



OWNER'S MANUAL

D3676/D3677/D3678/D8576

What This Owner's Manual Can Do For You

- It explains exactly how The Rite Door® operates.
- It explains periodic maintenance requirements necessary to assure reliable operation.
- It explains simple things to do and check before you call for service, so you may save the cost of an unnecessary service call.
- It provides a complete listing of service replaceable parts.
- It provides your Adams Rite Limited Warranty and what steps to take for service.

Owners Record

The model number is located on the hinge stile mounting base. Refer to this number and the additional information below when you call upon your local Rite Door® dealer regarding this product.

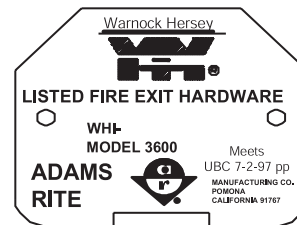
Model No: D3676/D8576/D3677/D3678

Finish:

Door Size:

Hardware Supplier:

Date Installed:

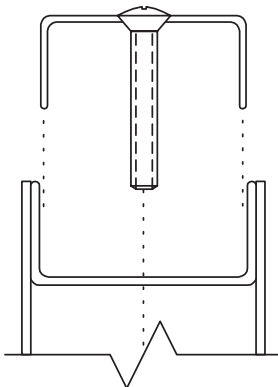


Exit Device Operation

The Rite Door® Top Rod Concealed Vertical Rod (CVR) devices provides for life safety, security & fire containment by use of a rotating top latch and post type header strike. When the push bar is depressed, the top rod retracts to release the door. Upon closing, the top actuator deadlatches around the top strike post securing the door.

Fire Door Labels, Strikes and Frame Screws

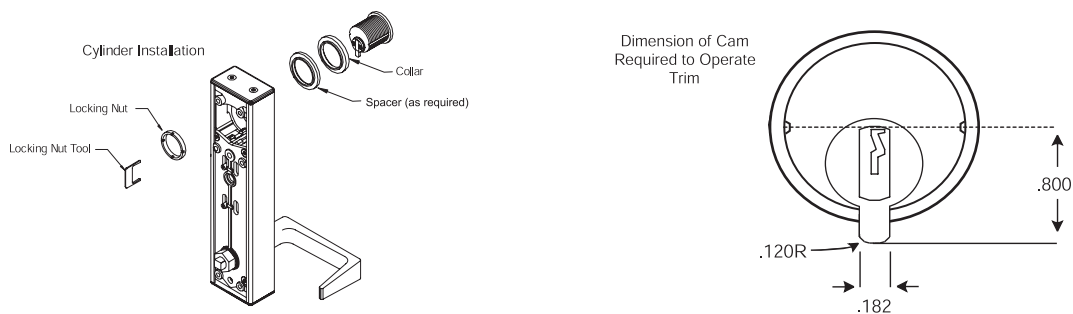
Fire Door Labels and other misc. hardware will be located in a removable channel located at the top of the door. This channel is secured by two Phillips head screws that can be easily removed. Please contact the factory immediately if this hardware can not be located.



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Entry Trim Operation

The 3080 series outside entry trim is an available option with The RITE Door®. The entry trim will activate the locking mechanism with any downward or upward motion of the lever handle. The trim utilizes a clutching mechanism that protects the lever from forced entry or vandalism. The trim will accept any standard mortise cylinder (1" – 1 ½" long) with an MS cam if re-keying or new cylinders are required. Spacer rings may be needed to accommodate longer cylinders. The number of spacers will vary depending on the length of cylinder being used. Maintenance of the trim will be discussed later in this manual.



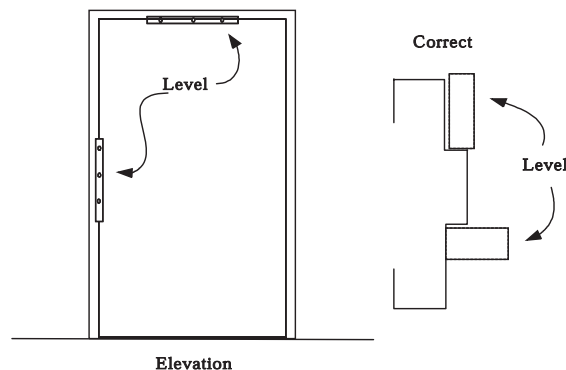
Recommended Maintenance

Exit Devices are designed for life safety first. Adams Rite devices are cycle tested in excess of one million cycles, both as prototypes during design and as quality samples during production. Atmospheric and other localized conditions may vary greatly, but extremely dirty, salty or abrasive situations could require service attention such as cleaning and lubrication of moving parts from time to time to assure reliability. Service personnel should be reminded that life safety is the goal.

Some simple maintenance procedures can be taken to keep the exit device and trim in good working condition.

- Maintaining the correct positioning and tightening of screws on top actuator.
- Lubrication of top actuator from time to time with a high grade, lithium based grease. Moving parts inside the device and rods can also be sprayed annually with white silicone grease to assure reliability.
- Tightening of pushbar and entry trim screws.
- Tightening of end cap screws.
- Tightening of top strike post.

*** Please note that reliable RITE Door® operation is dependant upon the frame being square and plumb to function correctly. The diagram below will give you an idea of how to tell if your frame is set properly.



End Cap and Pushbar Removal / Replacement

To facilitate maintenance procedures, the two end caps and pushbar can be removed. To begin, open the door to 90°. Manually trip the top actuator to the locked position so pushbar is extended. Remove end caps by removing the two black screws that secure each end cap. (Figure 1) The latch side end cap will have a piece of metal attached that works as a stop. Remove carefully to avoid breaking.

For pushbar removal follow the steps above then remove the four mounting screws on each end of the back bar. (Figure 2) This will allow you to slide the pushbar towards the hinges until the lead edge is clear of the scissor mechanism. Then slide the pushbar back toward the locking edge to clear the remaining scissor. Note when reattaching the pushbar that the stop plate on the inside of the pushbar should be located closer to the latch side of the door. Be sure to tighten the four mounting screws on the backbar after installing pushbar.

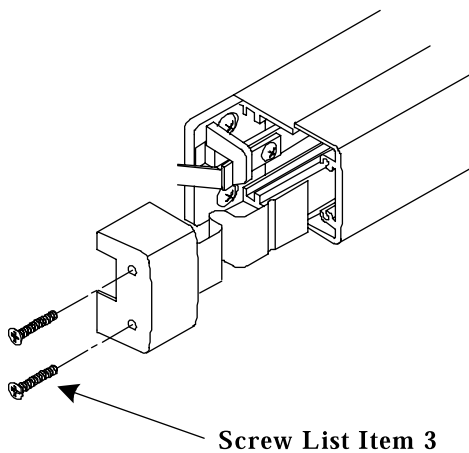
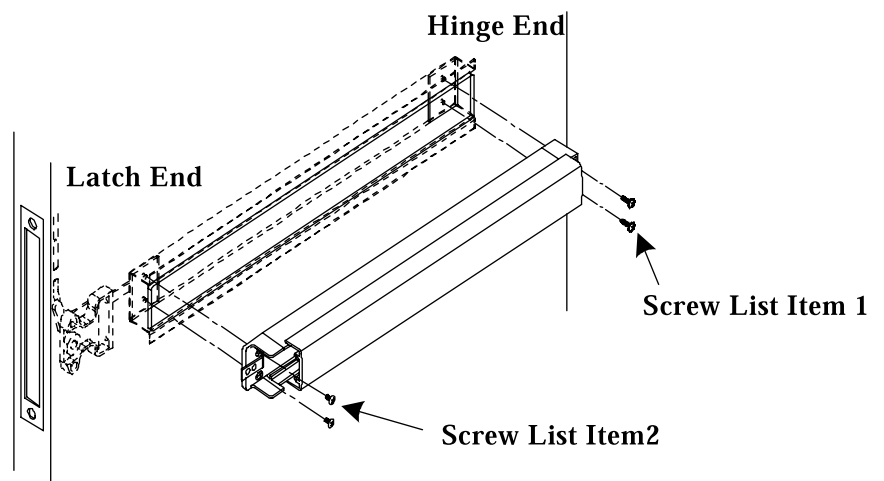


Figure 1



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Top Actuator Operation & Top Strike Positioning

Proper operation of this device relies heavily on the correct adjustment of the top actuator. The strike is designed to be operated with a minimum of 1/16" between top of door and frame. The diagram below (Figure A) shows the correct relationship of the square bolt to the top actuator. The square bolt must be flush with the stop plate. There are four #10-32 x 1/2" Phillips head screws that are in slotted holes in the top channel of the door that keep the actuator secured. These will have to be removed to adjust the square bolt.

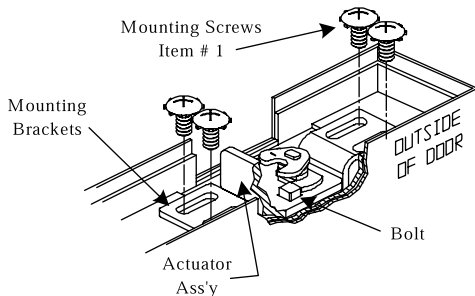


Figure A

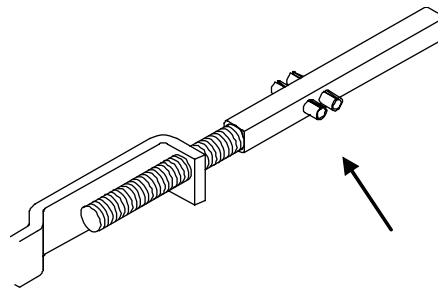


Figure B

The square bolt can be adjusted up or down (CW to lower - CCW to raise) so that it is flush with the stop plate. Be sure that the square bolt is not too high, as this will cause the actuator to rock in the channel. The pins in the square bolt (Figure B) must be turned in the proper direction to fit through the slot in actuator. After the square bolt has been adjusted, hand tighten the four mounting screws.

The top strike must be properly located, and tightened securely, for the device to operate correctly. **A minimum 1/16" between top of door and frame is required. Position the top strike so that it is centered on the hole cutout. (Figure D) Tip the strike post into the hole and hand tighten. Depress the pushbar to open the top latch actuator. Slowly close the door so that the top actuator and strike engage. This technique will self align the components. Depress the pushbar and open the door slowly. Tighten the top strike post with the allen wrench and also secure the top actuator by tightening the four mounting screws (Figure C).

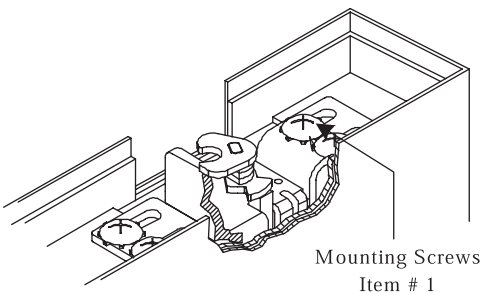


Figure C

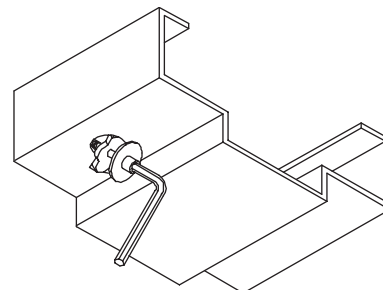


Figure D

Entry Trim Maintenance

The entry trim screws mounted on the interior of the door should be checked to assure tightness. The diagrams on the following page (Figure C) will show how to locate the screws. A detailed parts list is also included for your convenience.

A heavily scratched handle or escutcheon can be removed and replaced if necessary. Here are the directions on how to change each.

Changing 3080 Series Escutcheon or Handles

Step 1

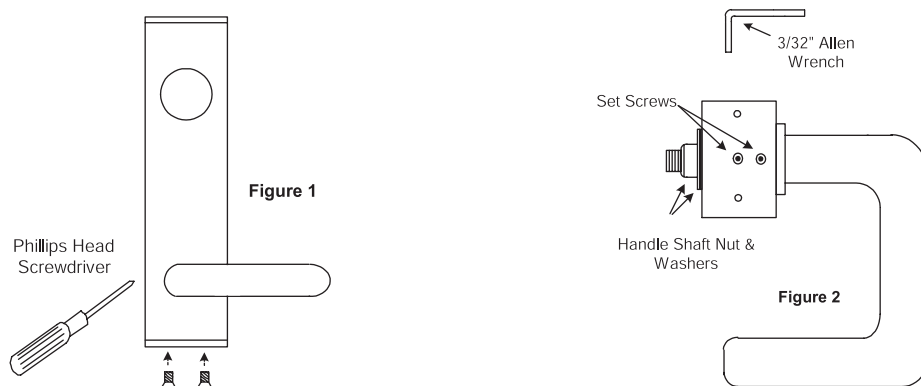
- Turn the lever handle into position shown in Figure 1.
- Remove the two flat Phillips head screws on the bottom escutcheon plate using a Phillips head screwdriver.
- Remove bottom escutcheon plate.

Step 2

- On the bottom of the trim, loosen the two set screws (TWO TURNS MAXIMUM!) with the 3/32" allen wrench provided.
- Remove the handle shaft nut and two washers shown in Figure 2.
- Remove handle from escutcheon assembly.
- If handle only is being replaced move onto Step 3.
- Remove and replace escutcheon.

Step 3

- Replace lever and install washers and handle shaft nut. (DO NOT OVER TIGHTEN!) Nut should be lightly tightened down then backed off until handle is operational.
- Tighten the two bottom set screws.
- Replace the bottom escutcheon plates and secure with the Phillips head screws.



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Entry Trim - con't

The entry trim utilizes a clutching mechanism that protects the handle from vandalism or forced entry. If the handle has been forced into the clutch position one or both of the 1/8" dia x 1" rotation limiting pins, located below the handle lock nut, may have to be replaced. This can be done by simply removing the trim from the door and replacing the pins. When reattaching the trim make sure the trim spindle engages the device before tightening nuts.

You will find a detailed parts breakdown of the entry trim on the following page for your convenience. (Figure C). The internal components of the trim are under extremely high pressure and should not be tampered with. The warranty will be voided if the seal on back of the trim has been broken.

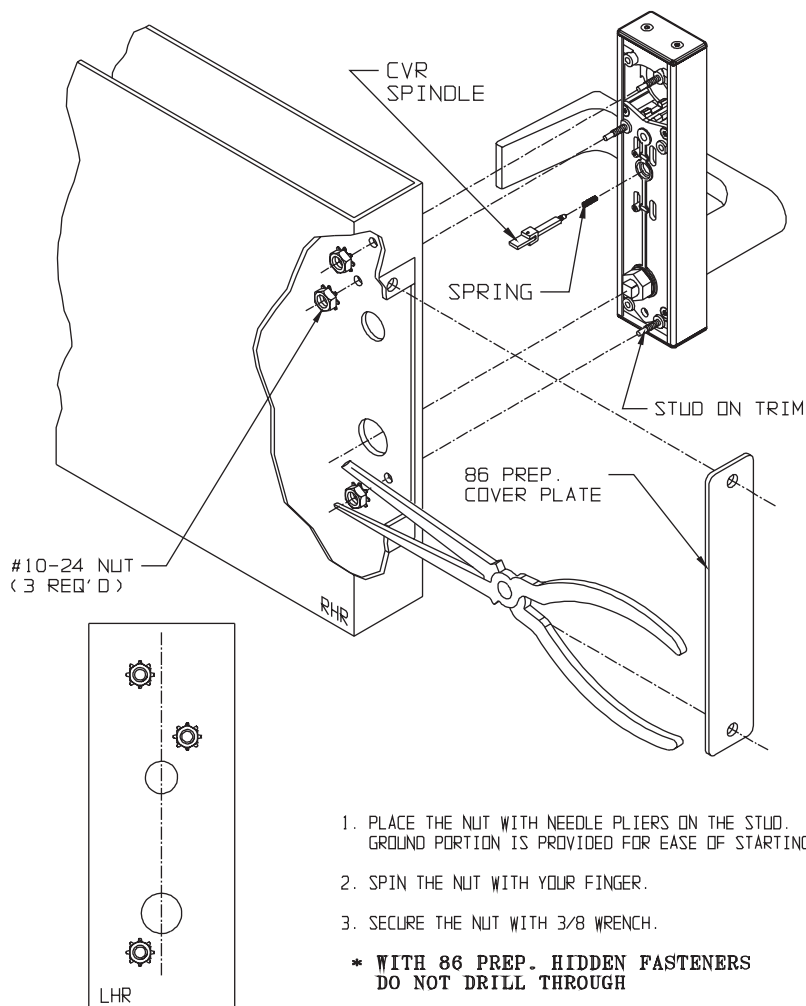
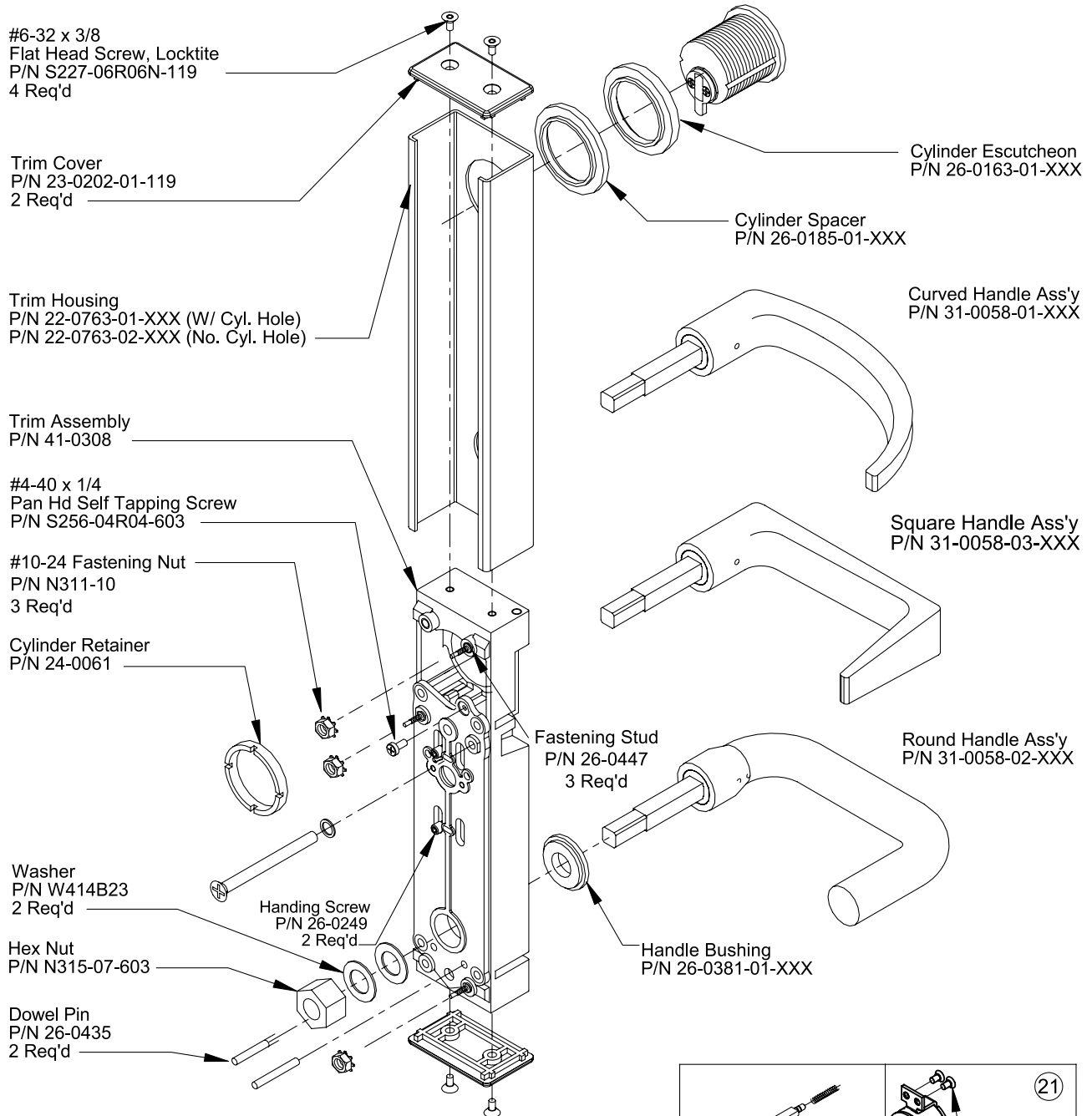
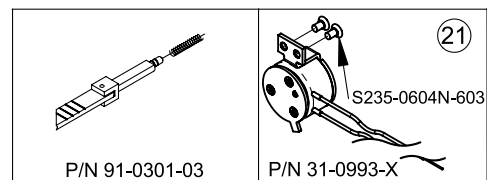


Figure B



D3081/D3082/D3083
Entry Trim
Replacement Parts List



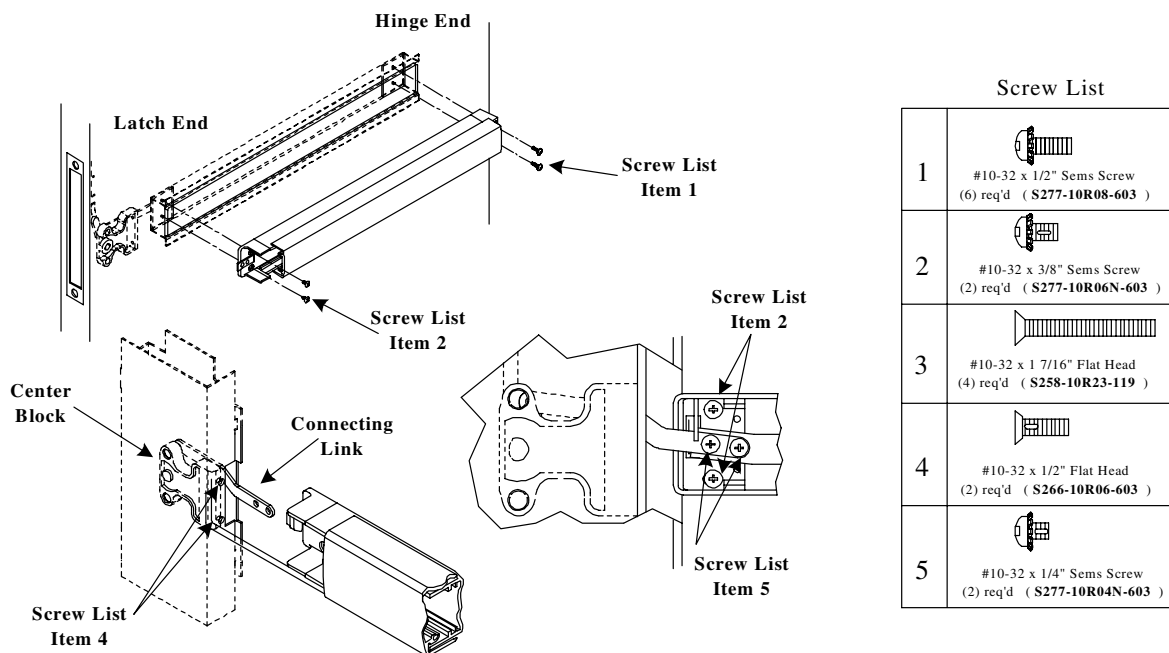
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Maintenance of Top Rod Assembly

Annually apply a small amount of commercial grease to the top of the square bolt at the top of the door. In unusually dirty situations a small amount of spray lubricant can be applied to the center gear mechanism by removing the edge plate on the edge of the door.

To replace the rod mechanism it will be necessary to take the door down if it is less than 8' tall. For taller doors it will most likely be necessary to take the door out of the frame.

To remove the top rod assembly, first remove the cover plate from the locking edge of the door. Then remove the lever trim. Remove both end caps and push bar from the device. Remove the two sem screws from the link arm. Holding the rod assembly through the access hole in the door edge, remove the two screws from the edge of the panic bar cutout and pull the top rod assembly out through the access hole.



To replace, first remove the top latch assembly from the top edge of the door by removing the four screws. Adjust the new rod length as the old rod, making sure the top square bolt is threaded about half way giving you optimum adjustment. With the rod at the correct length, screw the cap head screw all the way through the rod. Push the rod assembly up through the access hole making sure the trim adapter is facing the pull side of the door. Pull the link arm through to the exit device cutout. Push the gear assembly up to the edge of the push bar cutout and screw into place. The link arm goes over the slide arm of the exit device, and then replace the sems screws.

Replace the top latch over the square bolt making sure pins in the square bolt are oriented to the slot in the top assembly as outlined in the top actuator section.



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Latch Retraction (LR) Devices

Electric latch retraction is an available feature for The RITE Door®. The LR option provides for electric latch retraction from a remote location. All D3676LR, D3677LR & D8576LR devices are required to be operated with the D-PS-LR Adams Rite power supply. This power supply will provide the necessary 16 Amperes of current @28VDC required to operate these devices. The power supply features dual system retraction, allowing independent or sequential control for up to two devices. Fire alarm interface and auxiliary power source outputs are also standard features on the power supply. The D-PS-LR power supply is equipped with automatic door interface circuitry. Refer to the diagram inside the access panel of the D-PS-LR power supply or on the following page for wiring of the devices and auxiliary outputs.

Troubleshooting

If and when a problem with the Electric Latch Retraction system occurs some troubleshooting tips for the units are given here for your convenience. A qualified installer or electrician is recommended to repair any electrical problems that may be encountered. Before proceeding through the trouble shooting section, ensure that exit device latches are not binding against their corresponding strikes. A bound latch can cause sluggish electric retraction or prevent retraction entirely.

Neither Exit Device Retracts After The Control Switch is Activated

Ensure exit device wires are properly terminated in the power supply. Verify continuity through power transfer devices such as wired hinges and door cords/loops.

"Main Power" Red LED Is Not Lit

Verify line voltage is present. Check fuse F2 (in the black fuse holder). Ensure that the Primary Voltage Selection Switch SW2 is properly set.

"Output Power" LED On Power Supply Board Is Not Lit

Check fuse F1. If fuse F1 is blown, the wires that are run to the exit device are probably shorted together against the conduit, door frame, or electric hinge. Use a meter to check for shorts. There is no Fire Alarm connection between J3-9 and J3-10 or the factory installed jumper between J3-9 and J3-10 is removed.

IN1 And IN2 lights Do Not Light In Response To Input Switches

An open connection in the field wiring exists between the Adams Rite Power Supply and control switch used for activating the latch solenoids. A defective control switch exists on J3-1 and J3-2 or J3-3 and J3-4.

OUT1 And OUT2 Lights Do Light In Response To Input Switches

An open connection in the field wiring between the Adams Rite Power Supply and the exit device may exist. Do a resistance check to verify. If previous suggestions do not solve the problem, and one EXIT DEVICE works and one does not, prop the door open and connect a voltmeter across the BLACK and WHITE leads coming from the exit device. Next, activate the malfunctioning Exit Device. If the voltmeter measures approximately 28VDC at the time of activation, but the latch did not budge, then the two wire driver is not generating pulses to the PULL coil of the solenoid. The exit device must be replaced.

Devices Retract Even Though The Control Switch Had Not Been Activated

A maintain control switch is being used and is in the closed position. Control switch is defective - Disconnect switch to verify.

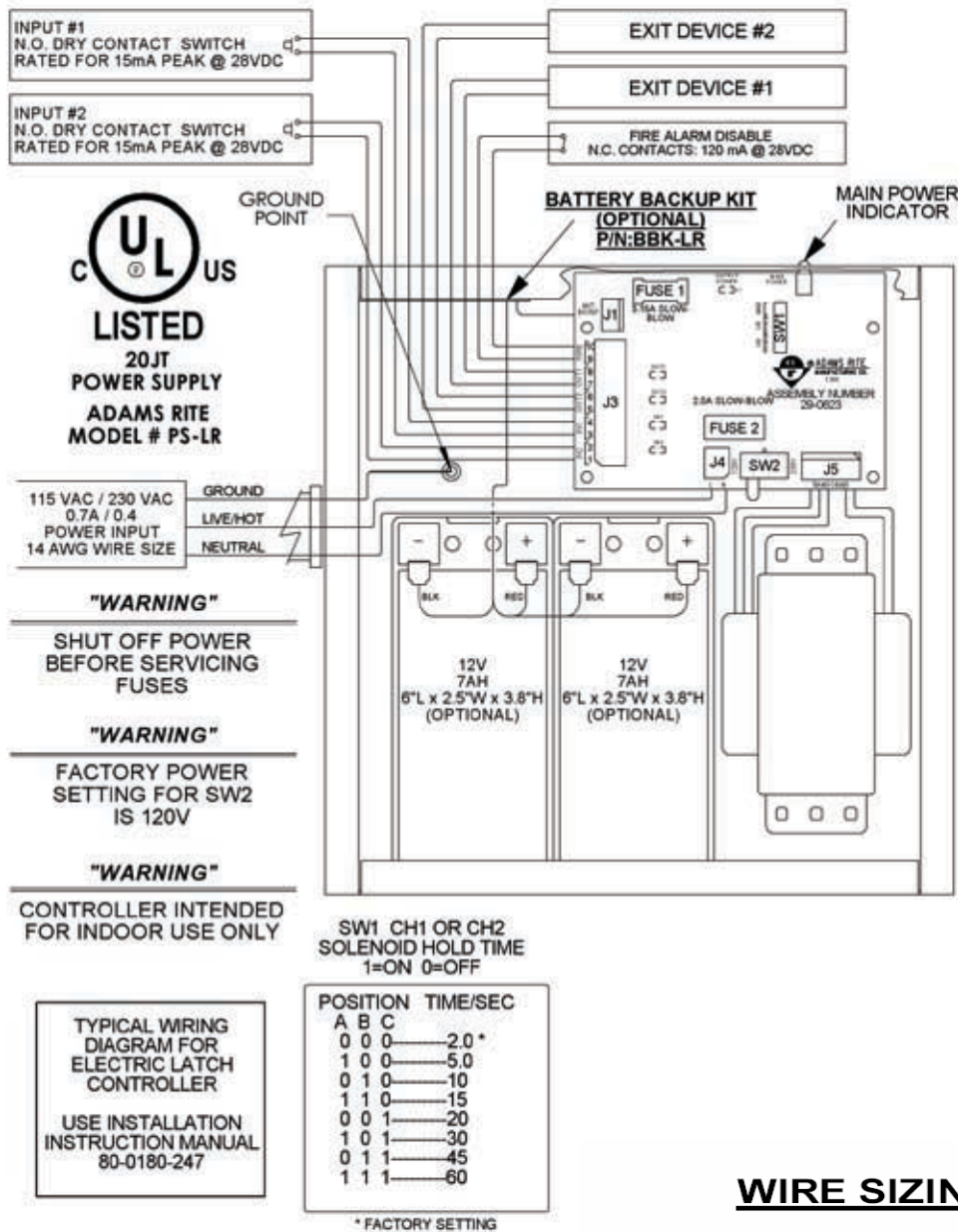
Buzzing Sound Is Coming From Inside The Exit Device

The latch is binding against its corresponding strike and preventing it from retracting fully due to misalignment between the latch and strike opening.

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PS-LR Power Supply Wiring Diagram

FIG. 1



WIRE SIZING FIG. 3

AWG CHART --- RUN LENGTH	
24 VDC ---16 AMPS	
RUN LENGTH (IN FEET)	WIRE GAGE
0 --- 40	16
40 --- 60	14
60 --- 100	12