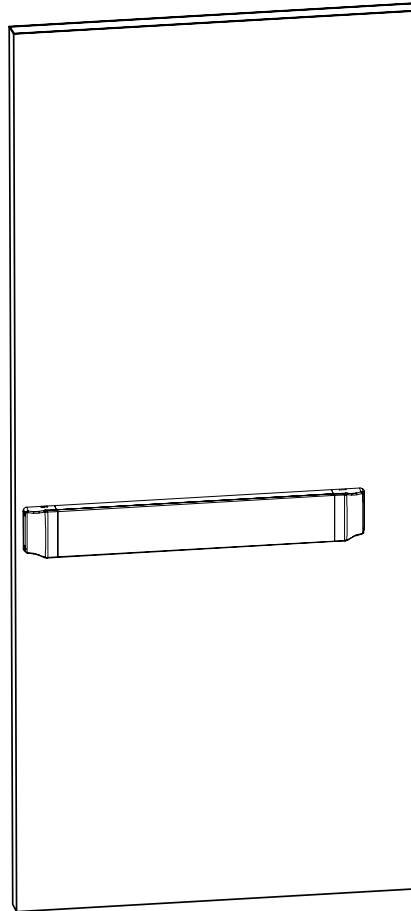


VON DUPRIN®

Installation Instructions

94/9547 *INPACT*™

Recessed Exit Device



Devices covered by these instructions:

- 94/9547/48 Concealed Vertical Rod Device (Panic and Fire)
- 94/9547-LBR Concealed Vertical Rod Device (Fire)
- EL94/9547/48 Concealed Vertical Rod Device (Panic and Fire)
- EL94/9547-LBR Concealed Vertical Rod Device (Fire)
- LX94/9547/48 Concealed Vertical Rod Device (Panic and Fire)
- LX94/9547-LBR Concealed Vertical Rod Device (Fire)

**Read All Warnings
Before Starting Installation!**

Patent pending.

© 2006 Ingersoll-Rand Company Limited

911364_00(3)

Index

- General Information 2
- Specifications 2
- Warnings 2
- Tools Needed 3
- Parts 3
- Installation 4

GENERAL INFORMATION

The 94/9547 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 specifications, warnings, tools needed, and parts.

SPECIFICATIONS

Mechanical

- This device is for doors 3' to 4' wide
- Vertical rods adjustable for doors 6' 8" to 8' tall
- Rods for 10' doors are available upon request
- Pushpad projection (depressed) 1-1/8" to 1-1/4"

Solenoid (EL devices only)

- Voltage: 24 VDC continuous duty
- Current: 0.25 A holding current
16 A in-rush current



WARNING

Install in accordance with instructions or device will not function.



CAUTION

For less bottom rod (LBR) devices, do not cover the door gap at the auxiliary fire latch with a door edge guard or similar product. If edge guard is installed, remove it.

TOOLS NEEDED

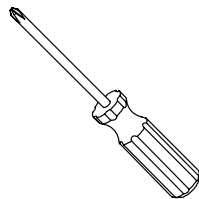
These are the tools needed for installing a 94/9547 into a factory-prepared door and frame.



1/2" drill bit



7/64" hex key

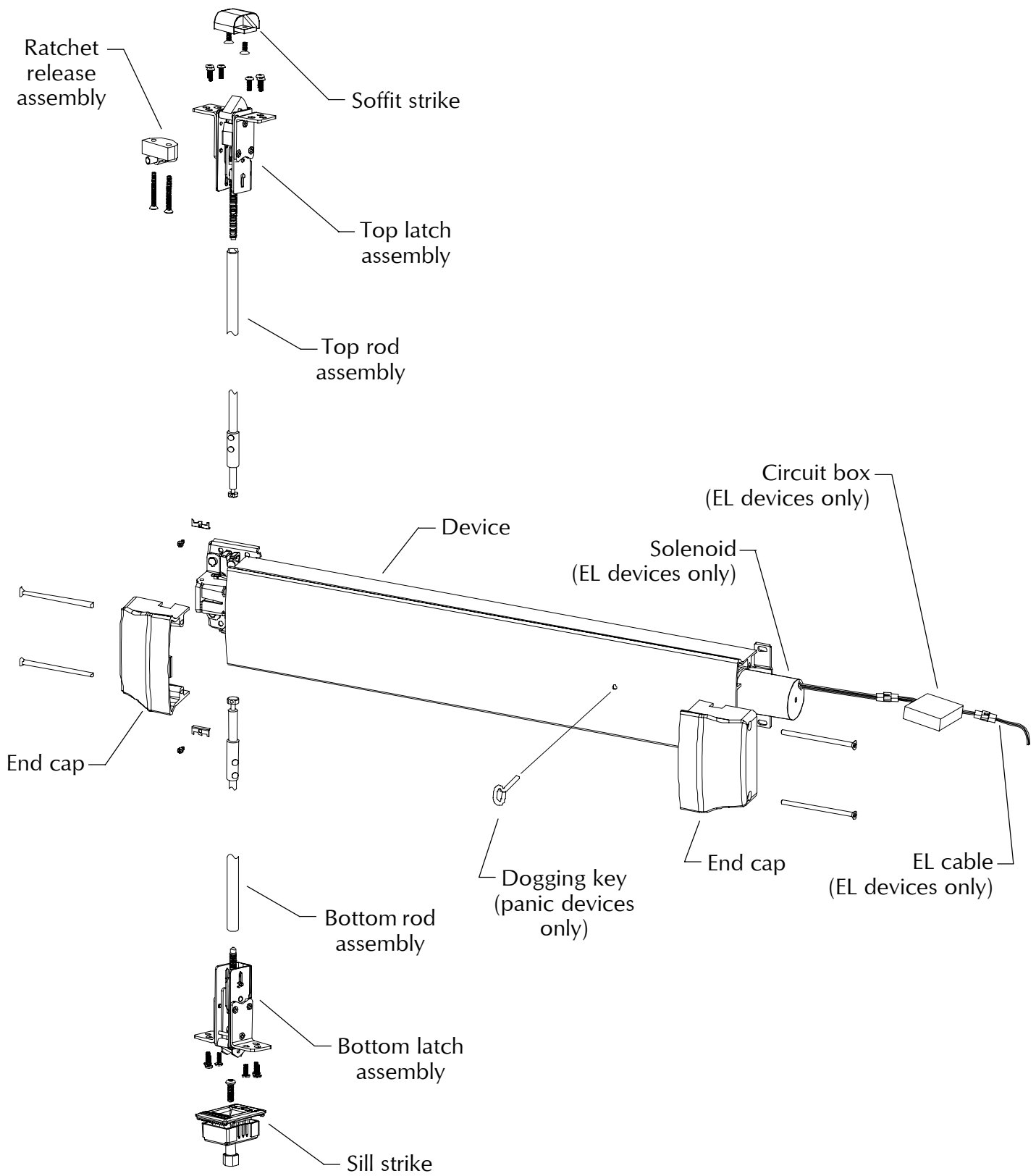


Phillips screwdriver



Hammer

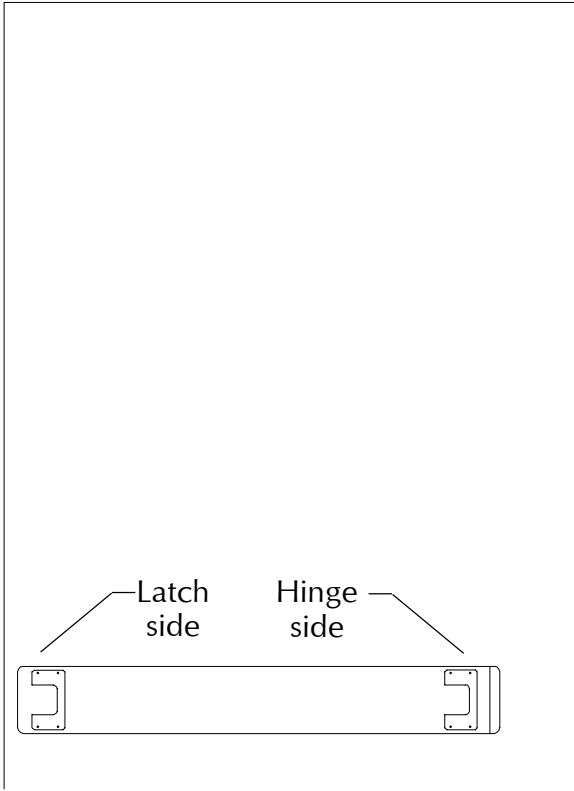
PARTS



INSTALLATION

1 Prepare door for 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.



2 Prepare hole for ratchet release plunger.

2.1. Determine stop height (Figure 2-1), then mark center of hole on device side of door (Figure 2-2).

2.2. Drill a 1/2" diameter hole where marked through device side of door **only**.

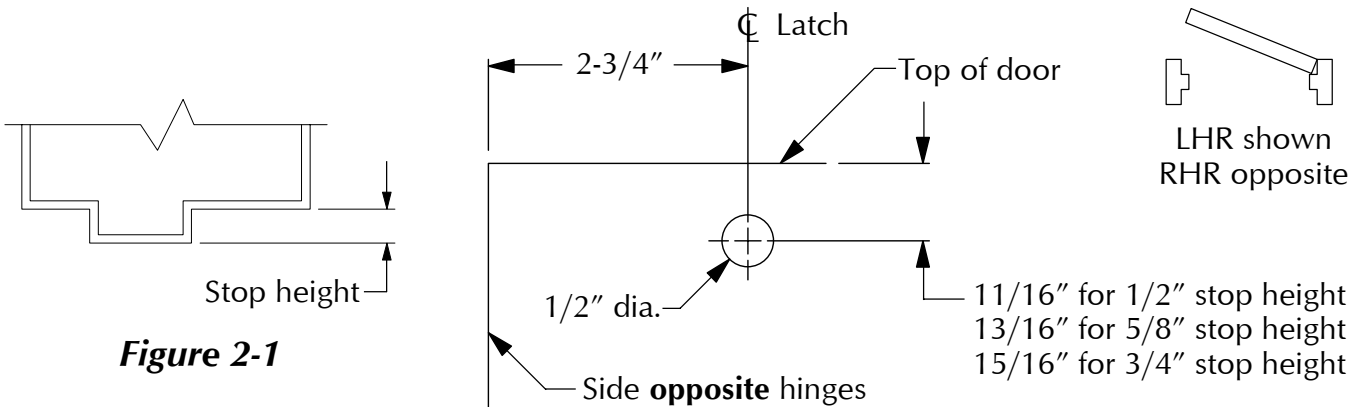
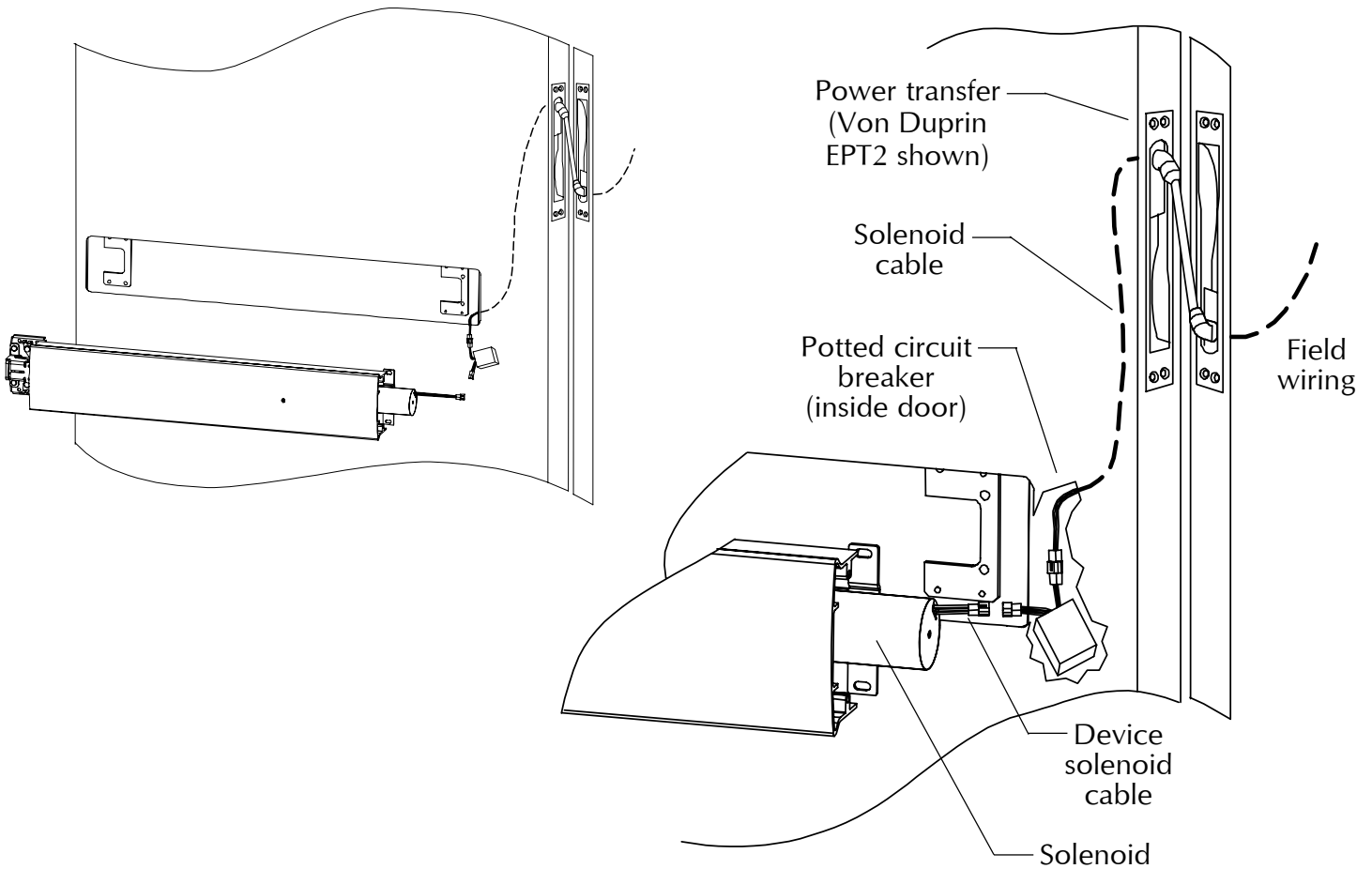


Figure 2-2

3 Wire potted circuit breaker. (EL devices only.)

- 3.1. Connect field wiring to frame side of Von Duprin EPT2, Von Duprin door loop, or electric hinge.
- 3.2. Pull solenoid cable through device cutout in face of door.
- 3.3. Connect solenoid cable to door side of power transfer.
- 3.4. Connect solenoid cable to potted circuit breaker.

⚠ WARNING
Disconnect power before wiring solenoid.



⚠ NOTE
The potted circuit breaker is a protection circuit that disconnects power from the solenoid if the solenoid plunger fails to seat properly. To reset the protection circuitry, remove power from the solenoid and reapply.

4 Wire LX switch. (LX devices only.)

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

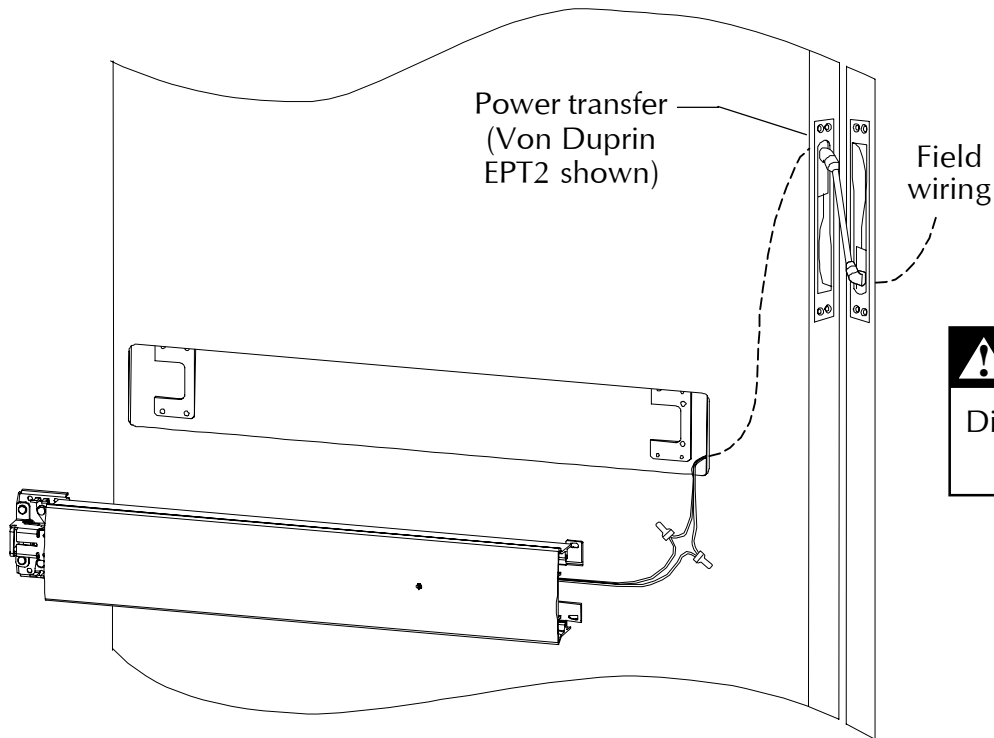


Figure 4-1

WARNING
Disconnect power before wiring LX switch.

NOTE
The latch bolt monitor switch is activated whenever the latch bolt is retracted. The switch function is shown with the latchbolt extended and the touchbar not depressed.

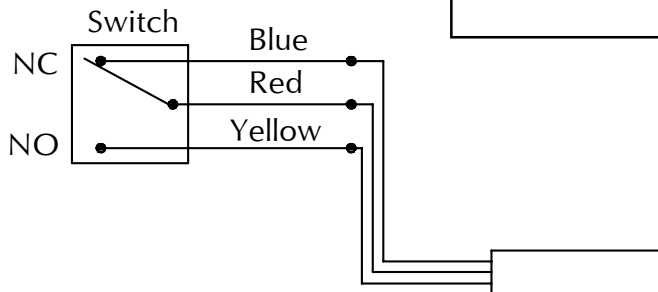


Figure 4-2

5 Mount device on door.

- 5.1. Mount device on door using supplied mounting screws (Figure 5-1).
- 5.2. Center device in pocket, leaving an even gap all around the device.
- 5.3. If outside trim is used, bolt through to trim (see Figure 5-2 and trim installation instructions).
- 5.4. For EL devices, connect potted circuit breaker to device solenoid cable (Figure 5-3).

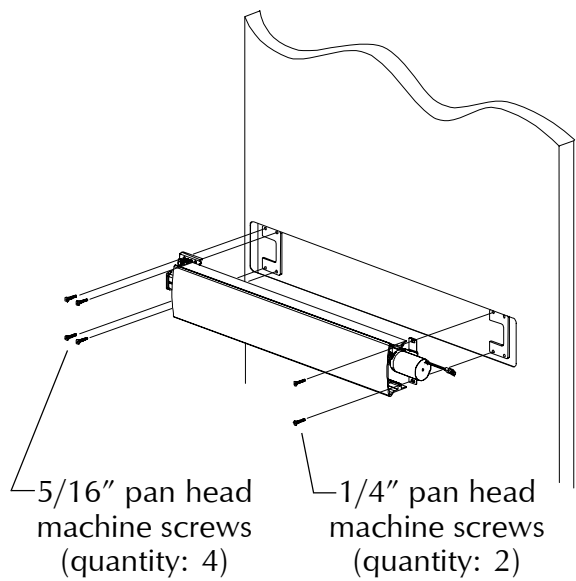


Figure 5-1

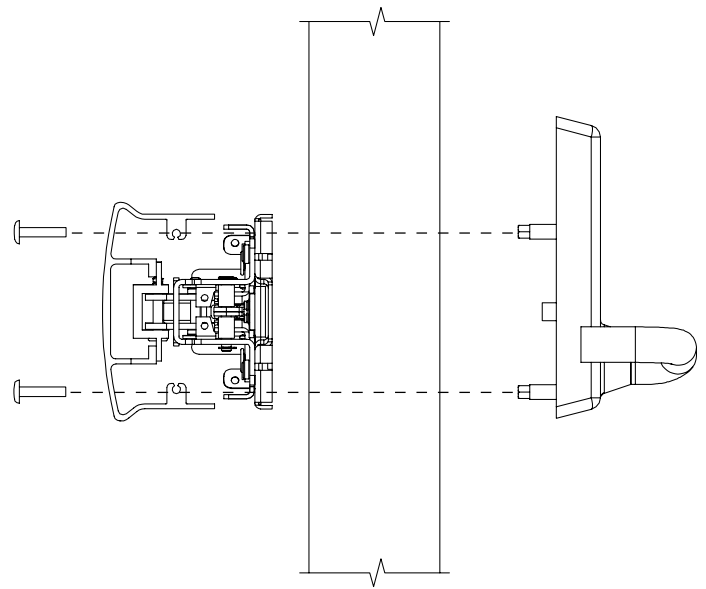


Figure 5-2

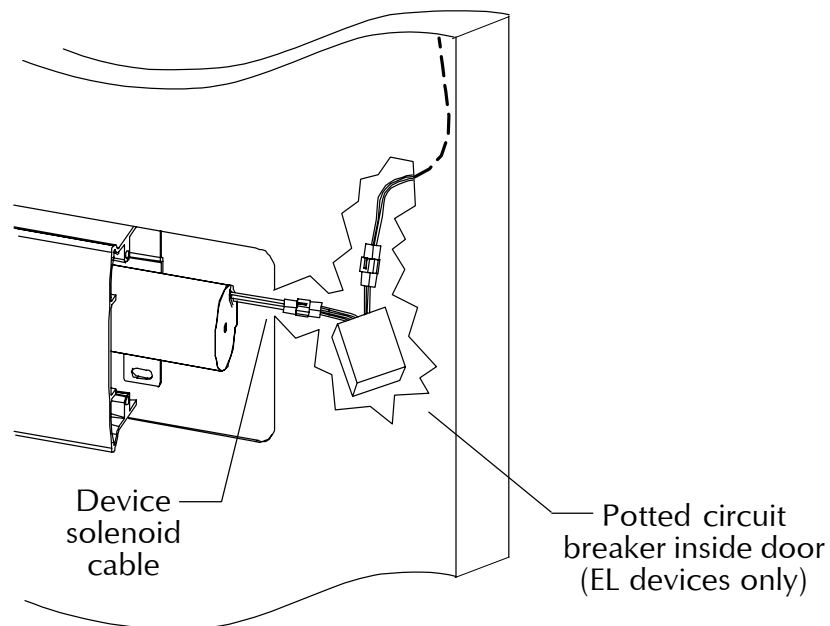


Figure 5-3

6 Install top latch.

- 6.1. Rivet two-piece top rod together. Align holes according to door height (Figure 6-1). Rod length for a 7-foot door is approximately 38-1/2". Top rod sections are longer than bottom rod sections.
- 6.2. Attach brackets to top latch, then thread rod assembly onto latch (Figure 6-2).
- 6.3. Slide rod and latch into prep at door top (Figure 6-3), and attach rod to center case (Figure 6-4).
- 6.4. Fasten latch to door with supplied screws (Figure 6-5).

Door Height	1st Hole	2nd Hole
6' 8"	1	B
6' 10"	1	A
7' 0"	2	A
7' 2"	3	A
7' 4"	4	A
7' 6"	5	A
7' 8"	6	A
7' 10"	7	A
8' 0"	8	A
8' 2"	9	A
8' 4"	10	A

For door heights between those shown on the chart, use the next door height up. For example, for a 6' 11" door, use 7' on the chart.

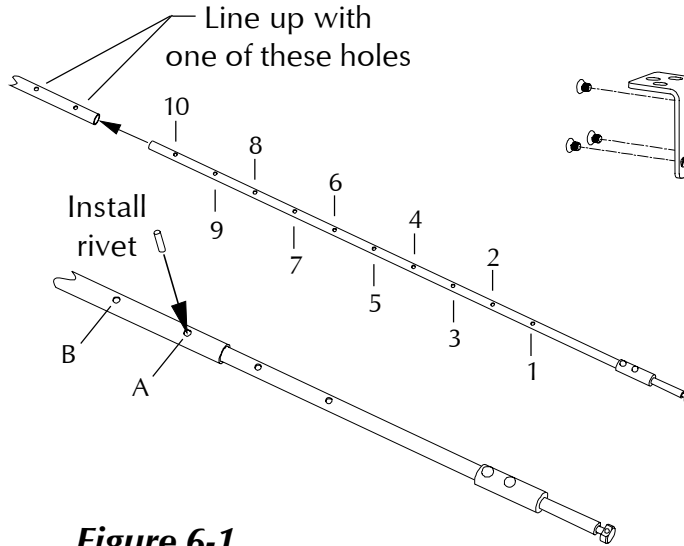


Figure 6-1

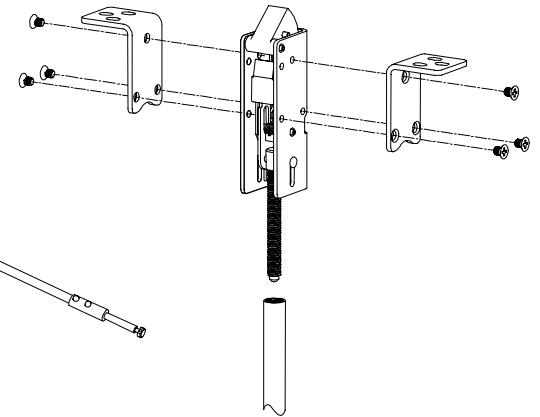


Figure 6-2

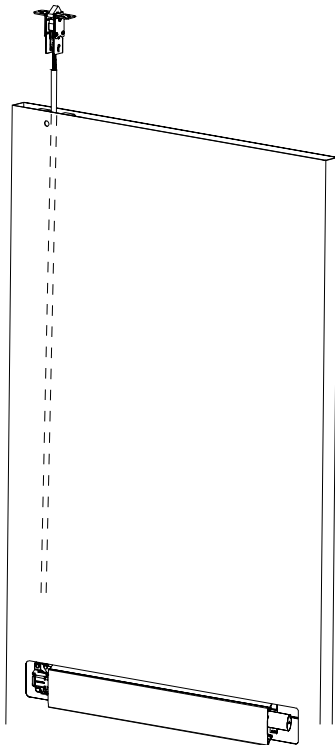


Figure 6-3

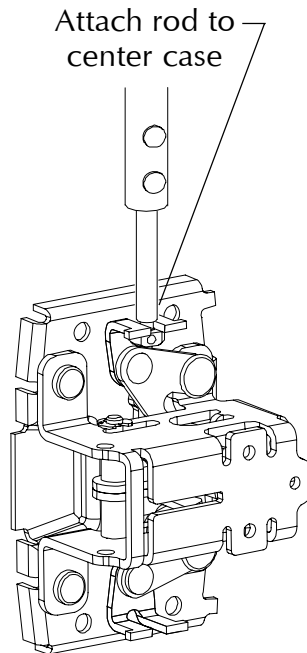


Figure 6-4

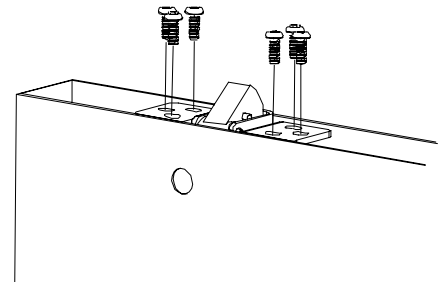


Figure 6-5

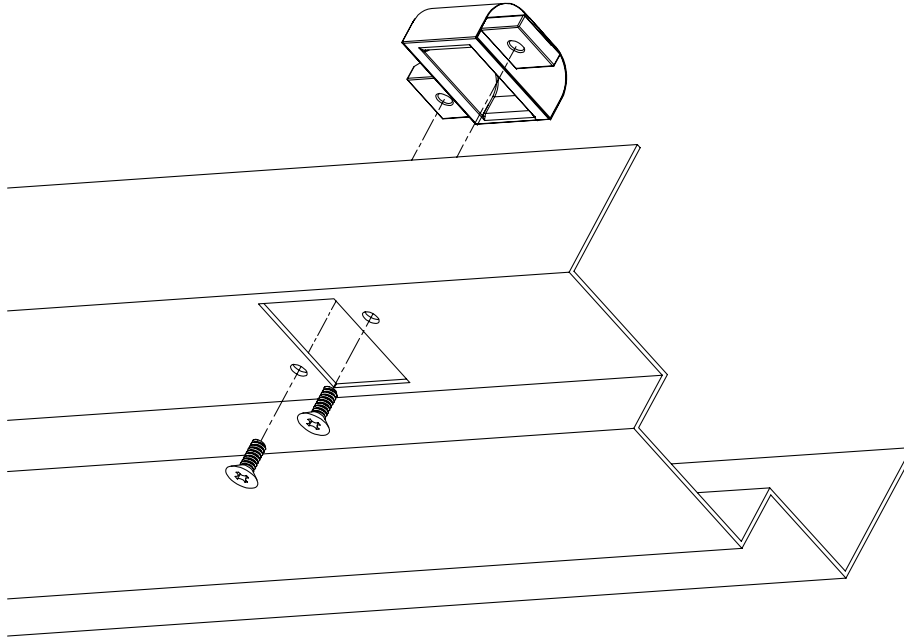
7 Install bottom latch. (Skip this step for LBR devices.)

7.1. Repeat Steps 6.1 through 4.4 for bottom rod and latch. Use hole 8 for most applications. Approximate rod length is 34-1/2".

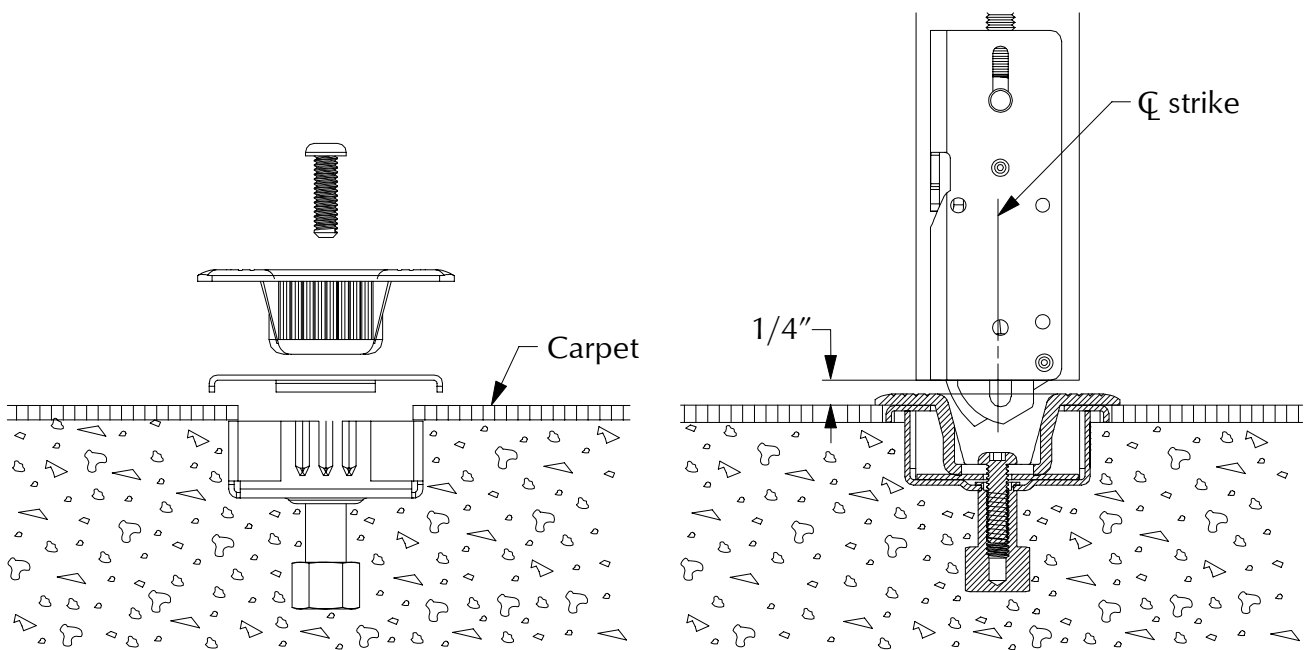
7.2. Press pushpad to retract latches.

7.3. Hang door.

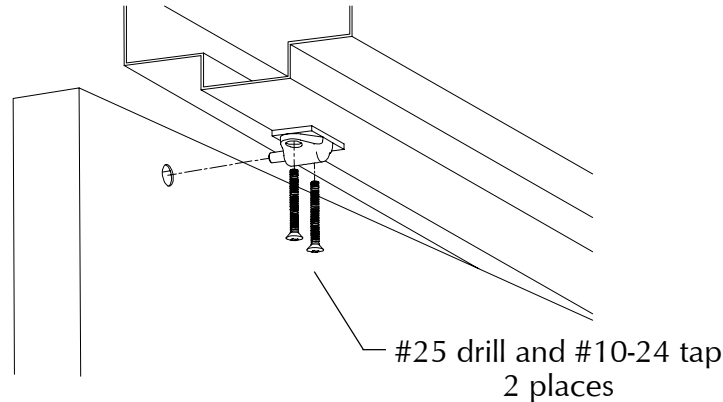
8 Install 338 soffit strike.



9 Install sill strike or threshold. (Skip this step for LBR.)



10 Install ratchet release assembly.



11 Adjust top rod.

- 11.1. Fully depress and hold pushpad.
- 11.2. Set top latch in fully retracted (hold) position (Figure 11-1).
- 11.3. Push down on center case connector, adjust rod length, and connect top rod (Figure 11-2).
- 11.4. Verify that pushpad projection, when depressed, is between 1-1/8" and 1-1/4". Adjust top rod if necessary: **Lengthening the top rod will reduce pushpad projection when depressed.**
- 11.5. If using trim, verify that the trim fully retracts the top latch. If the trim does not fully retract the top latch, adjust the top rod so it is shorter.
- 11.6. Open door and release latches by inserting a Phillips head screwdriver into the ratchet release plunger hole. Check top latch deadlocking: Top latch should not retract when pressed down.
 - If top latch bolt does not stay fully retracted, shorten top rod (Figure 11-2) and retest.
 - If top latch bolt does not fully extend or deadlock, lengthen top rod (Figure 11-2) and retest.
 - If bottom latch bolt does not stay fully retracted, shorten bottom rod (see Step 12) and retest.
 - If bottom latch bolt does not fully extend, lengthen bottom rod (see Step 12) and retest.

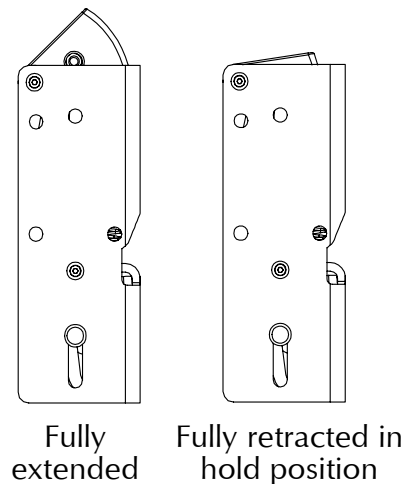


Figure 11-1

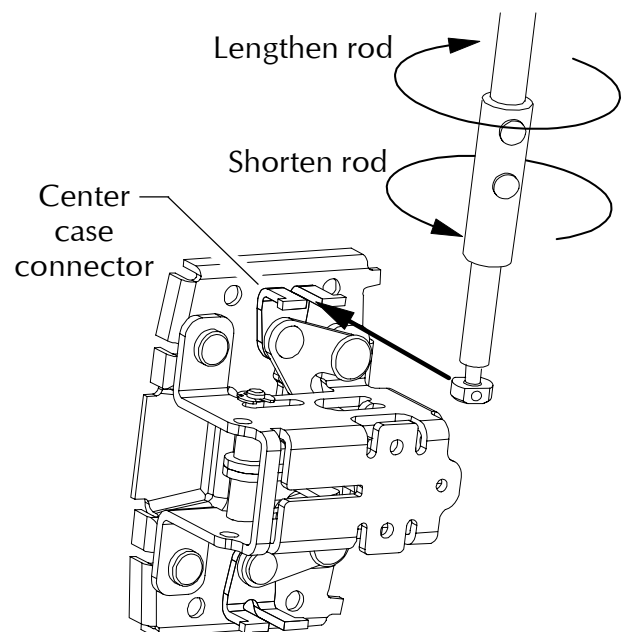
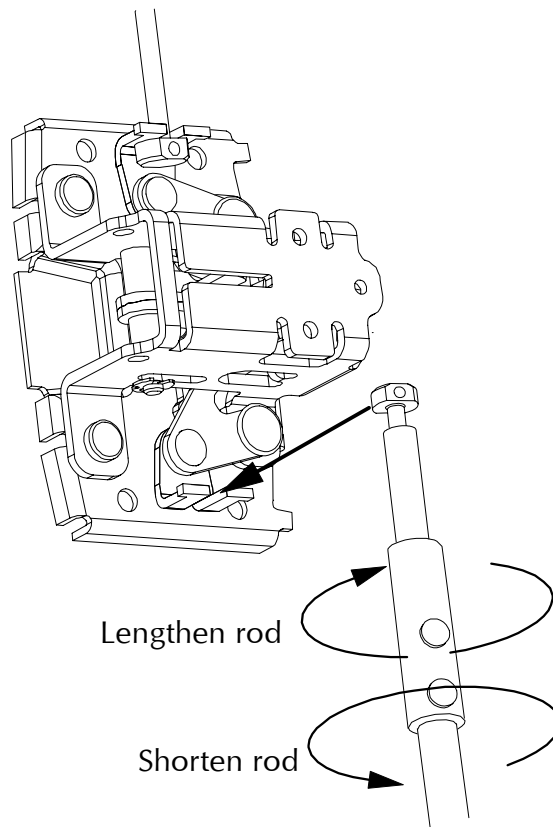


Figure 11-2

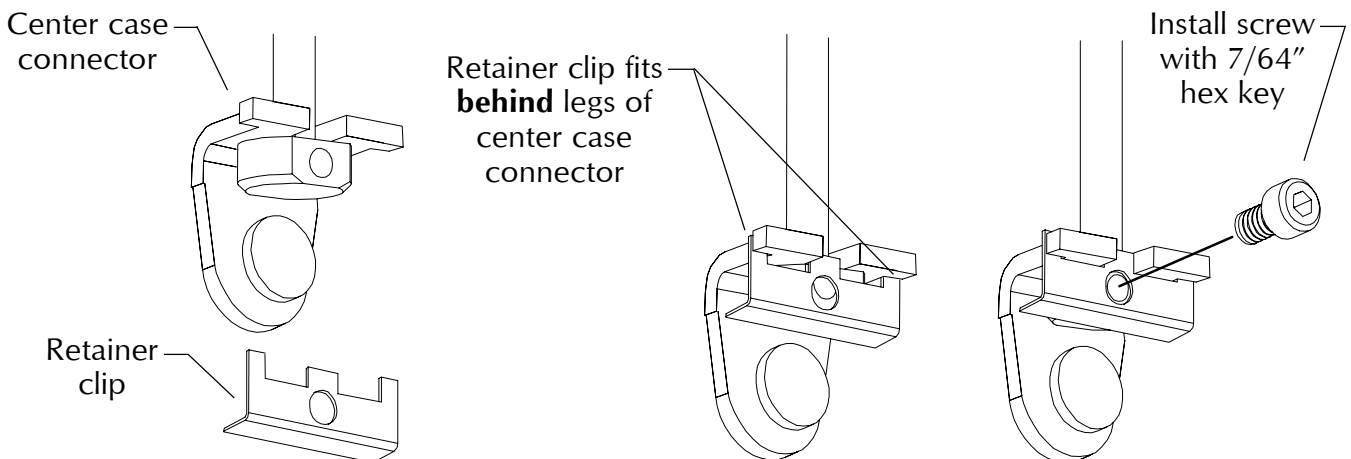
12 Adjust bottom rod. (Skip this step for LBR devices.)

12.1. Fully depress pushpad and release. Top latch should be in retracted position.

12.2. Adjust bottom rod length by rotating rod so latch clears floor when door is open.



13 Install retainer clips on top and bottom rods at center case.



14 Test device operation.

- 14.1. Fully depress pushpad and push door open.
- 14.2. Release pushpad. Latch bolts should remain retracted.
- 14.3. Close door. Latch bolts should fully extend ($5/8'' \pm 1/16''$) and engage strikes.

15 Troubleshooting solenoid operation. (EL devices only.)

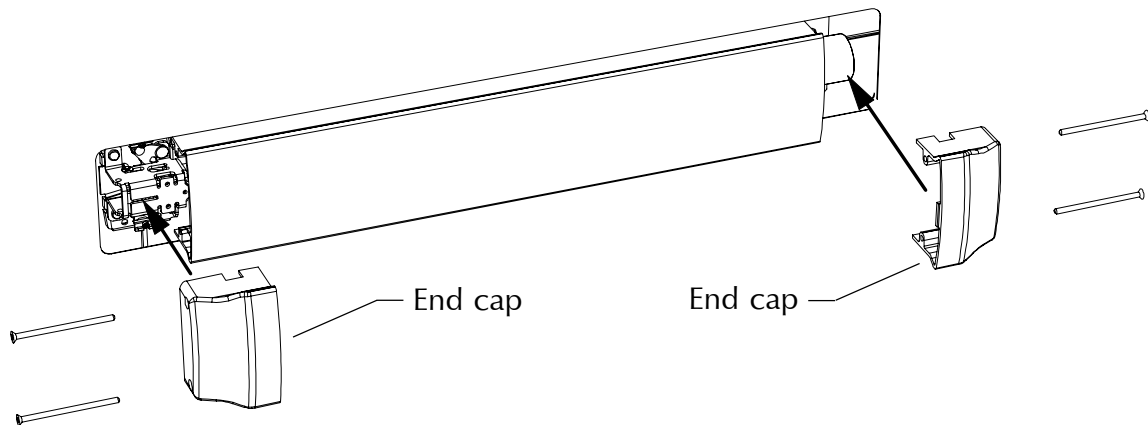
If solenoid fails to retract latch bolt when power is applied:

- (a) Check wiring for proper connections.
- (b) Check that power is reaching the solenoid.
- (c) Check that device is centered in door pocket.

If the solenoid retracts the latch bolt momentarily but will not remain in energized position:

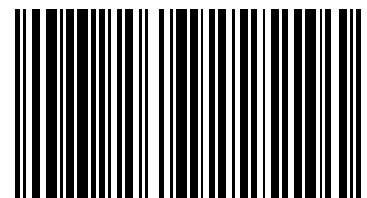
- (a) Check wiring and power source for excessive voltage drop.
- (b) Check for latch bolt binding in strikes.
- (c) Check vertical rod adjustment.
- (d) Check that device is centered in door pocket.

16 Install end caps.



17 Install auxiliary fire latch. (LBR devcies only.)

See installation instructions packaged with auxiliary fire latch kit.



911364-00