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|   | FIELD INSTALLATION – ECR<br>RETROFIT | 7/21/20 | A    | 1 of 29 | 1185     |

# **INSTALLATION INSTRUCTIONS**

## **Updating, Retrofitting or Upgrading the Rope Gripper® ECR Switch or Contact Assembly**

### **FOR**

**Models #620, #621, #622, #624, #625, #626, & #626SPL  
Hollister-Whitney “Rope Gripper®” & Pumping Unit  
(Patent # 5,228,540)  
CSA Certification File #88181**



***BEFORE PERFORMING ANY MAINTENANCE ON THE ROPE GRIPPER®,  
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!***




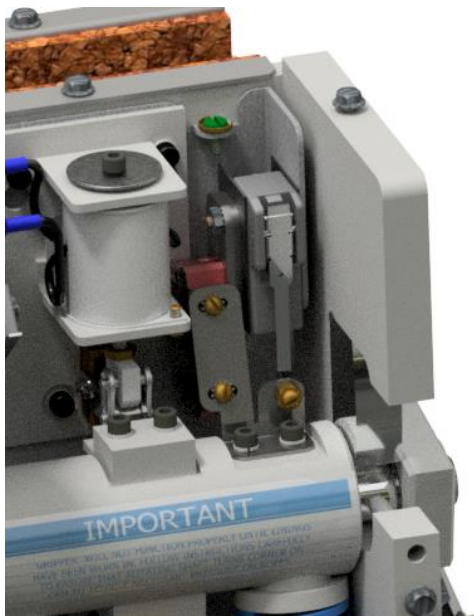
***BEFORE PERFORMING ANY MAINTENANCE ON THE ROPE GRIPPER®,  
REMOVE ALL ELECTRICITY FROM THE MACHINE AND BRAKES TO  
PREVENT ANY UNINTENDED MOVEMENT THAT MAY RESULT IN INJURY  
OR DEATH DURING THE MAINTENANCE PERIOD!***

***READ THE ENTIRE REPLACEMENT PROCEDURE BEFORE BEGINNING ANY OF THE  
STEPS OUTLINED BELOW. CONTACT HOLLISTER-WHITNEY WITH ANY QUESTIONS  
PRIOR TO BEGINNING THE BEARING REPLACEMENT.***

### **Warranty and Repair Information**

- All parts and equipment manufactured by Hollister-Whitney Elevator Company, LLC are guaranteed against defects in material and workmanship for a period of one (1) year from the date of shipment. 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.
- Manuals, Parts Lists and Repair Information can be found at: <https://www.hollisterwhitney.com/support/>
- **For free technical support, contact Hollister-Whitney at 1-217-222-0466.** Technical support can also be reached at: [HW Product Support <productsupport@hwec.com>](mailto:productsupport@hwec.com)

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### **Tools Required**

- 1) Screw Drivers; Medium Flat Blade, Phillips #2, as well as smaller ones,
- 2) 1/8" Hex (Allen) Wrench, Ball End Recommended (Safety Set Screws),
- 3) 5/32" Hex (Allen) Wrench, Long Handle Ball End Recommended,
- 4) 5/16" Wrench,
- 5) Dikes (side cutters),
- 6) Bastard or other small file,
- 7) Small can of compressed air,
- 8) Wire Strippers


### **Introduction**

The instructions found here are for upgrading your currently installed Rope Gripper® to the new ECR Contact Assembly. All instructions assume that all the proper company safety procedures have been followed and applied prior to any work being started.

The 620-064-RK kit is used on all models of Rope Gripper®. Please review Print #620-064-RK found at the end of this manual. If any parts are missing or damaged contact Hollister-Whitney prior to beginning any work.

While the switch upgrade described below can be done on all Rope Gripper® Models, due to the tight spaces inside the 620 Rope Gripper® it will be easiest to remove the switch assembly as per the below. Other Grippers can be retrofitted without removing the entire switch assembly.

In the instructions below, pictures of the 620 Rope Gripper® are generally on the left, while a 622 Rope Gripper® assembly is pictured on the right. Steps for the 622 are appropriate for models 621, 624, 625, 626, and 626SPL.

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### **ECR Contact Installation**

1. Confirm that the car is out of service and that all company policies for securing the lift and protecting the public have been met.
2. Remove the cover from both the Rope Gripper® and from the Pumping Unit.
3. Follow the instructions on the inside of the pump unit cover to turn the Valve Stem to Manual.




4. If the Rope Gripper® is not already locked open; using the hand pump, open the gripper to the “ready” position and lock it open with the safety set screws (1/8” Hex Key).



5. Remove the two Allen head screws (5/32” Hex Key) that hold the Actuating Bracket to the Rotating Shaft Tube. Discard the actuating bracket and shorting bar.



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6. Retain the screws and replace them loosely in the Rotating Shaft Tube; this is a convenient place to store these for later use.

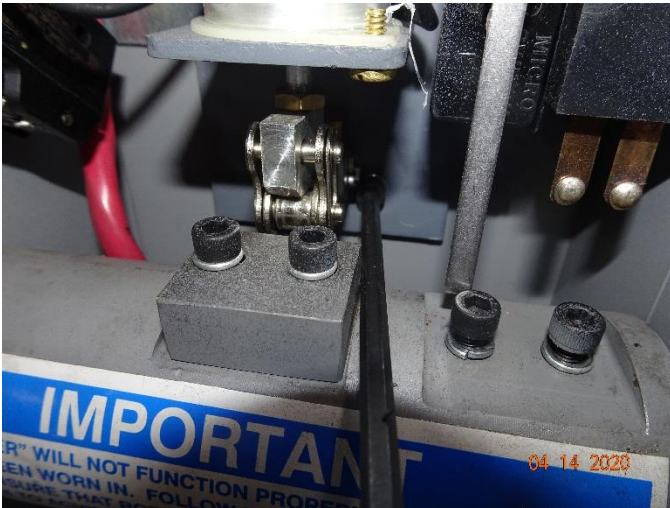
**NOTE:** If you are retrofitting a 620 Rope Gripper®, continue. If you are retrofitting a 621, 622, 624, 625, 626 or 626SPL, skip to Step 11.



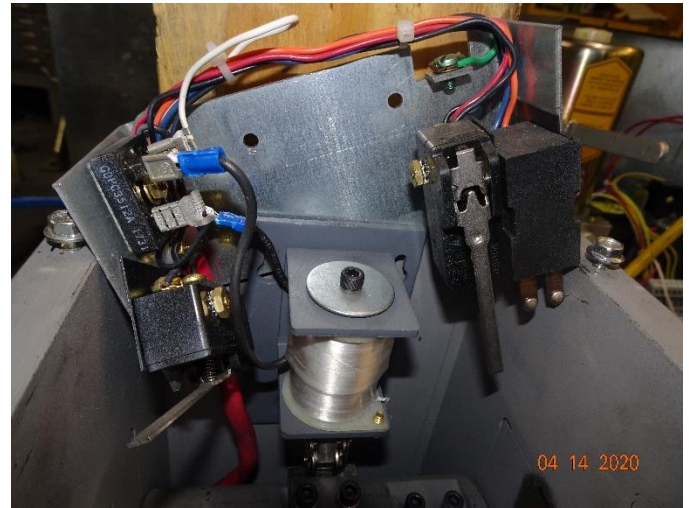
7. Locate the top two Allen screws on top of the latching coil bracket.
8. Remove the screws (and washers) from the top of the latching coil bracket and retain them. (5/32" Hex Key)



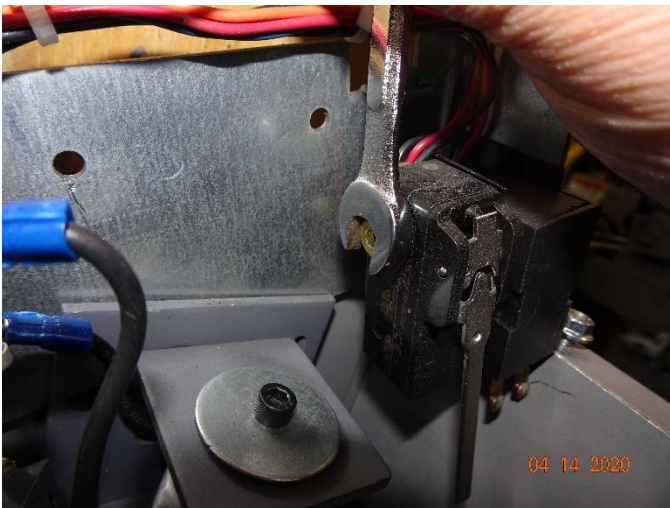
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9. Loosen BUT DO NOT REMOVE the bottom two Allen screws from the latching coil bracket. It should only take a quarter or half turn to loosen the bracket. (5/32" Hex Key)



10. Lift the assembly out of the Gripper and tip it slightly to gain access to the two switches.



11. Remove the nut and star washer that holds both switches (Brake Ready and ECR) in place (5/16" wrench). An extra nut and star washer have been included in the kit for convenience, just in case.

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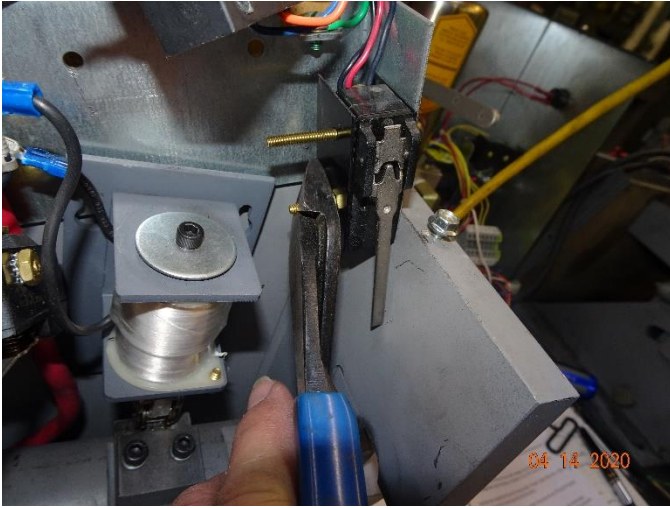
12. Slide the two switches off the bracket assembly. Push the ECR contact assembly out of the way and place the microswitch back over the screws onto the bracket.



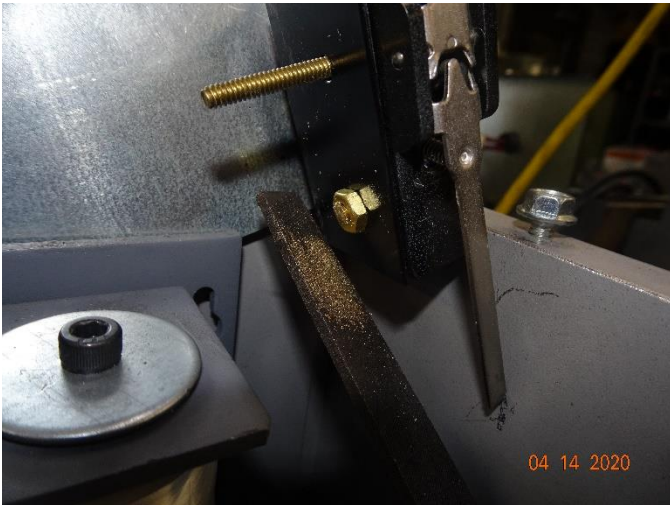
13. Place the nut on the BOTTOM screw and snug down the nut against the insulating spacer. Confirm the order of parts from the bracket inward: insulating spacer against the bracket, microswitch, second insulating spacer, and nut.



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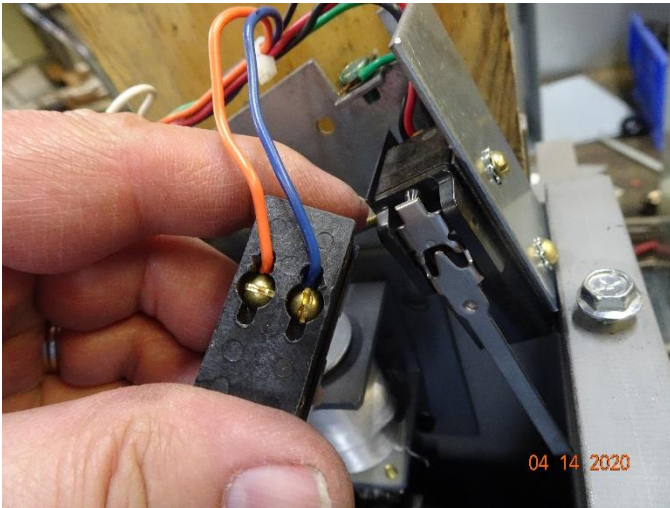
14. Using a pair of dikes or side cutters, nip off the bottom screw flush with the nut.



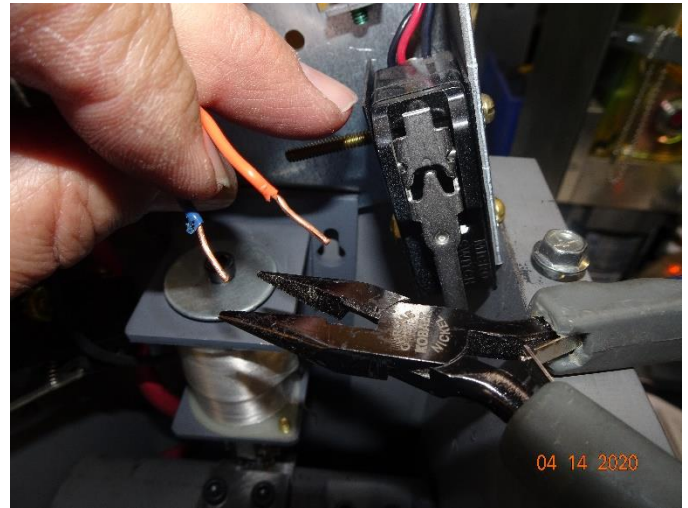
15. Cutting the screw will likely leave a sharp point where it was cut. File off the end of the screw as necessary so it is flat, with approximately a thread extending past the nut. Using small can of compressed air, blow area clean of debris.



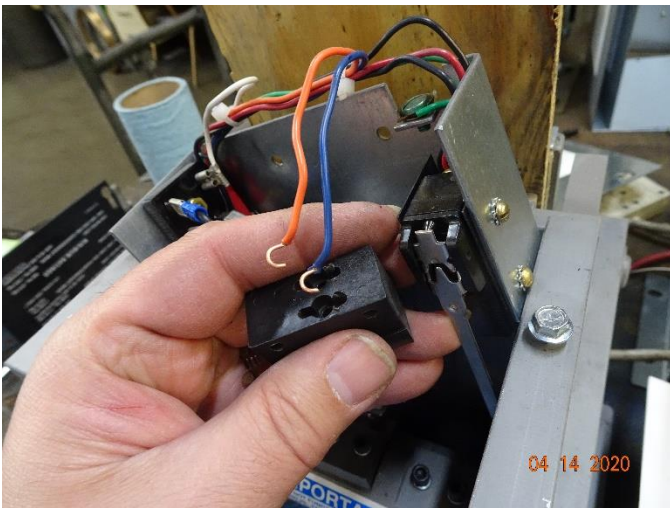
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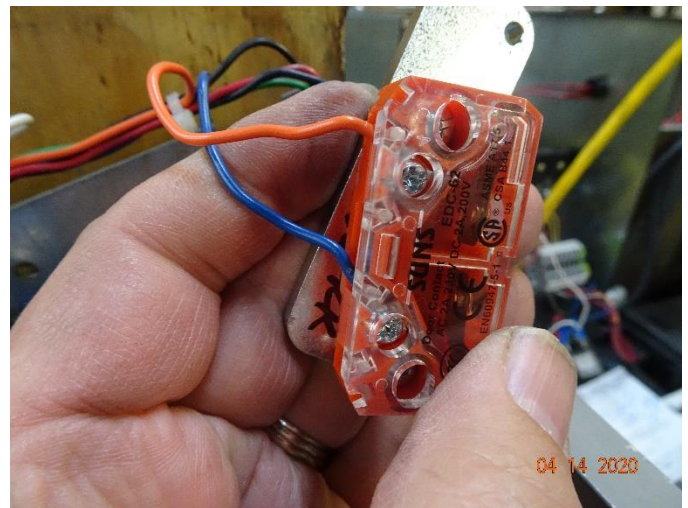
16. Turn over the old ECR contact to reveal the two screws on the back.




18. Carefully straighten the ends of both wires. If they are too damaged to straighten, nip off just enough of the wire to remove the damaged portion. Strip the wires back so there is 1/4 to 3/8" of bare wire.



17. Remove the two screws from the ECR assembly to release the blue and orange wires.

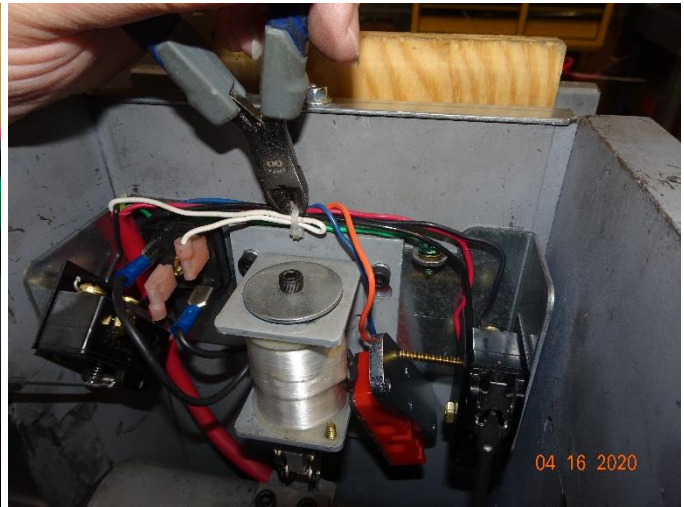


19. Attach these wires to opposite sides of the new ECR switch provided. It doesn't matter which side is which, but if one wire is shorter than the other, use the shortest wire for the top and the longer of the two for the bottom.

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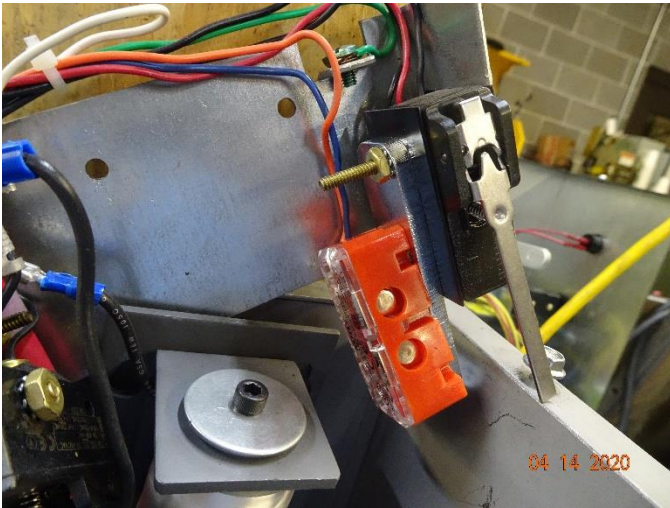
20. Now remove the nut from the screw that was nipped off.



21. To gain a bit of maneuvering room for the next to steps in may be necessary to cut the small zip tie closes to the switches. Place the new ECR and ECR bracket onto the two screws in the switch bracket assembly.

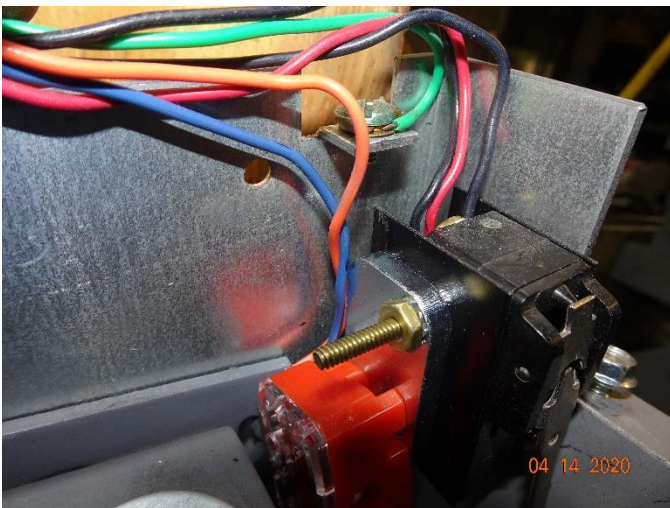


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22. Place the star washer and nut on the top screw and secure the new ECR bracket assembly to the switch bracket assembly.


**NOTE:** If you are retrofitting a 620 Rope Gripper®, continue. If you are retrofitting a 621, 622, 624, 625, 626 or 626SPL, skip to Step 25.



23. When complete, make sure the blue and orange wires are still secure. The wires should also be pulled upwards, pushed flat against the sheet metal and pushed as far towards the outside (to the right) as possible.

24. Return the retrofitted microswitch assembly into the Gripper. Some care may need to be taken with the orange and blue wires to make sure they clear the latching coil assembly during this process. Replace the top two screws into the assembly and tighten the bottom two screws.




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25. Install the new actuating assembly. It will be easier to remove the brass screw and nut to allow the two Allen head screws in the rotating shaft tube to be installed.

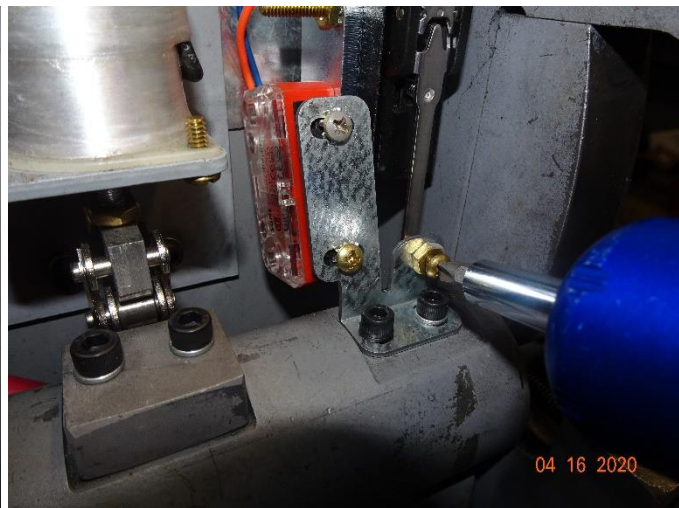


26. Line up hole for the brass screw with the lever on the microswitch.

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27. Snug the assembly down. The shorting bar needs to be centered within the openings in the ECR contact. Adjust the Actuating Assembly and Shorting Bar as necessary to get the best fit for your assembly.
28. In the pumping unit, remove the orange and blue wires from terminal blocks RG5 and RG6 and test for continuity across these wires; there should be continuity between Blue and Orange. If not, the wires may have come loose from the new ECR contact. Correct as necessary. Reconnect Orange to RG5 and Blue to RG6 in the pumping unit.



29. Insert the brass screw that activates the lever of the Brake Ready microswitch. Drive it in until you hear the click of the switch (switch opening). Turn the screw a quarter turn more. Gently lock down the brass nut on the screw.
30. In the pumping Unit, the valve stem should be in manual. Give the hand pump handle a brief pump to relieve pressure on the safety set screws. Back the safety set screws out, remove them and store them in the bottom of the pumping unit.
31. While observing the new ECR contact and shorting bar, adjust the valve stem cam so that the valve allows the Gripper to very slowly clamp or close. Observe the action of the new ECR contact and shorting bar. The goal is



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to make sure the shorting bar is actuating the ECR contact properly, and that the contact bar points are clearing the ECR housing properly as the contact bar backs out, so as not to damage the ECR casing.

32. When the shorting bar has cleared the ECR, close the valve stem again and hand pump very slowly and observe the two pieces as the shorting bar reenters the ECR.

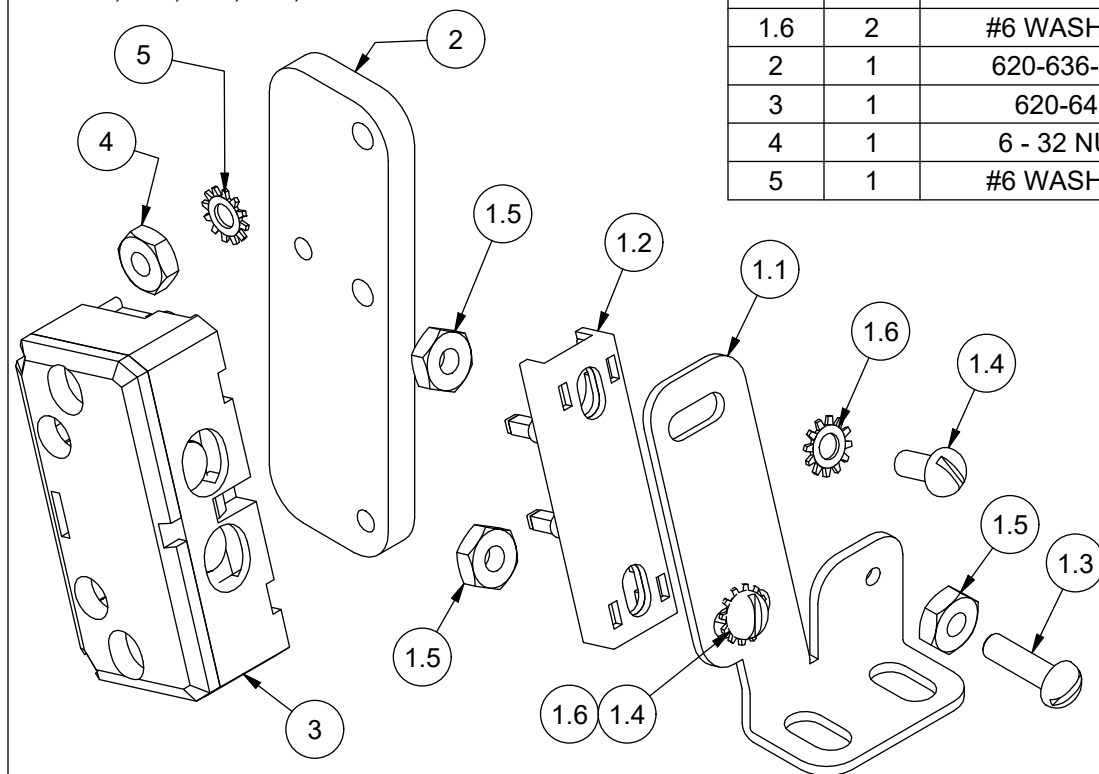


33. Adjust the shorting bar as necessary for fit, clearance and travel based on the above observation and repeat the process as necessary.
34. The ECR upgrade is now complete.
35. Observe all company policies and safety procedures and protocols for returning the lift to service.



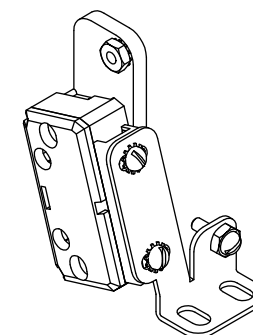
**NOTES:**

1. ECR RETROFIT KIT INTENDED FOR ALL HYDRAULIC ROPE GRIPPER MODEL SWITCH ASSEMBLIES
2. SEE PAGE 2 OF 2 FOR EXAMPLE RENDERINGS OF 620-064-RK;
  - APPLIED TO 620-064 WHICH IS USED IN MODEL 620,
  - APPLIED TO 622-064 WHICH IS USED IN MODELS 621, 622, 624, 625, 626 AND 626SPL.



**PARTS LIST**

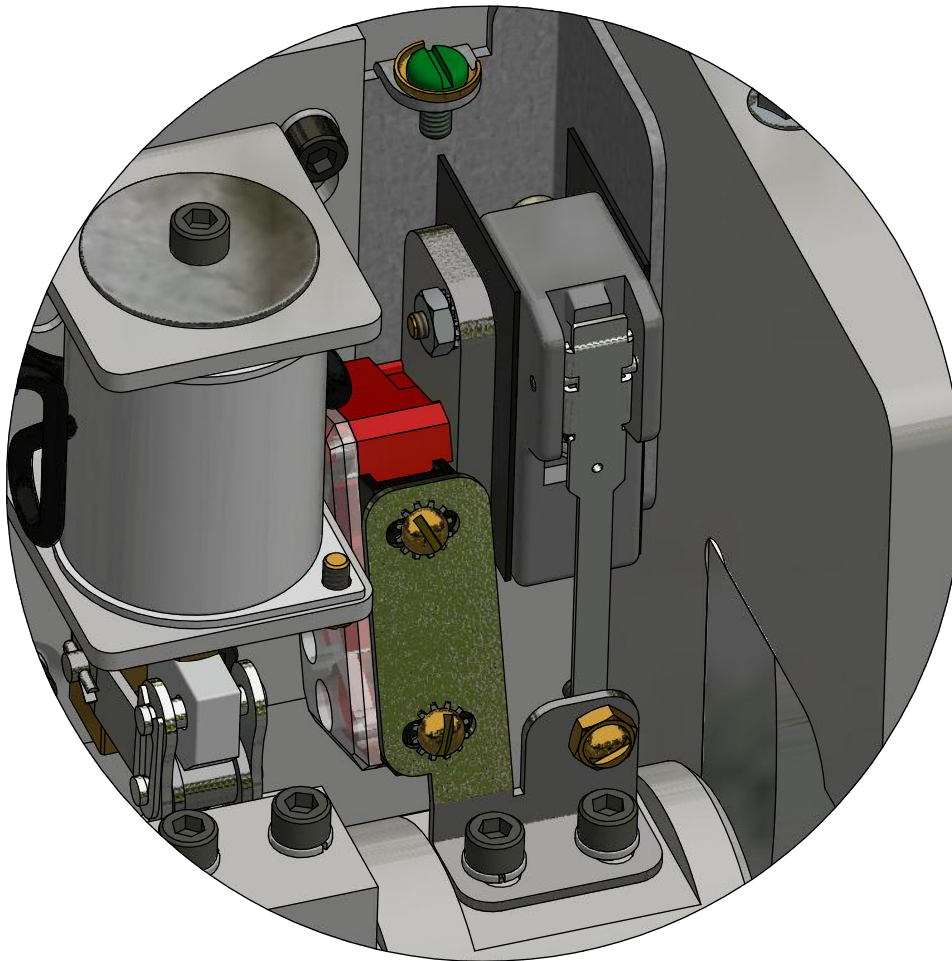
| ITEM | QTY | PART NUMBER        | DESCRIPTION                                   |
|------|-----|--------------------|---|
| 1    | 1   | 620-638-18RK       | ACTUATING ANGLE ASSEMBLY, RETROFIT KIT - 18mm |
| 1.1  | 1   | 620-639-RK         | SWITCH ACTUATING ANGLE - RETROFIT KIT         |
| 1.2  | 1   | 620-640-18         | SHORTING BAR - 18mm                           |
| 1.3  | 1   | #6-32 UNC X 0.5    | BRASS MACHINE SCREW                           |
| 1.4  | 2   | #6-32 UNC X 0.3125 | BRASS MACHINE SCREW                           |
| 1.5  | 3   | #6-32 UNC NUT      | BRASS NUT                                     |
| 1.6  | 2   | #6 WASHER          | EXTERNAL STAR LOCK WASHER                     |
| 2    | 1   | 620-636-RK         | ECR SWITCH MOUNT - RETROFIT KIT               |
| 3    | 1   | 620-641            | ECR CONTACT - EDC-61                          |
| 4    | 1   | 6 - 32 NUT         | MACHINE SCREW NUT                             |
| 5    | 1   | #6 WASHER          | EXTERNAL STAR LOCK WASHER                     |



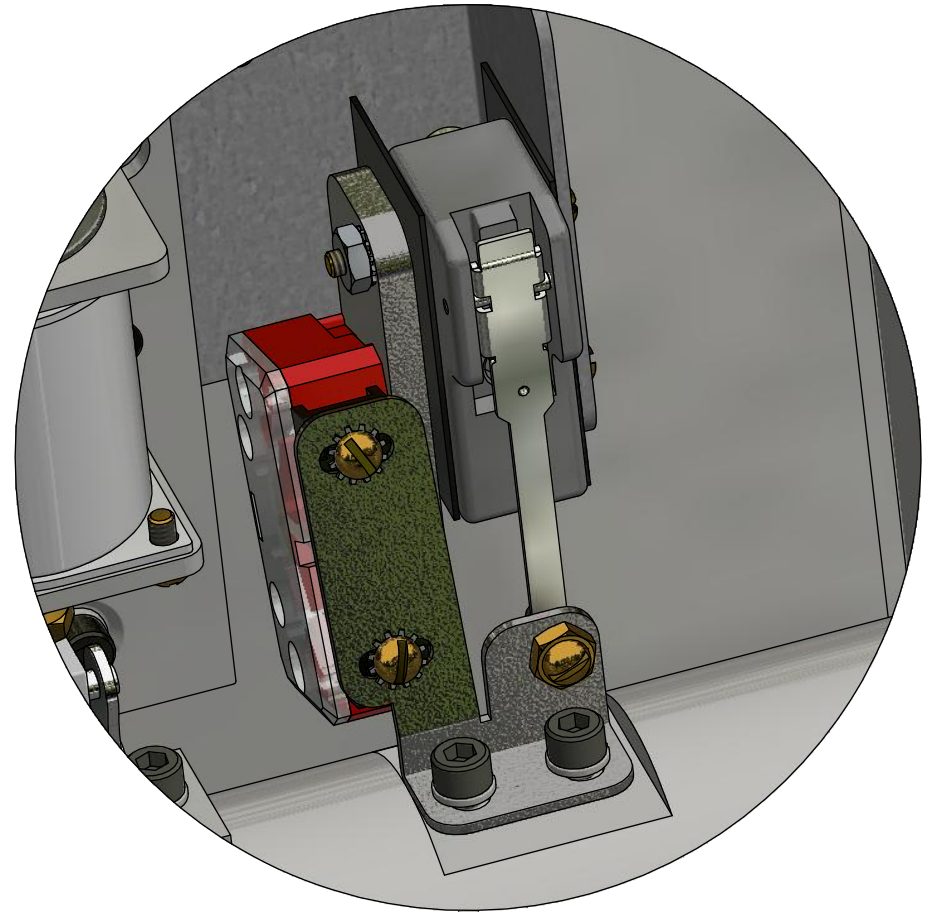
**ASSEMBLY VIEW  
SCALE 1:2**

WEIGHT: 0.2 lbmass

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|  |  |  |  |  | <b>HOLLISTER-WHITNEY</b>                          |  |  |  |
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|  |  |  |  |  | TITLE   |  |  |  |
|  |  |  |  |  | ECR UPGRADE RETROFIT KIT - HYDRAULIC ROPE GRIPPER |  |  |  |
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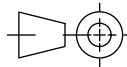


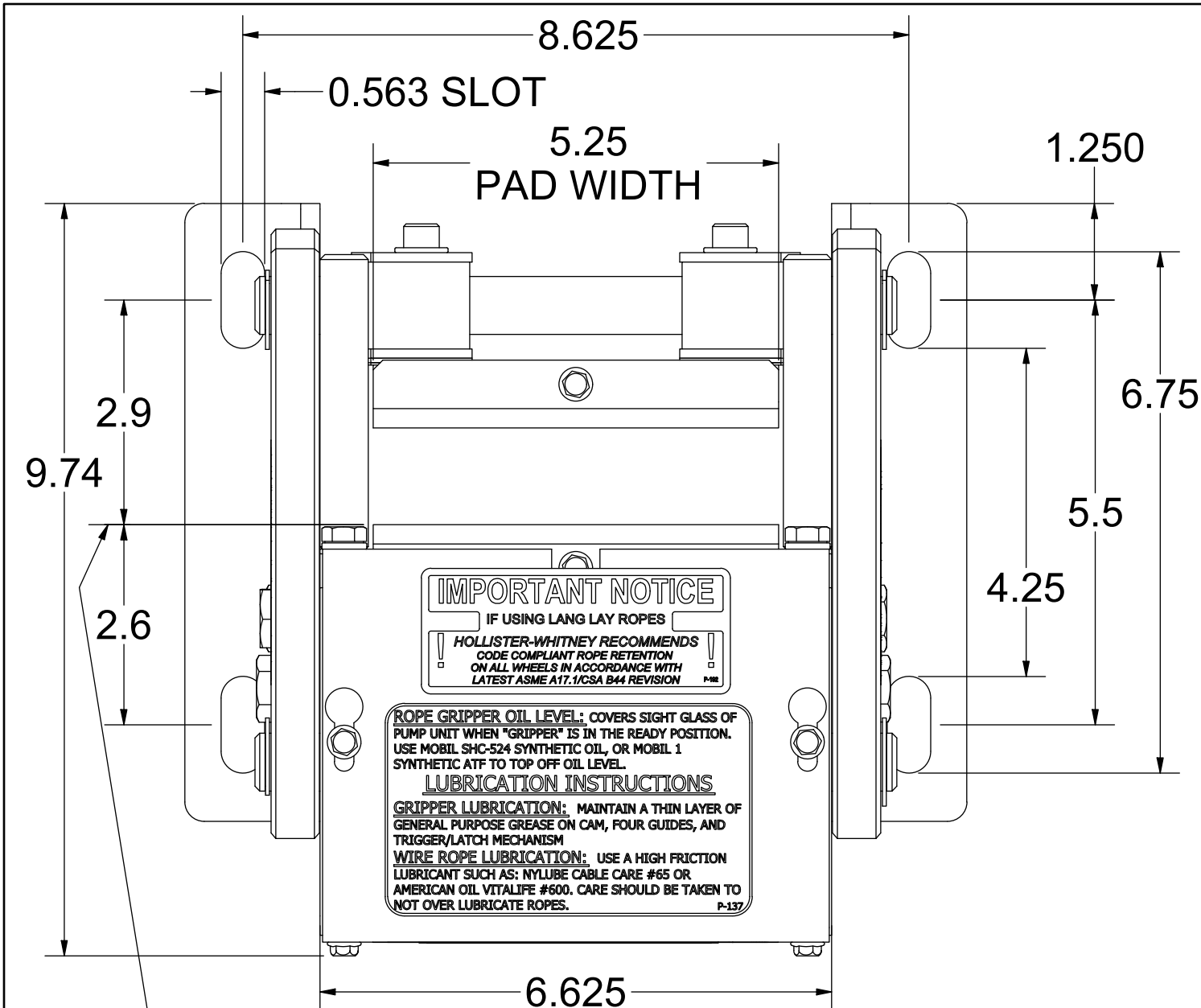
**620-064 WITH  
KIT INSTALLED  
SCALE 1 : 1**



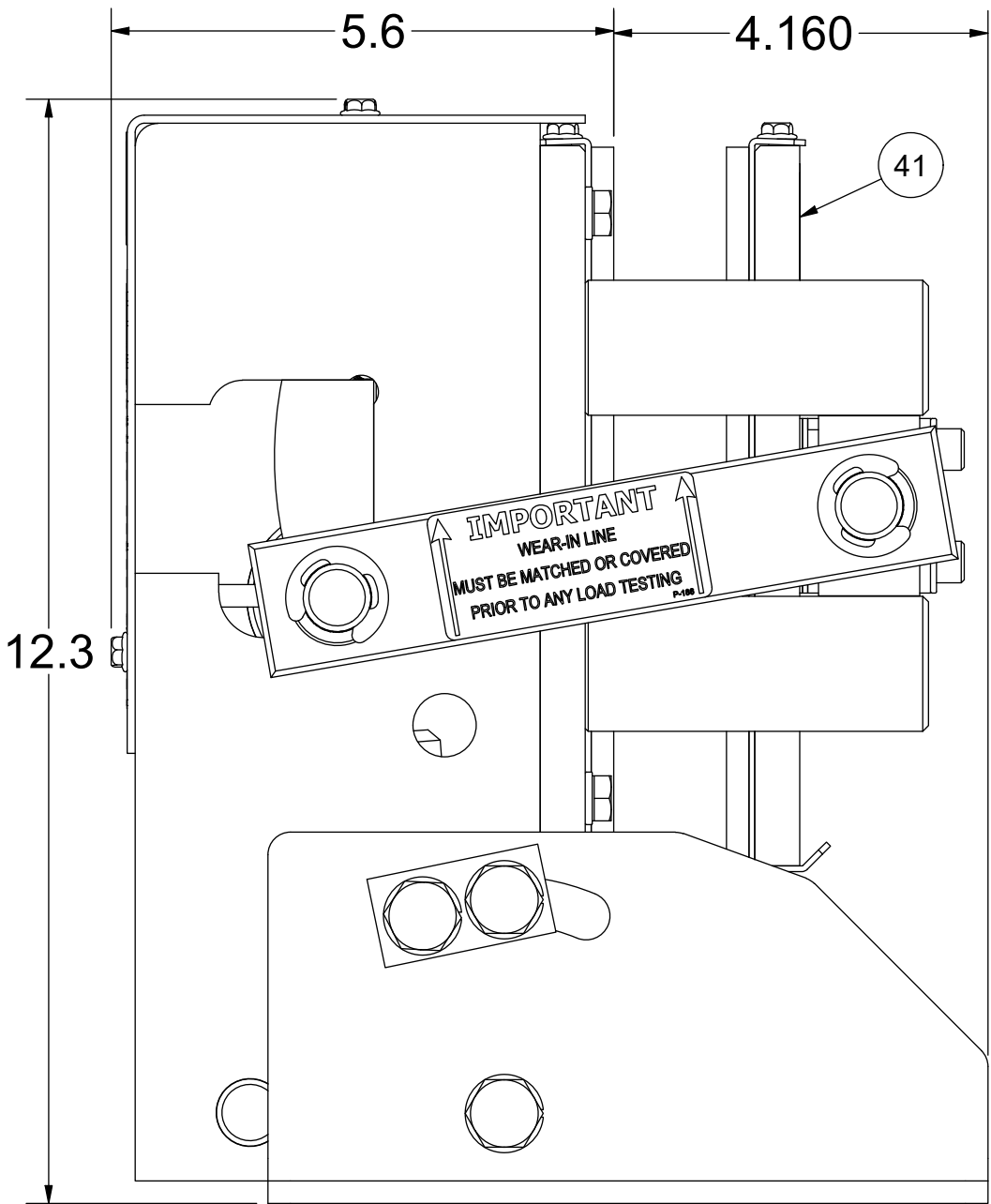
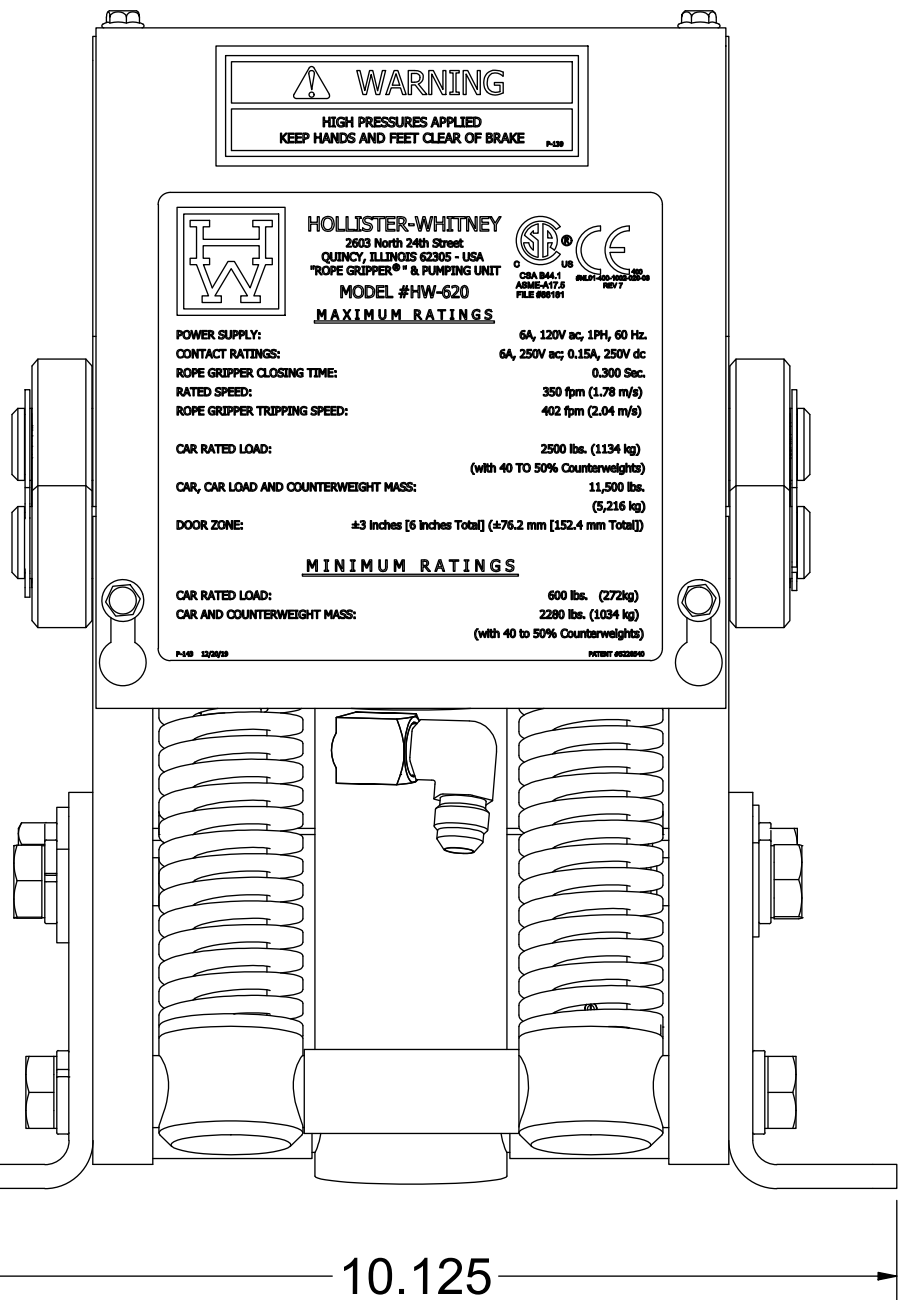
**622-064 WITH  
KIT INSTALLED  
SCALE 1:1**

WEIGHT: N/A

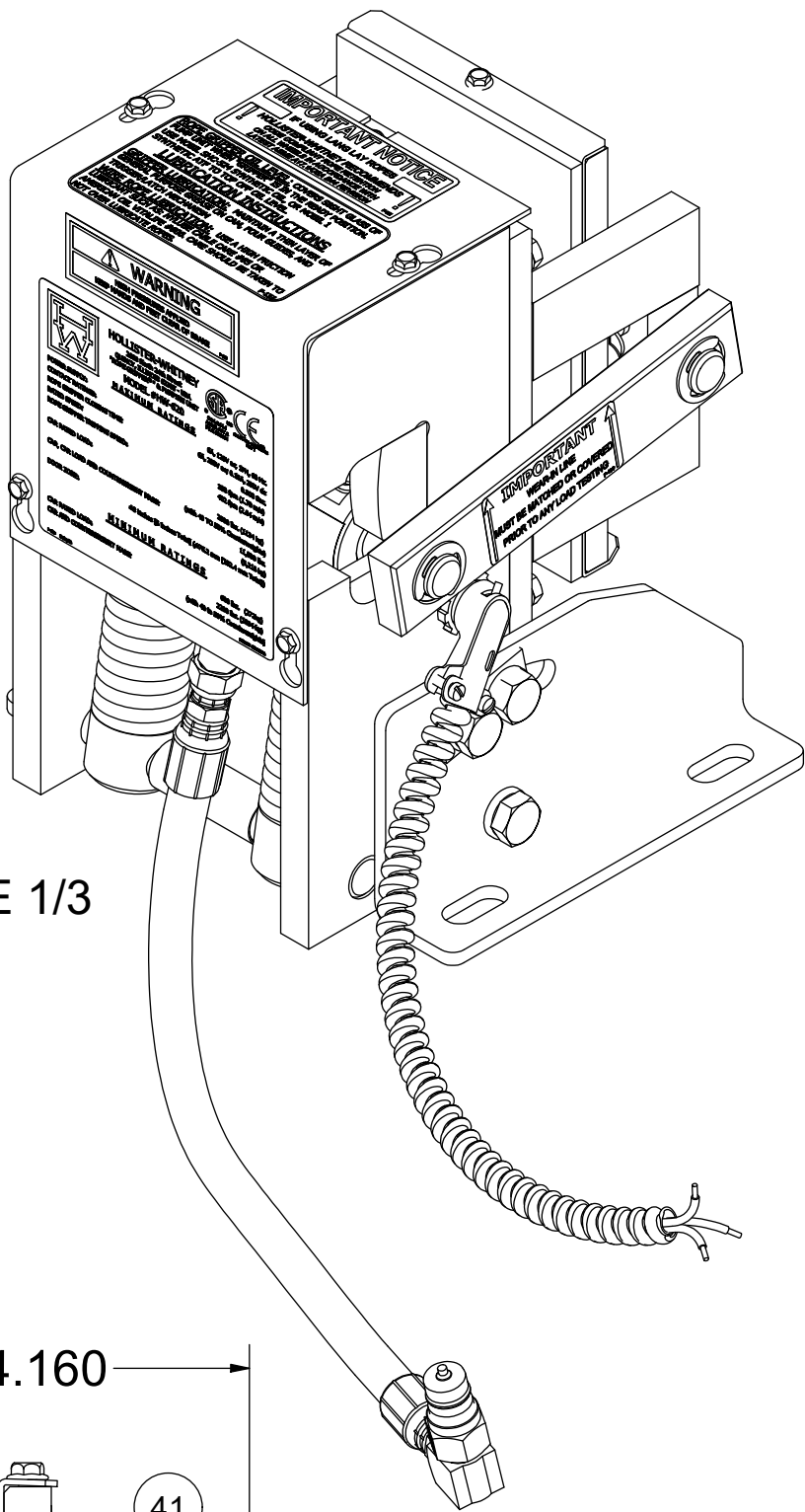
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|---|--|--|--|--|---|------------|-------|----------------|---|
|   |  |  |  |  | HOLLISTER-WHITNEY                                 |            |       |                |   |
|   |  |  |  | SEE PAGE 1 FOR REVISIONS   | ELEVATOR CO. LLC                                  |            |       |                |   |
|   |  |  |  |  | TITLE   |            |       |                |   |
|   |  |  |  |  | ECR UPGRADE RETROFIT KIT - HYDRAULIC ROPE GRIPPER |            |       |                |   |
| <p>THIS DRAWING IS SUPPLIED AS A REPRESENTATION OF THE EQUIPMENT HOLLISTER-WHITNEY ELEVATOR CO. LLC ("MANUFACTURER") HAS AGREED TO SUPPLY. SLIGHT ADJUSTMENTS MAY OCCUR DURING MANUFACTURING AND INSTALLATION. ANY MODIFICATIONS NOT APPROVED IN WRITING BY MANUFACTURER MAY AFFECT OPERATION, VOIDS ANY WARRANTY AND RELEASES MANUFACTURER OF ALL LIABILITY.</p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION THAT CANNOT BE REPRODUCED OR DIVULGED, IN WHOLE OR IN PART, WITHOUT WRITTEN AUTHORIZATION FROM THE MANUFACTURER.</p> |  |  |  | THIRD ANGLE PROJECTION   |   | DRAWN BY   | SCALE | MATERIAL       | REFERENCE TOL.                                      |
|   |  |  |  |  |   | LTL        | 1:1   | SEE PARTS LIST | ALL DIMENSIONS REFERENCE UNLESS OTHERWISE SPECIFIED |
|   |  |  |  |  |   | SHEET SIZE |       | DATE           | 620-064-RK<br>SHEET 2 OF 2                          |
|   |  |  |  |  |   | A          |       | 3/25/2020      |   |



PAD POSITION REFERENCE;  
CENTERLINE OF ROPE WILL  
VARY WITH ROPE SIZE



SCALE 1/3



| ITEM | QTY | PART NUMBER          | DESCRIPTION  |
|------|-----|----------------------|--|
| 1    | 1   | 620-003              | STATIONARY SHOE ASSEMBLY                           |
| 2    | 1   | 620-004              | MOVABLE SHOE                                       |
| 3    | 2   | 620-007              | SHAFT SUPPORT BLOCK                                |
| 4    | 4   | 620-008              | SPACER (11 GA.) - LINING WEAR                      |
| 5    | 2   | 620-008-1            | SPACER (16 GA.) - LINING WEAR                      |
| 6    | 2   | 620-008-2            | SPACER (22 GA.) - LINING WEAR                      |
| 7    | 1   | 620-015              | TUBING ASSEMBLY                                    |
| 8    | 2   | 620-018              | ROTATING & NON-ROTATING SHAFT                      |
| 9    | 2   | 601-020              | CONNECTING ARM ASSEMBLY                            |
| 10   | 2   | 620-022              | LINING ASSEMBLY                                    |
| 11   | 2   | 601-025              | LOWER SPRING GUIDE ASSEMBLY                        |
| 12   | 2   | 601-027              | SPRING UPPER SUPPORT                               |
| 13   | 2   | 601-029              | SPRING UPPER SUPPORT GUIDE                         |
| 14   | 2   | 601-030              | GRIPPER SPRING                                     |
| 15   | 2   | 620-031              | SHAFT  |
| 16   | 2   | 620-032              | SPACER TUBING                                      |
| 17   | 1   | 620-033              | TUBING - SPACER                                    |
| 18   | 1   | 601-035              | CYLINDER - ASSEMBLY                                |
| 19   | 1   | 622-036              | HYDRAULIC CYLINDER PIVOT BRACKET ASSEMBLY          |
| 20   | 1   | 620-037              | HYDRAULIC HOSE - STANDARD 27" LENGTH               |
|      |     | 620-037- "L"         | HYDRAULIC HOSE - "L" = LENGTH IN FEET (30' MAX)    |
| 21   | 1   | 620-038              | QUICK CONNECT FITTING                              |
| 22   | 1   | 601-039              | 1/8 X 1/4 NPT, 90° ELBOW                           |
| 23   | 1   | 620-040              | COVER - 620 ROPE GRIPPER                           |
| 24   | 1   | 601-041 R            | MOUNTING ANGLE - RIGHT                             |
| 25   | 1   | 601-041 L            | MOUNTING ANGLE - LEFT                              |
| 26   | 1   | 620-638-18RK         | ACTUATING ANGLE w/SCREWS                           |
| 27   | 1   | 620-064-1            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 10'          |
|      |     | 620-064-2            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 24'          |
|      |     | 620-064-3            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 18'          |
| 28   | 1   | 601-078              | LATCH  |
| 29   | 1   | 600-081-1            | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 620-064 |
|      |     | 600-081-2            |  |
|      |     | 600-081-3            |  |
| 30   | 1   | 600-082              | 801-DC2 90° ANGLE BOX CONNECTOR                    |
| 31   | 1   | 610-087              | 90° ADAPTOR, 45° FH 5/8"-18 X 1/4 NPT 18           |
| 32   | 1   | 610-091              | 3-8 x 3-8 NPT STREET 90 DEG. ELBOW                 |
| 33   | 2   | 601-095              | DOUBLE BOLT WASHER                                 |
| 34   | 1   | 620-100              | PUMPING UNIT                                       |
| 35   | 1   | 622-207              | HOSE GROMMET                                       |
| 36   | 1   | 620-607              | SOLENOID LOCKING UNIT                              |
| 37   | 1   | 620-636-RK           | ECR SWITCH MOUNT - RETROFIT KIT                    |
| 38   | 1   | 620-641              | ECR CONTACT - EDC-61                               |
| 39   | 4   | 90-033               | E-CLIP, #X5133-74                                  |
| 40   | 1   | P-139                | ROPE GRIPPER WARNING LABEL - SMALL                 |
| 41   | 1   | P-133                | ROPE GRIPPER WARNING LABEL - MEDIUM                |
| 42   | 1   | P-137                | GRIPPER LUBE INST. STICKER                         |
| 43   | 1   | P-141                | IMPORTANT LABEL - APPLIED TO TUBING                |
| 44   | 1   | P-143                | 620 ROPE GRIPPER LABEL                             |
| 45   | 1   | P-144-2              | AIR BLEED LABEL                                    |
| 46   | 2   | P-186                | ROPE GRIPPER WEAR-IN LINE STICKER                  |
| 47   | 1   | P-192                | IMPORTANT NOTICE - LANG LAY ROPES, ROPE GRIPPER    |
| 48   | 6   | 1/2 - 13 UNC x 1.25" | HEX HEAD BOLT                                      |
| 49   | 6   | 1/2 LOCK WASHER      | STANDARD LOCK WASHER                               |
| 50   | 4   | 5/16 - 18 UNC x 2.0  | SOCKET HEAD CAP SCREW                              |
| 51   | 4   | 5/16" WASHER         | STANDARD WASHER                                    |
| 52   | 2   | #10-32 UNF x 0.375"  | SOCKET HEAD CAP SCREW                              |
| 53   | 2   | #10-32 UNF x 0.75    | SOCKET HEAD CAP SCREW                              |
| 54   | 8   | #10 LOCK WASHER      | STANDARD LOCK WASHER                               |
| 55   | 1   | 10-32 UNF x 0.25     | SET SCREW  |
| 56   | 2   | 1/4 - 20 UNC x 1.5   | HALF DOG SET SCREW                                 |
| 57   | 4   | #10-24 UNC x 0.5     | SOCKET HEAD CAP SCREW                              |
| 58   | 6   | #10-24 UNC x 0.5     | WHIZ BOLT  |

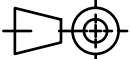
Weight - Pumping Unit: 29.2 lbmass, Gripper: 64.43 lbmass

- NOTE:**
- QTY LISTED FOR ITEMS 4, 5 & 6 ARE STANDARD. ACTUAL QTY MAY VARY WITH ROPE DIAMETER.
  - REFERENCE DIMENSIONS SHOWN TO AID IN SETUP AND INSTALL

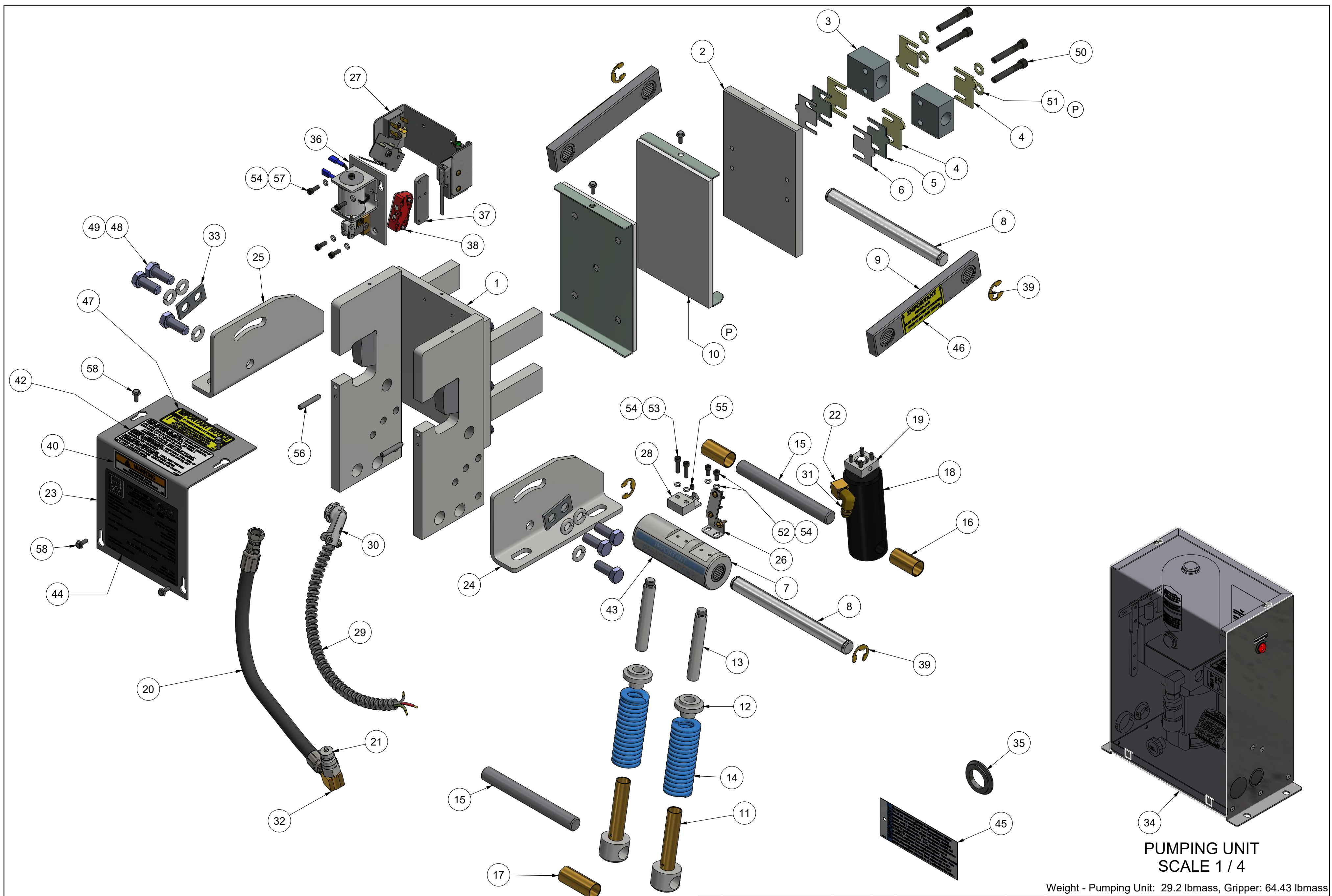
|  |  |  |  |                                       |          |                |   |
|--|--|--|--|---------------------------------------|----------|----------------|---|
|  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |          |                |   |
|  |  |  |  | TITLE                                 |          |                |   |
|  |  |  |  | "ROPE GRIPPER" ASSEMBLY               |          |                |   |
|  |  |  |  | DRAWN BY                              | SCALE    | MATERIAL       | REFERENCE TOL.  |
|  |  |  |  | LTL                                   | 1 / 2    | SEE PARTS LIST | ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |
|  |  |  |  | SHEET SIZE                            | DATE     |                | 620-RevP-RK   |
|  |  |  |  | C                                     | 9/8/2003 |                | SHEET 1 OF 2  |

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THIRD ANGLE PROJECTION





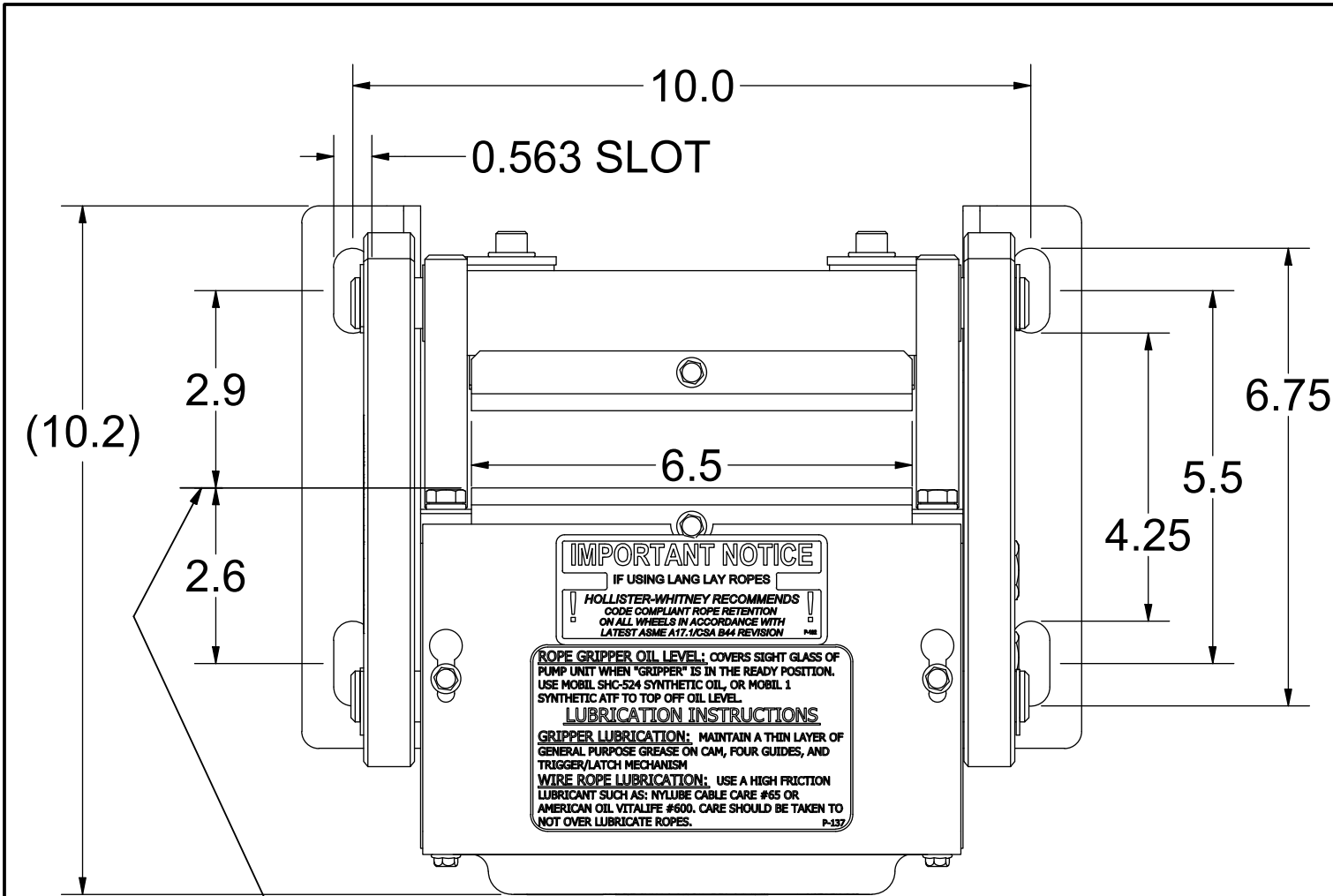


PUMPING UNIT  
SCALE 1 / 4

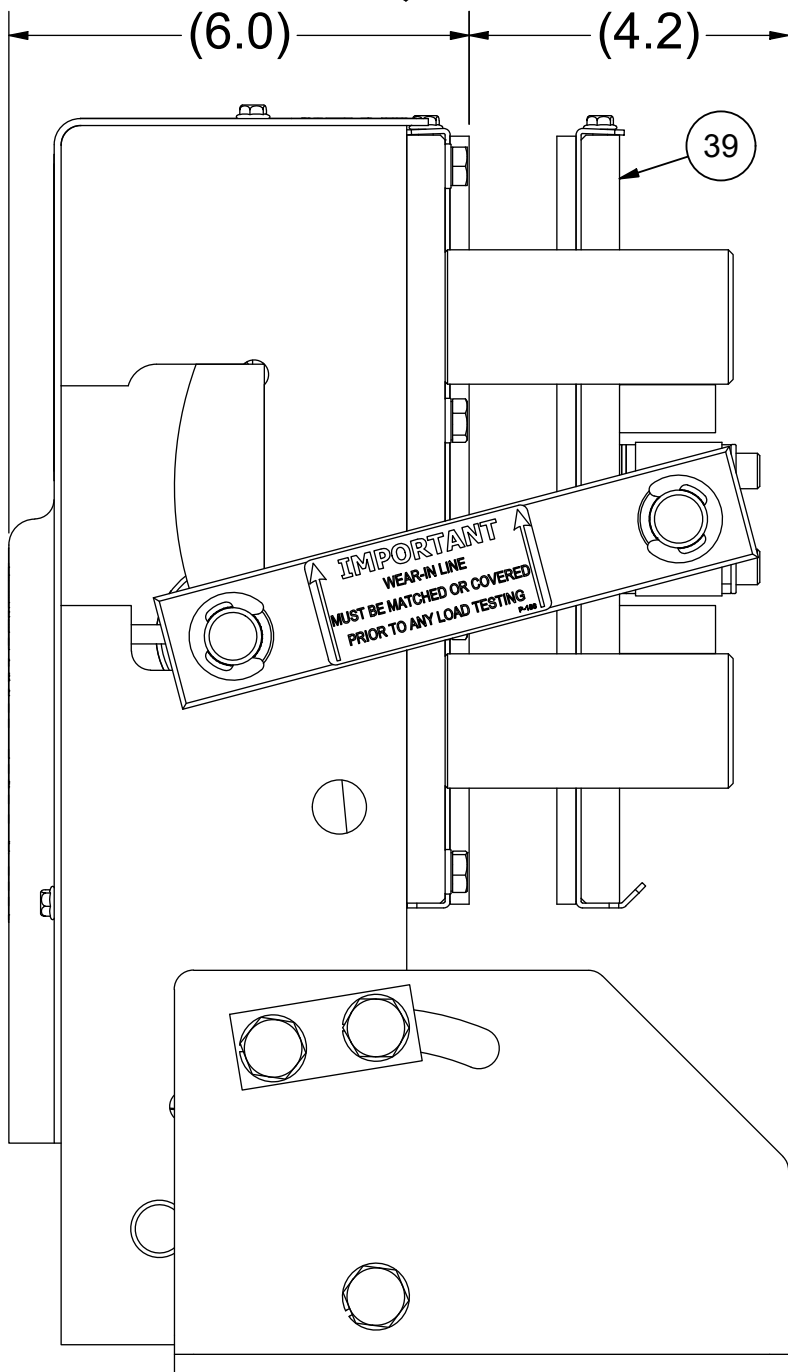
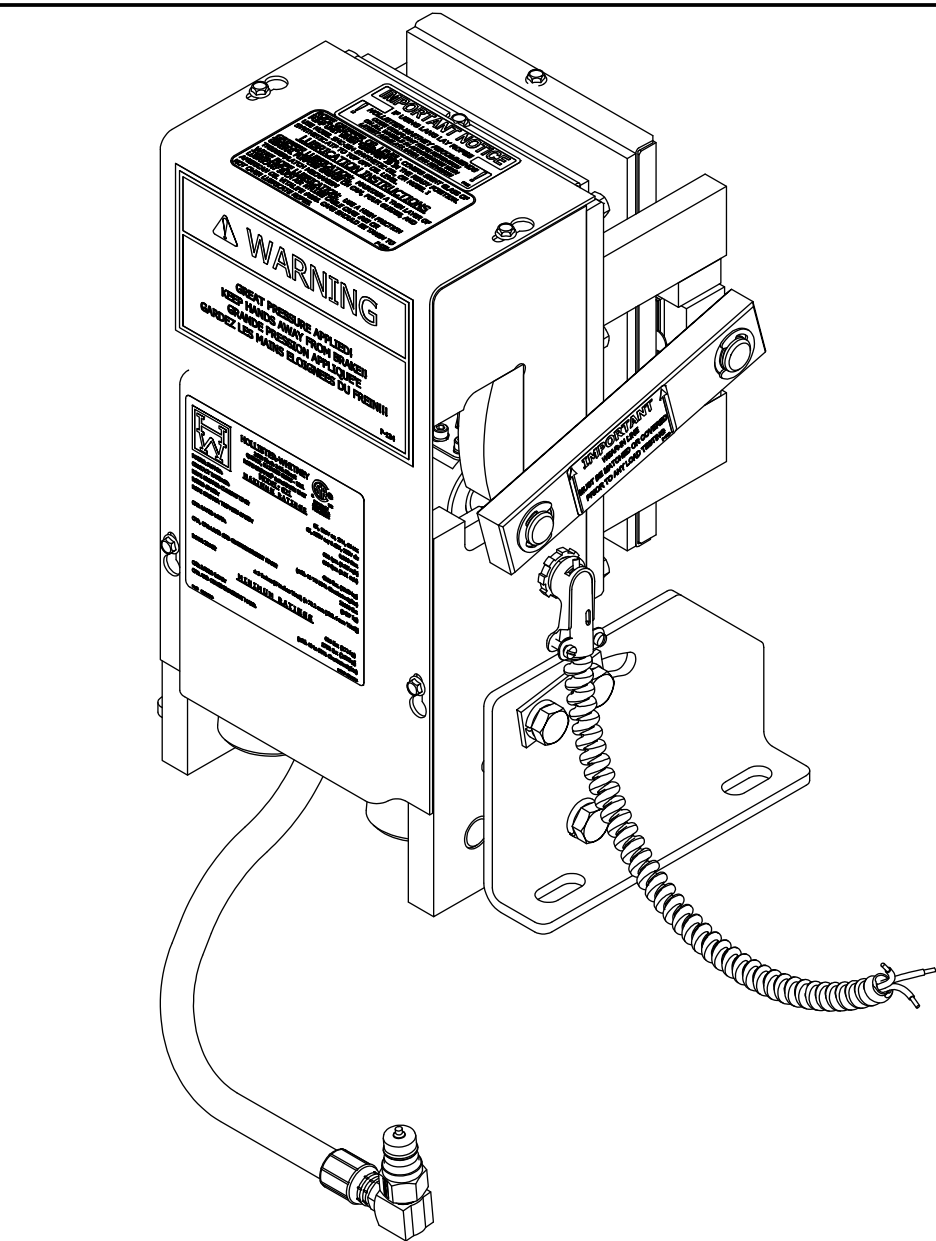
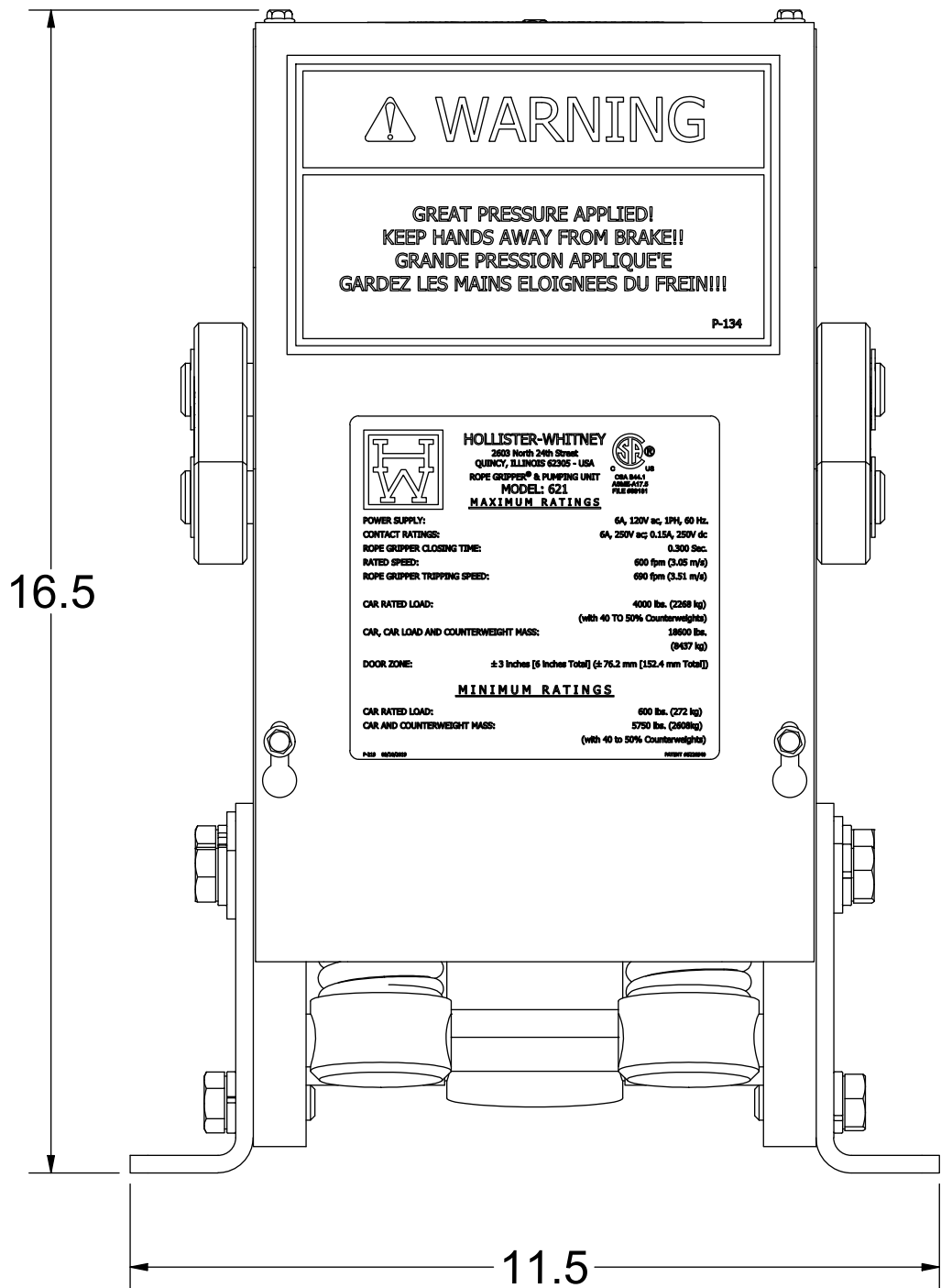
Weight - Pumping Unit: 29.2 lbmass, Gripper: 64.43 lbmass

SEE PREVIOUS PAGE  
FOR REVISIONS

|   |  |  |  |  |  |                                       |                 |                            |   |
|---|--|--|--|--|--|---------------------------------------|-----------------|----------------------------|---|
|   |  |  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |                 |                            |   |
|   |  |  |  |  |  | TITLE                                 |                 |                            |   |
|   |  |  |  |  |  | "ROPE GRIPPER" ASSEMBLY               |                 |                            |   |
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|   |  |  |  |  |  | THIRD ANGLE PROJECTION                |                 | SHEET SIZE<br>C            | DATE<br>9/8/2003  |
|   |  |  |  |  |  | 620-RevP-RK                           |                 | SHEET 2 OF 2               |   |



PAD POSITION REFERENCE;  
CENTERLINE OF ROPE WILL  
VARY WITH ROPE SIZE



| ITEM | QTY | PART NUMBER          | DESCRIPTION  |
|------|-----|----------------------|--|
| 1    | 1   | 622-003              | STATIONARY SHOE ASSEMBLY                           |
| 2    | 2   | 620-007              | SHAFT SUPPORT BLOCK                                |
| 3    | 4   | 620-008              | SPACER (11 GA.) - LINING WEAR                      |
| 4    | 2   | 620-008-1            | SPACER (16 GA.) - LINING WEAR                      |
| 5    | 2   | 620-008-2            | SPACER (22 GA.) - LINING WEAR                      |
| 6    | 1   | 622-015              | TUBING ASSEMBLY                                    |
| 7    | 2   | 622-018              | SHAFT - ROTATING & NON-ROTATING                    |
| 8    | 2   | 600-020              | CONNECTING ARM ASSEMBLY                            |
| 9    | 2   | 622-022              | LINING ASSEMBLY                                    |
| 10   | 2   | 600-025              | LOWER SPRING GUIDE ASSEMBLY                        |
| 11   | 2   | 600-027              | UPPER SPRING SUPPORT                               |
| 12   | 2   | 600-029              | GUIDE - UPPER SPRING SUPPORT                       |
| 13   | 2   | 621-030              | SPRING   |
| 14   | 2   | 622-031              | SHAFT  |
| 15   | 2   | 601-032              | TUBING - SPACER                                    |
| 16   | 1   | 622-033              | TUBING - SPACER                                    |
| 17   | 1   | 600-035              | CYLINDER ASSEMBLY                                  |
| 18   | 1   | 622-036              | HYDRAULIC CYLINDER PIVOT BRACKET ASSEMBLY          |
| 19   | 1   | 620-037              | HYDRAULIC HOSE - STANDARD 27" LENGTH               |
| 20   | 1   | 620-037- "L"         | HYDRAULIC HOSE - "L" = LENGTH IN FEET (30' MAX)    |
| 20   | 1   | 620-038              | QUICK CONNECT FITTING                              |
| 21   | 1   | 622-040              | COVER - 622 ROPE GRIPPER                           |
| 22   | 1   | 600-041 R            | ANGLE, RIGHT HAND - MOUNTING                       |
| 23   | 1   | 600-041 L            | ANGLE, LEFT HAND - MOUNTING                        |
| 24   | 1   | 620-638-18RK         | ACTUATING ANGLE ASSEMBLY, RETROFIT KIT, 18mm       |
| 25   | 1   | 622-064-1            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 10'          |
| 25   | 1   | 622-064-2            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 24'          |
| 25   | 1   | 622-064-3            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 18'          |
| 26   | 1   | 622-072              | MOVABLE SHOE ASSEMBLY                              |
| 27   | 1   | 601-078              | LATCH  |
| 28   | 1   | 600-081-1            | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
| 28   | 1   | 600-081-2            |  |
| 28   | 1   | 600-081-3            |  |
| 29   | 1   | 600-082              | 801-DC2 90° ANGLE BOX CONNECTOR                    |
| 30   | 1   | 610-087              | PARKER #149F-6-4 MALE ELBOW                        |
| 31   | 1   | 610-091              | 3-8 x 3-8 NPT STREET 90 DEG. ELBOW                 |
| 32   | 2   | 600-095              | WASHER - DOUBLE BOLT                               |
| 33   | 1   | 620-100              | PUMPING UNIT                                       |
| 34   | 1   | 622-207              | HOSE GROMMET                                       |
| 35   | 1   | 620-607              | SOLENOID LOCKING UNIT                              |
| 36   | 1   | 620-636-RK           | ECR SWITCH MOUNT - RETROFIT KIT                    |
| 37   | 1   | 620-641              | ECR CONTACT - EDC-61                               |
| 38   | 4   | 90-033               | E-CLIP, #X5133-74                                  |
| 39   | 1   | P-133                | ROPE GRIPPER WARNING LABEL - MEDIUM                |
| 40   | 1   | P-134                | ROPE GRIPPER WARNING LABEL - LARGE                 |
| 41   | 1   | P-137                | GRIPPER LUBE INST. STICKER                         |
| 42   | 1   | P-141                | IMPORTANT LABEL - APPLIED TO TUBING                |
| 43   | 1   | P-144-2              | AIR BLEED LABEL                                    |
| 44   | 2   | P-186                | ROPE GRIPPER WEAR-IN LINE STICKER                  |
| 45   | 1   | P-192                | IMPORTANT NOTICE - LANG LAY ROPES, ROPE GRIPPER    |
| 46   | 1   | P-219                | 621 ROPE GRIPPER LABEL                             |
| 47   | 6   | 1/2 - 13 UNC x 1.25" | HEX HEAD BOLT                                      |
| 48   | 6   | 1/2 LOCK WASHER      | STANDARD LOCK WASHER                               |
| 49   | 4   | 5/16 - 18 UNC x 2.0  | SOCKET HEAD CAP SCREW                              |
| 50   | 4   | 5/16" WASHER         | STANDARD WASHER                                    |
| 51   | 2   | 1/4 - 20 UNC x 1.5   | HALF DOG SET SCREW                                 |
| 52   | 2   | #10-32 UNF x 0.375"  | SOCKET HEAD CAP SCREW                              |
| 53   | 2   | #10-32 UNF x 0.75    | SOCKET HEAD CAP SCREW                              |
| 54   | 8   | #10 LOCK WASHER      | STANDARD LOCK WASHER                               |
| 55   | 1   | 10-32 UNF x 0.25     | SET SCREW  |
| 56   | 4   | #10-24 UNC x 0.5     | SOCKET HEAD CAP SCREW                              |
| 57   | 6   | #10-24 UNC x 0.5     | WHIZ BOLT  |

Weight - Pumping Unit: 29.2 lbmass, Gripper: 95.01 lbmass

NOTE:

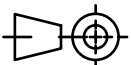
- QTY LISTED FOR ITEMS 3, 4 & 5 ARE STANDARD. ACTUAL QTY MAY VARY WITH ROPE DIAMETER.
- REFERENCE DIMENSIONS SHOWN TO AID IN SETUP AND INSTALL

|  |  |  |  |                                       |           |                |   |
|--|--|--|--|---------------------------------------|-----------|----------------|---|
|  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |           |                |   |
|  |  |  |  | TITLE                                 |           |                |   |
|  |  |  |  | "ROPE GRIPPER" ASSEMBLY               |           |                |   |
|  |  |  |  | DRAWN BY                              | SCALE     | MATERIAL       | REFERENCE TOL.                                      |
|  |  |  |  | LTL                                   | 1/2.5     | SEE PARTS LIST | ALL DIMENSIONS REFERENCE UNLESS OTHERWISE SPECIFIED |
|  |  |  |  | SHEET SIZE                            | DATE      |                | 621-RevA-RK   |
|  |  |  |  | C                                     | 7/31/2019 |                | SHEET 1 OF 2  |

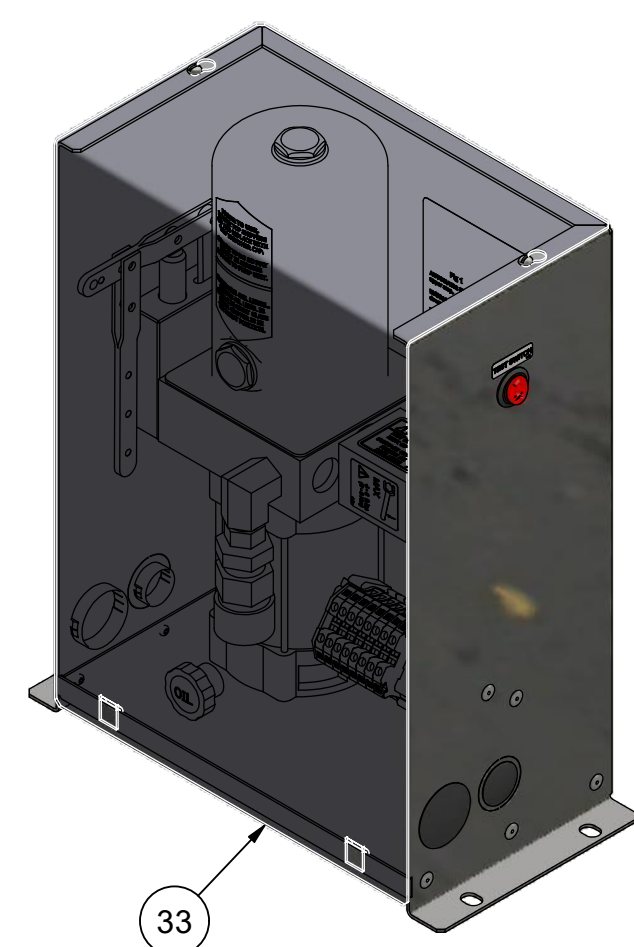
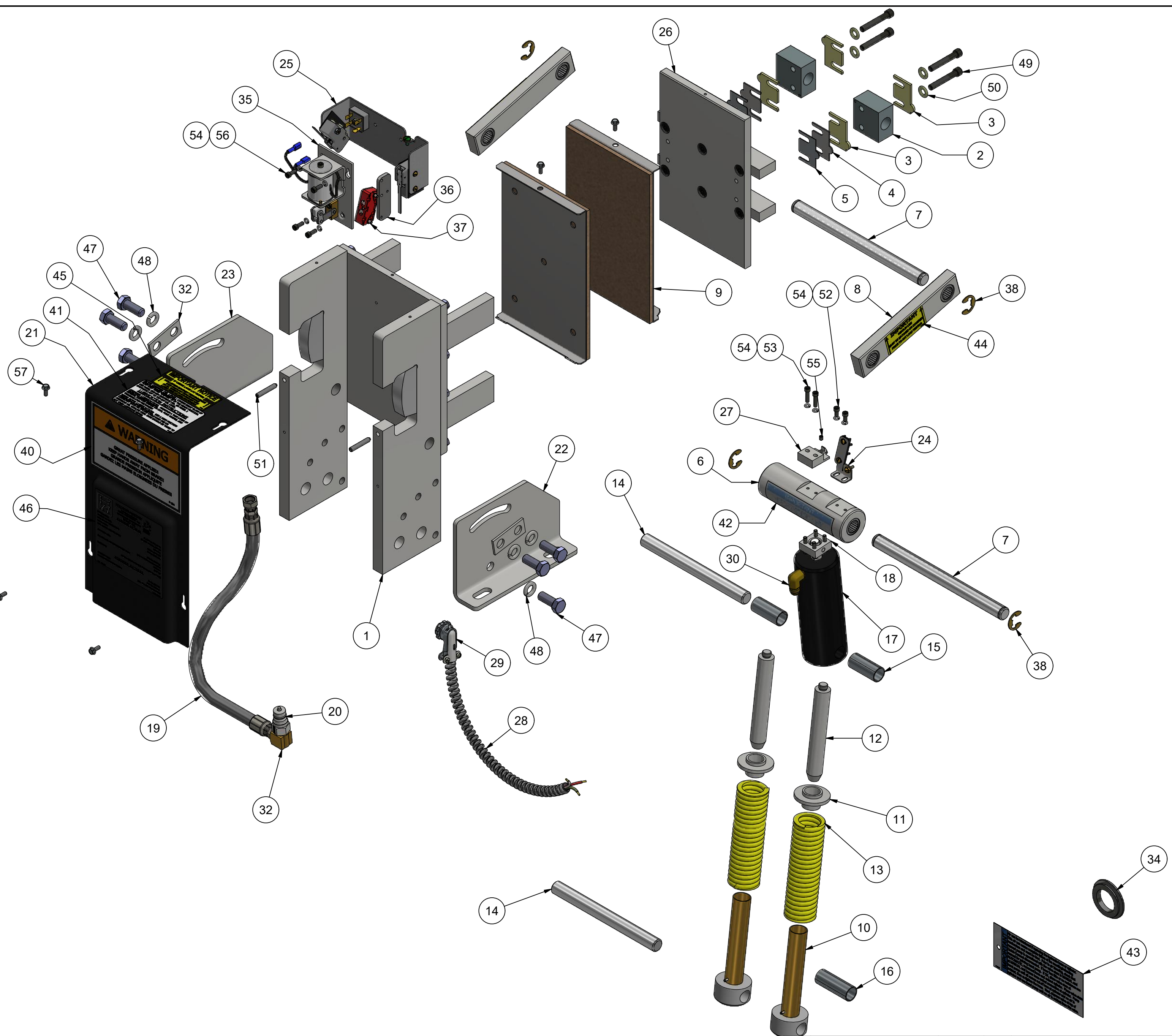
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THIRD ANGLE PROJECTION



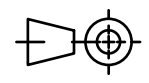




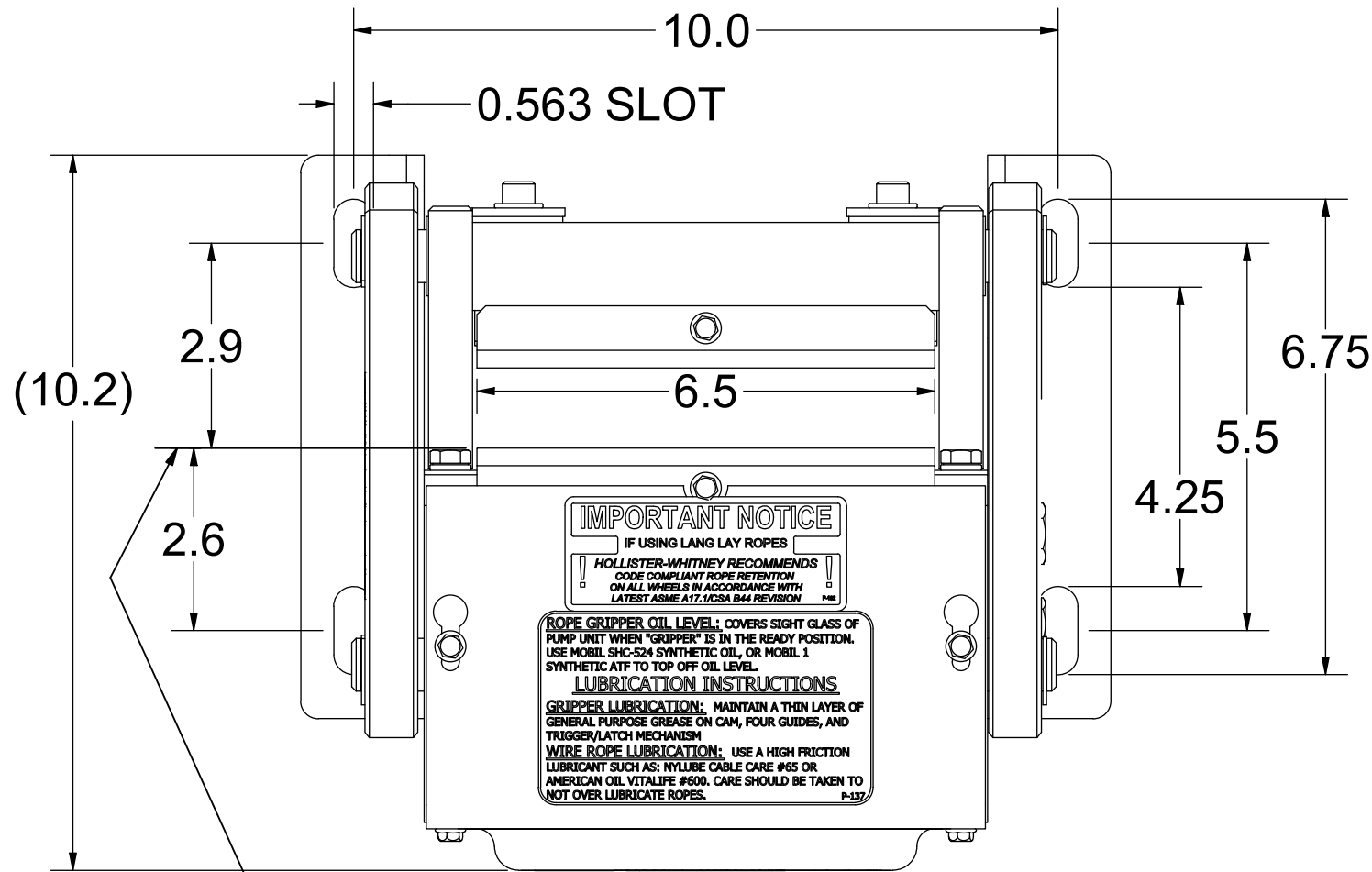
PUMPING UNIT  
SCALE 1 / 4

Weight - Pumping Unit: 29.2 lbmass, Gripper: 95.01 lbmass

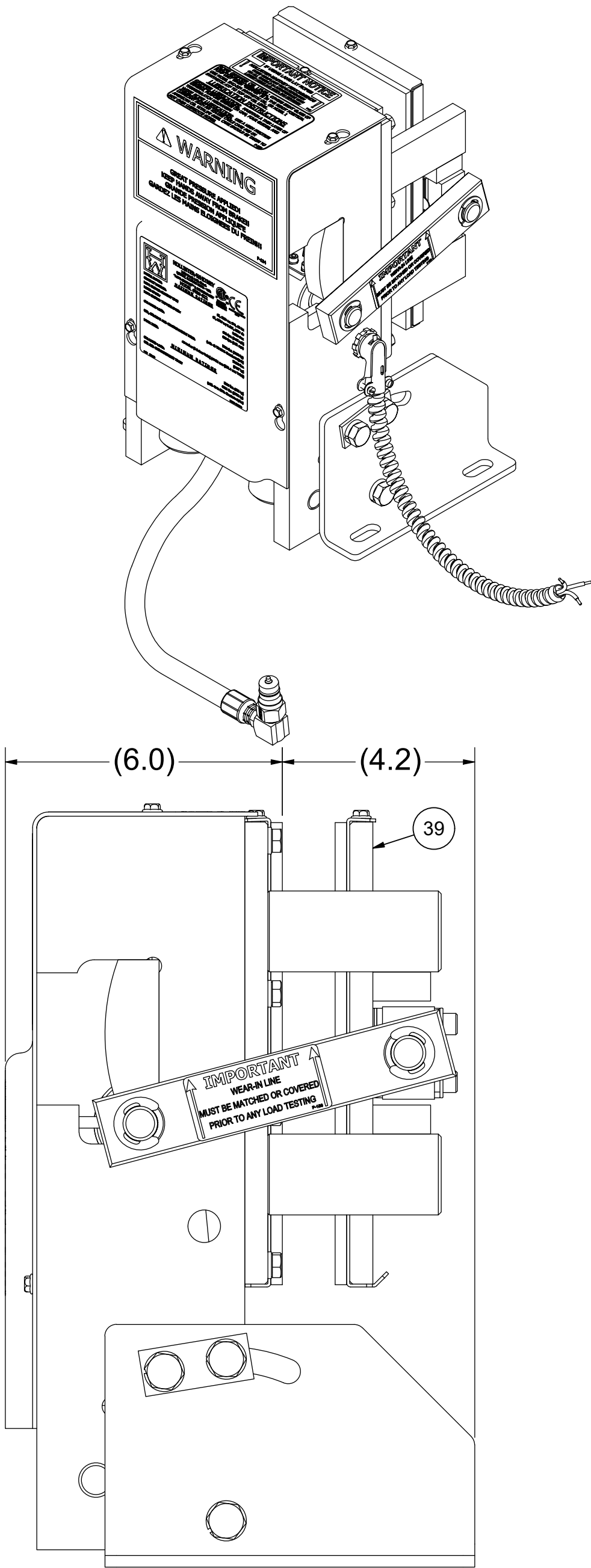
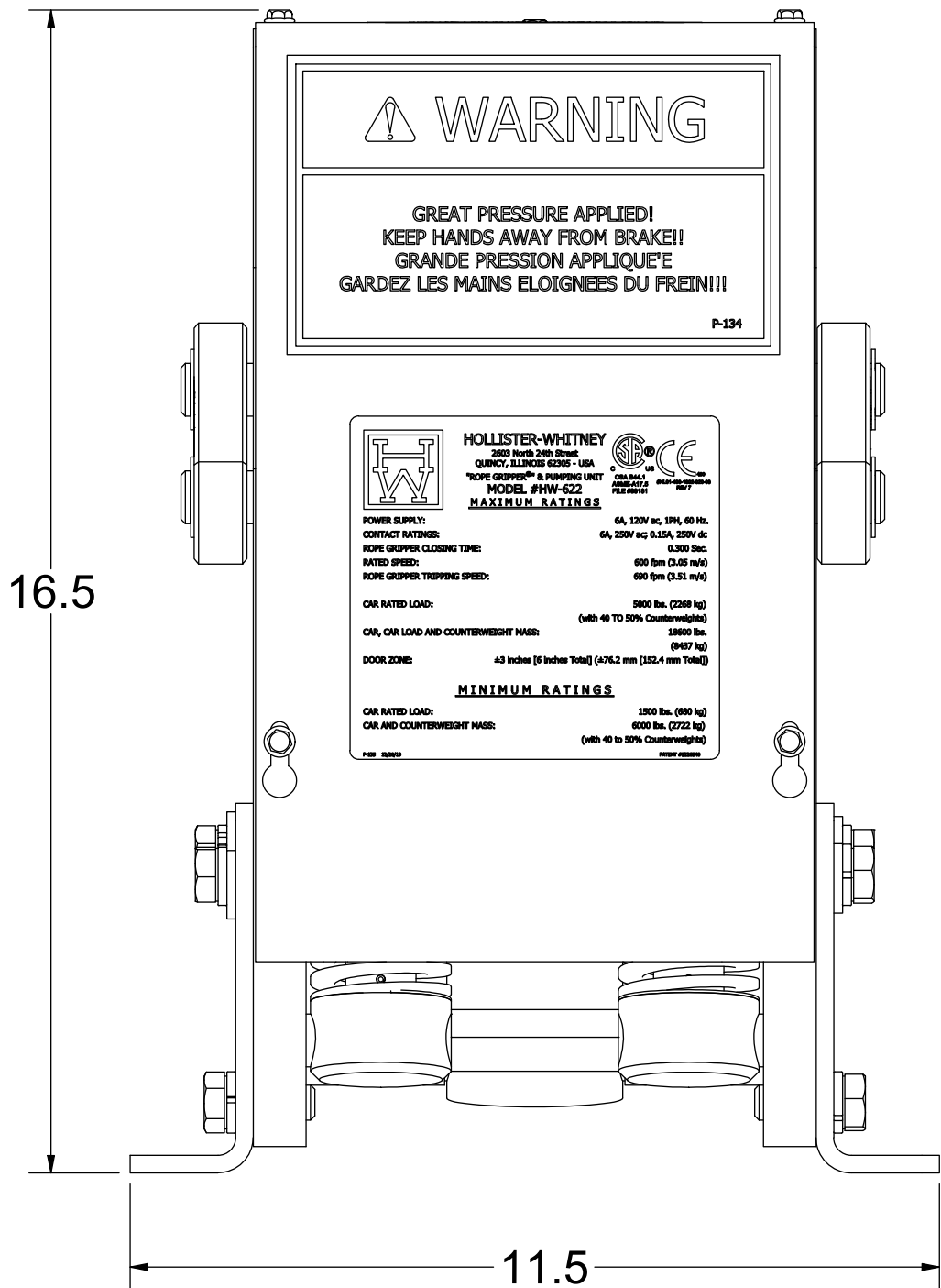
SEE PREVIOUS PAGE  
FOR REVISIONS

|   |  |  |  |  |  |   |              |                            |   |
|---|--|--|--|--|--|---|--------------|----------------------------|---|
|   |  |  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC   |              |                            |   |
|   |  |  |  |  |  | TITLE   |              |                            |   |
|   |  |  |  |  |  | "ROPE GRIPPER" ASSEMBLY   |              |                            |   |
| THIS DRAWING IS SUPPLIED AS A REPRESENTATION OF THE EQUIPMENT<br>HOLLISTER-WHITNEY ELEVATOR CO. LLC ("MANUFACTURER") HAS AGREED TO<br>SUPPLY. SLIGHT ADJUSTMENTS MAY OCCUR DURING MANUFACTURING AND<br>INSTALLATION. ANY MODIFICATIONS NOT APPROVED IN WRITING BY<br>MANUFACTURER MAY AFFECT OPERATION. VOIDS ANY WARRANTY AND<br>RELEASES MANUFACTURER OF ALL LIABILITY.<br>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION<br>THAT CANNOT BE REPRODUCED OR DIVULGED, IN WHOLE OR IN PART, WITHOUT<br>WRITTEN AUTHORIZATION FROM THE MANUFACTURER. |  |  |  |  |  | DRAWN<br>BY<br>LTL  | SCALE<br>1/4 | MATERIAL<br>SEE PARTS LIST | REFERENCE TOL.<br>ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |
|   |  |  |  |  |  | THIRD ANGLE PROJECTION<br> |              | SHEET SIZE<br>C            | DATE<br>7/31/2019   |
|   |  |  |  |  |  | 621-RevA-RK<br>SHEET 2 OF 2   |              |                            |   |





PAD POSITION REFERENCE;  
CENTERLINE OF ROPE WILL  
VARY WITH ROPE SIZE



| ITEM | QTY | PART NUMBER          | DESCRIPTION  |
|------|-----|----------------------|--|
| 1    | 1   | 622-003              | STATIONARY SHOE ASSEMBLY                           |
| 2    | 2   | 620-007              | SHAFT SUPPORT BLOCK                                |
| 3    | 4   | 620-008              | SPACER (11 GA.) - LINING WEAR                      |
| 4    | 2   | 620-008-1            | SPACER (16 GA.) - LINING WEAR                      |
| 5    | 2   | 620-008-2            | SPACER (22 GA.) - LINING WEAR                      |
| 6    | 1   | 622-015              | TUBING ASSEMBLY                                    |
| 7    | 2   | 622-018              | SHAFT - ROTATING & NON-ROTATING                    |
| 8    | 2   | 600-020              | CONNECTING ARM ASSEMBLY                            |
| 9    | 2   | 622-022              | LINING ASSEMBLY                                    |
| 10   | 2   | 600-025              | LOWER SPRING GUIDE ASSEMBLY                        |
| 11   | 2   | 600-027              | UPPER SPRING SUPPORT                               |
| 12   | 2   | 600-029              | GUIDE - UPPER SPRING SUPPORT                       |
| 13   | 2   | 600-030              | SPRING (BLUE) - STANDARD DUTY                      |
| 14   | 2   | 622-031              | SHAFT  |
| 15   | 2   | 601-032              | TUBING - SPACER                                    |
| 16   | 1   | 622-033              | TUBING - SPACER                                    |
| 17   | 1   | 600-035              | CYLINDER ASSEMBLY                                  |
| 18   | 1   | 622-036              | HYDRAULIC CYLINDER PIVOT BRACKET ASSEMBLY          |
| 19   | 1   | 620-037              | HYDRAULIC HOSE - STANDARD 27" LENGTH               |
| 20   | 1   | 620-037- "L"         | HYDRAULIC HOSE - "L" = LENGTH IN FEET (30' MAX)    |
| 21   | 1   | 620-038              | QUICK CONNECT FITTING                              |
| 22   | 1   | 622-040              | COVER - 622 ROPE GRIPPER                           |
| 23   | 1   | 600-041 R            | ANGLE, RIGHT HAND - MOUNTING                       |
| 24   | 1   | 600-041 L            | ANGLE, LEFT HAND - MOUNTING                        |
| 25   | 1   | 620-638-18RK         | ACTUATING ANGLE ASSEMBLY, RETROFIT KIT - 18mm      |
| 26   | 1   | 622-064-1            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 10'          |
| 27   | 1   | 622-064-2            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 24'          |
| 28   | 1   | 622-064-3            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 18'          |
| 29   | 1   | 622-072              | MOVABLE SHOE ASSEMBLY                              |
| 30   | 1   | 601-078              | LATCH  |
| 31   | 1   | 600-081-1            | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
| 32   | 1   | 600-081-2            |  |
| 33   | 1   | 600-081-3            |  |
| 34   | 1   | 600-082              | 801-DC2 90° ANGLE BOX CONNECTOR                    |
| 35   | 1   | 610-087              | PARKER #149F-6-4 MALE ELBOW                        |
| 36   | 1   | 610-091              | 3-8 x 3-8 NPT STREET 90 DEG. ELBOW                 |
| 37   | 2   | 600-095              | WASHER - DOUBLE BOLT                               |
| 38   | 1   | 620-100              | PUMPING UNIT                                       |
| 39   | 1   | 622-207              | HOSE GROMMET                                       |
| 40   | 1   | 620-607              | SOLENOID LOCKING UNIT                              |
| 41   | 1   | 620-636-RK           | ECR SWITCH MOUNT - RETROFIT KIT                    |
| 42   | 1   | 620-641              | ECR CONTACT - EDC-61                               |
| 43   | 4   | 90-033               | E-CLIP, #X5133-74                                  |
| 44   | 1   | P-133                | ROPE GRIPPER WARNING LABEL - MEDIUM                |
| 45   | 1   | P-134                | ROPE GRIPPER WARNING LABEL - LARGE                 |
| 46   | 1   | P-137                | GRIPPER LUBE INST. STICKER                         |
| 47   | 1   | P-135                | 622 ROPE GRIPPER LABEL                             |
| 48   | 1   | P-141                | IMPORTANT LABEL - APPLIED TO TUBING                |
| 49   | 1   | P-144-2              | AIR BLEED LABEL                                    |
| 50   | 2   | P-186                | ROPE GRIPPER WEAR-IN LINE STICKER                  |
| 51   | 1   | P-192                | IMPORTANT NOTICE - LANG LAY ROPES, ROPE GRIPPER    |
| 52   | 6   | 1/2 - 13 UNC x 1.25" | HEX HEAD BOLT                                      |
| 53   | 6   | 1/2 LOCK WASHER      | STANDARD LOCK WASHER                               |
| 54   | 4   | 5/16 - 18 UNC x 2.0  | SOCKET HEAD CAP SCREW                              |
| 55   | 4   | 5/16" WASHER         | STANDARD WASHER                                    |
| 56   | 2   | 1/4 - 20 UNC x 1.5   | HALF DOG SET SCREW                                 |
| 57   | 2   | #10-32 UNF x 0.375"  | SOCKET HEAD CAP SCREW                              |
| 58   | 2   | #10-32 UNF x 0.75    | SOCKET HEAD CAP SCREW                              |
| 59   | 8   | #10 LOCK WASHER      | STANDARD LOCK WASHER                               |
| 60   | 1   | 10-32 UNF x 0.25     | SET SCREW  |
| 61   | 4   | #10-24 UNC x 0.5     | SOCKET HEAD CAP SCREW                              |
| 62   | 6   | #10-24 UNC x 0.5     | WHIZ BOLT  |

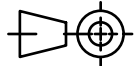
Weight - Pumping Unit: 29.2 lbmass, Gripper: 91.94 lbmass

**NOTE:**  
1. QTY LISTED FOR ITEMS 3, 4 & 5 ARE STANDARD. ACTUAL QTY MAY VARY WITH ROPE DIAMETER.  
2. REFERENCE DIMENSIONS SHOWN TO AID IN SETUP AND INSTALL

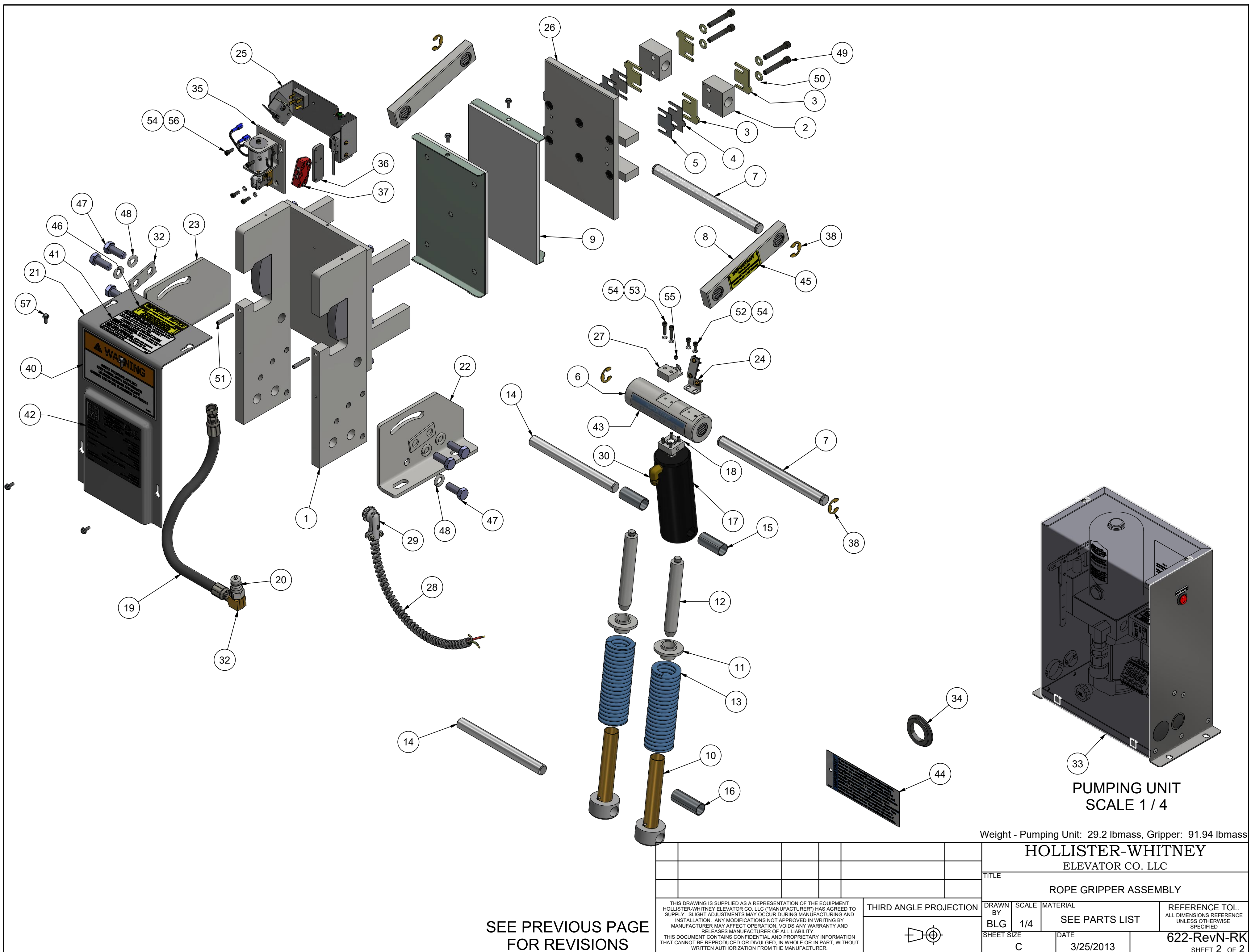
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|  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC                                       |  |  |  |
|  |  |  |  | TITLE   |  |  |  |
|  |  |  |  | ROPE GRIPPER ASSEMBLY   |  |  |  |
|  |  |  |  | DRAWN BY<br>BLG   |  |  |  |
|  |  |  |  | SCALE<br>1/2.5  |  |  |  |
|  |  |  |  | MATERIAL<br>SEE PARTS LIST  |  |  |  |
|  |  |  |  | REFERENCE TOL.<br>ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |  |  |  |
|  |  |  |  | SHEET SIZE<br>C   |  |  |  |
|  |  |  |  | DATE<br>3/25/2013   |  |  |  |
|  |  |  |  | 622-RevN-RK<br>SHEET 1 OF 2   |  |  |  |

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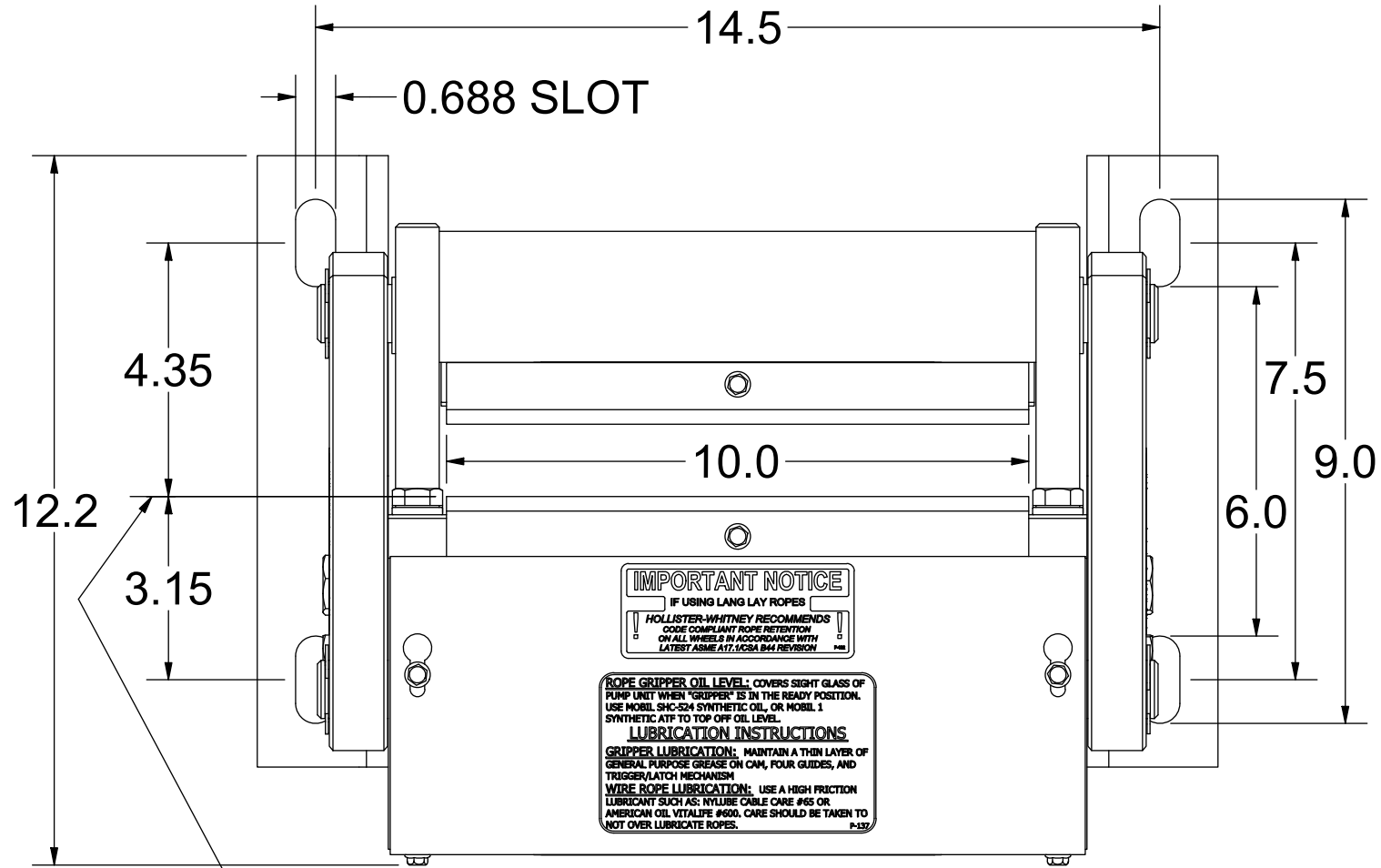
THIRD ANGLE PROJECTION



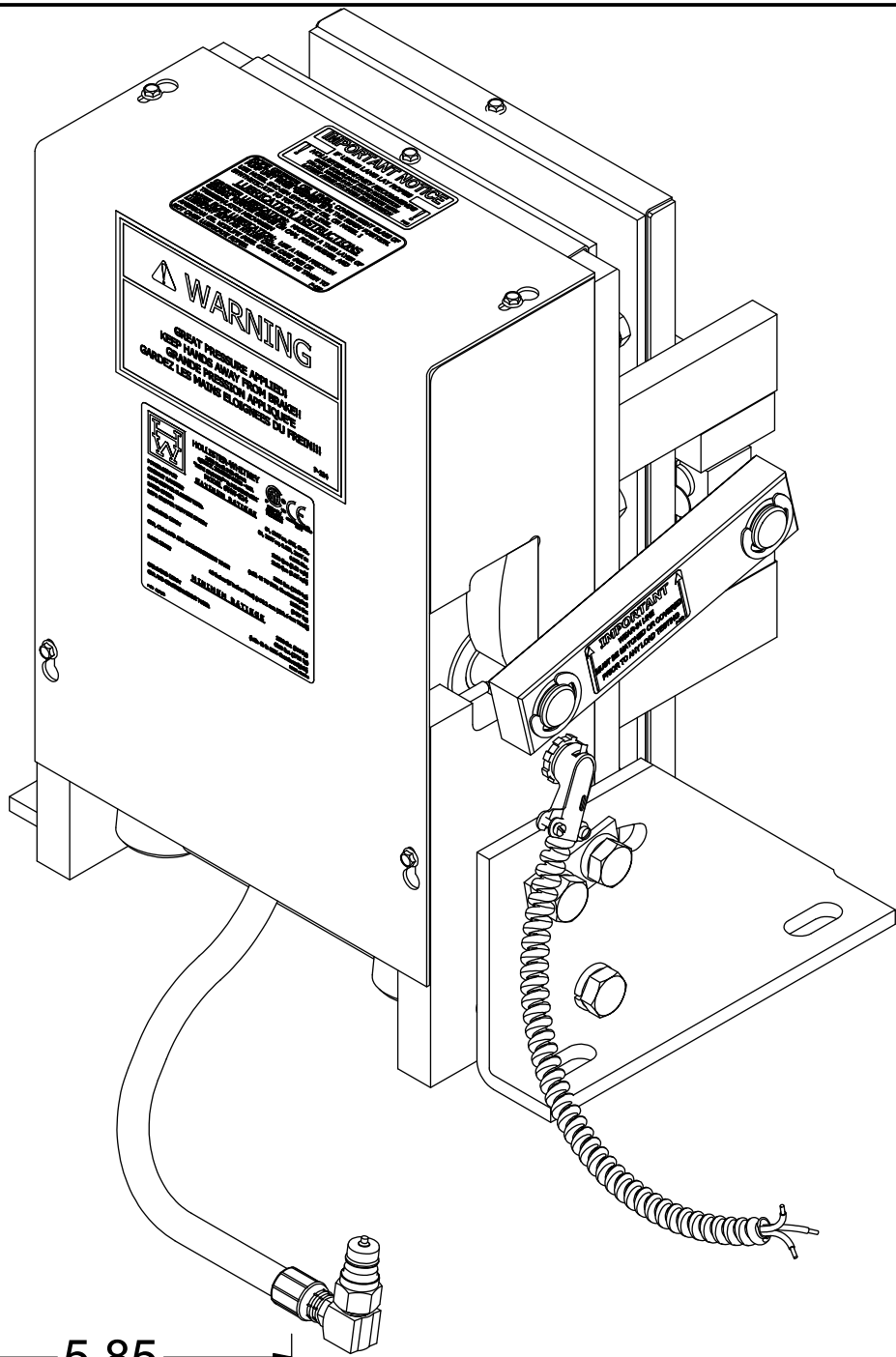
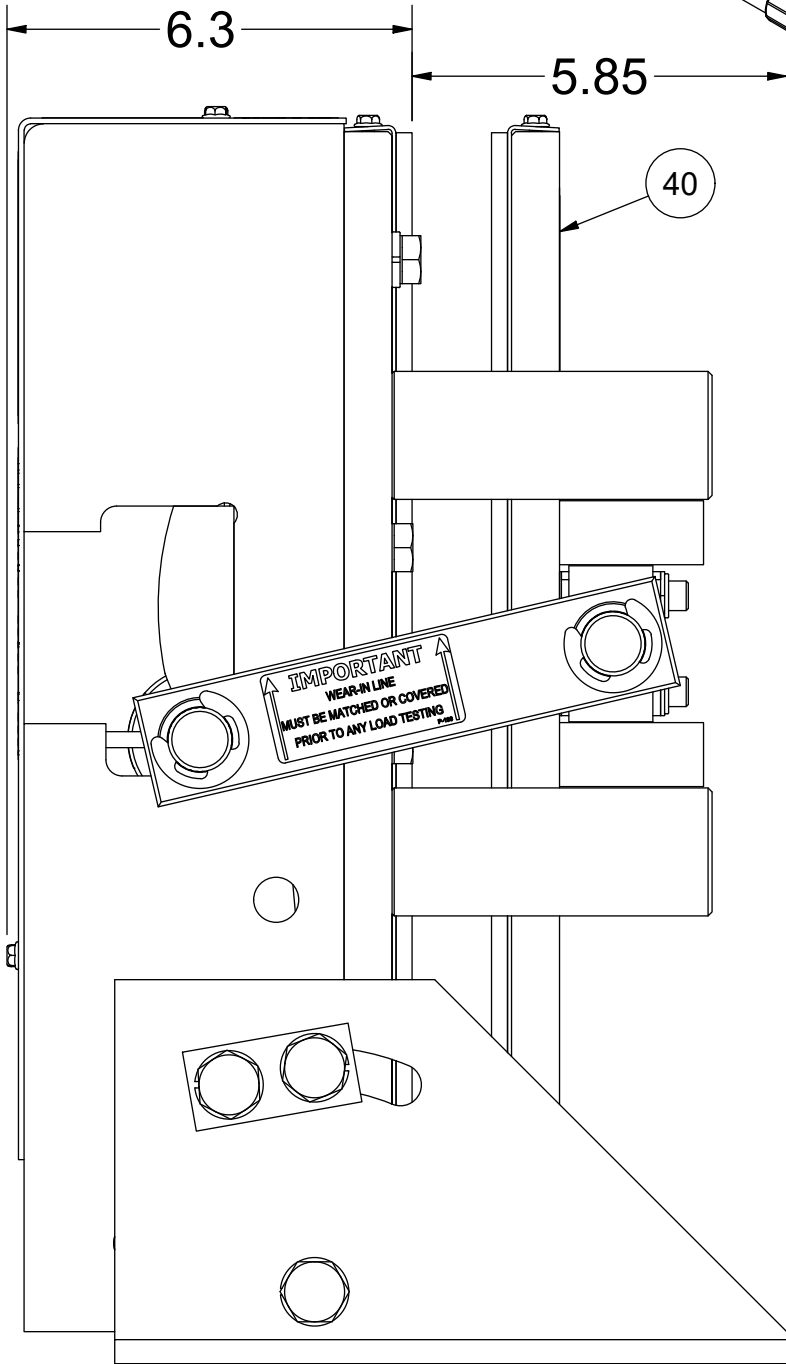
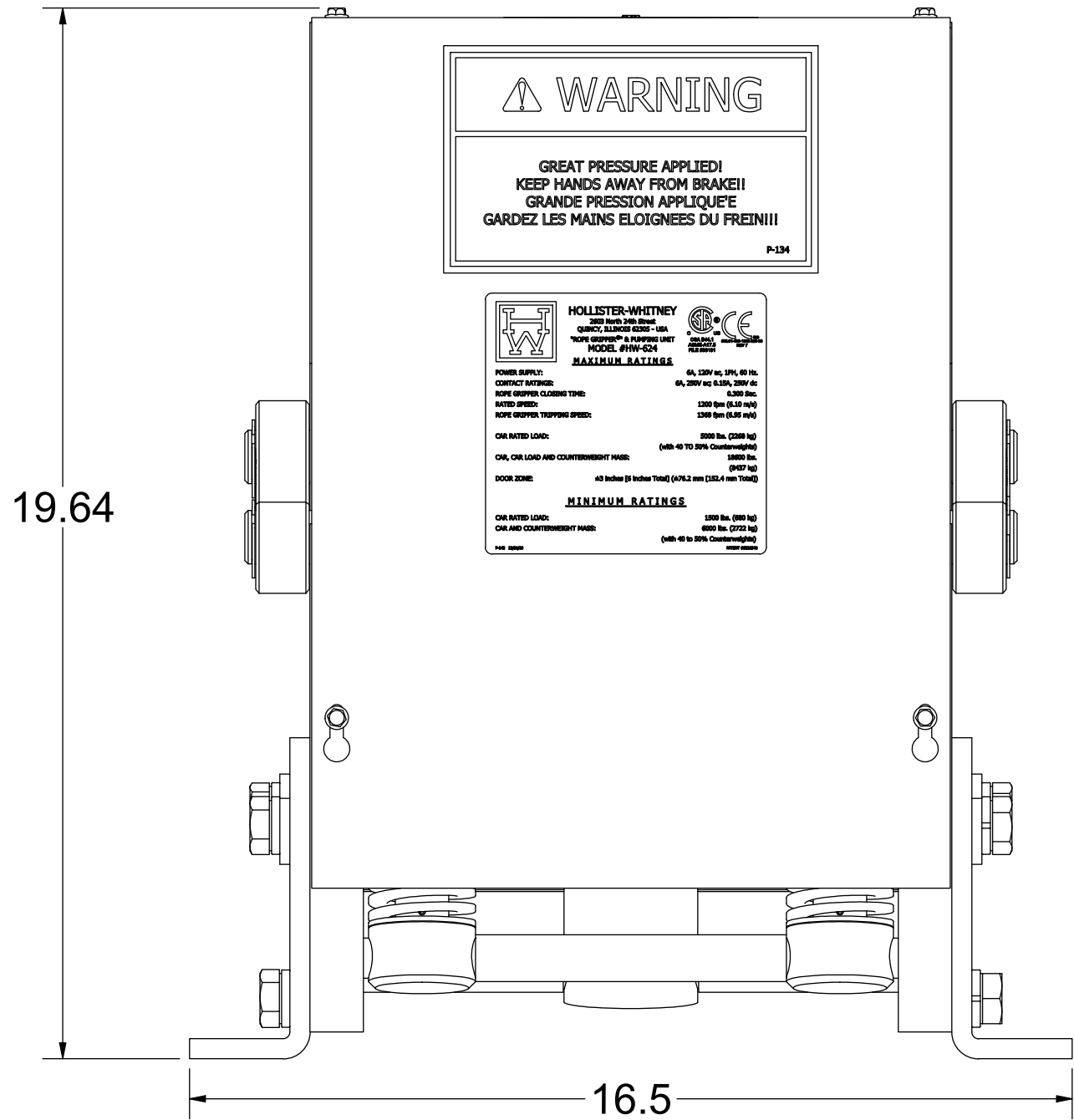








PAD POSITION REFERENCE;  
CENTERLINE OF ROPE WILL  
VARY WITH ROPE SIZE



| ITEM | QTY | PART NUMBER            | DESCRIPTION  |
|------|-----|------------------------|--|
| 1    | 1   | 624-003                | STATIONARY SHOE ASSEMBLY                           |
| 2    | 2   | 624-007                | SHAFT SUPPORT BLOCK                                |
| 3    | 4   | 624-008                | SPACER (11 GA.) - LINING WEAR                      |
| 4    | 2   | 624-008-1              | SPACER (16 GA.) - LINING WEAR                      |
| 5    | 2   | 624-008-2              | SPACER (22 GA.) - LINING WEAR                      |
| 6    | 1   | 624-015                | TUBING ASSEMBLY                                    |
| 7    | 2   | 626-018                | SHAFT - ROTATING & NON-ROTATING                    |
| 8    | 2   | 610-020                | CONNECTING ARM ASSEMBLY                            |
| 9    | 2   | 610-022                | LINING ASSEMBLY                                    |
| 10   | 2   | 600-025                | LOWER SPRING GUIDE ASSEMBLY                        |
| 11   | 2   | 600-027                | UPPER SPRING SUPPORT                               |
| 12   | 2   | 600-029                | GUIDE - UPPER SPRING SUPPORT                       |
| 13   | 2   | 600-030                | SPRING   |
| 14   | 2   | 626-031                | SHAFT  |
| 15   | 2   | 624-032                | TUBING - SPACER                                    |
| 16   | 1   | 624-033                | TUBING - SPACER                                    |
| 17   | 1   | 600-035                | CYLINDER ASSEMBLY                                  |
| 18   | 1   | 622-036                | HYDRAULIC CYLINDER PIVOT BRACKET ASSEMBLY          |
| 19   | 1   | 620-037                | HYDRAULIC HOSE - STANDARD 27" LENGTH               |
| 20   | 1   | 620-037- "L"           | HYDRAULIC HOSE - "L" = LENGTH IN FEET (30' MAX)    |
| 21   | 1   | 620-038                | QUICK CONNECT FITTING                              |
| 22   | 1   | 626-040                | COVER - 624 & 626 ROPE GRIPPER                     |
| 23   | 1   | 610-041 R              | ANGLE, R.H. - MOUNTING                             |
| 24   | 1   | 610-041 L              | ANGLE, L.H. - MOUNTING                             |
| 25   | 1   | 620-638-18RK           | ACTUATING ANGLE ASSEMBLY, RETROFIT KIT - 18mm      |
| 26   | 1   | 622-064-1              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 10'          |
| 27   | 1   | 622-064-2              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 24'          |
| 28   | 1   | 622-064-3              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 18'          |
| 29   | 1   | 624-072                | MOVABLE SHOE ASSEMBLY                              |
| 30   | 1   | 601-078                | LATCH  |
| 31   | 1   | 600-081-1              | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
| 32   | 1   | 600-081-2              | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
| 33   | 1   | 600-081-3              | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
| 34   | 1   | 600-082                | 801-DC2 90° ANGLE BOX CONNECTOR                    |
| 35   | 4   | 610-085                | E-CLIP (TRUARC) X5133-98                           |
| 36   | 1   | 610-087                | PARKER #149F-6-4 MALE ELBOW                        |
| 37   | 1   | 610-091                | 3-8 x 3-8 NPT STREET 90 DEG. ELBOW                 |
| 38   | 2   | 610-095                | WASHER - DOUBLE BOLT                               |
| 39   | 1   | 620-100                | PUMPING UNIT                                       |
| 40   | 1   | 622-207                | HOSE GROMMET                                       |
| 41   | 1   | 620-607                | SOLENOID LOCKING UNIT                              |
| 42   | 1   | 620-636-RK             | ECR SWITCH MOUNT - RETROFIT KIT                    |
| 43   | 1   | 620-641                | ECR CONTACT - EDC-61                               |
| 44   | 1   | P-133                  | ROPE GRIPPER WARNING LABEL - MEDIUM                |
| 45   | 2   | P-134                  | ROPE GRIPPER WARNING LABEL - LARGE                 |
| 46   | 1   | P-137                  | GRIPPER LUBE INST. STICKER                         |
| 47   | 1   | P-141                  | IMPORTANT LABEL - APPLIED TO TUBING                |
| 48   | 1   | P-142                  | 624 ROPE GRIPPER LABEL                             |
| 49   | 1   | P-144-2                | AIR BLEED LABEL                                    |
| 50   | 2   | P-186                  | ROPE GRIPPER WEAR-IN LINE STICKER                  |
| 51   | 1   | P-192                  | IMPORTANT NOTICE - LANG LAY ROPES, ROPE GRIPPER    |
| 52   | 6   | 5/8" - 11 UNC x 1 1/2" | HEX CAP SCREW                                      |
| 53   | 6   | 5/8 WASHER             | STANDARD LOCK                                      |
| 54   | 4   | 5/16 - 18 UNC x 2.25   | SOCKET HEAD CAP SCREW                              |
| 55   | 4   | 5/16" WASHER           | STANDARD WASHER                                    |
| 56   | 2   | #10-32 UNF x 0.75      | SOCKET HEAD CAP SCREW                              |
| 57   | 2   | #10-32 UNF x 0.375"    | SOCKET HEAD CAP SCREW                              |
| 58   | 8   | #10 LOCK WASHER        | STANDARD LOCK WASHER                               |
| 59   | 1   | 10-32 UNF x 0.25       | SET SCREW  |
| 60   | 2   | 1/4 - 20 UNC x 1.5     | HALF DOG SET SCREW                                 |
| 61   | 4   | #10-24 UNC x 0.5       | SOCKET HEAD CAP SCREW                              |
| 62   | 8   | #10-24 UNC x 0.5       | WHIZ BOLT  |

Weight - Pumping Unit: 29.2 lbmass, Gripper: 210.30 lbmass

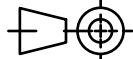
NOTE:

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- REFERENCE DIMENSIONS SHOWN TO AID IN SETUP AND INSTALL

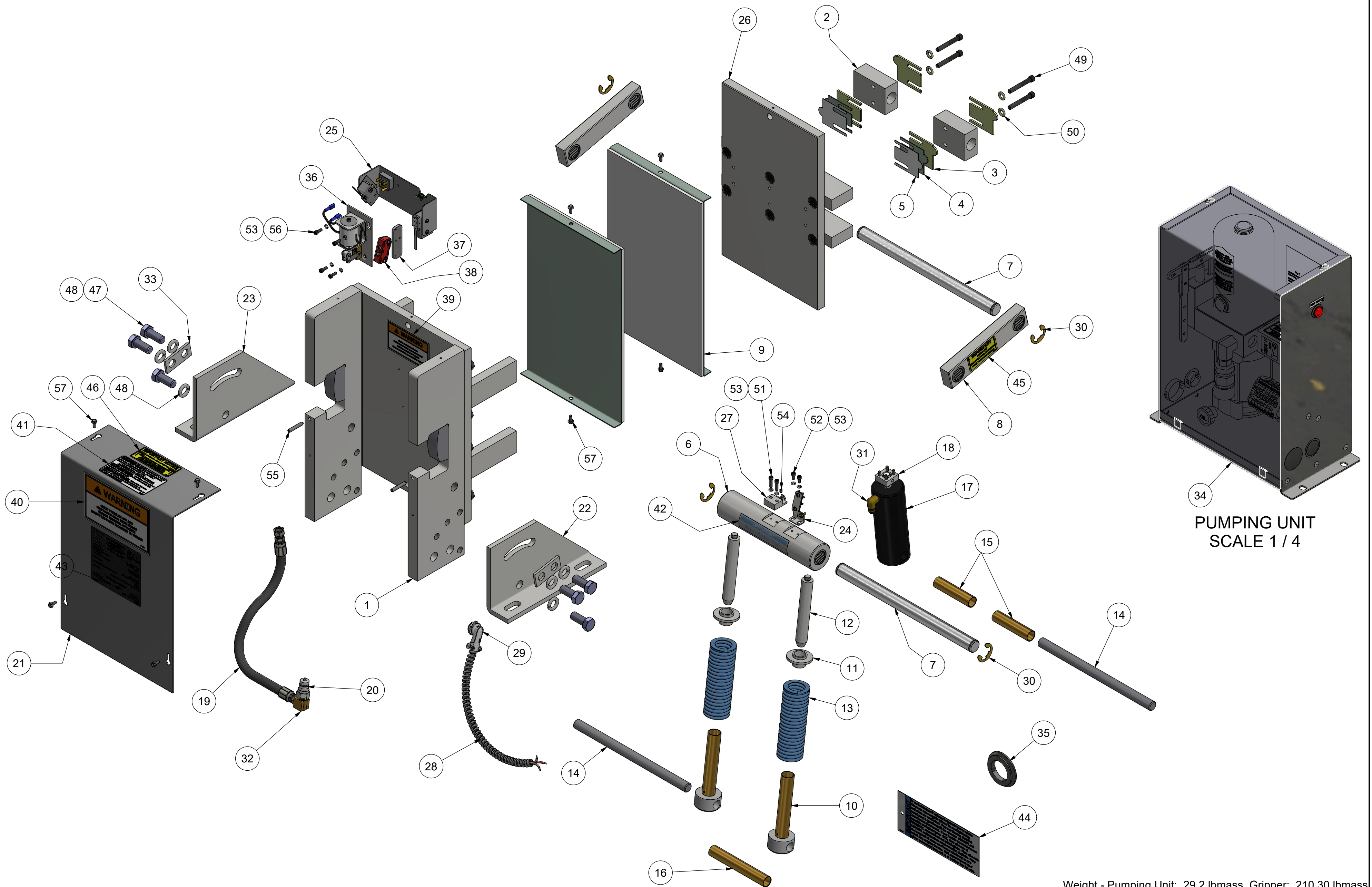
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|  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |            |                |   |
|  |  |  |  | TITLE                                 |            |                |   |
|  |  |  |  | "ROPE GRIPPER" ASSEMBLY               |            |                |   |
|  |  |  |  | DRAWN BY                              | SCALE      | MATERIAL       | REFERENCE TOL.  |
|  |  |  |  | LTL                                   | 1 / 3      | SEE PARTS LIST | ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |
|  |  |  |  | SHEET SIZE                            | DATE       |                | 624-RevN-RK   |
|  |  |  |  | C                                     | 10/12/2006 |                | SHEET 1 OF 2  |

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THIRD ANGLE PROJECTION







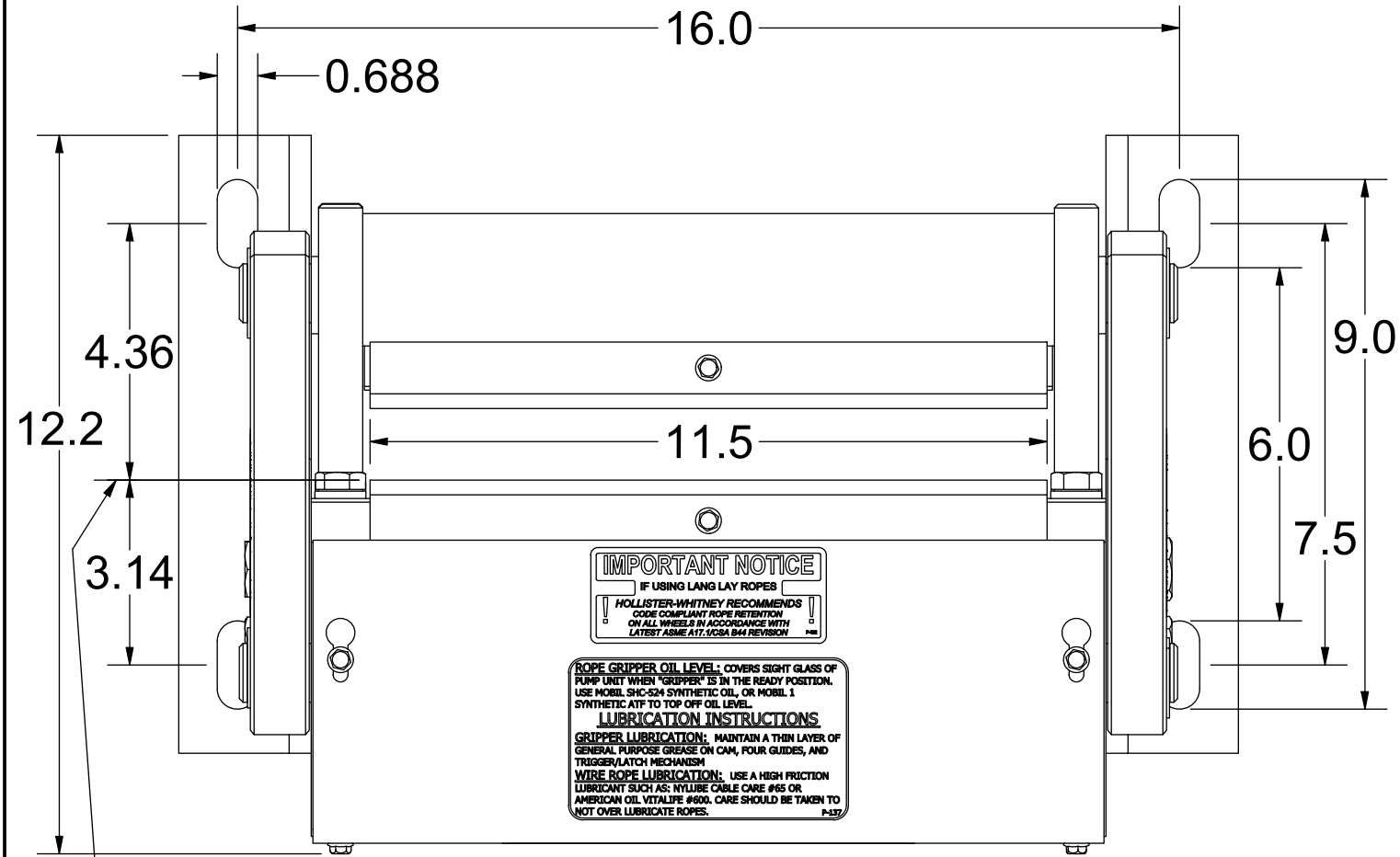
PUMPING UNIT  
SCALE 1 / 4

Weight - Pumping Unit: 29.2 lbmass, Gripper: 210.30 lbmass

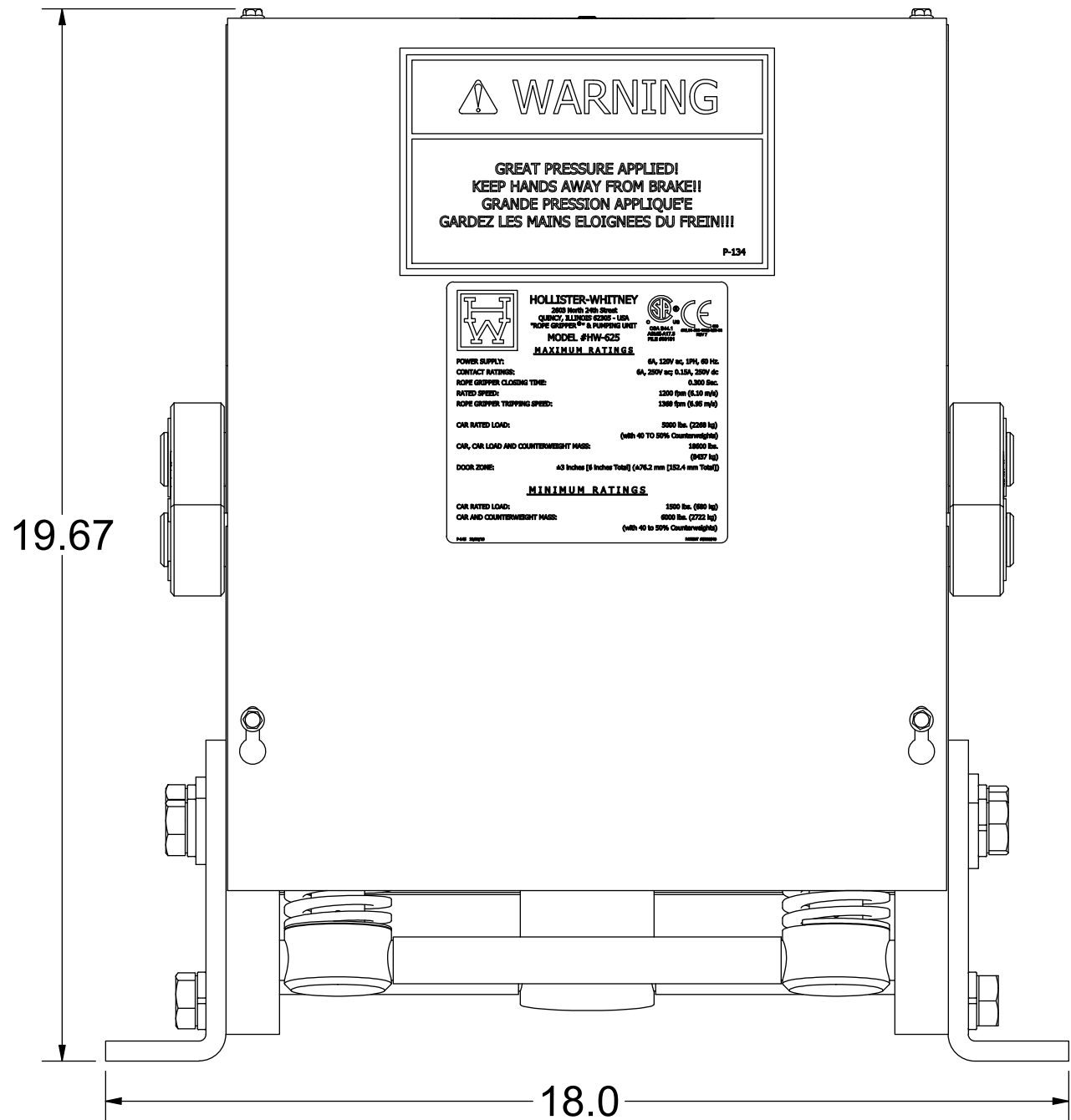
SEE PREVIOUS PAGE  
FOR REVISIONS

|   |  |  |  |  |  |                                       |       |                |   |
|---|--|--|--|--|--|---------------------------------------|-------|----------------|---|
|   |  |  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |       |                |   |
|   |  |  |  |  |  | TITLE                                 |       |                |   |
|   |  |  |  |  |  | "ROPE GRIPPER" ASSEMBLY               |       |                |   |
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|   |  |  |  |  |  | LTL                                   | 1/5   | SEE PARTS LIST | ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |
| THIRD ANGLE PROJECTION<br>  |  |  |  |  |  | SHEET SIZE                            |       | DATE           | 624-RevN-RK   |
|   |  |  |  |  |  | C                                     |       | 10/12/2006     | SHEET 2 OF 2  |

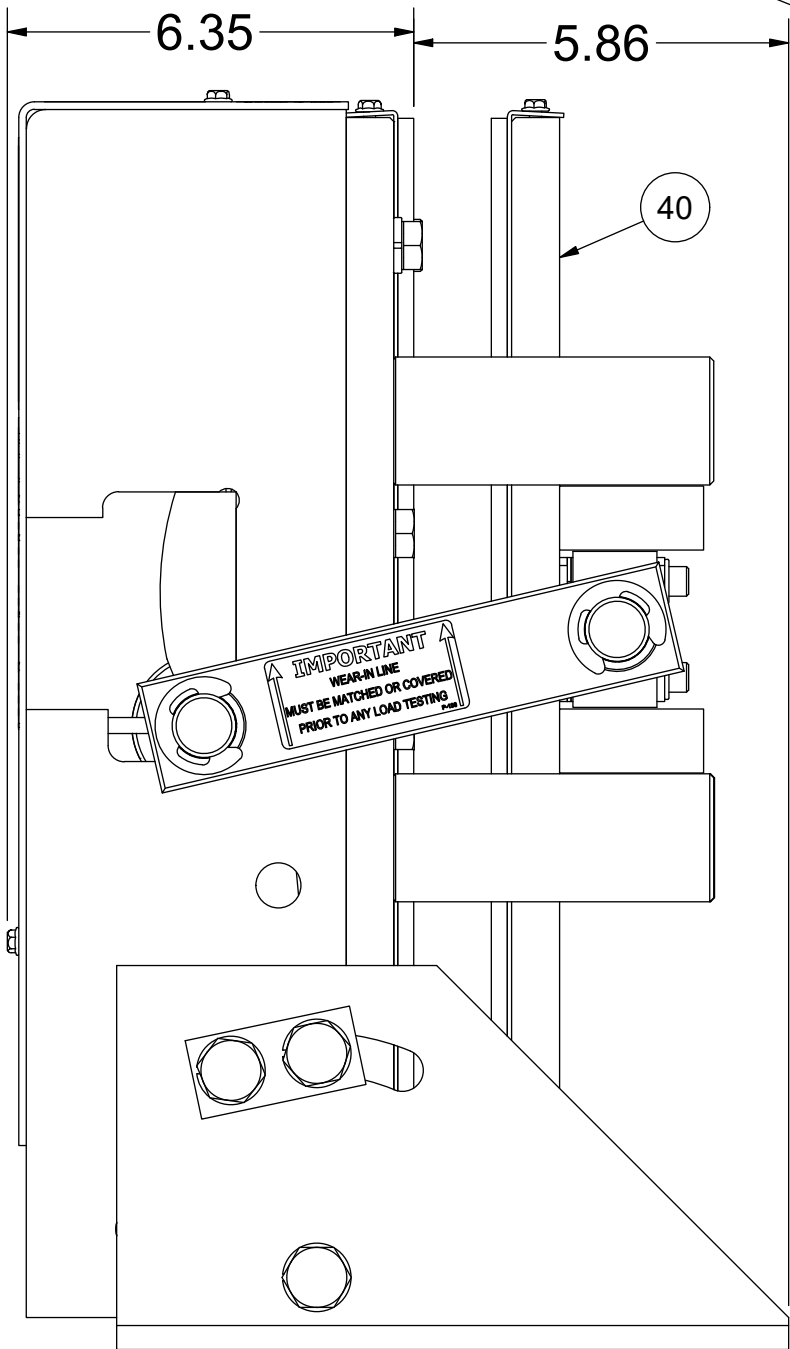
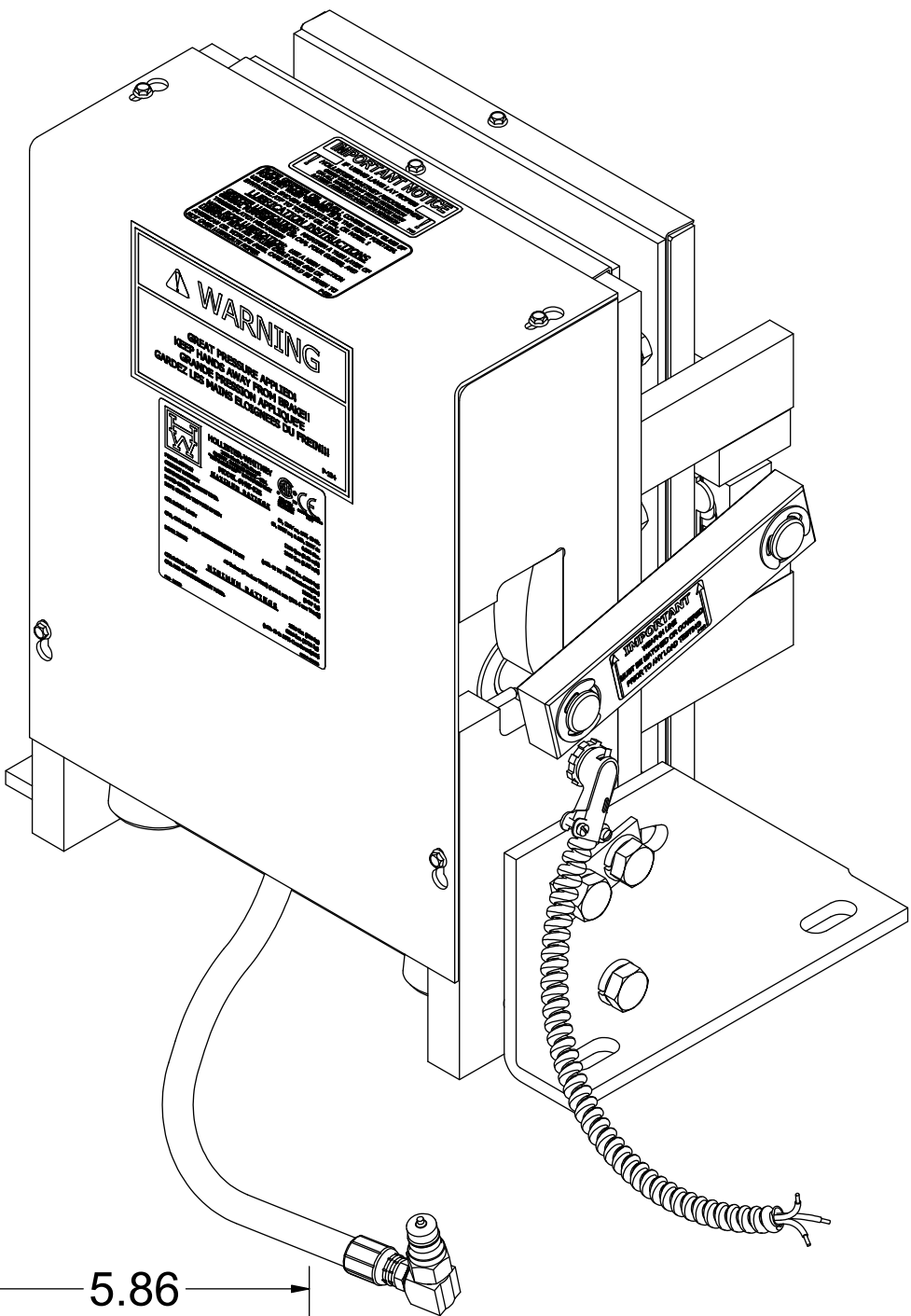




PAD POSITION REFERENCE;  
CENTERLINE OF ROPE WILL  
VARY WITH ROPE SIZE



- NOTE:**
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  - REFERENCE DIMENSIONS SHOWN TO AID IN SETUP AND INSTALL

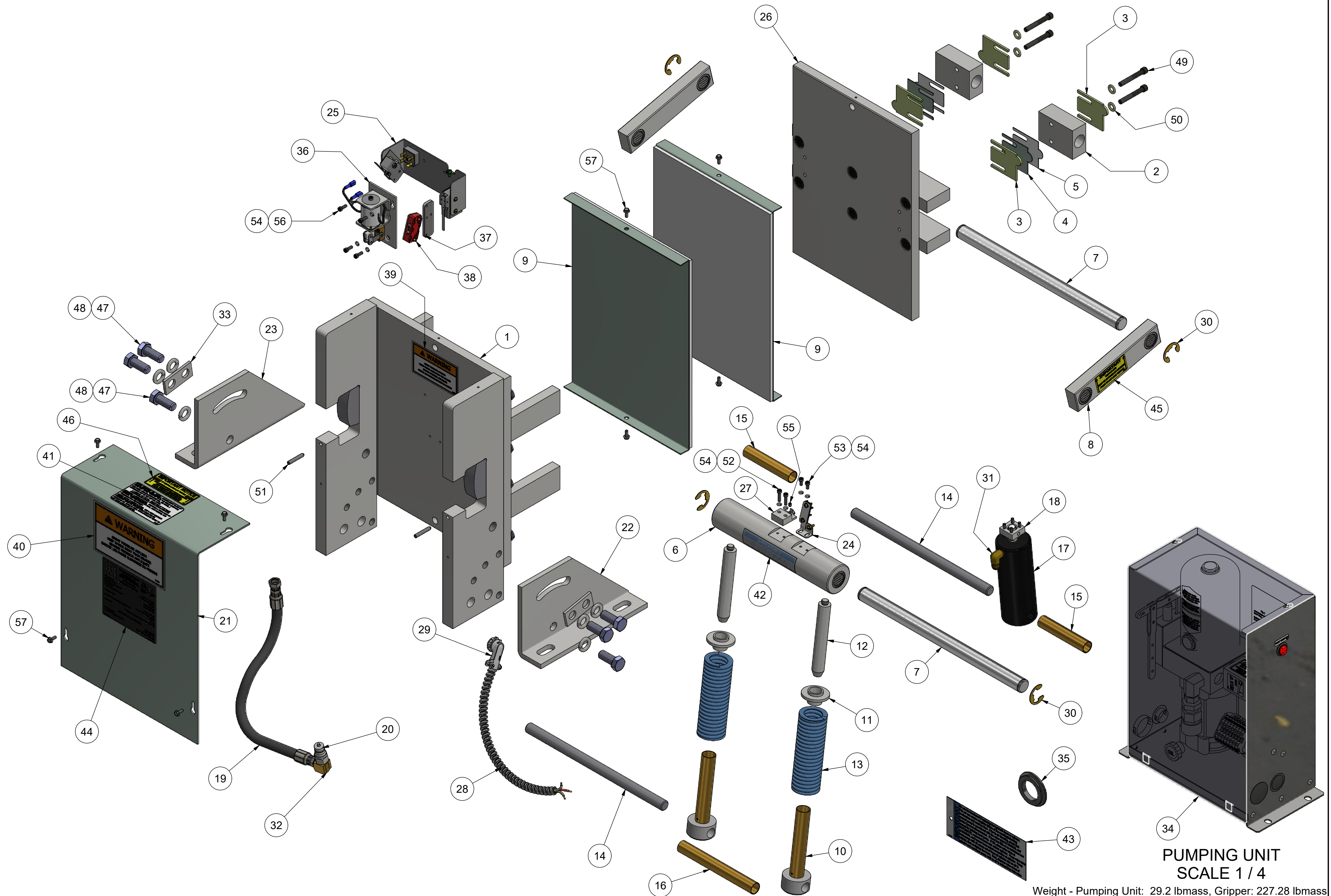


| ITEM | QTY | PART NUMBER            | DESCRIPTION  |
|------|-----|------------------------|--|
| 1    | 1   | 625-003                | STATIONARY SHOE ASSEMBLY                           |
| 2    | 2   | 624-007                | SHAFT SUPPORT BLOCK                                |
| 3    | 4   | 624-008                | SPACER (11 GA.) - LINING WEAR                      |
| 4    | 2   | 624-008-1              | SPACER (16 GA.) - LINING WEAR                      |
| 5    | 2   | 624-008-2              | SPACER (22 GA.) - LINING WEAR                      |
| 6    | 1   | 625-015                | TUBING ASSEMBLY                                    |
| 7    | 2   | 610-018                | SHAFT - ROTATING & NON-ROTATING                    |
| 8    | 2   | 610-020                | CONNECTING ARM ASSEMBLY                            |
| 9    | 2   | 625-022                | LINING ASSEMBLY                                    |
| 10   | 2   | 600-025                | LOWER SPRING GUIDE ASSEMBLY                        |
| 11   | 2   | 600-027                | UPPER SPRING SUPPORT                               |
| 12   | 2   | 600-029                | GUIDE - UPPER SPRING SUPPORT                       |
| 13   | 2   | 600-030                | SPRING   |
| 14   | 2   | 610-031                | SHAFT  |
| 15   | 2   | 605-032                | TUBING - SPACER                                    |
| 16   | 1   | 605-033                | TUBING - SPACER                                    |
| 17   | 1   | 600-035                | CYLINDER ASSEMBLY                                  |
| 18   | 1   | 622-036                | HYDRAULIC CYLINDER PIVOT BRACKET ASSEMBLY          |
| 19   | 1   | 620-037                | HYDRAULIC HOSE - STANDARD 27" LENGTH               |
|      |     | 620-037- "L"           | HYDRAULIC HOSE - "L" = LENGTH IN FEET (30' MAX)    |
| 20   | 1   | 620-038                | QUICK CONNECT FITTING                              |
| 21   | 1   | 625-040                | COVER - 625 ROPE GRIPPER                           |
| 22   | 1   | 610-041 R              | ANGLE, R.H. - MOUNTING                             |
| 23   | 1   | 610-041 L              | ANGLE, L.H. - MOUNTING                             |
| 24   | 1   | 620-638-18RK           | ACTUATING ANGLE ASSEMBLY, RETROFIT KIT - 18mm      |
| 25   | 1   | 622-064-1              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 10'          |
|      |     | 622-064-2              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 24'          |
|      |     | 622-064-3              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 18'          |
| 26   | 1   | 625-072                | MOVABLE SHOE ASSEMBLY                              |
| 27   | 1   | 601-078                | LATCH  |
| 28   | 1   | 600-081-1              | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
|      |     | 600-081-2              |  |
|      |     | 600-081-3              |  |
| 29   | 1   | 600-082                | 801-DC2 90° ANGLE BOX CONNECTOR                    |
| 30   | 4   | 610-085                | E-CLIP (TRUARC) X5133-98                           |
| 31   | 1   | 610-087                | PARKER #149F-6-4 MALE ELBOW                        |
| 32   | 1   | 610-091                | 3-8 x 3-8 NPT STREET 90 DEG. ELBOW                 |
| 33   | 2   | 610-095                | WASHER - DOUBLE BOLT                               |
| 34   | 1   | 620-100                | PUMPING UNIT                                       |
| 35   | 1   | 622-207                | HOSE GROMMET                                       |
| 36   | 1   | 620-607                | SOLENOID LOCKING UNIT                              |
| 37   | 1   | 620-636-RK             | ECR SWITCH MOUNT - RETROFIT KIT                    |
| 38   | 1   | 620-641                | ECR CONTACT - EDC-61                               |
| 39   | 1   | P-133                  | ROPE GRIPPER WARNING LABEL - MEDIUM                |
| 40   | 2   | P-134                  | ROPE GRIPPER WARNING LABEL - LARGE                 |
| 41   | 1   | P-137                  | GRIPPER LUBE INST. STICKER                         |
| 42   | 1   | P-141                  | IMPORTANT LABEL - APPLIED TO TUBING                |
| 43   | 1   | P-144-2                | AIR BLEED LABEL                                    |
| 44   | 1   | P-145                  | 625 ROPE GRIPPER LABEL                             |
| 45   | 2   | P-186                  | ROPE GRIPPER WEAR-IN LINE STICKER                  |
| 46   | 1   | P-192                  | IMPORTANT NOTICE - LANG LAY ROPES, ROPE GRIPPER    |
| 47   | 6   | 5/8" - 11 UNC x 1 1/2" | HEX CAP SCREW                                      |
| 48   | 6   | 5/8 WASHER             | STANDARD LOCK                                      |
| 49   | 4   | 5/16 - 18 UNC x 2.25   | SOCKET HEAD CAP SCREW                              |
| 50   | 4   | 5/16" WASHER           | STANDARD WASHER                                    |
| 51   | 2   | 1/4 - 20 UNC x 1.5     | HALF DOG SET SCREW                                 |
| 52   | 2   | #10-32 UNF x 0.75      | SOCKET HEAD CAP SCREW                              |
| 53   | 2   | #10-32 UNF x 0.375"    | SOCKET HEAD CAP SCREW                              |
| 54   | 8   | #10 LOCK WASHER        | STANDARD LOCK WASHER                               |
| 55   | 1   | 10-32 UNF x 0.25       | SET SCREW  |
| 56   | 4   | #10-24 UNC x 0.5       | SOCKET HEAD CAP SCREW                              |
| 57   | 8   | #10-24 UNC x 0.5       | WHIZ BOLT  |

Weight - Pumping Unit: 29.2 lbmass, Gripper: 227.28 lbmass

|  |  |  |  |                                       |                |   |  |
|--|--|--|--|---------------------------------------|----------------|---|--|
|  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |                |   |  |
|  |  |  |  | TITLE                                 |                |   |  |
|  |  |  |  | ROPE GRIPPER ASSEMBLY                 |                |   |  |
| A  |  |  |  | DOCUMENT ECR<br>UPGRADE, PUR #1276    | LTL<br>2/24/20 |   |  |
| THIS DRAWING IS SUPPLIED AS A REPRESENTATION OF THE EQUIPMENT. HOLLISTER-WHITNEY ELEVATOR CO. LLC ("MANUFACTURER") HAS AGREED TO SUPPLY. SLIGHT ADJUSTMENTS MAY OCCUR DURING MANUFACTURING AND INSTALLATION. ANY MODIFICATIONS NOT APPROVED IN WRITING BY MANUFACTURER MAY AFFECT OPERATION. VOIDS ANY WARRANTY AND RELEASES MANUFACTURER OF ALL LIABILITY. THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION THAT CANNOT BE REPRODUCED OR DIVULGED, IN WHOLE OR IN PART, WITHOUT WRITTEN AUTHORIZATION FROM THE MANUFACTURER. |  |  |  | THIRD ANGLE PROJECTION                |                |   |  |
|  |  |  |  | DRAWN BY<br>BLG                       | SCALE<br>1 / 4 | MATERIAL<br>SEE PARTS LIST  |  |
|  |  |  |  | SHEET SIZE<br>C                       |                | DATE<br>4/26/2013   |  |
|  |  |  |  |                                       |                | REFERENCE TOL.<br>ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |  |
|  |  |  |  |                                       |                | 625-RevN-RK<br>SHEET 1 OF 2   |  |





**PUMPING UNIT  
SCALE 1 / 4**

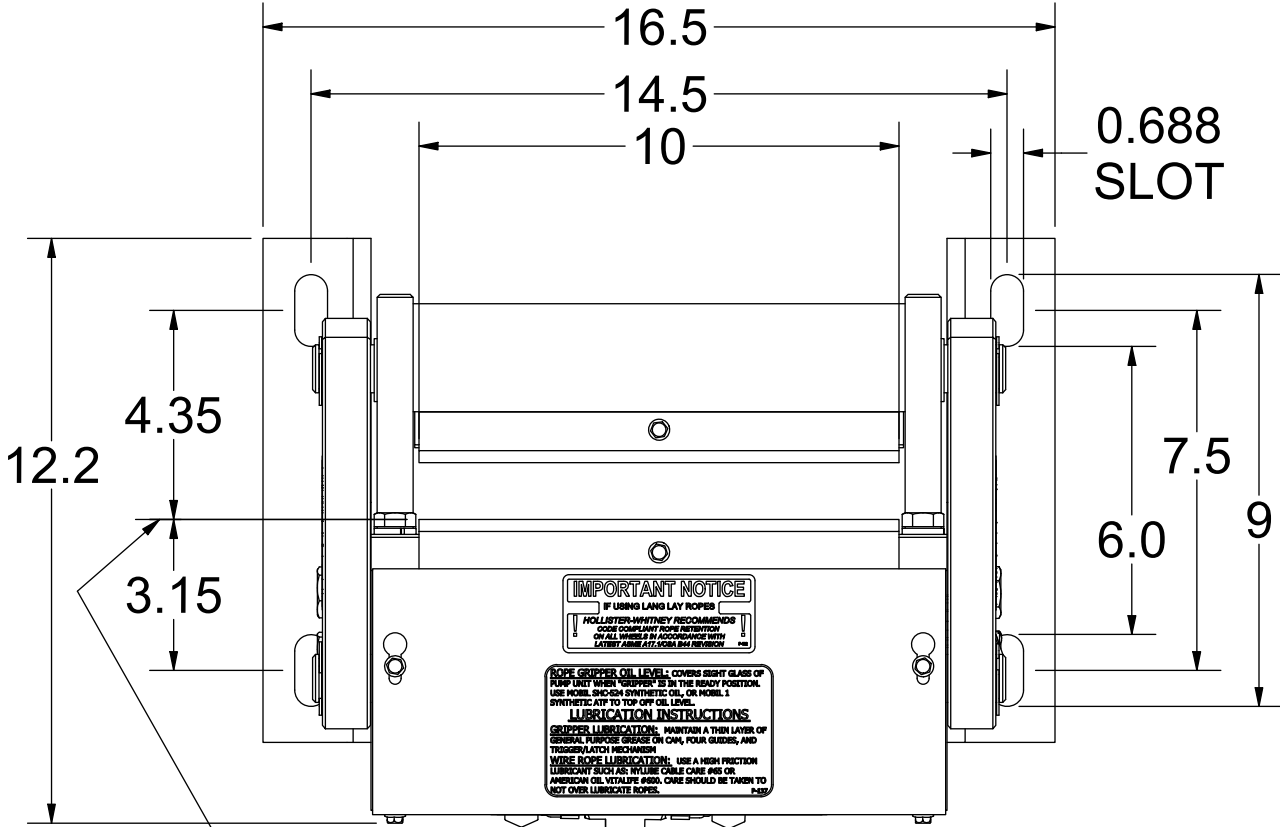
Weight - Pumping Unit: 29.2 lbmass, Gripper: 227.28 lbmass

**SEE PREVIOUS PAGE  
FOR REVISIONS**

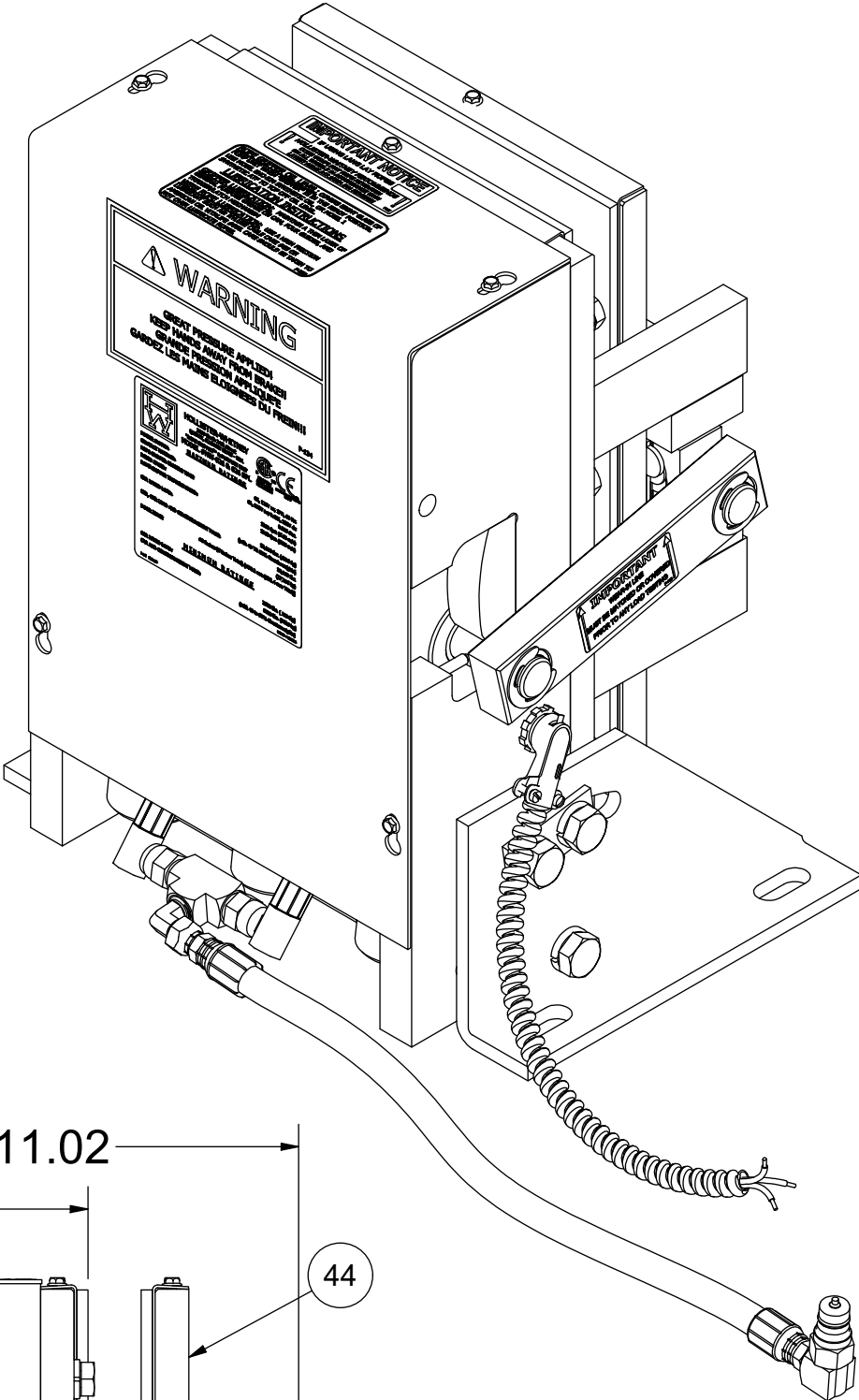
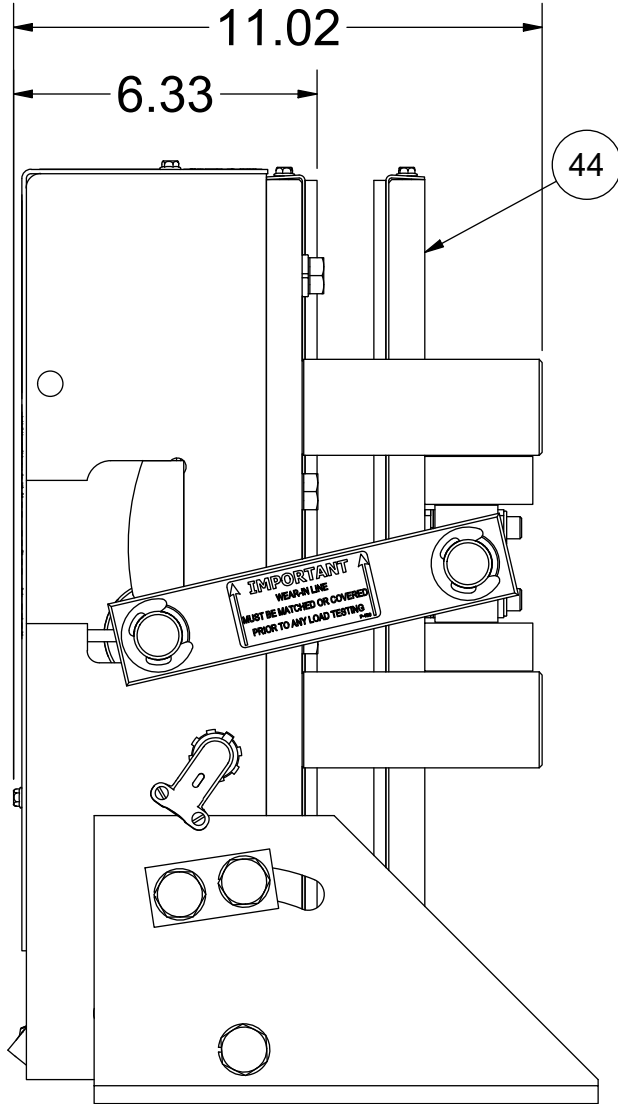
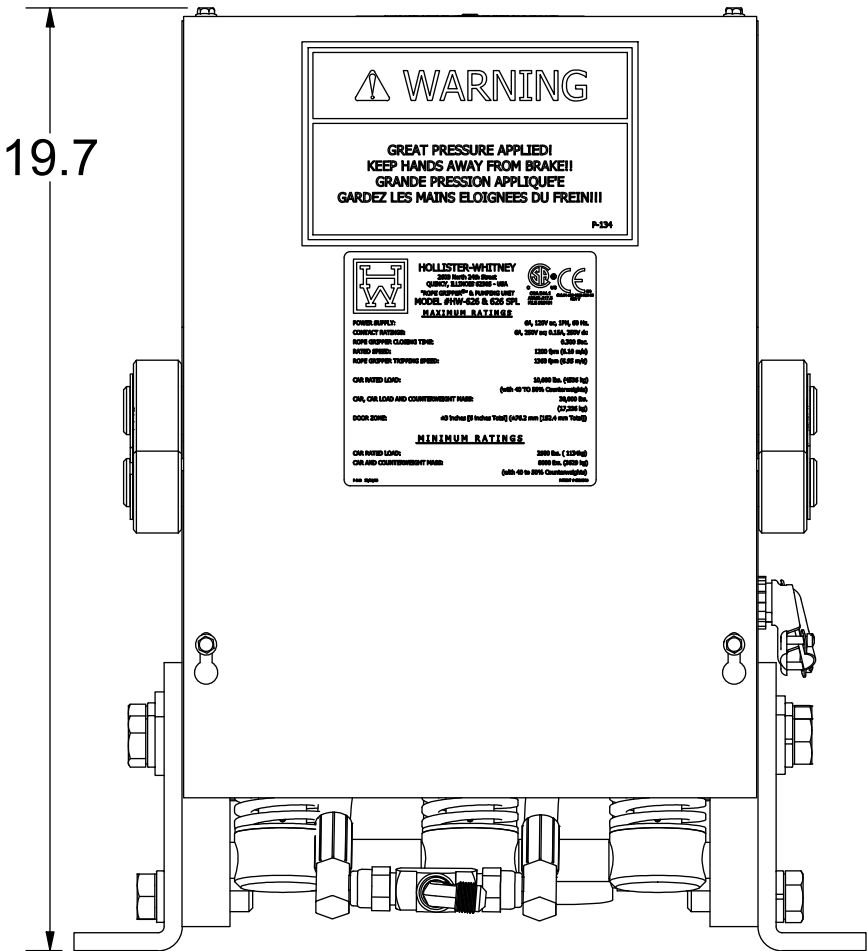
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|--|--|--|--|--|--|---|-----------------|-------------------|---|
|  |  |  |  |  |  | <b>HOLLISTER-WHITNEY<br/>ELEVATOR CO. LLC</b> |                 |                   |   |
|  |  |  |  |  |  | TITLE   |                 |                   |   |
|  |  |  |  |  |  | ROPE GRIPPER ASSEMBLY                         |                 |                   |   |
| <small>THIS DRAWING IS SUPPLIED AS A REPRESENTATION OF THE EQUIPMENT<br/>HOLLISTER-WHITNEY ELEVATOR CO. LLC ("MANUFACTURER") HAS AGREED TO<br/>SUPPLY. SLIGHT ADJUSTMENTS MAY OCCUR DURING MANUFACTURING AND<br/>INSTALLATION. ANY MODIFICATIONS NOT APPROVED IN WRITING BY<br/>MANUFACTURER MAY AFFECT OPERATION, VOIDS ANY WARRANTY AND<br/>RELEASES MANUFACTURER OF ALL LIABILITY.<br/>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION<br/>THAT CANNOT BE REPRODUCED OR DIVULGED, IN WHOLE OR IN PART, WITHOUT<br/>WRITTEN AUTHORIZATION FROM THE MANUFACTURER.</small> |  |  |  |  |  | THIRD ANGLE PROJECTION                        | DRAWN BY<br>BLG | SCALE<br>1 / 4.5  | MATERIAL<br>SEE PARTS LIST  |
|  |  |  |  |  |  |   | SHEET SIZE<br>C | DATE<br>4/26/2013 | REFERENCE TOL.<br>ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED<br><b>625-RevN-RK</b><br>SHEET 2 OF 2 |



| ITEM | QTY | PART NUMBER          | DESCRIPTION  |
|------|-----|----------------------|--|
| 1    | 1   | 626-003              | STATIONARY SHOE ASSEMBLY                           |
| 2    | 2   | 624-007              | SHAFT SUPPORT BLOCK                                |
| 3    | 1   | 626-007              | SHAFT SUPPORT BLOCK                                |
| 4    | 6   | 624-008              | SPACER (11 GA.) - LINING WEAR                      |
| 5    | 3   | 624-008-1            | SPACER (16 GA.) - LINING WEAR                      |
| 6    | 3   | 624-008-2            | SPACER (22 GA.) - LINING WEAR                      |
| 7    | 1   | 626-015              | TUBING ASSEMBLY                                    |
| 8    | 2   | 626-018              | SHAFT - ROTATING & NON-ROTATING                    |
| 9    | 2   | 610-020              | CONNECTING ARM ASSEMBLY                            |
| 10   | 2   | 610-022              | LINING ASSEMBLY                                    |
| 11   | 3   | 600-025              | LOWER SPRING GUIDE ASSEMBLY                        |
| 12   | 3   | 600-027              | UPPER SPRING SUPPORT                               |
| 13   | 3   | 600-029              | GUIDE - UPPER SPRING SUPPORT                       |
| 14   | 3   | 600-030              | SPRING   |
| 15   | 2   | 626-031              | SHAFT  |
| 16   | 3   | 626-032              | TUBING - SPACER                                    |
| 17   | 2   | 626-033              | TUBING - SPACER                                    |
| 18   | 2   | 610-035              | 610-035 CYLINDER ASSEMBLY                          |
| 19   | 2   | 622-036              | HYDRAULIC CYLINDER PIVOT BRACKET ASSEMBLY          |
| 20   | 1   | 620-037              | HYDRAULIC HOSE - STANDARD 27" LENGTH               |
|      |     | 620-037- "L"         | HYDRAULIC HOSE - "L" = LENGTH IN FEET (30' MAX)    |
| 21   | 1   | 620-038              | QUICK CONNECT FITTING                              |
| 22   | 1   | 626-040              | COVER - 624 & 626 ROPE GRIPPER                     |
| 23   | 1   | 610-041 R            | ANGLE, R.H. - MOUNTING                             |
| 24   | 1   | 610-041 L            | ANGLE, L.H. - MOUNTING                             |
| 25   | 1   | 620-638-18RK         | ACTUATING ANGLE ASSEMBLY, RETROFIT KIT - 18mm      |
| 26   | 1   | 622-064-1            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 10'          |
|      |     | 622-064-2            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 24'          |
|      |     | 622-064-3            | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 18'          |
| 27   | 1   | 624-072              | MOVABLE SHOE ASSEMBLY                              |
| 28   | 1   | 601-078              | LATCH  |
| 29   | 1   | 600-081-1            | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
|      |     | 600-081-2            |  |
|      |     | 600-081-3            |  |
| 30   | 1   | 600-082              | 801-DC2 90° ANGLE BOX CONNECTOR                    |
| 31   | 4   | 610-085              | E-CLIP (TRUARC) X5133-98                           |
| 32   | 1   | 610-086              | 3/8" TEE   |
| 33   | 2   | 610-087              | PARKER #149F-6-4 MALE ELBOW                        |
| 34   | 1   | 610-088              | BRASS ELBOW, #149F-6-6, 45°FH 5/8"-18 x 3/8 NPTF18 |
| 35   | 1   | 610-091              | 3-8 x 3-8 NPT STREET 90 DEG. ELBOW                 |
| 36   | 2   | 626-092              | HOSE ASSEMBLY                                      |
| 37   | 2   | 610-095              | WASHER - DOUBLE BOLT                               |
| 38   | 1   | 620-100              | PUMPING UNIT                                       |
| 39   | 1   | 622-207              | HOSE GROMMET                                       |
| 40   | 1   | 620-607              | SOLENOID LOCKING UNIT                              |
| 41   | 1   | 620-636-RK           | ECR SWITCH MOUNT - RETROFIT KIT                    |
| 42   | 1   | 620-641              | ECR CONTACT - EDC-61                               |
| 43   | 1   | P-133                | ROPE GRIPPER WARNING LABEL - MEDIUM                |
| 44   | 2   | P-134                | ROPE GRIPPER WARNING LABEL - LARGE                 |
| 45   | 1   | P-137                | GRIPPER LUBE INST. STICKER                         |
| 46   | 1   | P-140                | 626 & 626SPL ROPE GRIPPER LABEL                    |
| 47   | 1   | P-141                | IMPORTANT LABEL - APPLIED TO TUBING                |
| 48   | 1   | P-144-2              | AIR BLEED LABEL                                    |
| 49   | 2   | P-186                | ROPE GRIPPER WEAR-IN LINE STICKER                  |
| 50   | 1   | P-192                | IMPORTANT NOTICE - LANG LAY ROPES, ROPE GRIPPER    |
| 51   | 6   | 5/8" - 11 UNC x 2"   | HEX CAP SCREW                                      |
| 52   | 6   | 5/8 WASHER           | STANDARD LOCK                                      |
| 53   | 6   | 5/16 - 18 UNC x 2.25 | SOCKET HEAD CAP SCREW                              |
| 54   | 6   | 5/16" WASHER         | STANDARD WASHER                                    |
| 55   | 2   | 1/4 - 20 UNC x 1.5   | HALF DOG SET SCREW                                 |
| 56   | 2   | #10-32 UNF x 0.75    | SOCKET HEAD CAP SCREW                              |
| 57   | 2   | #10-32 UNF x 0.375"  | SOCKET HEAD CAP SCREW                              |
| 58   | 8   | #10 LOCK WASHER      | STANDARD LOCK WASHER                               |
| 59   | 1   | 10-32 UNF x 0.25     | SET SCREW  |
| 60   | 4   | #10-24 UNC x 0.5     | SOCKET HEAD CAP SCREW                              |
| 61   | 8   | #10-24 UNC x 0.5     | WHIZ BOLT  |




PAD POSITION REFERENCE;  
CENTERLINE OF ROPE WILL  
VARY WITH ROPE SIZE



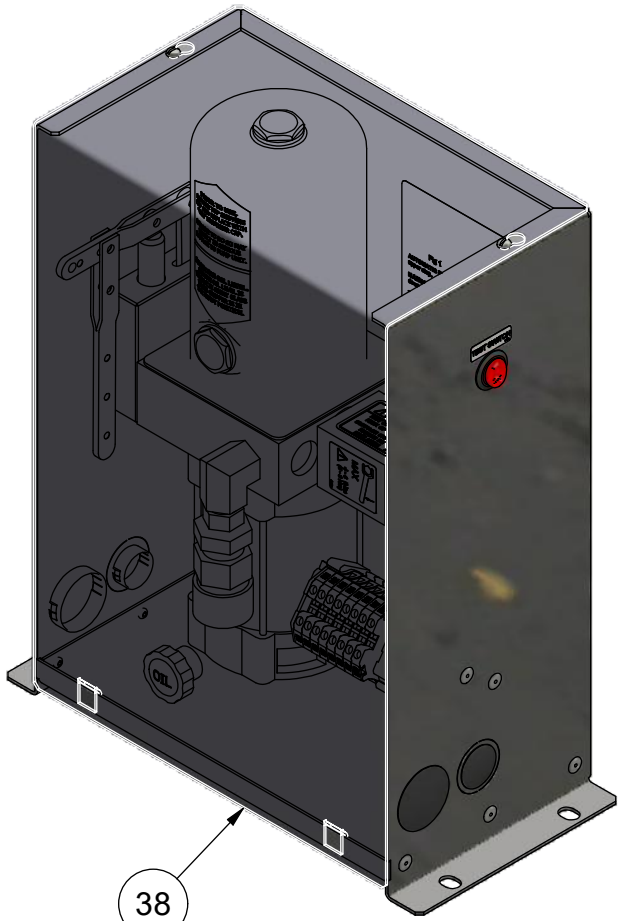
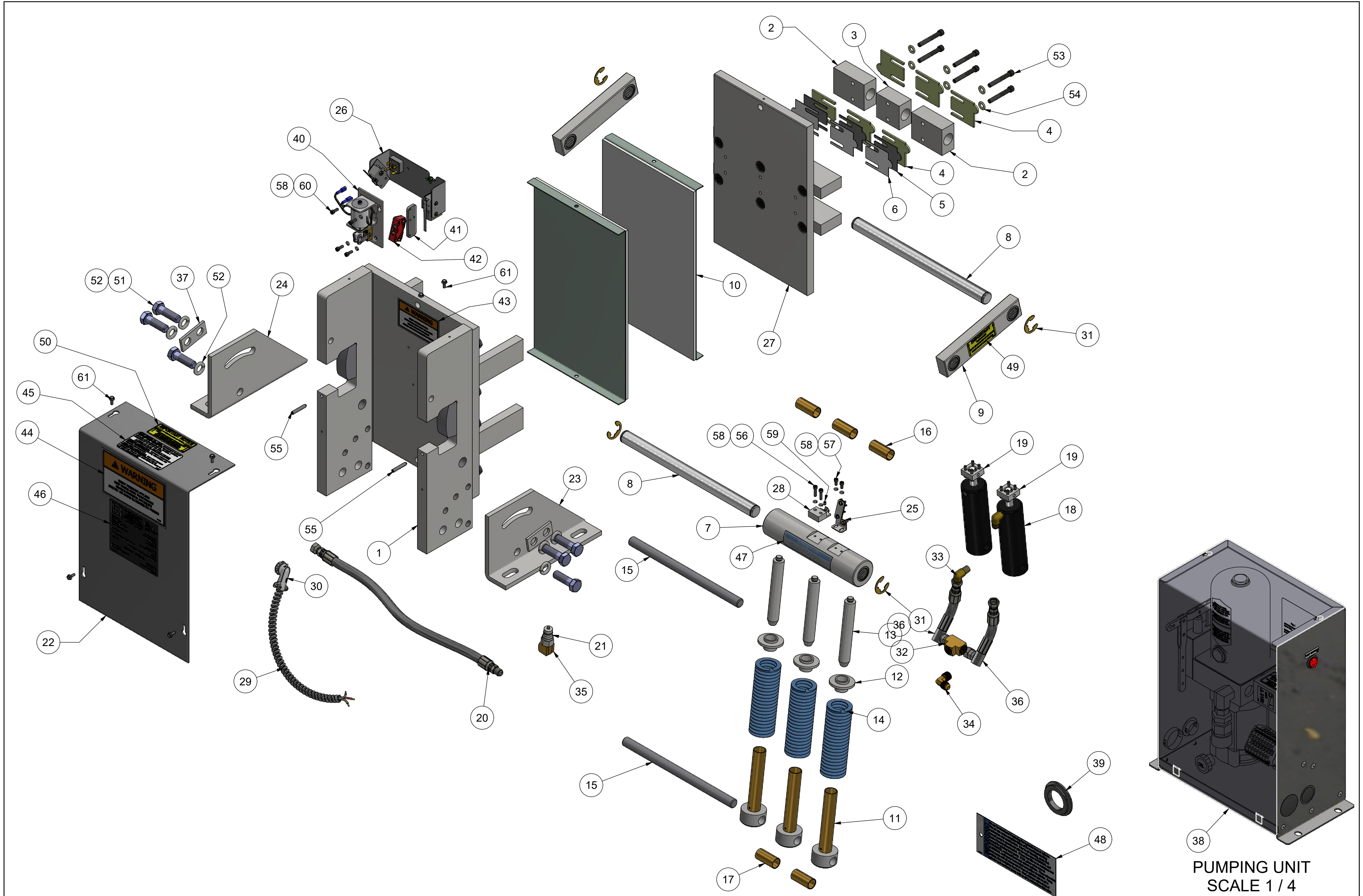
NOTE:

- QTY LISTED FOR ITEMS 4, 5, & 6 ARE STANDARD. ACTUAL QTY MAY VARY WITH ROPE DIAMETER.
- REFERENCE DIMENSIONS SHOWN TO AID IN SETUP AND INSTALL

Weight - Pumping Unit: 29.2 lbmass, Gripper: 215.07 lbmass

|   |  |  |   |   |                                       |                         |                |                            |   |
|---|--|--|---|---|---------------------------------------|-------------------------|----------------|----------------------------|---|
|   |  |  |   |   | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |                         |                |                            |   |
|   |  |  |   |   | TITLE                                 |                         |                |                            |   |
|   |  |  | A | DOCUMENT ECR<br>UPGRADE, PUR #1276  | LTL<br>2/24/20                        | "ROPE GRIPPER" ASSEMBLY |                |                            |   |
| <p>THIS DRAWING IS SUPPLIED AS A REPRESENTATION OF THE EQUIPMENT<br/>HOLLISTER-WHITNEY ELEVATOR CO. LLC ("MANUFACTURER") HAS AGREED TO<br/>SUPPLY. SLIGHT ADJUSTMENTS MAY OCCUR DURING MANUFACTURING AND<br/>INSTALLATION. ANY MODIFICATIONS NOT APPROVED IN WRITING BY<br/>MANUFACTURER MAY AFFECT OPERATION, VOIDS ANY WARRANTY AND<br/>RELEASES MANUFACTURER OF ALL LIABILITY.</p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION<br/>THAT CANNOT BE REPRODUCED OR DIVULGED, IN WHOLE OR IN PART, WITHOUT<br/>WRITTEN AUTHORIZATION FROM THE MANUFACTURER.</p> |  |  |   | THIRD ANGLE PROJECTION  |                                       | DRAWN<br>BY<br>LTL      | SCALE<br>1 / 4 | MATERIAL<br>SEE PARTS LIST | REFERENCE TOL.<br>ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |
|   |  |  |   |  |                                       | SHEET SIZE<br>C         |                | DATE<br>5/27/2004          |   |





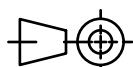
PUMPING UNIT  
SCALE 1 / 4

Weight - Pumping Unit: 29.2 lbmass, Gripper: 215.07 lbmass

SEE PREVIOUS PAGE  
FOR REVISIONS

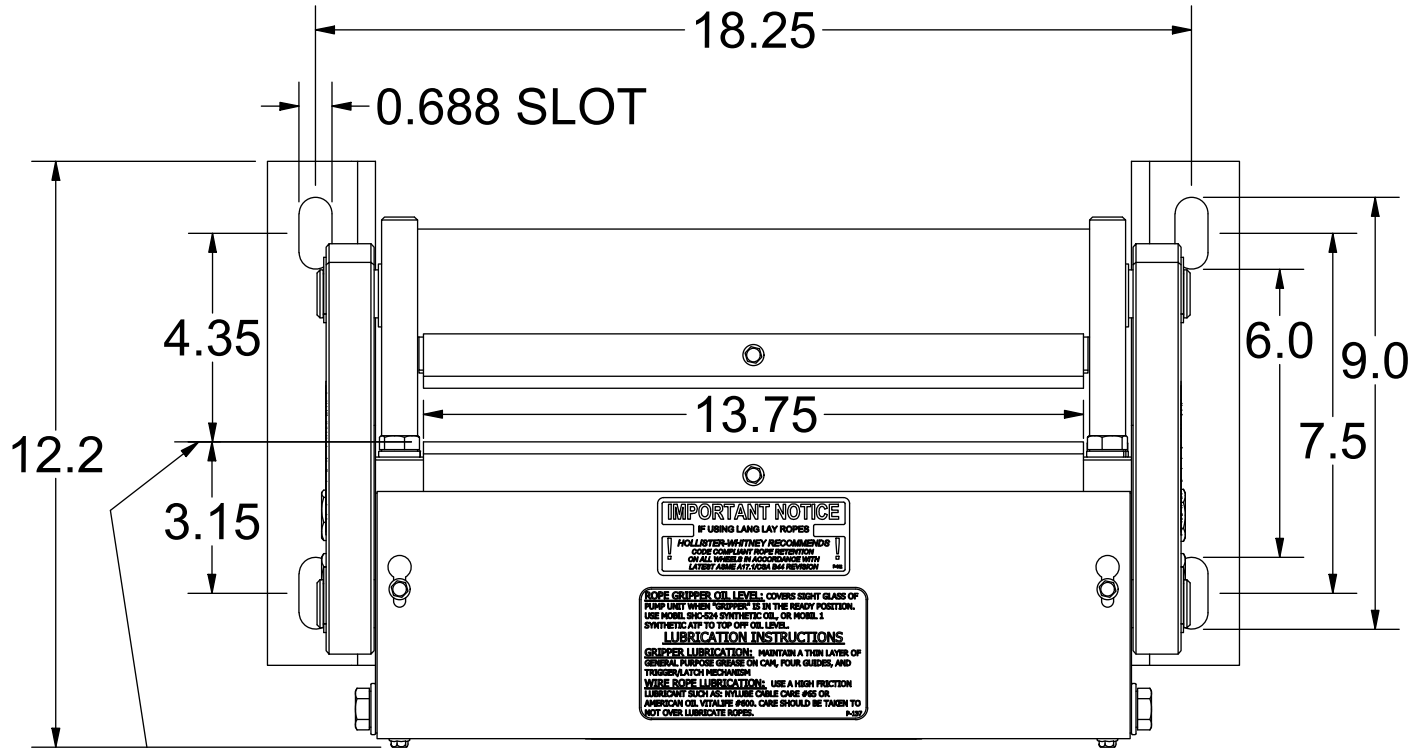
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|--|--|--|--|--|--|---------------------------------------|----------------|----------------------------|---|
|  |  |  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |                |                            |   |
|  |  |  |  |  |  | TITLE                                 |                |                            |   |
|  |  |  |  |  |  | "ROPE GRIPPER" ASSEMBLY               |                |                            |   |
| THIS DRAWING IS SUPPLIED AS A REPRESENTATION OF THE EQUIPMENT HOLLISTER-WHITNEY ELEVATOR CO. LLC ("MANUFACTURER") HAS AGREED TO SUPPLY. SLIGHT ADJUSTMENTS MAY OCCUR DURING MANUFACTURING AND INSTALLATION. ANY MODIFICATIONS NOT APPROVED IN WRITING BY MANUFACTURER MAY AFFECT OPERATION, VOIDS ANY WARRANTY AND RELEASES MANUFACTURER OF ALL LIABILITY.<br>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION THAT CANNOT BE REPRODUCED OR DIVULGED, IN WHOLE OR IN PART, WITHOUT WRITTEN AUTHORIZATION FROM THE MANUFACTURER. |  |  |  |  |  | DRAWN BY<br>LTL                       | SCALE<br>1 / 5 | MATERIAL<br>SEE PARTS LIST | REFERENCE TOL.<br>ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |
|  |  |  |  |  |  | SHEET SIZE<br>C                       |                | DATE<br>5/27/2004          | 626-RevQ-RK<br>SHEET 2 OF 2   |

THIRD ANGLE PROJECTION

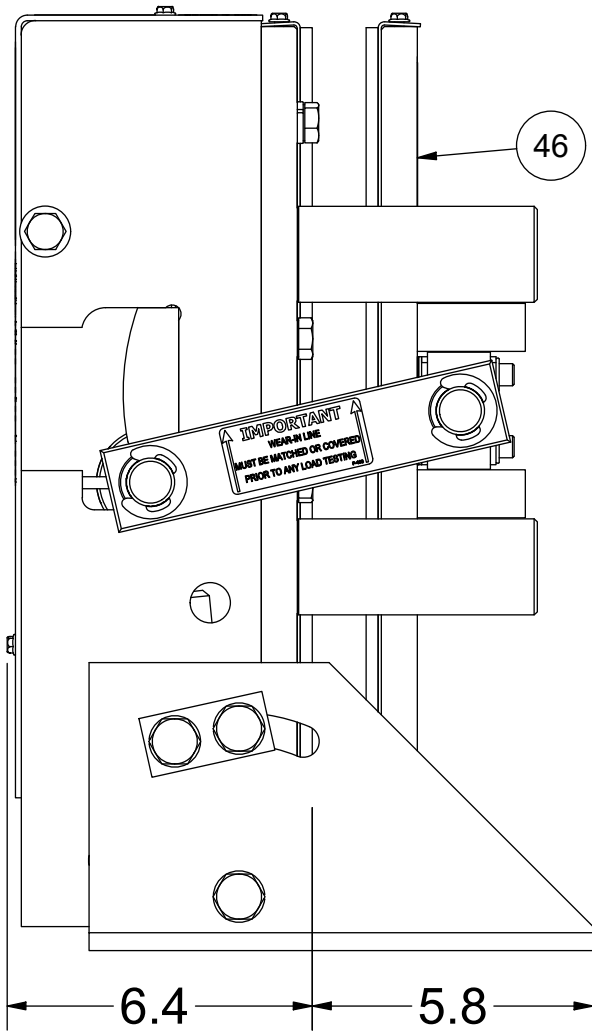
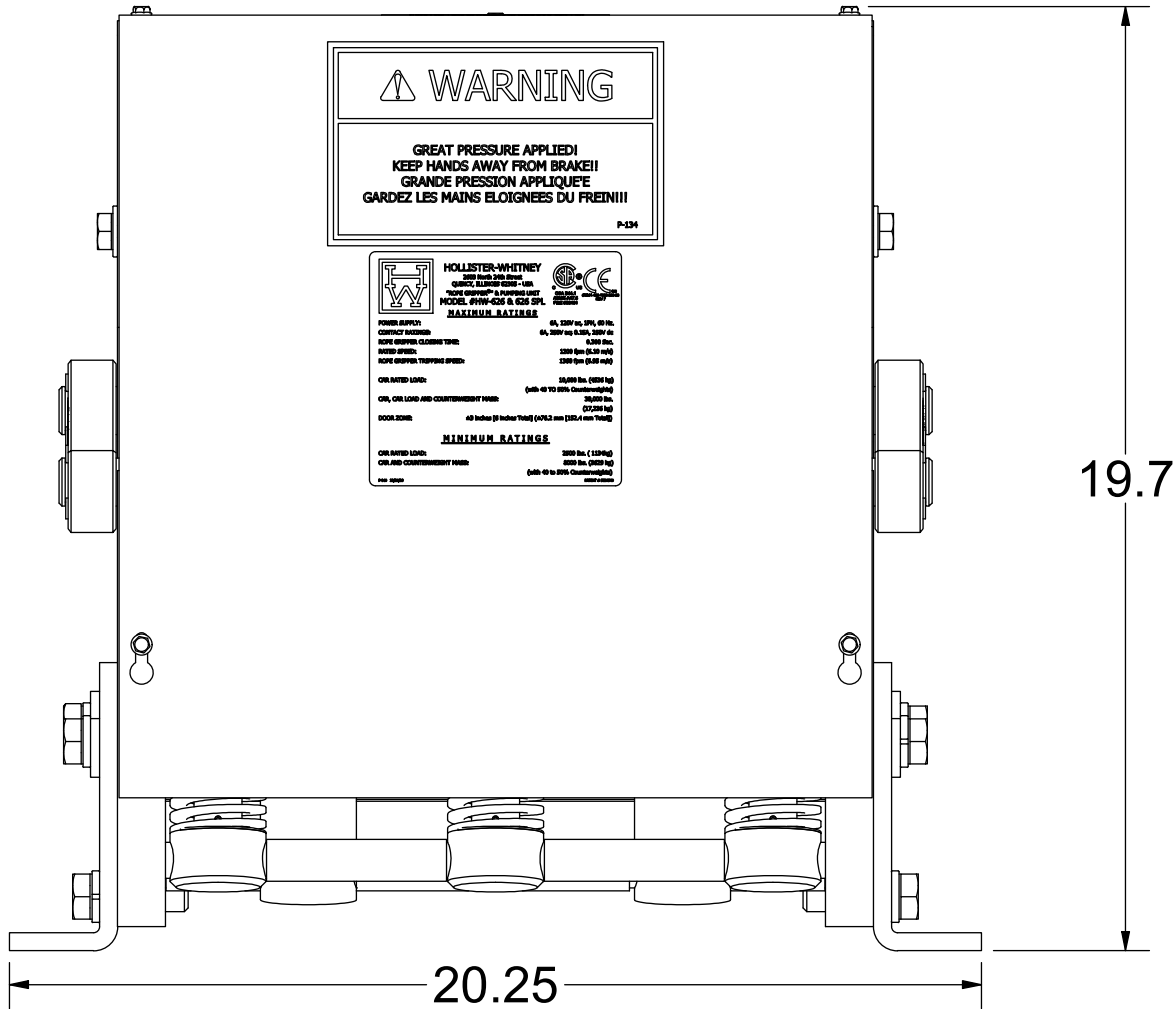
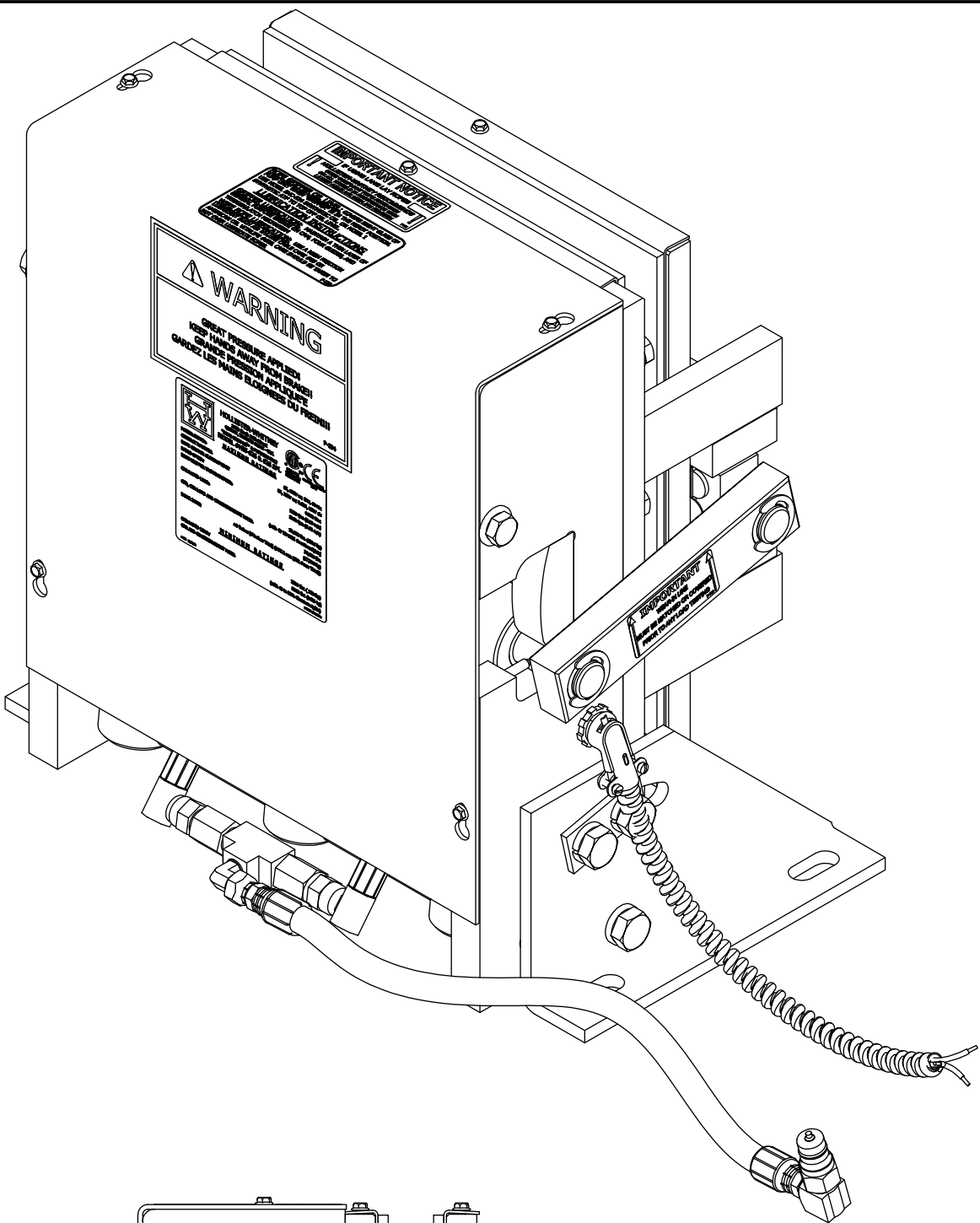




| ITEM | QTY | PART NUMBER            | DESCRIPTION  |
|------|-----|------------------------|--|
| 1    | 1   | 626-003-SPL            | STATIONARY SHOE ASSEMBLY                           |
| 2    | 2   | 624-007                | SHAFT SUPPORT BLOCK                                |
| 3    | 1   | 626-007                | SHAFT SUPPORT BLOCK                                |
| 4    | 6   | 624-008                | SPACER (11 GA.) - LINING WEAR                      |
| 5    | 3   | 624-008-1              | SPACER (16 GA.) - LINING WEAR                      |
| 6    | 3   | 624-008-2              | SPACER (22 GA.) - LINING WEAR                      |
| 7    | 1   | 626-015-SPL            | TUBING ASSEMBLY                                    |
| 8    | 2   | 626-018-SPL            | SHAFT - ROTATING & NON-ROTATING                    |
| 9    | 2   | 610-020                | CONNECTING ARM ASSEMBLY                            |
| 10   | 2   | 610-022-SPL            | LINING ASSEMBLY                                    |
| 11   | 3   | 600-025                | LOWER SPRING GUIDE ASSEMBLY                        |
| 12   | 3   | 600-027                | UPPER SPRING SUPPORT                               |
| 13   | 3   | 600-029                | GUIDE - UPPER SPRING SUPPORT                       |
| 14   | 3   | 600-030                | SPRING   |
| 15   | 2   | 626-031-SPL            | SHAFT  |
| 16   | 2   | 601-032                | TUBING - SPACER                                    |
| 17   | 1   | 626-032-SPL            | TUBING - SPACER                                    |
| 18   | 2   | 626-033-SPL            | TUBING - SPACER                                    |
| 19   | 2   | 610-035                | 610-035 CYLINDER ASSEMBLY                          |
| 20   | 2   | 622-036                | HYDRAULIC CYLINDER PIVOT BRACKET ASSEMBLY          |
| 21   | 1   | 620-037                | HYDRAULIC HOSE - STANDARD 27" LENGTH               |
|      |     | 620-037- "L"           | HYDRAULIC HOSE - "L" = LENGTH IN FEET (30' MAX)    |
| 22   | 1   | 620-038                | QUICK CONNECT FITTING                              |
| 23   | 1   | 626-040-SPL            | COVER - ROPE GRIPPER                               |
| 24   | 1   | 610-041 R              | ANGLE, R.H. - MOUNTING                             |
| 25   | 1   | 610-041 L              | ANGLE, L.H. - MOUNTING                             |
| 26   | 1   | 620-638-18RK           | ACTUATING ANGLE ASSEMBLY, RETROFIT KIT - 18mm      |
| 27   | 1   | 622-064-1              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 10'          |
|      |     | 622-064-2              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 24'          |
|      |     | 622-064-3              | SWITCH ASS'Y LESS ECR, LEAD LENGTHS = 18'          |
| 28   | 1   | 626-072-SPL            | MOVABLE SHOE ASSEMBLY                              |
| 29   | 1   | 601-078                | LATCH  |
| 30   | 1   | 600-081-1              | CONDUIT - FLEXIBLE (1/2"), LENGTH TO MATCH 622-064 |
|      |     | 600-081-2              |  |
|      |     | 600-081-3              |  |
| 31   | 1   | 600-082                | 801-DC2 90° ANGLE BOX CONNECTOR                    |
| 32   | 4   | 610-085                | E-CLIP (TRUARC) X5133-98                           |
| 33   | 1   | 610-086                | 3/8 NPT TEE  |
| 34   | 2   | 610-087                | PARKER #149F-6-4 MALE ELBOW                        |
| 35   | 1   | 610-088                | BRASS ELBOW, #149F-6-6, 45°FH 5/8"-18 x 3/8 NPTF18 |
| 36   | 2   | 626-092                | HOSE ASSEMBLY                                      |
| 37   | 1   | 610-091                | 3-8 x 3-8 NPT STREET 90 DEG. ELBOW                 |
| 38   | 2   | 610-095                | WASHER - DOUBLE BOLT                               |
| 39   | 1   | 626-097 SPL            | BAR - SUPPORT                                      |
| 40   | 1   | 620-100                | PUMPING UNIT                                       |
| 41   | 2   | 622-115                | 3/8 NPT EXTENSION                                  |
| 42   | 1   | 622-207                | HOSE GROMMET                                       |
| 43   | 1   | 620-607                | SOLENOID LOCKING UNIT                              |
| 44   | 1   | 620-636-RK             | ECR SWITCH MOUNT - RETROFIT KIT                    |
| 45   | 1   | 620-641                | ECR CONTACT - EDC-61                               |
| 46   | 2   | P-134                  | ROPE GRIPPER WARNING LABEL - LARGE                 |
| 47   | 1   | P-137                  | GRIPPER LUBE INST. STICKER                         |
| 48   | 1   | P-140                  | 626 & 626SPL ROPE GRIPPER LABEL                    |
| 49   | 1   | P-141                  | IMPORTANT LABEL - APPLIED TO TUBING                |
| 50   | 1   | P-144-2                | AIR BLEED LABEL                                    |
| 51   | 2   | P-186                  | ROPE GRIPPER WEAR-IN LINE STICKER                  |
| 52   | 1   | P-192                  | IMPORTANT NOTICE - LANG LAY ROPES, ROPE GRIPPER    |
| 53   | 6   | 5/8" - 11 UNC x 2"     | HEX CAP SCREW                                      |
| 54   | 6   | 5/8 WASHER             | STANDARD LOCK                                      |
| 55   | 2   | 1/2" - 13 UNC x 1 3/4" | HEX CAP SCREW                                      |
| 56   | 2   | 1/2" WASHER            | SAE WASHER   |
| 57   | 6   | 5/16-18 UNC x 1.75     | SOCKET HEAD CAP SCREW                              |
| 58   | 6   | 5/16" WASHER           | STANDARD WASHER                                    |
| 59   | 2   | 1/4 - 20 UNC x 1.5     | HALF DOG SET SCREW                                 |
| 60   | 2   | #10-32 UNF x 0.75      | SOCKET HEAD CAP SCREW                              |
| 61   | 2   | #10-32 UNF x 0.375"    | SOCKET HEAD CAP SCREW                              |
| 62   | 1   | 10-32 UNF x 0.25       | SET SCREW  |
| 63   | 4   | 5/16-18 UNC x 1.75     | SOCKET HEAD CAP SCREW                              |
| 64   | 8   | #10-24 UNC x 0.5       | WHIZ BOLT  |
| 65   | 8   | #10 LOCK WASHER        | STANDARD LOCK WASHER                               |



PAD POSITION REFERENCE;  
CENTERLINE OF ROPE WILL  
VARY WITH ROPE SIZE



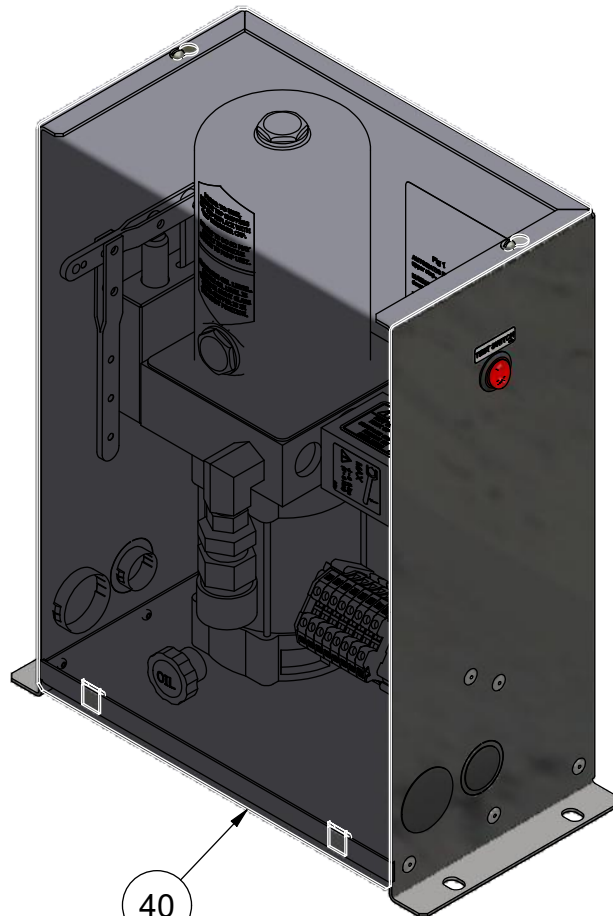
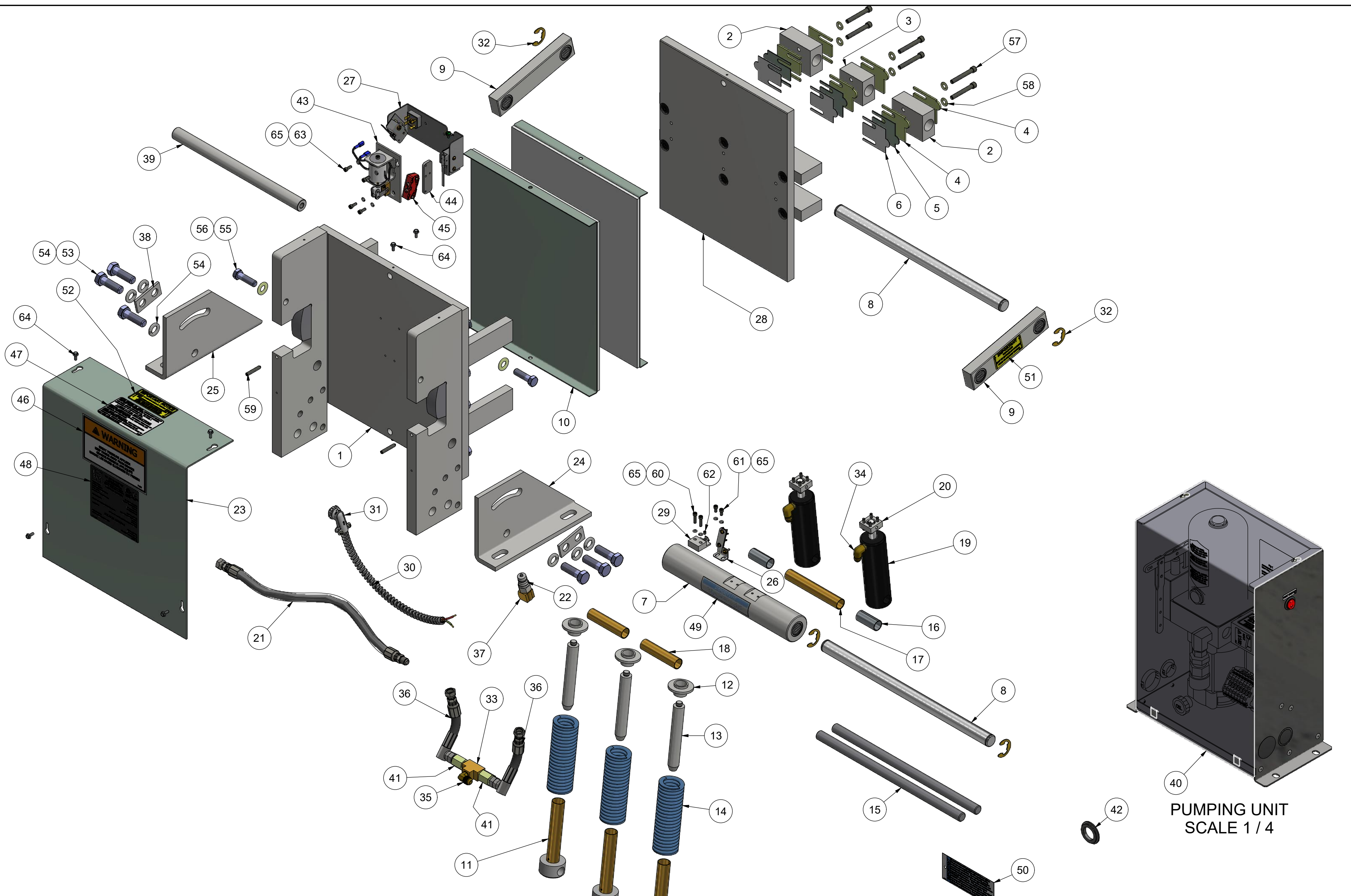
NOTE:

- QTY LISTED FOR ITEMS 4, 5, & 6 ARE STANDARD. ACTUAL QTY MAY VARY WITH ROPE DIAMETER.
- REFERENCE DIMENSIONS SHOWN TO AID IN SETUP AND INSTALL

Weight - Pumping Unit: 29.2 lbmass, Gripper: 259.94 lbmass

| HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |  |  |  |  |  | TITLE                   |           |                 |   |
|---------------------------------------|--|--|--|--|--|-------------------------|-----------|-----------------|---|
|                                       |  |  |  |  |  | "ROPE GRIPPER" ASSEMBLY |           |                 |   |
|                                       |  |  |  |  |  | DRAWN BY                | SCALE     | MATERIAL        | REFERENCE TOL.                                      |
|                                       |  |  |  |  |  | BLG                     | 1 / 4     | SEE PARTS LIST  | ALL DIMENSIONS REFERENCE UNLESS OTHERWISE SPECIFIED |
|                                       |  |  |  |  |  | SHEET SIZE              | DATE      | 626-SPL-RevN-RK |   |
|                                       |  |  |  |  |  | C                       | 5/29/2013 | SHEET 1 OF 2    |   |





PUMPING UNIT  
SCALE 1 / 4

Weight - Pumping Unit: 29.2 lbmass, Gripper: 259.94 lbmass

SEE PREVIOUS PAGE  
FOR REVISIONS

|   |  |  |  |  |  |                                       |              |                            |   |
|---|--|--|--|--|--|---------------------------------------|--------------|----------------------------|---|
|   |  |  |  |  |  | HOLLISTER-WHITNEY<br>ELEVATOR CO. LLC |              |                            |   |
|   |  |  |  |  |  | TITLE                                 |              |                            |   |
|   |  |  |  |  |  | "ROPE GRIPPER" ASSEMBLY               |              |                            |   |
| THIS DRAWING IS SUPPLIED AS A REPRESENTATION OF THE EQUIPMENT<br>HOLLISTER-WHITNEY ELEVATOR CO. LLC ("MANUFACTURER") HAS AGREED TO<br>SUPPLY. SLIGHT ADJUSTMENTS MAY OCCUR DURING MANUFACTURING AND<br>INSTALLATION. ANY MODIFICATIONS NOT APPROVED IN WRITING BY<br>MANUFACTURER MAY AFFECT OPERATION, VOIDS ANY WARRANTY AND<br>RELEASES MANUFACTURER OF ALL LIABILITY.<br>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION<br>THAT CANNOT BE REPRODUCED OR DIVULGED, IN WHOLE OR IN PART, WITHOUT<br>WRITTEN AUTHORIZATION FROM THE MANUFACTURER. |  |  |  |  |  | DRAWN<br>BY<br>BLG                    | SCALE<br>1/5 | MATERIAL<br>SEE PARTS LIST | REFERENCE TOL.<br>ALL DIMENSIONS REFERENCE<br>UNLESS OTHERWISE<br>SPECIFIED |
|   |  |  |  |  |  | SHEET SIZE<br>C                       |              | DATE<br>5/29/2013          | 626-SPL-RevN-RK<br>SHEET 2 OF 2   |

THIRD ANGLE PROJECTION

