



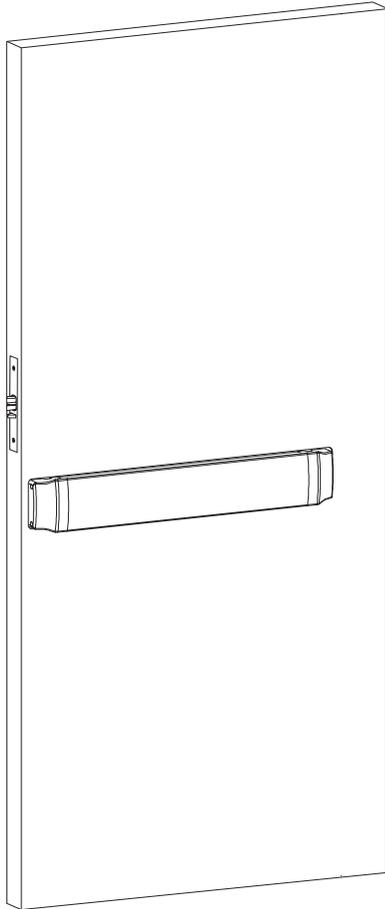
24908410

Recessed Exit Device

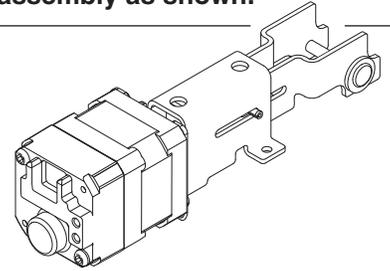
QEL94/9575

VON DUPRIN®

Installation Instructions



Instruction applies to devices built after Dec. 2014. To identify device, see QEL motor assembly as shown.



⚠ WARNING

Install in accordance with instructions or device will not function.

Devices covered by these instructions:

QEL94/9575 Mortise Device (Panic and Fire)

Read All Warnings Before Starting Installation!

Index

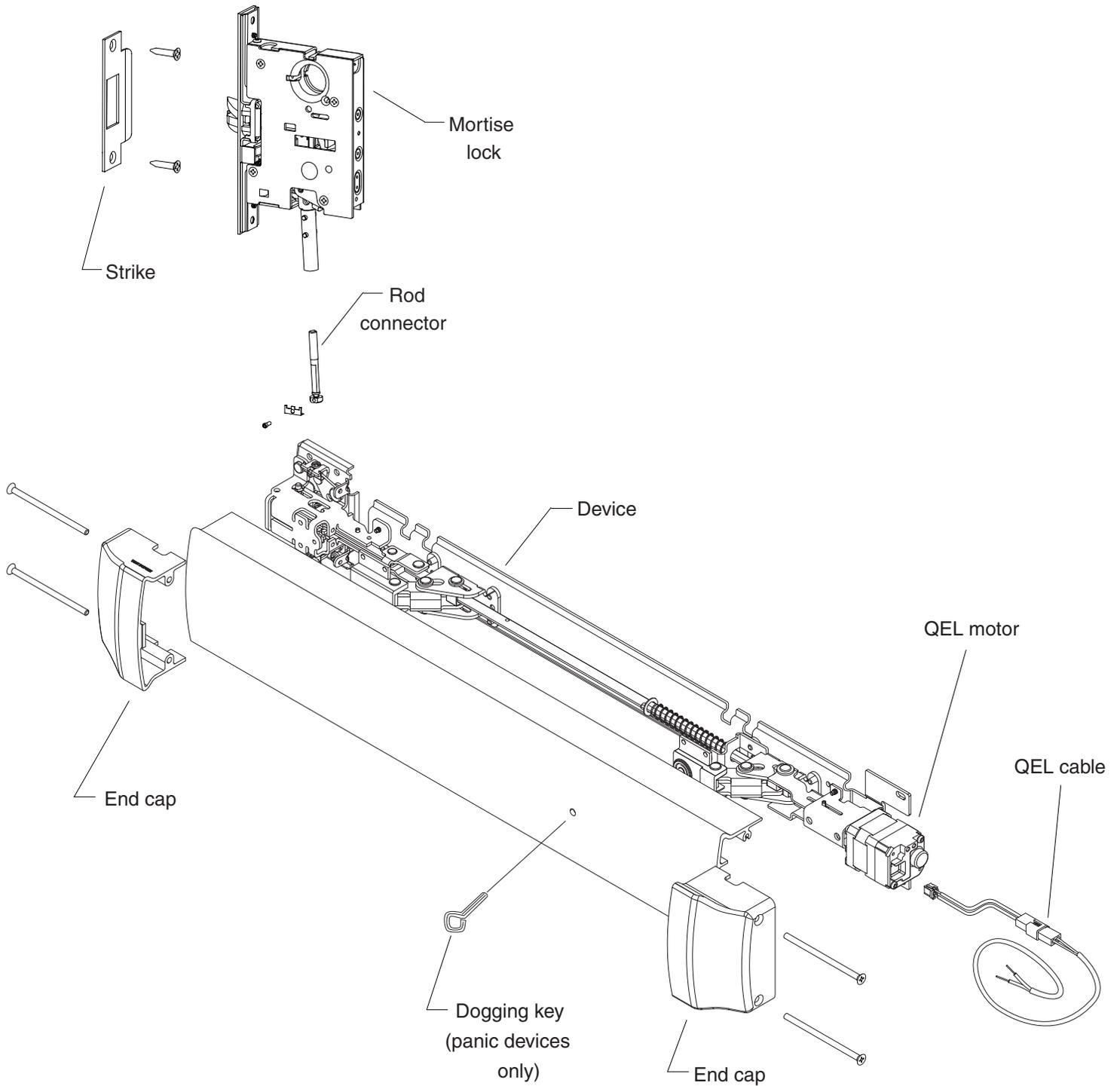
- Warning 1
- Parts 2
- General Information 3
- Specifications 3
- Tools Needed 3
- Set Handling 3
- Installation 4



Customer Service

1-877-671-7011 www.allegion.com/us

PARTS



GENERAL INFORMATION

The QEL94/9575 Exit Device is designed to provide reduced pushpad projection and a unique appearance by embedding the device into the face of the door.

These instructions assume that a factory-prepared door and frame are being used.

Before starting installation, review "Warning," "Parts," "Specifications," and "Tools Needed."

SPECIFICATIONS

Mechanical

- Pushpad projection (depressed) 1 1/8" to 1 1/4"

Electrical Load

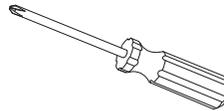
- Voltage: 24 VDC
- Current: 1.0 A inrush (0.5 sec)
0.14 A holding

TOOLS NEEDED

These are the tools needed for installing a QEL94/9575 into a factory-prepared door and frame.



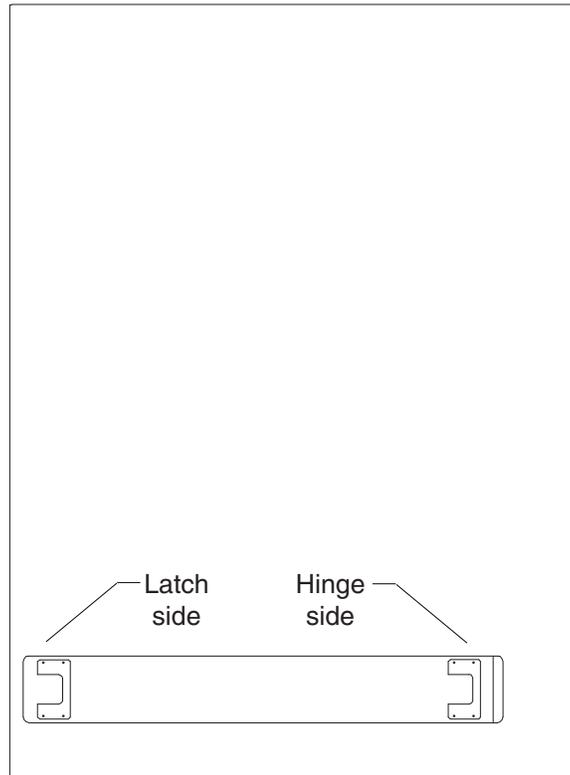
7/64" hex key



#2 Phillips screwdriver

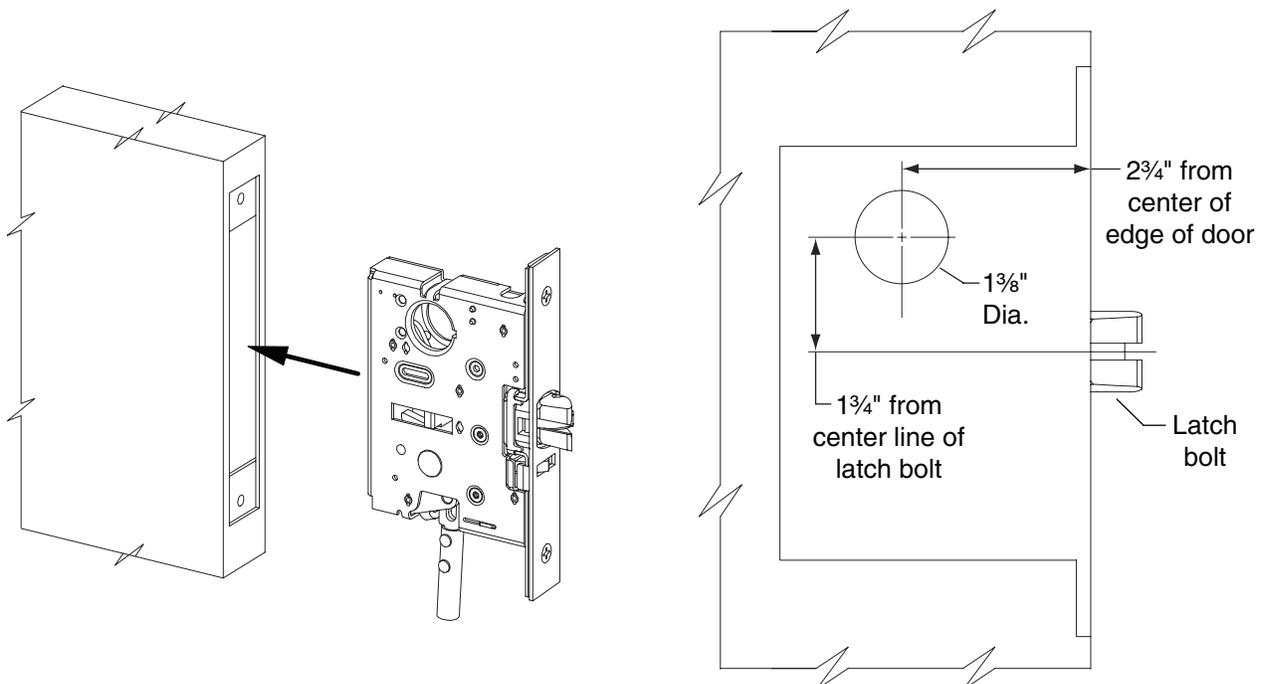
1 PREPARE DOOR FOR OUTSIDE TRIM (SKIP THIS STEP IF NOT USING TRIM)

Drill through the four mounting holes and trim access hole at the latch side of the cutout. **See trim installation instructions for hole sizes and locations.**

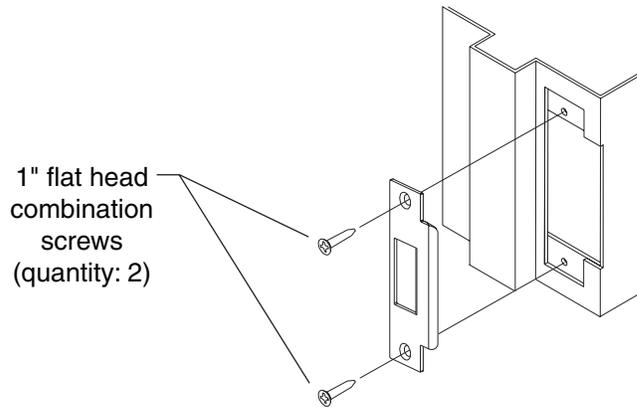


2 PREPARE DOOR FOR OUTSIDE CYLINDER (SKIP STEP IF NOT USING OUTSIDE CYLINDER)

- Temporarily install mortise lock in door and locate cylinder hole on outside face of door as shown.
- Remove mortise lock and prepare cylinder hole through outside face of door only.



3 INSTALL STRIKE



4 WIRE LX SWITCH (LX DEVICES ONLY)

- Connect field wiring to frame side of power transfer (Figure 4-1).
- See LX switch wiring information (Figure 4-2) for switch configuration.
- Connect LX switch wiring to door side of power transfer using crimp connectors. Unused wires should be insulated separately.

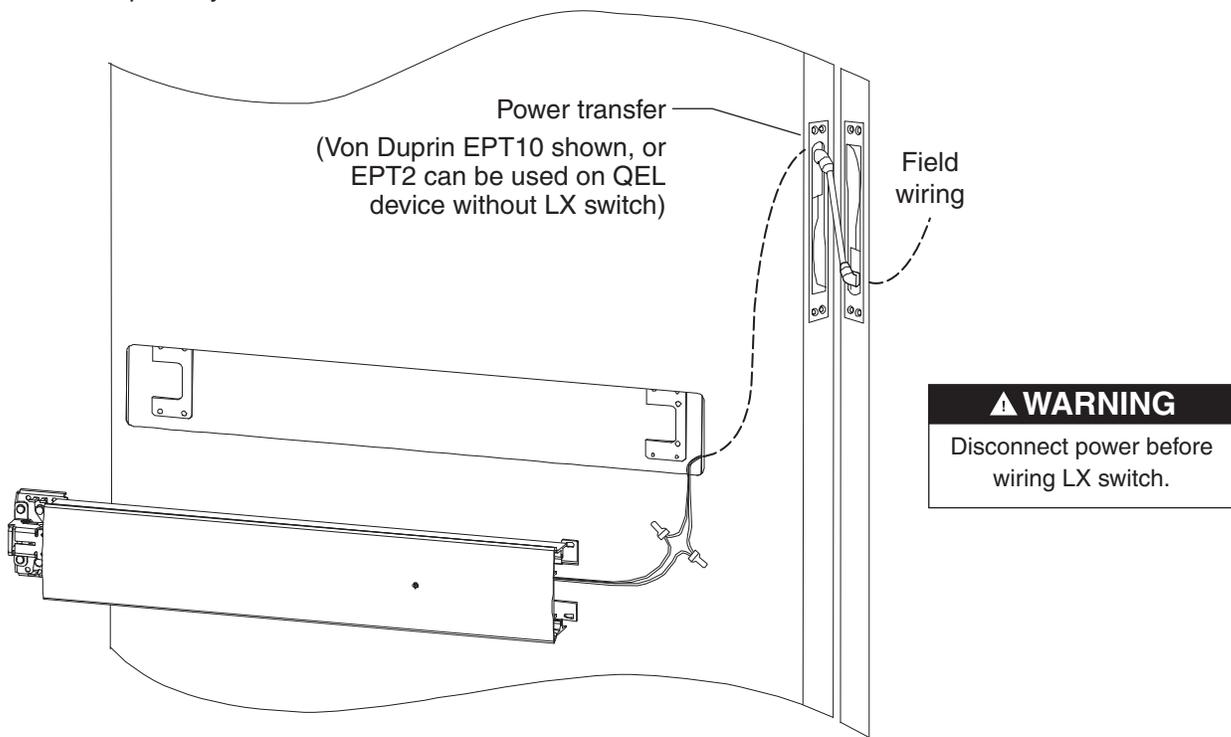


Figure 4-1

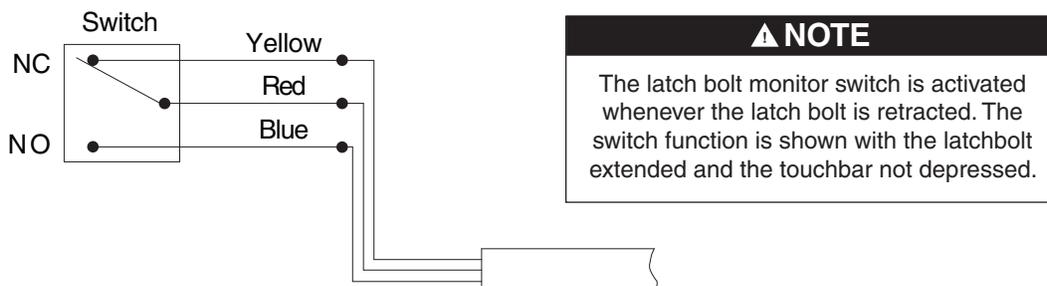


Figure 4-2

5 MOUNT DEVICE ON DOOR

- Mount device on door using supplied mounting screws (Figure 5-1).
- Center device in pocket, leaving an even gap all around the device.
- If outside trim is used, bolt through to trim (see Figure 5-2 and trim installation instructions).

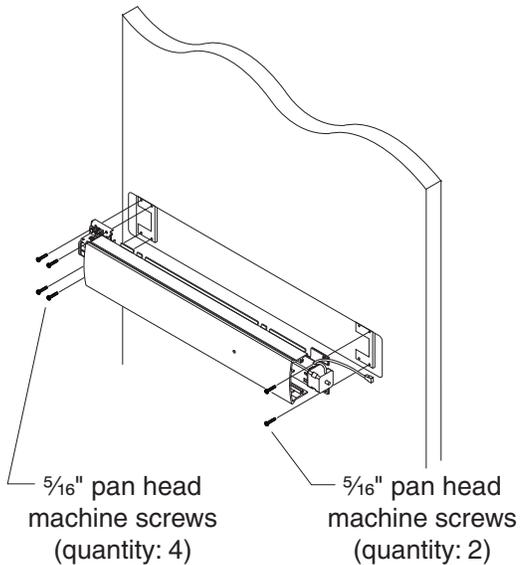


Figure 5-1

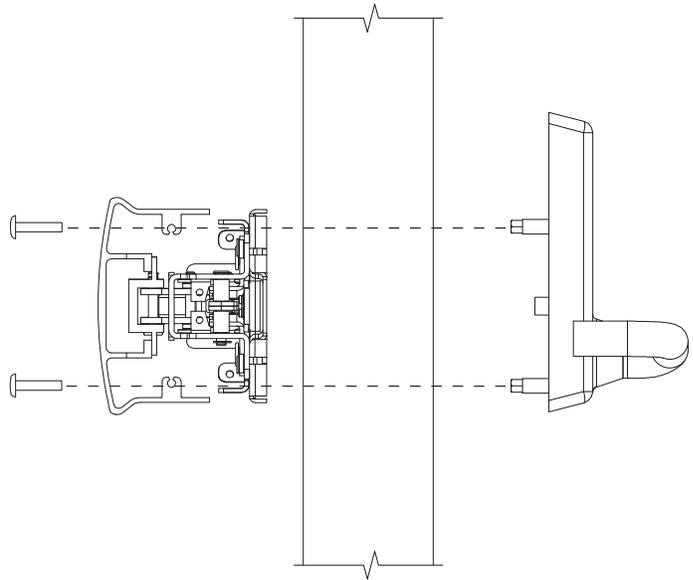
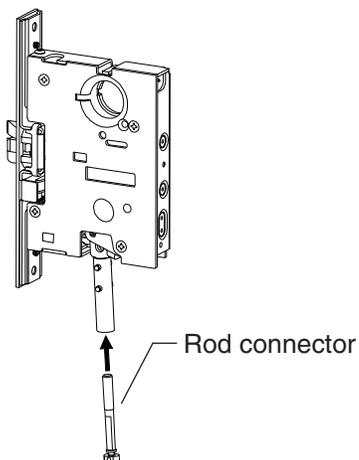


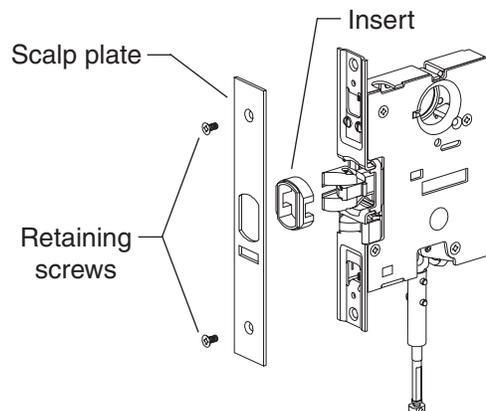
Figure 5-2

6 INSTALL MORTISE LOCK

- Thread rod connector into mortise lock.

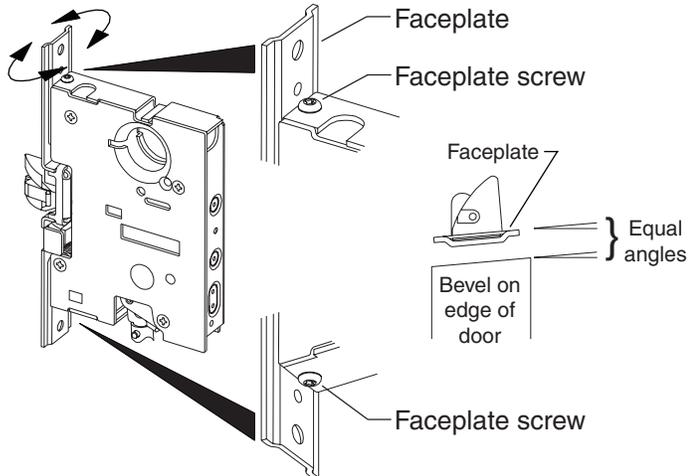


- Remove retaining screws, scalp plate, and insert.

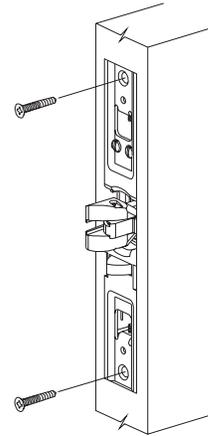


6 INSTALL MORTISE LOCK (continued)

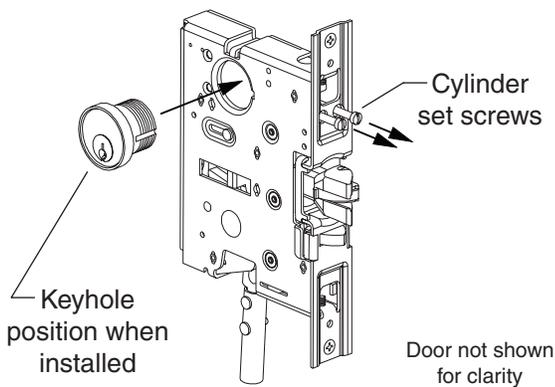
- c. Adjust faceplate for door bevel.
1. Loosen top and bottom faceplate screws.
 2. Pivot faceplate to match door bevel.
 3. Tighten top and bottom faceplate screws.



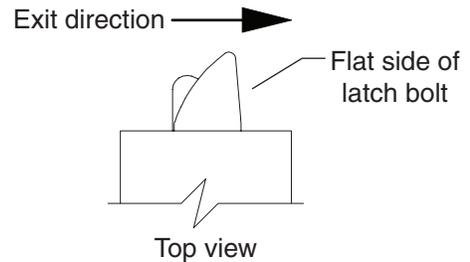
- d. Install mortise lock in door with two #12-12 x 12-24 combination screws.



- e. If using outside cylinder:
1. Back out cylinder set screws enough to clear cylinder mounting hole.
 2. Thread cylinder into mortise lock through hole in outside face of door.
 3. Tighten the cylinder set screw that is closest to outside face of door. Remove the other cylinder set screw.



- f. Rotate latch bolt so flat side faces exit direction.



- g. Replace insert, scalp plate, and scalp plate retaining screws (See step b).

7 ADJUST ROD CONNECTOR

- Fully depress and hold pushpad and pull rod connector to set mortise lock latch bolt in fully retracted (hold) position (Figure 8-1).
- Push down on center case connector, adjust rod connector length, and connect rod to center case connector (Figure 8-2).
- Verify that pushpad projection is $1\frac{1}{8}$ " to $1\frac{1}{4}$ " when depressed. Adjust rod connector if necessary:
Lengthening the rod connector reduces pushpad projection when depressed.
- If using trim, verify that the trim fully retracts the latch bolt. If the trim does not fully retract the latch bolt, adjust the rod connector so it is shorter.
- Open the door and release latch by pushing in auxiliary bolt. Check deadlocking: Latch bolt should not retract when pressed in.

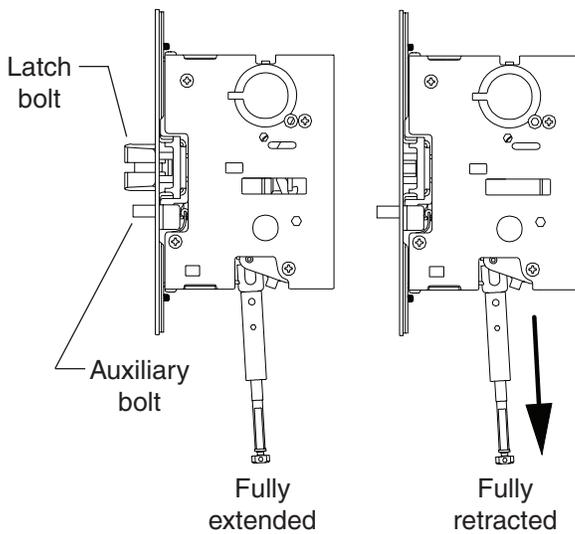


Figure 8-1

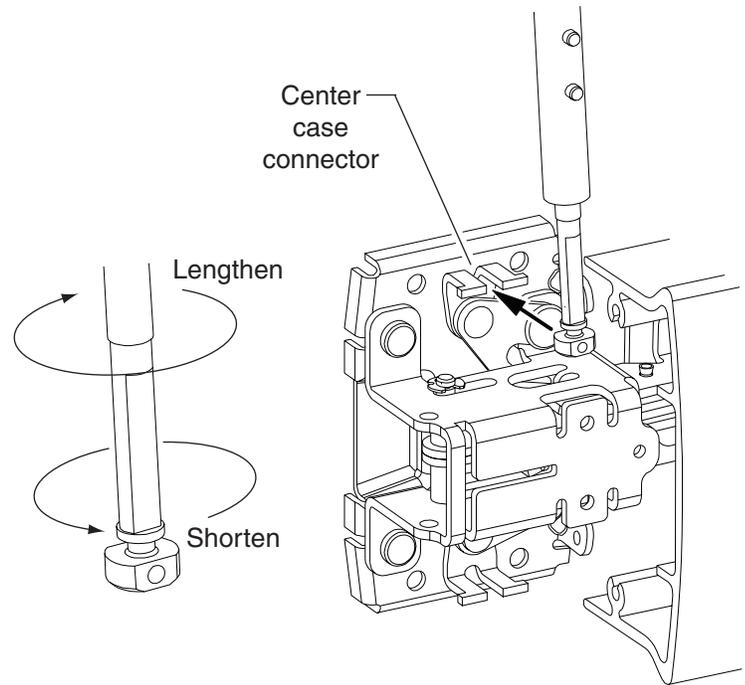
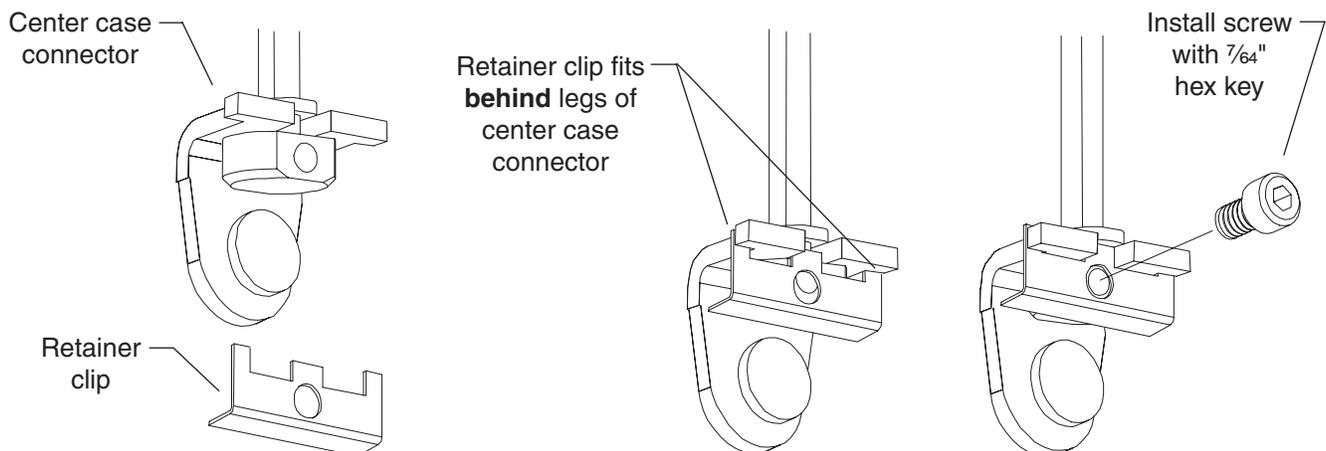


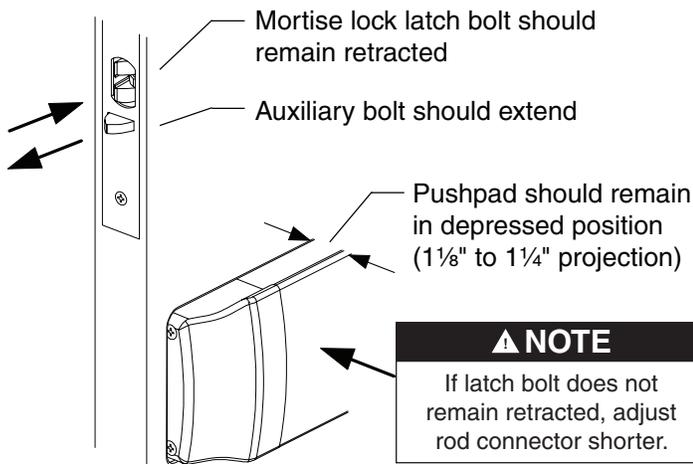
Figure 8-2

8 INSTALL RETAINER CLIP ON ROD CONNECTOR AT CENTER CASE

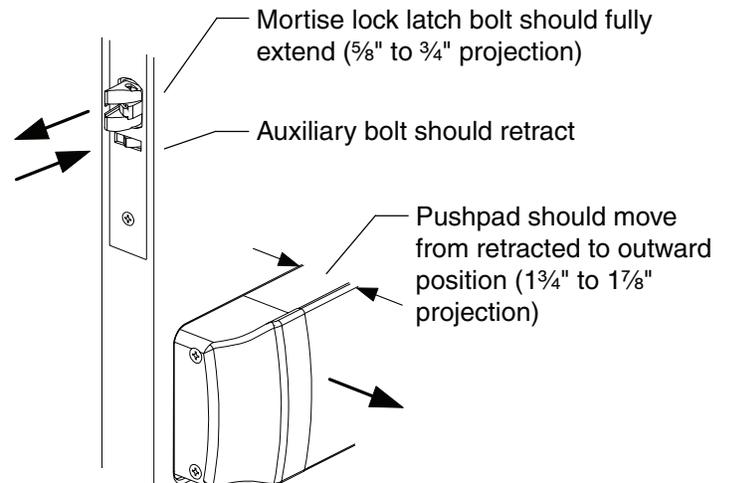


9 TEST MECHANICAL DEVICE OPERATION

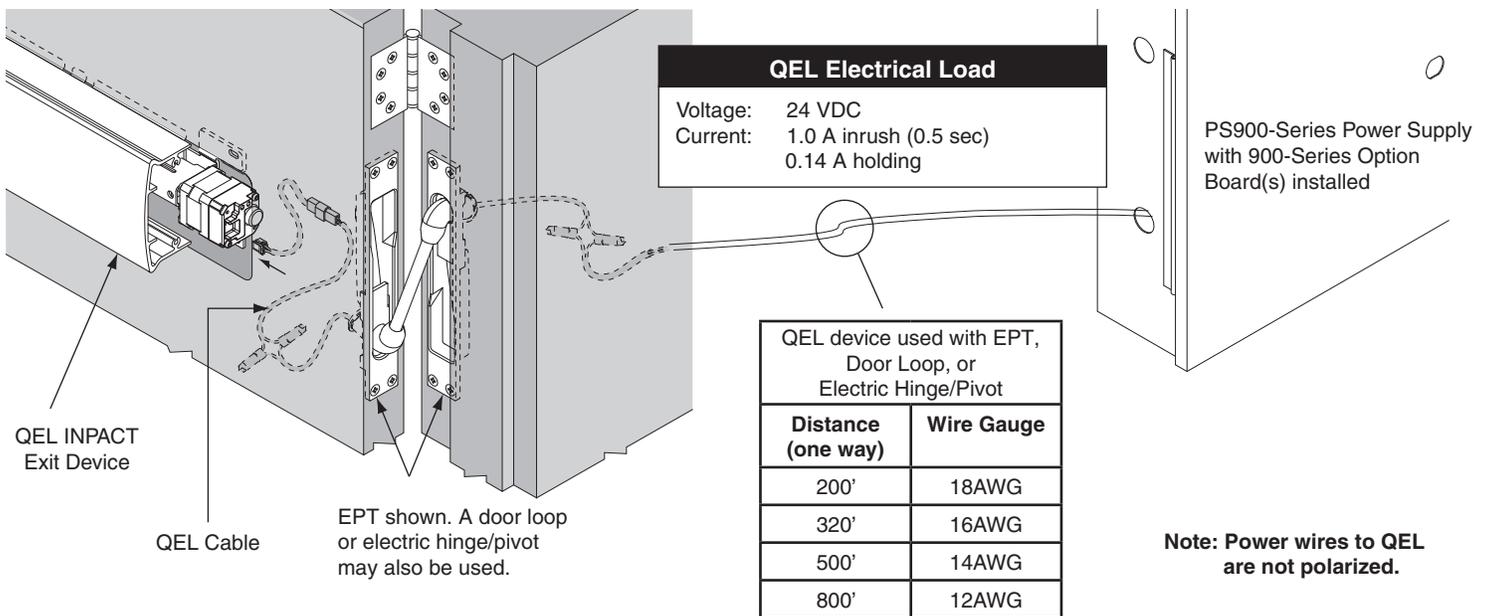
a. Fully depress pushpad, push door open, and release pushpad.



b. Close door or press auxiliary bolt in.



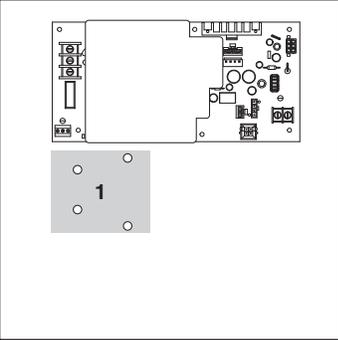
10 ROUTE TWO WIRES FROM QEL EXIT DEVICE TO POWER SUPPLY



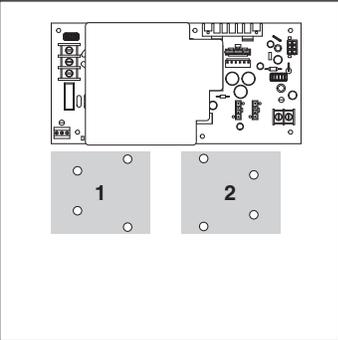
11 INSTALL 900-2RS, 4RL, OR 4R OPTION BOARD(S) INTO POWER SUPPLY

a Review Available 900 series Option Board Mounting Locations (Gray)

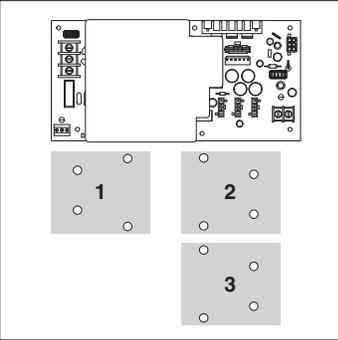
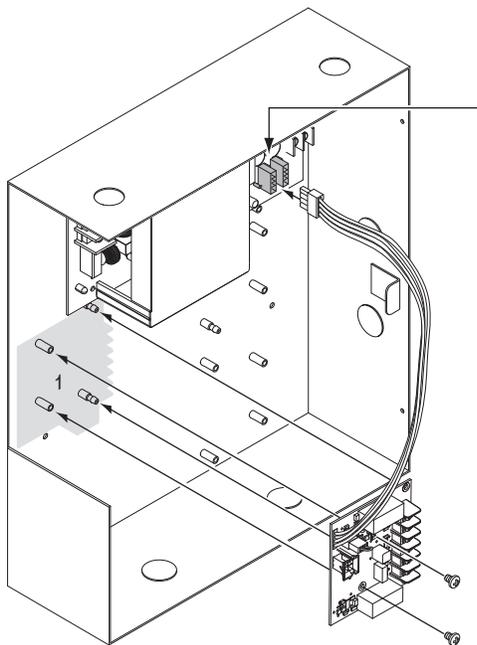
PS902



PS904
PS914



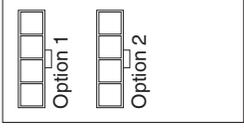
PS906

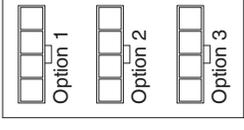
b Plug Option Board Cable into any Available Option Connector



Option 1 PS902
1 Board



Option 1 PS904, 914
Option 2 2 Boards



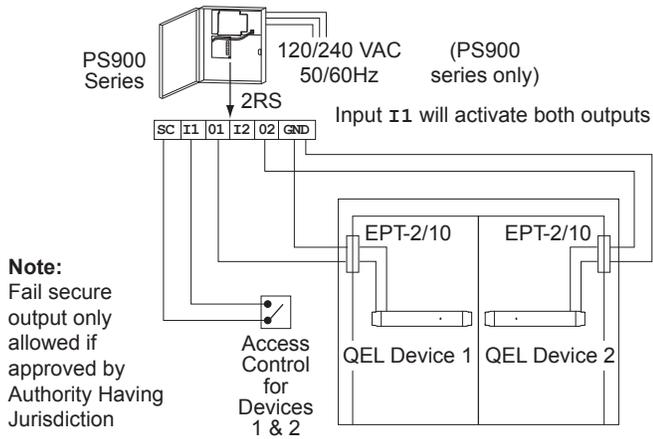
Option 1 PS906
Option 2 3 Boards
Option 3

c Secure Board(s) with Screws

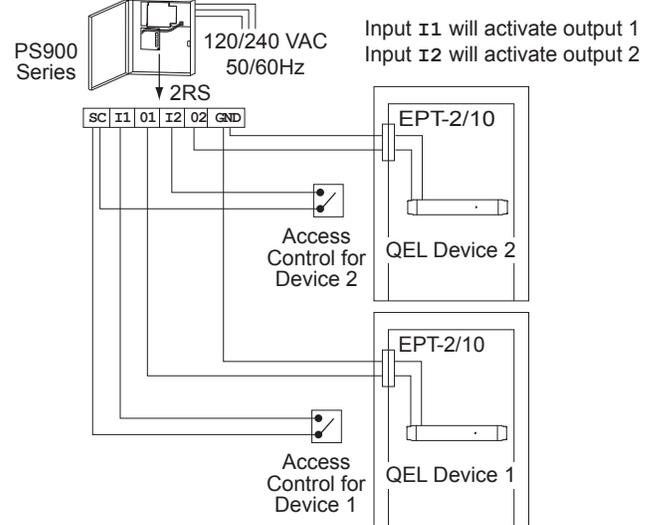
- Notes:**
1. 24VDC output setting required when QEL device connected
 2. If installing board in location 2 or 3, rotate board 180°
 3. The QEL is compatible with an existing 900-2Q board if currently installed.
 4. Latchbolt retraction of (2) sequenced QEL's requires more than 1 second to complete.
 5. When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating.

12 CONNECT INPUT AND OUTPUT WIRES TO OPTION BOARD, 2RS SHOWN

Sequential Mode - Typical Wiring



Individual Mode - Typical Wiring



13 APPLY POWER TO POWER SUPPLY. IF 900-BB IS USED, THEN RECONNECT BATTERIES

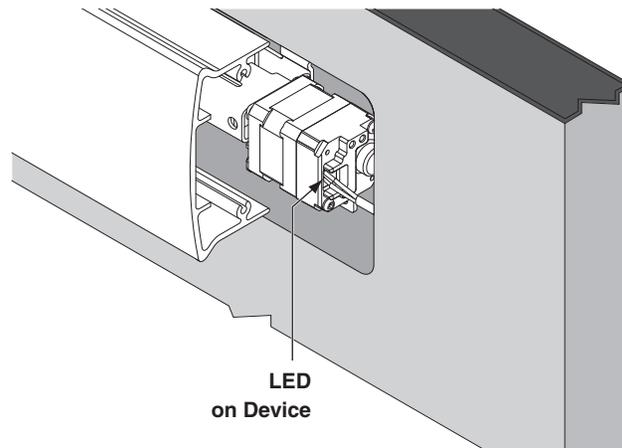
14 CHECK OPERATION

- Activate each input and verify all QEL devices operate properly.
- If any device does not operate properly, see step 15 for troubleshooting.

15 IF NECESSARY, TROUBLESHOOT OPERATION

Power at the QEL	QEL Response	Condition/Solution
24VDC	LED - Solid green Latchbolt - retracted	Operation normal, latch retracted immediately
	LED - Solid red after latchbolt attempts to retract multiple times	Latchbolt cannot fully retract mechanically Verify mechanical adjustment (on vertical rod or mortise lock devices if used). Remove and reapply input voltage to reset this condition.* <i>See Test Mechanical Device Operation on page 9 as needed.**</i>
	LED - Flashing green/red Latchbolt - not retracted	Excessive tamper (while power applied, the pushpad was pulled out at least 3 time) Wait 15 seconds and latchbolt will retract again OR remove and reapply power to clear condition
24VDC low	LED - Flashing green Latchbolt - retracted	Voltage low during latchbolt retraction (latchbolt retracts at reduced force) Wire length is too long, wire gauge is too small or power supply has poor regulation
29VDC or greater	LED- Flashing red Latchbolt - will not retract	Input voltage is too high for proper operation Wrong power supply, power supply defective.
13VDC or lower		Input voltage is too low for proper operation Wrong power supply, power supply defective or not set to the proper output voltage. To set, remove AC power from power supply, change power supply setting from 12 to 24VDC, then reapply AC power and verify proper operation.
0VDC	LED - off Latchbolt - not retracted	No input voltage Problem with the power supply, control switch or wiring
0VDC	LED - off Latchbolt - retracted	No input voltage Mechanical dogging is engaged

*For information about adjusting exit devices, you can find their installation instructions in the support area at www.allegion.com/us or call Technical Services at 1-877-671-7011



16 INSTALL END CAPS

▲ NOTE

Make sure pushpad is in outward position before installing end caps.

