

Overhead Concealed Swing Door Systems GT 300-350-8300-8350 Quick Set-Up and Parts Guide

P/N C-00093 Rev 8-10-16

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Associated Manuals Part Numbers:

Overhead Concealed Swing Door Systems 300/350/8300/8350 (P/N 15-10744) Magnum IV Control Wiring and Adjustment Manual (P/N C-00084) Analog Control Wiring and Adjustment Manual (P/N 15-12544-10) Swing Door Owner's Manual (C-00010) for Decal Installation NABCO Price Book; P/N 16-9244-30 (for Sensors, Switches, and Accessories)

WARNING

- Turn OFF all power to the Automatic Door if a Safety System is not working.
- Instruct the Owner to keep all power turned OFF until corrective action can be achieved by a NABCO trained technician. Failure to follow these practices may result in serious consequences.
- NEVER leave a Door operating without all Safety detection systems operational.

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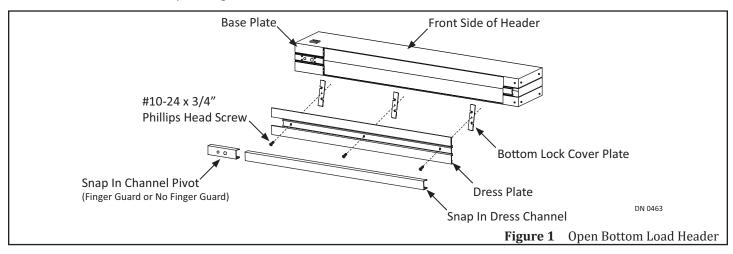
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SECTION 1: ASSEMBLE THE DOOR FRAME

1.1 Prep the Bottom Load Header

FOR SIDE LOAD HEADER SKIP TO SUBSECTION 1.2

- 1. Place Header on flat surface with Bottom facing up. Protect Header from scratches.
- 2. Remove #10-24 x 3/4 inch screws and Dress Plate. Set aside.
- 3. Mark the locations of each Lock Cover Plate to ensure it is reinstalled in the correct position.
- 4. Remove Lock Cover Plates. Set Aside.
- 5. Remove boxes and/or parts bags from inside Header. Set aside.

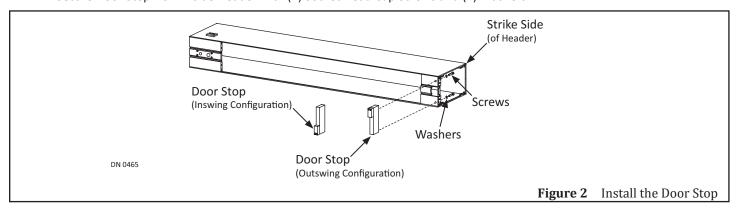


1.1.1 Install the Door Stop (Standard)

FOR PANIC LATCH SKIP TO SUBSECTION 1.1.2

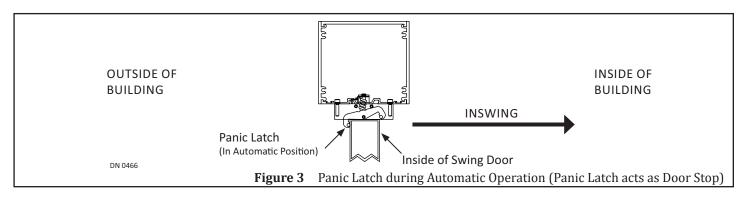
Door Stops are standard and can be installed on an Inswing door and an Outswing door. A Door Stop is used to stop the door from swinging farther back from the fully closed position.

- 1. Obtain the Door Stop.
- 2. Remove (4) Socket Head Cap Screws and (4) Washers. Set aside.
- 3. Go to the bottom, Pivot side of Header. Butt the Door Stop against the underside of the 3-1/4 inch Strike Base.
 - a. For an Outswing, the Stop end of Door Stop must face front side of Header.
 - b. For an Inswing, the Stop end of Door Stop must face back side of Header.
- 4. Secure Door Stop from inside Header with (2) Socket Head Cap Screws and (2) Washers.



1.1.2 Install the Panic Latch (Inswing Doors)

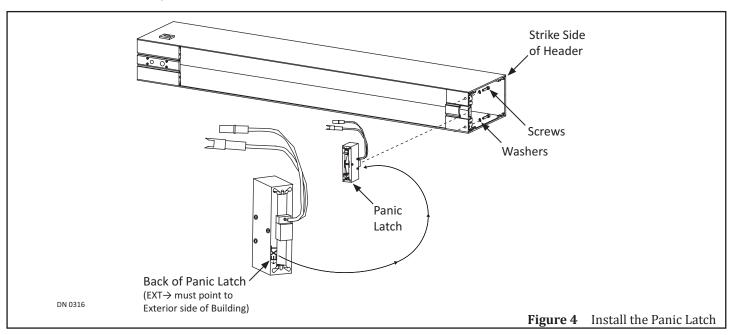
During Automatic Operation, the Inswing door opens to the Interior side of the building/room. The Panic Latch is then used as a Door Stop. The Panic Latch is installed on Inswing doors only.



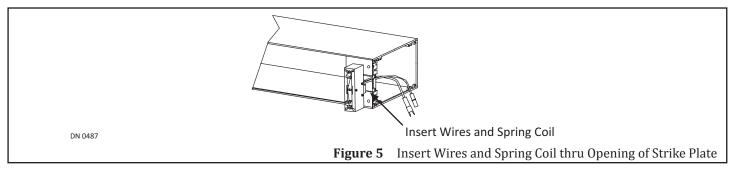
During Emergency Operation, the Inswing door is manually pushed Out to the exterior side of the building/room (not to exceed 50 pounds of pressure; per ANSI code). The Panic Latch flips to allow emergency egress and immediately shuts the Swing door OFF.

Note: For wiring instructions please refer to P/N 15-4572 Panic Breakout Latch Wiring Installation Instructions Manual.

- 1. Obtain the Panic Latch and (1) Decal. Set the Decal aside with all other Decals that were packed within Header.
- 2. Remove (4) Socket Head Cap Screws and (4) Washers. Set aside.
- 3. Turn the Panic Latch so the (EXT→) (exit arrow) points to the Exterior side of the Building.
 - a. Failure to do so, will install the Panic Latch backwards.



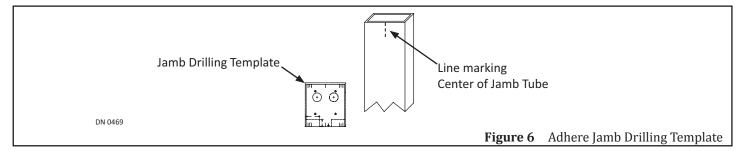
- 4. Go to the bottom, Strike side of Header.
- 5. Insert the Panic Latch wires and spring coil into the opening until the Panic Latch butts up against the Header.



- 6. Secure the Panic Latch from inside the Header with (2) Socket Head Cap Screws and (2) Washers.
 - a. Do Not wire or test the Panic Latch at this time.

1.2 Prep the Jamb Tubes

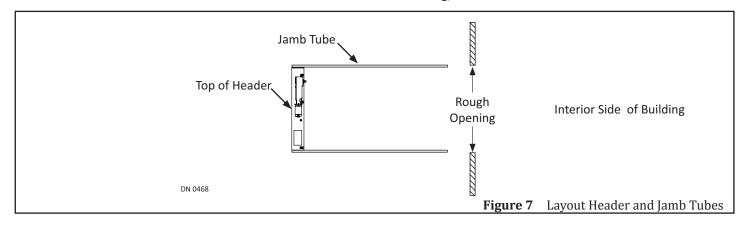
- 1. Measure the full height of existing Swing door.
- 2. Go to the bottom of each Jamb Tube, measure the full height calculation of Swing door plus:
 - > 3/4 inch (19mm); if a Threshold is being installed
 - ▶ 1/4 inch (6.4mm); if a Threshold is not being installed
- 3. Mark the measurement across the inside face of each Jamb Tube.
 - a. It is recommended to use a level for this step.
- 4. Obtain (1) Jamb Drilling Template provided by NABCO.
- 5. Locate the line that was drawn across the inside face of each Jamb Tube. Place the bottom edge of the Jamb Drilling Template directly above that line.
- 6. Line up the center of the Jamb Drilling Template to the previously drawn center mark.
- 7. Adhere the Jamb Drilling Template to each Jamb.
- 8. The Jamb Drilling Template is removable.
 - a. An arrow is clearly marked at the bottom of the Jamb Drilling Template. This arrow must point to the line that was marked across the full width of Jambs.



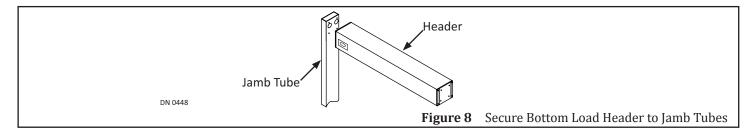
- 9. Drill (4) .391 diameter holes through (4) clearly marked (A)s on the Template. Countersink each screw hole.
- 10. Obtain (4) Rivnuts provided by NABCO. Install (1) Rivnut into each drilled .391 hole.
- 11. Drill (1) 1-1/4 inch diameter hole through (1 of 2) clearly marked (B)s on the Template to allow incoming 120 VAC Power.
 - a. The 120 VAC incoming power must be routed through the Strike Jamb, only.
- 12. Remove the Template from the Strike Jamb, then adhere same Template to the Pivot Jamb. Repeat steps.

1.3 Install the Header to Jamb Tubes

- 1. Determine which Jamb tube is the Pivot Jamb and the Strike Jamb.
 - a. Swing door pivots on side of Pivot Jamb.
 - b. Swing door locks on side of Strike Jamb.
- 2. Position each Jamb tube at both sides of the Header.
 - a. Be sure to orientate the frame in relation to the outside of building/room.



3. Secure Header to both Jamb Tubes with (8) 1/4-20 x 3/4 inch Hex Head Cap Screws and (8) 1/4 inch Star Washers from the Parts bag provided within the Header.

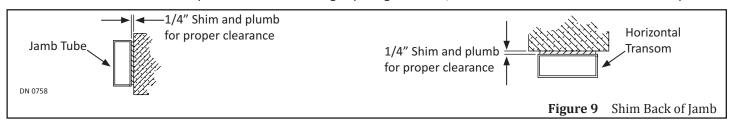


SECTION 2: INSTALL THE FRAME TO BUILDING

1. Lift to position the assembled Frame into the rough opening. Insert all incoming wiring through the 1-1/4 inch hole located on the Strike side of Header.

Note: Incoming 120 VAC Power wires must be pulled through the Strike end of Header for a single Swing door or the middle of Header for a simultaneous pair Swing door. It is recommended to install wires into an Electrical conduit.

2. Plumb Jamb tubes in both planes to ensure the rough opening allows a 1/4 inch clearance. Shim back of Jamb as required.



- 3. Plumb the Header at the top to ensure the rough opening allows a 1/4 inch clearance. Shim top of Header as required.
- Note: It is recommended to countersink holes as required to flush the surface.
- Note: It is recommended to drill tap threads for anchors in a steel or aluminum structure.

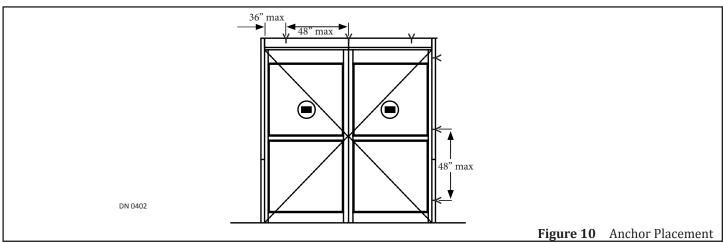
Note: To prevent Header sag, secure the Header in the middle to the top horizontal structural member of the opening. Use of 3/8 inch threaded rod or 1/4 inch bolts are acceptable methods of supporting the center of the header.

2.1 Anchor Placement for Header

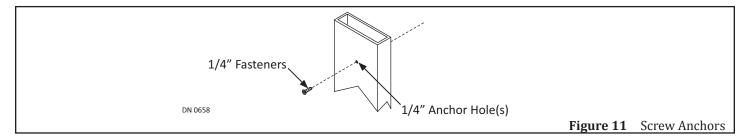
Use 1/4 inch diameter anchors or 3/8 inch threaded rods, with a maximum 48 inches on center. First anchor maximum is 36 inches from each end of the Header. Anchors and Fasteners must be appropriate for the type of structure being fastened into. Anchors and Fasteners are not provided by NABCO.

2.2 Anchor Placement for Jamb Tubes

Use 1/4 inch diameter anchors with a minimum of 3 per Jamb Tube, maximum is 48 inches on center. Drill 1/4 inch diameter holes in the face of Jamb and then countersink each hole. Anchors and Fasteners must be appropriate for the type of structure being fastened into. Anchors and Fasteners are not provided by NABCO.



4. Secure the Frame with Fasteners not provided by NABCO.

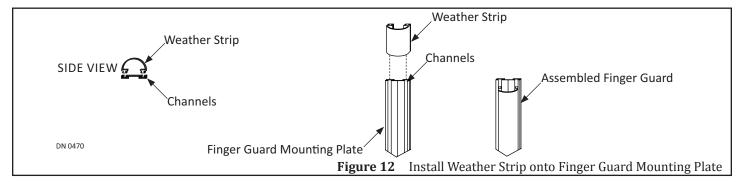


2.3 Install the Finger Guard

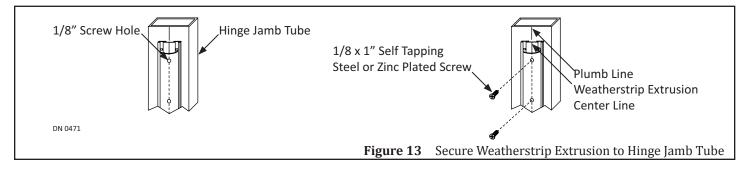
Note: Screws must be appropriate for the type of structure being fastened into. Screws are not provided by NABCO.

Note: Do not overtighten screws to prevent deforming Weatherstrip Extrusion. Ensure each screw is flush to the Jamb tube.

- 1. Go to the top of the Pivot Jamb tube, at the center, drop a Plumb Line to the floor.
- 2. Mark the Center line on the inside face of the Pivot Jamb Tube. It is recommended to use a level.
- 1. Obtain the Finger Guard Mounting Plate.
- 2. Insert the Weather Strip into both channels located on the Finger Guard Mounting Plate.
 - a. Sprayed silicone (not included) inside the Channels may ease the insertion of the Weather Strip.



3. Line up the Center Notch located down the full length of the Finger Guard Mounting Plate, with the Center Mark located on the Pivot Jamb Tube. It is recommended to use a level.

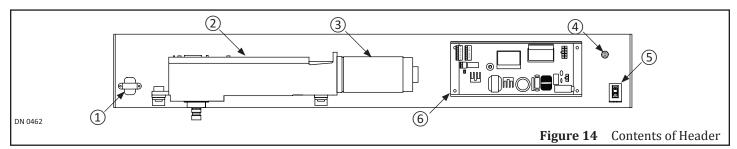


- 4. Drill (3-4) 1/4 inch evenly spaced screw holes down the Finger Guard Assembly.
 - a. Each screw hole must go through the Weather Strip, Mounting Plate and the Pivot Jamb Tube.
- 5. Secure the Finger Guard Mounting Plate onto the Pivot Jamb with 1/4 x 1 inch self tapping Screws (zinc or steel plated).

SECTION 3: INSTALL BOTTOM LOAD COMPONENTS

FOR SIDE LOAD HEADER SKIP TO SECTION 4

Note: Location of Contents within Header are subject to change according to Swing door specifications.

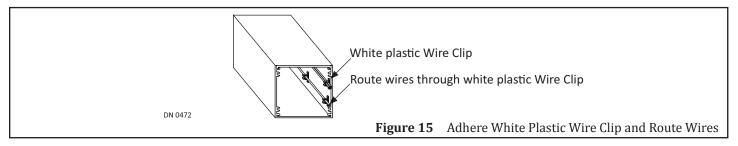


- 1. Transformer (Optional)
- 2. Motor Operator
- 3. Control

- 4. Rocker Switch
- 5. Multi-Module (Optional)
- Ground Screw

3.1 Secure Incoming Wires

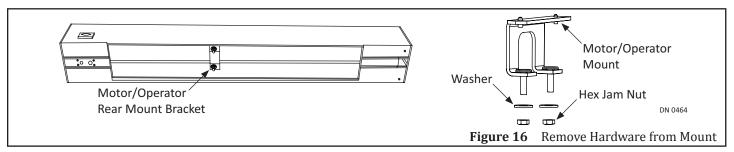
- 1. Obtain (self sticking) white plastic Wire Clips provided by NABCO.
- 2. Adhere each Wire Clip to sides of Header. Insert wiring (as deemed necessary).
 - a. 120 VAC Power wires must be routed separate from other wiring, adhere those Wire Clips inside the Header, near the top to prevent pinching.



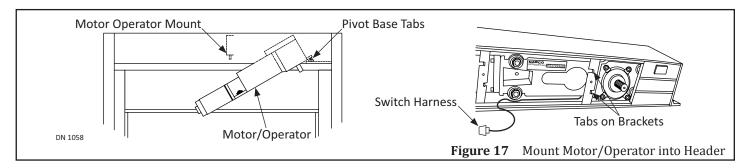
Note: If 120 VAC Power wires must be installed from Hinge Side of Header, ensure that wires are securely clipped, to prevent pinching of the wires during the Motor/Operator installation process.

3.2 Install Motor/Operator into Header

- 1. Go to (inside) top of Header. Locate the Rear Mount Bracket.
- 2. With a 9/16 inch Deep Well Socket and Ratchet, remove (2) 3/8-16 Hex Jam Nuts and (2) Washers from (2) studs that extend downward from the Rear Mount Bracket. Set aside.
- 3. Hold the Front end of Motor/Operator at an upward angle to slide Front Mount onto (2) Pivot Base Tabs located inside of Header.



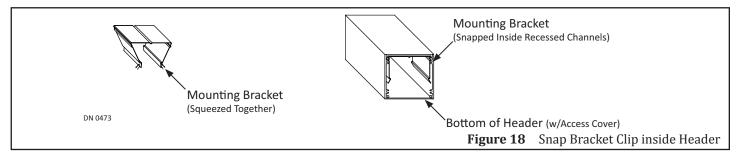
- 4. Lift the rear of the Motor Operator up onto (2) studs extending downward.
 - a. Ensure the Switch Harness is tucked between the back wall of Header and above the Mounting Bracket.
- 5. Secure the Motor/Operator with (2) 3/8-16 inch Hex Jam Nuts and (2) 7/16 x 1 inch Washers.
 - a. It is important not to pinch any wiring during the Motor/Operator installation.



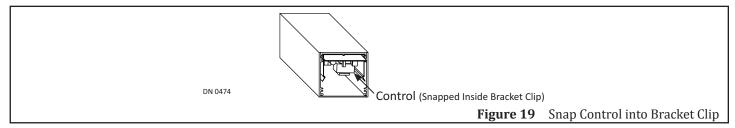
3.3 Install the Control

It may be necessary to mount a Soft Starter Capacitor on the Operator prior to installing the Analog Control. For detailed information, please refer to the "Analog Control Wiring and Adjustment Manual; P/N 15-10745".

- 1. Obtain the Bracket Clip.
- 2. Squeeze (2) open ends of the Bracket Clip together until both protruding channels are successfully snapped inside each recessed channel.
- 3. Snap the Bracket Clip within the recessed channels approximately 4-5 inches away from where the Motor/Operator will be installed.



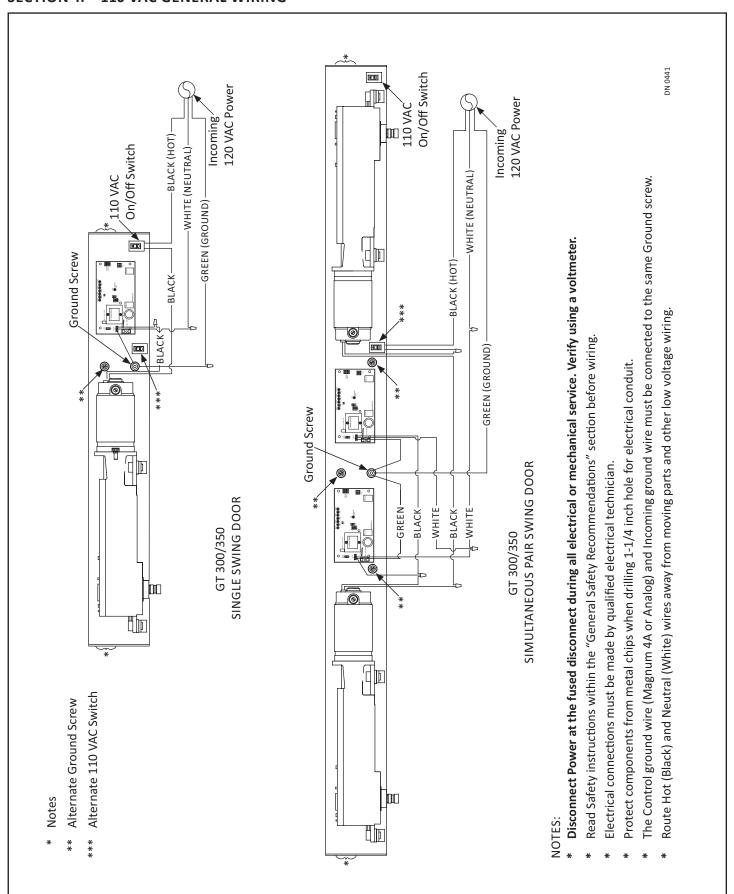
- 4. Snap the Control inside the Bracket Clip.
 - a. Face of Control must face down (towards bottom opening of Header).



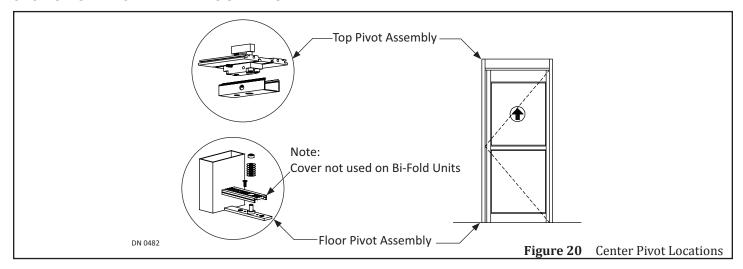
3.4 Install Optional Components

Install all other optional components by following installation and wiring instructions provided with each component.

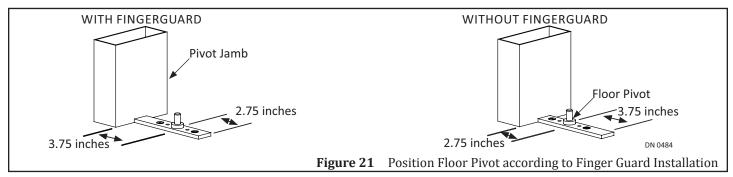
SECTION 4: 110 VAC GENERAL WIRING



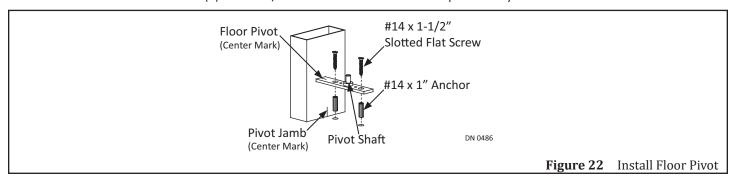
SECTION 5: INSTALL THE FLOOR PIVOT



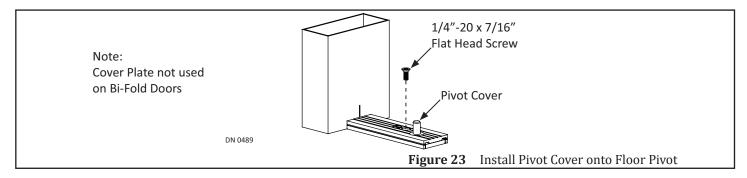
- 1. Obtain the Floor Pivot Assembly. The Pivot Shaft is not centered on the Floor Pivot. One end is used:
 - ▶ With the Finger Guard; so the Pivot Shaft measures 3.75 inches away from the Pivot Jamb.
 - ▶ Without the Finger Guard; so the Pivot Shaft measures 2.75 inches away from the Pivot Jamb.



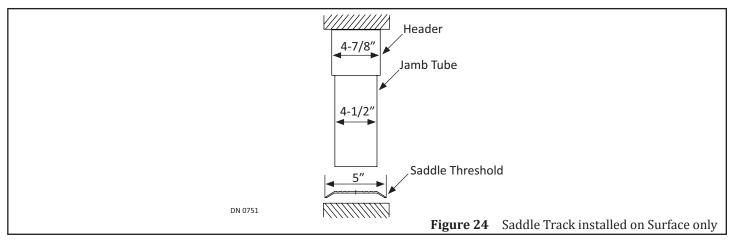
- 2. Measure and mark the center of the Pivot Jamb and the Floor Pivot.
- 3. Butt the center mark of the Floor Pivot up against the center mark of the Pivot Jamb.
- 4. Align both Pivot Shafts. Drop a Plumb Line from the Top Pivot Shaft to the Floor Pivot Shaft. The Plumb Line must drop down the center.
- 5. Use the Floor Pivot as a template to mark and drill (2) holes for #14 x 1 inch Blue anchors provided by NABCO.
- 6. Insert (2) #14 x 1" Blue anchors into each anchor hole.
- 7. Secure the Floor Pivot with (2) #14 x 1-1/2 inch Slotted Flat Head Screws provided by NABCO.



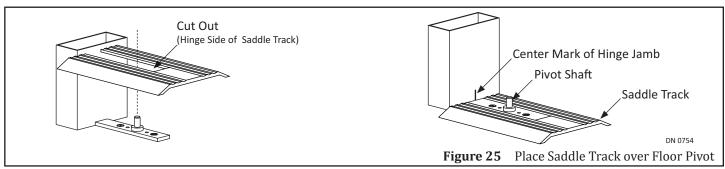
8. Secure the Pivot Cover onto the Floor Pivot with (1) 1/2-20 x 7/16 inch Flat Head Machine Screw.



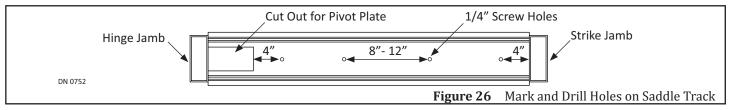
SECTION 6: INSTALL THE SADDLE THRESHOLD



1. Obtain the Saddle Threshold. The Pivot Side of the Saddle Threshold has a cut out for the Pivot Plate. Place the Pivot Side of the Saddle Threshold over the Floor Pivot Assembly. Ensure the Saddle Track is centered to the Strike Jamb and square.

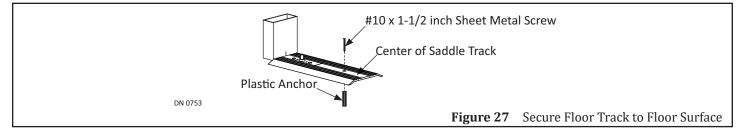


- 2. Square and center the Saddle Threshold to the Strike Jamb.
- 3. Obtain $#10 \times 1-1/2$ inch sheet metal screws and anchors (Not provided by NABCO).
 - a. The number of screws and anchors depends upon the length of the Saddle Threshold.
- 4. In the center of the Saddle Threshold, approximately 4 inches from the cutout for the Pivot Plate, mark (1) screw hole.
- 5. In the center of the Saddle Threshold, approximately 4 inches from the Strike Jamb, mark (1) screw hole.



- 6. Mark remaining screw holes 8 12 inches apart and evenly spaced.
- 7. Drill screw holes into the floor no less than 1-1/2 inch deep for #14 x 1" anchors.
- 8. Remove the Saddle Threshold. Set aside.
- 9. Insert #14 x 1" plastic anchors into the drilled screw holes

- 10. Secure the Floor Track with #10 x 1-1/2 inch sheet metal screws (Not provided by NABCO).
 - a. Do not overtighten screws to prevent deforming the Saddle Threshold.

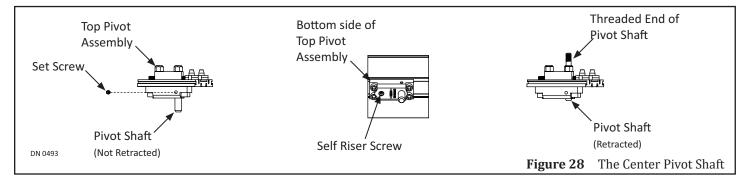


SECTION 7: INSTALL THE SWING DOOR

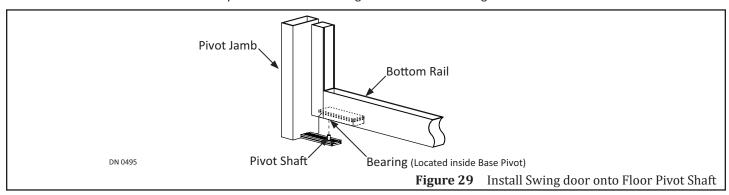
7.1 Install the NABCO Swing Door

FOR SWING DOORS NOT PROVIDED BY NABCO SKIP TO SUBSECTION 7.2

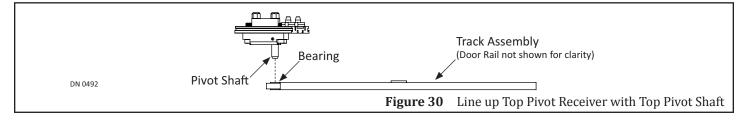
- 1. Go to the Pivot side of Header. Loosen the Set Screw located directly above the Pivot Shaft.
- 2. Go to the Self Riser screw located underneath the top Pivot.
- 3. Turn the Self Riser Screw counter-clockwise to retract the Center Pivot Shaft.



4. Go to the bottom Pivot Assembly. Locate the Ball Bearing. Insert the Ball Bearing onto the Floor Pivot Shaft.

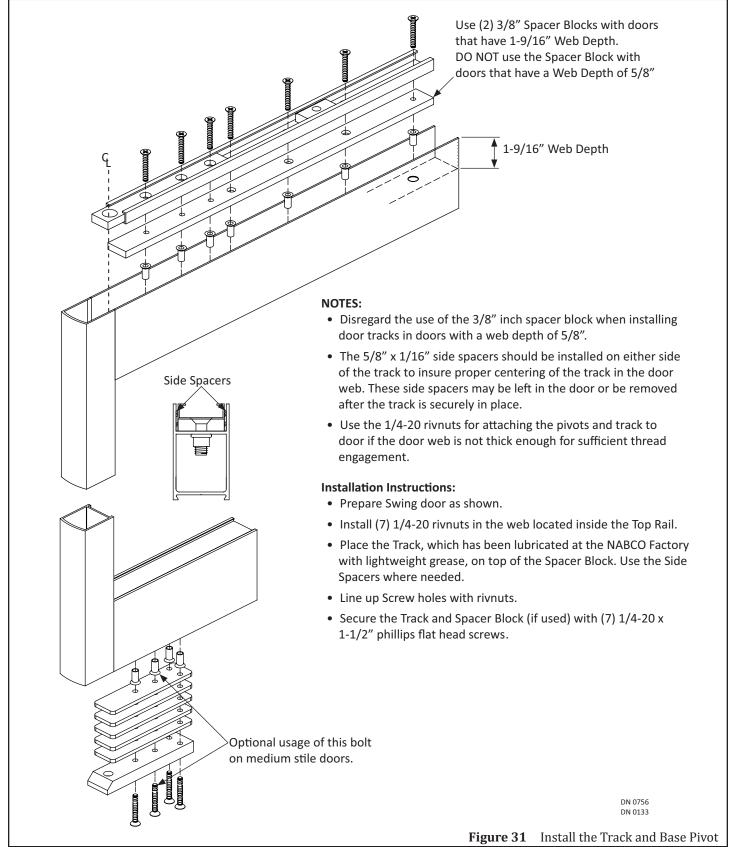


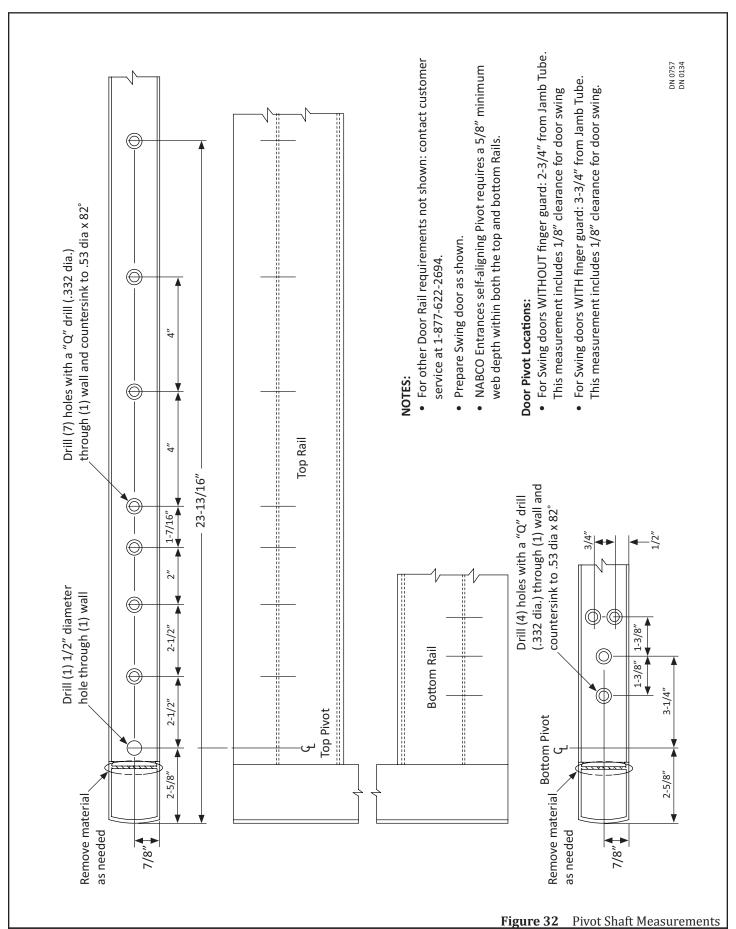
- 5. Go to the Top Rail. Locate the Track Assembly.
- 6. With a flat head screwdriver, turn the Self Riser Screw clockwise until the Riser Bar is all the way down into the Bearing.
 - a. Tighten the Riser Bar tight to the base Pivot Plate to ensure the Pivot Shaft is fully engaged inside the Bushing.



7.2 Install the Swing Door (Not provided by NABCO)

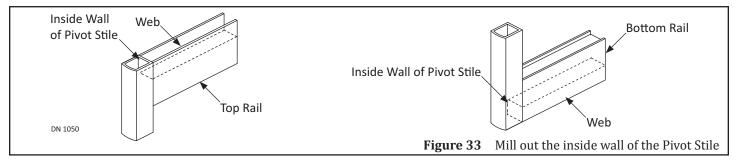
FOR NABCO SWING DOORS SKIP TO SECTION 8





7.2.1 Prep the Door Rail

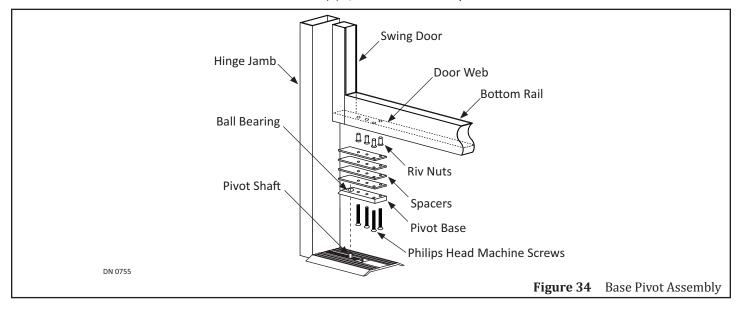
The inside wall of the Pivot Stile may butt up against the Door Rail (at the very top). If the Track needs to extend past the Door Rail, the inside wall will need to be milled out to match the width and depth of the Web. This may need to be done to the top Door Rail and/or the bottom Door Rail.



7.2.2 Install the Base Pivot into the Bottom Door Rail

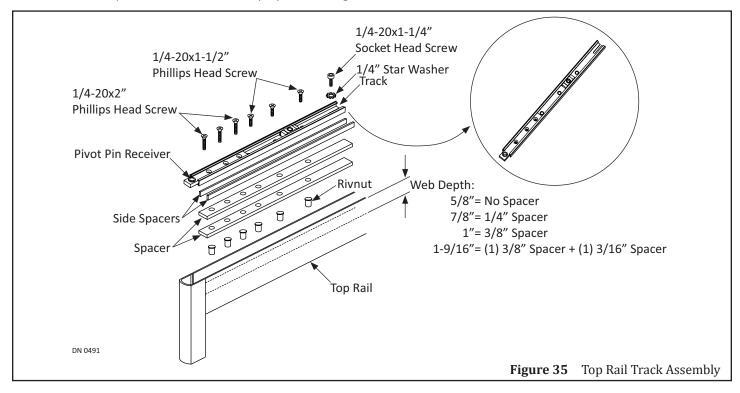
Note: Please refer to Figure 32 for detailed Base Pivot installation measurements.

- 1. Lay the Swing door onto a flat surface that is sturdy enough to keep the door stable, and high enough to see while drilling.
- 2. Go to the Bottom Rail on the Pivot side of Swing Door. Measure to find the center inside the Web. Mark a horizontal line all the way across the full width of the Web face.
- 3. From the outer edge of the Pivot Stile measure:
 - With the Finger Guard; 3-5/8 inches.
 - Without the Finger Guard; 2-5/8 inches.
- 4. Mark a vertical line across the horizontal line onto the Web face. This is the center of the Bearing.
- 5. From the center of the Bearing mark, measure another 3-1/4 inches. Mark a vertical line across the horizontal line onto the Web face. This is the center of the second .322 diameter anchor hole.
- 6. Obtain (1) Spacer. Center the Spacer inside the Web. Align the second screw hole to the second anchor hole marked onto the Web face.
- 7. Use the Spacer as a template to mark the remaining (3) anchor holes. Ensure the Spacer is aligned and centered. Drill (4) .322 anchor holes.
- 8. Countersink the (4) anchor holes to .53 diameter x 82 degrees.
- 9. Insert (4) 1/4-20 tapped Rivnuts into the (4) .322 anchor holes.
- 10. Obtain the Base Pivot assembly. Place (1-4) Spacers on the bottom side of the Pivot Base.
 - a. The Gel filled Bearing is located on the top side of the Pivot Base.
- 11. Insert the Pivot Base assembly up into the Web. Add/subtract spacers until the Base Pivot is flush to the outside edge of the Door Rail. Secure the Pivot Base to the Web with (4) 1/4 20 x 2 inch Phillips Head Machine Screws.

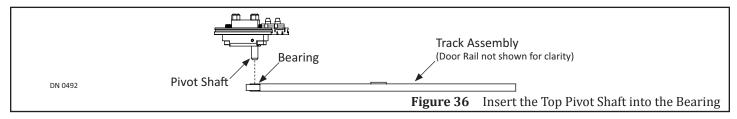


7.2.3 Partially Install the Track into the Top Door Rail

- 1. Lay the Swing door on a flat surface that is sturdy enough to keep the door stable, and high enough to see while drilling.
 - a. Protect Swing door from scratches.
- 2. Please refer to SECTION 3 for detailed Track installation measurements.
- 3. Go to the Top Rail on the Pivot side of Swing Door. Measure to find the center inside the Web. Mark a horizontal line all the way across the full width of the Web face.
- 4. From the outer edge of the Pivot Stile measure 23-13/16 inches. Mark a vertical line across the horizontal line onto the Web Face. This is the center of (1) .322 anchor hole.
- 5. Drill (1) .322 anchor hole.
- 6. Countersink the anchor hole to .53 diameter x 82 degrees.
 - a. It is recommended to drill tap threads for anchors in a steel or aluminum structure.
- 7. Insert (1) 1/4-20 tapped Rivnut into the .322 anchor hole.
- 8. Obtain the Track Assembly.
- 9. Place (1) Spacer Block inside the Web according to the Web Depth:
 - ▶ 5/8 inch deep: No Spacer Block is required
 - ▶ 7/8 inch deep: Insert 1/4 inch Spacer Block
 - ▶ 1 inch deep: Insert 3/8 inch Spacer Block
 - ▶ 1-9/16 inch deep: Insert (2) 3/8 inch Spacer Blocks
- 10. Place (1) Track on top of the Spacer Block (or the Web if a Spacer Block is not used).
 - a. Ensure the Pivot Pin Receiver is on the Pivot Side of the Web.
- 11. Place (2) 5/8 " x 1/16" Side Spacers on either side of the Track.
 - a. Side Spacers are used to ensure proper centering of Track.

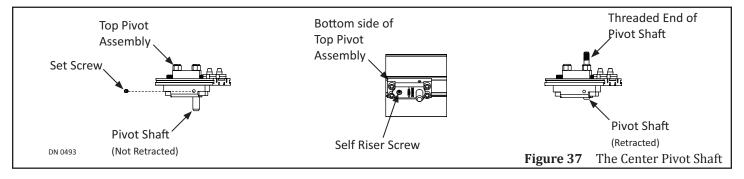


- 12. From the outer edge of the Pivot Stile measure:
 - ▶ With the Finger Guard; 3-5/8 inches.
 - ▶ Without the Finger Guard; 2-5/8 inches
- 13. Slide the Track towards the Pivot Stile or away from the Pivot Stile until the Bearing is centered to that measurement.
- 14. Locate the Slot at the end of the Track. Locate the Pre-drilled screw hole.
- 15. Secure the Track to the Web with (1) 1/4 inch Star Washer and (1) 1/4-20x1-1/4 inch Socket Head screw. Tighten but do not overtighten. The Socket Head screw may need to be loosened one more time.

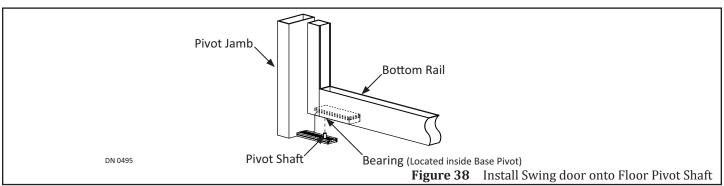


7.2.4 Temporily Install the Swing Door

- 1. Go to the Pivot side of Header. Locate the Pivot Assembly.
- 2. Loosen the Set Screw located directly above the Pivot Shaft.
- 3. Go to the Self Riser screw located underneath the Pivot Assembly.
- Turn the Self Riser Screw counter-clockwise to retract the Pivot Shaft.



5. Go to the bottom Door Rail. Slide the Bearing onto the Pivot Shaft.



- 6. Go to the top Door Rail. Turn the Self Riser Screw clockwise to insert the Pivot Shaft into the Bearing.
- 7. With a flat head screwdriver, turn the Self Riser Screw clockwise until the Pivot Shaft is inserted all the way down into the Bearing.
- 8. Slide the Track Assembly back and forth until the Swing door is properly aligned.
 - a. It is recommended to use a Level.
- 9. Tighten the Set Screw, do not overtighten. The Set Screw may have to be loosened one more time.

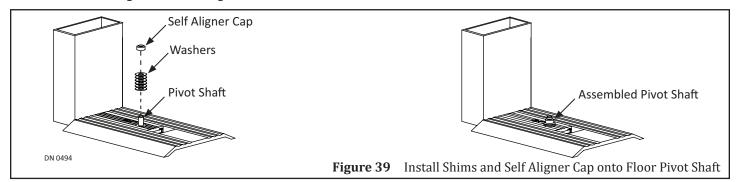
7.2.5 Align the Swing Door

- 1. Fully open the Swing door.
- 2. Go to the Track Assembly located inside the Top Rail.
- 3. Loosen (1) 1/4-20x1-1/4 inch Socket Head Screw.
- 4. Slide the Track Assembly back and forth until the Swing door is properly aligned.
 - a. It is recommended to use a Level.
- 5. Tighten the Socket Head Screw but do not tighten all the way down.
 - a. The Socket Head Cap Screw may need to be loosened one more time.

7.2.6 Adjust the Swing Door\Height

- 1. Measure for proper clearance:
 - ▶ Top of Swing door must be: 1/8 inch to 1/16 inch from Header.
 - ▶ Bottom of Swing door must be: 3/16 inch to 1/16 inch from Floor (or threshold if it is installed).

- 2. Remove the Swing door.
- 3. Slide (1-6) Spacer Shims onto the Pivot Shaft to adjust the Swing door for proper clearance.
- 4. Slide (1) Self Aligner Cap on top of the (1-6) Spacer Shims.
- Reinstall the Swing door.
- 6. Check the alignment according to Subsection 7.2.5.



7.2.7 Permanently Install the Track

- 1. Fully open the Swing door.
- 2. Use the Track as a template. Mark a vertical line across the horizontal line inside each pre-drilled screw hole. Each mark is the center of (6) .322 anchor holes.
- 3. Remove the Swing door.
- 4. Lay the Swing door on a flat surface that is sturdy enough to keep the door stable, and high enough to see while drilling.
 - a. Protect Swing door from scratches.
- 5. Drill (6) .322 anchor holes.
- 6. Countersink the anchor hole to .53 diameter x 82 degrees.
 - a. It is recommended to drill tap threads for anchors in a steel or aluminum structure.
- 7. Insert (6) 1/4-20 tapped Rivnut into each .322 anchor hole.
- 8. Secure the Track to the Web with (3) 1/4-20x2 inch Socket Head screws and (3) 1/4-20x1-1/2 inch Phillips Head screws. Tighten but do not overtighten.

7.2.8 Permanently Install the Swing Door

1. Follow instructions within subsection 7.2.4.

SECTION 8: INSTALL THE SWING ARM

8.1 Set Pre-Load

WARNING

Proper Preload is critical for the Control/Operator to open/close the Swing Door correctly.

CAUTION

Power must be turned OFF during the Swing Arm installation.

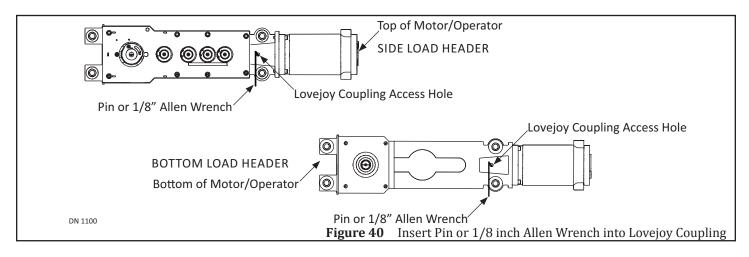
DANGER

Ensure the Motor/Operator is plugged into the Controller.

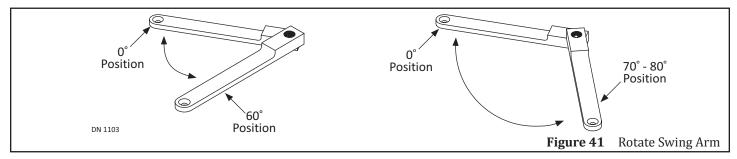
- 1. Ensure the Spring on the Operator is in the Unwound (0°) position.
 - a. The Motor/Operator is shipped in the Unwound (0°) position.
- 2. Obtain (1) Pin or 1/8 inch Allen Wrench.
- 3. Go underneath the Header. Locate the Operator Spindle.
- 4. Slide the Swing Arm onto the Spindle.
- 5. In order to achieve correct Back Check and Latch Check positions, the Spring on the Operator must be wound up approximately 130 140 degrees. With a firm grip, from the Unwound (0 degree) position, rotate the Swing Arm approximately 60 degrees: Clockwise for Left handing; Counterclockwise for Right Handing.
- 6. While holding the Swing Arm in that position, insert (1) Pin or 1/8 inch Allen Wrench into the Lovejoy Coupling Access Hole.
 - a. It may be necessary to ease the Swing Arm back until the Pin or 1/8 inch Allen Wrench engages the Lovejoy Coupling.

DANGER

Do not allow the Pin or 1/8 inch Allen Wrench to drop out of the Lovejoy Coupling Access hole at any time during installation. The Swing Arm will spring back to its original location and can result in personal injury or damage.

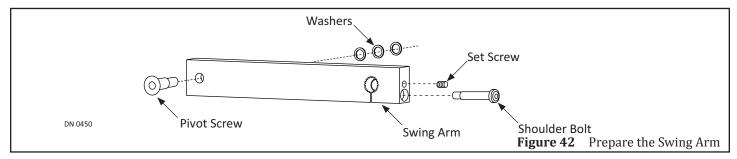


- 7. Remove the Swing Arm from the Operator Spindle.
 - a. The Pin or 1/8 inch Allen Wrench will keep the Spring from unwinding.
- 8. Go to the 0 degree position again, slide the Swing Arm back onto the Operator Spindle. With a firm grip, slightly remove pressure from the Spring to allow removal of the Allen wrench. Continue to rotate the Swing Arm an additional 70-80 degrees. Re-insert the Allen wrench and then remove the Swing Arm.
 - a. The Spring on the Operator should be wound approximately 130 140 degrees.

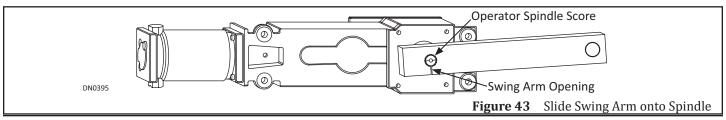


8.2 Secure the Swing Arm

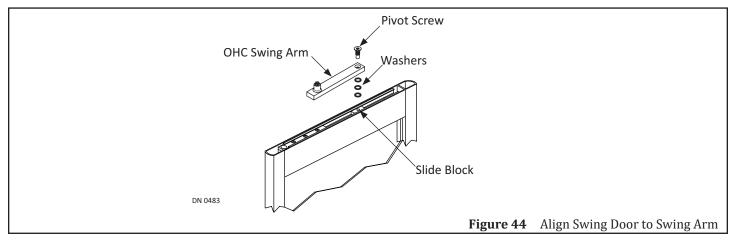
- 1. Obtain the Swing Arm. With an 5/16 inch Allen Wrench, remove the Pivot Screw and (3) washers. Set aside.
- 2. Remove the Set Screw to loosen the Shoulder Bolt with an 3/16 inch Allen Wrench. Set aside.



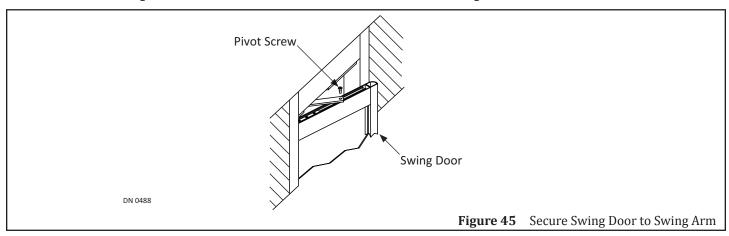
- 3. Fully close the Swing door. Go to the Output Spindle located at the bottom of the Operator.
 - a. A Score has been etched onto the bottom of Output Spindle.
- 4. Line up the Opening located on the bottom of the Swing Arm so it is perpendicular to the Spindle Score. Slide the Swing Arm onto the Spindle.



- 5. Obtain the Swing Arm's Pivot Screw and (3) Washers that were set aside during Pre-Load.
- 6. Open the Swing Door to align the Top Slide Block with the Pivot Screw hole (located on free end of Swing Arm).
- 7. Check to see how many Washers will be necessary to install between the Swing Arm and the Swing door.
 - 3 for 3/16 inch Clearance Door
 - 2 for 1/8 inch Clearance Door
 - ▶ 1 for 1/16 inch Clearance Door
- 8. Align Washers on top of the hole located on the Top Slide Block. Hold washers in place.



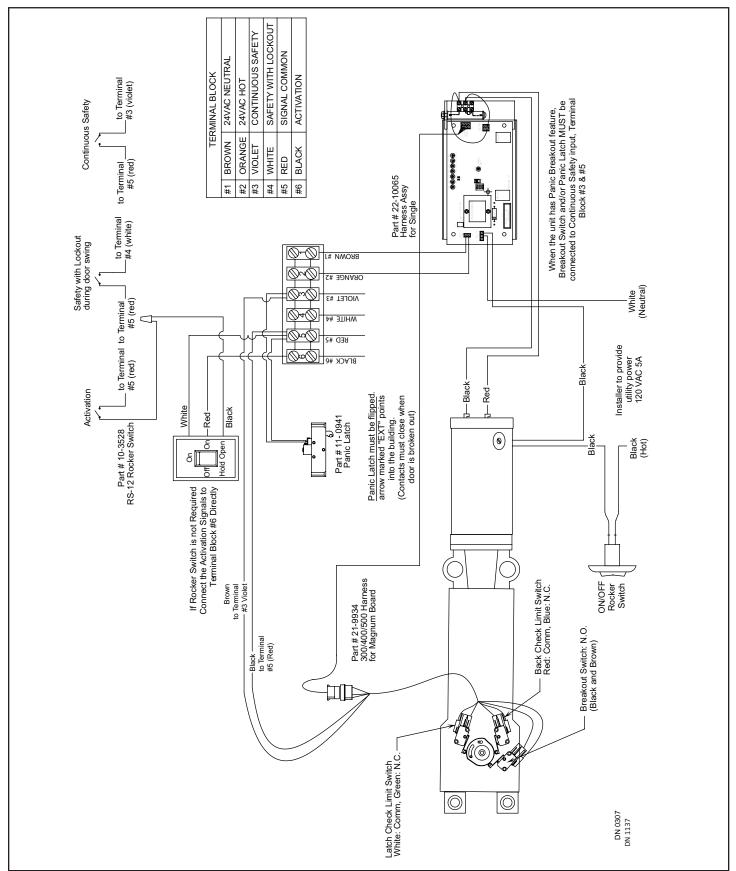
- 9. Align the Slide Block so it is aligned with the Pivot Screw hole again.
- 10. Secure the Swing Arm to the Slide Block with the Pivot Screw. Do not to overtighten Pivot Screw.



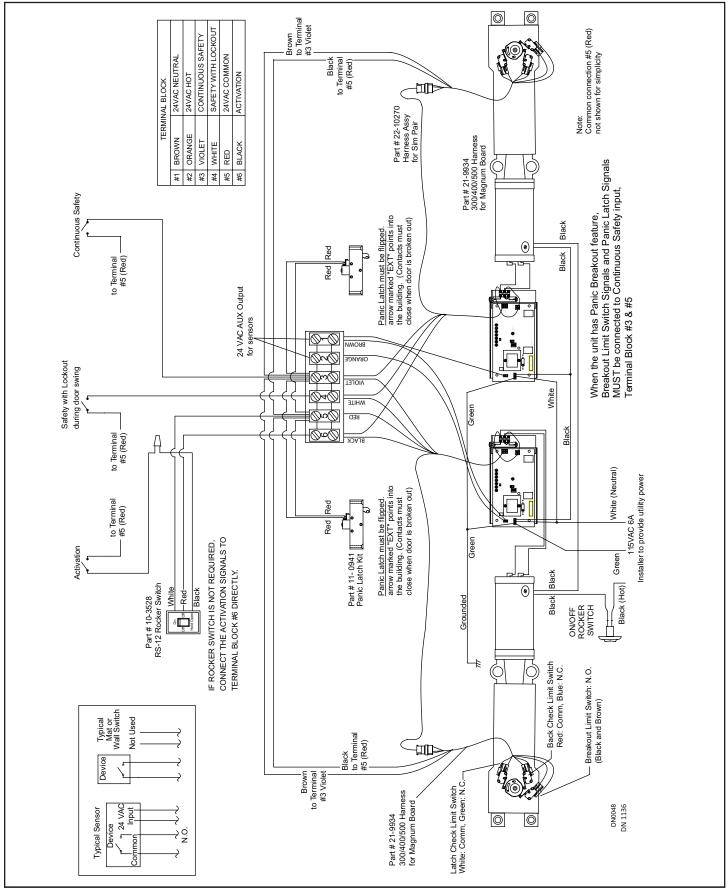
- 11. Secure the Swing Arm by reinstalling the Set Screw and tightening both the Shoulder Bolt plus Set Screw with an 5/16 inch Allen Wrench.
- 12. Remove the 1/8 inch Allen Wrench or similar tool from the Lovejoy Coupling Access hole.
 - a. The Swing door will close.
- 13. Go to the Rocker Switch. Flip the switch to ON.
 - a. This will activate the Swing door.
- 14. Go the Magnum 4A Control.
 - 1. When the Swing door opens, watch the Green LED go from Blinking Fast on opening, then Solid in Back Check to full open.
 - 2. When the Swing door closes, watch the Green LED go from Solid, to Flashing slowly then OFF for Latch Check (approximately 10° closed).

SECTION 9: MAGNUM GENERAL WIRING

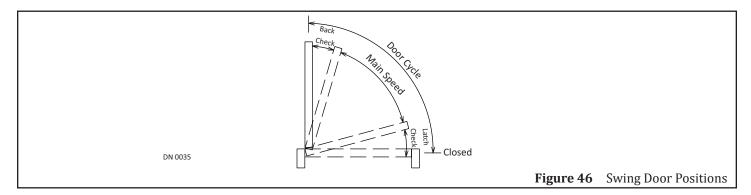
9.1 GT-300-350 Single Swing Door



9.2 GT-300-350 Simultaneous Pair Swing Door



SECTION 10: TEST THE PRE-LOAD



| Position Description | | |
|---|---|--|
| Opening | Opening Range from fully closed to 10° from fully open. | |
| Back Check 10° from fully open to fully open. | | |
| Closing Range from fully open to 10° from fully closed. | | |
| Latch Check 10° from fully closed to fully closed. | | |

- 1. Turn Power ON. Open the Swing Door.
 - a. Swing door should slow down at 75° 80° open.
 - b. If Swing door stops at any other degree, Back Check needs to be adjusted.
- 2. Close the Swing Door.
 - a. Swing door should slow down at 75° 80° close.
 - b. If Swing door slows down at any other degree, Latch Check needs to be adjusted.

SECTION 11: ADJUSTMENTS

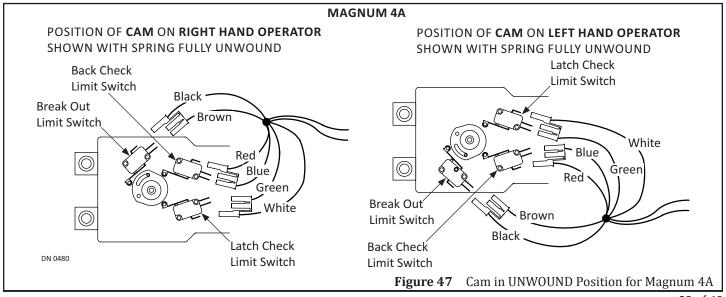
11.1 Pre-Load Adjustments

Note: Adjustments to the Cam Assembly is rarely necessary. It is recommended to adjust the Cams Assembly as a last resort.

Note: It is recommended to obtain one of the following Manuals to use as reference:

- ► Magnum 4A Manual; 15-10682
- ► Analog Control Manual; 15-10745

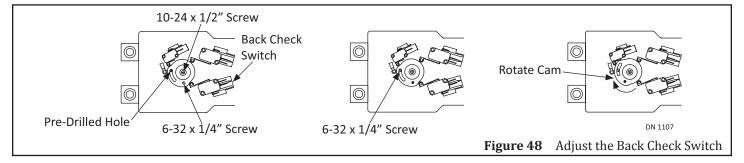
The Cam Assembly is preset at the NABCO factory to activate Back Check/Latch Check at 90 degrees with the Operator Spring set in the UNWOUND position.



| LEFT HAND | OPERATOR | RIGHT HANI | O OPERATOR |
|--|------------|--------------------------|----------------------|
| MAGNUM | CONTROL | MAGNUM | CONTROL |
| Latch Check Switch Wires White & Green | | Back Check Switch Wires | Red & Blue |
| Back Check Switch Wires | Red & Blue | Latch Check Switch Wires | White & Green |
| LEFT HAND | OPERATOR | RIGHT HANI | O OPERATOR |
| ANALOG | CONTROL | ANALOG (| CONTROL |
| Latch Check Switch Wires Orange & Brown | | Back Check Switch Wires | Yellow, White & Blue |
| Back Check Switch Wires Yellow, White & Blue | | Latch Check Switch Wires | Orange & Brown |

11.1.1 Rotate the Cam for Back Check (Bottom Load Units)

- 1. Go to the top of Header. Remove to the Cover used to protect the access hole located directly above the Cam Assembly.
- 2. Go inside the Header. Remove the Cover used to protect the Cam Assembly. Set Aside.
- 3. Remove the 6-32 x 1/4 inch screw.
- 4. Go to the c-shaped slot located to the Left or Right of the 6-32 x 1/4 inch screw. Locate (1) pre-drilled hole.
- 5. Insert the 6-32 x 1/4 inch screw inside the pre-drilled hole.
- 6. Tighten, but only so the 6-32 x 1/4 inch screw does not fall out of the Slot.
- 7. Go to the middle of the Cam. Loosen the 10-24 x 1/2 inch screw.
- 8. Rotate the Cam until the appropriate Back Check position has been achieved.



9. Tighten down both the 6-32 x 1/4 inch screw and 10-24 x 1/2 inch screw. Replace both Covers.

11.1.2 Side Load Units

- 1. Go inside the Header. The Cam Assembly can be adjusted from the side.
 - a. The Switch Assembly Cover is not installed on a Side Load Header.
- 2. Remove the 6-32 x 1/4 inch screw with a 1/4 inch open end wrench. Please see Figure 17.
- 3. Go to the C-shaped slot located to the Left or Right of the 6-32 x 1/4 inch screw. Locate (1) pre-drilled hole.
- 4. Insert the 6-32 x 1/4 inch screw inside the pre-drilled hole.
- 5. Tighten, but only so the $6-32 \times 1/4$ inch screw does not fall out of the Slot.
- 6. Go to the middle of the Cam. Loosen the 10-24 x 1/2 inch screw with a 5/16 inch box or open end wrench.
- 7. Rotate the Cam until the appropriate Back Check position has been achieved.
- 8. Tighten down both the $6-32 \times 1/4$ inch screw and $10-24 \times 1/2$ inch screw.

11.2 Adjust the Swing Arm for Latch Check

Latch Check positions can not be adjusted by rotating the Cam. Adjustments must be accomplished by removing, and then sliding the Swing Arm back onto the Operator Spindle to the left or right of the last position.

a. (1) Notch is 18 degrees on Door Position.

11.3 Magnum Control Adjustments

Before adjusting speeds:

- Set the Current Limit to maximum
- Adjust the Open-Close-Check speeds
- ► Adjust current limit to the proper level

 Table 1
 Dip Switch Information

| Dip Switch | ON Position | OFF Position |
|------------|----------------------|------------------------|
| 1 | Not Used | Not Used |
| 2 | Normally Open Safely | Normally Closed Safely |
| 3 | Push-N-Go Inactive | Push-N-Go Active |
| 4 | Timer Mode | Sequential Mode |

 Table 2
 Potentiometers and Functions

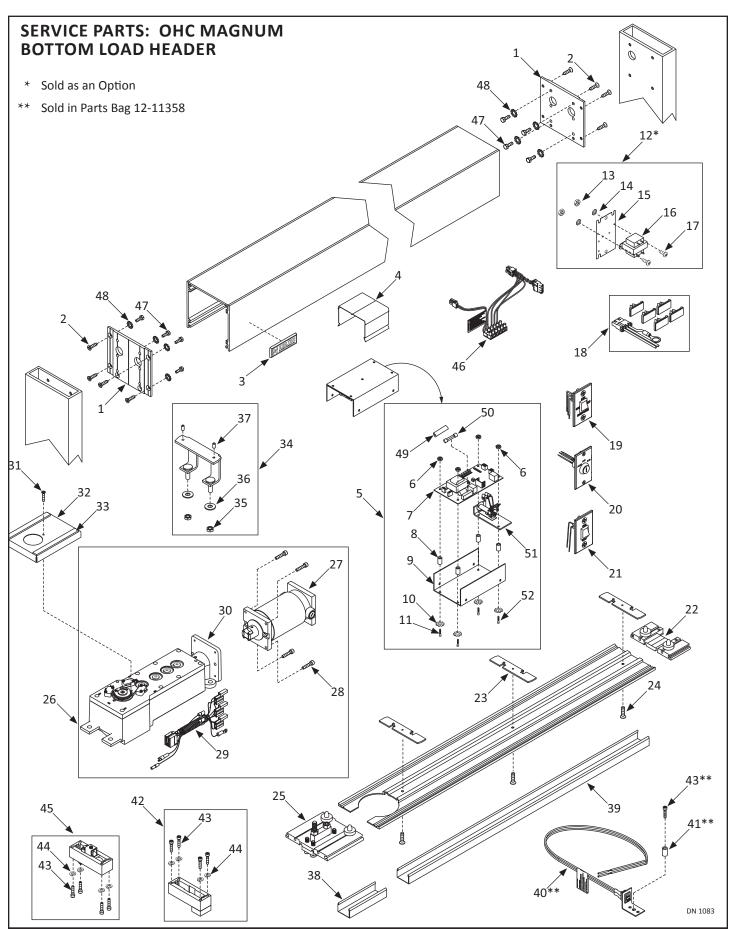
| Potentiometer | Function | |
|---------------|---|--|
| STOP | Adjusts how door reacts to continuous safety input (terminal # 3) during Opening. Counterclockwise = door slowly closes, Clockwise = door creeps open For Magnum 4A only: After 8 seconds of the door being held open, motor voltage is lowered to reduce stress on motor and control. "stop" will adjust this reduced voltage. | |
| OPEN | Adjusts opening speed. Clockwise = Faster | |
| ВСНК | Adjusts Back Check speed. Clockwise = Faster | |
| TDAS | Adjusts how long door remains open after loss of activation signal. Clockwise = Longer | |
| TDPG | Adjusts how long door remains open after Push-N-Go. Clockwise = Longer | |
| LCHK | Adjusts Latch Check speed. Clockwise = Faster | |
| CLOSE | Adjusts closing speed. Clockwise = Faster | |
| Current Limit | Adjusts how hard the door will push against an obstacle (while opening) before recycling. Clockwise = less sensitive | |

Table 3 Slide Switch

| Position | Function |
|----------|---|
| UP | Low Energy (GT-500) |
| DOWN | High Energy (GT-400); Door opens faster |

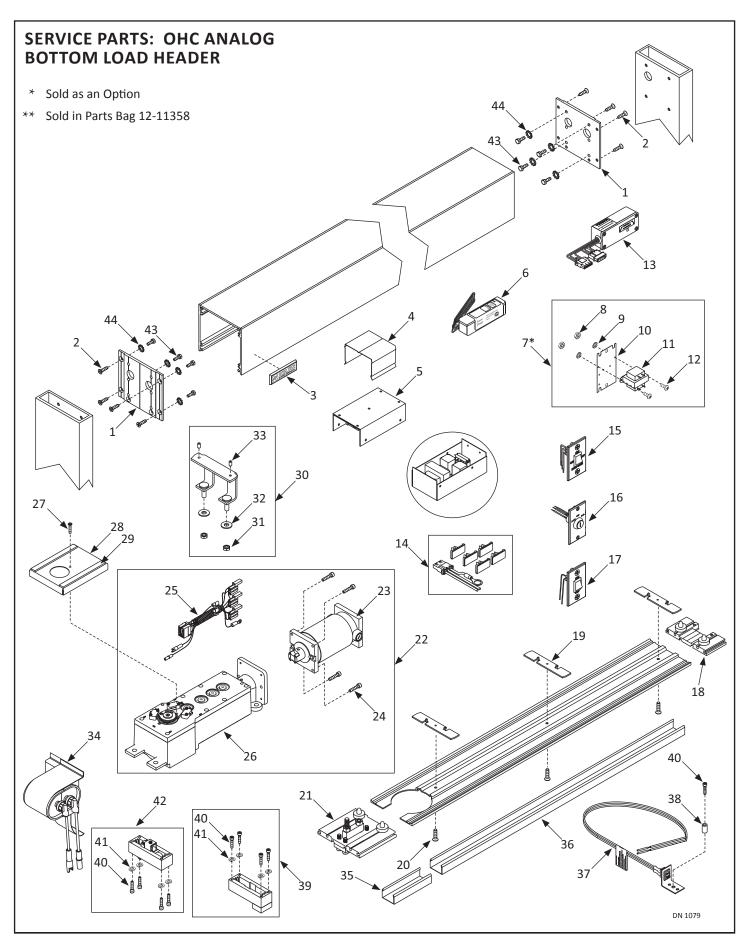
 Table 4
 Magnum Control LED Information

| LED Color | LED Status | Door Status |
|-----------|--------------------------------------|----------------------------------|
| Green | Fast Flashing (2 flashes per second) | Door is opening. |
| | On Steady | Door is in Back Check. |
| | Slow Flashing (1 flash per second) | Door is closing. |
| | Off | Door is in Latch Check or Closed |
| Red | Indicator | Action |
| | Slow Flashing (1 flashes per second) | Continuous Safety Activated |
| | Fast Flashing (2 flashes per second) | Safety with Lockout Activated |
| | On Solid | Recycle Activated |



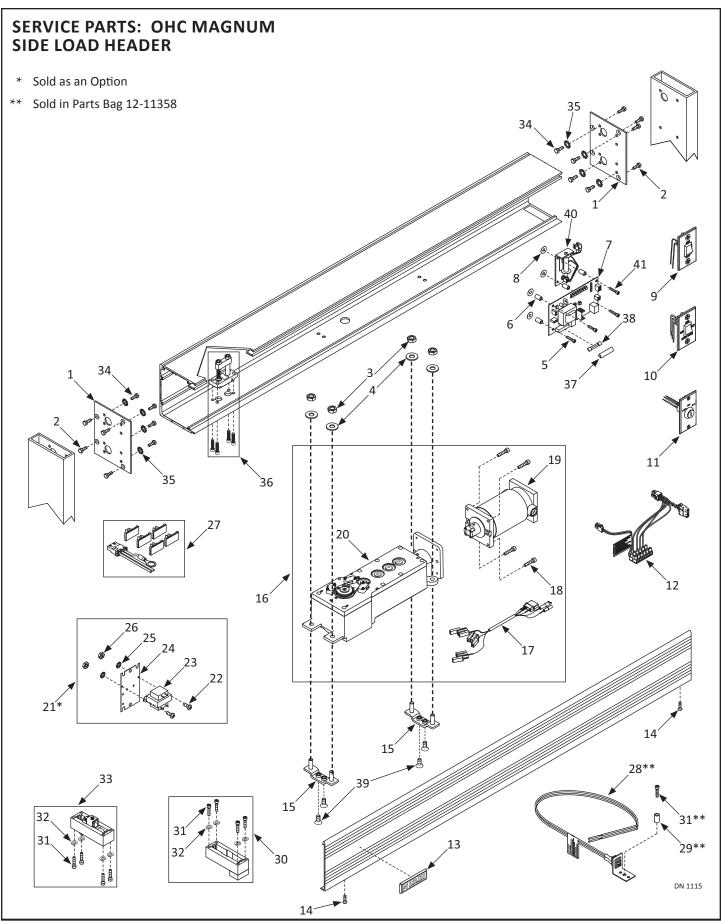
| Magnum Bottom Load Header | | | |
|---------------------------|--------------|-----------------------------|--|
| Item | Part | Finish/Sizes/Notes | Description |
| 1 | 24-1523-01 | Clear | SWING HEADER END CAP |
| | 24-1523-02 | Dark Bronze | SWING HEADER END CAP |
| 2 | 24-4941-02 | | FHMS, 1/4-20 X 1", PHIL, TRILOBE, ZN |
| 3 | 14-9199 | | NAMEPLATE, ADHESIVE BACKED |
| 4 | 24-0555 | | MOUNT, CONTROL BOX |
| 5 | 12-10292-04A | | MAGNUM BOARD IV & CHASSIS ASSY REV A |
| 6 | 24-0021-04 | | HEX NUT #10-24 |
| 7 | 24-9800-04 | | MAGNUM CONTROL BOARD-04 |
| 8 | 14-8743 | | SPACER - NYLON #10 X 5/8 3/8 OD |
| 9 | 24-8686 | | CHASSIS, CONTROL |
| 10 | 24-0019-06 | | WASHER,EXT.#10 |
| 11 | 24-0012-13 | | SCREW - PHLLP PAN HD MACH #10-24 X 1 1/4 |
| 12 | 14-2101 | Sold as an Option | TRANSFORMER W/BRACKET, 24 VOLT - 40 VA |
| 13 | 24-0021-04 | | HEX NUT #10-24 |
| 14 | 24-0019-06 | | WASHER,EXT.#10 |
| 15 | 24-10679-02 | | PLATE TRANSFORMER & RELAY MTG TELESCOPIC |
| 16 | 14-2101-01 | | TRANSFORMER ONLY, 24 VOLT - 40 VA |
| 17 | 10-0617 | | SCREW - 10-24 X 3/8 PHIL PAN S.S. |
| 18 | 22-0779 | | POWER HARNESS ASSY - SWINGER |
| 19 | 10-3528 | | LE RS-12 ON/OFF/HLD OPN RCKR SWITCH ASY |
| 20 | 22-1772-03 | | KEY SWITCH KS-14 3 POSITION |
| 21 | 10-3527 | | LE RS-11 ON/OFF RCKR SWITCH ASY W/FPLT |
| 22 | 24-0158-01 | Clear | OHC - SGL STRIKE BASE 3-1/4 |
| | 24-0158-02 | Dark Bronze | OHC - SGL STRIKE BASE 3-1/4 |
| 23 | 24-1849 | | LOCK COVER PLATE - BOTTOM |
| 24 | 24-0011-01 | | FHMS,10-24 X 3/4,PHILLIPS |
| | 24-0011-09 | | FHMS,1/4-20 X 1,PHILLIPS |
| 25 | 21-1590 | Clear/no Finger Guard | OHC - TOP PIVOT/BASE ASY NO F/G 204-UL P |
| | 21-1591 | Dark Bronze/no Finger Guard | OHC - TOP PIVOT/BASE ASY NO F/G 313-UL P |
| | 21-1593 | Clear/Finger Guard | OHC - TOP PIVOT/BASE ASSY F/G 204-UL PRT |
| | 21-1594 | Dark Bronze/Finger Guard | OHC - TOP PIVOT/BASE ASSY F/G 313-UL PRT |
| 26 | 11-1391 | LH | SWING OPERATOR ASSY - LH |
| | 11-1390 | RH | SWING OPERATOR ASSY - RH |
| 27 | 22-0575 | | MOTOR & COUPLING SUB-ASSY - SWINGER |
| 28 | 24-0010-46 | | SCREW, SOCKET HEAD CAP #10-24 X 7/8" |
| 29 | 21-9934 | | MICROSWITCH WIRING HARNESS, MAGNUM |
| 30 | 42-0385 | | OPERATOR SUB-ASSY SWINGER |
| 31 | 24-0011-02 | | FHMS,10-24 X 1,PHILLIPS |
| 32 | 22-4498 | | SWITCH, ASSY COVER - SWINGER |
| 33 | 14-3444-02 | | PROTECTIVE STRIP, BUMP ON 5-3/8" LONG |
| 34 | 21-0709 | | OPERATOR MOUNT FRAME ASSY |
| 35 | 24-0021-15 | | HEX JAM NUT 3/8"-16 |

| | Magnum Bottom Load Header | | | |
|------|---------------------------|--------------------|--|--|
| Item | Part | Finish/Sizes/Notes | Description | |
| 36 | 24-0017-02 | | WASHER, 7/16 ID X 1 OD X .083 THK | |
| 37 | 24-0016-04 | | SCREW, SET 1/4-20 X 1/2, KNURL POINT | |
| 38 | 24-0160-01 | No Finger Guard | OHC - SNAP IN CHANNEL PIVOT SIDE NO F/G | |
| | 24-0161-02 | Finger Guard | OHC - SNAP IN CHANNEL PIVOT SIDE F/G | |
| 39 | 24-0159-01 | | EXTRUSION, ALUM - SNAP IN DRESS CHANNEL | |
| | 24-0159-02 | | EXTRUSION, ALUM - SNAP IN DRESS CHANNEL | |
| 40 | 11-13185 | | POWER SWITCH ASSY, SWINGERS / 710 | |
| 41 | 14-8743 | | SPACER - NYLON #10 X 5/8 3/8 OD | |
| 42 | 21-0741-01 | | OHC - DOOR STOP ASSY - NON PANIC | |
| 43 | 24-0010-01 | | SHCS,10-24 X 7/8CAD-UL PART | |
| 44 | 24-0018-01 | | WASHER, .194 ID .334 OD .047 THK-UL PART | |
| 45 | 11-0930-01 | | PANIC LATCH ASSY KIT, OHC-UL PART | |
| | 11-0930-02 | | PANIC LATCH ASSY KIT, OHC-UL PART | |
| 46 | 22-10065 | Single Swing Door | HARNESS ASSY - MAGNUM, SINGLE | |
| | 22-10270 | Simultaneous Pair | MAGNUM HARNESS ASSY, SIM PAIR | |
| 47 | 24-0014-02 | | HHCS, 1/4-20 X 3/4", ZN | |
| 48 | 24-0019-05 | | 1/4" EXTERNAL STAR WASHER | |
| 49 | 14-10015 | Magnum 1-4 only | FUSE COVER | |
| 50 | 14-9470 | Magnum 4A only | FUSE, MC | |
| | 14-11862 | Magnum 1-4 only | FUSE 5 AMP | |
| 51 | 11-10280 | | BRAKE MODULE-MOTOR HARNESS ASSY-SWINGER | |
| 52 | 24-0010-03 | | SHCS, 10-24 X 1 | |



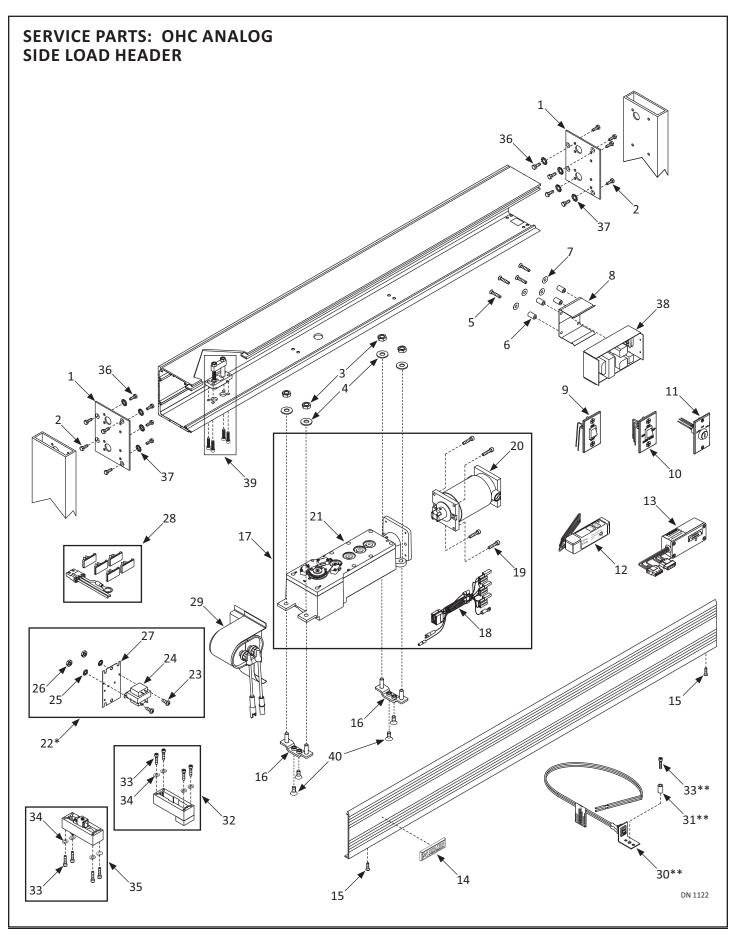
| | Analog Bottom Load Header | | | |
|------|---------------------------|-----------------------------|--|--|
| Item | Dowt | | | |
| 1 | Part 24-1523-01 | Finish/Sizes/Notes Clear | Description SWING HEADER END CAP | |
| 1 | 24-1523-01 | Dark Bronze | SWING HEADER END CAP | |
| 2 | 24-1323-02 | Dark Brotize | FHMS, 1/4-20 X 1", PHIL, TRILOBE, ZN | |
| 3 | 14-9199 | | NAMEPLATE, ADHESIVE BACKED | |
| 4 | 24-0555 | | MOUNT, CONTROL BOX | |
| 5 | 41-1512 | Assembly including Chasis | CONTROL BOX - SC | |
| 6 | 14-11807 | Assembly including chasis | PC-6 LOCK OUT RELAY ASSY LE OPR | |
| 7 | 14-2101 | Sold as an Option | TRANSFORMER W/BRACKET, 24 VOLT - 40 VA | |
| 8 | 24-0021-04 | Sold as all Option | HEX NUT #10-24 | |
| 9 | 24-0019-06 | | WASHER,EXT.#10 | |
| 10 | 24-10679-02 | | PLATE TRANSFORMER & RELAY MTG TELESCOPIC | |
| 11 | 14-2101-01 | | TRANSFORMER ONLY, 24 VOLT - 40 VA | |
| 12 | 10-0617 | | SCREW - 10-24 X 3/8 PHIL PAN S.S. | |
| 13 | 24-3425-01 | | TIME DELAY MODULE W/CLIP | |
| 14 | 22-0779 | | POWER HARNESS ASSY - SWINGER | |
| 15 | 10-3528 | | LE RS-12 ON/OFF/HLD OPN RCKR SWITCH ASY | |
| 16 | 22-1772-03 | | KEY SWITCH KS-14 3 POSITION | |
| 17 | 10-3527 | | LE RS-11 ON/OFF RCKR SWITCH ASY W/FPLT | |
| 18 | 24-0158-01 | Clear | OHC - SGL STRIKE BASE 3-1/4 | |
| | 24-0158-02 | Dark Bronze | OHC - SGL STRIKE BASE 3-1/4 | |
| 19 | 24-1849 | | LOCK COVER PLATE - BOTTOM | |
| 20 | 24-0011-01 | | FHMS,10-24 X 3/4,PHILLIPS | |
| | 24-0011-09 | | FHMS,1/4-20 X 1,PHILLIPS | |
| 21 | 21-1590 | Clear/no Finger Guard | OHC - TOP PIVOT/BASE ASY NO F/G 204-UL P | |
| | 21-1591 | Dark Bronze/no Finger Guard | OHC - TOP PIVOT/BASE ASY NO F/G 313-UL P | |
| | 21-1593 | Clear/Finger Guard | OHC - TOP PIVOT/BASE ASSY F/G 204-UL PRT | |
| | 21-1594 | Dark Bronze/Finger Guard | OHC - TOP PIVOT/BASE ASSY F/G 313-UL PRT | |
| 22 | 11-1391 | LH | SWING OPERATOR ASSY - LH | |
| | 11-1390 | RH | SWING OPERATOR ASSY - RH | |
| 23 | 22-0575 | | MOTOR & COUPLING SUB-ASSY - SWINGER | |
| 24 | 24-0010-46 | | SCREW, SOCKET HEAD CAP #10-24 X 7/8" | |
| 25 | 22-0570 | | OPERATOR SWITCH HARNESS SWGR-UL PRT | |
| 26 | 42-0385 | | OPERATOR SUB-ASSY SWINGER | |
| 27 | 24-0011-02 | | FHMS,10-24 X 1,PHILLIPS | |
| 28 | 22-4498 | | SWITCH, ASSY COVER - SWINGER | |
| 29 | 14-3444-02 | | PROTECTIVE STRIP, BUMP ON 5-3/8" LONG | |
| 30 | 21-0709 | | OPERATOR MOUNT FRAME ASSY | |
| 31 | 24-0021-15 | | HEX JAM NUT 3/8"-16 | |
| 32 | 24-0017-02 | | WASHER, 7/16 ID X 1 OD X .083 THK | |
| 33 | 24-0016-04 | | SCREW, SET 1/4-20 X 1/2, KNURL POINT | |
| 34 | 11-2067 | | SOFT START KIT, 30 MF | |
| | 11-3536 | | SUPER SOFT START KIT, 15 MF | |

| Analog Bottom Load Header | | | | |
|---------------------------|------------|--------------------|--|--|
| Item | Part | Finish/Sizes/Notes | Description | |
| 35 | 24-0160-01 | No Finger Guard | OHC - SNAP IN CHANNEL PIVOT SIDE NO F/G | |
| | 24-0161-02 | Finger Guard | OHC - SNAP IN CHANNEL PIVOT SIDE F/G | |
| 36 | 24-0159-01 | | EXTRUSION, ALUM - SNAP IN DRESS CHANNEL | |
| | 24-0159-02 | | EXTRUSION, ALUM - SNAP IN DRESS CHANNEL | |
| 37 | 11-13185 | | POWER SWITCH ASSY, SWINGERS / 710 | |
| 38 | 14-8743 | | SPACER - NYLON #10 X 5/8 3/8 OD | |
| 39 | 21-0741-01 | | OHC - DOOR STOP ASSY - NON PANIC | |
| 40 | 24-0010-01 | | SHCS,10-24 X 7/8CAD-UL PART | |
| 41 | 24-0018-01 | | WASHER, .194 ID .334 OD .047 THK-UL PART | |
| 42 | 11-0930-01 | | PANIC LATCH ASSY KIT, OHC-UL PART | |
| | 11-0930-02 | | PANIC LATCH ASSY KIT, OHC-UL PART | |
| 43 | 24-0014-02 | | HHCS, 1/4-20 X 3/4", ZN | |
| 44 | 24-0019-05 | | 1/4" EXTERNAL STAR WASHER | |



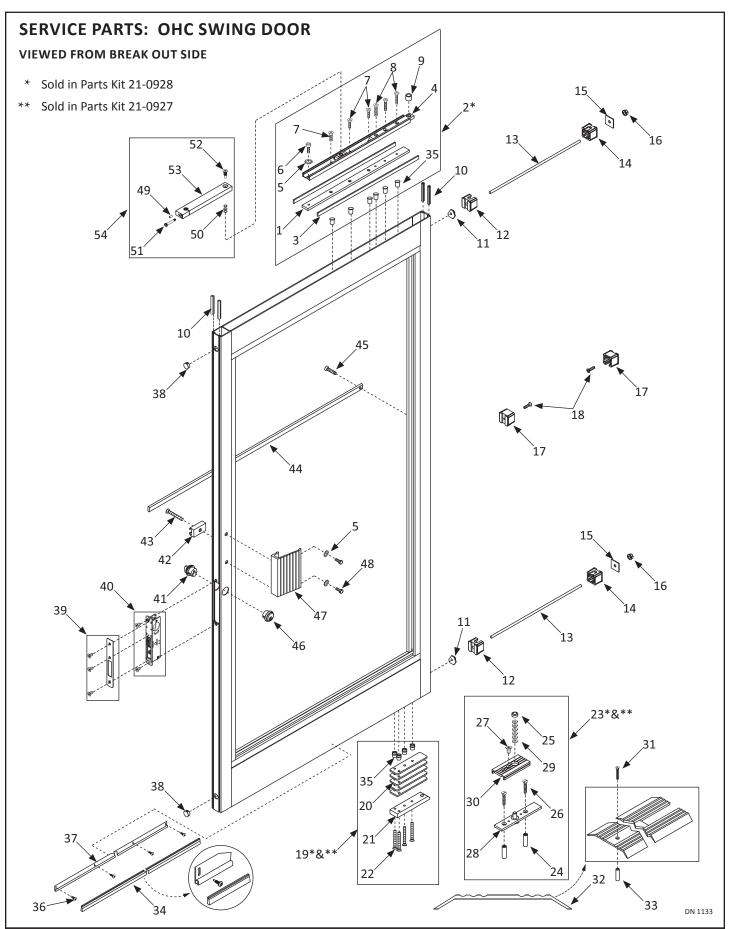
| | Magnum Side Load Header | | | |
|------|-------------------------|--------------------|--|--|
| Item | Part | Finish/Sizes/Notes | Description | |
| 1 | 14-12024-01 | Clear | ENDCAP - 8300 SIDELOAD NH 204 4 HOLE | |
| | 14-12024-02 | Dark Bronze | ENDCAP - 8300 SIDELOAD NH 313 4 HOLE | |
| 2 | 24-0011-70 | Zinc | FHMS, 1/4-20 X 7/16", PHIL, UND, ZN | |
| | 24-0011-73 | Black Onix | FHMS,1/4-20 X 7/16", PHIL, UND, BLK OX | |
| 3 | 24-0021-15 | | HEX JAM NUT 3/8"-16 | |
| 4 | 24-0017-02 | | WASHER, 7/16 ID X 1 OD X .083 THK | |
| 5 | 24-0010-03 | | SHCS, 10-24 X 1 | |
| 6 | 14-8743 | | SPACER - NYLON #10 X 5/8 3/8 OD | |
| 7 | 24-9800 | | MAGNUM CONTROL BOARD | |
| 8 | 24-0017-47 | | WASHER, 156 ID X .750 OD X .020 THK | |
| 9 | 10-3527 | | LE RS-11 ON/OFF RCKR SWITCH ASY W/FPLT | |
| 10 | 10-3528 | | LE RS-12 ON/OFF/HLD OPN RCKR SWITCH ASY | |
| 11 | 22-1772-03 | | KEY SWITCH KS-14 3 POSITION | |
| 12 | 22-10065 | Single Swing Door | HARNESS ASSY - MAGNUM, SINGLE | |
| | 22-10270 | Simultaneous Pair | MAGNUM HARNESS ASSY, SIM PAIR | |
| 13 | 14-9199 | | NAMEPLATE, ADHESIVE BACKED | |
| 14 | 24-0094-04 | | SCREW, PHLLPS PAN HD MACH #8 X 5/8" AB | |
| 15 | 22-11938 | | BRACKET, OPERATOR, SIDELOAD HEADER | |
| 16 | 41-8987-07 | RH | MAGNUM SWINGER OPERATOR LH | |
| | 41-8987-08 | LH | MAGNUM SWINGER OPERATOR RH | |
| 17 | 21-9934 | | MICROSWITCH WIRING HARNESS, MAGNUM | |
| 18 | 24-0010-46 | | SCREW, SOCKET HEAD CAP #10-24 X 7/8" | |
| 19 | 21-9934 | | MICROSWITCH WIRING HARNESS, MAGNUM | |
| 20 | 24-10920-07 | LH wo/Clutch | MAGNUM SW GB W/WELDED CLUTCH LH APPL | |
| | 24-10920-08 | RH wo/Clutch | MAGNUM SW GB W/WELDED CLUTCH RH APPL | |
| | 24-10920-09 | LH w/Clutch | MAGNUM SW GB W/CLUTCH LH APPL | |
| | 24-10920-10 | RH/w Clutch | MAGNUM SW GB W/CLUTCH RH APPL | |
| 21 | 14-2101 | Sold as an Option | TRANSFORMER W/BRACKET, 24 VOLT - 40 VA | |
| 22 | 10-0617 | | SCREW - 10-24 X 3/8 PHIL PAN S.S. | |
| 23 | 14-2101-01 | | TRANSFORMER ONLY, 24 VOLT - 40 VA | |
| 24 | 24-10679-02 | | PLATE TRANSFORMER & RELAY MTG TELESCOPIC | |
| 25 | 24-0019-06 | | WASHER,EXT.#10 | |
| 26 | 24-0021-04 | | HEX NUT #10-24 | |
| 27 | 22-0779 | | POWER HARNESS ASSY - SWINGER | |
| 28 | 11-13185 | | POWER SWITCH ASSY, SWINGERS / 710 | |
| 29 | 14-8743 | | SPACER - NYLON #10 X 5/8 3/8 OD | |
| 30 | 21-0741-01 | | OHC - DOOR STOP ASSY - NON PANIC | |
| 31 | 24-0010-01 | | SHCS,10-24 X 7/8CAD-UL PART | |
| 32 | 24-0018-01 | | WASHER, .194 ID .334 OD .047 THK-UL PART | |
| 33 | 11-0930-01 | | PANIC LATCH ASSY KIT, OHC-UL PART | |
| | 11-0930-02 | | PANIC LATCH ASSY KIT, OHC-UL PART | |
| 34 | 24-0014-02 | | HHCS, 1/4-20 X 3/4", ZN | |

| Magnum Side Load Header | | | |
|-------------------------|-------------|--------------------|---|
| Item | Part | Finish/Sizes/Notes | Description |
| 35 | 24-0019-05 | | 1/4" EXTERNAL STAR WASHER |
| 36 | 21-0750 | | TOP PIVOT ASSY |
| 37 | 14-10015 | Magnum 1-4 only | FUSE COVER |
| 38 | 14-9470 | Magnum 4A only | FUSE, MC |
| | 14-11862 | Magnum 1-4 only | FUSE 5 AMP |
| 39 | 24-0011-23 | Zinc | FHMS,5/16"-18 X 3/4, SKT,ZINC |
| | 24-0011-137 | Black Zinc | FHMS, 5/16"-18 X 3/4, SKT BLK ZINC |
| 40 | 11-10280 | | BRAKE MODULE-MOTOR HARNESS ASSY-SWINGER |
| 41 | 24-0010-03 | | SHCS, 10-24 X 1 |



| Analog Side Load Header | | | |
|-------------------------|-------------|--------------------|--|
| Item | Part | Finish/Sizes/Notes | Description |
| 1 | 14-12024-01 | Clear | ENDCAP - 8300 SIDELOAD NH 204 4 HOLE |
| | 14-12024-02 | Dark Bronze | ENDCAP - 8300 SIDELOAD NH 313 4 HOLE |
| 2 | 24-0011-70 | Zinc | FHMS, 1/4-20 X 7/16", PHIL, UND, ZN |
| | 24-0011-73 | Black Onix | FHMS,1/4-20 X 7/16", PHIL, UND, BLK OX |
| 3 | 24-0021-15 | | HEX JAM NUT 3/8"-16 |
| 4 | 24-0017-02 | | WASHER, 7/16 ID X 1 OD X .083 THK |
| 5 | 24-0011-02 | | FHMS,10-24 X 1,PHILLIPS |
| 6 | 14-8743 | | SPACER - NYLON #10 X 5/8 3/8 OD |
| 7 | 24-0017-47 | | WASHER, 156 ID X .750 OD X .020 THK |
| 8 | 24-12060 | | MOUNTING BRACKET ANALOG CONTROL |
| 9 | 10-3527 | | LE RS-11 ON/OFF RCKR SWITCH ASY W/FPLT |
| 10 | 10-3528 | | LE RS-12 ON/OFF/HLD OPN RCKR SWITCH ASY |
| 11 | 22-1772-03 | | KEY SWITCH KS-14 3 POSITION |
| 12 | 14-11807 | | PC-6 LOCK OUT RELAY ASSY LE OPR |
| 13 | 22-0575 | | MOTOR & COUPLING SUB-ASSY - SWINGER |
| 14 | 14-9199 | | NAMEPLATE, ADHESIVE BACKED |
| 15 | 24-0094-04 | | SCREW, PHLLPS PAN HD MACH #8 X 5/8" AB |
| 16 | 22-11938 | | BRACKET, OPERATOR, SIDELOAD HEADER |
| 17 | 11-1390 | RH | SWING OPERATOR ASSY - RH |
| | 11-1391 | LH | SWING OPERATOR ASSY - LH |
| 18 | 22-0570 | | OPERATOR SWITCH HARNESS SWGR-UL PRT |
| 19 | 24-0010-46 | | SCREW, SOCKET HEAD CAP #10-24 X 7/8" |
| 20 | 22-0575 | | MOTOR & COUPLING SUB-ASSY - SWINGER |
| 21 | 42-0385 | | OPERATOR SUB-ASSY SWINGER |
| 22 | 14-2101 | Sold as an Option | TRANSFORMER W/BRACKET, 24 VOLT - 40 VA |
| 23 | 10-0617 | | SCREW - 10-24 X 3/8 PHIL PAN S.S. |
| 24 | 14-2101-01 | | TRANSFORMER ONLY, 24 VOLT - 40 VA |
| 25 | 24-10679-02 | | PLATE TRANSFORMER & RELAY MTG TELESCOPIC |
| 26 | 24-0019-06 | | WASHER,EXT.#10 |
| 27 | 24-0021-04 | | HEX NUT #10-24 |
| 28 | 22-0779 | | POWER HARNESS ASSY - SWINGER |
| 29 | 11-2067 | | SOFT START KIT, 30 MF |
| | 11-3536 | | SUPER SOFT START KIT, 15 MF |
| 30 | 11-13185 | | POWER SWITCH ASSY, SWINGERS / 710 |
| 31 | 14-8743 | | SPACER - NYLON #10 X 5/8 3/8 OD |
| 32 | 21-0741-01 | | OHC - DOOR STOP ASSY - NON PANIC |
| 33 | 24-0010-01 | | SHCS,10-24 X 7/8CAD-UL PART |
| 34 | 24-0018-01 | | WASHER, .194 ID .334 OD .047 THK-UL PART |
| 35 | 11-0930-01 | | PANIC LATCH ASSY KIT, OHC-UL PART |
| 26 | 11-0930-02 | | PANIC LATCH ASSY KIT, OHC-UL PART |
| 36 | 24-0014-02 | | HHCS, 1/4-20 X 3/4", ZN |
| 37 | 24-0019-05 | | 1/4" EXTERNAL STAR WASHER |

| Analog Side Load Header | | | |
|-------------------------|-------------|--------------------|------------------------------------|
| Item | Part | Finish/Sizes/Notes | Description |
| 38 | 41-1512 | w/Chassis | CONTROL BOX - SC |
| 39 | 21-0750 | | TOP PIVOT ASSY |
| 40 | 24-0011-23 | Zinc | FHMS,5/16"-18 X 3/4, SKT,ZINC |
| | 24-0011-137 | Black Zinc | FHMS, 5/16"-18 X 3/4, SKT BLK ZINC |



| Swing Door | | | |
|------------|------------|---|--|
| Item | Part | Finish/Sizes/Notes | Description |
| 1 | 24-3557 | 1/4" Spacer | SPACER, BLOCK - 1/4IN |
| | 24-0507 | 3/8" Spacer | BLOCK - SPACER 3/8 |
| 2 | 21-0925 | Sold with Parts Bag 12-3398 | OHC TRACK ASSY WITH SCREW BAG ASSY |
| | | Sold in Parts Kit 21-0927 | |
| 3 | 24-0743 | 5/8" Web | SLIDE SPACER, 5/8" TRACK |
| 4 | 22-2134 | | TRACK, W/TOP PIVOT BLOCK OHC |
| 5 | 24-0019-05 | | 1/4" EXTERNAL STAR WASHER |
| 6 | 24-0010-25 | | SCREW, SOCKET HEAD CAP 1/4-20 X 1 1/2" |
| 7 | 24-0011-16 | | FHMS,1/4-20 X 1 1/2,,PHIL UND |
| 8 | 24-0011-10 | | FHMS,1/4-20 X 2,PHILLIPS |
| 9 | 14-0771 | | BEARING, 1/2" X 3/4" X 5/8" WIDE |
| 10 | 14-2279-05 | | PILE WEATHERING, BLK, .45 TALL, W/ ADHES |
| 11 | 14-9279 | | OFFSET TEE NUT, 3/8"-16 |
| 12 | 24-9503 | | CLIP, MUNTIN BAR - RAIL .500 HOLE |
| 13 | 14-3624 | | THREADED ROD, 3/8"-16 - ZINC PLATED |
| 14 | 24-9504 | | CLIP, MUNTIN BAR - RAIL .386 HOLE |
| 15 | 14-9225 | | BACKING PLATE, TIE ROD - DOOR ASSEMBLY |
| 16 | 24-0021-21 | | NUT, WHIZLOCK, 3/8-16, ZN |
| 17 | 24-9502 | | CLIP, MUNTIN BAR - RAIL .261 HOLE |
| 18 | 24-4941-02 | | FHMS, 1/4-20 X 1", PHIL, TRILOBE, ZN |
| 19 | 21-0098 | Sold in Parts Kits: 21-0928 and 21-0927 | BTTM PIVOT ASSY, DOOR PORTION, SWG DOOR |
| 20 | 24-0748 | | OHC - SPACER, BASE PIVOT |
| 21 | 24-0747-01 | | OHC - BASE PIVOT SUB-ASSY |
| 22 | 24-0011-10 | | FHMS,1/4-20 X 2,PHILLIPS |
| 23 | 21-0926 | Sold in Parts Kits: 21-0928 and 21-0927 | BTM PIVOT ASSY, FLOOR PORTION-UL PART |
| 24 | 14-1018 | | ANCHOR - PLASTIC #14 X 1 BLUE |
| 25 | 24-0029 | | PIVOT BASE - SELF ALIGNER-UL PART |
| 26 | 24-0031-04 | | FHSMS, #14 X 1-1/2", SLOT, TYPE A |
| 27 | 24-0011-70 | | FHMS, 1/4-20 X 7/16", PHIL, UND, ZN |
| 28 | 24-0029 | | PIVOT BASE - SELF ALIGNER-UL PART |
| 29 | 24-0017-08 | | WASHER, 7/16 ID,31/32 OD,.031 THK-UL PRT |
| 30 | 24-0742 | | COVER - PLATE THRESHOLD 5-1/4-UL PART |
| 31 | 24-0031-07 | | SCREW, SLTD FLAT HD, #10 X 1 1/2" TYPE A |
| 32 | 24-10901 | | THRESHOLD SWINGER, MACHINED |
| 33 | 14-6394 | | ANCHOR, STRT PLSTC 10-12" X 1" |
| 34 | 14-4899-15 | | BRUSH, WTHRNG007, BRISTLE NYLON .980 |
| 35 | 14-8640-01 | | RIVNUT, 1/4"-20 AVK #AKS4-420-165 |
| 36 | 24-0013-03 | Zinc | PHSMS, 6 X 1/2", PHIL, TEKS, ZN |
| | 24-0013-04 | Black Zinc | PHSMS, 6 X 1/2", PHIL, TEKS, BLK ZN |
| 37 | 24-9125-01 | Clear | WEATHERING EXT, 204 |
| | 24-9125-02 | Dark Bronze | WEATHERING EXT, 313 |
| 38 | 14-9511-04 | Black | PLUG, HOLE, .813 DIAMETER, BLK |

| Swing Door | | | |
|------------|------------|--------------------|---------------------------------------|
| Item | Part | Finish/Sizes/Notes | Description |
| 39 | 24-0565-11 | | LOCK, COVER W/LATCH CUTOUT 204 |
| | 24-0565-12 | | LOCK, COVER W/LATCH CUTOUT 313 |
| 40 | 24-0564 | | HOOKBOLT, DEADLOCK CR LAURENCE |
| 41 | 22-0090-01 | Silver | CYLINDER, THUMB TURN SILVER |
| | 22-0090-02 | Dark Bronze | CYLINDER, THUMB TURN BRONZE |
| 42 | 14-5474-01 | Silver | BLOCK, PILLOW - MACHINED |
| | 14-5474-02 | Dark Bronze | BLOCK, PILLOW - MACHINED |
| 43 | 24-0011-10 | | FHMS,1/4-20 X 2,PHILLIPS |
| 44 | 24-5475-01 | Clear | PUSH BAR - MACHINED |
| | 24-5475-02 | Dark Bronze | PUSH BAR - MACHINED |
| 45 | 24-0011-16 | | FHMS,1/4-20 X 1 1/2,,PHIL UND |
| 46 | 22-4495-01 | Silver | KEYED ALIKE LOCK CYLINDERS SILVER |
| | 22-4495-02 | Dark Bronze | KEYED ALIKE LOCK CYLINDERS BRONZE |
| 47 | 24-5473-01 | Silver | PULL HANDLE MACHINED |
| | 24-5473-02 | Dark Bronze | PULL HANDLE MACHINED |
| 48 | 24-0014-02 | | HHCS, 1/4-20 X 3/4", ZN |
| 49 | 24-0016-42 | | SCREW,SET 5/16-24 X 5/8, CUT POINT |
| 50 | 24-0017-24 | | WASHER, 15/32 ID X 5/8 OD X .062 THK |
| 51 | 24-1247-02 | | BOLT, SHOULDER 3/8" DIA X 1 3/4" |
| 52 | 24-0744 | | SCREW, PIVOT |
| 53 | 24-0585-01 | | ARM, SPLINED, OHC, SILVER |
| | 24-0585-02 | | ARM, SPLINED, OHC, BRONZE |
| 54 | 21-0907-01 | Clear | OHC - ARM ASSY PANIC/NON PANIC NH 204 |
| | 21-0907-02 | Dark Bronze | OHC - ARM ASSY PANIC/NON PANIC NH 313 |
| | | | |