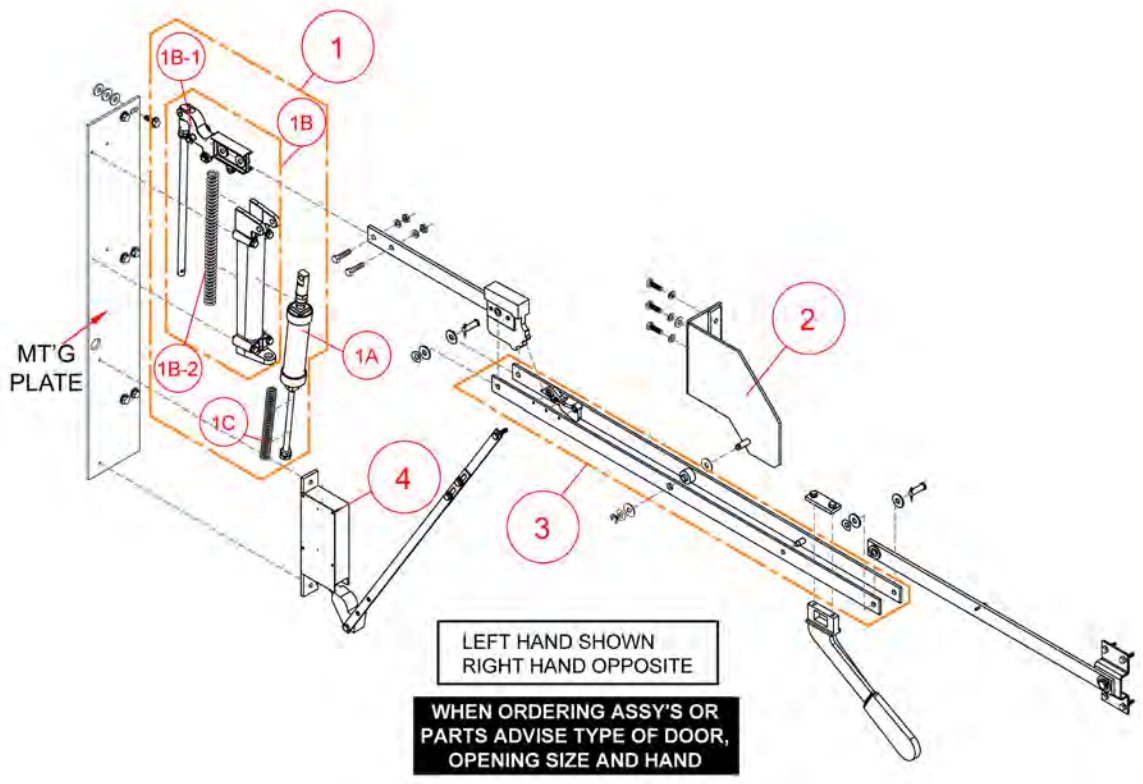
Part No.	Item No	Description
SPG-0045N	1C	Spring, 6” Lg X 11/16” OD-0.105 Wire- 28 Turns (**Page#** 325)
CL3-0003N	2	Arm Assembly, S/S Staight Arm Closer Rear (**Page#** 323)
CL3-0002L/R	3	Arm Assembly, S/S SAC Bracket & Front (**Page#** 323)
INT9-0001L/R	4	Interlock Assembly,Type “HD” (**Page#** 351)

Mounting hardware included.

Manual Equipment Isometric Drawing

Straight Arm Closer

Two Speed (22”-120” D.O.)



Two Speed (22”-42” D.O.)

Part No.v	Item No	Description
CL4-0008N	1	Arm & Housing Assembly, 2/SP SAC 42” & Under D.O. (**Page#** 323)
OC-0002N	1A	Oil Check, OC-500-C S/S & 2/SP Straight Arm Closer (**Page#** 327)
CL2-0011N	1B	Housing Assembly, 2/SP SAC/ BAC With 0.148-Wire Spring (**Page#** 323)
CL1-0007N	1B-1	Rocker Arm Assembly, BAC & SAC (**Page#** 324)
SPG-0057N	1B-2	Spring,12 3/4” Lg X 13/16” OD-0.148 Wire- 42 Turns (**Page#** 324)
SPG-0045N	1C	Spring, 6” Lg X 11/16” OD-0.105 Wire- 28 Turns (**Page#** 325)
CL2-0004L/R	2	Bracket Assembly, 2/SP SAC & BAC Slow Door (**Page#** 323)
CL4-0003N	3	Arm Assembly, 2/SP SAC Intermediate (**Page#** 323)
INT9-0001L/R	4	Interlock Assembly,Type “HD” (**Page#** 351)

Two Speed (43”-120” D.O.)

Part No.	Item No	Description
CL4-0008N	1	Arm & Housing Assembly, 2/SP SAC 42” & Under D.O. (**Page#** 323)
OC-0002N	1A	Oil Check, OC-500-C S/S & 2/SP Straight Arm Closer (**Page#** 327)
CL2-0012N	1B	Housing Assembly, 2/SP SAC/ BAC With .155-Wire Spring (**Page#** 323)
CL1-0007N	1B-1	Rocker Arm Assembly, BAC & SAC (**Page#** 324)
SPG-0059N	1B-2	Spring,12 3/4” Lg X 13/16” OD-0.148 Wire- 42 Turns (**Page#** 324)
SPG-0049N	1C	Spring,6” Lg X 11/16” OD-0.120 Wire- 28 Turns (**Page#** 325)
CL2-0004L/R	2	Bracket Assembly, 2/SP BAC Slow Door (**Page#** 323)
CL4-0003N	3	Arm Assembly, 2/SP SAC Intermediate (**Page#** 323)
INT9-0001L/R	4	Interlock Assembly,Type “HD” (**Page#** 351)

Mounting hardware included.

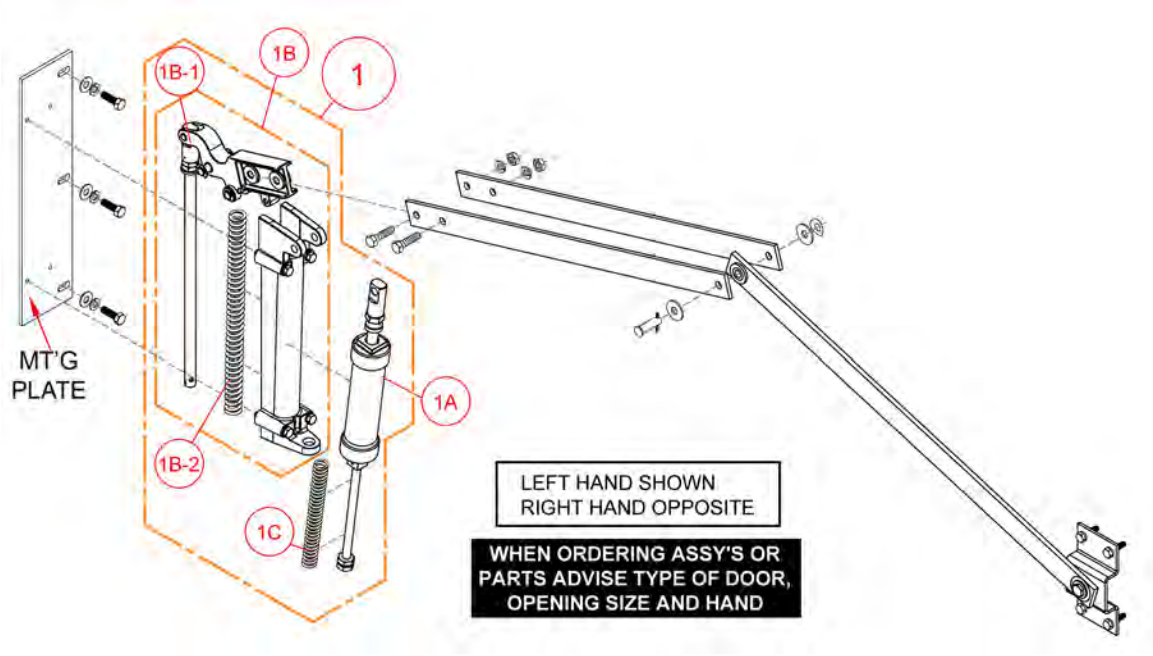
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Manual Equipment Isometric Drawing

Broken Arm Closer

Single Speed (22”-144” D.O.)



Part No.	Item No	Description
CL1-0004N	1	Arm & Housing Assembly, S/S BAC (**Page#** 323)
OC-0001N	1A	Oil Check, OC-500-A S/S & 2/SP Broken Arm Closer (**Page#** 327)
CL1-0008N	1B	Housing Assembly, S/S Broken Arm Closer Rocker (**Page#** 323)

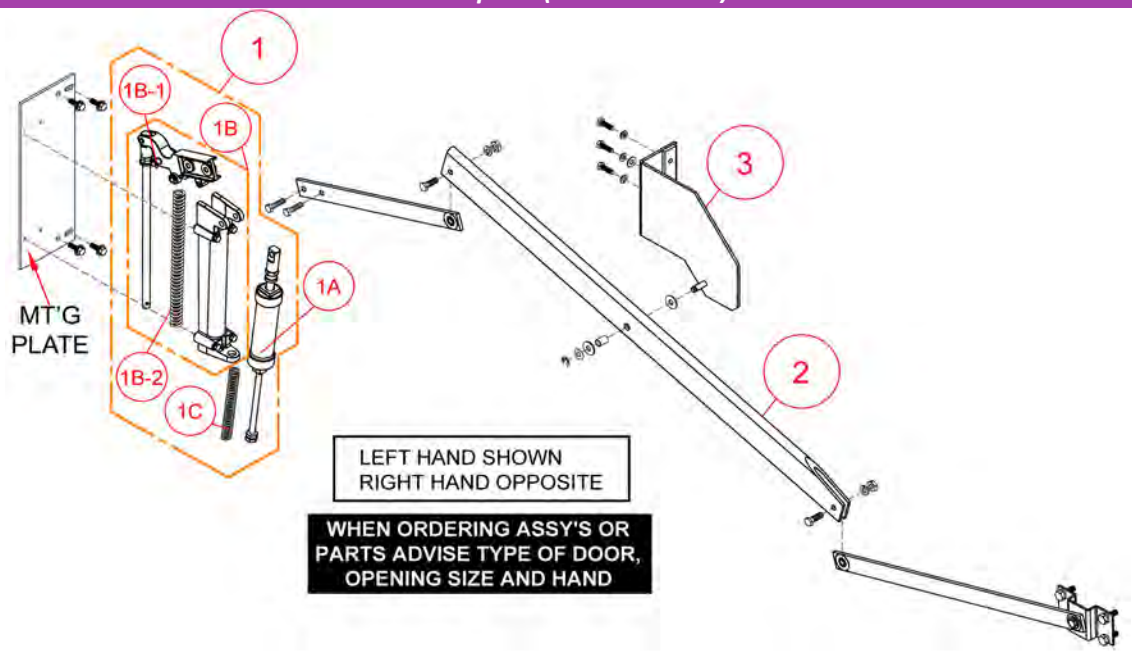
Part No.	Item No	Description
CL1-0007N	1B-1	Rocker Arm Assembly, BAC & SAC (**Page#** 324)
SPG-0052N	1B-2	Spring,11” Lg X 13/16” OD-0.135 Wire- 42 Turns (**Page#** 324)
SPG-0045N	1C	Spring, 6” Lg X 11/16” OD-0.105 Wire- 28 Turns (**Page#** 325)

Mounting hardware included.

Manual Equipment Isometric Drawing

Broken Arm Closer

Two Speed (22”-120” D.O.)



Two Speed (22”-35” D.O.)

Part No.	Item No	Description
CL1-0004N	1	Arm & Housing Assembly, S/S BAC (**Page#** 323)
OC-0001N	1A	Oil Check, OC-500-A S/S & 2/SP Broken Arm Closer (**Page#** 327)
CL1-0008N	1B	Housing Assembly, S/S Broken Arm Closer Rocker With .135-Wire Spring (**Page#** 323)
CL1-0007N	1B-1	Rocker Arm Assembly, BAC & SAC (**Page#** 324)
SPG-0052N	1B-2	Spring,11” Lg X 13/16” OD-0.135 Wire- 42 Turns (**Page#** 324)
SPG-0045N	1C	Spring, 6” Lg X 11/16” OD-0.105 Wire- 28 Turns (**Page#** 325)
CL2-0006N	2	Arm, 2/SP Broken Arm Closer Intermediate (**Page#** 323)
CL2-0004L/R	3	Bracket Assembly, 2/SP SAC & BAC Slow Door (**Page#** 323)

Two Speed (36”-51” D.O.)

Part No.	Item No	Description
CL2-0009N	1	Arm & Housing Assembly, 2/SP BAC 36”-51” D.O. (**Page#** 323)
OC-0001N	1A	Oil Check, OC-500-A S/S & 2/SP Broken Arm Closer (**Page#** 327)
CL2-0011N	1B	Housing Assembly, 2/SP SAC/ BAC With .148-Wire Spring (**Page#** 323)
CL1-0007N	1B-1	Rocker Arm Assembly, BAC & SAC (**Page#** 324)
SPG-0057N	1B-2	Spring,12 3/4” Lg X 13/16” OD-0.148 Wire- 42 Turns (**Page#** 324)
SPG-0045N	1C	Spring, 6” Lg X 11/16” OD-0.105 Wire- 28 Turns (**Page#** 325)
CL2-0006N	2	Arm, 2/SP Broken Arm Closer Intermediate (**Page#** 323)
CL2-0004L/R	3	Bracket Assembly, 2/SP SAC & BAC Slow Door (**Page#** 323)

Two Speed (52”-120” D.O.)

Part No.	Item No	Description
CL2-0010N	1	Arm & Housing Assembly, 2/SP BAC 52”-120” D.O. (**Page#** 323)
OC-0001N	1A	Oil Check, OC-500-A S/S & 2/SP Broken Arm Closer (**Page#** 327)
CL2-0012N	1B	Housing Assembly, 2/SP SAC/ BAC With .155-Wire Spring (**Page#** 323)
CL1-0007N	1B-1	Rocker Arm Assembly, BAC & SAC (**Page#** 324)

Part No.	Item No	Description
SPG-0059N	1B-2	Spring,12 3/4” Lg X 17/32” OD-0.155 Wire- 42 Turns (**Page#** 324)
SPG-0049N	1C	Spring,6” Lg X 11/16” OD-0.120 Wire- 28 Turns (**Page#** 325)
CL2-0006N	2	Arm, 2/SP Broken Arm Closer Intermediate (**Page#** 323)
CL2-0004L/R	3	Bracket Assembly, 2/SP SAC & BAC Slow Door (**Page#** 323)

Mounting hardware included.

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Manual Hatch Equipment

Broken Arm Closers

Field Survey is REQUIRED with all Broken Arm Closer orders.

Conventional

Single Speed



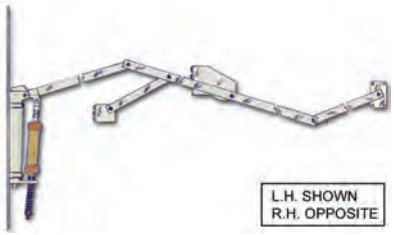
Part No.
CL1-0001L/R*

Two Speed



Part No.	2/SP
CL2-0001L/R*	22”-35”
CL2-0002L/R*	36”-51”
CL2-0003L/R*	52” & UP

Three Speed



Part No.
CL9-0001L/R*

Water Resistant

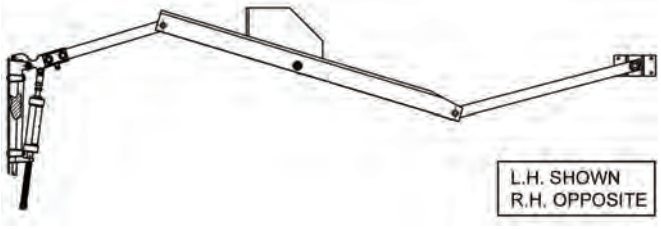
Note: All ferrous material are yellow zinc dichromate plated

Single Speed



Part No.
CL1-0017L/R*

Two Speed



Part No.
CL2-0015L/R*

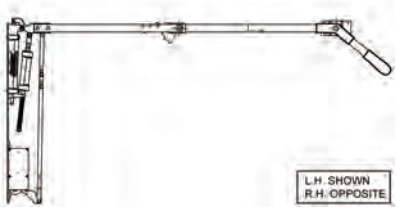
Straight Arm Closers

Conventional

- Field Survey is REQUIRED with all straight arm closer orders.
- Straight arm closers come with “HD” Interlock and mounting plate.

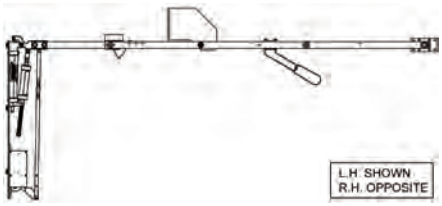
Note: Straight arm closers are not available for water resistant conditions.

Single Speed



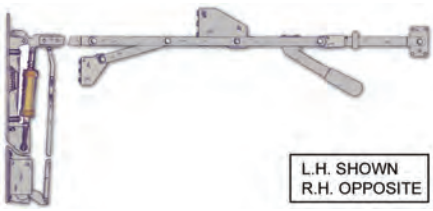
Part No.
CL3-0001L/R*

Two Speed



Part No.	2/SP
CL4-0001L/R*	22”-42”
CL4-0002L/R*	43” & UP

Three Speed



Part No.
CL9-0002L/R*

(*) Special Engineering Required

DOOR EQUIPMENT

Manual Hatch Equipment

Arms & Bracket

CL2-0006N*



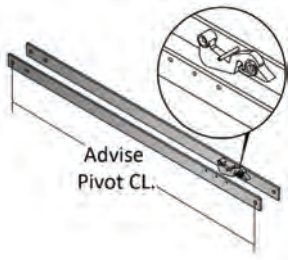
Arm, 2/SP B.A.C. Intermediate Aluminum (Advise Pivot C.L. Dimension)

CL3-0002L/R*



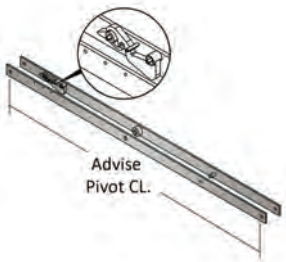
Arm Assembly, S/S S.A.C. Bracket & Front (Advise Pivot C.L. Dimension)

CL3-0003N*



Arm Assembly, S/S S.A.C. Rear (Advise Pivot C.L. Dimension)

CL4-0003N*



Arm Assembly, 2/SP S.A.C. Intermediate (Advise Pivot C.L. Dimension)

CL2-0004L/R*



Bracket Assembly, 2/SP B.A.C. & S.A.C. Slow Door (Advise Dimension)

Housing Assemblies and Parts

Broken Arm Closers & Straight Arm Closers

Arm & Housing Assembly With Oil Check



Part No.	Description
CL1-0004N	S/S, B.A.C.
CL2-0009N	2/SP, B.A.C. 36”-51” D.O.
CL2-0010N	2/SP, B.A.C. 52”-120” D.O.
CL3-0005N	S/S, S.A.C.
CL4-0008N	2/SP, S.A.C. 22”-42” D.O.
CL4-0009N	2/SP, S.A.C. 42”-120” D.O.

Housing Assembly



Part No.	Description
CL1-0008N	S/S, B.A.C. Rocker
CL3-0006N	S/S, S.A.C. Rocker
CL2-0011N	2/SP, S.A.C. 22”-42” D.O. & 2/SP, B.A.C. 36”-51” D.O. Rocker
CL2-0012N	2/SP, S.A.C. 43”-120” D.O. & 2/SP, B.A.C. 52”-120” D.O. Rocker

(*) Special Engineering Required

Manual Hatch Equipment

Housing Assemblies and Parts

Broken Arm Closers & Straight Arm Closers

Arm Assembly



Part No.	Description
CL1-0007N	B.A.C. & S.A.C. Rocker (Advise Dimension)

Springs, Oil Check & Closer (For B.A.C., S.A.C., Car & Gate Closers)



Closer Springs For B.A.C.

Conventional

Part No.	S/S	2/SP	Description
SPG-0052N	22"-UP	22"-35"	Spring, 11" LG x 13/16" OD-0.148 Wire- 36 Turns
SPG-0057N		36"-51"	Spring, 12 3/4" LG x 13/16" OD-0.148 Wire- 42 Turns
SPG-0059N		52"-UP	Spring, 12 3/4" LG x 17/32" OD-0.155 Wire- 42 Turns Music Wire

Water Resistant

Part No.	S/S	2/SP	Description
SPG-0053N	22"-UP	22"-35"	Spring, 11" LG x 13/16" OD-0.148 Wire- 36 Turns ST. ST'L
SPG-0056N		36"-51"	Spring, 12 3/4" LG x 13/16" OD-0.148 Wire- 42 Turns ST. ST'L
SPG-0058N		52"-UP	Spring, 12 3/4" LG x 27/32" OD-0.155 Wire- 42 Turns ST. ST'L

Closer Springs For S.A.C.

Conventional

Part No.	S/S	2/SP	Description
SPG-0055N	22"-UP		Spring, 11" LG x 13/16" OD-0.148 Wire- 36 Turns
SPG-0057N		22"-42"	Spring, 12 3/4" LG x 13/16" OD-0.148 Wire- 42 Turns
SPG-0059N		43"-UP	Spring, 12 3/4" LG x 17/32" OD-0.155 Wire- 42 Turns Music Wire

Water Resistant

Part No.	S/S	2/SP	Description
SPG-0054N	22"-UP		Spring, 11" LG x 13/16" OD-0.148 Wire- 36 Turns ST. ST'L
SPG-0056N		22"-42"	Spring, 12 3/4" LG x 13/16" OD-0.148 Wire- 42 Turns ST. ST'L
SPG-0058N		43"-UP	Spring, 12 3/4" LG x 27/32" OD-0.155 Wire- 42 Turns ST. ST'L

DOOR EQUIPMENT

Manual Hatch Equipment

Springs, Oil Check & Closer (For B.A.C., S.A.C., Car & Gate Closers)

Oil Check Springs For B.A.C.

Conventional

Part No.	S/S	2/SP	Description
SPG-0045N	22”-UP	22”-35” 36”-51”	Spring, 6” LG x 11/16” OD-0.105 Wire-28 Turns
SPG-0049N		52”-UP	Spring, 6” LG x 11/16” OD-0.120 Wire-28 Turns

Water Resistant

Part No.	S/S	2/SP	Description
SPG-0044N	22”-UP	22”-35” 36”-51”	Spring, 6” LG x 5/8” OD-0.105 Wire- 28 Turns ST. ST’L
SPG-0048N		52”-UP	Spring, 6” LG x 11/16” OD-0.120 Wire-28 Turns ST. ST’L

Oil Check Springs For S.A.C.

Conventional

Part No.	S/S	2/SP	Description
SPG-0045N	22”-UP	22”-42”	Spring, 6” LG x 11/16” OD-0.105 Wire-28 Turns
SPG-0049N		43”-UP	Spring, 6” LG x 11/16” OD-0.120 Wire-28 Turns

Water Resistant

Part No.	S/S	2/SP	Description
SPG-0044N	22”-UP	22”-42”	Spring, 6” LG x 5/8” OD-0.105 Wire- 28 Turns ST. ST’L
SPG-0048N		43”-UP	Spring, 6” LG x 11/16” OD-0.120 Wire-28 Turns ST. ST’L

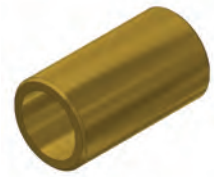
Hardware

CL1-0010N



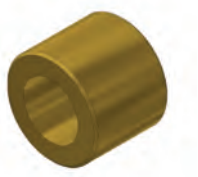
Bolt Assembly, B.A.C. & S.A.C. Bracket Pivot

HWBS-0028N



Bushing, B.A.C., .5 OD x .375 ID x .875 LG Bronze, Sleeve - 7/8” LG.

HWBS-0031N

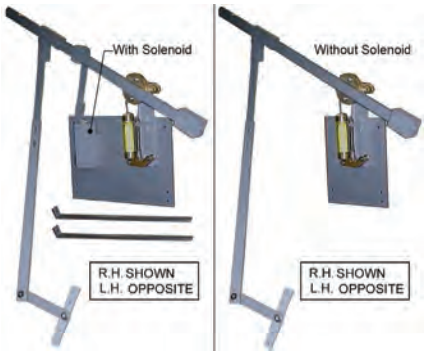


Bushing, S.A.C., .625 OD x .375 ID x .5LG Bronze, Sleeve - 1/2” LG.

Manual Car Equipment

Collapsible Gate Closers

Conventional



Note: To order manual gate or car door closer arms, contact G.A.L. sales or engineering for information. A field survey is required regarding opening size, hand, type of doors, and center lines of pivot points.

Part No.	Description
CL8-0001L/R*	Closer, 110/220 VAC, Collapsing Gate With Solenoid Release*, With 12” X 21” Mounting Plate
CL8-0002L/R*	Closer, Collapsing Gate Without Solenoid Release*, With 12” X 8 1/4” Mounting Plate

(*) Special Engineering Required

DOOR EQUIPMENT

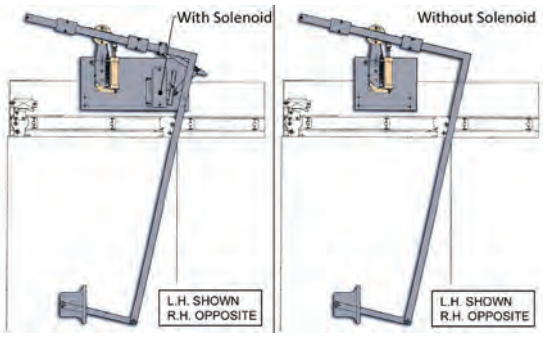
Manual Car Equipment

Car Door Closers

Conventional

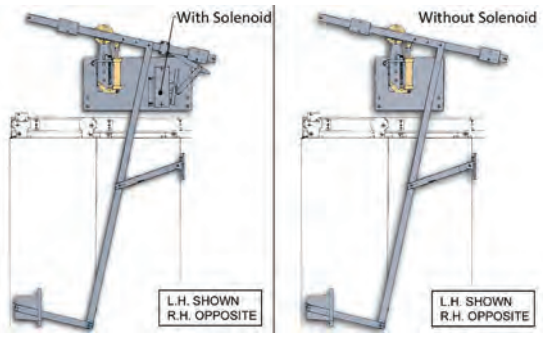
Note: To order manual gate or car door closer arms, contact G.A.L. sales or engineering for information. A field survey is required regarding opening size, hand, type of doors, and center lines of pivot points.

Single Speed



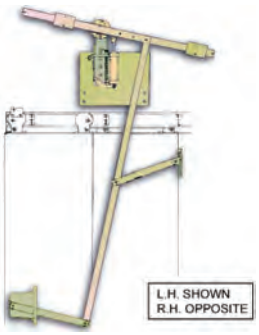
Part No.	Description
CL10-0001L/R*	Closer, S/S Manual Car With Solenoid Release, 110/220 VAC
CL10-0003L/R*	Closer, S/S Manual Car Without Solenoid Release

Two Speed



Part No.	Description
CL10-0002L/R*	Closer, 2/SP Manual Car With Solenoid Release, 110/220 VAC
CL10-0004L/R*	Closer, 2/SP Manual Car Without Solenoid Release

Water Resistant - Two Speed



Note: All ferrous material are yellow zinc dichromate plated

Part No.	Description
CL10-0005L/R*	Closer, Yellow Zinc Dichromate 2/SP Manual Car, Without Solenoid Release

Car Door & Collapsible Gates Closers

Solenoid Release Units & Links

CL8-0006L/R



Release Unit, Manual Gate Closer Solenoid, 120 V.A.C. Or 220 V.A.C.

CL8-0007L/R



Link, Solenoid Release Hold Open Upper

CL8-0008L/R



Link, Solenoid Release Hold Open Lower

DOOR EQUIPMENT

Manual Car Equipment

Car Door & Collapsible Gates Closers

Solenoid Release Units & Links

CL8-0016N



Link, Gate Closer

CL8-0010N



Pivot Plate Assembly, Manual Gate Closer

Brackets

CL8-0011N



Bracket, Manual Gate Closer Pivot

CL8-0013N



Bracket, Manual Gate Closer Adjustable Weight

CL8-0017L/R



Elbow Bracket, Manual Gate Closer Fix Weight

Manual Hatch & Car Equipment

Oil Checks

Note: G.A.L. uses Mobil DTE#10 hydraulic oil.

Broken Arm and Straight Arm Closers



Part No.	Item No	Description
OC-0001N	B.A.C.	Oil Check, OC-500-A, S/S & 2/SP Broken Arm Closer
OC-0002N	S.A.C.	Oil Check, OC-500-C, S/S & 2/SP Straight Arm Closer

Car Door & Collapsible Gates Closers

CL8-0026L/R



Bracket Assembly, Oil Check And (For Manual Gate And Car Door Closer)

OC-0005N



Oil Check, OC-502-B, S/S & 2/SP Manual Car & Gate Closer With Long Damping Valve

OC-0006N



Oil Check, OC-503, Replacement For Richard Wilcox Checks

OC-0008N



O-Ring, Oil Check Replacement Set For Car Door & Collapsible Gates Closers

(*) Special Engineering Required

GAL Interlocks

DOOR EQUIPMENT

Type		Function
• DM	–	For double swing doors, used with retiring cam
• DM-MH	–	For double swing doors, with mechanical hold, arranged for retiring cam
• HD	–	For manual sliding door, used with manual straight arm closers
• K	–	For manual sliding doors
• K1	–	For manual swing doors
• K5	–	For manual double swing doors
• MO Bar	–	For manual sliding doors, with GAL track, S/S & 2/SP
• MOCP Bar	–	For manual sliding C/P doors, with GAL track
• VR	–	For manual vertical rising doors
• N	–	For manual swing or sliding doors (replaced "M" locks), arranged for retiring cam
• NHA	–	For manual swing or sliding doors, used for housing jobs, with retiring cam
• MO	–	For master operation, powered doors, with MO single roller release
• MOCP	–	For master operation, C/P opening doors, with vertical MOM roller release
• MOCPH	–	For master operation, C/P doors, with horizontal MOH roller release
• MOH	–	For master operation, S/S-2/SP-3/SP doors, with horizontal MOH roller release
• MOM	–	For master operation, S/S-2/SP-3/SP doors, with vertical roller release
• MOCPH10	–	For glass door, master operation, C/P doors
• MOH10	–	For glass door, master operation S/S-2/SP-C/P doors
• MO10	–	For special OTIS arrangement
• MOHRD10	–	For round elevator, master operation, with MOH roller release
• MOXH	–	For master operation, S/S-2/SP doors, with MOH roller release, explosion resistant
• WX	–	Manual swing or sliding doors, explosion resistant, used with retiring cam
• MOX-CP-RC	–	Master operation, C/P doors, dust/explosion resistant, arranged for retiring cam
• MOX-RC	–	Master Operation, S/S-2/SP doors, dust/explosion resistant, arranged for retiring cam
• MOCPHA	–	Master operation C/P doors, with MOH roller release, vandal resistant w/ shield
• MOHA	–	Master operation S/S-2/SP doors, with MOH roller release, vandal resistant w/ shield
• MOWH	–	Master operation S/S-2/SP-C/P doors, with MOH roller release, water resistant
• WP	–	Manual swing or sliding doors, used with retiring cam
• MOW-CP-RC	–	Manual C/P sliding doors, arranged for retiring cam, water resistant
• MOW-RC	–	Manual S/S-2/SP sliding doors, arranged for retiring cam, water resistant

INTERLOCK ASSEMBLIES 328-362

INTERLOCK ACCESSORIES
- Emergency Key Box
- Transfer Linkage
- Pit Interlock Access
- Jampers, Keys, Reinforcement Plates Etc.

363-368

MOUNTING ANGLES, BRACKET & PLATES 369-371

"MO" & "K" BARS & BRACKET ASSEMBLIES 372

LATCH & CAM PARTS 373-375

CONTACTS, COVERS, KEEPERS, & ROLLER RELEASE ASSEMBLIES 375-381

ROLLERS, ROLLER ARM ASSEMBLIES, & SHAFT SUPPORTS 382-386

SWITCH ASSEMBLIES 387-389

SHAFTS & SHAFT CODES 390-391

MANUAL LOCK SHAFTS & SHAFT CODES 390-391

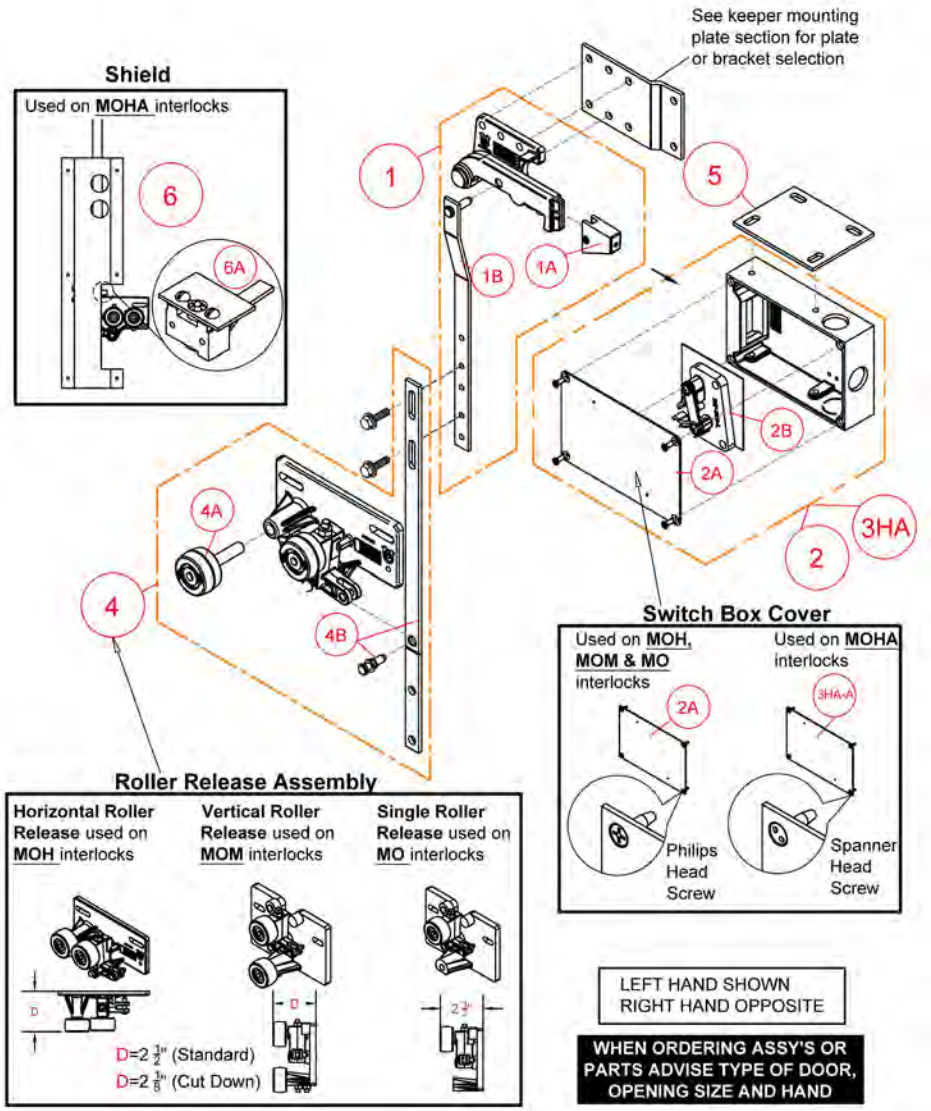
HARDWARE 391-394

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MOH", "MOHA", "MOM", "MO"

Sliding Door (Conventional/Vandal Resistant)



Part No.	Item No	Description
INT1H-0016L/R	1	Keeper Assembly, MO Interlock (**Page#** 380)
INT1H-0017N	1A	Contact, MO Keeper Bridging (**Page#** 376)
INT1H-0018N	1B	Link, Upper MO Interlock Assembly (**Page#** 384)
INT1H-0013L/R	2	Switch Assembly, MO Interlock (**Page#** 387)
INT1H-0014N	2A	Cover, MO Interlock (**Page#** 378)
INT1H-0024L/R	2B	Contact Base, MO Interlock (**Page#** 377)
INT1H-0036L	1A/2B	Contact Kit, "MO-KT" (**Page#** 375)
INT1H-0126L/R	3HA	Switch Assembly, MOHA Interlock (**Page#** 388)

Part No.	Item No	Description
INT1H-0127N	3HA-A	Cover, MOHA Interlock (**Page#** 379)
INT1X-XXXXX	4	Roller Release Assembly (**Page#** 382-383)
INT1H-0023N	4A	Roller & Shaft, MO Interlock (**Page#** 386)
INT1H-XXXXX	4B	Link, MO Interlock Lower (**Page#** 383-385)
INT1H-0031N	5	Plate, Switch Track Mounting 2" CL (**Page#** 370)
INT1H-XXXXX	6	Shield, MOHA (**Page#** 385)
INT1H-0128L/R	6A	Emergency Unlocking Device, MOHA (**Page#** 385)

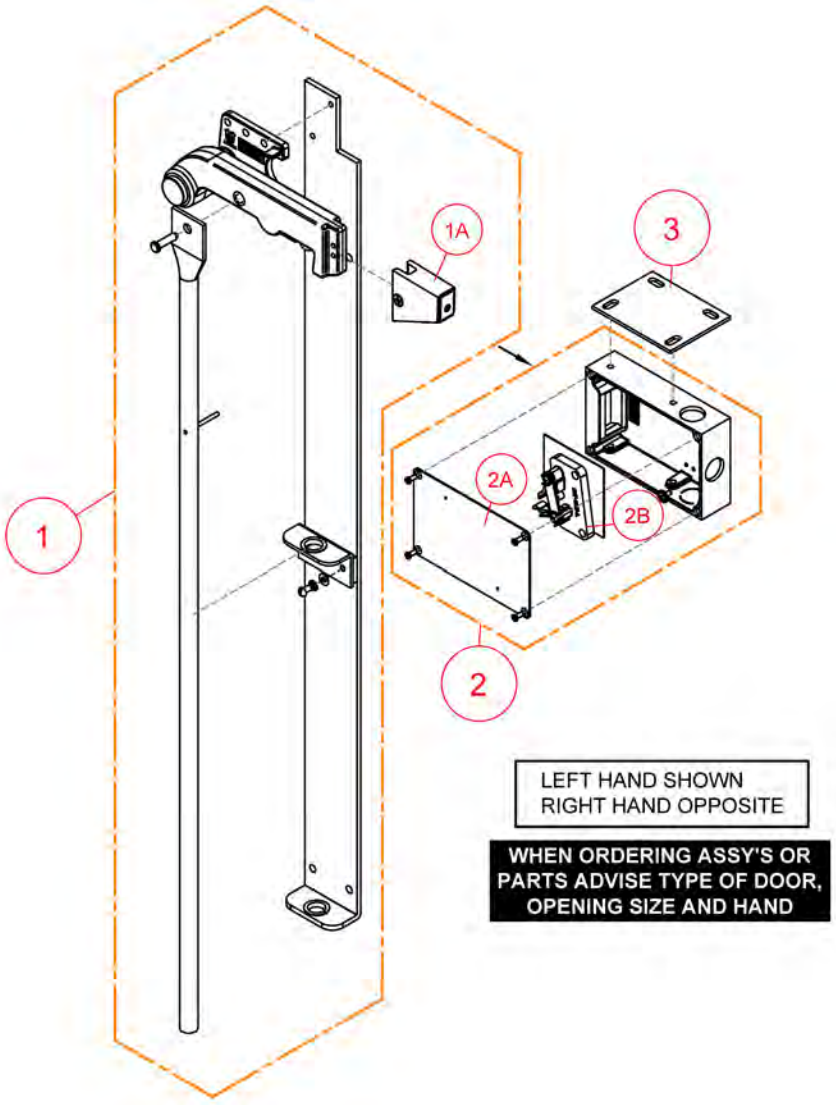
Mounting hardware included.

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Interlock Isometric Drawing

TYPE: "MO" Bar Lock

Manual Sliding Door



Part No.	Item No	Description
INT1H-0131L/R	1	MO Bar and Keeper Assembly (**Page#** 372)
INT1H-0017N	1A	Contact, MO Keeper Bridging (**Page#** 376)
INT1H-0013L/R	2	Switch Assembly, MO (**Page#** 387)
INT1H-0014N	2A	Cover, MO (**Page#** 378)

Part No.	Item No	Description
INT1H-0024L/R	2B	Contact Base, MO (**Page#** 377)
INT1H-0031N	3	Plate, Switch Track Mounted (**Page#** 370)
INT1H-0036L	1A/2B	Contact Kit, "MO-KT" (**Page#** 375)

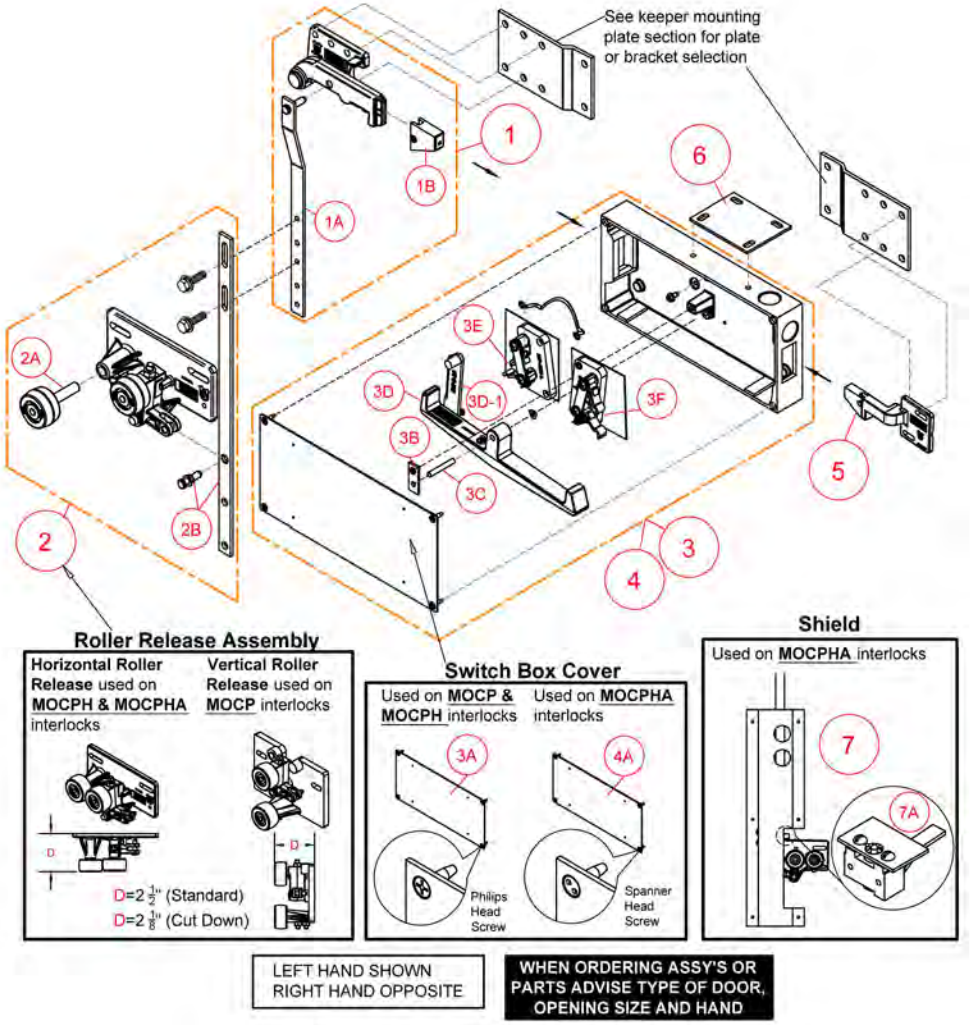
Mounting hardware included.

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MOCP", "MOCPH", "MOCPHA"

Sliding Door - Center Parting (Conventional/Vandal Resistant)



Part No.	Item No	Description
INT1H-0016L/R	1	Keeper Assembly, MO Interlock (**Page#** 380)
INT1H-0018N	1A	Link, Upper MO Interlock (**Page#** 384)
INT1H-0017N	1B	Contact, MO Keeper Bridging (**Page#** 376)
INT1X-XXXXX	2	Roller Release Assembly (**Page#** 382-383)
INT1H-0023N	2A	Roller & Shaft, MO Interlock (**Page#** 386)
INT1H-XXXXX	2B	Link, MO Interlock Lower (**Page#** 383-385)
INT2H-0007N	3	Switch Assembly, MOCP Interlock (**Page#** 387)
INT2H-0022N	4	Switch Assembly, MOCPHA Interlock (**Page#** 387)
INT2H-0008N	3A	Cover, MOCP Interlock (**Page#** 379)
INT2H-0023N	4A	Cover, MOCPHA Interlock With Spanner Screw (**Page#** 379)
INT2H-0011N	3B	Plate, MOCP Rocker Arm With Screw (**Page#** 388)

Part No.	Item No	Description
PIN-0046N	3C	Pin, 3/16" X 1 5/16" Clear Nylon (**Call G.A.L.**)
INT2H-0010N	3D	Arm, MOCP Rocker Assembly (**Page#** 388)
INT2H-0024N	3D-1	Cam, MOCP Rocker Arm Lift up (**Page#** 388)
INT1H-0024L/R	3E	Contact Base, MO Interlock (**Page#** 377)
INT2H-0018R	3F	Contact Base, MOCP Interlock (**Page#** 377)
INT2H-0015N	5	Keeper Fixed, MOCP Interlock (**Page#** 380)
INT1H-0031N	6	Plate, Switch Track Mounting 2" CL (**Page#** 370)
INT1H-XXXXX	7	Shield, MOHA (**Page#** 385)
INT1H-0128L/R	7A	Emergency Unlocking Device, "MOHA" (**Page#** 385)
INT1H-0036L	1B/3E	Contact Kit, "MO-KT" (**Page#** 375)
INT2H-0017R	1B/3F	Contact Kit, "MOCP-KT" **See page** 375)

Mounting hardware included.

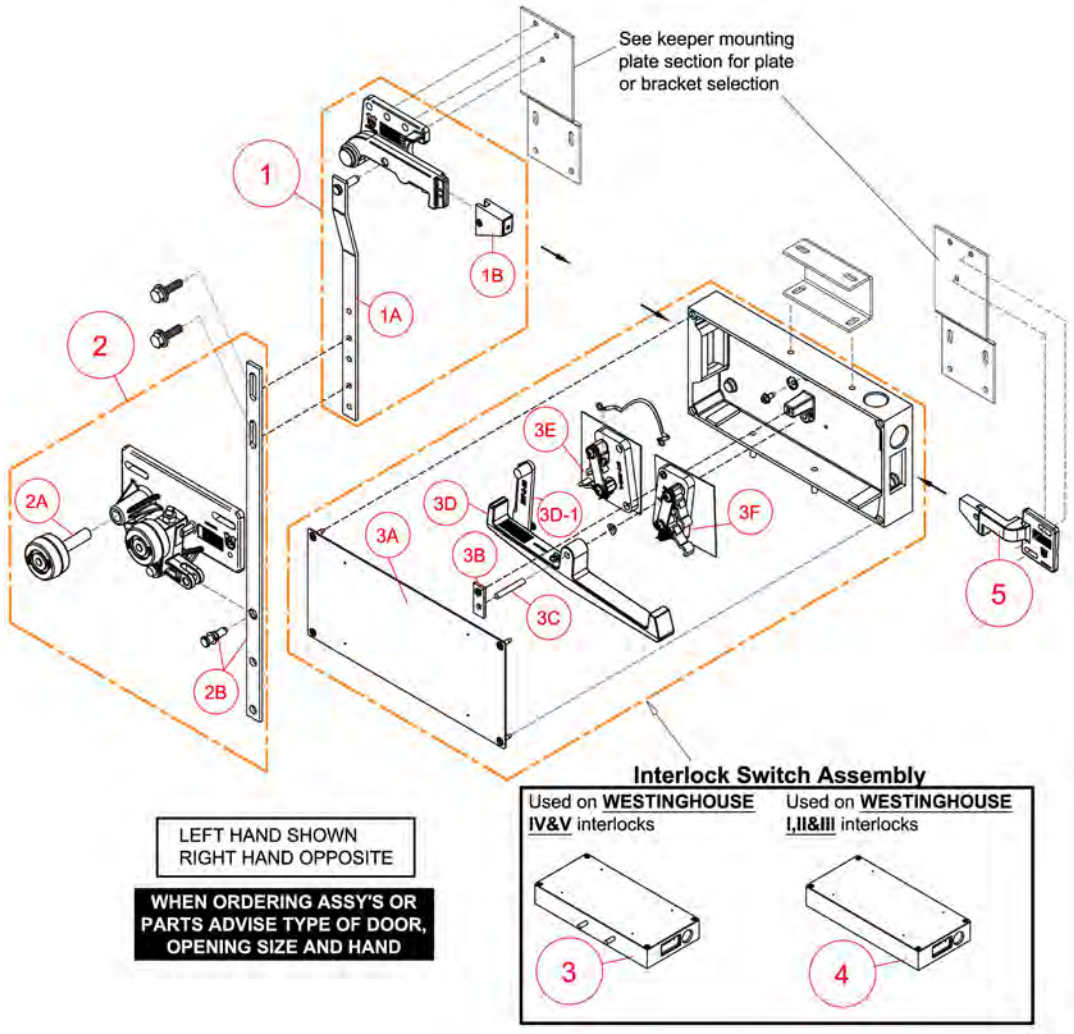
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MOCPH"

Sliding Door - Center Parting (Westinghouse Replacement)



Part No.	Item No	Description
INT1H-0016L/R	1	Keeper Assembly, MO Interlock (**Page#** 380)
INT1H-0018N	1A	Link, Upper MO Interlock (**Page#** 384)
INT1H-0017N	1B	Contact, MO Keeper Bridging (**Page#** 376)
INT1H-0022L/R	2	Release Roller Assembly, MOH B Link, Horizontal Releases (**Page#** 382)
INT1H-0023N	2A	Roller & Shaft, MO Interlock (**Page#** 386)
INT1H-0026N	2B	Link, Lower "B" MO Interlock Assembly-18 3/4", 18 3/4" Lg X 1/2" Wd X 1/8" Thk (**Page#** 383)
INT2H-0051N	3	Switch, MOCP Interlock Westinghouse IV & V (**Page#** 207)
INT2H-0008N	3A	Cover, MOCP Interlock (**Page#** 379)
INT2H-0011N	3B	Plate, MOCP Rocker Arm With Screw (**Page#** 388)

Part No.	Item No	Description
PIN-0046N	3C	Pin, 3/16" X 1 5/16" Clear Nylon (**Call G.A.L.**)
INT2H-0010N	3D	Arm, MOCP Rocker Assembly (**Page#** 388)
INT2H-0024N	3D-1	Cam, MOCP Rocker Arm Lift up (**Page#** 388)
INT1H-0024L/R	3E	Contact Base, MO Interlock (**Page#** 377)
INT2H-0018R	3F	Contact Base, MOCP Interlock (**Page#** 377)
INT2H-0007N	4	Switch Assembly, MOCP Interlock (**Page#** 387)
INT2H-0015N	5	Keeper Fixed, MOCP Interlock (**Page#** 380)
INT1H-0036L	1B/3E	Contact Kit, "MO-KT" (**Page#** 375)
INT2H-0017R	1B/3F	Contact Kit, "MOCP-KT" (**Page#** 375)

Mounting hardware included.

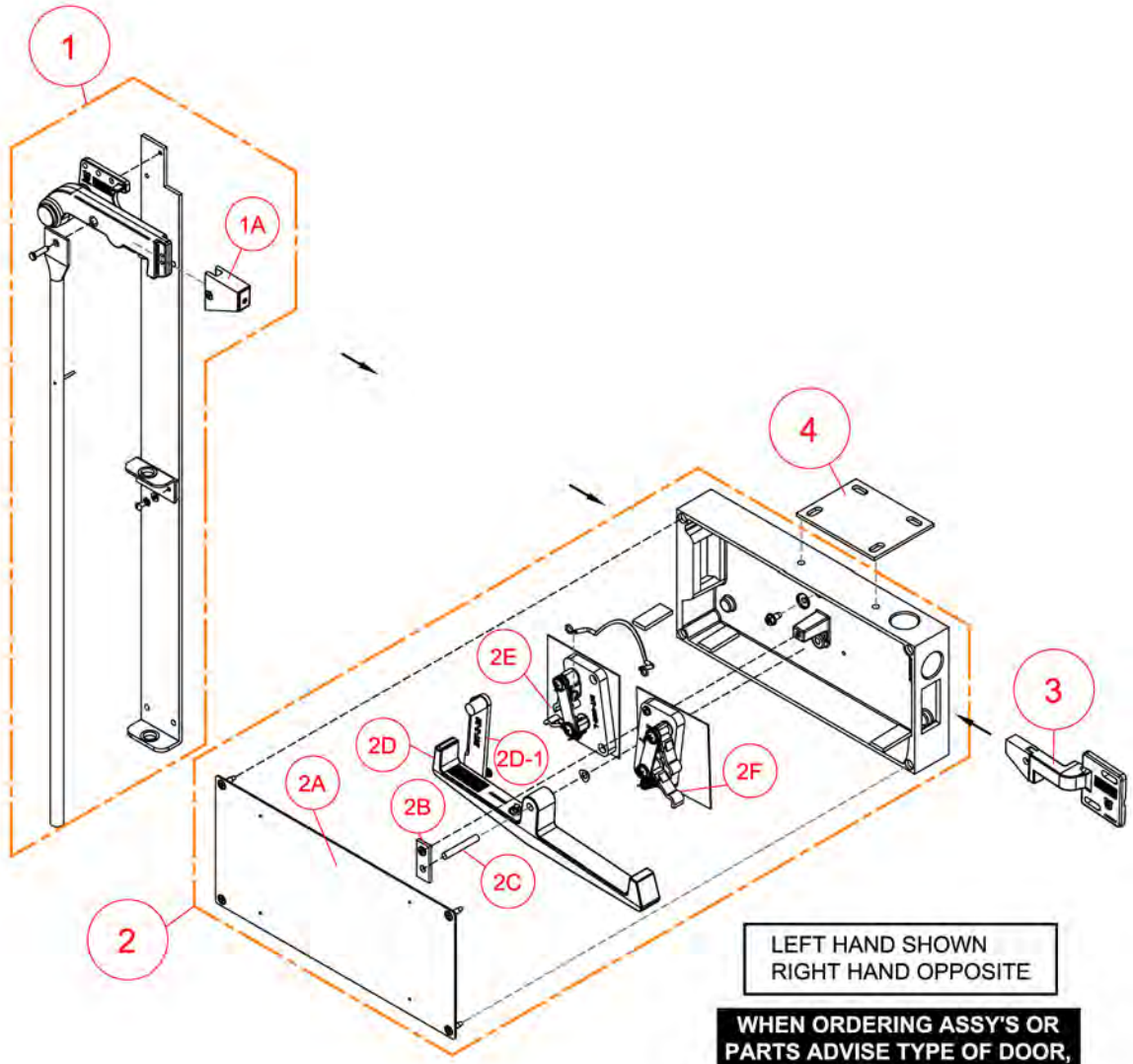
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MOCP" Bar Lock

Sliding Door - Manual Center Parting



Part No.	Item No	Description
INT1H-0131L/R	1	MO Bar and Keeper Assembly (**Page#** 372)
INT1H-0017N	1A	Contact, MO Keeper Bridging (**Page#** 376)
INT2H-0007N	2	Switch Assembly, MOCP (**Page#** 387)
INT2H-0008N	2A	Cover, MOCP (**Page#** 379)
INT2H-0011N	2B	Plate, MOCP Rocker Arm With Screw (**Page#** 388)
PIN-0046N	2C	Pin, 3/16" X 1 5/16" Clear Nylon (**Call G.A.L.**)
INT2H-0010N	2D	Arm, MOCP Rocker Assembly (**Page#** 388)

Part No.	Item No	Description
INT2H-0024N	2D-1	Cam, MOCP Rocker Arm Lift up (**Page#** 388)
INT1H-0024L/R	2E	Contact Base, MO Interlock (**Page#** 377)
INT2H-0018R	2F	Contact Base, MOCP Interlock (**Page#** 377)
INT2H-0015N	3	Keeper Fixed, MOCP Interlock (**Page#** 380)
INT1H-0031N	4	Plate, Switch Track Mounting 2" CL (**Page#** 370)
INT1H-0036L	1A/2E	Contact Kit, "MO-KT" (**Page#** 375)
INT2H-0017R	1A/2F	Contact Kit, "MOCP-KT" (**Page#** 375)

Mounting hardware included.

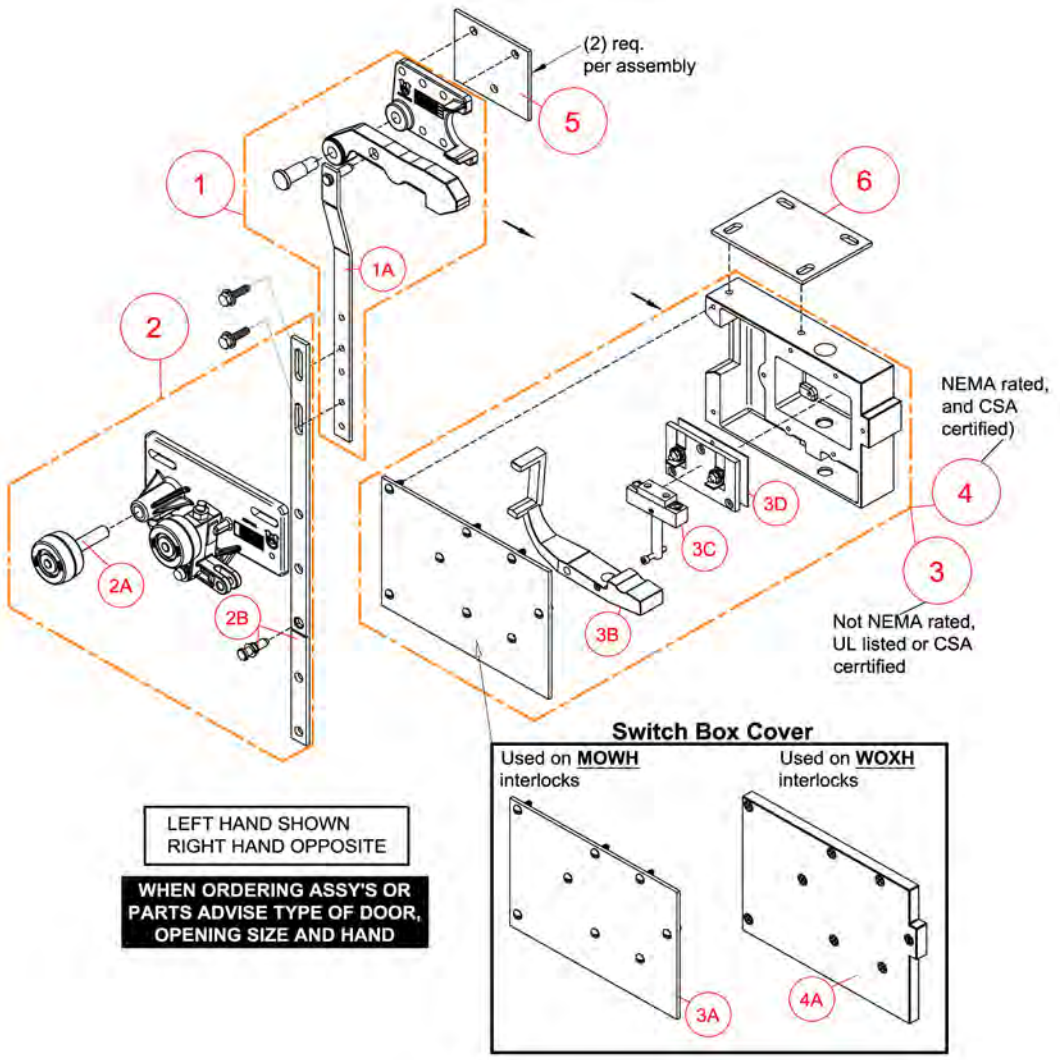
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MOWH", "MOXH"

Sliding Door (Water & Explosion Resistant)



Part No.	Item No	Description
INT3-0011L/R	1	Keeper Assembly, MOW/MOX Interlock, Yellow Zinc Dichromate (**Page#** 381)
INT3-0018N	1A	Link, (Upper) MOW/MOX Yellow Zinc Dichromate (**Page#** 384)
INT3-XXXXX	2	MOWH/MOXH Roller Release Assembly (**Page#** 383)
INT3-0023N	2A	Roller & Shaft, MOW/MOX Interlock, Yellow Zinc Dichromate (**Page#** 386)
INT3-XXXXX	2B	Link, MOWH/MOXH Lower, Yellow Zinc Dichromate (**Page#** 384)
INT3X-0007L/R	3	Switch Assembly, MOX Interlock (**Page#** 388)
INT3W-0007L/R	4	Switch Assembly, MOW Interlock (**Page#** 388)

Part No.	Item No	Description
INT3X-0008L/R	3A	Cover, MOX Interlock (**Page#** 379)
INT3W-0008L/R	4A	Cover, MOW Interlock (**Page#** 379)
INT3-0024L/R	3B	Rocker, MOW-MOX Interlock Arm vv(**Page#** 388)
INT3-0010N	3C	Contact, MOW/MOX Bridging, Yellow Zinc Dichromate (**Page#** 376)
INT3-0009N	3D	Contact Base, MOW/MOX Interlock Assembly, Yellow Zinc Dichromate (**Page#** 377)
INT3-0020N	5	Spacer, MOW/MOX Interlock Keeper, Yellow Zinc Dichromate (**Page#** 386)
INT3-0021N	6	Plate, Switch Track Mounting 2" CL Plated, Yellow Zinc Dichromate (**Page#** 370)

Mounting hardware included.

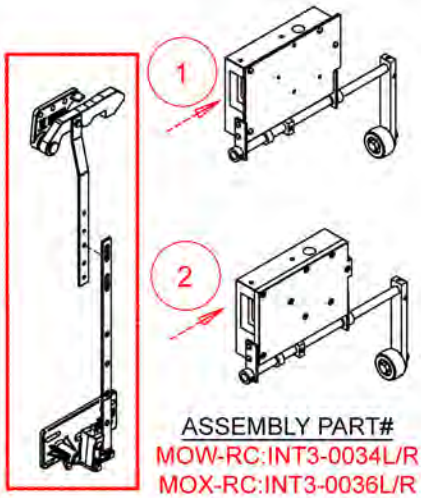
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MOW-RC", "MOW-CP-RC", "MOX-RC", "MOX-CP-RC"

Sliding Door (Water & Explosion Resistant-Retiring Cam Activated)

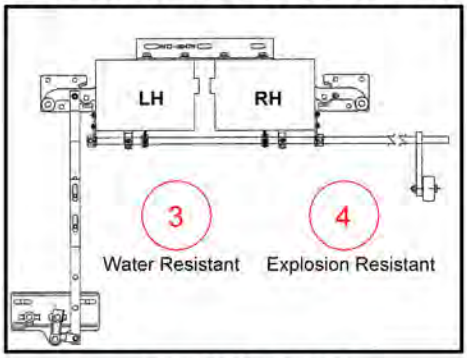


ASSEMBLY PART#
MOW-RC:INT3-0034L/R
MOX-RC:INT3-0036L/R

LEFT HAND SHOWN
RIGHT HAND OPPOSITE

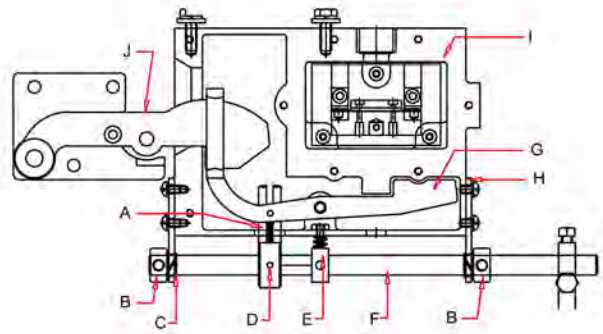
WHEN ORDERING ASSY'S OR PARTS ADVISE TYPE OF DOOR, OPENING SIZE AND HAND

C/P DOOR INTERLOCK ARRANGEMENT



ASSEMBLY PART#
MOW-CP-RC:INT3-0035N*
MOX-CP-RC:INT3-0037N*

MOW-RC / MOX-RC SWITCH



Item	Part No.	Description
A	INT3X-0011N	Plate,MOW/MOX Interlock Activating
	SPG-0050N	Spring,5/8" LG x .118 OD -0.025 Wire
B	HDW-0364N	Collar,3/4 OD x .439 ID x 3/8 Br. Aluminum
C	HWBS-0018N	Bushing,Nyliner 1/2 ID type 7
D	HDW-0365N	Collar,1" OD x 7/16 ID x 7/16 Br. Aluminum
		Pin, 1/8" OD x 1" LG Roll
E		Collar,Aluminum Spring Return Seat
F	SHF-0173N	Shaft,7/16" DIA .x 11 1/2" LG MOX/MOW
G	INT3-0024L/R	Rocker,MOW/WOX Interlock Arm
H	INT3X-0012N	Bracket,MOW/MOX Interlock Shaft Support
I	ACST-0092L/R	Box,MOW/MOX Interlock RC Activated
J	INT3-0044L/R	Keeper only,MOW/MOX Interlock

Part No.	Item No	Description
INT3-0034L/R	1	Interlock, MOW-RC Water Resistant Retiring Cam Activated (Not NEMA Rated, UL Listed or CSA Certified) (**Page#** 357)
INT3-0036L/R	2	Interlock, MOX-RC Explosion Resistant Retiring Cam Activated (NEMA Rated and UL Listed But Not CSA Certified) (**Page#** 356)

Part No.	Item No	Description
INT3-0035N	3	Interlock, MOW-CP-RC Water Resistant Retiring Cam Activated (Not NEMA Rated, UL Listed or CSA Certified) (**Page#** 357)
INT3-0037N	4	Interlock, MOX-CP-RC Explosion Resistant Retiring Cam Activated (NEMA Rated and UL Listed But Not CSA Certified) (**Page#** 356)

Mounting hardware included.

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Interlock Isometric Drawing

TYPE: "DM", "DM-MH" (w/ Mechanical Hold)

Double Swing Door - Retiring Cam Operation

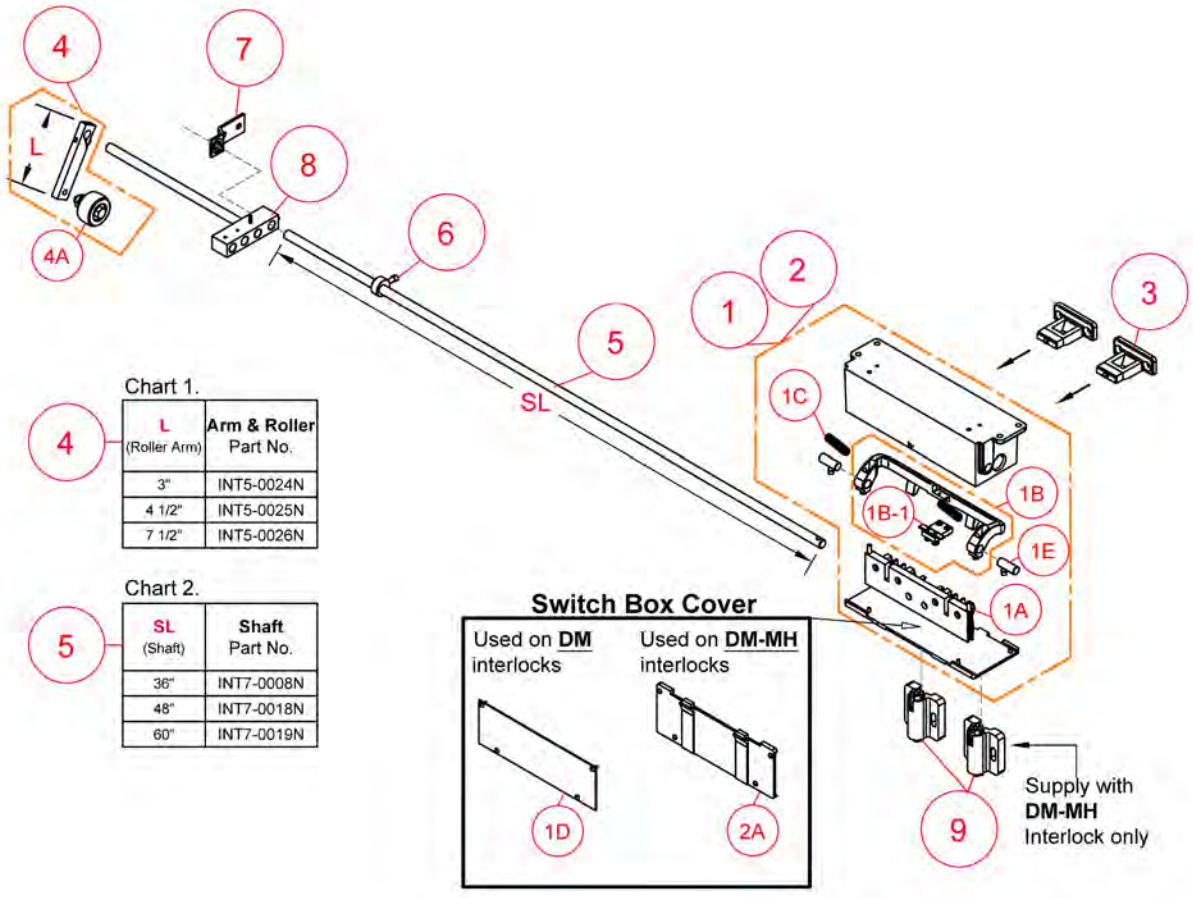


Chart 1.

L (Roller Arm)	Arm & Roller Part No.
3"	INT5-0024N
4 1/2"	INT5-0025N
7 1/2"	INT5-0026N

Chart 2.

SL (Shaft)	Shaft Part No.
36"	INT7-0008N
48"	INT7-0018N
60"	INT7-0019N

Part No.	Item No	Description
INT7-0002N	1	Switch Assembly, DM Interlock (**Page#** 387)
INT7-0007N	1A	Contact Base, DM Interlock (**Page#** 377)
INT7-0004N	1B	Cam, DM Interlock Locking (**Page#** 373)
INT7-0006N	1B-1	Contact, DM Interlock Bridging (**Page#** 376)
SPG-0026N	1C	Spring, 1 7/8" Lg X 3/8" OD-0.043 Wire. (**Call G.A.L.**)
INT7-0003N	1D	Cover, DM Interlock (**Page#** 378)
INT7-0010N	1E	Shaft, DM Interlock 1 3/16" Lg Assembly (**Page#** 406)
INT7-0014N	2	Switch Assembly, DM-MH Interlock (**Page#** 387)
INT7-0015N	2A	Cover, DM-MH Interlock (**Page#** 378)

Part No.	Item No	Description
INT7-0012N	3	Keeper, DM Interlock (**Page#** 381)
SEE CHART 1	4	Arm & Roller (**Page#** 386)
INT5-0027N	4A	Roller & Bolt, Roller Arm (**Page#** 386)
SEE CHART 2	5	Shaft (**Page#** 406)
INT5-0028N	6	Clamp, Lock Emergency Unlocking Assembly (**Page#** 386)
INT7-0011N	7	Support, DM/SDM Interlock Shaft, Includes Nylon Bushing (**Page#** 386)
INT7-0009N	8	Shaft/Coupling, DM Interlock (**Page#** 391)
INT7-0016N	9	Latch, Mechanical Hold Snap (**Page#** 374)

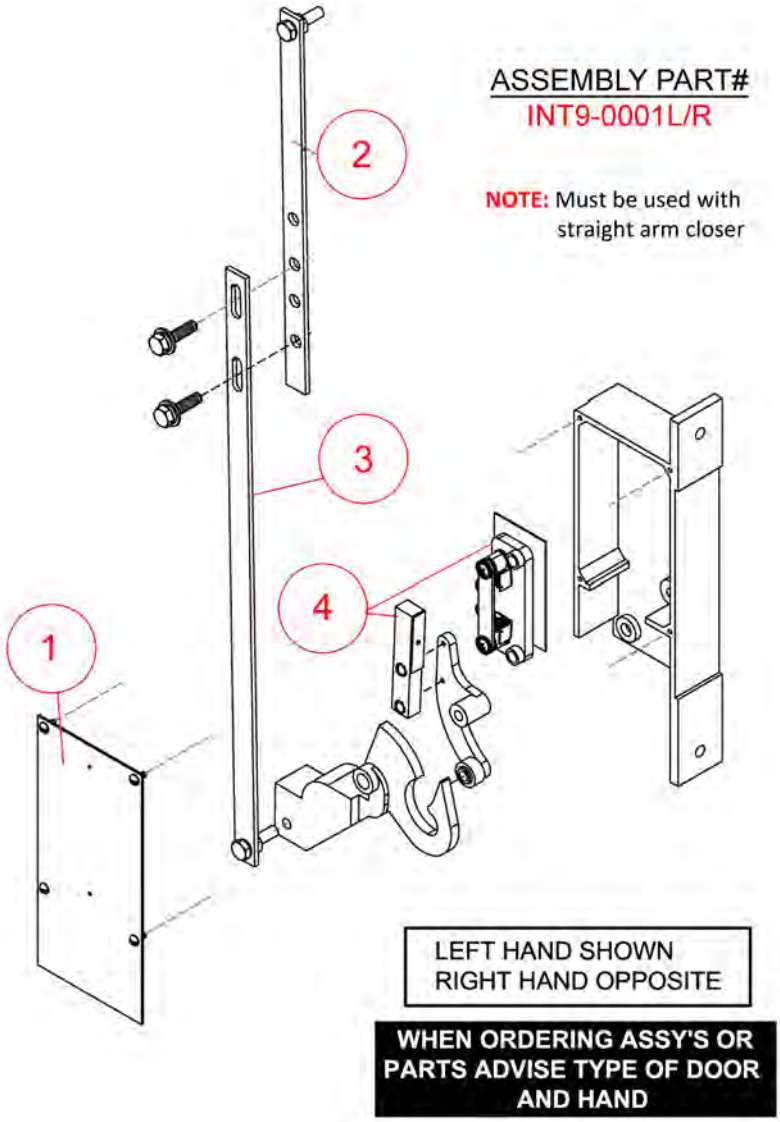
Mounting hardware included.

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "HD"

Sliding Door - For Straight Arm Closers



Part No.	Item No	Description
INT9-0003N	1	Cover, HD Interlock Assembly (**Page#** 378)
INT9-0005N	2	Link, HD Interlock Upper (**Page#** 384)

Part No.	Item No	Description
INT9-0006N	3	Link, HD Interlock Lower (**Page#** 384)
INT9-0004N	4	Contact Kit, HD Interlock (**Page#** 375)

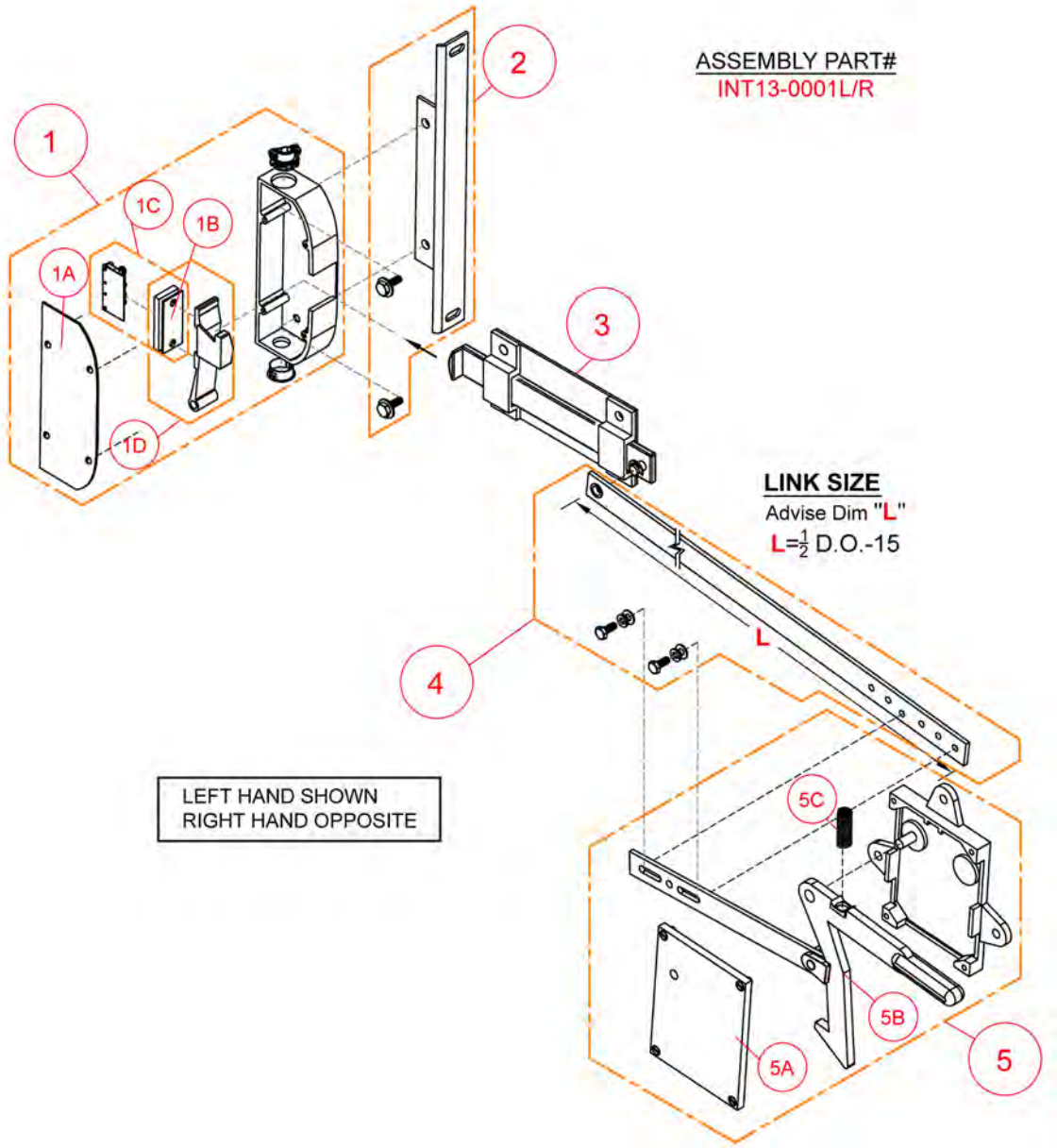
Mounting hardware included.

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Interlock Isometric Drawing

TYPE: "VR"

Manual Vertical Rising Doors



Part No.	Item No	Description
INT13-0002L/R	1	Switch Assembly, VR Interlock (**Page#** 387)
INT13-0004N	1A	Cover, VR Interlock Assembly (**Page#** 379)
INT13-0007N	1B	Contact, VR Interlock Bridging Assembly (**Page#** 376)
INT13-0008N	1C	Contact Kit, VR Interlock (**Page#** 376)
INT13-0006L/R	1D	Cam Assembly, VR Interlock (**Page#** 373)
INT13-0003N	2	Angle, VR Interlock Mounting (**Page#** 369)

Part No.	Item No	Description
INT13-0005L/R	3	Locking Bolt Assembly, VR Interlock (**Page#** 374)
INT13-0012N	4	Link, VR Interlock Connecting (**Page#** 374)
INT13-0009L/R	5	Latch Assembly, VR Interlock (**Page#** 374)
INT13-0011L/R	5A	Cover, VR Interlock Latch (**Page#** 380)
INT13-0010N	5B	Latch, VR Interlock Center (**Page#** 374)
SPG-0075N	5C	Spring, 2" Lg X 15/32" OD-.067 Wire, 14 Turns (**Page#** 394)

Mounting hardware included.

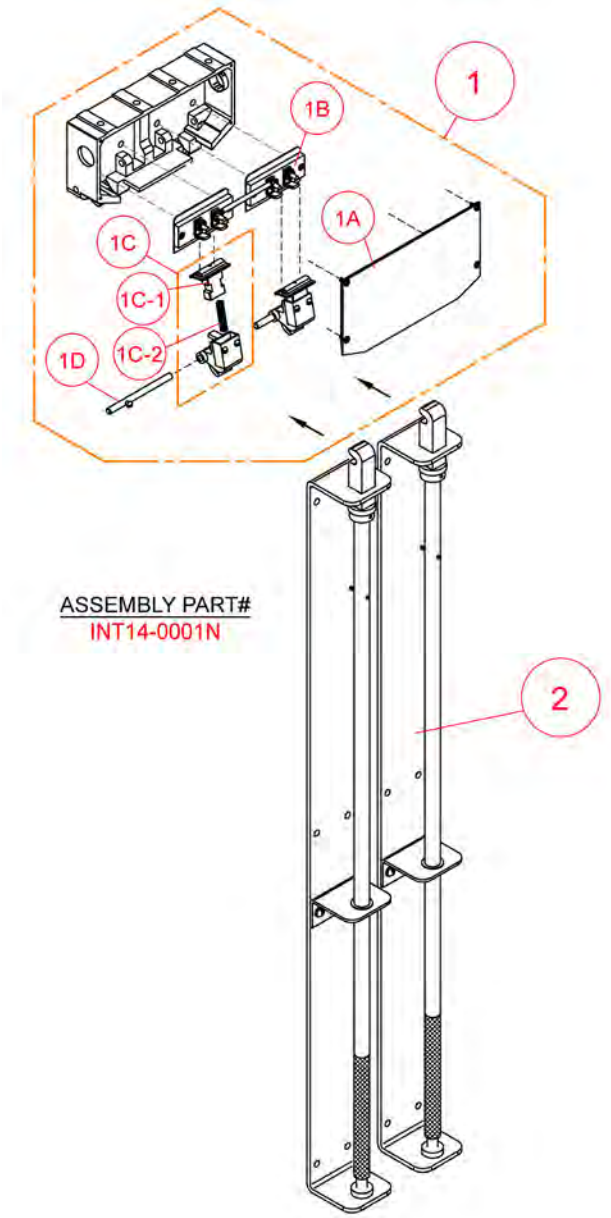
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "K5" (w/ Double Bar & Brackets)

Manual Double Swing Door



Part No.	Item No	Description
INT14-0002N	1	Switch Assembly, K5 Interlock (**Page#** 387)
INT14-0003N	1A	Cover, K5 Interlock With Insulator (**Page#** 378)
SW11-0003N	1B	Contact Base, "K" Series (**Page#** 414)
INT16-0007N	1C	Cam Assembly, K1/K5 Interlock Contact (**Page#** 373)

Part No.	Item No	Description
SW11-0005N	1C-1	Contact, "K" Series Bridging (**Page#** 413)
SPG-0024N	1C-2	Spring, 1 1/4" Lg X 9/32" OD-0.030 Wire, 15 Turns Stainless Steel (**Page#** 418)
SW11-0006N	1D	Shaft, "K" Series Door Contact (**Page#** 406)
INT16-0009N	2	Bar, K1/K5 Interlock Bracket & Locking (**Page#** 372)

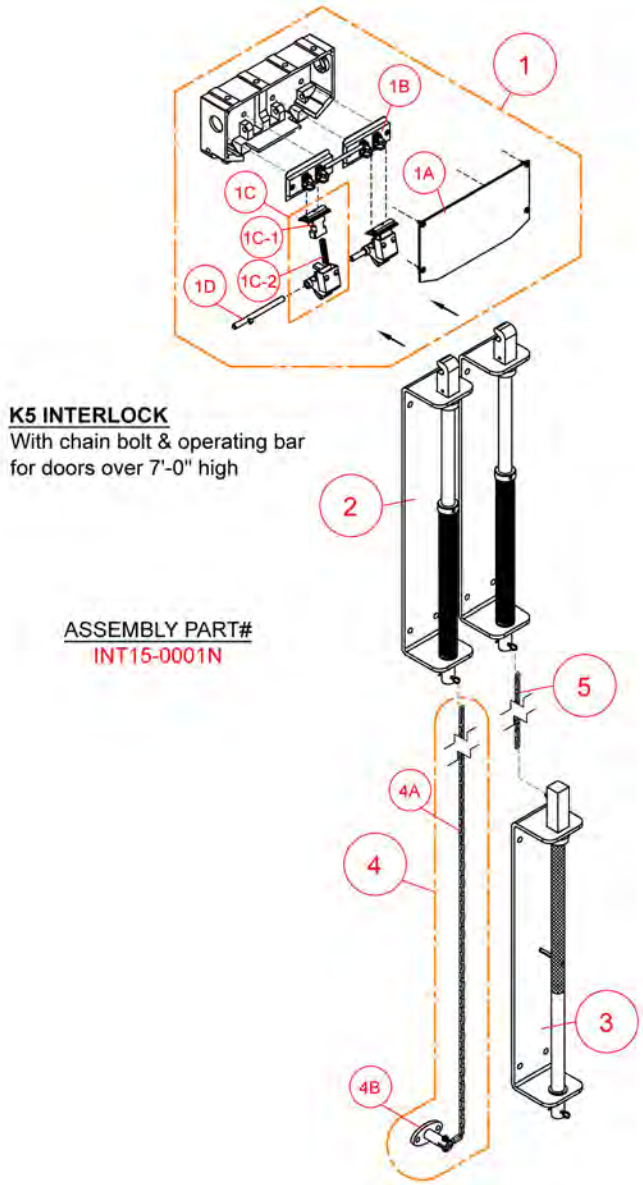
Mounting hardware included.

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Interlock Isometric Drawing

TYPE: "K5" (w/ Chain Bolt & Operating Bar)

Manual Double Swing Door



K5 INTERLOCK
With chain bolt & operating bar
for doors over 7'-0" high

ASSEMBLY PART#
INT15-0001N

Part No.	Item No	Description
INT14-0002N	1	Switch Assembly, K5 Interlock (**Page#** 387)
INT14-0003N	1A	Cover, K5 Interlock With Insulator (**Page#** 378)
SW11-0003N	1B	Contact Base, "K" Series (**Page#** 414)
INT16-0007N	1C	Cam Assembly, K1/K5 Interlock Contact (**Page#** 373)
SW11-0005N	1C-1	Contact, "K" Series Bridging (**Page#** 413)
SPG-0024N	1C-2	Spring, 1 1/4" Lg X 9/32" OD-0.030 Wire, 15 Turns Stainless Steel (**Page#** 418)

Part No.	Item No	Description
SW11-0006N	1D	Shaft, "K" Series Door (**Page#** 406)
INT15-0002N	2	Bar, K5 Interlock Upper (**Page#** 372)
INT15-0003N	3	Bar, K5 Interlock Lower (**Page#** 372)
INT15-0008N	4	Anchor Kit, K5 Interlock Chain (72" Chain) (**Page#** 372)
CHN-0014N	4A	Chain, K5 Interlock #2 end Welded Sash 72" Lg Copper Plated (**Page#** 373)
INT15-0007N	4B	Anchor, K5 Interlock Chain (**Page#** 372)
CHN-0013N	5	Chain, K5 Interlock #2 end Welded Sash 36" Lg Copper Plated (**Page#** 373)

Mounting hardware included.

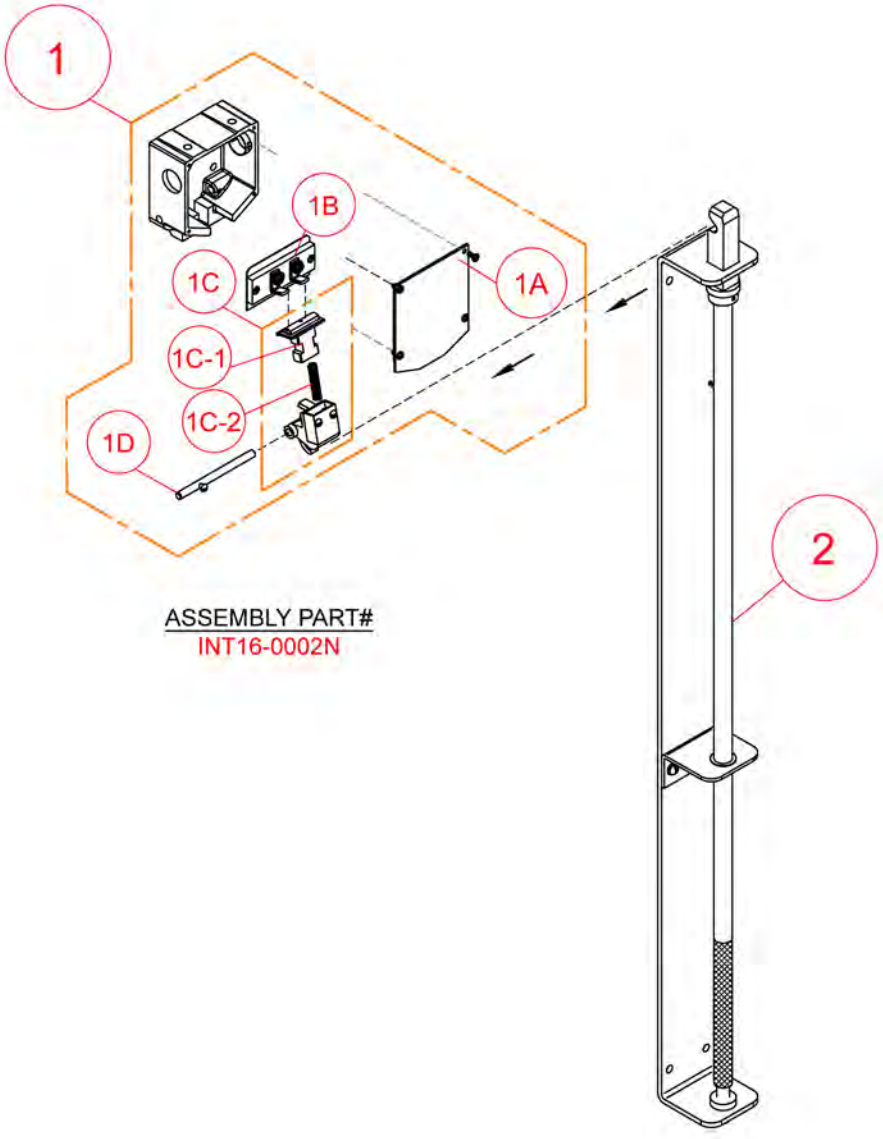
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "K" (w/ Bar & Bracket)

Manual Sliding Door



Part No.	Item No	Description
INT16-0004N	1	Switch Assembly, K Interlock (Sliding Doors) (**Page#** 387)
INT16-0006N	1A	Cover, K Switch Assembly (**Page#** 378)
SW11-0003N	1B	Contact Base, "K" Series (**Page#** 414)
INT16-0008N	1C	Cam, K Interlock Contact (Sliding Doors) (**Page#** 373)

Mounting hardware included.

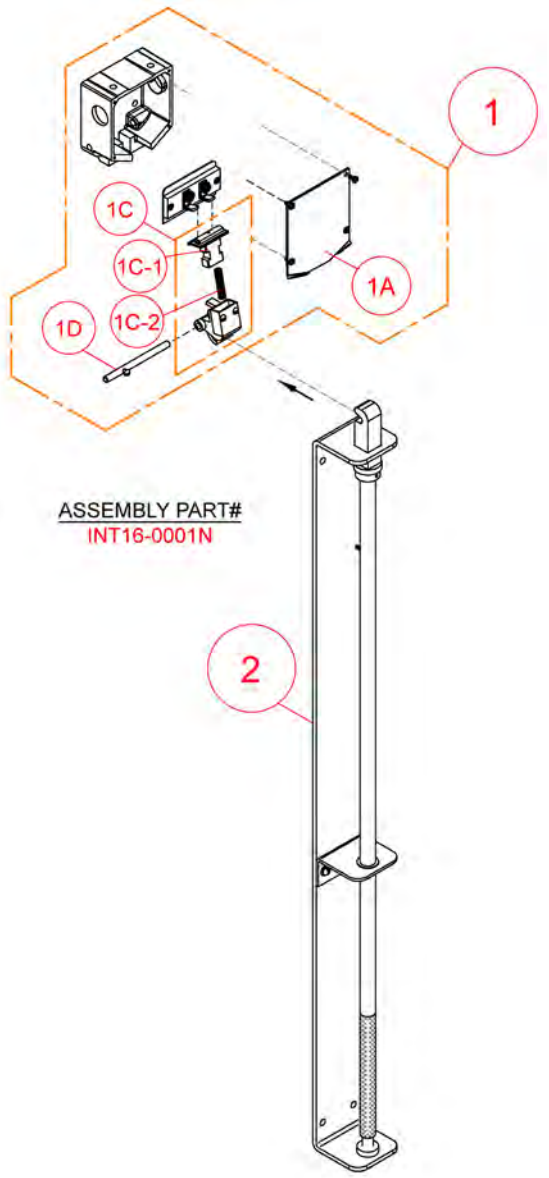
Part No.	Item No	Description
SW11-0005N	1C-1	Contact, "K" Series Bridging Contact (**Page#** 413)
SPG-0024N	1C-2	Spring, 1 1/4" Lg X 9/32" OD-0.030 Wire, 15 Turns Stainless Steel (**Page#** 418)
SW11-0006N	1D	Shaft, "K" Series Door Contact (**Page#** 406)
INT16-0010N	2	Bar, K Interlock Locking(Sliding Doors) (**Page#** 372)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Interlock Isometric Drawing

TYPE: "K-1" (w/ Bar & Bracket)

Manual Swing Door



Part No.	Item No	Description
INT16-0003N	1	Switch Assembly, K1 Interlock (Swing Doors) (**Page#** 387)
INT16-0005N	1A	Cover, K1 Switch Assembly (**Page#** 378)
SW11-0003N	1B	Contact Base, "K" Series (**Page#** 414)
INT16-0007N	1C	Cam, K1/K5 Interlock Contact (Swing Doors) (**Page#** 373)

Part No.	Item No	Description
SW11-0005N	1C-1	Contact, "K" Series Bridging (**Page#** 413)
SPG-0024N	1C-2	Spring, 1 1/4" Lg X 9/32" OD-0.030 Wire, 15 Turns Stainless Steel (**Page#** 418)
SW11-0006N	1D	Shaft, "K" Series Switch (**Page#** 406)
INT16-0009N	2	Bar, K1/K5 Locking(Swing Doors) (**Page#** 372)

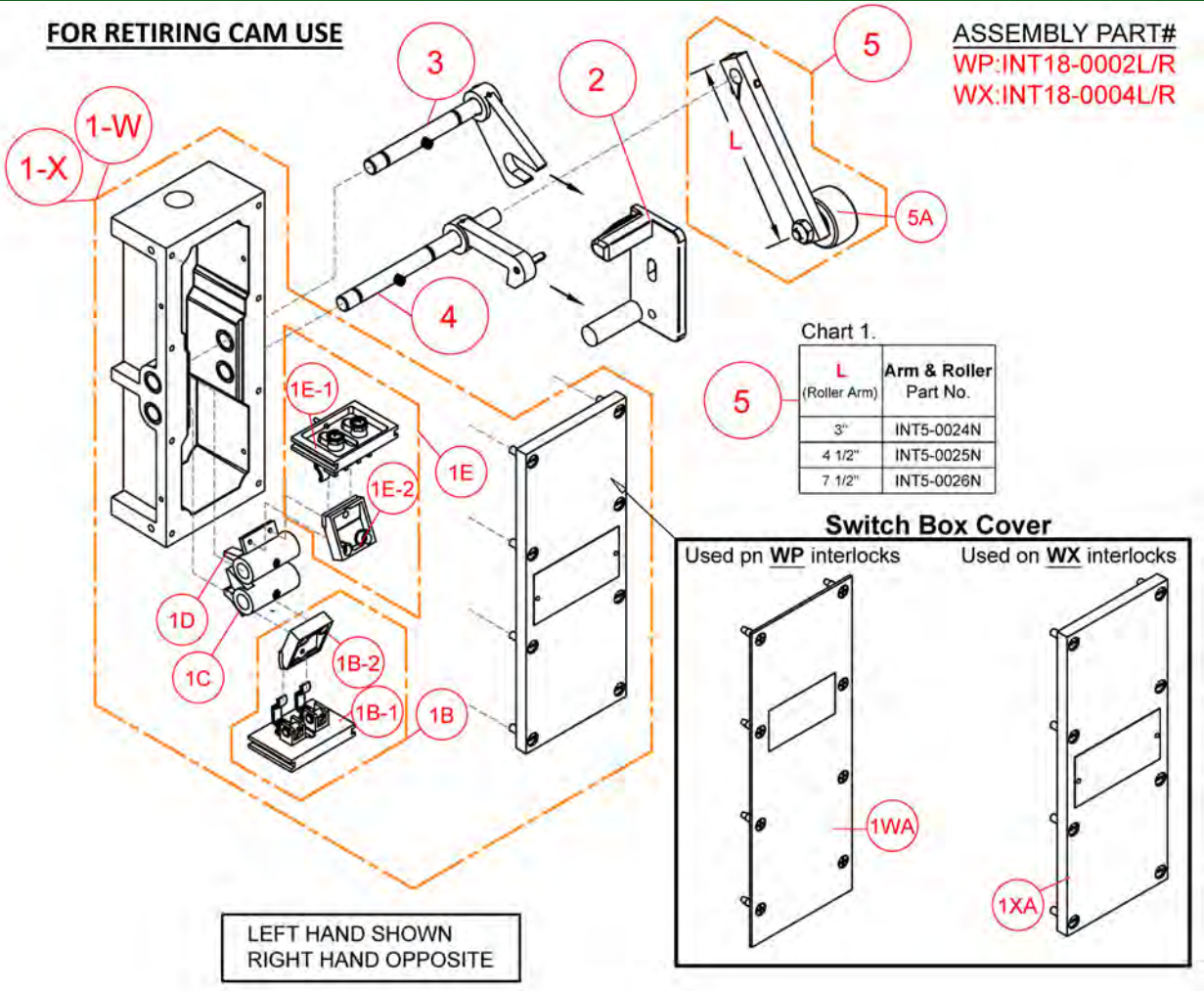
Mounting hardware included.

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "WX", "WP"

Manual Sliding Door (Water & Explosion Resistant)



Part No.	Item No	Description
INT18-0008L/R	1-X	Switch Assembly, WX Explosion Slide (Not NEMA Rated, UL Listed or CSA Certified) (**Page#** 388)
INT18-0010N	1XA	Cover, 3/8" WX Interlock With Hardware (**Page#** 380)
INT18-0006L/R	1-W	Switch Assembly, WP Moisture Slide (NEMA Rated and CSA Certified) (**Page#** 388)
INT18-0009N	1WA	Cover, 1/8" WP Interlock With Gasket & Hardware (**Page#** 380)
INT18-0013N	1B	Contact Kit, WP/WX Door (**Page#** 376)
INT18-0014N	1B-1	Contact Base, WP/WX Door (**Page#** 377)
INT5-0015N	1B-2	Contact, WP/WX Interlock Bridging (**Page#** 375 or 413)
INT18-0021N	1C	Cam, WP/WX Door Contact (**Page#** 374)
INT18-0020N	1D	Cam, WP/WX Retiring Cam Contact (**Page#** 374)

Part No.	Item No	Description
INT18-0011N	1E	Contact Kit, WP/WX Retiring Cam (**Page#** 376)
INT18-0012N	1E-1	Contact Base, WP/WX Retiring Cam (**Page#** 377)
INT5-0018N	1E-2	Contact, M/N/NHA Cam Bridging (**Page#** 376)
INT18-0019L/R	2	Keeper, WP/WX Interlock Sliding (**Page#** 381)
INT18-0025L/R	3	Latch, WP/WX Sliding Door (**Page#** 375)
INT18-0024L/R	4	Cam, WP/WX Sliding Door Forked (**Page#** 375)
SEE CHART 1	5	Arm & Roller (**Page#** 386)
INT5-0027N	5A	Roller & Bolt, Roller Arm (**Page#** 386)

Mounting hardware included.

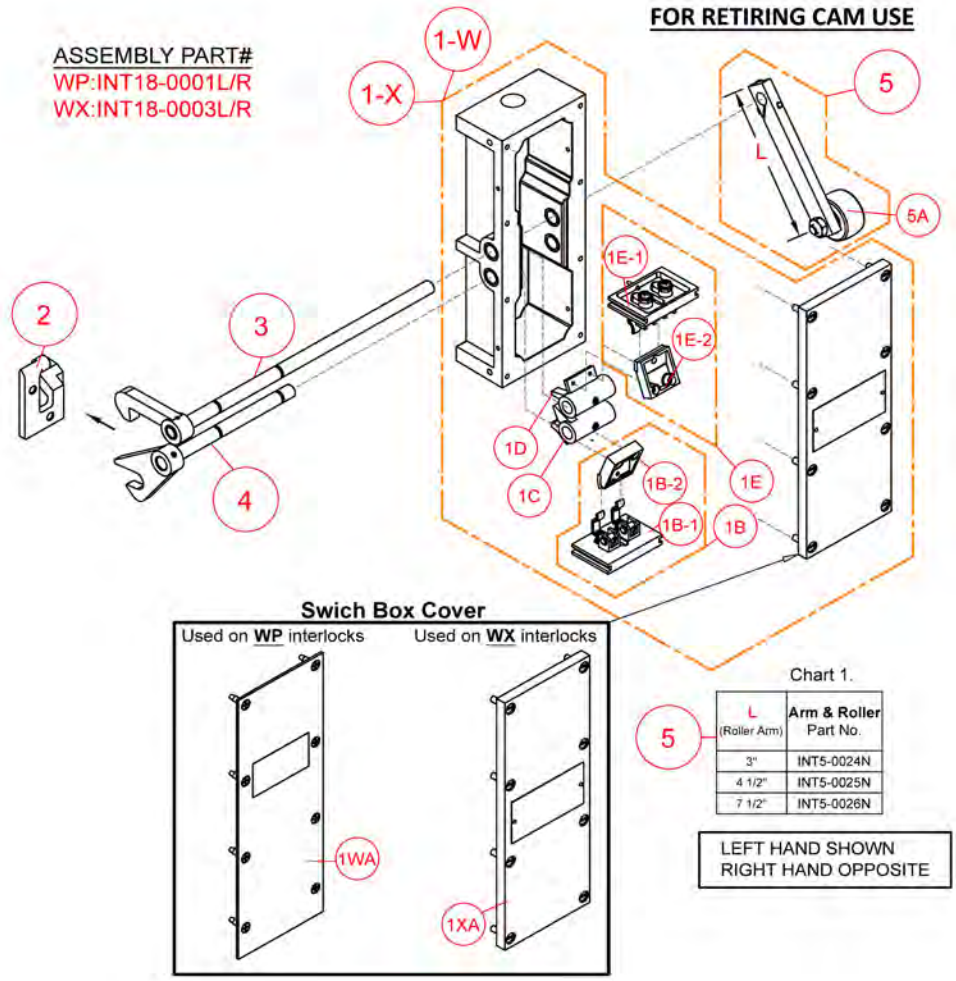
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "WX", "WP"

Manual Swing Door (Water & Explosion Resistant)



Part No.	Item No	Description
INT18-0007L/R	1-X	Switch Assembly, WX Explosion Swing (Not NEMA Rated, UL Listed or CSA Certified) (**Page#** 388)
INT18-0010N	1XA	Cover, 3/8' WX Interlock With Hardware (**Page#** 380)
INT18-0005L/R	1-W	Switch Assembly, WP Moisture Swing (NEMA Rated and CSA Certified) (**Page#** 388)
INT18-0009N	1WA	Cover, 1/8" WP Interlock With Gasket & Hardware (**Page#** 380)
INT18-0013N	1B	Contact Kit, WP/WX Door (**Page#** 376)
INT18-0014N	1B-1	Contact Base, WP/WX Door (**Page#** 377)
INT5-0015N	1B-2	Contact, WP/WX Interlock Bridging (**Page#** 375 or 413-Lock & Contact Section)
INT18-0021N	1C	Cam, WP/WX Door Contact (**Page#** 374)
INT18-0020N	1D	Cam, WP/WX Retiring Cam Contact (**Page#** 374)

Part No.	Item No	Description
INT18-0011N	1E	Contact Kit, WP/WX Retiring Cam (**Page#** 376)
INT18-0012N	1E-1	Contact Base, WP/WX Retiring Cam (**Page#** 377)
INT5-0018N	1E-2	Contact, M/N/NHA Cam Bridging (**Page#** 376)
INT18-0018L/R	2	Keeper, WP/WX Interlock Swing (**Page#** 381)
INT18-0023L/R	3	Latch, WP/WX Swing Door (**Page#** 375)
INT18-0022L/R	4	Cam, WP/WX Swing Door Forked (**Page#** 375)
SEE CHART 1	5	Arm & Roller (**Page#** 386)
INT5-0027N	5A	Roller & Bolt, Roller Arm (**Page#** 386)

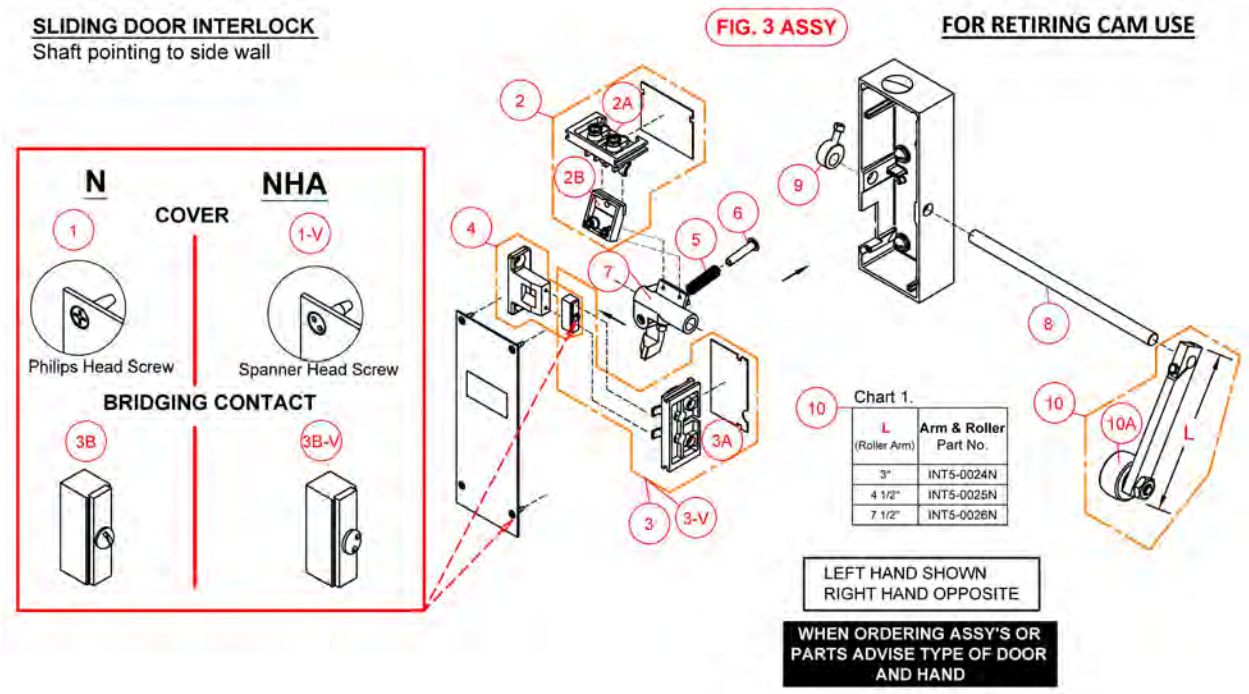
Mounting hardware included.

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "N", "NHA"

Manual Sliding Door



Part No.	Item No	Description
INT22-XXXXX	FIG. 3 ASSY	Interlock, N/NHA Sliding Door (**Page#** 359-360)
INT22-0015N	1	Cover, "N" Interlock (**Page#** 379)
INT22-0041N	1-V	Cover, "NHA" Interlock (**Page#** 379)
INT22-0019N	2	Contact Kit, N/NHA Interlock Upper (**Page#** 376)
INT22-0021N	2A	Contact Base, N/NHA Upper
INT5-0018N	2B	Contact, M/N/NHA Cam Bridging (**Page#** 377)
INT22-0020N	3	Contact Kit, "N" Interlock Lower (**Page#** 375)
INT22-0058N	3-V	Contact Kit, NHA Interlock Lower, With Spanner Head Screws (**Page#** 375)
INT22-0022N	3A	Contact Base, "N/NHA" Interlock Lower (**Page#** 377)
INT5-0019N	3B	Bridging Contact, M/N Keeper (**Page#** 376 or 413-Lock & Contact Section)

Part No.	Item No	Description
INT22-0057N	3B-V	Bridging Contact, NHA Keeper, With Spanner Head Screws (**Page#** 376)
INT4-XXXXX	4	Keeper, N/NHA Interlock (**Page#** 381)
SPG-0030N	5	Spring, 1 7/8" Lg X 13/32" OD-0.050 Wire, 15 Turns (**Page#** 394)
INT22-0018N	6	Retainer, N/NHA Interlock Pin Spring (**Page#** 393)
INT22-0016L/R	7	Cam Locking, N/NHA Interlock (**Page#** 374)
INT5-0023N	8	Shaft, M/N Interlock Cam Sliding Door (**Page#** 391)
INT5-0028N	9	Clamp, Lock Emergency Unlocking Assembly (**Page#** 368)
SEE CHART 1	10	Arm & Roller (**Page#** 386)
INT5-0027N	10A	Roller & Bolt, Roller Arm (**Page#** 386)

Mounting hardware included.

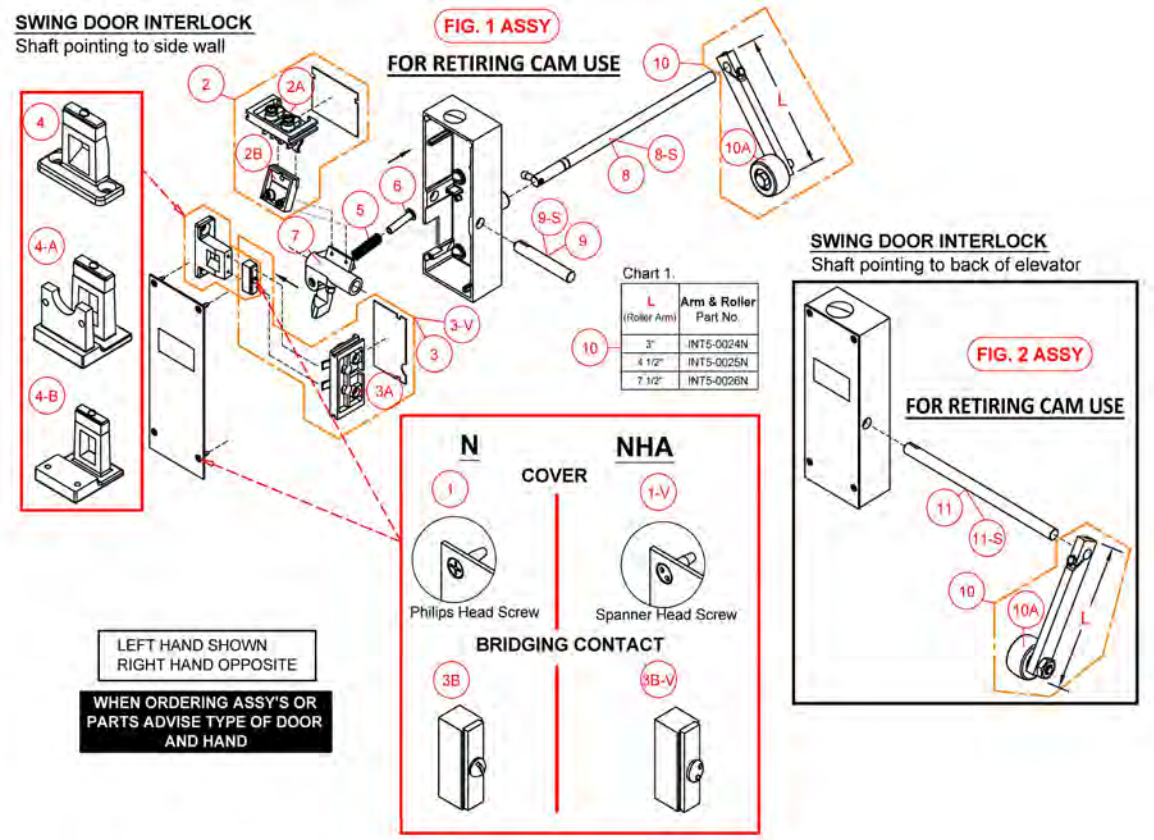
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "N", "NHA"

Manual Swing Door



Part No.	Item No	Description
INT22-XXXXX	FIG. 1 ASSY	Interlock, N/NHA Swing Door - Shaft pointing to side wall (**Page#** 358, 360)
INT22-XXXXX	FIG. 2 ASSY	Interlock, N/NHA Swing Door - Shaft pointing to back of elevator (**Page#** 358, 360)
INT22-0015N	1	Cover, "N" Interlock (**Page#** 379)
INT22-0041N	1-V	Cover, "NHA" Interlock (**Page#** 379)
INT22-0019N	2	Contact Kit, N/NHA Interlock Upper (**Page#** 376)
INT22-0021N	2A	Contact Base, N/NHA Upper (**Page#** 377)
INT5-0018N	2B	Contact, M/N/NHA Cam Bridging Upper (**Page#** 376)
INT22-0020N	3	Contact Kit, "N" Interlock Lower (**Page#** 375)
INT22-0058N	3-V	Contact Kit, NHA Interlock Lower, With Spanner Head Screws (**Page#** 375)
INT22-0022N	3A	Contact Base, "N/NHA" Interlock Lower (**Page#** 377)
INT5-0019N	3B	Bridging Contact, M/N Keeper (**Page#** 376 or 413-Lock & Contact Section)
INT22-0057N	3B-V	Bridging Contact, NHA Keeper, With Spanner Head Screws (**Page#** 376)
INT4-XXXXX	4	Keeper, N/NHA Interlock - Surface Mounted (**Page#** 380-381)

Part No.	Item No	Description
INT4-XXXXX	4-A	Keeper, N/NHA Interlock - Flush Mounted (**Page#** 380-381)
INT4-XXXXX	4-B	Keeper, N/NHA Interlock - Kalamein (**Page#** 380-381)
SPG-0030N	5	Spring, 1 7/8" Lg X 13/32" OD-0.050 Wire, 15 Turns (**Page#** 394)
INT22-0018N	6	Retainer, N/NHA Interlock Pin Spring (**Page#** 393)
INT22-0016L/R	7	Cam Locking, N/NHA Interlock (**Page#** 374)
INT5-0022N	8	Shaft, M/N Interlock Ball Pin 10" Lg (**Page#** 391)
INT5-0040N	8-S	Shaft, MHA/NHA Interlock Ball Pin 10" Lg, SS (**Page#** 391)
INT5-0020N	9	Shaft, M/N Interlock 3" Cam Swing Door (**Page#** 391)
INT5-0038N	9-S	Shaft, MHA/NHA Interlock 3" Cam Swing Door, SS (**Page#** 391)
SEE CHART 1	10	Arm & Roller (**Page#** 386)
INT5-0027N	10A	Roller & Bolt, Roller Arm (**Page#** 386)
INT5-0021N	11	Shaft, M/N Interlock 10" Cam Swing Door (**Page#** 391)
INT5-0039N	11-S	Shaft, MHA/NHA Interlock 10" Cam Swing Door, SS (**Page#** 391)

Mounting hardware included.

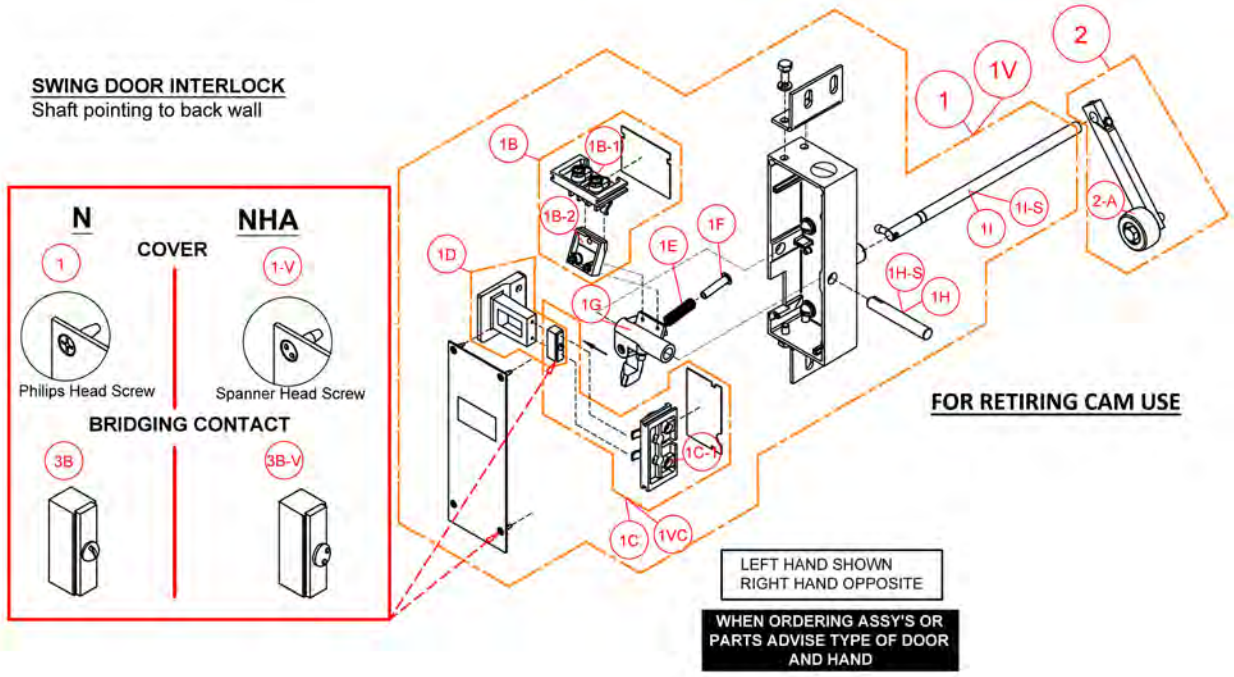
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "N", "NHA" (WECO)

Manual Swing Door (Westinghouse Replacement)



Part No.	Item No	Description
INT22-0013L/R	1	Switch Assembly, "N" Interlock Swing Door (Existing Westinghouse SW-1 Lock Cutouts) (**Page#** 207)
INT22-0039L/R	1V	Switch Assembly, "NHA" Interlock Swing Door (**Page#** 389)
INT22-0015N	1A	Cover, "N" Interlock (**Page#** 379)
INT22-0041N	1VA	Cover, "NHA" Interlock (**Page#** 379)
INT22-0019N	1B	Contact Kit, N/NHA Interlock Upper (**Page#** 376)
INT22-0021N	1B-1	Contact Base, N/NHA Upper (**Page#** 377)
INT5-0018N	1B-2	Contact, M/N/NHA Cam Bridging (**Page#** 376)
INT22-0020N	1C	Contact Kit, "N" Interlock Lower (**Page#** 375 or 293)
INT22-0058N	1VC	Contact Kit, NHA Interlock Lower, With Spanner Head Screws (**Page#** 375)
INT22-0022N	1C-1	Contact Base, "N/NHA" Interlock Lower (**Page#** 377)
INT5-0019N	1C-D	Bridging Contact, M/N Keeper (**Page#** 376 or 413-Lock & Contact Section)

Mounting hardware included.

Part No.	Item No	Description
INT22-0057N	1VC-D	Bridging Contact, NHA Keeper, With Spanner Head Screws (**Page#** 376)
INT4-0005N	1D	Keeper, N/NHA Westinghouse Swing Door Interlock (**Page#** 381)
SPG-0030N	1E	Spring, 1 7/8" Lg X 13/32" OD-0.050 Wire, 15 Turns (**Page#** 394)
INT22-0018N	1F	Retainer, N/NHA Interlock Pin Spring (**Page#** 393)
INT22-0016L/R	1G	Cam Locking, N/NHA Interlock (**Page#** 374)
INT5-0020N	1H	Shaft, M/N Interlock 3" Cam Swing Door (**Page#** 391)
INT5-0038N	1H-S	Shaft, MHA/NHA Interlock 3" Cam Swing Door, SS (**Page#** 391)
INT5-0022N	1I	Shaft, M/N Interlock Ball Pin 10" Lg (**Page#** 391)
INT5-0040N	1I-S	Shaft, MHA/NHA Interlock Ball Pin 10" Lg, SS (**Page#** 391)
INT5-0025N	2	Arm & Roller, 4 1/2" CL. (**Page#** 386 or 293)
INT5-0027N	2A	Roller & Bolt, Roller Arm (**Page#** 386)

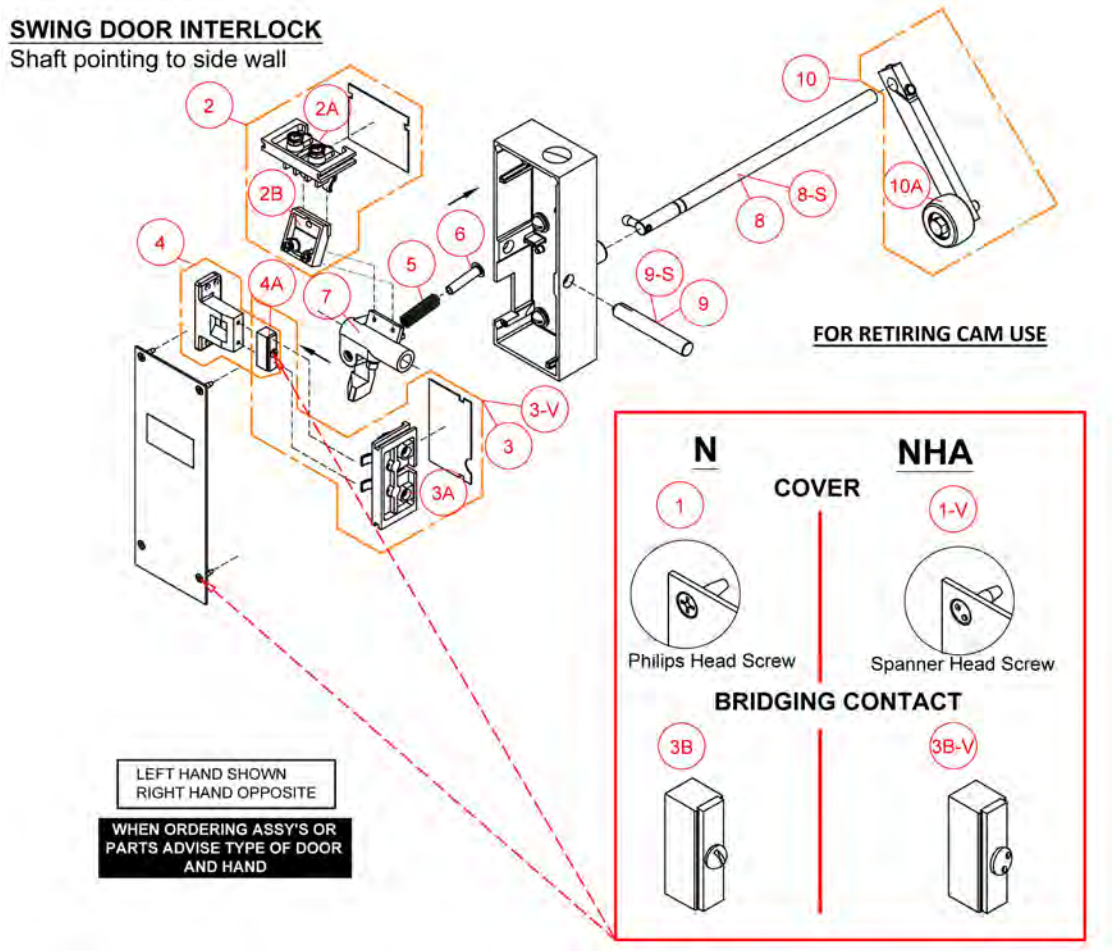
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "N", "NHA" (OTIS)

Manual Swing Door-Otis Replacement



Part No.	Item No	Description
INT22-0015N	1	Cover, "N" Interlock (**Page#** 379)
INT22-0041N	1-V	Cover, "NHA" Interlock (**Page#** 379)
INT22-0019N	2	Contact Kit, N/NHA Interlock Upper (**Page#** 376)
INT22-0021N	2A	Contact Base, N/NHA Upper (**Page#** 377)
INT5-0018N	2B	Contact, M/N/NHA Cam Bridging (**Page#** 376)
INT22-0020N	3	Contact Kit, "N" Interlock Lower (**Page#** 375 or 293)
INT22-0058N	3-V	Contact Kit, NHA Interlock Lower, With Spanner Head Screws (**Page#** 375)
INT22-0022N	3A	Contact Base, "N/NHA" Interlock Lower (**Page#** 377)
INT5-0019N	3B	Bridging Contact, M/N Keeper (**Page#** 376 or 413-Lock & Contact Section)
INT22-0057N	3B-V	Bridging Contact, NHA Keeper, With Spanner Head Screws (**Page#** 376)

Mounting hardware included.

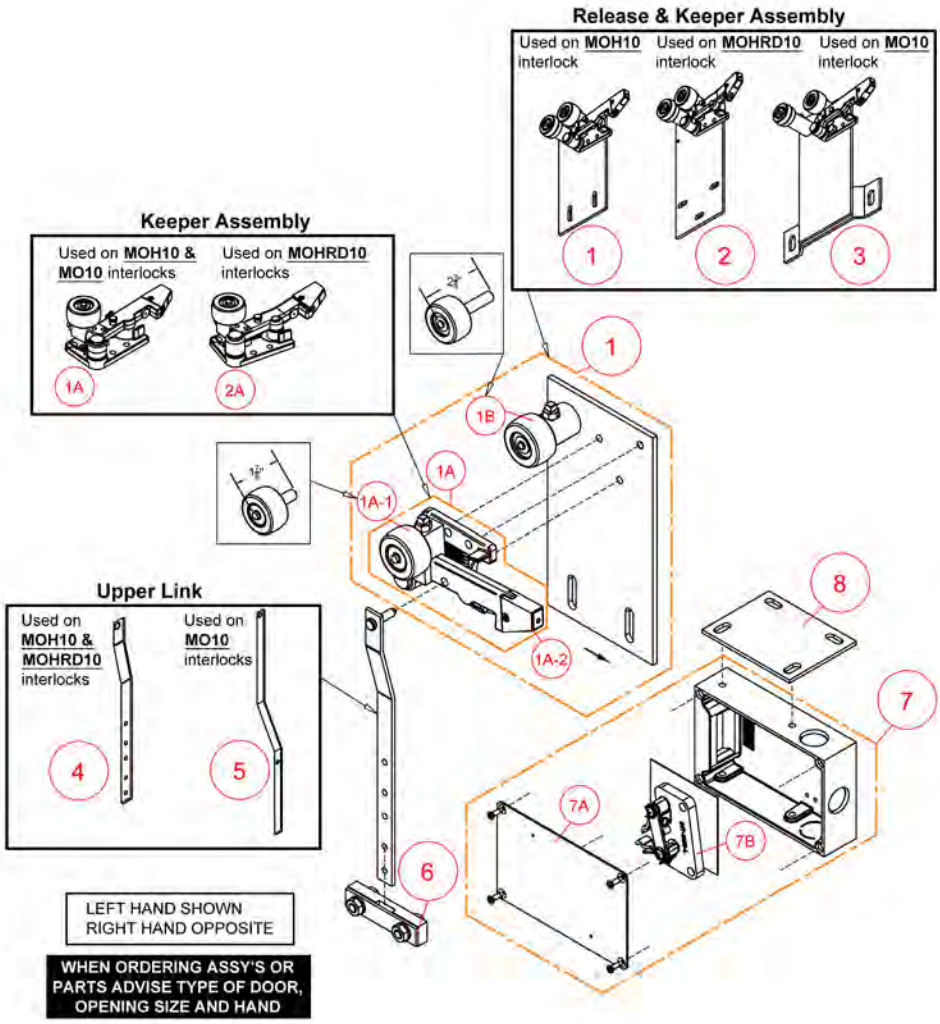
Part No.	Item No	Description
INT4-0006N	4	Keeper, N/NHA Otis Swing Door Interlock (**Page#** 381)
SPG-0030N	5	Spring, 1 7/8" Lg X 13/32" OD-0.050 Wire, 15 Turns (**Page#** 394)
INT22-0018N	6	Retainer, N/NHA Interlock Pin Spring (**Page#** 393)
INT22-0016L/R	7	Cam Locking, N/NHA Interlock (**Page#** 374)
INT5-0022N	8	Shaft, M/N Interlock Ball Pin 10" Lg (**Page#** 391)
INT5-0040N	8-S	Shaft, MHA/NHA Interlock Ball Pin 10" Lg, SS (**Page#** 391)
INT5-0020N	9	Shaft, M/N Interlock 3" Cam Swing Door (**Page#** 391)
INT5-0038N	9-S	Shaft, MHA/NHA Interlock 3" Cam Swing Door, SS (**Page#** 391)
INT5-0025N	10	Arm & Roller, 4 1/2" CL. (**Page#** 386 or 293-Car Zone Lock Section)
INT5-0027N	10A	Roller & Bolt, Roller Arm (**Page#** 386)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MO10", "MOH10", "MOHRD10"

Sliding Door - Otis Replacement & Round Elevator



Part No.	Item No	Description
INT23-0007L/R	1	Release-Keeper Assembly, MOH10 (**Page#** 385)
INT23-0008L/R	2	Release-Keeper, MOHRD10 Round Door (**Page#** 385)
INT23-0006L/R	3	Release & Keeper Assembly, Type "MO10" (**Page#** 385)
INT23-0009L/R	1A	Keeper Assembly, MOH10 Interlock (**Page#** 380)
INT23-0010L/R	2A	Keeper Assembly, MOHRD10 Interlock (Keeper Bent For Round Elevators) (**Page#** 380)
INT23-0012N	1A-1	Roller & Shaft, MO10 Interlock (Movable Roller) (**Page#** 386)

Part No.	Item No	Description
INT1H-0017N	1A-2	Contact, MO Keeper Bridge (**Page#** 376)
INT1H-0023N	1B	Roller & Shaft, MO Interlock (**Page#** 386)
INT1H-0018N	4	Link, Upper MO Interlock Assembly, 10 1/2"Lg X 1/2"Wd X 1/8"Thk (**Page#** 384)
INT23-0013N	5	Link, Type "MO10" Interlock Upper (**Page#** 384)
INT23-0011N	6	Guide, MO10 Interlock Link (**Page#** 393)
INT1H-0013L/R	7	Switch Assembly, MO Interlock (**Page#** 387)
INT1H-0014N	7A	Cover, MO Interlock (**Page#** 378)
INT1H-0024L/R	7B	Contact Base, MO Interlock (**Page#** 377)
INT1H-0031N	8	Plate, Switch Track Mounting 2" CL (**Page#** 370)

Mounting hardware included.

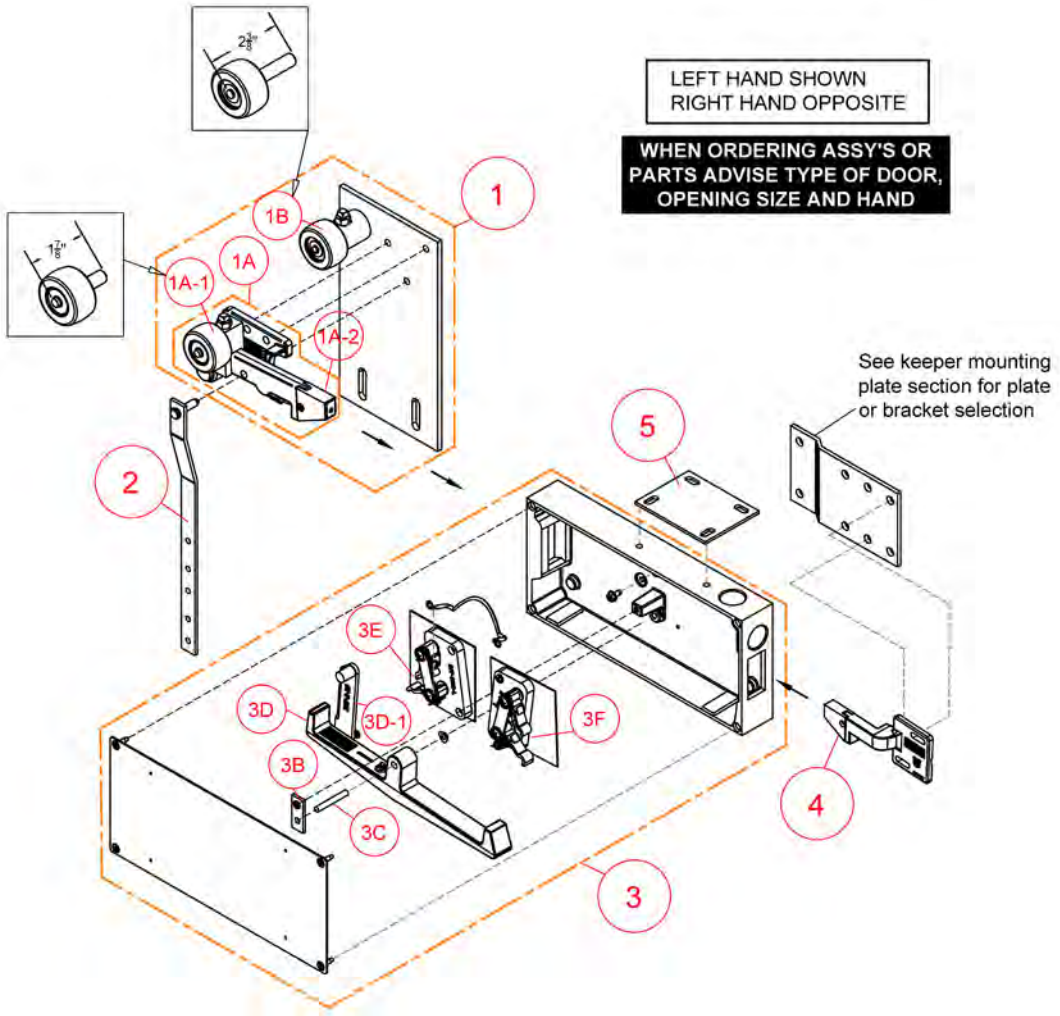
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Interlock Isometric Drawing

TYPE: "MOCPH10"

Sliding Door - Center Parting



Part No.	Item No	Description
INT23-0007L/R	1	Release-Keeper Assembly, MOH10 (**Page#** 385)
INT23-0009L/R	1A	Keeper Assembly, MOH10 Interlock (**Page#** 380)
INT23-0012N	1A-1	Roller & Shaft, MO10 Interlock (Movable Roller) (**Page#** 386)
INT1H-0017N	1A-2	Contact, MO Keeper Bridge (**Page#** 376)
INT1H-0023N	1B	Roller & Shaft, MO Interlock (**Page#** 386)
INT1H-0018N	2	Link, Upper MO Interlock Assembly, 10 1/2" Lg X 1/2" Wd X 1/8" Thk (**Page#** 384)
INT2H-0007N	3	Switch Assembly, MOCP Interlock (**Page#** 387)
INT2H-0008N	3A	Cover, MOCP Interlock (**Page#** 379)

Part No.	Item No	Description
NT2H-0011N	3B	Cover, MOCP Interlock (**Page#** 379)
PIN-0046N	3C	Pin, 3/16" X 1 5/16" Clear Nylon (**Call G.A.L.**)
INT2H-0010N	3D	Arm, MOCP Rocker Assembly (**Page#** 388)
INT2H-0024N	3D-1	Cam, MOCP Rocker Arm Lift up (**Page#** 388)
INT1H-0024L/R	3E	Contact Base, MO Interlock (**Page#** 377)
INT2H-0018R	3F	Contact Base, MOCP Interlock (**Page#** 377)
INT2H-0015N	4	Keeper Fixed, MOCP Interlock (**Page#** 380)
INT1H-0031N	5	Plate, Switch Track Mounting 2" CL (**Page#** 370)
INT1H-0036L	1A-2/3E	Contact Kit, MO-KT (**Page#** 375)
INT2H-0017R	1A-2/3F	Contact Kit, MO-KT (**Page#** 375)

Mounting hardware included.

DOOR EQUIPMENT

Interlock Assemblies (Power Doors)

Sliding Door (Conventional)

MO Interlock (Single Roller)



MOM Interlock (Vertical Rollers)



MOH Interlock (Horizontal Rollers)



MOH Interlock (Horizontal Rollers) Bottom Mounted



MO Interlock With Single Roller

Part No.	S/S	2/SP	C/P	2SP/CP	Link Length
INT1H-0098L/R	20”-29”		33”-39”	33”-39”	A (14 3/4”)
INT1H-0099L/R	30”-39”	30”-39”	40”-49”	40”-49”	B (18 3/4”)
INT1H-0100L/R	24”-29” 40”-44”	40”-44”	50”-59”	50”-59”	C (22 3/4”)
INT1H-0101L/R	45”-48”	45”-52”	60”-79”	60”-79”	D (26 3/4”)
INT1H-0102L/R		53”-60”	80”-83”	80”-83”	E (30 3/4”)
INT1H-0103L/R		61”-72”			F (36 3/4”)

MOM Interlock With Vertical Rollers

Standard

Part No.	S/S	2/SP	C/P	2SP/CP	Link Length
INT1M-0001L/R	20”-29”		33”-39”	33”-39”	A (14 3/4”)
INT1M-0002L/R	30”-39”	30”-39”	40”-49”	40”-49”	B (18 3/4”)
INT1M-0003L/R	40”-44”	24”-29” 40”-44”	50”-59”	50”-59”	C (22 3/4”)
INT1M-0004L/R	45”-48”	45”-52”	60”-79”	60”-79”	D (26 3/4”)
INT1M-0005L/R		53”-60”	80”-83”	80”-83”	E (30 3/4”)
INT1M-0006L/R		61”-72”			F (36 3/4”)

Cut Down Release

Part No.	S/S	2/SP	C/P	2SP/CP	Link Length
INT1M-0078L/R	20”-29”		33”-39”	33”-39”	A (14 3/4”)
INT1M-0079L/R	30”-39”	30”-39”	40”-49”	40”-49”	B (18 3/4”)
INT1M-0080L/R	40”-44”	24”-29” 40”-44”	50”-59”	50”-59”	C (22 3/4”)
INT1M-0081L/R	45”-48”	45”-52”	60”-79”	60”-79”	D (26 3/4”)
INT1M-0082L/R		53”-60”	80”-83”	80”-83”	E (30 3/4”)
INT1M-0083L/R		61”-72”			F (36 3/4”)

(*) Special Engineering Required

Interlock Assemblies (Power Doors)

Sliding Door (Conventional)

MOH Interlock With Horizontal Rollers

Standard

Part No.	S/S	2/SP	3/SP	C/P	2SP/CP	3SP/CP	Link Length
INT1H-0001L/R	20”-29”			30”-39”	33”-39”		A (14 3/4”)
INT1H-0002L/R	30”-39”	30”-39”		40”-49”	40”-49”		B (18 3/4”)
INT1H-0003L/R	40”-44”	24”-29” 40”-44”		50”-59”	50”-59” 84”-89”		C (22 3/4”)
INT1H-0004L/R	45”-48”	45”-52”	30”-54”	60”-79”	60”-79” 90”-106”	84”-111”	D (26 3/4”)
INT1H-0005L/R		53”-60”	55”-64”	80”-83”	80”-83”	112”-131”	E (30 3/4”)
INT1H-0006L/R		61”-72”	65”-69”		139”-144”	132”-140”	F (36 3/4”)

Cut Down Release

Part No.	S/S	2/SP	3/SP	C/P	2SP/CP	Link Length
INT1H-0078L/R	20”-29”			33”-39”	33”-39”	A (14 3/4”)
INT1H-0079L/R	30”-39”	30”-39”		40”-49”	40”-49”	B (18 3/4”)
INT1H-0080L/R	40”-44”	24”-29” 40”-44”		50”-59”	50”-59”	C (22 3/4”)
INT1H-0081L/R	45”-48”	45”-52”	30”-54”	60”-79”	60”-79”	D (26 3/4”)
INT1H-0082L/R		53”-60”	55”-64”	80”-83”	80”-83”	E (30 3/4”)
INT1H-0083L/R		61”-72”	65”-69”			F (36 3/4”)

MOH Interlock (Bottom Mounted) With Horizontal Rollers

Standard

Part No.	2/SP	3/SP	Link Length
INT1H-0059L/R	20”-29”		A (14 3/4”)
INT1H-0060L/R	30”-39”	30”-39”	B (18 3/4”)
INT1H-0061L/R	40”-44”	24”-29” 40”-44”	C (22 3/4”)
INT1H-0062L/R	45”-48”	45”-48”	D (26 3/4”)
INT1H-0063L/R	20”-29”		A (14 3/4”)
INT1H-0064L/R	30”-39”		B (18 3/4”)
INT1H-0065L/R	40”-44”		C (22 3/4”)
INT1H-0066L/R	45”-48”		D (26 3/4”)

Cut Down Release

Part No.	2/SP	3/SP	Link Length
INT1H-0084L/R	20”-29”		A (14 3/4”)
INT1H-0085L/R	30”-39”	30”-39”	B (18 3/4”)
INT1H-0086L/R	40”-44”	24”-29” 40”-44”	C (22 3/4”)
INT1H-0087L/R	45”-48”	45”-48”	D (26 3/4”)
INT1H-0088L/R	20”-29”		A (14 3/4”)
INT1H-0089L/R	30”-39”		B (18 3/4”)
INT1H-0090L/R	40”-44”		C (22 3/4”)
INT1H-0091L/R	45”-48”		D (26 3/4”)

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Assemblies (Power Doors)

Sliding Door (Vandal/Water/Dust/Explosion Resistant)

MOHA Interlock
(Horizontal Rollers & Shield)



MOWH Interlock
(Horizontal Rollers)



MOXH Interlock
(Horizontal Rollers)



Vandal Resistant

MOHA Interlock With Horizontal Rollers & Shield

Note: Interlocks using "HA" shield must have lower link cut off on job so as not to extend below bottom of shield.

Part No.	Shield Size	S/S	2/SP	Link Length
INT1H-0106L/R	18 1/8"	30"-39"	30"-39"	B (18 3/4")
INT1H-0107L/R	22 1/8"	40"-42"	40"-44"	C (22 3/4")
INT1H-0108L/R	26 1/8"		45"-52"	D (26 3/4")
INT1H-0109L/R	30 1/8"		53"-60"	E (30 3/4")
INT1H-0110L/R	34 1/8"		61"-68"	E (30 3/4")
INT1H-0111L/R	38 1/8"		69"-72"	F (36 3/4")

Water Resistant

MOWH Interlock With Horizontal Rollers

Standard

Note: UL listed, but **NOT** NEMA rated nor CSA certified

Part No.	S/S	2/SP	C/P	2SP/CP	Link Length
INT3W-0001L/R	22"-29"		24"-39"	24"-39"	A (14 3/4")
INT3W-0002L/R	30"-39"	24"-39"	40"-49"	40"-49"	B (18 3/4")
INT3W-0003L/R	40"-44"	40"-44"	50"-59"	50"-59"	C (22 3/4")
INT3W-0004L/R	45"-48"	45"-52"	60"-79"	60"-79"	D (26 3/4")
INT3W-0005L/R		53"-60"	80"-83"	80"-83"	E (30 3/4")
INT3W-0006L/R		61"-72"			F (36 3/4")

Cut Down Release 2 1/8"

Part No.	S/S	2/SP	C/P	2SP/CP	Link Length
INT3W-0010L/R	22"-29"		24"-39"	24"-39"	A (14 3/4")
INT3W-0011L/R	30"-39"	24"-39"	40"-49"	40"-49"	B (18 3/4")
INT3W-0012L/R	40"-44"	40"-44"	50"-59"	50"-59"	C (22 3/4")
INT3W-0013L/R	45"-48"	45"-52"	60"-79"	60"-79"	D (26 3/4")
INT3W-0014L/R		53"-60"	80"-83"	80"-83"	E (30 3/4")
INT3W-0015L/R		61"-72"			F (36 3/4")
INT3W-0017L/R					

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Assemblies (Power Doors)

Dust/Explosion Resistant

MOXH Interlock With Horizontal Rollers

NOTE: UL listed, NEMA 7, Class 1 Group D. California approved #3288. Pennsylvania #4913. **NOT** CSA certified

Part No.	S/S	2/SP	C/P	2SP/CP	Link Length
INT3X-0001L/R	22”-29”		24”-39”	24”-39”	A (14 3/4”)
INT3X-0002L/R	30”-39”	24”-39”	40”-49”	40”-49”	B (18 3/4”)
INT3X-0003L/R	40”-44”	40”-44”	50”-59”	50”-59”	C (22 3/4”)
INT3X-0004L/R	45”-48”	45”-52”	60”-79”	60”-79”	D (26 3/4”)
INT3X-0005L/R		53”-60”	80”-83”	80”-83”	E (30 3/4”)
INT3X-0006L/R		61”-72”			F (36 3/4”)

Sliding Door - Center Parting (Conventional/Vandal Resistant)

MOCP Interlock (Vertical Rollers)



USE “MO” KEY

MOCPH Interlock (Horizontal Rollers)



USE “MO” KEY

MOCPHA Interlock (Horizontal Rollers & Shield)



USE “VHA-1” KEY

Center Parting - Conventional

MOCP Interlock With Vertical Rollers

Standard

Part No.	C/P	Link Length
INT2M-0001N	30”-39”	A (14 3/4”)
INT2M-0002N	40”-49”	B (18 3/4”)
INT2M-0003N	50”-59”	C (22 3/4”)

MOCP Interlock With Vertical Rollers

Cut Down Release

Part No.	C/P	Link Length
INT2M-0026N	30”-39”	A (14 3/4”)
INT2M-0027N	40”-49”	B (18 3/4”)
INT2M-0028N	50”-59”	C (22 3/4”)

MOCPH Interlock With Horizontal Rollers

Standard

Part No.	C/P	2SP/CP	Link Length
INT2H-0001N	24”-39”		A (14 3/4”)
INT2H-0002N	40”-49”		B (18 3/4”)
INT2H-0003N	50”-59”		C (22 3/4”)
INT2H-0004N	60”-72”	60”-72”	D (26 3/4”)
INT2H-0005N			E (30 3/4”)
INT2H-0006N			F (36 3/4”)

MOCPH Interlock With Horizontal Rollers

Cut Down Release

Part No.	C/P	Link Length
INT2H-0026N	30”-39”	A (14 3/4”)
INT2H-0027N	40”-49”	B (18 3/4”)
INT2H-0028N	50”-59”	C (22 3/4”)
INT2H-0210N		D (Varies)
INT2H-0211N		E (Varies)
INT2H-0212N		F (Varies)

Center Parting - Vandal Resistant

MOCPHA Interlock With Horizontal Rollers & Shield

Note: Interlocks using “HA” shield must have lower link cut off on job so as not to extend below bottom of shield.

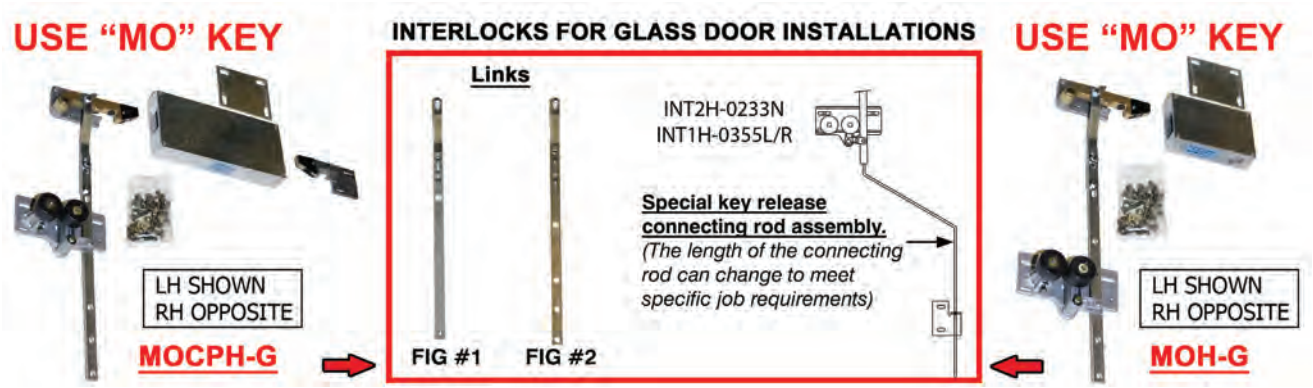
Part No.	Shield Size	C/P	Link Length
INT2H-0019N	14 1/8”	30”-39”	A (14 3/4”)
INT2H-0020N	18 1/8”	40”-49”	B (18 3/4”)
INT2H-0021N	22 1/8”	50”-59”	C (22 3/4”)

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Assemblies (Power Doors)

Sliding Door - (Glass Door Elevator)



MOCPH-G Interlock With Horizontal Rollers

Note: "MOCPH-G" interlock for C/P glass doors includes special key unlocking link and horizontal release roller assembly

INT2H-0233N: Includes special key release connecting rod

Part No.	C/P	Link Length
INT2H-0233N*	30"-59"	READ NOTE
INT2H-0040N*		FIG. #1
INT2H-0041N*		FIG. #2

MOH-G Interlock With Horizontal Rollers

Note: "MOH-G" interlock for glass door includes special key unlocking link and horizontal release roller assembly

INT1H-0355L/R: Includes special key release connecting rod

Part No.	Link Length
INT1H-0355L/R	READ NOTE
INT1H-0174L/R	FIG. #1
INT1H-0175L/R	FIG. #2

MOH10 Interlock



Note: "MOH10" interlock, glass door installation w/ door plate, keeper, release roller assembly, and key unlocking link

Part No.
INT23-0002L/R

MOHRD10 Interlock



Note: "MOHRD10" interlock, w/ door plate, keeper, release roller assembly, and key unlocking link (Used on solid or glass door)

Part No.
INT23-0004L/R

OTIS Replacement

MO10 Interlock



Note:
"MO10" interlock, w/ Otis replacement door bracket, keeper, release roller assembly, and key unlocking link

Part No.
INT23-0001L/R

Round Door

MOCPH10 Interlock



Note: "MOCPH10" interlock C/P glass doors: Includes door plate, keeper, release roller assembly, and key unlocking link

Part No.
INT24-0001N*

(*) Special Engineering Required

Interlock Assemblies (Manual Doors)

Swing Door Interlocks - Conventional

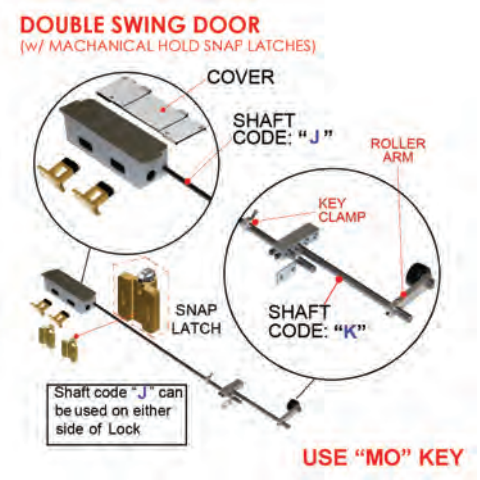
DM Interlock



Note: To replace an interlock shaft, match the shaft code to the shaft configuration shown in parts section on pg. 390

Part No.	Shaft Code	Roller Arm
INT7-0001N	"J" & "K"	3" C.L.
INT7-0020N	"J" & "K"	4 1/2" C.L.

DM-MH Interlock



Note: To replace an interlock shaft, match the shaft code to the shaft configuration shown in parts section on pg. 390

Part No.	Shaft Code	Roller Arm
INT7-0013N	"J" & "K"	3" C.L.
INT7-0021N	"J" & "K"	4 1/2" C.L.

K1 Interlock



Part No.	S/S
INT16-0001N	22"-48"

K5 Interlock



Part No.
INT14-0001N

K5 Interlock



Part No.
INT15-0001N

DOOR EQUIPMENT

Interlock Assemblies (Manual Doors)

Slide Door Interlocks - Conventional

K Interlock



Part No.	S/S	2/SP
INT16-0002N	22"-48"	24"-72"

MO Bar Lock



Part No.
INT1H-0130L/R

MOCP Bar Lock



Part No.
INT2H-0042N

Conventional

HD Interlock



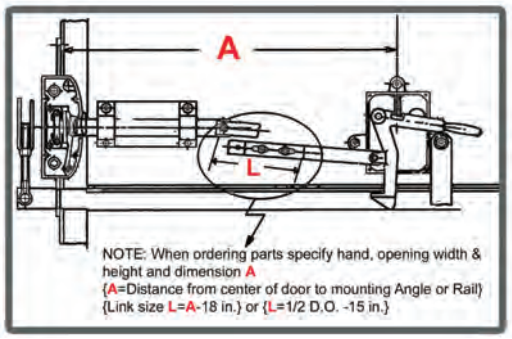
"HD" Interlock is designed for use with G.A.L. Straight Arm Closer.
A NON-REVERSING DEVICE must be used and ordered when "HD" is ordered for non-G.A.L. closer. Use part no. INT9-0002N

Part No.
INT9-0001L/R
INT9-0002N

VR Interlock

Used on Manual Vertical Rising Door





NOTE: When ordering, specify:

1. Left or right hand
2. Net door opening width
3. Advise "A" dimension, center line of door to guide rail where switch is mounted.
   "A"=_____ A = L + 18"

   L = 1/2 D.O.-15"

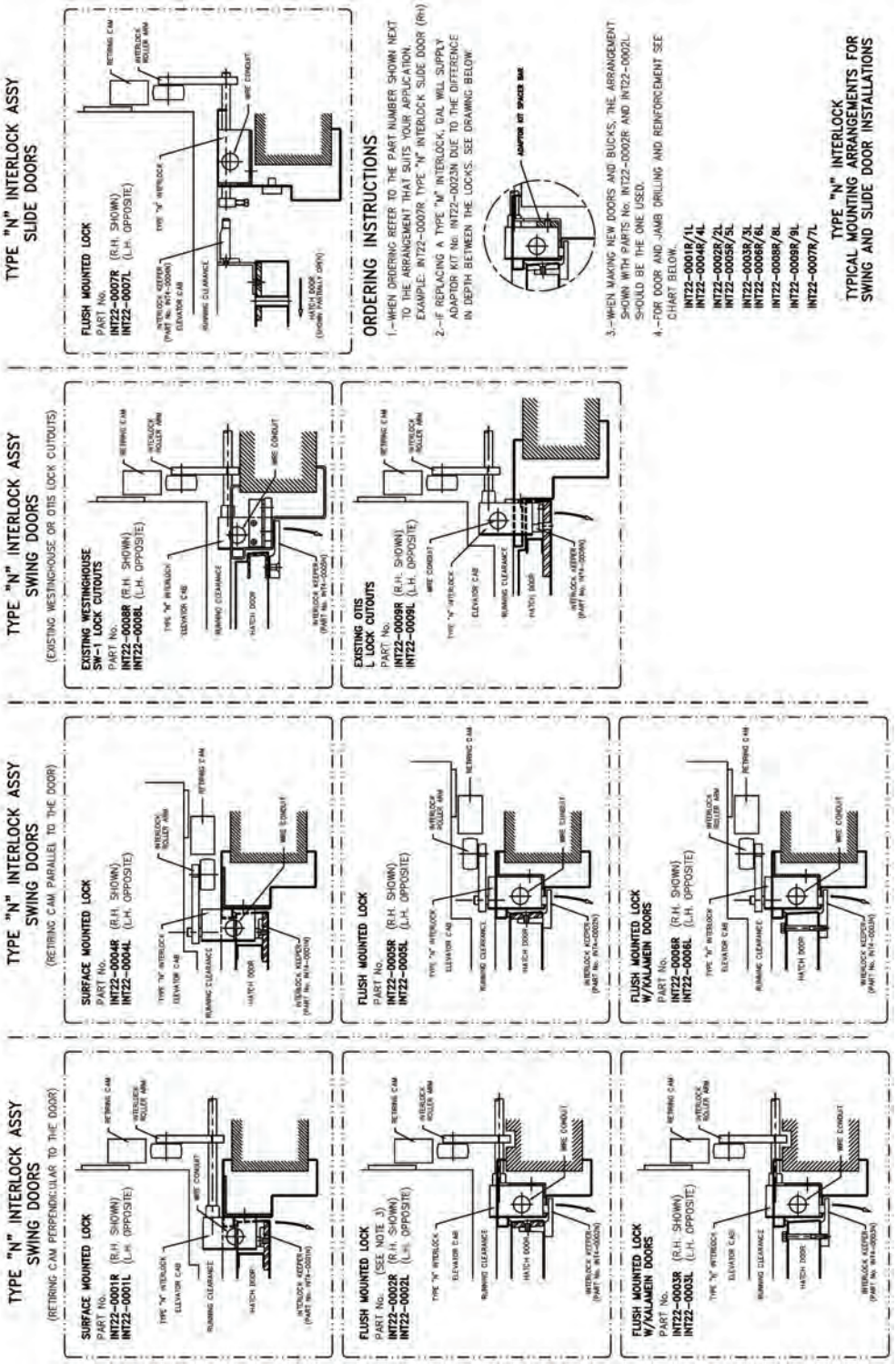
Part No.
INT13-0001L/R

(*) Special Engineering Required

Interlock Assemblies (Manual Doors)

Conventional

N Interlock Mounting Arrangement



DOOR EQUIPMENT

Interlock Assemblies (Manual Doors)

Conventional

What G.A.L. Needs to Know For Ordering "N" Locks

- What model lock is being replaced: **"N" Interlock** or **"M" Interlock**
  - If **"M" interlock** is being replaced an adaptor kit is required: Part No. INT22-0023L/R
- Advise type of door: **"swing"** or **"slide"**
- Advise hand from outside of elevator looking in. What side is lock or strike jamb located: **"left"** or **"right"**
- What direction is the shaft pointing towards coming out of the switch box: **"side wall"** or **"back of elevator"**
- How long does the shaft need to be? If not standard length, is a shaft support (Part No. INT25-0011N) required?
- What keeper is required: **"Surface"**, **"Flush"**, **"Kalamein", etc.**
- Roller arm supplied is 4 1/2" C.L. Would a different size be needed instead? (See roller arm listing in table below)
- Mounting hardware is not supplied, due to varying field conditions.

N Interlock Standard Roller Arm Shaft Lengths

Standard length outside of box:

- Swing door, shaft from the back: 9" long
- Swing door, shaft from the side: 7" long
- Sliding door, shaft from the side: 6" long
- Sliding door, shaft from the back: 9" long
- Sliding door, shaft from the back: 8 ¼" long (Fig. 4B)
- Sliding door, shaft thru the cover: 2 ¾" long (Fig. 4)

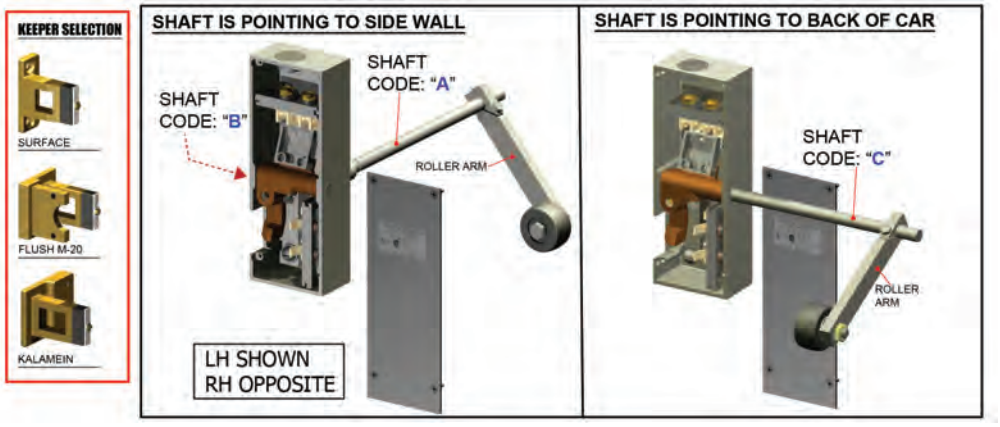
• **Extra charge:** If an installation requires a shaft to be longer than the standard length, an extra charge per foot will be added to the base price.

List Price: $10.00 per foot

Interlock Replacement Shaft Code

To replace an interlock shaft, match the shaft code to the shaft configuration shown in parts section on pg. 390

N Interlock (For Swing Doors)



N Interlock (For Swing Doors)

Shaft is pointing to side wall. Use M/N key.

Part No.	Keeper Type	Roller Arm
INT22-0001L/R	Surface	4 1/2" C.L.
INT22-0059L/R	Surface	3" C.L.
INT22-0068L/R	Surface	7 1/2" C.L.
INT22-0002L/R	Flush M-20	4 1/2" C.L.
INT22-0060L/R	Flush M-20	3" C.L.
INT22-0071L/R	Flush M-20	7 1/2" C.L.
INT22-0003L/R	Kalamein	4 1/2" C.L.
INT22-0069L/R	Kalamein	7 1/2" C.L.

N Interlock (For Swing Doors)

Shaft is pointing to back of car. Use M/N key.

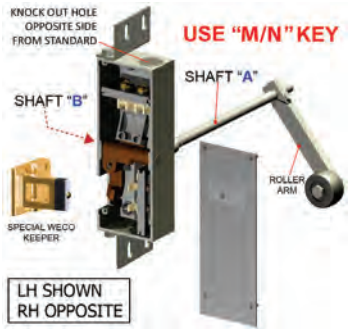
Part No.	Keeper Type	Roller Arm
INT22-0004L/R	Surface	4 1/2" C.L.
INT22-0061L/R	Surface	3" C.L.
INT22-0070L/R	Surface	7 1/2" C.L.
INT22-0005L/R	Flush M-20	4 1/2" C.L.
INT22-0072L/R	Flush M-20	7 1/2" C.L.
INT22-0006L/R	Kalamein	4 1/2" C.L.

(*) Special Engineering Required

Interlock Assemblies (Manual Doors)

Conventional

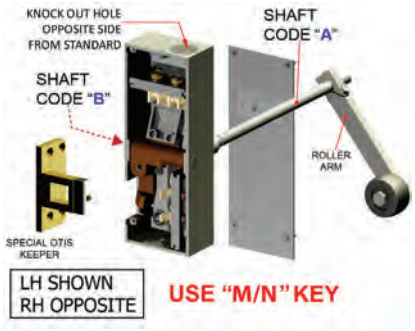
N Interlock (For Swing Doors) - WECO Replacement



For existing Westinghouse lock with special WECO keeper, shaft pointing to side wall. Includes mounting angles.

Part No.	Shaft Code	Roller Arm
INT22-0008L/R	"A" & "B"	4 1/2" C.L.

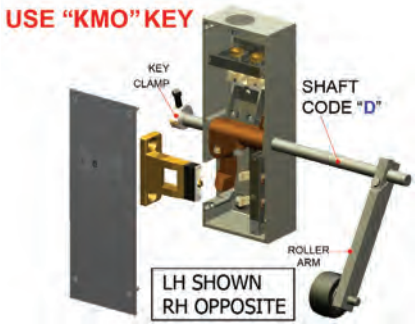
N Interlock (For Swing Doors) - OTIS



For existing OTIS "L" lock with special OTIS keeper, shaft pointing to side wall.

Part No.	Shaft Code	Roller Arm
INT22-0009L/R	"A" & "B"	4 1/2" C.L.

N Interlock (For Sliding Doors) - Standard



With surface keeper, shaft pointing to side wall.

Part No.	Shaft Code	Roller Arm
INT22-0007L/R	"D"	4 1/2" C.L.

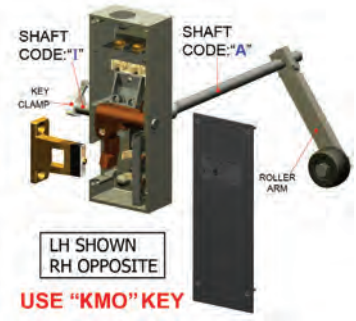
N Interlock (For Sliding Doors) - Fig. 4



With surface keeper, shaft thru cover pointing to back of car.

Part No.	Shaft Code	Roller Arm
INT22-0042L/R	"G" & "H"	4 1/2" C.L.

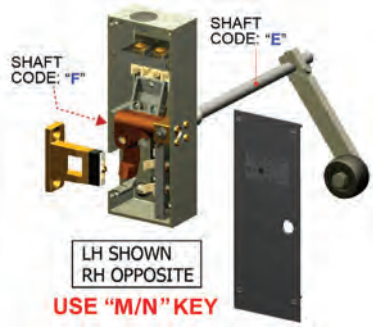
N Interlock (For Sliding Doors) - Fig. 4A



With sliding door keeper, shaft pointing out to the back of car.

Part No.	Shaft Code	Roller Arm
INT22-0043L/R	"A" & "I"	4 1/2" C.L.

N Interlock (For Sliding Doors) - Fig. 4B



With surface keeper, shaft pointing out to the back of car. Keyhole is within cover.

Part No.	Shaft Code	Roller Arm
INT22-0044L/R	"E" & "F"	4 1/2" C.L.

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Assemblies (Manual Doors)

"NHA" Housing Authority Type

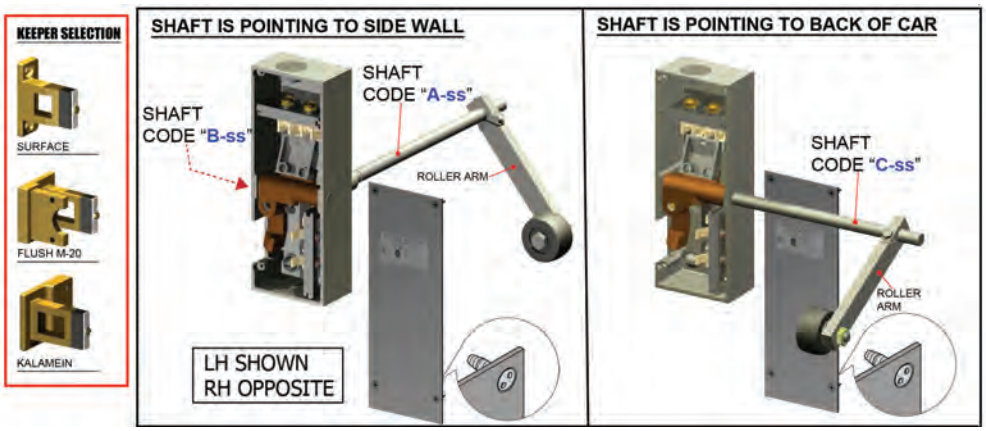
NHA Interlock Standard Roller Arm Shaft Lengths

• **Extra charge:** If an installation requires a shaft to be longer than the standard length, an extra charge per foot will be added to the base price. **List Price:** $10.00 per foot

Interlock Replacement Shaft Code

To replace an interlock shaft, match the shaft code to the shaft configuration shown in parts section on pg. 390

NHA Interlock (For Swing Doors)



• ***Supplied with stainless steel shafts and spanner screws on cover & keeper***
• Mounting hardware is not supplied due to varying field conditions.

NHA Interlock (For Swing Doors)

Shaft is pointing to side wall. Use M/N key.

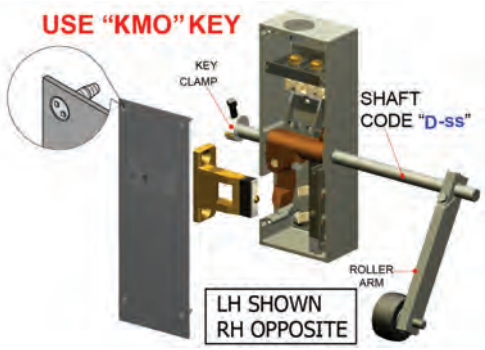
Part No.	Keeper Type	Roller Arm
INT22-0026L/R	Surface	4 1/2" C.L.
INT22-0027L/R	Flush M-20	4 1/2" C.L.
INT22-0028L/R	Kalamein	4 1/2" C.L.

NHA Interlock (For Swing Doors)

Shaft is pointing to back of car. Use M/N key.

Part No.	Keeper Type	Roller Arm
INT22-0029L/R	Surface	4 1/2" C.L.
INT22-0030L/R	Flush M-20	4 1/2" C.L.
INT22-0031L/R	Kalamein	4 1/2" C.L.

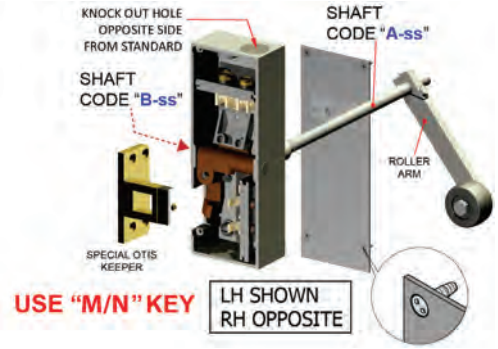
NHA Interlock (For Sliding Doors)



With surface keeper, shaft pointing to side wall.

Part No.	Shaft Code	Roller Arm
INT22-0032L/R	"D-ss"	4 1/2" C.L.

NHA Interlock (For Swing Doors) - OTIS



For existing OTIS "L" lock with special OTIS keeper, shaft pointing to side wall.

Part No.	Shaft Code	Roller Arm
INT22-0034L/R	"A-ss" & "B-ss"	4 1/2" C.L.

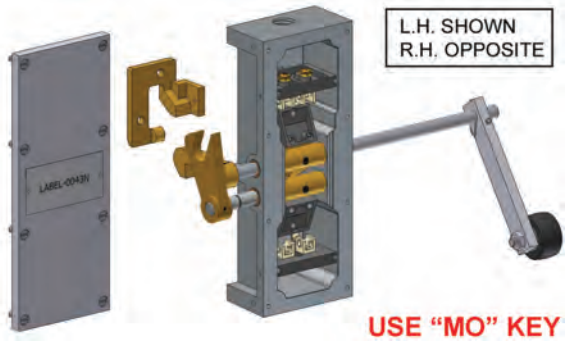
(*) Special Engineering Required

Interlock Assemblies (Manual Doors)

Retiring Cam Operated - Dust/Explosion Resistant

WX Interlock - Swing Door

INT18-0003L/R



CSA certified, NEMA 7 & 9, Class 1 Group D, Class II Group E, F, G. California approved # 4637-1, Pennsylvania # 4912. Not UL listed

WX Interlock - Slide Door

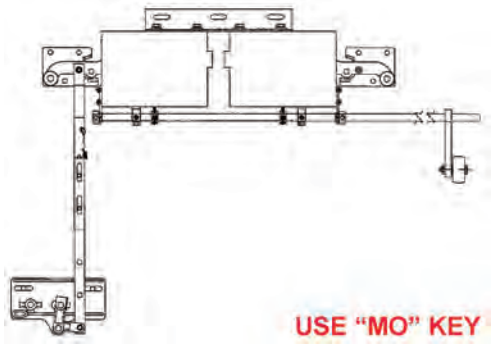
INT18-0004L/R



CSA certified, NEMA 7 & 9, Class 1 Group D, Class II Group E, F, G. California approved # 4637-1, PENN # 4912. Not UL listed

MOX-CP-RC Interlock

INT3-0037N*



Custom Engineered For C/P & 2SP/CP Doors. NOT NEMA 7, UL listed, nor CSA certified. B link supplied with stainless steel shaft. Hatch doors must be ungeared (no bumpers)

MOX-RC Interlock

INT3-0036L/R



Custom Engineered For S/S & 2/SP Doors. NOT NEMA rated, UL listed, nor CSA certified. With 11 1/2" long stainless steel shaft

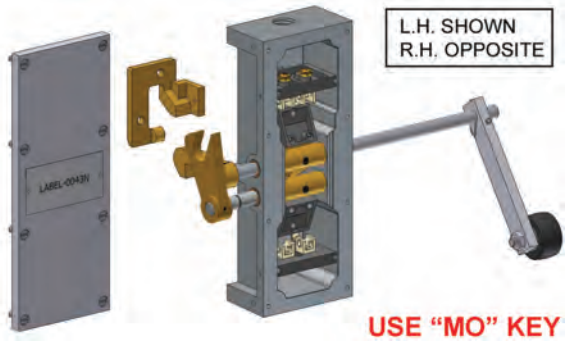
DOOR EQUIPMENT

Interlock Assemblies (Manual Doors)

Retiring Cam Operated - Water Resistant

WP Interlock - Swing Door

INT18-0001L/R



NEMA 4 and CSA certified, NOT UL listed

WP Interlock - Slide Door

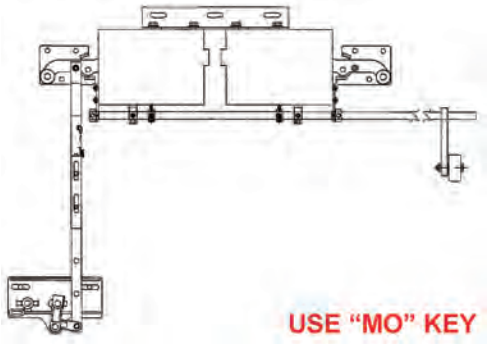
INT18-0002L/R



Note: NEMA 4 and CSA certified, NOT UL listed

MOW-CP-RC Interlock

INT3-0035N*



Custom Engineered For C/P & 2SP/CP Doors. All shafts are stainless steel. Locks have neoprene gaskets between cover and box. NOT NEMA rated, UL listed nor CSA certified. B Link supplied with stainless steel shaft. Hatch doors must be ungeared (no bumpers)

MOW-RC Interlock

INT3-0034L/R*



Custom Engineered For S/S & 2/SP Doors. All shafts are stainless steel 11 ½" long. Locks have neoprene gaskets between cover and box. NOT NEMA rated, UL listed nor CSA certified

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Accessories

Emergency Key Box and Parts

Flush Mounted



Note: Key not included with key box. Key is sold separately.

Part No.	Description
INT1H-0051N	Box, Flush/SS #4 Satin Emergency Key
INT1H-0052N	Box, Flush/SS Mirror Emergency Key
INT1H-0053N	Box, Flush/MZ #4 Satin Emergency Key
INT1H-0054N	Box, Flush/MZ Mirror Emergency Key
INT1H-0055N	Box, Flush/MZ #1 OXZ Emergency Key
INT1H-0056N	Box, Flush/MZ #2 OXZ Emergency Key
INT1H-0057N	Box, Flush/MZ #3 OXZ Emergency Key

Surface Mounted



Note: Key not included with key box. Key is sold separately.

Part No.	Description
INT1H-0044N	Box, Surface/SS #4 Satin Emergency Key
INT1H-0045N	Box, Surface/SS Mirror Emergency Key
INT1H-0046N	Box, Surface/MZ #4 Satin Emergency Key
INT1H-0047N	Box, Surface/MZ Mirror Emergency Key
INT1H-0048N	Box, Surface/MZ #1 OXZ Emergency Key
INT1H-0049N	Box, Surface/MZ #2 OXZ Emergency Key
INT1H-0050N	Box, Surface/MZ #3 OXZ Emergency Key

Hammer

INT1H-0172N



Hammer, Emergency Key Box Stainless Steel

Hammer

INT1H-0173N



Hammer, Emergency Key Box Muntz

Emergency Key Box Glass

INT1H-0171N



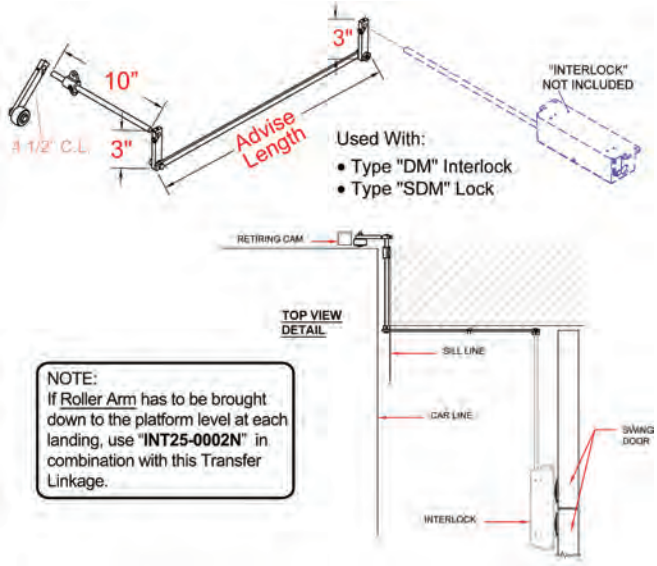
Glass, Red, Emergency Key Box, 2 1/2" x 2 1/2" x 3/32" Thick

DOOR EQUIPMENT

Interlock Accessories

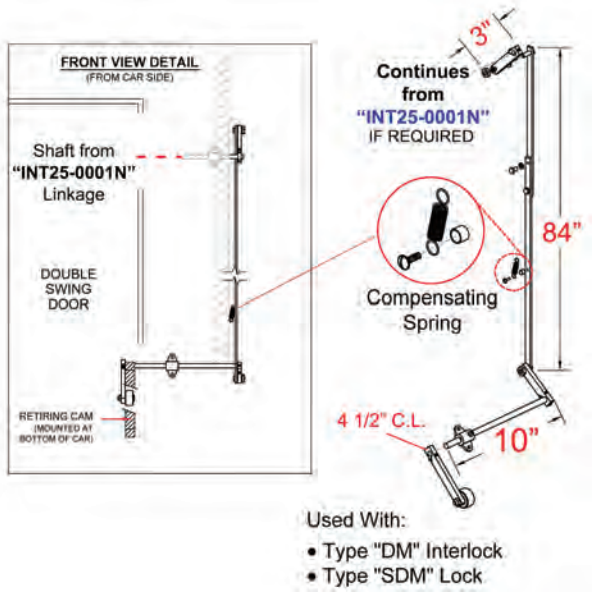
Transfer Linkage

INT25-0001N



Linkage, Interlock Transfer, Drawing No. 5087-S
Where Used: CALL GAL FOR MORE INFORMATION

INT25-0002N



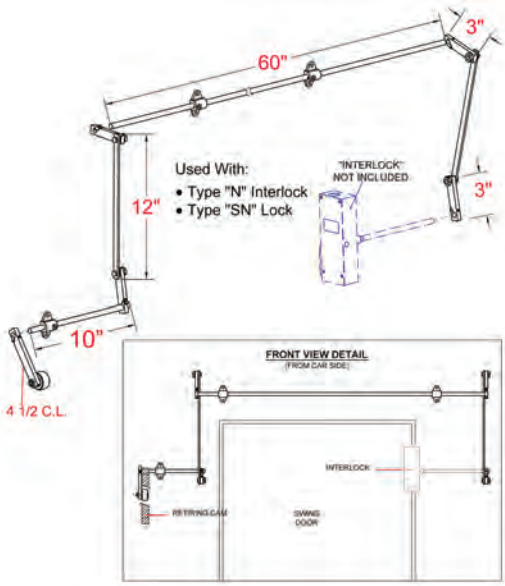
Linkage, Interlock Transfer, With Long Link & Compensating Spring, Drawing No. 5087-S
Where Used: CALL GAL FOR MORE INFORMATION

INT25-0003N



Linkage, Interlock Transfer, Drawing No. 5089-S
Where Used: CALL GAL FOR MORE INFORMATION

INT25-0004N



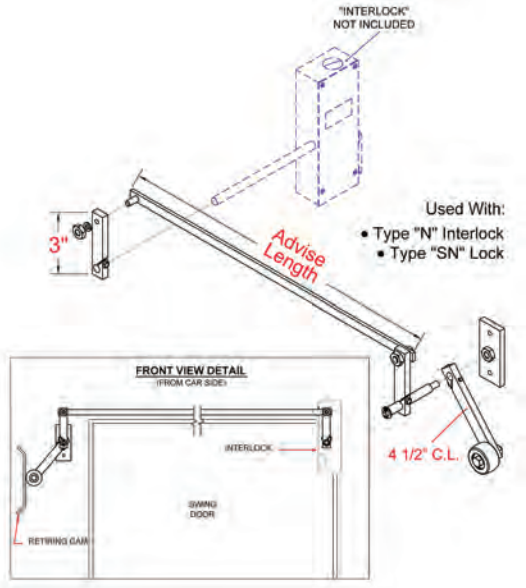
Linkage, Interlock Transfer, Drawing No. 5113-S Fig. 2
Where Used: CALL GAL FOR MORE INFORMATION

(*) Special Engineering Required

Interlock Accessories

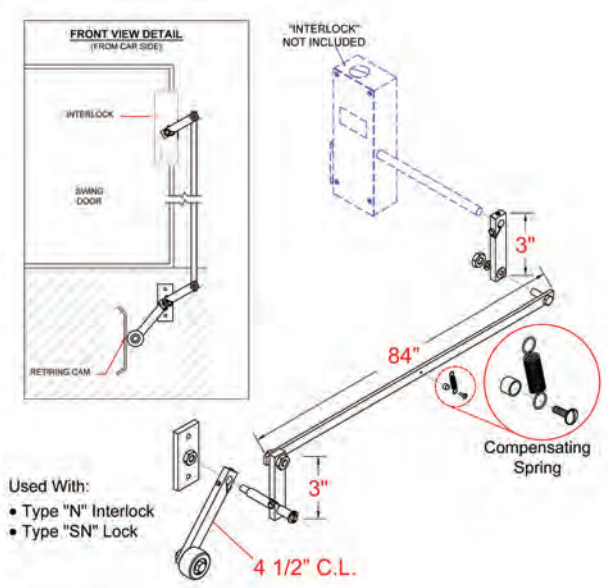
Transfer Linkage

INT25-0005N



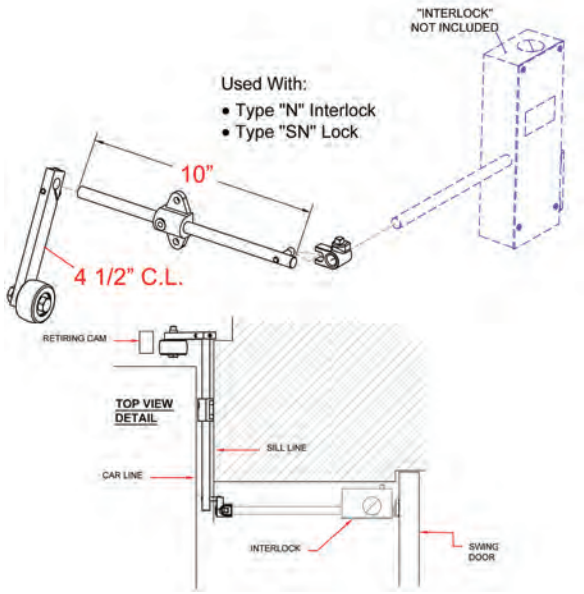
Linkage, Interlock Transfer, Drawing No. 5113-S Fig.3
Where Used: CALL GAL FOR MORE INFORMATION

INT25-0006N



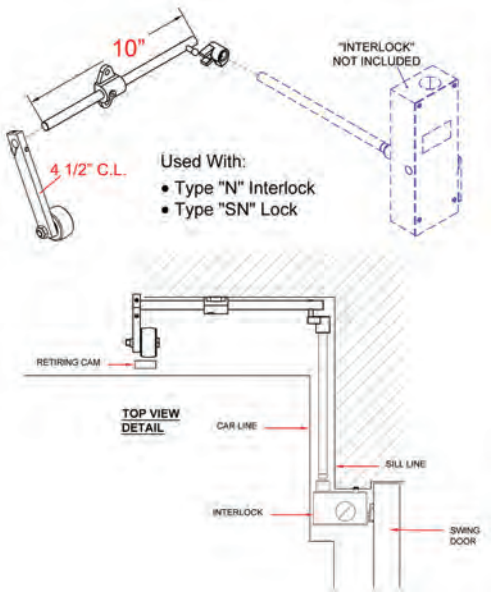
Linkage, Interlock Transfer, With Long Link & Compensating Spring, , Drawing No. 5113-S Fig. 3
Where Used: CALL GAL FOR MORE INFORMATION

INT25-0007N



Linkage, Interlock Transfer, Drawing No. 5129-S
Where Used: CALL GAL FOR MORE INFORMATION

INT25-0008N



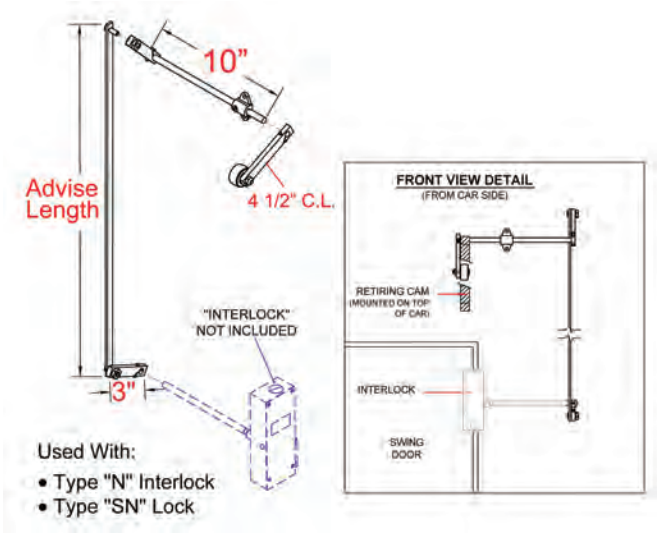
Linkage, Interlock Transfer, Drawing No. 5129-S1
Where Used: CALL GAL FOR MORE INFORMATION

DOOR EQUIPMENT

Interlock Accessories

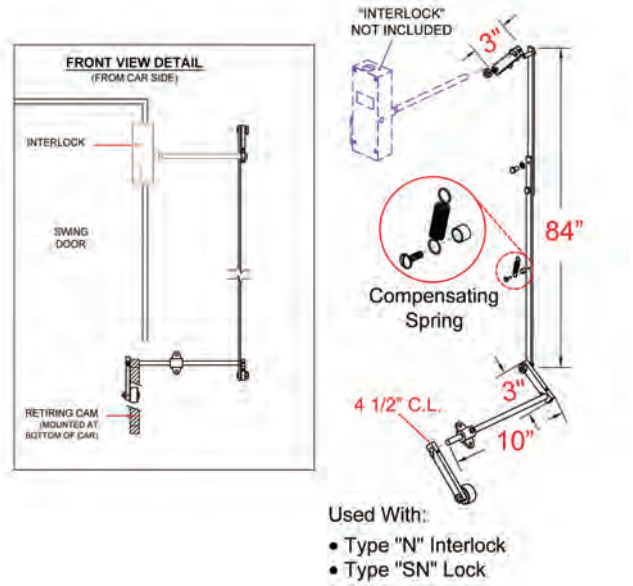
Transfer Linkage

INT25-0009N



Linkage, Interlock Transfer, With 12" Link, Drawing No. SK-3597A
Where Used: CALL GAL FOR MORE INFORMATION

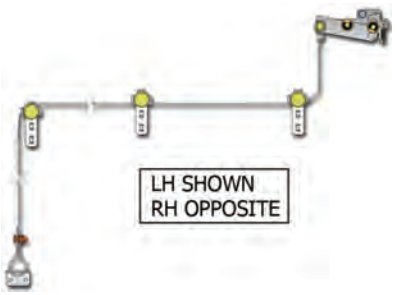
INT25-0010N



Linkage, Interlock Transfer, With Long Link & Compensating Spring, Drawing No. SK-3597A
Where Used: CALL GAL FOR MORE INFORMATION

Pit "MO" Interlock Access Device

INT1H-0500L/R



Pit "MO" Interlock Access Device Assembly

INT1H-0503N



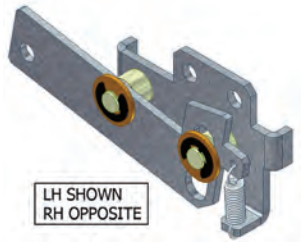
Cable Anchor Assembly, Pit "MO" Interlock Access

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Accessories

Pit "MO" Interlock Access Device

INT1H-0501L/R	INT1H-0502N	INT1H-0504N	SPG-0085N
			
Lever Assembly, Pit "MO" Interlock Access	Pulley Assembly, Pit "MO" Interlock Access	Hardware, Pit "MO" Interlock Access Mounting	Extension Spring For Pit "MO" Interlock Access Device, 1.25" Lg X 0.035 Dia Wire

Miscellaneous

Jumper (MO)	Jumper (M/N)	Jumper (M/N/MO)
INT1H-0035N	INT5-0029N	INT5-0042N
		
Jumper, MO Interlock Where Used: All MO Interlocks	Jumper, M/N Interlock Where Used: N, M, SM, SN	Jumper, M/N/MO Combo Interlock Where Used: All MO Interlocks, M, N, SM, SN

Keys (MO)	Keys (VHA-1)	Keys (M/N)
INT1H-0034N	INT1H-0129N	INT5-0030N
		
Key, MO Interlock Where Used: All MO, K Series, VR, DM, SDM, M, N, SM, SN Slide Doors Only, And Straight Arm Closers	Key, Type VHA-1 Emergency, For MOHA Interlocks Where Used: MOCPHA, MOHA	Key, M/N Interlock Where Used: M, N, NHA, SM, SN

DOOR EQUIPMENT

Interlock Accessories

Miscellaneous

Key Clamps (KMO)

INT1H-0157N



Description
Clamp Set, KMO Emergency Key
Where Used: All MO Interlocks

Key Clamps

INT5-0028N



Description
Clamp, Emergency Unlocking
Where Used: SN, SM, DM, DM-MH, NHA, SDM, M, N

Non-Reversing Device (HD)

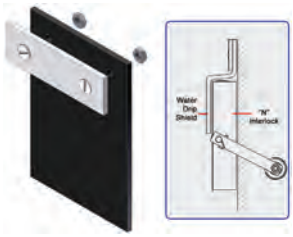
INT9-0002N



Description
Device, “HD” Non-Reversing, Used For Non-GAL Straight Arm Closers, With “HD” Lock

Water Deflector Shield (N)

INT22-0056N



Description
Shield, “N” Neoprene Interlock Water Deflector

Adaptor Kit (N/NHA)

INT22-0023L/R



Description
Adaptor Kit, “N/NHA” Interlock. Used For Replacing “M” Interlocks With A New “N” Interlock

Pull Strap (VR)

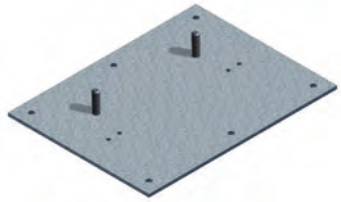
INT13-0013N



Description
Strap, “VR” 36” Lg. Pull, Cotton 2 Ply, Used With “VR” Lock To Pull Vertical Rise Door Closed

Reinforcement Plates

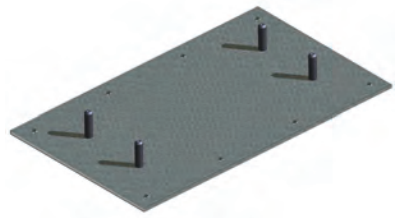
INT1H-0215N



Plate, Interlock Reinforcement With Studs, With (2) 1/4-20 x 1” Lg Self-Clinching Zinc Studs
Where Used: MOH, MOCPH

Reinforcement Plates

INT1H-0220N



Plate, Interlock Hat Mounting Reinforcement With Studs, With (4) 1/4-20 x 1” Lg Self-Clinching Zinc Studs
Where Used: MOH, MOCPH

Reinforcement Plates

INT3-0049N



Plate, Interlock Reinforcement With Studs, Yellow Zinc Dichromate With (2) 1/4-20 x 1” Lg Self-Clinching Zinc Studs
Where Used: MOWH

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Parts

Angles, Brackets, Channels, and Plates

Switch Mounting Angles

INT13-0003N



Angle, VR Interlock Mounting
Where Used: VR

INT1H-0041N



Angle, S/S - C/P "MOES" Mounting
Where Used: All MOM, MOXH, MO, MOCPH, MOCPHA, MOH, MOHA

INT1H-0042N



Angle, 2/SP - 2SP/CP "MOES" Mounting
Where Used: MOXH, MO, MOH, MOHA, MOM

INT1H-0342N



Angle, C/P MAC Interlock Mounting, For Standard GAL Tracks
Where Used: MOH

INT1H-0343L/R



Angle, 2/SP MAC Interlock Mounting, For Standard GAL Tracks
Where Used: MOH

INT3-0031N



Angle, S/S - C/P "MOES" Mounting, Yellow Zinc Dichromate
Where Used: MOWH

INT3-0032N



Angle, 2/SP "MOES" Mounting, Yellow Zinc Dichromate
Where Used: MOWH

INT1H-0184N



Bracket, MO Interlock Switch Mounting, S/S 20"-48" D.O., Lock Bottom Mounted 3 3/4" x 3 7/16"

INT1H-0070N



Channel, MO Lock Mounting 1 3/8"

INT2H-0053N



Channel, MOCP/MOH Lock Mounting 2 3/16"

INT2H-0058N



Channel, MOCP Lock Mounting, 7 15/16" Width x 3" Height

INT2H-0231N



Channel, MOCP Lock Mounting 2 3/4"

DOOR EQUIPMENT

Interlock Parts

Angles, Brackets, Channels, and Plates

Switch Mounting Plates

INT1H-0031N



Plate, Switch Track Mounting 2" CL, 3 3/4" x 2 7/8" # 11 Gauge
Where Used: MO Interlocks & Gate Switches

INT3-0021N



Plate, Switch Track Mounting 2" CL, 3 3/4" x 2 7/8" # 11 Gauge, Yellow Zinc Dichromate
Where Used: MO Interlocks & Gate Switches

INT1H-0058N



Plate, C/P 60"-144" D.O. 1" Offset Switch MO Mounting, 4 3/4" x 3" x # 11 Gauge

INT1H-0077N



Plate, 1" Offset Notched 2/SP-CP Lg Open, 4 3/4" x 3" x # 11 Gauge

Keeper Door Mounting Plates

INT1H-0071N



Plate, MO Keeper Mounting
Where Used: All MOM, MO, MOCPH, MOCPHA, MOH, MOHA

INT1H-0043N



Plate, MO Keeper Door Mounting, 10 3/4" x 3 1/4" x 10 Gauge
Where Used: All MOM, MOXH, MOH, MOCPH

INT1H-0072N



Plate, MO Keeper & Reel Closer Door Mounting, 10 3/4" x 3 1/4" x 10 Gauge
Where Used: All MOM, MOH, MOCPH

INT2H-0201L/R



Plate, MOH/MOCP Keeper Door Mounting - 3/4" Offset
Where Used: MOCPH, MOH

INT2H-0204L/R



Plate, MOH/MOCPH Keeper & Reel Closer Door Mounting, 1/2" Offset (Westinghouse)
Where Used: MOCPH

INT1H-0168N



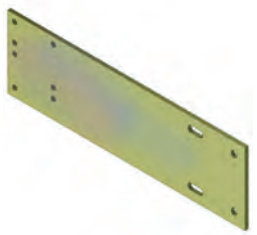
Plate, MOH Keeper Door Mounting, 3 1/4" x 10 3/16" x 11 Gauge (Westinghouse)
Where Used: MOH

INT3-0033N



Plate, MO Keeper Door Mounted, 10 3/4" x 3 1/4" x 10 Gauge, Yellow Zinc Dichromate
Where Used: MOWH

INT3-0034N



Plate, MO Keeper Door Mounting, Arranged For Reel Closer Yellow Zinc Dichromate
Where Used: MOWH

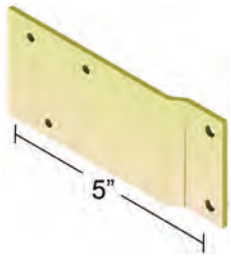
(*) Special Engineering Required

Interlock Parts

Angles, Brackets, Channels, and Plates

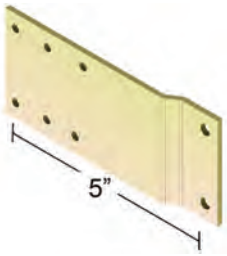
Keeper Mounting Plates

INT3-0048L



Plate, MO Keeper Mounting, For C/P 33”-59” D.O. (Water Resistant, Yellow Zinc Dichromate)
Where Used: MOWH

INT3-0048R



Plate, MO Keeper Mounting, For C/P 33”-59” D.O. (Water Resistant, Yellow Zinc Dichromate)
Where Used: MOWH

INT1H-0038L



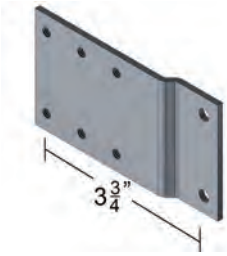
Plate, MO Keeper Mounting, For 2/SP HA 37”-72”, C/P 33”-59” D.O.
Where Used: MOCP, MOCPH, MOCPHA

INT1H-0038R



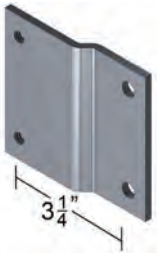
Plate, MO Keeper Mounting, For 2/SP HA 37”-72”, C/P 33”-59” D.O.
Where Used: MOCPH, MOCP

INT1H-0037N



Plate, MO Keeper Mounting, For 2/SP & 2/SP HA 30”-72”, 3/SP 41”-69”, 2SP/CP 58”-83” D.O.
Where Used: All MOM, MO, MOH, MOHA

INT1H-0039N



Plate, MO Keeper Mounting, For C/P 30”-32” D.O.
Where Used: MOCP, MOCPH, MOCPHA

INT1H-0040N



Plate, MO Keeper Mounting, For 2SP/CP 54”-57” D.O.
Where Used: All MOM, MOH

INT1H-0156N



Plate, MO Keeper Mountings, For 2/SP 33”-36” D.O.
Where Used: MO, MOH

INT1H-0132L/R



Plate, MO Keeper Mounting “OS”
Where Used: All MOM, MOH, MOCPH

INT1H-0345N



Plate, MO Keeper Mounting Round Door Special
Where Used: MOCPH, MOH

INT2H-0029N



Plate, MO Keeper Mounting “OS”, 9 3/16” x 2 1/2” x #11 Gauge C/P Hatch - 30”-34” D.O.
Where Used: MOCP, MOCPH

INT2H-0030N



Plate, MO Keeper Mounting “OS”, 8 3/16” x 2 1/2” x #11 Gauge C/P Hatch - 35”-59” D.O.
Where Used: MOCPH

DOOR EQUIPMENT

Interlock Parts

Angles, Brackets, Channels, and Plates

Keeper Mounting Plates

INT2H-0052N



Plate, MOCP/MOH Keeper Mounting, Existing Westinghouse & Otis 8 5/32" x 3 1/4" x #10 Gauge
Where Used: MOCP/MOH

Bars & Chains

Conventional

INT1H-0131L/R



MO Bar, Bracket, And Keeper Assembly
Where Used: MO Bar Lock, MOCP Bar Lock

INT1H-0219N



Tubing, MO Bar Only, 33 1/4" Lg
Where Used: MO Bar Lock, MOCP Bar Lock

INT15-0002N



Bar, K5 Interlock Upper Chain Bolt

INT15-0003N



Bar, K5 Interlock Lower Operating

INT16-0009N



Bar, K1/K5 Interlock Locking

INT16-0010N



Bar, K Interlock Locking

INT15-0008N



Anchor Kit, K5 Interlock Chain, With 72" Chain

INT15-0007N



Anchor, K5 Interlock Chain

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Parts

Bars & Chains

Conventional

CHN-0013N



Chain, K5 Interlock #2 End Welded Sash 36" Lg, Copper Plated

CHN-0014N



Chain, K5 Interlock #2 End Welded Sash 72" Lg, Copper Plated

Cams

Conventional

INT13-0006L/R



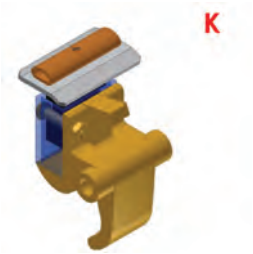
Cam Assembly, VR Interlock

INT16-0007N



Cam, K1/K5 Interlock Contact

INT16-0008N



Cam, K Interlock Contact

INT5-0012L/R



Cam Locking, M Interlock

INT22-0050L/R



Cam Locking, "N" Interlock Slide Door, Short, Fig. 4 & 4B

INT7-0004N



Cam, DM/DM-MH Interlock Locking

DOOR EQUIPMENT

Interlock Parts

Cams

Vandal Resistant/Dust/Explosion Resistant

INT22-0016L/R



Cam Locking, N/NHA Interlock

INT18-0020N



Cam, WP/WX Retiring Cam Contact

INT18-0021N



Cam, WP/WX Door Contact

Latch Assemblies & Parts

Conventional

INT13-0005L/R



Locking Bolt Assembly, VR Interlock

INT13-0009L/R



Latch Assembly, VR Interlock

INT13-0010N



Latch, VR Interlock Center

INT13-0012N



Link, VR Interlock Connecting

INT7-0016N



Latch, Mechanical Hold Snap
Where Used: DM-MH, SDM-MH

INT7-0017N



Keeper, Mechanical Hold
Where Used: SDM, DM

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Parts

Cams and Latch Assemblies

Dust/Explosion Resistant

INT18-0022L/R



Cam, WP/WX Swing Door, Door Forked

INT18-0024L/R



Cam, WP/WX Slide Door, Door Forked

INT18-0023L/R



Latch, WP/WX Swing Door

INT18-0025L/R



Latch, WP/WX Slide Door

Contacts

Contact Kits

INT9-0004N



Contact Kit, HD Interlock

INT5-0014N



Contact Kit, M Interlock Upper

INT5-0015N



Contact Kit, M Interlock Lower
Where Used: M, SM, CSM

INT2H-0017R



Contact Kit, MOCP-KT
Where Used: MOCP, MOCPH, MOCPH10, MOCPHA

INT1H-0036R



Contact Kit, MO-KT
Where Used: All MOM, MO, MOH

INT1H-0036L



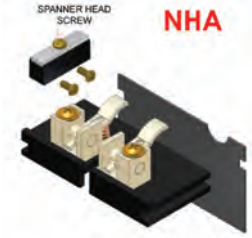
Contact Kit, MO-KT/MOCP-KT
Where Used: All MOM, MO, MO10, MOCP, MOCPH, MOH

INT22-0020N



Contact Kit, "N" Interlock Lower

INT22-0058N



Contact Kit, NHA Interlock Lower, With Spanner Head Screws

DOOR EQUIPMENT

Interlock Parts

Contacts

Contact Kits

INT22-0019N



Contact Kit, N/NHA Interlock Upper

INT13-0008N



Contact Kit, VR Interlock

INT18-0011N



Contact Kit, WP/WX Retiring Cam

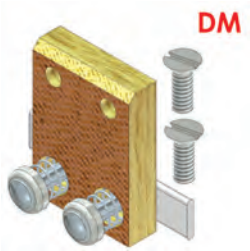
INT18-0013N



Contact Kit, WP/WX Door

Bridging Contacts

INT7-0006N



Bridging Contact, DM Interlock Cam
Where Used: DM, DM-MH

INT1H-0017N



Bridging Contact, MO Keeper
Where Used: All MO

INT5-0018N



Bridging Contact, M/N/NHA Upper Cam

INT5-0019N



Bridging Contact, M/N Keeper
Where Used: M, N, CSM, DM, SN, SM

INT3-0010N



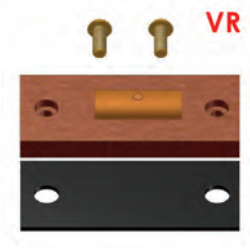
Bridging Contact, MOW/MOX, Yellow Zinc Dichromate

INT22-0057N



Bridging Contact, NHA Keeper, With Spanner Head Screws

INT13-0007N



Bridging Contact, VR Interlock Assembly

INT18-0015N



Bridging Contact, WP/WX Interlock

K, K1, K5 Interlock Contact Kits, Bridging Contact & Contact Base, Can Be Found On Pages 413-414

(*) Special Engineering Required

Interlock Parts

Contacts

Contact Bases

INT7-0007N



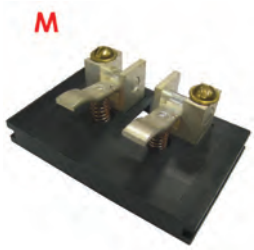
Contact Base, DM Interlock

INT5-0016N



Contact Base, M Interlock Upper
(Old # M-3)

INT5-0017N



Contact Base, M Interlock Lower,
(Old # M-2)
Where Used: M, SM, CSM

INT1H-0024L/R



Contact Base, MO Interlock
Where Used: All MOM, MO, MOH, MOCPH, MOCPH10 Left Hand

INT2H-0018R



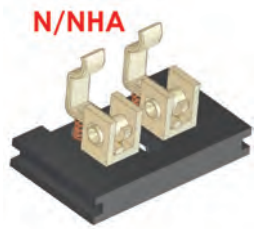
Contact Base, MOCP Interlock
Where Used: MOCP, MOCPH, MOCPH10, MOCPHA

INT3-0009N



Contact Base, MOW/MOX Interlock Assembly, Yellow Zinc Dichromate

INT22-0021N



Contact Base, N/NHA Upper

INT22-0022N



Contact Base, N/NHA Interlock Lower, Also Used On SN, SN-Z, & SN-C

INT10-0001N



Contact Base, “W” Retiring Cam, With Black Mark

INT10-0002N



Contact Base, “W” Door, With Red Mark

INT18-0012N



Contact Base, WP/WX Retiring Cam, With Black Mark

INT18-0014N



Contact Base, WP/WX Door, With Red Mark

K, K1, K5 Interlock Contact Kits, Bridging Contact & Contact Base, Can Be Found On Pages 413-414

DOOR EQUIPMENT

Interlock Parts

Contacts

Insulators

INS-0024N



Description
Insulator, N Interlock Upper, 2 13/32" x 1 15/16" x 1/32"
Where Used: N

INS-0025N



Description
Insulator, N Interlock Lower, 2 7/8" x 1 11/16" x 1/32"
Where Used: N

Covers

INT7-0003N



Cover, Type DM Interlock (Also Used in Type SDM)

INT7-0015N



Cover, Type DM-MH Interlock (Also Used in Type SDM-MH)

INT9-0003N



Cover, Type HD Interlock

INT16-0006N



Cover, Type K Interlock, Slide Door

INT16-0005N



Cover, Type K1 Interlock, Swing Door

INT14-0003N



Cover, Type K5 Interlock, Double Swing Door

INT5-0011N



Cover, Type M Interlock

INT1H-0014N



Cover, Type MO Interlock

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Parts

Covers

INT2H-0008N



Cover, Type MOCPH Interlock

INT2H-0023N



Cover, Type MOCPHA Interlock , With Spanner Head Screws

INT2H-0047N



Cover, Type MOCPH Interlock Clear Lucite Type (Used For Israel Jobs)

INT1H-0191N



Cover, Type MOH Interlock Clear Lucite, Includes Hardware Screws (Used For Israel Jobs)

INT1H-0127N



Cover, Type MOHA Interlock, With Spanner Head Screws

INT3W-0008L/R



Cover, Type MOW Interlock GW Gate Switch, With Hardware & Gasket
Where Used: MOWH, GW

INT3X-0008L/R



Cover, Type MOX Interlock GX Gate Switch, Yellow Zinc Dichromate, With Hardware
Where Used: MOXH, GX

INT22-0015N



Cover, Type “N” Interlock

INT22-0048L/R



Cover, Type “N” Interlock Slide Door, Fig. 4

INT22-0049L/R



Cover, Type “N” Interlock Slide Door, Fig. 4B

INT22-0041N



Cover, Type “NHA” Interlock, With Spanner Head Screws

INT13-0004N



Cover, Type VR Interlock

DOOR EQUIPMENT

Interlock Parts

Covers

INT13-0011L/R



Cover, Type VR Interlock Latch

INT18-0009N



Cover, Type WP Interlock, With Gasket & Hardware

INT18-0010N



Cover, Type WX Interlock, With HDW Hardware

Keeper Assemblies

INT1H-0016L/R



Keeper Assembly, MO Interlock
Where Used: MO, MOCPH, MOH, MOM

INT23-0009L/R



Keeper Assembly, MOH10 Interlock

INT23-0010L/R



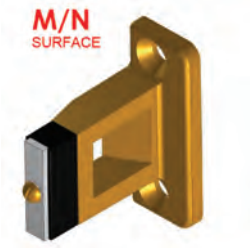
Keeper Assembly, MOHRD10 Interlock, Keeper Bent For Round Elevators

INT2H-0015N



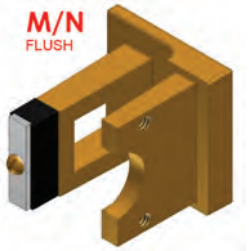
Keeper Fixed, MOCP Interlock

INT4-0001N



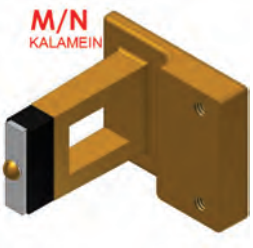
Keeper, M/N Interlock Swing Door, Surface Mounted
Where Used: SN-C, CSM, M, N, SM, SN,

INT4-0002N



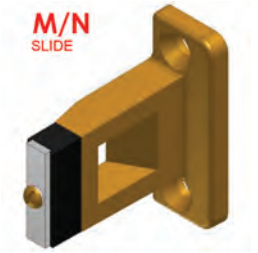
Keeper, M/N Interlock Swing Door, Flush Mounted
Where Used: M, N, SM, SN

INT4-0003N



Keeper, M/N Interlock Swing Door, Kalamein
Where Used: M, N, SM, SN

INT4-0004N



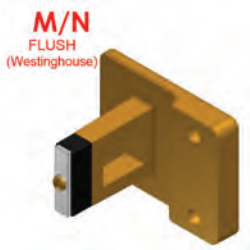
Keeper, M/N Interlock Slide Door
Where Used: M, N, SM, SN

(*) Special Engineering Required

Interlock Parts

Keeper Assemblies

INT4-0005N



Keeper, M/N Interlock Westinghouse Swing, For Existing Westinghouse
Where Used: M, N, SM, SN

INT4-0006N



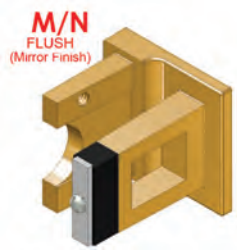
Keeper, M/N Interlock OTIS Swing Door, For Existing OTIS
Where Used: M, N

INT4-0007L/R



Keeper, "ME" Interlock Swing Door
Where Used: M or N When Replacing An "E" Interlock

INT4-0008N



Keeper, M/N Interlock Swing Mirror Finished, Flush Mounted
Where Used: M, N, SM, SN

INT4-0009N



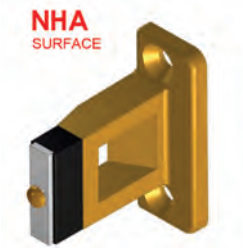
Keeper, M/N Interlock Swing Mirror Finished, Kalamein
Where Used: N, SM, M

INT7-0012N



Keeper, DM Interlock
Where Used: SDM, DM, DM-MH

INT4-0011N



Keeper, NHA Interlock Swing Door, Surface Mounted Lock With Spanner Head Screw
Where Used: NHA

INT4-0012N



Keeper, NHA Interlock Swing Door, Flush Mounted Lock With Spanner Head Screw
Where Used: NHA

INT3-0011L/R



Keeper Assembly, MOW/MOX Interlock, Yellow Zinc Dichromate
Where Used: MOWH, MOXH

INT18-0018L/R



Keeper, WP/WX Interlock Swing
Where Used: WX, WP

INT18-0019L/R



Keeper, WP/WX Interlock Slide
Where Used: WX, WP

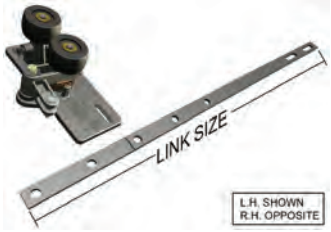
DOOR EQUIPMENT

Interlock Parts

Release Roller Assemblies (MO)

Conventional

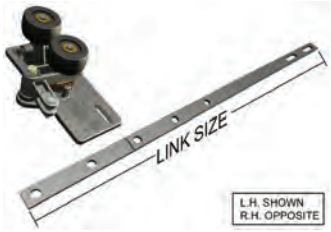
"MOH" Horizontal Releases



Note: Release roller assemblies for MOCP & MOCPH interlocks use left hand ONLY.

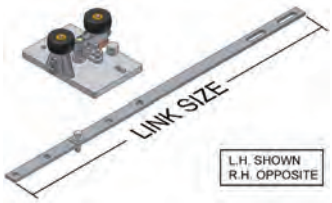
Part No.	S/S	2/SP	3/SP	C/P	2SP/CP	Link	Size
INT1H-0135L/R	20"-29"			33"-39"	33"-39"	"A"	14 3/4"
INT1H-0022L/R	30"-39"	30"-39"		40"-49"	40"-49"	"B"	18 3/4"
INT1H-0136L/R	40"-44"	40"-44"		50"-59"	50"-59"	"C"	22 3/4"
INT1H-0137L/R	45"-48"	45"-52"	30"-54"	60"-79"	60"-79"	"D"	26 3/4"
INT1H-0138L/R		53"-60"	55"-64"	80"-83"	80"-83"	"E"	30 3/4"
INT1H-0139L/R		61"-72"	65"-69"			"F"	36 3/4"

"MOH" Horizontal Releases (Cut Down to 2 1/8")



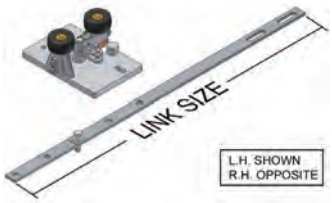
Part No.	S/S	2/SP	3/SP	C/P	2SP/CP	Link	Size
INT1H-0140L/R	20"-29"			33"-39"	33"-39"	"A"	14 3/4"
INT1H-0092L/R	30"-39"	30"-39"		40"-49"	40"-49"	"B"	18 3/4"
INT1H-0141L/R	40"-44"	40"-44"		50"-59"	50"-59"	"C"	22 3/4"
INT1H-0142L/R	45"-48"	45"-52"	30"-54"	60"-79"	60"-79"	"D"	26 3/4"
INT1H-0143L/R		53"-60"	55"-64"	80"-83"	80"-83"	"E"	30 3/4"
INT1H-0144L/R		61"-72"	65"-69"			"F"	36 3/4"

"MOM" Vertical Releases



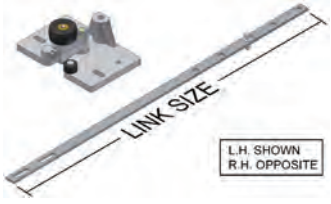
Part No.	S/S	2/SP	C/P	2SP/CP	Link	Size
INT1M-0135L/R	20"-29"		30"-39"	33"-39"	"A"	14 3/4"
INT1M-0033L/R	30"-39"	30"-39"	40"-49"	40"-49"	"B"	18 3/4"
INT1M-0136L/R	40"-44"	40"-44"	50"-59"	50"-59"	"C"	22 3/4"
INT1M-0137L/R	45"-48"	45"-52"	60"-79"	60"-79"	"D"	26 3/4"
INT1M-0138L/R		53"-60"	80"-83"	80"-83"	"E"	30 3/4"
INT1M-0139L/R		61"-72"			"F"	36 3/4"

"MOM" Vertical Releases (Cut Down to 2 1/8")



Part No.	S/S	2/SP	C/P	2SP/CP	Link	Size
INT1M-0140L/R	20"-29"		30"-39"	33"-39"	"A"	14 3/4"
INT1M-0092L/R	30"-39"	30"-39"	40"-49"	40"-49"	"B"	18 3/4"
INT1M-0141L/R	40"-44"	40"-44"	50"-59"	50"-59"	"C"	22 3/4"
INT1M-0142L/R	45"-48"	45"-52"	60"-79"	60"-79"	"D"	26 3/4"
INT1M-0143L/R		53"-60"	80"-83"	80"-83"	"E"	30 3/4"
INT1M-0144L/R		61"-72"			"F"	36 3/4"

"MO" Single Roller Releases (Used For: MO Interlock)



Part No.	S/S	2/SP	C/P	2SP/CP	Link	Size
INT1H-0145L/R	20"-29"		33"-39"	33"-39"	"A"	14 3/4"
INT1H-0104L/R	30"-39"	30"-39"	40"-49"	40"-49"	"B"	18 3/4"
INT1H-0146L/R	40"-44"	40"-44"	50"-59"	50"-59"	"C"	22 3/4"
INT1H-0147L/R	45"-48"	45"-52"	60"-79"	60"-79"	"D"	26 3/4"
INT1H-0148L/R		53"-60"	80"-83"	80"-83"	"E"	30 3/4"
INT1H-0149L/R		61"-72"			"F"	36 3/4"

(*) Special Engineering Required

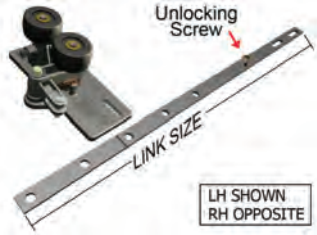
DOOR EQUIPMENT

Interlock Parts

Release Roller Assemblies (MO)

Vandal Resistant

Horizontal Releases (Used For: MOCPHA & MOHA Interlock)

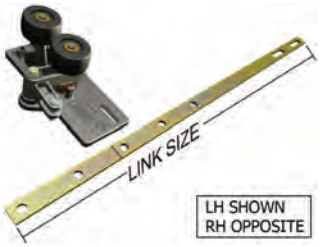


Note: Links should not protrude below shield. Cut off in field.

Part No.	S/S	2/SP	C/P	Link	Size
INT1H-0150L/R	24”-29”		30”-39”	“A”	14 3/4”
INT1H-0151L/R	30”-39”	30”-39”	40”-49”	“B”	18 3/4”
INT1H-0152L/R	40”-42”	40”-44”	50”-59”	“C”	22 3/4”
INT1H-0153L/R		45”-52”		“D”	26 3/4”
INT1H-0154L/R		53”-60”		“E”	30 3/4”
INT1H-0185L/R		61”-68”		“E”	30 3/4”
INT1H-0155L/R		69”-72”		“F”	36 3/4”

Water/Explosion Resistant

Horizontal Releases (Used For: MOXH & MOWH Interlock)

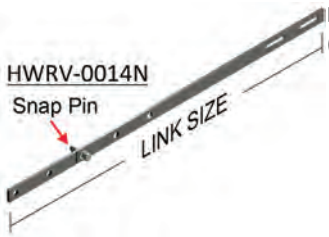


Features: Stainless steel shafts and yellow zinc dichromate plated ferrous parts

Part No.	S/S	2/SP	C/P	2SP/CP	Link	Size
INT3-0025L/R	22”-29”		33”-39”	33”-39”	“A”	14 3/4”
INT3-0019L/R	30”-39”	24”-39”	40”-49”	40”-49”	“B”	18 3/4”
INT3-0027L/R	40”-44”	40”-44”	50”-59”	50”-59”	“C”	22 3/4”
INT3-0028L/R	45”-48”	45”-52”	60”-72”	60”-72”	“D”	26 3/4”
INT3-0029L/R		53”-60”			“E”	30 3/4”
INT3-0030L/R		61”-72”			“F”	36 3/4”

Lower Links (MO Interlock)

Conventional



INT1H-0025N THRU INT1H-0030N are used for: All MOM, MO, MOCPH, MOH
(HWRV-0014N snap pin must be purchased separately.)

Part No.	S/S	2/SP	3/SP	C/P	2SP/CP	Link	Size
INT1H-0025N	20”-29”			33”-39”	33”-39”	“A”	14 3/4”
INT1H-0026N	30”-39”	30”-39”		40”-49”	40”-49”	“B”	18 3/4”
INT1H-0027N	40”-44”	40”-44”		50”-59”	50”-59”	“C”	22 3/4”
INT1H-0028N	45”-48”	45”-52”	30”-54”	60”-79”	60”-79”	“D”	26 3/4”
INT1H-0029N		53”-60”	55”-64”	80”-83”	80”-83”	“E”	30 3/4”
INT1H-0030N		61”-72”	65”-69”			“F”	36 3/4”

Lower Links (MOHA Interlock)

Vandal Resistant



Note: Interlocks using “HA” shield must have lower link cut off on job, so as not to extend below bottom of shield. All links come with unlocking screw. (HWRV-0014N snap pin must be purchased separately.)

Part No.	S/S	2/SP	C/P	Link	Size
INT1H-0112N	20”-29”		30”-39”	“A”	14 3/4”
INT1H-0113N	30”-39”	30”-39”	40”-49”	“B”	18 3/4”
INT1H-0114N	40”-42”	40”-44”	50”-59”	“C”	22 3/4”
INT1H-0115N		45”-52”		“D”	26 3/4”
INT1H-0116N		53”-68”		“E”	30 3/4”
INT1H-0118N		69”-72”		“F”	36 3/4”

DOOR EQUIPMENT

Interlock Parts

Lower Links (MOW & MOX Interlock)

Water/Explosion Resistant

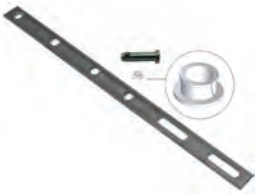


Note: All ferrous material are yellow zinc dichromate plated

Part No.	S/S	2/SP	C/P	2SP/CP	Link	Size
INT3-0012N	22”-29”		33”-39”	33”-39”	“A”	14 3/4”
INT3-0013N	30”-39”	24”-39”	40”-49”	40”-49”	“B”	18 3/4”
INT3-0014N	40”-44”	40”-44”	50”-59”	50”-59”	“C”	22 3/4”
INT3-0015N	45”-48”	45”-52”	60”-72”	60”-72”	“D”	26 3/4”
INT3-0016N		53”-60”			“E”	30 3/4”
INT3-0017N		61”-72”			“F”	36 3/4”

Lower Links (Special)

INT1H-0176N



Description
Link, MO Interlock Special Lower A, Fig. 1 (For Glass Door)
Where Used: MOH (INT1H-0174L/R), MOCPH

INT1H-0177N



Description
Link, MO Interlock Special Lower A, Fig. 2 (For Glass Door)
Where Used: MOH (INT1H-0175L/R), MOCPH

Upper Links (MO Interlock)

INT1H-0018N



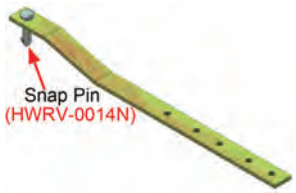
Link, MO & MOHA Interlock Assembly Upper, Link Size: 10 1/2” x 1/2” x 1/8”
Where Used: All MOM, MO, MOCPH, MOH

INT1H-0178N



Link, MO Interlock Special Upper (For Glass Door)
Where Used: MOH, MOCPH

INT3-0018N



Link, MOW/MOX Interlock Assembly Upper, Yellow Zinc Dichromate
Where Used: MOWH, MOXH

Custom Links (MO, MO10, HD)

INT9-0005N



Link, HD Interlock Upper
Where Used: HD

INT9-0006N



Link, HD Interlock Lower
Where Used: HD

INT23-0013N



Link, Type “MO10” Interlock, Link Size: 17 5/8”
Where Used: MO10

INT1H-0198N



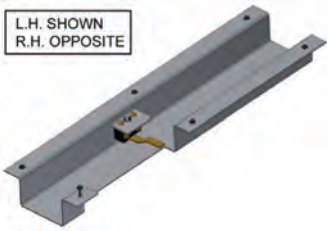
Tubing Link, MO Interlock Assembly Lower
Where Used: MOCPH, MOH, MOM

(*) Special Engineering Required

Interlock Parts

Shield With Emergency Unlocking Devices (MOHA, MOCPHA)

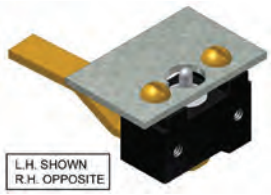
Vandal Resistant



Note: MOCPHA Interlock: Only ***LEFT*** handed shield is needed. A ***FIXED KEEPER*** is used on the right side.

Part No.	Shield Length	S/S	2/SP	C/P
INT1H-0119L/R	14 1/8”	24”-29”		30”-39”
INT1H-0120L/R	18 1/8”	30”-39”	30”-39”	40”-49”
INT1H-0121L/R	22 1/8”	40”-42”	40”-44”	50”-59”
INT1H-0122L/R	26 1/8”		45”-52”	
INT1H-0123L/R	30 1/8”		53”-60”	
INT1H-0124L/R	34 1/8”		61”-68”	
INT1H-0125L/R	38 1/8”		69”-72”	

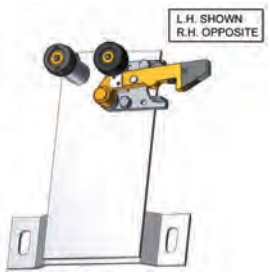
INT1H-0128L/R



Description
Emergency Unlocking Device
Where Used: MOCPHA, MOHA

Roller Release & Keeper Assembles With Door Mounting Plate

INT23-0006L/R



Release & Keeper Assembly, Type “MO10”

INT23-0007L/R



Release & Keeper Assembly, Type “MOH10”

INT23-0008L/R



Release & Keeper Assembly, Type “MOHRD10”
For Round Elevators

Roller Release Spacers (MO)



Part No.	MO Roller Release
INT1H-0197N	3/4”
INT1H-0094N	1 1/4”
INT1H-0095N	1 3/4”
INT1H-0096N	2 1/4”

Part No.	MO Roller Release
INT1H-0097N	2 3/4”
INT1H-0193N	3 1/4”
INT1H-0194N	3 3/4”
INT1H-0202N	4 1/4”

DOOR EQUIPMENT

Interlock Parts

Keeper Spacer (MO, MOW, MOX)

INT3-0020N



Description
Spacer, MOW/MOX Interlock Keeper, Yellow Zinc Dichromate
Where Used: MOWH, MOXH

Rollers (MO)

Conventional/Water/Explosion Resistant

INT1H-0023N



Roller & Shaft, MO Interlock

INT1H-0093N



Roller & Shaft, MO Cut Down

INT23-0012N



Roller & Shaft, MO10 Interlock, Movable Roller

INT3-0023N



Roller & Shaft, MOW/MOX Interlock, Yellow Zinc Dichromate

Roller Arms (M/N)

INT5-0024N



Arm & Roller, 3" CL

INT5-0025N



Arm & Roller, 4 1/2" CL

INT5-0026N



Arm & Roller, 7 1/2" CL

INT5-0027N



Roller & Bolt, M/N Roller Arm

Shaft Supports

Conventional

INT7-0011N



Support, DM/SDM Interlock Shaft, Includes Nylon Bushing
Where Used: DM-MH, DM, SDM

INT22-0066N



Support, N Interlock Shaft With Bushing For Wide Jamb (Drawing # 8432)
Where Used: N

INT25-0011N



Shaft Support, Bearing Block For Transfer Linkage & Lock and "N", "SN" Interlocks
Where Used: Transfer Linkage and Manual "N" & "SN" Locks

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Parts

Switch Assemblies

Conventional

INT1H-0013L/R



Switch Assembly, MO Interlock
Where Used: MO, MOH, MOH10, MOHRD10, MOM

INT1H-0190L/R



Switch Assembly, MO Interlock, With Clear Lucite Cover
Where Used: MOH

INT2H-0046N



Switch Assembly, MOCP Interlock, With Clear Lucite Cover
Where Used: MOCPH

INT2H-0007N



Switch Assembly, MOCP Interlock
Where Used: MOCP, MOCPH, MOCPH10

INT2H-0022N



Switch Assembly, MOCPHA Interlock
Where Used: MOCPHA

INT7-0002N



Switch Assembly, DM Interlock
Where Used: DM

INT7-0014N



Switch Assembly, DM-MH Interlock
Where Used: DM-MH

INT13-0002L/R



Switch Assembly, VR Interlock
Where Used: VR

INT14-0002N



Switch Assembly, K5 Interlock
Where Used: K5

INT16-0003N



Switch Assembly, K1 Interlock
Where Used: K1

INT16-0004N



Switch Assembly, K Interlock
Where Used: K

INT19-0006N



Retrofit Kit, MOCPSH Interlock (Used To Convert An "MOCPSH" Interlock To A "MOCPH" Interlock)
Where Used: MOCPH

DOOR EQUIPMENT

Interlock Parts

Switch Assemblies

Conventional

INT2H-0010N



Arm, MOCP Rocker Assembly
Where Used: MOCP, MOCPH, MOCPH10, MOCPHA

INT2H-0011N



Plate, MOCP Rocker Arm, With Screw
Where Used: MOCPH

INT2H-0024N



Cam, MOCP Rocker Arm Lift Up
Where Used: MOCP, MOCPH

Vandal/Water/Dust/Explosion Resistant

INT18-0005L/R



Switch Assembly, WP Moisture Swing (NEMA 4 Rated And CSA Certified)

INT18-0006L/R



Switch Assembly, WP Moisture Slide (NEMA 4 Rated And CSA Certified)

INT18-0007L/R



Switch Assembly, WX Explosion Swing, (NEMA 7 & 9 Rated, Class 1 - Group D, and Class 2 - Groups E, F and G, UL Listed, And CSA Certified)

INT18-0008L/R



Switch Assembly, WX Explosion Slide, (NEMA 7 & 9 Rated, Class 1 - Group D, and Class 2 - Groups E, F and G, UL Listed, And CSA Certified)

INT1H-0126L/R



Switch Assembly, MOHA Interlock With Spanner Head Screws
Where Used: MOHA

INT3W-0007L/R



Switch Assembly, MOW Interlock, Yellow Zinc Dichromate (UL Listed, Not NEMA Rated Nor CSA Certified)
Where Used: MOWH

INT3X-0007L/R



Switch Assembly, MOX Interlock, Yellow Zinc Dichromate (NEMA 7 Rated, Class 1 - Group D), And UL Listed, But Not CSA Certified
Where Used: MOXH

INT3-0024L/R



Arm, MOW-MOX Interlock Rocker
Where Used: MOWH, MOXH

(*) Special Engineering Required

Interlock Parts

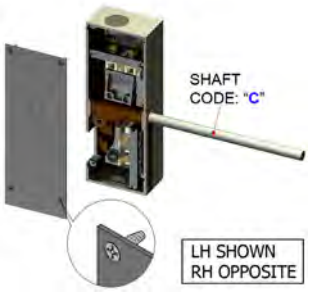
"N" & "NHA" Switch Assemblies (Swing)

INT22-0010L/R



Switch Assembly, "N" Interlock Swing Door

INT22-0011L/R



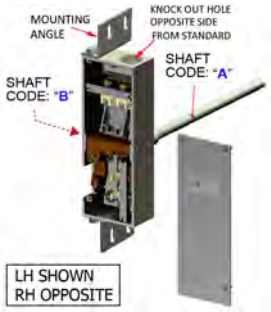
Switch Assembly, "N" Interlock Swing Door

INT22-0014L/R



Switch Assembly, "N" Interlock Swing Door, Replacement For OTIS "L" Lock

INT22-0013L/R



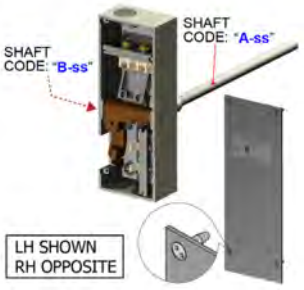
Switch Assembly, "N" Interlock Swing Door, Existing Westinghouse Lock

INT22-0037L/R



Switch Assembly, "NHA" Interlock Swing Door, Includes Stainless Steel Shaft

INT22-0036L/R



Switch Assembly, "NHA" Interlock Swing Door, Includes Stainless Steel Shaft

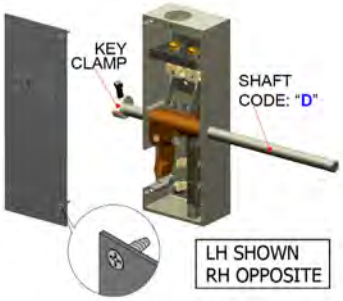
INT22-0040L/R



Switch Assembly, NHA Interlock Swing Door, Includes Stainless Steel Shaft, Replacement For OTIS "L" Lock

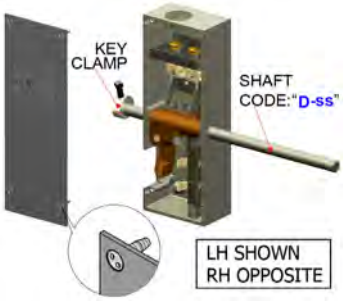
"N" & "NHA" Switch Assemblies (Slide)

INT22-0012L/R



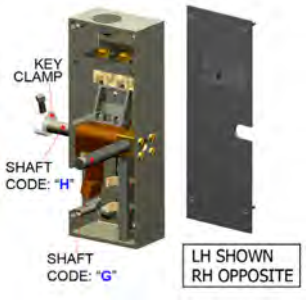
Switch Assembly, "N" Interlock Slide Door

INT22-0038L/R



Switch Assembly, "NHA" Interlock Slide Door, Includes Stainless Steel Shaft

INT22-0045L/R



Switch Assembly, "N" Interlock Slide Door, Figure 4

DOOR EQUIPMENT

Interlock Parts

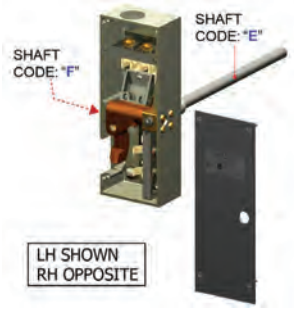
"N" & "NHA" Switch Assemblies (Slide)

INT22-0046L/R



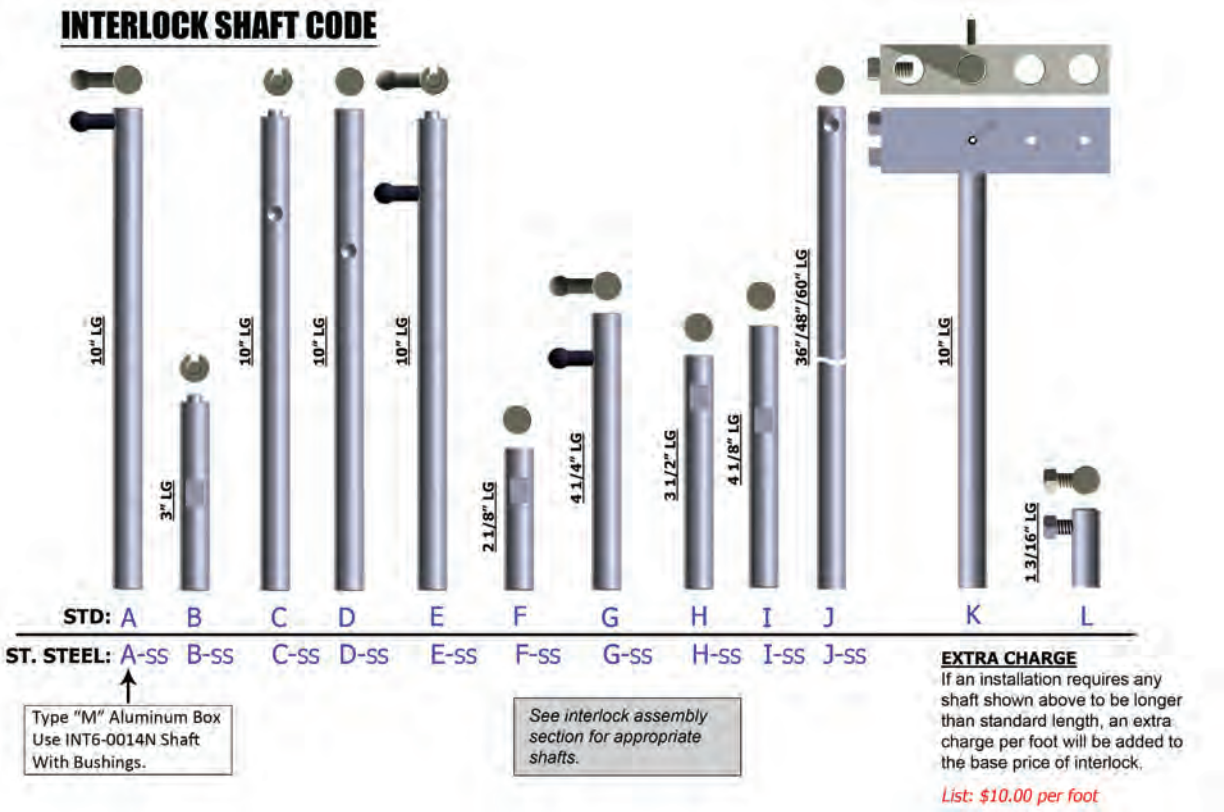
Switch Assembly, "N" Interlock Slide Door, Right Hand Installation. Figure 4A

INT22-0047L/R



Switch Assembly, "N" Interlock Slide Door, Right Hand Installation. Figure 4B

Shafts and Shaft Codes



(*) Special Engineering Required

Interlock Parts

Shafts and Shaft Codes

Conventional

Part No.	Shaft Code	Where Used:	Description
INT5-0022N	"A"	N, M	Shaft, "N/M" Interlock Ball Pin 10" Lg, Also Used On SN Lock & Contact (Bronze Box Only)
INT5-0020N	"B"	N, M	Shaft, "N/M" Interlock 3" Cam Swing Door
INT5-0021N	"C"	N, M	Shaft, "N/M" Interlock 10" Cam Swing Door, Also Used On SN Lock & Contact
INT5-0023N	"D"	N, M	Shaft, "N/M" Interlock Cam Slide Door 10" Lg, Also Used On SN Lock & Contact
INT22-0052N	"E"	N	Shaft, "N" Interlock Ball Pin 10" Lg
INT22-0055N	"F"	N, M	Shaft, "N/M" Interlock Cam Slide Door 2 1/8" Lg (5/8" To Center Flat)
INT22-0051N	"G"	N, M	Shaft, "N/M" Interlock Ball Pin 4 1/4" Lg
INT22-0053N	"H"	N, M	Shaft, "N/M" Interlock Cam Slide Door 3 1/2" Lg (5/8" To Center Flat)
INT22-0054N	"I"	N, M	Shaft, "N/M" Interlock Cam Slide Door 4 1/8" Lg (1 9/16" To Center Flat)
INT7-0008N	"J"	DM, SDM, DM-MH, SDM-MH	Shaft, DM Interlock 36" Lg
INT7-0018N	"J"	DM, SDM, DM-MH, SDM-MH	Shaft, DM Interlock 48" Lg
INT7-0019N	"J"	DM, SDM, DM-MH, SDM-MH	Shaft, DM Interlock 60" Lg
INT7-0009N	"K"	DM, SDM, DM-MH, SDM-MH	Shaft/Coupling, DM Interlock
INT7-0010N	"L"	DM, SDM, DM-MH	Shaft, DM Interlock 1 3/16" Lg Assembly

Vandal Resistant

Part No.	Shaft Code	Where Used:	Description
INT5-0040N	"A-ss"	NHA, MHA	Shaft, MHA/NHA Interlock Ball Pin 10" Lg, Stainless Steel
INT5-0038N	"B-ss"	NHA, MHA	Shaft, MHA/NHA Interlock Cam Swing Door, Stainless Steel 3"
INT5-0039N	"C-ss"	NHA, MHA	Shaft, MHA/NHA Interlock Cam Swing Door, Stainless Steel 10"
INT5-0041N	"D-ss"	NHA, MHA	Shaft, MHA/NHA Interlock Cam Slide Door 10" Lg, Stainless Steel

Hardware

Bumpers

INT16-0012N



Bumper, K/K1/K5 Interlock 7/8" O.D., Upper Rubber Interlock Bars 7/8" O.D. x 3/8" ID x 1/4" Lg
Where Used: K, K5, K1

INT16-0013N



Bumper, K/K1/K5 Interlock 1 1/8" O.D., Lower Rubber Interlock Bars 1 1/8"O.D. x 9/16" ID x 1/4" Lg
Where Used: K, K5, K1

INT1H-0019N



Bumper, Stem MO Interlock, 7/16" O.D. x 1/8" ID x 3/8" Lg.
Where Used: All MOM, MO, MO10, MOCP, MOCPH, MOCPH10, MOH, MOH10, MOHRD10

INT1H-0020N



Bumper, Keeper MO Interlock, 3/4" O.D. x 3/8" ID x 7/16" Lg.
Where Used: All MOM, MO, MO10, MOCP, MOCPH, MOCPH10, MOH, MOH10, MOHRD10

DOOR EQUIPMENT

Interlock Parts

Hardware

Bushings

HWBS-0001N



Bushing, Nyliner 1/4 ID Type 7, 4L2-FF SNAP-In Type 7
Where Used: All MOM, MOH, MO, MO10, MOCP, MOCPH, MOCPH10, MOH10, MOHRD10

HWBS-0010N



Bushing, Nyliner 3/8 ID Type 7-Short, 6L2-FF SNAP-In Type 7
Where Used: VR

HWBS-0023N



Bushing, Nyliner 3/8 ID Type 4, 6L8-D Sleeve Type 4
Where Used: VR

Mounting Hardware

INT1H-0032N



Hardware, MO Interlock Mounting

INT1H-0069N



Hardware, MO Bottom Mounted, 2 1/4" Roller Type "O.S." Hanger

INT2H-0016N



Hardware, MOCP Interlock Mounting

INT3-0022N



Hardware, MOW/MOX Interlock, Yellow Zinc Dichromate

INT23-0014N



Hardware, MOH10 Interlock Mounting

INT23-0015N



Hardware, MOHRD10 Interlock Mounting

INT22-0024N



Hardware, N/NHA Interlock Mounting

Screws

HWSC-0011N



Screw, 1/4-20 x 1 1/4" Hex HD Steel Plated, Cap 3/4" THD Steel Plated
Where Used: MOH, MOCPH

HWSC-0111N



Screw, 6-32 x 1/4" Flat HD Steel Plated, Slotted Machine Screw Plated
Where Used: MOH, MOCPH

HWSC-0129N



Screw, 6-32 x 5/16" Rend Head Slot Brass, Slotted Machine Screw
Where Used: VR, K, K1

HWSC-0167N



Screw, 1/4-20 x 1/2" Square Head
Where Used: DM

(*) Special Engineering Required

DOOR EQUIPMENT

Interlock Parts

Hardware

Screws

HWSC-0274N



Screw, 6-32 x 5/16" Phillips Pan Had, Thread Steel Plated Screw Type TT
Where Used: MOH, MOCPH

HWSC-0276N



Screw, 6-32 x 1/2" Phillip Flat HD Rolling, Thread Steel Plated Screw
Where Used: MOCPH

HWSC-0278N



Screw, 10-32 x 1/2" Flat Head Steel Plated
Where Used: VR

HWSC-0286N



Screw, 6-32 x 1/4" Phillips Flat HD Rolling, Undercut Steel Zinc Plated
Where Used: MOH, MOCPH

HWSC-0345N



Screw, 5/16-18 x 1/2" Hex Tap-Sems, Yellow Zinc Dichromate
Where Used: VR Interlocks

HWSC-0215N



Screw, 6-32 x 1/2" Flat Spanner HD Brass-Gal, Modified For "HA" Cover
Where Used: MOHA, MOCPHA

Pin

HWRV-0014N



Pin, MO Interlock Snap, 1/4" x 7/8" Lg.
Where Used: MOXH, MOCPH, MOH, MOWH

Guide

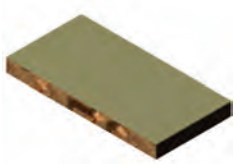
INT23-0011N



Guide, MO10 Interlock Link
Where Used: MOHRD10, MOCPH10,MOH10

Spacer

HDW-0347N



Corprene, Adhesive Tape, Spacer Cork (1/16 x 3/4 x 3/8") For Roller Release
Where Used: MOCPH, MOCPHA, MOH, MOHA

Retainer

INT22-0018N



Retainer, N/NHA Interlock Pin Spring
Where Used: N, NHA

Washer

HWWS-0090N



Washer, 3/16" ID-3/8" Bend Spring # 237-1
Where Used: MOCPH

Spring and Pin

INT16-0011N



Spring, K/K1/K5 Interlock Bar, 6 7/8" Lg x 1/2" O.D. With Pin

DOOR EQUIPMENT

Interlock Parts

Hardware

Springs

SPG-0023N



Spring, 1 5/8" Lg x 3/8" O.D.-0.035 Wire
Where Used: W, WP, WX

SPG-0035N



Spring, 1 1/2" Lg x 13/32" O.D.-0.060 Wire
Where Used: W, WP, WX

SPG-0030N



Spring, 1 7/8" Lg x 13/32" O.D.-0.050 Wire
Where Used: N, NHA, SN, SN-Z

SPG-0075N



Spring, 2" Lg x 15/32" O.D.-0.067 Wire- Cut From SPG-0040N-SST
Where Used: VR

SPG-0042N



Spring, 7 1/2" Lg x 13/16" O.D.-0.080 Wire
Where Used: K5

(*) Special Engineering Required

GAL
Locks, Contacts & Switches

DOOR EQUIPMENT

LOCKS w/ contacts

Type	Function
• SN	– For swing & sliding doors, with single contact
• SDM	– For double swing doors, with single contact
• SDM-MH	– For double swing doors, with single contact for each door, and mechanical holding devices
• MB	– For mechanical lock only, no contacts

These locks are not approved for passenger elevator use, and do not meet the national elevator code requirement for elevator interlocks as defined by ASME code.

DOOR CONTACTS

- **SDC** – Single door contact for top or side emergency exit use
- **SN-C** – For blind swing shaft way doors
- **AG** – For top or side emergency exit use
- **AG-HW** – For top exit with special Hollister Keeper

GATE SWITCHES

- **G** – For standard sliding doors
- **VG** – For vertical rising doors
- **VG-1** – For vertical rising doors-spring loaded
- **GW** – Water Resistant Gate Switch for standard sliding doors
- **GX** – Explosion Resistant Gate Switch for standard sliding doors

(Continued)

LOCK & DOOR CONTACT ASSEMBLIES
PAGE 404-407

GATE SWITCH ASSEMBLIES
PAGE 407-409

LIMIT SWITCH ASSEMBLIES
PAGE 410-411

MAGNETIC LIMIT SWITCH ASSEMBLY KIT
PAGE 411

SLACK & BROKEN CABLE SWITCH ASSEMBLIES
PAGE 412

LOCK, CONTACT & SWITCH PARTS
- Cams
- Shafts
- Contacts & Contact Kits
- Covers
- Keepers
- Mounting Plates
- Rollers & Arms
- Springs
- Hardware

PAGE 413-419

"G" Gate Switch



"SDC" Door Contact



"LS" Limit Switch



"SN" Lock



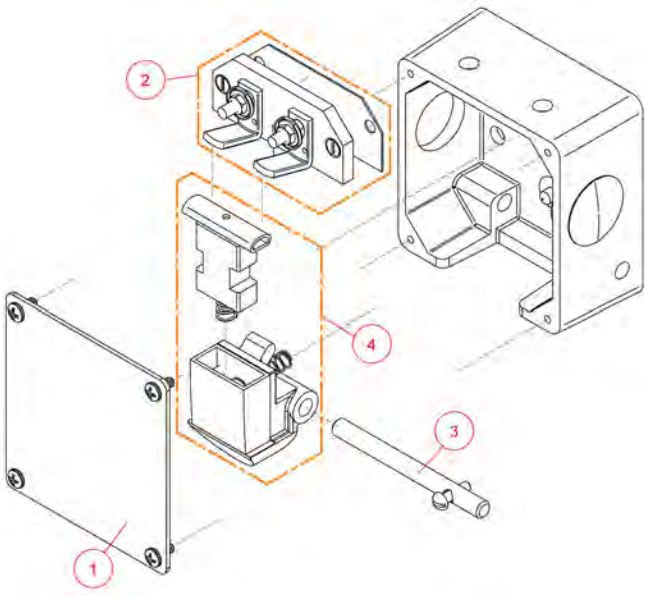
LIMIT SWITCHES

Type		Function
LS	–	N.C. contacts, back mounted
LSO	–	N.O. contacts, back mounted
LD	–	(2) N.C. contacts, back mounted
LD-HA	–	(2) N.C. contacts, back mounted, with gasket
LS-HA	–	N.C. contacts, back mounted, with gasket
LSO-HA	–	N.O. contacts, back mounted, with gasket
LTD-HA	–	(2) N.C. contacts, side mounted, with gasket
LTS	–	N.C. contacts, side mounted
LTS-HA	–	N.C. contacts, sided mounted, with gasket

Door Contact Isometric Drawing

SDC Single Door Contact

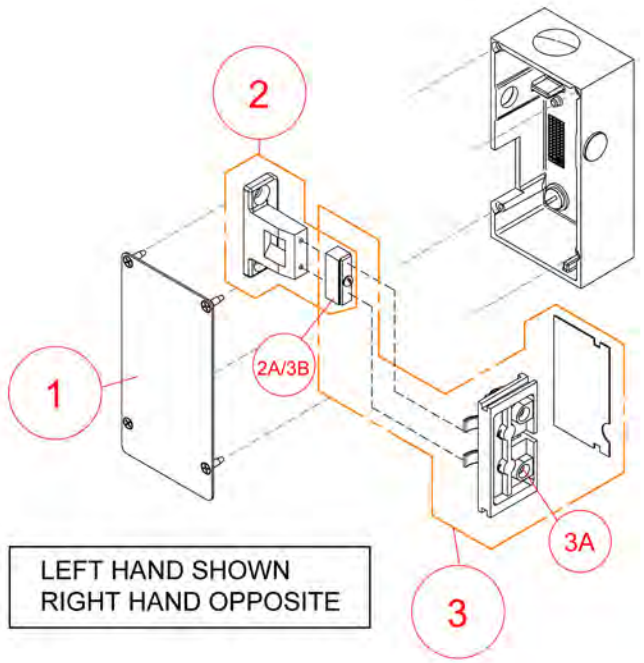
Type "SDC"



Part No.	Item No	Description
SW10-0002N	1	Cover, SDC Single Door (Page# 415)
SW10-0003N	2	Contact Base, SDC (Page# 413)
SW10-0006N	3	Shaft, SDC Door Contact (Page# 406)
SW10-0004N	4	Cam Assembly, SDC Bridging Contact (Page# 413)

SN-C Door Contact

Type "SN-C"



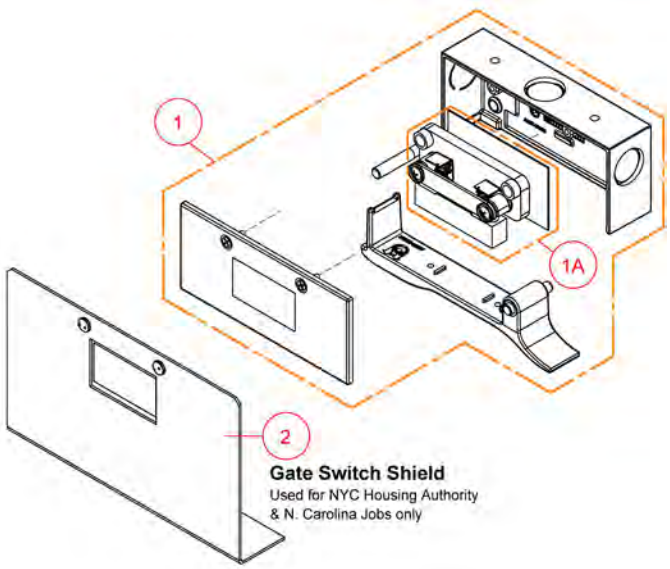
Part No.	Item No	Description
SW21-9001N	1	Cover, SN/SN-Z/SN-C Lock And Contact (Page# 415)
INT4-0001N	2	Keeper, M/N Interlock Swing Door (Page# 380-Interlock Section)
INT5-0019N	2A/3B	Bridging Contact, M/N Keeper (Page# 413 or 376-Interlock Section)
INT22-0020N	3	Contact Kit, "N" Interlock Lower (Page# 375-Interlock Section)
INT22-0022N	3A	Contact Base, "N/NHA" Interlock Lower (Page# 376-Interlock Section)

DOOR EQUIPMENT

Switch Isometric Drawing

Gate Switch

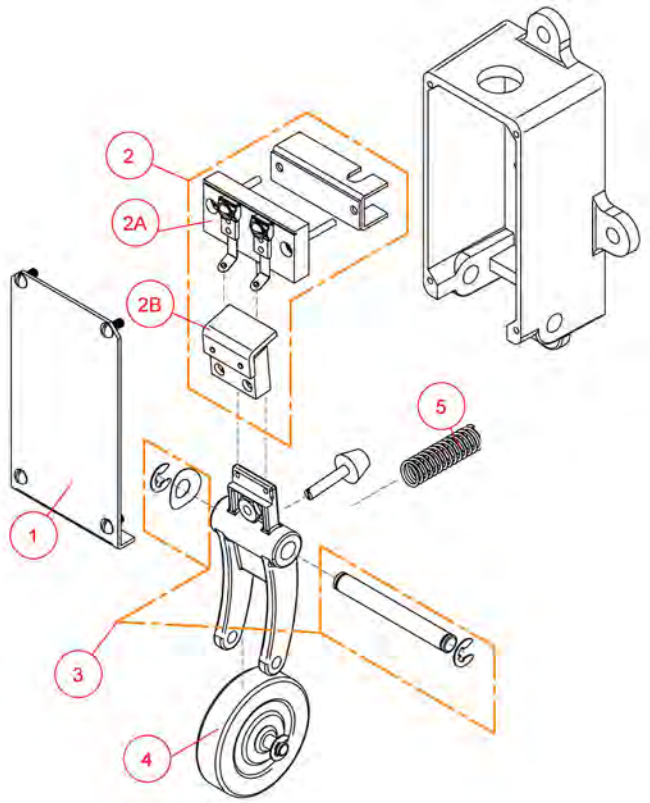
Type "G"



Part No.	Item No	Description
SW1-0001N	1	Switch Assembly, Gate (**Page#** 407)
SW1-0003N	1A	Contact Kit, G-Kit Gate Switch (**Page#** 414)
SW1-0041N	2	Shield Kit, Tamper Resistant Gate Switch (**Page#** 415)

Limit Switch

Type "LSO"



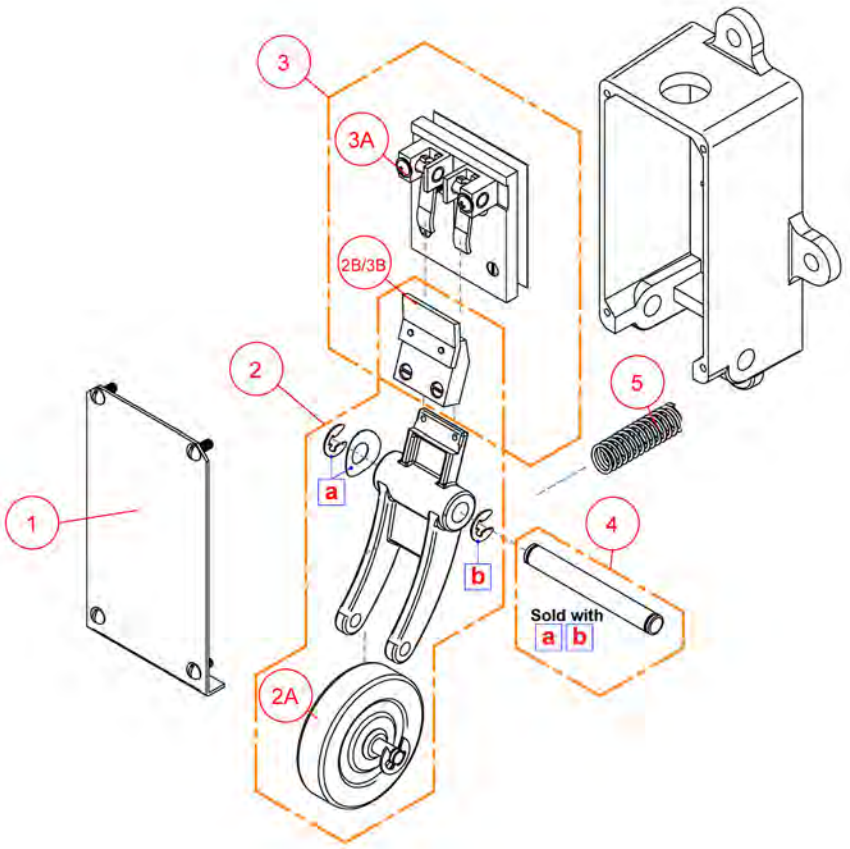
Part No.	Item No	Description
SW5-0018N	1	Cover, LSO Limit Switch Assembly, Water Resistant With Gasket (**Page#** 416)
SW5-0025N	2	Contact Kit, LSO-HA Limit Switch (**Page#** 414)
SW5-0024N	2A	Contact Base, LSO Limit Switch With Screws (X2) (**Page#** 414)
SW5-0023N	2B	Contact, LSO-HA Bridging With Screws (X2) (**Page#** 414)
SW5-0013N	3	Shaft, LS Switch Arm Pivot (**Page#** 406)
SW4-0009N	4	Roller & Shaft, Limit Switch (**Page#** 417)
SPG-0033N	5	Spring, 1 3/4" Lg X 17/32" OD (**Page#** 418)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Switch Isometric Drawing

Limit Switch

Type "LS"



Part No.	Item No	Description
SW5-0004N	1	Cover, LS/LD Limit Switch (**Page#** 416)
SW5-0005N	2	Arm, LS Limit Switch (**Page#** 418)
SW4-0009N	2A	Roller & Shaft, Limit Switch (**Page#** 417)
SW5-0011N	2B/3B	Contact, LS Bridging Assembly (**Page#** 415)

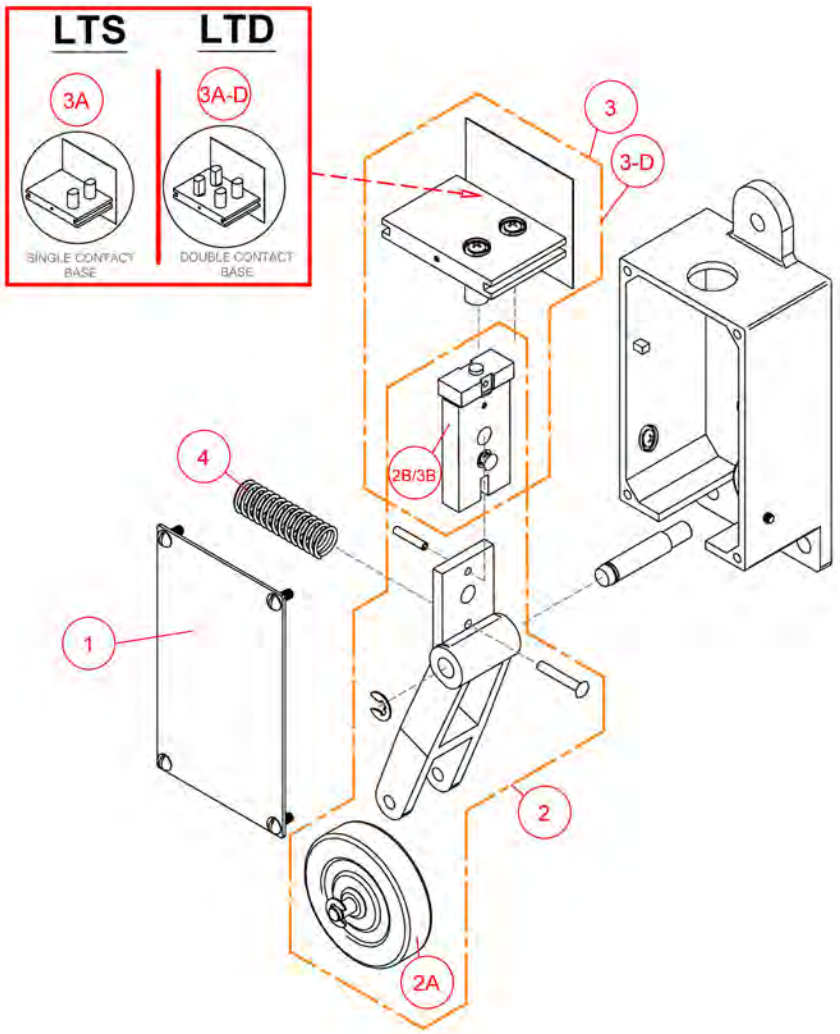
Part No.	Item No	Description
SW5-0016N	3	Contact Kit, LS Switch (**Page#** 414)
SW5-0012N	3A	Contact Base, LS Limit Switch With Insulator (**Page#** 414)
SW5-0013N	4	Shaft, LS Switch Arm Pivot (**Page#** 406)
SPG-0033N	5	Spring, 1 3/4" Lg X 17/32" OD (**Page#** 418)

DOOR EQUIPMENT

Switch Isometric Drawing

Limit Switch

Type "LTS" & "LTD"



Part No.	Item No	Description
SW4-0003N	1	Cover, LTS/LTD Limit Switch Assembly (**Page#** 416)
SW4-0004N	2	Arm, LTS/LTD Limit Switch (**Page#** 417)
SW4-0009N	2A	Roller & Shaft, Limit Switch (**Page#** 417)
SW4-0007N	2B/3B	Contact, LTS/LTD Bridging (**Page#** 414)
SW4-0013N	3	Contact Kit, LTS Switch (**Page#** 414)

Part No.	Item No	Description
SW4-0014N	3-D	Contact Kit LTD Switch (**Page#** 414)
SW4-0005N	3A	Contact Base Assembly, LTS Limit Single (**Page#** 414)
SW4-0006N	3A-D	Contact Base, LTD Limit Double (**Page#** 414)
SPG-0033N	4	Spring, 1 3/4" Lg X 17/32" OD (**Page#** 418)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Switch Isometric Drawing

Manual Reset Limit Switch

"Slack Cable" & "Roller Arm" Types

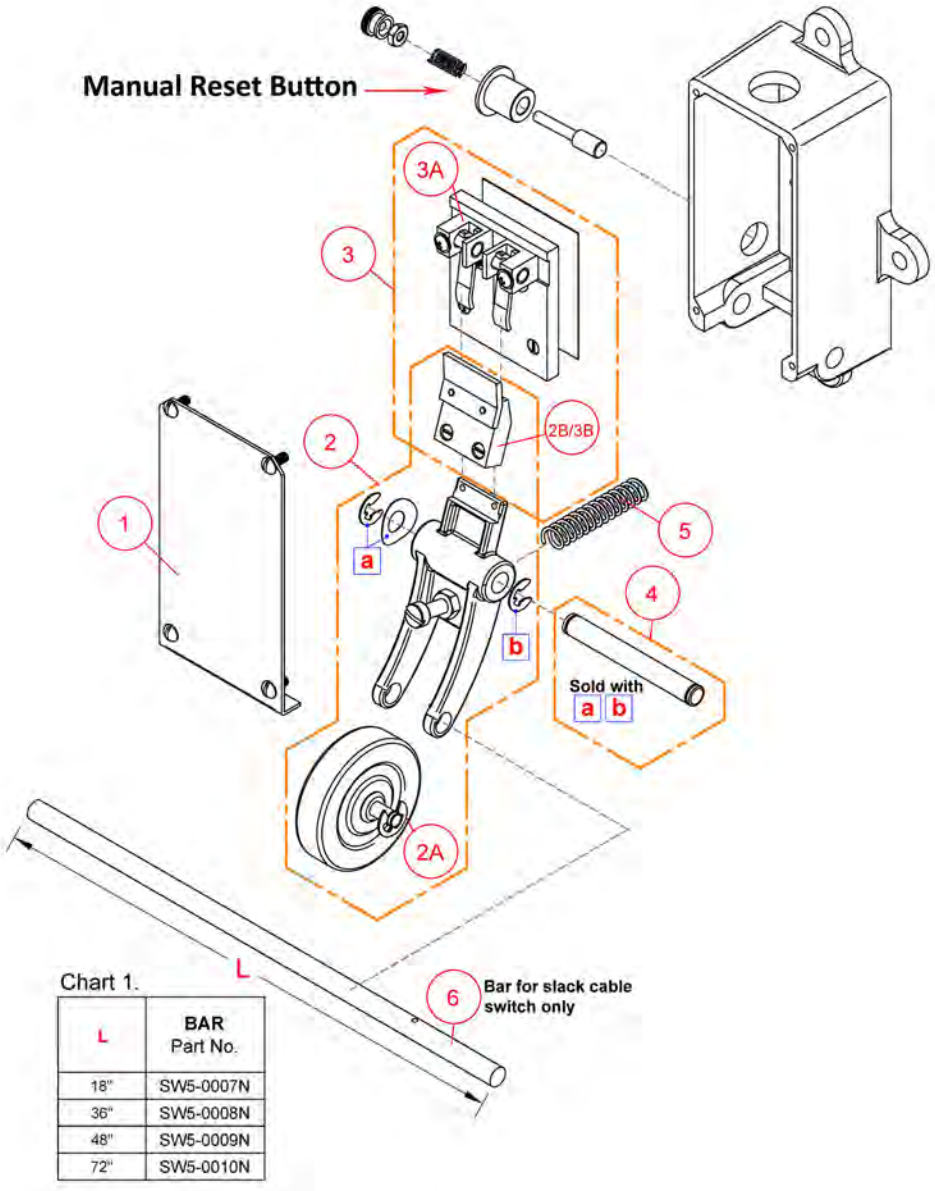


Chart 1.

L	BAR Part No.
18"	SW5-0007N
36"	SW5-0008N
48"	SW5-0009N
72"	SW5-0010N

Part No.	Item No	Description
SW5-0004N	1	Cover, LS/LD Limit Switch (**Page#** 416)
SW5-0006N	2	Arm, Slack Cable Switch (**Page#** 418)
SW5-0015N	2A	Roller & Shaft, Slack Cable (**Page#** 418)
SW5-0011N	2B/3B	Contact, LS Bridging Assembly (**Page#** 418)
SW5-0016N	3	Contact Kit, LS Switch (**Page#** 414)

Part No.	Item No	Description
SW5-0012N	3A	Contact Base, LS Limit Switch With Insulator (**Page#** 414)
SW5-0013N	4	Shaft, LS Switch Arm Pivot (**Page#** 406)
SPG-0027N	5	Spring, 2 1/8" Lg X 7/16" OD (**Page#** 418)
SEE CHART 1	6	Bar, Slack Cable Switch (**Page#** 412)

DOOR EQUIPMENT

Lock & Contact Isometric Drawing

Double Swing Door

Type "SDM & SDM-MH"

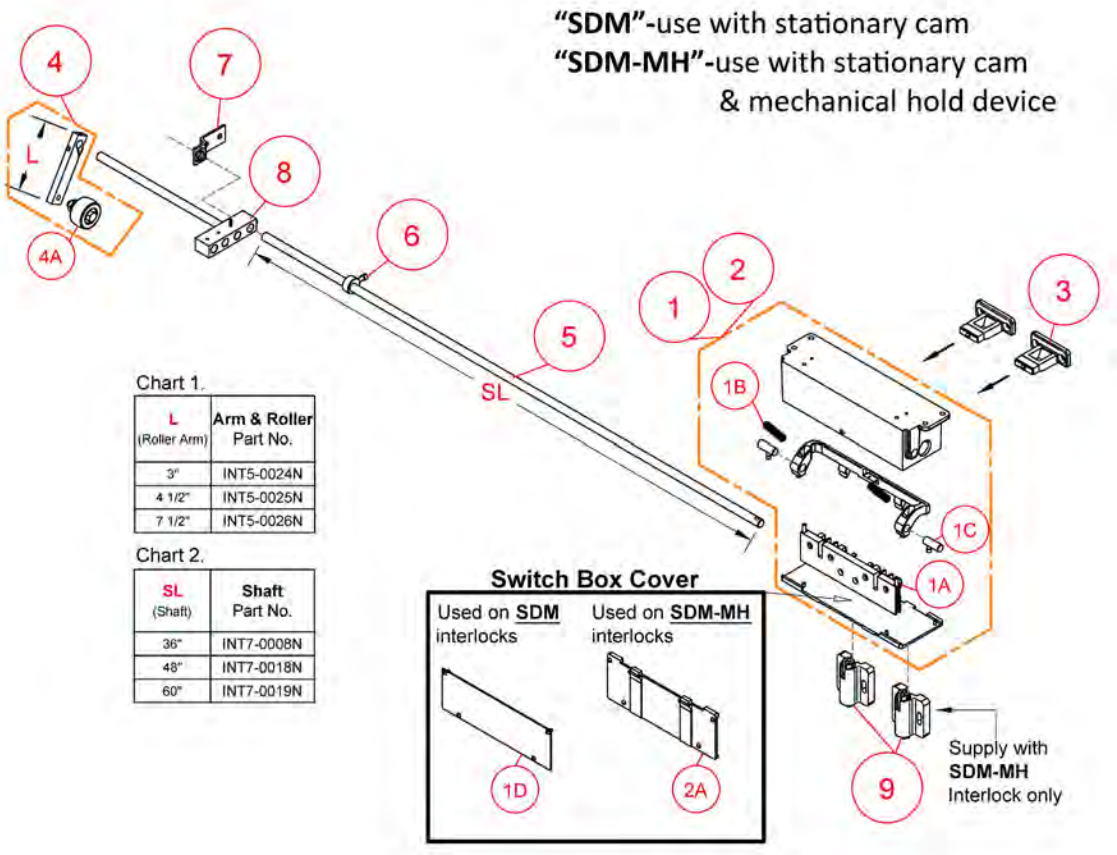


Chart 1.

L (Roller Arm)	Arm & Roller Part No.
3"	INT5-0024N
4 1/2"	INT5-0025N
7 1/2"	INT5-0026N

Chart 2.

SL (Shaft)	Shaft Part No.
36"	INT7-0008N
48"	INT7-0018N
60"	INT7-0019N

Part No.	Item No	Description
INT8-0002N	1	Switch Assembly, SDM Lock/Contact (**Page#** 405)
INT8-0004N	1A	Contact Base, SDM Lock (**Page#** 413)
SPG-0026N	1B	Spring, 1 7/8" Lg X 3/8" OD-0.043 Wire. (Call G.A.L.)
INT7-0010N	1C	Shaft, Dm Interlock 1 3/16" Lg Assembly (**Page#** 406)
INT8-0008N	1D	Cover, SDM Lock & Contact (**Page#** 415)
INT8-0006N	2	Switch Assembly, SDM-MH Lock-C (**Page#** 405)
INT8-0009N	2A	Cover, SDM-MH Lock & Contact (**Page#** 415)
INT7-0012N	3	Keeper, DM Interlock (**Page#** 381-Interlock Section)

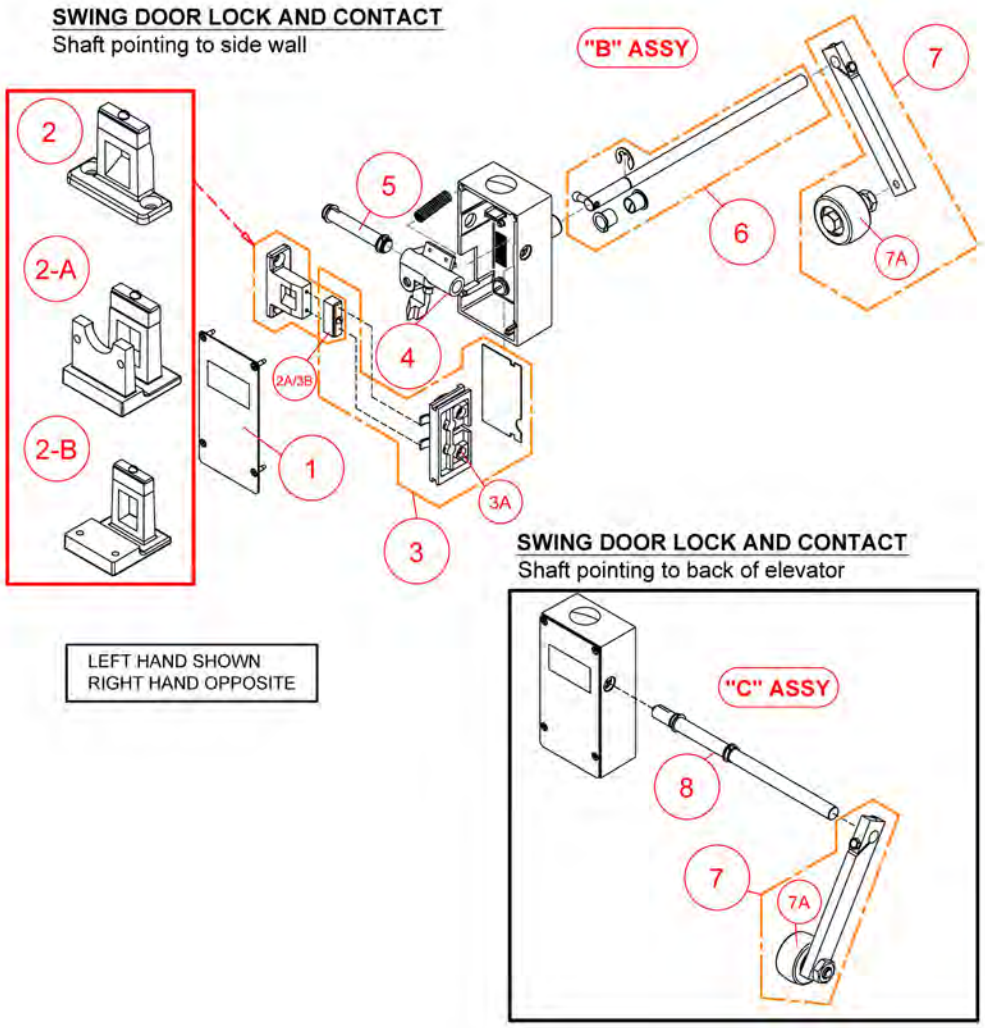
Part No.	Item No	Description
SEE CHART 1	4	Arm & Roller (**Page#** 386-Interlock Section)
INT5-0027N	4A	Roller & Bolt, Roller Arm (**Page#** 386-Interlock Section)
SEE CHART 1	5	Shaft, DM Interlock (**Page#** 406)
INT5-0028N	6	Clamp, Lock Emergency Unlocking Assembly (**Page#** 368-Interlock Section)
INT7-0009N	8	Shaft/Coupling, DM Interlock (**Page#** 406)
INT7-0011N	7	Support, DM/SDM Interlock Shaft Includes Nylon Bushing (**Page#** 368-Interlock Section)
INT7-0016N	9	Latch, Mechanical Hold Snap (**Page#** 374-Interlock Section)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Lock & Contact Isometric Drawing

Swing Door

Type "SN"



Part No.	Item No	Description
SW21-XXXXX	"B" ASSY	Lock And Contact, SN Swing Door (Shaft Pointing To Side Wall) (**Page#** 404)
SW21-XXXXX	"C" ASSY	Lock And Contact, SN Swing Door (Shaft Pointing To Side Wall) (**Page#** 404)
SW21-9001N	1	Cover, SN/SN-Z/SN-C Lock And Contact (**Page#** 415)
INT4-0001N	2	Keeper, N/NHA Interlock (Surface Mounted) (**Page#** 380-Interlock Section)
INT4-0002N	2-A	Keeper, N/NHA Interlock (Flush Mounted) (**Page#** 380-Interlock Section)
INT4-0003N	2-B	Keeper, N/NHA Interlock (Flush Mounted-Kalamein) (**Page#** 380-Interlock Section)
INT4-0001N	2A	Keeper, M/N Interlock Swing Door (**Page#** 380-Interlock Section)
INT5-0019N	2A/3B	Bridging Contact, M/N Keeper (**Page#** 413 or 376-Interlock Section)

Part No.	Item No	Description
INT6-0015N	5	Shaft, 3" Lg SM & SN Lock Cam (**Page#** 406)
INT6-0012L/R	4	Cam Locking, SM & SN Lock And Contact (**Page#** 413)
INT22-0022N	3A	Contact Base, "N/NHA" Interlock Lower (**Page#** 377-Interlock Section)
INT22-0020N	3	Contact Kit, "N" Interlock Lower (**Page#** 375-Interlock Section)
INT6-0014N	6	Shaft Assembly, SM/M Lock Ball Pin 10" Lg (**Page#** 406)
INT5-0025N	7	Arm & Roller, 4 1/2" C.L. (**Page#** 386-Interlock Section)
INT5-0027N	7A	Roller & Bolt, Roller Arm (**Page#** 386-Interlock Section)
INT6-0016N	8	Shaft Assembly, SM/M Lock Cam 10" Lg (**Page#** 406)

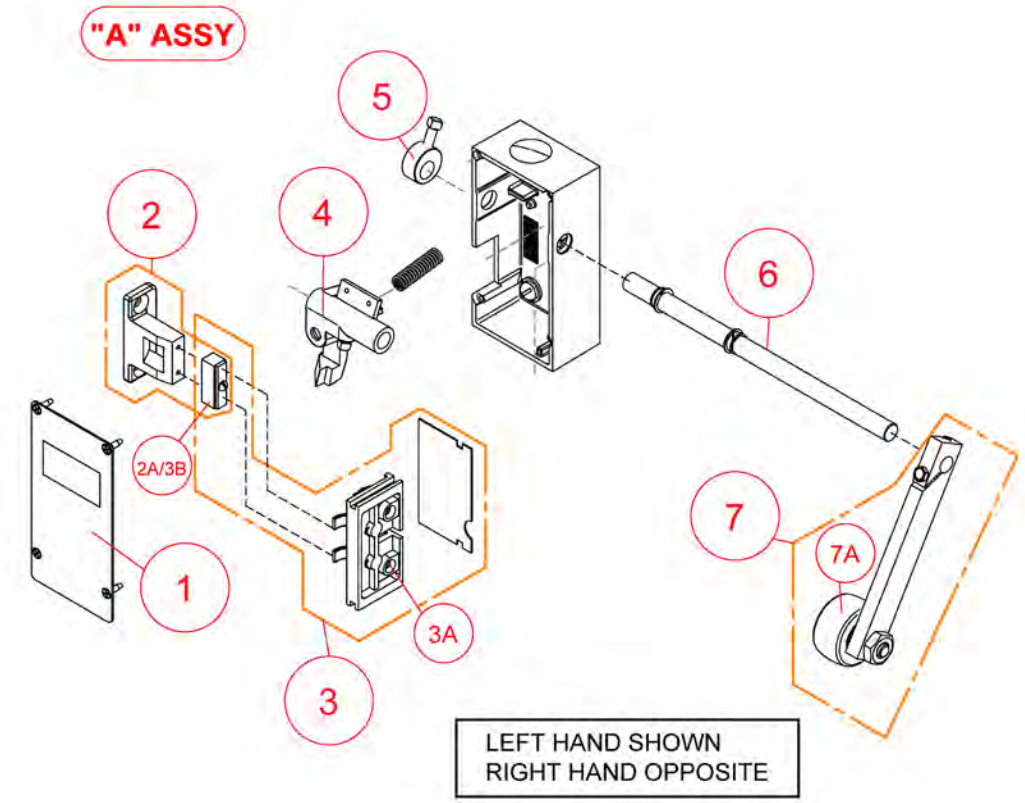
NOTE: Isometric drawings should be used for reference only (See parts sections for details)

DOOR EQUIPMENT

Lock & Contact Isometric Drawing

Sliding Door

Type "SN"



Part No.	Item No	Description
SW21-0341L/R	"A" ASSY	Lock/Contact, SN Slide Door 4 1/2" C.L. Arm (**Page#** 405)
SW21-9001N	1	Cover, SN/SN-Z/SN-C Lock And Contact (**Page#** 415)
INT4-0004N	2	Keeper, M/N Interlock Slide Door (**Page#** 380-Interlock Section)
INT5-0019N	2A/3B	Bridging Contact, M/N Keeper (**Page#** 413 or 376-Interlock Section)
INT22-0020N	3	Contact Kit, "N" Interlock Lower (**Page#** 375-Interlock Section)
INT22-0022N	3A	Contact Base, "N/NHA" Interlock Lower (**Page#** 377-Interlock Section)

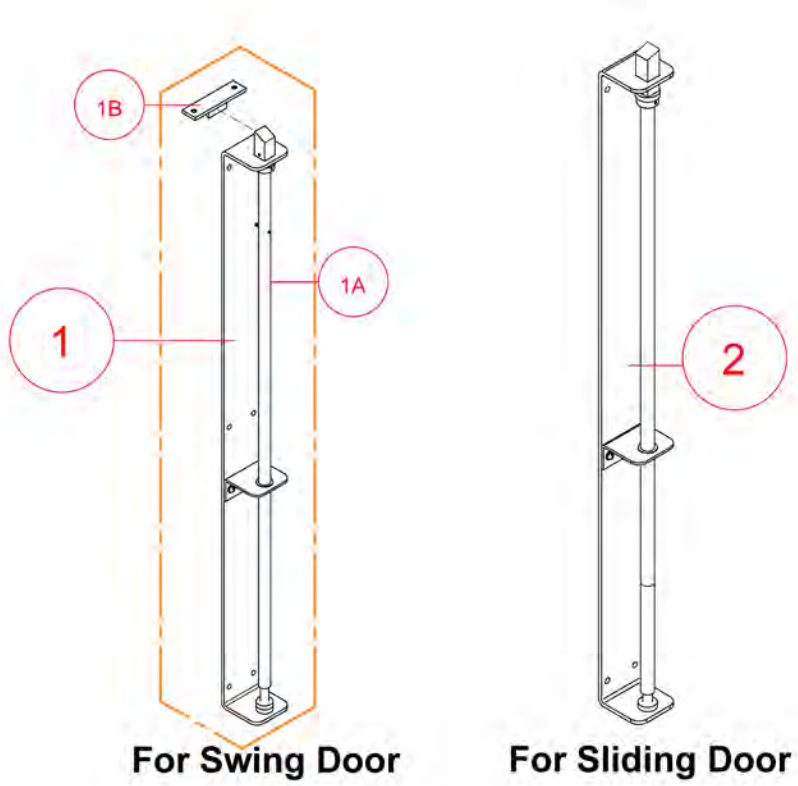
Part No.	Item No	Description
INT6-0012L/R	4	Cam Locking, SM & SN Lock And Contact (**Page#** 413)
INT5-0028N	5	Clamp, Lock Emergency Unlocking Assembly (**Page#** 368-Interlock Section)
INT6-0017N	6	Shaft, 10" Lg SM/M Lock Cam (**Page#** 406)
INT5-0025N	7	Arm & Roller, 4 1/2" C.L. (**Page#** 386-Interlock Section)
INT5-0027N	7A	Roller & Bolt, Roller Arm (**Page#** 386)

NOTE: Isometric drawings should be used for reference only (See parts sections for details)

Lock & Contact Isometric Drawing

Swing/Sliding Door

Type "MB"



Part No.	Item No	Description
INT26-0001N	1	Lock, "MB" Swing With Keeper Bar (**Page#** 407)
INT26-0004N	1A	Bar, "MB" Swing Locking (**Page#** 351-Interlock Section)

Part No.	Item No	Description
INT26-0003N	1B	Keeper, "MB" Swing Door (**Page#** 407)
INT26-0002N	2	Lock, "MB" Sliding Without Keeper Bar (**Page#** 407)

DOOR EQUIPMENT

Lock, Contact, & Switch Assemblies

Lock Replacement Shaft Code

• To replace a lock shaft, match the shaft code to the shaft configuration shown in this section on pg. 406

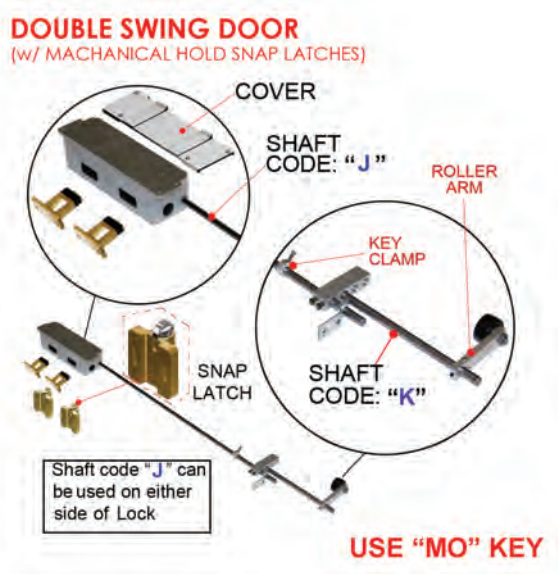
"SDM" Lock (Double Swing Door)

"SDM" Lock and Contact



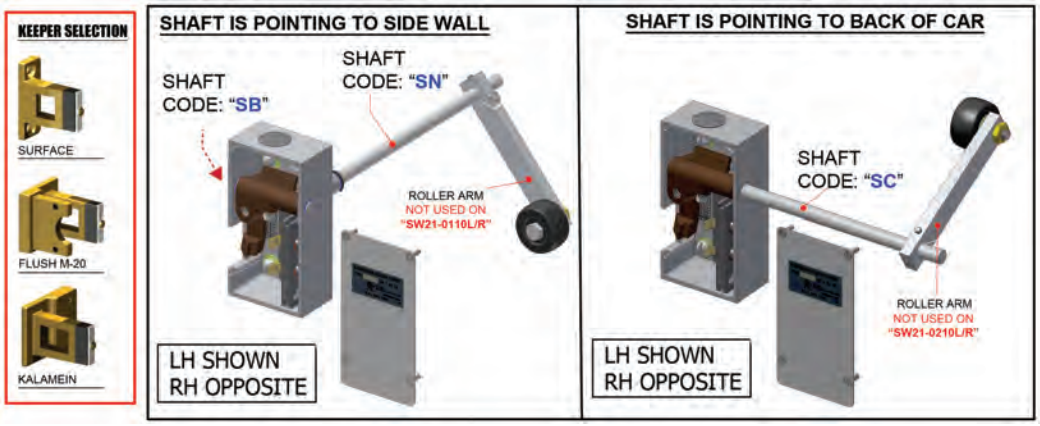
Part No.	Keeper Type	Roller Arm
INT8-0001N	DM Interlock	3" CL
INT8-0007N	DM Interlock	4 1/2" CL

"SDM-MH" Lock and Contact



Part No.	Keeper Type	Roller Arm
INT8-0005N	DM Interlock	3" CL

"SN" Lock (For Swing Doors)



Note: All "SN" locks include, switch, keeper & roller arms.

Shaft is pointing to side wall. Use M/N key.

Part No.	Keeper Type	Roller Arm
SW21-0110L/R	Surface	None
SW21-0111L/R	Surface	4 1/2" CL
SW21-0121L/R	Flush M-20	4 1/2" CL
SW21-0131L/R	Kalamein	4 1/2" CL

Shaft is pointing to back of car. Use M/N key.

Part No.	Keeper Type	Roller Arm
SW21-0210L/R	Surface	None
SW21-0211L/R	Surface	4 1/2" CL
SW21-0221L/R	Flush M-20	4 1/2" CL
SW21-0231L/R	Kalamein	4 1/2" CL

(*) Special Engineering Required

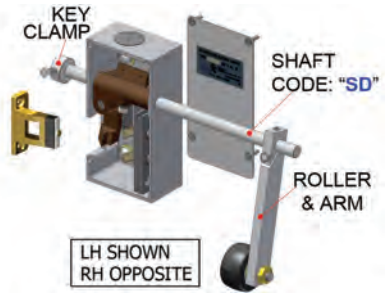
Lock, Contact, & Switch Assemblies

Lock Replacement Shaft Code

• To replace a lock shaft, match the shaft code to the shaft configuration shown in this section on pg. 406

"SN" Lock (For Sliding Doors)

SW21-0341L/R



Keeper Type	Roller Arm
STD Sliding Door	4 1/2" CL

"SN" Adaptor Kit

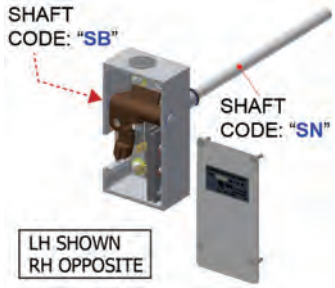
SW21-9003N



Description
Adaptor Kit, SN Lock/Contact, Used When Replacing An Older "SM" Lock

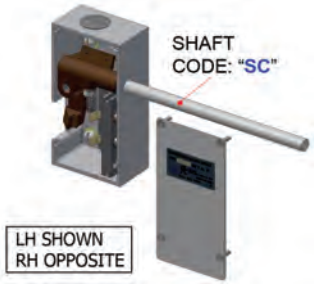
"SN" Switch Assemblies

SW21-0100L/R



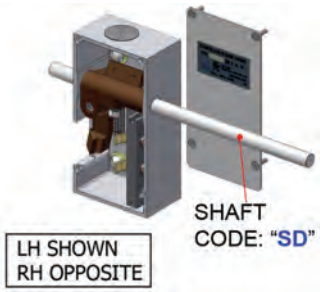
Switch Assembly, SN Lock Swing Doors, Shaft Pointing To Side Wall (Figure 1)

SW21-0200L/R



Switch Assembly, SN Lock Swing Doors, Shaft Pointing To Back Of Car (Figure 2)

SW21-0300L/R



Switch Assembly, SN Lock Slide Doors, Shaft Pointing To Side Wall (Figure 3)

"SDM" Switch Assemblies

INT8-0002N



Description
Switch Assembly, SDM Lock/Contact

INT8-0006N

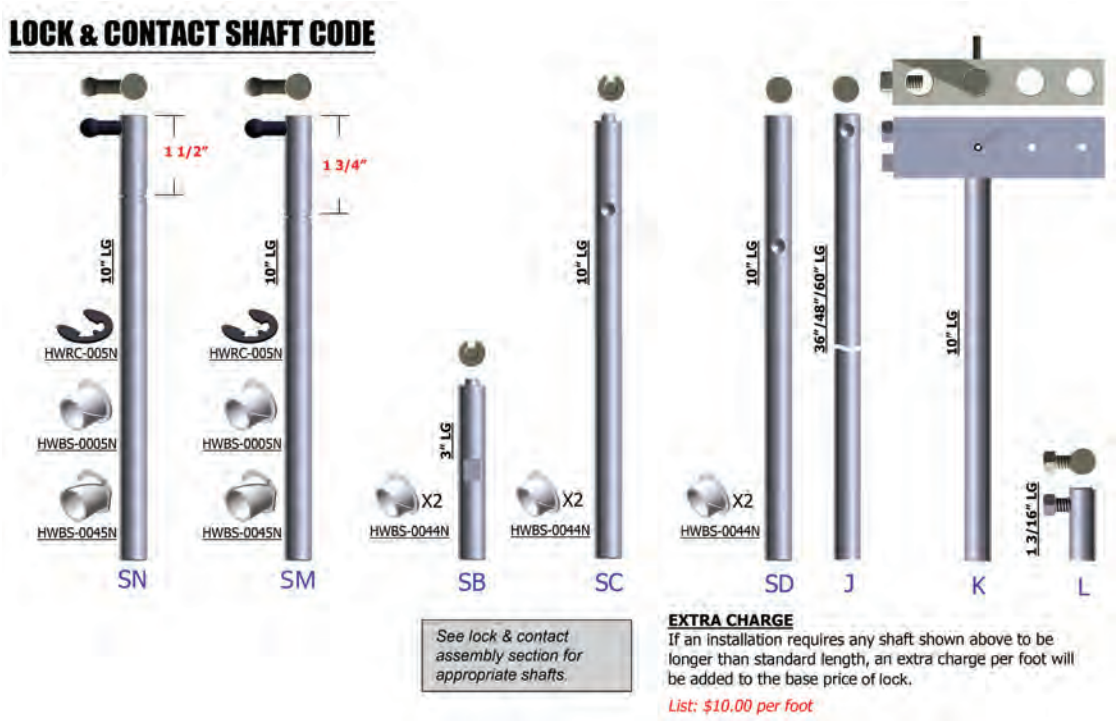


Description
Switch Assembly, SDM-MH Lock-C

DOOR EQUIPMENT

Lock, Contact, & Switch Assemblies

Shaft Codes



Lock Shafts

Part No.	Shaft Code	Description
INT6-0014N	"SM"	Shaft, SM/M Ball Pin, 10" Lg. (Aluminum Box)
SW21-0101N	"SN"	Shaft Assembly, SN Lock Ball Pin
INT6-0015N	"SB"	Shaft, 3" Lg SM & SN Lock Cam
INT6-0016N	"SC"	Shaft, 10" Lg SM Lock Cam
INT6-0017N	"SD"	Shaft, 10" Lg SM/M Lock Cam For Slide Doors

Part No.	Shaft Code	Description
INT7-0008N	"J"	Shaft, DM Interlock 36" Lg
INT7-0018N	"J"	Shaft, DM Interlock 48" Lg
INT7-0019N	"J"	Shaft, DM Interlock 60" Lg
INT7-0009N	"K"	Shaft/Coupling, DM Interlock
INT7-0010N	"L"	Shaft, DM Interlock 1 3/16" Lg Assembly

Shafts

Conventional / Water Resistant

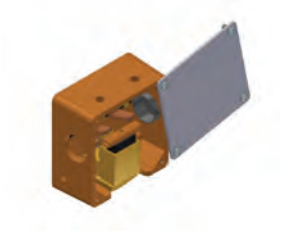
SW10-0006N	***SW11-0006N***	***SW14-0004N***	***SW5-0013N***
			
Shaft, SDC Door Contact Assembly Where Used: SDC Switch box	Shaft, K/ K1/ K2/ K5 Switch, Where Used: K, K1, K2, K5 Switch Box.	Shaft, Type "SCLS" Limit Switch Where Used: SCLS Switch Box	Shaft, LS Switch Arm Pivot Where Used: LS, LS-HA, LD, LD-HA

(*) Special Engineering Required

Lock, Contact, & Switch Assemblies

Door Contact Assemblies

SW10-0001N



Contact, SDC Single Door

SW21-2001L/R



Contact, Type "SN-C" Door With Bridging Keeper

SW12-0001N



Contact, AG Door

SW12-0002N



Contact, AG-HW Door With Hollister Keeper

"MB" Bar Lock and Keeper

INT26-0001N



Lock, "MB" Bar Swing, With Keeper

INT26-0002N



Lock, "MB" Bar Sliding, Without Keeper

INT26-0004N



Bar, "MB" Swing Locking

INT26-0003N



Keeper, MB Swing Door

Gate Switch Assemblies

"G" Gate Switch Arrangement

North Carolina requires Gate Switch with a shield. Refer to Vandal Resistant section Part Number **SW1-0002N.**

SW1-0001N



Switch Assembly, "G" Gate

SW1-0013N



Switch, "G" Gate Old Style Header Mounted, Used With Old Style Header Mounting Plate

SW1-0044N



Switch Assembly, "G" Gate With MO Track Mounting Plate
Door Opening: S/S 22"-54" , 2/SP 24"-96", 3/SP 30"-96", C/P 24"-83" & 84"-144", 2SP/CP 24"-83", 30"-72", & 84"-144", 3SP/CP 60"-83" & 84"-144"

DOOR EQUIPMENT

Lock, Contact, & Switch Assemblies

Gate Switch Assemblies

"G" Gate Switch Arrangement

SW1-0046N



Switch Assembly, "G" Gate, S/S With Header Mounted Angle
Door Opening: S/S 22"-54"

SW1-0047N



Switch Assembly, "G" Gate 2/SP-3/SP With Header Mounted Angle
Door Opening: 2/SP 24"-96", 3/SP 30"-96"

SW1-0048N



Switch Assembly, "G" Gate, MODL & MOVFR II Kit With Gate Switch Roller & Track Mounting Plate (GAL Canada)
Door Opening: S/S 22"-54", 2/SP 24"-96", 3/SP 30"-96", C/P 24"-83"

"G" Gate Switch Arrangement With Shield (Vandal Resistant)

Note: SW1-0045N & SW1-0049N
Used for NYC housing authority & North Carolina jobs only

Note: SW1-0050N & SW1-0051N
Used for specially engineered job situations

SW1-0002N



Switch Assembly, "G" Gate With Shield & Screw In NYC HA & North Carolina Only

SW1-0050N



Switch Assembly, "G" Gate, S/S 22"-54" D.O., With Shield & Header Mounted Angle

SW1-0051N



Switch Assembly, "G" Gate 2/SP 24"-96" D.O., 3/SP 30"-96" D.O., With Shield & Header Mounted Angle

SW1-0045N



Switch Assembly, "G" Gate With Shield & Track Mounting Plate
Door Opening: S/S 22"-54", 2/SP 24"-96", 3/SP 30"-96", C/P 24"-83" & 84"-144", 2SP/CP 24"-83" & 84"-144", 3SP/CP 60"-83" & 84"-144"

SW1-0049N



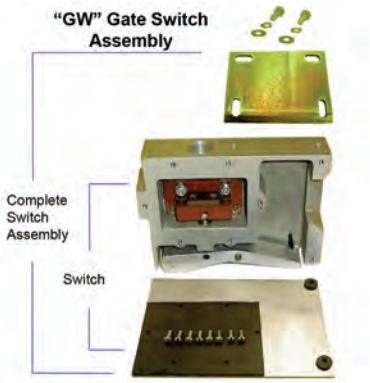
Switch Assembly, "G" Gate With Shield, Track Mounting Plate, & MODL & MOVFR II Kit With Roller (GAL Canada)
Door Opening: S/S 22"-54", 2/SP 24"-96", 3/SP 30"-96", C/P 24"-83"

(*) Special Engineering Required

Lock, Contact, & Switch Assemblies

Gate Switch Assemblies

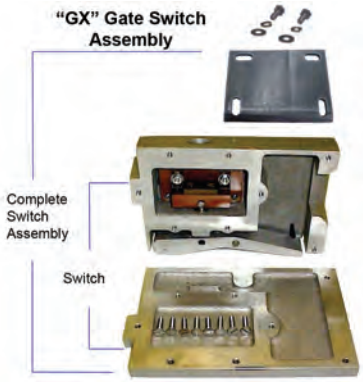
"GW" Gate Switch - Water Resistant



Note: SW15-0001L/R
Center opening installation uses R.H. gate switch

Part No.	Description
SW15-0001L/R*	Switch, "GW" Gate, Yellow Zinc Dichromate (Not NEMA Rated-UL Listed Or CSA Certified)
SW15-0007L/R*	Switch Assembly, "GW" Gate, (Not NEMA Rated-UL Listed Or CSA Certified) D.O.: S/S - 22"-54", 2/SP - 24"-96", 3/SP - 30"-96", C/P - 2SP/CP - 3SP/CP - 84"-144"
SW15-0009L/R*	Switch Assembly, "GW" Shield Gate, (Not NEMA Rated-UL Listed Or CSA Certified) D.O.: S/S - 22"-54", 2/SP - 24"-96", 3/SP - 30"-96", C/P - 2SP/CP - 3SP/CP - 84"-144"

"GX" Gate Switch - Dust/Explosion Resistant



Note: SW15-0002L/R
Center opening installation uses R.H. gate switch

Part No.	Description
SW15-0002L/R*	Switch, "GX" Explosion Resistant Gate, (Not NEMA Rated-UL Listed Or CSA Certified)
SW15-0008L/R*	Switch Assembly, "GX" Explosion Resistant Gate, (Not NEMA Rated-UL Listed Or CSA Certified) D.O.: S/S - 22"-54", 2/SP - 24"-96", 3/SP - 30"-96", C/P - 2SP/CP - 3SP/CP - 84"-144"
SW15-0010L/R*	Switch Assembly, "GX" Explosion Resistant Shield Gate, (Not NEMA Rated-UL Listed Or CSA Certified) D.O.: S/S - 22"-54", 2/SP - 24"-96", 3/SP - 30"-96", C/P - 2SP/CP - 3SP/CP - 84"-144"

"VG" Gate Switch

SW2-0001N



Switch, "VG" Gate Vertical Mounting

"VG-1" Gate Switch

SW2-0003N



Switch, "VG-1" Gate, Vertical Mounting With Spring Loaded Actuating Cam

DOOR EQUIPMENT

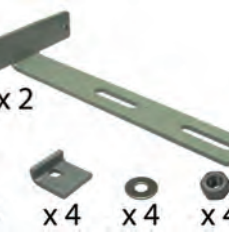
Lock, Contact, & Switch Assemblies

Limit Switch Assemblies

Note:
Mounting brackets for limit switches can also be ordered from Hollister Whitney. Contact Hollister Whitney for order detail.

LS Limit Switch	LSO Limit Switch	LD Limit Switch	LD-HA Limit Switch
SW5-0001N	SW5-0020N	SW16-0001N	SW16-0006N
			
Switch, “LS” Limit (1) N.C. Contact	Switch, “LSO-HA” Limit (1) N.O. Contact	Switch, LD Limit (2) N.C. Contacts	Switch, “LD-HA” Limit (2) N.C. Contacts, With Gasket

LS-HA Limit Switch	LSO-HA Limit Switch	LTD Limit Switch	LTD-HA Limit Switch
SW5-0017N	SW5-0022N	SW4-0002N	SW4-0012N
			
Switch, “LS-HA” Limit (1) N.C. Contact, With Gasket	Switch, “LSO-HA” Limit (1) N.O. Contact, With Gasket	Switch, LTD Limit, (1) N.C. - (1) N.O. Contacts	Switch, LTD-HA Limit (1) N.C. (1) N.O. Contact, With Gasket

LTS Limit Switch	LTS-HA Limit Switch	LS Mounting Bracket Kit
SW4-0001N	SW4-0011N	SEL-0092N
		
Switch, LTS Limit, (1) N.C. Contact	Switch, “LTS-HA” Limit (1) N.C., Contact, With Gasket	Bracket Kit, LS Limit Switches Mounting

(*) Special Engineering Required

Lock, Contact, & Switch Assemblies

Limit Switch Assemblies

Water/Dust/Corrosion/Explosion Resistant







Note: Mounting brackets for water and explosion resistant limit switches are supplied by Hollister Whitney. Contact Hollister Whitney for order detail.

Part No.	Description
SW17-0005N	Switch, “LS2A4K” Leveling, SPDT, NEMA Rated 4X S.S. Corrosion Resistant (Replacement For SW17-0004N) Only Available On Special Order. Requires Special 16” Cam (H.W.#411-4) In Lieu Of Vane.
SW17-0006N	Switch, “LSXA3N” Limit - N.C., NEMA Rated 7 & 9 Explosion Resistant. Only Available On Special Order
SW17-0007N	Switch, “LSXA3K” Leveling, SPDT, NEMA Rated 7 & 9 Explosion Resistant. Only Available On Special Order. Requires Special 16” Cam (H.W.#411-4) In Lieu Of Vane
SW17-0002N	Switch, “LSA3K” Limit, SPDT, NEMA Rated 4-Water & Dust Tight. Only Available On Special Order
SW17-0001N	Switch, “LSA3N” Limit - N.C., NEMA Rated 4-Water & Dust Tight

SCLS (Slopping Cam) Limit Switch



Part No.	Description
SW14-0001N	Switch, “SCLS” Limit, (Music Box) Replaces Otis Terminal Stopping Switch

Magnetic Limit Switch Assembly Kits

Two MLS Limit Switch

SW22-0020N



Kit, 2 Magnetic Limit Switch

Three MLS Limit Switch

SW22-0030N



Kit, 3 Magnetic Limit Switch

MLS Limit Switch Replacement

SW22-0001N

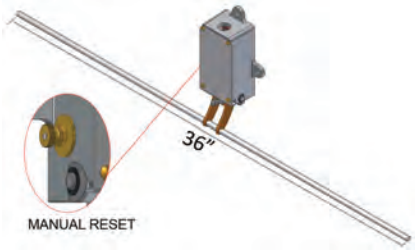


Switch, “MLS” Magnetic Limit, (Unit Has Four Magnetic Switches In One)

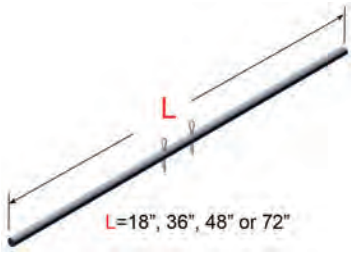
DOOR EQUIPMENT

Lock, Contact, & Switch Assemblies

Slack Cable Switch

SC Slack Cable Switch & Roller	*SC Slack Cable Switch & Bar*
SW5-0003N	*SW5-0002N*
	
Switch, "SC" Slack Cable Switch With Roller & Manual Reset Button, (1) N.C. Contact	Switch, "SC" Slack Cable With 36" Bar & Manual Reset Button, (1) N.C. Contact

Bars - Slack Cable Switches



Part No.	Description
SW5-0007N	Bar, Slack Cable Switch 18" Lg
SW5-0008N	Bar, Slack Cable Switch 36" Lg
SW5-0009N	Bar, Slack Cable Switch 48" Lg
SW5-0010N	Bar, Slack Cable Switch 72" Lg

Broken Cable Switch

Cable Switch Assembly	*Cable Switch*	*Cable Spring Assembly*	*Cable Rod Assembly*
SW3-0002N	*SW3-0001N*	*SW3-0004N*	*SW3-0005N*
			
Switch & Spring Assembly, Broken Cable - (1) N.C.	Switch, Broken Cable - (1) N.C.	Spring/Angle Assembly, Cable Where Used: Broken Cable	Rod Assembly, Adjusting Cable Where Used: Broken Cable

(*) Special Engineering Required

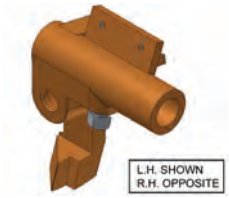
DOOR EQUIPMENT

Lock, Contact, & Switch Parts

Cams

Conventional / Water / Explosion / Dust Resistant

INT6-0012L/R



Cam Locking, SM & SN Lock And Contact

INT8-0003N



Cam, SDM Lock/Contact Locking

SW14-0002N



Cam Assembly, Type "SCLS" Limit Switch
Where Used: SCLS

SW2-0002N



Cam Assembly, VG Gate Switch
Where Used: VG

SW10-0004N



Cam Assembly, SDC Bridging Contact
Where Used: SDC

SW15-0003L/R



Cam, Type "GW And GX" Activating
Where Used: GW, GX

Contacts & Contact Kits

INT22-0020N



Contact Kit, N/SN Interlock Lower

INT5-0015N



Contact Kit, M/SM Interlock Lower

INT5-0017N



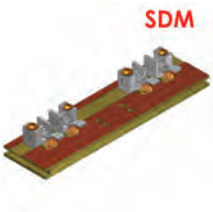
Contact Base, M Interlock Lower

INT5-0019N



Contact, M/N/SM/SN/SDM Keeper Bridging Block

INT8-0004N



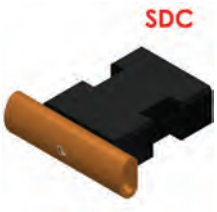
Contact Base, SDM Lock

SW10-0003N



Contact Base, SDC
Where Used: SDC Switch

SW10-0005N



Contact, SDC Bridging
Where Used: SDC Switch

SW11-0008N



Contact Kit, K, K1, K2, K5 Switch
Where Used: K, K1, K2, K5 Switch

DOOR EQUIPMENT

Lock, Contact, & Switch Parts

Contacts & Contact Kits

SW11-0005N



Contact, K, K1, K2, K5 Bridging
Where Used: K, K1, K2, K5 Switch

SW11-0003N



Contact Base, K, K1, K2, K5 Switch
Where Used: K, K1, K2, K5 Switch

SW12-0004N



Contact Base, AG Door
Where Used: AG (Door Contact)

SW1-0003N



Contact Kit, G-KT Gate Switch
Where Used: Broken Cable, G, VG

SW5-0040N



Contact Kit, LSO Limit Switch
Where Used: LSO, LSO-HA Switch

SW5-0024N



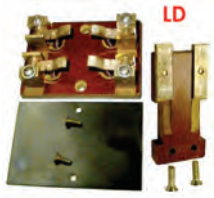
Contact Base, LSO Limit Switch With (2) Screws
Where Used: LSO, LSO-HA Switch

SW5-0023N



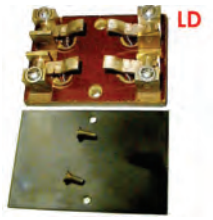
Contact, LSO Bridging, With (2) Screws
Where Used: LSO, LSO-HA Switch

SW16-0005N



Contact Kit, LD Limit Switch
Where Used: LD, LD-HA Switch

SW16-0002N



Contact Base, LD Limit Switch
Where Used: LD, LD-HA Switch

SW16-0003N



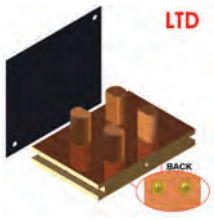
Contact, LD Bridging
Where Used: LD, LD-HA Switch

SW4-0014N



Contact Kit, LTD Limit Switch
Where Used: LTD, LTD-HA Switch

SW4-0006N



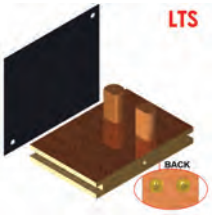
Contact Base, LTD Limit Switch Double
Where Used: LTD, LTD-HA Switch

SW4-0013N



Contact Kit, LTS Limit Switch
Where Used: LTS, LTS-HA Switch

SW4-0005N



Contact Base, LTS Limit Switch Single
Where Used: LTS, LTS-HA Switch

SW4-0007N



Contact, LTS/LTD Bridging
Where Used: LTS, LTS-HA, LTD, LTD-HA Switch

SW5-0016N



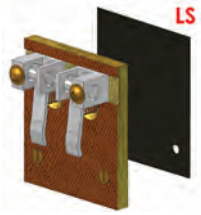
Contact Kit, LS Limit Switch
Where Used: LS, LS-HA Switch

(*) Special Engineering Required

Lock, Contact, & Switch Parts

Contacts & Contact Kits

SW5-0012N



Contact Base, LS Limit Switch, With Insulator
Where Used: LS, LS-HA Switch

SW5-0011N

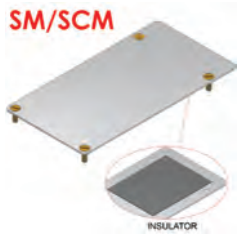


Contact, LS Bridging
Where Used: LS, LS-HA Switch

Covers

Conventional / Water Resistant

INT6-0011N



Cover Assembly, SM/CSM Lock Contact

INT8-0008N



Cover, SDM Lock & Contact

INT8-0009N



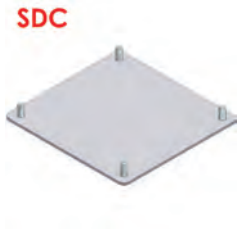
Cover, SDM-MH Lock & Contact

SW21-9001N



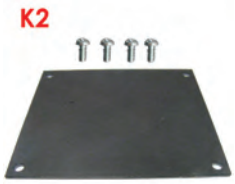
Cover, SN/SN-Z/SN-C Lock And Contact

SW10-0002N



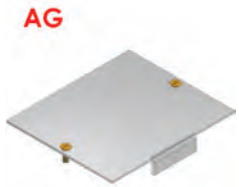
Cover, SDC Single Assembly Door
Where Used: SDC

SW11-0002N



Cover, K2 Door Contact Assembly
Where Used: K2 (Door Contact)

SW12-0003N



Cover, AG Door Contact Assembly
Where Used: AG (Door Contact)

SW1-0041N



Shield Kit, Tamper Resistant Gate Switch, Includes (2) Spanner Head Screws
Where Used: G

DOOR EQUIPMENT

Lock, Contact, & Switch Parts

Covers

Conventional / Water Resistant

SW15-0011N



Shield, Gate Switch North Carolina - Yellow Zinc Dichromate
Where Used: G

SW4-0003N



Cover, LTS/LTD Limit Switch Assembly
Where Used: LTS, LTS-HA, LTD, LTD-HA

SW4-0010N



Cover, LTS-HA/LTD-HA Limit Switch With Gasket
Where Used: LTS-HA, LTD-HA

SW5-0004N



Cover, LS/LD Limit Switch
Where Used: LS, LD

SW5-0018N



Cover, LS-HA/LD-HA/LSO-HA Limit Switch, With Gasket
Where Used: LS-HA, LD-HA

INT3W-0008L/R



Cover, Type MOW Interlock GW Gate Switch, With Hardware & Gasket
Where Used: MOWH, GW

INT3X-0008L/R

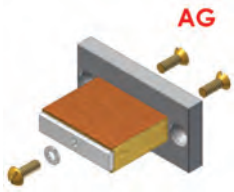


Cover, Type MOX Interlock GX Gate Switch, Yellow Zinc Dichromate, With Hardware
Where Used: MOXH, GX

Note: Standard "G" gate switch cover not available as separate item. Must purchase complete gate switch.

Keepers

SW12-0005N



Description
Keeper, AG Door Contact
Where Used: AG (Door Contact)

SW12-0006N



Description
Keeper, AG-HW Door Contact Hollister
Where Used: AG (Door Contact) - Hollister

(*) Special Engineering Required

Lock, Contact, & Switch Parts

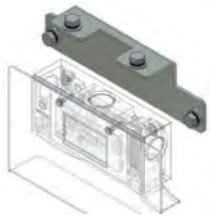
Mounting Plates

SW1-0008N



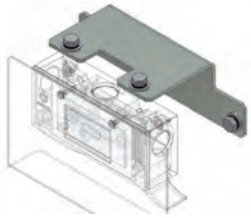
Bracket, Gate Switch Type "C" Hanger, SS-2SP-3SP
Where Used: G

SW1-0014N



Header Mounting Kit, SS Gate Switch
Where Used: G

SW1-0016N



Header Mounting Kit, 2 SP Gate Switch
Where Used: G

Rollers & Arms

ROL-0006N



Roller, Gate Switch 1 1/4" O.D, 1 1/4 O.D. X 1/4 I.D.
Where Used: G

SW1-0005N



Roller, Arm, Gate Switch, Used With MODG Operators
Where Used: G, VG

SW1-0006N



Roller, Arm, Gate Switch 2CP, Gate Switch Roller And Arm
Where Used: G

SW1-0007N



Roller And Bolt, Gate Switch
Where Used: G, VG

SW11-0007N



Arm, K2 Contact Actuating
Where Used: K2 (Door Contact)

SW14-0003N



Arm, Sloping Cam Limit Switch
Where Used: SCLS

SW15-0004N



Roller And Bolt, Gate Switch Plated
Where Used: GW, GX

SW15-0005N



Roller And Arm, Gate Switch Plated
Where Used: GW, GX

SW16-0004N



Arm, LD Limit Switch
Where Used: LD, LD-HA

SW17-0008N



Lever Assembly, Actuating Switch, To Be Used On NEMAs 47 & 9
Where Used: LSA3N, LS2A3N, LSXA3N, LSXA3K, LS2A4K

SW4-0004N



Arm, LTS/LTD Limit Switch
Where Used: LTS, LTS-HA, LTD, LTD-HA

SW4-0009N



Roller, Shaft, Limit Switch
Where Used: LTS, LTS-HA, LTD, LTD-HA, LD, LD-HA, Single/Double Contact

DOOR EQUIPMENT

Lock, Contact, & Switch Parts

Rollers & Arms

SW5-0005N



Arm, LS Limit Switch
Where Used: LS, LS-HA

SW5-0006N



Arm, "SC" Slack Cable Switch
Where Used: Manual Reset, Slack Cable

SW5-0015N



Roller, "SC" Shaft, Slack Cable (Remove Bushing)
Where Used: Slack Cable

Springs

Conventional / Water Resistant

SPG-0060N



Spring, 9/16" Lg x 1 7/32" OD-0.080 Wire- 6 1/2" Turns
Where Used: SCLS

SPG-0005N



Spring, 1" Lg x 1/4" OD-0.020 Wire-12 Turns-Music
Where Used: SDC

SPG-0014N



Spring, 1 1/16" Lg x 11/32" OD-0.026 Wire- 11 Turns
Where Used: SCLS

SPG-0024N



Spring, 1 1/4" Lg x 9/32" OD-0.030 Wire- 15 Turns Stainless Steel
Where Used: K2, SDC - Double Swing

SPG-0077N



Spring, 1 7/8" Lg x 15/32" OD-0.067 Wire-13 Turns (Cut From SPG-0040N-St Stl.)
Where Used: LD, LD-HA

SPG-0027N



Spring, 2 1/8" Lg x 7/16" OD-0.047 Wire- 15 Turns
Where Used: LS, LS-HA

SPG-0041N



Spring, 22" Lg x .542 OD-0.076 Wire-110 Turns-Music
Where Used: Broken Cable

(*) Special Engineering Required

Lock, Contact, & Switch Parts

Hardware

HDW-0002N	*HWBS-0050N*	*HWSC-0291N*
		
Plug, 3/4” ID Elect K/O DP 875 Blk Bushing Where Used: G, SN	Bushing, Flanged 3/4 OD 5/8 ID Brz Where Used: Slack Cable	Screw, 1/4-20 X 1 1/4” Hex Head Steel Where Used: G

GAL
Signal Fixture Components

GAL SIGNAL FIXTURES



CAR TOP INSPECTION & PITCH SWITCHES
420-423



PUSH BUTTON MODULES
(ALL TYPES)
424-433



PUSH-PULL & TOGGLE SWITCH MODULES
434-441



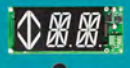
KEY SWITCH MODULES:
- Fire Service
- Emergency Power

442-471



KEY SWITCH MODULES :
(VARIOUS MARKINGS & TYPES)
- Medeco
- GAL Standard

472-478









- Key Cylinders
- Cabinet Locks
- Capacity Plates
- Handicap Plates
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- Hinges
- Indicators
- Lamps
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479-500

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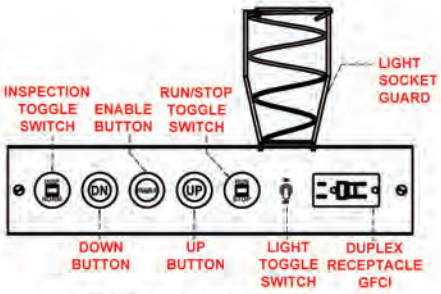
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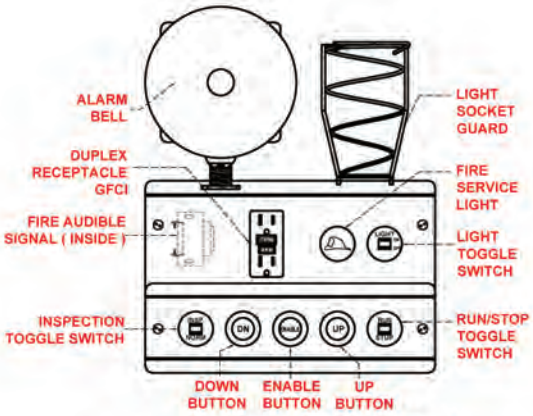
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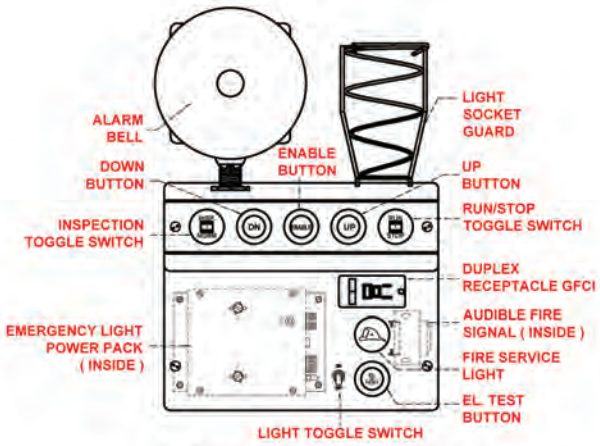
Car Top Inspection Stations



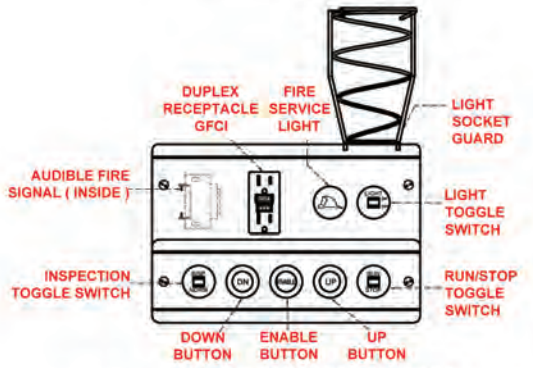
CT- 10 | P/N: CTI-0001N



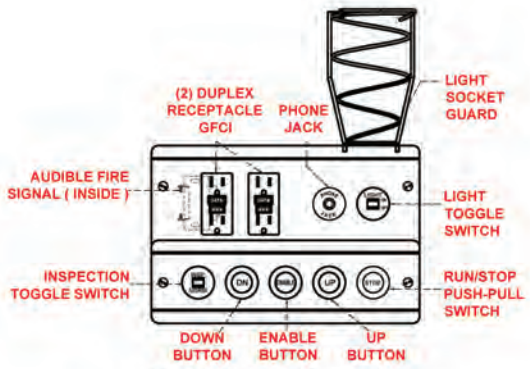
CT- 7 | P/N: CTI-0007N (120 V)*
P/N: CTI-0018N (24 V)*



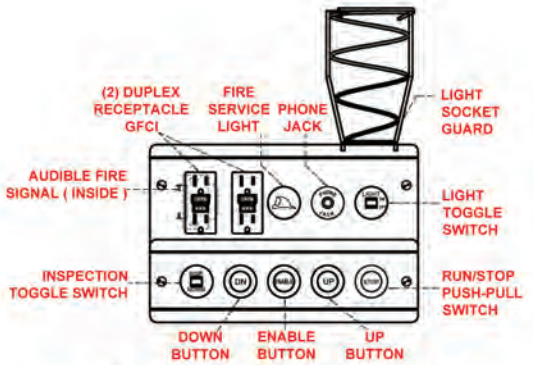
CT- 4 | P/N: CTI-0006N (120 V)*
P/N: CTI-0017N (24 V)*



CT- 6 | P/N: CTI-0004N (120 V)*
P/N: CTI-0015N (24 V)*



CT- 9 | P/N: CTI-0011N



CT- 13 | P/N: CTI-0012N (120 V)*
P/N: CTI-0020N (24 V)*

Voltage Requirements

- Fire light & audible fire signal: 120 or 24 volts (See Part No.)*
- Alarm bells: 6 volts
- Lamps socket and GFCI receptacle: 120 volts
- Emergency light power pack: 120 volts

(*) Special Engineering Required

SIGNAL FIXTURE COMPONENTS

Car Top Inspection Stations

Note: Light bulb not included.

Basic Car Top Arrangement

CTI-0001N



Inspection Station, CT-10 Car Top, With Light Socket

CTI-0018N



Inspection Station, CT-7 24V Car Top, With Light Socket, Fire Light, & Alarm Bell

CTI-0007N



Inspection Station, CT-7 120V Car Top, With Light Socket, Fire Light, & Alarm Bell

CTI-0006N



Inspection Station, CT-4 120V Car Top, With Light Socket, Fire Light, Alarm Bell, & Emergency Light Power Pack

CTI-0017N



Inspection Station, CT-4 24V Car Top, With Light Socket, Fire Light, Alarm Bell, & Emergency Light Power Pack

CTI-0004N



Inspection Station, CT-6 120V Car Top, With Fire Light & Light Socket

CTI-0015N



Inspection Station, CT-6 24V Car Top, With Fire Light & Light Socket

CTI-0011N



Inspection Station, CT-9 Car Top, With Light Socket, (2) Duplex GFCI, & Less Fire Hat

CTI-0012N



Inspection Station, CT-13 120V Car Top, With Fire Light, Light Socket, Phone Jack, & (2) Duplex GFCI

CTI-0020N



Inspection Station, CT-13 24V Car Top, With Fire Light, Light Socket, Phone Jack, & (2) Duplex GFCI



Note: Car top stations used with G.A.L. GALaxy controllers have circuit boards in them related to specific controllers. To order one of these car top stations contact G.A.L. controller engineering department with G.A.L. Job No. for assistance.

SIGNAL FIXTURE COMPONENTS

Car Top Inspection Stations

Weather Resistant

CTI-0003N



Inspection Station, CT-11WP Car Top Weather Resistant-Push Pull Inspection, Fire Light, & Stop

CTI-0010N



Inspection Station, CT-8 WP 120V Car Top Weather Resistant-Push Pull Inspection, Fire Light, & Stop

CTI-0019N



Inspection Station, CT-8 WP 24V Car Top Weather Resistant-Push Pull Inspection & Stop

NYC Housing Authority Type

CTI-0005N



Description
Inspection Station, CT-12 Car Top-NYCHA, & Run Toggle With Off-On Inspection Key Switch

CTI-0016N



Description
Inspection Station, CT-12 NYCHA Tricon Controller Car Top, & Run Toggle With Off-On Inspection Key Switch

Fire Service

Car Top Audible Signals

CTI-0013N



Description
Fire Service, CT-F 120 Volts Car Top A1-382K Audible Signal 120V With 3.3K Ohm 10 Watt Parallel Resistor

CTI-0014N



Description
Fire Service, CT-F 24 Volts Car Top # A1-383K Audible Signal 24V

Alarm Bell

HWEL-0162N



Bell, 6” Alarm, 6 Volt, Red Or Gray (Replaces HWEL-0009N)

Alarm Bell (WP)

HWEL-0136N



Bell, 6” Alarm, Water Resistant, 6 Volt, Red Or Gray With #449 WP Box

Lamp Guard

HWEL-0195N



Lamp Guard, Tapered Coil

Socket

HWEL-0011N



Socket, Light Bulb Holder, Pigtail Type-8 1/2” 18 Gauge

(*) Special Engineering Required

SIGNAL FIXTURE COMPONENTS

Pit Switches

Toggle Switch Type

PTS-0001N



DISCONTINUED

Description
Pit Switch (Toggle), Discontinued - Use PTS-0002N DISCONTINUED

PTS-0002N



Description
Pit Switch With Guards - (Toggle)

Push/Pull to Stop Switch Type

Conventional

PTS-0004N



Description
Pit Switch, With Guard - (Push/Pull to Stop)

Water Resistant

PTS-0003N



Description
Pit Switch, With Guard, Water Resistant - (Push/Pull to Stop)

Emergency Exit Switches - Top Of Car

SW19-0001N



Switch, Type “CTE-1” Emergency Exit, Top Of Car - With Depressed Button

SW19-0002N



Switch, Type “CTE-2” Emergency Exit, Top Of Car - With Depressed Button, And RKB Key Switch 2P-R1 (1)N.O. (1)N.C. Contact, Key-1612

SW19-0003N



Switch, Type “CTE-3” Emergency Exit, Top Of Car - With Depressed Button, And RKB Key Switch 2P-R1 (1)N.O. (1)N.C. Contact, Medeco Key # Ins

SW19-0004N



Switch, Type “CTE-4” Emergency Exit, Top Of Car NYCHA - With Depressed Button, Water Resistant

SW19-0005N



Switch, Type “CTE-5” Emergency Exit, Top Of Car - With Reset Button Compliant With ASME-A17.1-2000 Code

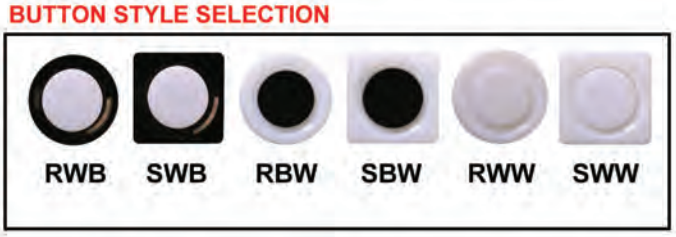
SIGNAL FIXTURE COMPONENTS

Push Button Modules

Modules With Plastic Cap

Illuminated - Incandescent Lamps





Markings	Lamp	Contact	RWB	SWB	RBW	SBW	RWW	SWW
(Blank)	12V	2NO	PB1-0017N	PB1-0045N	PB1-0073N	PB1-0101N	PB1-0129N	PB1-0157N
(Blank)	24V	2NO	PB1-0018N	PB1-0046N	PB1-0074N	PB1-0102N	PB1-0130N	PB1-0158N
(Blank)	48V	2NO	PB1-0019N	PB1-0047N	PB1-0075N	PB1-0103N	PB1-0131N	PB1-0159N
(Blank)	120V	2NO	PB1-0020N	PB1-0048N	PB1-0076N	PB1-0104N	PB1-0132N	PB1-0160N
ALARM	6V	2NO	PB1-0027N	PB1-0055N			PB1-0139N	PB1-0167N
Arrow	12V	2NO	PB1-0022N	PB1-0050N	PB1-0078N	PB1-0106N	PB1-0134N	PB1-0162N
Arrow	24V	2NO	PB1-0023N	PB1-0051N	PB1-0079N	PB1-0107N	PB1-0135N	PB1-0163N
Arrow	48V	2NO	PB1-0024N	PB1-0052N	PB1-0080N	PB1-0108N	PB1-0136N	PB1-0164N
Arrow	120V	2NO	PB1-0025N	PB1-0053N	PB1-0081N	PB1-0109N	PB1-0137N	PB1-0165N
B	12V	2NO	PB1-0594N	PB1-0604N	PB1-0614N	PB1-0624N	PB1-0634N	PB1-0644N
B	24V	2NO	PB1-0595N	PB1-0605N	PB1-0615N	PB1-0625N	PB1-0635N	PB1-0645N
B	48V	2NO	PB1-0596N	PB1-0606N	PB1-0616N	PB1-0626N	PB1-0636N	PB1-0646N
B	120V	2NO	PB1-0597N	PB1-0607N	PB1-0617N	PB1-0627N	PB1-0637N	PB1-0647N
L	12V	2NO	PB1-0695N	PB1-0696N	PB1-0697N	PB1-0698N	PB1-0699N	PB1-0700N
L	24V	2NO	PB1-0701N	PB1-0702N	PB1-0703N	PB1-0704N	PB1-0705N	PB1-0706N
L	48V	2NO	PB1-0707N	PB1-0708N	PB1-0709N	PB1-0710N	PB1-0711N	PB1-0712N
L	120V	2NO	PB1-0713N	PB1-0714N	PB1-0715N	PB1-0716N	PB1-0717N	PB1-0718N
LL	12V	2NO	PB1-0725N	PB1-0726N	PB1-0727N	PB1-0728N	PB1-0729N	PB1-0730N
LL	24V	2NO	PB1-0731N	PB1-0732N	PB1-0733N	PB1-0734N	PB1-0735N	PB1-0736N
LL	48V	2NO	PB1-0737N	PB1-0738N	PB1-0739N	PB1-0740N	PB1-0741N	PB1-0742N
LL	120V	2NO	PB1-0743N	PB1-0744N	PB1-0745N	PB1-0746N	PB1-0747N	PB1-0748N
P	12V	2NO	PB1-0791N	PB1-0796N	PB1-0771N	PB1-0776N	PB1-0781N	PB1-0786N
P	24V	2NO	PB1-0792N	PB1-0797N	PB1-0772N	PB1-0777N	PB1-0782N	PB1-0787N
P	48V	2NO	PB1-0793N	PB1-0798N	PB1-0773N	PB1-0778N	PB1-0783N	PB1-0788N
P	120V	2NO	PB1-0794N	PB1-0799N	PB1-0774N	PB1-0779N	PB1-0784N	PB1-0789N
PH	12V	2NO	PB1-0599N	PB1-0609N	PB1-0619N	PB1-0629N	PB1-0639N	PB1-0649N
PH	24V	2NO	PB1-0600N	PB1-0610N	PB1-0620N	PB1-0630N	PB1-0640N	PB1-0650N
PH	48V	2NO	PB1-0601N	PB1-0611N	PB1-0621N	PB1-0631N	PB1-0641N	PB1-0651N
PH	120V	2NO	PB1-0602N	PB1-0612N	PB1-0622N	PB1-0632N	PB1-0642N	PB1-0652N
1	12V	2NO	PB1-0228N	PB1-0253N	PB1-0278N	PB1-0303N	PB1-0328N	PB1-0353N
1	24V	2NO	PB1-0229N	PB1-0254N	PB1-0279N	PB1-0304N	PB1-0329N	PB1-0354N
1	48V	2NO	PB1-0230N	PB1-0255N	PB1-0280N	PB1-0305N	PB1-0330N	PB1-0355N
1	120V	2NO	PB1-0231N	PB1-0256N	PB1-0281N	PB1-0306N	PB1-0331N	PB1-0356N
2	12V	2NO	PB1-0233N	PB1-0258N	PB1-0283N	PB1-0308N	PB1-0333N	PB1-0358N
2	24V	2NO	PB1-0234N	PB1-0259N	PB1-0284N	PB1-0309N	PB1-0334N	PB1-0359N
2	48V	2NO	PB1-0235N	PB1-0260N	PB1-0285N	PB1-0310N	PB1-0335N	PB1-0360N
2	120V	2NO	PB1-0236N	PB1-0261N	PB1-0286N	PB1-0311N	PB1-0336N	PB1-0361N
3	12V	2NO	PB1-0238N	PB1-0263N	PB1-0288N	PB1-0313N	PB1-0338N	PB1-0363N
3	24V	2NO	PB1-0239N	PB1-0264N	PB1-0289N	PB1-0314N	PB1-0339N	PB1-0364N
3	48V	2NO	PB1-0240N	PB1-0265N	PB1-0290N	PB1-0315N	PB1-0340N	PB1-0365N
3	120V	2NO	PB1-0241N	PB1-0266N	PB1-0291N	PB1-0316N	PB1-0341N	PB1-0366N
4	12V	2NO	PB1-0243N	PB1-0268N	PB1-0293N	PB1-0318N	PB1-0343N	PB1-0368N
4	24V	2NO	PB1-0244N	PB1-0269N	PB1-0294N	PB1-0319N	PB1-0344N	PB1-0369N
4	48V	2NO	PB1-0245N	PB1-0270N	PB1-0295N	PB1-0320N	PB1-0345N	PB1-0370N
4	120V	2NO	PB1-0246N	PB1-0271N	PB1-0296N	PB1-0321N	PB1-0346N	PB1-0371N

SIGNAL FIXTURE COMPONENTS

Push Button Modules

Modules With Plastic Cap

Illuminated - Incandescent Lamps

Markings	Lamp	Contact	RWB	SWB	RBW	SBW	RWW	SWW
5	12V	2NO	PB1-0248N	PB1-0273N	PB1-0298N	PB1-0323N	PB1-0348N	PB1-0373N
5	24V	2NO	PB1-0249N	PB1-0274N	PB1-0299N	PB1-0324N	PB1-0349N	PB1-0374N
5	48V	2NO	PB1-0250N	PB1-0275N	PB1-0300N	PB1-0325N	PB1-0350N	PB1-0375N
5	120V	2NO	PB1-0251N	PB1-0276N	PB1-0301N	PB1-0326N	PB1-0351N	PB1-0376N
6	12V	2NO	PB1-0378N	PB1-0413N	PB1-0448N	PB1-0483N	PB1-0518N	PB1-0553N
6	24V	2NO	PB1-0379N	PB1-0414N	PB1-0449N	PB1-0484N	PB1-0519N	PB1-0554N
6	48V	2NO	PB1-0380N	PB1-0415N	PB1-0450N	PB1-0485N	PB1-0520N	PB1-0555N
6	120V	2NO	PB1-0381N	PB1-0416N	PB1-0451N	PB1-0486N	PB1-0521N	PB1-0556N
7	12V	2NO	PB1-0383N	PB1-0418N	PB1-0453N	PB1-0488N	PB1-0523N	PB1-0558N
7	24V	2NO	PB1-0384N	PB1-0419N	PB1-0454N	PB1-0489N	PB1-0524N	PB1-0559N
7	48V	2NO	PB1-0385N	PB1-0420N	PB1-0455N	PB1-0490N	PB1-0525N	PB1-0560N
7	120V	2NO	PB1-0386N	PB1-0421N	PB1-0456N	PB1-0491N	PB1-0526N	PB1-0561N
8	12V	2NO	PB1-0388N	PB1-0423N	PB1-0458N	PB1-0493N	PB1-0528N	PB1-0563N
8	24V	2NO	PB1-0389N	PB1-0424N	PB1-0459N	PB1-0494N	PB1-0529N	PB1-0564N
8	48V	2NO	PB1-0390N	PB1-0425N	PB1-0460N	PB1-0495N	PB1-0530N	PB1-0565N
8	120V	2NO	PB1-0391N	PB1-0426N	PB1-0461N	PB1-0496N	PB1-0531N	PB1-0566N
9	12V	2NO	PB1-0393N	PB1-0428N	PB1-0463N	PB1-0498N	PB1-0533N	PB1-0568N
9	24V	2NO	PB1-0394N	PB1-0429N	PB1-0464N	PB1-0499N	PB1-0534N	PB1-0569N
9	48V	2NO	PB1-0395N	PB1-0430N	PB1-0465N	PB1-0500N	PB1-0535N	PB1-0570N
9	120V	2NO	PB1-0396N	PB1-0431N	PB1-0466N	PB1-0501N	PB1-0536N	PB1-0571N
10	12V	2NO	PB1-0398N	PB1-0433N	PB1-0468N	PB1-0503N	PB1-0538N	PB1-0573N
10	24V	2NO	PB1-0399N	PB1-0434N	PB1-0469N	PB1-0504N	PB1-0539N	PB1-0574N
10	48V	2NO	PB1-0400N	PB1-0435N	PB1-0470N	PB1-0505N	PB1-0540N	PB1-0575N
10	120V	2NO	PB1-0401N	PB1-0436N	PB1-0471N	PB1-0506N	PB1-0541N	PB1-0576N
11	12V	2NO	PB1-0403N	PB1-0438N	PB1-0473N	PB1-0508N	PB1-0543N	PB1-0578N
11	24V	2NO	PB1-0404N	PB1-0439N	PB1-0474N	PB1-0509N	PB1-0544N	PB1-0579N
11	48V	2NO	PB1-0405N	PB1-0440N	PB1-0475N	PB1-0510N	PB1-0545N	PB1-0580N
11	120V	2NO	PB1-0406N	PB1-0441N	PB1-0476N	PB1-0511N	PB1-0546N	PB1-0581N
12	12V	2NO	PB1-0408N	PB1-0443N	PB1-0478N	PB1-0513N	PB1-0548N	PB1-0583N
12	24V	2NO	PB1-0409N	PB1-0444N	PB1-0479N	PB1-0514N	PB1-0549N	PB1-0584N
12	48V	2NO	PB1-0410N	PB1-0445N	PB1-0480N	PB1-0515N	PB1-0550N	PB1-0585N
12	120V	2NO	PB1-0411N	PB1-0446N	PB1-0481N	PB1-0516N	PB1-0551N	PB1-0586N

Illuminated - Neon Lamps

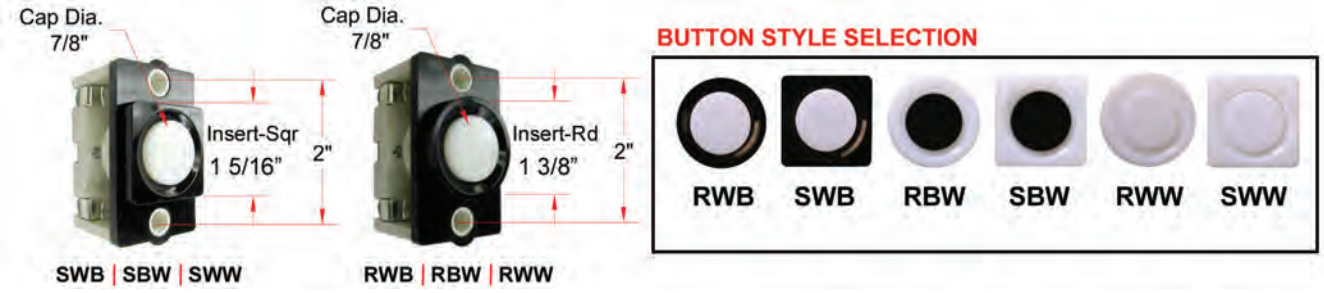
Markings	Lamp	Contact	RWB	SWB	RBW	SBW	RWW	SWW
(Blank)	120V	2NO	PB1-0021N	PB1-0049N	PB1-0077N	PB1-0105N	PB1-0133N	PB1-0161N
Arrow	120V	2NO	PB1-0026N	PB1-0054N	PB1-0082N	PB1-0110N	PB1-0138N	PB1-0166N
B	120V	2NO	PB1-0598N	PB1-0608N	PB1-0618N	PB1-0628N	PB1-0638N	PB1-0648N
L	120V	2NO	PB1-0719N	PB1-0720N	PB1-0721N	PB1-0722N	PB1-0723N	PB1-0724N
LL	120V	2NO	PB1-0749N	PB1-0750N	PB1-0751N	PB1-0752N	PB1-0753N	PB1-0754N
P	120V	2NO	PB1-0795N	PB1-0800N	PB1-0775N	PB1-0780N	PB1-0785N	PB1-0790N
PH	120V	2NO	PB1-0603N	PB1-0613N	PB1-0623N	PB1-0633N	PB1-0643N	PB1-0653N
TEST	120V	2NC	PB1-0028N	PB1-0056N	PB1-0084N	PB1-0112N	PB1-0140N	PB1-0168N
1	120V	2NO	PB1-0232N	PB1-0257N	PB1-0282N	PB1-0307N	PB1-0332N	PB1-0357N
2	120V	2NO	PB1-0237N	PB1-0262N	PB1-0287N	PB1-0312N	PB1-0337N	PB1-0362N
3	120V	2NO	PB1-0242N	PB1-0267N	PB1-0292N	PB1-0317N	PB1-0342N	PB1-0367N
4	120V	2NO	PB1-0247N	PB1-0272N	PB1-0297N	PB1-0322N	PB1-0347N	PB1-0372N
5	120V	2NO	PB1-0252N	PB1-0277N	PB1-0302N	PB1-0327N	PB1-0352N	PB1-0377N
6	120V	2NO	PB1-0382N	PB1-0417N	PB1-0452N	PB1-0487N	PB1-0522N	PB1-0557N
7	120V	2NO	PB1-0387N	PB1-0422N	PB1-0457N	PB1-0492N	PB1-0527N	PB1-0562N
8	120V	2NO	PB1-0392N	PB1-0427N	PB1-0462N	PB1-0497N	PB1-0532N	PB1-0567N
9	120V	2NO	PB1-0397N	PB1-0432N	PB1-0467N	PB1-0502N	PB1-0537N	PB1-0572N
10	120V	2NO	PB1-0402N	PB1-0437N	PB1-0472N	PB1-0507N	PB1-0542N	PB1-0577N
11	120V	2NO	PB1-0407N	PB1-0442N	PB1-0477N	PB1-0512N	PB1-0547N	PB1-0582N
12	120V	2NO	PB1-0412N	PB1-0447N	PB1-0482N	PB1-0517N	PB1-0552N	PB1-0587N

SIGNAL FIXTURE COMPONENTS

Push Button Modules

Modules With Plastic Cap

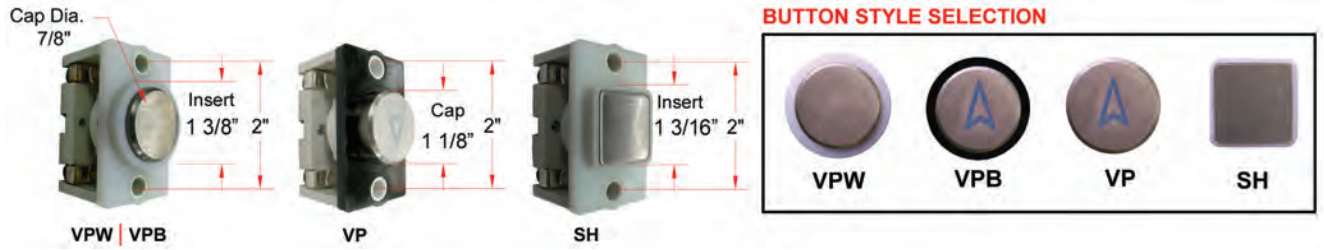
Non-Illuminated



Markings	Contact	RWB	SWB	RBW	SBW	RWW	SWW
(Blank)	2NO	PB1-0001N	PB1-0029N	PB1-0057N	PB1-0085N	PB1-0113N	PB1-0141N
CALL	2NO	PB1-0588N	PB1-0589N	PB1-0590N	PB1-0591N	PB1-0592N	PB1-0593N
CALL CANCEL	1NO-1NC	PB1-0011N	PB1-0039N	PB1-0067N	PB1-0095N	PB1-0123N	PB1-0151N
DN	1NO-1NC	PB1-0014N	PB1-0042N	PB1-0070N	PB1-0098N	PB1-0126N	PB1-0154N
DOOR CLOSE	1NO-1NC	PB1-0003N	PB1-0031N	PB1-0059N	PB1-0087N	PB1-0115N	PB1-0143N
DOOR HOLD OPEN	1NO-1NC	PB1-0005N	PB1-0033N	PB1-0061N	PB1-0089N	PB1-0117N	PB1-0145N
DOOR OPEN	1NO-1NC	PB1-0002N	PB1-0030N	PB1-0058N	PB1-0086N	PB1-0114N	PB1-0142N
DOOR STOP	1NO-1NC	PB1-0004N	PB1-0032N	PB1-0060N	PB1-0088N	PB1-0116N	PB1-0144N
ENABLE	2NO	PB1-0689N	PB1-0690N	PB1-0691N	PB1-0692N	PB1-0693N	PB1-0694N
FRONT DOOR CLOSE	1NO-1NC	PB1-0007N	PB1-0035N	PB1-0063N	PB1-0091N	PB1-0119N	PB1-0147N
FRONT DOOR OPEN	1NO-1NC	PB1-0006N	PB1-0034N	PB1-0062N	PB1-0090N	PB1-0118N	PB1-0146N
NON STOP	1NO-1NC	PB1-0010N	PB1-0038N	PB1-0066N	PB1-0094N	PB1-0122N	PB1-0150N
PUSH FOR HELP	2NO	PB1-0755N	PB1-0756N	PB1-0757N	PB1-0758N	PB1-0759N	PB1-0760N
PUSH TO CALL	2NO	PB1-0015N	PB1-0043N	PB1-0071N	PB1-0099N	PB1-0127N	PB1-0155N
PUSH TO TALK	2NO	PB1-0016N	PB1-0044N	PB1-0072N	PB1-0100N	PB1-0128N	PB1-0156N
REAR DOOR CLOSE	1NO-1NC	PB1-0009N	PB1-0037N	PB1-0065N	PB1-0093N	PB1-0121N	PB1-0149N
REAR DOOR OPEN	1NO-1NC	PB1-0008N	PB1-0036N	PB1-0064N	PB1-0092N	PB1-0120N	PB1-0148N
RESET	1NO-1NC	PB1-0012N	PB1-0040N	PB1-0068N	PB1-0096N	PB1-0124N	PB1-0152N
UP	1NO-1NC	PB1-0013N	PB1-0041N	PB1-0069N	PB1-0097N	PB1-0125N	PB1-0153N

Modules With Metal Cap

Illuminated - Incandescent Lamps



Markings	Lamp	Contact	VPW St Stl	VPW Mtz	VPB St Stl	VPB Mtz	VP St Stl	VP Mtz	SH St Stl	SH Mtz
(Blank)	12V	2NO	PB2-1350N	PB2-1355N					PB2-0017N	PB2-0045N
(Blank)	24V	2NO	PB2-1351N	PB2-1356N					PB2-0018N	PB2-0046N
(Blank)	48V	2NO	PB2-1352N	PB2-1357N					PB2-0019N	PB2-0047N
(Blank)	120V	2NO	PB2-1353N	PB2-1358N					PB2-0020N	PB2-0048N
ALARM	6V	2NO	PB2-0139N	PB2-0167N	PB2-0195N	PB2-0223N	PB2-0083N	PB2-0111N	PB2-0027N	PB2-0055N
Arrow	12V	2NO	PB2-0134N	PB2-0162N	PB2-0190N	PB2-0218N	PB2-0078N	PB2-0106N	PB2-0022N	PB2-0050N
Arrow	24V	2NO	PB2-0135N	PB2-0163N	PB2-0191N	PB2-0219N	PB2-0079N	PB2-0107N	PB2-0023N	PB2-0051N
Arrow	48V	2NO	PB2-0136N	PB2-0164N	PB2-0192N	PB2-0220N	PB2-0080N	PB2-0108N	PB2-0024N	PB2-0052N
Arrow	120V	2NO	PB2-0137N	PB2-0165N	PB2-0193N	PB2-0221N	PB2-0081N	PB2-0109N	PB2-0025N	PB2-0053N
B	12V	2NO	PB2-0613N	PB2-0627N	PB2-0641N	PB2-0655N	PB2-0585N	PB2-0599N	PB2-0673N	PB2-0698N

SIGNAL FIXTURE COMPONENTS

Push Button Modules

Modules With Metal Cap

Illuminated - Incandescent Lamps

Markings	Lamp	Contact	VPW St Stl	VPW Mtz	VPB St Stl	VPB Mtz	VP St Stl	VP Mtz	SH St Stl	SH Mtz
B	24V	2NO	PB2-0763N	PB2-0783N	PB2-0803N	PB2-0823N	PB2-0723N	PB2-0743N	PB2-0674N	PB2-0699N
B	48V	2NO	PB2-0764N	PB2-0784N	PB2-0804N	PB2-0824N	PB2-0724N	PB2-0744N	PB2-0675N	PB2-0700N
B	120V	2NO	PB2-0765N	PB2-0785N	PB2-0805N	PB2-0825N	PB2-0725N	PB2-0745N	PB2-0676N	PB2-0701N
P	12V	2NO	PB2-0614N	PB2-0628N	PB2-0642N	PB2-0656N	PB2-0586N	PB2-0600N	PB2-0678N	PB2-0703N
P	24V	2NO	PB2-0767N	PB2-0787N	PB2-0807N	PB2-0827N	PB2-0727N	PB2-0747N	PB2-0679N	PB2-0704N
P	48V	2NO	PB2-0768N	PB2-0788N	PB2-0808N	PB2-0828N	PB2-0728N	PB2-0748N	PB2-0680N	PB2-0705N
P	120V	2NO	PB2-0769N	PB2-0789N	PB2-0809N	PB2-0829N	PB2-0729N	PB2-0749N	PB2-0681N	PB2-0706N
1	12V	2NO	PB2-0601N	PB2-0615N	PB2-0629N	PB2-0643N	PB2-0573N	PB2-0587N	PB2-0683N	PB2-0708N
1	24V	2NO	PB2-0771N	PB2-0791N	PB2-0811N	PB2-0831N	PB2-0731N	PB2-0751N	PB2-0684N	PB2-0709N
1	48V	2NO	PB2-0772N	PB2-0792N	PB2-0812N	PB2-0832N	PB2-0732N	PB2-0752N	PB2-0685N	PB2-0710N
1	120V	2NO	PB2-0773N	PB2-0793N	PB2-0813N	PB2-0833N	PB2-0733N	PB2-0753N	PB2-0686N	PB2-0711N
2	12V	2NO	PB2-0602N	PB2-0616N	PB2-0630N	PB2-0644N	PB2-0574N	PB2-0588N	PB2-0688N	PB2-0713N
2	24V	2NO	PB2-0775N	PB2-0795N	PB2-0815N	PB2-0835N	PB2-0735N	PB2-0755N	PB2-0689N	PB2-0714N
2	48V	2NO	PB2-0776N	PB2-0796N	PB2-0816N	PB2-0836N	PB2-0736N	PB2-0756N	PB2-0690N	PB2-0715N
2	120V	2NO	PB2-0777N	PB2-0797N	PB2-0817N	PB2-0837N	PB2-0737N	PB2-0757N	PB2-0691N	PB2-0716N
3	12V	2NO	PB2-0603N	PB2-0617N	PB2-0631N	PB2-0645N	PB2-0575N	PB2-0589N	PB2-0693N	PB2-0718N
3	24V	2NO	PB2-0779N	PB2-0799N	PB2-0819N	PB2-0839N	PB2-0739N	PB2-0759N	PB2-0694N	PB2-0719N
3	48V	2NO	PB2-0780N	PB2-0800N	PB2-0820N	PB2-0840N	PB2-0740N	PB2-0760N	PB2-0695N	PB2-0720N
3	120V	2NO	PB2-0781N	PB2-0801N	PB2-0821N	PB2-0841N	PB2-0741N	PB2-0761N	PB2-0696N	PB2-0721N
4	12V	2NO	PB2-0604N	PB2-0618N	PB2-0632N	PB2-0646N	PB2-0576N	PB2-0590N	PB2-1059N	PB2-1104N
4	24V	2NO	PB2-0899N	PB2-0927N	PB2-0955N	PB2-0983N	PB2-0843N	PB2-0871N	PB2-1060N	PB2-1105N
4	48V	2NO	PB2-0900N	PB2-0928N	PB2-0956N	PB2-0984N	PB2-0844N	PB2-0872N	PB2-1061N	PB2-1106N
4	120V	2NO	PB2-0901N	PB2-0929N	PB2-0957N	PB2-0985N	PB2-0845N	PB2-0873N	PB2-1062N	PB2-1107N
5	12V	2NO	PB2-0605N	PB2-0619N	PB2-0633N	PB2-0647N	PB2-0577N	PB2-0591N	PB2-1064N	PB2-1109N
5	24V	2NO	PB2-0903N	PB2-0931N	PB2-0959N	PB2-0987N	PB2-0847N	PB2-0875N	PB2-1065N	PB2-1110N
5	48V	2NO	PB2-0904N	PB2-0932N	PB2-0960N	PB2-0988N	PB2-0848N	PB2-0876N	PB2-1066N	PB2-1111N
5	120V	2NO	PB2-0905N	PB2-0933N	PB2-0961N	PB2-0989N	PB2-0849N	PB2-0877N	PB2-1067N	PB2-1112N
6	12V	2NO	PB2-0606N	PB2-0620N	PB2-0634N	PB2-0648N	PB2-0578N	PB2-0592N	PB2-1069N	PB2-1114N
6	24V	2NO	PB2-0907N	PB2-0935N	PB2-0963N	PB2-0991N	PB2-0851N	PB2-0879N	PB2-1070N	PB2-1115N
6	48V	2NO	PB2-0908N	PB2-0936N	PB2-0964N	PB2-0992N	PB2-0852N	PB2-0880N	PB2-1071N	PB2-1116N
6	120V	2NO	PB2-0909N	PB2-0937N	PB2-0965N	PB2-0993N	PB2-0853N	PB2-0881N	PB2-1072N	PB2-1117N
7	12V	2NO	PB2-0607N	PB2-0621N	PB2-0635N	PB2-0649N	PB2-0579N	PB2-0593N	PB2-1074N	PB2-1119N
7	24V	2NO	PB2-0911N	PB2-0939N	PB2-0967N	PB2-0995N	PB2-0855N	PB2-0883N	PB2-1075N	PB2-1120N
7	48V	2NO	PB2-0912N	PB2-0940N	PB2-0968N	PB2-0996N	PB2-0856N	PB2-0884N	PB2-1076N	PB2-1121N
7	120V	2NO	PB2-0913N	PB2-0941N	PB2-0969N	PB2-0997N	PB2-0857N	PB2-0885N	PB2-1077N	PB2-1122N
8	12V	2NO	PB2-0608N	PB2-0622N	PB2-0636N	PB2-0650N	PB2-0580N	PB2-0594N	PB2-1079N	PB2-1124N
8	24V	2NO	PB2-0915N	PB2-0943N	PB2-0971N	PB2-0999N	PB2-0859N	PB2-0887N	PB2-1080N	PB2-1125N
8	48V	2NO	PB2-0916N	PB2-0944N	PB2-0972N	PB2-1000N	PB2-0860N	PB2-0888N	PB2-1081N	PB2-1126N
8	120V	2NO	PB2-0917N	PB2-0945N	PB2-0973N	PB2-1001N	PB2-0861N	PB2-0889N	PB2-1082N	PB2-1127N
9	12V	2NO	PB2-0609N	PB2-0623N	PB2-0637N	PB2-0651N	PB2-0581N	PB2-0595N	PB2-1084N	PB2-1129N
9	24V	2NO	PB2-0919N	PB2-0947N	PB2-0975N	PB2-1003N	PB2-0863N	PB2-0891N	PB2-1085N	PB2-1130N
9	48V	2NO	PB2-0920N	PB2-0948N	PB2-0976N	PB2-1004N	PB2-0864N	PB2-0892N	PB2-1086N	PB2-1131N
9	120V	2NO	PB2-0921N	PB2-0949N	PB2-0977N	PB2-1005N	PB2-0865N	PB2-0893N	PB2-1087N	PB2-1132N
10	12V	2NO	PB2-0610N	PB2-0624N	PB2-0638N	PB2-0652N	PB2-0582N	PB2-0596N	PB2-1089N	PB2-1134N
10	24V	2NO	PB2-0923N	PB2-0951N	PB2-0979N	PB2-1007N	PB2-0867N	PB2-0895N	PB2-1090N	PB2-1135N
10	48V	2NO	PB2-0924N	PB2-0952N	PB2-0980N	PB2-1008N	PB2-0868N	PB2-0896N	PB2-1091N	PB2-1136N
10	120V	2NO	PB2-0925N	PB2-0953N	PB2-0981N	PB2-1009N	PB2-0869N	PB2-0897N	PB2-1092N	PB2-1137N
11	12V	2NO	PB2-0611N	PB2-0625N	PB2-0639N	PB2-0653N	PB2-0583N	PB2-0597N	PB2-1094N	PB2-1139N
11	24V	2NO	PB2-1027N	PB2-1035N	PB2-1043N	PB2-1051N	PB2-1011N	PB2-1019N	PB2-1095N	PB2-1140N
11	48V	2NO	PB2-1028N	PB2-1036N	PB2-1044N	PB2-1052N	PB2-1012N	PB2-1020N	PB2-1096N	PB2-1141N
11	120V	2NO	PB2-1029N	PB2-1037N	PB2-1045N	PB2-1053N	PB2-1013N	PB2-1021N	PB2-1097N	PB2-1142N
12	12V	2NO	PB2-0612N	PB2-0626N	PB2-0640N	PB2-0654N	PB2-0584N	PB2-0598N	PB2-1099N	PB2-1144N
12	24V	2NO	PB2-1031N	PB2-1039N	PB2-1047N	PB2-1055N	PB2-1015N	PB2-1023N	PB2-1100N	PB2-1145N
12	48V	2NO	PB2-1032N	PB2-1040N	PB2-1048N	PB2-1056N	PB2-1016N	PB2-1024N	PB2-1101N	PB2-1146N
12	120V	2NO	PB2-1033N	PB2-1041N	PB2-1049N	PB2-1057N	PB2-1017N	PB2-1025N	PB2-1102N	PB2-1147N

SIGNAL FIXTURE COMPONENTS

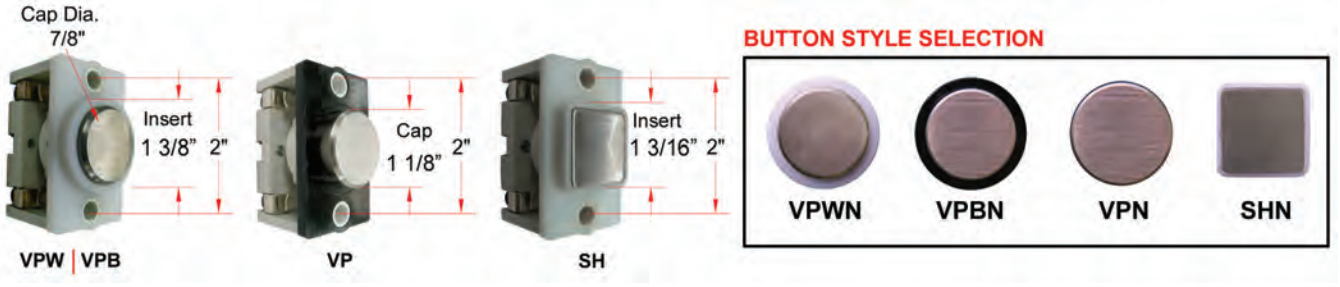
Push Button Modules

Modules With Metal Cap

Illuminated - Neon Lamps

Markings	Lamp	Contact	VPW St Stl	VPW Mtz	VPB St Stl	VPB Mtz	VP St Stl	VP Mtz	SH St Stl	SH Mtz
(Blank)	120V	2NO	PB2-1354N	PB2-1359N					PB2-0021N	PB2-0049N
Arrow	120V	2NO	PB2-0138N	PB2-0166N	PB2-0194N	PB2-0222N	PB2-0082N	PB2-0110N	PB2-0026N	PB2-0054N
B	120V	2NO	PB2-0766N	PB2-0786N	PB2-0806N	PB2-0826N	PB2-0726N	PB2-0746N	PB2-0677N	PB2-0702N
P	120V	2NO	PB2-0770N	PB2-0790N	PB2-0810N	PB2-0830N	PB2-0730N	PB2-0750N	PB2-0682N	PB2-0707N
EL TEST	120V	2NC	PB2-0140N	PB2-0168N	PB2-0196N	PB2-0224N	PB2-0084N	PB2-0112N	PB2-0028N	PB2-0056N
1	120V	2NO	PB2-0774N	PB2-0794N	PB2-0814N	PB2-0834N	PB2-0734N	PB2-0754N	PB2-0687N	PB2-0712N
2	120V	2NO	PB2-0778N	PB2-0798N	PB2-0818N	PB2-0838N	PB2-0738N	PB2-0758N	PB2-0692N	PB2-0717N
3	120V	2NO	PB2-0782N	PB2-0802N	PB2-0822N	PB2-0842N	PB2-0742N	PB2-0762N	PB2-0697N	PB2-0722N
4	120V	2NO	PB2-0902N	PB2-0930N	PB2-0958N	PB2-0986N	PB2-0846N	PB2-0874N	PB2-1063N	PB2-1108N
5	120V	2NO	PB2-0906N	PB2-0934N	PB2-0962N	PB2-0990N	PB2-0850N	PB2-0878N	PB2-1068N	PB2-1113N
6	120V	2NO	PB2-0910N	PB2-0938N	PB2-0966N	PB2-0994N	PB2-0854N	PB2-0882N	PB2-1073N	PB2-1118N
7	120V	2NO	PB2-0914N	PB2-0942N	PB2-0970N	PB2-0998N	PB2-0858N	PB2-0886N	PB2-1078N	PB2-1123N
8	120V	2NO	PB2-0918N	PB2-0946N	PB2-0974N	PB2-1002N	PB2-0862N	PB2-0890N	PB2-1083N	PB2-1128N
9	120V	2NO	PB2-0922N	PB2-0950N	PB2-0978N	PB2-1006N	PB2-0866N	PB2-0894N	PB2-1088N	PB2-1133N
10	120V	2NO	PB2-0926N	PB2-0954N	PB2-0982N	PB2-1010N	PB2-0870N	PB2-0898N	PB2-1093N	PB2-1138N
11	120V	2NO	PB2-1030N	PB2-1038N	PB2-1046N	PB2-1054N	PB2-1014N	PB2-1022N	PB2-1098N	PB2-1143N
12	120V	2NO	PB2-1034N	PB2-1042N	PB2-1050N	PB2-1058N	PB2-1018N	PB2-1026N	PB2-1103N	PB2-1148N

Non-Illuminated



Markings	Contact	VPWN St Stl	VPWN Mtz	VPBN St Stl	VPBN Mtz	VPN St Stl	VPN Mtz	SHN St Stl	SHN Mtz
(Blank)	2NO	PB2-0113N	PB2-0141N	PB2-0169N	PB2-0197N	PB2-0057N	PB2-0085N	PB2-0001N	PB2-0029N
Arrow	2NO	PB2-0502N	PB2-0520N	PB2-0538N	PB2-0556N	PB2-0466N	PB2-0484N		
1	1NO-1NC	PB2-0507N	PB2-0525N	PB2-0543N	PB2-0561N	PB2-0471N	PB2-0489N	PB2-0441N	PB2-0453N
2	1NO-1NC	PB2-0508N	PB2-0526N	PB2-0544N	PB2-0562N	PB2-0472N	PB2-0490N	PB2-0442N	PB2-0454N
3	1NO-1NC	PB2-0509N	PB2-0527N	PB2-0545N	PB2-0563N	PB2-0473N	PB2-0491N	PB2-0443N	PB2-0455N
4	1NO-1NC	PB2-0510N	PB2-0528N	PB2-0546N	PB2-0564N	PB2-0474N	PB2-0492N	PB2-0444N	PB2-0456N
5	1NO-1NC	PB2-0511N	PB2-0529N	PB2-0547N	PB2-0565N	PB2-0475N	PB2-0493N	PB2-0445N	PB2-0457N
6	1NO-1NC	PB2-0512N	PB2-0530N	PB2-0548N	PB2-0566N	PB2-0476N	PB2-0494N	PB2-0446N	PB2-0458N
7	1NO-1NC	PB2-0513N	PB2-0531N	PB2-0549N	PB2-0567N	PB2-0477N	PB2-0495N	PB2-0447N	PB2-0459N
8	1NO-1NC	PB2-0514N	PB2-0532N	PB2-0550N	PB2-0568N	PB2-0478N	PB2-0496N	PB2-0448N	PB2-0460N
9	1NO-1NC	PB2-0515N	PB2-0533N	PB2-0551N	PB2-0569N	PB2-0479N	PB2-0497N	PB2-0449N	PB2-0461N
10	1NO-1NC	PB2-0516N	PB2-0534N	PB2-0552N	PB2-0570N	PB2-0480N	PB2-0498N	PB2-0450N	PB2-0462N
11	1NO-1NC	PB2-0517N	PB2-0535N	PB2-0553N	PB2-0571N	PB2-0481N	PB2-0499N	PB2-0451N	PB2-0463N
12	1NO-1NC	PB2-0518N	PB2-0536N	PB2-0554N	PB2-0572N	PB2-0482N	PB2-0500N	PB2-0452N	PB2-0464N
B	1NO-1NC	PB2-0505N	PB2-0523N	PB2-0541N	PB2-0559N	PB2-0469N	PB2-0487N	PB2-0439N	PB2-0434N
CALL	1NO-1NC	PB2-0665N	PB2-0667N	PB2-0669N	PB2-0671N	PB2-0661N	PB2-0663N	PB2-0657N	PB2-0659N
CALL CANCEL	1NO-1NC	PB2-0123N	PB2-0151N	PB2-0179N	PB2-0207N	PB2-0067N	PB2-0095N	PB2-0011N	PB2-0039N
DN	1NO-1NC	PB2-0126N	PB2-0154N	PB2-0182N	PB2-0210N	PB2-0070N	PB2-0098N	PB2-0014N	PB2-0042N
DOOR CLOSE	1NO-1NC	PB2-0115N	PB2-0143N	PB2-0171N	PB2-0199N	PB2-0059N	PB2-0087N	PB2-0003N	PB2-0031N
DOOR HOLD	1NO-1NC	PB2-0504N	PB2-0522N	PB2-0540N	PB2-0558N	PB2-0468N	PB2-0089N	PB2-0438N	PB2-0433N
DOOR HOLD OPEN	1NO-1NC	PB2-0117N	PB2-0145N	PB2-0173N	PB2-0201N	PB2-0061N	PB2-0486N	PB2-0005N	PB2-0033N
DOOR OPEN	1NO-1NC	PB2-0114N	PB2-0142N	PB2-0170N	PB2-0198N	PB2-0058N	PB2-0086N	PB2-0002N	PB2-0030N
DOOR STOP	1NO-1NC	PB2-0116N	PB2-0144N	PB2-0172N	PB2-0200N	PB2-0060N	PB2-0088N	PB2-0004N	PB2-0032N

SIGNAL FIXTURE COMPONENTS

Push Button Modules

Modules With Metal Cap

Non-Illuminated

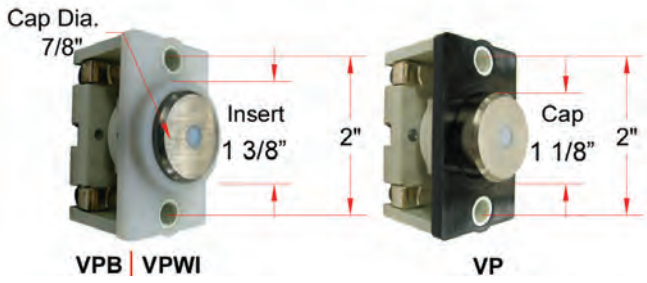
Markings	Contact	VPWN St Stl	VPWN Mtz	VPBN St Stl	VPBN Mtz	VPN St Stl	VPN Mtz	SHN St Stl	SHN Mtz
EL. TEST	2NC	PB2-0503N	PB2-0521N				PB2-0485N	PB2-0437N	PB2-0432N
FRONT DOOR CLOSE	1NO-1NC	PB2-0119N	PB2-0147N	PB2-0175N	PB2-0203N	PB2-0063N	PB2-0091N	PB2-0007N	PB2-0035N
FRONT DOOR OPEN	1NO-1NC	PB2-0118N	PB2-0146N	PB2-0174N	PB2-0202N	PB2-0062N	PB2-0090N	PB2-0006N	PB2-0034N
NON STOP	1NO-1NC	PB2-0122N	PB2-0150N	PB2-0178N	PB2-0206N	PB2-0066N	PB2-0094N	PB2-0010N	PB2-0038N
P	1NO-1NC	PB2-0506N	PB2-0524N	PB2-0542N	PB2-0560N	PB2-0470N	PB2-0488N	PB2-0440N	PB2-0435N
PUSH FOR HELP	2NO	PB2-0501N	PB2-0519N	PB2-0537N	PB2-0555N	PB2-0465N	PB2-0483N	PB2-0436N	PB2-0431N
PUSH TO CALL	2NO	PB2-0127N	PB2-0155N	PB2-0183N	PB2-0211N	PB2-0071N	PB2-0099N	PB2-0015N	PB2-0043N
PUSH TO TALK	2NO	PB2-0128N	PB2-0156N	PB2-0184N	PB2-0212N	PB2-0072N	PB2-0100N	PB2-0016N	PB2-0044N
REAR DOOR CLOSE	1NO-1NC	PB2-0120N	PB2-0148N	PB2-0176N	PB2-0204N	PB2-0064N	PB2-0092N	PB2-0008N	PB2-0036N
REAR DOOR OPEN	1NO-1NC	PB2-0121N	PB2-0149N	PB2-0177N	PB2-0205N	PB2-0065N	PB2-0093N	PB2-0009N	PB2-0037N
RESET	1NO-1NC	PB2-0124N	PB2-0152N	PB2-0180N	PB2-0208N	PB2-0068N	PB2-0096N	PB2-0012N	PB2-0040N
STOP	1NO-1NC	PB2-0666N	PB2-0668N	PB2-0670N	PB2-0672N	PB2-0662N	PB2-0664N	PB2-0658N	PB2-0660N
TEST	2NC			PB2-0539N	PB2-0557N	PB2-0467N			
UP	1NO-1NC	PB2-0125N	PB2-0153N	PB2-0181N	PB2-0209N	PB2-0069N	PB2-0097N	PB2-0013N	PB2-0041N

Non-Illuminated (Water Resistant)

Markings	Contact	VPN-WP St Stl
(Blank)	2NO	PB3-0044N
DOOR CLOSE	1NO-1NC	PB2-1151N
DOOR OPEN	1NO-1NC	PB2-1150N

Illuminated - Jewel Light

Incandescent Lamps





Lamp	Contact	VPB St Stl	VPB Mtz	VP St Stl	VP Mtz	VPWI St Stl	VPWI Mtz
12V	2NO	PB2-0185N	PB2-0213N	PB2-0073N	PB2-0101N	PB2-0129N	PB2-0157N
24V	2NO	PB2-0186N	PB2-0214N	PB2-0074N	PB2-0102N	PB2-0130N	PB2-0158N
48V	2NO	PB2-0187N	PB2-0215N	PB2-0075N	PB2-0103N	PB2-0131N	PB2-0159N
120V	2NO	PB2-0188N	PB2-0216N	PB2-0076N	PB2-0104N	PB2-0132N	PB2-0160N

Neon Lamps

Lamp	Contact	VPB St Stl	VPB Mtz	VP St Stl	VP Mtz	VPWI St Stl	VPWI Mtz
120V	2NO	PB2-0189N	PB2-0217N	PB2-0077N	PB2-0105N	PB2-0133N	PB2-0161N

SIGNAL FIXTURE COMPONENTS

Push Button Modules

VPMC-11 Jewel Light Metal Modules





Lamp	Contact	VPMC11 St Stl	VPMC11 Mtz	VPMC11H St Stl (NYC-HA)
6V Incand.	2NO	PB3-0016N	PB3-0022N	PB3-0028N
12V Incand.	2NO	PB3-0011N	PB3-0017N	PB3-0023N
24V Incand.	2NO	PB3-0012N	PB3-0018N	PB3-0024N
48V Incand.	2NO	PB3-0013N	PB3-0019N	PB3-0025N
120V Incand.	2NO	PB3-0014N	PB3-0020N	PB3-0026N
120V Neon	2NO	PB3-0015N	PB3-0021N	PB3-0027N
120V Neon	2NC	PB3-0029N	PB3-0030N	PB3-0031N
(Blank)	2NO	PB3-0007N	PB3-0008N	
(Blank)	1NO-1NC	PB3-0005N	PB3-0006N	
(Red Insert)	1NO-1NC	PB3-0009N	PB3-0010N	

SIGNAL FIXTURE COMPONENTS

Push Button Modules

VPMC-14 Extender Modules & Parts

PB3-0001N



Push Button, VPMC-14 2NO With 6-120V-LED For Extenders & Telephones, Muntz Finish-5/16 Nylon Insert

PB3-0002N



Push Button, VPMC-14 2NO With 6-120V-LED For Extenders & Telephones, Stainless Steel Finish-5/16 Nylon Insert

PB3-0039N



Base Assembly, VPMC-14 Button For 6-120V-LED Extenders & Telephones

PB3-0003N



Cap Assembly, VPMC-14 Button Used With LED For Extenders & Telephones, Muntz Finish-5/16 Nylon Insert

PB3-0004N



Cap Assembly, VPMC-14 Button Used With Led For Extenders & Telephones, Stainless Steel Finish-5/16 Nylon Insert

LED Printed Circuit Boards

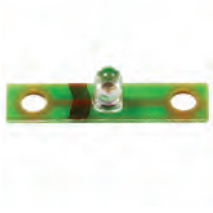
DISCONTINUED



Part No LED-0005N: Board, LED Extender, All Voltage Driver For LED-0006N.

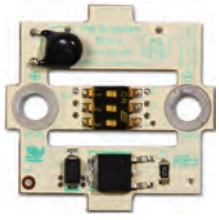
Note: If This Board Needs To Be Replaced For An Extender Push Button Module, Use PBLB-0006AN And Remove The LED-0006N.

LED-0006N



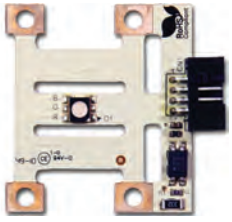
Board, 6-120V-LED Super-Red For O.S. Extender Push Button

PBLB-0006AN



Board, LED Universal, For Standard And Extender Push Button Modules, 6-120V AC/DC Multi-Color, Non-Spectral

GALX-1095AN

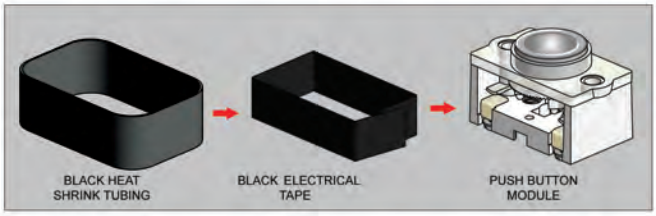


Board, LED Extender Push Button, For GALaxy Controller With RGB Multi-Color Spectral Light Input

SIGNAL FIXTURE COMPONENTS

Push Button Modules

RA Series PB Modules With Metal Caps



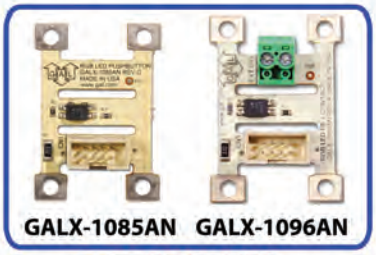




AVAILABLE CAP STYLES



AVAILABLE LED BOARDS (SOLD SEPARATELY)



SPECTRAL-LITE
(USED WITH GALAXY CONTROLLERS ONLY)



UNIVERSAL
MULT COLOR 7

Note: All PB9 push button modules are LED compatible. LED light board is required, though sold *separately*.

Standard & California

Cap Style	Contact	St Stl Models	St Stl Part No	Mtz Models	Mtz Part No
Convex	1NO-1NC	RAS1	PB9-0041N	RAM1	PB9-0046N
Convex	2NO	RAS1	PB9-0001N	RAM1	PB9-0006N
Concave	2NO	RAS2	PB9-0002N	RAM2	PB9-0007N
Concave	1NO-1NC	RAS2	PB9-0042N	RAM2	PB9-0047N

Standard

Cap Style	Contact	St Stl Models	St Stl Part No	Mtz Models	Mtz Part No
2 Wave	2NO	RAS3	PB9-0003N	RAM3	PB9-0008N
2 Wave	1NO-1NC	RAS3	PB9-0043N	RAM3	PB9-0048N
4 Wave	1NO-1NC	RAS4	PB9-0044N	RAM4	PB9-0049N
4 Wave	2NO	RAS4	PB9-0004N	RAM4	PB9-0009N
Groove	1NO-1NC	RAS5	PB9-0045N	RAM5	PB9-0050N
Groove	2NO	RAS5	PB9-0005N	RAM5	PB9-0010N

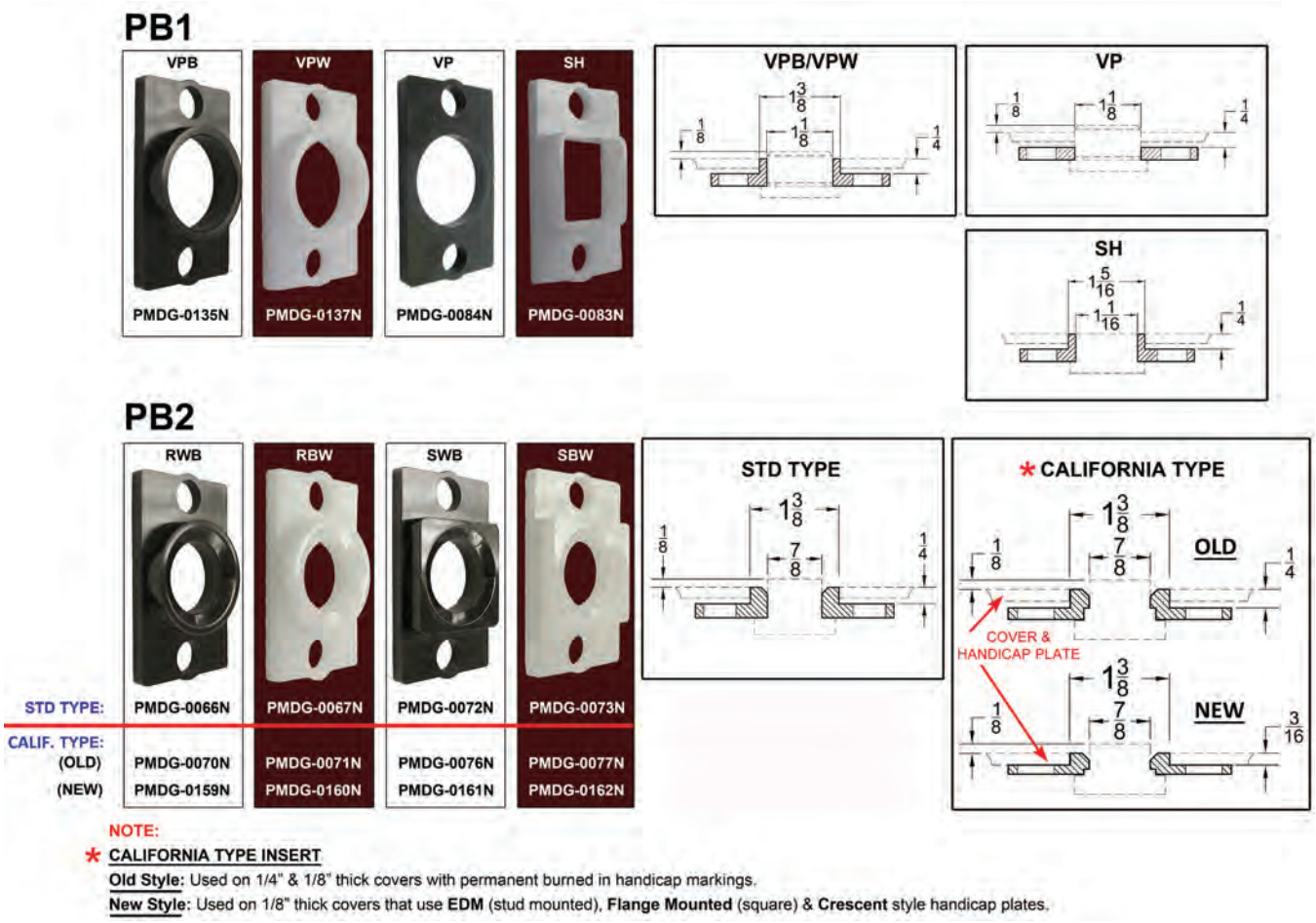
California

Note: California Type button protrudes 1/8" from surface of cover.

Cap Style	Contact	St Stl Models	St Stl Part No	Mtz Models	Mtz Part No
2 Wave	1NO-1NC	RAS3	PB9-0057N	RAM3	PB9-0060N
2 Wave	2NO	RAS3	PB9-0051N	RAM3	PB9-0054N
4 Wave	2NO	RAS4	PB9-0052N	RAM4	PB9-0055N
4 Wave	1NO-1NC	RAS4	PB9-0058N	RAM4	PB9-0061N
Groove	1NO-1NC	RAS5	PB9-0059N	RAM5	PB9-0062N
Groove	2NO	RAS5	PB9-0053N	RAM5	PB9-0056N

SIGNAL FIXTURE COMPONENTS

Push Button Inserts



NOTE:

* **CALIFORNIA TYPE INSERT**

Old Style: Used on 1/4" & 1/8" thick covers with permanent burned in handicap markings.

New Style: Used on 1/8" thick covers that use **EDM** (stud mounted), **Flange Mounted** (square) & **Crescent** style handicap plates.

Standard Type

Part No.	Model	Cap Dia
PMDG-0066N	RRB	7/8”
PMDG-0067N	RRW	7/8”
PMDG-0072N	SRB	7/8”
PMDG-0073N	SRW	7/8”
PMDG-0084N	VP	1 1/8”
PMDG-0135N	VPB	1 1/8”
PMDG-0137N	VPW	1 1/8”
PMDG-0083N	SH	1 1/16”

California Type

Part No.	Model	Cap Dia
PMDG-0070N	RRB	7/8”
PMDG-0071N	RRW	7/8”
PMDG-0076N	SRB	7/8”
PMDG-0077N	SRW	7/8”
PMDG-0159N	RRB	7/8”
PMDG-0160N	RRW	7/8”
PMDG-0161N	SRB	7/8”
PMDG-0162N	SRW	7/8”

SIGNAL FIXTURE COMPONENTS

Push-Pull Type Modules

Emergency Stop Switch Modules

Note: All emergency stop switch modules have a third set of contacts on the stem of the handle (cap) which may be N.O. or N.C. depending on the function of the switch.

Handle (Round Red Plastic) Marked: Push To Stop			
Part No.	**Model**	**Halo (Insert)**	**Contact Arrangement**
PB4-0009H/V	RRB	Round Black	1NO-1NC
PB4-0010H/V	RRB	Round Black	2NO-1NC
PB4-0011H/V	RRB	Round Black	2NC-1NO
PB4-0012H/V	RRW	Round White	2NO-1NC
PB4-0013H/V	RRW	Round White	2NC-1NO
PB4-0014H/V	SRB	Square Black	2NO-1NC
PB4-0015H/V	SRB	Square Black	2NC-1NO
PB4-0016H/V	SRW	Square White	2NO-1NC
PB4-0017H/V	SRW	Square White	2NC-1NO

Horizontal Image Shown

PB4-0009H/V



PB4-0010H/V



PB4-0011H/V



PB4-0012H/V



PB4-0013H/V



PB4-0014H/V



PB4-0015H/V



PB4-0016H/V



PB4-0017H/V



SIGNAL FIXTURE COMPONENTS

Push-Pull Type Modules

Emergency Stop Switch Modules

Note: All emergency stop switch modules have a third set of contacts on the stem of the handle (cap) which may be N.O. or N.C. depending on the function of the switch.

Handle (Round Red Plastic) Marked: Pull To Stop			
Part No.	**Model**	**Halo (Insert)**	**Contact Arrangement**
PB4-0001H/V	RRB	Round Black	2NC-1NO
PB4-0002H/V	RRB	Round Black	2NO-1NC
PB4-0003H/V	RRW	Round White	2NC-1NO
PB4-0004H/V	RRW	Round White	2NO-1NC
PB4-0005H/V	SRB	Square Black	2NC-1NO
PB4-0006H/V	SRB	Square Black	2NO-1NC
PB4-0007H/V	SRW	Square White	2NC-1NO
PB4-0008H/V	SRW	Square White	2NO-1NC

Horizontal Image Shown

PB4-0001H/V



PB4-0002H/V



PB4-0003H/V



PB4-0004H/V



PB4-0005H/V



PB4-0006H/V



PB4-0007H/V



PB4-0008H/V



SIGNAL FIXTURE COMPONENTS

Push-Pull Type Modules

Emergency Stop Switch Modules (VP)

Note: All emergency stop switch modules have a third set of contacts on the stem of the handle (cap) which may be N.O. or N.C. depending on the function of the switch.

Handle (Round Metal) Marked: Pull To Stop

Part No.	Model	Handle (Cap)	Halo (Insert)	Contact Arrangement
PB4-0018H/V	VP	Stainless Steel	(None)	2NC-1NO
PB4-0019H/V	VP	Stainless Steel	(None)	2NO-1NC
PB4-0020H/V	VP	Muntz	(None)	2NC-1NO
PB4-0021H/V	VP	Muntz	(None)	2NO-1NC

Horizontal Image Shown

PB4-0018H/V



PB4-0019H/V



PB4-0020H/V



PB4-0021H/V



Handle (Round Metal) Marked: Push To Stop

Part No.	Model	Handle (Cap)	Halo (Insert)	Contact Arrangement
PB4-0022H/V	VP	Stainless Steel	(None)	2NO-1NC
PB4-0023H/V	VP	Stainless Steel	(None)	2NC-1NO
PB4-0024H/V	VP	Muntz	(None)	2NO-1NC
PB4-0025H/V	VP	Muntz	(None)	2NC-1NO

Horizontal Image Shown

PB4-0022H/V



PB4-0023H/V



PB4-0024H/V



PB4-0025H/V



SIGNAL FIXTURE COMPONENTS

Push-Pull Type Modules

Emergency Stop Switch Modules (VP With Halo)

Note: All emergency stop switch modules have a third set of contacts on the stem of the handle (cap) which may be N.O. or N.C. depending on the function of the switch.

Handle (Round Metal) Marked: Pull To Stop

Part No.	Model	Handle (Cap)	Halo (Insert)	Contact Arrangement
PB4-0026H/V	VPW	Stainless Steel	Round White	2NC-1NO
PB4-0027H/V	VPW	Stainless Steel	Round White	2NO-1NC
PB4-0028H/V	VPB	Stainless Steel	Round Black	2NC-1NO
PB4-0029H/V	VPB	Stainless Steel	Round Black	2NO-1NC
PB4-0030H/V	SH	Stainless Steel	Square White	2NC-1NO
PB4-0031H/V	SH	Stainless Steel	Square White	2NO-1NC
PB4-0032H/V	VPW	Muntz	Round White	2NC-1NO
PB4-0033H/V	VPW	Muntz	Round White	2NO-1NC
PB4-0034H/V	VPB	Muntz	Round Black	2NC-1NO
PB4-0035H/V	VPB	Muntz	Round Black	2NO-1NC
PB4-0036H/V	SH	Muntz	Square White	2NC-1NO
PB4-0037H/V	SH	Muntz	Square White	2NO-1NC

Horizontal Image Shown

PB4-0026H/V



PB4-0027H/V



PB4-0028H/V



PB4-0029H/V



PB4-0030H/V



PB4-0031H/V



PB4-0032H/V



PB4-0033H/V



PB4-0034H/V



PB4-0035H/V



PB4-0036H/V



PB4-0037H/V



SIGNAL FIXTURE COMPONENTS

Push-Pull Type Modules

Emergency Stop Switch Modules (VP With Halo)

Note: All emergency stop switch modules have a third set of contacts on the stem of the handle (cap) which may be N.O. or N.C. depending on the function of the switch.

Handle (Round Metal) Marked: Push To Stop				
Part No.	**Model**	**Handle (Cap)**	**Halo (Insert)**	**Contact Arrangement**
PB4-0038H/V	VPW	Stainless Steel	Round White	2NO-1NC
PB4-0039H/V	VPW	Stainless Steel	Round White	2NC-1NO
PB4-0040H/V	VPB	Stainless Steel	Round Black	2NO-1NC
PB4-0041H/V	VPB	Stainless Steel	Round Black	2NC-1NO
PB4-0042H/V	SH	Stainless Steel	Square White	2NO-1NC
PB4-0043H/V	SH	Stainless Steel	Square White	2NC-1NO
PB4-0044H/V	VPW	Muntz	Round White	2NO-1NC
PB4-0045H/V	VPW	Muntz	Round White	2NC-1NO
PB4-0046H/V	VPB	Muntz	Round Black	2NO-1NC
PB4-0047H/V	VPB	Muntz	Round Black	2NC-1NO
PB4-0048H/V	SH	Muntz	Square White	2NO-1NC
PB4-0049H/V	SH	Muntz	Square White	2NC-1NO

Horizontal Image Shown

PB4-0038H/V



PB4-0039H/V



PB4-0040H/V



PB4-0041H/V



PB4-0042H/V



PB4-0043H/V



PB4-0044H/V



PB4-0045H/V



PB4-0046H/V



PB4-0047H/V



PB4-0048H/V



PB4-0049H/V

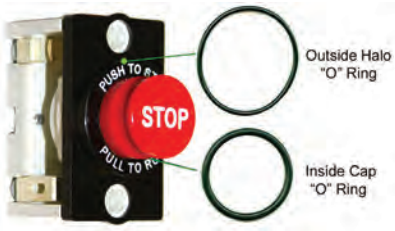


SIGNAL FIXTURE COMPONENTS

Push-Pull Type Modules

Emergency Stop Switch Modules (Water Resistant)

Handle (Round Metal) Marked: Push To Stop



Note: All emergency stop switch modules have a third set of contacts on the stem of the handle (cap) which may be N.O. or N.C. depending on the function of the switch.

Part No.	Model	Halo (Insert)	Contact Arrangement
PB4-0079H/V	RRB-W	Round Black	2NC-1NO

Door Hold Switch Modules

Handle (Round White Plastic)

Part No.	Model	Marking	Halo (Insert)	Contact Arrangement
PB4-0050N	RWB	PUSH FOR INSP.	Round Black	1NO-1NC
PB4-0051N	RWB	DOOR HOLD OPEN	Round Black	1NO-1NC
PB4-0076N	SWB	DOOR HOLD OPEN	Square Black	1NO-1NC

PB4-0050N



PB4-0051N



PB4-0076N



SIGNAL FIXTURE COMPONENTS

Toggle Type Modules

Various Toggle Type Switch Modules

Part No.	Model	Marking	Contact Arrangement
PB6-0010V	SBW	DOOR HOLD	1NO-1NC
PB6-0011V	RBW	DOOR-HOLD	1NO-1NC
PB6-0012V	SBB	DOOR HOLD	1NO-1NC
PB6-0013V	RBB	DOOR HOLD	1NO-1NC
PB6-0014V	RBB	LIGHT-OFF	1NO-1NC

Part No.	Model	Marking	Contact Arrangement
PB6-0015V	RBB	INSP.-NORM	1NO-1NC
PB6-0017V	RBW	ON-OFF	1NO-1NC
PB6-0018V	SBW	ON-OFF	1NO-1NC
PB6-0019V	RBB	ON-OFF	1NO-1NC
PB5-0021N			

Note: These switches are supplied vertically mount only. An adaptor plate (**Part No. PB5-0021N)** is available to convert vertical to horizontal mounting for round module.

PB6-0010V



PB6-0011V



PB6-0012V



PB6-0013V



PB6-0014V



PB6-0015V



PB6-0017V



PB6-0018V



PB6-0019V



PB5-0021N



Adaptor Plate

SIGNAL FIXTURE COMPONENTS

Toggle Type Modules

Run-Stop Toggle Switch Modules

Part No.	Model	Halo (Insert)	Contact Arrangement
PB6-0001V**	RRB	Round Black	1NO-1NC
PB6-0002V	SRW	Square White	2NO-1NC
PB6-0003V	RRW	Round White	2NO-1NC
PB6-0004V	SRB	Square Black	2NO-1NC
PB6-0005V	RRB	Round Black	2NO-1NC
PB6-0006V	SRW	Square White	2NC-1NO
PB6-0007V	RRW	Round White	2NC-1NO
PB6-0008V	SRB	Square Black	2NC-1NO
PB6-0009V	RRB	Round Black	2NC-1NO

****PB6-0001V:** Toggle switch is for pit switch & car top station



RRW



SRW



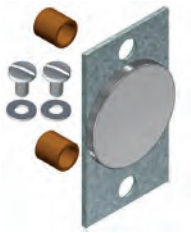
RRB



SRB

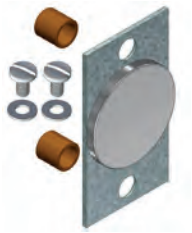
Plug Assemblies

PB5-0001N



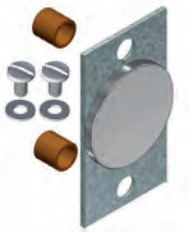
Plug Assembly, 1 3/8" Dia. Station Cover St. Stl. With Backplate & Hardware

PB5-0052N



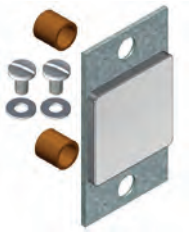
Plug Assembly, 1 1/8" Dia. Station Cover St. Stl. With Backplate & Hardware

PB5-0050N



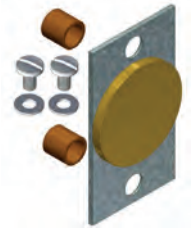
Plug Assembly, 1" Dia. Station Cover St. Stl. With Backplate & Hardware

PB5-0003N



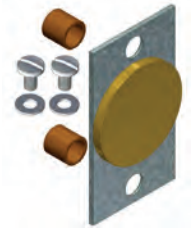
Plug Assembly, 1 5/16" Square Station Cover St. Stl. With Backplate & Hardware

PB5-0002N



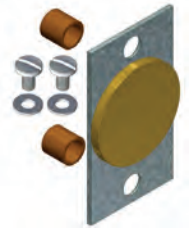
Plug Assembly, 1 3/8" Dia. Station Cover Muntz With Backplate & Hardware

PB5-0053N



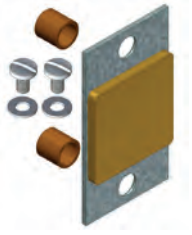
Plug Assembly, 1 1/8" Dia. Station Cover Muntz With Backplate & Hardware

PB5-0051N



Plug Assembly, 1" Dia. Station Cover Muntz With Backplate & Hardware

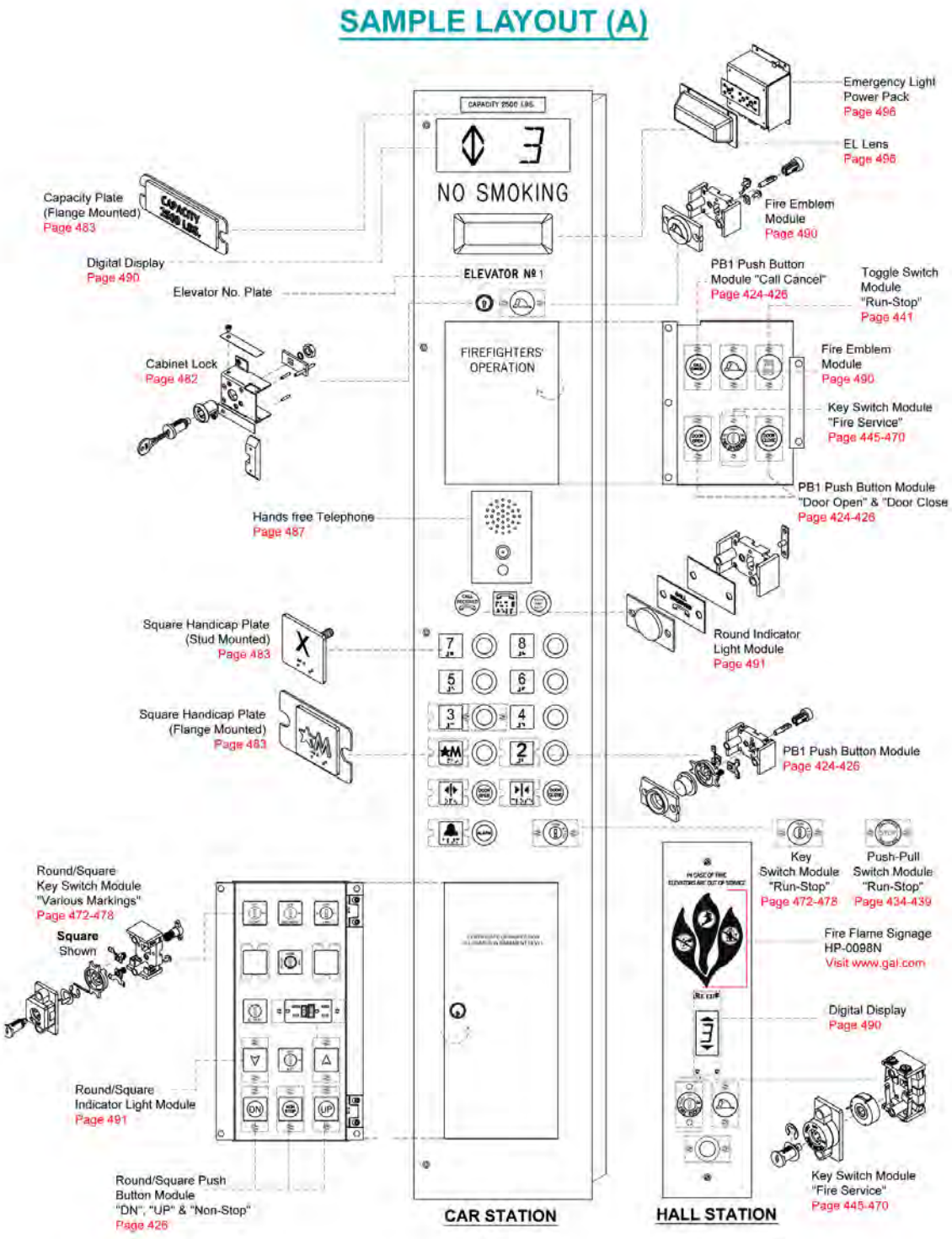
PB5-0004N



Plug Assembly, 1 5/16" Square Station Cover Muntz With Backplate & Hardware

SIGNAL FIXTURE COMPONENTS

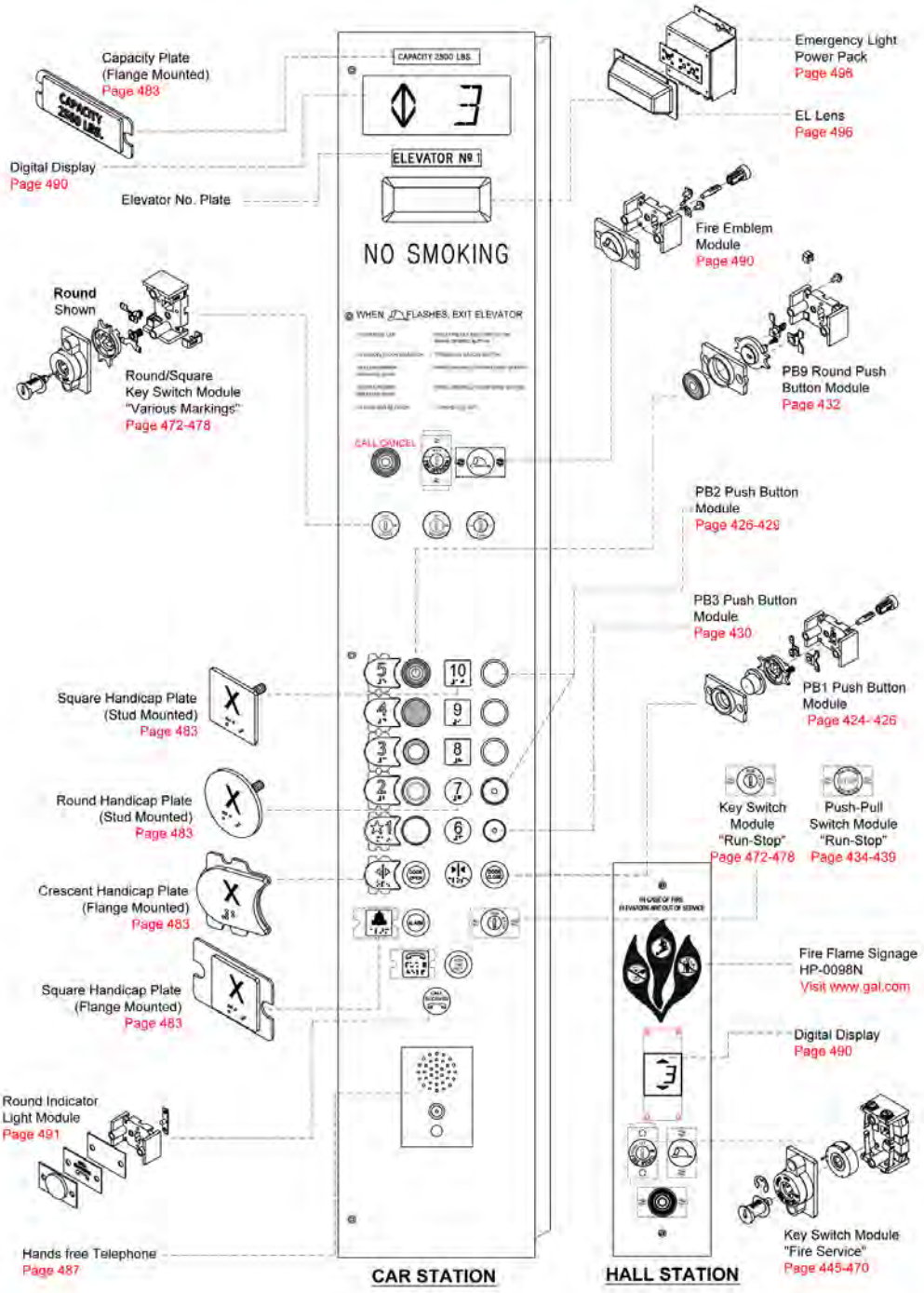
Car and Hall Station Panel Layout



Sample Drawing-*For reference purpose only*

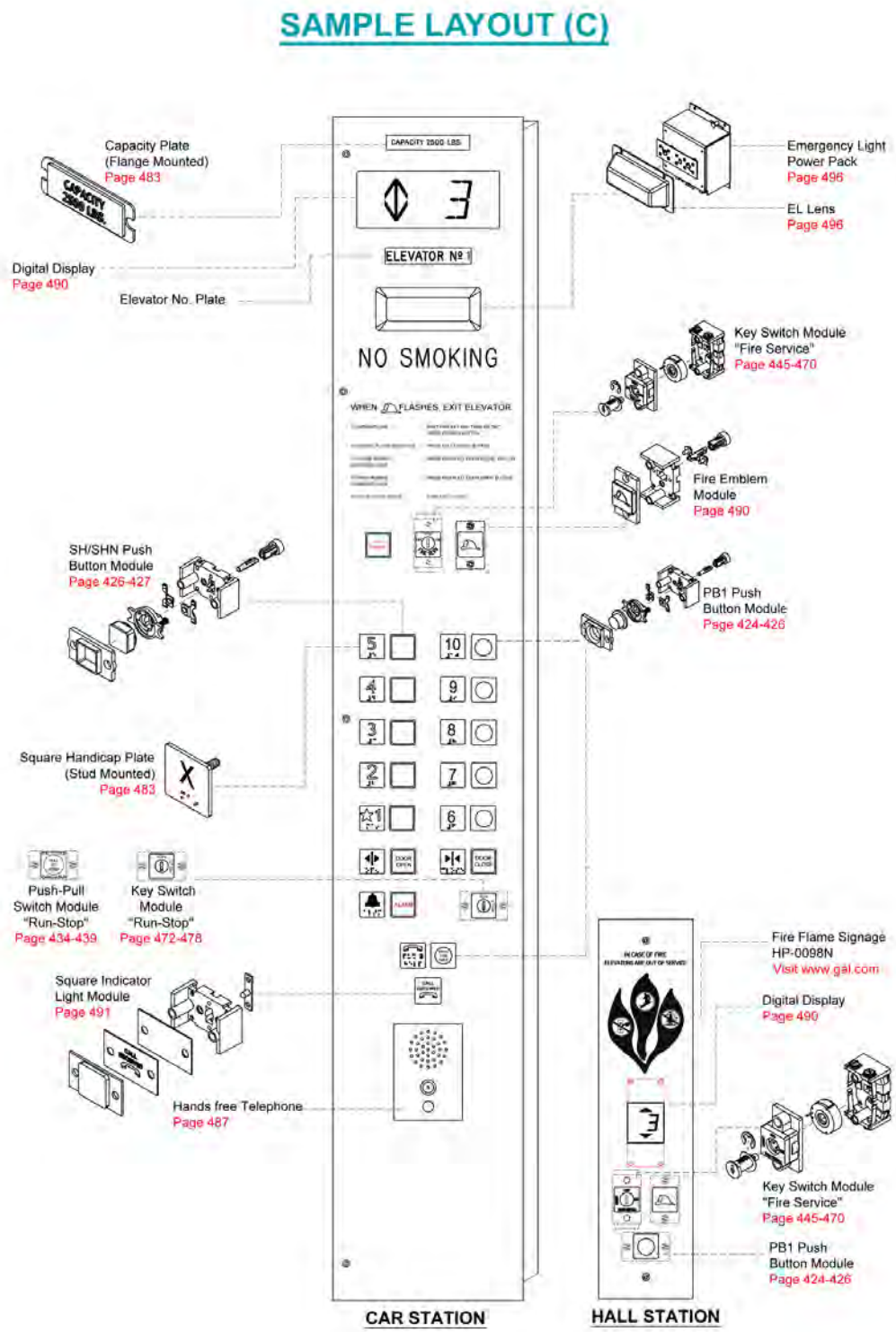
Car and Hall Station Panel Layout

SAMPLE LAYOUT (B)



SIGNAL FIXTURE COMPONENTS

Car and Hall Station Panel Layout



Sample Drawing-*For reference purpose only*

Fire Service Key Switches

How To Find Your Fire Service Key Switch

1) Find what code year your job was done under: ANSI 1996, ASME 2000, 2004-2010. Does this code still apply or was it changed from the original installation time?
2) Check the **State & City Code Charts** first to see if your state or city is listed under the correct code year for this job. If not listed here, go to the **National Code Charts** to locate code year required.
3) Find out if key switch has a round or square insert (halo), shell, or flush configuration.
4) What is marked on the insert (halo) or cover? Check for correct markings in chart.
5) Check key switch functions and match to functions in chart.
6) What key was used? (Make and Key No.)
7) Part No. is found under (SST) St. Steel or (MTZ) Muntz bronze finish in code charts.
8) Chose if it is mounted horizontal or vertical.

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

National Code Chart

FIRE CODE COMPLIANCE CHART						
Abbr.	**State**	**City**	**ANSI-1996**	**ASME-2000**	**ASME-2004**	**ASME-2007-2010**
States	All States	Cities Not Listed	•	•	•	
AK	Alaska	All Cities			•	•
AL	Alabama	Birmingham			•	
		Cities Not Listed				•
AR	Arkansas	All Cities				•
AZ	Arizona	All Cities			•	•
CA	California	All Cities	•		•	
CO	Colorado	Boulder		•		
		Denver			•	
		Cities Not Listed				•
CT	Connecticut	All Cities	•			
DC	District of Columbia	Washington DC			•	
DE	Delaware	Dover		•		•
		Kent			•	
		New Castle		•	•	
		Sussex County		•		
		Wilmington		•		
FL	Florida	Up to 5 Floors			•	•
		6 Floors and Above	Contact Engineering			
GA	Georgia	All Cities				•
HI	Hawaii	All Cities	•			
IA	Iowa	All Cities				•
ID	Idaho	All Cities		•		•
IL	Illinois	Chicago City	•	•		•
		Cities Not Listed			•	•
IN	Indiana	All Cities		•		•
KS	Kansas	All Cities			•	
KY	Kentucky	All Cities			•	•
LA	Louisiana	All Cities			•	•
MA	Massachusetts	All Cities	•	•	•	•
MD	Maryland	All Cities				•
ME	Maine	All Cities	•	•	•	•
MI	Michigan	Detroit	ANSI-1993			
		Cities Not Listed			•	•
MN	Minnesota	All Cities			•	
MO	Missouri	St. Louis				•
		Cities Not Listed			•	

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

Fire Service Key Switches

National Code Chart

FIRE CODE COMPLIANCE CHART						
Abbr.	**State**	**City**	**ANSI-1996**	**ASME-2000**	**ASME-2004**	**ASME-2007-2010**
MS	Mississippi	All Cities			•	
MT	Montana	All Cities		•	•	
NC	North Carolina	All Cities				•
ND	North Dakota	All Cities				•
NE	Nebraska	All Cities				•
NH	New Hampshire	All Cities	•	•	•	•
NJ	New Jersey	All Cities	•		•	•
NM	New Mexico	All Cities				•
NV	Nevada	All Cities				•
NY	New York	Islip Township	•	•	•	•
		Mount Vernon	•	•	•	•
		New Rochelle	•	•	•	•
		New York City	•	•		
		White Plains	•	•	•	•
		Yonkers	•	•	•	
		Cities Not Listed		•	•	•
OH	Ohio	All Cities				•
OK	Oklahoma	Oklahoma City		•		
		Tulsa			•	
		Cities Not Listed				•
OR	Oregon	All Cities				•
PA	Pennsylvania	All Cities	•	•		
PR	Puerto Rico	Puerto Rico	•		•	
RI	Rhode Island	All Cities				•
SC	South Carolina	All Cities	•	•	•	•
SD	South Dakota	All Cities			•	•
TN	Tennessee	All Cities			•	•
TX	Texas	Fort Worth			•	•
		Cities Not Listed				•
UT	Utah	All Cities				•
VA	Virginia	All Cities			•	•
VT	Vermont	All Cities				•
WV	West Virginia	All Cities				•
WA	Washington	Seattle				•
		Cities Not Listed			•	
WI	Wisconsin	All Cities				•
WY	Wyoming	All Cities			•	•

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

National Code Chart

ANSI-1996

HALL CHICAGO Key #1617



RKR



SKR

HALL MEDECO Key #FS



RKR



SKR

HALL MEDECO Key #FS



SHELL MOUNT

HALL MEDECO Key #FS



FLUSH MOUNT

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0057V/H	
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0049V/H	KS3-0050V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0058V/H	
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0051V/H	KS3-0052V/H
Shell Mounted	Cover	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0073V/H	KS3-0074V/H
Flush Mounted	Cover	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0067V/H	KS3-0068V/H

CAR CHICAGO Key #1617



RKR



SKR

CAR MEDECO Key #FS



RKR



SKR

CAR MEDECO Key #FS



SHELL MOUNT

CAR MEDECO Key #FS



FLUSH MOUNT

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	GAL # FSS 1617	KS3-0059V/H	
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Medeco # FS	KS3-0053V/H	KS3-0054V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	GAL # FSS 1617	KS3-0060V/H	
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Medeco # FS	KS3-0055V/H	KS3-0056V/H
Shell Mounted	Cover	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Medeco # FS	KS3-0075V/H	KS3-0076V/H
Flush Mounted	Cover	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Medeco # FS	KS3-0069V/H	KS3-0070V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

National Code Chart

ASME-2000

HALL CHICAGO Key #1617



RKR



SKR

HALL MEDECO Key #FS



RKR



SKR

HALL MEDECO Key #FS



SHELL MOUNT

HALL MEDECO Key #FS



FLUSH MOUNT

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0085V/H	KS3-0089V/H
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0087V/H	
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0091V/H	KS3-0095V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0093V/H	
Shell Mounted	Cover	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0073V/H	KS3-0074V/H
Flush Mounted	Cover	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0067V/H	KS3-0068V/H

CAR CHICAGO Key #1617



RKR



SKR

CAR MEDECO Key #FS



RKR



SKR

CAR MEDECO Key #FS



SHELL MOUNT

CAR MEDECO Key #FS



FLUSH MOUNT

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	GAL # FSS 1617	KS3-0088V/H	
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Medeco # FS	KS3-0086V/H	KS3-0090V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	GAL # FSS 1617	KS3-0094V/H	
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Medeco # FS	KS3-0092V/H	KS3-0096V/H
Shell Mounted	Cover	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Medeco # FS	KS3-0149V/H	
Flush Mounted	Cover	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Medeco # FS	KS3-0150V/H	KS3-0151V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

National Code Chart

ASME-2004

HALL
CHICAGO Key #1617



RKR



SKR

HALL
MEDECO Key #FS



RKR



SKR

HALL
MEDECO Key #FS



SHELL MOUNT

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0087V/H	
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0085V/H	KS3-0089V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0093V/H	
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0091V/H	KS3-0095V/H
Shell Mounted	Cover	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0073V/H	KS3-0074V/H

CAR
CHICAGO Key #1617



RKR

CAR
MEDECO Key #FS



RKR

From 2004 and on, all Phase II (Car) fire service key switches are mounted on a sub-panel located inside the lock box and are ONLY supplied in RKR round configuration. SKR square configurations are ONLY available prior to 2004.

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	GAL # FSS 1617	KS3-0088V	
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Medeco # FS	KS3-0086V	KS3-0090V

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

National Code Chart

ASME-2007-2010



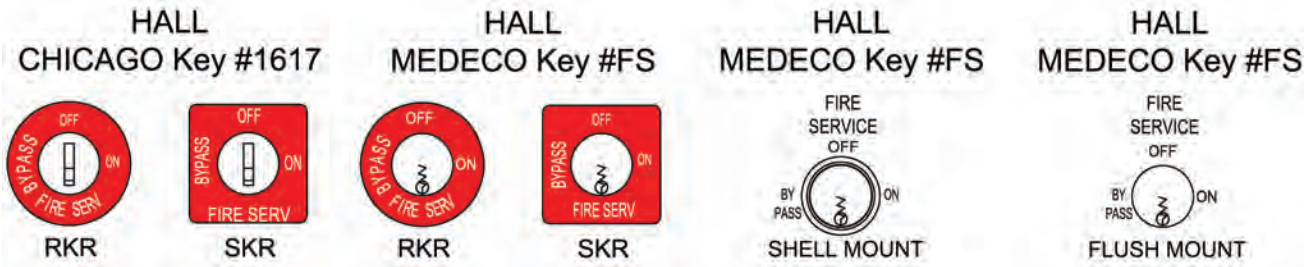
PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	ACE FEO-K1	KS3-0179V/H	KS3-0186V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	ACE FEO-K1	KS3-0181V/H	KS3-0188V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	ACE FEO-K1	KS3-0180V	KS3-0187V

If your fire service switch configuration is not found in the **State and City Code Chart** below, use the **National Code Chart** for the code year required.

State and City Code Chart: ANSI-1996

California (All Cities)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0057V/H	
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0049V/H	KS3-0050V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0058V/H	
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0051V/H	KS3-0052V/H
Shell Mounted	Cover	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0073V/H	KS3-0074V/H
Flush Mounted	Cover	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0067V/H	KS3-0068V/H

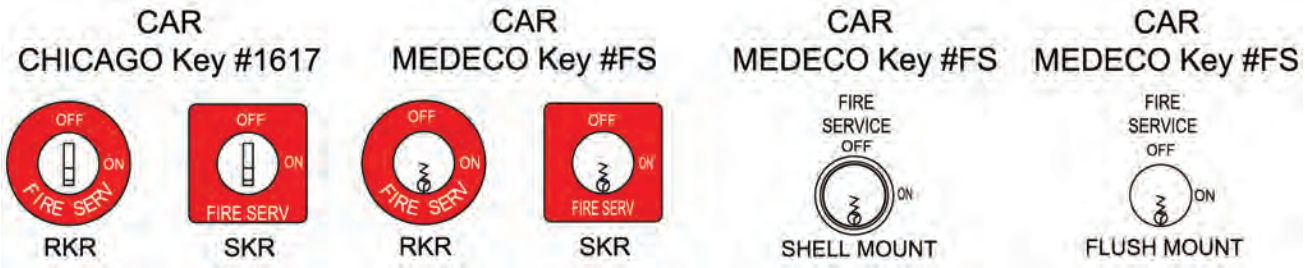
NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ANSI-1996

California (All Cities)



PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0041V/H	
(RKR) Round	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0043V/H	KS3-0044V/H
(SKR) Square	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0042V/H	
(SKR) Square	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0045V/H	KS3-0046V/H
Shell Mounted	Cover	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0071V/H	KS3-0072V/H
Flush Mounted	Cover	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0065V/H	KS3-0066V/H

Connecticut (All Cities)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	ACE BFD-1	KS3-0033V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	ACE BFD-1	KS3-0034V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	ACE BFD-1	KS3-0035V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	ACE BFD-1	KS3-0036V/H

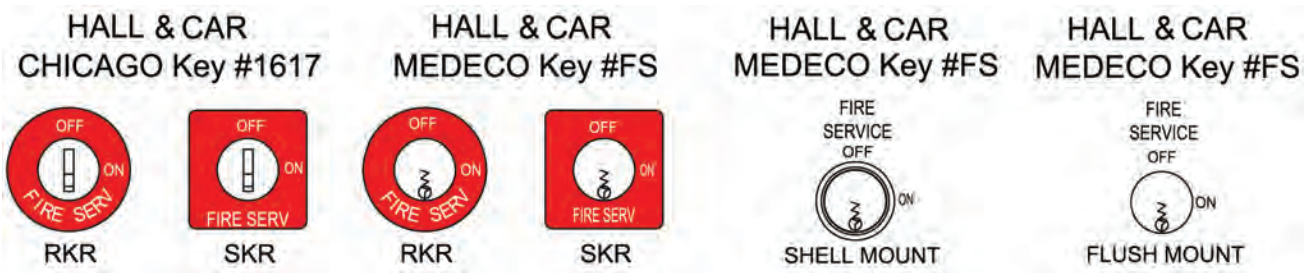
NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ANSI-1996

Illinois, Chicago City



PHASE I (HALL) PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
RKR Round	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0041V/H	
RKR Round	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0043V/H	KS3-0044V/H
SKR Square	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0042V/H	
SKR Square	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0045V/H	KS3-0046V/H
Shell Mounted	Cover	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0071V/H	KS3-0072V/H
Flush Mounted	Cover	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0065V/H	KS3-0066V/H

Maine (All Cities)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0009V/H	KS3-0010V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0011V/H	KS3-0012V/H

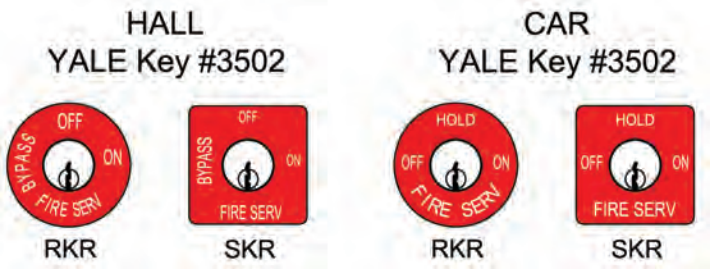
PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0013V/H	KS3-0014V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0015V/H	KS3-0016V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ANSI-1996



Massachusetts (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0009V/H	KS3-0010V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0011V/H	KS3-0012V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0013V/H	KS3-0014V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0015V/H	KS3-0016V/H

New Hampshire (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0009V/H	KS3-0010V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0011V/H	KS3-0012V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0013V/H	KS3-0014V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0015V/H	KS3-0016V/H

New Jersey (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0011V/H	KS3-0012V/H

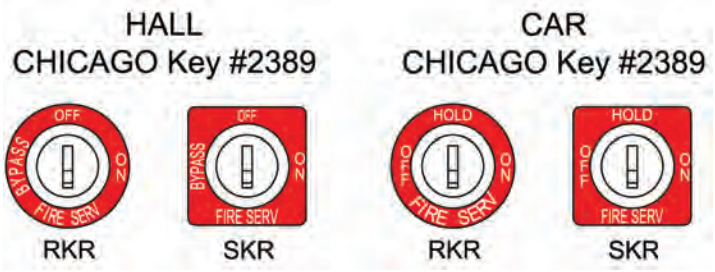
PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0015V/H	KS3-0016V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

Fire Service Key Switches

State and City Code Chart: ANSI-1996

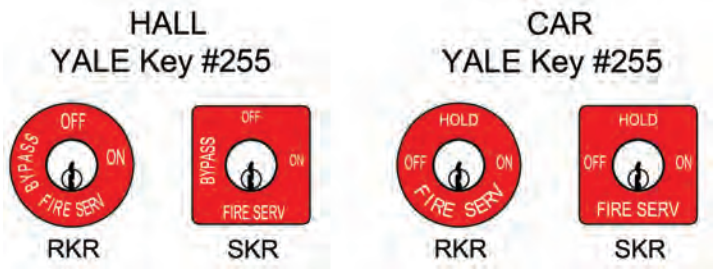
New York, Islip Township



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Chicago # 2389	KS3-0168V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Chicago # 2389	KS3-0169V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Chicago # 2389	KS3-0170V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Chicago # 2389	KS3-0171V/H

New York, Mount Vernon



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0064V/H	KS3-0147V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0141V/H	KS3-0148V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 255	KS3-0021V/H	KS3-0022V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 255	KS3-0023V/H	KS3-0024V/H

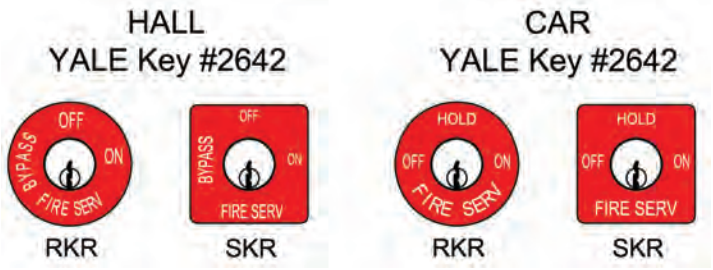
NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ANSI-1996

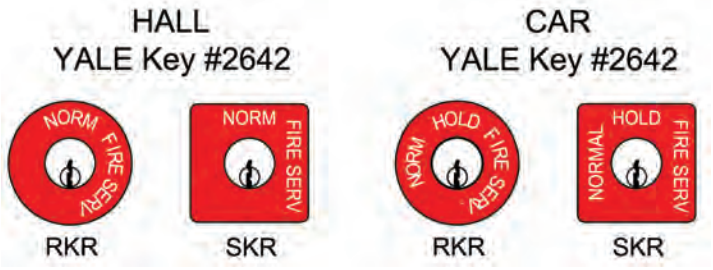
New York, New Rochelle



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0025V/H	KS3-0026V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0027V/H	KS3-0028V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 2642	KS3-0029V/H	KS3-0030V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 2642	KS3-0031V/H	KS3-0032V/H

New York, New York City



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	NORM FIRE SERV.	2 Position Key Removable In: All 2 Position	Yale # 2642	KS3-0001V/H	KS3-0002V/H
(SKR) Square	Halo	NORM FIRE SERV.	2 Position Key Removable In: All 2 Position	Yale # 2642	KS3-0003V/H	KS3-0004V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. NORM • HOLD	2 Position Key Removable In: Normal/Hold	Yale # 2642	KS3-0005V/H	KS3-0006V/H
(SKR) Square	Halo	FIRE SERV. NORM • HOLD	2 Position Key Removable In: Normal/Hold	Yale # 2642	KS3-0007V/H	KS3-0008V/H

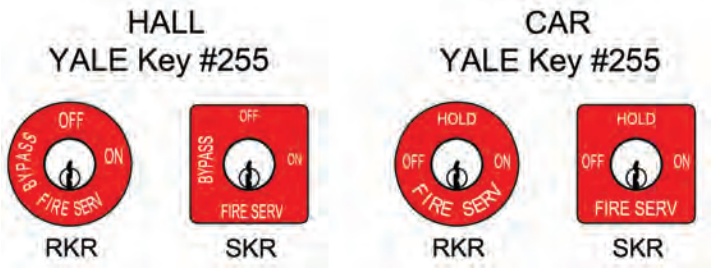
NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ANSI-1996

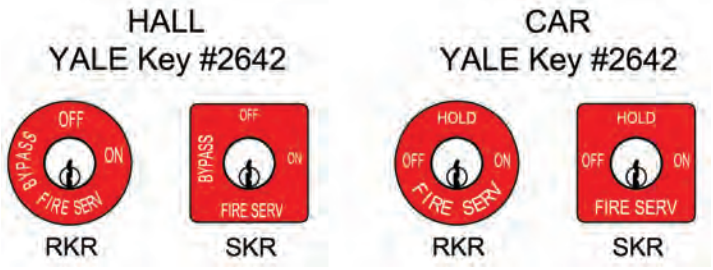
New York, White Plains



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0017V/H	KS3-0018V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0019V/H	KS3-0020V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 255	KS3-0021V/H	KS3-0022V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 255	KS3-0023V/H	KS3-0024V/H

New York, Yonkers



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0025V/H	KS3-0026V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0027V/H	KS3-0028V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 2642	KS3-0029V/H	KS3-0030V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 2642	KS3-0031V/H	KS3-0032V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ANSI-1996

Pennsylvania (All Cities)

HALL
CHICAGO Key #1617



RKR SKR

HALL
MEDECO Key #FS



RKR SKR

HALL
MEDECO Key #FS



SHELL MOUNT

HALL
MEDECO Key #FS



FLUSH MOUNT

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0057V/H	
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0049V/H	KS3-0050V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	GAL # FSS 1617	KS3-0058V/H	
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0051V/H	KS3-0052V/H
Shell Mounted	Cover	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0073V/H	
Flush Mounted	Cover	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Medeco # FS	KS3-0067V/H	KS3-0068V/H

CAR
CHICAGO Key #1617



RKR SKR

CAR
MEDECO Key #FS



RKR SKR

CAR
MEDECO Key #FS



SHELL MOUNT

CAR
MEDECO Key #FS



FLUSH MOUNT

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0041V/H	
(RKR) Round	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0043V/H	KS3-0044V/H
(SKR) Square	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0042V/H	
(SKR) Square	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0045V/H	KS3-0046V/H
Shell Mounted	Cover	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0071V/H	KS3-0072V/H
Flush Mounted	Cover	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0065V/H	KS3-0066V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ANSI-1996

South Carolina (All Cities)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Illinois # SC 1000	KS3-0037V/H
(SKR) Square	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Illinois # SC 1000	KS3-0038V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Illinois # SC 1000	KS3-0039V/H
(SKR) Square	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Illinois # SC 1000	KS3-0040V/H

Puerto Rico, Puerto Rico (In Spanish)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	SERV. BOMBEROS OFF • ON	2 Position Key Removable In: All 2 Position	GAL # FSS 1617	KS3-0176V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	BOMBEROS OFF • ON • AUTO	3 Position Key Removable In: All 3 Position	GAL # FSS 1617	KS3-0174V/H
(RKR) Round	Halo	PARAR CARRO OFF • ON	2 Position Key Removable In: All 2 Position	GAL # 1601	KS3-0175V/H

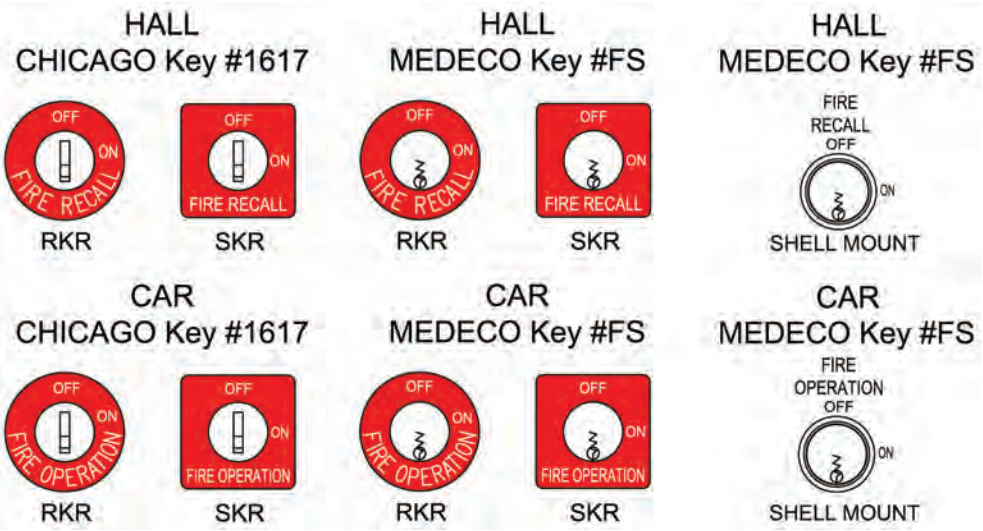
NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2000

Illinois, Chicago City



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0164V/H	
(RKR) Round	Halo	FIRE RECALL OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0156V/H	KS3-0157V/H
(SKR) Square	Halo	FIRE RECALL OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0165V/H	
(SKR) Square	Halo	FIRE RECALL OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0158V/H	KS3-0159V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0166V/H	
(RKR) Round	Halo	FIRE OPERATION OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0160V/H	KS3-0161V/H
(SKR) Square	Halo	FIRE OPERATION OFF • ON	2 Position Key Removable In: Off	GAL # FSS 1617	KS3-0167V/H	
(SKR) Square	Halo	FIRE OPERATION OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0162V/H	KS3-0163V/H

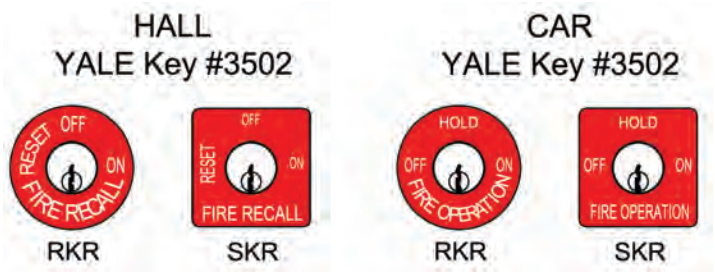
PHASE I (HALL) PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
Shell Mounted	Cover	FIRE RECALL OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0071V/H	KS3-0072V/H
Shell Mounted	Cover	FIRE OPERATION OFF • ON	2 Position Key Removable In: Off	Medeco # FS	KS3-0071V/H	KS3-0072V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2000



Maine (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0105V/H	KS3-0107V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0106V/H	KS3-0108V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 3502	KS3-0109V/H	KS3-0111V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 3502	KS3-0110V/H	KS3-0112V/H

Massachusetts (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0105V/H	KS3-0107V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0106V/H	KS3-0108V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0118V/H	KS3-0120V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0119V/H	KS3-0121V/H

New Hampshire (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0105V/H	KS3-0107V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0106V/H	KS3-0108V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 3502	KS3-0109V/H	KS3-0111V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 3502	KS3-0110V/H	KS3-0112V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2000

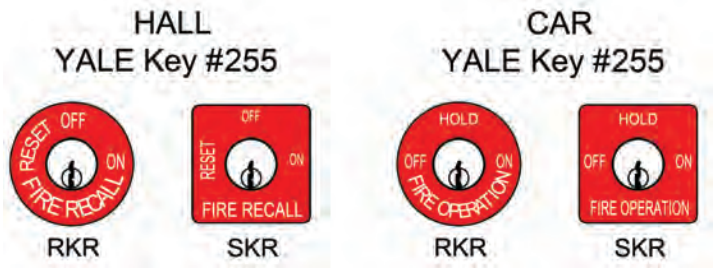
New York, Islip Township



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Chicago # 2389	KS3-0189V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Chicago # 2389	KS3-0191V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Chicago # 2389	KS3-0190V/H

New York, Mount Vernon



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0129V/H	KS3-0131V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0130V/H	KS3-0132V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 255	KS3-0133V	KS3-0135V
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 255	KS3-0134V/H	KS3-0136V/H

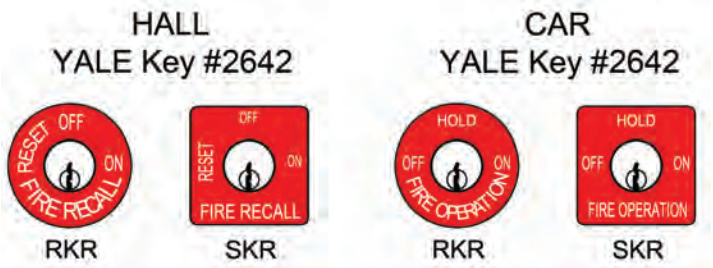
NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2000

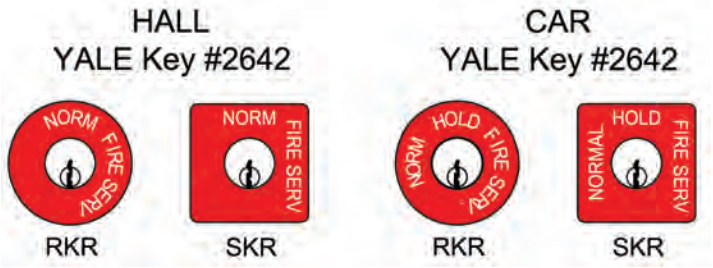
New York, New Rochelle



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0117V/H	KS3-0123V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0122V/H	KS3-0124V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 2642	KS3-0125V/H	KS3-0126V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 2642	KS3-0127V/H	KS3-0128V/H

New York, New York City



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	NORM FIRE SERV.	2 Position Key Removable In: All 2 Position	Yale # 2642	KS3-0001V/H	KS3-0002V/H
(SKR) Square	Halo	NORM FIRE SERV.	2 Position Key Removable In: All 2 Position	Yale # 2642	KS3-0003V/H	KS3-0004V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE SERV. NORM • HOLD	2 Position Key Removable In: Normal/Hold	Yale # 2642	KS3-0005V/H	KS3-0006V/H
(SKR) Square	Halo	FIRE SERV. NORM • HOLD	2 Position Key Removable In: Normal/Hold	Yale # 2642	KS3-0007V/H	KS3-0008V/H

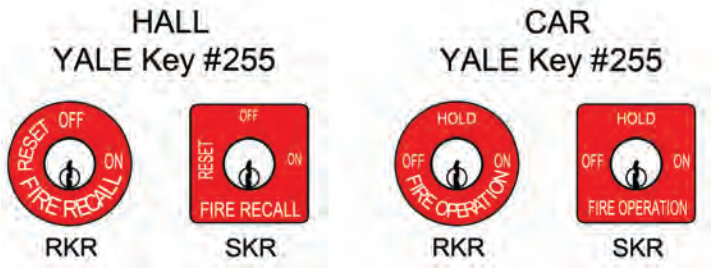
NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2000

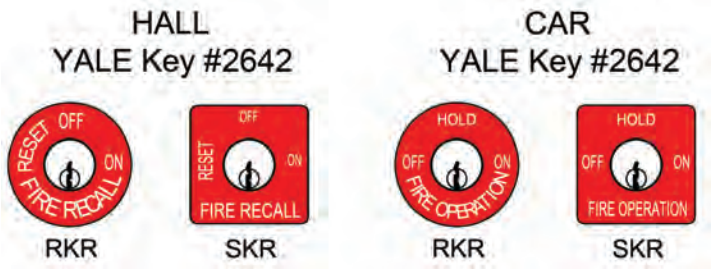
New York, White Plains



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0129V/H	KS3-0131V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0130V/H	KS3-0132V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 255	KS3-0133V/H	KS3-0135V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 255	KS3-0134V/H	KS3-0136V/H

New York, Yonkers



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0117V/H	KS3-0123V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0122V/H	KS3-0124V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 2642	KS3-0125V/H	KS3-0126V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 2642	KS3-0127V/H	KS3-0128V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

Fire Service Key Switches

State and City Code Chart: ASME-2000

South Carolina (All Cities)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Illinois # SC 1000	KS3-0145V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Illinois # SC 1000	KS3-0146V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Illinois # SC 1000	KS3-0143V/H
(SKR) Square	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Illinois # SC 1000	KS3-0144V/H

State and City Code Chart: ASME-2004-2010

From 2004 and on, all Phase II (Car) fire service key switches are mounted on a sub-panel located inside the lock box and are ONLY supplied in RKR round configuration. SKR square configurations are ONLY available prior to 2004.

Arizona (All Cities)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Northeast # AZFS	KS3-0183V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Northeast # AZFS	KS3-0185V/H

Prior to 2004, Arizona abided by ANSI-1996 National Codes. Refer to the National Code Chart: ANSI-1996 for the fire service switch configuration.

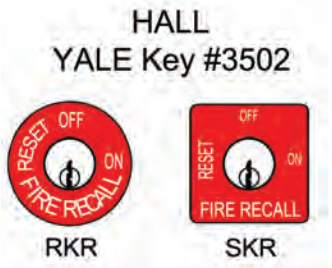
PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Northeast # AZFS	KS3-0184V

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2004-2010

Maine (All Cities)





PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0105V/H	KS3-0107V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0106V/H	KS3-0108V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 3502	KS3-0109V	KS3-0111V





Massachusetts (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0105V/H	KS3-0107V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0106V/H	KS3-0108V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Yale # 3502	KS3-0118V	KS3-0120V

New Hampshire (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0105V/H	KS3-0107V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0106V/H	KS3-0108V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 3502	KS3-0109V	KS3-0111V

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2004-2010

New Jersey (All Cities)

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0105V/H	KS3-0107V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 3502	KS3-0106V/H	KS3-0108V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 3502	KS3-0109V	KS3-0111V

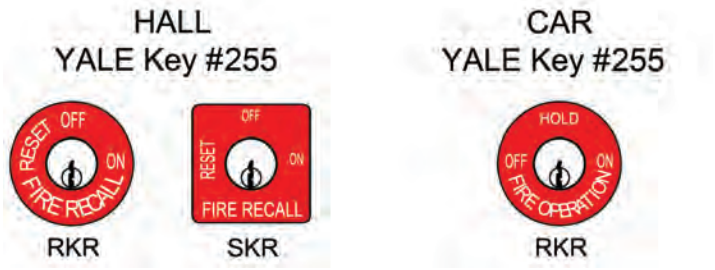
New York, Islip Township



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Chicago # 2389	KS3-0189V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Chicago # 2389	KS3-0191V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Chicago # 2389	KS3-0190V

New York, Mount Vernon



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0129V/H	KS3-0131V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0130V/H	KS3-0132V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 255	KS3-0133V	KS3-0135V

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2004-2010

New York, New Rochelle



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0117V/H	KS3-0123V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0122V/H	KS3-0124V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 2642	KS3-0125V	KS3-0126V

New York, White Plains



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0129V/H	KS3-0131V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 255	KS3-0130V/H	KS3-0132V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 255	KS3-0133V	KS3-0135V

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2004-2010

New York, Yonkers



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0117V/H	KS3-0123V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Yale # 2642	KS3-0122V/H	KS3-0124V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No	Mtz Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Yale # 2642	KS3-0125V	KS3-0126V

South Carolina (All Cities)



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Illinois # SC 1000	KS3-0145V/H
(SKR) Square	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Illinois # SC 1000	KS3-0146V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR) Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Illinois # SC 1000	KS3-0143V

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

State and City Code Chart: ASME-2004-2010

Rhode Island



Rhode Island's fire service key switch # WD01, fire operation, and fire recall cylinder & key are not supplied by G.A.L. Key switch must be purchased from Adams for the 2000 code year and after. Prior to the 2000 code refer to the 1996 National Code Chart for replacement G.A.L key switch.

PHASE I (HALL)	Marked On:	Marking	Function	Key No
(RKR) Round	Halo	FIRE RECALL | OFF • ON	3 PositionKey Removable In: Off/On	ADAMS # WDO1

PHASE II (CAR)	Marked On:	Marking	Function	Key No
(RKR) Round	Halo	FIRE SERV. | OFF • HOLD • ON	3 PositionKey Removable In: Off/Hold	ADAMS # WDO1

Weatherproof

National Code Chart: ANSI-1996



PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR)-WP Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Hudson # 502	KS3-0061V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR)-WP Round	Halo	FIRE SERV. OFF • HOLD • ON	3 Position Key Removable In: All 3 Position	Hudson # 502	KS3-0063V/H

National Code Chart: ASME-2000 & 2004

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR)-WP Round	Halo	FIRE RECALL RESET • OFF • ON	3 Position Key Removable In: Off/On	Hudson # 502	KS3-0178V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR)-WP Round	Halo	FIRE OPERATION OFF • HOLD • ON	3 Position Key Removable In: Off/Hold	Hudson # 502	KS3-0177V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Fire Service Key Switches

Weatherproof

California & Pennsylvania: ANSI-1996

PHASE I (HALL)	Marked On:	Marking	Function	Key No	SST Part No
(RKR)-WP Round	Halo	FIRE SERV. BYPASS • OFF • ON	3 Position Key Removable In: Off/On	Hudson # 502	KS3-0061V/H

PHASE II (CAR)	Marked On:	Marking	Function	Key No	SST Part No
(RKR)-WP Round	Halo	FIRE SERV. OFF • ON	2 Position Key Removable In: Off	Hudson # 502	KS3-0062V/H

Emergency Power Key Switches



PHASE I (HALL)	Marking	Function	Key No	SST Part No
(RKR) Round	EMERG. POWER 1 • AUTO • 2	3 Position Key Removable In: All 3 Position	GAL # FSS 1617	KS3-0097V/H
(RKR) Round	EMERG. POWER AUTO • ON	2 Position Key Removable In: All 2 Position	GAL # FSS 1617	KS3-0098V/H
(RKR) Round	EMERG. POWER 1 • AUTO • 2	3 Position Key Removable In: All 3 Position	Yale # 2642	KS3-0099V/H
(RKR) Round	EMERG. POWER AUTO • ON	2 Position Key Removable In: All 2 Position	Yale # 2642	KS3-0100V/H
(RKR) Round	EMERG. POWER 1 • AUTO • 2	3 Position Key Removable In: All 3 Position	Medeco # FS	KS3-0103V/H
(RKR) Round	EMERG. POWER AUTO • ON	2 Position Key Removable In: All 2 Position	Medeco # FS	KS3-0104V/H

NOTE: All **Round** and **Square** Fire Service Key Switches use **Red** Halo

SIGNAL FIXTURE COMPONENTS

Key Switch Modules

G.A.L. (Chicago) Standard Modules

Round Halo: Model "RKB" & "RKW"

Key Position Legend	
A	2 Position Spring Return
B	2 Position - Removable In 1 Position
C	2 Position - Removable In 2 Position
D	3 Position Spring Return To Center Off
E	3 Position - Removable In 3 Position
F	4 Position - Removable In 4 Position



RKB
Black Halo



RKW
White Halo



RKB
Run Stop

Markings	Position	Contact Arrangement	St. Stl. RKB	St. Stl. RKW	Key Code
(Blank)	A	2NO	**KS1-0093V/H**	**KS1-0116V/H**	1613
(Blank)	A	2NO	**KS1-0331V/H**	**KS1-0334V/H**	1601
DN	A	2NO	**KS1-0094V/H**	**KS1-0117V/H**	1613
DN	A	2NO	**KS1-0332V/H**	**KS1-0335V/H**	1601
UP	A	2NO	**KS1-0095V/H**	**KS1-0118V/H**	1613
UP	A	2NO	**KS1-0333V/H**	**KS1-0336V/H**	1601
OFF-UP-DN-ACCESS	D	Multi Contact	**KS1-0096V/H**	**KS1-0119V/H**	1612
OFF-ON-ACCESS	C	1NO-1NC	**KS1-0097V/H**	**KS1-0120V/H**	1612
OFF-ON-INSPECT.	C	1NO-1NC	**KS1-0098V/H**	**KS1-0121V/H**	1612
OFF-ON	B	1NO-1NC	**KS1-0099V/H**	**KS1-0122V/H**	1601
OFF-ON	B	2NO	**KS1-0100V/H**	**KS1-0123V/H**	1601
OFF-ON	C	1NO-1NC	**KS1-0101V/H**	**KS1-0124V/H**	1601
OFF-ON	C	2NO	**KS1-0102V/H**	**KS1-0125V/H**	1601
OFF-ON-ELEC. EYE	C	1NO-1NC	**KS1-0103V/H**	**KS1-0126V/H**	1601
OFF-ON-HIGH EYE	C	1NO-1NC	**KS1-0104V/H**	**KS1-0127V/H**	1601
OFF-ON-LOW EYE	C	1NO-1NC	**KS1-0105V/H**	**KS1-0128V/H**	1601
OFF-ON-LIGHT	C	2NO	**KS1-0106V/H**	**KS1-0129V/H**	1601
OFF-ON-FAN	C	2NO	**KS1-0107V/H**	**KS1-0130V/H**	1601
OFF-LIGHT-FAN	E	Multi Contact	**KS1-0108V/H**	**KS1-0131V/H**	1601
LO-OFF-HI-FAN	E	Multi Contact	**KS1-0109V/H**	**KS1-0132V/H**	1601
OFF-LIGHT-FAN-HIGH	F	Multi Contact	**KS1-0110V/H**	**KS1-0133V/H**	1601
OFF-ON-ATT.	C	1NO-1NC	**KS1-0111V/H**	**KS1-0134V/H**	1601
OFF-ON-IND. SERV.	C	1NO-1NC	**KS1-0112V/H**	**KS1-0135V/H**	1601
OFF-ON-M.G.	C	1NO-1NC	**KS1-0113V/H**	**KS1-0136V/H**	1601
OFF-ON-EMERG. SERV.	C	1NO-1NC	**KS1-0114V/H**	**KS1-0137V/H**	1601
OFF-ON-DOOR HOLD	C	1NO-1NC	**KS1-0115V/H**	**KS1-0138V/H**	1601

Run-Stop Key Switches

Model	Markings	Position	Contact Arrangement	St. Stl.	Key Code
RKB	RUN-STOP	C	2NO-2NC	**KS1-0357V/H**	1601
RKB	RUN-STOP	C	2NO-2NC	**KS1-0368V/H**	1612
RKB	RUN-STOP	C	2NO-2NC	**KS1-0375V/H**	1615P
RKW	RUN-STOP	C	2NO-2NC	**KS1-0366V/H**	1601
RKW	RUN-STOP	C	2NO-2NC	**KS1-0436H**	1615P

SIGNAL FIXTURE COMPONENTS

Key Switch Modules

G.A.L. (Chicago) Standard Modules

Square Halo: Model "SKB" & "SKW"

Key Position Legend	
A	2 Position Spring Return
B	2 Position - Removable In 1 Position
C	2 Position - Removable In 2 Position
D	3 Position Spring Return To Center Off
E	3 Position - Removable In 3 Position
F	4 Position - Removable In 4 Position



St. Stl. SKB
Black Halo



St. Stl. SKW
White Halo



St. Stl. SKB
Black Halo

Markings	Position	Contact Arrangement	St. Stl. SKB	St. Stl. SKW	Key Code
(Blank)	A	2NO	**KS1-0234V/H**	**KS1-0257V/H**	1613
(Blank)	A	2NO	**KS1-0337V/H**	**KS1-0340V/H**	1601
DN	A	2NO	**KS1-0235V/H**	**KS1-0258V/H**	1613
DN	A	2NO	**KS1-0338V/H**	**KS1-0341V/H**	1601
UP	A	2NO	**KS1-0236V/H**	**KS1-0259V/H**	1613
UP	A	2NO	**KS1-0339V/H**	**KS1-0342V/H**	1601
OFF-UP-DN-ACCESS	D	Multi Contact	**KS1-0237V/H**	**KS1-0260V/H**	1612
OFF-ON-ACCESS	C	1NO-1NC	**KS1-0238V/H**	**KS1-0261V/H**	1612
OFF-ON-INSPECT.	C	1NO-1NC	**KS1-0239V/H**	**KS1-0262V/H**	1612
OFF-ON	B	1NO-1NC	**KS1-0240V/H**	**KS1-0263V/H**	1601
OFF-ON	B	2NO	**KS1-0241V/H**	**KS1-0264V/H**	1601
OFF-ON	C	1NO-1NC	**KS1-0242V/H**	**KS1-0265V/H**	1601
OFF-ON	C	2NO	**KS1-0243V/H**	**KS1-0266V/H**	1601
OFF-ON-ELEC. EYE	C	1NO-1NC	**KS1-0244V/H**	**KS1-0267V/H**	1601
OFF-ON-HIGH EYE	C	1NO-1NC	**KS1-0245V/H**	**KS1-0268V/H**	1601
OFF-ON-LOW EYE	C	1NO-1NC	**KS1-0246V/H**	**KS1-0269V/H**	1601
OFF-ON-LIGHT	C	2NO	**KS1-0247V/H**	**KS1-0270V/H**	1601
OFF-ON-FAN	C	2NO	**KS1-0248V/H**	**KS1-0271V/H**	1601
OFF-LIGHT-FAN	E	Multi Contact	**KS1-0249V/H**	**KS1-0272V/H**	1601
LO-OFF-HI-FAN	E	Multi Contact	**KS1-0250V/H**	**KS1-0273V/H**	1601
OFF-LIGHT-FAN-HIGH	F	Multi Contact	**KS1-0251V/H**	**KS1-0274V/H**	1601
OFF-ON-ATT.	C	1NO-1NC	**KS1-0252V/H**	**KS1-0275V/H**	1601
OFF-ON-IND. SERV.	C	1NO-1NC	**KS1-0253V/H**	**KS1-0276V/H**	1601
OFF-ON-M.G.	C	1NO-1NC	**KS1-0254V/H**	**KS1-0277V/H**	1601
OFF-ON-EMERG. SERV.	C	1NO-1NC	**KS1-0255V/H**	**KS1-0278V/H**	1601
OFF-ON-DOOR HOLD	C	1NO-1NC	**KS1-0256V/H**	**KS1-0279V/H**	1601
ACCESS-NORM.-INSP.	E	Multi Contact	**KS1-0353V/H**		1612

Run-Stop Key Switches

Model	Markings	Position	Contact Arrangement	St. Stl.	Key Code
SKB or SKW	RUN-STOP	C	1NO-1NC	**KS1-0282V/H**	1601
SKB	RUN-STOP	C	2NO-2NC	**KS1-0370V/H**	1612

SIGNAL FIXTURE COMPONENTS

Key Switch Modules

Medeco Security Modules

Round Halo: Model "RKB" & "RKW"

Key Position Legend	
A	2 Position Spring Return
B	2 Position - Removable In 1 Position
C	2 Position - Removable In 2 Position
D	3 Position Spring Return To Center Off
E	3 Position - Removable In 3 Position
F	4 Position - Removable In 4 Position



St. Stl. RKB
Black Halo



Mtz RKW
White Halo



St. Stl. RKB
Black Halo

Markings	Position	Contact Arrangement	St. Stl. RKB	St. Stl. RKW	Mtz RKB	Mtz RKW	Key Code
(Blank)	A	2NO	KS1-0001V/H	KS1-0024V/H	KS1-0047V/H	KS1-0070V/H	*
DN	A	2NO	KS1-0002V/H	KS1-0025V/H	KS1-0048V/H	KS1-0071V/H	*
UP	A	2NO	KS1-0003V/H	KS1-0026V/H	KS1-0049V/H	KS1-0072V/H	*
OFF-UP-DN-ACCESS	D	Multi Contact	KS1-0004V/H	KS1-0027V/H	KS1-0050V/H	KS1-0073V/H	INS
OFF-ON-ACCESS	C	1NO-1NC	KS1-0005V/H	KS1-0028V/H	KS1-0051V/H	KS1-0074V/H	INS
OFF-ON-INSPECT.	C	1NO-1NC	KS1-0006V/H	KS1-0029V/H	KS1-0052V/H	KS1-0075V/H	INS
OFF-ON	B	1NO-1NC	KS1-0007V/H	KS1-0030V/H	KS1-0053V/H	KS1-0076V/H	*
OFF-ON	B	2NO	KS1-0008V/H	KS1-0031V/H	KS1-0054V/H	KS1-0077V/H	*
OFF-ON	C	1NO-1NC	KS1-0009V/H	KS1-0032V/H	KS1-0055V/H	KS1-0078V/H	*
OFF-ON	C	2NO	KS1-0010V/H	KS1-0033V/H	KS1-0056V/H	KS1-0079V/H	*
OFF-ON-ELEC. EYE	C	1NO-1NC	KS1-0011V/H	KS1-0034V/H	KS1-0057V/H	KS1-0080V/H	LF
OFF-ON-HIGH EYE	C	1NO-1NC	KS1-0012V/H	KS1-0035V/H	KS1-0058V/H	KS1-0081V/H	LF
OFF-ON-LOW EYE	C	1NO-1NC	KS1-0013V/H	KS1-0036V/H	KS1-0059V/H	KS1-0082V/H	LF
OFF-ON-LIGHT	C	2NO	KS1-0014V/H	KS1-0037V/H	KS1-0060V/H	KS1-0083V/H	LF
OFF-ON-FAN	C	2NO	KS1-0015V/H	KS1-0038V/H	KS1-0061V/H	KS1-0084V/H	LF
OFF-LIGHT-FAN	E	Multi Contact	KS1-0016V/H	KS1-0039V/H	KS1-0062V/H	KS1-0085V/H	LF
LO-OFF-HI-FAN	E	Multi Contact	KS1-0017V/H	KS1-0040V/H	KS1-0063V/H	KS1-0086V/H	LF
OFF-LIGHT-FAN-HIGH	F	Multi Contact	KS1-0018V/H	KS1-0041V/H	KS1-0064V/H	KS1-0087V/H	LF
OFF-ON-ATT.	C	1NO-1NC	KS1-0019V/H	KS1-0042V/H	KS1-0065V/H	KS1-0088V/H	LF
OFF-ON-IND. SERV.	C	1NO-1NC	KS1-0020V/H	KS1-0043V/H	KS1-0066V/H	KS1-0089V/H	LF
OFF-ON-M.G.	C	1NO-1NC	KS1-0021V/H	KS1-0044V/H	KS1-0067V/H	KS1-0090V/H	LF
OFF-ON-EMERG. SERV.	C	1NO-1NC	KS1-0022V/H	KS1-0045V/H	KS1-0068V/H	KS1-0091V/H	LF
OFF-ON-DOOR HOLD	C	1NO-1NC	KS1-0023V/H	KS1-0046V/H	KS1-0069V/H	KS1-0092V/H	LF
ACCESS-NORM.-INSP.	E	Circuit No. 1010	KS1-0346V/H		KS1-0348V/H		INS
NORM-INSP-INSPECT.	C	1NO-1NC	KS1-0345V/H		KS1-0347V/H		INS
OFF-ON-ACCESS-ENABLE	C	1NO-1NC			KS1-0380V/H		INS
NORM-INSP-INSPECT.	B	1NO-1NC	KS1-0349V				(NYC-HA)
NORM-INSP-INSPECT.	B	2NC	KS1-0350V				(NYC-HA)
OFF-ON-MEDICAL EMERG.	C	2NO	KS1-0367V/H				"___" Key

SIGNAL FIXTURE COMPONENTS

Key Switch Modules

Medeco Security Modules

Round Halo: Model "RKB" & "RKW"

Run-Stop Key Switches

Model	Markings	Position	Contact Arrangement	St. Stl.	Mtz	Key Code
RKB or RKW	RUN-STOP	C	1NO-1NC	**KS1-0139V/H**	**KS1-0140V/H**	LF
RKB	RUN-STOP	C	2NO-2NC		**KS1-0371V/H**	INS
RKB	RUN-STOP	C	2NO-2NC	**KS1-0369V/H**		INS
RKB	RUN-STOP	C	2NO-2NC	**KS1-0376V/H**		NNN
RKB	RUN-STOP	C	2NO-2NC	**KS1-0356V/H**		LF
RKW	RUN-STOP	C	2NO-2NC	**KS1-0365V/H**		LF

Square Halo: Model "SKB" & "SKW"

Key Position Legend	
A	2 Position Spring Return
B	2 Position - Removable In 1 Position
C	2 Position - Removable In 2 Position
D	3 Position Spring Return To Center Off
E	3 Position - Removable In 3 Position
F	4 Position - Removable In 4 Position
*	Specify Key Code



Mtz SKB
Black Halo



St. Stl. SKW
White Halo



St. Stl. SKB
Black Halo

Markings	Position	Contact Arrangement	St. Stl. SKB	St. Stl. SKW	Mtz SKB	Mtz SKW	Key Code
(Blank)	A	2NO	**KS1-0142V/H**	**KS1-0165V/H**	**KS1-0188V/H**	**KS1-0211V/H**	*
DN	A	2NO	**KS1-0143V/H**	**KS1-0166V/H**	**KS1-0189V/H**	**KS1-0212V/H**	*
UP	A	2NO	**KS1-0144V/H**	**KS1-0167V/H**	**KS1-0190V/H**	**KS1-0213V/H**	*
OFF-UP-DN-ACCESS	D	Multi Contact	**KS1-0145V/H**	**KS1-0168V/H**	**KS1-0191V/H**	**KS1-0214V/H**	INS
OFF-ON-ACCESS	C	1NO-1NC	**KS1-0146V/H**	**KS1-0169V/H**	**KS1-0192V/H**	**KS1-0215V/H**	INS
OFF-ON-INSPECT.	C	1NO-1NC	**KS1-0147V/H**	**KS1-0170V/H**	**KS1-0193V/H**	**KS1-0216V/H**	INS
OFF-ON	B	1NO-1NC	**KS1-0148V/H**	**KS1-0171V/H**	**KS1-0194V/H**	**KS1-0217V/H**	*
OFF-ON	B	2NO	**KS1-0149V/H**	**KS1-0172V/H**	**KS1-0195V/H**	**KS1-0218V/H**	*
OFF-ON	C	1NO-1NC	**KS1-0150V/H**	**KS1-0173V/H**	**KS1-0196V/H**	**KS1-0219V/H**	*
OFF-ON	C	2NO	**KS1-0151V/H**	**KS1-0174V/H**	**KS1-0197V/H**	**KS1-0220V/H**	*
OFF-ON-ELEC. EYE	C	1NO-1NC	**KS1-0152V/H**	**KS1-0175V/H**	**KS1-0198V/H**	**KS1-0221V/H**	LF
OFF-ON-HIGH EYE	C	1NO-1NC	**KS1-0153V/H**	**KS1-0176V/H**	**KS1-0199V/H**	**KS1-0222V/H**	LF
OFF-ON-LOW EYE	C	1NO-1NC	**KS1-0154V/H**	**KS1-0177V/H**	**KS1-0200V/H**	**KS1-0223V/H**	LF
OFF-ON-LIGHT	C	2NO	**KS1-0155V/H**	**KS1-0178V/H**	**KS1-0201V/H**	**KS1-0224V/H**	LF
OFF-ON-FAN	C	2NO	**KS1-0156V/H**	**KS1-0179V/H**	**KS1-0202V/H**	**KS1-0225V/H**	LF
OFF-LIGHT-FAN	E	Multi Contact	**KS1-0157V/H**	**KS1-0180V/H**	**KS1-0203V/H**	**KS1-0226V/H**	LF
LO-OFF-HI-FAN	E	Multi Contact	**KS1-0158V/H**	**KS1-0181V/H**	**KS1-0204V/H**	**KS1-0227V/H**	LF
OFF-LIGHT-FAN-HIGH	F	Multi Contact	**KS1-0159V/H**	**KS1-0182V/H**	**KS1-0205V/H**	**KS1-0228V/H**	LF
OFF-ON-ATT.	C	1NO-1NC	**KS1-0160V/H**	**KS1-0183V/H**	**KS1-0206V/H**	**KS1-0229V/H**	LF
OFF-ON-IND. SERV.	C	1NO-1NC	**KS1-0161V/H**	**KS1-0184V/H**	**KS1-0207V/H**	**KS1-0230V/H**	LF
OFF-ON-M.G.	C	1NO-1NC	**KS1-0162V/H**	**KS1-0185V/H**	**KS1-0208V/H**	**KS1-0231V/H**	LF
OFF-ON-EMERG. SERV.	C	1NO-1NC	**KS1-0163V/H**	**KS1-0186V/H**	**KS1-0209V/H**	**KS1-0232V/H**	LF
OFF-ON-DOOR HOLD	C	1NO-1NC	**KS1-0164V/H**	**KS1-0187V/H**	**KS1-0210V/H**	**KS1-0233V/H**	LF
ACCESS-NORM.-INSP.	C	2NO-2NC	**KS1-0372V/H**				INS

SIGNAL FIXTURE COMPONENTS

Key Switch Modules

Medeco Security Modules

Square Halo: Model "SKB" & "SKW"

Run-Stop Key Switches

Model	Markings	Position	Contact Arrangement	St. Stl.	Mtz	Key Code
SKB or SKW	RUN-STOP	C	1NO-1NC	**KS1-0280V/H**	**KS1-0281V/H**	LF
SKB	RUN-STOP	C	2NO-2NC		**KS1-0373V/H**	INS

Medeco Security Flush Cylinder Modules

No Halo

Key Position Legend	
A	2 Position Spring Return
B	2 Position - Removable In 1 Position
C	2 Position - Removable In 2 Position
D	3 Position Spring Return To Center Off
E	3 Position - Removable In 3 Position
F	4 Position - Removable In 4 Position
*	Specify Key Code



Flush Mounted

Cover Marking	Position	Contact Arrangement	St. Stl.	Mtz	Key Code
(Blank)/DN/UP	A	2NO	**KS1-0283V/H**	**KS1-0295V/H**	*
OFF-UP-DN-ACCESS	D	Multi Contact	**KS1-0284V/H**	**KS1-0296V/H**	INS
OFF-ON-ACCESS/ OFF-ON-INSPECT.	C	1NO-1NC	**KS1-0285V/H**	**KS1-0297V/H**	INS
OFF-ON	B	1NO-1NC	**KS1-0286V/H**	**KS1-0298V/H**	*
OFF-ON	B	2NO	**KS1-0287V/H**	**KS1-0299V/H**	*
OFF-ON	C	1NO-1NC	**KS1-0288V/H**	**KS1-0300V/H**	*
OFF-ON	C	2NO	**KS1-0289V/H**	**KS1-0301V/H**	*
OFF-ON-LIGHT/ OFF-ON-FAN	C	2NO	**KS1-0291V/H**	**KS1-0303V/H**	LF
OFF-LIGHT-FAN	E	Multi Contact	**KS1-0292V/H**	**KS1-0304V/H**	LF
LO-OFF-HI-FAN	E	Multi Contact	**KS1-0293V/H**	**KS1-0305V/H**	LF
OFF-LIGHT-FAN-HIGH	F	Multi Contact	**KS1-0294V/H**	**KS1-0306V/H**	LF
"OFF-ON" ELECT. EYE "OFF-ON" HIGH EYE "OFF-ON" LOW EYE "OFF-ON" ATT "OFF-ON" IND. SERV. "OFF-ON" M.G. "OFF-ON" EMERG. SERV. "OFF-ON" DOOR HOLD	C	1NO-1NC	**KS1-0290V/H**	**KS1-0302V/H**	LF

SIGNAL FIXTURE COMPONENTS

Key Switch Modules

Medeco Security Shell Mounted Modules

Cover Mounted Shell

Key Position Legend	
A	2 Position Spring Return
B	2 Position - Removable In 1 Position
C	2 Position - Removable In 2 Position
D	3 Position Spring Return To Center Off
E	3 Position - Removable In 3 Position
F	4 Position - Removable In 4 Position
*	Specify Key Code



Shell Mounted

Cover Marking	Position	Contact Arrangement	St. Stl.	Mtz	Key Code
(Blank)/DN/UP	A	2NO	**KS1-0307V/H**	**KS1-0319V/H**	*
OFF-UP-DN-ACCESS	D	Multi Contact	**KS1-0308V/H**	**KS1-0320V/H**	INS
OFF-ON-ACCESS/OFF-ON-INSPECT.	C	1NO-1NC	**KS1-0309V/H**	**KS1-0321V/H**	INS
OFF-ON	B	1NO-1NC	**KS1-0310V/H**	**KS1-0322V/H**	*
OFF-ON	B	2NO	**KS1-0311V/H**	**KS1-0323V/H**	*
OFF-ON	C	1NO-1NC	**KS1-0312V/H**	**KS1-0324V/H**	*
OFF-ON	C	2NO	**KS1-0313V/H**	**KS1-0325V/H**	*
OFF-ON-LIGHT/OFF-ON-FAN	C	2NO	**KS1-0315V/H**	**KS1-0327V/H**	LF
OFF-LIGHT-FAN	E	Multi Contact	**KS1-0316V/H**	**KS1-0328V/H**	LF
LO-OFF-HI-FAN	E	Multi Contact	**KS1-0317V/H**	**KS1-0329V/H**	LF
OFF-LIGHT-FAN-HIGH	F	Multi Contact	**KS1-0318V/H**	**KS1-0330V/H**	LF
"OFF-ON" ELECT. EYE "OFF-ON" HIGH EYE "OFF-ON" LOW EYE "OFF-ON" ATT "OFF-ON" IND. SERV. "OFF-ON" M.G. "OFF-ON" EMERG. SERV. "OFF-ON" DOOR HOLD	C	1NO-1NC	**KS1-0314V/H**	**KS1-0326V/H**	LF

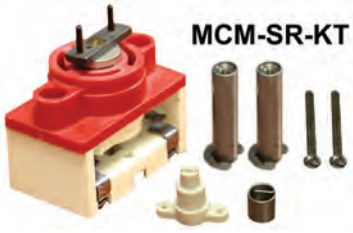
Medeco "O.S." Shell Mounted Replacement Modules

KS1-0342N



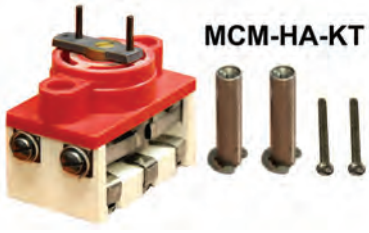
"MCM-KT" Medeco Replacement Key Switch Contact Module Kit, OFF-ON Type, Vertical Or Horizontal, (1) N.O. (1) N.C. Contacts, With Mounting Screws 1 3/4" Lg. & 1 5/8" Lg. Stand-offs

KS1-0343N



"MCM-SR-KT" Medeco Replacement Key Switch Contact Module Kit, Spring Return, (2) N.C. Contacts, With Mounting Screws 1 3/4" Lg. & 1 5/8" Lg. Standoffs

KS1-0344N



"MCM-HA-KT" Medeco Replacement Key Switch Contact Module Kit, 3 Position, Spring Return From Left And Right Side To Center Off, For Hoistway Access Use, With Mounting Screws 1 3/4" Lg. & 1 5/8" Lg. Standoffs

SIGNAL FIXTURE COMPONENTS

Key Switch Modules

Various Specialty Key Switch Modules

Round Halo: Model "RKB" & "RKR"

Key Position Legend	
A	2 Position Spring Return
B	2 Position - Removable In 1 Position
C	2 Position - Removable In 2 Position
D	3 Position Spring Return To Center Off
E	3 Position - Removable In 3 Position
F	3 Position - Removable In 3 Position (D.P.D.T)



St Stl. RKR Red Halo



St Stl. RKR Red Halo



SST RKB Black Halo

Emergency Power Switches

Model	Markings	Position	Contact Arrangement	St. Stl.	Key Code
RKR	AUTO-ON-EMERG.POWER	C	1NO-1NC	**KS3-0098V/H**	1617
RKR	AUTO-ON-EMERG.POWER	C	1NO-1NC	**KS3-0100V/H**	Yale 2642
RKR	AUTO-ON-EMERG.POWER	C	1NO-1NC	**KS3-0104V/H**	Medeco FS
RKR	1-AUTO-2-EMERG.POWER	E	Circuit No.1010	**KS3-0097V/H**	1617
RKR	1-AUTO-2-EMERG.POWER	E	Circuit No.1010	**KS3-0099V/H**	Yale 2642
RKR	1-AUTO-2-EMERG.POWER	E	Circuit No.1010	**KS3-0103V/H**	Medeco FS

Access/Inspection Switches

Model	Markings	Position	Contact Arrangement	St. Stl.	Key Code
RKB	ACCESS-NORM.-INSP.	F	D.P.D.T.	**KS1-0351V/H**	1612
RKB	ACCESS-NORM.-INSP.	E	Circuit No.1010	**KS1-0344V/H**	HA 1612
RKB	ACCESS-NORM.-INSP.	E	Multi Contact	**KS1-0354V/H**	1612

Car Lobby Key Switch

Model	Markings	Position	Contact Arrangement	St. Stl.	Key Code
RKB or SKB	OFF-CAR LOBBY -ON	C	1NO-1NC	**KS3-0142V/H**	LF

Foreign Language Key Switches

Markings are available upon request. Special order only.

SIGNAL FIXTURE COMPONENTS

Key Cylinder Assemblies

Medeco Security Key Cylinder Assemblies With Threaded Stud



Includes (2) keys (Refer to the column below for Key Code)
All Cylinders are R63C series

Key Cylinders - Stainless Steel Finish

Part No.	Medeco Key	Part No.	Medeco Key	Part No.	Medeco Key
KCL-0007N	A	**KCL-0028N**	V	**KCL-0057N**	PP
KCL-0008N	B	**KCL-0029N**	W	**KCL-0058N**	QQ
KCL-0009N	C	**KCL-0031N**	Y	**KCL-0059N**	RR
KCL-0010N	D	**KCL-0032N**	Z	**KCL-0061N**	TT
KCL-0012N	F	**KCL-0042N**	AA	**KCL-0062N**	UU
KCL-0013N	G	**KCL-0043N**	BB	**KCL-0063N**	VV
KCL-0014N	H	**KCL-0044N**	CC	**KCL-0064N**	WW
KCL-0015N	I	**KCL-0046N**	EE	**KCL-0065N**	XX
KCL-0021N	O	**KCL-0047N**	FF	**KCL-0066N**	YY
KCL-0022N	P	**KCL-0048N**	GG	**KCL-0067N**	ZZ
KCL-0023N	Q	**KCL-0049N**	HH	**KCL-0068N**	LF
KCL-0024N	R	**KCL-0055N**	NN	**KCL-0069N**	FS
KCL-0025N	S	**KCL-0056N**	OO	**KCL-0070N**	INS
KCL-0027N	U				

Key Cylinders - Stainless Steel Finish (Triple Letter)

Part No.	Medeco Key	Part No.	Medeco Key	Part No.	Medeco Key
KCL-0075N	AAA	**KCL-0082N**	KKK	**KCL-0088N**	SSS
KCL-0076N	BBB	**KCL-0083N**	LLL	**KCL-0089N**	TTT
KCL-0077N	CCC	**KCL-0133N**	NNN*	**KCL-0090N**	UUU
KCL-0078N	DDD	**KCL-0084N**	OOO	**KCL-0091N**	VVV
KCL-0079N	GGG	**KCL-0085N**	PPP	**KCL-0092N**	WWW
KCL-0080N	HHH	**KCL-0086N**	QQQ	**KCL-0093N**	XXX
KCL-0081N	III	**KCL-0087N**	RRR	**KCL-0094N**	ZZZ

*** Note:** "NNN" Key is used for Run-Stop key switch.

Key Cylinders - Stainless Steel Finish (TYPE "TL")

"TL" Tenant Lock
Does not include keys.
Any "letter" key will operate this key cylinder



Part No.	Description
KCL-0074N	Type "TL" Cylinder Assembly, Medeco, Stainless Steel Finish

SIGNAL FIXTURE COMPONENTS

Key Switches (Electrical Contact)

Medeco Security Electrical Key Switch Assemblies With (6) Leads

All cylinders are R63C Series

Includes (2) R63C Series Keys
(2) N.O. (2) N.C. Contacts



Note: Key codes shown below are normally in stock. Any Medeco key codes not shown that were supplied by G.A.L. can be special ordered and may take up to 3 weeks to ship.

Electrical Switch - Spring Return

Part No.	Function	Medeco Key
KS2-0001N	2 Position - Key Removable In: 1 Position	AA
KS2-0002N	2 Position - Key Removable In: 1 Position	BB
KS2-0003N	2 Position - Key Removable In: 1 Position	CC
KS2-0004N	2 Position - Key Removable In: 1 Position	DD
KS2-0005N	2 Position - Key Removable In: 1 Position	EE
KS2-0006N	2 Position - Key Removable In: 1 Position	MM

Electrical Switch - Key Removable "Off" Only

Part No.	Function	Medeco Key
KS2-0007N	2 Position - Key Removable In: 1 Position	FF
KS2-0008N	2 Position - Key Removable In: 1 Position	GG
KS2-0009N	2 Position - Key Removable In: 1 Position	HH
KS2-0010N	2 Position - Key Removable In: 1 Position	JJ
KS2-0011N	2 Position - Key Removable In: 1 Position	KK

Electrical Switch - Key Removable Both Positions

Part No.	Function	Medeco Key
KS2-0012N	2 Position - Key Removable In: 2 Position	QQ
KS2-0013N	2 Position - Key Removable In: 2 Position	RR
KS2-0014N	2 Position - Key Removable In: 2 Position	SS
KS2-0015N	2 Position - Key Removable In: 2 Position	TT
KS2-0016N	2 Position - Key Removable In: 2 Position	UU
KS2-0017N	2 Position - Key Removable In: 2 Position	VV
KS2-0018N	2 Position - Key Removable In: 2 Position	WW
KS2-0019N	2 Position - Key Removable In: 2 Position	XX
KS2-0020N	2 Position - Key Removable In: 2 Position	YY
KS2-0021N	2 Position - Key Removable In: 2 Position	ZZ
KS2-0039N	2 Position - Key Removable In: 2 Position	LF

Massachusetts "EMT" Medical Emergency Key Switch





Square



Round

Key Not Supplied With Switch

Part No.	Function	Description
KS2-0029N	2 Position - Key Removable In: 1 Position	Massachusetts "EMT" Key Switch With Blue Square Insert Marked "MEDICAL EMERGENCY"
KS2-0022N	3 Position - Key Removable In: 1 Position	Massachusetts "EMT" Key Switch With Blue Round Insert Marked "MEDICAL EMERGENCY"

SIGNAL FIXTURE COMPONENTS

Key Switches (Electrical Contact)

Chicago Specialty Electrical Key Switch Assemblies With Terminals

Includes a set of (2) Keys
(Refer to the column below for Key Code)



Electrical Switch - Spring Return

Part No.	Function	Model No	Chicago Key
KS2-0023N	2 Position - Key Removable In: 1 Position	2174-70 KA	2111
KS2-0026N	2 Position - Key Removable In: 1 Position	2174-70	2136

Electrical Switch - Key Removable Both Postions

Part No.	Function	Model No	Chicago Key
KS2-0024N	2 Position - Key Removable In: 2 Position	2174-2 KA	2111
KS2-0025N	2 Position - Key Removable In: 2 Position	3535 KA	2111
KS2-0027N	2 Position - Key Removable In: 2 Position	3535	2136
KS2-0028N	2 Position - Key Removable In: 2 Position	2174-2	2136

Keys, Cylinders

Note: Call G.A.L. Sales for key Part No or check G.A.L. website, “Search Parts”, “Search Key”, lookup key code, find Part No. (Some G.A.L. standard keys may have these letters on them (“G”, “X”, or “P”). This does not affect the key code No.)

Medeco



Key, Medeco
Specify Key Code: A-Z, AA-ZZ, AAA-ZZZ, INS, HA, FS

Medeco



Key, Medeco
Key Code: MK Key (Master)

GAL (Standard)



Key, G.A.L. Standard (Chicago)
Specify Key Code: 1601, 1610, 1612, 1613, 1615, 1617, 1618

Yale



Key, Yale
Specify Key Code: 255, 2642, 3502

Hudson



Key, Hudson
Specify Key Code: 501, 502, 503

ACE



Key, ACE (Northeast)
Specify Key Code: BFD-1, FEO-K1

Chicago



Key, Chicago
Specify Key Code: 2007, 2111, 2136, 2387, 2389

Illinois



Key, Illinois (Northeast)
Key Code: SC 1000

SIGNAL FIXTURE COMPONENTS

Keyed Cabinet Locks

Fire Service Cabinet Lock Assemblies

Note: Left Hand (L) Shown, Right Hand (R) Opposite

KCL-0114L/R



Includes (2) 1617 Keys

Lock Assembly, 2004 FS Cabinet Door-Chicago, Chicago Key # 1617 With Latch Plate

KCL-0115L/R



Includes (2) WD01 Keys

Lock Assembly, 2004 FS Cabinet Door-Adams, Adams Key # WD-01 With Latch Plate

KCL-0116L/R



Includes (2) BFD-1 Keys

Lock Assembly, 2004 FS Cabinet Door-Ace, Ace Key # BFD-1 With Latch Plate

KCL-0117L/R



Includes (2) R63C-FS Keys

Lock Assembly, 2004 FS Cabinet Door-Medeco Stainless Steel, Medeco Key # FS With Latch Plate

KCL-0118L/R



Includes (2) 3502 Keys

Lock Assembly, 2004 FS Cabinet Door-Yale, Yale Key # 3502 With Latch Plate

KCL-0146L/R



Includes (2) R63C-FS Keys

Lock Assembly, 2004 FS Cabinet Door-Medeco Muntz, Medeco Key # FS With Latch Plate

KCL-0144L/R



Includes (2) FEO-K1 Keys

Lock Assembly, 2007 FS Cabinet Door-FEO, FEO Key # FEO-K1 With Latch Plate

Utility Service Cabinet Lock Assemblies

KCL-0097N



Includes (2) R63C-LF Keys

Lock, Medeco Service Cabinet Cover Stainless Steel, Medeco Key # LF, 2 Position, With Shell/Cam Flag

KCL-0145N



Includes (2) R63C-LF Keys

Lock, Medeco Service Cabinet Cover Muntz, Medeco Key # LF, 2 Position, With Shell/Cam Flag

KS2-0035N



Includes (2) 2136 Keys

Cylinder, Service Cabinet Chicago Key # 2136, 2 Position-Removable In 2, With "Z" Cam Flag



Includes (2) 1601 Keys

Part No.	Description
KCL-0125N	Lock, Chicago Service Cabinet Cover, Chicago Key # 1617 With Cylinder-Sleeve & Cam Flag
KS2-0044N	Lock, Chicago Service Cabinet Cover, Chicago Key # 1601 With Cylinder-Sleeve & Cam Flag

SIGNAL FIXTURE COMPONENTS

Capacity Plates



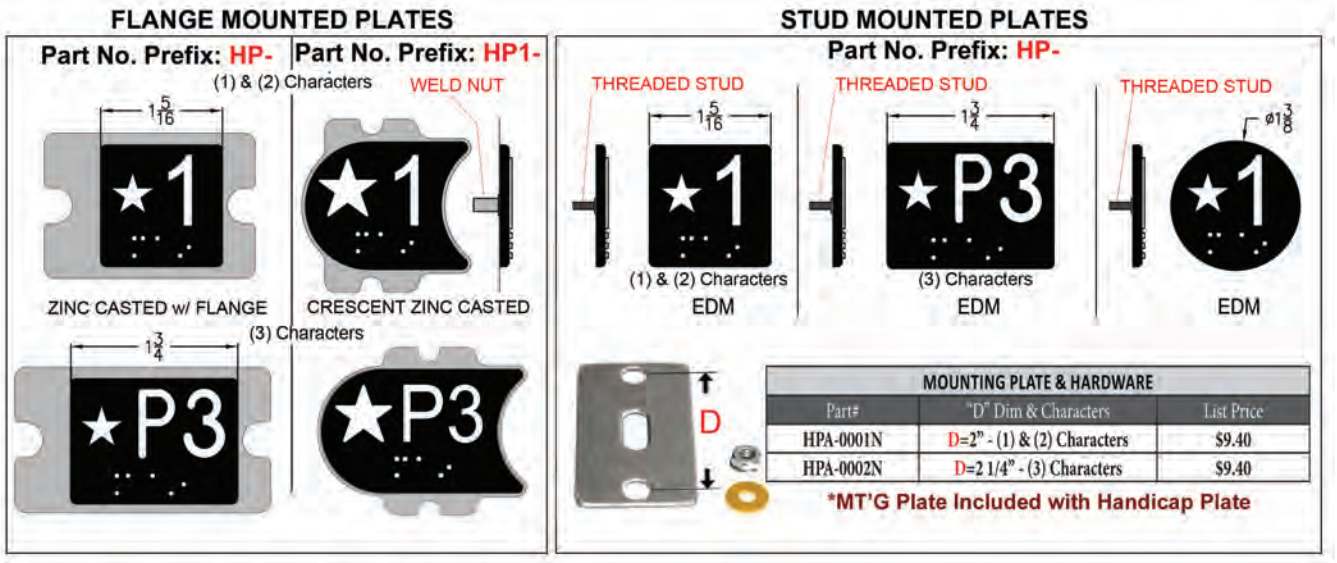
All capacity plates are 1 1/8" x 3".

Part No.	Capacity (lbs)
HP-0105N	1000
HP-0153N	1200
HP-0106N	1500
HP-0111N	1800

Part No.	Capacity (lbs)
HP-0107N	2000
HP-0112N	2100
HP-0108N	2500
HP-0109N	3000

Part No.	Capacity (lbs)
HP-0110N	3500
HP-0113N	4000
HP-0114N	4500
HP-0115N	5000

Handicap Plates



Ordering Removable Handicap Plates
(All handicap plates have Braille markings)

Note: Due to the large variation of handicap markings & plates contact G.A.L. sales for ordering support.

1) **Specify type of plate:**
   - Zinc casted with flanges
   - Crescent casted with flanges & weld nut
   - EDM type with stud & mounting plate

2) **Specify marking, numerals or symbols:**
   - Does egress "Star" have to be added
   - Make note of the cutout size or the space of the replacement plate
   - Single & double markings fit in a cutout 1 5/16" square, and triple markings fit in a 1 3/4 x 1 5/16" cutout

3) **Specify if handicap plate has black background with natural stainless steel finished marking or marking painted white.** (California jobs, as well as some coverless, Muntz metal, & mirror finished jobs, have had white painted markings.)

4) **Specify station cover plate finish that handicap plate is being used on:** Stainless steel, Muntz, Bronze, or Mirror.

SIGNAL FIXTURE COMPONENTS

Emergency Phones

Hands Free Emergency Phones

Surface Mount



Note: All cover mounted emergency telephones come with voice ID.

Size: 5 3/8" W x 7 1/4" H x 1 3/8" D

Part No.	Material - Finish	Button Model
TEL-0002N	St. Stl. - #4 Satin	VPMC
TEL-0003N	Mtz - #4 Satin	VPMC

Flange Mount



Size: 4 1/4" W x 7 1/4" H x 1 1/2" D

Part No.	Material - Finish	Button Model
TEL-0004N	Cold Rolled Steel - Red Paint	VPMC

Cabinet Flush Mount - With Phone



Left hand cabinet shown, right hand opposite

Model 1013-TI: includes TEL-0004N phone

Cover Size: 10 1/8" W x 13 3/8" H
Box Depth: 3 1/2"

Part No.	Material - Finish	Button Model
TEL-0045L/R	St. Stl. - #4 Satin	VPB
TEL-0046L/R	Mtz - #4 Satin	VPB
TEL-0047L/R	St. Stl. - #8 Mirror	VPB
TEL-0048L/R	Mtz - #8 Mirror	VPB

Cover Flush Mount - With Engraving



Cover Size: 6" W x 8 3/4" H
Box Depth: 1 5/8"

Part No.	Material - Finish	Button Model
TEL-0063N	St. Stl. - #4 Satin	VPMC

SIGNAL FIXTURE COMPONENTS

Emergency Phones

Hands Free Emergency Phones

Cover Flush Mount - Without Engraving



Model 1013-T

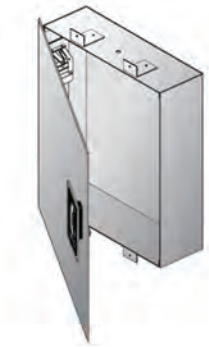
Cover Size:
10 1/8" W x 13 3/8" H
Box Depth: 3 1/2"

Part No.	Material - Finish	Button Model
TEL-0005N	St. Stl. - #4 Satin	RWB
TEL-0006N	St. Stl. - #4 Satin	RBW
TEL-0007N	St. Stl. - #4 Satin	SWB
TEL-0008N	St. Stl. - #4 Satin	SBW
TEL-0009N	St. Stl. - #4 Satin	RWW
TEL-0010N	St. Stl. - #4 Satin	SWW
TEL-0011N	St. Stl. - #4 Satin	VP
TEL-0012N	St. Stl. - #4 Satin	VPB
TEL-0013N	St. Stl. - #4 Satin	VPW
TEL-0014N	St. Stl. - #4 Satin	SH
TEL-0015N	Mtz - #4 Satin	RWB
TEL-0016N	Mtz - #4 Satin	RBW
TEL-0017N	Mtz - #4 Satin	SWB
TEL-0018N	Mtz - #4 Satin	SBW
TEL-0019N	Mtz - #4 Satin	RWW
TEL-0020N	Mtz - #4 Satin	SWW
TEL-0021N	Mtz - #4 Satin	VP
TEL-0022N	Mtz - #4 Satin	VPB
TEL-0023N	Mtz - #4 Satin	VPW
TEL-0024N	Mtz - #4 Satin	SH

Part No.	Material - Finish	Button Model
TEL-0025N	St. Stl. - #8 Mirror	RWB
TEL-0026N	St. Stl. - #8 Mirror	RBW
TEL-0027N	St. Stl. - #8 Mirror	SWB
TEL-0028N	St. Stl. - #8 Mirror	SBW
TEL-0029N	St. Stl. - #8 Mirror	RWW
TEL-0030N	St. Stl. - #8 Mirror	SWW
TEL-0031N	St. Stl. - #8 Mirror	VP
TEL-0032N	St. Stl. - #8 Mirror	VPB
TEL-0033N	St. Stl. - #8 Mirror	VPW
TEL-0034N	St. Stl. - #8 Mirror	SH
TEL-0035N	Mtz - #8 Mirror	RWB
TEL-0036N	Mtz - #8 Mirror	RBW
TEL-0037N	Mtz - #8 Mirror	SWB
TEL-0038N	Mtz - #8 Mirror	SBW
TEL-0039N	Mtz - #8 Mirror	RWW
TEL-0040N	Mtz - #8 Mirror	SWW
TEL-0041N	Mtz - #8 Mirror	VP
TEL-0042N	Mtz - #8 Mirror	VPB
TEL-0043N	Mtz - #8 Mirror	VPW
TEL-0044N	Mtz - #8 Mirror	SH

Hands Free Emergency Phone Parts

Cabinet Flush Mounted (No Phone)



Model 1013-TI
Left hand cabinet shown, right hand opposite

Cover Size: 10 1/8" W x 13 3/8" H
Box Depth: 3 1/2"

Part No.	Material - Finish
TEL-0052L/R	St. Stl. - #4 Satin
TEL-0053L/R	Mtz - #4 Satin

Part No.	Material - Finish
TEL-0054L/R	St. Stl. - #8 Mirror
TEL-0055L/R	Mtz - #8 Mirror

Push Button Module & Parts Replacement



See push button module section to replace "VPMC-14" Part No. PB3-0001N or PB3-0002N, or any of the push buttons used for the model 1013-T cover flush mounted phone box in the "PB1" or "PB2" push button section, marked "PUSH TO CALL".

SIGNAL FIXTURE COMPONENTS

Emergency Phones

Hands Free Emergency Phone Parts

Line Concentrators

TEL-0061N



Concentrator, Viking LC-2 Line

TEL-0082N



Concentrator, Viking FAXJ-1000 Line

TEL-0099N



Concentrator, Viking LC-6 Line

Line Communications Failure Station

TEL-0100N



Line Communications Failure Station, Viking LV-1K

TEL-0101N



line Status Monitor, LM-24D Viking

TEL-0090N



"310" Comm Failure Station, Chicago Cylinder

TEL-0091N



"310" Comm Failure Station, Medeco Cylinder

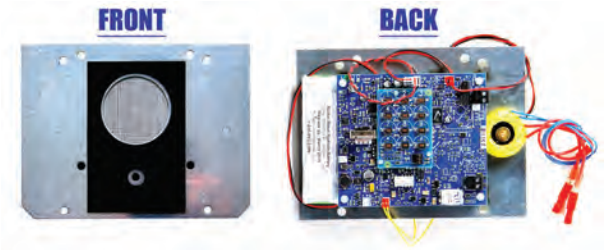
Telephone Replacements For Viking



Note: The 5400 phone was replaced by the 6400 phone.

Part No.	Description
TEL-0066N	Telephone, Model 6400 Emergency, With Mounting Plate & Voice ID

Telephone Replacements For K-TECH



Requirement: All elevators must meet the 2010 ASME A17.1/CSA B44-10 Elevator Code, Section 2.27 Emergency Operation and Signaling Devices.

Part No.	Description
TEL-0102N	Phone, K-TECH Building Powered, Used With Line Loss Monitor
TEL-0098N	Phone, K-TECH Building Powered, Used With Line Loss Monitor, Water Resistant (Use For Water Resistant & N.Y.C.H.A. Jobs)

SIGNAL FIXTURE COMPONENTS

Emergency Phones

Hands Free Emergency Phone Parts

Telephone Replacements For K-TECH

TEL-0088N



Device, K-TECH SUREcom Machine Room Communication

TEL-0089N



Phone, K-TECH Machine Room/Lobby

TEL-0094N



ET98, K-TECH Line Lost Indicator

Telephone Replacements For WURTEC



Part No.	Description
TEL-0074N	Telephone, Model 7400 Emergency, WURTEC Program Hands Free Telephone

Hinges



Part No.	Cover Length	Hinge Length
CST3-0021N	10 5/8”	8 1/4”
CST3-0019N	12 5/8”	10 1/4”
Contact G.A.L. Sales	14 5/8”	12 1/4”

CST3-0026N



Hinge, 5 7/8” Key Repository Box Cover

CST3-0013L/R



Hinge, Car Station Mechanical Mounting Top/ Bottom Mignon Assembly, 2-1/2” Deep Box

CST3-0017L/R



Hinge, Car Station Mechanical Mounting Top/ Bottom Mignon Assembly

SIGNAL FIXTURE COMPONENTS

Hinges

CST3-0023L/R	*COP-0029N*
	
Hinge, Car Station WP Mechanical Mounting Top/Bottom	Hinge, Invisible Mortise Brass, With Mounting Brackets

Handle - Phone Box Cover



Part No.	Description
HP-0068N	Handle, Phone Box Cover, With Braille Marking

SIGNAL FIXTURE COMPONENTS

Indicators

Position Indicator Inserts With Shield



PID1



PID2



Inserts 1 1/8" Round

Part No.	Marking
PID1-0001NS	(Green Arrow)
PID1-0002NS	(Red Arrow)
PID1-0003NS	1
PID1-0004NS	2
PID1-0005NS	3
PID1-0006NS	4
PID1-0007NS	5
PID1-0008NS	6
PID1-0009NS	7
PID1-0010NS	8
PID1-0011NS	9

Part No.	Marking
PID1-0012NS	10
PID1-0013NS	11
PID1-0014NS	12
PID1-0015NS	13
PID1-0016NS	14
PID1-0017NS	15
PID1-0018NS	16
PID1-0019NS	17
PID1-0020NS	18
PID1-0021NS	19

Part No.	Marking
PID1-0022NS	20
PID1-0023NS	SS
PID1-0024NS	SB
PID1-0025NS	RC
PID1-0026NS	LL
PID1-0027NS	L
PID1-0028NS	PH
PID1-0029NS	M
PID1-0030NS	B
PID1-0031NS	G

Inserts 1 1/16" Square

Part No.	Marking
PID2-0001NS	(Green Arrow)
PID2-0002NS	(Red Arrow)
PID2-0003NS	1
PID2-0004NS	2
PID2-0005NS	3
PID2-0006NS	4

Part No.	Marking
PID2-0007NS	5
PID2-0008NS	6
PID2-0009NS	7
PID2-0010NS	8
PID2-0011NS	9

Part No.	Marking
PID2-0012NS	10
PID2-0013NS	PH
PID2-0014NS	LL
PID2-0015NS	B
PID2-0016NS	L

Indicator Lights

PB5-0018H



Module, Indicator 1 3/8" Dia, Marked: "Gate Lock Bypass On" 120 Volt PSB

PB5-0019H



Module, Indicator 1 3/8" Dia, Marked: "Door Lock Bypass On" 120 Volt PSB

PB5-0007N



Base, Fire Service Light, With 120 PSB-LED & Holder

SIGNAL FIXTURE COMPONENTS

Indicators

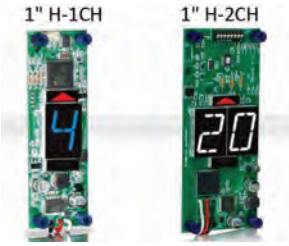
Fire Service Indicator Modules

Horizontal Image Shown

PB5-0005H/V	PB5-0006H/V	PB5-0008H/V	PB5-0009H/V
			
Module, RRW Fire Emblem 1 3/8" Dia Fire Service Light-120V PSB-LED	Module, SRW Fire Emblem 1 5/16" Square Fire Service Light-120V PSB-LED	Insert, RRW Fire Emblem 1 3/8" Dia	Insert, SRW Fire Emblem 1 5/16" Square

Position Indicator Digital Display Boards

Digital Display - 1" H-1CH and 1" H-2CH with Arrow



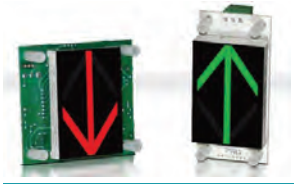
Part No.	Description
CEE-0005N	Display, Red LED Digital 1" H-1CH With Arrow (MSV11)
CEE-0075N	Display, Blue LED Digital 1" H-1CH With Arrow, With Grey Lens (MSV11)
CEE-0079N	Display, Green LED Digital 1" H-1CH With Arrow, With Grey Lens (MSV11)
CEE-0006N	Display, Red LED Digital 1" H-2CH With Arrow (MSV21)
CEE-0071N	Display, Blue LED Digital 1" H-2CH With Arrow & Grey Lens (MSV21)
CEE-0080N	Display, Green LED Digital 1" H-2CH With Arrow & Grey Lens (MSV21)

Digital Display - 2.2" H-2CH with Arrow



Part No.	Description
CEE-0002N	Display, Red LED Digital 2.2" H-2CH With Arrow (MH222)
CEE-0070N	Display, Blue LED Digital 2.2" H-2CH With Arrow
CEE-0085N	Display, Red LED Digital 2.2" H-2CH With Arrow, (MV22X)

Digital Display - 2.5" H with Arrow



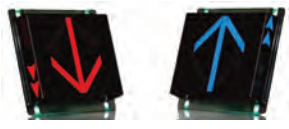
Part No.	Description
CEE-0078N	Display, LED Digital 2.5" H With Arrow, Lantern Vertical, (SA125) Includes Lens

Digital Display - 2.2" H-3CH with Arrow



Part No.	Description
CEE-0004N	Display, Red LED Digital 2.2" H-3CH With Arrow

Digital Display - 3" H with Arrow



Part No.	Description
CEE-0031N	Display, LED Digital 3" H With Arrow, Lantern Hall (ASB30-XZXG)
CEE-0033N	Display, LED Digital 3" H With Arrow, Lantern Hall (ASB30-XMAG)
CEE-0034N	Display, LED Digital 3" H With Arrow, Lantern Car (ASB30-MTX)

SIGNAL FIXTURE COMPONENTS

Indicators

Indicator Light Modules

Visible Only When Illuminated

"CALL RECEIVED"



PB5-0048H/V



PB5-0049H/V



Super Red LED Board
LED-0006N

Module, 1 3/8" Dia Round or 1 5/16" Square Bronze Window Indicator LIght (For Phone Only)

- Visible Only When Illuminated
- Marked "CALL RECEIVED"
- Horizontal or Vertical

- Super Red LED Board Included -

LIST: $67.00



Square Lens Insert
(Bronze Plexiglas)
LNS-0001N

OR



Round Lens Insert
(Bronze Plexiglas)
LNS-0002N



Film (Call Received)
FLM-0001H/V



Film (Advise Marking)
FLM-0002H/V

"VARIOUS MARKINGS"



PB5-0046H/V



PB5-0047H/V

Module, 1 3/8" Dia Round or 1 5/16" Square Bronze Window Indicator Light

- Visible Only When Illuminated
- Advise Markings
- LED Board, PSB Lamps and Lamp Holder Sold Separately (See Lamp Parts Category for PSB Lamp Part Numbers)
- Horizontal or Vertical

- PSB Lamp Contacts Included -

LIST: $58.00

LAMP OPTION
(Sold Separately)

PSB Lamps

Incandescent LED



Lamp Holder
PBLB-0006AN

LED Board



PBLB-0006AN

Remove PSB Lamp Contacts When Using This Board

COMMON FILM MARKINGS:





Light Filter
LNS-0031N



Module Base



Mounting Screw
(Rnd Hd 8-32 x 1 1/8" LG)

PSB Lamp Contacts Used for PSB Lamps



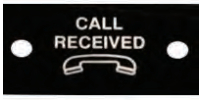
Binding-Washer Steel Plated Screw
Used for Mounting Contact/LED Boards,
8-32 x 5/16" LG

SIGNAL FIXTURE COMPONENTS

Indicators

Films & Holders - Visible When Illuminated

FLM-0001H/V



Film, Visible Only When Illuminated Marked "Call Received" With Phone Symbol, For 1 3/8" Dia & 1 5/16" Square Bronze Plexiglas Indicator Module

FLM-0002H/V



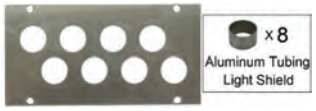
Film, Visible Only When Illuminated, Marked, For 1 3/8" Dia & 1 5/16" Square Bronze Plexiglas Indicator Module. Advise Marking: _____

FLM-0003N



Film, Multi-Character Display Indicator. Advise Markings Required. (Max. 8 Characters With No Arrows, 6 Characters With Up-Down Arrows)

LNS-0005N



Holder, Lamp Shield, 7 3/4" x 4" x 1/8", Aluminum Plate With 1" OD x 1/2" Lg Aluminum Tubing Light Shield

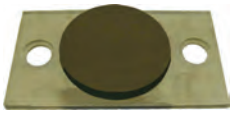
Lens - Visible When Illuminated

LNS-0001N



Lens, 1 5/16" Square Bronze Plexiglas Insert

LNS-0002N



Lens, 1 3/8" Round Dia. Bronze Plexiglas Insert

LNS-0003N



Lens, 7 1/2" X 3" Red Plexiglas, For Digital Display

LNS-0004N



Lens, 7 1/2" X 3" Bronze Plexiglas, For Multi Character Display

Lens - Molded Lantern

PMDG-0032N



Description
Lens, 2 1/2" Arrow Molded Lantern (If Required Colored Filter # F1 Sold Seperately)

PMDG-0033N



Description
Lens, 3" Dia. Round Molded Lantern (If Required Colored Filter # F2 Sold Seperately)

Lens - Vandal Resistant Lantern

LNS-0016N



Description
Lens, Plexiglas White 9 Dot, Vandal Resistant
Size: 2 1/2" W x 2 3/4" H

LNS-0017N



Description
Lens, Plexiglas White 3 Dot, Vandal Resistant
Size: 2 1/2" W x 3 1/8" H

Filters - Lantern Lens

F1 2 1/2" Lantern Arrow Lens



Part No.
- LNS-0011N White
- LNS-0012N Green
- LNS-0014N Red

Description
Filter, 2 5/8" x 2 5/8" For Lantern Arrow Lens

F2 3" Dia Molded Round Lantern Lens



Part No.
- LNS-0033N Green
- LNS-0032N Red

Description
Filter, 2 3/4" x 3 1/8" For Molded Round Lantern Lens # PMDG-0033N

SIGNAL FIXTURE COMPONENTS

Lamps

Lamp Sockets & Holders

LMP-0033N



Holder, “Dialight” Spring Clip

LMP-0034N



Socket, “Dialight” Lamp

LMP-0037L/R



Socket, 6” Leads 12-255 Lamp Snap In Light

LMP-0038N



Socket, PSB Pos-Indicator Lamp With Screw

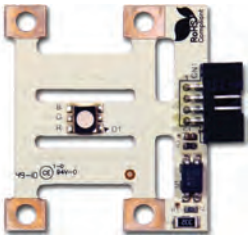
PMDG-0026N



Holder, Push Button Lamp, For PSB Type Lamp

LED Printed Circuit Boards

GALX-1095AN



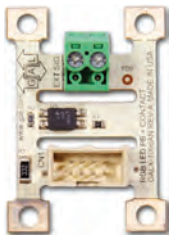
Board, LED Extender Push Button, For GALaxy Controller With RGB Multi-Color Spectral Light Input

GALX-1085AN



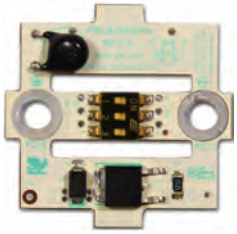
Board, LED Push Button “H”, For GALaxy Controller With RGB Multi-Color Spectral Light Input

GALX-1096AN



Board, LED Alarm Push Button, 6 Volt +1 Contact, RGB Input

PBLB-0006AN



Board, LED Universal, For Standard And Extender Push Button Modules, 6-120V AC/DC Multi-Color, Non-Spectral

LED-0008N



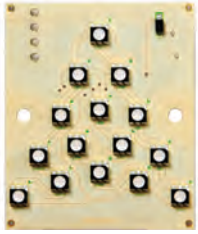
Board, LED Lantern Assembly-120V AC Input For Round & Arrow Lens

LED-0012N



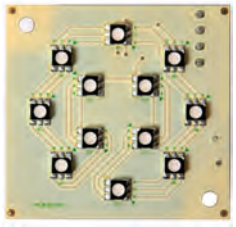
Board, LED Lantern Assembly-24V AC Input For Round & Arrow Lens

LED-0015AN



Board, LED Lantern, Arrow
24V-120V AC/DC Input
CALL G.A.L. For Pricing

LED-0029AN



Board, LED Lantern, Round
24V-120V AC/DC Input
CALL G.A.L. For Pricing

SIGNAL FIXTURE COMPONENTS

Lamps

LED Printed Circuit Boards

LED-0006N	LED-0005N	PBLB-0004AN
	DISCONTINUED 	DISCONTINUED 
Board, LED Super-Red For O.S. Extender Push Button	Board, LED Extender, All Voltage Driver For LED-0006N If This Board Needs To Be Replaced For An Extender Push Button Module, Use PBLB-0006AN And Remove The LED-0006N From Original PB Module. DISCONTINUED	Push Button LED Light Board, Replace By Part No. PBLB-0006AN DISCONTINUED

LED Lamps

LED Miniature Flat Bulb, PSB Type



Part No.	Voltage	Color
LMP-0039N	6 AC	Red
LMP-0054N	24 AC	Orange
LMP-0048N	28 AC	White
LMP-0043N	120 AC	Blue

Part No.	Voltage	Color
LMP-0045N	120 AC	White
LMP-0046N	120 AC	Green
LMP-0047N	120 AC	Yellow
LMP-0049N	120 AC	Red

Incandescent Lamps

LMP-0010N	LMP-0011N	LMP-0016N	LMP-0017N
			
Lamp, 130 VDC Model #25T8DC-IF	Lamp, 130 VDC Red	Lamp, #94 - 12 Volt	Lamp, #1692 - 24 Volt

SIGNAL FIXTURE COMPONENTS

Lamps

Incandescent Lamps

LMP-0021N



Lamp, #6S6 - 24V/6W Screw Base

LMP-0023N



Lamp, #6S6 - 120V/6W Screw Base

LMP-0018N



Lamp, 25W - 120 Volts AC/ DC #25S11/2C For Talking Lantern

LMP-0022N



Lamp, # 44 - 6 Volt

LMP-0019N



Lamp, Lumiline White 18” Long 115-125V

LMP-0035N



Lamp, Lumiline White 12” Long 115-125V

LMP-0020N



Lamp, #25T10/F-120V Light

Dialight Set



Part No.	Voltage	Color
LMP-0027N	28 VC	Amber
LMP-0028N	28 VC	Green
LMP-0029N	28 VC	Red



Part No.	Voltage	Color
LMP-0030N	125 AC	Amber
LMP-0031N	125 AC	Green
LMP-0032N	125 AC	Red

Miniature Lamp, PSB Type



Incandescent Lamp



Neon Lamp

Part No.
LPM-0008N

Part No.	Voltage
LMP-0001N	6 AC
LMP-0009N	12 AC
LMP-0003N	28 AC
LMP-0004N	35 AC

Part No.	Voltage
LMP-0036N	48 AC
LMP-0006N	120 AC
LMP-0007N	155 AC
LMP-0008N	120 AC

SIGNAL FIXTURE COMPONENTS

Emergency Light Unit

Power Packs

EMER-0001N

DISCONTINUED



Emergency Light Unit, EL-1, EL-2, EL-4
Replaced By Part No. EMER-0034N
DISCONTINUED

EMER-0034N



Emergency Light Unit, EL-4 LED With LED Boards Parts

EMER-0007N



Emergency Light Unit, EL-4NL. No Lights Or Sockets. (Used For Flush Mounted Lens Fixtures And Remote Lighting)

Batteries

BAT-0003N



Battery, Sealed Lead Acid (6V-4.5Ah/20Hr). Used For EL-4 Power Pack

BAT-0001N



Battery, Emergency Light, 5 Cell "D" Size Ni-Cad. Used For EL-1, EL-2, & EL-3 Power Pack

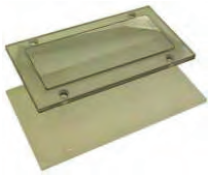
Lens & Printed Circuit Boards - Emergency Light

PMDG-0136N



Lens, Emergency Light

EMER-0004N



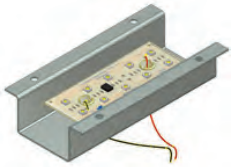
Lens, Flush Emergency Light (2 Pieces)

EMER-0033N



Reflector, Emergency Light Flush Mounted

EMER-0035N



Reflector & Board, EL4-LED Flush Light

EMER-0067N



Board, 10 LED Emergency Light

EMER-0032N



Board, Emergency Light EL-4

SIGNAL FIXTURE COMPONENTS

Printed Circuit Boards

Serial Hall & Car Station Boards

GALX-1070AN



Board, Serial Hall Station 24V DC

GALX-1091AN



Board, Serial Hall Power Feed Thru. Full Color Spectral Light Push Button With Code Blue

GALX-1093AN



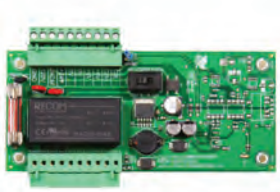
Board, Serial Hall Station RGB No Mount. Full Color Spectral Light

GALX-1076AN



Board, IO Board With Power and ISO COMM

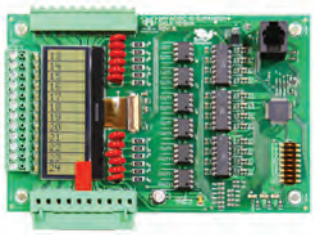
GALX-1094AN



Board, Expandable IO Power/COMM Boost

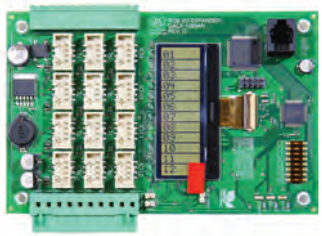
Push Button Interphase Boards

GALX-1078AN



Board, IO Expander 24V AC/DC For Standard Push Buttons

GALX-1089AN



Board, RGB Plug/Play IO Expander For Spectral Lights

SIGNAL FIXTURE COMPONENTS

Audible Signals

Chimes

HWEL-0068N



Chime, TG024-BF1 Audible Signal, +/- 20-24 VAC/DC (Replace by HWEL-0221N)
DISCONTINUED

HWEL-0067N



Chime, TG120-BF1 Audible Signal, +/- 48-120 VAC/DC (Replace by HWEL-0221N)
DISCONTINUED

HWEL-0122N



Chime, TG012-BF1 Audible Signal, +/- 12 VAC/DC (Used For Car And Hall Lanterns)

HWEL-0144N



Chime, TG024-BFM Audible Signal, +/- 24 VAC/DC, Micro Comm Series (Used For Car And Hall Lanterns)

HWEL-0221N



Chime, SGOMV-B1 Audible Signal 24-120 VAC/DC (Replaces Part No. HWEL-0067N & HWEL-0068N)

CEE-0020N



Chime, MPCB1 Digital Display Passing Used With LED Position Indicator Displays (Used For Car Stations Only)

HWEL-0076N



Chime, A1-382K Audible Signal, 30-120 VAC/DC With Bracket/Resistor 3.3K 5% PW-10

HWEL-0080N



Chime, A1-383K Audible Signal, 4-28 VAC/DC With Bracket

Gongs

HWEL-0081N



Gong, 2" DIA Shell 110V M6452-3A

HWEL-0082N



Gong, 2" DIA Shell 24V M6452-5

HWEL-0083N



Gong, 2" DIA Shell 48V M6452-7

HWEL-0093N



Gong, 2" DIA Shell 12V M6452-2

HWEL-0094N



Gong, 2" DIA Shell 120V M6452-6

SIGNAL FIXTURE COMPONENTS

Car Switch Parts

CSW-0002N



Car Switch Assembly, 4 Step

CSW-0003N



Car Switch Assembly, 6 Step

CSW-0004N



Handle Assembly, Car Switch

CSW-0005N



Base Assembly, Finger Contact, 4 Step Car Switch

CSW-0006N



Base Assembly, Finger Contact , 6 Step Car Switch

CSW-0007N



Carbon Contact & Aluminum Cam Assembly, 4 Step Car Switch

CSW-0008N



Carbon Contact & Aluminum Cam Assembly, 6 Step Car Switch

CONT-0011N



Contact, Carbon, For 6 Step Car Switch

CONT-0012N



Contact, Carbon, For 4 Step Car Switch

CSW-0009N



Cam, Aluminum, For 4 or 6 Step Car Switch

CSW-0010N



Spring, Car Switch Torsion

CSW-0011N



Bushing, Torsion Spring Bronze (2) Required For Car Switch

SIGNAL FIXTURE COMPONENTS

Car Switch Parts

CSW-0012N



Assembly, Micro Switch/Bracket, For Car Switch

MICS-0004N



Microswitch, BZ-2RW822-A2

CSW-0013N



Bracket, Micro Switch, For Car Switch

CSW-0014N



Stop, Handle “U” Stainless Steel, Car Switch

CSW-0015N



Stop, Handle “D” Stainless Steel, Car Switch

CSW-0016N



Stop, Handle “U” Bronze, Car Switch

CSW-0017N



Stop, Handle “D” Bronze, Car Switch

CSW-0018N



Ring, Handle Centering Lock, Mounted To Car Switch Cover

CSW-0024N



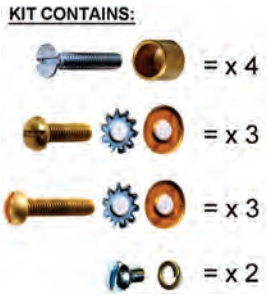
Mounting Plate, Carbon Contact 4 Step Car Switch

CSW-0025N



Mounting Plate, Carbon Contact 6 Step Car Switch

CSW-0026N



Kit, Hardware Car Switch Rebuild

GAL
Controller Equipment

GAL CONTROLLER

STANDARD CONTROLLERS

TRACTION
- AC
- DC
- PM

HYDRAULIC
- Simplex
- Complex

SYSTEM APPLICATION

TRACTION
- Up to 8 Cars
- Up to 60 floors
- Up to 1400 FPM
- Hydraulic Elevators
- Geared up to 500 fpm
- Gearless up to 1400 fpm
- AC Vector Drive
- DC SCR Drive
- Active Front End AC & DC Drive

HYDRAULIC
- Up to 6 Car Group
- Up to 8 floors
- Soft Start
- Across the Line Start
- Wye Delta Start



RESCUVATOR, BRAKE PANEL & FAULT MONITOR
501-505



GALAXY BOARDS
506-520



AC DRIVE & REGEN UNIT
521-523



TRAVELING CABLE
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TRANSFORMERS, FILTERS & REACTORS
524-531



RESISTORS
532-533









- Air Conditioner
- Fault Monitor
- Rope Gripper Panel
- Brake Panel
- Dynamic Braking Resistors
- Encoders & Parts
- GALaxy Documentations
- GALaxy Enclosures & Parts
- GALaxy Wires & Cables
- Load Weighing Units & Parts
- Monitor Configuration
- Monitor Interface
- Relays & Contactors
- Selectors
- Magnetic Limit Switches
- Terminal Blocks

534-548



RELAY LOGIC CONTROLLER PARTS
549-558

STANDARD FEATURES

CSA B44 / ASME A17.1-2010 Certified
TSSA Certification
Inspection Operation (car top and controller)
Access Operation
Independent Service
Fire Service Phase I
Fire Service Phase II
Earthquake Service
On Board LCD Display Interface
Field Adjustable Parameters (Door Times, Lobby, etc.)

OPTIONAL FEATURES

Selective Rear Doors
Attendant Service
Code Blue Hospital Service
Security
Remote Diagnostics
- GALileo
- IDS Compatible

Inter-Group Emergency Power
Emergency Power Pack Service
Emergency Power Rescue System
Magnetic Slowdown Switches
Spectral-Lite Compatible
Tapeless Positioning
Short Floor Interface
CANBUS Interface
Cross Assignment/Cross Cancelation Panel
Regen Drives
Air Conditioning
Sabbath Services
Traveling Cable

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GALaxy Standard Warranty

- All GALaxy parts and equipment manufactured by GAL Manufacturing Corp. have a warranty which covers defects in material and workmanship for a period of two (2) years from the date of shipment.
- The warranty covers ONLY the repair or replacement of parts, F.O.B. our factory, upon determination by inspection at our factory that warranty is applicable.
- Equipment and components not of our manufacture are warranted ONLY to the extent of the original manufacturer's warranty.
- Our warranty specifically does not include any other incidental liability or expense such as transportation, labor, and unauthorized repairs.

The following are not covered by the warranty:

- Damage to or deterioration to the exterior of an item(s), which occurs during delivery.
- Damage after initial delivery resulting from accident, misuse or neglect.
- Damage resulting from failure to follow instructions contained in the owner's manual.
- Damage resulting from the performance of repairs by someone other than the GALaxy repair department.

Defective Merchandise Policy-Warranty

- A Return Material Authorization (RMA) number must be obtained from G.A.L Manufacturing Corp. prior to any items being returned.
- Proof of purchase may be required to verify warranty status.
- Customer will be responsible for shipping charges to the repair facility.

This Standard Warranty supersedes all other terms and conditions

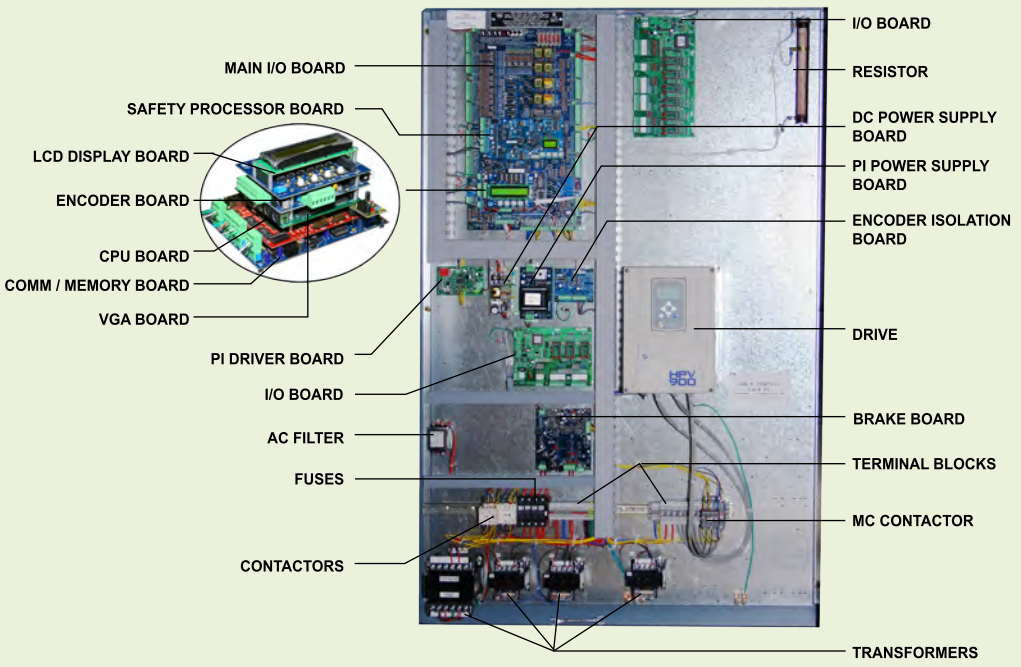
Why is GALaxy superior:

1) Non-proprietary designs
2) Full offering: hydraulic traction, AC/DC geared & gearless
3) Easy to install, maintain, and upgrade
4) Improved quality & savings through low life-cycle cost (LCC)
5) Backwards compatibility software & hardware
6) Integrated interface & wiring with G.A.L. MOVFR operator & signal fixtures
7) Free phone & email tech support
8) Free training & classes at G.A.L. Manufacturing Corp.
9) TSSA certified for code compliance

GALAXY IV



GALAXY III



Emergency Power Rescue System

GALaxy Controller

Emergency Operation Options

GALAXY CONTROLLER

EBR:

Emergency Manual Brake Release

Functional description

• The mechanic manually releases the brake which allows the car to drift to the nearest floor in the direction of load.
• GALaxy controller monitors the main power source, controls the UPS function, and determines car position, door zone position, car speed and direction. Car speed, position and door zone status is displayed.
• The EBR UPS supplies backup power to elevator controller brake circuitry when the main power source is not available.
• The motor windings are shorted together to limit car speed.
• The UPS automatically recharges when main power source is restored.
• The UPS can provide functionality for a maximum of four hours.

Specifications

• Designed to work exclusively with GALaxy control systems
• The 1.5 kVA UPS system is interconnected to the GALaxy control circuitry.
• The GALaxy controller is designed to operate off single-phase power supplied by UPS system.
• All required equipment is mounted in the GALaxy controller cabinet.

Compliance

• ASME A 17.1/CSA B44-04

EPRS:

Emergency Power Rescue System

Functional description

• The EPRS UPS supplies backup power to elevator controller and drive/motor system when the main power source is not available.
• Car is automatically moved to floor level and doors are opened. Car is then removed from automatic service.
• GALaxy controller the main power source, controls the UPS function, determines optimal direction of travel based on position and load, communicates special rescue drive and speed curve parameters to drive.
• The UPS automatically recharges when main power source is restored.

Specifications

• Designed to work exclusively with GALaxy control systems
• The UPS system is interconnected to the GALaxy control circuitry.
• The GALaxy controller is designed to operate off single-phase power supplied by UPS system when in emergency power mode.
• UPS sizing based on motor/drive requirements.
• Available in a wall mounted enclosure 30” H x 34” W x 12” D.

Compliance

• ASME A17.1/CSA B44-04

CONTROLLER

Emergency Power Rescue System

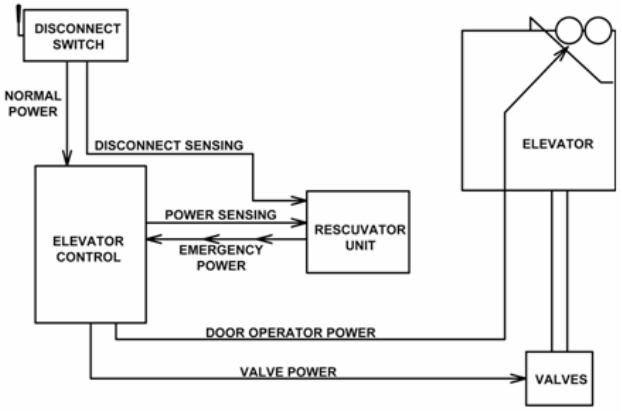
Rescuvator To The Rescue

When the power goes off, Rescuvator comes on while all elevator safety features remain operative. Immediately the functions of control and door operation are given their proper voltage by the use of a battery operated transistorized power supply. The elevator then descends to the lowest landing and opens its doors to discharge passengers who might otherwise have been trapped.

Rescuvator is capable of operating approximately 80% of all existing hydraulic elevators. It is designed for manual or DC power door operation and will provide the voltages listed above.

- Rescuvator includes reverse phase and phase failure relay.
- Basic power is provided by a 12 volt sealed battery.
- Battery power is inverted and converted electronically.
- Transistorized power supply provides proper AC and DC voltages for emergency operation.
- Rescuvator provides 220 and 110 volts single phase 60 Hz. AC and 265 volts DC or 130 volts DC. Other voltages are available on request.
- Rescuvator activates low oil return circuitry.
- Automatically maintains battery at its proper charge.
- Installation requires a maximum of 2 wires to the elevator disconnect switch and 16 wires to the controller.
- Compatible with relay type and microprocessor type controllers.
- Automatically activates during power loss.
- Supplies power for rescue operation.
- Causes car to descend quickly and smoothly to lowest landing.
- Keeps doors closed until proper floor level is reached.
- Automatically opens doors at lowest landing.
- Safely shuts down elevator until normal power is restored.
- Automatically resets for future emergencies.

- Wall mounted vented cabinet with cover. (cover not shown)
- 20” W x 22” H x 7 1/2” D.
- 14 gauge steel component plate.
- Rugged plug-in printed circuit boards.
- Plug-in relays.
- Field selectable output voltages.
- Maintenance-free sealed long lasting 12 volt battery.
- Battery condition LEDs.
- Automatic battery charger.



IMPORTANT
During Rescuvator operation all code required elevator safety features and elevator disconnect switch remain functional.

Emergency Power Rescue System

Rescuator

Model 5 - Rescuator Assemblies



Part No.	Description
RSCV-0006N	Rescuator, 120V/208-240V Model 5-Single Or Three Phase
RSCV-0007N	Rescuator, 440V-480V Model 5-Three Phase, Includes Power Failure Transformer
RSCV-0008N	Rescuator, 575V-600V Model 5-Three Phase, Includes Power Failure Transformer

Model 5 - Rescuator Parts



Battery includes hardware:

(2) Lock washers, S.S. 1/4 ID x 1/2 OD x 0.075 thick
(4) Flat washer 1/4- ID x 3/4 OD x 0.0625 thick
(2) Hex head screw 1/4-20 x 1" LG

Part No.	Description
BAT-0002N	Battery, Rescuator- Model 5

***Note: RSCV-0001N - Relays & Fuses not included. They are sold separately as follow**

(2) RELY-0003N 12VDC (2) RELY-0007N 110VDC (4) FUSE-0003N 3 AMP-250V (1) FUSE-0010N 2 AMP-250V

*RSCV-0001N**



Board, Rescuator Main Assembly Rescuator- Model 5

RELY-0003N



Relay, 3PDT Plug-In 12 V.D.C Light & Button, (157-23B2LC Plug-In 3 Pole)

RELY-0007N



Relay, 110 V.D.C 3 Pole With Light & Button, (KUP-14D45F Plug-In 3 Pole)

RELY-0136N



Relay, 3 Phase Monitoring 380-600V, Use For Rescuator 5: RSCV-0007N & RSCV-0008N

FUSE-0003N



Fuse, 3 AMP 250V AGC

FUSE-0010N



Fuse, 2 AMP 250V AGC

FUSE-0011N



Fuse, 50 MA 600 Volt

FUSE-0009N



Holder, Fuse 1 Pole 60 AMP 250V Box Connector - Model 5 (Fuse FUSE-0008N Not Included But Required)

CONTROLLER

Emergency Power Rescue System

Rescuvator

Model 5 - Rescuvator Parts

RSCV-0002N



Board, Rescuvator Converter- Model 5

RSCV-0003N



Board, Rescuvator Charger Assembly Charger- Model 5

RSCV-0009N



Transformer, Power Assembly Rescuvator- Model 5 (Includes (2) HWPC-0020 Jumpers)

RSCV-0011N



Cable, Converter Assembly Harness To Main Board

RSCV-0012N



Cable, Charger Assembly Hardness To Main Board

RSCV-0013N



Harness, Wire Solenoid To Main Board Main Board, Model 5

RSCV-0018N



Cable, Transformer Assembly PF Board To Main Board

RSCV-0022N



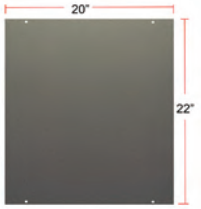
Solenoid, Rescuvator Assembly Rescuvator- Model 5

RSCV-0023N



Transistor, Module Assembly Sanrex QBB100A- Model 5

RSCV-0031N



Cover, Enclosure Model 5, 20" x 22" x 16 Gauge Galvanized

RSCV-0015N



Cable, 14 1/2" Harness Assembly Xtor Pack To Battery

RSCV-0016N



Cable, 4 3/4" Harness Assembly Solenoid To Fuse Block

RSCV-0017N



Cable, 6 3/4" Harness Assembly Battery To Fuse Block

DIOD-0015N



Diode, Bridge Rectifier, Silicon 1PH FWB-25 AMP 800 V.D.C With Quick Disc. Leads

Emergency Power Rescue System

Rescuator

Model 2 & 3 - Replacement Parts & Kits

FUSE-0008N



Fuse, 60 AMP 250V Timedelay

RSCV-0030N



Kit, Model 2 Inverter Conversion (Replaces Kit No. M-10117-36 Aluminum Heat Sink & Charger Board Assembly)

RELY-0046N



Solenoid, M3-Contactor, Model 3

RSCV-0024N



Board, Rescuator Converter- Model 3 With Drawing M10117-43 For Connections - Replaces RV 86.2 (Includes Connectors Conn-0032N & 34N)

RSCV-0025N



Board, Rescuator Charger - M3 (Replaces RV 85 - Model 3)

RELY-0047N



Relay, PH Monitor 190-270V - 8 Pins (Replaces RV 3 - Model 3)

RELY-0048N



Relay, PH Monitor 93-130V (Replaces RV 4 - Model 3)

HWPC-0020N



Plug, Insulated Shorting

XTOR-0012N



Transistor, Module 100A (RV 87)

XFER-0004N



Transformer, 500VA Multap Model AA-0736, 110-132.5V

CONTROLLER

GALaxy IV Boards

Note: Contact G.A.L. sales department for more information and pricing.

GALX-1100AN



Description
Board, CPU Free Scale Tract/Hydro

GALX-1101AN



Description
Board, Display VGA/LCD

GALX-1102AN



Description
Board, Traction Main I/O

GALX-1104AN



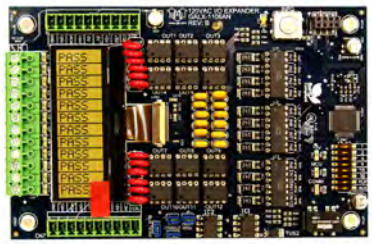
Description
Board, 3PH Brake Board

GALX-1105AN



Description
Brake Relay Board

GALX-1106AN



Description
Board, 120 VAC I/O Expander Control

GALX-1107AN



Description
Board, 24 VAC I/O Expander Control

GALX-1108AN



Description
Board, 5V 6A Power Supply 120 VAC Input

GALX-1109AN



Description
Board, Cop Interface

GALX-1110AN



Description
Board, Selector Main

GALX-1111AN



Description
Board, I/O Connector

GALX-1114AN



Description
Board, Can Bus PI Driver Board

GALaxy IV Boards

GALX-1115AN



Description
Board, Upper/Lower Selector Sensor

GALX-1116AN

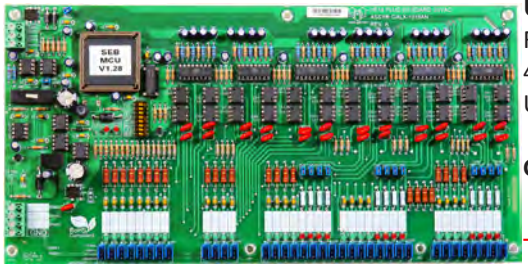


Description
Board, 5V 6A Power Supply 24 VAC Input

GALaxy III Boards

I/O Boards

1018 Series



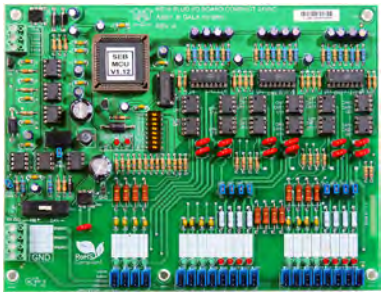
Universal I/O board:
Full size, 8 1/8" x 12 1/8"
48 I/O, rated @ **24 VAC**, with HE 14 Plug.
Used for car calls.

GALX-1018AN – Universal I/O can be made into ANY GALX-1018xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1018AN	Universal I/O		
GALX-1018AON	Car Call	1 to 17	Rear
GALX-1018APN	Car Call	18 to 41	Rear
GALX-1018BN	Car Call	1 to 12	Front

Part No.	Board Function	Floors	F/R Opening
GALX-1018BON	Car Call	37 to 60	Front
GALX-1018BVN	Car Call	42 to 60	Rear
GALX-1018CN	Car Call	13 to 36	Front

1019 Series



Universal I/O board:
Compact size, 8 3/32" x 6 3/16"
24 I/O, rated @ **24 VAC**, with HE 14 plug.
Used for car calls.

GALX-1019AN – Universal I/O can be made into ANY GALX-1019xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1019AN	Universal I/O		
GALX-1019APN	Car Call	18 to 29	Rear
GALX-1019BON	Car Call	37 to 48	Front

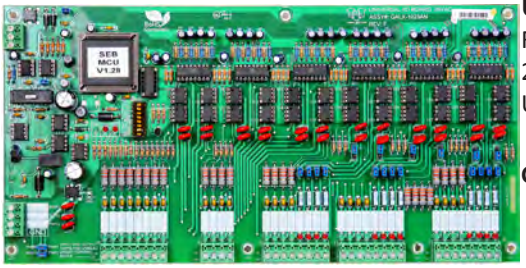
Part No.	Board Function	Floors	F/R Opening
GALX-1019BWN	Car Call	42 to 53	Rear
GALX-1019CN	Car Call	13 to 24	Front
GALX-1019MN	Car Call	1 to 10	Rear

CONTROLLER

GALaxy III Boards

I/O Boards

1023 Series



Universal I/O board:
Full size, 8 1/8" x 12 3/8"
24 I/O, rated @ **24 VAC**, with Standard Screw Terminal.
Used for multiple purposes. See table.

GALX-1023AN – Universal I/O can be made into ANY GALX-1023xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1023ADN	Code Blue	1 to 24	Rear
GALX-1023AEN	Hall Lantern	13 to 25	Rear
GALX-1023AFN	Inconspicuous Riser		Rear
GALX-1023AGN	Inconspicuous Riser	13 to 25	Rear
GALX-1023AHN	Hall Call Lockout	1 to 23	Rear
GALX-1023AJN	Hall Lantern	25 to 36	Rear
GALX-1023AKN	Hall Call	13 to 25	Rear
GALX-1023ALN	Attendant Annunciator	13 to 25	Front
GALX-1023AMN	Emergency Power Status Indicator		Front
GALX-1023AN	Universal I/O		
GALX-1023ANN	Hall Call	25 to 31	Front
GALX-1023AON	Car Call	1 to 17	Rear
GALX-1023APN	Car Call	18 to 41	Rear
GALX-1023AQN	Floor Lockout	1 to 23	Rear
GALX-1023ARN	Group Car Call Lockout	1 to 23	Front
GALX-1023ASN	Group Car Call Lockout	1 to 23	Rear
GALX-1023ATN	Inconspicuous Riser	25 to 29	Front
GALX-1023AUN	Hall Lantern	25 to 37	Front
GALX-1023AVN	Hall Call Lockout Only Or Hall Call Lockouts + Group Car Call Lockouts (F/R) / Hall Call Lockouts + Group Car Call Lockouts (F)	24 to 47	Front
GALX-1023AWN	Hall Call Lockout Only Or Hall Call Lockouts + Group Car Call Lockouts (F/R) / Hall Call Lockouts + Group Car Call Lockouts (F)	48 to 60	Front
GALX-1023AXN	Hall Call Lockout	24 to 49	Front/Rear
GALX-1023AYN	Hall Call Lockout	24 to 47	Rear
GALX-1023AZN	Hall Call Lockout	48 to 60	Rear
GALX-1023BAN	Hall Lantern	25 to 37	Rear
GALX-1023BDN		13 to 25	Rear
GALX-1023BEN	Attendant Annunciator	13 to 25	Rear
GALX-1023BFN	Attendant Annunciator	25 to 37	Front
GALX-1023BGN	Remote Car Call	21 to 29	Front
GALX-1023BHN	Car Call Latch	1 to 23	Front
GALX-1023BKN	Hall Call High Rise	37 to 49	Front
GALX-1023BLN	Hall Call High Rise	49 to 60	Front
GALX-1023BMN	Car Call Lock-Out	24 to 47	Front
GALX-1023BN	Car Call	1 to 12	Front
GALX-1023BNN	Car Call Lock-Out	48 to 60	Front
GALX-1023BON	Car Call	37 to 60	Front
GALX-1023BPN	Inconspicuous Riser	25 to 37	Front

Part No.	Board Function	Floors	F/R Opening
GALX-1023BQN	Inconspicuous Riser	25 to 37	Rear
GALX-1023BRN	Inconspicuous Riser	37 to 49	Front
GALX-1023BSN	Inconspicuous Riser	49 to 60	Front
GALX-1023BVN	Car Call	42 to 60	Rear
GALX-1023BZN	Floor Lockout	24 to 47	Front
GALX-1023CCN	VIP W-Out Code Blue / VIP With Front Code Blue	1 to 24	Front
GALX-1023CDN	Group Car Call Lockout	24 to 47	Front
GALX-1023CGN	Car Call Lock-Out	24 to 47	Rear
GALX-1023CHN	Hall Call	25 to 37	Rear
GALX-1023CIN	Car Call Security Override	1 to 23	Front
GALX-1023CJN	Group Car Call Lockout	48 to 60	Front
GALX-1023CKN	Group Car Call Lockout	24 to 47	Rear
GALX-1023CLN	Group Car Call Lockout	48 to 60	Rear
GALX-1023CMN	Hall Call Lockout	48 to 60	Front
GALX-1023CN	Car Call	13 to 36	Front
GALX-1023CNN	Floor Lockout	24 to 47	Rear
GALX-1023CON	Hall Call Lockout	48 to 60	Front
GALX-1023CPN	Hall Lantern	37 to 49	Front
GALX-1023CRN	Hall Lantern	48 to 60	Front
GALX-1023CSN	Inconspicuous Riser	49 to 60	Rear
GALX-1023CTN	Hall Lantern	37 to 49	Rear
GALX-1023CUN	Hall Lantern	49 to 60	Rear
GALX-1023CVN	Hall Call	37 to 49	Rear
GALX-1023CWN	Hall Call	49 to 60	Rear
GALX-1023CXN	Inconspicuous Riser	37 to 49	Rear
GALX-1023CYN	Car Call Lock-Out	48 to 60	Rear
GALX-1023CZN	Code Blue	25 to 48	Front
GALX-1023DAN	Code Blue	48 to 60	Front
GALX-1023DBN	Code Blue	25 to 48	Rear
GALX-1023DCN	Discrete Position Interface	22 to 45	Front
GALX-1023DDN	Discrete Position Interface	46 to 60	Front
GALX-1023DEN	Attendant Annunciator	37 to 49	Front
GALX-1023DFN	Attendant Annunciator	49 to 60	Front
GALX-1023DGN	Attendant Annunciator	25 to 37	Rear
GALX-1023DHN	Attendant Annunciator	37 to 49	Rear
GALX-1023DIN	Attendant Annunciator	49 to 60	Rear
GALX-1023DJN	Hall Group		
GALX-1023DMN	Remote Car Call	21 to 44	Front
GALX-1023DN	Hall Call	1 to 13	Front
GALX-1023DNN	General Purpose I/O	1 to 24	
GALX-1023DON	General Purpose I/O	25 to 48	
GALX-1023DPN	General Purpose I/O	49 to 72	
GALX-1023DQN	Code Blue Second Riser	1 to 24	Front
GALX-1023DRN	Code Blue Second Riser	25 to 48	Front

CONTROLLER

GALaxy III Boards

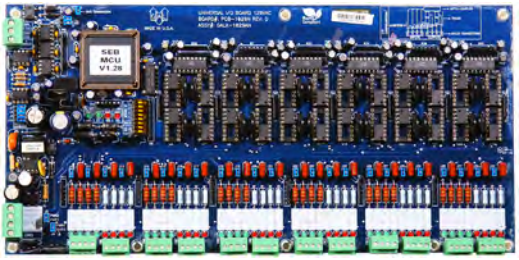
I/O Boards

1023 Series

Part No.	Board Function	Floors	F/R Opening
GALX-1023DSN	Code Blue Second Riser	49 to 60	Front
GALX-1023DTN	Code Blue Second Riser	1 to 24	Rear
GALX-1023DUN	Code Blue Second Riser	25 to 48	Rear
GALX-1023DVN	Hall Fire Service &Logic		Front
GALX-1023DWN	Remote Car Call	1 to 20	Rear
GALX-1023DXN	Guilbert Freight Door Operator		Front
GALX-1023DYN	VIP W-Out Code Blue / VIP With Front Code Blue	25 to 48	Front
GALX-1023EAN	Group Car Call Security Override	1 to 23	Front
GALX-1023EBN	Elevator Robot Interface Low Rise		Front
GALX-1023ECN	Elevator Robot Interface High Rise		Front
GALX-1023EN	Hall Call	13 to 25	Front
GALX-1023FN	Hall Lantern	1 to 13	Front
GALX-1023GN	Hall Lantern	13 to 25	Front
GALX-1023HN	Car Call Lock-Out	1 to 23	Front
GALX-1023JN	Binary Position Indicator / Message Interface	1 to 7	Front

Part No.	Board Function	Floors	F/R Opening
GALX-1023KN	Discrete Position Interface	1 to 21	Front
GALX-1023LN	Remote Car Call	1 to 20	Front
GALX-1023MN	Car Call	1 to 17	Rear
GALX-1023NN	Hall Call	2 to 13	Rear
GALX-1023ON	Floor Lockout	1 to 23	Front
GALX-1023PN	Hall Call Lockout/Hall Call Lockouts + Group Car Call Lockouts	1 to 23	Front
GALX-1023QN	Inconspicuous Riser	2 to 13	Front
GALX-1023RN	Inconspicuous Riser	14 to 25	Front
GALX-1023SN	General Purpose I/O	1 to 20	
GALX-1023TN	Car Call Lock-Out	1 to 23	Rear
GALX-1023UN	Code Blue	1 to 24	Front
GALX-1023VN	Hydro Message Interface		Front
GALX-1023WN	Pelle Freight Doors		Front
GALX-1023YN	Attendant Annunciator	2 to 13	Rear
GALX-1023ZN	Attendant Annunciator	1 to 13	Front

1029 Series



Universal I/O board:

Full size, 8 1/8" x 12 3/8"

24 inputs & 24 outputs isolated, rated @ **120 VAC**, with Standard Screw Terminal.

Used for multiple purposes. See table.

GALX-1029AN – Universal I/O can be made into ANY GALX-1029xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1029AAN	Car Call	1 to 12	Front
GALX-1029ABN	Car Call	1 to 17	Rear
GALX-1029ACN	Car Call	13 to 36	Front
GALX-1029ADN	Car Call	18 to 41	Rear
GALX-1029AEN	Car Call	37 to 60	Front
GALX-1029AFN	Car Call	42 to 60	Front
GALX-1029AN	Universal I/O		
GALX-1029BMN	Car Call Lock-Out		
GALX-1029BN	Universal I/O		
GALX-1029CN	Car Call	1 to 13	Front
GALX-1029DN	Cross Assignment	1 to 13	Front
GALX-1029EN	Housing Car Call	1 to 12	Front
GALX-1029FN	Housing Car Call	13 to 24	Front
GALX-1029GN	Housing Hall Call	1 to 13	Front
GALX-1029HN	Housing Hall Call	13 to 25	Front
GALX-1029IN	Housing Top Of Car		Front

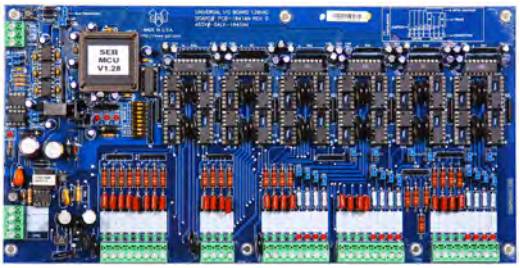
Part No.	Board Function	Floors	F/R Opening
GALX-1029JN	Car Call Lock-Out		
GALX-1029KN	Cross Cancellation	1 to 13	Front
GALX-1029LN	Cross Cancellation	13 to 25	Front
GALX-1029MN	Cross Assignment	13 to 25	Front
GALX-1029NN	Cross Assignment	25 to 31	Front
GALX-1029ON	Cross Cancellation	25 to 31	Front
GALX-1029PN	Car Call Lock-Out		
GALX-1029QN	Cross Cancellation	1 to 13	Rear
GALX-1029RN	Cross Assignment	25 to 37	Front
GALX-1029SN	Cross Assignment	37 to 49	Front
GALX-1029TN	Cross Assignment	49 to 60	Front
GALX-1029UN	General Purpose		
GALX-1029VN	Cross Cancellation	25 to 37	Front
GALX-1029WN	Cross Cancellation	37 to 49	Front
GALX-1029XN	Car Call	14 to 29	Front

CONTROLLER

GALaxy III Boards

I/O Boards

1041 Series



Universal I/O board:
Full size, 8 1/8" x 12 3/8"
48 I/O, rated @ **120 VAC**, with Standard Screw Terminals.
Used for multiple purposes. See table.

GALX-1041AN – Universal I/O can be made into ANY GALX-1041xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1041AAN	Simple Hydro Security		Front
GALX-1041ABN	Courion Door Operator		Front
GALX-1041ACN	Ems Automatic Freight Doors		Front
GALX-1041ADN	Code Blue	1 to 24	Rear
GALX-1041AEN	Hall Lantern	1 to 13	Rear
GALX-1041AFN	Inconspicuous Riser	1 to 13	Rear
GALX-1041AGN	Inconspicuous Riser	13 to 25	Rear
GALX-1041AHN	Hall Call Lockout	1 to 23	Rear
GALX-1041AIN	Pelle Freight Doors		Rear
GALX-1041AJN	Hall Lantern	14 to 25	Rear
GALX-1041AKN	Hall Call	13 to 25	Rear
GALX-1041ALN	Attendant Annunciator	13 to 25	Front
GALX-1041AMN	Emergency Power Status Indicator		Front
GALX-1041AN	Universal I/O		
GALX-1041ANN	Hall Call	25 to 31	Front/Rear
GALX-1041AON	Car Call	1 to 17	Rear
GALX-1041APN	Car Call	18 to 41	Rear
GALX-1041AQN	Floor Lockout	1 to 23	Rear
GALX-1041ARN	Group Car Call Lockout	1 to 23	Front
GALX-1041ASN	Group Car Call Lockout	1 to 23	Rear
GALX-1041ATN	Inconspicuous Riser	25 to 29	Front
GALX-1041AUN	Hall Lantern	25 to 36	Front
GALX-1041AVN	Hall Call Lockout Only Or Hall Call Lockouts + Group Car Call Lockouts (F/R) / Hall Call Lockouts + Group Car Call Lockouts (F)	24 to 47	Front
GALX-1041AWN	Hall Call Lockout Only Or Hall Call Lockouts + Group Car Call Lockouts (F/R) / Hall Call Lockouts + Group Car Call Lockouts (F)	48 to 60	Front
GALX-1041AXN	Hall Call Lockout	24 to 29	Front/Rear
GALX-1041AYN	Hall Call Lockout	24 to 47	Rear
GALX-1041AZN	Hall Call Lockout	48 to 60	Rear
GALX-1041BAN	Hall Lantern	25 to 37	Rear
GALX-1041BEN	Attendant Annunciator	13 to 25	Rear
GALX-1041BFN	Attendant Annunciator	25 to 37	Front
GALX-1041BGN	Remote Car Call	21 to 29	Front
GALX-1041BHN	Simple Hydro FLS & OS Security		Front
GALX-1041BIN	Otis Type F Door Operator		Rear
GALX-1041BJN	Hall Call High Rise	25 to 37	Front

Part No.	Board Function	Floors	F/R Opening
GALX-1041BKN	Hall Call High Rise	37 to 49	Front
GALX-1041BLN	Hall Call High Rise	49 to 60	Front
GALX-1041BMN	Car Call Lock-Out	24 to 47	Front
GALX-1041BN	Car Call	1 to 12	Front
GALX-1041BNN	Car Call Lock-Out	48 to 60	Front
GALX-1041BON	Car Call	37 to 60	Front
GALX-1041BPN	Inconspicuous Riser	25 to 37	Front
GALX-1041BQN	Inconspicuous Riser	37 to 49	Rear
GALX-1041BRN	Inconspicuous Riser	49 to 60	Front
GALX-1041BSN	Inconspicuous Riser	2 to 13	Front
GALX-1041BTN	Simple Hydro FLS-HCS-CSA-CSB Security		Front
GALX-1041BVN	Car Call	42 to 60	Rear
GALX-1041BZN	Floor Lockout	24 to 47	Front
GALX-1041CAN	Courion Door Operator		Rear
GALX-1041CBN	Emergency Brake Sheave		Front
GALX-1041CCN	VIP Without Code Blue / VIP With Front Code Blue	1 to 24	Front
GALX-1041CDN	Group Car Call Lockout	24 to 47	Front
GALX-1041CGN	Car Call Lock-Out	24 to 47	Rear
GALX-1041CHN	Hall Call	25 to 37	Rear
GALX-1041CIN	Car Call Security Override	1 to 23	Front
GALX-1041CJN	Group Car Call Lockout	48 to 60	Front
GALX-1041CKN	Group Car Call Lockout	24 to 47	Rear
GALX-1041CLN	Group Car Call Lockout	48 to 60	Rear
GALX-1041CMN	Hall Call Lockout	48 to 60	Front
GALX-1041CN	Car Call	13 to 36	Front
GALX-1041CNN	Floor Lockout	24 to 47	Rear
GALX-1041CON	Hall Call Lockout	48 to 60	Front
GALX-1041CPN	Hall Lantern	37 to 49	Front
GALX-1041CQN	Attendant Annunciator	38 to 48	Front
GALX-1041CRN	Hall Lantern	48 to 60	Front
GALX-1041CSN	Inconspicuous Riser	49 to 60	Rear
GALX-1041CTN	Hall Lantern	37 to 49	Rear
GALX-1041CUN	Hall Lantern	49 to 60	Rear
GALX-1041CVN	Hall Call	37 to 49	Rear
GALX-1041CWN	Hall Call	49 to 60	Rear
GALX-1041CXN	Inconspicuous Riser	1 to 13	Rear
GALX-1041CYN	Car Call Lock-Out	48 to 60	Rear
GALX-1041CZN	Code Blue	25 to 48	Front
GALX-1041DAN	Code Blue	48 to 60	Front
GALX-1041DBN	Code Blue	25 to 48	Rear
GALX-1041DCN	Discrete Position Interface	22 to 45	Front
GALX-1041DDN	Discrete Position Interface	46 to 60	Front
GALX-1041DEN	Attendant Annunciator	37 to 49	Front

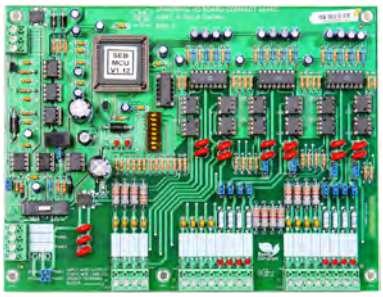
GALaxy III Boards

I/O Boards

1041 Series

Part No.	Board Function	Floors	F/R Opening
GALX-1041DFN	Attendant Annunciator	49 to 60	Front
GALX-1041DGN	Attendant Annunciator	25 to 37	Rear
GALX-1041DHN	Attendant Annunciator	37 to 49	Rear
GALX-1041DIN	Attendant Annunciator	49 to 60	Rear
GALX-1041DJN	Hall Group	1 to 13	
GALX-1041DKN	Simple Hydro Discrete Position Indicator		Front
GALX-1041DLN	Simple Hydro Binary Position Indicator		Front
GALX-1041DMN	Remote Car Call	21 to 44	Front
GALX-1041DN	Hall Call	1 to 13	Front
GALX-1041DNN	General Purpose I/O	1 to 24	
GALX-1041DON	General Purpose I/O	25 to 48	
GALX-1041DPN	General Purpose I/O	49 to 72	
GALX-1041DQN	Code Blue Second Riser	1 to 24	Front
GALX-1041DRN	Code Blue Second Riser	25 to 48	Front
GALX-1041DSN	Code Blue Second Riser	49 to 60	Front
GALX-1041DTN	Code Blue Second Riser	1 to 24	Rear
GALX-1041DUN	Code Blue Second Riser	25 to 48	Rear
GALX-1041DVN	Hall Fire Service &Logic		Front
GALX-1041DWN	Remote Car Call	1 to 20	Rear
GALX-1041DXN	Guilbert Freight Door Operator		Front
GALX-1041DYN	VIP W-Out Code Blue / VIP With Front Code Blue	25 to 48	Front
GALX-1041EAN	Group Car Call Security Override	1 to 23	Front
GALX-1041EBN	Elevator Robot Interface Low Rise		Front
GALX-1041ECN	Elevator Robot Interface High Rise		Front
GALX-1041EN	Hall Call	13 to 25	Front
GALX-1041FN	Hall Lantern	1 to 13	Front
GALX-1041GN	Hall Lantern	13 to 25	Front
GALX-1041HN	Car Call Lock-Out	1 to 23	Front
GALX-1041JN	Binary Position Indicator / Message Interface	1 to 7	Front
GALX-1041KN	Discrete Position Interface	1 to 21	Front
GALX-1041LN	Remote Car Call	1 to 20	Front
GALX-1041MN	Car Call	1 to 17	Rear
GALX-1041NN	Hall Call	2 to 13	Rear
GALX-1041ON	Floor Lockout	1 to 23	Front
GALX-1041PN	Hall Call Lockout/Hall Call Lockouts + Group Car Call Lockouts	1 to 23	Front
GALX-1041QN	Inconspicuous Riser	14 to 25	Front
GALX-1041RN	Inconspicuous Riser	37 to 49	Front
GALX-1041SN	General Purpose I/O	1 to 20	
GALX-1041TN	Car Call Lock-Out	1 to 23	Rear
GALX-1041UN	Code Blue	1 to 24	Front
GALX-1041VN	Hydro Message Interface		Front
GALX-1041WN	Pelle Freight Doors		Front
GALX-1041XN	Code Blue	25 to 31	Front
GALX-1041YN	Attendant Annunciator	1 to 13	Rear
GALX-1041ZN	Attendant Annunciator	1 to 13	Front

1042 Series



Universal I/O board:

Compact size, 8 3/32" x 8 3/16"
24 I/O, rated @ **120 VAC**, with Standard Screw Terminals.
Used for multiple purposes. See table.

GALX-1042AN – Universal I/O can be made into ANY GALX-1042xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1042ADN	Code Blue	1 to 12	Rear
GALX-1042AEN	Hall Lantern	2 to 7	Rear
GALX-1042AFN	Inconspicuous Riser	2 to 7	Rear
GALX-1042AHN	Hall Lock-Out	1 to 11	Rear
GALX-1042AJN	Hall Lantern	14 to 19	Rear
GALX-1042AKN	Hall Call	13 to 19	Rear
GALX-1042ALN	Attendant Annunciator	14 to 18	Front
GALX-1042AN	Universal I/O		
GALX-1042ANN	Hall Call	25 to 31	Front
GALX-1042APN	Car Call		Rear
GALX-1042AQN	Floor Lock-Out	1 to 11	Front
GALX-1042ARN	Group Car Call Lock-Out	1 to 11	Rear
GALX-1042ASN	Group Car Call Lock-Out	1 to 11	Front
GALX-1042ATN	Hall Call Lock-Out	24 to 29	Front/Rear
GALX-1042AVN	Car Call Lock-Out	24 to 29	Front/Rear
GALX-1042AWN	Group Car Call Lock-Out	24 to 35	Rear
GALX-1042AXN	Inconspicuous Riser	25 to 29	Front
GALX-1042AYN	Operator Interface		Rear
GALX-1042AZN	Housing Safety		Front
GALX-1042BAN	Hall Lantern	26 to 31	Rear
GALX-1042BBN	Discrete Position Indicator Interface	22 to 33	Front

CONTROLLER

GALaxy III Boards

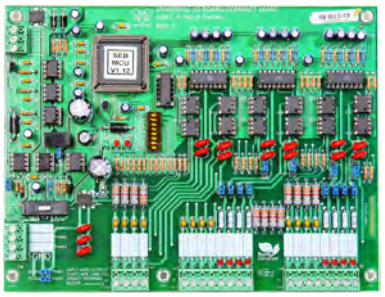
I/O Boards

1042 Series

Part No.	Board Function	Floors	F/R Opening
GALX-1042BCN	Simple Hydro General & Car Call Lockout		Front
GALX-1042BDN	Simple Hydro Hall Call	1 to 5	Front
GALX-1042BEN	Simple Hydro Inconspicuous Riser	1 to 4	Front
GALX-1042BHN	Simple Hydro General & Floor Lockout		Front
GALX-1042BKN	Hall Call	37 to 43	Front
GALX-1042BLN	Hall Call	49 to 55	Front
GALX-1042BMN	Car Call Lock-Out	24 to 35	Front
GALX-1042BN	Car Call	1 to 5	Front
GALX-1042BNN	Simple Hydro Binary Position Indicator		Front
GALX-1042BON	Car Call	37 to 48	Front
GALX-1042BPN	Simple Hydro Discrete Position Indicator		Front
GALX-1042BSN	Inconspicuous Riser	49 to 60	Rear
GALX-1042BTN	Inconspicuous Riser	37 to 43	Front
GALX-1042BUN	Inconspicuous Riser	49 to 55	Front
GALX-1042BWN	Car Call	42 to 53	Rear
GALX-1042BXN	Simple Hydro Code Blue	1 to 5	Front
GALX-1042BYN	Hall Lantern	13 to 31	Front
GALX-1042BZN	Floor Lock-Out	25 to 35	
GALX-1042CBN	Emergency Brake Sheave		
GALX-1042CCN	VIP W/Out Code Blue, VIP W/Front Code Blue	1 to 12	Front
GALX-1042CFN	Message Interface		Front
GALX-1042CGN	Car Call Lock-Out	26 to 35	
GALX-1042CHN	Hall Call	25 to 31	Rear

Part No.	Board Function	Floors	F/R Opening
GALX-1042CJN	Manual Brake Pick		
GALX-1042CKN	Manual Brake Pick Ext		
GALX-1042CN	Car Call	13 to 24	Front
GALX-1042DJN	Serial Hall Aux I/O		Front
GALX-1042DN	Hall Call	1 to 7	Front
GALX-1042EN	Hall Call	13 to 19	Front
GALX-1042FN	Hall Lantern	2 to 6	Front
GALX-1042GN	Hall Lantern	14 to 19	Front
GALX-1042HN	Car Call Lock-Out	1 to 11	
GALX-1042JN	Binary Position Indicator Interface	1 to 7	Front
GALX-1042KN	Discrete Position Indicator Interface	1 to 9	Front
GALX-1042MN	Car Call	1 to 10	Rear
GALX-1042NN	Hall Call	2 to 6	Rear
GALX-1042ON	Floor Lock-Out	1 to 11	
GALX-1042PN	Hall Call Lock-Out	1 to 11	
GALX-1042QN	Inconspicuous Riser	1 to 7	Front
GALX-1042RN	Inconspicuous Riser	13 to 19	Front
GALX-1042TN	Car Call Lock-Out	1 to 11	
GALX-1042UN	Code Blue	1 to 12	Front
GALX-1042VN	Hydro Message Interface		Front
GALX-1042YN	Attendant Annunciator	2 to 7	Rear
GALX-1042ZN	Attendant Annunciator	1 to 7	Front

1043 Series



Universal I/O board:

Compact size, 8 3/32" x 8 3/16"
24 I/O, rated @ **24 VAC**, with Standard Screw Terminals.
Used for multiple purposes. See table.

GALX-1043AN – Universal I/O can be made into ANY GALX-1043xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1043ADN	Code Blue	1 to 12	Rear
GALX-1043AEN	Hall Lantern	2 to 7	Rear
GALX-1043AFN	Inconspicuous Riser	2 to 7	Rear
GALX-1043AHN	Hall Lock-Out	1 to 11	
GALX-1043AJN	Hall Lantern	14 to 19	Front
GALX-1043AKN	Hall Call	13 to 19	Rear
GALX-1043ALN	Attendant Annunciator	14 to 18	Front
GALX-1043AN	Universal I/O		
GALX-1043ANN	Hall Call	25 to 31	Front
GALX-1043APN	Car Call	18 to 29	Rear
GALX-1043AQN	Floor Lock-Out	1 to 11	

Part No.	Board Function	Floors	F/R Opening
GALX-1043ARN	Group Car Call Lock-Out	1 to 11	Front
GALX-1043ASN	Group Car Call Lock-Out	1 to 11	Rear
GALX-1043AVN	Car Call Lock-Out	24 to 29	Front/Rear
GALX-1043AWN	Group Car Call Lock-Out	24 to 29	Rear
GALX-1043AXN	Inconspicuous Riser	25 to 29	Front
GALX-1043BAN	Hall Lantern	26 to 31	Rear
GALX-1043BBN	Discrete Position Indicator Interface	22 to 33	Front
GALX-1043BCN	Simple Hydro General & Car Call Lockout		Front
GALX-1043BEN	Attendant Annunciator	14 to 18	Rear

GALaxy III Boards

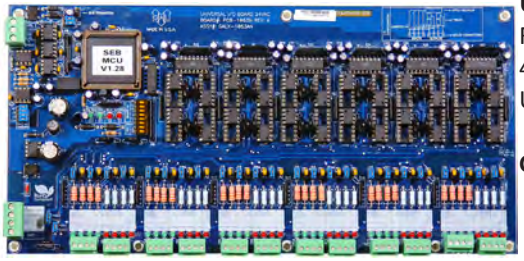
I/O Boards

1043 Series

Part No.	Board Function	Floors	F/R Opening
GALX-1043BKN	Hall Call	37 to 43	Front
GALX-1043BLN	Hall Call	49 to 54	Front
GALX-1043BMN	Car Call Lock-Out	24 to 35	Front
GALX-1043BN	Car Call	1 to 5	Front
GALX-1043BON	Car Call	37 to 48	Front
GALX-1043BSN	Inconspicuous Riser	49 to 60	Rear
GALX-1043BTN	Inconspicuous Riser	37 to 43	Front
GALX-1043BUN	Inconspicuous Riser	49 to 55	Front
GALX-1043BWN	Car Call	42 to 53	Rear
GALX-1043BYN	Hall Lantern	25 to 31	Front
GALX-1043BZN	Floor Lock-Out	24 to 35	Rear
GALX-1043CCN	VIP W/Out Code Blue, VIP W/Front Code Blue	1 to 12	Front
GALX-1043CEN	Binary Position Indicator Interface		Rear
GALX-1043CGN	Car Call Lock-Out	24 to 35	Front
GALX-1043CHN	Hall Call	25 to 31	Rear
GALX-1043CN	Car Call	13 to 24	Front
GALX-1043DJN	Serial Hall Aux I/O		Front
GALX-1043DN	Hall Call	1 to 7	Front

Part No.	Board Function	Floors	F/R Opening
GALX-1043EN	Hall Call	13 to 19	Front
GALX-1043FN	Hall Lantern	2 to 6	Front
GALX-1043GN	Hall Lantern	14 to 19	Rear
GALX-1043HN	Car Call Lock-Out	1 to 11	Front
GALX-1043JN	Binary Position Indicator Interface	1 to 7	Front
GALX-1043KN	Discrete Position Indicator Interface	1 to 9	Front
GALX-1043MN	Car Call	1 to 10	Rear
GALX-1043NN	Hall Call	1 to 7	Rear
GALX-1043ON	Floor Lock-Out	1 to 11	Rear
GALX-1043PN	Hall Call Lock-Out	1 to 11	Rear
GALX-1043QN	Inconspicuous Riser	13 to 19	Front
GALX-1043RN	Inconspicuous Riser		Front
GALX-1043TN	Car Call Lock-Out	1 to 11	Front
GALX-1043UN	Code Blue	1 to 12	Front
GALX-1043VN	Hydro Message Interface		Rear
GALX-1043YN	Attendant Annunciator	2 to 7	Front
GALX-1043ZN	Attendant Annunciator	1 to 6	Front

1063 Series



Universal I/O board:

Full size, 8 1/8" x 12 3/8"

48 I/O, rated @ **24 VAC**, with Molex Terminals.

Used for multiple purposes. See table.

GALX-1063AN – Universal I/O can be made into ANY GALX-1063xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1063AAN	Car Call	1 to 12	Front
GALX-1063ABN	Car Call	1 to 17	Front/Rear
GALX-1063ACN	Car Call	13 to 36	Front
GALX-1063ADN	Car Call	18 to 41	Front
GALX-1063AEN	Car Call	37 to 60	Front
GALX-1063AFN	Car Call	42 to 60	Rear
GALX-1063AN	Universal I/O		
GALX-1063CN	Car Call	13 to 24	Front
GALX-1063DN	Cross Assignment	1 to 13	Front

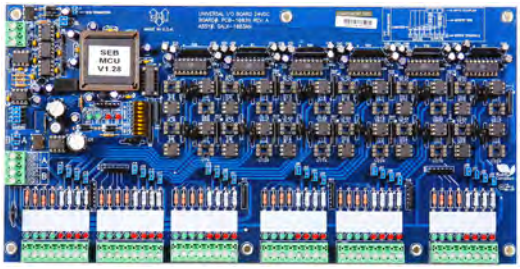
Part No.	Board Function	Floors	F/R Opening
GALX-1063JN	Car Call Lock-Out		
GALX-1063MN	Cross Assignment	13 to 25	Front
GALX-1063NN	Cross Assignment	25 to 31	Front
GALX-1063RN	Cross Assignment	25 to 37	Front
GALX-1063SN	Cross Assignment	37 to 49	Front
GALX-1063TN	Cross Assignment	49 to 60	Front
GALX-1063UN	General Purpose		
GALX-1063VN	Cross Cancellation	25 to 37	Front
GALX-1063XN	Car Call	29 to 24	Front

CONTROLLER

GALaxy III Boards

I/O Boards

1083 Series



Universal I/O board:
Full size, 8 1/8" x 12 3/8"
48 I/O, rated @ **24 VDC**, with Standard Screw Terminal.
Used for multiple purposes. See table.

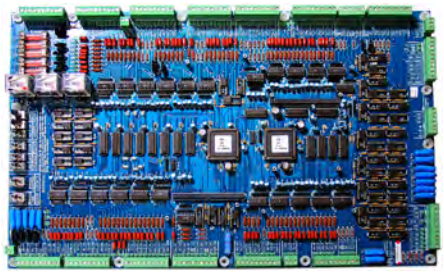
GALX-1083AN – Universal I/O can be made into ANY GALX-1083xxx board.

Part No.	Board Function	Floors	F/R Opening
GALX-1083AN	Universal I/O		
GALX-1083BN	Car Call	1 to 12	Front
GALX-1083CN	Car Call	13 to 36	Front
GALX-1083DN	Hall Call	1 to 13	Front
GALX-1083EN	Hall Call	13 to 25	Front
GALX-1083FN	Hall Lantern	1 to 13	Front
GALX-1083GN	Hall Lantern	13 to 25	Front
GALX-1083HN	Car Call	1 to 12	Front
GALX-1083IN	Car Call	13 to 36	Front
GALX-1083JN	Hall Call	1 to 13	Front
GALX-1083KN	Hall Call	13 to 25	Front

Part No.	Board Function	Floors	F/R Opening
GALX-1083LN	Hall Lantern	1 to 13	Front
GALX-1083MN	Hall Lantern	13 to 25	Rear
GALX-1083NN	Car Call	1 to 17	Rear
GALX-1083ON	Car Call	1 to 17	Rear
GALX-1083PN	Hall Call	1 to 13	Rear
GALX-1083QN	Hall Call	1 to 13	Rear
GALX-1083RN	Hall Lantern	1 to 13	Rear
GALX-1083SN	Hall Lantern	1 to 13	Front
GALX-1083TN	Discrete Position Indicator	1 to 21	Rear
GALX-1083UN	Discrete Position Indicator	1 to 21	Front
GALX-1083VN	Hall Lantern	13 to 25	Rear

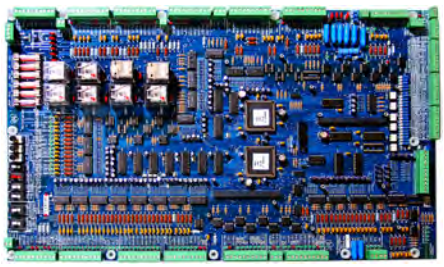
Main I/O Boards

1039 Series



Part No.	Description
GALX-1039AN	Board, Hydro Simplex Main I/O
GALX-1039BN	Board, Hydro Simplex Main I/O (NYC)
GALX-1039CN	Board, Hydro S Main I/O Controller Stop
GALX-1039DN	Board, Hydro S Main I/O NYC Controller Stop Bypass

1064 Series

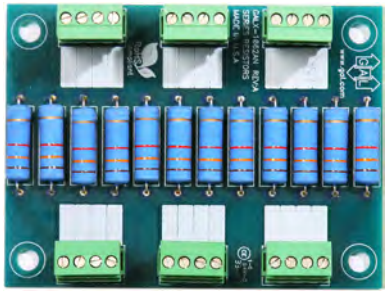


Part No.	Description
GALX-1064AN	Board, Traction Main I/O Revised
GALX-1064BN	Board, Traction Main I/O Revised NYC
GALX-1064CN	Board, Hydro-C Main I/O Revised
GALX-1064DN	Board, Hydro-C Main I/O Revised NYC
GALX-1064EN	Board, Hydro-C Main I/O Controller Stop Bypass
GALX-1064FN	Board, Hydro-C Main I/O NYC Controller Stop Bypass
GALX-1064GN	Board, Traction Main I/O Australia

GALaxy III Boards

Resistor Series Boards

1062 Series



Part No.	Description
GALX-1062AAN	Board, 15K Series Resistor 2D to 13D
GALX-1062ABN	Board, 15K Series Resistor 1U to 12U
GALX-1062ACN	Board, 15K Series Resistor 14D to 25D
GALX-1062ADN	Board, 15K Series Resistor 13U to 24U
GALX-1062AEN	Board, 15K Series Resistor 26D to 37D
GALX-1062AFN	Board, 15K Series Resistor 25U to 36D
GALX-1062AN	Board, Series Resistor Feed Thru
GALX-1062BN	Board, Series Resistor 2D to 13D No Resistor
GALX-1062CN	Board, Series Resistor 1U to 12U No Resistor
GALX-1062DN	Board, Series Resistor 14D to 25D No Resistor
GALX-1062EN	Board, Series Resistor 13U to 24U No Resistor
GALX-1062FN	Board, Series Resistor 26D to 37D No Resistor
GALX-1062GN	Board, Series Resistor 25U to 36U No Resistor
GALX-1062HN	Board, 3.3K Series Resistor 2D to 13D
GALX-1062IN	Board, 3.3K Series Resistor 1U to 12U
GALX-1062JN	Board, 3.3K Series Resistor 14D to 25D
GALX-1062KN	Board, 3.3K Series Resistor 13U to 24U
GALX-1062MN	Board, 3.3K Series Resistor 25U to 36U
GALX-1062NN	Board, Series Resistor 38D to 49D No Resistor
GALX-1062ON	Board, Series Resistor 27U to 48U No Resistor
GALX-1062PN	Board, 1K Series Resistor 2D to 13D
GALX-1062QN	Board, 1K Series Resistor 1U to 12U
GALX-1062RN	Board, 1K Series Resistor 14D to 25D
GALX-1062SN	Board, 1K Series Resistor 13U to 24U
GALX-1062UN	Board, 1K Series Resistor 25U to 36U

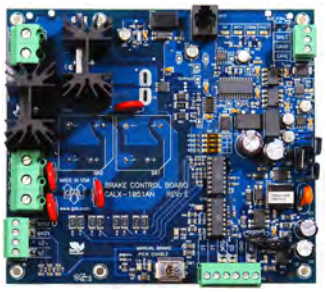
Brakes & Brake Relay Boards

GALX-1047AN



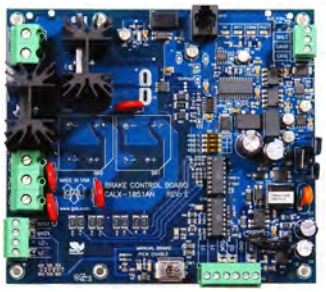
Board, Electronic Brake Controller

GALX-1051AN



Board, Brake Control 3 Phase 10A Max 20A PK

GALX-1051BN



Board, Brake Control 3 Phase 50A Max 100A PK

GALX-1053AN



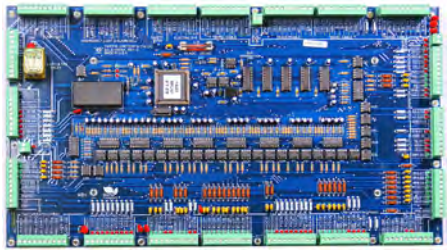
Board, Brake Relays Max 4A

CONTROLLER

GALaxy III Boards

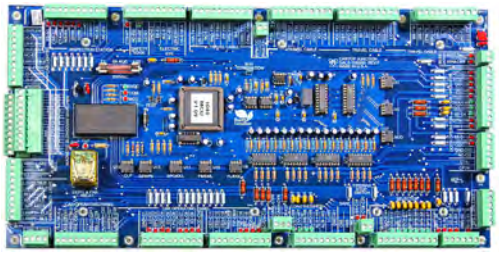
Car Top Interface Boards

GALX-1037AN



Board, Large Car Top

GALX-1040AN



Board, Small Car Top

CPU Boards

Note: Refer to GALX-1100AN for replacement.

GALX-0056N



Board, CPU Traction DF With DI ROM DOS

GALX-0057N



Board, CPU Traction NDF With DI ROM DOS

GALX-0058N



EPROM Chip for GALX-0058N

Board, CPU Simplex Hydro With DI ROM DOS

GALX-0059N

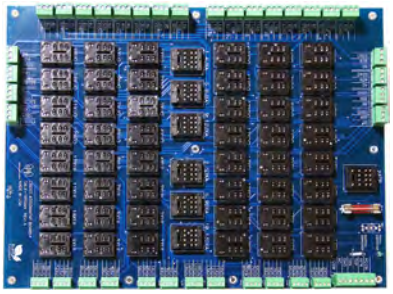


EPROM Chip for GALX-0058N

Board, CPU Complex Hydro With DI ROM DOS

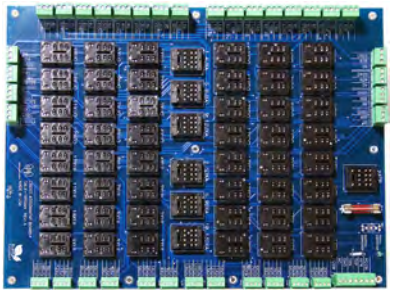
Cross Assignment Boards

GALX-1059AN



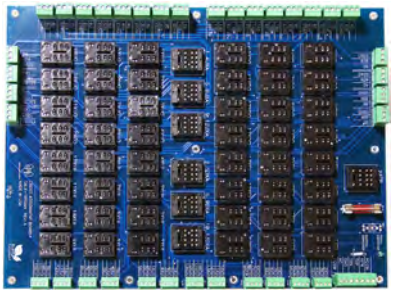
Board,Cross Assignment 1-13 Floors, 120 VAC

GALX-1059EN



Board, Cross Assignment 13-25 Floors, 24 VAC

GALX-1059FN



Board,Cross Assignment 25-37 Floors, 24 VAC

GALaxy III Boards

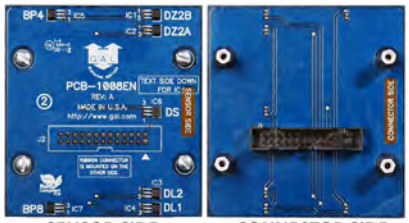
Selector Boards

GALX-1008DN



Board, Selector Sensor D BP1, BP2

GALX-1008EN



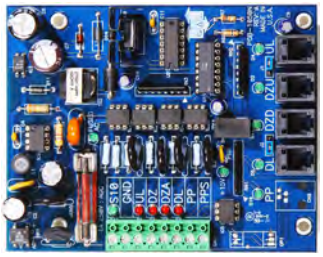
Board, Selector Sensor E BP4, BP8

GALX-1008FN



Board, Selector Sensor F BP16, BP32

GALX-1050AN



Board, Compact Selector

GALX-1011BN



Board, Selector Driver

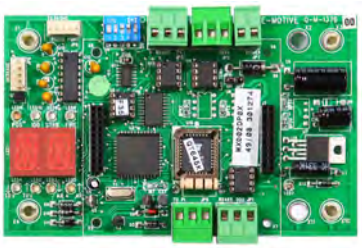
Position Indicator Boards

CEE-0044N



Board, Driver Control Galcan-C Special Build

CEE-0062N



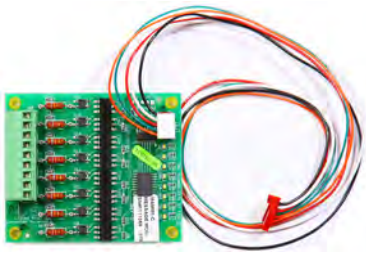
Board, Driver Can-Bus Control 32 Display Emotive

CEE-0076N



Board, SMCDU Control Driver

CEE-0018N



Alternate, Message Module MAMM1

CEE-0021N



Display, Led Digital 1/2"H-2Ch-Mdisp

GALX-1079AN



Board, PI Power Supply

CONTROLLER

GALaxy III Boards

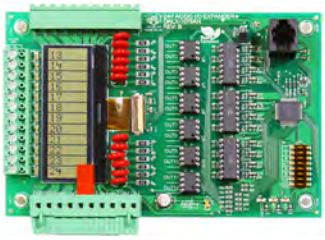
Spectralite Boards

GALX-1076AN



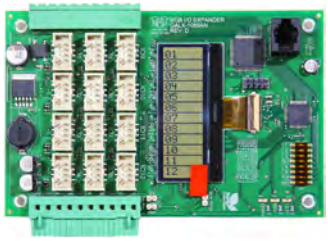
Board, I/O Board With Power and Iso Comm

GALX-1078AN



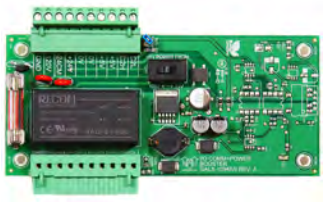
Board, I/O Expander 24V AC/DC

GALX-1089AN



Board, RGB Plug/Play I/O Expander

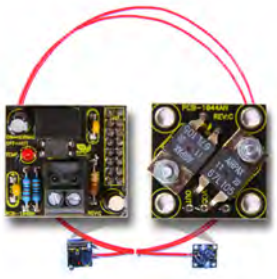
GALX-1094AN



Board, Expandable I/O Power/ Comm Boost

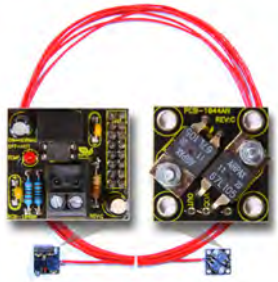
Miscellaneous Boards

GALX-0115N



Assembly, DB Resistor/Interface Board Temp Sensor 6' Lg

GALX-0116N



Assembly, DB Resistor/Interface Board Temp Sensor 18' Lg

GALX-1066AN



Board, Trac/Hydro SPB Safety Monitor

GALX-1091AN



Board, Serial Hall Power Feed Thru

GALX-1057AN



Board, Serial Hall Driver

GALX-0027N



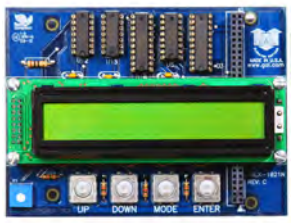
Board, VGA Monitor/Keyboard Connector

GALX-0224N



Board, Dual Serial Port

GALX-1021AN

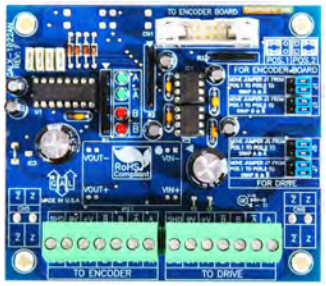


Board, LCD Display

GALaxy III Boards

Miscellaneous Boards

GALX-1022AN



Board, Encoder Isolation

GALX-1036BN



Board, Communication Memory Above 29 Floors

GALX-1045N



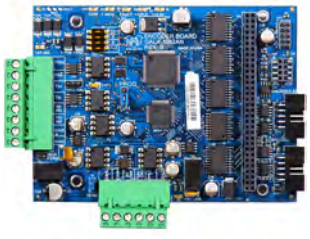
Board, RS232 to RS485 Converter

GALX-1068AN



Board, GALaxy Analog Load Weigh/ Tempsense

GALX-1092AN



Board, PC104 Encoder Interface Inc/Can/485

CONTROLLER

GALaxy III Boards

Miscellaneous Boards



Part No.	Description
GALX-0033N	Board, Can Driver PC104
GALX-0034N	Board, CPU Traction SAT-DX4
GALX-0035N	Board, CPU Hydro SAT-V41
GALX-1006BN	Board, Relay II Rev D
GALX-1008AN	Board, Selector Sensor A
GALX-1008BN	Board, Selector Sensor B
GALX-1008CN	Board, Selector Sensor > 15 Floors
GALX-1010AN	Board, Main I/O
GALX-1011AN	Board, Selector Driver (Old Rev)
GALX-1012AN	Board, Expansion I/O Driver
GALX-1012BN	Board, 1006 Driver
GALX-1012PN	Board, Scurve Driver
GALX-1015AN	Board, Scurve A1015
GALX-1033AN	Board, Power Supply 5V +15V - 15V

AC Drives & Regen Units

KEB Drive



KEB COMBIVERT F5 provides different levels of power ranges that can be precisely tailored for the application.

IMPORTANT NOTE: All drives and/or Regen units are configured to be used with new or existing G.A.L. GALaxy controllers ONLY. All drive and/or Regen unit warranty exchanges or returns must be pre-approved by both G.A.L. and drive manufacture – please call GAL for authorization approval.

Geared - 230 V.A.C.

Part No.	Mfg Part ID	AMP
DRV-0200N	13.F5.A1E-PLB2	22
DRV-0201N	14.F5.A1E-PLB2	28
DRV-0184N	14.F5.A1G-PLB2	28
DRV-0202N	15.F5.A1G-PLB2	42
DRV-0203N	15.F5.A1G-PLB3	42
DRV-0204N	16.F5.A1H-PLB2	57
DRV-0205N	17.F5.A1H-PLB3	84
DRV-0195N	19.F5.A1R-PLB3	104
DRV-0196N	21.F5.A1R-PLB2	154

Gearless - 230 V.A.C.

Part No.	Mfg Part ID	AMP
DRV-0151N	12.F5.A1D-PLP2	15.2
DRV-0146N	14.F5.A1E-PLP2	28
DRV-0149N	15.F5.A1G-PLP2	42
DRV-0140N	15.F5.A1G-PLP3	42
DRV-0142N	16.F5.A1H-PLP2	57
DRV-0141N	17.F5.A1H-PLP2	84
DRV-0147N	17.F5.A1H-PLP3	84
DRV-0145N	19.F5.A1R-PLP2	104
DRV-0150N	19.F5.A1R-PLP3	104
DRV-0136N	20.F5.A1R-PLP2	130
DRV-0129N	21.F5.A1R-PLP2	154

Geared - 460 V.A.C.

Part No.	Mfg Part ID	AMP
DRV-0206N	13.F5.A1E-RLB2	11
DRV-0207N	14.F5.A1E-RLB2	14
DRV-0208N	15.F5.A1E-RLB2	21
DRV-0209N	16.F5.A1G-RLB2	27
DRV-0210N	17.F5.A1G-RLB2	34
DRV-0211N	18.F5.A1H-RLB2	40
DRV-0212N	19.F5.A1H-RLB2	52
DRV-0197N	20.F5.A1H-RLB2	65
DRV-0213N	22.F5.A1R-RLB2	96
DRV-0214N	22.F5.A1R-RLB3	96
DRV-0215N	24.F5.A1U-RLB2	172
DRV-0216N	26.F5.A1U-RLB2	231

Gearless - 460 V.A.C.

Part No.	Mfg Part ID	AMP
DRV-0152N	12.F5.A1D -RLP2	7.6
DRV-0153N	13.F5.A1E -RLP2	11
DRV-0154N	14.F5.A1E -RLP2	14
DRV-0155N	15.F5.A1E -RLP2	21
DRV-0138N	15.F5.A1G-RLP2	21
DRV-0102N	16.F5.A1G-RLP2	27
DRV-0156N	17.F5.A1G -RLP2	34
DRV-0131N	17.F5A.1H-RLP2	34
DRV-0099N	18.F5.A1H-RLP2	40
DRV-0100N	19.F5.A1H-RLP2	52
DRV-0097N	20.F5.A1H-RLP2	64
DRV-0101N	22.F5.A1R-RLP2	96
DRV-0148N	22.F5.A1R-RLP3	96
DRV-0157N	24.F5.A1U -RLP2	172
DRV-0130N	26.F5.A1U-RLP2	231

Magnetek DSD 412 Drive



Magnetek's DSD 412 is the DC drive of choice throughout the elevator industry and the world. These drives can be used on both geared and gearless elevator systems.

IMPORTANT NOTE: All drives and/or Regen units are configured to be used with new or existing G.A.L. GALaxy controllers ONLY. All drive and/or Regen unit warranty exchanges or returns must be pre-approved by both G.A.L. and drive manufacture – please call GAL for authorization approval.

Part No.	Mfg Part ID	AMP
DRV-0115N	53ST0164-4A00	25
DRV-0044N	53ST0309-4A00	50
DRV-0042N	53ST0609-4A00	100
DRV-0043N	53ST1259-4A00	190
DRV-0068N	53ST2009-4A00	300

CONTROLLER

AC Drives & Regen Units

Magnetek H9S2 Drive



Magnetek's HPV 900 Series 2 AC Elevator Drive continues the tradition of high performance, high overload capacity and long-life reliability. It is designed for both new installations and modernization projects, and provides advanced closed-loop vector control for superior performance.

IMPORTANT NOTE: All drives and/or Regen units are configured to be used with new or existing G.A.L. GALaxy controllers ONLY. All drive and/or Regen unit warranty exchanges or returns must be pre-approved by both G.A.L. and drive manufacture – please call GAL for authorization approval.

Part No.	Voltage	Mfg Part ID	Motor
DRV-0171N	230 V.A.C.	H9-2031-2E1-01	10 HP
DRV-0172N	230 V.A.C.	H9-2041-2E1-01	15 HP
DRV-0173N	230 V.A.C.	H9-2052-2E1-01	20 HP
DRV-0181N	230 V.A.C.	H9-2075-2E1-01	25 HP
DRV-0186N	230 V.A.C.	H9-2098-2E1-01	40 HP
DRV-0168N	230 V.A.C.	H9-2025-2E1-01	7.5 HP
DRV-0174N	460 V.A.C.	H9-4016-2E1-01	10 HP
DRV-0175N	460 V.A.C.	H9-4021-2E1-01	15 HP
DRV-0176N	460 V.A.C.	H9-4027-2E1-01	20 HP
DRV-0169N	460 V.A.C.	H9-4034-2E1-01	25 HP
DRV-0188N	460 V.A.C.	H9-4041-2E1-01	30 HP
DRV-0189N	460 V.A.C.	H9-4052-2E1-01	40 HP
DRV-0190N	460 V.A.C.	H9-4065-2E1-01	50 HP
DRV-0191N	460 V.A.C.	H9-4072-2E1-01	60 HP
DRV-0192N	460 V.A.C.	H9-4096-2E1-01	70 HP

Regen Unit



IMPORTANT NOTE: All drives and/or Regen units are configured to be used with new or existing G.A.L. GALaxy controllers ONLY. All drive and/or Regen unit warranty exchanges or returns must be pre-approved by both G.A.L. and drive manufacture – please call GAL for authorization approval.

Part No.	Use With	Voltage	Mfg Part ID	AMP
DRV-0112N	HPV Drive	230 V.A.C.	RC5-230-0400	40
DRV-0113N	HPV Drive	230 V.A.C.	RC5-230-0600	60
DRV-0114N	HPV Drive	230 V.A.C.	RC5-230-0800	80
DRV-0111N	HPV Drive	230 V.A.C.	RC5-230-1000	100
DRV-0095N	HPV Drive	460 V.A.C.	RC5-460-0400	40
DRV-0093N	HPV Drive	460 V.A.C.	RC5-460-0600	60
DRV-0094N	HPV Drive	460 V.A.C.	RC5-460-0750	75
DRV-0098N	HPV Drive	460 V.A.C.	RC5-460-1000	100
DRV-0159N	KEB Drive	230 V.A.C.	25.R6.S3E-R00A	221
DRV-0158N	KEB Drive	460 V.A.C.	15.R6.S3E-R00A	26
DRV-0096N	KEB Drive	460 V.A.C.	19.R6.S3E-R00A	70

AC Drives & Regen Units

Drive Board



The HPV 900 is the only commercially provided AC Drive designed from the ground up as an Elevator Drive. It employs the latest and best technology available to achieve the performance and reliability demanded by the industry.

IMPORTANT NOTE: All drives and/or Regen units are configured to be used with new or existing G.A.L. GALaxy controllers ONLY. All drive and/or Regen unit warranty exchanges or returns must be pre-approved by both G.A.L. and drive manufacture – please call GAL for authorization approval.

Part No.	Description
DRV-0079N	Board, Main Control HPV900 Drive
DRV-0090N	Board, Main Control HPV600 Drive
DRV-0137N	Board, HPV600 Drive Communication
DRV-0143N	Board, Main Control KEB
DRV-0144N	Board, Communication KEB Geared
DRV-0182N	Board, Main Control DSD 412

Traveling Cable & Harness



Traveling Cables

Part No.	Description
HRNS-0001N	Cable, CSX57 Traveling (Per Foot)
HRNS-0023N	Cable, CSX77 Traveling (Per Foot)

Traveling Cable Grips

Part No.	Description
GRIP-0001N	Grip, Universal Bale 1.5”-1.74” Cable Diagram
GRIP-0002N	Grip, Single Eye/Single Weave/Split Rod
GRIP-0003N	Grip, Double Eye/Single Weave/Split Rod

Harnesses

Part No.	Description
HRNS-0012N	Harness, 10’ CTI-MOVFR Standard 14-18G+1Shp
HRNS-0002N	Harness, 15’ CTI-Tapeless Selector 8-18G
HRNS-0003N	Harness, 15’ CTI-Taped Selector 14-18G+1S
HRNS-0004N	Harness, 15’ CTI-MOVFR Can Bus 6-18G+1Shp
HRNS-0005N	Harness, 15’ CTI-COP 8-14G+14-18G+2Shp

CONTROLLER

AC Transformers, Filters & Reactors

Filters

Ripple Filters (Chokes)



A Ripple Filter can be used with any controller as needed to reduce audible noise on DC SCR installations.

Shipping Weight: range from 100-1000 lbs.
AMP: range from 60-350 A

Stackable and Non-Stackable
Type B: Bottom Mounted | **Type T:** Top Mounted

Part No.	AMP	Description	
XFER-0109N	60	Stackable	
XFER-0056N	100	Stackable	
XFER-0068N	150	Stackable	
XFER-0059N	200	Stackable	
XFER-0096N	250	Stackable	
XFER-0197N	300	Stackable	
XFER-0286N	60	Type B	
XFER-0287N	100	Type B	
XFER-0257N	150	Type B	
XFER-0281N	200	Type B	

Part No.	AMP	Description	
XFER-0288N	250	Type B	
XFER-0289N	300	Type B	
XFER-0553N	60	Type T	
XFER-0554N	100	Type T	
XFER-0323N	150	Type T	
XFER-0351N	200	Type T	
XFER-0557N	250	Type T	
XFER-0558N	300	Type T	
XFER-0571N	350	Type T	

Line Filters



A Line Filter is used in any Traction or Hydro Controller and Regen Unit to attenuate EMI and noise that enter equipment.

Part No.	Voltage	AMP	
ELF-0003N	120 A.C.	5	
ELF-0080N	480 A.C.	30	
ELF-0081N	480 A.C.	55	

Part No.	Voltage	AMP	
ELF-0061N	480 A.C.	75	
ELF-0082N	480 A.C.	100	
ELF-0083N	480 A.C.	180	

Trap Filters



A Trap Filter can be used in any controller to remove Interfering frequency from other transmitters.

Part No.	Voltage	AMP	HP	
ELF-0013N	480 A.C.	3	5	
ELF-0014N	480 A.C.	3	7.5	
ELF-0015N	480 A.C.	3	10	
ELF-0016N	480 A.C.	5	15	
ELF-0017N	480 A.C.	8	20	
ELF-0018N	480 A.C.	8	25	
ELF-0019N	480 A.C.	10	30	
ELF-0020N	480 A.C.	15	40	
ELF-0021N	480 A.C.	15	50	
ELF-0022N	480 A.C.	20	60	
ELF-0023N	480 A.C.	25	75	
ELF-0024N	480 A.C.	30	100	

AC Transformers, Filters & Reactors

Reactors



A Line Reactor can be used in any controller to limit current and protect drives and motor.

Part No.	Voltage	AMP	HP	
ELF-0025N	240 A.C.	16.7	5	
ELF-0036N	240 A.C.	30.8	10	
ELF-0035N	240 A.C.	46.2	15	
ELF-0026N	240 A.C.	59.4	20	
ELF-0031N	240 A.C.	74.8	25	
ELF-0033N	240 A.C.	88	30	
ELF-0038N	240 A.C.	114	40	
ELF-0032N	480 A.C.	14	10	
ELF-0043N	480 A.C.	21	15	
ELF-0048N	480 A.C.	27	20	
ELF-0041N	480 A.C.	34	25	
ELF-0042N	480 A.C.	40	30	
ELF-0045N	480 A.C.	53	40	
ELF-0037N	480 A.C.	65	50	
ELF-0049N	480 A.C.	77	60	
ELF-0054N	480 A.C.	96	75	

Transformers

Control (General)

XFER-0182N



Primary Volt (AC): 110
Secondary Volt (AC): 24
Kilo Volt AMP (KVA): 0.02

XFER-0004N



Primary Volt (AC): 110/132.5
Secondary Volt (AC): 22/24
Kilo Volt AMP (KVA): 0.5

XFER-0061N



Primary Volt (AC): 115
Secondary Volt (AC): 18
Kilo Volt AMP (KVA): 0.09

XFER-0054N



Primary Volt (AC): 120/240
Secondary Volt (AC): 24
Kilo Volt AMP (KVA): 0.15

XFER-0158N



Primary Volt (AC): 208/240/460
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 0.5

XFER-0082N



Primary Volt (AC): 208/240/480
Secondary Volt (AC): 120/240
Kilo Volt AMP (KVA): 0.5

XFER-0190N



Primary Volt (AC): 208/240/480
Secondary Volt (AC): 120/240
Kilo Volt AMP (KVA): 1

XFER-0219N



Primary Volt (AC): 240/460
Secondary Volt (AC): 120/240
Kilo Volt AMP (KVA): 2

CONTROLLER

AC Transformers, Filters & Reactors

Transformers

Control (General)

XFER-0274N



J250A1KC1A02
Micron Buck-Boost Transformers

Primary Volt (AC): 240/480
Secondary Volt (AC): 24/48
Kilo Volt AMP (KVA): 0.25

XFER-0043N



Primary Volt (AC): 380/575
Secondary Volt (AC): 220
Kilo Volt AMP (KVA): 0.2

XFER-0053N



Primary Volt (AC): 480/240
Secondary Volt (AC): 120/240
Kilo Volt AMP (KVA): 0.5

Control (1 Phase)

XFER-0559N



Primary Volt (AC): 24
Secondary Volt (AC): 230
Kilo Volt AMP (KVA): 1.5

XFER-0560N



Primary Volt (AC): 24
Secondary Volt (AC): 230
Kilo Volt AMP (KVA): 2

XFER-0561N



Primary Volt (AC): 24
Secondary Volt (AC): 230
Kilo Volt AMP (KVA): 5

XFER-0013N



Primary Volt (AC): 110/220
Secondary Volt (AC): 4/8/6
Kilo Volt AMP (KVA): 0.108

XFER-0018N



Primary Volt (AC): 110/220
Secondary Volt (AC): 12/18
Kilo Volt AMP (KVA): 0.72

XFER-0032N



Primary Volt (AC): 110/220
Secondary Volt (AC): 14/16
Kilo Volt AMP (KVA): 0.4

XFER-0239N



Primary Volt (AC): 115
Secondary Volt (AC): 230
Kilo Volt AMP (KVA): 3

XFER-0244N



Primary Volt (AC): 115
Secondary Volt (AC): 115/230
Kilo Volt AMP (KVA): 0.75

AC Transformers, Filters & Reactors

Transformers

Control (1 Phase)

XFER-0146N



Primary Volt (AC): 120/240
Secondary Volt (AC): 24
Kilo Volt AMP (KVA): 0.35

XFER-0206N



Primary Volt (AC): 145
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 0.75

XFER-0307N



Primary Volt (AC): 145
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 2

XFER-0222N



Primary Volt (AC): 145
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 2.5

XFER-0264N



Primary Volt (AC): 145
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 3.5

XFER-0265N



Primary Volt (AC): 145
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 4

XFER-0223N



Primary Volt (AC): 145
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 3

XFER-0319N



Primary Volt (AC): 145
Secondary Volt (AC): 155
Kilo Volt AMP (KVA): 1

XFER-0014N



Primary Volt (AC): 197.6/208/218.4
Secondary Volt (AC): 10.8/12.12
Kilo Volt AMP (KVA): 0.1

XFER-0020N



Primary Volt (AC): 208/220
Secondary Volt (AC): 208/220
Kilo Volt AMP (KVA): 0.75

XFER-0019N



Primary Volt (AC): 208/220/240
Secondary Volt (AC): 208/220/240
Kilo Volt AMP (KVA): 1

XFER-0009N



Primary Volt (AC): 208/220/240
Secondary Volt (AC): 100/110/120
Kilo Volt AMP (KVA): 0.5

CONTROLLER

AC Transformers, Filters & Reactors

Transformers

Control (1 Phase)

XFER-0238N



Primary Volt (AC): 208/230/400/460/575
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 1

XFER-0218N



Primary Volt (AC): 208/230/400/460/575
Secondary Volt (AC): N/A
Kilo Volt AMP (KVA): 1.5

XFER-0209N



Primary Volt (AC): 208/240/460/575
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 2

XFER-0267N



Primary Volt (AC): 208/575/600
Secondary Volt (AC): 115/230
Kilo Volt AMP (KVA): 0.5

XFER-0017N



Primary Volt (AC): 220/440
Secondary Volt (AC): 4/8/6
Kilo Volt AMP (KVA): 0.36

XFER-0304N



Primary Volt (AC): 240
Secondary Volt (AC): 460
Kilo Volt AMP (KVA): 20

XFER-0015N



Primary Volt (AC): 240/480
Secondary Volt (AC): 120
Kilo Volt AMP (KVA): 0.1

XFER-0021N



Primary Volt (AC): 240/480
Secondary Volt (AC): 120
Kilo Volt AMP (KVA): 0.2

XFER-0213N



Primary Volt (AC): 380/400/415/438
Secondary Volt (AC): 120
Kilo Volt AMP (KVA): 0.5

XFER-0276N



Primary Volt (AC): 380/400/415/438
Secondary Volt (AC): 120
Kilo Volt AMP (KVA): 0.75

XFER-0016N



Primary Volt (AC): 400
Secondary Volt (AC): 220
Kilo Volt AMP (KVA): 0.5

XFER-0011N



Primary Volt (AC): 440/480/575
Secondary Volt (AC): 208/220
Kilo Volt AMP (KVA): 0.5

AC Transformers, Filters & Reactors

Transformers

Control (1 Phase)

XFER-0254N



Primary Volt (AC): 480
Secondary Volt (AC): 115
Kilo Volt AMP (KVA): 1.5

XFER-0268N



Primary Volt (AC): 208/575/600
Secondary Volt (AC): 115/230
Kilo Volt AMP (KVA): 0.75

XFER-0208N



Primary Volt (AC): 208/240/460/575
Secondary Volt (AC): 145
Kilo Volt AMP (KVA): 1.5

XFER-0044N



Primary Volt (AC): N/A
Secondary Volt (AC): N/A
Kilo Volt AMP (KVA): N/A

XFER-0057N



Primary Volt (AC): N/A
Secondary Volt (AC): N/A
Kilo Volt AMP (KVA): 0.5

XFER-0169N



Primary Volt (AC): N/A
Secondary Volt (AC): N/A
Kilo Volt AMP (KVA): 0.75

Control (3 Phase)

XFER-0037N



Primary Volt (AC): 197/208/219
Secondary Volt (AC): 175/185
Kilo Volt AMP (KVA): 3

XFER-0034N



Primary Volt (AC): 197/208/219
Secondary Volt (AC): 175/185/208
Kilo Volt AMP (KVA): 5

XFER-0027N



Primary Volt (AC): 197/219
Secondary Volt (AC): 175/185
Kilo Volt AMP (KVA): 1

XFER-0031N



Primary Volt (AC): 200/220/240
Secondary Volt (AC): 100/110/120/208/220
Kilo Volt AMP (KVA): 5

CONTROLLER

AC Transformers, Filters & Reactors

Transformers

Control (3 Phase)

XFER-0029N



Primary Volt (AC): 208/220/240
Secondary Volt (AC): 208/220
Kilo Volt AMP (KVA): 3

XFER-0026N



Primary Volt (AC): 208/220/240
Secondary Volt (AC): 208/220
Kilo Volt AMP (KVA): 1

XFER-0023N



Primary Volt (AC): 208/220/240
Secondary Volt (AC): 208/220/240
Kilo Volt AMP (KVA): 0.5

XFER-0036N



Primary Volt (AC): 440/450/600
Secondary Volt (AC): 100/105/115/208/220
Kilo Volt AMP (KVA): 5

XFER-0030N



Primary Volt (AC): 440/460/480
Secondary Volt (AC): 165/175/185
Kilo Volt AMP (KVA): 3

XFER-0022N



Primary Volt (AC): 440/480/575
Secondary Volt (AC): 208/220
Kilo Volt AMP (KVA): 0.5

XFER-0033N



Primary Volt (AC): 440/480/575
Secondary Volt (AC): 208/220
Kilo Volt AMP (KVA): 5

XFER-0025N



Primary Volt (AC): 440/480/575
Secondary Volt (AC): 208/220
Kilo Volt AMP (KVA): 1

XFER-0028N



Primary Volt (AC): 440/480/575
Secondary Volt (AC): N/A
Kilo Volt AMP (KVA): 3

XFER-0024N



Primary Volt (AC): 440/480/575
Secondary Volt (AC): 208
Kilo Volt AMP (KVA): 0.5

XFER-0035N



Primary Volt (AC): 440/480/600
Secondary Volt (AC): 100/115/208/220
Kilo Volt AMP (KVA): 5.9

AC Transformers, Filters & Reactors

Transformers

Isolation Transformers



An Isolation Transformer can be used with any controller as needed to transform building voltage to motor voltage, and reduce noise on building power lines.

Shipping Weight: range from 100-1000 lbs.
Primary Voltage: range from 24-600 volts.
Secondary Voltage: range from 1.9-500 volts.
KVA: range from 0.00875-75

Stackable and Non-Stackable

Note: For information & quotes for transformers, filters, & reactors call G.A.L. tech support. Advise capacity, speed, AMPs, & voltage.

CONTROLLER

Resistors

1/4 to 20 Watt



1 Watt



10 Watt



20 Watt

Part No.	Watt	OHMS
RES-0264N	1/4	200
RES-0077N	1/2	5000
RES-0126N	1	470
RES-0127N	1	560
RES-0128N	1	1500
RES-0211N	1	7500
RES-0129N	1	15000
RES-0130N	1	27000

Part No.	Watt	OHMS
RES-0078N	2	25
RES-0079N	5	30
RES-0080N	5	250
RES-0081N	5	3300
RES-0300N	10	500
RES-0197N	10	3300
RES-0082N	10	5000
RES-0301N	10	5000

Part No.	Watt	OHMS
RES-0302N	10	7500
RES-0303N	10	10000
RES-0083N	10	15000
RES-0304N	10	15000
RES-0217N	12	25
RES-0084N	12	75
RES-0257N	20	100
RES-0085N	20	250

Part No.	Watt	OHMS
RES-0074N	20	400
RES-0075N	20	1000
RES-0087N	20	1200
RES-0088N	20	1500
RES-0065N	20	6000
RES-0089N	20	7500
RES-0090N	20	10000
RES-0091N	20	25000

25 to 50 Watt



25 Watt



25 Watt



50 Watt

25 to 50 Watt

Part No.	Watt	OHMS	Band(s)
RES-0092N	25	3000	0
RES-0067N	25	5000	0

25 to 50 Watt

Part No.	Watt	OHMS	Band(s)
RES-0093N	25	25	1
RES-0094N	25	10000	1

25 to 50 Watt

Part No.	Watt	OHMS	Band(s)
RES-0095N	50	250	1
RES-0076N	50	1500	1
RES-0096N	50	50000	1

100 to 200 Watt



100 Watt



200 Watt



200 Watt, Short *

100 Watt

Part No.	Watt	OHMS	Band(s)
RES-0097N	100	100	2
RES-0135N	100	100	3
RES-0136N	100	100	4
RES-0139N	100	100	5

Part No.	Watt	OHMS	Band(s)
RES-0098N	100	175	2
RES-0099N	100	300	2
RES-0137N	100	300	3

Part No.	Watt	OHMS	Band(s)
RES-0138N	100	300	4
RES-0140N	100	300	5
RES-0100N	100	500	2

Contact G.A.L. sales for pricing

Resistors

100 to 200 Watt

200 Watt

*** Note: RES-0115N & RES-0116N:** Length is 6 ½" Lg. (short)

Part No.	Watt	OHMS	Band(s)
RES-0001N	200	10	0
RES-0004N	200	50	0
RES-0068N	200	50	0
RES-0104N	200	50	2
RES-0115N *	200	50	2
RES-0005N	200	100	0
RES-0105N	200	100	2

Part No.	Watt	OHMS	Band(s)
RES-0106N	200	150	2
RES-0107N	200	200	2
RES-0008N	200	250	0
RES-0069N	200	250	0
RES-0108N	200	250	2
RES-0116N *	200	250	2
RES-0009N	200	500	0

Part No.	Watt	OHMS	Band(s)
RES-0109N	200	500	2
RES-0110N	200	750	2
RES-0011N	200	1000	0
RES-0112N	200	1500	2
RES-0113N	200	2500	2
RES-0389N	200	5000	2
RES-0114N	200	25000	2

375 to 1600 Watt



375 Watt



1600 Watt

Part No.	Watt	OHMS	Band(s)
RES-0015N	375	1	0
RES-0117N	375	1	2
RES-0016N	375	2	0
RES-0118N	375	2	2
RES-0017N	375	3	0

Part No.	Watt	OHMS	Band(s)
RES-0119N	375	3	2
RES-0018N	375	5	0
RES-0120N	375	5	2
RES-0019N	375	10	0
RES-0121N	375	10	2

Part No.	Watt	OHMS	Band(s)
RES-0297N	375	20	2
RES-0388N	375	25	2
RES-0390N	1000	5	0
RES-0288N	1600	3.91	0
RES-0286N	1600	4.4	0

Spiral Resistor



Part No.	Description
RES-0122N	Resistor, Spiral #8 Wire
RES-0123N	Resistor, Spiral #10 Wire
RES-0124N	Resistor, Spiral #12 Wire

Compounding Strip



Description
Part No: RES-0284N Strip, VV Compounding Shunting

Resistor Band

HWEL-0001N



Resistor Band, 100 Watts Resistor

Resistor Band

HWEL-0003N



Resistor Band, 200 Watt MOH & MOM Resistor

Resistor Band

HWEL-0004N



Resistor Band, 200 Watt MOCT, (For 1 5/8 x 6 1/2 Res.)

Resistor Band

HWEL-0007N



Band, 375 Watt Ribwound Resistor

CONTROLLER

Accessories & Parts

Air Conditioner

CAC-0004N



Description
Conditioner, Air Controller 500W 120 V.A.C

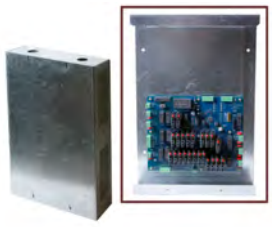
CAC-0005N



Description
Conditioner, Air 1600BTU Side Mounting 304 S.S.

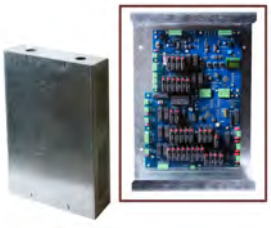
Fault Monitor & Rope Gripper Panel

FM-0014N



Description
Monitor, “DFM-1” Door Lock F/R/M Fault (Front & Rear)

FM-0015N



Description
Panel Assembly, “RG-1” Rope Gripper & “DFM-1” Door Lock Fault Monitor (Replaced RG-0082N)

Brake Panels

BRK-0044N



Brake Panel, Single Phase Rectifier, HW10019

BRK-0045N



Brake Panel, Single Phase Rectifier with Transformer. XFER, HW10019-T

BRK-0046N



Brake Panel, Three Phase Rectifier, HW10019-1

BRK-0047N



Brake Panel, Three Phase Rectifier with Transformer. XFER, HW10019-1-T

BRK-0048N



Brake Panel, Two Phase Rectifier, HW10019-2

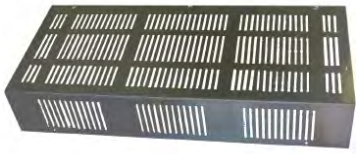
Accessories & Parts

Dynamic Braking Resistor & Box Assemblies



Due to variations with motors used for elevators, there are many arrangements for these resistor assemblies. You must provide the G.A.L. controller number for each elevator found on the data plate in the upper left hand side of the GALaxy controller above the main board.

GALX-0063N



Cover, Controller Cabinet Resistor Box

GALX-0064N



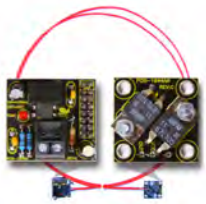
Panel, Controller Cabinet Resistor Box

GALX-0068N



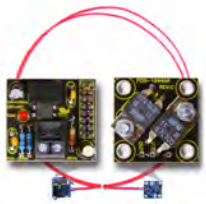
Box Assembly, Controller Cabinet Resistor

GALX-0115N



Assembly, D.B. Resistor/Interface Board Temp Sensor 6” Lg

GALX-0116N



Assembly, D.B. Resistor/Interface Board Temp Sensor 18’ Lg

GALX-0032N



Jumper, 4” Lg Wire Resistor Terminal

Encoders

ENCO-0032N



Kit, DC Gearless Encoder Brake Sheave (TU)

ENCO-0008N



Kit Encoder, 2048 PPR 5 V.D.C Differential Geared

ENCO-0009N



Kit Encoder, 10000 PPR 5 V.D.C Differential Gearless

ENCO-0001N



Encoder, 2048 PPR 5 V.D.C Differential

CONTROLLER

Accessories & Parts

Encoders

ENCO-0006N



Encoder, 10000 PPR 5 V.D.C Differential

ENCO-0047N



Encoder, Incremental 2048PPR 58MM Shaft

ENCO-0035N



Encoder, Absolute Hollow 12MM Without Cap

ENCO-0050N



Kit Encoder, Retrofit 485 To Can Open (Replacement For Encoder Part No. ENCO-0035N)

ENCO-0033N



Encoder, Can Bus 12MM Shaft

ENCO-0046N



Encoder, Absolute 12MM Shaft Can Open

ENCO-0049N



Encoder, Can Open 1-30 VDC Input

ENCO-0038N



Kit, Endat Encoder Option Card S2 PM

Encoder Cables



Part No.	Description
ENCO-0002N	Cable, Encoder 10 Meter With M12 Connector
ENCO-0007N	Cable, Encoder 15 Meter With M12 Connector
ENCO-0017N	Cable, Encoder 35 Meter With M12 Connector
ENCO-0019N	Cable, Encoder 100 Meter With M12 Connector
ENCO-0041N	Cable, Encoder 15 Meter Can Open Encoder
ENCO-0042N	Cable, Encoder 50 Meter Can Open Encoder
ENCO-0043N	Cable, Encoder 75 Meter Can Open Encoder
ENCO-0044N	Cable, Encoder 100 Meter Can Open Encoder

Encoder Parts

ENCO-0003N



Bracket, Encoder Mounting

ENCO-0004N



Coupling, Encoder Misalign 3/8" Bore

ENCO-0030N



Bracket, Incremental Encoder Right Angle Spring Loaded

ENCO-0031N



Wheel, Rubber (CIL 517)

Accessories & Parts

GALaxy Documentation Packages



Part No.	Description
DOC-0005N	Manual, GALaxy Controller DC
DOC-0006N	Manual, GALaxy Controller Hydro C
DOC-0007N	Manual, GALaxy Controller Hydro S
DOC-0008N	Manual, GALaxy Controller VVVF
DOC-0009N	Manual, GALaxy Controller VVVF NDF
DOC-0010N	Manual, Magnetek DSD-412 Drive
DOC-0011N	Manual, Magnetek HPV900 Drive
DOC-0012N	Manual, Magnetek HPV600 Drive
DOC-0013N	Manual, Sprecher + Schuh Soft Start
DOC-0016N	Manual, Siemens Soft Start
DOC-0020N	Manual, Magnetek HPV900 PM Drive
DOC-0023N	Manual, Power Regen Unit VS656RC5
DOC-0027N	Manual, KEB F5 PM Drive
DOC-0028N	Manual, KEB R6 Regen Unit
DOC-0029N	Manual, Model GAL-6400 Hands Free Emergency Telephone
DOC-0030N	Manual, Magnetek Quattro DC Drive
DOC-0044N	Manual, Gar V.A.C Soft Start

GALaxy Cabinet Enclosures and Parts



Part No.	Description
CAB-0004N	Cabinet, “D” Horizontal Assembly Standard
CAB-0008N	Panel, Hydro Controller Type-D-Mounting Tray
CAB-0018N	Plate, Side Wall PC Board Mounting
CAB-0019N	Legs, Set of 8” Ht Controller Cabinet
CAB-0048N	Cabinet, Traction Control Type “A” Assembly 16” D x 45” W x 66 3/4” H
CAB-0071N	Arm, Monitor Mounting
CAB-0076N	Cab Split, 60 x 25.5 x 18 Drive Cabinet
CAB-0077N	Cab Back Plate, 58 x 23.5 x 18
CAB-0078N	Cab Split, 72 x 25.5 x 18
CAB-0079N	Cab Back Plate, 70 x 23.5
CAB-0085N	Kit, Hinge Replacement (6) A/B Cabs
CAB-0086N	Adapter Kit, Plate With HDW For CAC-0004N
CAB-0097N	Doors, Replacement For “A” Cab With Hardware
GALX-0107N	Cover, A/B Cabinet AC Side Wall Louver, 7” x 34” x 14 Ga. Galvanized

GALaxy Wires and Cables

GALX-0040N



Sensor, NPN 10 To 30 V.D.C 150 MA

GALX-0140N



Cable, Assembly GALcom 6 Ft Ribbon Red Lion To GAL CPU

GALX-0239N



Cable, Assembly GALcom 12 Ft Ribbon Red Lion To GAL CPU (Use For Lobby Monitor or Machine Room)

GALX-0131N



Cable, Assembly For GALX-1045N To CPU, 1092AN-1022AN

CONTROLLER

Accessories & Parts

GALaxy Wires and Cables

GALX-0213N



Cable, Communication Red Lion To GAL CPU (Use For Lobby Monitor or Machine Room)

GALX-0225N



Cable, Assembly Serial 10 Pin Header To DB9

GALX-0227N



Assembly, Cable Serial Link 1036 To DSD 412

GALX-0261N



Cable, Serial Drive Communication GALaxy Link To KEB Drive

CONN-0208N



Cable, Serial Drive Communication GALaxy Link To HPV900

WIRE-0054N



Cable, Serial Drive Communication GALaxy Link To HPV9 v2

GALX-0049N



Cable, Selector Sensor 3 Connector Ribbon , For Selector With (1-15 Landings)

GALX-0050N



Cable, Selector Sensor 4 Connector Ribbon , For Selector With (16-29 Landings)

Load Weighing Units & Parts



Part No.	Description
GALX-0157N	Sensor, Micelect 1 Per 3/8 Rope, 10 MM
GALX-0158N	Sensor, Micelect 1 Per 1/2 Rope, 13 MM
GALX-0159N	Sensor, Micelect 1 Per 5/8 Rope, 16 MM

GALX-0174N



Description
Unit, Load Weighing Control, Micelect Part# LM3D-EMC-CSA-5V, (OLD# LW-ANLOG-5V)

GALX-0216N



Description
Load Weighing, K-Weigh 5200 0-5V With Can

Accessories & Parts

Monitor Configuration - GALileo

GALX-0284N



Kit, Galileo Lobby Monitor Configuration

GALX-0285N



Kit, Galileo Machine Room Configuration

GALX-0212N



Touch Screen, GI10V2 With Isolated Ports

GALX-0243N



Box, GALileo Lobby Monitor Interface Assembly (Use For Lobby Monitor)

GALX-1045N



Board, RS232 To RS485 Converter (Use For Lobby Monitor)

PWS-0002N



Supply, In:120/240PR 30W-9.5A 50/60 (Use For Lobby Monitor)

GALX-0233N



Power Supply, Red Lion PSDRO200 (Use For Lobby Monitor or Machine Room)

GALX-0213N



Cable, Communication Red Lion To GAL CPU (Use For Lobby Monitor or Machine Room)

GALX-0239N



Cable, Assembly GALcom 12 Ft Ribbon Red Lion To GAL CPU (Use For Lobby Monitor or Machine Room)

GALX-0131N



Cable, Assembly 1045N-CPU, 1092AN-1022AN

Monitor Interface



Part No.	Description
GALX-0137N	Kit, 17" Lobby Monitor Interface
GALX-0178N	Kit, 19" Lobby Monitor Interface

CONTROLLER

Accessories & Parts

Relays & Contactors

Auxiliary Contacts

RELY-0079N



Contact, Auxiliary 1NO-1NC

RELY-0141N



Contact, Auxiliary 1NO-1NC Side Mounting

RELY-0161N



Contact, Auxiliary 1NO-1NC Side Mounting L.H.

RELY-0195N



Contact, Auxiliary 1NO-1NC Side Mounting R.H.

RELY-0051N



Contact, Auxiliary 1NO-1NC

RELY-0063N



Contact, Auxiliary Block 2NO-2NC

RELY-0142N



Contact, Auxiliary 2NO-2NC

RELY-0165N



Contact, Auxiliary 1NO-1NC Interlock. Kit

RELY-0166N



Contact, Auxiliary 1NC

RELY-0184N



Contact, Auxiliary Block

RELY-0188N



Adaptor, DIN-Rail Panel Mount 0.16-24 AMP

Contactors

RELY-0050N



Contactor, 208-240 V.A.C Coil 3NO-1NC Poles

RELY-0052N



Contactor, 120 V.A.C Coil 3NO-17 AMP 1NO Auxiliary

RELY-0053N



Contactor, 4N.O, Poles 200-240 V.A.C Coil

RELY-0057N



Contactor, PWR 200 AMP DC SP 120 V.A.C Coil

Accessories & Parts

Relays & Contactors

Contactors

RELY-0076N



Contactor, 120 V.A.C Coil 3 Pole 220 AMP 2NO-1NC

RELY-0140N



Contactor, 120 V.A.C Coil 3 Pole 130 AMP 1NO-1NC Auxiliary

RELY-0175N



Contactor, 120 V.A.C Coil 3 Pole 50 AMP 1NO-1NC

RELY-0176N



Contactor, Auxiliary Block 2NO-2NC

RELY-0177N



Contactor, 120 V.A.C Coil 3 Pole 25 AMP 1NO-1NC

RELY-0178N



Contactor, Auxiliary Snap-On Side Mounting Interlock

RELY-0183N



Contactor, 120 V.A.C Coil 3 Pole 140 AMP 1NO Auxiliary

RELY-0239N



Contactor, 120 V.A.C Coil 3NO-1NC Poles

RELY-0089N



Contactor, 120 V.A.C Coil 3NO 34 AMP 1NO Auxiliary

RELY-0090N



Contactor, 120 V.A.C Coil 3 Pole 42 AMP 1NO-1NC Auxiliary

RELY-0137N



Contactor, 600 V.A.C Coil 3 Pole 28 AMP 1NC Auxiliary

RELY-0145N



Contactor, 480 V.A.C Coil 3 Pole 28 AMP 1NC Auxiliary



Part No.	Description
RELY-0084N	Contactor, 208 V.A.C Coil 3 Pole 23 AMP 1NO Auxiliary
RELY-0080N	Contactor, 120 V.A.C Coil 3 Pole 23 AMP 1NO Auxiliary
RELY-0099N	Contactor, 120 V.A.C Coil 3 Pole 43 AMP 1NO Auxiliary
RELY-0073N	Contactor, 120 V.A.C Coil 3 Pole 60 AMP 1NO Auxiliary
RELY-0068N	Contactor, 120 V.A.C Coil 3 Pole 72 AMP 1NO Auxiliary

CONTROLLER

Accessories & Parts

Relays & Contactors

Contactors



Part No.	Description
RELY-0065N	Contactor, 120 V.A.C Coil 3 Pole 54 AMP 1NO-1NC Auxiliary
RELY-0091N	Contactor, 120 V.A.C Coil 3 Pole 65 AMP 1NO-1NC Auxiliary
RELY-0064N	Contactor, 120 V.A.C Coil 3 Pole 80 AMP 1NO-1NC Auxiliary
RELY-0087N	Contactor, 120 V.A.C Coil 3 Pole 95 AMP 1NO-1NC Auxiliary
RELY-0070N	Contactor, 120 V.A.C Coil 3 Pole 110 AMP 1NO-1NC Auxiliary

Dual Contactors With Interlock

RELY-0104N



Contactor, Revised 120 V.A.C CL 3 Pole 23 AMP 1NO-1NC Auxiliary

RELY-0108N



Contactor, Revised 120 V.A.C CL 3 Pole 85 AMP 1NO-1NC Auxiliary

RELY-0059N



Contactor, Revised 120 V.A.C CL 3 Pole 180 AMP 1NO-1NC Auxiliary

RELY-0110N



Contactor, Revised 120 V.A.C CL 3 Pole 140 AMP 1NO-1NC Auxiliary



Part No.	Description
RELY-0225N	Contactor, Revised 120 V.A.C 34 AMP (MRL)
RELY-0229N	Contactor, Revised 120 V.A.C 42 AMP (MRL)
RELY-0233N	Contactor, Revised 120 V.A.C 80 AMP (MRL)
RELY-0228N	Contactor, Revised 120 V.A.C 95 AMP (MRL)

Relays (Overload)

Any overload that are not in GAL stock will be specially ordered and drop shipped directly to the customer.

RELY-0074N



Overload, Relay Thermal 3 PH 45 - 60 AMP

RELY-0112N



Overload, Relay Thermal 3 PH 18 - 30 AMP

RELY-0173N



Overload, 3 PH Adjustable 26 - 85 AMP

RELY-0179N



Overload, 3 PH Adjustable 66 - 110 AMP

Accessories & Parts

Relays & Contactors

Relays (Overload)

RELY-0181N



Overload, Relay Thermal 3 PH 10 - 16 AMP

RELY-0221N



Overload, Relay Thermal 3 PH 72 - 90 AMP

RELY-0016N



Relay, Magnetic A10C

RELY-0018N



Relay, Magnetic A18C

RELY-0019N



Relay, Magnetic A24C

RELY-0020N



Relay, Magnetic A27C

RELY-0021N



Relay, Thermal COV 4

RELY-0022N



Relay, Thermal DOV 4

RELY-0023N



Relay, Thermal EOV 4

RELY-0024N



Relay, Thermal BOV 16

RELY-0025N



Relay, Thermal COV 16

RELY-0027N



Relay, Thermal EOV 16

RELY-0215N



Relay, Thermal DOV 16 (Replaced RELY-0026N)

RELY-0266N



Heater, Allen-Bradley Thermal Overload, “W” Series Only. (Specify “W-__” No. Found On Bottom Of Heater)

CONTROLLER

Accessories & Parts

Relays & Contactors

Relays (Phase Monitoring)

RELY-0047N



Relay, Phase Monitor 190-270V

RELY-0048N



Relay, Phase Monitor 93-130V

RELY-0136N



Relay, 3 Phase Monitoring 380-600V

Relays (Plug In)

RELY-0011N



Relay, 12 V.D.C 3-Pole PC Term With Light-Button

RELY-0012N



Relay, 110 V.D.C With Light Button

RELY-0185N



Relay, 4 Pole 6 V.D.C Coil Miniature



Part No.	Description
RELY-0013N	Relay, 24 V.D.C DPDT With Light PCB Icecube
RELY-0014N	Relay, 48 V.D.C DPDT With Light PCB Icecube
RELY-0180N	Relay, 110 V.D.C DPDT With Light PCB Icecube
RELY-0226N	Relay, 110 V.D.C Latch
RELY-0032N	Relay, 24 V.A.C 3DPDT With Light Button
RELY-0174N	Relay, 24 V.A.C DPDT With Light PCB Icecube
RELY-0144N	Relay, 120 V.A.C DPDT With Light Icecube



Part No.	Description
RELY-0113N	Relay, 4 Pole 24 V.A.C Coil Miniature
RELY-0115N	Relay, 4 Pole 120 V.A.C Coil Miniature
RELY-0244N	Relay, 4 Pole 220 V.A.C Coil Miniature
RELY-0162N	Relay, 4-PDT 24 V.D.C Coil With Diode Suppressor

Accessories & Parts

Relays & Contactors

Soft Starter



Part No.	Description
SFST-0008N	Soft Starter, S&S 32 AMP 600V 120V Fault Cont
SFST-0009N	Soft Starter, S&S 51 AMP 600V 120V Fault Cont
SFST-0010N	Soft Starter, S&S 64 AMP 600V 120V Fault Cont
SFST-0011N	Soft Starter, S&S 74 AMP 600V 120V Fault Cont
SFST-0012N	Soft Starter, S&S 104 AMP 600V 120V Fault Cont

Timers



Part No.	Description
RELY-0163N	Timer, On Delay Multi-Range Turning DIN Rail Mounting Relay
RELY-0164N	Timer, Off Delay Multi-Range Turning DIN Rail Mounting Relay

Selectors

Tapeless Selectors & Kits



Part No.	Description
GALX-0151N	Assembly, Tapeless Selector Box Wired





Part No.	Description
GALX-0153N	Kit, Selector Tapeless Without Encoder
GALX-0313N	Kit, Selector Tapeless With Can Open 15M CBL (Replaced GALX-0130N)
GALX-0306N	Kit, Selector Tapeless With Can Open 35M CBL (Replaced GALX-0167N)
GALX-0314N	Kit, Selector Tapeless With Can Open 50M CBL (Replaced GALX-0231N)
GALX-0315N	Kit, Selector Tapeless With Can Open 75M CBL (Replaced GALX-0232N)
GALX-0316N	Kit, Selector Tapeless With Can Open 100M CBL (Replaced GALX-0256N)

Steel Tape Selector Kits



Part No.	Description
GALX-0276AN	Kit, Selector 2 Channel Pulse Differential Sensors 2-15 FLS -WP
GALX-0276N	Kit, Selector 2 Channel Pulse Differential Sensors 2-15 FLS
GALX-0277AN	Kit, Selector 2 Channel Pulse Differential Sensors 16-60 FLS-WP
GALX-0277N	Kit, Selector 2 Channel Pulse Differential Sensors 16-60 FLS
GALX-0024N	Kit, Selector (1-15 Landings)
GALX-0048N	Kit, Selector (16-60 Landings)

CONTROLLER

Accessories & Parts

Selectors

Steel Tape Readers



Part No.	Description
GALX-0025AN	Assembly, GALaxy Steel Tape Reader 2-15 FLS-WP, With Conformal Coating
GALX-0025N	Assembly, GALaxy Steel Tape Reader 2-15 FLS
GALX-0026AN	Assembly, GALaxy Steel Tape Reader 16-32 FLS-WP, With Conformal Coating
GALX-0026N	Assembly, GALaxy Steel Tape Reader 16-32 FLS

Steel Tapes

GALX-0009N



Description
Tape, Steel 3W Oval Perforated

GALX-0052N



Description
Tape, Stainless Steel 3W Oval Perforated

Selector Parts

ENCO-0010N



Sensor, Magnetic With Integral Cable-Phone Jack
Used For: Tapeless Selector

GALX-0149N



Unistrut, 36” Tapeless Selector
Used For: Tapeless Selector

GALX-0154N



Alignment, Formed Alum W Magnet Tapeless
Used For: Tapeless Selector

GALX-0006N



Angle, Position Detection Mounting, 6 3/8” x 4 1/2” x 1/4” (Bend)
Used For: Tapeless Selector

GALX-0011N



Jig, Position Detection System
Used For: Tape Selector

GALX-0307N



Guide, Nylon Tape, Selector. (Early Version of Guide Was White)
Used For: Tape Selector

GALX-0004N



Plates Assembly, Tension Spring/ Thread Rod/Brackets
Used For: Tape Selector

HDW-0243N



Magnet, 2” Strip Tape South Pole Adhesive
Used For: Tape Selector

Accessories & Parts

Selectors

Selector Parts

HDW-0315N



Magnet, 4” Strip Tape North Pole Adhesive
Used For: Tape Selector

HDW-0242N



Magnet, 8” Strip Tape South Pole Adhesive
Used For: Tape Selector

HDW-0494N



Magnet, 8” Strip Tape South Pole Adhesive With Steel Back
Used For: Tape Selector

GALX-0020N



Bracket, GALaxy Selector Rail Kit
Used For: Tape Selector

GALX-0010N



Hardware, Selector Mounting
Used For: Tape Selector

SEL-0092N



Bracket, GAL Limit Switches Mounting Kit
Used For: “LS” & “LTS”

Magnetic Limit Switches

SW22-0020N



Description
Kit, 2 Magnetic Limit Switch

SW22-0030N



Description
Kit, 3 Magnetic Limit Switch

CONTROLLER

Accessories & Parts

Terminal Block Assemblies & Parts

CONN-0073N



Terminal, End Stop

CONN-0082N



Terminal, Feed-Thru 30A 26-10 Wag M4/6

CONN-0085N



Terminal, End Cover Section FEM6 Grey

CONN-0112N



Terminal, Feed-Thru M4/6P 5113 Green

GALX-0066N



Terminal Assembly, DBR & Brake Resistor

HWEL-0058N



Track, Din Rail 35MM x 2 Meter (78-3/4")

Cooling Fan

HWEL-0148N



Fan Assembly, GALaxy Controller Cooling, With Guard And Wires, 115 V.A.C.

HWEL-0109N



Fan Assembly, GALaxy Controller Cooling, Without Guard, 115 V.A.C.

HWEL-0108N



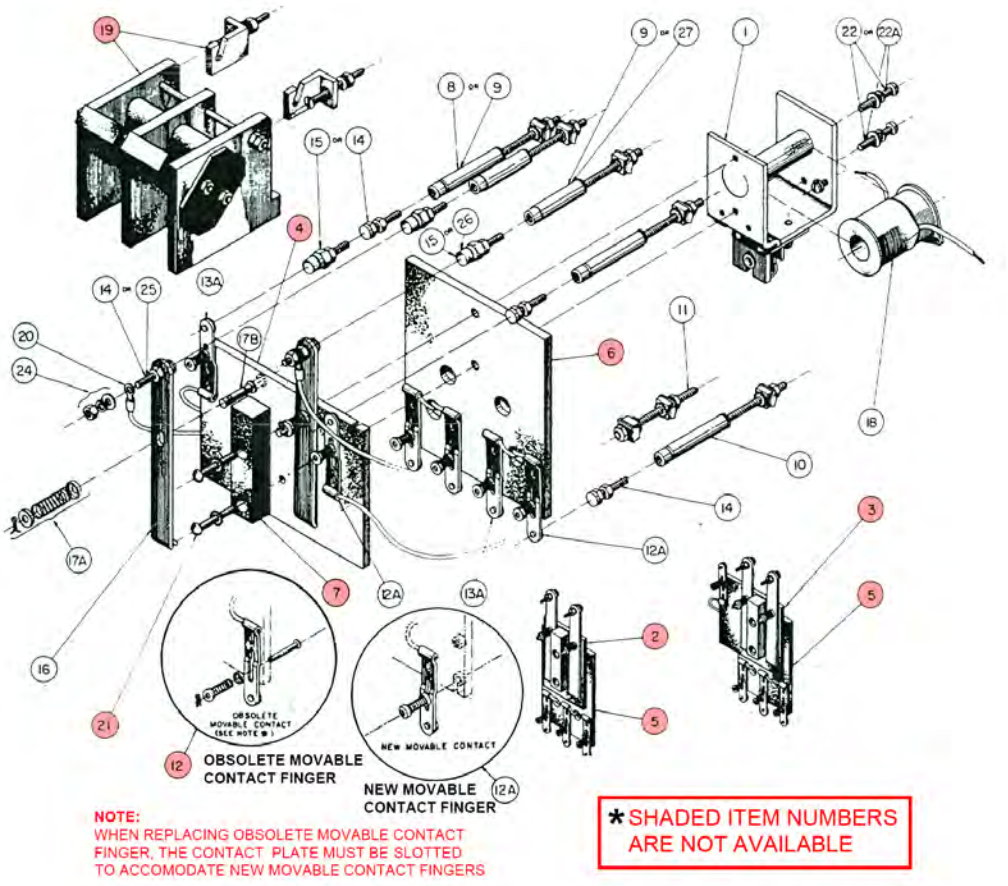
Fan Guard, Wire Form Cooling

Relay Logic Controllers - Old Style

Replacement Parts

Relay Logic Controller Relays

"LC-28" Relay Assembly



As inventory runs out, certain supported parts may not be available in the future.

Part No.	Item No	Description
LC-0032N	1	Frame/Armature, Contactor For Small Contactor (Use For LC28, LC49, LC53, LC54)
LC-0056N*	2	Plate, 2P 3/8-1/2 Main 2 N.O. Aux Contact, With 1 N.O. Auxiliary
LC-0057N*	3	Plate, 2P 3/8" Or 1/2" Main Contact, With 2 N.O. Auxiliary
LC-0058N*	4	Plate, 2P 3/8" Or 1/2" Main Contact, With 2 N.O. Auxiliary
LC-0074N*	5	Plate, 4 N.C. Auxiliary Contact, For " Lc28" Contactor
LC-0076N*	6	Separator, 2 Pole 3/8" Or 1/2" Main, 3/8" & 1/2" Main Contacts
LC-0101N*	7	Post, 1 7/8" Lg Contact
LC-0085N	8	Post, 1 7/8" Lg Contact
LC-0084N	9	Post, 1 7/16" Lg Contact
LC-0082N	10	Post, 1 5/8" Lg Contact
LC-0107N	11	Stud Assembly, 10-32 X 2 1/8" Lg Terminal
LC-0021L/R	12A & 13A	Contact, Movable Finger, Short Lead 3/4" Rivet
CONT-0003N	14	Contact, 3/8" Dia. Silver Plated 3/4" Lg

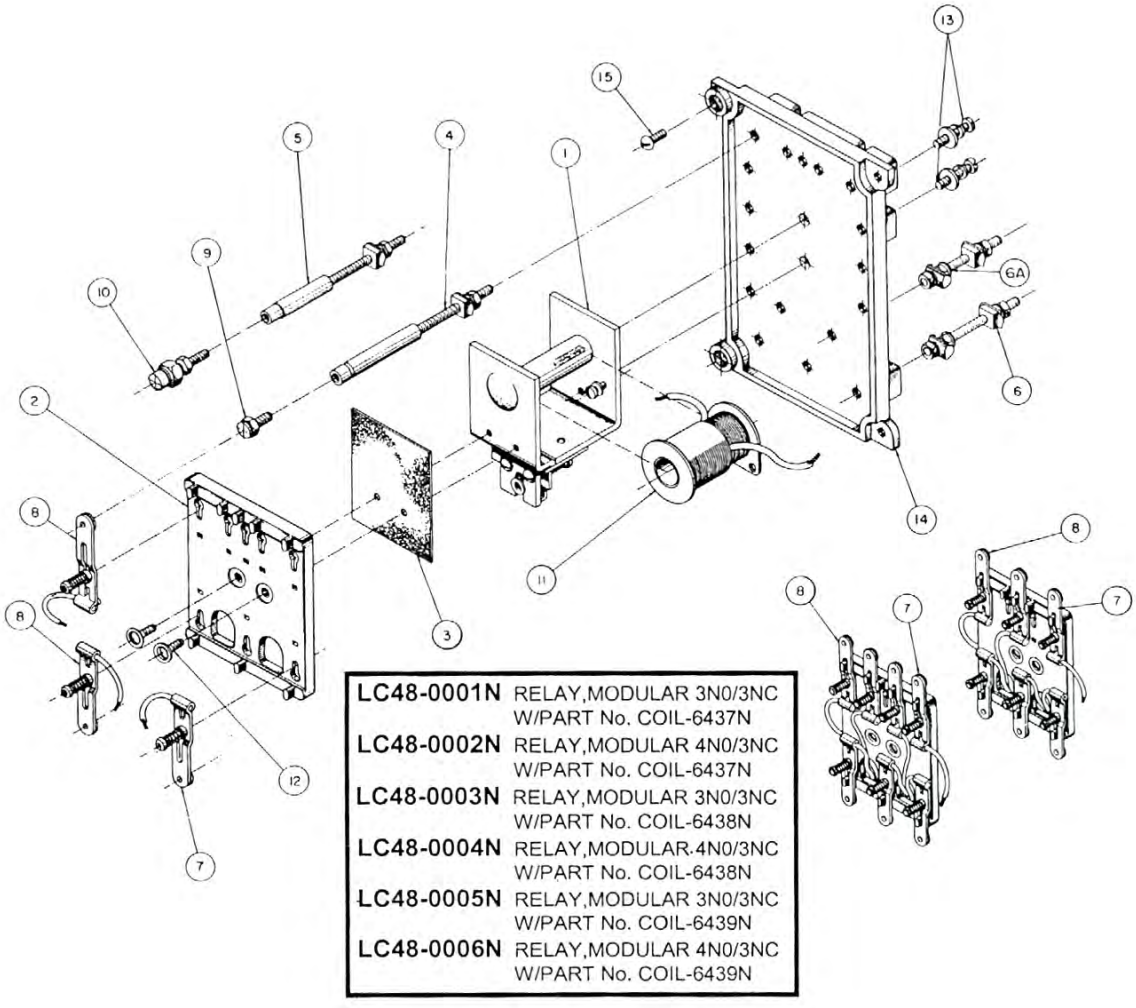
Part No.	Item No	Description
CONT-0001N	15	Contact, 3/8" Dia. Carbon, With Stud
LC-0003N	16	Holder Arm, 3/8" & 1/2" Contact
LC-0104N	17A & B	Spring Assembly, 3/8" Or 1/2" Main Contact
COIL-6438N	18	Coil, 23000T #39W 4900 OHM 230 VDC
LC-0009N*	19	Wire, Main Contact #14, 3/8"1/2" Contact
LC-0011N	20	Wire, Main Contact #14, 3/8", 1/2" Contact
LC-0111N*	21	Screw, Round Head #10-32 X 7/8", #10 Flat Washer
LC-0112N	22	Screw, Fillister Head #10-32 X 1", Flat & Lock Washer For 3/4" Panel
LC-0113N	22A	Screw, Fillister Head #10-32 X 1 1/4", Flat & Lock Washer For 1" Panel
LC-0114N	24	Nut, 10-32 X 3/8"W-#10 Flat & Lock Washer, Hex Head Plated With #10 Flat & Split Lock Washer Plated
CONT-0005N	25	Contact, 1/2" Dia. Copper
COIL-0004N	26	Coil, 9000T #36W 1280 OHM 220 VAC
LC-0081N	27	Post, 1 3/16" Lg Contact

Relay Logic Controllers - Old Style

Replacement Parts

Relay Logic Controller Relays

"LC-48" Relay Assembly



As inventory runs out, certain supported parts may not be available in the future.

Part No.	Item No	Description
LC-0034N	1	Frame/Armature, Floor Relay 1 Or 2 N.C. Contacts
LC-0037N	1	Frame/Armature, Floor Relay 3 N.C. Contacts
LC-0078N	2	Plate, 4 N.O. Max & 3 N.C. Max Contact, 3 N.C. Maximum. Use For Relay LC28, LC48, LC48P
LC-0044N	3	Insulator, 2 Holes
LC-0094N	4	Post, 2.055" Lg Contact
LC-0083N	5	Post, 1 7/16" Lg Contact
LC-0108N	6	Stud Assembly, 10-32 X 1 3/4" Lg Terminal
LC-0125N	6A	Stud Assembly, 10-32 X 1 1/2" Lg Terminal
LC-0029L/R	7 & 8	Contact, Movable Finger, Short Lead 5/8" Rivet

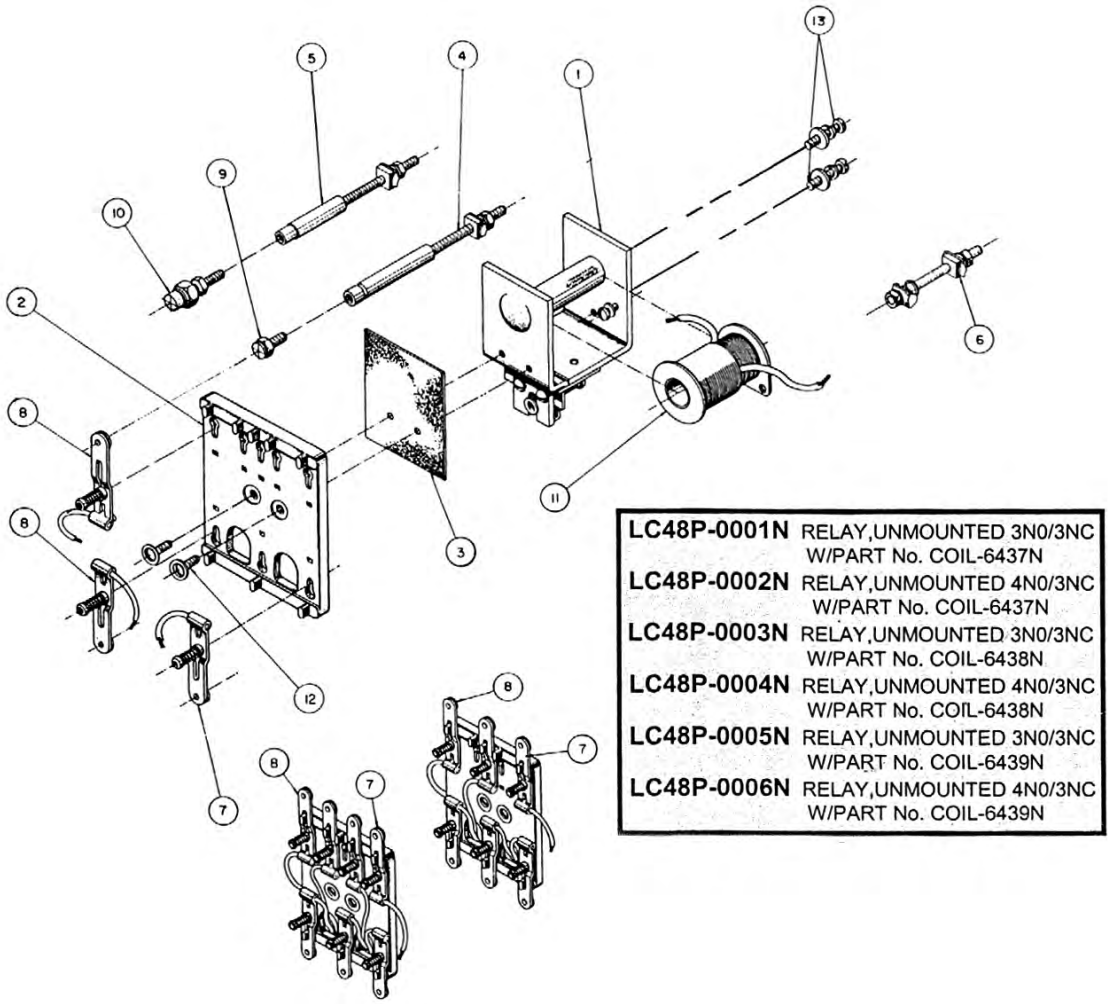
Part No.	Item No	Description
CONT-0002N	9	Contact, 3/8" Dia. Silver Plated 3/8" Lg
CONT-0001N	10	Contact, 3/8" Dia. Carbon, With Stud
COIL-6437N	11	Coil, 27500T #40W 7600 OHM 265 VDC
COIL-6438N	11	Coil, 23000T #39W 4900 OHM 230 VDC
COIL-6439N	11	Coil, 9000T #35W 750 OHM 85 VDC
HWSC-0016N	12	Screw, 8-32 X 1/4 Binding Head Slot Brass
LC-0124N	13	Screw, Fillister Head #8-32 X 3/8", With Flat & Split Washer Plated
LC-0004N	14	Base, Use For Relay LC48 And LC54
HWSC-0018N	15	Screw, 8-32 X 5/8", Slotted Round Head Plated

Relay Logic Controllers - Old Style

Replacement Parts

Relay Logic Controller Relays

"LC-48P" Relay Assembly



As inventory runs out, certain supported parts may not be available in the future.

Part No.	Item No	Description
LC-0034N	1	Frame/Armature, Floor Relay 1 Or 2 N.C. Contacts
LC-0037N	1	Frame/Armature, Floor Relay 3 N.C. Contacts
LC-0078N	2	Plate, 4 N.O. Max & 3 N.C. Max Contact, 3 N.C. Maximum. Use For Relay LC28, LC48, LC48P
LC-0044N	3	Insulator, 2 Holes
LC-0086N	4	Post, 1.987" Lg Contact
LC-0084N	5	Post, 1 7/16" Lg Contact
LC-0107N	6	Stud Assembly, 10-32 X 2 1/8" Lg Terminal
LC-0029L/R	7 & 8	Contact, Movable Finger, Short Lead 5/8" Rivet

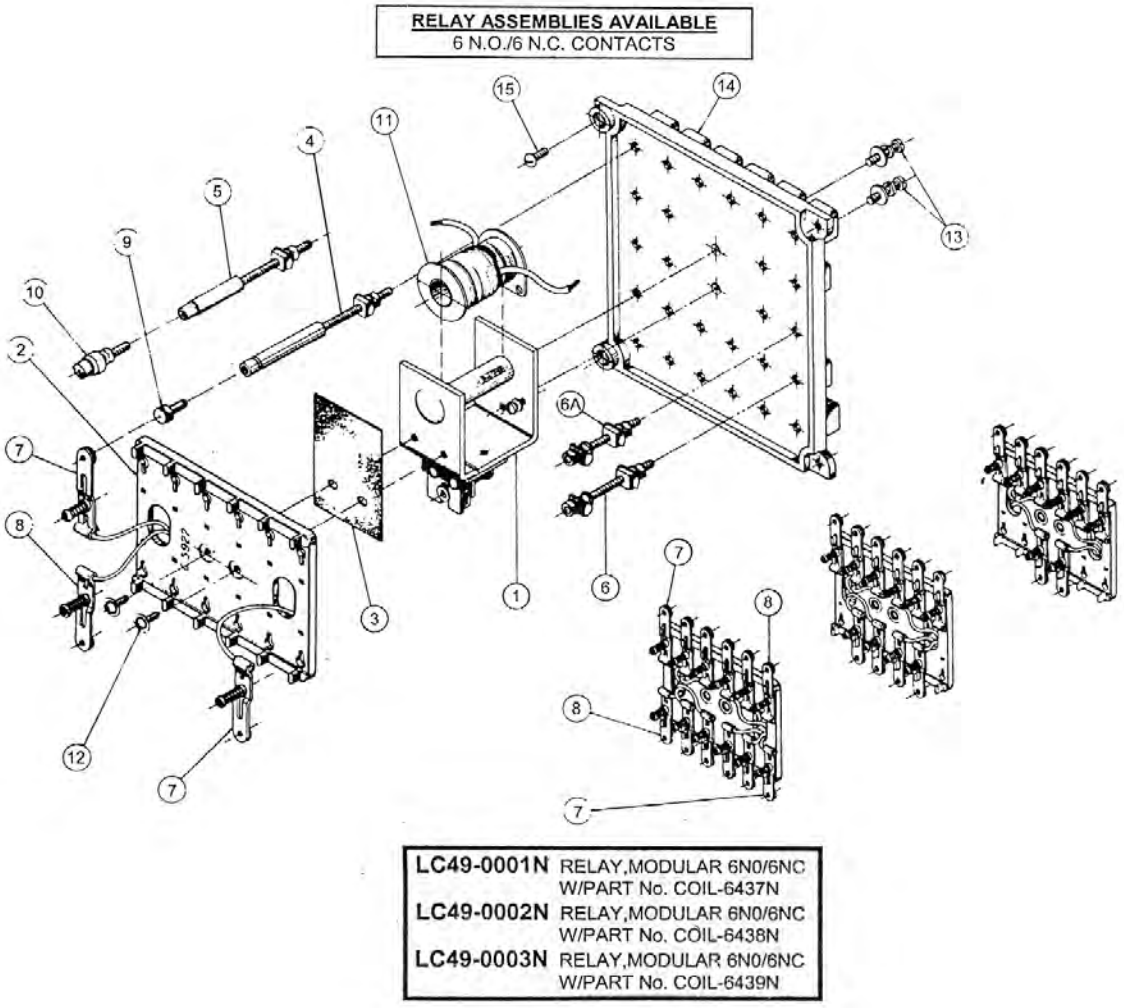
Part No.	Item No	Description
CONT-0002N	9	Contact, 3/8" Dia. Silver Plated 3/8" Lg
CONT-0001N	10	Contact, 3/8" Dia. Carbon, With Stud
COIL-6437N	11	Coil, 27500T #40W 7600 OHM 265 VDC
COIL-6438N	11	Coil, 23000T #39W 4900 OHM 230 VDC
COIL-6439N	11	Coil, 9000T #35W 750 OHM 85 VDC
HWSC-0016N	12	Screw, 8-32 X 1/4 Binding Head Slot Brass
LC-0112N	13	Screw, Fillister Head #10-32 X 1", Flat & Lock Washer For 3/4" Panel
LC-0113N	13	Screw, Fillister Head #10-32 X 1 1/4", Flat & Lock Washer For 1" Panel

Relay Logic Controllers - Old Style

Replacement Parts

Relay Logic Controller Relays

"LC-49" Relay Assembly



As inventory runs out, certain supported parts may not be available in the future.

Part No.	Item No	Description
LC-0035N	1	Frame/Armature, Intermediate Relay 2 N.C. Contacts
LC-0038N	1	Frame/Armature, Intermediate Relay 4 N.C. Contacts
LC-0039N	1	Frame/Armature, Intermediate Relay 6 N.C. Contacts
LC-0079N	2	Plate, 6 N.O. Max & 6 N.C. Max Contact. Use For Relay LC49, LC49P
LC-0044N	3	Insulator, 2 Holes
LC-0094N	4	Post, 2.055" Lg Contact
LC-0083N	5	Post, 1 7/16" Lg Contact
LC-0108N	6	Stud Assembly, 10-32 X 1 3/4" Lg Terminal
LC-0125N	6A	Stud Assembly, 10-32 X 1 1/2" Lg Terminal
LC-0029L/R	7 & 8	Contact, Movable Finger, Short Lead 5/8" Rivet

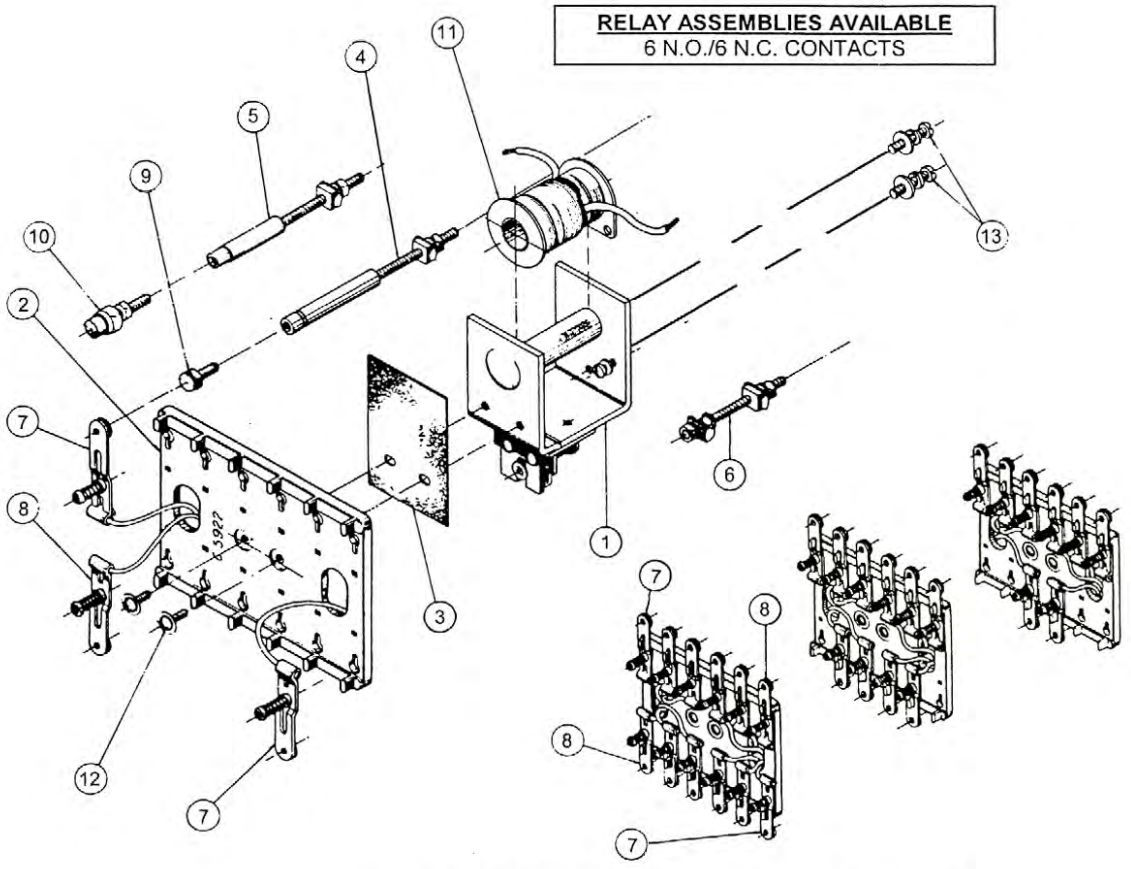
Part No.	Item No	Description
CONT-0002N	9	Contact, 3/8" Dia. Silver Plated 3/8" Lg
CONT-0001N	10	Contact, 3/8" Dia. Carbon, With Stud
COIL-6437N	11	Coil, 27500T #40W 7600 OHM 265 VDC
COIL-6438N	11	Coil, 23000T #39W 4900 OHM 230 VDC
COIL-6439N	11	Coil, 9000T #35W 750 OHM 85 VDC
HWSC-0016N	12	Screw, 8-32 X 1/4 Binding Head Slot Brass
LC-0124N	13	Screw, Fillister Head #8-32 X 3/8", With Flat & Split Washer Plated
LC-0005N	14	Base, Use For Relay LC49
HWSC-0018N	15	Screw, 8-32 X 5/8", Slotted Round Head Plated

Relay Logic Controllers - Old Style

Replacement Parts

Relay Logic Controller Relays

"LC-49P" Relay Assembly



LC49P-0001N	RELAY,UNMOUNTED 6N0/6NC W/PART No. COIL-6437N
LC49P-0002N	RELAY,UNMOUNTED 6N0/6NC W/PART No. COIL-6438N
LC49P-0003N	RELAY,UNMOUNTED 6N0/6NC W/PART No. COIL-6439N

As inventory runs out, certain supported parts may not be available in the future.

Part No.	Item No	Description
LC-0035N	1	Frame/Armature, Intermediate Relay 2 N.C. Contacts
LC-0038N	1	Frame/Armature, Intermediate Relay 4 N.C. Contacts
LC-0039N	1	Frame/Armature, Intermediate Relay 6 N.C. Contacts
LC-0079N	2	Plate, 6 N.O. Max & 6 N.C. Max Contact. Use For Relay LC49, LC49P
LC-0044N	3	Insulator, 2 Holes
LC-0086N	4	Post, 1.987" Lg Contact
LC-0084N	5	Post, 1 7/16" Lg Contact
LC-0107N	6	Stud Assembly, 10-32 X 2 1/8" Lg Terminal

Part No.	Item No	Description
LC-0029L/R	7 & 8	Contact, Movable Finger, Short Lead 5/8" Rivet
CONT-0002N	9	Contact, 3/8" Dia. Silver Plated 3/8" Lg
CONT-0001N	10	Contact, 3/8" Dia. Carbon, With Stud
COIL-6437N	11	Coil, 27500T #40W 7600 OHM 265 VDC
COIL-6438N	11	Coil, 23000T #39W 4900 OHM 230 VDC
COIL-6439N	11	Coil, 9000T #35W 750 OHM 85 VDC
HWSC-0016N	12	Screw, 8-32 X 1/4 Binding Head Slot Brass
LC-0112N	13	Screw, Fillister Head #10-32 X 1", Flat & Lock Washer For 3/4" Panel
LC-0113N	13	Screw, Fillister Head #10-32 X 1 1/4", Flat & Lock Washer For 1" Panel

Relay Logic Controllers - Old Style

Relay Logic Controller Parts

Coils



Part No.	Description	
COIL-0004N	Coil, 9000T #36W 1280 OHM 220 VAC	
COIL-5630N	Coil, 22000T #35W 3600 OHM 265 VDC	
COIL-5631N	Coil, 17945T #38W 4500 OHM 230 VDC	
COIL-5632N	Coil, 19125T #40W 8000 OHM 265 VDC	
COIL-5633N	Coil, 17945T #38W 4500 OHM 230 VDC	
COIL-5634N	Coil, 10005T #35W 1320 OHM 110 VDC	
COIL-5693N	Coil, 4500T #34W 390 OHM 208-220 VAC	
COIL-5744N	Coil, 13200T #39W 4000 OHM 220 VAC	
COIL-5749N	Coil, 3000T #30W 220 VAC	
COIL-5750N	Coil, 3300T #31W 220 VAC	
COIL-5760N	Coil, 17675T #34W 2330 OHM 230 VDC	
COIL-5761N	Coil, 450T #18W 1.4 OHM	
COIL-5785N	Coil, 18000T #36W 3100 OHM 230 VDC	
COIL-5786N	Coil, 17000T #32W 1500 OHM 230 VDC	
COIL-5959N	Coil, 11400T #33W 800 OHM	
COIL-6179N	Coil, 13600T #33W 1500 OHM 185 VDC	
COIL-6180N	Coil, 925T #21W 6 OHM	

Part No.	Description	
COIL-6202N	Coil, 11000T #32W 900 OHM 130 VDC	
COIL-6212N	Coil, 10250T #33W 920 OHM 130 VDC	
COIL-6310N	Coil, 16800T #39W 4850 OHM 230 VDC	
COIL-6311N	Coil, 7150T #32W 90 VDC	
COIL-6312N	Coil, 9600T #37W 1650 OHM 130 VDC	
COIL-6333N	Coil, 7000T #30W 390 OHM 85 VDC	
COIL-6369N	Coil, 4150T #32W 2350 OHM 48 VDC	
COIL-6373N	Coil, 6800T #31W 308 OHM 45 VDC	
COIL-6393N	Coil, 5664T #30W 200 OHM 36 VDC	
COIL-6437N	Coil, 27500T #40W 7600 OHM 265 VDC	
COIL-6438N	Coil, 23000T #39W 4900 OHM 230 VDC	
COIL-6439N	Coil, 9000T #35W 750 OHM 85 VDC	
COIL-6779N	Coil, 24100T #35W 3660 OHM 265 VDC	
COIL-6780N	Coil, 925T #21W 5.2 OHM	
COIL-6781N	Coil, 450T #18W 1.1 OHM	
COIL-6782N	Coil, 12500T #31W 785 OHM 130 VDC	
COIL-9432N	Coil, 13000T #36 W 220 VDC	

Reverse Phase Relay



Part No.	Description	
LC27-0001N	Relay, "RPR-1" Reverse Phase	
LC27-0002N	Resistor Kit, 440-550V For "RPR-1" Reverse Phase Relay (2) 10K OHM 25W	

Ward Lenard Replacement Relay



Part No.	Description	
LC56-0001N	Relay Kit, Ward Lenard Replacement (Replaces The "CC" Or "HC" Ward Lenard Relay)	

Contact Plates & Base

LC-0004N



Use For Relay LC48 And LC54

LC-0005N



Use For Relay LC49

LC-0078N



Use For Relay LC28, LC48, LC48P

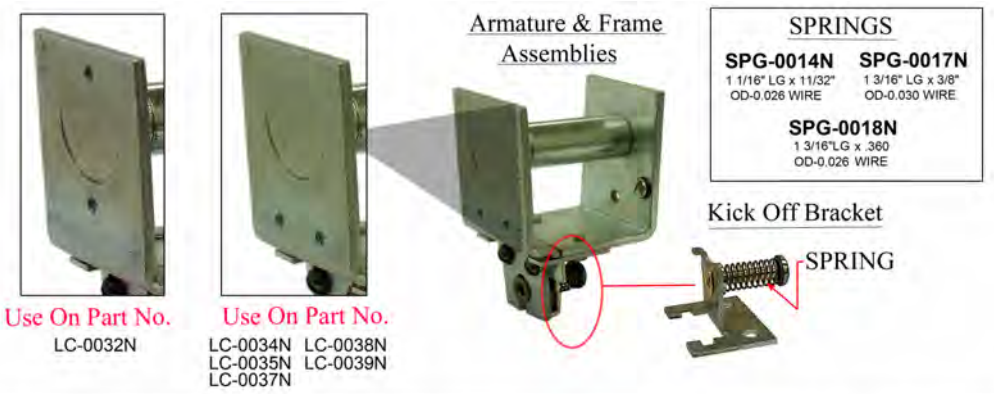
LC-0079N



Use For Relay LC49, LC49P

Relay Logic Controllers - Old Style

Replacement Parts



Armature & Frame Part No.	No. Of N.C. Contacts	Use For Relay	Kick Off Brackets Part No.	Spring Reference Part No.
LC-0034N	1	LC48, LC48P, LC49, LC49P	LC-0136N	SPG-0014N
LC-0037N	2			
LC-0035N	3	LC48, LC48P, LC49, LC49P	LC-0135N	SPG-0018N
LC-0038N	4			
LC-0039N	5	LC49, LC49P	LC-0137N	SPG-0017N
LC-0032N	6	LC28, LC53, LC49, LC49P, LC54		

Armature & Frame Assemblies

Part No.	Description	
LC-0032N	Frame/Armature, For Small Contactor (Use For LC28, LC49, LC53, LC54)	
LC-0034N	Frame/Armature, Floor Relay 1 Or 2 N.C. Contacts	
LC-0035N	Frame/Armature, Intermediate Relay 2 N.C. Contacts	
LC-0037N	Frame/Armature, Floor Relay 3 N.C. Contacts	
LC-0038N	Frame/Armature, Intermediate Relay 4 N.C. Contacts	
LC-0039N	Frame/Armature, Intermediate Relay 6 N.C. Contacts	

Kick Off Bracket & Spring Assemblies

Part No.	Description	
LC-0135N	Kick Off Bracket And Spring Assembly For Floor Relay With 3N.C. Contacts	
LC-0136N	Kick Off Bracket And Spring Assembly For Floor Relay With 1 Or 2 N.C. Contact S	
LC-0137N	Kick Off Bracket And Spring Assembly And V.V. Field Contactor (LC28) For Intermediate Relay With 2 4 Or 6N.C. Contacts	

Relay Contacts

Finger Contacts

LC-0021L/R



Contact, Movable Finger, Short Lead 3/4" Rivet

LC-0024L/R



Contact, Movable Finger, Long Lead 5/8" Rivet

LC-0029L/R



Contact, Movable Finger, Short Lead 5/8" Rivet

Relay Logic Controllers - Old Style

Replacement Parts

Relay Contacts



Silver Plated Contacts

Part No.	Description	
CONT-0002N	Contact, 3/8” Dia. Silver Plated 3/8” Lg	
CONT-0003N	Contact, 3/8” Dia. Silver Plated 3/4” Lg	

Copper Contacts

Part No.	Description	
CONT-0005N	Contact, 1/2” Dia. Copper, With Stud	
LC-0018N	Contact, 1” Dia. Main Copper, With Stud	
LC-0015N	Contact, 1 1/2” Dia. Main Copper, With Stud	
LC-0016N	Contact, 1 3/4” Dia. Main Copper, With Stud	

Carbon Contacts

Part No.	Description	
CONT-0001N	Contact, 3/8” Dia. Carbon, With Stud	
CONT-0004N	Contact, 1/2” Dia. Carbon, With Stud	
CONT-0006N	Contact, 1” Dia. Carbon 3/4” Thick	
CONT-0008N	Contact, 1 1/2” Dia. Carbon 7/8” Thick	
CONT-0009N	Contact, 1 3/4” Dia. Carbon 1” Thick	

Contact Holders

Part No.	Description	
LC-0042N	Holder, 1” Dia. Carbon Contact	
LC-0040N	Holder, 1 1/2” Dia. Carbon Contact	
LC-0041N	Holder, 1 3/4” Dia. Carbon Contact	

Contact Holder Parts

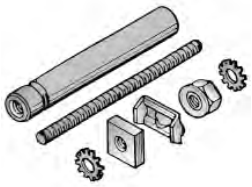
Part No.	Description	
LC-0001N	Holder Arm, 1” Contact	
LC-0003N	Holder Arm, 3/8” & 1/2” Contact	
LC-0002N	Holder Arm, 7/8”, 1 1/2”, Or 1 3/4” Contact	
LC-0103N	Spring Assembly, 1” Main Contact	
LC-0104N	Spring Assembly, 3/8” Or 1/2” Main Contact	
LC-0105N	Spring Assembly, 7/8”, 1 1/2” Or 1 3/4” Main Contact	

Relay Logic Controllers - Old Style

Replacement Parts

Relay Contacts

Contact Post Assemblies



Part No.	Length
LC-0081N	1 3/16"
LC-0082N	1 5/8"
LC-0083N	1 7/16"
LC-0084N	1 7/16"

Part No.	Length
LC-0085N	1 7/8"
LC-0086N	1.987"
LC-0087N	2 3/4"
LC-0088N	2 7/16"

Part No.	Length
LC-0089N	3 1/2"
LC-0090N	3 1/4"
LC-0091N	3 3/4"

Part No.	Length
LC-0092N	3"
LC-0093N	4 1/4"
LC-0094N	2.055"

Contact Wires



Part No.	Contact Size	Description
LC-0010N	1"	Wire, Main Contact #10, 1" Contact (15" Lg.)
LC-0011N	3/8", 1/2"	Wire, Main Contact #14, 3/8", 1/2" Contact (Discontinued)
LC-0012N	7/8", 1 3/4"	Wire, Main Contact #4, 7/8", 1 3/4" 50% Carbon Contact (15" Lg.)
LC-0014N	1", 1 1/2"	Wire, Main Contact #8, 1 1/2", 1" 50% Carbon Contact (15" Lg.)

Controller Timer







Current Part No.	(Tube Type) Old Part No. 10041-x	(Solid State) Old Part No. 10121-x	(Solid State) Old Part No. 10196-x	Description	D.C. Voltage Range
TMR-0001N	1, 2 & 8	1 & 8	1	Single Pot	170-300
	3, 4 & 9	3 & 9	1	Double Pot	
TMR-0002N	13	13, 15, & 16	2	Single Pot	100-200
	-	13A, 15A, & 16A	2	Double Pot	
Timer Range: 0.01-640 Seconds					

Part No.	Description	List Price
TMR-0007N	Timer, Oasumad 10-260 A.C./D.C. 0.1 Seconds-10 Hours (Replaced by TMR-0009N)	Discontinued
TMR-0009N	Timer, 24-240 A.C./D.C.-0.7 Amp, 0.1 Seconds - 100 Hours (Replaces TMR-0007N)	

Relay Logic Controllers - Old Style

Relay Logic Controller Parts

Loher Tach Generator - Armature & Brushes

ENCO-0055N



Encoder Kit, Replacement For 1" & 1.5" Dia. Shaft Loher Tach Armature On Existing Dynalift Jobs
Note: This Encoder Can Replace Either DYLF-0132N or MTR-0019N

DYLF-0132N



Armature, Loher Tach Generator For 1.5" Dia Shaft, Includes Armature Housing & 4 Brushes (Item Not-Returnable)

MTR-0019N



Armature, Loher Tach Generator For 1" Dia Shaft, With 4 Brushes (Item Not-Returnable)

MTR-0016N



Brush, Loher Tach Generator, 1/8" x 3/16" x 1/2" For 1" Dia Shaft (Set of 4 Pieces)

Hardware

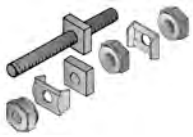
Stud Assemblies

LC-0107N



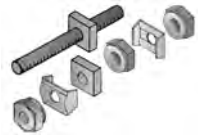
Stud Assembly, 10-32 X 2 1/8" Lg Terminal

LC-0108N



Stud Assembly, 10-32 X 1 3/4" Lg Terminal

LC-0125N



Stud Assembly, 10-32 X 1 1/2" Lg Terminal

Screws, Nuts, & Insulator

HWSC-0016N



Screw, 8-32 X 1/4 Binding Head Slot Brass

HWSC-0018N



Screw, 8-32 X 5/8", Slotted Round Head Plated

LC-0124N



Screw, Fillister Head #8-32 X 3/8", With Flat & Split Washer Plated

LC-0112N



Screw, Fillister Head #10-32 X 1", Flat & Lock Washer For 3/4" Panel

LC-0113N



Screw, Fillister Head #10-32 X 1 1/4", Flat & Lock Washer For 1" Panel

LC-0114N



Nut, 10-32 X 3/8" With #10 Flat & Split Lock Washer Plated

LC-0044N



Insulator, Contact Plate, For Relays LC-48 & LC-49

GAL Canada
Door Equipment

GAL CANADA EQUIPMENT



DOOR OPERATORS
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CAR & HATCH DOOR HANGERS
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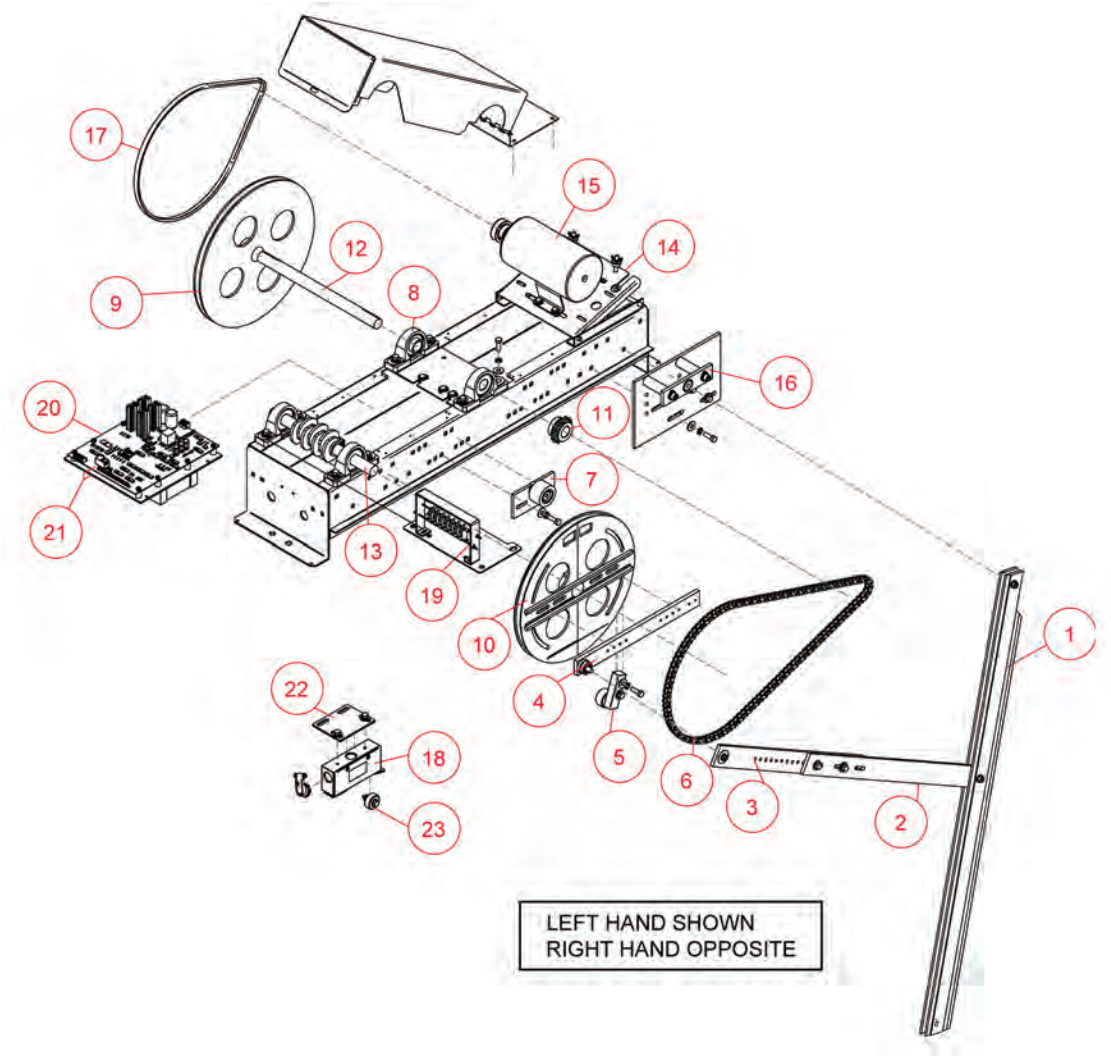
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Operator Isometric Drawing

895 Operator

Single Speed / Two Speed



Part No.	Item No	Description
895-3003	1	Crank Arm Assembly
895-3017	2	Slotted “C” Linkage
895-3025	3	Tapped “C” Linkage
895-3020	4	“A” Bar
1000-3016	5	Roller Stop
895-3013	6	#35 Chain Kit
895-3014	7	Chain Tensioner
895-3010	8	Pillow Block Bearings
895-3015	9	Pulley Wheel
895-3016	10	Chain Wheel
895-3012	11	Chain #35 Sprocket
895-3009	12	Pulley Drive Shaft

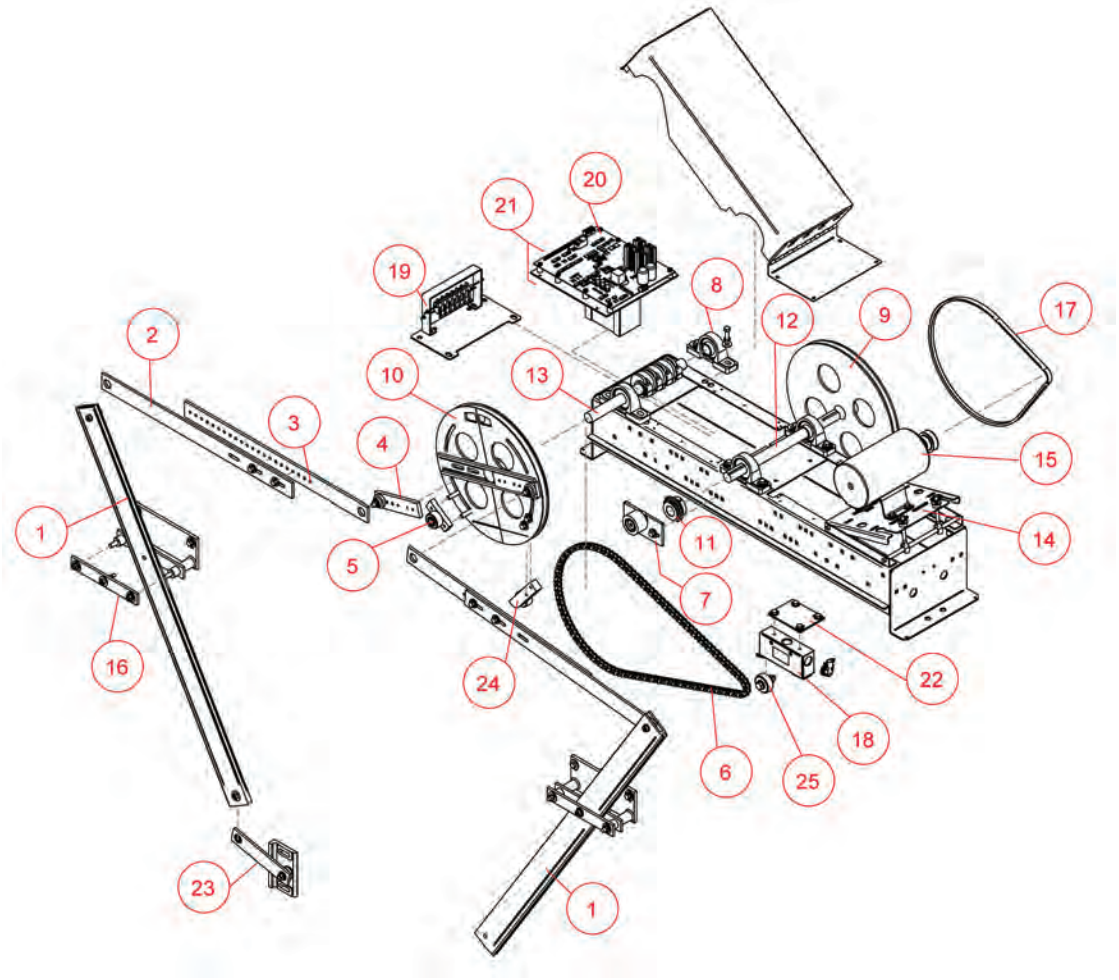
Part No.	Item No	Description
895-3022	13	Cam Shaft
1000-3005	14	Motor Pivot Plate
895-3006	15	1/6 HP Motor
895-3046	16	Pivot Bar
1000-3008	17	“V” Belt
SW1-0001N	18	Gate Switch Type “G”
895-3024	19	Limit Switch Assembly
895-3050	20	Drive Board
895-3051	21	Drive Unit Complete
890-3025	22	Gate Switch Mounting Plate
SW1-0007N	23	Roller & Bolt, Gate Switch

DOOR EQUIPMENT

Operator Isometric Drawing

895 Operator

Center Parting



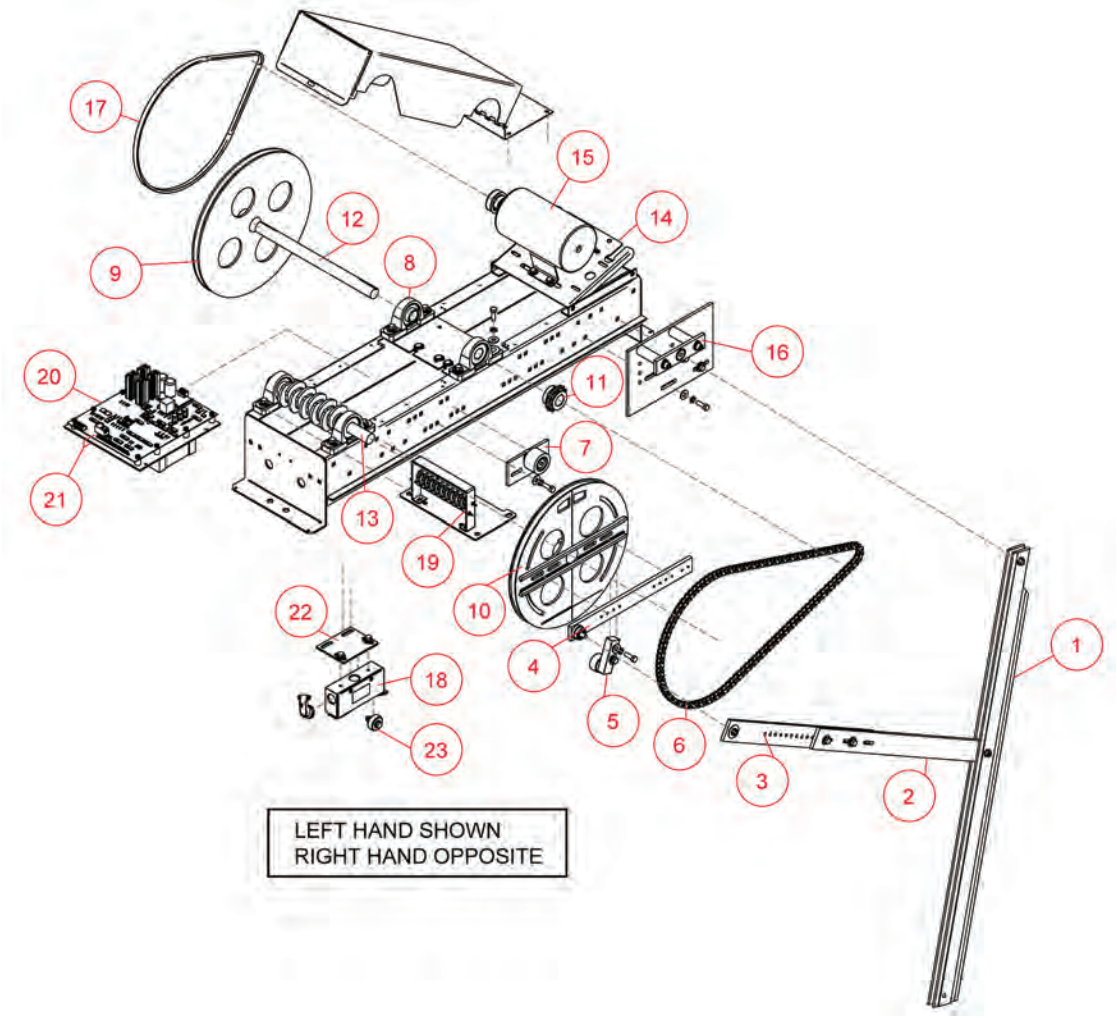
Part No.	Item No	Description
895-3003-1	1	Crank Arm Set
895-3017	2	Slotted “C” Linkage
895-3025	3	Tapped “C” Linkage
895-3027	4	C/P “A” Bar Assembly
1000-3016-2	5	Roller Stop Outside
895-3013	6	#35 Chain Kit
895-3014	7	Chain Tensioner
895-3010	8	Pillow Block Bearings
895-3015	9	Pulley Wheel
895-3017	10	Chain Wheel
895-3012	11	Chain #35 Sprocket
895-3009	12	Pulley Drive Shaft
895-3022	13	Cam Shaft

Part No.	Item No	Description
1000-3005	14	Motor Pivot Plate
895-3006	15	1/6 HP Motor
895-3029	16	Pivot Bracket Assembly
1000-3008	17	“V” Belt
SW1-0001N	18	Gate Switch Type “G”
895-3024	19	Limit Switch Assembly
895-3050	20	Drive Board
895-3051	21	Drive Unit Complete
890-3025	22	Gate Switch Mounting Plate
895-3028-6	23	Slave Bracket Asembly
1000-3016-1	24	Roller-Stop Inside
SW1-0007N	25	Roller & Bolt, Gate Switch

Operator Isometric Drawing

1000 Operator

Single Speed / Two Speed



Part No.	Item No	Description
1000-3003	1	Crank Arm Assembly
1000-3026	2	Slotted “C” Linkage
1000-3025	3	Tapped “C” Linkage
1000-3020	4	“A” Bar
1000-3016	5	Roller Stop
1000-3014	6	#40 Chain Kit
1000-3015	7	Chain Tensioner
1000-3011	8	Pillow Block Bearings
1000-3009	9	Pulley Wheel
1000-3017	10	Chain Wheel
1000-3013	11	Chain #40 Sprocket
1000-3010	12	Pulley Drive Shaft

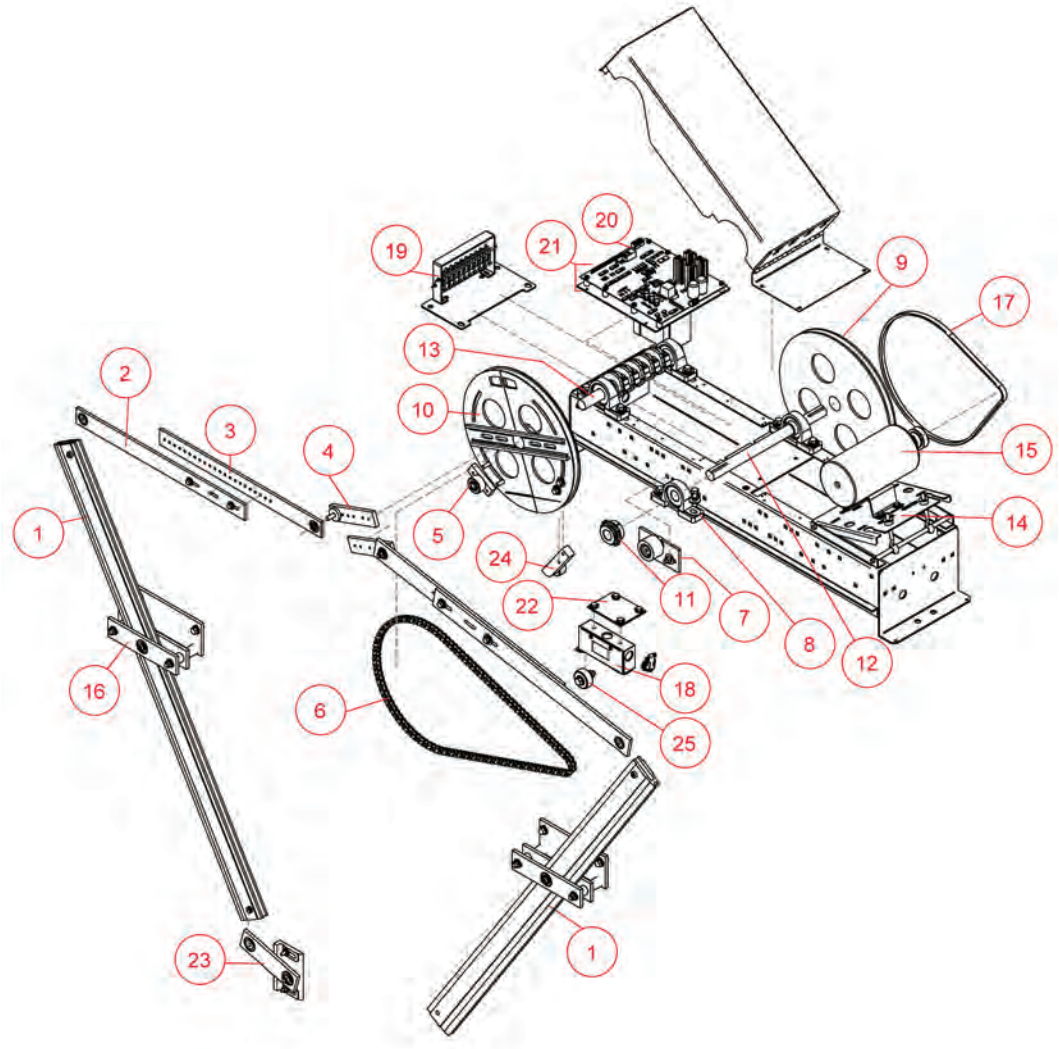
Part No.	Item No	Description
1000-3002	13	Cam Shaft
1000-3005	14	Motor Pivot Plate
1000-3006	15	1/3 HP Motor
1000-3046	16	Pivot Bar
1000-3008	17	“V” Belt
SW1-0001N	18	Gate Switch Type “G”
1000-3024	19	Limit Switch Assembly
1000-3050	20	Drive Board
1000-3051	21	Drive Unit Complete
890-3025	22	Gate Switch Mounting Plate
SW1-0007N	23	Roller & Bolt, Gate Switch

DOOR EQUIPMENT

Operator Isometric Drawing

1000 Operator

Center Parting



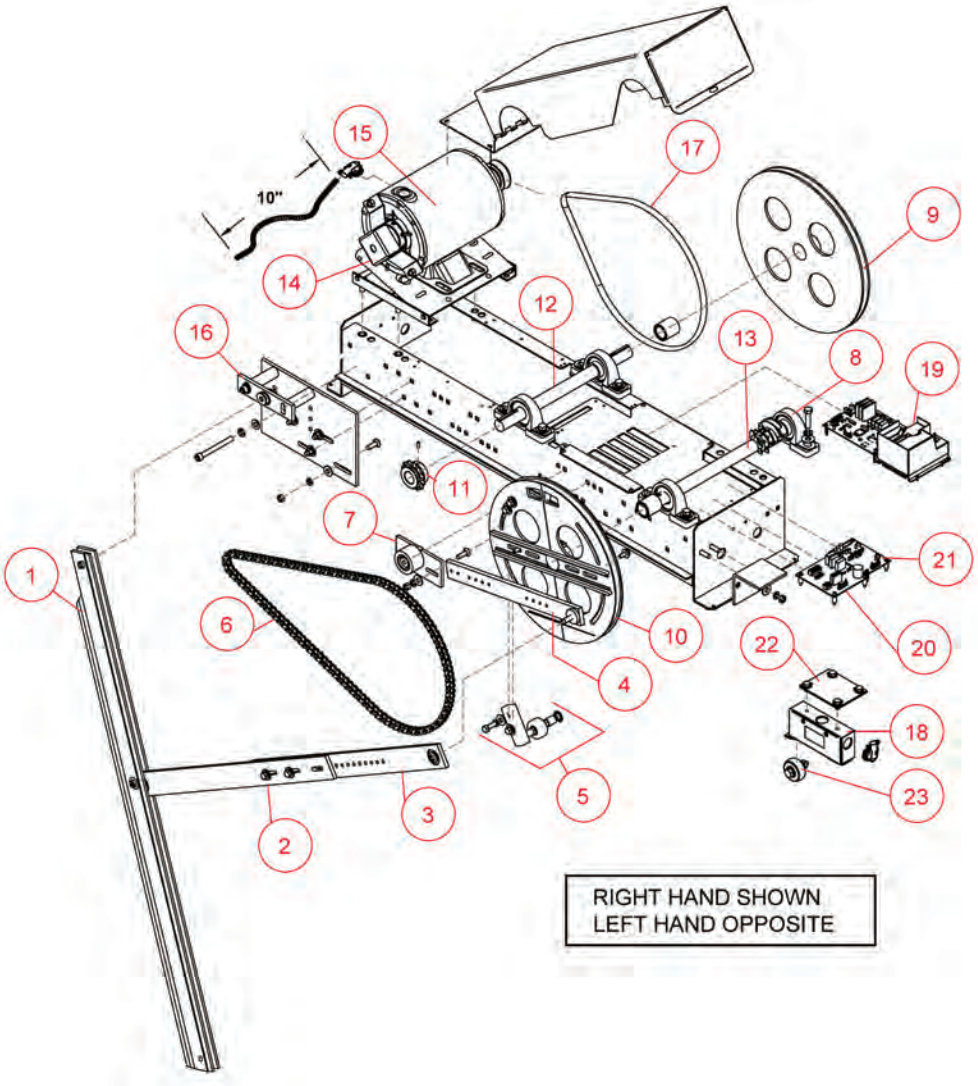
Part No.	Item No	Description
1000-3003-1	1	Crank Arm Set
1000-3026	2	Slotted “C” Linkage
1000-3025	3	Tapped “C” Linkage
1000-3027	4	C/P “A” Bar Assembly
1000-3016-2	5	Roller Stop Outside
1000-3014	6	#40 Chain Kit
1000-3015	7	Chain Tensioner
1000-3011	8	Pillow Block Bearings
1000-3009	9	Pulley Wheel
1000-3017	10	Chain Wheel
1000-3013	11	Chain #40 Sprocket
1000-3010	12	Pulley Drive Shaft
1000-3002	13	Cam Shaft

Part No.	Item No	Description
1000-3005	14	Motor Pivot Plate
1000-3006	15	1/3 HP Motor
1000-3029	16	Pivot Bracket Assembly
1000-3008	17	“V” Belt
SW1-0001N	18	Gate Switch Type “G”
1000-3024	19	Limit Switch Assembly
1000-3050	20	Drive Board
1000-3051	21	Drive Unit Complete
890-3025	22	Gate Switch Mounting Plate
1000-3028-6	23	Slave Bracket Assembly
1000-3016-1	24	Roller Stop Inside
SW1-0007N	25	Roller & Bolt, Gate Switch

Operator Isometric Drawing

MOVFE-2500 Harmonic Operator

Single Speed / Two Speed



Part No.	Item No	Description
1000-3003	1	Crank Arm Assembly
2500-3026	2	Slotted “C” Linkage
2500-3025	3	Tapped “C” Linkage
1000-3020	4	“A” Bar
1000-3016	5	Roller Stop
1000-3014	6	#40 Chain Kit
1000-3015	7	Chain Tensioner
1000-3011	8	Pillow Block Bearings
1000-3009	9	Pulley Wheel
1000-3017	10	Chain Wheel
1000-3013	11	Chain #40 Sprocket
1000-3010	12	Pulley Drive Shaft

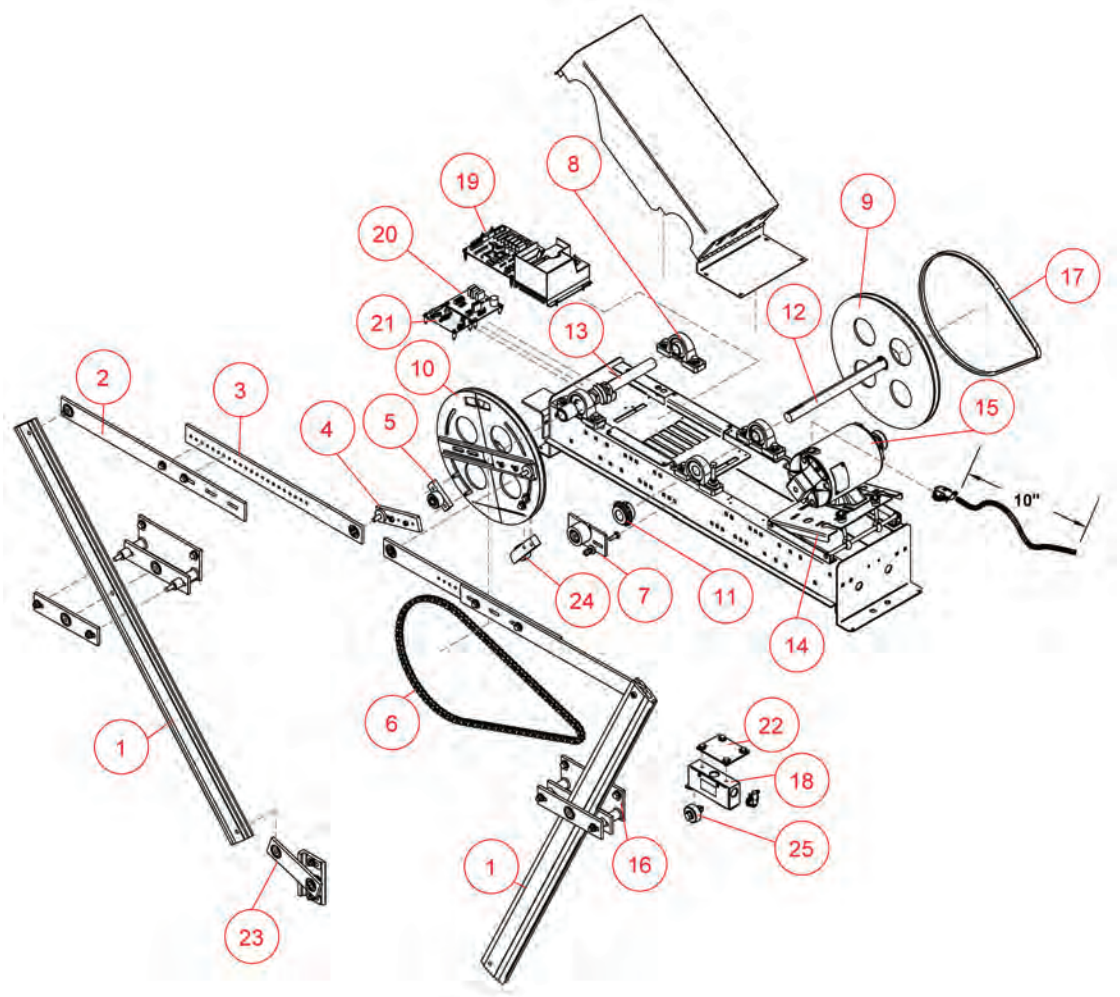
Part No.	Item No	Description
1000-3002	13	Cam Shaft
1000-3005	14	Motor Pivot Plate
2500-3057	15	1/2 HP Motor
2500-3046	16	Pivot Bar
1000-3008	17	“V” Belt
SW1-0001N	18	Gate Switch Type “G”
2500-3050	19	VFE Drive Unit (Includes Parameter Part # 2500-3051)
2500-3055	20	I/O Board
2500-3056	21	Optd Cam Board
890-3025	22	Gate Switch Mounting Plate
SW1-0007N	23	Roller & Bolt, Gate Switch

DOOR EQUIPMENT

Operator Isometric Drawing

MOVFE-2500 Harmonic Operator

Center Parting



Part No.	Item No	Description
1000-3003-1	1	Crank Arm Set
2500-3026	2	Slotted “C” Linkage
2500-3025	3	Tapped “C” Linkage
1000-3027	4	C/P “A” Bar Assembly
1000-3016-2	5	Roller Stop Outside
1000-3014	6	#40 Chain Kit
1000-3015	7	Chain Tensioner
1000-3011	8	Pillow Block Bearings
1000-3009	9	Pulley Wheel
1000-3017	10	Chain Wheel
1000-3013	11	Chain #40 Sprocket
1000-3010	12	Pulley Drive Shaft
1000-3002	13	Cam Shaft

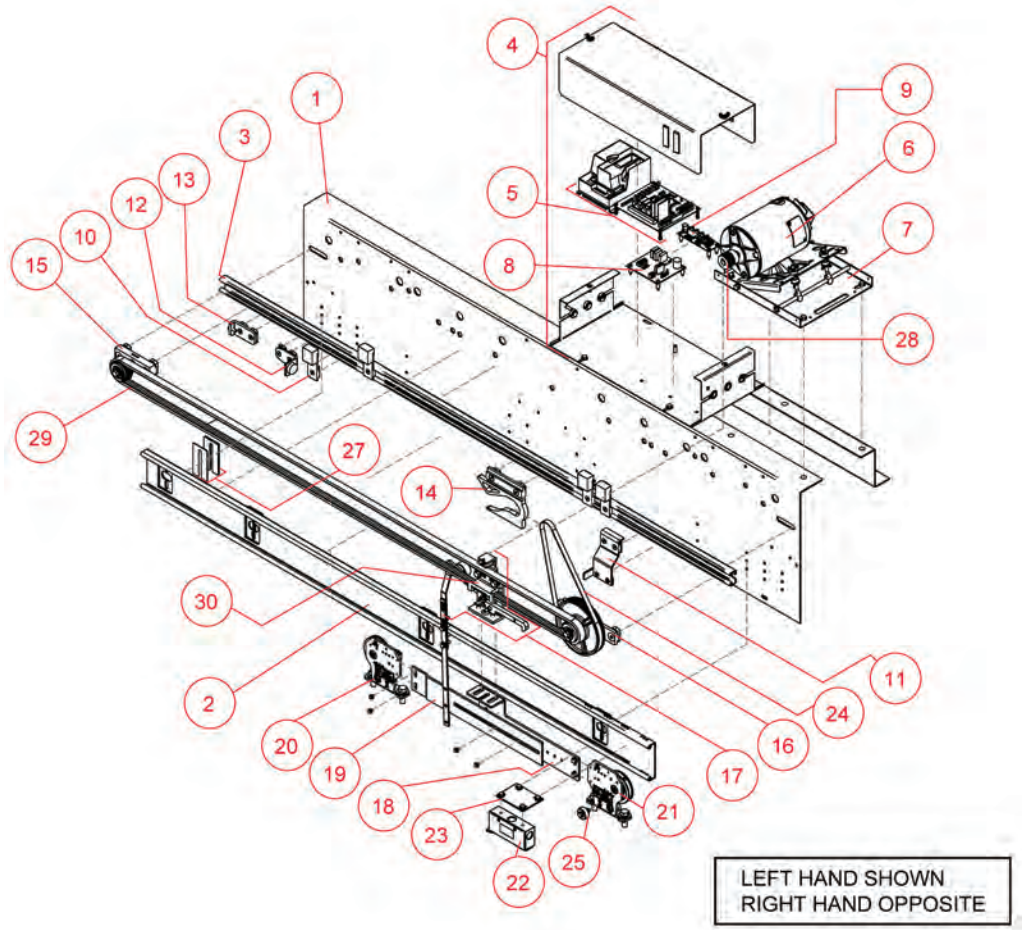
Part No.	Item No	Description
1000-3005	14	Motor Pivot Plate
2500-3057	15	1/2 HP Motor
2500-3029	16	Pivot Bracket Assembly
1000-3008	17	“V” Belt
SW1-0001N	18	Gate Switch Type “G”
2500-3050	19	VFE Drive Unit (Includes Parameter Part # 2500-3051)
2500-3055	20	I/O Board
2500-3056	21	Optd Cam Board
890-3025	22	Gate Switch Mounting Plate
2500-3028-6	23	Slave Bracket Assembly
1000-3016-1	24	Roller Stop Inside
SW1-0007N	25	Roller & Bolt, Gate Switch

DOOR EQUIPMENT

Operator Isometric Drawing

MOVFE-2500 Linear Operator

Single Speed



Part No.	Item No	Description
Call GAL Canada	1	Combination Header Plate
Call GAL Canada	2	Hanger Track
2000-3066	3	Fixing Strut
2500-3054	4	Complete Drive Unit
2500-3050	5	VFE Drive Unit (Includes Parameter Part # 2500-3051)
2500-3058	6	1/2 HP Motor
2500-3063	7	Base Pivot Assembly
2500-3055	8	I/O Board
2500-1002	9	Transfer Board
2500-5019	10	Sensor Assembly
2000-3092	11	Keeper Bracket
2000-3089	12	Open Door Stop
2000-3080	13	Tension Block
2000-3084	14	Clutch Cam

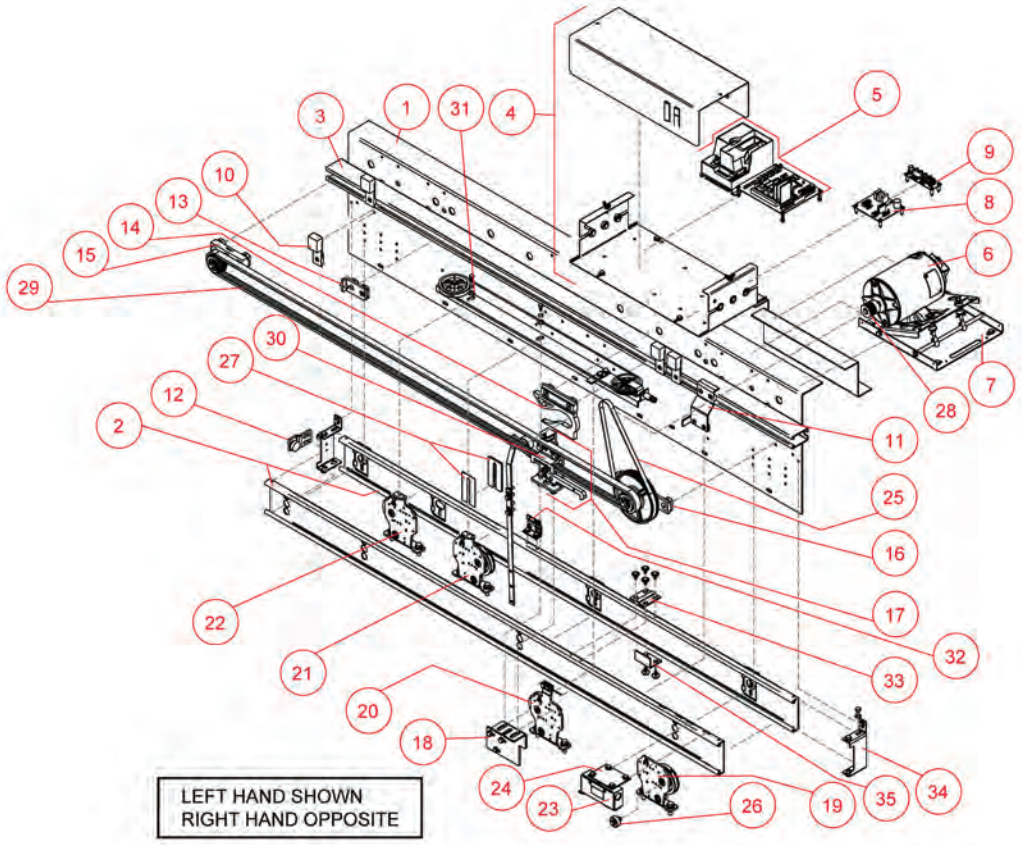
Part No.	Item No	Description
2500-3075	15	Take Up Pulley
2500-3074	16	Drive Pulley
2000-3068	17	Lower Belt Keeper Bracket
2000-1031	18	Universal Plate
2000-1037- 39	19	Extension Arm
HH1-0022R	20	Sheave, Right Hand
HH1-0022L	21	Sheave, Left Hand
SW1-0001N	22	Gate Switch Type “G”
890-3025	23	Gate Switch Mounting Plate
2500-5010	24	Motor “V”-Belt
SW1-0007N	25	Roller & Bolt, Gate Switch
909-6025	26	Track Shims
2500-5008	27	Multi-”V” Motor Pulley
2500-5009	28	Drive Belt
2500-1004	29	Eagle Belt Bracket

DOOR EQUIPMENT

Operator Isometric Drawing

MOVFE-2500 Linear Operator

Two Speed



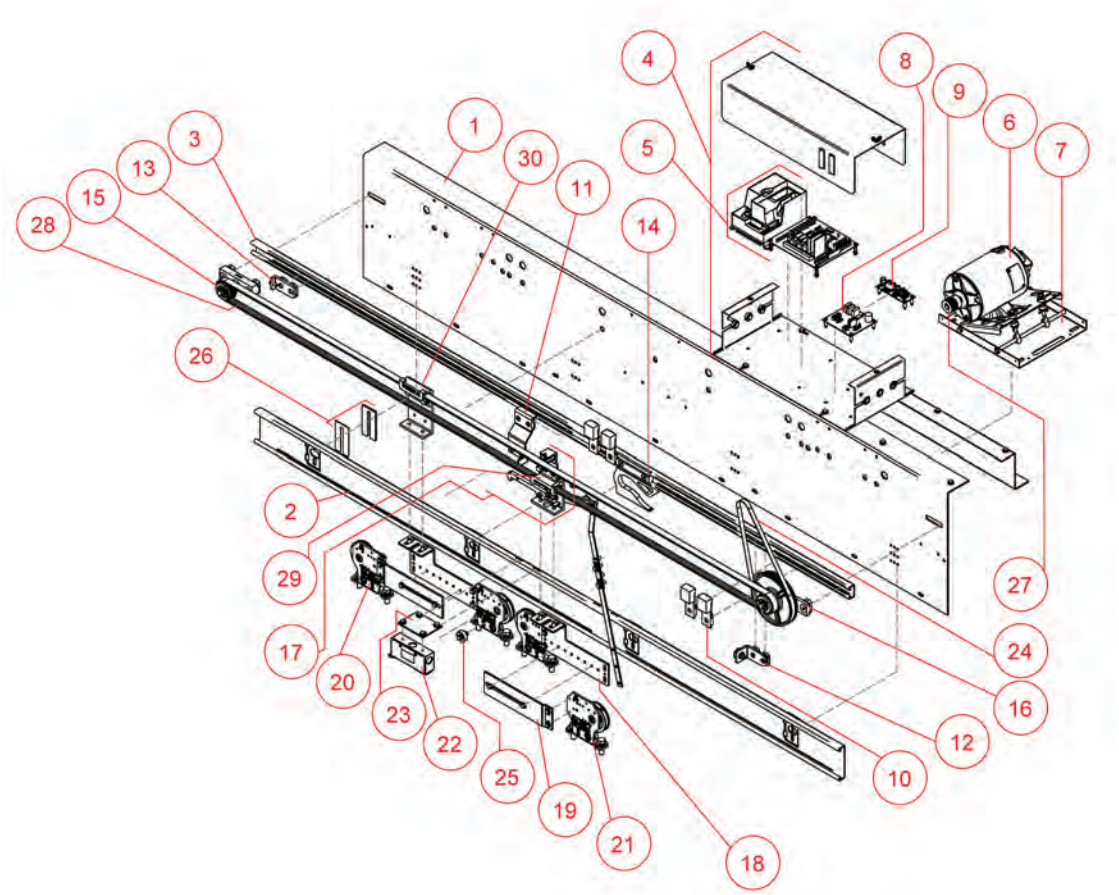
Part No.	Item No	Description
Call GAL Canada	1	Combination Header Plate
Call GAL Canada	2	Hanger Track
2000-3067	3	Fixing Strut
2500-3054	4	Complete Drive Unit
2500-3050	5	VFE Drive Unit (Includes Parameter Part # 2500-3051)
2500-3058	6	1/2 HP Motor
2500-3063	7	Base Pivot Assembly
2500-3055	8	I/O Board
2500-1002	9	Transfer Board
2500-5019	10	Sensor Assembly
2000-3092	11	Keeper Bracket
2000-3089-2	12	Open Door Stop
2000-3080	13	Tension Block
2000-3084	14	Clutch Cam
2500-3075	15	Take Up Pulley
2500-3074	16	Drive Pulley
2000-3068	17	Lower Belt Keeper Bracket
2000-1040-2S-L	18	Universal Plate

Part No.	Item No	Description
HH1-0022L	19	Sheave, Left Hand
CDH2-0065R	20	Sheave, 2Sp Cable Gear, Fast Door Sheave
CDH2-0067L	21	Sheave, 2Sp Cable Gear Bar, Slow Door Sheave
CDH2-0067R	22	Sheave, 2Sp Cable Gear Bar, Slow Door Sheave
SW1-0001N	23	Gate Switch Type “G”
890-3025	24	Gate Switch Mounting Plate
2500-5010	25	Motor “V” Belt
SW1-0007N	26	Roller & Bolt, Gate Switch
909-6025	27	Track Shims
2500-5008	28	Multi- “V” Motor Pulley
2500-5009	29	Drive Belt
2500-1004	30	Eagle Belt Bracket
Call GAL Canada	31	Cable Gearing Bar
CDH2-0082N	32	Clamp, 2Sp Cable Anchor
HH2-0053N	33	Bracket, Track Top 1 1/2”
HH2-0052L	34	Bracket, Track End 1 1/2”, 2/Sp For 4 1/4” Track
HH2-0054N	35	Angle, Track Bottom 1 1/2”

Operator Isometric Drawing

MOVFE-2500 Linear Operator

Center Parting



Part No.	Item No	Description
Call GAL Canada	1	Combination Header Plate
Call GAL Canada	2	Hanger Track
2000-3066	3	Fixing Strut
2500-3054	4	Complete Drive Unit
2500-3050	5	VFE Drive Unit (Includes Parameter Part # 2500-3051)
2500-3058	6	1/2 HP Motor
2500-3063	7	Base Pivot Assembly
2500-3055	8	I/O Board
2500-1002	9	Transfer Board
2500-5019	10	Sensor Assembly
2000-3092	11	Keeper Bracket
2000-3089	12	Open Door Stop
2000-3080	13	Tension Block
2000-3084	14	Clutch Cam
2500-3075	15	Take-Up Pulley

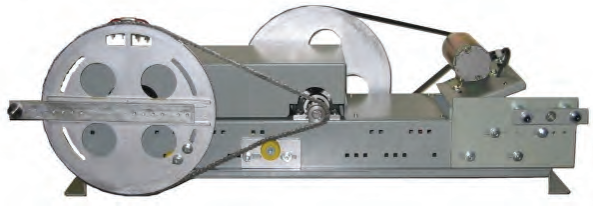
Part No.	Item No	Description
2500-3074	16	Drive Pulley
2000-3068	17	Lower Belt Keeper Bracket
2000-1040	18	Universal Plate
2000-1041 & 2000-1042	19	Extension Arm
HH1-0022R	20	Sheave, Right Hand
HH1-0022L	21	Sheave, Left Hand
SW1-0001N	22	Gate Switch Type “G”
890-3025	23	Gate Switch Mounting Plate
2500-5010	24	Motor “V” Belt
SW1-0007N	25	Roller & Bolt, Gate Switch
909-6025	26	Track Shims
2500-5008	27	Mult “V” Motor Pulley
2500-5009	28	Drive Belt
2500-1004	29	Eagle Belt Bracket
2000-3069	30	Upper Belt Bracket

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Harmonic (Medium Duty)

895 (Single Speed)



16" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
895-4125-1L/R	8'	28"-29"	
895-4150-1L/R	8'	30"-34"	
895-4175-1L/R	8'	35"-39"	
895-4200-1L/R	8'	40"-44"	
895-4225-1L/R	8'	45"-51"	
895-4250-1L/R	8'	52"-54"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
895-4125-2L/R	8'	28"-29"	
895-4150-2L/R	8'	30"-34"	
895-4175-2L/R	8'	35"-39"	
895-4200-2L/R	8'	40"-44"	
895-4225-2L/R	8'	45"-51"	
895-4250-2L/R	8'	52"-54"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
895-4125-3L/R	8' 6"	28"-29"	
895-4150-3L/R	8' 6"	30"-34"	
895-4175-3L/R	8' 6"	35"-39"	
895-4200-3L/R	8' 6"	40"-44"	
895-4225-3L/R	8' 6"	45"-51"	
895-4250-3L/R	8' 6"	52"-54"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
895-4125-4L/R	8' 6"	28"-29"	
895-4150-4L/R	8' 6"	30"-34"	
895-4175-4L/R	8' 6"	35"-39"	
895-4200-4L/R	8' 6"	40"-44"	
895-4225-4L/R	8' 6"	45"-51"	
895-4250-4L/R	8' 6"	52"-54"	

28" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
895-4125-5L/R	9'	28"-29"	
895-4150-5L/R	9'	30"-34"	
895-4175-5L/R	9'	35"-39"	
895-4200-5L/R	9'	40"-44"	
895-4225-5L/R	9'	45"-51"	
895-4250-5L/R	9'	52"-54"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
895-4125-6L/R	9'	28"-29"	
895-4150-6L/R	9'	30"-34"	
895-4175-6L/R	9'	35"-39"	
895-4200-6L/R	9'	40"-44"	
895-4225-6L/R	9'	45"-51"	
895-4250-6L/R	9'	52"-54"	

34" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
895-4125-7L/R	9' 6"	28"-29"	
895-4150-7L/R	9' 6"	30"-34"	
895-4175-7L/R	9' 6"	35"-39"	
895-4200-7L/R	9' 6"	40"-44"	
895-4225-7L/R	9' 6"	45"-51"	
895-4250-7L/R	9' 6"	52"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
895-4125-8L/R	9' 6"	28"-29"	
895-4150-8L/R	9' 6"	30"-34"	
895-4175-8L/R	9' 6"	35"-39"	
895-4200-8L/R	9' 6"	40"-44"	
895-4225-8L/R	9' 6"	45"-51"	
895-4250-8L/R	9' 6"	52"-54"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
895-4125-9L/R	10'	28"-29"	
895-4150-9L/R	10'	30"-34"	
895-4175-9L/R	10'	35"-39"	
895-4200-9L/R	10'	40"-44"	
895-4225-9L/R	10'	45"-51"	
895-4250-9L/R	10'	52"-54"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
895-4125-10L/R	10'	28"-29"	
895-4150-10L/R	10'	30"-34"	
895-4175-10L/R	10'	35"-39"	
895-4200-10L/R	10'	40"-44"	
895-4225-10L/R	10'	45"-51"	
895-4250-10L/R	10'	52"-54"	

Door Operator Assemblies

Door Operator Harmonic (Medium Duty)

895 (Single Speed)

Header Height - CUSTOM

Part No.	Cab Height	S/S	
895-4000*	Custom	28”-200”	

895 (Two Speed) - Open Loop

16” Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-1L/R	8’	28”-29”	
895-4300-1L/R	8’	30”-34”	
895-4325-1L/R	8’	35”-39”	
895-4350-1L/R	8’	40”-44”	
895-4375-1L/R	8’	45”-51”	
895-4400-1L/R	8’	52”-54”	

16” Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-2L/R	8’	28”-29”	
895-4300-2L/R	8’	30”-34”	
895-4325-2L/R	8’	35”-39”	
895-4350-2L/R	8’	40”-44”	
895-4375-2L/R	8’	45”-51”	
895-4400-2L/R	8’	52”-54”	

22” Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-3L/R	8’ 6”	28”-29”	
895-4300-3L/R	8’ 6”	30”-34”	
895-4325-3L/R	8’ 6”	35”-39”	
895-4350-3L/R	8’ 6”	40”-44”	
895-4375-3L/R	8’ 6”	45”-51”	
895-4400-3L/R	8’ 6”	52”-54”	

22” Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-4L/R	8’ 6”	28”-29”	
895-4300-4L/R	8’ 6”	30”-34”	
895-4325-4L/R	8’ 6”	35”-39”	
895-4350-4L/R	8’ 6”	40”-44”	
895-4375-4L/R	8’ 6”	45”-51”	
895-4400-4L/R	8’ 6”	52”-54”	

28” Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-5L/R	9’	28”-29”	
895-4300-5L/R	9’	30”-34”	
895-4325-5L/R	9’	35”-39”	
895-4350-5L/R	9’	40”-44”	
895-4375-5L/R	9’	45”-51”	
895-4400-5L/R	9’	52”-54”	

28” Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-6L/R	9’	28”-29”	
895-4300-6L/R	9’	30”-34”	
895-4325-6L/R	9’	35”-39”	
895-4350-6L/R	9’	40”-44”	
895-4375-6L/R	9’	45”-51”	
895-4400-6L/R	9’	52”-54”	

34” Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-7L/R	9’ 6”	28”-29”	
895-4300-7L/R	9’ 6”	30”-34”	
895-4325-7L/R	9’ 6”	35”-39”	
895-4350-7L/R	9’ 6”	40”-44”	
895-4375-7L/R	9’ 6”	45”-51”	
895-4400-7L/R	9’ 6”	52”-54”	

34” Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-8L/R	9’ 6”	28”-29”	
895-4300-8L/R	9’ 6”	30”-34”	
895-4325-8L/R	9’ 6”	35”-39”	
895-4350-8L/R	9’ 6”	40”-44”	
895-4375-8L/R	9’ 6”	45”-51”	
895-4400-8L/R	9’ 6”	52”-54”	

40” Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-9L/R	10’	28”-29”	
895-4300-9L/R	10’	30”-34”	
895-4325-9L/R	10’	35”-39”	
895-4350-9L/R	10’	40”-44”	
895-4375-9L/R	10’	45”-51”	
895-4400-9L/R	10’	52”-54”	

40” Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
895-4275-10L/R	10’	28”-29”	
895-4300-10L/R	10’	30”-34”	
895-4325-10L/R	10’	35”-39”	
895-4350-10L/R	10’	40”-44”	
895-4375-10L/R	10’	45”-51”	
895-4400-10L/R	10’	52”-54”	

DOOR EQUIPMENT

Door Operator Assemblies

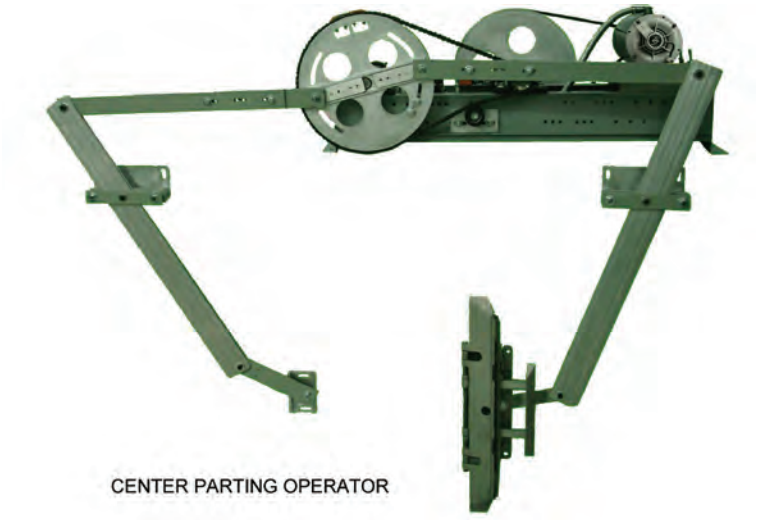
Door Operator Harmonic (Medium Duty)

895 (Two Speed) - Open Loop

Header Height - CUSTOM

Part No.	Cab Height	2/SP	
895-4002*	Custom	28”-200”	

895 (Center Parting)



CENTER PARTING OPERATOR

16” Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
895-3000-1L/R	8’	29”-33”	
895-3025-1L/R	8’	34”-39”	
895-3050-1L/R	8’	40”-44”	
895-3075-1L/R	8’	45”-49”	
895-3100-1L/R	8’	50”-54”	

16” Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
895-3000-2L/R	8’	29”-33”	
895-3025-2L/R	8’	34”-39”	
895-3050-2L/R	8’	40”-44”	
895-3075-2L/R	8’	45”-49”	
895-3100-2L/R	8’	50”-54”	

22” Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
895-3000-3L/R	8’ 6”	29”-33”	
895-3025-3L/R	8’ 6”	34”-39”	
895-3050-3L/R	8’ 6”	40”-44”	
895-3075-3L/R	8’ 6”	45”-49”	
895-3100-3L/R	8’ 6”	50”-54”	

22” Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
895-3000-4L/R	8’ 6”	29”-33”	
895-3025-4L/R	8’ 6”	34”-39”	
895-3050-4L/R	8’ 6”	40”-44”	
895-3075-4L/R	8’ 6”	45”-49”	
895-3100-4L/R	8’ 6”	50”-54”	

28” Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
895-3000-5L/R	9’	29”-33”	
895-3025-5L/R	9’	34”-39”	
895-3050-5L/R	9’	40”-44”	
895-3075-5L/R	9’	45”-49”	
895-3100-5L/R	9’	50”-54”	

28” Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
895-3000-6L/R	9’	29”-33”	
895-3025-6L/R	9’	34”-39”	
895-3050-6L/R	9’	40”-44”	
895-3075-6L/R	9’	45”-49”	
895-3100-6L/R	9’	50”-54”	

Door Operator Assemblies

Door Operator Harmonic (Medium Duty)

895 (Center Parting)

34" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
895-3000-7L/R	9' 6"	29"-33"	
895-3025-7L/R	9' 6"	34"-39"	
895-3050-7L/R	9' 6"	40"-44"	
895-3075-7L/R	9' 6"	45"-49"	
895-3100-7L/R	9' 6"	50"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
895-3000-8L/R	9' 6"	29"-33"	
895-3025-8L/R	9' 6"	34"-39"	
895-3050-8L/R	9' 6"	40"-44"	
895-3075-8L/R	9' 6"	45"-49"	
895-3100-8L/R	9' 6"	50"-54"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
895-3000-9L/R	10'	29"-33"	
895-3025-9L/R	10'	34"-39"	
895-3050-9L/R	10'	40"-44"	
895-3075-9L/R	10'	45"-49"	
895-3100-9L/R	10'	50"-54"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
895-3000-10L/R	10'	29"-33"	
895-3025-10L/R	10'	34"-39"	
895-3050-10L/R	10'	40"-44"	
895-3075-10L/R	10'	45"-49"	
895-3100-10L/R	10'	50"-54"	

Header Height - CUSTOM

Part No.	Cab Height	C/P	
895-3000*	Custom	29"-200"	

Door Operator Harmonic (Heavy Duty)

1000 (Single Speed)



16" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-1L/R	8'	28"-29"	
1000-4150-1L/R	8'	30"-34"	
1000-4175-1L/R	8'	35"-39"	
1000-4200-1L/R	8'	40"-44"	
1000-4225-1L/R	8'	45"-51"	
1000-4250-1L/R	8'	52"-54"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-2L/R	8'	28"-29"	
1000-4150-2L/R	8'	30"-34"	
1000-4175-2L/R	8'	35"-39"	
1000-4200-2L/R	8'	40"-44"	
1000-4225-2L/R	8'	45"-51"	
1000-4250-2L/R	8'	52"-54"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-3L/R	8' 6"	28"-29"	
1000-4150-3L/R	8' 6"	30"-34"	
1000-4175-3L/R	8' 6"	35"-39"	
1000-4200-3L/R	8' 6"	40"-44"	
1000-4225-3L/R	8' 6"	45"-51"	
1000-4250-3L/R	8' 6"	52"-54"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-4L/R	8' 6"	28"-29"	
1000-4150-4L/R	8' 6"	30"-34"	
1000-4175-4L/R	8' 6"	35"-39"	
1000-4200-4L/R	8' 6"	40"-44"	
1000-4225-4L/R	8' 6"	45"-51"	
1000-4250-4L/R	8' 6"	52"-54"	

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Harmonic (Heavy Duty)

1000 (Single Speed)

28" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-5L/R	9'	28"-29"	
1000-4150-5L/R	9'	30"-34"	
1000-4175-5L/R	9'	35"-39"	
1000-4200-5L/R	9'	40"-44"	
1000-4225-5L/R	9'	45"-51"	
1000-4250-5L/R	9'	52"-54"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-6L/R	9'	28"-29"	
1000-4150-6L/R	9'	30"-34"	
1000-4175-6L/R	9'	35"-39"	
1000-4200-6L/R	9'	40"-44"	
1000-4225-6L/R	9'	45"-51"	
1000-4250-6L/R	9'	52"-54"	

34" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-7L/R	9' 6"	28"-29"	
1000-4150-7L/R	9' 6"	30"-34"	
1000-4175-7L/R	9' 6"	35"-39"	
1000-4200-7L/R	9' 6"	40"-44"	
1000-4225-7L/R	9' 6"	45"-51"	
1000-4250-7L/R	9' 6"	52"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-8L/R	9' 6"	28"-29"	
1000-4150-8L/R	9' 6"	30"-34"	
1000-4175-8L/R	9' 6"	35"-39"	
1000-4200-8L/R	9' 6"	40"-44"	
1000-4225-8L/R	9' 6"	45"-51"	
1000-4250-8L/R	9' 6"	52"-54"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-9L/R	10'	28"-29"	
1000-4150-9L/R	10'	30"-34"	
1000-4175-9L/R	10'	35"-39"	
1000-4200-9L/R	10'	40"-44"	
1000-4225-9L/R	10'	45"-51"	
1000-4250-9L/R	10'	52"-54"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
1000-4125-10L/R	10'	28"-29"	
1000-4150-10L/R	10'	30"-34"	
1000-4175-10L/R	10'	35"-39"	
1000-4200-10L/R	10'	40"-44"	
1000-4225-10L/R	10'	45"-51"	
1000-4250-10L/R	10'	52"-54"	

Header Height - CUSTOM

Part No.	Cab Height	S/S	
1000-4000*	Custom	28"-200"	

1000 (Two Speed) - Open Loop

16" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-1L/R	8'	28"-29"	
1000-4300-1L/R	8'	30"-34"	
1000-4325-1L/R	8'	35"-39"	
1000-4350-1L/R	8'	40"-44"	
1000-4375-1L/R	8'	45"-51"	
1000-4400-1L/R	8'	52"-54"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-2L/R	8'	28"-29"	
1000-4300-2L/R	8'	30"-34"	
1000-4325-2L/R	8'	35"-39"	
1000-4350-2L/R	8'	40"-44"	
1000-4375-2L/R	8'	45"-51"	
1000-4400-2L/R	8'	52"-54"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-3L/R	8' 6"	28"-29"	
1000-4300-3L/R	8' 6"	30"-34"	
1000-4325-3L/R	8' 6"	35"-39"	
1000-4350-3L/R	8' 6"	40"-44"	
1000-4375-3L/R	8' 6"	45"-51"	
1000-4400-3L/R	8' 6"	52"-54"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-4L/R	8' 6"	28"-29"	
1000-4300-4L/R	8' 6"	30"-34"	
1000-4325-4L/R	8' 6"	35"-39"	
1000-4350-4L/R	8' 6"	40"-44"	
1000-4375-4L/R	8' 6"	45"-51"	
1000-4400-4L/R	8' 6"	52"-54"	

Door Operator Assemblies

Door Operator Harmonic (Heavy Duty)

1000 (Two Speed) - Open Loop

28" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-5L/R	9'	28"-29"	
1000-4300-5L/R	9'	30"-34"	
1000-4325-5L/R	9'	35"-39"	
1000-4350-5L/R	9'	40"-44"	
1000-4375-5L/R	9'	45"-51"	
1000-4400-5L/R	9'	52"-54"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-6L/R	9'	28"-29"	
1000-4300-6L/R	9'	30"-34"	
1000-4325-6L/R	9'	35"-39"	
1000-4350-6L/R	9'	40"-44"	
1000-4375-6L/R	9'	45"-51"	
1000-4400-6L/R	9'	52"-54"	

34" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-7L/R	9' 6"	28"-29"	
1000-4300-7L/R	9' 6"	30"-34"	
1000-4325-7L/R	9' 6"	35"-39"	
1000-4350-7L/R	9' 6"	40"-44"	
1000-4375-7L/R	9' 6"	45"-51"	
1000-4400-7L/R	9' 6"	52"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-8L/R	9' 6"	28"-29"	
1000-4300-8L/R	9' 6"	30"-34"	
1000-4325-8L/R	9' 6"	35"-39"	
1000-4350-8L/R	9' 6"	40"-44"	
1000-4375-8L/R	9' 6"	45"-51"	
1000-4400-8L/R	9' 6"	52"-54"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-9L/R	10'	28"-29"	
1000-4300-9L/R	10'	30"-34"	
1000-4325-9L/R	10'	35"-39"	
1000-4350-9L/R	10'	40"-44"	
1000-4375-9L/R	10'	45"-51"	
1000-4400-9L/R	10'	52"-54"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
1000-4275-10L/R	10'	28"-29"	
1000-4300-10L/R	10'	30"-34"	
1000-4325-10L/R	10'	35"-39"	
1000-4350-10L/R	10'	40"-44"	
1000-4375-10L/R	10'	45"-51"	
1000-4400-10L/R	10'	52"-54"	

Header Height - CUSTOM

Part No.	Cab Height	2/SP	
1000-4002*	Custom	28"-200"	

1000 (Center Parting)



16" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-1L/R	8'	29"-33"	
1000-3025-1L/R	8'	34"-39"	
1000-3050-1L/R	8'	40"-44"	
1000-3075-1L/R	8'	45"-49"	
1000-3100-1L/R	8'	50"-54"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-2L/R	8'	29"-33"	
1000-3025-2L/R	8'	34"-39"	
1000-3050-2L/R	8'	40"-44"	
1000-3075-2L/R	8'	45"-49"	
1000-3100-2L/R	8'	50"-54"	

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Harmonic (Heavy Duty)

1000 (Center Parting)

22" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-3L/R	8' 6"	29"-33"	
1000-3025-3L/R	8' 6"	34"-39"	
1000-3050-3L/R	8' 6"	40"-44"	
1000-3075-3L/R	8' 6"	45"-49"	
1000-3100-3L/R	8' 6"	50"-54"	

28" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-5L/R	9'	29"-33"	
1000-3025-5L/R	9'	34"-39"	
1000-3050-5L/R	9'	40"-44"	
1000-3075-5L/R	9'	45"-49"	
1000-3100-5L/R	9'	50"-54"	

34" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-7L/R	9' 6"	29"-33"	
1000-3025-7L/R	9' 6"	34"-39"	
1000-3050-7L/R	9' 6"	40"-44"	
1000-3075-7L/R	9' 6"	45"-49"	
1000-3100-7L/R	9' 6"	50"-54"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-9L/R	10'	29"-33"	
1000-3025-9L/R	10'	34"-39"	
1000-3050-9L/R	10'	40"-44"	
1000-3075-9L/R	10'	45"-49"	
1000-3100-9L/R	10'	50"-54"	

Header Height - CUSTOM

Part No.	Cab Height	C/P	
1000-3000*	Custom	29"-200"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-4L/R	8' 6"	29"-33"	
1000-3025-4L/R	8' 6"	34"-39"	
1000-3050-4L/R	8' 6"	40"-44"	
1000-3075-4L/R	8' 6"	45"-49"	
1000-3100-4L/R	8' 6"	50"-54"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-6L/R	9'	29"-33"	
1000-3025-6L/R	9'	34"-39"	
1000-3050-6L/R	9'	40"-44"	
1000-3075-6L/R	9'	45"-49"	
1000-3100-6L/R	9'	50"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-8L/R	9' 6"	29"-33"	
1000-3025-8L/R	9' 6"	34"-39"	
1000-3050-8L/R	9' 6"	40"-44"	
1000-3075-8L/R	9' 6"	45"-49"	
1000-3100-8L/R	9' 6"	50"-54"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
1000-3000-10L/R	10'	29"-33"	
1000-3025-10L/R	10'	34"-39"	
1000-3050-10L/R	10'	40"-44"	
1000-3075-10L/R	10'	45"-49"	
1000-3100-10L/R	10'	50"-54"	

Door Operator Assemblies

Door Operator Harmonic (Heavy Duty)

MOVFE-2500 (Single Speed)



16" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-1L/R	8'	28"-29"	
2500-4150-1L/R	8'	30"-34"	
2500-4175-1L/R	8'	35"-39"	
2500-4200-1L/R	8'	40"-44"	
2500-4225-1L/R	8'	45"-51"	
2500-4250-1L/R	8'	52"-54"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-2L/R	8'	28"-29"	
2500-4150-2L/R	8'	30"-34"	
2500-4175-2L/R	8'	35"-39"	
2500-4200-2L/R	8'	40"-44"	
2500-4225-2L/R	8'	45"-51"	
2500-4250-2L/R	8'	52"-54"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-3L/R	8' 6"	28"-29"	
2500-4150-3L/R	8' 6"	30"-34"	
2500-4175-3L/R	8' 6"	35"-39"	
2500-4200-3L/R	8' 6"	40"-44"	
2500-4225-3L/R	8' 6"	45"-51"	
2500-4250-3L/R	8' 6"	52"-54"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-4L/R	8' 6"	28"-29"	
2500-4150-4L/R	8' 6"	30"-34"	
2500-4175-4L/R	8' 6"	35"-39"	
2500-4200-4L/R	8' 6"	40"-44"	
2500-4225-4L/R	8' 6"	45"-51"	
2500-4250-4L/R	8' 6"	52"-54"	

28" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-5L/R	9'	28"-29"	
2500-4150-5L/R	9'	30"-34"	
2500-4175-5L/R	9'	35"-39"	
2500-4200-5L/R	9'	40"-44"	
2500-4225-5L/R	9'	45"-51"	
2500-4250-5L/R	9'	52"-54"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-6L/R	9'	28"-29"	
2500-4150-6L/R	9'	30"-34"	
2500-4175-6L/R	9'	35"-39"	
2500-4200-6L/R	9'	40"-44"	
2500-4225-6L/R	9'	45"-51"	
2500-4250-6L/R	9'	52"-54"	

34" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-7L/R	9' 6"	28"-29"	
2500-4150-7L/R	9' 6"	30"-34"	
2500-4175-7L/R	9' 6"	35"-39"	
2500-4200-7L/R	9' 6"	40"-44"	
2500-4225-7L/R	9' 6"	45"-51"	
2500-4250-7L/R	9' 6"	52"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-8L/R	9' 6"	28"-29"	
2500-4150-8L/R	9' 6"	30"-34"	
2500-4175-8L/R	9' 6"	35"-39"	
2500-4200-8L/R	9' 6"	40"-44"	
2500-4225-8L/R	9' 6"	45"-51"	
2500-4250-8L/R	9' 6"	52"-54"	

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Harmonic (Heavy Duty)

MOVFE-2500 (Single Speed)

40" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-9L/R	10'	28"-29"	
2500-4150-9L/R	10'	30"-34"	
2500-4175-9L/R	10'	35"-39"	
2500-4200-9L/R	10'	40"-44"	
2500-4225-9L/R	10'	45"-51"	
2500-4250-9L/R	10'	52"-54"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-4125-10L/R	10'	28"-29"	
2500-4150-10L/R	10'	30"-34"	
2500-4175-10L/R	10'	35"-39"	
2500-4200-10L/R	10'	40"-44"	
2500-4225-10L/R	10'	45"-51"	
2500-4250-10L/R	10'	52"-54"	

Header Height - CUSTOM

Part No.	Cab Height	S/S	
2500-4000*	Custom	28"-200"	

MOVFE-2500 (Two Speed) - Close Loop

16" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-1L/R	8'	28"-29"	
2500-4300-1L/R	8'	30"-34"	
2500-4325-1L/R	8'	35"-39"	
2500-4350-1L/R	8'	40"-44"	
2500-4375-1L/R	8'	45"-51"	
2500-4400-1L/R	8'	52"-54"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-2L/R	8'	28"-29"	
2500-4300-2L/R	8'	30"-34"	
2500-4325-2L/R	8'	35"-39"	
2500-4350-2L/R	8'	40"-44"	
2500-4375-2L/R	8'	45"-51"	
2500-4400-2L/R	8'	52"-54"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-3L/R	8' 6"	28"-29"	
2500-4300-3L/R	8' 6"	30"-34"	
2500-4325-3L/R	8' 6"	35"-39"	
2500-4350-3L/R	8' 6"	40"-44"	
2500-4375-3L/R	8' 6"	45"-51"	
2500-4400-3L/R	8' 6"	52"-54"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-4L/R	8' 6"	28"-29"	
2500-4300-4L/R	8' 6"	30"-34"	
2500-4325-4L/R	8' 6"	35"-39"	
2500-4350-4L/R	8' 6"	40"-44"	
2500-4375-4L/R	8' 6"	45"-51"	
2500-4400-4L/R	8' 6"	52"-54"	

28" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-5L/R	9'	28"-29"	
2500-4300-5L/R	9'	30"-34"	
2500-4325-5L/R	9'	35"-39"	
2500-4350-5L/R	9'	40"-44"	
2500-4375-5L/R	9'	45"-51"	
2500-4400-5L/R	9'	52"-54"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-6L/R	9'	28"-29"	
2500-4300-6L/R	9'	30"-34"	
2500-4325-6L/R	9'	35"-39"	
2500-4350-6L/R	9'	40"-44"	
2500-4375-6L/R	9'	45"-51"	
2500-4400-6L/R	9'	52"-54"	

34" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-7L/R	9' 6"	28"-29"	
2500-4300-7L/R	9' 6"	30"-34"	
2500-4325-7L/R	9' 6"	35"-39"	
2500-4350-7L/R	9' 6"	40"-44"	
2500-4375-7L/R	9' 6"	45"-51"	
2500-4400-7L/R	9' 6"	52"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-8L/R	9' 6"	28"-29"	
2500-4300-8L/R	9' 6"	30"-34"	
2500-4325-8L/R	9' 6"	35"-39"	
2500-4350-8L/R	9' 6"	40"-44"	
2500-4375-8L/R	9' 6"	45"-51"	
2500-4400-8L/R	9' 6"	52"-54"	

Door Operator Assemblies

Door Operator Harmonic (Heavy Duty)

MOVFE-2500 (Two Speed) - Close Loop

40" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-9L/R	10'	28"-29"	
2500-4300-9L/R	10'	30"-34"	
2500-4325-9L/R	10'	35"-39"	
2500-4350-9L/R	10'	40"-44"	
2500-4375-9L/R	10'	45"-51"	
2500-4400-9L/R	10'	52"-54"	

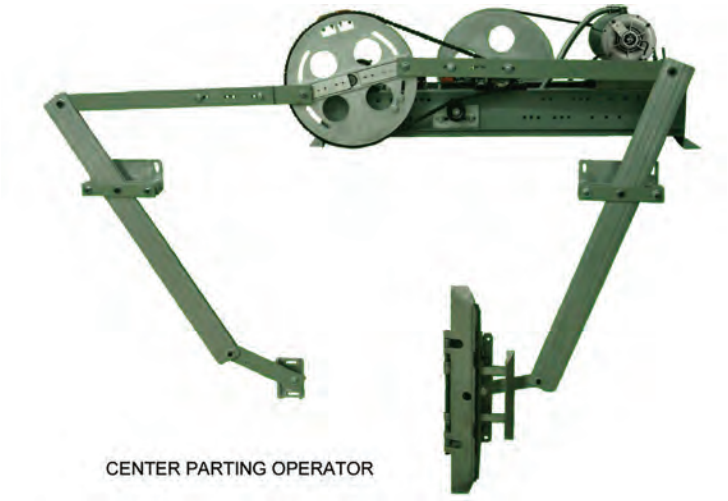
40" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-4275-10L/R	10'	28"-29"	
2500-4300-10L/R	10'	30"-34"	
2500-4325-10L/R	10'	35"-39"	
2500-4350-10L/R	10'	40"-44"	
2500-4375-10L/R	10'	45"-51"	
2500-4400-10L/R	10'	52"-54"	

Header Height - CUSTOM

Part No.	Cab Height	2/SP	
2500-4002*	Custom	28"-200"	

MOVFE-2500 (Center Parting)



CENTER PARTING OPERATOR

16" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-1L/R	8'	29"-33"	
2500-3025-1L/R	8'	34"-39"	
2500-3050-1L/R	8'	40"-44"	
2500-3075-1L/R	8'	45"-49"	
2500-3100-1L/R	8'	50"-54"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-2L/R	8'	29"-33"	
2500-3025-2L/R	8'	34"-39"	
2500-3050-2L/R	8'	40"-44"	
2500-3075-2L/R	8'	45"-49"	
2500-3100-2L/R	8'	50"-54"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-3L/R	8' 6"	29"-33"	
2500-3025-3L/R	8' 6"	34"-39"	
2500-3050-3L/R	8' 6"	40"-44"	
2500-3075-3L/R	8' 6"	45"-49"	
2500-3100-3L/R	8' 6"	50"-54"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-4L/R	8' 6"	29"-33"	
2500-3025-4L/R	8' 6"	34"-39"	
2500-3050-4L/R	8' 6"	40"-44"	
2500-3075-4L/R	8' 6"	45"-49"	
2500-3100-4L/R	8' 6"	50"-54"	

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Harmonic (Heavy Duty)

MOVFE-2500 (Center Parting)

28" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-5L/R	9'	29"-33"	
2500-3025-5L/R	9'	34"-39"	
2500-3050-5L/R	9'	40"-44"	
2500-3075-5L/R	9'	45"-49"	
2500-3100-5L/R	9'	50"-54"	

34" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-7L/R	9' 6"	29"-33"	
2500-3025-7L/R	9' 6"	34"-39"	
2500-3050-7L/R	9' 6"	40"-44"	
2500-3075-7L/R	9' 6"	45"-49"	
2500-3100-7L/R	9' 6"	50"-54"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-9L/R	10'	29"-33"	
2500-3025-9L/R	10'	34"-39"	
2500-3050-9L/R	10'	40"-44"	
2500-3075-9L/R	10'	45"-49"	
2500-3100-9L/R	10'	50"-54"	

Header Height - CUSTOM

Part No.	Cab Height	C/P	
2500-3000*	Custom	29"-200"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-6L/R	9'	29"-33"	
2500-3025-6L/R	9'	34"-39"	
2500-3050-6L/R	9'	40"-44"	
2500-3075-6L/R	9'	45"-49"	
2500-3100-6L/R	9'	50"-54"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-8L/R	9' 6"	29"-33"	
2500-3025-8L/R	9' 6"	34"-39"	
2500-3050-8L/R	9' 6"	40"-44"	
2500-3075-8L/R	9' 6"	45"-49"	
2500-3100-8L/R	9' 6"	50"-54"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-3000-10L/R	10'	29"-33"	
2500-3025-10L/R	10'	34"-39"	
2500-3050-10L/R	10'	40"-44"	
2500-3075-10L/R	10'	45"-49"	
2500-3100-10L/R	10'	50"-54"	

Door Operator Assemblies

Door Operator Linear (Heavy Duty)

MOVFE-2500 (Single Speed)



16" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-1L/R	8'	30"-30"	
2500-6025-1L/R	8'	31"-33"	
2500-6050-1L/R	8'	34"-36"	
2500-6075-1L/R	8'	37"-39"	
2500-6100-1L/R	8'	40"-42"	
2500-6125-1L/R	8'	43"-45"	
2500-6150-1L/R	8'	46"-48"	
2500-6175-1L/R	8'	49"-51"	
2500-6200-1L/R	8'	52"-54"	
2500-6225-1L/R	8'	55"-57"	
2500-6250-1L/R	8'	58"-60"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-2L/R	8'	30"-30"	
2500-6025-2L/R	8'	31"-33"	
2500-6050-2L/R	8'	34"-36"	
2500-6075-2L/R	8'	37"-39"	
2500-6100-2L/R	8'	40"-42"	
2500-6125-2L/R	8'	43"-45"	
2500-6150-2L/R	8'	46"-48"	
2500-6175-2L/R	8'	49"-51"	
2500-6200-2L/R	8'	52"-54"	
2500-6225-2L/R	8'	55"-57"	
2500-6250-2L/R	8'	58"-60"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-3L/R	8' 6"	30"-30"	
2500-6025-3L/R	8' 6"	31"-33"	
2500-6050-3L/R	8' 6"	34"-36"	
2500-6075-3L/R	8' 6"	37"-39"	
2500-6100-3L/R	8' 6"	40"-42"	
2500-6125-3L/R	8' 6"	43"-45"	
2500-6150-3L/R	8' 6"	46"-48"	
2500-6175-3L/R	8' 6"	49"-51"	
2500-6200-3L/R	8' 6"	52"-54"	
2500-6225-3L/R	8' 6"	55"-57"	
2500-6250-3L/R	8' 6"	58"-60"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-4L/R	8' 6"	30"-30"	
2500-6025-4L/R	8' 6"	31"-33"	
2500-6050-4L/R	8' 6"	34"-36"	
2500-6075-4L/R	8' 6"	37"-39"	
2500-6100-4L/R	8' 6"	40"-42"	
2500-6125-4L/R	8' 6"	43"-45"	
2500-6150-4L/R	8' 6"	46"-48"	
2500-6175-4L/R	8' 6"	49"-51"	
2500-6200-4L/R	8' 6"	52"-54"	
2500-6225-4L/R	8' 6"	55"-57"	
2500-6250-4L/R	8' 6"	58"-60"	

28" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-5L/R	9'	30"-30"	
2500-6025-5L/R	9'	31"-33"	
2500-6050-5L/R	9'	34"-36"	
2500-6075-5L/R	9'	37"-39"	
2500-6100-5L/R	9'	40"-42"	
2500-6125-5L/R	9'	43"-45"	
2500-6150-5L/R	9'	46"-48"	
2500-6175-5L/R	9'	49"-51"	
2500-6200-5L/R	9'	52"-54"	
2500-6225-5L/R	9'	55"-57"	
2500-6250-5L/R	9'	58"-60"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-6L/R	9'	30"-30"	
2500-6025-6L/R	9'	31"-33"	
2500-6050-6L/R	9'	34"-36"	
2500-6075-6L/R	9'	37"-39"	
2500-6100-6L/R	9'	40"-42"	
2500-6125-6L/R	9'	43"-45"	
2500-6150-6L/R	9'	46"-48"	
2500-6175-6L/R	9'	49"-51"	
2500-6200-6L/R	9'	52"-54"	
2500-6225-6L/R	9'	55"-57"	
2500-6250-6L/R	9'	58"-60"	

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Linear (Heavy Duty)

MOVFE-2500 (Single Speed)

34" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-7L/R	9' 6"	30"-30"	
2500-6025-7L/R	9' 6"	31"-33"	
2500-6050-7L/R	9' 6"	34"-36"	
2500-6075-7L/R	9' 6"	37"-39"	
2500-6100-7L/R	9' 6"	40"-42"	
2500-6125-7L/R	9' 6"	43"-45"	
2500-6150-7L/R	9' 6"	46"-48"	
2500-6175-7L/R	9' 6"	49"-51"	
2500-6200-7L/R	9' 6"	52"-54"	
2500-6225-7L/R	9' 6"	55"-57"	
2500-6250-7L/R	9' 6"	58"-60"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-8L/R	9' 6"	30"-30"	
2500-6025-8L/R	9' 6"	31"-33"	
2500-6050-8L/R	9' 6"	34"-36"	
2500-6075-8L/R	9' 6"	37"-39"	
2500-6100-8L/R	9' 6"	40"-42"	
2500-6125-8L/R	9' 6"	43"-45"	
2500-6150-8L/R	9' 6"	46"-48"	
2500-6175-8L/R	9' 6"	49"-51"	
2500-6200-8L/R	9' 6"	52"-54"	
2500-6225-8L/R	9' 6"	55"-57"	
2500-6250-8L/R	9' 6"	58"-60"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-9L/R	10'	30"-30"	
2500-6025-9L/R	10'	31"-33"	
2500-6050-9L/R	10'	34"-36"	
2500-6075-9L/R	10'	37"-39"	
2500-6100-9L/R	10'	40"-42"	
2500-6125-9L/R	10'	43"-45"	
2500-6150-9L/R	10'	46"-48"	
2500-6175-9L/R	10'	49"-51"	
2500-6200-9L/R	10'	52"-54"	
2500-6225-9L/R	10'	55"-57"	
2500-6250-9L/R	10'	58"-60"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	S/S	
2500-6000-10L/R	10'	30"-30"	
2500-6025-10L/R	10'	31"-33"	
2500-6050-10L/R	10'	34"-36"	
2500-6075-10L/R	10'	37"-39"	
2500-6100-10L/R	10'	40"-42"	
2500-6125-10L/R	10'	43"-45"	
2500-6150-10L/R	10'	46"-48"	
2500-6175-10L/R	10'	49"-51"	
2500-6200-10L/R	10'	52"-54"	
2500-6225-10L/R	10'	55"-57"	
2500-6250-10L/R	10'	58"-60"	

Header Height - CUSTOM

Part No.	Cab Height	S/S	
2500-6000*	Custom	30"-200"	

MOVFE-2500 (Two Speed) - Close Loop

16" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-1L/R	8'	30"-30"	
2500-7025-1L/R	8'	31"-32"	
2500-7050-1L/R	8'	33"-34"	
2500-7075-1L/R	8'	35"-36"	
2500-7100-1L/R	8'	37"-38"	
2500-7125-1L/R	8'	39"-40"	
2500-7150-1L/R	8'	41"-42"	
2500-7175-1L/R	8'	43"-44"	
2500-7200-1L/R	8'	45"-46"	
2500-7225-1L/R	8'	47"-48"	
2500-7250-1L/R	8'	49"-52"	
2500-7275-1L/R	8'	53"-56"	
2500-7300-1L/R	8'	57"-60"	
2500-7325-1L/R	8'	61"-64" 65"-68"	
2500-7350-1L/R	8'	69"-72"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-2L/R	8'	30"-30"	
2500-7025-2L/R	8'	31"-32"	
2500-7050-2L/R	8'	33"-34"	
2500-7075-2L/R	8'	35"-36"	
2500-7100-2L/R	8'	37"-38"	
2500-7125-2L/R	8'	39"-40"	
2500-7150-2L/R	8'	41"-42"	
2500-7175-2L/R	8'	43"-44"	
2500-7200-2L/R	8'	45"-46"	
2500-7225-2L/R	8'	47"-48"	
2500-7250-2L/R	8'	49"-52"	
2500-7275-2L/R	8'	53"-56"	
2500-7300-2L/R	8'	57"-60"	
2500-7325-2L/R	8'	61"-65" 65"-68"	
2500-7350-2L/R	8'	69"-72"	

Door Operator Assemblies

Door Operator Linear (Heavy Duty)

MOVFE-2500 (Two Speed) - Close Loop

22" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-3L/R	8' 6"	30"-30"	
2500-7025-3L/R	8' 6"	31"-32"	
2500-7050-3L/R	8' 6"	33"-34"	
2500-7075-3L/R	8' 6"	35"-36"	
2500-7100-3L/R	8' 6"	37"-38"	
2500-7125-3L/R	8' 6"	39"-40"	
2500-7150-3L/R	8' 6"	41"-42"	
2500-7175-3L/R	8' 6"	43"-44"	
2500-7200-3L/R	8' 6"	45"-46"	
2500-7225-3L/R	8' 6"	47"-48"	
2500-7250-3L/R	8' 6"	49"-52"	
2500-7275-3L/R	8' 6"	53"-56"	
2500-7300-3L/R	8' 6"	57"-60"	
2500-7325-3L/R	8' 6"	61"-64" 65"-68"	
2500-7350-3L/R	8' 6"	69"-72"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-4L/R	8' 6"	30"-30"	
2500-7025-4L/R	8' 6"	31"-32"	
2500-7050-4L/R	8' 6"	33"-34"	
2500-7075-4L/R	8' 6"	35"-36"	
2500-7100-4L/R	8' 6"	37"-38"	
2500-7125-4L/R	8' 6"	39"-40"	
2500-7150-4L/R	8' 6"	41"-42"	
2500-7175-4L/R	8' 6"	43"-44"	
2500-7200-4L/R	8' 6"	45"-46"	
2500-7225-4L/R	8' 6"	47"-48"	
2500-7250-4L/R	8' 6"	49"-52"	
2500-7275-4L/R	8' 6"	53"-56"	
2500-7300-4L/R	8' 6"	57"-60"	
2500-7325-4L/R	8' 6"	61"-64" 65"-68"	
2500-7350-4L/R	8' 6"	69"-72"	

28" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-5L/R	9'	30"-30"	
2500-7025-5L/R	9'	31"-32"	
2500-7050-5L/R	9'	33"-34"	
2500-7075-5L/R	9'	35"-36"	
2500-7100-5L/R	9'	37"-38"	
2500-7125-5L/R	9'	39"-40"	
2500-7150-5L/R	9'	41"-42"	
2500-7175-5L/R	9'	43"-44"	
2500-7200-5L/R	9'	45"-46"	
2500-7225-5L/R	9'	47"-48"	
2500-7250-5L/R	9'	49"-52"	
2500-7275-5L/R	9'	53"-56"	
2500-7300-5L/R	9'	57"-60"	
2500-7325-5L/R	9'	61"-64" 65"-68"	
2500-7350-5L/R	9'	69"-72"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-6L/R	9'	30"-30"	
2500-7025-6L/R	9'	31"-32"	
2500-7050-6L/R	9'	33"-34"	
2500-7075-6L/R	9'	35"-36"	
2500-7100-6L/R	9'	37"-38"	
2500-7125-6L/R	9'	39"-40"	
2500-7150-6L/R	9'	41"-42"	
2500-7175-6L/R	9'	43"-44"	
2500-7200-6L/R	9'	45"-46"	
2500-7225-6L/R	9'	47"-48"	
2500-7250-6L/R	9'	49"-52"	
2500-7275-6L/R	9'	53"-56"	
2500-7300-6L/R	9'	57"-60"	
2500-7325-6L/R	9'	61"-64" 65"-68"	
2500-7350-6L/R	9'	69"-72"	

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Linear (Heavy Duty)

MOVFE-2500 (Two Speed) - Close Loop

34" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-7L/R	9' 6"	30"-30"	
2500-7025-7L/R	9' 6"	31"-32"	
2500-7050-7L/R	9' 6"	33"-34"	
2500-7075-7L/R	9' 6"	35"-36"	
2500-7100-7L/R	9' 6"	37"-38"	
2500-7125-7L/R	9' 6"	39"-40"	
2500-7150-7L/R	9' 6"	41"-42"	
2500-7175-7L/R	9' 6"	43"-44"	
2500-7200-7L/R	9' 6"	45"-46"	
2500-7225-7L/R	9' 6"	47"-48"	
2500-7250-7L/R	9' 6"	49"-52"	
2500-7275-7L/R	9' 6"	53"-56"	
2500-7300-7L/R	9' 6"	57"-60"	
2500-7325-7L/R	9' 6"	61"-64" 65"-68"	
2500-7350-7L/R	9' 6"	69"-72"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-8L/R	9' 6"	30"-30"	
2500-7025-8L/R	9' 6"	31"-32"	
2500-7050-8L/R	9' 6"	33"-34"	
2500-7075-8L/R	9' 6"	35"-36"	
2500-7100-8L/R	9' 6"	37"-38"	
2500-7125-8L/R	9' 6"	39"-40"	
2500-7150-8L/R	9' 6"	41"-42"	
2500-7175-8L/R	9' 6"	43"-44"	
2500-7200-8L/R	9' 6"	45"-46"	
2500-7225-8L/R	9' 6"	47"-48"	
2500-7250-8L/R	9' 6"	49"-52"	
2500-7275-8L/R	9' 6"	53"-56"	
2500-7300-8L/R	9' 6"	57"-60"	
2500-7325-8L/R	9' 6"	61"-64" 65"-68"	
2500-7350-8L/R	9' 6"	69"-72"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-9L/R	10'	30"-30"	
2500-7025-9L/R	10'	31"-32"	
2500-7050-9L/R	10'	33"-34"	
2500-7075-9L/R	10'	35"-36"	
2500-7100-9L/R	10'	37"-38"	
2500-7125-9L/R	10'	39"-40"	
2500-7150-9L/R	10'	41"-42"	
2500-7175-9L/R	10'	43"-44"	
2500-7200-9L/R	10'	45"-46"	
2500-7225-9L/R	10'	47"-48"	
2500-7250-9L/R	10'	49"-52"	
2500-7275-9L/R	10'	53"-56"	
2500-7300-9L/R	10'	57"-60"	
2500-7325-9L/R	10'	61"-64" 65"-68"	
2500-7350-9L/R	10'	69"-72"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	2/SP	
2500-7000-10L/R	10'	30"-30"	
2500-7025-10L/R	10'	31"-32"	
2500-7050-10L/R	10'	33"-34"	
2500-7075-10L/R	10'	35"-36"	
2500-7100-10L/R	10'	37"-38"	
2500-7125-10L/R	10'	39"-40"	
2500-7150-10L/R	10'	41"-42"	
2500-7175-10L/R	10'	43"-44"	
2500-7200-10L/R	10'	45"-46"	
2500-7225-10L/R	10'	47"-48"	
2500-7250-10L/R	10'	49"-52"	
2500-7275-10L/R	10'	53"-56"	
2500-7300-10L/R	10'	57"-60"	
2500-7325-10L/R	10'	61"-64" 65"-68"	
2500-7350-10L/R	10'	69"-72"	

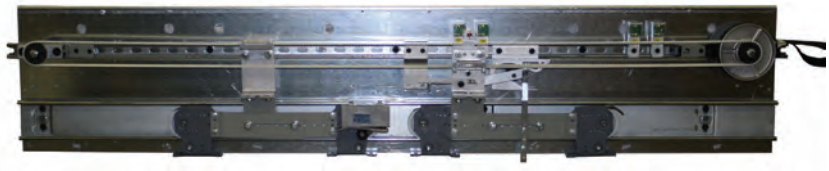
Header Height - CUSTOM

Part No.	Cab Height	2/SP	
2500-7000*	Custom	30"-200"	

Door Operator Assemblies

Door Operator Linear (Heavy Duty)

MOVFE-2500 (Center Parting)



16" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-1L/R	8'	30"-32"	
2500-5025-1L/R	8'	33"-35"	
2500-5050-1L/R	8'	36"-38"	
2500-5075-1L/R	8'	39"-41"	
2500-5100-1L/R	8'	42"-50"	
2500-5125-1L/R	8'	51"-53"	
2500-5150-1L/R	8'	54"-56"	
2500-5175-1L/R	8'	54"-56"	
2500-5200-1L/R	8'	57"-59"	
2500-5225-1L/R	8'	60"-62"	

16" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-2L/R	8'	30"-32"	
2500-5025-2L/R	8'	33"-35"	
2500-5050-2L/R	8'	36"-38"	
2500-5075-2L/R	8'	39"-41"	
2500-5100-2L/R	8'	42"-50"	
2500-5125-2L/R	8'	51"-53"	
2500-5150-2L/R	8'	54"-56"	
2500-5175-2L/R	8'	54"-56"	
2500-5200-2L/R	8'	57"-59"	
2500-5225-2L/R	8'	60"-62"	

22" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-3L/R	8' 6"	30"-32"	
2500-5025-3L/R	8' 6"	33"-35"	
2500-5050-3L/R	8' 6"	36"-38"	
2500-5075-3L/R	8' 6"	39"-41"	
2500-5100-3L/R	8' 6"	42"-50"	
2500-5125-3L/R	8' 6"	51"-53"	
2500-5150-3L/R	8' 6"	54"-56"	
2500-5175-3L/R	8' 6"	54"-56"	
2500-5200-3L/R	8' 6"	57"-59"	
2500-5225-3L/R	8' 6"	60"-62"	

22" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-4L/R	8' 6"	30"-32"	
2500-5025-4L/R	8' 6"	33"-35"	
2500-5050-4L/R	8' 6"	36"-38"	
2500-5075-4L/R	8' 6"	39"-41"	
2500-5100-4L/R	8' 6"	42"-50"	
2500-5125-4L/R	8' 6"	51"-53"	
2500-5150-4L/R	8' 6"	54"-56"	
2500-5175-4L/R	8' 6"	54"-56"	
2500-5200-4L/R	8' 6"	57"-59"	
2500-5225-4L/R	8' 6"	60"-62"	

28" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-5L/R	9'	30"-32"	
2500-5025-5L/R	9'	33"-35"	
2500-5050-5L/R	9'	36"-38"	
2500-5075-5L/R	9'	39"-41"	
2500-5100-5L/R	9'	42"-50"	
2500-5125-5L/R	9'	51"-53"	
2500-5150-5L/R	9'	54"-56"	
2500-5175-5L/R	9'	54"-56"	
2500-5200-5L/R	9'	57"-59"	
2500-5225-5L/R	9'	60"-62"	

28" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-6L/R	9'	30"-32"	
2500-5025-6L/R	9'	33"-35"	
2500-5050-6L/R	9'	36"-38"	
2500-5075-6L/R	9'	39"-41"	
2500-5100-6L/R	9'	42"-50"	
2500-5125-6L/R	9'	51"-53"	
2500-5150-6L/R	9'	54"-56"	
2500-5175-6L/R	9'	54"-56"	
2500-5200-6L/R	9'	57"-59"	
2500-5225-6L/R	9'	60"-62"	

DOOR EQUIPMENT

Door Operator Assemblies

Door Operator Linear (Heavy Duty)

MOVFE-2500 (Center Parting)

34" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-7L/R	9' 6"	30"-32"	
2500-5025-7L/R	9' 6"	33"-35"	
2500-5050-7L/R	9' 6"	36"-38"	
2500-5075-7L/R	9' 6"	39"-41"	
2500-5100-7L/R	9' 6"	42"-50"	
2500-5125-7L/R	9' 6"	51"-53"	
2500-5150-7L/R	9' 6"	54"-56"	
2500-5175-7L/R	9' 6"	54"-56"	
2500-5200-7L/R	9' 6"	57"-59"	
2500-5225-7L/R	9' 6"	60"-62"	

34" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-8L/R	9' 6"	30"-32"	
2500-5025-8L/R	9' 6"	33"-35"	
2500-5050-8L/R	9' 6"	36"-38"	
2500-5075-8L/R	9' 6"	39"-41"	
2500-5100-8L/R	9' 6"	42"-50"	
2500-5125-8L/R	9' 6"	51"-53"	
2500-5150-8L/R	9' 6"	54"-56"	
2500-5175-8L/R	9' 6"	54"-56"	
2500-5200-8L/R	9' 6"	57"-59"	
2500-5225-8L/R	9' 6"	60"-62"	

40" Header Height - 120 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-9L/R	10'	30"-32"	
2500-5025-9L/R	10'	33"-35"	
2500-5050-9L/R	10'	36"-38"	
2500-5075-9L/R	10'	39"-41"	
2500-5100-9L/R	10'	42"-50"	
2500-5125-9L/R	10'	51"-53"	
2500-5150-9L/R	10'	54"-56"	
2500-5175-9L/R	10'	54"-56"	
2500-5200-9L/R	10'	57"-59"	
2500-5225-9L/R	10'	60"-62"	

40" Header Height - 230 V.A.C.

Part No.	Cab Height	C/P	
2500-5000-10L/R	10'	30"-32"	
2500-5025-10L/R	10'	33"-35"	
2500-5050-10L/R	10'	36"-38"	
2500-5075-10L/R	10'	39"-41"	
2500-5100-10L/R	10'	42"-50"	
2500-5125-10L/R	10'	51"-53"	
2500-5150-10L/R	10'	54"-56"	
2500-5175-10L/R	10'	54"-56"	
2500-5200-10L/R	10'	57"-59"	
2500-5225-10L/R	10'	60"-62"	

Door Operator Parts - Harmonic

Crank/Drive Arm Assemblies

895 Series



895 Series (Single Speed)

16" Header Height

Part No.	Cab Height	S/S	
895-3004-1	8'	28"-29"	
895-3004-6	8'	30"-34"	
895-3004-11	8'	35"-39"	
895-3004-16	8'	40"-44"	
895-3004-21	8'	45"-51"	
895-3004-26	8'	52"-54"	

22" Header Height

Part No.	Cab Height	S/S	
895-3004-2	8' 6"	28"-29"	
895-3004-7	8' 6"	30"-34"	
895-3004-12	8' 6"	35"-39"	
895-3004-17	8' 6"	40"-44"	
895-3004-22	8' 6"	45"-51"	
895-3004-27	8' 6"	52"-54"	

Door Operator Parts - Harmonic

Crank/Drive Arm Assemblies

895 Series (Single Speed)

28" Header Height

Part No.	Cab Height	S/S	
895-3004-3	9'	28"-29"	
895-3004-8	9'	30"-34"	
895-3004-13	9'	35"-39"	
895-3004-18	9'	40"-44"	
895-3004-23	9'	45"-51"	
895-3004-28	9'	52"-54"	

34" Header Height

Part No.	Cab Height	S/S	
895-3004-4	9' 6"	28"-29"	
895-3004-9	9' 6"	30"-34"	
895-3004-14	9' 6"	35"-39"	
895-3004-19	9' 6"	40"-44"	
895-3004-24	9' 6"	45"-51"	
895-3004-29	9' 6"	52"-54"	

40" Header Height

Part No.	Cab Height	S/S	
895-3004-5	10'	28"-29"	
895-3004-10	10'	30"-34"	
895-3004-15	10'	35"-39"	
895-3004-20	10'	40"-44"	
895-3004-25	10'	45"-51"	
895-3004-30	10'	52"-54"	

Specially Engineered

Part No.	Cab Height	S/S	
895-3004*	Custom	28"-200"	

895 Series (Two Speed)

16" Header Height

Part No.	Cab Height	2/SP	
895-3005-1	8'	28"-29"	
895-3005-6	8'	30"-34"	
895-3005-11	8'	35"-39"	
895-3005-16	8'	40"-44"	
895-3005-21	8'	45"-51"	
895-3005-26	8'	52"-54"	

22" Header Height

Part No.	Cab Height	2/SP	
895-3005-2	8' 6"	28"-29"	
895-3005-7	8' 6"	30"-34"	
895-3005-12	8' 6"	35"-39"	
895-3005-17	8' 6"	40"-44"	
895-3005-22	8' 6"	45"-51"	
895-3005-27	8' 6"	52"-54"	

28" Header Height

Part No.	Cab Height	2/SP	
895-3005-3	9'	28"-29"	
895-3005-8	9'	30"-34"	
895-3005-13	9'	35"-39"	
895-3005-18	9'	40"-44"	
895-3005-23	9'	45"-51"	
895-3005-28	9'	52"-54"	

34" Header Height

Part No.	Cab Height	2/SP	
895-3005-4	9' 6"	28"-29"	
895-3005-9	9' 6"	30"-34"	
895-3005-14	9' 6"	35"-39"	
895-3005-19	9' 6"	40"-44"	
895-3005-24	9' 6"	45"-51"	
895-3005-29	9' 6"	52"-54"	

40" Header Height

Part No.	Cab Height	2/SP	
895-3005-5	10'	28"-29"	
895-3005-10	10'	30"-34"	
895-3005-15	10'	35"-39"	
895-3005-20	10'	40"-44"	
895-3005-25	10'	45"-51"	
895-3005-30	10'	52"-54"	

Specially Engineered

Part No.	Cab Height	2/SP	
895-3005*	Custom	28"-200"	

DOOR EQUIPMENT

Door Operator Parts - Harmonic

Crank/Drive Arm Assemblies

895 Series (Center Parting)

16" Header Height

Part No.	Cab Height	C/P	
895-3003-1	8'	29"-33"	
895-3003-6	8'	34"-39"	
895-3003-11	8'	40"-44"	
895-3003-16	8'	45"-49"	
895-3003-21	8'	50"-54"	

22" Header Height

Part No.	Cab Height	C/P	
895-3003-2	8' 6"	29"-33"	
895-3003-7	8' 6"	34"-39"	
895-3003-12	8' 6"	40"-44"	
895-3003-17	8' 6"	45"-49"	
895-3003-22	8' 6"	50"-54"	

28" Header Height

Part No.	Cab Height	C/P	
895-3003-3	9'	29"-33"	
895-3003-8	9'	34"-39"	
895-3003-13	9'	40"-44"	
895-3003-18	9'	45"-49"	
895-3003-23	9'	50"-54"	

34" Header Height

Part No.	Cab Height	C/P	
895-3003-4	9' 6"	29"-33"	
895-3003-9	9' 6"	34"-39"	
895-3003-14	9' 6"	40"-44"	
895-3003-19	9' 6"	45"-49"	
895-3003-24	9' 6"	50"-54"	

40" Header Height

Part No.	Cab Height	C/P	
895-3003-5	10'	29"-33"	
895-3003-10	10'	34"-39"	
895-3003-15	10'	40"-44"	
895-3003-20	10'	45"-49"	
895-3003-25	10'	50"-54"	

Specially Engineered

Part No.	Cab Height	C/P	
895-3003*	Custom	29"-200"	

1000 & 2500HH Series (Single Speed)

16" Header Height

Part No.	Cab Height	S/S	
1000-3004-1	8'	28"-29"	
1000-3004-6	8'	30"-34"	
1000-3004-11	8'	35"-39"	
1000-3004-16	8'	40"-44"	
1000-3004-21	8'	45"-51"	
1000-3004-26	8'	52"-54"	

22" Header Height

Part No.	Cab Height	S/S	
1000-3004-2	8' 6"	28"-29"	
1000-3004-7	8' 6"	30"-34"	
1000-3004-12	8' 6"	35"-39"	
1000-3004-17	8' 6"	40"-44"	
1000-3004-22	8' 6"	45"-51"	
1000-3004-27	8' 6"	52"-54"	

28" Header Height

Part No.	Cab Height	S/S	
1000-3004-3	9'	28"-29"	
1000-3004-8	9'	30"-34"	
1000-3004-13	9'	35"-39"	
1000-3004-18	9'	40"-44"	
1000-3004-23	9'	45"-51"	
1000-3004-28	9'	52"-54"	

34" Header Height

Part No.	Cab Height	S/S	
1000-3004-4	9' 6"	28"-29"	
1000-3004-9	9' 6"	30"-34"	
1000-3004-14	9' 6"	35"-39"	
1000-3004-19	9' 6"	40"-44"	
1000-3004-24	9' 6"	45"-51"	
1000-3004-29	9' 6"	52"-54"	

Door Operator Parts - Harmonic

Crank/Drive Arm Assemblies

1000 & 2500HH Series (Single Speed)

40" Header Height

Part No.	Cab Height	S/S	
1000-3004-5	10'	28"-29"	
1000-3004-10	10'	30"-34"	
1000-3004-15	10'	35"-39"	
1000-3004-20	10'	40"-44"	
1000-3004-25	10'	45"-51"	
1000-3004-30	10'	52"-54"	

Specially Engineered

Part No.	Cab Height	S/S	
1000-3004*	Custom	28"-200"	

1000 & 2500HH Series (Two Speed)

16" Header Height

Part No.	Cab Height	2/SP	
1000-3005-1	8'	28"-29"	
1000-3005-6	8'	30"-34"	
1000-3005-11	8'	35"-39"	
1000-3005-16	8'	40"-44"	
1000-3005-21	8'	45"-51"	
1000-3005-26	8'	52"-54"	

22" Header Height

Part No.	Cab Height	2/SP	
1000-3005-2	8' 6"	28"-29"	
1000-3005-7	8' 6"	30"-34"	
1000-3005-12	8' 6"	35"-39"	
1000-3005-17	8' 6"	40"-44"	
1000-3005-22	8' 6"	45"-51"	
1000-3005-27	8' 6"	52"-54"	

28" Header Height

Part No.	Cab Height	2/SP	
1000-3005-3	9'	28"-29"	
1000-3005-8	9'	30"-34"	
1000-3005-13	9'	35"-39"	
1000-3005-18	9'	40"-44"	
1000-3005-23	9'	45"-51"	
1000-3005-28	9'	52"-54"	

34" Header Height

Part No.	Cab Height	2/SP	
1000-3005-4	9' 6"	28"-29"	
1000-3005-9	9' 6"	30"-34"	
1000-3005-14	9' 6"	35"-39"	
1000-3005-19	9' 6"	40"-44"	
1000-3005-24	9' 6"	45"-51"	
1000-3005-29	9' 6"	52"-54"	

40" Header Height

Part No.	Cab Height	2/SP	
1000-3005-5	10'	28"-29"	
1000-3005-10	10'	30"-34"	
1000-3005-15	10'	35"-39"	
1000-3005-20	10'	40"-44"	
1000-3005-25	10'	45"-51"	
1000-3005-30	10'	52"-54"	

Specially Engineered

Part No.	Cab Height	2/SP	
1000-3005*	Custom	28"-200"	

1000 & 2500HH Series (Center Parting)

16" Header Height

Part No.	Cab Height	C/P	
1000-3003-1	8'	29"-33"	
1000-3003-6	8'	34"-39"	
1000-3003-11	8'	40"-44"	
1000-3003-16	8'	45"-49"	
1000-3003-21	8'	50"-54"	

22" Header Height

Part No.	Cab Height	C/P	
1000-3003-2	8' 6"	29"-33"	
1000-3003-7	8' 6"	34"-39"	
1000-3003-12	8' 6"	40"-44"	
1000-3003-17	8' 6"	45"-49"	
1000-3003-22	8' 6"	50"-54"	

DOOR EQUIPMENT

Door Operator Parts - Harmonic

Crank/Drive Arm Assemblies

1000 & 2500HH Series (Center Parting)

28" Header Height

Part No.	Cab Height	C/P	
1000-3003-3	9'	29"-33"	
1000-3003-8	9'	34"-39"	
1000-3003-13	9'	40"-44"	
1000-3003-18	9'	45"-49"	
1000-3003-23	9'	50"-54"	

34" Header Height

Part No.	Cab Height	C/P	
1000-3003-4	9' 6"	29"-33"	
1000-3003-9	9' 6"	34"-39"	
1000-3003-14	9' 6"	40"-44"	
1000-3003-19	9' 6"	45"-49"	
1000-3003-24	9' 6"	50"-54"	

40" Header Height

Part No.	Cab Height	C/P	
1000-3003-5	10'	29"-33"	
1000-3003-10	10'	34"-39"	
1000-3003-15	10'	40"-44"	
1000-3003-20	10'	45"-49"	
1000-3003-25	10'	50"-54"	

Specially Engineered

Part No.	Cab Height	C/P	
1000-3003*	Custom	29"-200"	

Drive Board Assemblies (VFE 2500 Series)

2500-3050-1



Description
Voltage: 120 VAC
Where Used: VFE 2500

2500-3050-2



Description
Voltage: 230 VAC
Where Used: VFE 2500

Electronic Assemblies (895 Series)

895-3051



Description
Complete Electronic Assembly 120 VAC
Where Used: 895

895-3051-1



Description
Complete Electronic Assembly 230 VAC
Where Used: 895

895-3052



Description
Electronic Assembly (No PCB)
Where Used: 895

Door Operator Parts - Harmonic

Electronic Assemblies (1000 Series)

1000-3051



Description
Electronic Assembly 120 VAC
Where Used: 1000

1000-3051-1



Description
Electronic Assembly 230 VAC
Where Used: 1000

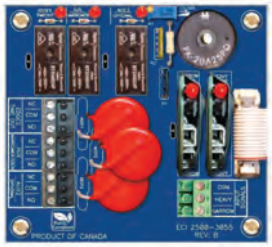
1000-3052



Description
Electronic Assembly
Where Used: 1000

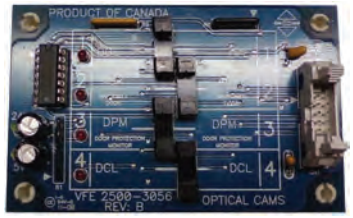
Modules and Boards (VFE 2500 Series)

2500-3055



Description
VFE I/O Board

2500-3056



Description
Harmonic Optical Cam Board

2500-1005



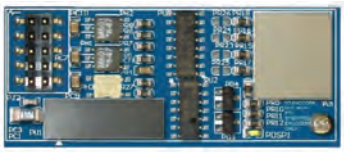
Description
VFE 2500 Can Bus Module

2500-3061



Description
Universal Input Module

2500-1003



Description
VFE Encoder Module

DOOR EQUIPMENT

Door Operator Parts - Harmonic

PCB Assemblies

Medium Duty - 895 Series



Part No.	Description	
895-3050	ECI 895 PCB Standard Assembly 120 VAC	
895-3050-1	ECI 895 PCB Asc. 2000 Assembly 24 VDC	
895-3050-2	ECI 895 PCB Standard Assembly 230 VAC	

Heavy Duty - 1000 Series



Part No.	Description	
1000-3050	ECI 1000 PCB Standard Assembly 120 VAC	
1000-3050-1	ECI 1000 PCB Asc. 2000 Assembly 24 VDC	
1000-3050-2	ECI 1000 PCB Standard Assembly 230 VAC	

VFE 2500 Series



Part No.	Description	
2500-3050-1	VFE Drive Board Assembly 120 VAC	
2500-3050-2	VFE Drive Board Assembly 230 VAC	

Pivot Assemblies



895 Series

Part No.	S/S	2/SP	
895-3031-1	28”-29”	28”-29”	
895-3031-2	30”-34”	30”-34”	
895-3031-3	35”-39”	35”-39”	
895-3031-4	40”-44”	40”-44”	
895-3031-5	45”-55”	45”-55”	
895-3031*	Custom	Custom	

1000 Series

Part No.	S/S	2/SP	
1000-3031-1	28”-29”	28”-29”	
1000-3031-2	30”-34”	30”-34”	
1000-3031-3	35”-39”	35”-39”	
1000-3031-4	40”-44”	40”-44”	
1000-3031-5	45”-55”	45”-55”	
1000-3031*	Custom	Custom	

VFE 2500 Series

Part No.	S/S	2/SP	
2500-3031-1	28”-29”	28”-29”	
2500-3031-2	30”-34”	30”-34”	
2500-3031-3	35”-39”	35”-39”	
2500-3031-4	40”-44”	40”-44”	
2500-3031-5	45”-55”	45”-55”	
2500-3031*	Custom	Custom	

Door Operator Parts - Harmonic

Slave Bracket Assemblies



Medium Duty - 895 Series

Part No.	Length	S/S	2/SP	C/P	
895-3028-5	5”			29”-33”	
895-3028-6	6”	30”-34”	30”-34”	34”-49”	
895-3028-8	8”	35”-39”	35”-39”	50”-54”	
895-3028-10	10”	40”-44”	40”-44”		
895-3028-12	12”	45”-54”	45”-54”		
895-3028-14	14”				
895-3028-SP*	Custom				

Heavy Duty - 1000 Series

Part No.	Length	S/S	2/SP	C/P	
1000-3028-5	5”			29”-33”	
1000-3028-6	6”	30”-34”	30”-34”	34”-49”	
1000-3028-8	8”	35”-39”	35”-39”	50”-54”	
1000-3028-10	10”	40”-44”	40”-44”		
1000-3028-12	12”	45”-54”	45”-54”		
1000-3028-14	14”				
1000-3028-SP*	Custom				

VFE 2500 Series

Part No.	Length	S/S	2/SP	C/P	
2500-3028-5	5”			29”-33”	
2500-3028-6	6”	30”-34”	30”-34”	34”-49”	
2500-3028-8	8”	35”-39”	35”-39”	50”-54”	
2500-3028-10	10”	40”-44”	40”-44”		
2500-3028-12	12”	45”-54”	45”-54”		
2500-3028-14	14”				
2500-3028-SP*	Custom				

Slave Bracket Parts

Slave Arm



Call For Pricing

Slave Bracket



Part No. 895-3028
CAD Price: $43.50

Slave Arms

Medium Duty - 895

Part No.	Arm Length
895-1062-5	5”
895-1062-6	6”
895-1062-8	8”
895-1062-10	10”
895-1062-12	12”
895-1062-14	14”

Heavy Duty - 1000

Part No.	Arm Length
1000-1062-5	5”
1000-1062-6	6”
1000-1062-8	8”
1000-1062-10	10”
1000-1062-12	12”
1000-1062-14	14”

VFE 2500

Part No.	Arm Length
2500-1062-5	5”
2500-1062-6	6”
2500-1062-8	8”
2500-1062-10	10”
2500-1062-12	12”
2500-1062-14	14”

Bar Assemblies (Type “A” Bar)

1000-3020



Description
“A” Bar Assembly, Single & Two Speed
Where Used: 895, 1000, 2500HH

1000-3027



Description
“A” Bar Assembly, Center Parting
Where Used: 895, 1000, 2500HH

DOOR EQUIPMENT

Door Operator Parts - Harmonic

Bar, Pivot Assemblies

Single Speed & Two Speed



Part No.	Where Used	
895-3046	895	
1000-3046	1000	
2500-3046	VFE 2500	

Bracket, Pivot Assemblies

Center Parting



Part No.	Where Used	
895-3029	895	
1000-3029	1000	
2500-3029	VFE 2500	

Cam Assemblies

895-3023



Description
Where Used: 895

1000-3023



Description
Where Used: 1000

2500-1010



Description
Where Used: VFE 2500

Chain Sprocket Assemblies

895-3012



Description
Chain Sprocket Assemblly, #35 Chain
Where Used: 895

895-3013



Description
Chain Sprocket Assembly, #40 Chain
Where Used: 895

1000-3013



Description
Chain Sprocket Assembly, #40 Chain
Where Used: 1000, 2500HH

Motor Assemblies and Related Parts

2500-3057



Description
Induction Motor Assembly
Where Used: VFE 2500

2500-3057-1



Description
Induction Motor Assembly
Where Used: VFE 2500

1000-3006



Description
ECI 1000 1/3 HP Motor 48 VDC 1150PRM
Where Used: 1000

895-3006



Description
ECI 895 1/6 HP Motor 24 VDC 1150RPM
Where Used: 895

Door Operator Parts - Harmonic

Motor Assemblies and Related Parts

1000-3004



Description
Motor Tension Hardware
Where Used: 895, 1000, 2500HH

1000-3007



Description
1000 Motor V-Belt Pulley
Where Used: 895, 1000, 2500HH

1000-3008



Description
AX 53 Serrated V-BELT (4L550)
Where Used: 895, 1000, 2500HH

Wheel Assemblies (Chain, Wheel)

895-3047



Description
Chain Wheel Assemblies
Where Used: 895

1000-3047



Description
Chain Wheel Assemblies
Where Used: 1000

1000-3017-1



Description
Chain Wheel Assemblies
Where Used: VFE 2500

895-3017



Description
Pulley Wheel Assemblies
Where Used: 895

1000-3017



Description
Pulley Wheel Assemblies
Where Used: 1000, 2500HH

DOOR EQUIPMENT

Door Operator Parts - Harmonic

Connectors

2500-3077



Description
VFE 3 Pin I/O Board Connector
Where Used: VFE 2500

2500-3078



Description
VFE 9 Pin I/O Board Connector
Where Used: VFE 2500

2500-3080



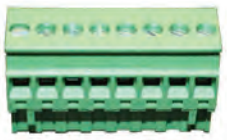
Description
VFE 3 Pin Detector Connector
Where Used: VFE 2500

2500-3081



Description
VFE 16 Pin Input/Output Connector
Where Used: VFE 2500

2500-3082



Description
VFE 8 Pin Power Connector
Where Used: VFE 2500

Fuses

1000-1427



Description
MDL 3A/250V Fuse F-1
Where Used: 895, 1000

1000-1428



Description
MDL 2A/250V Fuse F-2
Where Used: 895, 1000

1000-1429



Description
GBB 9A/60V Fuse F-3
Where Used: 895, 1000

2500-3070



Description
VFE Fuse 4-AMP Slow Blow
Where Used: VFE 2500

Linkages (Type "C")

Tapped "C" Linkage



Part No.	Where Used	
2500-3025	VFE 2500	
895-3025	895	
1000-3025	1000	

Slotted "C" Linkage



Part No.	Where Used	
2500-3026	VFE 2500	
895-3026	895	
1000-3026	1000	

Door Operator Parts - Harmonic

Silencer Strap Assembly



Part No.	Where Used	
895-3018	895	
1000-3018	1000, 2500HH	
1000-3014**	1000, 2500HH	

Silencer & Bearing Package



Part No.	Where Used	
895-3043	895	
1000-3043	1000	
2500-3043	VFE 2500	

Parameter Unit and Cable

2500-3051



Description
VFE Parameter Unit
Where Used: VFE 2500

2500-2026



Description
VFE 7” Parameter Unit Cable
Where Used: VFE 2500

2500-2026-1



Description
VFE 7 1/2” Parameter Unit Cable
Where Used: VFE 2500

Relays



Part No.	Where Used	Description	
895-1214	895	MY4 Relay 120 VAC	
895-1214-1	895	MY4 Relay 230 VAC	
895-1215	895	LY3 Relay 24 VDC	
895-1216	895	MY4 Relay 24 VDC	
1000-1430	895, 1000	G5V-2-DC24 Relay	
1000-1439	1000	6 MJN2C-E-DC24	

Rollers, Chain Tension Assembly

895-3014



Description
Chain Tension Roller Assemblies
Where Used: 895

1000-3015



Description
Chain Tension Roller Assemblies
Where Used: 1000, 2500HH

DOOR EQUIPMENT

Door Operator Parts - Harmonic

Rollers, Stop

1000-3016



Description
Single Speed & Two Speed, Stop Roller
Where Used: 895, 1000, 2500HH

1000-3016-1



Description
Center Parting Inside, Stop Roller
Where Used: 895, 1000, 2500HH

1000-3016-2



Description
Center Parting Outside, Stop Roller
Where Used: 895, 1000, 2500HH

Miscellaneous Parts

2500-2017



Description
Transformer
Where Used: VFE 2500

2500-2020



Description
VFE Encoder For 1/2 HP AC Motor
Where Used: VFE 2500

2500-3076



Description
Enable Chip
Where Used: VFE 2500

895-6010



Description
KBC-1502 Bridge Rectifier
Where Used: 895, 1000

895-3010



Description
Pillow Block Bearing
Where Used: 895

1000-3011



Description
Pillow Block Bearing
Where Used: 1000, 2500HH

895-3024



Description
Standard Limit Switch Rack
Where Used: 895

1000-3024



Description
Limit Switch Rack
Where Used: 1000

Door Operator Parts - Harmonic

Miscellaneous Parts

2500-3073



Description
VFE 10 Pin Ribbon Cable
Where Used: VFE 2500

2500-3074



Description
VFE 14 Pin Ribbon Cable
Where Used: VFE 2500

2500-3069



Description
Manual (Electronic /Electrical)
Where Used: VFE 2500

2500-3070-1



Description
Manual (Harmonic Mechanical)
Where Used: VFE 2500

Door Operator Parts - Linear (VFE 2500 Series)

Drive Belts



Single Speed

Part No.	Belt Length	S/S	
2500-2000-5	112”	30”-30”	
2500-2000-9	124”	31”-33”	
2500-2000-13	136”	34”-36”	
2500-2000-15	146”	37”-39”	
2500-2000-19	158”	40”-42”	
2500-2000-22	170”	43”-45”	

Part No.	Belt Length	S/S	
2500-2000-26	182”	46”-48”	
2500-2000-28	194”	49”-51”	
2500-2000-33	206”	52”-54”	
2500-2000-34	218”	55”-57”	
2500-2000-37	230”	58”-60”	

Two Speed

Part No.	Belt Length	2/SP	
2500-2000-1	97”	30”-30”	
2500-2000-2	101”	31”-32”	
2500-2000-3	108”	33”-34”	
2500-2000-4	112”	35”-36”	
2500-2000-6	120”	37”-38”	
2500-2000-7	124”	39”-42”	
2500-2000-10	128”	43”-44”	
2500-2000-11	136”	45”-46”	

Part No.	Belt Length	2/SP	
2500-2000-14	140”	47”-48”	
2500-2000-16	146”	47”-48”	
2500-2000-18	148”	49”-52”	
2500-2000-21	164”	53”-56”	
2500-2000-24	176”	57”-60”	
2500-2000-27	188”	61”-64”	
2500-2000-29	200”	65”-68”	
2500-2000-32	212”	69”-72”	

Center Parting

Part No.	Belt Length	C/P	
2500-2000-8	124”	30”-32”	
2500-2000-12	134”	33”-35”	
2500-2000-17	146”	36”-38”	
2500-2000-20	158”	39”-41”	
2500-2000-23	170”	42”-44”	

Part No.	Belt Length	C/P	
2500-2000-25	182”	45”-47”	
2500-2000-30	194”	48”-50”	
2500-2000-31	206”	51”-56”	
2500-2000-35	218”	57”-59”	
2500-2000-36	228”	60”-62”	

Custom

Part No.	Belt Length	C/P	
2500-2000-SP	Custom	30”-200”	

DOOR EQUIPMENT

Door Operator Parts - Linear (VFE 2500 Series)

Modules and Boards (VFE 2500 Series)

2500-3050-1



Description
VFE Drive Board Assembly, 120 VAC

2500-3050-2



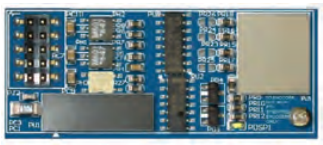
Description
VFE Drive Board Assembly, 230 VAC

2500-1002



Description
VFE Linear Signal Transfer Board

2500-1003



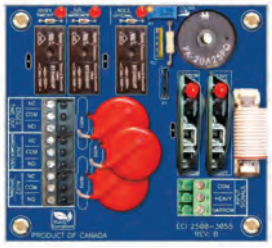
Description
VFE Encoder Module

2500-1005



Description
VFE Can Bus Module

2500-3055



Description
VFE I/O Board

2500-3061



Description
VFE Universal Input Module

Cables

2500-3073



Description
VFE 10 Pin Ribbon Cable

2500-3073-1



Description
VFE 14 Pin Ribbon Cable

2500-3074



Description
VFE Drive Pulley Assembly

2500-4006



Description
VFE Geared Motor Encoder Cable

Door Operator Parts - Linear (VFE 2500 Series)

Connectors

2500-3077



Description
VFE 3 Pin I/O Board Connector

2500-3078



Description
VFE 9 Pin I/O Board Connector

2500-3082



Description
VFE 8 Pin Power Connector

2500-3080



Description
VFE 3 Pin Detector Connector

2500-3081



Description
VFE 16 Pin Input/Output Connector

Door Stops

Header Door Stop



Part No.	Description	
2500-3089-3	VFE Header Door Stop, S/S 30”-70” D.O.	
2500-3089-1	VFE Header Door Stop, 2/SP 29”-53” D.O.	
2500-3089-2	VFE Header Door Stop, C/P 30”-35” D.O.	

Track Door Stop



Part No.	Description	
2500-3088-3	VFE Fixing Track Door Stop, S/S 30”-70” D.O.	
2500-3088-1	VFE Fixing Track Door Stop, 2/SP 54”-66” D.O.	
2500-3088-2	VFE Fixing Track Door Stop, C/P 36”-62” D.O.	

Extension Arms



Single Speed

Part No.	Arm Length	S/S	
2500-1002-2	9”	30”-30”	
2500-1002-6	18 1/2”	31”-42”	
2500-1002-7	30”	43”-51”	
2500-1002-8	39 1/2”	52”-60”	

Center Parting

Part No.	Arm Length	C/P	
2500-1002-3	10”	42”-50” 54”-56”	
2500-1002-4	14”	51”-53”	
2500-1002-5	14”	57”-62”	

DOOR EQUIPMENT

Door Operator Parts - Linear (VFE 2500 Series)

Motor Assemblies and Related Parts

2500-3057-2



Description
VFE 1/2 HP 3 Phase 230 VAC Induction Motor Assembly VFE2500-Hl

2500-3057-3



Description
VFE 1/2 HP 3 Phase 230 VAC Induction Motor Assembly Comes With Encoder Assembly VFE2500-Hl

2500-2016-L/R



Description
VFE Geared Motor 91W 3 Phase 230 VAC Comes With Encoder Left Hand



Part No.	Description	
2500-2075-1	Motor Belt R350J, Cab Height: 8’	
2500-2075-2	Motor Belt R440J, Cab Height: 8’ 6”	
2500-2075-3	Motor Belt R580J, Cab Height: 9’	
2500-2075-4	Motor Belt R700J, Cab Height: 9’ 6”	
2500-2075-5	Motor Belt R780J, Cab Height: 10’	

Keeper Brackets

2500-3068-1



Description
VFE Lower Belt Bracket, Standard

2500-3068-L/R



Description
VFE Lower Belt Bracket, Keeper

2500-3092-L/R



Description
VFE Keeper Bracket

Parameter Unit and Cables

2500-3051



Description
VFE Parameter Unit

2500-2026



Description
VFE 7’ Parameter Unit Cable

2500-2026-1



Description
VFE 7 1/2” Parameter Unit Cable

Door Operator Parts - Linear (VFE 2500 Series)

Pulley Assemblies

2500-2060



Description
VFE Geared Motor Pulley

2500-3025-1



Description
VFE 1/2 HP Motor Pulley VFE2500-HI

2500-3079



Description
VFE Take Up Pulley Assembly

Fixing Struts



Single Speed

Part No.	Strut Length	S/S	
2500-1000-38	60”	30”-30”	
2500-1000-7	66”	31”-33”	
2500-1000-11	72”	34”-36”	
2500-1000-14	78”	37”-39”	
2500-1000-18	84”	40”-42”	
2500-1000-20	90”	43”-45”	
2500-1000-24	96”	46”-48”	
2500-1000-26	102”	49”-51”	
2500-1000-29	108”	52”-54”	
2500-1000-33	114”	55”-57”	
2500-1000-35	120”	58”-60”	

Two Speed

Part No.	Strut Length	2/SP	
2500-1000-1	52 1/2”	30”-30”	
2500-1000-2	54”	31”-32”	
2500-1000-3	58”	33”-34”	
2500-1000-4	60”	35”-36”	
2500-1000-5	64”	37”-38”	
2500-1000-6	66”	39”-42”	
2500-1000-39	68”	43”-44”	
2500-1000-9	72”	45”-46”	
2500-1000-12	74”	47”-48”	
2500-1000-13	78”	49”-52”	
2500-1000-16	86”	53”-56”	
2500-1000-19	86”	53”-56”	
2500-1000-22	92”	57”-60”	
2500-1000-25	98”	61”-64”	
2500-1000-28	104”	65”-68”	
2500-1000-31	110”	69”-72”	

Center Parting

Part No.	Strut Length	C/P	
2500-1000-8	66”	30”-32”	
2500-1000-10	72”	33”-35”	
2500-1000-15	78”	36”-38”	
2500-1000-17	84”	39”-41”	
2500-1000-21	90”	42”-44”	
2500-1000-23	96”	45”-47”	
2500-1000-27	102”	48”-50”	
2500-1000-30	108”	51”-56”	
2500-1000-32	114”	57”-59”	
2500-1000-34	120”	60”-62”	
2500-1000-36	30”-200”	Custom	

DOOR EQUIPMENT

Door Operator Parts - Linear (VFE 2500 Series)

Universal Bracket



Part No.	Length	S/S	2/SP	C/P	Description	
2500-1001-11R	14”	30”-60”			VFE Universal Bracket 14”	
2500-1001-9L	14”	30”-60”			VFE Universal Bracket 14”	
2500-1001-2L/R	6”		30”-72”		VFE Universal Bracket 6”	
2500-1001-1L	5 1/2”			30”-32”	VFE Universal Bracket 5 1/2”	
2500-1001-3L	7”			33”-35”	VFE Universal Bracket 7”	
2500-1001-4L	8 1/2”			36”-38”	VFE Universal Bracket 8 1/2”	
2500-1001-5L	10”			39”-62”	VFE Universal Bracket 10”	

Miscellaneous Parts

2500-3068-1



Description
VFE C/P Upper Belt Bracket

2000-3080



Description
VFE Tension Block

2500-3084



Description
VFE Clutch Cam

2500-3085



Description
Linear Clutch Linkage Arm

2500-3075-1



Description
VFE 24 VDC, 10 AMP, 250 VAC Relay

2500-3076



Description
VFE Enable Chip

2500-5019



Description
VFE Hall Effect Sensor Assembly

2500-2020



Description
VFE Encoder For 1/2 HP AC Motor

2500-3070



Description
VFE Fuse 4-AMP Slow Blow

2500-2017



Description
VFE Step Up/Step Down Transformer, 500 VA 110/220 VAC

2500-3069



Description
VFE Linear Mechanical Manual

GAL Canada Operator

Car Door Hanger Assemblies

Type "I" - Drive Arm Pivot Bracket

Part No.	Description
CDH23-0001L/R	Hanger, I-Single Speed Round Car With Gate Switch Mounting Angle * Drive Arm Pivot Bracket With Special Sheaves *
CDH23-0002N	Hanger, I-Center Parting Round Car With Gate Switch Mounting Angle * Drive Arm Pivot Bracket With Special Sheaves *

Car Door Header Assemblies - 909 Series

Track and Hanger Assemblies

Single Speed - Ungeared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	S/S	Header	Track Length	
909-1080-24L/R	22"-24"	16"	46"	
909-1080-26L/R	25"-27"	16"	52"	
909-1080-30L/R	28"-30"	16"	58"	
909-1080-32L/R	31"-33"	16"	64"	
909-1080-36L/R	34"-36"	16"	70"	
909-1080-38L/R	37"-39"	16"	76"	
909-1080-42L/R	40"-42"	16"	82"	
909-1080-44L/R	43"-45"	16"	88"	
909-1080-48L/R	46"-48"	16"	94"	
909-1080-SPL/R	22"-200"	16"	Varies	
909-1086-24L/R	22"-24"	22"	46"	
909-1086-26L/R	25"-27"	22"	52"	
909-1086-30L/R	28"-30"	22"	58"	
909-1086-32L/R	31"-33"	22"	64"	
909-1086-36L/R	34"-36"	22"	70"	
909-1086-38L/R	37"-39"	22"	76"	
909-1086-42L/R	40"-42"	22"	82"	
909-1086-44L/R	43"-45"	22"	88"	
909-1086-48L/R	46"-48"	22"	94"	
909-1086-SPL/R	22"-200"	22"	Varies	
909-1090-24L/R	22"-24"	28"	46"	
909-1090-26L/R	25"-27"	28"	52"	
909-1090-30L/R	28"-30"	28"	58"	
909-1090-32L/R	31"-33"	28"	64"	
909-1090-36L/R	34"-36"	28"	70"	

Part No.	S/S	Header	Track Length	
909-1090-38L/R	37"-39"	28"	76"	
909-1090-42L/R	40"-42"	28"	82"	
909-1090-44L/R	43"-45"	28"	88"	
909-1090-48L/R	46"-48"	28"	94"	
909-1090-SPL/R	22"-200"	28"	Varies	
909-1096-24L/R	22"-24"	34"	46"	
909-1096-26L/R	25"-27"	34"	52"	
909-1096-30L/R	28"-30"	34"	58"	
909-1096-32L/R	31"-33"	34"	64"	
909-1096-36L/R	34"-36"	34"	70"	
909-1096-38L/R	37"-39"	34"	76"	
909-1096-42L/R	40"-42"	34"	82"	
909-1096-44L/R	43"-45"	34"	88"	
909-1096-48L/R	46"-48"	34"	94"	
909-1096-SPL/R	22"-200"	34"	Varies	
909-1100-24L/R	22"-24"	40"	46"	
909-1100-26L/R	25"-27"	40"	52"	
909-1100-30L/R	28"-30"	40"	58"	
909-1100-32L/R	31"-33"	40"	64"	
909-1100-36L/R	34"-36"	40"	70"	
909-1100-38L/R	37"-39"	40"	76"	
909-1100-42L/R	40"-42"	40"	82"	
909-1100-44L/R	43"-45"	40"	88"	
909-1100-48L/R	46"-48"	40"	94"	
909-1100-SPL/R	22"-200"	40"	Varies	

Two Speed - Geared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	2/SP	Header	Track Length
909-2081-30L/R	30"	16"	46"
909-2081-32L/R	31"-32"	16"	48"
909-2081-34L/R	33"-34"	16"	52"
909-2081-36L/R	35"-36"	16"	54"
909-2081-38L/R	37"-38"	16"	58"
909-2081-40L/R	39"-40"	16"	60"
909-2081-42L/R	41"-42"	16"	64"
909-2081-44L/R	43"-44"	16"	66"
909-2081-46L/R	45"-46"	16"	70"
909-2081-48L/R	47"-48"	16"	72"
909-2081-52L/R	49"-52"	16"	76"
909-2081-56L/R	53"-56"	16"	82"
909-2081-58L/R	57"-60"	16"	88"
909-2081-62L/R	61"-64"	16"	94"
909-2081-66L/R	65"-68"	16"	100"

Part No.	2/SP	Header	Track Length
909-2081-70L/R	69"-72"	16"	106"
909-2087-30L/R	30"	22"	46"
909-2087-32L/R	31"-32"	22"	48"
909-2087-34L/R	33"-34"	22"	52"
909-2087-36L/R	35"-36"	22"	54"
909-2087-38L/R	37"-38"	22"	58"
909-2087-40L/R	39"-40"	22"	60"
909-2087-42L/R	41"-42"	22"	64"
909-2087-44L/R	43"-44"	22"	66"
909-2087-46L/R	45"-46"	22"	70"
909-2087-48L/R	47"-48"	22"	72"
909-2087-52L/R	49"-52"	22"	76"
909-2087-56L/R	53"-56"	22"	82"
909-2087-58L/R	57"-60"	22"	88"
909-2087-62L/R	61"-64"	22"	94"

DOOR EQUIPMENT

Car Door Header Assemblies - 909 Series

Track and Hanger Assemblies

Two Speed - Geared

Part No.	2/SP	Header	Track Length
909-2087-66L/R	65”-68”	22”	100”
909-2087-70L/R	69”-72”	22”	106”
909-2091-30L/R	30”	28”	46”
909-2091-32L/R	31”-32”	28”	48”
909-2091-34L/R	33”-34”	28”	52”
909-2091-36L/R	35”-36”	28”	54”
909-2091-38L/R	37”-38”	28”	58”
909-2091-40L/R	39”-40”	28”	60”
909-2091-42L/R	41”-42”	28”	64”
909-2091-44L/R	43”-44”	28”	66”
909-2091-46L/R	45”-46”	28”	70”
909-2091-48L/R	47”-48”	28”	72”
909-2091-52L/R	49”-52”	28”	76”
909-2091-56L/R	53”-56”	28”	82”
909-2091-58L/R	57”-60”	28”	88”
909-2091-62L/R	61”-64”	28”	94”
909-2091-66L/R	65”-68”	28”	100”
909-2091-70L/R	69”-72”	28”	106”
909-2097-30L/R	30”	28”	46”
909-2097-32L/R	31”-32”	28”	48”
909-2097-34L/R	33”-34”	28”	52”
909-2097-36L/R	35”-36”	28”	54”
909-2097-38L/R	37”-38”	28”	58”
909-2097-40L/R	39”-40”	28”	60”
909-2097-42L/R	41”-42”	28”	64”

Part No.	2/SP	Header	Track Length
909-2097-44L/R	43”-44”	28”	66”
909-2097-46L/R	45”-46”	28”	70”
909-2097-48L/R	47”-48”	28”	72”
909-2097-52L/R	49”-52”	28”	76”
909-2097-56L/R	53”-56”	28”	82”
909-2097-58L/R	57”-60”	28”	88”
909-2097-62L/R	61”-64”	28”	94”
909-2097-66L/R	65”-68”	28”	100”
909-2097-70L/R	69”-72”	28”	106”
909-2111-30L/R	30”	40”	46”
909-2111-32L/R	31”-32”	40”	48”
909-2111-34L/R	33”-34”	40”	52”
909-2111-36L/R	35”-36”	40”	54”
909-2111-38L/R	37”-38”	40”	58”
909-2111-40L/R	39”-40”	40”	60”
909-2111-42L/R	41”-42”	40”	64”
909-2111-44L/R	43”-44”	40”	66”
909-2111-46L/R	45”-46”	40”	70”
909-2111-48L/R	47”-48”	40”	72”
909-2111-52L/R	49”-52”	40”	76”
909-2111-56L/R	53”-56”	40”	82”
909-2111-58L/R	57”-60”	40”	88”
909-2111-62L/R	61”-64”	40”	94”
909-2111-66L/R	65”-68”	40”	100”
909-2111-70L/R	69”-72”	40”	106”

Two Speed - Ungeared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	2/SP	Header	Track Length
909-2080-30L/R	30”	16”	46”
909-2080-32L/R	31”-32”	16”	48”
909-2080-34L/R	33”-34”	16”	52”
909-2080-36L/R	35”-36”	16”	54”
909-2080-38L/R	37”-38”	16”	58”
909-2080-40L/R	39”-40”	16”	60”
909-2080-42L/R	41”-42”	16”	64”
909-2080-44L/R	43”-44”	16”	66”
909-2080-46L/R	45”-46”	16”	70”
909-2080-48L/R	47”-48”	16”	72”
909-2080-52L/R	49”-52”	16”	76”
909-2080-56L/R	53”-56”	16”	82”
909-2080-58L/R	57”-60”	16”	88”
909-2080-62L/R	61”-64”	16”	94”
909-2080-66L/R	65”-68”	16”	100”
909-2080-70L/R	69”-72”	16”	106”
909-2086-30L/R	30”	22”	46”
909-2086-32L/R	31”-32”	22”	48”
909-2086-34L/R	33”-34”	22”	52”
909-2086-36L/R	35”-36”	22”	54”
909-2086-38L/R	37”-38”	22”	58”
909-2086-40L/R	39”-40”	22”	60”
909-2086-42L/R	41”-42”	22”	64”
909-2086-44L/R	43”-44”	22”	66”
909-2086-46L/R	45”-46”	22”	70”

Part No.	2/SP	Header	Track Length
909-2086-48L/R	47”-48”	22”	72”
909-2086-52L/R	49”-52”	22”	76”
909-2086-56L/R	53”-56”	22”	82”
909-2086-58L/R	57”-60”	22”	88”
909-2086-62L/R	61”-64”	22”	94”
909-2086-66L/R	65”-68”	22”	100”
909-2086-70L/R	69”-72”	22”	106”
909-2090-30L/R	30”	28”	46”

Car Door Header Assemblies - 909 Series

Track and Hanger Assemblies

Two Speed - Ungeared

Part No.	2/SP	Header	Track Length
909-2090-36L/R	35”-36”	28”	54”
909-2090-38L/R	37”-38”	28”	58”
909-2090-40L/R	39”-40”	28”	60”
909-2090-42L/R	41”-42”	28”	64”
909-2090-44L/R	43”-44”	28”	66”
909-2090-46L/R	45”-46”	28”	70”
909-2090-48L/R	47”-48”	28”	72”
909-2090-52L/R	49”-52”	28”	76”
909-2090-56L/R	53”-56”	28”	82”
909-2090-58L/R	57”-60”	28”	88”
909-2090-62L/R	61”-64”	28”	94”
909-2090-66L/R	65”-68”	28”	100”
909-2090-70L/R	69”-72”	28”	106”
909-2090-30L/R	30”	28”	46”
909-2096-32L/R	31”-32”	28”	48”
909-2096-34L/R	33”-34”	28”	52”
909-2096-36L/R	35”-36”	28”	54”
909-2096-38L/R	37”-38”	28”	58”
909-2096-40L/R	39”-40”	28”	60”
909-2096-42L/R	41”-42”	28”	64”
909-2096-44L/R	43”-44”	28”	66”
909-2096-46L/R	45”-46”	28”	70”
909-2096-48L/R	47”-48”	28”	72”

Part No.	2/SP	Header	Track Length
909-2096-52L/R	49”-52”	28”	76”
909-2096-56L/R	53”-56”	28”	82”
909-2096-58L/R	57”-60”	28”	88”
909-2096-62L/R	61”-64”	28”	94”
909-2096-66L/R	65”-68”	28”	100”
909-2096-70L/R	69”-72”	28”	106”
909-2110-30L/R	30”	40”	46”
909-2110-32L/R	31”-32”	40”	48”
909-2110-34L/R	33”-34”	40”	52”
909-2110-36L/R	35”-36”	40”	54”
909-2110-38L/R	37”-38”	40”	58”
909-2110-40L/R	39”-40”	40”	60”
909-2110-42L/R	41”-42”	40”	64”
909-2110-44L/R	43”-44”	40”	66”
909-2110-46L/R	45”-46”	40”	70”
909-2110-48L/R	47”-48”	40”	72”
909-2110-52L/R	49”-52”	40”	76”
909-2110-56L/R	53”-56”	40”	82”
909-2110-58L/R	57”-60”	40”	88”
909-2110-62L/R	61”-64”	40”	94”
909-2110-66L/R	65”-68”	40”	100”
909-2110-70L/R	69”-72”	40”	106”

Center Parting - Ungeared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	C/P	Header	Track Length	
909-3080-30	30”-32”	16”	64”	
909-3080-34	33”-35”	16”	70”	
909-3080-38	36”-38”	16”	76”	
909-3080-40	39”-41”	16”	82”	
909-3080-42	42”-44”	16”	88”	
909-3080-46	45”-47”	16”	94”	
909-3080-48	48”-50”	16”	100”	
909-3080-52	51”-53”	16”	106”	
909-3080-54	54”-56”	16”	112”	
909-3080-SP	30”-200”	16”	Varies	
909-3086-30	30”-32”	22”	64”	
909-3086-34	33”-35”	22”	70”	
909-3086-38	36”-38”	22”	76”	
909-3086-40	39”-41”	22”	82”	
909-3086-42	42”-44”	22”	88”	
909-3086-46	45”-47”	22”	94”	
909-3086-48	48”-50”	22”	100”	
909-3086-52	51”-53”	22”	106”	
909-3086-54	54”-56”	22”	112”	
909-3086-SP	30”-200”	22”	Varies	
909-3090-30	30”-32”	28”	64”	
909-3090-34	33”-35”	28”	70”	
909-3090-38	36”-38”	28”	76”	
909-3090-40	39”-41”	28”	82”	
909-3090-42	42”-44”	28”	88”	

Part No.	C/P	Header	Track Length	
909-3090-46	45”-47”	28”	94”	
909-3090-48	48”-50”	28”	100”	
909-3090-52	51”-53”	28”	106”	
909-3090-54	54”-56”	28”	112”	
909-3090-SP	30”-200”	28”	Varies	
909-3096-30	30”-32”	34”	64”	
909-3096-34	33”-35”	34”	70”	
909-3096-38	36”-38”	34”	76”	
909-3096-40	39”-41”	34”	82”	
909-3096-42	42”-44”	34”	88”	
909-3096-46	45”-47”	34”	94”	
909-3096-48	48”-50”	34”	100”	
909-3096-52	51”-53”	34”	106”	
909-3096-54	54”-56”	34”	112”	
909-3096-SP	30”-200”	34”	Varies	
909-3110-30	30”-32”	40”	64”	
909-3110-34	33”-35”	40”	70”	
909-3110-38	36”-38”	40”	76”	
909-3110-40	39”-41”	40”	82”	
909-3110-42	42”-44”	40”	88”	
909-3110-46	45”-47”	40”	94”	
909-3110-48	48”-50”	40”	100”	
909-3110-52	51”-53”	40”	106”	
909-3110-54	54”-56”	40”	112”	
909-3110-SP	30”-200”	40”	Varies	

DOOR EQUIPMENT

Hall Door Track Assemblies - 909 Series

Hall Door Track and Hanger Assemblies

Single Speed - Ungeared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	S/S	Track Length	
909-7124L/R	22”-34”	46”	
909-7127L/R	25”-27”	52”	
909-7130L/R	28”-30”	58”	
909-7133L/R	31”-33”	64”	
909-7136L/R	34”-36”	70”	

Part No.	S/S	Track Length	
909-7139L/R	37”-39”	76”	
909-7142L/R	40”-42”	82”	
909-7145L/R	43”-45”	88”	
909-7148L/R	46”-48”	94”	

Two Speed - Geared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	2/SP	Track Length	
909-7230L-G	30”	46”	
909-7230R-G	30”	46”	
909-7232L-G	31”-32”	48”	
909-7232R-G	31”-32”	48”	
909-7234L-G	33”-34”	52”	
909-7234R-G	33”-34”	52”	
909-7236L-G	35”-36”	54”	
909-7236R-G	35”-36”	54”	
909-7238L-G	37”-38”	58”	
909-7238R-G	37”-38”	58”	

Part No.	2/SP	Track Length	
909-7240L-G	39”-40”	60”	
909-7240R-G	39”-40”	60”	
909-7242L-G	41”-42”	64”	
909-7242R-G	41”-42”	64”	
909-7244L-G	43”-44”	66”	
909-7244R-G	43”-44”	66”	
909-7246L-G	45”-46”	70”	
909-7246R-G	45”-46”	70”	
909-7248L-G	47”-48”	72”	
909-7248R-G	47”-48”	72”	

Two Speed - Ungeared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	2/SP	Track Length	
909-7230L-NG	30”	46”	
909-7230R-NG	30”	46”	
909-7232L-NG	31”-32”	48”	
909-7232R-NG	31”-32”	48”	
909-7234L-NG	33”-34”	52”	
909-7234R-NG	33”-34”	52”	
909-7236L-NG	35”-36”	54”	
909-7236R-NG	35”-36”	54”	
909-7238L-NG	37”-38”	58”	
909-7238R-NG	37”-38”	58”	

Part No.	2/SP	Track Length	
909-7240L-NG	39”-40”	60”	
909-7240R-NG	39”-40”	60”	
909-7242L-NG	41”-42”	64”	
909-7242R-NG	41”-42”	64”	
909-7244L-NG	43”-44”	66”	
909-7244R-NG	43”-44”	66”	
909-7246L-NG	45”-46”	70”	
909-7246R-NG	45”-46”	70”	
909-7248L-NG	47”-48”	72”	
909-7248R-NG	47”-48”	72”	

Center Parting - Geared

Please refer to the G.A.L. Car & Hatch Hanger Isometric Drawings on page 141-151 for details.

Part No.	C/P	Track Length	
909-7332	30”-32”	64”	
909-7335	33”-35”	70”	
909-7338	36”-38”	76”	
909-7341	39”-41”	82”	
909-7344	42”-44”	88”	

Part No.	C/P	Track Length	
909-7347	45”-47”	94”	
909-7350	48”-50”	100”	
909-7356	51”-56”	106”	
909-7359	57”-59”	112”	

Door Protection - 906 Series

PANA-40

Part No.	Voltages	Nudging	Plug and Play	Light Indicators	3D Protection	Description	
906-2033	120 VAC	N	N	N	N	PANA-40 Controller MK-1	
906-2033-2	120 VAC	N	N	N	Y	PANA-40 Controller MK-1 3D	
906-2034	120 VAC	Y	N	N	N	PANA-40 Controller MK-2	
906-2034-2	120 VAC	Y	N	N	Y	PANA-40 Controller MK-2 3D	
906-3001	120 VAC	N	N	N	N	PANA-40 Plus MK-1	
906-3008-2	120 VAC	N	N	N	Y	PANA-40 Plus MK-1 3D	
906-3008-4	120 VAC	N	N	N	Y	PANA-40 Plus MK-1 3D Ultra Slim	
906-3001-2	120 VAC	N	N	N	N	PANA-40 Plus MK-1 Ultra Slim	
906-3002	120 VAC	Y	N	N	N	PANA-40 Plus MK-2	
906-3008	120 VAC	Y	N	N	Y	PANA-40 Plus MK-2 3D	
906-3008-7	120 VAC	Y	N	N	Y	PANA-40 Plus MK-2 3D Ultra Slim	
906-3002-2	120 VAC	Y	N	N	N	PANA-40 Plus MK-2 Ultra Slim	
906-2033-1	230 VAC	N	N	N	N	PANA-40 Controller MK-1	
906-2033-3	230 VAC	N	N	N	Y	PANA-40 Controller MK-1 3D	
906-2034-1	230 VAC	Y	N	N	N	PANA-40 Controller MK-2	
906-2034-3	230 VAC	Y	N	N	Y	PANA-40 Controller MK-2 3D	
906-3001-1	230 VAC	N	N	N	N	PANA-40 Plus MK-1	
906-3008-3	230 VAC	N	N	N	Y	PANA-40 Plus MK-1 3D	
906-3008-5	230 VAC	N	N	N	Y	PANA-40 Plus MK-1 3D Ultra Slim	
906-3001-3	230 VAC	N	N	N	N	PANA-40 Plus MK-1 Ultra Slim	
906-3002-1	230 VAC	Y	N	N	N	PANA-40 Plus MK-2	
906-3008-6	230 VAC	Y	N	N	Y	PANA-40 Plus MK-2 3D	
906-3008-8	230 VAC	Y	N	N	Y	PANA-40 Plus MK-2 3D Ultra Slim	
906-3002-3	230 VAC	Y	N	N	N	PANA-40 Plus MK-2 Ultra Slim	

Part No.	Plug and Play	Light Indicators	3D Protection	Description	
906-2030	N/A	N/A	N/A	PANA-40 Plus (Extension Cable Only)	
902-2023-1	N/A	N/A	N/A	PANA-40 Plus 3D Mounting Blocks (1 Detector)	
906-2022	N/A	N/A	N/A	PANA-40 Plus Lends RX/TX	
906-2023	N/A	N/A	N/A	PANA-40 Plus Mounting Blocks (1 Detector)	
906-2032	N	N	N	PANA-40 Plus RX (Detector Only)	
906-2046	N	N	Y	PANA-40 Plus RX 3D (Detector Only)	
906-2038-1	N	N	Y	PANA-40 Plus RX 3D Ultra Slim (Detector Only)	
906-2038	N	N	N	PANA-40 Plus RX Ultra Slim (Detector Only)	
906-2031	N	N	N	PANA-40 Plus TX (Detector Only)	
906-2045	N	N	Y	PANA-40 Plus TX 3D (Detector Only)	
906-2037-1	N	N	Y	PANA-40 Plus TX 3D Ultra Slim (Detector Only)	
906-2037	N	N	N	PANA-40 Plus TX Ultra Slim (Detector Only)	
906-2069	N/A	N/A	N/A	PANA-40 Plus Ultra Slim Lends RX/TX	

PANACHROME

Part No.	Voltages	Nudging	Plug and Play	Light Indicators	3D Protection	Description	
906-3015	120/230 VAC	Y	N	Y	Y	PANACHROME 3D	
906-3015-3	120/230 VAC	Y	N	Y	Y	PANACHROME (Controller Only)	
906-3015-4	N/A	Y	N	Y	Y	PANACHROME Extension Cable	
906-2080	N/A	N/A	N/A	N/A	N/A	PANACHROME Lends RX/TX	
906-3015-2	N/A	Y	N	Y	Y	PANACHROME RX (Detector Only)	
906-3015-1	N/A	Y	N	Y	Y	PANACHROME TX (Detector Only)	

DOOR EQUIPMENT

Door Protection - 906 Series

Elite 640

Part No.	Voltages	Nudging	Plug and Play	Light Indicators	3D Protection	Description	
906-3012	120/230 VAC	N	Y	N	N	Elite 640 System	
906-3014	120/230 VAC	N	Y	N	N	Elite 640 (Power Supply Only)	
906-3013	N/A	N	Y	N	N	Elite 640 Detector Set TX/RX	
906-2081	N/A	N/A	N/A	N/A	N/A	Elite 640 Lends RX/TX	

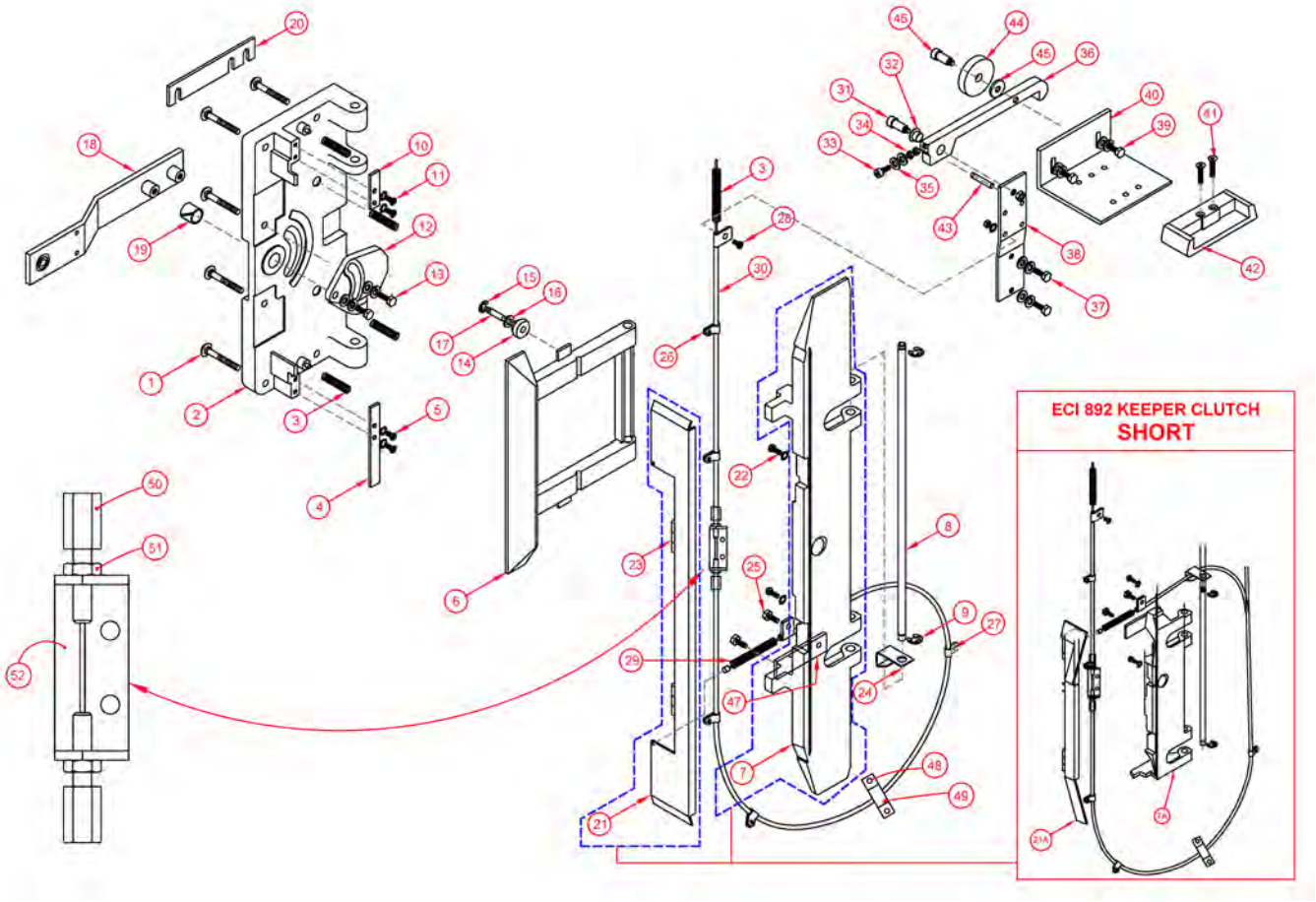
Elite Replacement Cable

Part No.	Voltages	Nudging	Plug and Play	Light Indicators	3D Protection	Description	
906-2070	N/A	N/A	N/A	N/A	N/A	Elite Replacement Cable TX	
906-2071	N/A	N/A	N/A	N/A	N/A	Elite Replacement Cable RX	

Clutch Isometric Drawing

892 Keeper Clutch

Standard & Short



DOOR EQUIPMENT

Clutch Isometric Drawing

892 Keeper Clutch

Standard & Short

Part No.	Item No	Description
892-2020	1	Bolt, Carriage 5/16-18 x 3/4
892-1001	2	Clutch Base
892-3001	1,2,7,8,9	Clutch Base Assembly
892-1015	3	Spring
892-1009	4	Stop Bar, Long
999-4003	5	Screw, Slotted Round Head 10-32 x 5/8, LW
892-3018	4,5	Stop Bar Assembly, Long
892-3004	6,14 to 17	Short Release Bar
892-3025	7,21 to 23	Long Release Bar
892-3030	7A,21 to 23	Shorty Release Bar (For Short)
892-1006	8	Pivot Shaft
892-2000	9	Retaining Ring 7/16
892-3011	8,9	Pivot Shaft Assembly
892-1010	10	Stop Bar, Short
999-4003	11	Screw, Slotted Round Head 10-32 x 5/8, LW
892-3019	10 &11	Stop Bar Assembly, Short
892-1004	12	Aluminum Cam
999-6002	13	Bolt, Hex 5/16 x 1" FW/LW
892-3013	12,13	Aluminum Cam Assembly
892-1014	14	Nylon Cam Roller
892-2001	15	Retaining Ring 5/16
892-2005	16	Washer, Plain 21/64
892-1013	17	Cam Roller Pin
892-3007	14 to 17	Nylon Cam Roller Assembly
TABLE	18	Clutch Arm
892-3017	19	Nyliner
892-3016	20	Shim Package, 3 x 1/8, 9 x 1/16
892-1021	21	Retractable Vane
892-1021-1	21A	Retractable Vane (For Short)
999-4009	22	Screw, Slotted Round Head 10-32 x 3/8, LW
892-1022	23	Hinge
892-3020	21 to 23	Retractable Vane Assembly
892-1024	24	Cable Clamp
999-5000	25	Bolt, Hex 1/4-20 x 1/2

Part No.	Item No	Description
906-2017	26	Cable Clip
999-3008	27	Screw, Tapping 8-16 x 1/2, FW
999-4003	28	Screw, 10-32 x 5/8, Nut, LW
892-1015-1	29	Spring
892-1023	30	Cable
892-3021	24 to 30	Cable Assembly
999-7014	31	Shoulder Screw, 3/8 x 5/8, Nut 5/16-18
892-1030	32	Bearing, Plastic
892-1027	33	Cable Screw, Socket Head Cap 1/4-28 x 7/8
999-5013	34	Nut, Jam 1/4-28
999-2005	35	Washer, Plain 21/63 x 19/32
892-1025	36	Hook
892-3023	31 to 36	Hook Assembly
894-2020	37	Bolt, Hex 1/4-20 x 3/4, FW/LW
892-1026	38	Hook Bracket
892-3024	37,38	Hook Bracket Assembly
894-2020	39	Bolt, Hex 5/16-18 x 3/4", FW/LW
892-1029	40	Keeper Bracket
892-3027	39,40	Keeper Bracket Assembly
999-4010	41	Screw, C'Sunk Socket Head 10-24 x 1"
892-1028	42	Keeper
892-3026	41,42	Keeper Assembly
892-3029	31 to 42	Complete Keeper Assembly
892-2003	43	Spring Pin (3/16 Dia. x 3/4 Lg.)
892-2010	44	Keeper Hook Roller (Plastic) 1 1/2 Dia x 3/8"
999-5009	45	Plastic Washer 5/8 OD x 5/16 ID x 1/8"
999-5016	46	1/4-20 x 1/2" Shoulder Bolt
892-1039	47	Retainer Plate
999-3014	48	Hex Self Tap Screw
892-1034	49	Hold Down Bracket
892-1037	50	Barrel Nut
999-5022	51	Hex Jam Nut
892-1035	52	Barrel Nut Mount
892-3062	50,52	Adjuster Assembly

Clutches

Clutch Assemblies - 892 Series

Complete Clutch (Non Restrictor)

895



Part No.	Link Size	Pick Up Roller Gap	Min Running Clearance	S/S	2/SP	C/P	
892-3000	Varies	Varies	2 5/8"	29"-200"	29"-200"	29"-200"	
892-3005	5"	3 1/8"	3"			29"-33"	
892-3006	6"	3 1/8"	3"	30"-34"	30"-34"	34"-49"	
892-3008	8"	3 1/8"	3"	35"-39"	35"-39"	50"-54"	
892-3010	10"	3 1/8"	3"	28"-29" 40"-44"	28"-29" 40"-44"		
892-3012	12"	3 1/8"	3"	45"-54"	45"-54"		

1000



Part No.	Link Size	Pick Up Roller Gap	Min Running Clearance	S/S	2/SP	C/P	
892-4000	Varies	Varies	2 5/8"	29"-200"	29"-200"	29"-200"	
892-4005	5"	3 1/8"	3"			29"-33"	
892-4006	6"	3 1/8"	3"	30"-34"	30"-34"	34"-49"	
892-4008	8"	3 1/8"	3"	35"-39"	35"-39"	50"-54"	
892-4010	10"	3 1/8"	3"	28"-29" 40"-44"	28"-29" 40"-44"		
892-4012	12"	3 1/8"	3"	45"-54"	45"-54"		

VFE 2500



Part No.	Link Size	Pick Up Roller Gap	Min Running Clearance	S/S	2/SP	C/P	
892-8000-1	Varies	Varies	2 5/8"	29"-200"	29"-200"	29"-200"	
892-8005-1	5"	3 1/8"	3"			29"-33"	
892-8006-1	6"	3 1/8"	3"	30"-34"	30"-34"	34"-49"	
892-8008-1	8"	3 1/8"	3"	35"-39"	35"-39"	50"-54"	
892-8010-1	10"	3 1/8"	3"	28"-29" 40"-44"	28"-29" 40"-44"		
892-8012-1	12"	3 1/8"	3"	54"-54"	54"-54"		

DOOR EQUIPMENT

Clutches

Clutch Assemblies - 892 Series

Keeper Clutch Assembly

895



Part No.	Link Size	Pick Up Roller Gap	Min Running Clearance	S/S	2/SP	C/P	
892-5000	Varies	Varies	2 5/8"	29"-200"	29"-200"	29"-200"	
892-5005	5"	3 1/8"	3"			29"-33"	
892-5006	6"	3 1/8"	3"	30"-34"	30"-34"	34"-49"	
892-5008	8"	3 1/8"	3"	35"-39"	35"-39"	50"-54"	
892-5010	10"	3 1/8"	3"	28"-29" 40"-44"	28"-29" 40"-44"		
892-5012	12"	3 1/8"	3"	45"-54"	45"-54"		

1000



Part No.	Link Size	Pick Up Roller Gap	Min Running Clearance	S/S	2/SP	C/P	
892-6000	Varies	Varies	2 5/8"	29"-200"	29"-200"		
892-6005	5"	3 1/8"	3"			29"-33"	
892-6006	6"	3 1/8"	3"	30"-34"	30"-34"	34"-49"	
892-6008	8"	3 1/8"	3"	35"-39"	35"-39"	50"-54"	
892-6008	Varies	Varies	2 5/8"			29"-200"	
892-6010	10"	3 1/8"	3"	28"-29" 40"-44"	28"-29" 40"-44"		
892-6012	12"	3 1/8"	3"	45"-54"	45"-54"		

VFE 2500



Part No.	Link Size	Pick Up Roller Gap	Min Running Clearance	S/S	2/SP	C/P	
892-8000	Varies	Varies	2 5/8"	29"-200"	29"-200"	29"-200"	
892-8005	5"	3 1/8"	3"			29"-33"	
892-8006	6"	3 1/8"	3"	30"-34"	30"-34"	34"-49"	
892-8008	8"	3 1/8"	3"	35"-39"	35"-39"	50"-54"	
892-8010	10"	3 1/8"	3"	28"-29" 40"-44"	28"-29" 40"-44"		
892-8012	12"	3 1/8"	3"	45"-54"	45"-54"		

Keeper Clutch Assembly (Short Clutch)

1000 or VFE 2500



Part No.	Link Size	Pick Up Roller Gap	Min Running Clearance	S/S	2/SP	C/P	
892-7000	Varies	Varies	2 5/8"	29"-200"	29"-200"	29"-200"	
892-7005	5"	3 1/8"	3"			29"-33"	
892-7006	6"	3 1/8"	3"	30"-34"	30"-34"	34"-49"	
892-7008	8"	3 1/8"	3"	35"-39"	35"-39"	50"-54"	
892-7010	10"	3 1/8"	3"	28"-29" 40"-44"	28"-29" 40"-44"		
892-7012	12"	3 1/8"	3"	45"-54"	45"-54"		

Clutches

Clutch Parts - 892 Series

Hardware

Clutch Arm Assembly



Part No.	Where Used	Link Size	
892-3015-5	ECI 895	5”	
892-3015-6	ECI 895	6”	
892-3015-10	ECI 895	10”	
892-3015-12	ECI 895	12”	
892-3015-14	ECI 895	14”	
892-4015-5	ECI 1000	5”	
892-4015-6	ECI 1000	6”	
892-4015-8	ECI 1000	8”	
892-4015-10	ECI 1000	10”	

Part No.	Where Used	Link Size	
892-4015-12	ECI 1000	12”	
892-4015-14	ECI 1000	14”	
892-3040-5	VFE 2500-HH	5”	
892-3040-6	VFE 2500-HH	6”	
892-3040-10	VFE 2500-HH	10”	
892-3040-12	VFE 2500-HH	12”	
892-3040-14	VFE 2500-HH	14”	
892-3015-8	ECI 895, VFE 2500-HL, VFE 2500-LL	8”	
892-3040-8	ECI 895, VFE 2500-HL, VFE 2500-LL	8”	

Release Bar (Short)



Part No.	Pick Up Roller Gap	
892-3004-1	1 5/8”	
892-3004	3 1/8”	
892-3004-2	4 1/8”	
892-3004-3*	Varies	

892-3001



Clutch Base Assembly

892-3007



Nylon Cam Roller Assembly

892-3013



Aluminum Cam Assembly

892-3021



Cable Assembly

892-3023



Complete Hook & Bkt. Assembly

892-3025



Long Release Bar C/W Vane Assembly

892-3026



Complete Keeper Assembly

892-3029



Hook/Bkt. Assembly & Keeper Assembly

DOOR EQUIPMENT

Clutches

Clutch Parts - 892 Series

Hardware

892-2020



Bolt, Carriage, 6X 5/16-18 X 2", Lock Washers, Flat Washers & Nuts

892-1023



Clutch Cable

892-1015



Clutch Spring (1 Pcs)

892-3003



Clutch Spring Set (4 Pcs)

892-3017



Nyliner

892-2000



Retaining Ring - Re-43

892-3016



Shim Package, 892 Clutch

2500-2003



Precision Bearing

1000-2003



Unground Bearing

895-2003



Unground Bearing

892-3020



Vane Assembly

Two Speed Linkage - 898 Series



G.A.L. door closers are distributed through GAL Canada. Refer to door closer section under G.A.L. to find the right part. All two speed linkage work with harmonic operator.

8 Cab Height

Part No.	2/SP		Part No.	2/SP		Part No.	2/SP	
898-4000-1L/R	32”		**898-4000-19L/R**	49”		**898-4000-35L/R**	64”	
898-4000-2L/R	33”		**898-4000-20L**	50”		**898-4000-36L/R**	65”	
898-4000-3L/R	34”		**898-4000-21L/R**	51”		**898-4000-37L/R**	66”	
898-4000-5L/R	35”		**898-4000-22L/R**	52”		**898-4000-38L/R**	67”	
898-4000-6L/R	36”		**898-4000-23L/R**	53”		**898-4000-39L/R**	68”	
898-4000-7L/R	37”		**898-4000-24L/R**	54”		**898-4000-40L/R**	69”	
898-4000-8L/R	38”		**898-4000-25L**	55”		**898-4000-41L/R**	70”	
898-4000-9L/R	39”		**898-4000-26R**	55”		**898-4000-42L/R**	71”	
898-4000-10L/R	40”		**898-4000-27L/R**	56”		**898-4000-43L/R**	72”	
898-4000-11L/R	41”		**898-4000-28L/R**	57”		**898-4000-44L/R**	73”	
898-4000-12L/R	42”		**898-4000-29L/R**	58”		**898-4000-45L/R**	74”	
898-4000-13L/R	43”		**898-4000-30L/R**	59”		**898-4000-46L/R**	75”	
898-4000-14L/R	44”		**898-4000-31L/R**	60”		**898-4000-47L/R**	76”	
898-4000-15L/R	45”		**898-4000-32L/R**	61”		**898-4000-48L**	77”	
898-4000-16L/R	46”		**898-4000-33L/R**	62”		**898-4000-49R**	77”	
898-4000-17L/R	47”		**898-4000-34L/R**	63”		**898-4000-50L/R**	78”	
898-4000-18L/R	48”							

8 6” Cab Height

Part No.	2/SP		Part No.	2/SP		Part No.	2/SP	
898-4001-1L/R	32”		**898-4001-18L/R**	48”		**898-4001-35L/R**	64”	
898-4001-2L/R	33”		**898-4001-19L/R**	49”		**898-4001-36L/R**	65”	
898-4001-3L/R	34”		**898-4001-20L/R**	50”		**898-4001-37L/R**	66”	
898-4001-4R	34”		**898-4001-21L/R**	51”		**898-4001-38L/R**	67”	
898-4001-5L/R	35”		**898-4001-22L/R**	52”		**898-4001-39L/R**	68”	
898-4001-6L/R	36”		**898-4001-23L/R**	53”		**898-4001-40L/R**	69”	
898-4001-7L/R	37”		**898-4001-24L/R**	54”		**898-4001-41L/R**	70”	
898-4001-8L/R	38”		**898-4001-25L**	55”		**898-4001-42L/R**	71”	
898-4001-9L/R	39”		**898-4001-26R**	55”		**898-4001-43L/R**	72”	
898-4001-10L/R	40”		**898-4001-27L/R**	56”		**898-4001-44L/R**	73”	
898-4001-11L/R	41”		**898-4001-28L/R**	57”		**898-4001-45L/R**	74”	
898-4001-12L/R	42”		**898-4001-29L/R**	58”		**898-4001-46L/R**	75”	
898-4001-13L/R	43”		**898-4001-30L**	59”		**898-4001-47L/R**	76”	
898-4001-14L/R	44”		**898-4001-31L/R**	60”		**898-4001-48L**	77”	
898-4001-15L/R	45”		**898-4001-32L/R**	61”		**898-4001-49R**	77”	
898-4001-16L/R	46”		**898-4001-33L/R**	62”		**898-4001-50L/R**	78”	
898-4001-17L/R	47”		**898-4001-34L/R**	63”				

DOOR EQUIPMENT

Two Speed Linkage - 898 Series

9 Cab Height

Part No.	2/SP		Part No.	2/SP		Part No.	2/SP	
898-4002-1L/R	32”		898-4002-18L/R	48”		898-4002-35L/R	64”	
898-4002-2L/R	33”		898-4002-19L/R	49”		898-4002-36L/R	65”	
898-4002-3L/R	34”		898-4002-20L/R	50”		898-4002-37L/R	66”	
898-4002-4R	34”		898-4002-21L/R	51”		898-4002-38L/R	67”	
898-4002-5L/R	35”		898-4002-22L/R	52”		898-4002-39L/R	68”	
898-4002-6L/R	36”		898-4002-23L/R	53”		898-4002-40L/R	69”	
898-4002-7L/R	37”		898-4002-24L/R	54”		898-4002-41L/R	70”	
898-4002-8L/R	38”		898-4002-25L	55”		898-4002-42L/R	71”	
898-4002-9L/R	39”		898-4002-26R	55”		898-4002-43L/R	72”	
898-4002-10L/R	40”		898-4002-27L/R	56”		898-4002-44L/R	73”	
898-4002-11L/R	41”		898-4002-28L/R	57”		898-4002-45L/R	74”	
898-4002-12L/R	42”		898-4002-29L/R	58”		898-4002-46L/R	75”	
898-4002-13L/R	43”		898-4002-30L	59”		898-4002-47L/R	76”	
898-4002-14L/R	44”		898-4002-31L/R	60”		898-4002-48L	77”	
898-4002-15L/R	45”		898-4002-32L/R	61”		898-4002-49R	77”	
898-4002-16L/R	46”		898-4002-33L/R	62”		898-4002-50L/R	78”	
898-4002-17L/R	47”		898-4002-34L/R	63”				

9 6” Cab Height

Part No.	2/SP		Part No.	2/SP		Part No.	2/SP	
898-4003-1L/R	32”		898-4003-17L/R	47”		898-4003-34L/R	63”	
898-4003-2L/R	33”		898-4003-18L/R	48”		898-4003-35L/R	64”	
898-4003-3L/R	34”		898-4003-19L/R	49”		898-4003-36L/R	65”	
898-400-4R	34”		898-4003-20L/R	50”		898-4003-37L/R	66”	
898-4003-5L/R	35”		898-4003-21L/R	51”		898-4003-38L/R	67”	
898-4003-6L/R	36”		898-4003-22L/R	52”		898-4003-39L/R	68”	
898-4003-7L/R	37”		898-4003-23L/R	53”		898-4003-40L/R	69”	
898-4003-8L/R	38”		898-4003-24L/R	54”		898-4003-41L/R	70”	
898-4003-9L/R	39”		898-4003-25L	55”		898-4003-42L/R	71”	
898-400-10R	40”		898-4003-26R	55”		898-4003-43L/R	72”	
898-4003-10L	40”		898-4003-27L/R	56”		898-4003-44L/R	73”	
898-4003-11L/R	41”		898-4003-28L/R	57”		898-4003-45L/R	74”	
898-4003-12L/R	42”		898-4003-29L/R	58”		898-4003-46L/R	75”	
898-4003-13L/R	43”		898-4003-30L	59”		898-4003-47L/R	76”	
898-4003-14L/R	44”		898-4003-31L/R	60”		898-4003-48L	77”	
898-4003-15L/R	45”		898-4003-32L/R	61”		898-4003-49R	77”	
898-4003-16L/R	46”		898-4003-33L/R	62”		898-4003-50L/R	78”	

Two Speed Linkage - 898 Series

10 Cab Height

Part No.	2/SP	
898-4004-1L/R	32”	
898-4004-2L/R	33”	
898-4004-3L/R	34”	
898-4004-4R	34”	
898-4004-5L/R	35”	
898-4004-6L/R	36”	
898-4004-7L/R	37”	
898-4004-8L/R	38”	
898-4004-9L/R	39”	
898-4004-10L/R	40”	
898-4004-11L/R	41”	
898-4004-12L/R	42”	
898-4004-13L/R	43”	
898-4004-14L/R	44”	
898-4004-15L/R	45”	
898-4004-16L/R	46”	
898-4004-17L/R	47”	

Part No.	2/SP	
898-4004-18L/R	48”	
898-4004-19L/R	49”	
898-4004-20L/R	50”	
898-4004-21L/R	51”	
898-4004-22L/R	52”	
898-4004-23L/R	53”	
898-4004-24L/R	54”	
898-4004-25L	55”	
898-4004-26R	55”	
898-4004-27L/R	56”	
898-4004-28L/R	57”	
898-4004-29L/R	58”	
898-4004-30L	59”	
898-4004-31L/R	60”	
898-4004-32L/R	61”	
898-4004-33L/R	62”	
898-4004-34L/R	63”	

Part No.	2/SP	
898-4004-35L/R	64”	
898-4004-36L/R	65”	
898-4004-37L/R	66”	
898-4004-38L/R	67”	
898-4004-39L/R	68”	
898-4004-40L/R	69”	
898-4004-41L/R	70”	
898-4004-42L/R	71”	
898-4004-43L/R	72”	
898-4004-44L/R	73”	
898-4004-45L/R	74”	
898-4004-46L/R	75”	
898-4004-47L/R	76”	
898-4004-48L	77”	
898-4004-49R	77”	
898-4004-50L/R	78”	

Special Engineered

Note: Worksheets are required for special engineering purposes

Part No.	Cab Height	2/SP	
898-4000-SP	8’	30”-200”	
898-4001-SP	8’ 6”	30”-200”	
898-4002-SP	9’	30”-200”	

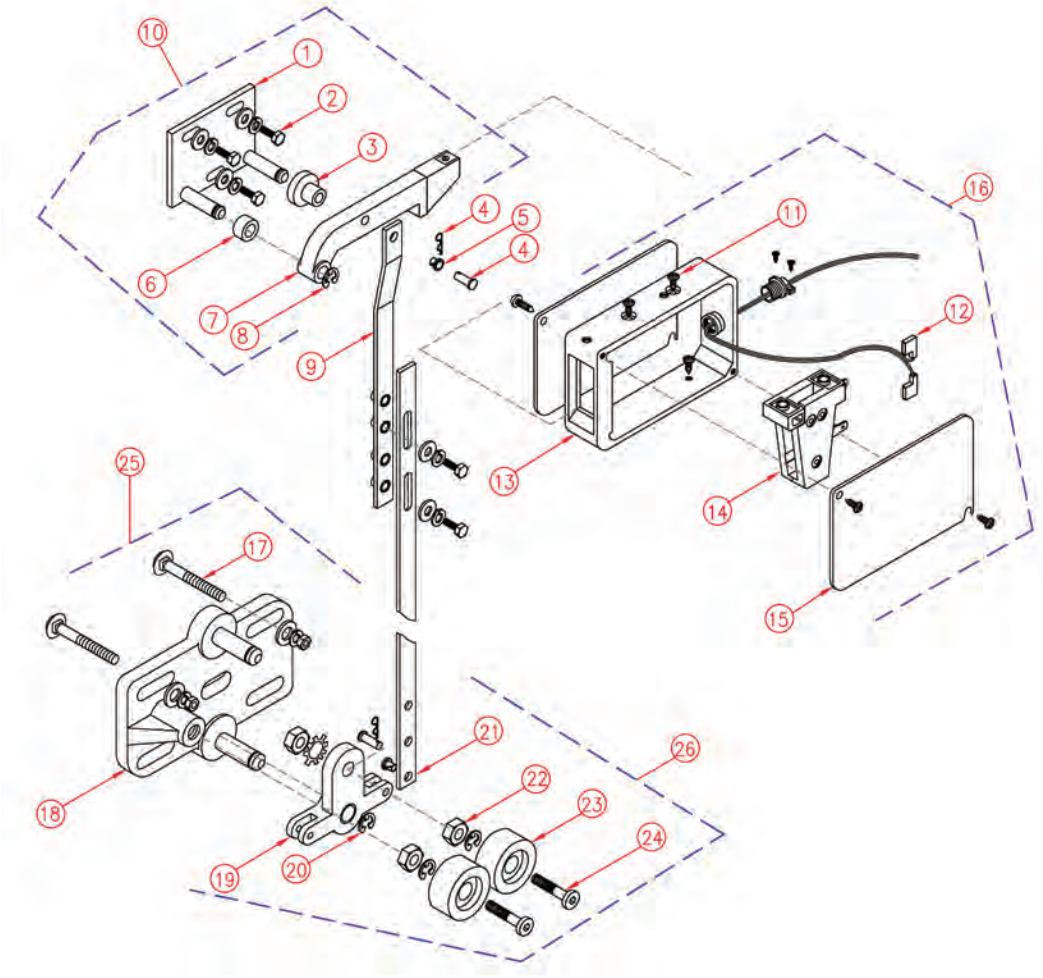
Part No.	Cab Height	2/SP	
898-4003-SP	9’ 6”	30”-200”	
898-4004-SP	10’	30”-200”	

DOOR EQUIPMENT

Interlock

Interlock Isometric Drawing

890 Interlock



Part No.	Item No	Description
890-3007	1	Beak Plate With Pins
890-3040	2	Beak Plate Fastener Package
890-3041	3	Rubber Beak Stop
890-3042	4	Hitch Pin & Clip
890-3043	5	4L2FF Nyliner
890-3012	6	Shaft Collar
890-3010	7	Beak
890-3011	8	C-Clip E-43
890-3009	9	Bent Linkage With Fasteners
890-3013	10	Beak Assembly- 1 To 8
890-3044	11	Switch Mtg. Screw Package
890-3003	12	Cable & Connector Set
890-3005	13	Interlock Housing
890-3004	14	Contact Housing

Part No.	Item No	Description
890-3002	15	Cover Plate With Screws
890-3006	16	Interlock Assembly
890-3045	17	Pick-Up Base Mtg. Screws
896-3021	18	Pick-Up Roller Base & Screws
896-3017	19	'T'-Section
896-3016	20	Retaining Ring Re-50
890-3014	21	Short Linkage 15-1/2"
890-3015	21	Long Linkage 27"
890-3046	22	1/2"-13 Hex. Jam Nut
896-3019	23	Pick-Up Roller
896-3047	24	Stem Screw With Nut
896-3022	25	Pick Roller Base Assembly- 17 To 24
896-3018	26	Complete 'T' Section 19 To 24

Heavy Duty Interlock Assemblies - 890 Series



Part No.	Linkage Size	Door Style	
890-3000-1L/R	15”	Side Slide, Two Speed, Center Parting	
890-3001-2L/R	27”	Side Slide, Two Speed, Center Parting	

Heavy Duty Interlock Parts - 890 Series

Beak Assembly and Parts

890-3013-L/R



Interlock Beak Assembly, Complete

890-3007



Beak Base C/W Pins

890-3007-1L/R



Beak Base Complete

890-2026-L/R



Beak Base Complete, Armor 4C

890-3011



Beak Base Spacer

890-3010



Replacement Beak Comes With Contact

890-3037



Beak Nose Assembly

890-3030



Beak Mounting Bar

890-2005



Beak Base “C” Clip

890-1009



Beak Base Bumper

890-2028



Beak Base Hardware Kit

896-3008



Beak Linkage Pin And Clip

DOOR EQUIPMENT

Heavy Duty Interlock Parts - 890 Series

Beak Assembly and Parts

890-3009



Beak Bent Linkage

Pick Up Roller Assembly and Parts

896-3022-L/R



Pick Up Roller Base Assembly, Complete

896-3018



Pick Up Roller "T" Section Assembly

896-3020



Pick Up Roller Assembly

896-3019



Pick Up Roller Only

896-3024



Pick Up Roller Base Hardware Kit

896-3016



Pick Up Roller Retaining Ring

896-2028



Pick Up Roller Mounting Plate

Heavy Duty Interlock Parts - 890 Series

Contact Kit and Parts

890-3021



Interlock Contact Kit

890-3004



Stationary Interlock Contact

890-3004-1



Stationary Interlock Contact (Braided Wire)

Bracket

890-2027



Interlock Bracket, 1 5/8”- 2 3/8”

890-3034



Interlock Bracket, 3 1/8” - 5”

890-3024



Interlock Bracket, NEL Style

890-3025



Track Interlock Bracket

Accessories

890-3002



Interlock Cover

890-3003



Interlock Housing Wire Set

890-3014



Interlock Linkage, 15”

890-3015



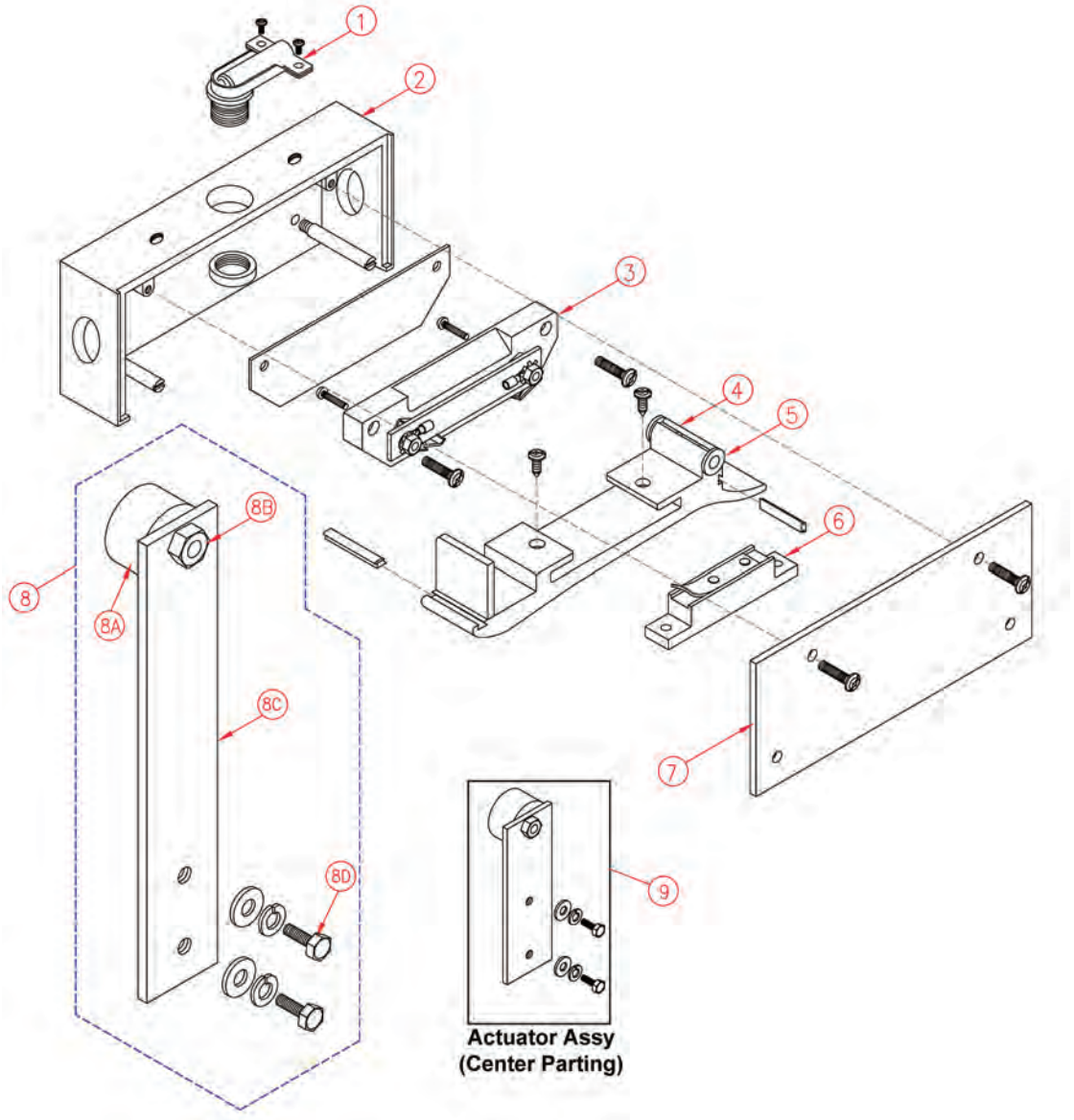
Interlock Linkage, 27”

DOOR EQUIPMENT

Gate Switch

Gate Switch Isometric Drawing

894 Gate Switch



Part No.	Item No	Description
895-7006	1	Elbow Connector
894-3002	2	Lock Body
894-3004	3	Contact Assembly
894-3006	4	Flipper Comes With Contact
894-3005	5	Nylon Bushings
894-3007	6	Flipper Contact
894-3003	7	Housing Cover

Part No.	Item No	Description
894-3008	8	Actuator Assembly SSL
896-1003	8A	Roller
999-7006	8B	Shoulder Screw 3/8 x 3/4, Nut
894-1122	8C	Actuator Bracket
894-2020	8D	Fastener Package
894-3009	9	Actuator Assembly C/P

Gate Switch Assemblies - 894 Series

Compatable With Linear Operators

Side Slide & Two Speed



Part No.	
2500-3091-2L/R	
2500-3091-3L/R	

Compatable With Linear Operators

Center Parting



Part No.	
2500-3091-1L/R	

Compatable With Universal Operators



Part No.	Door Style	
894-3000-1L/R	Center Parting	
894-3001-1L/R	Side Slide	
894-3002-1L/R	Two Speed	

Compatable With Universal Operators



Part No.	Door Style	
894-4000-1L/R	Center Parting	
894-4001-1L/R	Side Slide	
894-4002-1L/R	Two Speed	

Gate Switch Parts - 894 Series

894-3008



Actuator Assembly SSL & 2SPD

894-3009



Actuator Assembly C/P

2000-3086



Linear SSL & 2SPD Actuator Roller

2000-3087



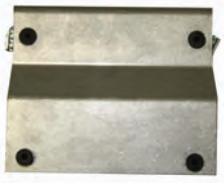
Linear C/P Actuator Roller

896-1003-1



Actuator Roller Comes With Shoulder Screw

2000-3078



Linear Gate Switch Bracket

890-3025



Track Mounting Bracket For Gate Switch

894-3005



Nylon Bushings

DOOR EQUIPMENT

Gate Switch Parts - 894 Series

2000-2003



Channel Nut, 1/4”

895-7006



Elbow Connector

894-3003



Gate Switch Housing Cover

894-3004



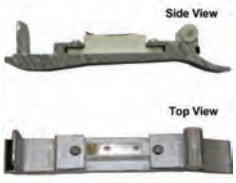
Gate Switch Contact Assembly

894-1120



Fish Paper

894-3006



Flipper Comes With Contact

894-3007



Flipper Contact

999-5019



Counter Sink Screw, 1/4-20 X 3/4”

Wire Rope - 908 Series

Peifer Drako 8 X 19 S-FC, RRL 3/8

Part No.	Length	Charateristic	
908-3750	Call for Info.	1370/1770 grade	

Peifer Drako 8 x 19 S-FC, RRL 1/2

Part No.	Length	Charateristic	
908-5000	Call for Info.	1370/1770 grade	

Peifer Drako 8 x 19 S-FC, RRL 5/8

Part No.	Length	Charateristic	
908-6250	Call for Info.	1370/1770 grade	

Rope Clamp

Part No.	
908-3000	

Swivel Head Rope Wedge Socket 1/2”

Part No.	Length	
908-2500	Long	
908-2500-1	Short	

Swivel Head Rope Wedge Socket 5/8”

Part No.	Length	
908-2625	Short	
908-2625-1	Long	

H-W Equipment

HOLLISTER WHITNEY


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Traction Machines-Geared

Overhead Traction Machines

H-W offers a complete line of heavy duty traction machines with speeds up to 500 f.p.m. The smooth running efficiency of tapered roller bearings, plus the fact that each machine is thoroughly tested before shipment, insures the best possible installation at the lowest possible cost.



Right Hand Arrangement Shown, Left Hand Arrangement Available

Shown with optional rope gripper mount

5 MODELS TO CHOOSE FROM:

MACHINE	MAXIMUM SHAFT LOAD		MACHINE WEIGHT LESS MOTOR	
	lbs	kgs	lbs	kgs
#34	11,000	4,990	1,200	544
#44	20,000	9,072	1,600	726
#54	26,000	11,793	2,300	1,043
#64	33,000	14,969	3,500	1,588
#74	60,000	27,216	5,500	2,495

Standard Equipment:

(at no extra cost)

- Direct Current Brake: #34 thru #64 Machines Furnished with Disc Brake, #74 Furnished with Drum Brake Only
- Motor Coupling Bored with Keyway
- Fabricated Steel Base
- Demountable Traction Sheave
- Demountable Bronze Gear
- Steel Worm on Integral Shaft
- Motor Mounting Pads
- Customer Name on Housing Cover
- Supplied w/ Oil

Optional Equipment:

- Drip Pans
- Mileage Recorder and Drive Assembly
- Brake Switch
- Sheave Guard
- Machine Isolation Assembly (Standard or Seismic)
- Motor Mounting in Field or by H-W
- Manual Brake Release
- Drum Brake
- Rope Gripper Mounting Provisions
- VVVF-AC Hoist Motor
- Machine Block-Up Assy.

When Ordering Overhead Traction Machines, Please Specify the Following:

- Rated Car Capacity • Rated Car Speed • Roping *(1:1 or 2:1)*
- Hand of Machine • Number and Size of Hoist Ropes
- Pitch of Hoist Ropes *(If Deflector Exists)* • Hoist Motor Manufacturer *(Motor Prints Required)* • Horsepower and R.P.M.
- Power Supply • Motor Mounting in Field or by H-W
- Name to be put on Upper Housing • Isolation Dimensions from Centerline of Sheave to Centerline of Beams on Either Side
- Other Optional Equipment

H-W EQUIPMENT

Traction Machines-Geared

Overhead Traction Machines

HORSEPOWER & MACHINE SELECTION CHARTS

1:1 ROPING, 40% COUNTERBALANCE

SPEED: CAR = MACHINE

	lbs	kgs	fpm	50	75	100	125	150	200	250	300	350	400	450	500
			m/s	0.25	0.38	0.51	0.64	0.76	1.02	1.27	1.52	1.78	2.03	2.29	2.54
#34	1000	454		3	3	5	5	5	7.5	10	10	12.5			
	1500	680		3	5	7.5	7.5	7.5	10	12.5	12.5	15			
	2000	907		5	7.5	7.5	10	10	12.5	15	20	20	25	30	30
#43/44	2500	1134		5	7.5	10	12.5	12.5	15	20	25	25	30	40	40
	3000	1361		7.5	10	12.5	12.5	15	20	25	25	30	40	40	50
	3500	1588		7.5	10	12.5	15	20	25	25	30	40	40	50	50
	4000	1814		10	12.5	15	20	20	25	30	40	40	50	60	60
#53/54	4500	2041		10	12.5	20	20	25	30	40	40	50	50	60	75
	5000	2268		12.5	15	20	25	25	30	40	50	50	60	75	75
	6000	2722		12.5	20	25	30	30	40	50	50	60	75		
#63/64	7000	3175		15	20	25	30	40	50	60	60	75			
	8000	3629		20	25	30	40	40	50	60	75	75			
#74	10000	4536				40	50	50	60	75					
	12000	5443				40	50	60	75						
	15000	6804				50	75	75							
	20000	9072				75									
	CAPACITY														
	CAR = MACHINE														

2:1 ROPING, 40% COUNTERBALANCE

SPEED: Car = 1/2 Machine

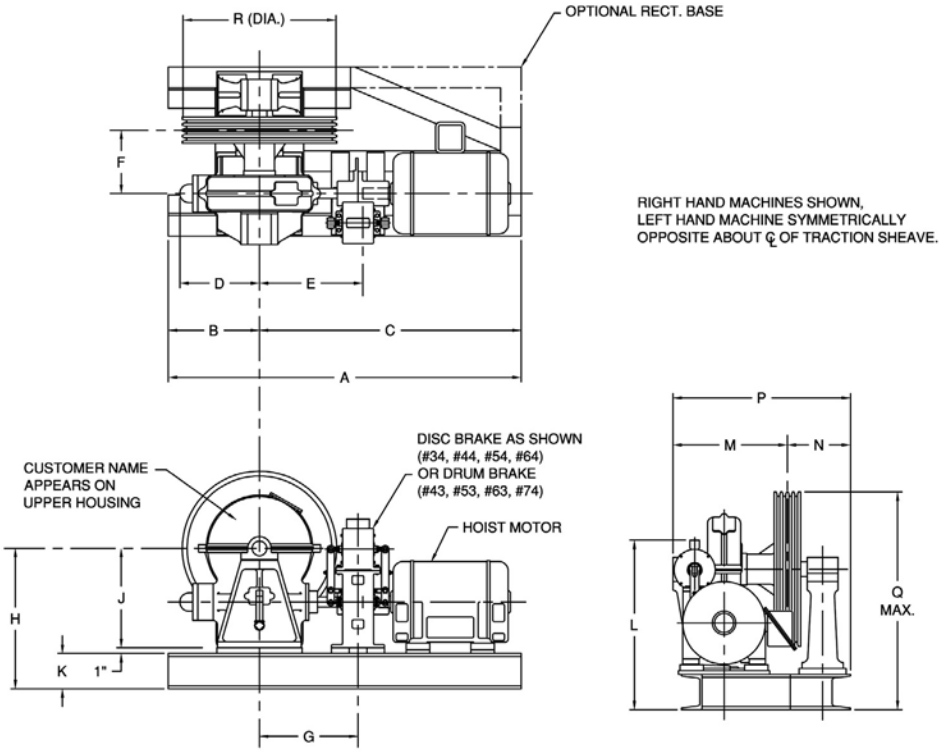
		fpm	25	50	75	100	125	150	175	200	225	250
	Car	m/s	0.13	0.25	0.38	0.51	0.64	0.76	0.89	1.02	1.14	1.27
	Machine	fpm	50	100	150	200	250	300	350	400	450	500
		m/s	0.25	0.51	0.76	1.02	1.27	1.52	1.78	2.03	2.29	2.54

	lbs	kgs	lbs	kgs										
#34	1000	454	2000	907	3	5	7.5	7.5	10	10	12.5			
	1500	680	3000	1361	3	7.5	10	10	12.5	15	20			
	2000	907	4000	1814	5	7.5	12.5	15	20	20	20	25	30	30
#43/44	2500	1134	5000	2268	5	10	15	20	20	25	30	30	40	40
	3000	1361	6000	2722	7.5	12.5	20	20	25	30	40	40	40	50
	3500	1588	7000	3175	7.5	12.5	20	25	30	40	40	50	50	60
	4000	1814	8000	3629	10	15	25	30	40	40	50	50	60	60
#53/54	4500	2041	9000	4082	10	20	25	30	40	50	50	60	60	75
	5000	2268	10000	4536	12.5	20	30	40	40	50	60	60	75	75
	6000	2722	12000	5443	12.5	25	40	40	50	60	60	75		
#63/64	7000	3175	14000	6350	15	25	40	50	60	60	75			
	8000	3629	16000	7257	20	30	50	60	75	75				
#74	10000	4536	20000	9072		40	60	75						
	12000	5443	24000	10886		40	75							
	15000	6804	30000	13608		50								
	20000	9072	40000	18144		75								
	MACHINE CAPACITY		CAR CAPACITY											
	1/2 CAR = MACHINE													

Traction Machines-Geared

Overhead Traction Machines

DIMENSIONS: INCHES [MILLIMETERS]



Mach.	Brake	A	B	C	D	E	F	G
#34 O.H.	#92 Disc	48 [1219]	11 [279]	37 [940]	10 7/8 [276]	13 11/16 [378]	8 [203]	12 [305]
#44 O.H.	#102 Disc	60 [1524]	15 1/2 [394]	44 1/2 [1130]	13 7/8 [352]	17 9/16 [446]	10 3/4 [273]	16 3/4 [425]
#43 O.H.	#90 Drum	60 [1524]	15 1/2 [394]	44 1/2 [1130]	13 7/8 [352]	17 3/8 [441]	10 3/4 [273]	16 3/4 [425]
#54 O.H.	#102 Disc	66 [1676]	17 1/2 [445]	48 1/2 [1232]	14 3/4 [375]	17 3/4 [451]	12 3/4 [324]	15 5/8 [397]
#53 O.H.	#100 Drum	66 [1676]	17 1/2 [445]	48 1/2 [1232]	14 3/4 [375]	19 9/16 [497]	12 3/4 [324]	19 [483]
#64 O.H.	#112 Disc	72 [1829]	20 [508]	52 [1321]	18 3/8 [467]	19 7/8 [505]	13 3/8 [340]	17 5/8 [448]
#63 O.H.	#110 Drum	78 [1981]	20 [508]	58 [1473]	18 3/8 [467]	24 3/8 [619]	13 3/8 [340]	23 3/8 [594]
#74 O.H.	#120 Drum	84 [2134]	20 [508]	64 [1626]	19 5/16 [491]	24 3/4 [629]	18 [457]	23 3/4 [603]

Mach.	Brake	H	J	K	L	M	N	P	Q	R (Dia.)	
#34 O.H.	#92 Disc	21 7/8 [556]	14 7/8 [378]	6 [152]	25 5/8 [652]	15 3/5 [396]	8 1/4 [210]	23 5/8 [600]	34 3/8 [873]	20 [508]	25 [635]
#44 O.H.	#102 Disc	23 7/8 [492]	16 7/8 [429]	6 [152]	28 7/8 [733]	20 [508]	10 3/4 [273]	30 3/4 [781]	37 7/8 [962]	20 [508]	28 [711]
#43 O.H.	#90 Drum	23 7/8 [492]	16 7/8 [429]	6 [152]	36 3/4 [933]	20 [508]	10 3/4 [273]	30 3/4 [781]	37 7/8 [962]	20 [508]	28 [711]
#54 O.H.	#102 Disc	26 3/4 [679]	19 3/4 [502]	6 [152]	30 5/8 [778]	23 3/4 [603]	15 [381]	38 3/4 [984]	41 3/4 [1060]	20 [508]	30 [762]
#53 O.H.	#100 Drum	26 3/4 [679]	19 3/4 [502]	6 [152]	39 [990]	23 3/4 [603]	15 [381]	38 3/4 [984]	41 3/4 [1060]	20 [508]	30 [762]
#64 O.H.	#112 Disc	33 1/4 [845]	24 1/4 [641]	8 [203]	34 1/2 [876]	25 1/2 [678]	16 1/8 [410]	41 5/8 [1060]	51 1/4 [1057]	25 [635]	38 [965]
#63 O.H.	#110 Drum	33 1/4 [845]	24 1/4 [641]	8 [203]	45 [1143]	25 1/2 [678]	16 1/8 [410]	41 5/8 [1060]	51 1/4 [1057]	25 [635]	38 [965]
#74 O.H.	#120 Drum	40 13/16 [1037]	29 13/16 [757]	10 [254]	46 5/8 [1184]	31 3/4 [806]	16 [406]	47 3/4 [1213]	59 13/16 [1519]	32 [813]	38 [965]

No. 74 Machine is supplied with a Drum Brake instead of Disc Type Shown

Traction Machines-Geared

Basement Set Traction Machines (STD)

These machines are designed for installation where there is insufficient room over the hatch for an overhead machine. The Standard Basement Set Machine has a narrow steel outboard stand to allow the traction wheel to project into the hatch.

Right Hand Arrangement Shown, Left Hand Arrangement Available



4 MODELS TO CHOOSE FROM:

MACHINE	MAXIMUM SHAFT LOAD		MACHINE WEIGHT LESS MOTOR	
	lbs	kgs	lbs	kgs
#44	20,000	9,072	1,600	726
#54	26,000	11,793	2,300	1,043
#64	33,000	14,969	3,500	1,588
#74	60,000	27,216	5,500	2,495

Standard Equipment

(at no extra cost)

- Steel Shaft Support Block
- Narrow Steel Outboard Stand
- Direct Current Brake: #44 thru #64 Machines Furnished with Disc Brake, #74 Furnished with Drum Brake Only
- Motor Coupling Bored with Keyway
- Fabricated Steel Base
- Demountable Traction Sheave
- Demountable Bronze Gear
- Steel Worm on Integral Shaft
- Motor Mounting Pads
- Customer Name on Housing Cover
- Supplied w/ Oil

Optional Equipment:

- Drip Pans
- Mileage Recorder and Drive Assembly
- Brake Switch
- Sheave Guard
- Machine Template
- Foundation Bolts and Pipe Spacers
- Motor Mounting in Field or by H-W
- Manual Brake Release
- Drum Brake
- Rope Gripper Mounting Provisions
- VVVF-AC Hoist Motor

When Ordering Standard Basement Set Traction Machines, Please Specify The Following:

• Rated Car Capacity • Rated Car Speed • Roping *(1:1 or 2:1)* • Hand of Machine • Number & Size of Hoist Ropes • Hoist Motor Manufacturer *(Motor Prints Required)* • Horsepower & R.P.M. • Power Supply • Motor Mounting in Field or by H-W • Name to be put on Upper Housing • Other Optional Equipment

Traction Machines-Geared

Basement Set Traction Machines (STD)

HORSEPOWER & MACHINE SELECTION CHARTS

1:1 ROPING, 40% COUNTERBALANCE

SPEED: CAR = MACHINE

	fpm	50	75	100	125	150	200	250	300	350	400	450	500
	m/s	0.25	0.38	0.51	0.64	0.76	1.02	1.27	1.52	1.78	2.03	2.29	2.54
lbs	kgs												
1000	454	3	3	5	5	7.5	7.5	10	10	12.5	15	15	
1500	680	3	5	7.5	7.5	10	12.5	12.5	15	20	20	20	30
2000	907	5	7.5	7.5	10	12.5	15	20	20	25	25	30	40
2500	1134	5	7.5	10	12.5	15	20	25	25	30	40	40	40
3000	1361	7.5	10	12.5	15	15	25	30	30	40	40	50	50
3500	1588	7.5	10	15	20	20	25	30	40	40	50	50	60
4000	1814	10	12.5	20	20	25	30	40	40	50	50	60	75
4500	2041	10	15	20	25	25	40	40	50	50	60	75	75
5000	2268	12.5	20	20	25	30	40	50	50	60	60	75	
6000	2722	12.5	20	25	30	40	50	50	60	75	75		
7000	3175	15	25	30	40	40	50	60	75	75			
8000	3629	20	25	30	40	50	60	75	75				
10000	4536			40	50	60	75						
12000	5443			50	60	75							
15000	6804			60	75								
20000	9072			75									

#43/44 · #53/54 · #63/64 · #74

CAPACITY
CAR = MACHINE

2:1 ROPING, 40% COUNTERBALANCE

SPEED: Car = 1/2 Machine

Car	fpm	25	50	75	100	125	150	175	200	225	250		
	m/s	0.13	0.25	0.38	0.51	0.64	0.76	0.89	1.02	1.14	1.27		
Machine	fpm	50	100	150	200	250	300	350	400	450	500		
	m/s	0.25	0.51	0.76	1.02	1.27	1.52	1.78	2.03	2.29	2.54		
lbs	kgs	lbs	kgs										
1000	454	2000	907	3	5	7.5	10	10	12.5	15	15	20	20
1500	680	3000	1361	5	7.5	10	12.5	15	20	20	25	25	30
2000	907	4000	1814	5	10	12.5	20	20	25	25	30	30	40
2500	1134	5000	2268	7.5	12.5	15	20	25	30	30	40	40	50
3000	1361	6000	2722	7.5	15	20	25	30	30	40	40	50	50
3500	1588	7000	3175	10	20	25	30	30	40	40	50	50	60
4000	1814	8000	3629	10	20	25	30	40	40	50	50	60	75
4500	2041	9000	4082	10	20	30	40	40	50	50	60	75	75
5000	2268	10000	4536	12.5	25	30	40	50	50	60	75	75	
6000	2722	12000	5443	15	30	40	50	60	60	75	75		
7000	3175	14000	6350	15	30	40	50	60	75	75			
8000	3629	16000	7257	20	40	50	60	75					
10000	4536	20000	9072		40	60	75						
12000	5443	24000	10886		50	75							
15000	6804	30000	13608		60								
20000	9072	40000	18144		75								

#43/44 · #53/54 · #63/64 · #74

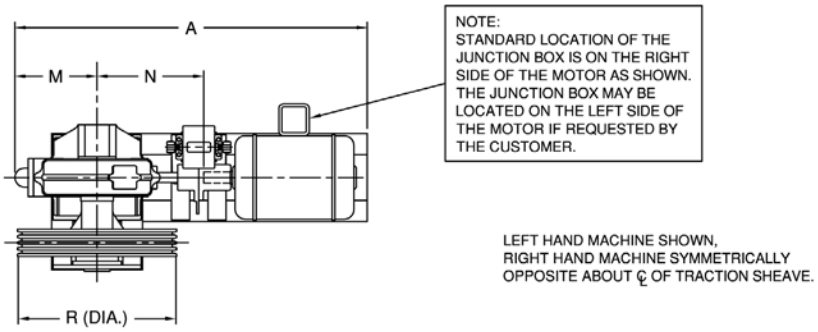
MACHINE CAPACITY | CAR CAPACITY

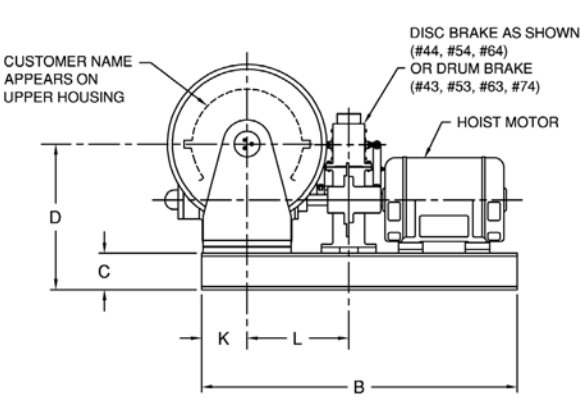
1/2 CAR = MACHINE

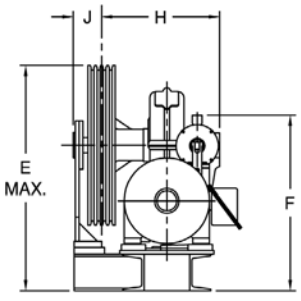
Traction Machines-Geared

Basement Set Traction Machines (STD)

DIMENSIONS: INCHES [MILLIMETERS]







Mach.	Brake	A	B	C	D	E	F	H	J	K	L	M	N	R (Dia.)	
														Min.	Max.
#43 B.S.	#90 DRUM	58 3/8 [1482]	52 [1321]	6 [152]	23 7/8 [606]	37 7/8 [962]	36 3/4 [933]	20 [508]	5 [127]	7 1/2 [191]	16 3/4 [425]	13 7/8 [352]	17 3/8 [441]	20 [508]	28 [711]
#44 B.S.	#102 DISC	58 3/8 [1483]	52 [1321]	6 [152]	23 7/8 [606]	37 7/8 [962]	28 7/8 [733]	20 [508]	5 [127]	7 1/2 [191]	16 3/4 [425]	13 7/8 [352]	17 9/16 [446]	20 [508]	28 [711]
#53 B.S.	#100 DRUM	63 1/4 [1607]	58 [1473]	6 [152]	26 3/4 [679]	41 3/4 [1060]	39 [991]	23 3/4 [603]	6 1/4 [159]	9 1/2 [241]	19 [483]	14 3/4 [375]	19 9/16 [497]	20 [508]	30 [762]
#54 B.S.	#102 DISC	63 1/4 [1607]	58 [1473]	6 [152]	26 3/4 [679]	41 3/4 [1060]	30 5/8 [778]	23 3/4 [603]	6 1/4 [159]	9 1/2 [241]	15 5/8 [397]	14 3/4 [375]	17 3/4 [451]	20 [508]	30 [762]
#63 B.S.	#110 DRUM	73 1/4 [1861]	66 [1676]	8 [203]	33 1/4 [845]	51 1/4 [1302]	45 [1143]	25 1/2 [648]	7 3/4 [197]	11 [279]	23 3/8 [594]	18 1/4 [464]	24 3/8 [619]	25 [635]	38 [965]
#64 B.S.	#112 DISC	73 1/4 [1861]	66 [1676]	8 [203]	33 1/4 [845]	51 1/4 [1302]	34 1/2 [876]	25 1/2 [648]	7 3/4 [197]	11 [279]	17 5/8 [448]	18 1/4 [464]	19 7/8 [505]	25 [635]	38 [965]
#74 B.S.	#120 DRUM	82 11/16 [2100]	76 [1930]	10 [254]	40 11/16 [1033]	59 11/16 [1516]	46 5/8 [1184]	31 3/4 [806]	10 [254]	12 1/2 [318]	23 3/4 [603]	19 5/16 [491]	24 3/4 [629]	32 [813]	38 [965]

Traction Machines-Geared

Basement Set Traction Machines (O.D.)

The O.D. machine is equipped with a deflector sheave mounted on the machine to eliminate the need for an additional sheave independently supported by the building structure.



#64 O.D.

Right Hand Arrangement Shown
Left Hand Arrangement Available



#74 O.D.

4 MODELS TO CHOOSE FROM:

MACHINE	MAXIMUM SHAFT LOAD		MACHINE WEIGHT LESS MOTOR	
	lbs	kgs	lbs	kgs
#44	20,000	9,072	2,000	907
#54	26,000	11,793	2,700	1,225
#64	33,000	14,969	3,900	1,769
#74	60,000	27,216	5,900	2,676

Standard Equipment
(at no extra cost)

- Direct Current Disc Brake
- Motor Coupling Bored with Keyway
- Fabricated Steel Base
- Demountable Traction Sheave
- Demountable Bronze Gear
- Steel Worm on Integral Shaft
- Motor Mounting Pads
- Customer Name on Housing
- Supplied w/ Oil
- Demountable Deflector Sheave

Optional Equipment:

- Drip Pans
- Mileage Recorder and Drive Assembly
- Brake Switch
- Sheave Guard
- Machine Template
- Foundation Bolts and Pipe Spacers
- Motor Mounting in Field or by H-W
- Manual Brake Release
- Drum Brake
- Rope Gripper Mounting Provisions
- VVVF-AC Hoist Motor

When Ordering O.D. Basement Set Traction Machines, Please Specify The Following:

- Rated Car Capacity • Rated Car Speed • Roping *(1:1 or 2:1)* • Hand of Machine
- Number & Size of Hoist Ropes • Hoist Motor Manufacturer *(Motor Prints Required)*
- Horsepower & R.P.M. • Power Supply • Motor Mounting in Field or by H-W
- Name to be put on Upper Housing • Other Optional Equipment

H-W EQUIPMENT

Traction Machines-Geared

Basement Set Traction Machines (O.D.)

HORSEPOWER & MACHINE SELECTION CHARTS

1:1 ROPING, 40% COUNTERBALANCE

SPEED: CAR = MACHINE

	fpm	50	75	100	125	150	200	250	300	350	400	450	500
	m/s	0.25	0.38	0.51	0.64	0.76	1.02	1.27	1.52	1.78	2.03	2.29	2.54
lbs	kgs												
1000	454	3	3	5	5	7.5	7.5	10	10	12.5	15	15	
1500	680	3	5	7.5	7.5	10	12.5	12.5	15	20	20	20	30
2000	907	5	7.5	7.5	10	12.5	15	20	20	25	25	30	40
2500	1134	5	7.5	10	12.5	15	20	25	25	30	40	40	40
3000	1361	7.5	10	12.5	15	15	25	30	30	40	40	50	50
3500	1588	7.5	10	15	20	20	25	30	40	40	50	50	60
4000	1814	10	12.5	20	20	25	30	40	40	50	50	60	75
4500	2041	10	15	20	25	25	40	40	50	50	60	75	75
5000	2268	12.5	20	20	25	30	40	50	50	60	60	75	
6000	2722	12.5	20	25	30	40	50	50	60	75	75		
7000	3175	15	25	30	40	40	50	60	75	75			

#43/44 · #53/54 · #63/64 · #74

CAPACITY
CAR = MACHINE

2:1 ROPING, 40% COUNTERBALANCE

SPEED: Car = 1/2 Machine

Car	fpm	25	50	75	100	125	150	175	200	225	250		
	m/s	0.13	0.25	0.38	0.51	0.64	0.76	0.89	1.02	1.14	1.27		
Machine	fpm	50	100	150	200	250	300	350	400	450	500		
	m/s	0.25	0.51	0.76	1.02	1.27	1.52	1.78	2.03	2.29	2.54		
lbs	kgs	lbs	kgs										
1000	454	2000	907	3	5	7.5	10	10	12.5	15	15	20	
1500	680	3000	1361	5	7.5	10	12.5	15	20	20	25	25	30
2000	907	4000	1814	5	10	12.5	20	20	25	25	30	30	40
2500	1134	5000	2268	7.5	12.5	15	20	25	30	30	40	40	50
3000	1361	6000	2722	7.5	15	20	25	30	30	40	40	50	50
3500	1588	7000	3175	10	20	25	30	30	40	40	50	50	60
4000	1814	8000	3629	10	20	25	30	40	40	50	50	60	75
4500	2041	9000	4082	10	20	30	40	40	50	50	60	75	75
5000	2268	10000	4536	12.5	25	30	40	50	50	60	75	75	
6000	2722	12000	5443	15	30	40	50	60	60	75	75		
7000	3175	14000	6350	15	30	40	50	60	75	75			

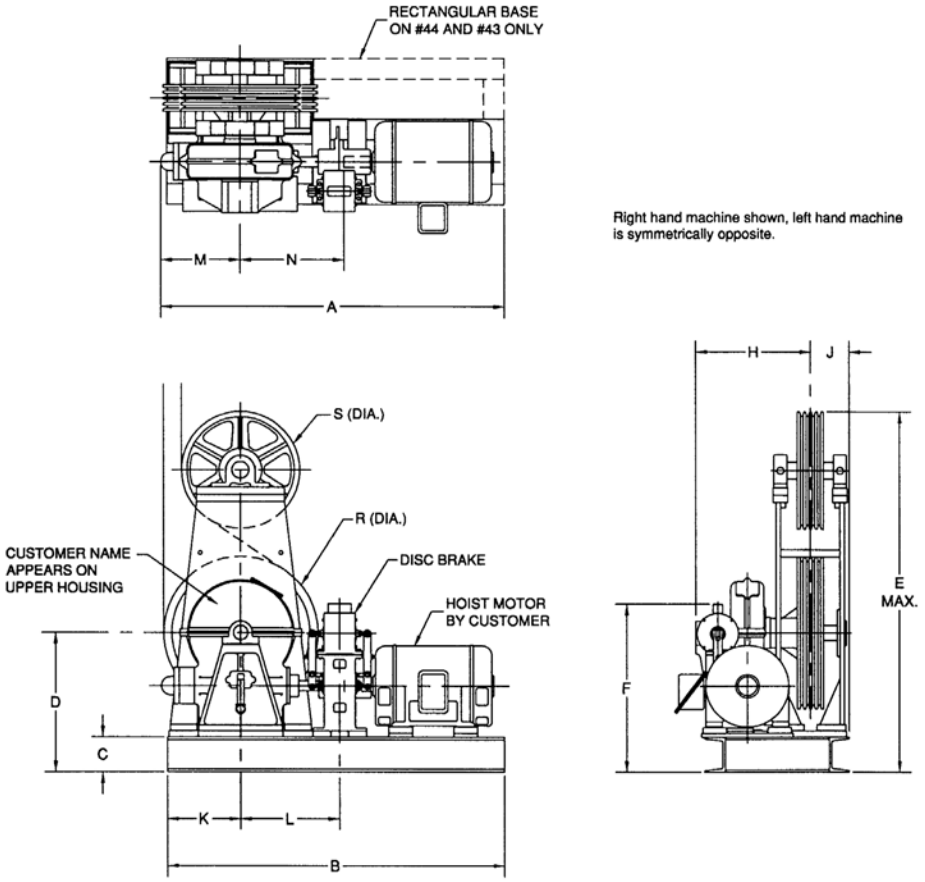
#43/44 · #53/54 · #63/64 · #74

MACHINE CAPACITY	CAR CAPACITY
1/2 CAR = MACHINE	

Traction Machines-Geared

Basement Set Traction Machines (O.D.)

DIMENSIONS: INCHES [MILLIMETERS]



O.D. BASEMENT SET TRACTION MACHINE DIMENSIONS INCHES [MILLIMETERS]															
MACH.	BRAKE	A	B	C	D	E	F	H	J	K	L	M	N	R(DIA.)	S(DIA.)
														MIN. MAX.	MIN. MAX.
#43 O.D.	#90 DRUM	58 3/8 [1483]	57 [1448]	6 [152]	23 7/8 [606]	64 1/8 [1629]	36 3/4 [933]	20 [508]	6 3/4 [171]	12 1/2 [318]	16 3/4 [425]	13 7/8 [352]	17 1/2 [445]	20 [508] 28 [711]	20 [508] 25 [635]
#44 O.D.	#102 DISC	58 3/8 [1483]	57 [1448]	6 [152]	23 7/8 [606]	64 1/8 [1629]	28 7/8 [733]	20 [508]	6 3/4 [171]	12 1/2 [318]	16 3/4 [425]	13 7/8 [352]	17 9/16 [446]	20 [508] 28 [711]	20 [508] 25 [635]
#53 O.D.	#100 DRUM	67 1/4 [1708]	62 [1575]	6 [152]	26 3/4 [679]	70 7/8 [1800]	39 [991]	23 3/4 [603]	7 1/8 [181]	9 1/2 [241]	19 [483]	14 3/4 [375]	19 1/2 [495]	20 [508] 30 [762]	20 [508] 25 [635]
#54 O.D.	#102 DISC	67 1/4 [1708]	62 [1575]	6 [152]	26 3/4 [679]	70 7/8 [1800]	30 5/8 [778]	23 3/4 [603]	7 1/8 [181]	9 1/2 [241]	15 5/8 [397]	14 3/4 [375]	17 3/4 [451]	20 [508] 30 [762]	20 [508] 25 [635]
#63 O.D.	#110 DRUM	72 3/4 [1848]	66 [1676]	8 [203]	33 1/4 [845]	79 3/8 [2016]	45 [1143]	25 1/2 [648]	8 1/8 [206]	11 1/2 [292]	23 3/8 [594]	18 1/4 [464]	24 3/8 [619]	25 [635] 38 [965]	20 [508] 25 [635]
#64 O.D.	#112 DISC	72 3/4 [1848]	66 [1676]	8 [203]	33 1/4 [845]	79 3/8 [2016]	34 1/2 [876]	25 1/2 [648]	8 1/8 [206]	11 1/2 [292]	17 5/8 [448]	18 1/4 [464]	19 7/8 [505]	25 [635] 38 [965]	20 [508] 25 [635]
#74 O.D.	#120 DRUM	82 7/8 [2105]	76 [1930]	10 [254]	41 3/8 [1051]	90 1/2 [2299]	48 5/8 [1235]	31 1/2 [800]	10 3/4 [273]	12 1/2 [318]	23 5/8 [600]	19 3/8 [492]	24 3/4 [629]	32 [813] 38 [965]	25 [635] 26 [660]

H-W EQUIPMENT

Traction Machines-Gearless

SPECIFICATIONS

- Loads up to 4000 lbs for the 1:1 models and 5000 lbs for the 2:1 models / Speeds up to 1000 FPM
- 15" diameter sheaves for 3/8" ropes for both 1:1 and 2:1 models; 20" diameter sheave for ropes up to ½" for both 1:1 and 2:1 models; 25" diameter sheaves for up to 5/8" ropes for the 1:1 models
- For modernization, can maintain existing deflector sheaves in most cases
- 28 and 40 pole motors for smooth, quiet and cool operation
- 2 independent braking systems available
  - Each capable of stopping and holding 125% of capacity
  - Optional Rope Gripper® available in lieu of second brake system
- Machines use standard core traction steel hoist rope or high strength IWRC rope
- 40% counterweight on the 1:1 model and 50% counterweight on the 2:1 models
- Sealed maintenance free bearings
- Fits through a 36" wide door
- GO GREEN – Approx. 90% efficiency
  - Add regenerative drive to your controls for additional electrical savings
- Excellent ride quality
- Lower maintenance
- Custom sub-bases available; may incorporate the Gripper
- 2:1 Models are perfectly suited for MRL (Machine-Room-Less) applications
- Can be mounted overhead (down-pull) or basement (up-pull)



GL 100 With Isolation Base



GL 260 With Guard



GL130A with Isolation Base



GL171 with Deflector & Rope Gripper Sub-Base



GL171 with Build-Up Frame & 620 Gripper



GL171 with Standard Base

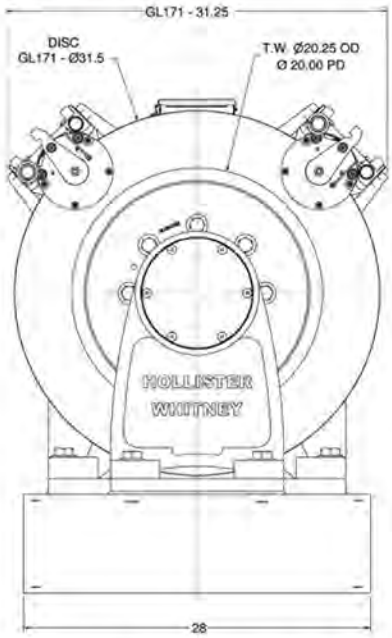


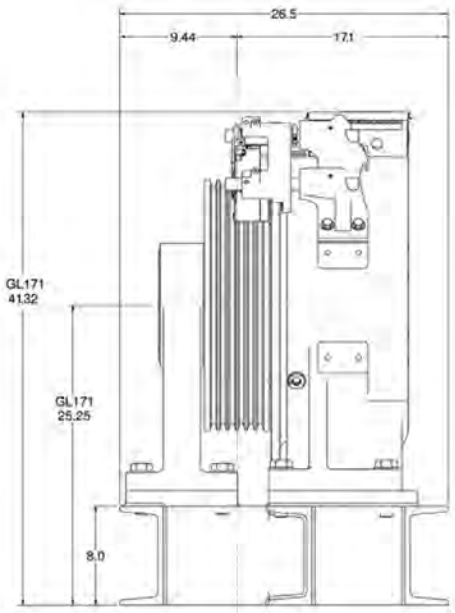
GL185 with Guard, Isolation & Rope Gripper Sub-Base

Traction Machines-Gearless

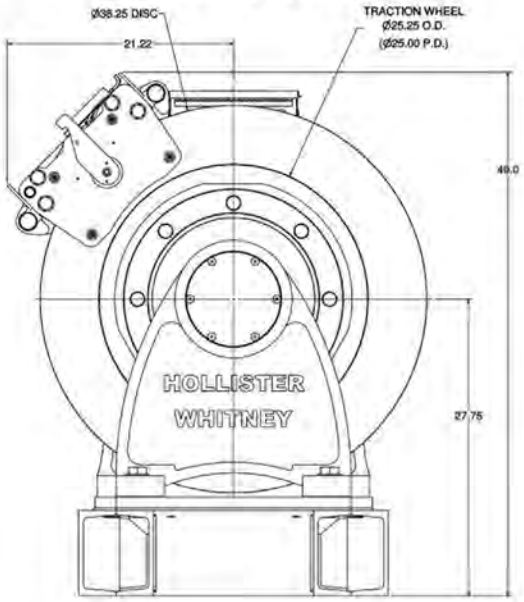
1:1 MACHINES

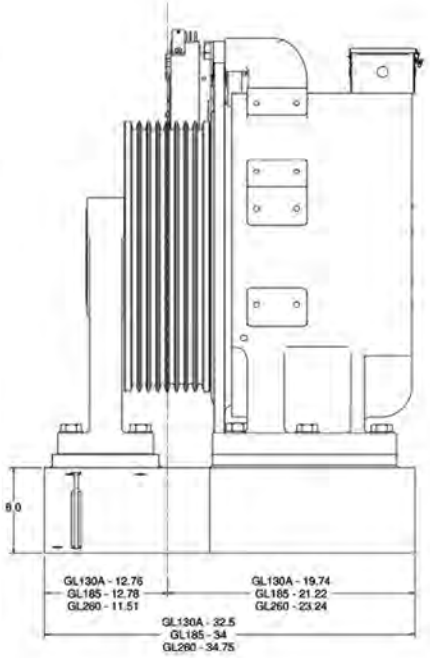
MODEL GL-171





MODEL GL-130A, GL-185, GL-260





H-W EQUIPMENT

Traction Machines-Gearless

Maximum System Loads:

MAXIMUM SYSTEM LOADS: Shaded boxes Represent different Sizes of Motor Windings per Machine Size													
Car Speed		15" T.W.		20" T.W.				25" T.W.					
(fpm)	(m/sec)	GL171 (lbs)	GL171 (kg)	GL171 (lbs)	GL171 (kg)	GL130A (lbs)	GL130A (kg)	GL130A (lbs)	GL130A (kg)	GL185 (lbs)	GL185 (kg)	GL260 (lbs)	GL260 (kg)
50	50	25700	11650	25700	11650	24750	11200	24750	11200	23350	10500	26700	12100
100	100	25700	11650	25700	11650	24750	11200	24750	11200	23350	10500	26700	12100
150	150	25700	11650	25700	11650	24750	11200	24750	11200	23350	10500	26700	12100
200	200	25700	11650	25700	11650	24750	11200	24750	11200	23350	10500	26700	12100
250	250	25700	11650	25700	11650	24750	11200	24750	11200	22500	10200	26700	12100
300	300	25700	11650	25700	11650	24750	11200	24750	11200	21300	9600	26700	12100
350	350	25700	11650	25700	11650	24750	11200	24750	11200	20300	9200	26700	12100
400	400	25700	11650	25700	11650	24750	11200	24750	11200	19500	8800	26700	12100
450	450	25700	11650	25700	11650	24750	11200	24750	11200	18800	8500	26700	12100
500	500	25600	11600	25700	11650	24750	11200	24750	11200	18300	8300	26700	12100
550	550	24900	11300	25700	11650	24750	11200	24750	11200	17700	8000	26700	12100
600	600	24200	11000	25700	11650	24750	11200	24750	11200	17300	7800	26700	12100
650	650	23600	10700	25700	11650	24750	11200	24750	11200	16900	7600	26700	12100
700	700	23100	10500	25200	11400	24750	11200	24750	11200	16500	7400	26700	12100

Maximum Machine Ratings for 1:1 Applications:

15" SHEAVES

Model	Line Voltage	Current	Capacity 50% Counterweight		Capacity 45% Counterweight		Capacity 40% Counterweight		Car Speed		Power		Torque		Est. BTU/Hour
	(AC)	(Amps)	(lbs)	(kg)	(lbs)	(kg)	(lbs)	(kg)	(ft/min)	(m/sec.)	H.P.	kW	Ft-(lbs)	Nm	
GL171-35L	208	99	2500	1130	2250	1020	2000	900	700	3.55	34.1	25.44	1005	1360	5642
GL171-35H	460	56	2500	1130	2250	1020	2000	900	700	3.55	34.1	25.44	1005	1360	5544
GL171-20L	208	32	3000	1360	2800	1270	2600	1180	150	0.76	9.1	6.78	1254	1700	6934
GL171-20H	460	16	3000	1360	2800	1270	2600	1180	150	0.76	9.1	6.78	1254	1700	6934
GL171-40L	208	65	3000	1360	2800	1270	2600	1180	300	1.52	18.2	13.57	1254	1700	6937

20" SHEAVES

Model	Line Voltage	Current	Capacity 50% Counterweight		Capacity 45% Counterweight		Capacity 40% Counterweight		Car Speed		Power		Torque		Est. BTU/Hour
	(AC)	(Amps)	(lbs)	(kg)	(lbs)	(kg)	(lbs)	(kg)	(ft/min)	(m/sec.)	H.P.	kW	Ft-(lbs)	Nm	
GL171-35L	208	99	1875	850	1700	770	1525	690	900	4.57	34.1	25.4	1005	1360	5642
GL171-35H	460	56	1875	850	1700	770	1525	690	900	4.57	34.1	25.4	1005	1360	5642
GL171-20L	208	32	2250	1020	2125	960	2000	900	200	1.01	9.1	6.78	1254	1700	6934
GL171-20H	460	16	2250	1020	2125	960	2000	900	200	1.01	9.1	6.78	1254	1700	6934
GL171-40L	208	65	2250	1020	2125	960	2000	900	400	2.03	18.2	13.6	1254	1700	6937
GL130A-20L	208	40	2800	1270	2650	1200	2500	1130	200	1.01	11.4	8.5	1568	2125	8671
GL130A-20H	460	20	2800	1270	2650	1200	2500	1130	200	1.01	11.4	8.5	1568	2125	8671
GL130A-40L	208	85	2800	1270	2650	1200	2500	1130	400	2.03	22.8	17	1568	2125	7917

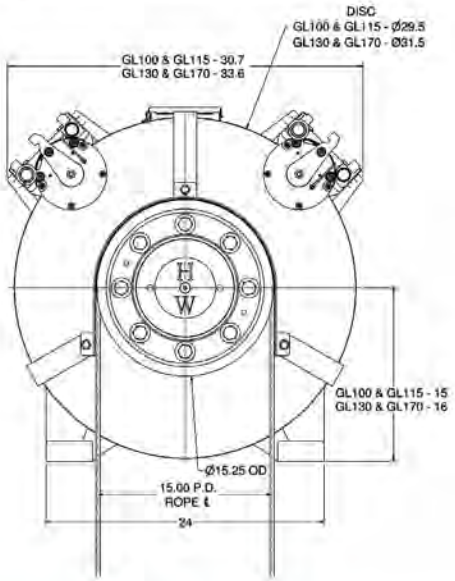
25" SHEAVES

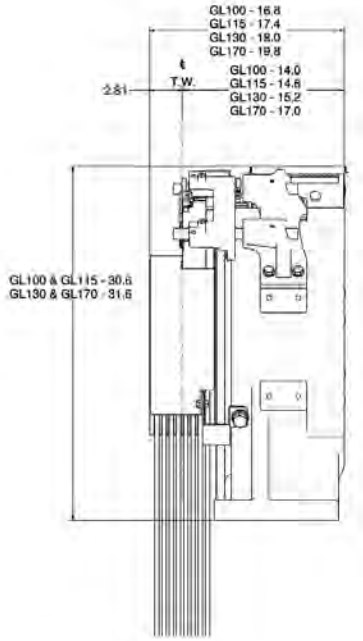
Model	Line Voltage	Current	Capacity 50% Counterweight		Capacity 45% Counterweight		Capacity 40% Counterweight		Car Speed		Power		Torque		Est. BTU/Hour
	(AC)	(Amps)	(lbs)	(kg)	(lbs)	(kg)	(lbs)	(kg)	(ft/min)	(m/sec.)	H.P.	kW	Ft-(lbs)	Nm	
GL130A-20L	208	40	2250	1020	2125	960	2000	900	250	1.27	11.4	8.5	1568	2125	8671
GL130A-20H	460	20	2250	1020	2125	960	2000	900	250	1.27	11.4	8.5	1568	2125	8671
GL130A-40L	208	85	2250	1020	2125	960	2000	900	500	2.54	22.8	17	1568	2125	7917
GL185-35L	208	78	3400	1540	3150	1420	3000	1360	350	1.78	24	17.9	2357	3195	6789
GL185-35H	460	38	3400	1540	3150	1420	3000	1360	350	1.78	24	17.9	2357	3195	6789
GL185-50L	208	105	3400	1540	3150	1420	3000	1360	500	2.54	34.3	25.6	2357	3195	9698
GL185-50H	460	50	3400	1540	3150	1420	3000	1360	500	2.54	34.3	25.6	2357	3195	9698
GL185-70L	208	148	3400	1540	3150	1420	3000	1360	700	3.56	48	35.8	2357	3195	13577
GL260-35L	208	115	4500	2040	4250	1920	4000	1810	350	1.78	32	23.9	3138	4250	9038
GL260-35H	460	55	4500	2040	4250	1920	4000	1810	350	1.78	32	23.9	3138	4250	9038
GL260-50L	208	150	4500	2040	4250	1920	4000	1810	500	2.54	45.7	34.1	3138	4250	12911
GL260-50H	460	76	4500	2040	4250	1920	4000	1810	500	2.54	45.7	34.1	3138	4250	12911
GL260-70L	208	225	4500	2040	4250	1920	4000	1810	700	3.56	63.9	47.7	3138	4250	18076

NOTE:
Consult H-W engineering for specific MACHINE|SPEED|CAPACITY combinations in yellow boxes

2:1 MACHINES

MODEL GL-100, GL-115, GL-130, GL-170





Maximum System Loads:

MAXIMUM SYSTEM LOADS									
Car Speed (fpm)	Car Speed (m/sec)	GL100 (lbs)	GL100 (kg)	GL115 (lbs)	GL115 (kg)	GL130 (lbs)	GL130 (kg)	GL170 (lbs)	GL170 (kg)
50	0.254	23500	10660	24000	10886	24500	11113	25000	11340
100	0.508	23500	10660	24000	10886	24500	11113	25000	11340
150	0.762	23500	10660	24000	10886	24500	11113	25000	11340
200	1.016	23500	10660	24000	10886	24500	11113	25000	11340
250	1.27	22700	10297	24000	10886	24000	10886	25000	11340
300	1.524	21500	9752	23450	10637	22800	10342	25000	11340
350	1.778	20500	9299	22450	10183	21800	9888	25000	11340
400	2.032	19700	8936	21450	9730	21000	9526	25000	11340
450	2.286	N/A	N/A	20850	9458	20200	9163	24700	11204
500	2.54	N/A	N/A	20050	9095	19600	8891	24100	10932
550	2.794	N/A	N/A	19650	8913	19000	8618	23300	10569
600	3.048	N/A	N/A	19050	8641	18400	8346	22700	10297
650	3.302	N/A	N/A	18650	8460	18000	8165	22100	10025
700	3.556	N/A	N/A	18250	8278	17600	7983	21700	9843
750	3.81	N/A	N/A	17850	8097	N/A	N/A	N/A	N/A
800	4.064	N/A	N/A	17450	7915	N/A	N/A	N/A	N/A
850	4.318	N/A	N/A	17250	7825	N/A	N/A	N/A	N/A
900	4.572	N/A	N/A	16850	7643	N/A	N/A	N/A	N/A
950	4.826	N/A	N/A	16650	7552	N/A	N/A	N/A	N/A
1000	5.08	N/A	N/A	16250	7371	N/A	N/A	N/A	N/A

H-W EQUIPMENT

Traction Machines-Gearless

Maximum Machine Ratings for 2:1 Applications:

15" SHEAVES

Model	Line Voltage	Current	Capacity 50% Counterweight		Car Speed		Power		Torque		Est. BTU/Hour
	(AC)	(Amps)	(lbs)	(kg)	(ft/min)	(m/sec.)	H.P.	kW	Ft-(lbs)	Nm	
GL100-15L	208	26	3000	1361	150	0.76	8.8	6.57	603	818	3279
GL100-15H	460	13	3000	1361	150	0.76	8.8	6.57	603	818	3309
GL100-20L	208	34	3000	1361	200	1.02	11.7	8.73	603	818	3606
GL100-20H	460	17	3000	1361	200	1.02	11.7	8.73	603	818	3569
GL11S-35L	208	68	3500	1588	350	1.78	23.9	17.8	704	954	4929
GL11S-35H	460	32	3500	1588	350	1.78	23.9	17.8	704	954	4858
GL11S-50L	208	95	3500	1588	500	2.54	34.1	25.4	704	954	5740
GL11S-50H	460	49	3500	1588	500	2.54	34.1	25.4	704	954	5839
GL130-20L	208	44	4000	1814	200	1.02	15.6	11.6	804	1090	4118
GL130-20H	460	22	4000	1814	200	1.02	15.6	11.6	804	1090	4070
GL130-35L	208	81	4000	1814	350	1.78	27.3	20.4	804	1090	5148
GL130-35H	460	38	4000	1814	350	1.78	27.3	20.4	804	1090	5228
GL170-35L	208	99	5000	2268	350	1.78	34.1	25.4	1005	1363	5642
GL170-35H	460	46	5000	2268	350	1.78	34.1	25.4	1005	1363	5544

20" SHEAVES

Model	Line Voltage	Current	Capacity 50% Counterweight		Car Speed		Power		Torque		Est. BTU/Hour
	(AC)	(Amps)	(lbs)	(kg)	(ft/min)	(m/sec.)	H.P.	kW	Ft-(lbs)	Nm	
GL100-15L	208	26	2250	1021	200	1.02	8.8	6.57	603	818	3279
GL100-15H	460	13	2250	1021	200	1.02	8.8	6.57	603	818	3309
GL100-20L	208	34	2250	1021	267	1.36	11.7	8.73	603	818	3606
GL100-20H	460	17	2250	1021	267	1.36	11.7	8.73	603	818	3569
GL11S-35L	208	68	2625	1191	467	2.37	23.9	17.8	704	954	4929
GL11S-35H	460	32	2625	1191	467	2.37	23.9	17.8	704	954	4858
GL11S-50L	208	95	2625	1191	667	3.39	34.1	25.4	704	954	5740
GL11S-50H	460	49	2625	1191	667	3.39	34.1	25.4	704	954	5839
GL130-20L	208	44	3000	1361	267	1.36	15.6	11.6	804	1090	4118
GL130-20H	460	22	3000	1361	267	1.36	15.6	11.6	804	1090	4070
GL130-35L	208	81	3000	1361	467	2.37	27.3	20.4	804	1090	5148
GL130-35H	460	38	3000	1361	467	2.37	27.3	20.4	804	1090	5228
GL170-35L	208	99	3750	1701	467	2.37	34.1	25.4	1005	1363	5642
GL170-35H	460	46	3750	1701	467	2.37	34.1	25.4	1005	1363	5544

Rope Grippers

Standard Rope Grippers



Rope Gripper

In recent years, there has been a great deal of discussion about the need for protection against injuries caused by elevator cars leaving the floor with the doors open and overspeeding in the up direction. That's why Hollister-Whitney introduced the Rope Gripper, a remarkable device used to grab elevator suspension ropes to stop the elevator in the event of a mechanical or electrical failure. It is imperative that if an elevator overspeeds in the up direction and/or if the elevator leaves the floor with the doors open.

The Rope Gripper has many unique features, such as a gently applied but powerful 'grip' which doesn't damage the rope or cause any undue stress to the machine or traction sheave. Protection is assured even when slipping traction occurs. The Rope Gripper provides easy alignment with adequate clearances between the rope and self grooving 'grip' linings and provides power compensation with a constant but powerful force to the rope even as the linings wear. Only four wires are required to the elevator controls and installation is simple. The Rope Gripper is mechanically activated and hydraulically reset.



Pumping Unit

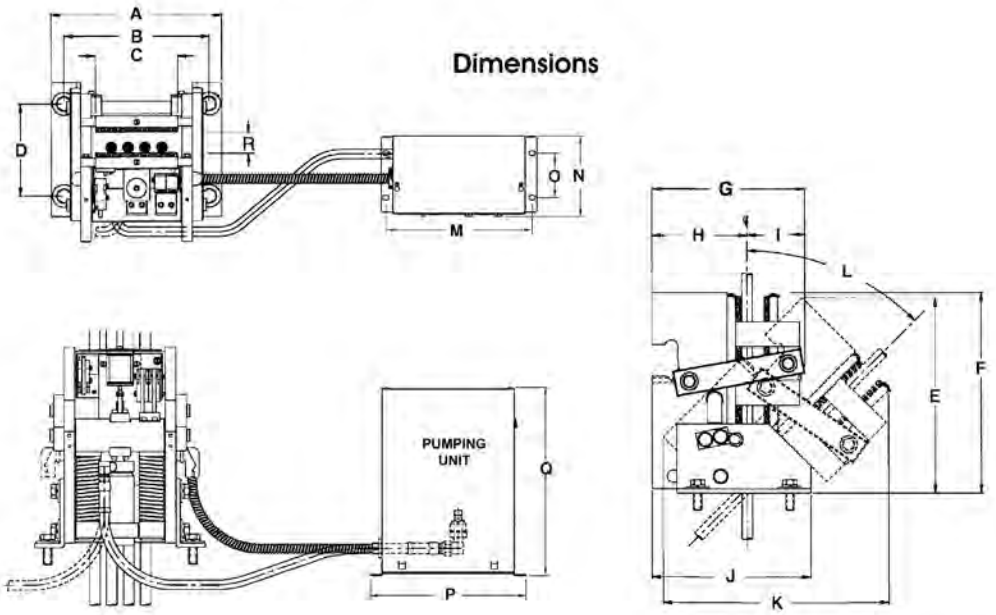
		"ROPE GRIPPER" MODEL					
		#618	#620	#622	#624	#625	#626
	MAX. OUT TO OUT OF CABLES:	3 3/8" (86 mm)	4 7/8" (124 mm)	6" (152 mm)	10" (254 mm)	11 1/2" (292 mm)	10" (254 mm)
	POWER SUPPLY:	6A, 120V ac, 1 PH, 60 Hz					
	CONTACT RATINGS:	6A, 250V ac, 0.15A, 250V dc					
1:1 ROPING	MAXIMUM RATINGS: RATED SPEED:	250 fpm (1.27 m/s)	350 fpm (1.78 m/s)	600 fpm (3.05 m/s)	1,200 fpm (6.10 m/s)		
	"ROPE GRIPPER" TRIPPING SPEED:	303 fpm (1.54 m/s)	402 fpm (2.04 m/s)	690 fpm (3.51 m/s)	1,368 fpm (6.95 m/s)		
	CAR RATED LOAD: (with 40 to 50% Counterweight)	1,800 lbs (816 kg)	2,500 lbs (1,134 kg)	5,000 lbs (2,268 kg)			10,000 lbs (4,536 kg)
	CAR, CAR LOAD, COUNTERWEIGHT, HOIST AND COMPENSATION ROPE MASS:	11,000 lbs (4,990 kg)	11,500 lbs (5,216 kg)	18,600 lbs (8,437 kg)			38,000 lbs (17,236 kg)
	DOOR ZONE:	10 inches (254 mm) ±					
	MIN. CAR RATED LOAD:	600 lbs (272 kg)	600 lbs (272 kg)	1,500 lbs (680 kg)			2,500 lbs (1,134 kg)
	CAR & COUNTER-WEIGHT MASS:	2,280 lbs (1,034 kg)	2,280 lbs (1,034 kg)	6,000 lbs (2,722 kg)			8,000 lbs (3,629 kg)
2:1 ROPING	MAXIMUM RATINGS: RATED SPEED:	175 fpm (.89 m/s)	250 fpm (1.27 m/s)	400 fpm (2.03 m/s)	800 fpm (4.06 m/s)		
	"ROPE GRIPPER" TRIPPING SPEED:	225 fpm (1.14 m/s)	303 fpm (1.54 m/s)	459 fpm (2.33 m/s)	921 fpm (4.68 m/s)		
	CAR RATED LOAD: (with 40 to 50% Counterweight)	3,600 lbs (1,633 kg)	5,000 lbs (2,268 kg)	10,000 lbs (4,536 kg)			20,000 lbs (9,072 kg)
	CAR, CAR LOAD, COUNTERWEIGHT, HOIST AND COMPENSATION ROPE MASS:	22,000 lbs (9,979 kg)	23,000 lbs (10,432 kg)	38,000 lbs (17,236 kg)			76,000 lbs (34,472 kg)
	DOOR ZONE:	10 inches (254 mm) ±					
	MIN. CAR RATED LOAD:	1,200 lbs (544 kg)	1,500 lbs (680 kg)	2,500 lbs (1,134 kg)			5,000 lbs (2,268 kg)
	CAR & COUNTER-WEIGHT MASS:	4,560 lbs (2,068 kg)	6,000 lbs (2,722 kg)	8,000 lbs (3,629 kg)			16,000 lbs (7,258 kg)
	SHIPPING WEIGHT:	90 lbs (41 kg)	100 lbs (45 kg)	180 lbs (82 kg)	300 lbs (136 kg)		335 lbs (152 kg)

Rope Grippers

Standard Rope Grippers

Notes for Models 618, 620 & 622

- Model 618 Rope Gripper (for European use) is designed to be manually pumped and does not include a pumping unit; in the event of a power failure, a battery back-up is necessary
- Pumping units, for 620 & 622, can be mounted on either side of Rope Gripper
- (4) 1/2" bolts (Grade 5 Minimum) are required to mount Rope Gripper and (4) 1/4" – 20 N.C. bolts to mount pumping unit
- C dimension indicates lining width and maximum outside to outside of hoist ropes
- L dimension is adjustable from 0° to 45°
- R dimension is 5/8" + Rope Sise



MODEL	Units	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
618	inch	7	6.125	3.25	5	9.8125	9.0625	8.625	5.4375	3.1875	8.6875	12	40°	5.875	2.875	2	6.5	8.125	1.25
	mm	178	156	83	127	249	230	219	138	81	221	305		149	73	51	165	207	32
620	inch	10.125	8.625	4.875	5.5	11.6875	12	9.25	5.75	3.5	9.5	13.5	45°	11.5	6.125	3.5	12.25	14.6875	1.25
	mm	257	219	124	140	297	305	235	146	89	241	343		292	156	89	311	373	32
622	inch	11.5	10	6	5.5	14.6875	16.25	9	5.75	3.25	9.5	18.5	45°	11.5	6.125	3.5	12.25	14.6875	1.25
	mm	292	254	152	140	373	413	229	146	83	241	470		292	156	89	311	373	32

When Ordering Rope Gripper, Specify the Following:

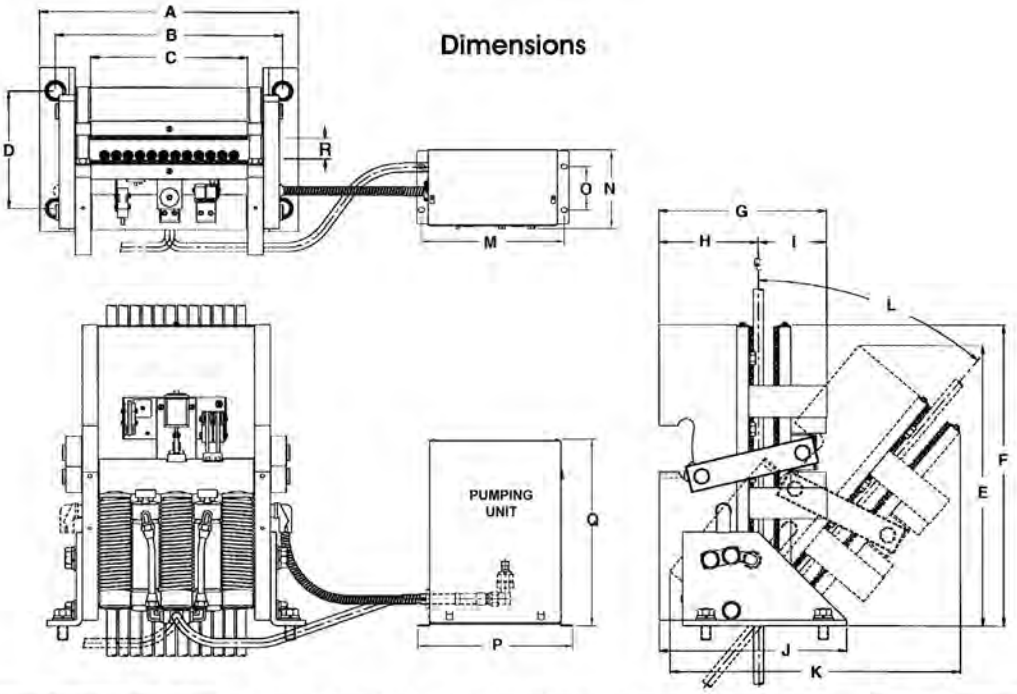
- Capacity • Car Speed • Empty Car Weight • Counterweight Weight • Rope Weight
- Compensation Weight • Number and Size of Cables • Center Line to Center Line of the Cables
- 1:1 or 2:1 Roping • Single or Double Wrap • Length of Hydraulic Hose (27" Standard, up to 96" optional)

Rope Grippers

Standard Rope Grippers

Notes for Models 624, 625 & 626

- Models 624 & 625 Rope Gripper have one less spring and cylinder than Model 626 show below
- Pumping units can be mounted on either side of the Rope Gripper
- (4) 5/8" bolts (grade 5 minimum) are required to mount Rope Gripper and (4) 1/4" – 20 N.C. bolts to mount pumping unit
- C dimension indicates lining width and maximum outside to outside of hoist ropes
- L dimension is adjustable from 0° to 40°
- R dimension is 5/8" + Rope Sise



MODEL	Units	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
624	inch	16.5	14.5	10	7.5	18.0625	19.625	10.75	6.375	4.375	12	18.5625	40°	11.5	6.125	3.5	12.25	14.6875	1.94
	mm	419	368	254	191	459	498	273	162	111	305	471		292	156	89	311	373	49
625	inch	18	16	11.5	7.5	18.0625	19.625	10.75	6.375	4.375	12	18.5625	40°	11.5	6.125	3.5	12.25	14.6875	1.94
	mm	457	406	292	191	459	498	273	162	111	305	471		292	156	89	311	373	49
626	inch	16.5	14.5	10	7.5	18.0625	19.625	10.75	6.375	4.375	12	18.5625	40°	11.5	6.125	3.5	12.25	14.6875	1.94
	mm	419	368	254	191	459	498	273	162	111	305	471		292	156	89	311	373	49
626 SPL	inch	20.25	18.25	13.75	7.5	18.0625	19.625	10.75	6.375	4.375	12	18.5625	40°	11.5	6.125	3.5	12.25	14.6875	1.94
	mm	514	464	349	191	459	498	273	162	111	305	471		292	156	89	311	373	49

When Ordering Rope Gripper, Specify the Following:

- Capacity • Car Speed • Empty Car Weight • Counterweight Weight • Rope Weight
- Compensation Weight • Number and Size of Cables • Center Line to Center Line of the Cables
- 1:1 or 2:1 Roping • Single or Double Wrap • Length of Hydraulic Hose (27" Standard, up to 96" optional)

H-W EQUIPMENT

Rope Grippers

Geared Rope Grippers

620G ROPE GRIPPER

Protects against ascending car overspeed and unintended car movement
- Protects against car falling up or down
- Protects against car leaving the floor with the door open
- Protects against slipping tractions

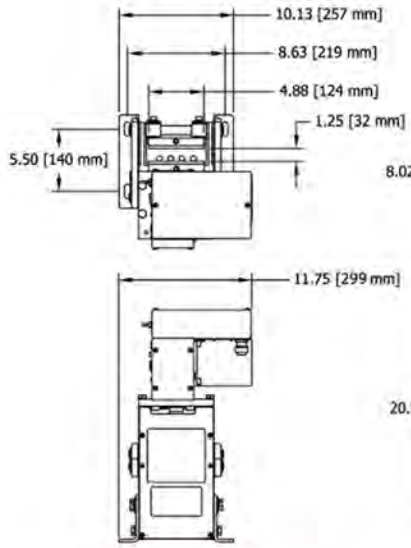
Powerful, steady pressure on ropes
- Won't damage ropes
- Won't put excessive stress on machine or sheave
- Easily replaceable, non asbestos, non metallic linings
- Brake engages ropes gently, but provides a quick, powerful grip

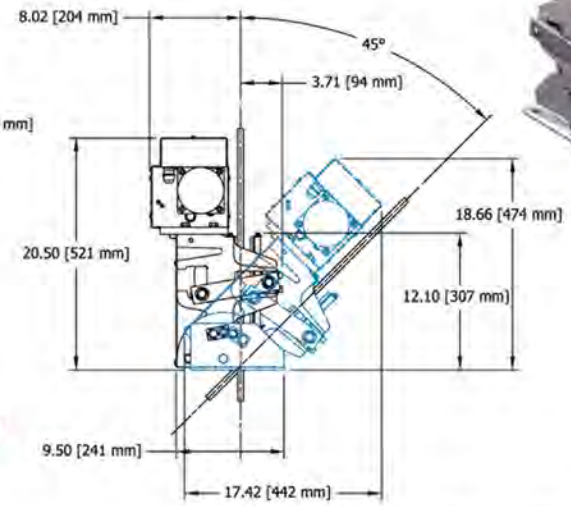
Compact – one piece design
- No separate Hydraulic or Air Unit
- Adjusts for almost every application
- Easy installation

Mechanically Set
- Triggers instantly on removal of power
- Designed to protect gears from potential damage
- Quiet, dependable operation

Electrically Set
- Automatic reset when power restores
- Manual reset required if fault is detected

110 VAC or 230 VAC – 50/60 Cycle – 3 Amp







Right Hand Model Shown

		1:1 ROPING	2:1 ROPING
MAX.	Rated Speed	350 fpm(1.78 m/s)	250 fpm(1.27 m/s)
	"Rope Gripper" Tripping Speed	402 fpm(2.04 m/s)	303 fpm(1.54 m/s)
	Car Rated Load: (with 40% to 50% Counterweights)	2,500 lbs(1,134 kg)	5,000 lbs(2,268 kg)
	Car, Car Load, Counterweight, Hoist and Compensation Rope Mass	11,500 lbs(5,216 kg)	23,000 lbs(10,423 kg)
	Door Zone	± 10 in (254 mm)	± ± 10 in (254 mm)
	Maximum Out to Out of Cables	4 7/8 in (124 mm)	4 7/8 in (124 mm)
MIN.	Car Rated Load	600 lbs(272 kg)	1,500 lbs(680 kg)
	Car & Counterweight Mass	2,280 lbs(1,034 kg)	6,000 lbs(2,722 kg)

Overspeed Governors & Tension Wts

Overspeed Governor with either standard or live shaft is designed and built to meet both the ASME A17.1 code and G.S.A. specifications. Governor is tested, preset, and sealed at the factory and comes standard with an overspeed switch, rope guard, and right or left hand arrangement

Options (available at an additional charge):

- Dusttight, watertight, and explosion proof switches
- Speed reducing switch
- Bracket hardware for adapting an encoder



Model 208 (Left Hand Shwon)

	MODELS			
	201 & 202	**207**	**208**	**210**
CAR SPEED FPM (MAX.)	500	500	800	800
TRIP SPEED FPM	625	625	970	970
SHEAVE DIAMETER	16"	12"	16"	16"
OVERSPEED SWITCH	Std.	Std.	Std.	Std.
SPEED REDUCING SWITCH	Optional	Optional	Optional	Optional
ROPE TYPE & SIZE	1/2" or 3/8" 8X19 T.S.	3/8" 8X19 T.S.	1/2" or 3/8" 8X19 T.S.	1/2" or 3/8" 8X19 T.S.
HAND	Right or Left	Right or Left	Right or Left	Right or Left
MAX. PULL-THRU	1200#	1200#	1200#	1200#
MIN. PULL-THRU	300#	300#	300#	300#
SHIPPING WEIGHT	180#	180#	180#	180#

210 Governor Restricted to 650# Hanging Load.

DEAD SHAFT MODELS		
201	207	208
201-SW	207-SW	208-SW
	207-RS	
LIVE SHAFT MODELS (FOR ENCODER MOUNTS)		
202-0.25	207-0.25	210-0.25
202-0.25-SW	207-0.25-SW	210-0.25-SW
202-0.472	207-0.25-RS	210-0.472
202-0.472-SW	207-0.472	210-0.472-SW
202-0.75-SW	207-0.472-SW	210-0.75
202-1.00	207-0.472-RS	210-0.75-SW
202-1.00-SW	207-0.75	210-1.00
	207-0.75-SW	210-1.00-SW
	207-0.75-RS	
	207-1.00	
	207-1.00-SW	
	207-1.00-RS	
SW-Speed Reducing Switch		
RS-Remote Set and Reset Capabilities		



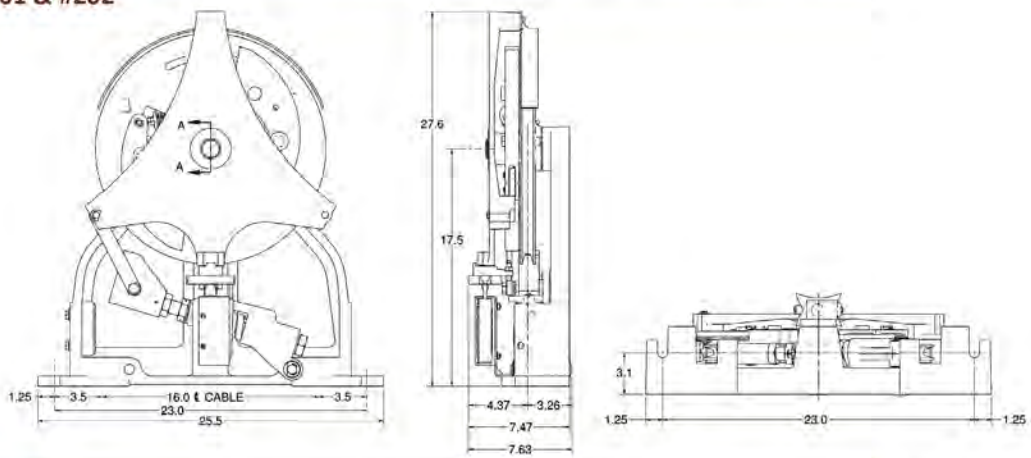
Model 210 (Left Hand Shown)

H-W EQUIPMENT

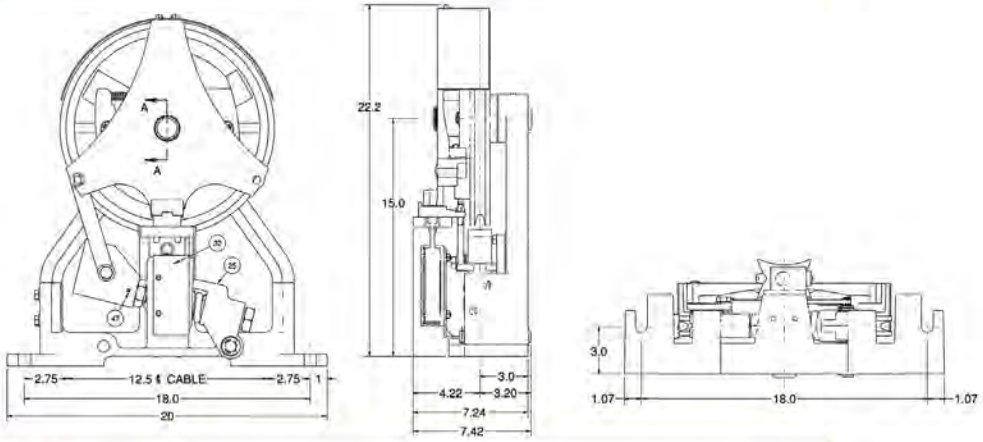
Overspeed Governors & Tension Wts

Dimensions (Inches) **Left Hand Models Shown**

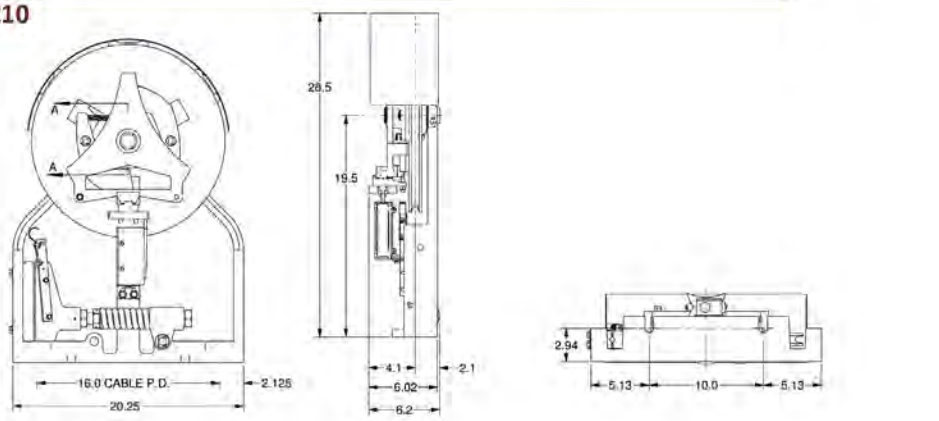
#201 & #202



#207



#208 & #210



Overspeed Governors & Tension Wts

REMOTE TRIP AND RESET GOVERNORS:

207-RS Standard & Live Shaft Governors

Governor Remote Reset

After the elevator has experienced an overspeed condition in which the governor tripped and set the safety, it will be necessary to reset the systems after the elevator has been deemed safe for operation.

1. To reset the governor hammer, run the car in the up direction. By moving the car up, it will release the tension on the governor rope, and the hammer can be returned to the ready to run position.

2. Once the hammer has been reset, it is necessary to reset the overspeed switch. Provided in the controller is an optional feature that will energize an electric actuator that will reset the overspeed switch to the ready run position.

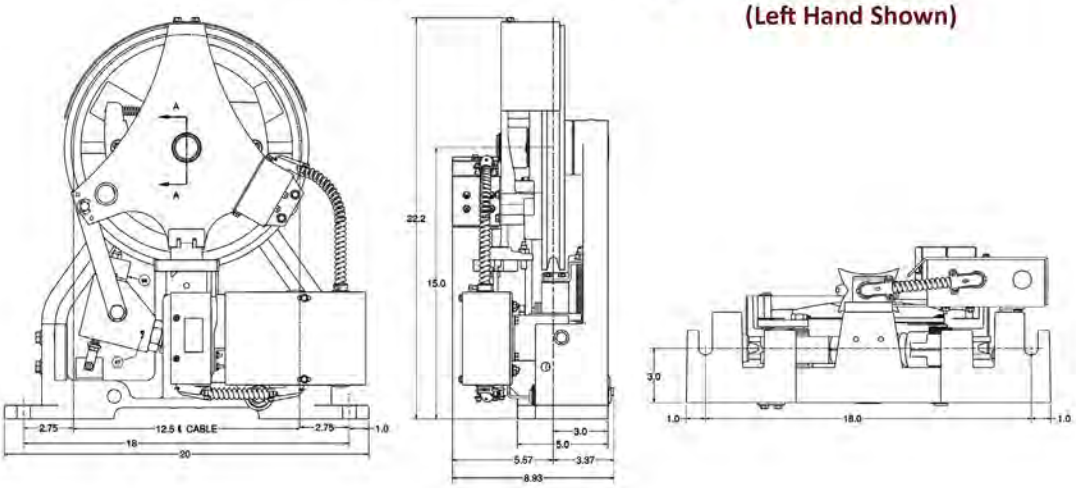
Governor Remote Trip

In a Machine-Room-Less application, if it is necessary to have a method to manually trip the governor for test and inspection purposes, the controller should provide a feature that will activate the speed trip test. For safety purposes, it is recommended that the test first be preformed at a slow speed. To perform the test, run the car in the down direction, then actlvate the feature. This will trigger an actuator on the governor, which in turn will cause the governor to activate and set the safety. Follow the Governor Remote Reset Instructions to return the car to the ready to run state.



Model 207-RS
(Left Hand Shown)

Dimensions (Inches)



H-W EQUIPMENT

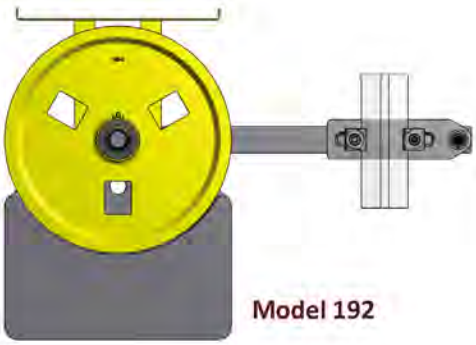
Overspeed Governors & Tension Wts

TENSION WEIGHTS:

#191 Swing Type - 12" Dia.
#192 Swing Type - 16" Dia.
#193 Frame Type - 16" Dia.
#194 Frame Type - 12" Dia.

Shipping weight for Tension Weights approximately 160#

Adjustable Arms are available for some models
Guard also available

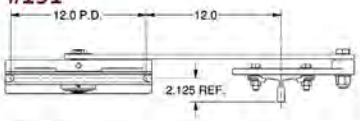


Model 192

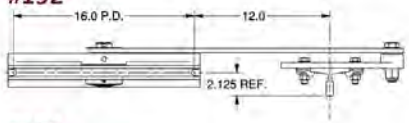
Dimensions (Inches)

8# Rail Arrangement

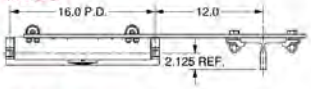
#191



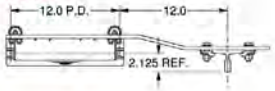
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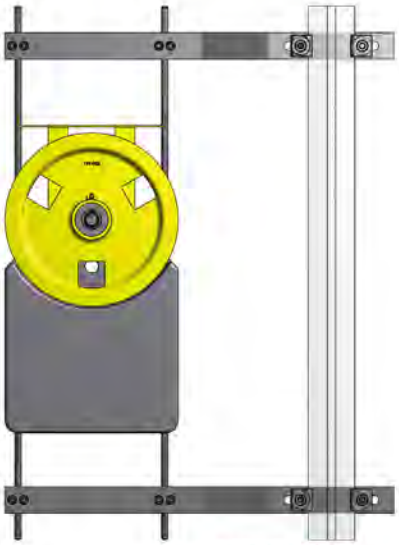


#193



#194





Model 194

When Ordering, Please Specify the Following:

GOVERNORS:

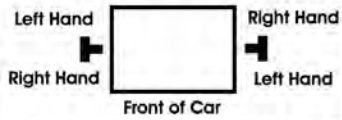
- Tripping Speed
- Right or Left Hand Arrangement
- Safety Pull-through (in lbs.)
- Governor Rope Size

*NOTE: Maximum car travel for #209 with 3/8" rope is 500'
Maximum car travel for #209 with 1/2" rope is 300'

TENSION WEIGHTS:

- Rail Size
- Governor Size

H-W determines governor hand according to the diagram shown, which is based on governor rope location looking into the hoistway from the hallway.



Brakes & Accessories

DC Disc Brakes



Hollister-Whitney's Direct Current Disc Brakes feature a completely enclosed coil, individual spring tension adjustments, and individual stroke adjustments. They are easy to install and adjust.

Operating voltage on Brake Coil is 230 Volts D.C. (115 Volts Optional). When using 230-volt coil, voltage may be decreased to 160 volts for running and holding. For 115-volt coil, voltage may be decreased to 85 volts for running and holding. A.C. to D.C. Rectifier Panels and Transformer available.

Electrical Information

Model 92
(used on 34 machine)

	Optional 115V	Standard 230V
Ohms	33	138
Amps	3.48	1.66
Watts	400	380

Model 102
(used on 44 & 54 machines)

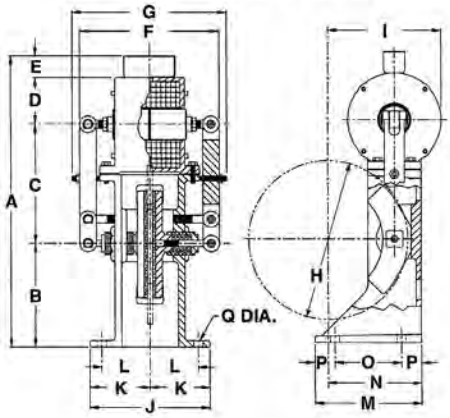
Model 112
(used on 64 machine)

	Optional 115V	Standard 230V
Ohms	46.45	190
Amps	2.44	1.24
Watts	277	292

When Ordering Brakes, Please Specify The Following:

- Speed and Capacity of the Machine
- Distance from the Center Line of the Worm Shaft to the Top of the Bedplate
- Voltage & Type of Motor Control

DIMENSIONS (INCHES)



Brake No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Ship. Wgt.
92	18 5/8	7	7 1/16	2 15/16	1 5/8	8 15/16	11 5/8	10	7 1/16	6 1/4	3 1/8	2 5/8	6	5 5/8	4 1/2	3/4	9/16	85#
102	21 7/8	7 3/4	9	3 1/2	1 5/8	10 1/2	11 5/8	12	8 1/2	9	4 1/2	3 5/8	8	7	5	1 1/2	11/16	95#
112	25 1/2	11 3/8	9	3 1/2	1 5/8	10 1/2	11 5/8	14	9 1/2	9	4 1/2	3 5/8	8	8	5	1 1/2	11/16	100#

H-W EQUIPMENT

Brakes & Accessories

DC Drum Brakes



Hollister-Whitney offers Direct Current Brakes that feature a completely enclosed coil, individual spring tension adjustments, individual stroke adjustments, and pivot shoes with toe and heel adjustments. They are easy to install and adjust *(split frame)*.

Operating voltage on Brake Coil is 230 Volts D.C. (115 Volts Optional). When using 230-volt coil, voltage may be decreased to 160 volts for running and holding. For 115-volt coil, voltage may be decreased to 85 volts for running and holding. D.C. Rectifier Panels, Transformer and Split Brake Drums available. Modifications available for non-standard drum diameters and widths.

Electrical Information

Models 80 – 111

	Optional 115V	Standard 230V
Ohms	71	280
Amps	1.63	.82
Watts	189	188

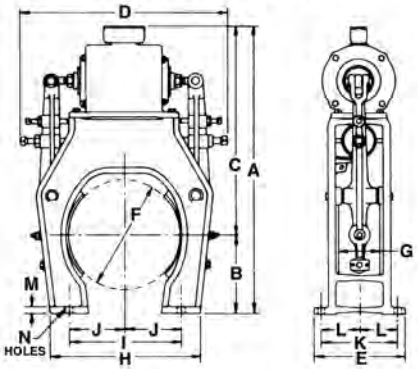
Models 115 – 125-20

	Optional 115V	Standard 230V
Ohms	84	313
Amps	1.38	.73
Watts	160	167

When Ordering Brakes, Please Specify The Following:

• Diameter and Width of Brake Drum • Distance from the Center Line of the Brake Drum to the Top of the Bedplate • Voltage • Control (Single Speed, 2 Speed, V.V., or V.F.A.C.) • Capacity and Speed • Amount of Existing Shoe Contact on Drum

DIMENSIONS (INCHES)



	Brake Assy. No.	Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Ship. Wgt.
	80	8H	26 1/8	7 5/16	19	18	8 1/4	8	3 5/8	13 1/2	10	5	7	3 1/2	5/8	9/16	190#
	81	8L	24 1/2	5 1/2	19	18	8 1/4	8	3 5/8	14	10	5	7	3 1/2	5/8	9/16	190#
	85	9H	26 1/8	7 5/16	19	18	8 1/4	9	3 5/8	13 1/2	10	5	7	3 1/2	5/8	9/16	165#
	86	9L	24 1/2	5 1/2	19	18	8 1/4	9	3 5/8	14	10	5	7	3 1/2	5/8	9/16	165#
	90	10H	26 1/8	7 5/16	19	18	8 1/4	10	3 5/8	13 1/2	10	5	7	3 1/2	5/8	9/16	160#
**	91	10L	24 1/2	5 1/2	19	18	8 1/4	10	3 5/8	14	10	5	7	3 1/2	5/8	9/16	160#
	95	11H	28 1/2	9 1/2	19	19	9 3/4	11	5 1/8	16 3/4	13	6 1/2	8 1/2	4 1/4	5/8	9/16	190#
**	96	11L	25 1/2	6 1/2	19	19	9 3/4	11	5 1/8	16 7/8	13	6 1/2	8 1/2	4 1/4	5/8	9/16	190#
	100	12H	28 1/2	9 1/2	19	19	9 3/4	12	5 1/8	16 3/4	13	6 1/2	8 1/2	4 1/4	5/8	9/16	190#
**	101	12L	25 1/2	6 1/2	19	19	9 3/4	12	5 1/8	16 7/8	13	6 1/2	8 1/2	4 1/4	5/8	9/16	190#
	105	13H	32 1/4	11 3/8	20 7/8	20	10 1/2	13	5 1/2	19	15 1/4	7 5/8	9	4 1/2	5/8	9/16	215#
	106	13L	28 1/4	7 1/2	20 7/8	20	10 1/2	13	5 1/2	19 1/4	15 1/4	7 5/8	9	4 1/2	5/8	9/16	215#
	110	14H	32 1/4	11 3/8	20 7/8	20	10 1/2	14	5 1/2	19	15 1/4	7 5/8	9	4 1/2	5/8	9/16	215#
**	111	14L	28 1/4	7 1/2	20 7/8	20	10 1/2	14	5 1/2	19 1/4	15 1/4	7 5/8	9	4 1/2	5/8	9/16	215#
	115	15H	35 5/8	13	20 7/8	23	11	15	6 1/8	20	16	8	9 3/4	4 7/8	5/8	9/16	250#
	116	15L	31 5/8	9	20 5/8	23	11	15	6 1/8	20 3/4	16	8	9 3/4	4 7/8	5/8	9/16	250#
	120	16H	35 5/8	13	20 5/8	23	11	16	6 1/8	20	16	8	9 3/4	4 7/8	5/8	9/16	250#
**	121	16L	31 5/8	9	20 5/8	23	11	16	6 1/8	20 3/4	16	8	9 3/4	4 7/8	5/8	9/16	250#
	125-18	18L	35 3/8	10 1/2	20 7/8	26 1/2	11 3/8	18	6 1/8	24	20	10	10	5	3/4	13/16	280#
	125-20	20L	35 3/8	10 1/2	20 7/8	26 1/2	11 3/8	20	6 1/8	24	20	10	10	5	3/4	13/16	280#

** These low brakes are available for pick up ONLY, at G.A.L. Bronx, New York. All brake shoes that have to be shipped to various locations must be ordered from Hollister Whitney, Quincy, Illinois.

† L: Low H: high

Brakes & Accessories

Brake Shoe Assemblies



** These brake shoes are available for pick up ONLY, at G.A.L. Bronx, New York. All brake shoes that have to be shipped to various locations must be ordered from Hollister Whitney, Quincy, Illinois.

† L: Low H: high

H-W Part No	GAL Part No	† Shoe Size
80-029A	-	8H/L
85-029A	-	9H/L
90-029A **	BRK-0038N	10H/L
95-029A **	BRK-0039N	11H/L
100-029A **	BRK-0040N	12H/L
105-029A	-	13H/L

H-W Part No	GAL Part No	† Shoe Size
110-029A **	BRK-0041N	14H/L
115-029A	-	15H/L
120-029A **	BRK-0042N	16H/L
125-18	-	18L
125-20	-	20L

Disc Brake Shoe



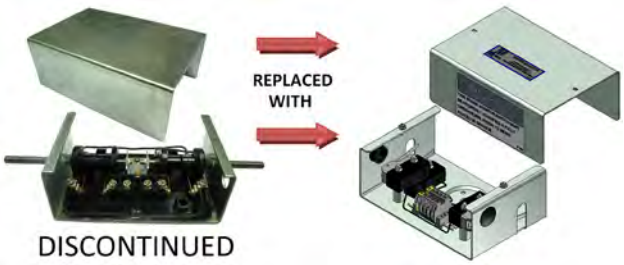
H-W Part No	Description
92-061	Disc Brake Shoe & Rod Assembly Set (#34 Machine)
102-061-RK	Disc Brake Shoe & Rod Assembly Set (Pre May 30, 2003 Machines)
102-061	Disc Brake Shoe & Rod Assembly Set (After June 1st 2003)

Brake Panels



H-W Part No	GAL Part No	Description
10019	BRK-0044N	Brake Panel, Single Phase Rectifier
10019-T	BRK-0045N	Brake Panel, Single Phase Rectifier With Transformer
10019-1	BRK-0046N	Brake Panel, Three Phase Rectifier
10019-1-T	BRK-0047N	Brake Panel, Three Phase Rectifier With Transformer

Disc Brake Monitor



H-W Part No	GAL Part No	Description
102-094	BRK3-0001N	Monitor, Disc Brake, Assembly

Rope Gripper Panel



H-W Part No	GAL Part No	Description
600-150	RG-0082N	Panel, Rope Gripper Auxiliary Controller

H-W EQUIPMENT

Car Slings & Platforms



At Hollister-Whitney we supply you with a complete line of passenger and freight car slings and platforms for both hydraulic and traction installations. Each car sling and platform assembly is supplied complete with channel stiles, crossheads, gussetts, braces, cable hitch plates (traction jobs only), cutout for sills, #26GA fireproofing on underside of wood platform, and one toe guard.

These items are available:

- Extra Toe Guards *(for double opening)*
- Isolated Platform
- Roller Guide Shoe Balance Weights
- Wood and Steel or All-Steel Platform
- Compensation Hitch
- Freight Cabs
- Vertical Rising Gates

Note: Due to the fact that equipment is quite specialized, contact our sales department for pricing. A written quotation will be furnished to meet your requirements.

When Ordering, Please Specify the Following:

For Car Slings and Platforms: Capacity • Platform Width • Platform Depth
• Distance from Front of Platform to Centerline of Car Rails • Distance Between Guides
• Type of Guide Shoes • Type of Safety • Number of Openings on Car • Cab Weight
• Underbeam to Platform Dimension • Type of Door *(Single or 2 Speed)* or Gate *(Manual or Powered)*
• Side or Corner Post • Construction of Platform *(Wood and Steel or All-Steel)*
• Car Sill Detail for All-Steel Platform • Classification *(Passenger, Class A, B, C-1, C-2, or C-3)*
• If Platform Isolation is Required

For Gates: Clear Gate Openings, Width and Height • Clear Inside Cab Width • Car Overtravel
• Dimension from Top Landing to the Underside of Nearest Obstruction for Both Posts and Gate *(With or Without Gate Switch)* • Single or Duplex Gate

For Cab: Platform Width • Platform Depth • Height of Cab • Number & Size of Openings
• Type of Lighting • Number and Size of Cutouts • Detail of Car Gates if Power Operated

Counterweight Frames

Hollister-Whitney can supply the counterweight frame as a separate unit or supply the counterweight frame and filler weights. Each counterweight frame is furnished with top and bottom channels, "T" bar side stiles, two tie rods, and cable hitch plate. Hanger assembly is also available for 2:1 roping.



Max. Frame Height = 19'-6"

Note: If filler weights are supplied by customer, H-W will supply filler weight drawings. Frame width can be varied to suit any D.B.G.* dimension. Estimating the amount of weights required is based on the total net car weight plus 40% to 50% of capacity minus frame weight.

FRAME NO.	STD D.B.G*	SHIPPING WEIGHT
260	27 1/2"	400 Lbs.
240	30 1/8"	410 Lbs.
230	38 3/4"	430 Lbs.
250	57 1/4"	480 Lbs.
255	66 3/4"	575 Lbs.

* D.B.G. is the distance between guide rails.

When Ordering Counterweight Frame and Guard, Please Specify the Following:

- D.B.G. • Maximum Overall Height of Frame • Maximum Width of Filler Weights *(Minimum is 5")*
- Total Counterweight Required • Number and Size of Hoist Ropes

Note: Hollister-Whitney Guide Shoe Assemblies #375, #376, #377, and #383 will mount on above standard counterweight frames without requiring mounting plates. All other guide shoes require mounting plates *(Drilling instructions are required if Hollister-Whitney is to furnish mounting plates, but not shoes).*

H-W EQUIPMENT

Guide Shoes

Rigid Guide Shoes

A complete line of heavy-duty rigid guide shoes with cast-iron liners and optional lubricator assemblies is available. Shoe assembly #371 will mount on a car sling with 5" stiles without needing shoe plates. The shoe assemblies #375 and #376 will mount on a standard H-W counterweight frame without needing shoe plates. All other shoes need shoe plates.

Model 371



Model 375



Model 376



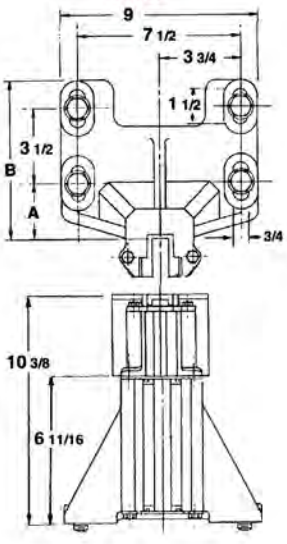


Model 381

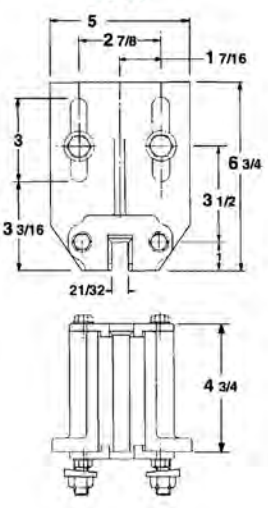
MODEL 371 ONLY		
RAIL SIZE	"A"	"B"
8#	3 1/8	7 3/4
11# - 30#	2 1/2	7 1/8

WHERE USED MAX. CAPACITY		RAIL SIZE	SHOE TYPE	SHOE	LINER MATERIAL	WEIGHT SET OF4
CAR	Pass or Frt. 6000# Cap.	5/8" Thru 1 1/4"	Rigid C.I.	371	6" Cast Iron	120#
	Freight 12000# Cap.	5/8" Thru 1 1/4"	Rigid C.S.	371	6" Cast Iron	124#
	Freight 20000# Cap.	1 1/8", 1 1/4"	Rigid C.I.	381	10" Cast Iron	250#
CWT.	8000#	5/8"	Rigid	375	4" Nylon or C.I.	40#
	12000#	5/8"	Rigid	376	No Liner	45#
Plates and mounting hardware for above						50#

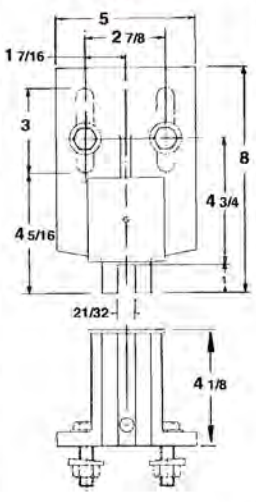
#371



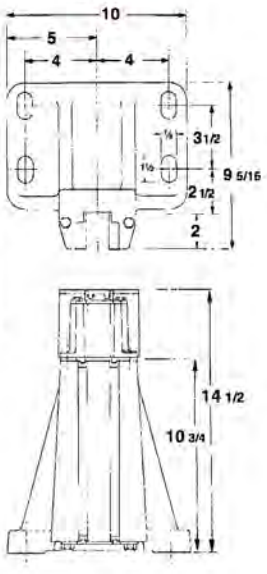
#375



#376



#381



Guide Shoes

Swivel Guide Shoes

Hollister-Whitney offers lightweight swivel guide shoes with nylon liners that are top quality and very competitively priced. Model #383 will mount on a standard H-W counterweight frame without needing shoe plates. Model #382 shoe assembly requires shoe plates.

	WHERE USED MAX. CAPACITY	RAIL SIZE	SHOE TYPE	SHOE	LINER MATERIAL	WEIGHT SET OF4
CAR	Pass or Class A 10000# Cap.	5/8"	Swivel	382	8 1/2" Nylon or C.I.	115#
CWT.	10000#	5/8"	Swivel	383	5 1/2" Nylon	40#
	Plates and mounting hardware for above					50#

Model 382



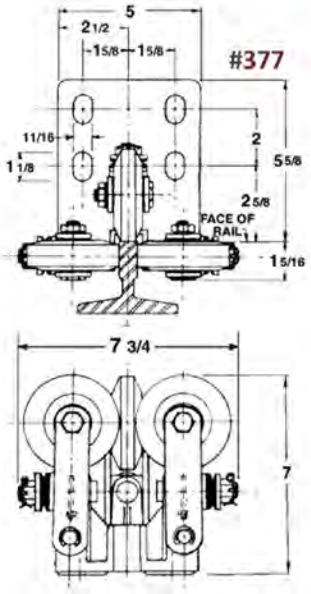
Model 383

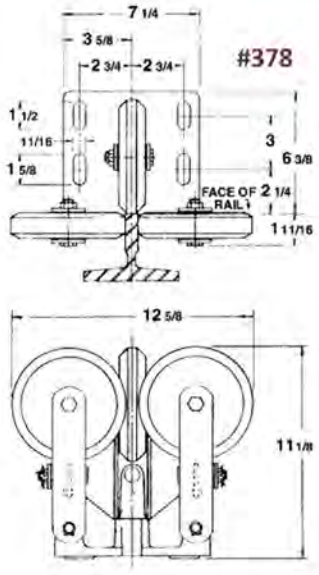


H-W EQUIPMENT

Guide Shoes

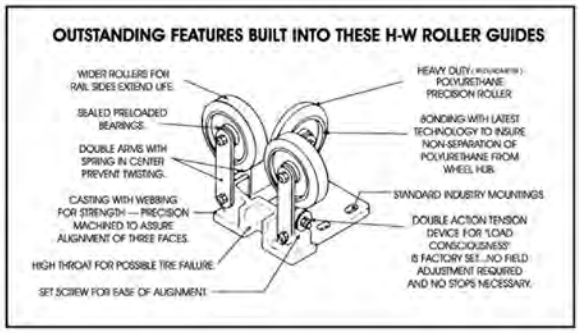
Roller Guide Shoes







Model 377 Model 378



Roller Guide Shoes from H-W are "Load Conscious!" The unique tension system actually causes the rollers to "feel" or "sense" the rail and adjust for loads near the balanced point and for rail misalignment, while a strong tension takes over to prevent excessive movement as heavier loads are placed off center. Rollers will never leave the rail with this "guide" and the outstanding tension system allows ultra long life of the roller wheels.

For higher capacities, the ultimate choice is the Hollister-Whitney four-wheel guides. Four wheels control more of the side to side movement.

Guide Shoes

Roller Guide Shoes

NOTE: CONTACT H-W FOR CAPACITY AND SPEEDS GREATER THAN SHOWN

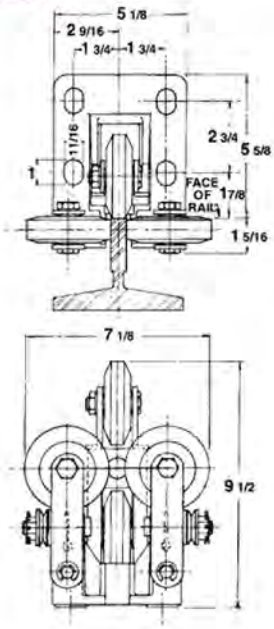
MODEL NO. & SHOE TYPE	WHERE USED	& RAIL SIZE	APPLICATION FOR Typical Elevator Installation: TYPE LOADING	MAX. CAR CAP.	CAR SPEED OF	WEIGHT SET OF 4
377 3-3 1/4" Rollers	Car	5/8"	Pass.	2000	300	55#
	Cwt.		Pass.	5000	600	
378 3-6" Rollers	Car	5/8" or 3/4" (EXCEPT 8#)	Pass.	4000	600	110#
			Class "A"Frt.	4000	200	
379 4-3 1/4" Rollers	Car	5/8"	Pass.	3500	300	75#
	Cwt.		Pass.	8000	1000	
380 4-6" Rollers	Car	5/8" or 3/4" (EXCEPT 8#)	Pass.	8000	1000	175#
			Class "A"Frt.	6000	200	

Note: Models 378 & 380 are not designed for use on 8# rails.

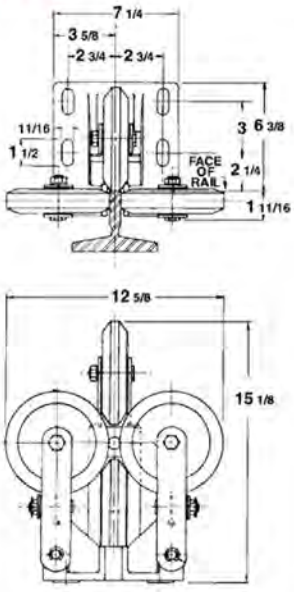


Model 379

#379



#380





Model 380

H-W EQUIPMENT

Sheaves

H-W Sheaves, (Car, Cwt., Overhead and Deflector) include the following standard equipment: shaft, bearings, support blocks (2- and 4-bolt types) and all mounting hardware. Also available are secondary sheave assemblies.

STANDARD DEFLECTOR SHEAVES All Sizes in Inches [Millimeters]					
PITCH DIA.	RIM WIDTH	HUB WIDTH	MAX. NO. & SIZE OF CABLES	SHEAVE NO.	SHIPPING WEIGHT
20 [508]	4 [102]	4 [102]	4 x 1/2 [13]	331-002	210#
	6 1/2 [165]		7 x 1/2 [13]	331-003	260#
	5 3/4 [146]		6 x 1/2 [13]	331-005	240#
	7 1/4 [184]	6 1/4 [159]	8 x 1/2 [13]	331-008	260#
25 [635]	4 1/2 [114]	4 [102]	4 x 5/8 [16]	331-011	325#
	5 3/4 [146]		6 x 1/2 [13] or 5 x 5/8 [16]	331-017	325#
	7 1/4 [184]	6 1/4 [159]	8 x 1/2 [13] or 6 x 5/8 [16]	331-023	350#



Car Or Counter Weight Sheave

HEAVY DUTY DEFLECTOR SHEAVES All Sizes in Inches [Millimeters]					
PITCH DIA.	RIM WIDTH	HUB WIDTH	MAX. NO. & SIZE OF CABLES	SHEAVE NO.	SHIPPING WEIGHT
25 [635]	7 1/2 [191]	6 1/4 [159]	7 x 5/8 [16]	331-025	375#
	4 1/2 [114]		4 x 5/8 [16]	331-026	325#
	6 1/2 [165]		6 x 5/8 [16]	331-027	350#
26 [660]	10 [254]	9 [229]	9 x 5/8 [16]	331-087	600#
30 [762]	6 1/2 [165]	6 1/2 [165]	6 x 5/8 [16] or 5 x 3/4 [20]	331-090	650#



Deflector Sheave

CAR 2:1, CWT 2:1, OVERHEAD SHEAVES All Sizes in Inches [Millimeters]					
PITCH DIA.	RIM WIDTH	HUB WIDTH	MAX. NO. & SIZE OF CABLES	SHEAVE NO.	SHIPPING WEIGHT
15 3/4 [400]	4 1/4 [108]	4 [102]	6 x 3/8 [10] or 10mm	331-064	235#
	5 1/2 [140]	5 [127]	8 x 3/8 [10] or 10mm	331-065	275#
20 [508]	6 1/2 [165]	6 1/2 [165]	7 x 1/2 [13]	331-009	375#
25 [635]	6 1/2 [165]		7 x 1/2 [13] or 6 x 5/8 [16]	331-092	500#
	8 1/2 [216]		9 x 1/2 [13] or 8 x 5/8 [16]	331-093	575#
26 [660]	10 [254]	9 [229]	9 x 5/8 [16]	331-088	600#
30 [762]	6 1/2 [165]	6 1/2 [165]	6 x 5/8 [16] or 5 x 3/4 [20]	331-090	650#
	8 1/2 [216]		8 x 5/8 [16] or 7 x 3/4 [20]	331-091	725#

* Above Maximum Number of Cables is Based on H-W Standard Traction & Deflector Sheave Groove Centers

3/8" Cable = 5/8" Pitch
1/2" Cable = 7/8" Pitch
5/8" Cable = 1" Pitch
3/4" Cable = 1 1/8" Pitch

When Ordering Sheaves, Please Specify the Following:

- Quantity and Size of Hoist Cables
- Centerline to Centerline of Cables
- Type of Sheave Supports
- Beam Spacing *(Centerline of Sheave to Centerline of Mounting Beams or Face of Mounting Channels)*
- Capacity and Speed
- Type of Sheave

Buffers

Oil Buffers

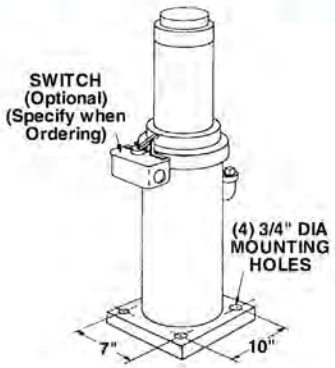


500 Oil Buffer with NEMA Switch



500 Oil Buffer with GAL Switch

The Hollister-Whitney Series 500 Oil Buffers answer your need for easy-to-install, reliable, and rugged car and counterweight oil buffers. These buffers are readily mountable wherever reliable oil buffers are needed. Series 500 Oil Buffers are designed and built to strict engineering standards and conform to ASME A17.1 and C.S.A. B44 safety codes. They also conform to New York City Housing Authority specifications and have Material and Equipment Acceptance (MEA) approval from the City of New York Department of Buildings.



When Ordering Oil Buffers, Please Specify the Following:

- Rated Car Speed
- Rated Car Capacity
- Empty Car Weight
- Total Counterweight Weight
- With or Without Switch
- If Car Buffer Strut is Required
- If Pit Channels are Required

ASSY. NO.	STROKE	OVERALL HEIGHT	COMP. HEIGHT	MAX. CAR SPEED	GROSS LOAD (Lbs.)		SHIPPING WEIGHT
					MIN.	MAX.	
500	9"	30"	21"	350 FPM	2,500	15,000	150#
510	12"	37"	25"	400 FPM	2,500	15,000	180#
520	18"	50"	32"	500 FPM	3,000	12,000	210#
530	26"	70"	44"	600 FPM	3,000	12,000	270#
535	45"	117"	72"	800 FPM	3,000	12,000	390#

H-W EQUIPMENT

Buffers

Spring Buffers



Car and Counterweight Spring Buffers from Hollister-Whitney are ruggedly built and designed to meet your specific requirements for 200 f.p.m. and below.



When Ordering Spring Buffers, Please Specify the Following:

- Rated Car Speed
- Rated Car Capacity
- Empty Car Weight
- Total Counterweight Weight
- Overall Height of Buffer
- If Pit Channels are Required

CAR SPRING BUFFERS				
Gross Load (Lbs.) Min.-Max.	Spring No.	Qty.	Comp. (Ins.)	O.A. Spring Hgt. (Ins.)
3550 - 5300	400-8	2	5	15 3/4
5000 - 7500	400-37	2	5	17
6700 - 10000	400-38	2	5	19 1/2
8300 - 12400	400-55	2	4	19
10350 - 15500	400-55	2	5	19
13350 - 20000	400-38	4	5	19 1/2
16550 - 24800	400-55	4	4	19
20700 - 31000	400-55	4	5	19
31000 - 46500	400-55	6	5	19

COUNTERWEIGHT SPRING BUFFERS				
Gross Load (Lbs.) Min.-Max.	Spring No.	Qty.	Comp. (Ins.)	O.A. Spring Hgt. (Ins.)
1800 - 2650	400-8	1	5	15 3/4
2500 - 3750	400-37	1	5	17
3350 - 5000	400-38	1	5	19 1/2
4150 - 6200	400-55	1	4	19
5200 - 7750	400-55	1	5	19
6700 - 10000	400-38	2	5	19 1/2
8300 - 12400	400-55	2	4	19
10350 - 15500	400-55	2	5	19
15500 - 23250	400-55	3	5	19
20700 - 31000	400-55	4	5	19

Note: Min. O.A. Buffer Height = Spring Height + 1"

The Hollister-Whitney Type "B" Flexible Guide Clamp Safety is Superior in Construction and Offers Many Important Features:

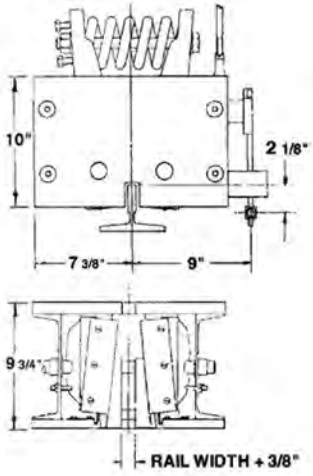
- Designed in compliance with all requirements of ASME A17.1 code
- Stopping force automatically exerted equally on both sides of each guide rail and readily adjustable through compression spring on each safety block
- Full swivel of rail grips provides full and uniform contact on all rail faces when safety is actuated
- Simple mounting under plank channels spaced for stile members of any size
- All operating linkage is adjustable and located under the car for easy installation, inspection, and maintenance from elevator pit
- Car safety switch operated by linkage under the car and automatically resets
- Arranged for mounting guide shoes of any type
- Dusttight, watertight, and explosionproof switches available at an additional charge

All H-W car guide shoes, except #377, bolt directly to #480 safety. Other manufacturer's shoes may require adapter plates.









MODEL	480		481		481 DUPLEX		481 TRIPLEX
MAXIMUM LOAD (LBS) = CAR + CAPACITY + COMPENSATION	15000	13000	20000	18000	30000	40000	50000
MAXIMUM CAR SPEED (FPM)	500	800	500	800	500	350	400
MAXIMUM TRIPPING SPEED (FPM)	625	970	625	970	625	452	510
RAIL SIZES	All except 8 lb.		18.5, 22.5, & 30 lb.				30 lb. only
MINIMUM PULL THROUGH (LBS)	100				125		150
SHIPPING WEIGHT (LBS)	400				800		1200

NOTE: ALL MODELS, INCLUDING THOSE DESIGNED TO BE USED IN HIGHER SPEED APPLICATION, MEET ASME CODE A17.1 REQUIREMENTS. IN ADDITION, MODEL #480, FOR 500 F.P.M. AND BELOW, IS APPROVED FOR V.A., G.S.A. AND STATES OF CALIFORNIA, PENNSYLVANIA, AND WISCONSIN. ALSO, MODEL #481, FOR 500 F.P.M. AND BELOW, IS APPROVED FOR STATES OF PENNSYLVANIA AND WISCONSIN.

When Ordering Safeties, Please Specify The Following:

- Car Speed • Face to Face of Guide Rails • Rail Size • Governor Location • Stile Size
- Type of Guide Shoes to be Used • Gross Load *(Empty Car Weight & Capacity)*

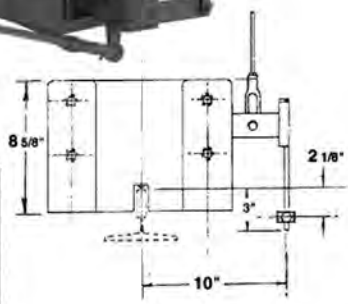
Safeties

Choose the Hollister-Whitney Type "A" Instantaneous Safety for these important features:

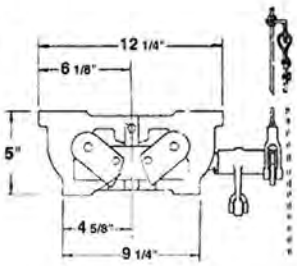
- Designed in compliance with all requirements of ASME A17.1 code
- Stopping force exerted equally on both sides of each guide rail
- Simple mounting under plank channels spaced for 6", 7", & 8" stile members *(Adapter plates available for other stile widths)*
- All operating linkage is adjustable and located under the car for easy installation, inspection, and maintenance from elevator pit
- Car safety switch operated by linkage under the car – manually reset for maximum safety
- Arranged for mounting guide shoes of any type
- Dusttight, watertight, and explosionproof switches available at an additional charge

Shoe assemblies #371 and #381 will mount to #540 safety without needing adapter plates. All other shoes require adapter plates.





MODEL	540
MAXIMUM LOAD (LBS) = CAR + CAPACITY + COMPENSATION	20,000
MAXIMUM CAR SPEED (FPM)	150
MAXIMUM TRIPPING SPEED (FPM)	210
RAIL SIZES	8, 11, 12, 15, 18.5 & 22.5 lb.
MINIMUM PULL THROUGH (LBS)	75
SHIPPING WEIGHT (LBS)	175



When Ordering Safeties, Please Specify the Following:

- Car Speed • Face to Face of Guide Rails
- Rail Size • Governor Location
- Stile Size • Type of Guide Shoes to be Used

Elevator Equipment Accessories

Mounting Brackets for G.A.L. Hatch Switches

H-W supplies you with a complete line of mounting brackets for G.A.L. hatch switches. Functional design and aluminum construction make these brackets economical and lightweight. H-W supplies brackets and cams only. Switches and vanes can be ordered directly through G.A.L. Please note that these brackets are specifically designed for G.A.L. switches only. Mounting brackets are equipped with all necessary mounting hardware.



Adjustable Guide Rail Brackets

Heavy-duty guide rail brackets are designed to securely attach car and counterweight rails to the building structure. H-W supplies rail brackets with all necessary mounting hardware. Our engineers will provide you with custom designs to accommodate all bracket conditions except seismic zone 3 or greater or cornerpost car brackets.



Guide Rails

H-W supplies guide rails from the finest quality steel, machined to exacting tolerances. All rails from H-W are supplied with rail splice plates and bolts.

When Ordering Rail Brackets, Please Specify:

- Rail size for Car or Counterweight
- Dimension from Back of Car Rail to Support
- Dimension from Centerline of Counterweight Rails to Support

Hollister-Whitney Rope Shackles and Springs

Hollister-Whitney wedge type shackles are of one piece construction specifically designed for elevators and are available in 18", 24", 30", and 36" overall lengths for 3/8", 1/2", and 5/8" ropes. Equalizer springs are normally supplied for counterweight shackles only. Wedge shackles conform to New York City Housing Authority specifications and also have Material and Equipment Acceptance (MEA) approval from the City of New York Department of Buildings.



When Ordering Wedge Shackles, Please Specify:

- Rope Size
- Overall Length
- Quantity

Hoist and Governor Ropes

H-W can supply you with special strength wire rope designed specifically for the requirements of your elevator. H-W recommends the use of 8 x 19, 21, or 25 traction steel.

Hollister-Whitney Elevator Corporation

#1 Hollister-Whitney Parkway
Quincy, IL 62305
Ph: 217-222-0466 Fax: 217-222-0493

website: www.hollisterwhitney.com
email: engineering@hwec.com
email: sales@hwec.com

ESTIMATION AND ORDER FORM

Company:		**Today's Date:**	
Company Address:		**Quote Due:**	
		Job Name:	
		Job Address:	
Contact:			
Phone:			
Fax:		**Your Job No.:**	
Email:		**H-W No.:**	(for H-W use only)

I REQUEST THAT H-W USE THE FOLLOWING INFORMATION TO:

☐ **Prepare a Price Quotation only**
☐ **Process my order using Purchase Order No. (attached):** _____
☐ **Prepare Hoistway Layout Drawings for submittal (Purchase Order required)**

NOTE: This form and separate field survey forms can be printed and used for gathering information for quoting, ordering, and to assist with generating layout drawings. Use supplemental pages as needed. It is essential that the information be accurate and complete to ensure timely delivery and trouble-free installation. Non-responses will be construed as the item is non-applicable.

GENERAL DATA		
Type of Application:		☐ Geared Overhead ☐ Geared Basement ☐ Geared Offset at Overhead ☐ Gearless Overhead ☐ Gearless Basement ☐ Hydraulic (Sling / Platform, ☐ Machine-Room-Less (MRL) (No mounting hardware) Buffers, Rail Brackets only)
Elevator Quantity and ID:		Quantity of Elevators: _____ Car Number Designation(s): _____
Construction Type:		☐ New Building ☐ Existing Building, New Shaft ☐ Existing Empty Shaft ☐ Modernization
Building Type:		☐ Residential ☐ Office ☐ Retail ☐ Hotel ☐ School or University ☐ Hospital ☐ Federal Gov't. ☐ Other Gov't. ☐ Other _____
Governing Codes:		☐ B44/ASME A17.1-_____ (year) ☐ NYC APPENDIX "K" OTHER: _____
Loading Classification:		☐ Passenger (only) ☐ Passenger/Class A ☐ Passenger/Class C1 ☐ Passenger/Class C2 ☐ Passenger/Class C3 ☐ Freight/Class A ☐ Freight/Class B ☐ Freight/Class C1 ☐ Freight/Class C2 ☐ Freight/Class C3
Seismic Requirements:		☐ Zone 0/1 (non-seismic) ☐ Zone 2 ☐ Zone 3 ☐ Zone 4
Roping:		☐ 1:1 ☐ 2:1 ☐ Single-Wrapped ☐ Double-Wrapped
Rail Arrangement:		☐ Sidepost ☐ Cornerpost
Capacity:		☐ 1500 LBS [680 kg] ☐ 2000 LBS [908 kg] ☐ 2500 LBS [1134 kg] ☐ 3000 LBS [1360 kg] ☐ 3500 LBS [1588 kg] ☐ 4000 LBS [1815 kg] ☐ 4500 LBS [2041 kg] ☐ 5000 LBS [2268 kg] ☐ 6000 LBS [2721 kg] ☐ 6500 LBS [2948 kg] ☐ 7000 LBS [3175 kg] ☐ 7500 LBS [3402 kg] ☐ 8000 LBS [3629 kg] ☐ 9000 LBS [4082 kg] ☐ 10000 LBS [4536 kg] ☐ 12000 LBS [5443 kg] ☐ 15000 LBS [6804 kg] ☐ 20000 LBS [9072 kg] ☐ Other: _____
Speed:		☐ 50 FPM [0.25m/s, 15mpm] ☐ 75 FPM [0.38m/s, 23mpm] ☐ 100 FPM [0.5m/s, 30 mpm] ☐ 125 FPM [0.63m/s, 38mpm] ☐ 150 FPM [0.75m/s, 45mpm] ☐ 200 FPM [1.0m/s, 60mpm] ☐ 250 FPM [1.25m/s, 75mpm] ☐ 300 FPM [1.5m/s, 90mpm] ☐ 350 FPM [1.75m/s, 105mpm] ☐ 400 FPM [2.0m/s, 120mpm] ☐ 450 FPM [2.25m/s, 135mpm] ☐ 500 FMP [2.5m/s, 150mpm] ☐ 600 FPM [3.0m/s, 180mpm] ☐ 700 FPM [3.50m/s, 210mpm] ☐ Other: _____
Power Supply:	**Voltage:**	☐ 208 V ☐ 230 V ☐ 460 V ☐ 480 V ☐ 575 V ☐ Other: _____
	Hertz:	☐ 60 Hz ☐ 50 Hz
NEMA Rating:	**Hoistway**	☐ Class 1 (Std) ☐ Class 4 ☐ Class 4X ☐ Class 7 ☐ Class 12 ☐ Other: _____
	Machine Rm.	☐ Class 1 (Std) ☐ Class 4 ☐ Class 4X ☐ Class 7 ☐ Class 12 ☐ Other: _____
	Description	Class 4-Watertight (hose proof), Class 4X-Watertight (splash proof), Class 7-Explosion proof, Class 12-Dust & Drip proof
Cab + Door/Gate Weight: (Required by Sales Dept. & Engineering Dept.)		Car No.(s): _____ Weight: _____ | Car No.(s): _____ Weight: _____ | Car No.(s): _____ Weight: _____ | Car No.(s): _____ Weight: _____

HOISTWAY SHAFT INFO				
Car(s) #:				
New or existing shaft?				
Simplex, duplex, or group?				
Occupied space below pit?				
Hoistway width:				
Hoistway depth:				
Pit depth:				
Clear overhead (to u/s beams):				
Total Travel:				
Number of Stops:				
Quantity Opgs. (front/rear/side)	F: ___ R: ____ S: ____	F: ___ R: ____ S: ____	F: ___ R: ____ S: ____	F: ___ R: ____ S: ____
Front Opening Size (W x H):				
Rear Opening Size (W x H):				
Side Opening Size (W x H):				
Hoistway Entrance Type:	☐ Swing ☐ 1-Sp. Side Slide ☐ 2-Sp. Side Slide ☐ 1-Sp. Center Opng. ☐ 2-Sp. Center Opng. ☐ Manual Bi-parting ☐ Power Bi-parting ☐ Other: _____	☐ Swing ☐ 1-Sp. Side Slide ☐ 2-Sp. Side Slide ☐ 1-Sp. Center Opng. ☐ 2-Sp. Center Opng. ☐ Manual Bi-parting ☐ Power Bi-parting ☐ Other: _____	☐ Swing ☐ 1-Sp. Side Slide ☐ 2-Sp. Side Slide ☐ 1-Sp. Center Opng. ☐ 2-Sp. Center Opng. ☐ Manual Bi-parting ☐ Power Bi-parting ☐ Other: _____	☐ Swing ☐ 1-Sp. Side Slide ☐ 2-Sp. Side Slide ☐ 1-Sp. Center Opng. ☐ 2-Sp. Center Opng. ☐ Manual Bi-parting ☐ Power Bi-parting ☐ Other: _____

MACHINES		
Geared Machines: **(Note: NEMA type is not available)**	**Geared Machine Type and Model:**	☐ Overhead ☐ #34OH ☐ #43/44OH ☐ #53/54OH ☐ #63/64OH ☐ #74OH ☐ Standard Basement ☐ #43/44BS ☐ #53/54BS ☐ #63/64BS ☐ #74BS ☐ O.D. Basement ☐ #43/44OD ☐ #53/54OD ☐ #63/64OD ☐ #74OD ☐ Basement (Used as Overhead) ☐ #43/44BS ☐ #53/54BS ☐ #63/64BS ☐ #74BS
	Brake:	☐ Disc (not available for #74) ☐ Drum (not available for #34)
	Hand:	☐ Left ☐ Right (Determined by which side traction sheave is on when standing at motor end.)
	Mach. Housing:	What name do you want on the machine housing: _____
	Accessories and Options:	☐ Sheave Guard ☐ Drip Pans ☐ Rope Gripper Mounting Provisions (not available with BS machine in OH) ☐ OH Machine Block-up Assy. (Not available for BS machine in OH) ☐ Basement Machine Template ☐ Basement Machine Foundation bolts ☐ Manual Brake Release ☐ 115 VDC Brake Coil (230 VDC Standard)
	AC Hoist Motors:	☐ H-W supplied (2048 Encoder) ☐ H-W supplied (1024 Encoder) ☐ H-W supplied (No Encoder) ☐ Customer supplied _____H.P. _____R.P.M. _____Mfr. (Motor data prints required from manufacturer before machine fabrication.)
	Machine Isolation (OH only):	☐ None ☐ Pads and brackets only (Less beams) ☐ Pads and brackets with blocking beams ☐ New slab of _____thickness ☐ Existing slab ☐ No slab
PMAC Gearless Machines: **(Note: NEMA type is not available)**	**Gearless Machines:**	☐ GL100 ☐ GL115 ☐ GL130 ☐ GL170 (Models GL100 – GL170 are suited for MRL) ☐ GL101 ☐ GL130A ☐ GL131 ☐ GL171 ☐ GL185 ☐ GL260
	KEB Encoder Cable:	Specify required length: ☐ 65'-0" [20m] Std. ☐ 82'-0" [25m] ☐ 98'-0" [30m] ☐ 131'-0" [40m] ☐ 164'-0" [50m] ☐ 246'-0" [75m] Max.
	Manual Brake Release Cable:	Specify length: ☐ 8'-0" Std. ☐ 15'-0" ☐ 20'-0" ☐ 25'-0" ☐ 30'-0" ☐ 40'-0" ☐ 50'-0" Max. Note: Cable is not required with G.A.L. Galaxy Controls. Not available on GL130A, GL185, GL260.
	Options:	☐ Machine Block-up Assy. ☐ Isolation Assy. ☐ Rope Gripper Mounting Provisions (Not available for MRL applications.) ☐ Second Brake for Emergency Brake (Rope Gripper may be required instead if conditions prevent use of second brake as the emergency brake.)

MACHINE ROOM AND HOISTWAY EQUIPMENT		
Rope Gripper Assembly:		☐ Rope Gripper (Not required on systems with emergency brake option.) ☐ NEMA 4 Switch ☐ Machine Mounting Provisions (available for new OH, BS, and OD machines) Specify length of hydraulic hose required (27" standard, up to 8'-0" max.): _____ For existing applications, verify the outside to outside dimension across the ropes: _____
Sheaves:		☐ Deflector ☐ With Guard ☐ Secondary (Double-Wrapped) ☐ With Guard ☐ 2:1 Car (Overslung) ☐ 2:1 Car (Underslung) ☐ 2:1 (CWT.) ☐ Overhead (B.S.) ☐ Hanging Note: Guards not available for overhead shvs.
Car Sling Assembly:		☐ Car Sling ☐ Painted ☐ Galvanized Overall Cab Height: _____
Platform Assembly: (includes 1 toe guard for sidepost or 2 for cornerpost)	**Platform Size:**	☐ Platform Size: _____Wide x _____Deep
	Platform Type:	☐ Sidepost ☐ Cornerpost
	Platform Material:	☐ Wood and Steel Construction (angle frame filled with layers of wood) ☐ With Standard Plywood ☐ 1 layer ☐ 2 layers ☐ 1/2" thk. ☐ 5/8" thk. ☐ 3/4" thk. ☐ With Marine Plywood ☐ 1 layer ☐ 2 layers ☐ 1/2" thk. ☐ 3/4" thk.
		☐ All-Steel Construction (channel stringers) ☐ With smooth steel floor plate to receive your finished flooring ☐ With checkered steel floor plate as the finished flooring ☐ With smooth steel floor plate + wood top subflooring to receive your finished flooring ☐Standard Plywood ☐ 1 layer ☐ 2 layers ☐ 1/2" thk. ☐ 3/4" thk. ☐Marine Plywood ☐ 1 layer ☐ 2 layers ☐ 1/2" thk. ☐ 3/4" thk
	Isolation:	☐ None ☐ Isolation with balance weights ☐ Isolation only, no balance weights
	Options:	☐ Painted ☐ Galvanized ☐ Stainless ☐ Additional Toe Guard (rear or side opng.)
	Compensation Hitch:	☐ None ☐ Chain ☐ Rope
Counter-weight Assembly:	**Options:**	☐ CWT. Frame ☐ Filler Weights ☐ Pit Guard ☐ Painted ☐ Galvanized
	Compensation Hitch:	☐ None ☐ Chain ☐ Rope
Freight Cab Assembly: (Car station cut-out detail required)		☐ Freight Cab Assy. (solid steel top, 14 ga. sheet steel, spray enamel, air dried only) Height (8'-0" standard, 10'-0" max.): _____ ☐ Manual Vertical Lift Gates by H-W ☐ Front ☐ Rear ☐ Gate Switch ☐ Power Vertical Lift Gates by Others Mfr: _____ (cab by others with power oper.)
Safety Assembly:	☐ Car ☐ CWT.	☐ Type A Instantaneous ☐ Type B Flexible Guide Clamp
Governor Assembly:	☐ Car ☐ CWT.	☐ Non-resettable (std.) ☐ Resettable ☐ 12" sheave (3/8" dia. rope) ☐ 16" sheave (3/8" or 1/2" dia. rope) ☐ Speed Reducing Sw. (optional) ☐ With live-shaft Specify Shaft Dia. ☐12mm ☐.25" ☐.75" ☐1.00"
Tension Weight Assembly:	☐ Car ☐ CWT.	☐ Swing Arm Type ☐ Frame Type ☐ With Guard ☐ 12" sheave (3/8" dia. rope) ☐ 16" sheave (3/8" or 1/2" dia. rope)
Car Guide Shoe Assembly:		☐ Rigid ☐ Swivel ☐ Roller with Guard ☐ Roller without Guard ☐Retainer/Adapter Plates (Only with car sling)
CWT. Guide Shoe Assembly:		☐ Rigid ☐ Swivel ☐ Roller with Guard ☐ Roller without Guard ☐Retainer/Adapter Plates (Only with cwt. frame)
Spring Buffer Assembly: (200 fpm or under)		☐ Car ☐ CWT.
Oil Buffer Assembly:		☐ Car ☐ CWT. ☐ With No Switch ☐ Standard Switch ☐ With NEMA 4 Switch ☐ Car buffer Strut Strut height of: _____
Rail Buffer Base Channels (Pit Channels):		☐ Car ☐ CWT. Guide rails are: ☐ New ☐ Existing For existing guide rails: ☐ Extend channels under rails ☐ Cut channels short of rails

MISCELLANEOUS		
2:1 Dead-End Hitch Plates:		☐ Car Dead-End Hitch Plates ☐ CWT. Dead-End Hitch Plates
Limit Mounting Brackets And Cam:		☐ Mounting Brackets and Cam for G.A.L. Limit Switches Qty: _____ G.A.L. Switch Model: ☐ Model L.S. ☐ Model L.T. ☐ Car Bracket and Cam Only
Guide Rails and Fishplates:	**Car Rails:**	☐ By H-W ☐ By Others ☐ 8# ☐ 15# ☐ 18.5# ☐ 22.5# ☐ 30# QTY: _____ of 16'-0" Lg. QTY: _____ of 8'-0" Lg.
	CWT. Rails:	☐ By H-W ☐ By Others ☐ 8# ☐ 15# ☐ 18.5# ☐ 22.5# ☐ 30# QTY: _____ of 16'-0" Lg. QTY: _____ of 8'-0" Lg.
	Fishplates:	☐ Standard ☐ Seismic Tee-Section ☐Seismic Triple Thick
Rail Brackets & Hardware:	**Car Rail Brackets:**	☐ New By H-W, Qty: _____ ☐ New By Others ☐ Existing Note: May require P.E. approval (by others) if located in seismic zone 3 or 4. Note: Not available for cornerpost rail applications.
	CWT. Rail Brackets:	☐ New By H-W, Qty: _____ ☐ New By Others ☐ Existing Note: May require P.E. approval (by others) if located in seismic zone 3 or 4.
Hoist and Governor Ropes:	**Hoist Rope: (8 x 19)**	☐ By H-W ☐ By Others Quantity: _____ ☐ 3/8" Std. T.S. ☐ 3/8" IWRC ☐ 1/2" Std. T.S. ☐ 5/8" Std. T.S. Hoist Rope Length: _____
	Governor Rope: (8 x 19)	☐ By H-W ☐ By Others Quantity: _____ ☐ 3/8" Std. T.S. ☐ 1/2" Std. T.S. Governor Rope Length: _____
Wedge Shackles and Equalizer Springs:		☐ Hoist Rope Wedge Shackles & Equalizer Springs QTY: _____ 18" O.A. Lg.: Size of Ropes: ☐ 3/8" ☐ 1/2" ☐ 5/8" ☐ 3/4" QTY: _____ 24" O.A. Lg.: Size of Ropes: ☐ 3/8" ☐ 1/2" ☐ 5/8" ☐ 3/4" QTY: _____ 30" O.A. Lg.: Size of Ropes: ☐ 3/8" ☐ 1/2" ☐ 5/8" ☐ 3/4" QTY: _____ 36" O.A. Lg.: Size of Ropes: ☐ 3/8" ☐ 1/2" ☐ 5/8" ☐ 3/4" QTY: _____ Equalizer Springs for Counterweight Shackles

ENGINEERING SERVICES		
Equipment Drawings and Maintenance Manuals		Job-specific assembly/parts drawings of your equipment will be sent to you after final engineering has been completed and they are free of charge. Maintenance manuals are available online.
Elevator Layout Drawings:	**Type of Layout:**	☐ Full Layout Drawing ☐ Machine Room Only Layout Drawing (includes overhead reactions) Note: Layouts are submitted via email in PDF format **ONLY**. No cad file formats will be submitted. Note: Pricing and lead time vary according to quantity and configuration of elevators and type of application. Lead time does not start until receipt of all required information.
	Options:	☐ English Units (our standard) ☐ Dual Units [S.I. (Metric) / U.S. (English)] ☐ Certified Engineer Stamp of overhead reaction calculations (licensed in state of Illinois)

INFORMATION FOR LAYOUT DRAWINGS

NOTE: The following additional information is required by H-W if layout drawings are to be prepared. This data is requested so that we can provide accurate layout drawings while avoiding unnecessary revisions, to help improve the approval process, and to assist with final engineering. Missing information can delay your project or create errors. Lead time for the layout drawings does not start until we have all information.

1. **General Specifications, Job Summary, or Scope of Project**.

2. **Architectural and Structural Drawings** - for "pre-designed" elevators with new construction.

3. **Design Build Jobs:** For "design build" jobs that have no architectural or structural drawings available, advise if H-W has complete freedom to determine the hoistway size, pit depth, and overhead height as per our requirements with no restrictions: _____

4. **Existing Hoistway Survey or Original Installation Layout** – for existing elevator construction. Indicate hoistway size; door type, size, and hand; machine room size and configuration; all floor heights; pit depth; and clear overhead height. We have various field survey forms available.

5. **Existing Equipment Survey or Original Installation Layout** - for "modernization" jobs with some existing equipment being retained in place. Indicate sizes and location of all equipment that is to be retained. We have field survey forms available. Identify all existing elevator equipment that is to be retained:

☐ Car rails and brackets	☐ CWT. rails and brackets	☐ Hoistway door frames and sills
☐ Car sling	☐ Car platform	☐ CWT. frame
☐ Safety	☐ Governor	☐ Tension weight
☐ Car shoes	☐ CWT. shoes	☐ Buffers
☐ Pit channels	☐ Machine beams / DEH beams	☐ Machine
☐ Deflector sheave	☐ Overhead sheave supports	☐ Overhead sheaves
☐ Cab enclosure	☐ Controller	☐ Other:_____

6. **Total Empty Car Weight -** For existing cars that are to be retained: _____

7. **Finished Car Flooring-** Material: _____ O.A. Thickness: _____ Total Weight: _____

8. **Rail Bracket Attachment-** Method of car and cwt. guide rail bracket attachment to the structure at the **outer** walls:
   ☐ Inserts ☐ Concrete anchors ☐ Steel framing (steel locations are required)

9. **MRL Plan Arrangement-** Have you chosen a specific Plan arrangement from our MRL Design Guide (available online): _____

10. **MRL Machine Access Door-** If you are considering our MRL Plan A1, A2, F, or G (counterweight located at the side), then a machine access door is an absolute requirement. If it is not structurally feasible to provide the access door, then these plan arrangements are **NOT** available. Confirm whether you can provide the machine access door: _____

11. **MRL Governor Access Door-** Confirm if required to adhere to NYC Appendix K, which requires a governor access door: _____

12. **Jobs with Live Shaft Governor-** Standard shaft dia. is 12 mm if using G.A.L. controls. If using other control manufacturer, then specify the required shaft diameter: ☐12 mm dia. ☐ .25" dia. ☐ .75" dia. ☐ 1.00" dia.

13. **Passenger Cab + Doors (by others):** Mfr.: _____ O.A. Height: _____ Cab + Door Weight: _____

14. **Freight Cab + Gates (by others):** Mfr.: _____ (Forward a job specific drawing of the cab and gate assy.)
    O.A. Height: _____ Cab Weight: _____ Gate(s) Weight: _____

15. **Guide Shoes (by others):** Mfr.: _____ Type: _____ Car Model: _____ Cwt. Model: _____

16. **Geared Machine (by others):** Mfr.: _____ Model: _____ Drive Sheave Dia.: _____
    (Forward a job specific drawing of the machine.)

17. **Gearless Machine (by others):** Mfr.: _____ Model: _____ Drive Sheave Dia.: _____
    (Forward a job specific drawing of the machine.)

18. **Hoist Motor (by others):** Mfr.: _____ HP: _____ RPM: _____ Frame Size: _____
    (Forward a job specific drawing of the motor data print.)

19. **Controller (by others):** Mfr.: _____ Model No.: _____ Size (WxDxH): _____

20. **Other Equipment (List item, mfr., model, size):** _____

INFORMATION FOR FABRICATION

1. **Approval of Layouts by H-W -** If layouts were prepared by H-W, then we will require your written approval verifying the accuracy of the layout drawings and authorizing us to proceed with final engineering to release to production.
2. **Copy of Layouts by Others -** If layouts were prepared by others, then we will require a copy of the layouts and your written authorization to proceed with final engineering to release to production based on those drawings.
3. **Field Survey Data -** If layouts are not required, then we will require sufficient field survey data and information to final engineer the shop drawings after your order has been processed.
4. **Hoist Motor Data -** For hoist motors from another vendor that are being shipped direct to our factory for mounting to our geared machines, we will require certified motor data prints from the manufacturer.
5. **Car Sill Detail -** Before fabrication of all-steel passenger car platforms that have no additional wood subflooring on top, we will require a car sill detail from your cab manufacturer showing the car sill in profile with all dimensions.
6. **COP Cutout Detail -** For both passenger and freight cabs with car operating panel(s) located at the side of the cab enclosure, we will require a drawing showing the size and location of the C.O.P. box cutout if the car sling is being provided by H-W so that we can determine if there is any interference with our car sling side bracing.

Special Notes:

1. **Does "Buy America Clause" apply?** _____
2. **Is export crating required?** _____
3. **Date material is required by:** _____
4. **Shipping and Billing Instruction:**

_____
_____
_____
_____

_____ **Name**

_____ **Signature**

_____ **Title**

_____ **Date**

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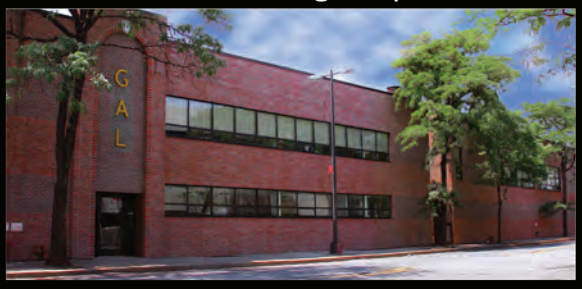
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