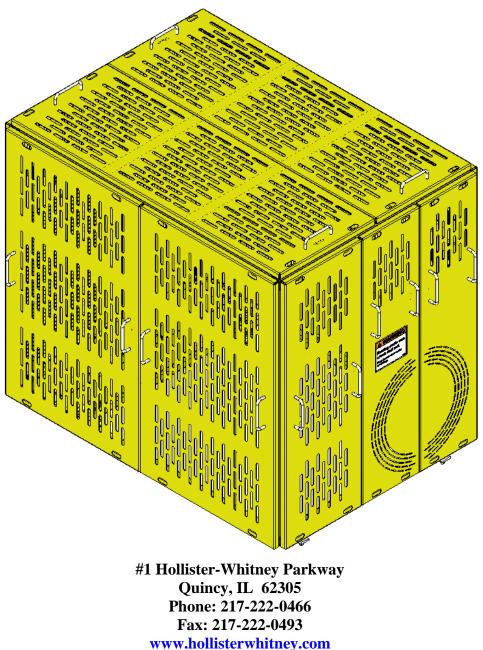


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# **Hollister-Whitney Elevator Corporation**

## **Overhead Traction Machine Guard Installation & User Guide**

For Use with Hollister-Whitney O.H. Geared Machine Models



e-mail: info@hollisterwhitney.com

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### **1. Installation Preparation**

Thank you for purchasing a Hollister-Whitney Elevator Corporation Overhead Traction Machine Guard. Hollister-Whitney Overhead Traction Machine Guards are suited for the machines listed in the table below (Table 1). Some modification of the Overhead Traction Machine Guard should be expected for proper fitment. This process may include but is not limited to the notching of components, drilling of holes, and cutting of members. Under no circumstances does Hollister-Whitney Elevator Corporation imply that these guards are universal and will not require some on site field modification. Hollister-Whitney Overhead Traction Machine Guards are intended to provide machine guarding above the machine base. Depending on the installation arrangement additional guarding provisions may be necessary. For additional rope guarding see your Hollister-Whitney Elevator Corporation Sales Representative.

#### **1.1. Verify Overhead Traction Machine**

• Verify the Overhead Traction Machine is ready for guarding.

#### 1.2. Verify Overhead Traction Machine Guard Assembly

- Verify the model of the Overhead Traction Machine Guard to be used.
- Reference the table below and verify the Overhead Traction Machine Guard to be used is the correct model for the Overhead Traction Machine being guarded.

Machine	Overhead Traction Machine Guard
#34 O.H.	34-230
#43 O.H.	43-230
#44 O.H.	43-230
#44F O.H.	45-230
#53 O.H.	53-230
#54 O.H.	54-230
#63 O.H.	63-230
#64 O.H.	64-230
#74 O.H.	74-230

#### **Table 1: Overhead Traction Machine Guard Model**

- For reference a generic Overhead Traction Machine Guard assembly drawing can be found at the end of this document.
- Verify all components are present, in good condition, and the Overhead Traction Machine Guard can be assembled. It may be necessary to fully assemble or partially re-assemble the Overhead Traction Machine Guard assembly depending on the shipment configuration.

#### 1.3. Plan for Overhead Traction Machine Guard Installation

- Inspect the Overhead Traction Machine and Overhead Traction Machine clearances to confirm the Overhead Traction Machine will fit inside the Overhead Traction Machine Guard and that adequate clearance is available adjacent to the Overhead Traction Machine to install the Overhead Traction Machine Guard.
- Prior to the installation of the Overhead Traction Machine Guard, plan and prepare for any utility routing that may be needed to the Overhead Traction Machine.



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- It is preferable that any utility routing such as but not limited to conduit, electrical, or hydraulic runs needed for the Overhead Traction Machine installation to be ran underneath the Overhead Traction Machine Guard.
- In some instances it may be necessary to add holes to the Machine Guard Panels for utility runs, etc. as necessary. Please note that conduit runs through the Machine Guard Panels may hinder their removal. Only run conduit through the Machine Guard Panels that are not needed to be removed for normal maintenance.
- Ensure that any utility routing will not interfere with the Overhead Traction Machine operation, or ease of removal of any necessary Machine Guard Panels.

## 2. Installation Guide

#### 2.1. Assemble Handles onto Machine Guard Panels

- Identify all Machine Guard Panels that require handles.
- Assemble Pull Handles (p/n 201-099) to the Machine Guard Panels with the #8–32 screws provided as shown below (Figure 1).

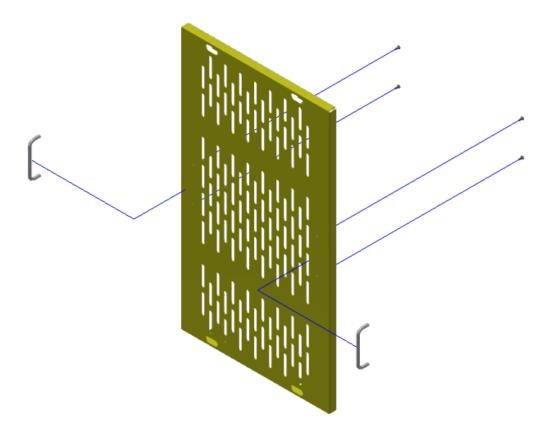


Figure 1: Machine Guard Panel Handle Assembly

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#### 2.2. Insert Machine Guard Isolators

- Identify the Machine Guard Mounting Tube (p/n \_ \_ -233) with the 2 large holes and "C" shaped brackets on each end.
- Insert Machine Guard Isolators (p/n 34-262) in the large holes as shown in the cross section view below (Figure 2).

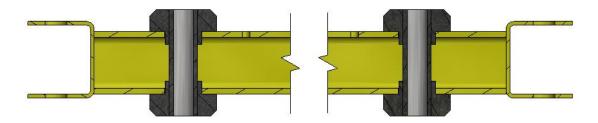


Figure 2: Machine Guard Mounting Tube

- Identify the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_ -244) with the 4 large holes.
- Insert Machine Guard Isolators (p/n 34-262) in the large holes as shown in the view below (Figure 3).
- <u>Note</u>: For an angled base machine one of the inside holes will be used as shown below (Figure 4). The inside hole that is used depends upon on the hand of machine.
- <u>Note</u>: Overhead Traction Machine Guard Assembly model 45-230 only has 2 large holes in the Machine Guard Corner Mounting Tube Assembly.

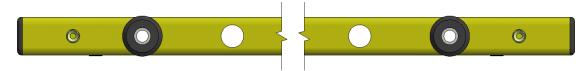


Figure 3: Machine Guard Corner Mounting Tube Assembly

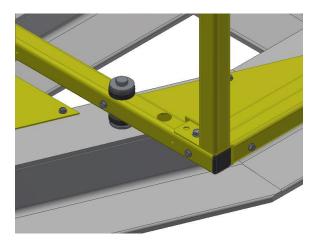


Figure 4: Machine Guard Corner Mounting Tube Angled Base

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#### 2.3. Position Machine Guard Corner Mounting Tube Assembly on Overhead Traction Machine

- <u>Note</u>: Overhead Traction Machine model #44F O.H. will already have the mounting tube holes pre-dilled for Overhead Traction Machine Guard model 45-230. Proceed to the next step.
  - Position the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) on the Overhead Traction Machine base. The Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) should be placed underneath the motor shaft between the brake mounting and the motor mounting components. Ensure that the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) clears the rope gripper if applicable. The Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) should be placed so the distance from the shaft centerline to the end of the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) should be placed so the distance from the shaft centerline to the end of the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) should be placed so the distance from the shaft centerline to the correct entry in the Motor Centerline Mounting Distance table below (Table 2). Reference the figure below for proper tube placement (Figure 5).
  - Verify the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) is positioned so the Machine Guard Isolators (p/n 34-262) are vertical.
  - Verify that that one side of the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) that has rivet nuts is placed facing up.
  - Verify that that one side of the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) that has rivet nuts is placed facing away from the motor.
  - Verify that both Machine Guard Isolators (p/n 34-262) are positioned appropriately on the flanges of the machine base to allow for proper bolting.
  - Verify that the Machine Guard Panels when positioned will clear the furthest brake component and not hinder any brake operation.
  - Once the Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) is properly positioned temporarily clamp in place.

Machine	Machine Centerline Mounting Distance
#34 O.H.	9-1/8 in
#43 O.H.	10-1/2 in
#44 O.H.	10-1/2 in
#44F O.H.	N/A
#53 O.H.	11-1/2 in
#54 O.H.	11-1/2 in
#63 O.H.	13 in
#64 O.H.	13 in
#74 O.H.	14 in

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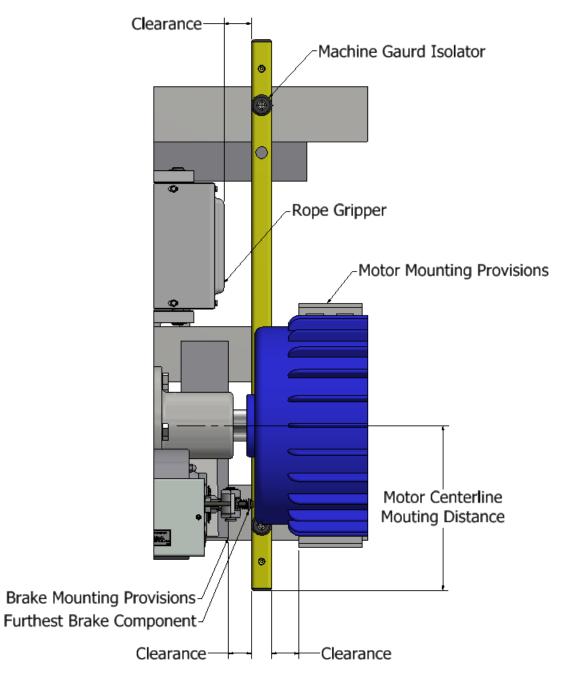


Figure 5: Machine Guard Corner Mounting Tube Assembly Placement



#### 2.4. Position Machine Guard Mounting Tube on Overhead Traction Machine

- <u>Note</u>: Overhead Traction Machine model #44F O.H. will already have the mounting tube holes pre-dilled for Overhead Traction Machine Guard model 45-230. Proceed to the next step.
  - Position Machine Guard Mounting Tube (p/n \_ \_-233) on the Overhead Traction Machine base. The Machine Guard Mounting Tube (p/n \_ \_-233) should be placed as close as possible but still clear the lower housing and A-stand. The tube should be placed so the Machine Guard Isolators (p/n 34-262) are vertical and the same distance from the edge of the base as the Guard Corner Mounting Tube Assembly (p/n \_ \_-244). Reference the figure below for proper tube placement (Figure 6).
  - On some small traction sheave configurations with a large arc of contact such as 180 degrees of wrap the Machine Guard Mounting Tube (p/n \_ \_-233) will need to be offset further from the machine to clear the suspension rope drop. The Machine Guard Mounting Tube (p/n \_ \_-233) should be placed as close to the machine as possible and not interfere with the suspension ropes, rope guarding, and machine operation.
  - Verify that both Machine Guard Isolators (p/n 34-262) are positioned appropriately on the flanges of the machine base to allow for proper bolting.
  - Once the tube is positioned temporarily clamp in place.

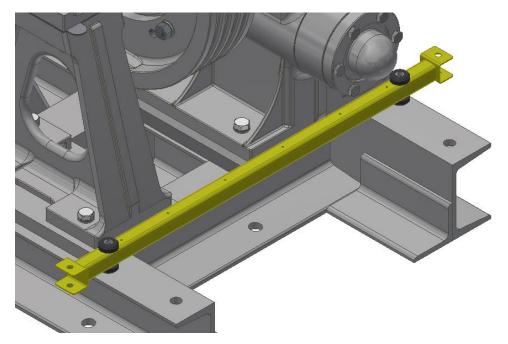


Figure 6: Machine Guard Mounting Tube Placement

#### 2.5. Drill Mounting Holes for Overhead Traction Machine Guard Mounting Tubes

<u>Note</u>: Overhead Traction Machine model #44F O.H. will already have the mounting tube holes pre-dilled for Overhead Traction Machine Guard model 45-230. Proceed to the next step.



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- With the mounting tubes correctly positioned and temporally clamped in place use a transfer punch through the Machine Guard Isolators (p/n 34-262) to mark each isolator location on the Overhead Traction Machine base.
- Remove temporary clamping and mounting tubes.
- Drill through the top flange of the Overhead Traction Machine base where marked with an appropriate drill size for clearance for a 3/8 inch bolt.
- <u>Note</u>: It may be necessary to remove the motor if access is needed to drill the Overhead Traction Machine Guard mounting holes into the Overhead Traction Machine base.

#### 2.6. Secure Overhead Traction Machine Guard Mounting Tubes on Overhead Traction Machine

- Position mounting tubes and secure in place with the appropriate 3/8 inch hardware provided as show below (Figure 7).
- For an assembled view of current progress for a machine with a foot mounted motor reference the Machine Guard Mounting Tube Assembled View below (Figure 8). For an assembled view of current progress for a machine with a flange mounted motor reference the Machine Guard Mounting Tube Assembled View below (Figure 9).

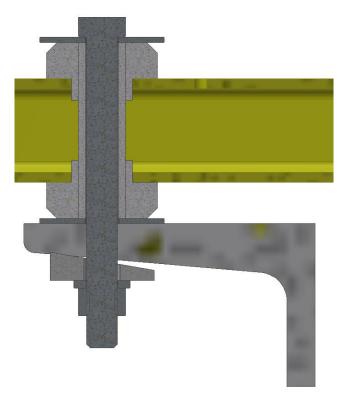


Figure 7: Machine Guard Mounting Tube Hardware

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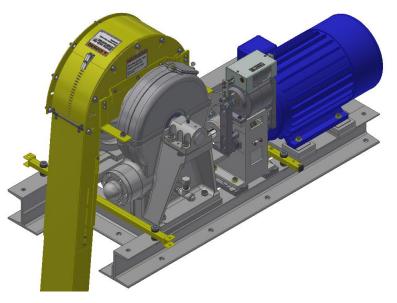


Figure 8: Machine Guard Mounting Tube Assembled View

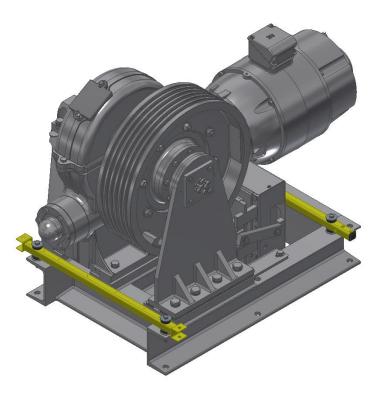


Figure 9: Machine Guard Mounting Tube Assembled View (Flange Mount Machine)

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#### 2.7. Assemble Overhead Traction Machine Guard Frame

- Position Machine Guard Side Frame (p/n \_ \_-231) on the mounting tubes and secure to Machine Guard Corner Mounting Tube Assembly (p/n \_ \_-244) with provided 1/4-20 hardware as represented below (Figure 10).
- Assemble Machine Guard Corner Tube Assemblies (p/n \_ \_ -223) and secure with provided 1/4-20 hardware similar to the previous step. An exploded view of the Overhead Traction Machine Guard is shown below for reference (Figure 11).
- For an assembled view of current progress reference the Machine Guard Mounting Tube Assembled View below (Figure 12).

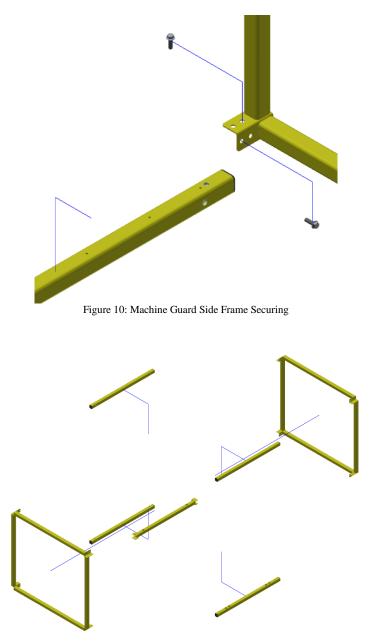


Figure 11: Machine Guard Frame Exploded View

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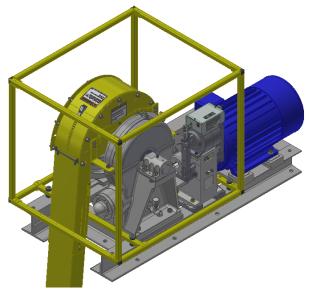


Figure 12: Machine Guard Frame Assembled View

#### 2.8. Drill and Bolt Machine Guard Side Frame to Machine Guard Mounting Tube

- With the Overhead Traction Machine Guard Frame assembled around the Overhead Traction Machine drill though the Machine Guard Side Frame (p/n \_ \_-231) with an appropriate clearance drill for 3/8 inch hardware at the mounting locations to Machine Guard Mounting Tube (p/n \_ \_-233).
- Secure with provided 3/8 inch hardware as represented below (Figure 13).
- An assembled view of this connection is shown below (Figure 14).

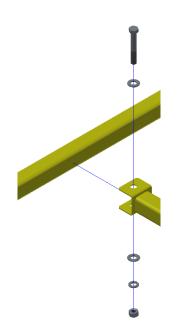


Figure 13: Machine Guard Side Frame Connection Exploded View

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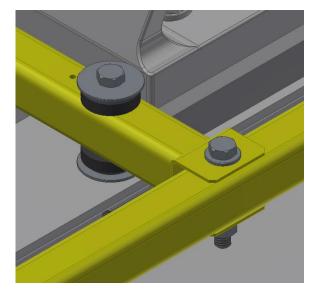


Figure 14: Machine Guard Side Frame Connection Assembled View

#### 2.9. Identify Machine Guard Panels

- Identify all Machine Guard Panels for the Overhead Traction Machine Guard model to be installed. Some Overhead Traction Machine Guard models may have more or less Machine Guard Panels for its respective machine model. Each Machine Guard Panel should be labeled with its respective part number
- For reference a generic Overhead Traction Machine Guard assembly drawing can be found at the end of this document.
- <u>Note</u>: Overhead Traction Machine Guard Assembly model 45-230 does not include Machine Guard Side Filler Panels (p/n \_ \_-243) or Machine Guard Motor Filler Panel (p/n \_ \_-239).

#### 2.10. Install Machine Guard Side Filler Panels

- <u>Note</u>: Overhead Traction Machine Guard Assembly model 45-230 does not include Machine Guard Side Filler Panels (p/n \_ \_-243). Proceed to the next step
  - Measure the location of the Machine Guard Mounting Tubes (p/n \_ \_-233) and cut out the appropriate notches on Machine Guard Side Filler Panels (p/n \_ \_-243) to clear the Machine Guard Mounting Tubes as illustrated below (Figure 15).
- <u>Note</u>: It may be necessary in some instances to cut outside the provided slotted pattern.
  - Remove the bottom inside 1/4-20 hardware where the Machine Guard Side Filler Panel (p/n \_ \_-243) is to be installed.
  - Install the Machine Guard Side Filler Panels (p/n \_ \_-243) as shown below with the 1/4-20 hardware that was just removed (Figure 16).
  - A slot is present to adjust the Machine Guard Side Filler Panel (p/n \_ \_-243) proximity to the machine base as needed.

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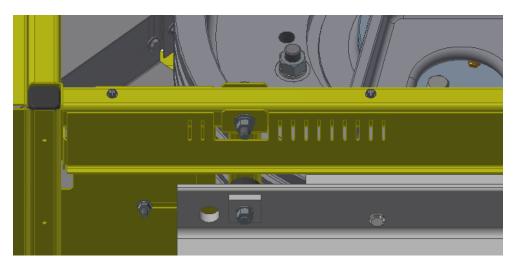


Figure 15: Machine Guard Side Filler Panel Notch

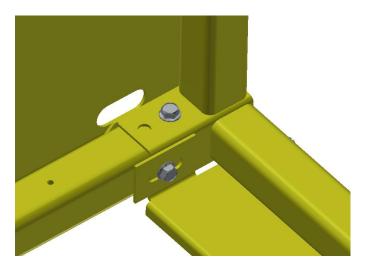


Figure 16: Machine Guard Side Filler Panel Installation

#### 2.11. Install Machine Guard Rope Filler Panels

- Locate the Machine Guard Rope Filler Panels (p/n \_ \_-241) and loosely assemble the two panels with the provided 1/4-20 hardware through the slotted holes so the panels can still be adjusted as needed.
- Place assembled Machine Guard Rope Filler Panels on top of appropriate frame tubes and secure with provided #10-24 screws through the pre drilled pilot holes.
- Tighten the 1/4-20 hardware that was previously loosely assembled.
- An assembled view of this connection is shown below (Figure 17).

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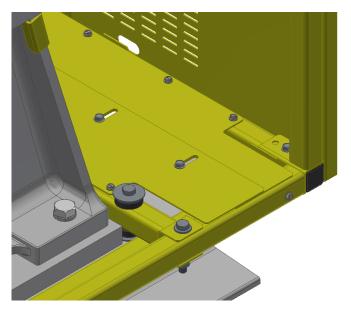


Figure 17: Machine Guard Rope Filler Panels Installed

- Iy may be necessary to modify the Machine Guard Rope Filler Panels (p/n \_ \_-241) depending on the roping configuration. The Machine Guard Rope Filler Panels (p/n \_ \_-241) can be notched to clear the Ropes and/or Rope Guards if applicable as shown below (Figure 18).
- It may also be necessary to remove a section of the Machine Guard Corner Tube Assembly (p/n \_ \_-232) depending on the roping configuration as shown below in (Figure 19).



Figure 18: Machine Guard Rope Filler Panel Modification.

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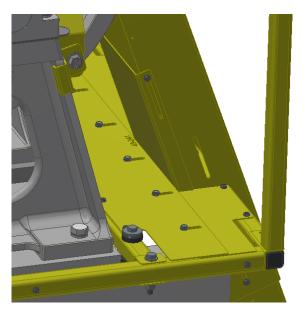


Figure 19: Machine Guard Rope Filler Panel & Mounting Tube Modification

#### 2.12. Install Machine Guard Motor Filler Panels

- <u>Note</u>: Overhead Traction Machine Guard Assembly model 45-230 does not include a Machine Guard Motor Filler Panel (p/n \_ \_-242). Proceed to the next step
  - Determine if the Overhead Traction Machine being guarded is equipped with a square base or an angled base.
  - If the Overhead Traction Machine being guarded is equipped with an angled base cut the Machine Guard Motor Filler Panel (p/n \_ \_-242) along the edge of the angled slots closest to the corner. The two corner pieces will be used and the center section can be discarded.
  - Notch the Machine Guard Motor Filler Panel (p/n \_ \_-242) using the provided slot pattern where needed to fit around the motor mounting provisions.

<u>Note:</u> It may be necessary in some instances to cut outside the provided slotted pattern.

- Place the Machine Guard Motor Filler Panel (p/n \_ \_-242) in the location to be installed and drill though the Overhead Traction Machine base with a 0.154 inch diameter drill where holes are present in the panel that are above the Overhead Traction Machine base members and secure with provided #10-24 screws. An assembled view of a square base configuration is shown below (Figure 20) and an assembled view of an angled base configuration is shown below (Figure 21).
- For an angled base configuration the corner piece cut from the Machine Guard Motor Filler Panel (p/n \_ \_- 242) can be secured inside the frame by following the same methodology as above if needed as shown below (Figure 22).

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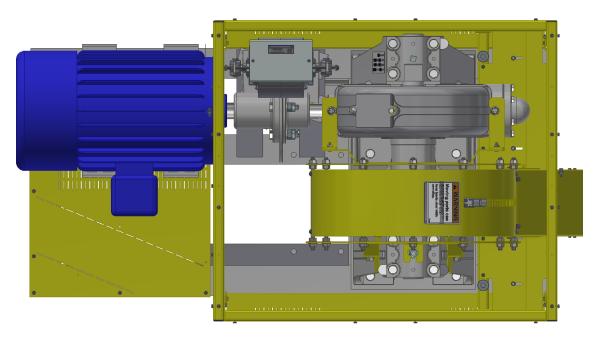


Figure 20: Machine Guard Motor Filler Panel Square Base Configuration

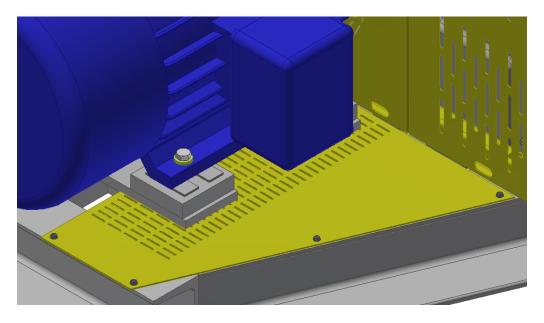


Figure 21: Machine Guard Motor Filler Panel Angled Base Configuration

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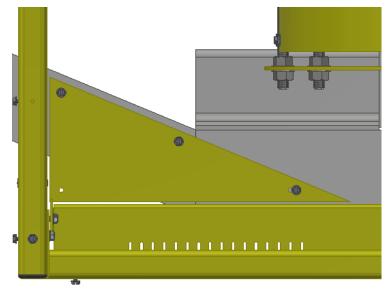


Figure 22: Machine Guard Motor Filler Panel Angled Base Corner Configuration

#### 2.13. Install Machine Guard Motor Panels

- Measure the diameter of the motor where the Machine Guard Motor Panels (p/n's \_ \_-239 & \_ \_-240) will meet with the motor.
- Cut the Machine Guard Motor Panels (p/n's \_ \_-239 & \_ \_-240) along the slotted circular pattern that corresponds to the measured motor diameter as shown below (Figure 23).
- <u>Note:</u> It may be necessary in some instances to cut outside the provided slotted pattern.
  - Start four (4) of the provided #10-24 screws into the appropriate pre-drilled pilot holes in the frame members that correspond to each appropriate Machine Guard Motor Panel (p/n's \_ \_-239 & \_ \_-240) attachment location but do not fully tighten. The panel attachment locations under the motor may not be accessible in some situations.
- <u>Note</u>: Leave the flange of the #10-24 screws approximately 3/16 of an inch from being fully tightened to allow the Machine Guard Panels to be assembled utilizing the key hole style slot.
- <u>Note</u>: Several pilot holes are present in the Overhead Machine Guard frame members to make it universal for either Overhead Traction Machine hand configuration. As a result not all pilot holes will be used. To identify which pilot holes will need to be used it is recommended that the Overhead Machine Guard Panels are positioned or measured and the appropriate pilot holes marked to aid in identification prior to starting the provided #10-24 screws.
  - Attach the Machine Guard Motor Panels (p/n's \_ \_-239 & \_ \_-240) and tighten the #10-24 screws as shown below (Figure 24).
- <u>Note</u>: To attach the Machine Guard Panels the large hole of the key hole slot must first be placed around the #10-24 screws and positioned so the flange of the #10-24 screws will clear the key hole style slot feature. The Machine Guard Panels must then be shifted to the proper final position. The edges of the Machine Guard Panels should be flush with the mating frame members.



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• Install the provided 1/4-20 hardware above the motor on the inside of the guard as shown below (Figure 25).

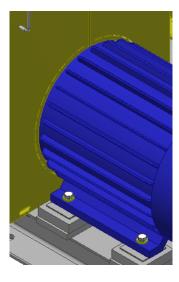


Figure 23: Machine Guard Motor Panel Modification

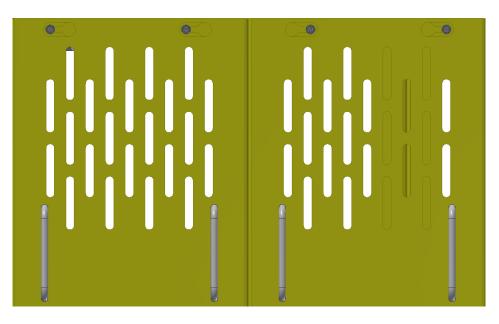


Figure 24: Machine Guard Motor Panel Attachment

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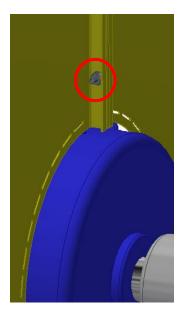


Figure 25: Machine Guard Motor Panel Bolt

#### 2.14. Install Machine Guard Rope Panels

- Start four (4) of the provided #10-24 screws into the appropriate pre-drilled pilot holes in the frame members that correspond to each appropriate Machine Guard Rope Panel (p/n's \_ \_-237 & \_ \_-238) attachment location but do not fully tighten.
- <u>Note</u>: Leave the flange of the #10-24 screws approximately 3/16 of an inch from being fully tightened to allow the Machine Guard Panels to be assembled utilizing the key hole style slot.
- <u>Note</u>: Several pilot holes are present in the Overhead Machine Guard frame members to make it universal for either Overhead Traction Machine hand configuration. As a result not all pilot holes will be used. To identify which pilot holes will need to be used it is recommended that the Overhead Machine Guard Panels are positioned or measured and the appropriate pilot holes marked to aid in identification prior to starting the provided #10-24 screws.
  - Attach the Machine Guard Rope Panels (p/n's \_ \_-237 & \_ \_-238) and tighten the #10-24 screws as shown below (Figure 26). The slotted hole patterns on each Machine Guard Rope Panel (p/n's \_ \_-237 & \_ \_-238) should mate up next to each other.
- <u>Note</u>: To attach the Machine Guard Panels the large hole of the key hole slot must first be placed around the #10-24 screws and positioned so the flange of the #10-24 screws will clear the key hole style slot feature. The Machine Guard Panels must then be shifted to the proper final position. The edges of the Machine Guard Panels should be flush with the mating frame members.
- <u>Note</u>: The Machine Guard Rope Panels will not cover the entire end on the Overhead Traction Machine Guard Assembly on Overhead Traction Machine Guard model 45-230 as shown below (Figure 27).

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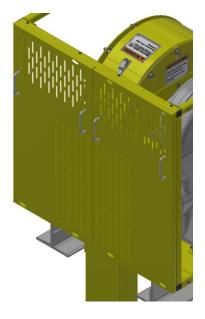


Figure 26: Machine Guard Rope Panel Installation



Figure 27: Machine Guard Model 45-230 Machine Guard Rope Panel Installation

- It may be necessary to notch the Machine Guard Rope Panels (p/n's \_ \_-237 & \_ \_-238) depending on the roping configuration.
- Cut the Machine Guard Rope Panels (p/n's \_ \_-237 & \_ \_-238) along the slotted pattern as necessary to clear the ropes and/or rope guards as shown below (Figure 28, Figure 29).
- <u>Note</u>: It may only be necessary to notch one of the Machine Guard Rope Panels (p/n's \_ -237 & \_ -238).

<u>Note</u>: It may be necessary in some instances to cut outside the provided slotted pattern.

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• If the Machine Guard Rope Panels (p/n's \_\_\_-237 & \_\_-238) are notched, install the provided 1/4-20 hardware as shown below (Figure 30). Install one set of hardware below the notch and one set of hardware above the notch. For some roping configurations hardware will not be able to be installed below the notch.

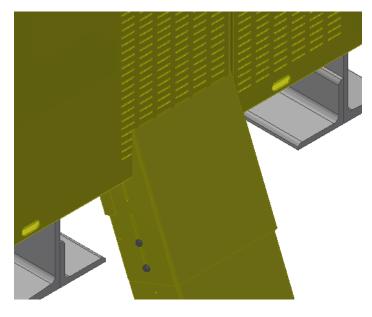


Figure 28: Machine Guard Rope Panel Modification

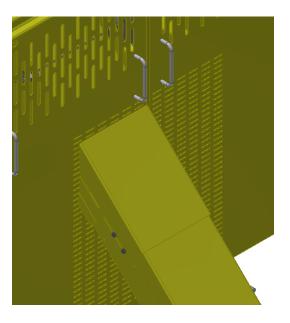


Figure 29: Machine Guard Rope Panel Modification

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#### Figure 30: Machine Guard Rope Panel Bolts

#### 2.15. Install Machine Guard End Panels

- Start four (4) of the provided #10-24 screws into the appropriate pre-drilled pilot holes in the frame members that correspond to each appropriate Machine Guard End Panel(s) (p/n \_ \_-236) attachment location but do not fully tighten.
- <u>Note</u>: Leave the flange of the #10-24 screws approximately 3/16 of an inch from being fully tightened to allow the Machine Guard Panels to be assembled utilizing the key hole style slot.
- <u>Note</u>: Several pilot holes are present in the Overhead Machine Guard frame members to make it universal for either Overhead Traction Machine hand configuration. As a result not all pilot holes will be used. To identify which pilot holes will need to be used it is recommended that the Overhead Machine Guard Panels are positioned or measured and the appropriate pilot holes marked to aid in identification prior to starting the provided #10-24 screws.
  - Attach Machine Guard End Panel(s) (p/n \_ \_-236) and tighten #10-24 screws as shown below (Figure 31).
- <u>Note</u>: To attach the Machine Guard Panels the large hole of the key hole slot must first be placed around the #10-24 screws and positioned so the flange of the #10-24 screws will clear the key hole style slot feature. The Machine Guard Panels must then be shifted to the proper final position. The edges of the Machine Guard Panels should be flush with the mating frame members.
- <u>Note</u>: Most Overhead Traction Machine Guard Assemblies will have one Machine Guard End Panel to be installed at the motor end of the Overhead Traction Machine Guard Assembly. Overhead Traction Machine Guard Assembly model 45-230 will have two end panels; one on the motor end and one on the rope end of the Overhead Traction Machine Guard Assembly.

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Figure 31: Machine Guard End Panel Installation

#### 2.16. Install Machine Guard Top Panels

- Start four (4) of the provided #10-24 screws into the appropriate pre-drilled pilot holes in the frame members that correspond to each appropriate Machine Guard Top Panel(s) (p/n \_ \_-234) attachment location but do not fully tighten.
- <u>Note</u>: Leave the flange of the #10-24 screws approximately 3/16 of an inch from being fully tightened against the Overhead Machine Guard frame members. This is to allow the Machine Guard Panels to be assembled utilizing the key hole style slot.
- <u>Note</u>: Several pilot holes are present in the Overhead Machine Guard frame members to make it universal for either Overhead Traction Machine hand configuration. As a result not all pilot holes will be used. To identify which pilot holes will need to be used it is recommended that the Overhead Machine Guard Panels are positioned or measured and the appropriate pilot holes marked to aid in identification prior to starting the provided #10-24 screws.
  - Attach Machine Guard Top Panel(s) (p/n \_ \_-234) and tighten #10-24 screws as shown below (Figure 32).
- <u>Note</u>: To attach the Machine Guard Panels the large hole of the key hole slot must first be placed around the #10-24 screws and positioned so the flange of the #10-24 screws will clear the key hole style slot feature. The Machine Guard Panels must then be shifted to the proper final position. The edges of the Machine Guard Panels should be flush with the mating frame members.

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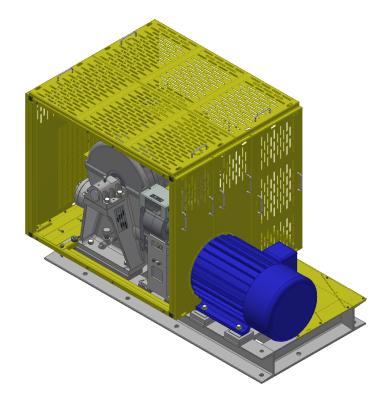


Figure 32: Machine Guard Top Panel Installation

#### 2.17. Install Machine Guard Side Panels

- Start four (4) of the provided #10-24 screws into the appropriate pre-drilled pilot holes in the frame members that correspond to each appropriate Machine Guard Side Panel(s) (p/n \_ \_-235) attachment location but do not fully tighten.
- <u>Note</u>: Leave the flange of the #10-24 screws approximately 3/16 of an inch from being fully tightened against the Overhead Machine Guard frame members. This is to allow the Machine Guard Panels to be assembled utilizing the key hole style slot.
- <u>Note</u>: Several pilot holes are present in the Overhead Machine Guard frame members to make it universal for either Overhead Traction Machine hand configuration. As a result not all pilot holes will be used. To identify which pilot holes will need to be used it is recommended that the Overhead Machine Guard Panels are positioned or measured and the appropriate pilot holes marked to aid in identification prior to starting the provided #10-24 screws.
  - Attach Machine Guard Side Panel(s) (p/n \_ \_-235) and tighten #10-24 screws as shown below (Figure 33).
- <u>Note</u>: To attach the Machine Guard Panels the large hole of the key hole slot must first be placed around the #10-24 screws and positioned so the flange of the #10-24 screws will clear the key hole style slot feature. The Machine Guard Panels must then be shifted to the proper final position. The edges of the Machine Guard Panels should be flush with the mating frame members.

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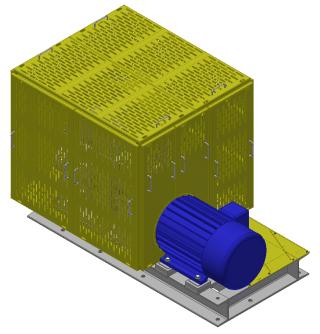


Figure 33: Machine Guard Side Panel Installation

#### 2.18. Attach Warning Label

• Attach self-adhesive Warning Label (p/n P-184) to one of the Machine Guard Motor Panels in similar location as illustrated below (Figure 34).

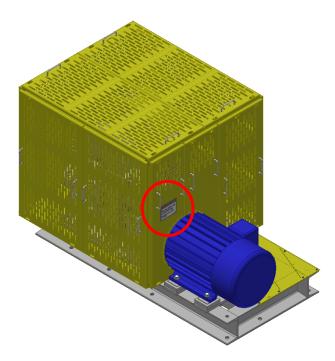


Figure 34: Attach Warning Label



## 3. Verification

#### **3.1. Verify Utility Runs (If Applicable)**

- Verify any utility runs are appropriately routed around or through the Machine Guard Panels.
- Verify any utility runs do not interfere with the removal of any necessary Machine Guard Panels.
- Verify any utility runs do not interfere with the Overhead Traction Machine operation.

#### **3.2. Verify Configuration**

- Verify the Overhead Traction Machine Guard and Overhead Traction Machine component clearances, such as but not limited to adjacent components, rope grippers, pumping units, rope retainers, machine brakes, motor mounting, etc.
- Verify that any hazard on the Overhead Traction Machine needing to be guarded is a safe distance away from the Overhead Traction Machine Guard and openings. Additional sheet metal filler plates can be added to reduce openings and gaps if applicable.

#### 3.3. Verify Operation

- Verify the Machine Guard Panels fit. The Machine Guard Panels should be easily removed and reassembled.
- Verify the Overhead Traction Machine Guard assembly does not interfere with the Overhead Traction Machine operation.
- Verify all hardware is securely tightened.

## 4. User Guide

#### 4.1. Machine Guard Panels

It is important to verify that conditions are safe to access the Overhead Traction Machine prior to the removal of the Machine Guard Panels. Only remove the Machine Guard Panels if conditions are safe to do so.

- To remove the Machine Guard Panels to access the Overhead Traction Machine, loosen the four (4) screws in each corner of the access panels as shown below (Figure 35). It is not necessary to completely remove the screws due to the attachment method provided. By only loosening the screws it helps to reduce the risk of lost hardware and/or FOD (Foreign Object Debris) in the area.
- After the four (4) mounting screws have been adequately loosened, the access panels may be first shifted a short distance and then pulled away from the Overhead Traction Machine Guard assembly for removal.
- Handles (p/n 201-099) are provided on the removable access panels to aid in their removal.
- Reattachment of the access panels can be done by reversing the process described above. Ensure the four (4) mounting screw are securely tightened after the access panels are reattached.
- <u>Note</u>: Some Machine Guard Panels that have been notched may have additional hardware securing them together. This additional hardware will need to be removed if these Machine Guard Panels are to be removed from the Overhead Traction Machine Guard Assembly.

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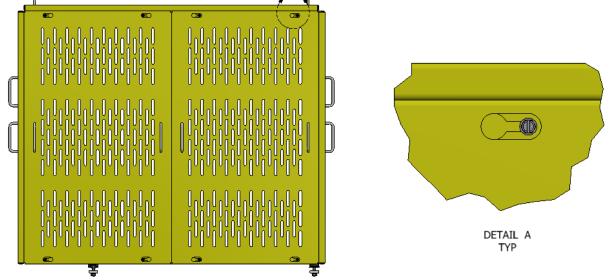


Figure 35: Access Panel Attachment

#### 4.2. Warning - Moving Part Can Crush And Cut

A Moving Parts Can Crush And Cut warning label is located on the Overhead Traction Machine Guard. See Figure 36 below.

<u>IMPORTANT</u>: Keep the guard in position and personnel clear during operation to reduce the risk of personal injury.



Figure 36: Warning - Moving Part Can Crush And Cut

