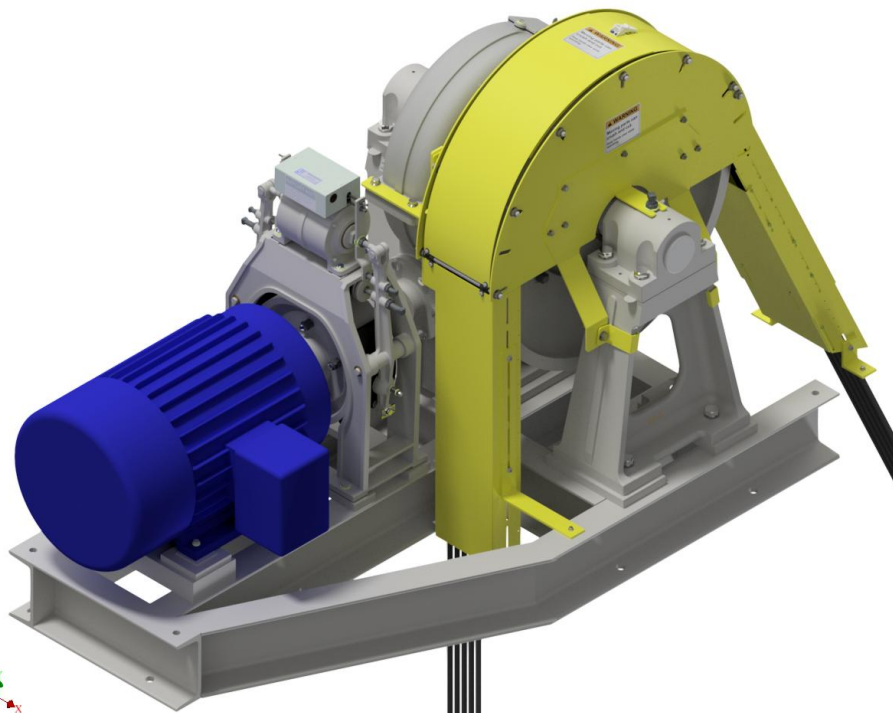
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# **Hollister-Whitney Elevator Corporation**

## **Traction Wheel Jump Guard Installation Guide**




**For Use with All Hollister-Whitney Geared Machine Models Used in Overhead Applications**



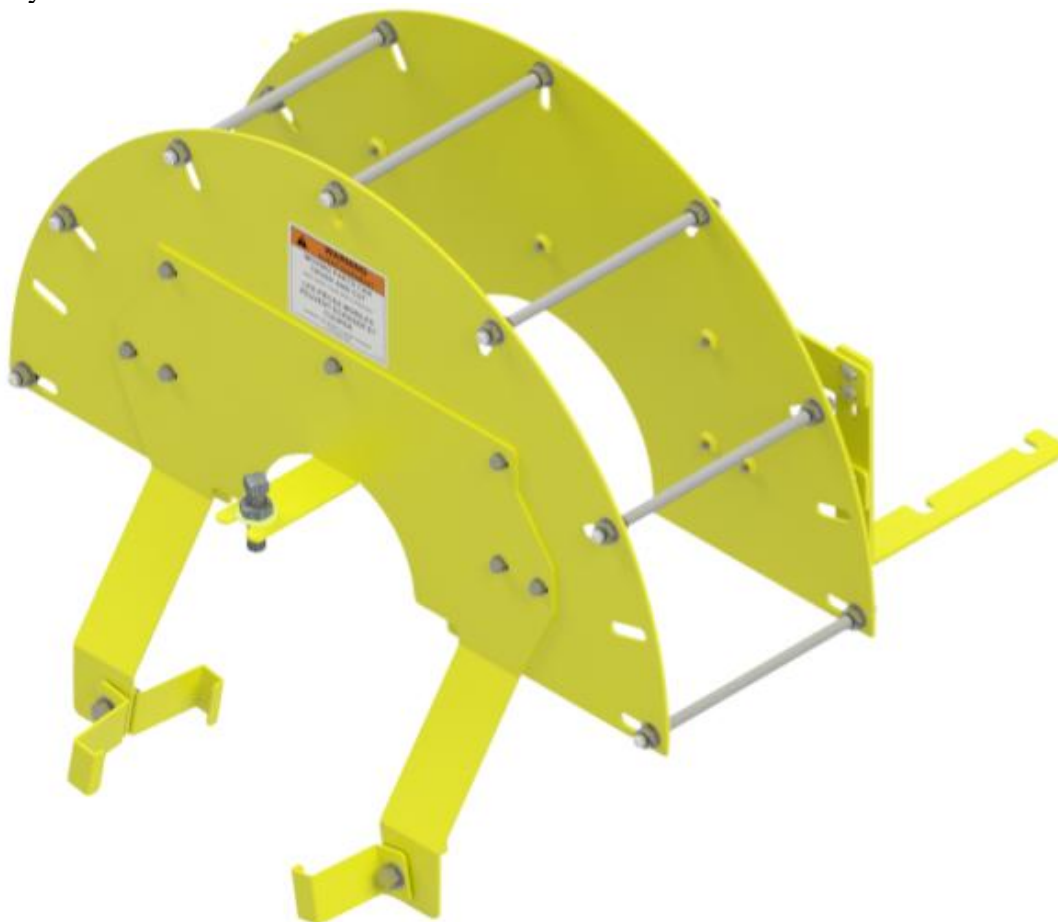
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## 1. Cautions and Warnings



***BEFORE PERFORMING GUARD INSTALLATION OR MAINTENANCE ON THE MACHINE, TAKE ALL THE NECESSARY SAFETY PRECAUTIONS TO IMMOBILIZE THE CAR AND COUNTERWEIGHT DURING THE MAINTENANCE PERIOD TO PREVENT ANY UNINTENDED MOVEMENT THAT MAY RESULT IN INJURY OR DEATH!***



***BEFORE PERFORMING ANY MAINTENANCE ON THE MACHINE, REMOVE ALL ELECTRICITY FROM THE MACHINE AND BRAKES TO PREVENT ANY UNINTENDED MOVEMENT THAT MAY RESULT IN INJURY OR DEATH DURING THE MAINTENANCE PERIOD!***

***READ THE ENTIRE INSTALLATION PROCEDURE BEFORE BEGINNING ANY OF THE STEPS OUTLINED BELOW. IF THERE ARE ANY QUESTIONS, PLEASE CONTACT HOLLISTER-WHITNEY PRIOR TO BEGINNING THE GUARD INSTALLATION.***

## 2. Introduction

- Thank You for choosing Hollister-Whitney Traction Wheel Jump Guarding. The Hollister-Whitney Jump Guarding is designed to supply Restraints for all Suspending Members (ropes) within the full Arc of Contact of the Traction Wheel.
- Restraints are placed at 30° intervals around the Arc of Contact of the Traction Wheel and provisions have been made within these instructions to place restraints at the end of the Arc of Contact for varying pull-off angles.
- An optional cover is available to enhance pinch point protection. Full machine guards are also available for full machine protection. Contact the Hollister-Whitney Sales Department for further information.


## 3. Verification of Parts and Machine

### 3.1. Verify Machine

- Verify the machine is ready for guarding.
- Observe all applicable safety precautions for taking the car out of service and preventing the machine from running during installation of the guarding.

### 3.2. Verify Traction Wheel Guard and Cover Assembly

- See Assembly Examples and Parts List at the end of this Installation Guide (Section 5) to confirm Traction Wheel Jump Guard is correct for Machine application.
- Verify all components are present and the Traction Wheel Jump Guard can be assembled.

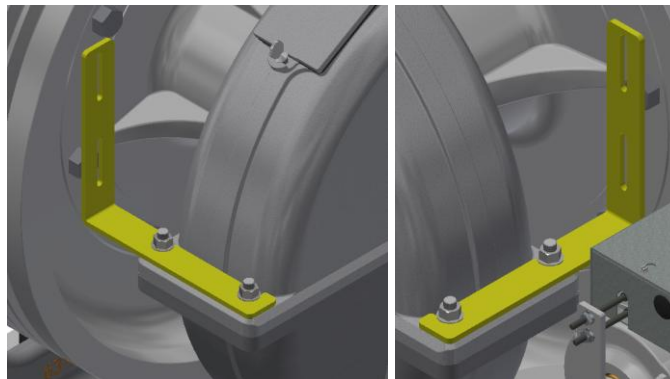
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#### 4. Installation and Assembly

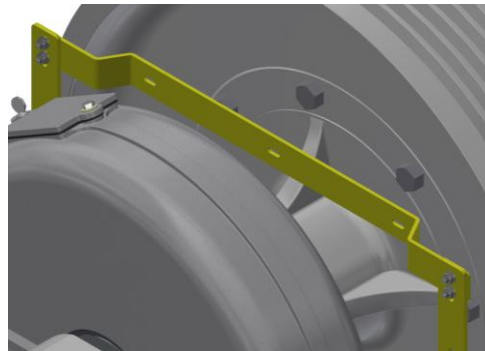
- Traction Wheel Guards are to be installed AFTER installing Suspension Ropes.
- Ropes are NOT SHOWN in some illustrations in this Installation Guide but are assumed to be present.

##### 4.1. Inboard Brackets and Side Plate Installation – Overhead and Basement Set Models

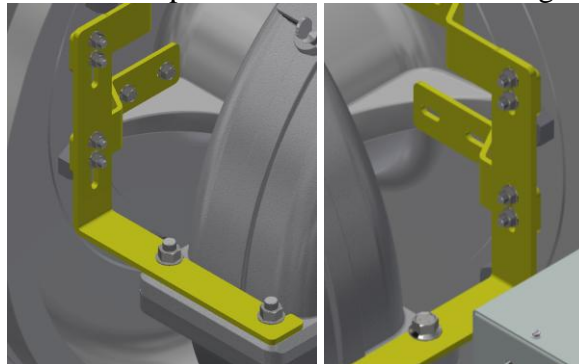
- Attach Housing Bracket #1 and #2 to the Upper Housing as shown, leaving studs in the machine housing and securing the bracket using the nuts provided. Confirm the upright faces of the Brackets are square with the Traction Wheel and with each other and lightly snug down the attachment nuts.




- Attach the Inboard Side Plate Bracket to the Housing Brackets as shown. Bolts should be finger tight for later positioning.

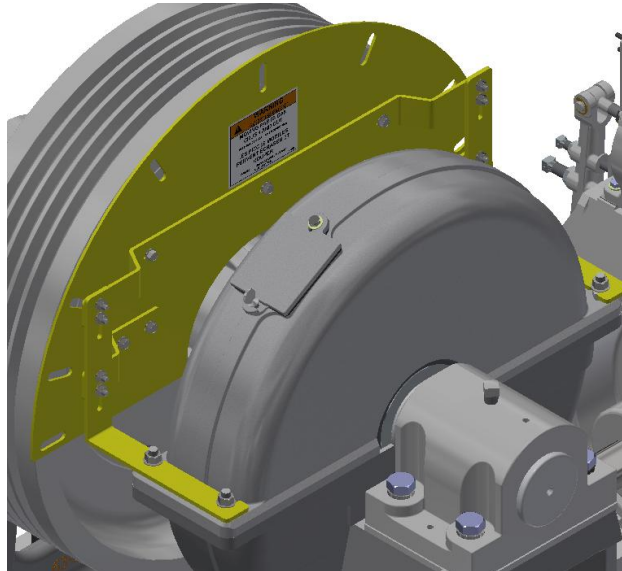


- If included, attach supplemental Side plate Bracket to each Housing Bracket.



- Attach the Side Plate Bracket as shown and snug the bolts down.

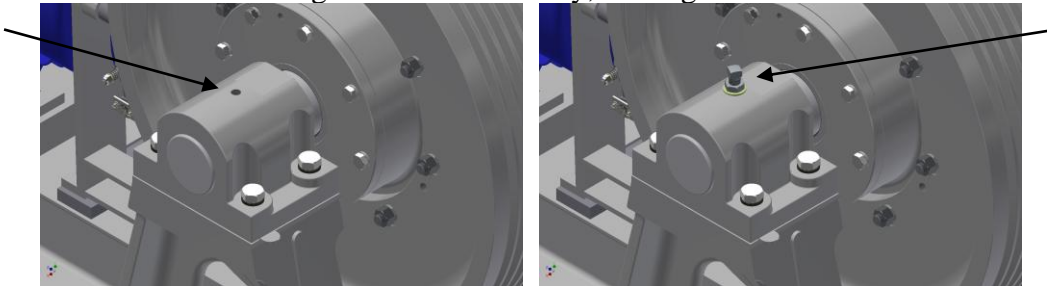
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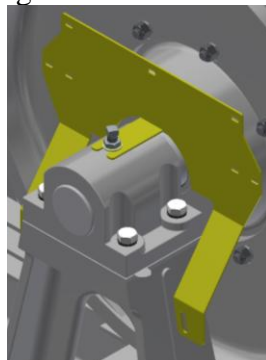
## 4.2. Outboard Brackets and Side Plate Installation

### 4.2.1. Overhead Machine Models


- Remove the Set Screw from the Outboard Stand Pillow Block and discard. A new longer Set Screw has been provided. Thread provided Jam Nut onto the new Set Screw. Run Jam Nut all the way up the screw and insert provided washer. Install assembly into Pillow Block and tighten Set Screw fully, leaving washer and Jam Nut loose.



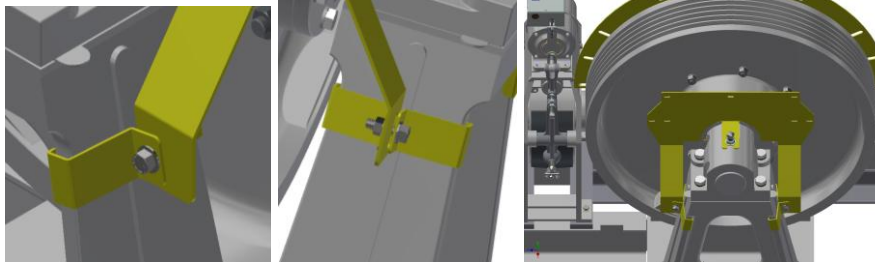
- Slip the Side Plate Bracket under the washer and position the bracket as shown. Snug down the Jam Nut finger tight.



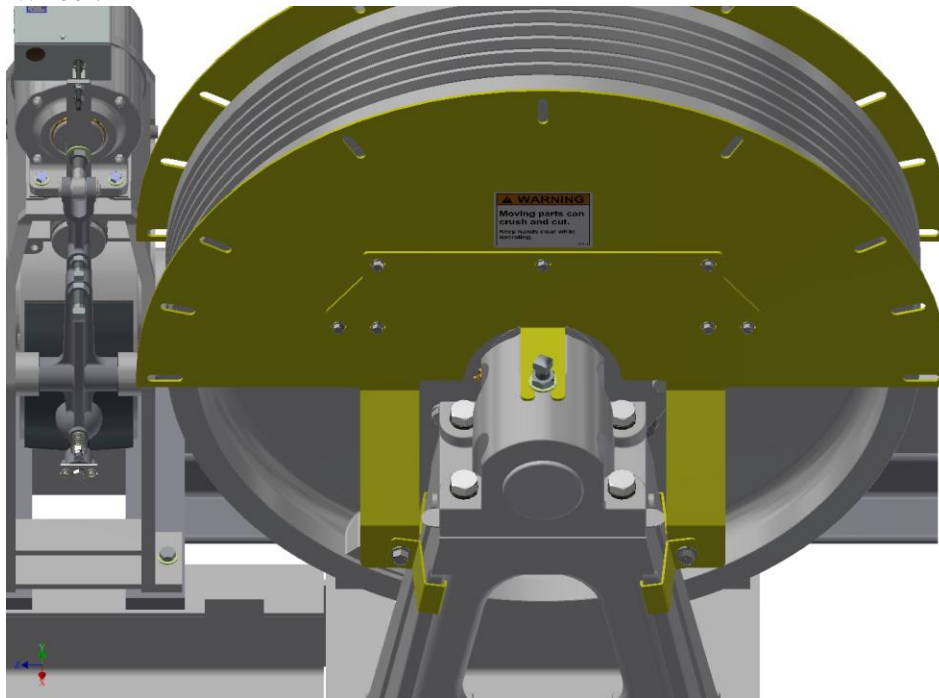


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- Install Side Bracket Clamps to “A”-stand and Side Plate Bracket. Snug down the clamping bolts making sure the bracket is square with the Traction Wheel.

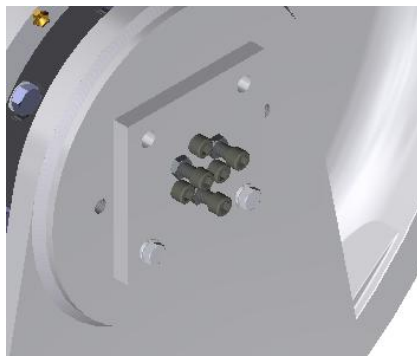



- Install Side Plate Assembly to the Side Plate Bracket. Tighten all clamping bolts, and the jam nut securely making sure the entire assembly remains square with the Traction Wheel.



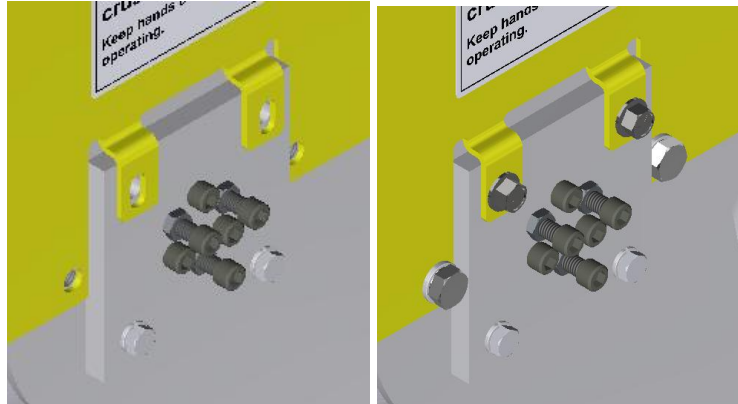
#### 4.2.2. Basement Set Models Used in Overhead

- Remove the two top bolts from the Outboard Stand.

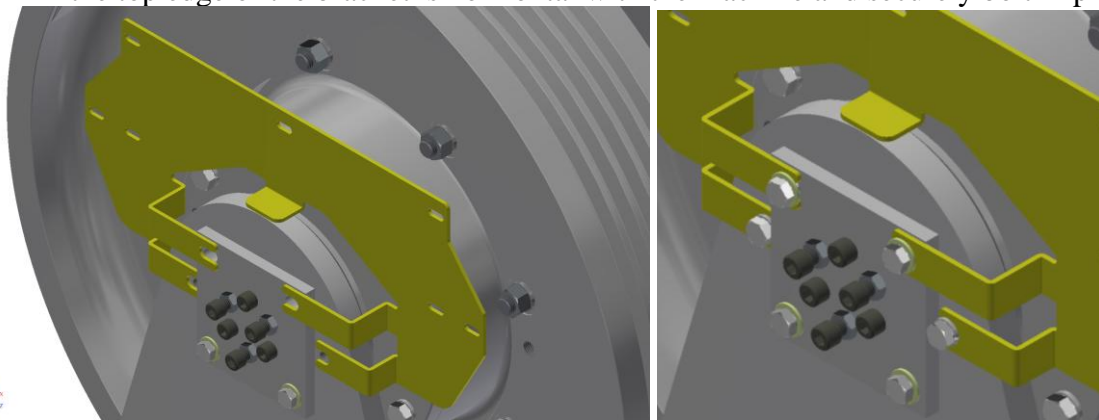


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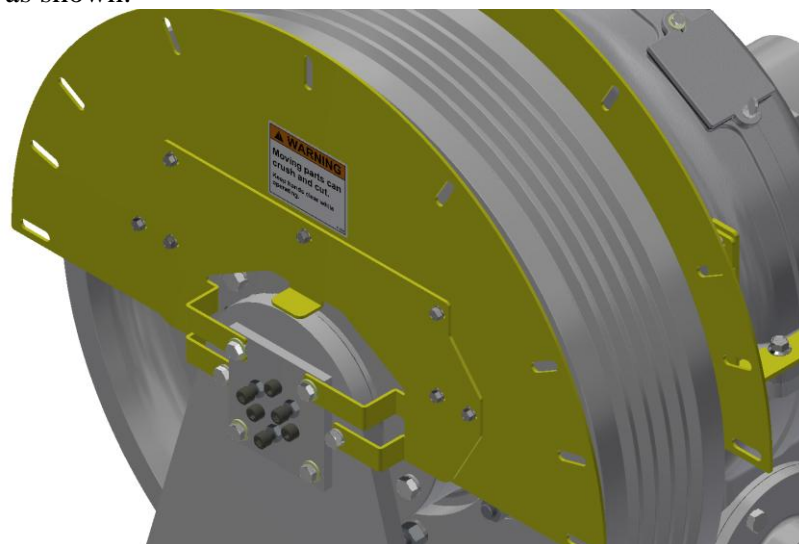
- For 43 and 53 Series Machines, set the Outboard Side Plate as shown and securely bolt in place.




- For 63 and 74 Series Machines, set the Outboard Side Plate Bracket in place. Make sure the top edge of the bracket is horizontal with the machine and securely bolt in place.



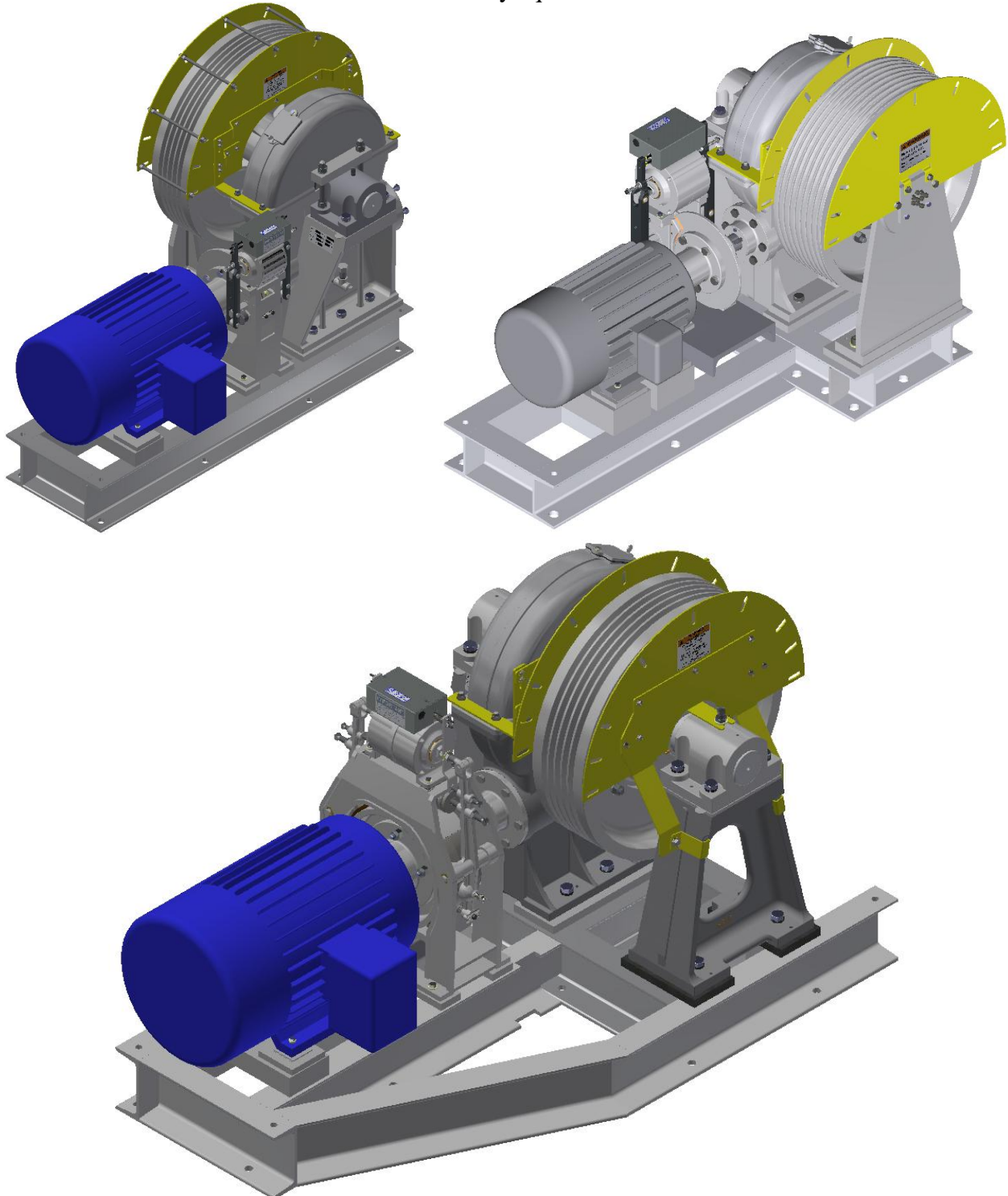
- For 63 and 74 Series Machines, securely bolt the Side Plate Assembly to the Side Plate Bracket as shown.




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#### 4.2.3. Securing Inboard and Outboard Side Plates - All Models

- Align the Inboard Side Plates with the Outboard Side Plates and securely tighten all bolts.
- Confirm all Side Plates are reasonably square with the traction wheel and with each other.

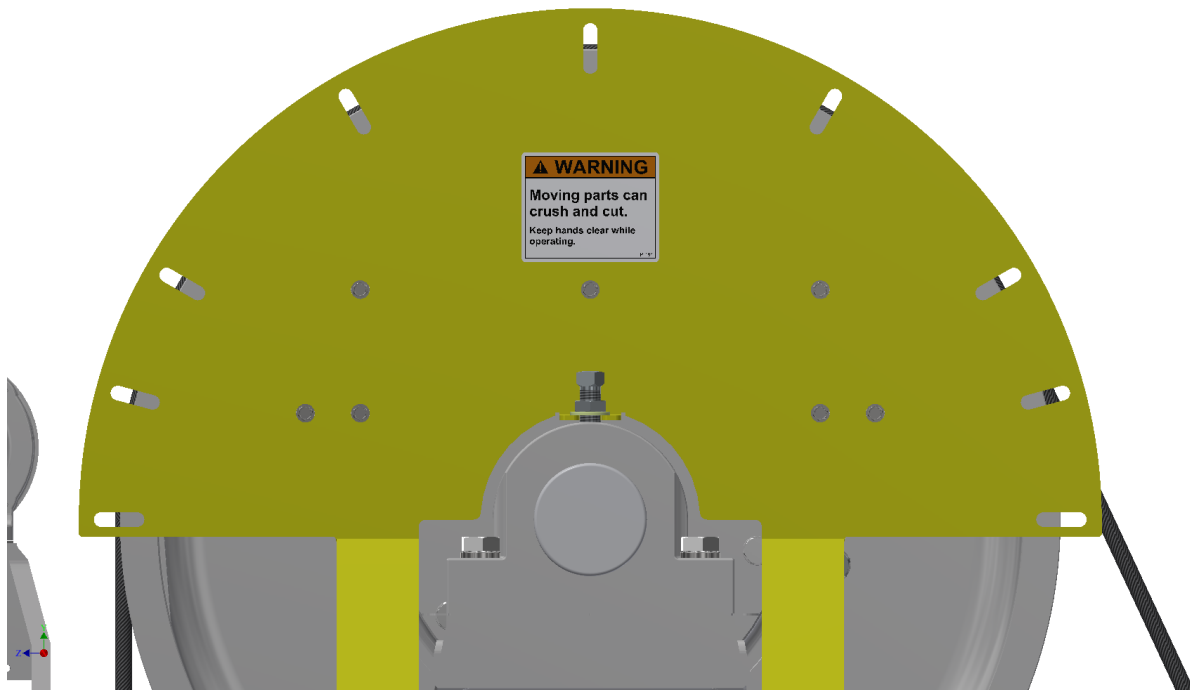




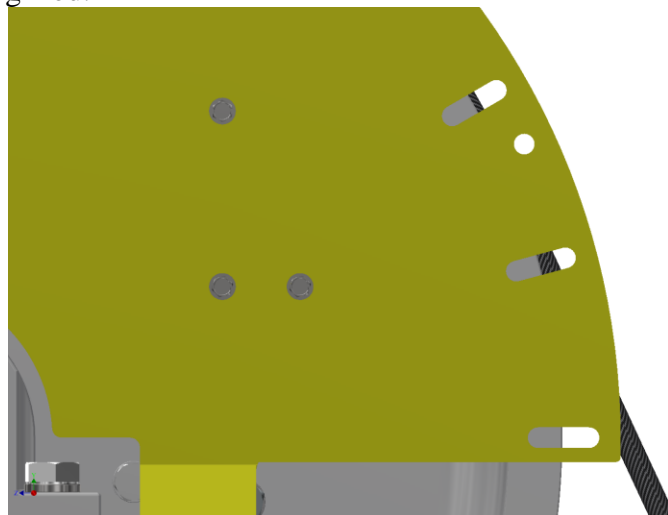
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### 4.3. Rope Retainer Installation

- Slots have been provided at 30° intervals around the Side Plates, with two additional slots at 15° up from each end. Assuming a straight drop on one side, this configuration allows for 150°, 165°, and 180° of wrap standard.



- It is recognized that the Angle of Wrap may fall between these standard positions as in the example above of 155°, and A17.1/B44 code (8.4.3.1.4 (b)) states that "... a restraint is located at each end of the arc of contact."
- As necessary, drill a 9/16" (0.5625") hole at the end of the Arc of Contact (in the example given 155°) as shown. Make sure that the hole position allows running clearance between the Rope and the Retaining Rod.



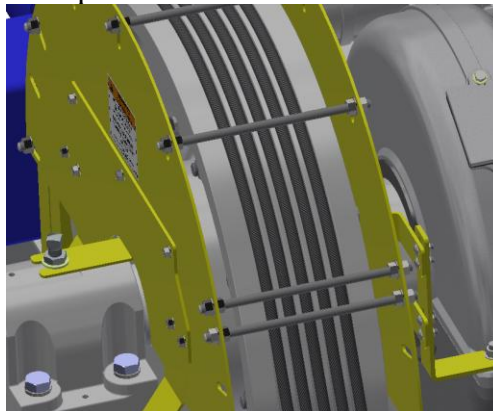
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**NOTE: Running Clearance Rule of Thumb:** Rope to Retaining Rod clearance should never be greater ½ (50%) of Rope Diameter.

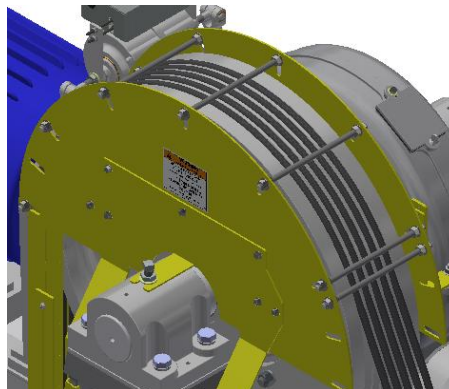
- Pre-Assemble all Rope Retaining (Threaded) Rods. Thread two opposing Flange Nuts onto each Rod. Thread them on far enough so that the rods can be inserted into the Side plates.




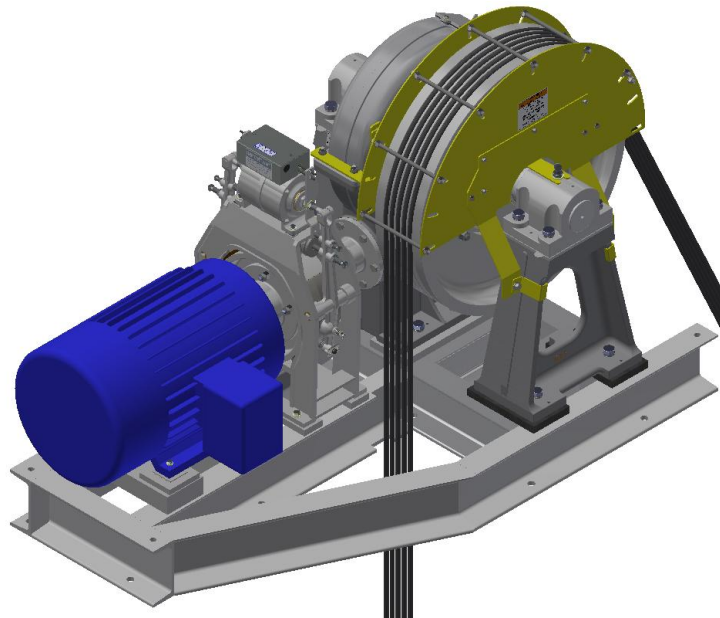
- Insert these assembled Rods into the Side Plates. Run the nuts out to contact the Side Plates. Make sure the Rods extend an equal distance out of each Plate. Take care to maintain the parallelism (squareness) of the plates with each other.



- Now thread the outside Flange Nuts onto the Rods and snug them finger tight. If an extra hole was added at the end of the Arc of Contact as in the 155° example above, the nuts on this rod can be fully tightened. Good Practice is to hold the inside Flange Nut while tightening the outside Flange Nut.
- When all nuts are in place, use a convenient shim material to set Rope to Retaining Rod running clearance per the **NOTE** above.



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- Confirm all Hardware is tight. All Hardware is Grade 5 and should be tightened to Grade 5 Specifications.

Size	ft-lbs
5/16"	17-18
3/8"	31-33
1/2"	75-80
5/8"	150-160

Grade 5 Table

- If installing Rope Covers, continue on to Step 4.4. Else, confirm all work related material (shims, packaging, tools, etc.) is clear of the machine.
- Observe all applicable safety precautions for returning the car to service after installation of the guarding.


## 4.4. Rope Cover Installation

### 4.4.1. Brake Side or “Front” Cover

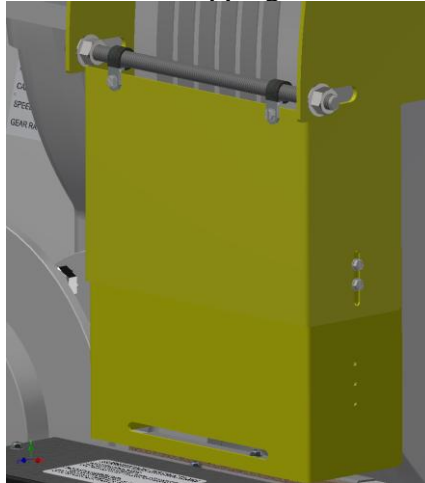
4.4.1.1. For OH Machines with Rope Grippers Mounted in Machine Base

- Install the “P” Clamps to the lowest Retaining Rod above the Rope Gripper and attach the Upper Cover (167-RG) to the “P” Clamps with self-tapping screws.

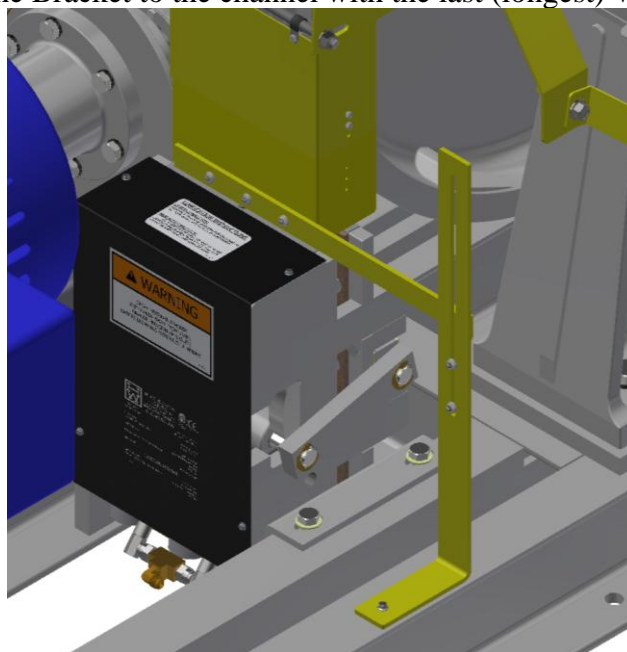



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- Allowing for approximately 1/8" of clearance between the top of the Rope Gripper and the bottom of the Lower Cover, slip the Lower Cover (168-RG) into place within the Upper Cover and with self-tapping screws fasten the two covers together.



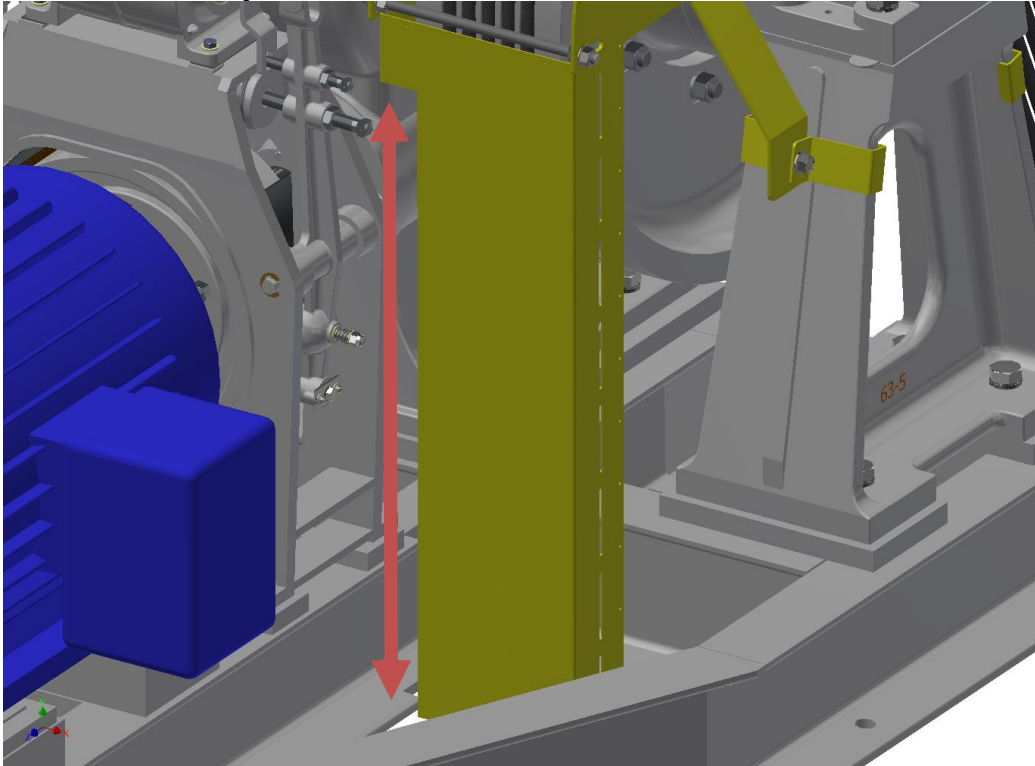
- Using the shorter of the included Whiz Bolts, attach the welded cross brace bracket to the Lower Cover. Line up the short arm of the brace over the outside channel of the machine base.
- Using the next longest Whiz Bolts, attach the bent "L" Bracket to the short arm of the cross brace and rest the "foot" of "L" Bracket on the outer channel of the Machine Bracket, assuring that the assembly is plumb.
- Mark the hole position for the "L" Bracket and drill a 5/16" hole through the top of the channel.
- Secure the Bracket to the channel with the last (longest) Whiz Bolt.



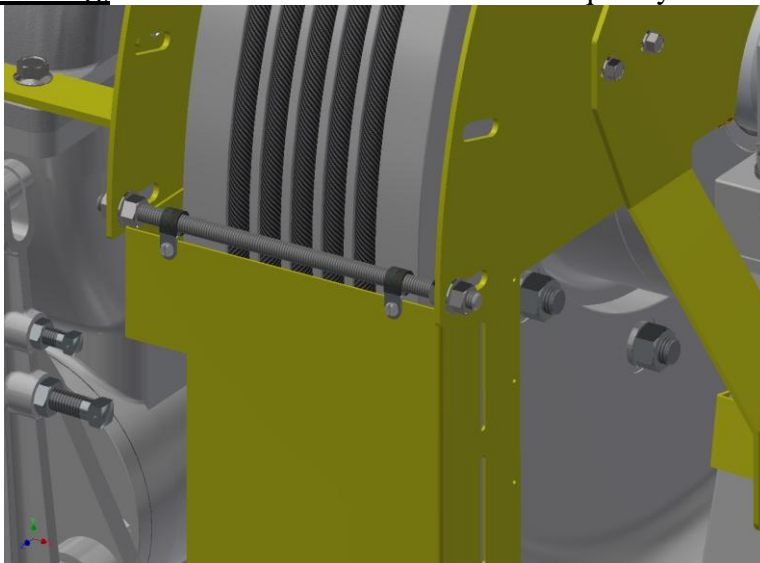
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4.4.1.2. For OH Machines **without** Rope Grippers Mounted in Machine Base, or for BS Machines mounted in the overhead (BSOH).


- Test fit the front Cover (167 or 249). On some machine configurations it may be necessary to trim the sheet metal Cover to clear the Brake and/or the Machine Base. As necessary, do so now.



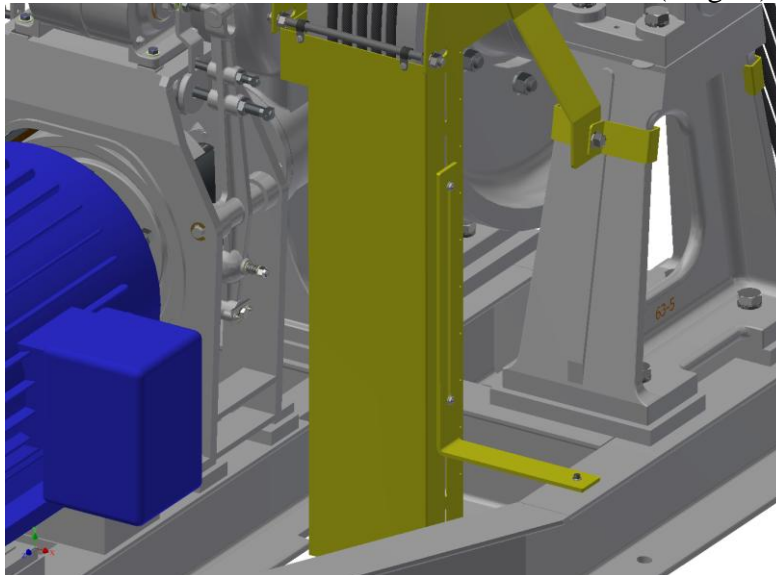
- Install the “P” Clamps to the lowest Retaining Rod above the Rope Gripper and attach the Cover (167 or 249) to the “P” Clamps with self-tapping screws. **Before continuing,** confirm the Cover was trimmed adequately and adjust as necessary.



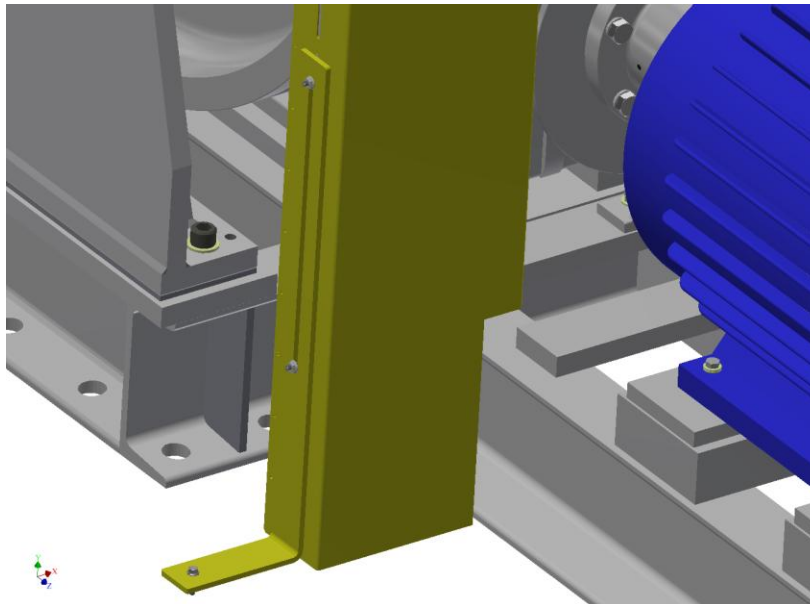



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- Using the shorter of the included Whiz Bolts, attach the bent “L” Bracket to the Cover.
  - For OH Machines, rest the “foot” of “L” Bracket on the outer channel of the Machine Bracket, assuring that the assembly is plumb.
  - For BSOH Machines, rest the “foot” of “L” Bracket on a suitable machine room surface
- Mark the hole position for the “L” Bracket
  - For OH Machines, drill a 5/16” hole through the top of the channel, and secure the Bracket to the channel with the last (longest) Whiz Bolt.



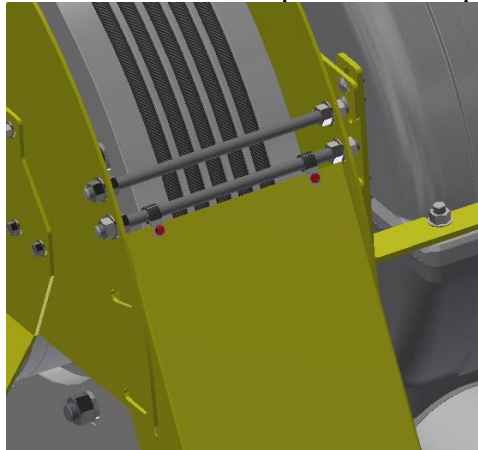
- For BSOH Machines, anchor the Bracket and Guard assembly as convenient for field conditions.



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#### 4.4.2. Thrust-End or “Back” Cover

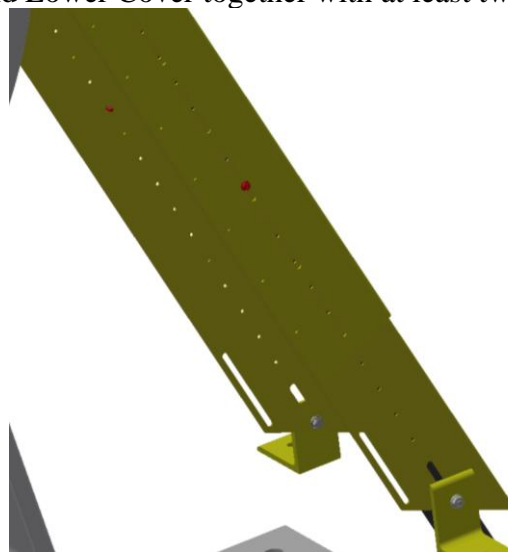
- Install the “P” Clamps to the lowest Retaining Rod on the thrust bearing end of the machine and attach the Upper Cover to the “P” Clamps with self-tapping screws.




- Loosely (Whiz Bolts finger tight) attach the Bottom Extension Angles to the Lower Cover and slip the Lower Cover into place within the Upper Cover.

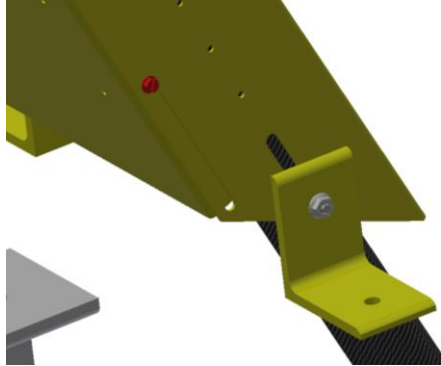


- Rest the Bottom Extension Angles on an attachment surface (such as the machine room floor) as dictated by field conditions. Make sure the Hoist Ropes are well centered under the cover.
- Secure the Upper and Lower Cover together with at least two (2) self-tapping screws.

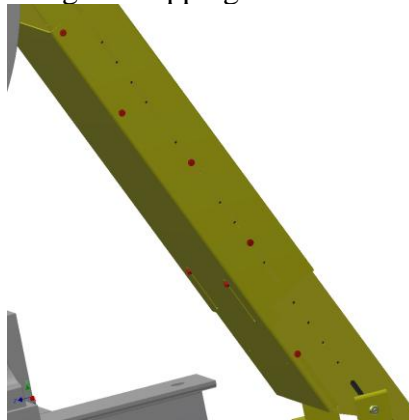


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- Slip the Lower Inside Panel (266) into Lower Cover and secure the lower most edges with a self-tapping screw on either side.



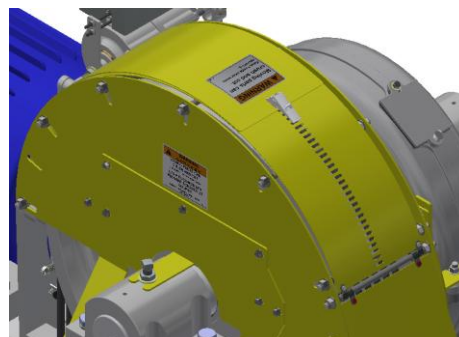
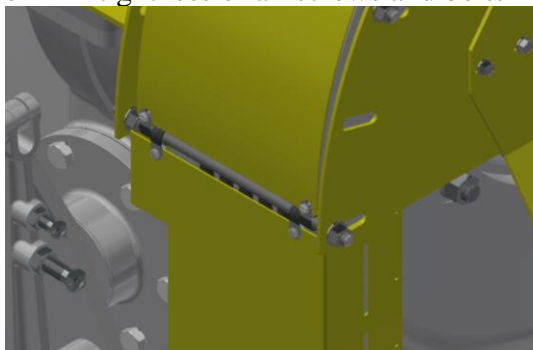
- Slip the Upper Inside Panel (265) onto the bottom of the Upper Cover as shown, sliding the panel up as far as possible for proper rope coverage and Traction Wheel clearance. Secure all covers in place with remaining self-tapping screws.




- Using the Bottom Extension Angles, anchor the cover assembly to a convenient location (such as the machine room floor) as dictated by field conditions.

#### 4.4.3. Top (Traction Wheel) Cover

- Install the “P” Clamps to the lowest Retaining Rod on either end of the Traction Wheel Jump Guard and attach the Top Cover halves to the “P” Clamps with self-tapping screws.
- Secure Top Cover halves together using the Draw Latch.
- Confirm tightness of all screws and bolts



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- Confirm all work-related material (shims, packaging, tools, etc.) is clear of the machine.
- Observe all applicable safety precautions for returning the car to service after installation of the guarding.


## 5. Assembly Parts List & Where Used

TRACTION WHEEL JUMP GUARD AND ROPE COVER ASSEMBLIES					
ASSEMBLY P/N	ITEM	QTY	SUB-ASSY P/N	DESCRIPTION	MACHINE
43-261	1	1	43-250-2022	TRACTION WHEEL JUMP GUARD, 20-22"	43/44 OH
			43-250-2426	TRACTION WHEEL JUMP GUARD, 24-25-26"	
			43-250-28	TRACTION WHEEL JUMP GUARD, 28"	
	2	1	45-269	REAR ROPE GUARD ASSEMBLY	
	3	1	45-270	FRONT ROPE GUARD ASSEMBLY	
	4	1	45-271	SHEAVE COVER ASSEMBLY	
43-261-RG	1	1	43-250-2022	TRACTION WHEEL JUMP GUARD, 20-22"	43/44 OH with Rope Gripper
			43-250-2426	TRACTION WHEEL JUMP GUARD, 24-25-26"	
			43-250-28	TRACTION WHEEL JUMP GUARD, 28"	
	2	1	45-269	REAR ROPE GUARD ASSEMBLY	
	3	1	45-270-RG	FRONT ROPE GUARD ASSEMBLY - RG	
	4	1	45-271	SHEAVE COVER ASSEMBLY	
43B-261	1	1	43B-250-2022	TRACTION WHEEL JUMP GUARD, 20-22"	44F & 43/44BSOH
			43B-250-2426	TRACTION WHEEL JUMP GUARD, 24-25-26"	43/44BSOH
			43B-250-28	TRACTION WHEEL JUMP GUARD, 28"	44F
			43B-250-2830	TRACTION WHEEL JUMP GUARD, 28-30"	
	2	1	45-269	REAR ROPE GUARD ASSEMBLY	44F & 43/44BSOH
	3	1	45-270	FRONT ROPE GUARD ASSEMBLY	
	4	1	45-271	SHEAVE COVER ASSEMBLY	
44F-261-RG	1	1	43B-250-2022	TRACTION WHEEL JUMP GUARD, 20-22"	44F with Rope Gripper
			43B-250-2426	TRACTION WHEEL JUMP GUARD, 24-25-26"	
			43B-250-2830	TRACTION WHEEL JUMP GUARD, 28-30"	
	2	1	45-269	REAR ROPE GUARD ASSEMBLY	
	3	1	45-270-RG	FRONT ROPE GUARD ASSEMBLY - RG	
	4	1	45-271	SHEAVE COVER ASSEMBLY	
53-261	1	1	53-250-2022	53/54 OH TRACTION WHEEL JUMP GUARD, 20 - 22"	53/54 OH
			53-250-2426	53/54 OH TRACTION WHEEL JUMP GUARD, 28 - 30"	
			53-250-2830	53/54 OH TRACTION WHEEL JUMP GUARD, 28 - 30"	
	2	1	53-269	REAR ROPE GUARD ASSEMBLY	
	3	1	53-270	FRONT ROPE GUARD ASSEMBLY	
	4	1	53-271	SHEAVE COVER ASSEMBLY	
53-261-RG	1	1	53-250-2022	53/54 OH TRACTION WHEEL JUMP GUARD, 20 - 22"	53/54 OH with Rope Gripper
			53-250-2426	53/54 OH TRACTION WHEEL JUMP GUARD, 24 - 26"	
			53-250-2830	53/54 OH TRACTION WHEEL JUMP GUARD, 28 - 30"	
	2	1	53-269	REAR ROPE GUARD ASSEMBLY	
	3	1	53-270-RG	REAR ROPE GUARD ASSEMBLY - RG	
	4	1	53-271	SHEAVE COVER ASSEMBLY	
53B-261	1	1	53B-250-2022	53/54BS OVERHEAD TRACTION WHEEL JUMP GUARD, 20 - 22"	53/54 BSOH
			53B-250-2426	53/54BS OVERHEAD TRACTION WHEEL JUMP GUARD, 24 - 26"	
			53B-250-2830	53/54BS OVERHEAD TRACTION WHEEL JUMP GUARD, 28 - 30"	
	2	1	53-269	REAR ROPE GUARD ASSEMBLY	
	3	1	53B-270	FRONT ROPE GUARD ASSEMBLY	
	4	1	53-271	SHEAVE COVER ASSEMBLY	

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ASSEMBLY P/N	ITEM	QTY	SUB-ASSY P/N	DESCRIPTION	MACHINE
63-261	1	1	63-250-25	63/64 OH TRACTION WHEEL JUMP GUARD, 25"	63/64 OH
			63-250-2830	63/64 OH TRACTION WHEEL JUMP GUARD, 28 - 30"	
			63-250-3234	63/64 OH TRACTION WHEEL JUMP GUARD, 32 - 34"	
			63-250-3638	63/64 OH TRACTION WHEEL JUMP GUARD, 36 - 38"	
	2	1	63-269	REAR ROPE GUARD ASSEMBLY	
	3	1	63-270	ROPE GUARD ASSEMBLY	
	4	1	53-271	SHEAVE COVER ASSEMBLY - 25 THRU 30" T.W.	
			63-271	SHEAVE COVER ASSEMBLY - 32 THRU 38" T.W.	
63-261-RG	1	1	63-250-25	63/64 OH TRACTION WHEEL JUMP GUARD, 25"	63/64 OH with Rope Gripper
			63-250-2830	63/64 OH TRACTION WHEEL JUMP GUARD, 28 - 30"	
			63-250-3234	63/64 OH TRACTION WHEEL JUMP GUARD, 32 - 34"	
			63-250-3638	63/64 OH TRACTION WHEEL JUMP GUARD, 36 - 38"	
	2	1	63-269	REAR ROPE GUARD ASSEMBLY	
	3	1	63-270-RG	REAR ROPE GUARD ASSEMBLY - RG	
	4	1	53-271	SHEAVE COVER ASSEMBLY - 25 THRU 30" T.W.	
			63-271	SHEAVE COVER ASSEMBLY - 32 THRU 38" T.W.	
63B-261	1	1	63B-250-25	63/64BS USED IN OVERHEAD TRACTION WHEEL JUMP GUARD, 25"	63/64 BSOH
			63B-250-2830	63/64BS OVERHEAD TRACTION WHEEL JUMP GUARD, 28-30"	
			63B-250-3234	63/64BS OVERHEAD TRACTION WHEEL JUMP GUARD, 32 - 34"	
			63B-250-3638	63/64BS OVERHEAD TRACTION WHEEL JUMP GUARD, 36 - 38"	
	2	1	63-269	REAR ROPE GUARD ASSEMBLY	
	3	1	63B-270	ROPE GUARD ASSEMBLY	
	4	1	53-271	SHEAVE COVER ASSEMBLY - 25 THRU 30" T.W.	
			63-271	SHEAVE COVER ASSEMBLY - 32 THRU 38" T.W.	
74-261	1	1	74-250-3234	74 OH TRACTION WHEEL JUMP GUARD, 32 - 34"	74 OH
			74-250-3638	74 OH TRACTION WHEEL JUMP GUARD, 36 - 38"	
	2	1	74-269	REAR ROPE GUARD ASSEMBLY	
	3	1	74-270	ROPE GUARD ASSEMBLY	
	4	1	74-271	SHEAVE COVER ASSEMBLY	
74-261-RG	1	1	74-250-3234	74 OH TRACTION WHEEL JUMP GUARD, 32 - 34"	74 OH with Rope Gripper
			74-250-3638	74 OH TRACTION WHEEL JUMP GUARD, 36 - 38"	
	2	1	74-269	REAR ROPE GUARD ASSEMBLY	
	3	1	74-270-RG	FRONT ROPE GUARD ASSEMBLY - RG	
	4	1	74-271	SHEAVE COVER ASSEMBLY	
74B-261	1	1	74B-250-3234	74BS OVERHEAD TRACTION WHEEL JUMP GUARD, 32 - 34"	74 BSOH
			74B-250-3638	74BS OVERHEAD TRACTION WHEEL JUMP GUARD, 36 - 38"	
	2	1	74-269	REAR ROPE GUARD ASSEMBLY	
	3	1	74B-270	FRONT ROPE GUARD ASSEMBLY	
	4	1	74-271	SHEAVE COVER ASSEMBLY	



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## ***NOTES:***