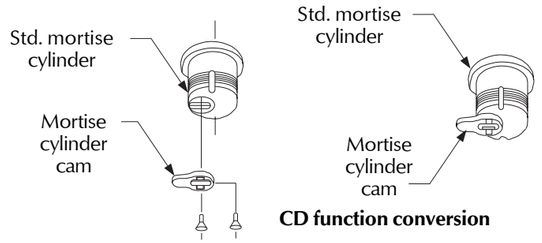
OPTIONAL EQUIPMENT - CONTINUED

CD (CYLINDER DOGGING)

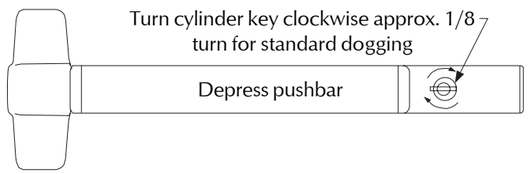
1. Remove mortise cylinder cam and reinstall in reverse (Figure 1).
2. Insert key and rotate cam to install the cylinder to the cover plate (Figure 2).
3. Remove key to slide cover plate in position in the mechanism case.



CD function conversion

Figure 1

Dogging procedure



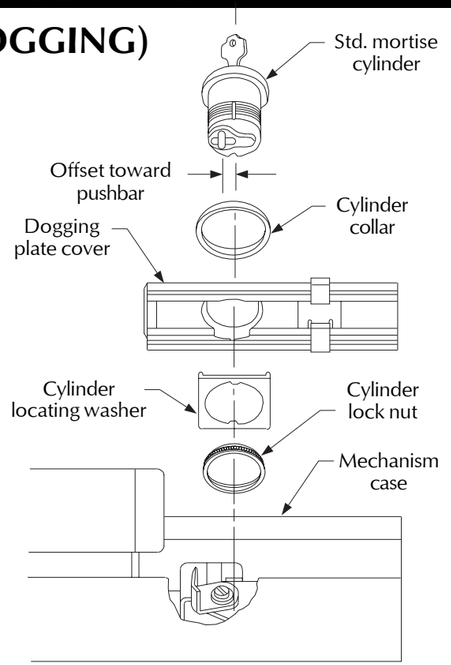
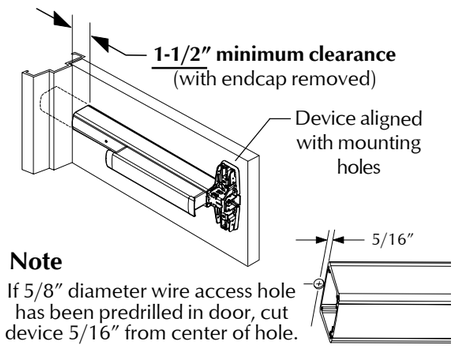


Figure 2

CUT DEVICE

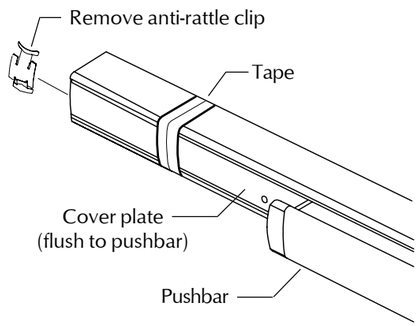
1 Measure amount to cut off device.



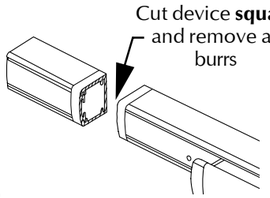
Note

If 5/8″ diameter wire access hole has been predrilled in door, cut device 5/16″ from center of hole.

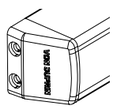
2 Tape and mark area being cut.



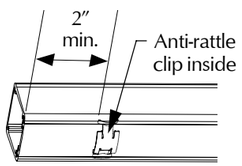
3 Cut device square.



NOTE: Device must be cut **square** for proper end cap fit



4 Slide anti-rattle clip into device.

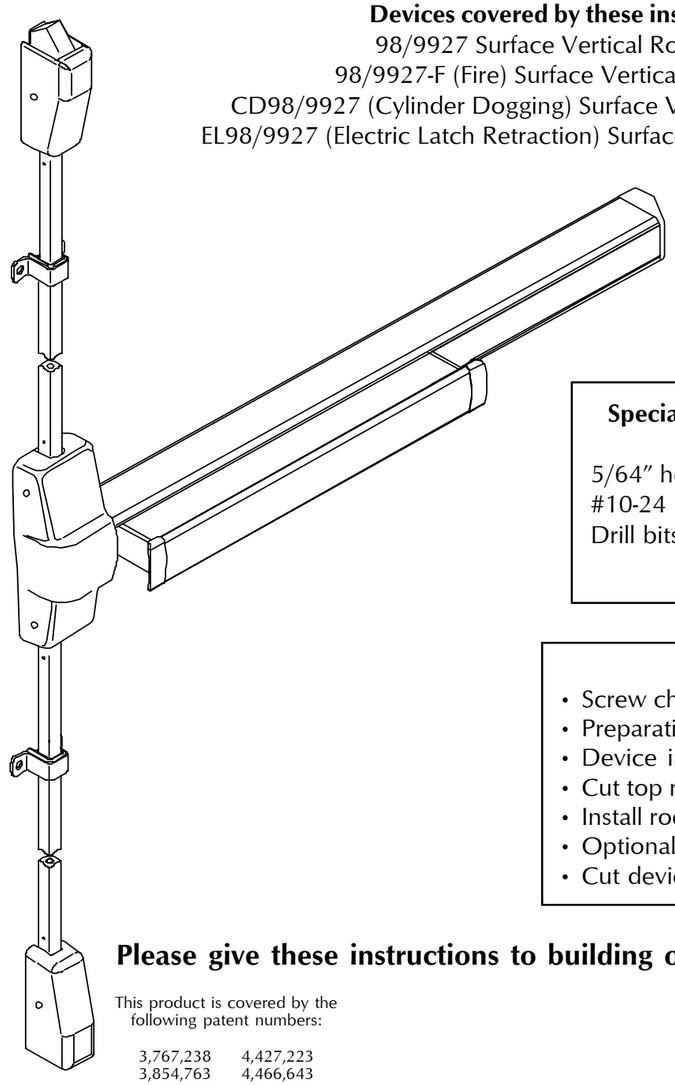


911375-00

VON DUPRIN®

Installation Instructions

The Quiet One® 98/9927 Surface Vertical Rod Exit Device



Devices covered by these instructions:

98/9927 Surface Vertical Rod Exit Device
98/9927-F (Fire) Surface Vertical Rod Exit Device
CD98/9927 (Cylinder Dogging) Surface Vertical Rod Exit Device
EL98/9927 (Electric Latch Retraction) Surface Vertical Rod Exit Device

Special tools needed:

5/64″ hex wrench
#10-24 tap
Drill bits: #25, 1/8″, 1/4″, 5/16″, 13/32″

Index:

Please give these instructions to building owner after device is installed

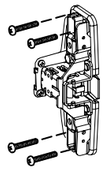
This product is covered by the following patent numbers:

3,767,238 4,427,223
3,854,763 4,466,643
4,167,280 4,741,563

Security & Safety
Proven Source. Proven Solutions.™

SCREW CHART

A



#10-24 X 1″ — Surface mount or Sex bolts (1-3/4″ door)

#10-24 X 1-1/2″ — Sex bolts (2-1/4″ door)

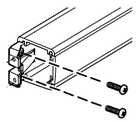
#10 x 1-1/4″ Wood screw — Surface mount (wood)

- Packaged with trim -

#10-24 X 1-3/8″ — 990 trims (1-3/4″ door)

#10-24 X 1-7/8″ — 990 trims (2-1/4″ door)

B



#10-24 X 3/4″ — Surface mount or Sex bolts (1-3/4″ door)

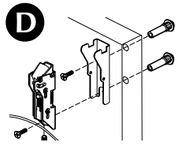
#10-24 X 1-1/8″ — Sex bolts 2-1/4″ door

#10 x 1-1/4″ Wood screw — Surface mount (wood)

C

#10-16 x 3/8″ Thread cutting — End cap

D



1/4-20 X 3/4″ — 1-3/4″ door

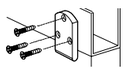
1/4-20 X 1-1/4″ — 2-1/4″ door

E

#10-24 X 3/4″ — Metal frame

#10 x 1-1/2″ Wood screw — Wood frame

F



#10-12 x 10-24 x 1-1/4″ Combination — Metal or wood frame

G

#10-12 x 10-24 x 1-1/4″ Combination — Variable floor surfaces

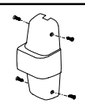
H

#8-32 X 1/4″ — Latch covers

I

#10-12 x 10-24 x 1″ Combination — Metal or wood door

J



#8-18 x 3/8″ Thread cutting — Center case cover

OPTIONAL EQUIPMENT

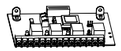
EL WIRING

12 AWG required for distances up to 200′
14 AWG permitted for distances 0-100′

EL Solenoid — Potted circuit board — Black, Black

Solenoid draws 16 A inrush current from PS873.
Solenoid must be wired to a PS873 logic board:

If 871-2 logic board, refer to Von Duprin instructions 941352.



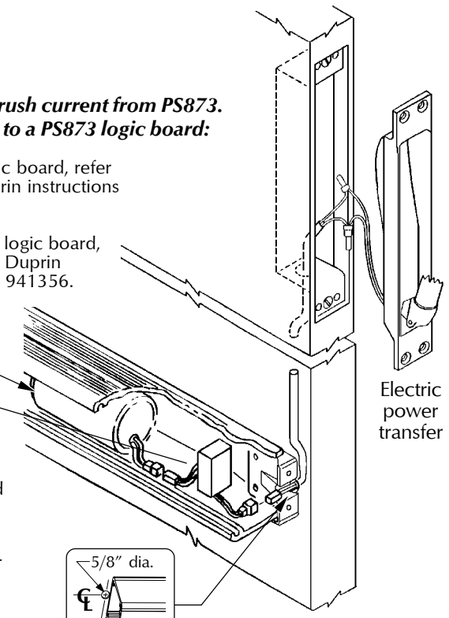
If other 873 logic board, refer to Von Duprin instructions 941356.

ELECTRICAL SPECIFICATIONS

Voltage: 24 VDC
Current: 16 A inrush (0.3 sec.)
0.25 A holding

NOTE

When power is applied to the **potted circuit board**, the solenoid receives a momentary signal to retract and a separate signal to hold as long as power is applied. When attempting to retract solenoid again, power must be removed from the circuit and reapplied.



Troubleshooting solenoid operation

If the solenoid fails to retract the latch bolt when power is applied, recheck wiring for proper connections.

If solenoid retracts latch bolt momentarily but will not remain in energized position:
1. Check wiring for proper connections, guage, and distances.
2. Check for latch bolt binding caused by improper strike installation, warped door, etc.

EL ADJUSTMENT PROCEDURE

A. Check for proper function:
1. Make sure device is not dogged.
2. Depress pushbar and make sure latch bolts retracts and extends fully (see page 4, step 9 & 11).
3. Electrically energize solenoid and hold.
4. Check latch bolt(s) for full retraction (must clear strike (see page 4, step 9 & 11).
5. Release solenoid and check latch bolt extension (see page 4, step 9 & 11).
6. Continue to Section B if device does not function electrically.

B. Determine if dogging rod adjustment is too long or short:
1. The dogging rod adjustment is too **long** if latch bolt does not retract and clear strike (see section C for adjustment).
2. The dogging rod adjustment is too **short** if latch bolt does not fully extend **or** latch bolt fully retracts but solenoid releases while energized (see Section D for adjustment).

C. Adjust solenoid if dogging rod is too **long** (see Figure 3):
1. Remove end cap ① and dogging cover ②.
2. Loosen cap screw ③.
3. Hold plunger ⑤ depressed in solenoid housing ⑥.
   Note: Push hard against plunger ⑤ to overcome an internal spring in solenoid housing ⑥.
4. Turned threaded bushing ④ in to shorten dogging rod ⑦ so latch bolt fully retracts.
5. Tighten cap screw ③.
   Note: Cap screw ③ must be tightened against flat on threaded bushing ④. Apply a few drops of Loc-Tite 222 to threads of cap screw ③.
6. Replace dogging cover ② and end cap ①.
7. Return to Section A to check for proper function.

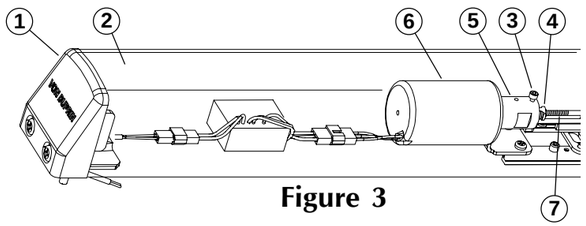
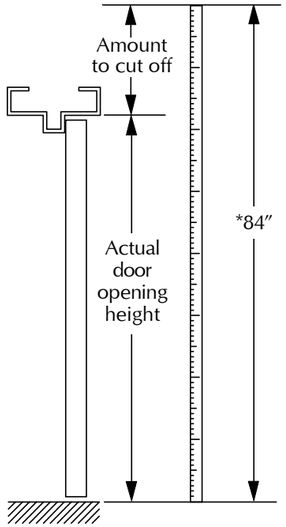


Figure 3

D. Solenoid adjustment if dogging rod adjustment is too **short** (see Figure 3):
1. Remove end cap ① and dogging cover ②.
2. Loosen cap screw ③.
3. Hold plunger ⑤ depressed in solenoid housing ⑥.
4. Turn threaded bushing ④ out to lengthen dogging rod ⑦ so plunger ⑤ just bottoms in solenoid housing ⑥ and latch bolt is fully retracted.
   Note: Push hard against plunger ⑤ to overcome an internal spring in solenoid housing ⑥.
5. Tighten cap screw ③.
   Note: Cap screw ③ must be tightened against flat on threaded bushing ④. Apply a few drops of Loc-Tite 222 to threads of cap screw ③.
6. Replace dogging cover ② and end cap ①.
7. Return to Section A to check for proper function.

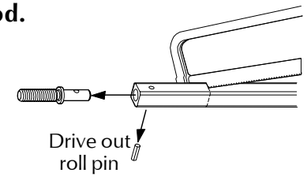
CUT TOP ROD

1. Measure amount to cut off rod as shown below.
Note: Rod cutting is required for doors shorter than 7′.

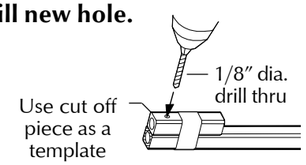


*Rods are factory sized for 7′ (84″) door. Measure actual door height and subtract that number from 84″ to get amount to cut off top rod.

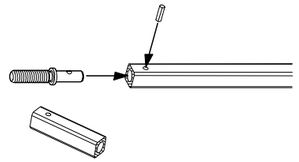
2. Cut rod.



3. Drill new hole.

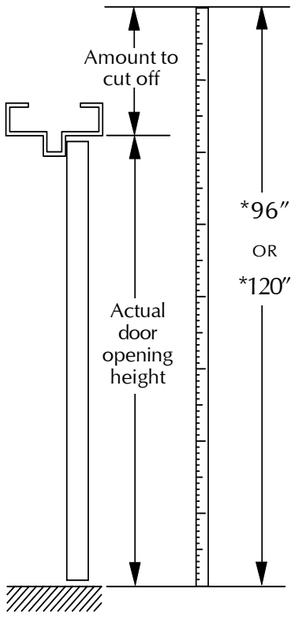


4. Reinstall rod end and roll pin.



INSTALL ROD EXTENSION

1. Measure door opening to determine amount to cut off rod extension.

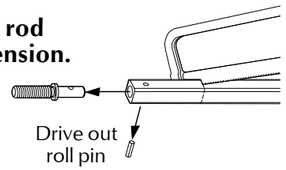


***Standard door heights:**

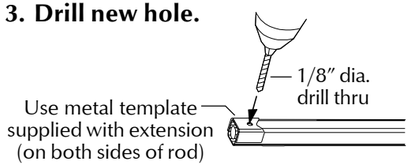
With no extension	7′ (84″)
With 1′ extension	8′ (96″)
With 3′ extension	10′ (120″)

*Rods are factory sized for door heights shown above. Measure actual door height and subtract that number from 96″ (for 1′ extension) or 120″ (for 3′ extension) to get amount to cut off extension.

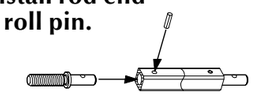
2. Cut rod extension.



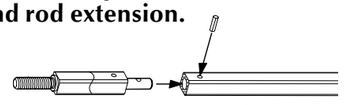
3. Drill new hole.



4. Reinstall rod end and roll pin.

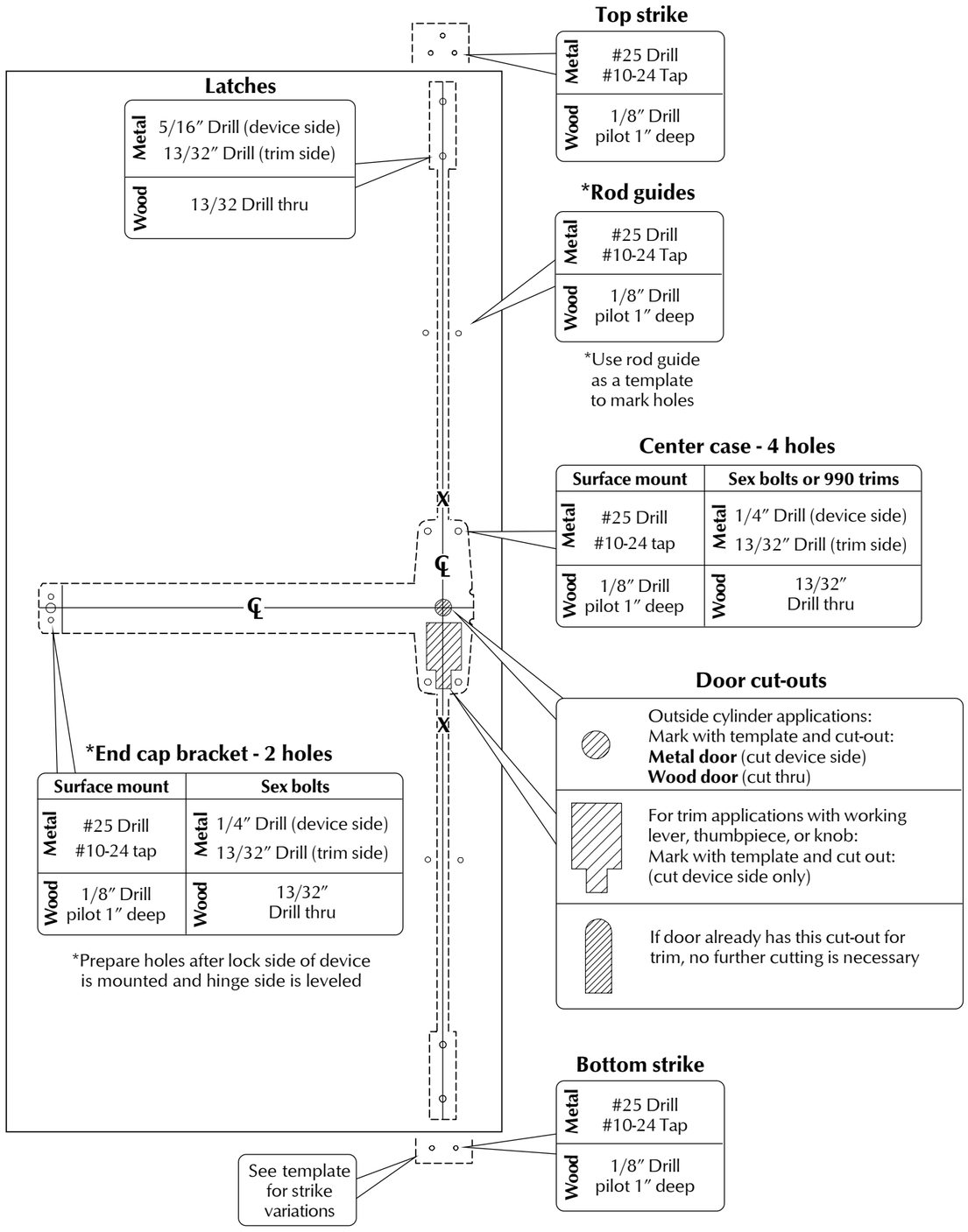


5. Connect top rod and rod extension.

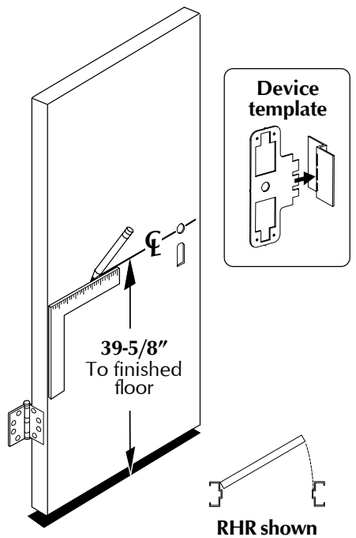


PREPARATION CHART

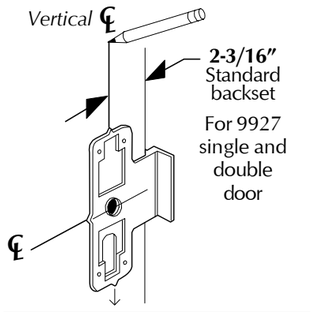
Go to instructions on next page before using Preparation Chart



1 Draw horizontal center line (℄) and assemble device template.

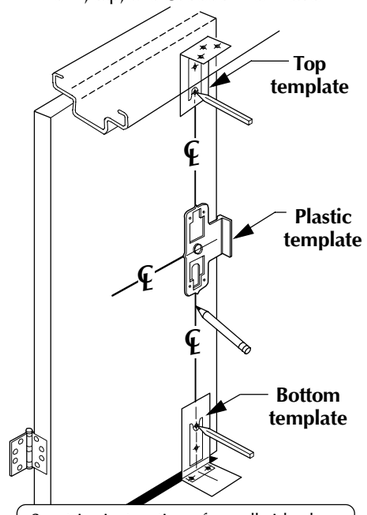


2 Position template as shown and mark vertical ℄.



3 Align top and bottom templates along center line, and prepare door.

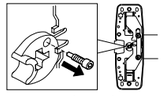
See "**Preparation Chart**" on page 3 for drill, tap, and cut-out information



See trim instructions for pull side door preparation. Line **X-X** in trim instructions is same as vertical device ℄

4 If using an outside cylinder, check NL drive screw and install tailpiece guide.

NL drive screw

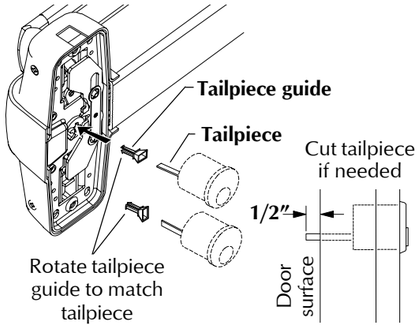


Note: When the NL drive screw is left in back of device, the outside cylinder will function only as a Night Latch.

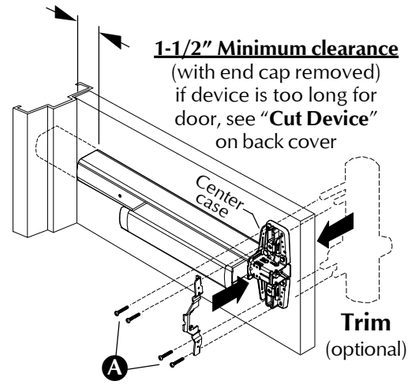
When installing trim that has a functional lever, knob, or thumb piece AND an outside cylinder to lock and unlock the trim, remove NL drive screw from back of device.

DO NOT remove NL drive screw for the following trims: **NL, EO, DT, TP-2, L-2, and K-2.**

With **"BE"** trim, device may need rehanded. Look for instructions on back of trim.

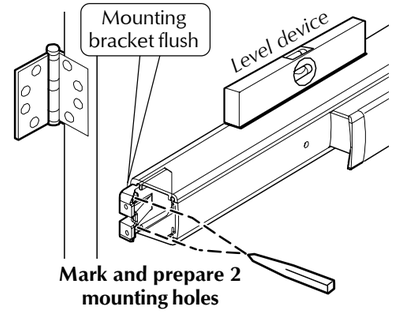


5 Install trim (if using) and secure device center case to door.

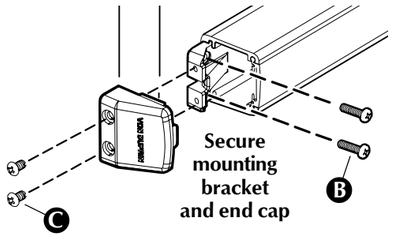


See "**Screw Chart**" on page 2 for screw types and sizes

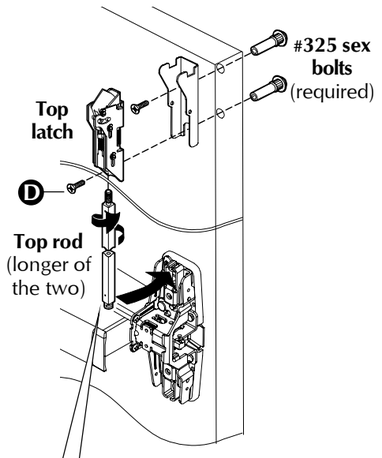
6 Install mounting bracket and end cap.



See "**Preparation Chart**" on page 3 for preparation information



7 Install top latch and rod.

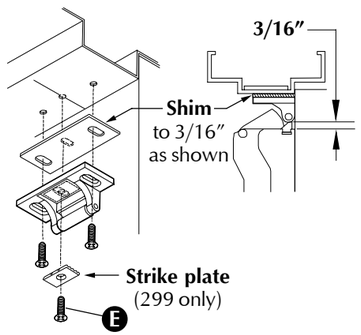


If top rod is too long, see "**cut top rod**" on page 6

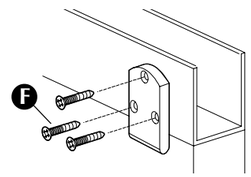
If top rod is too short, see "**install rod extension**" on page 6

8 Install top strike.

299/299F strike



260U strike

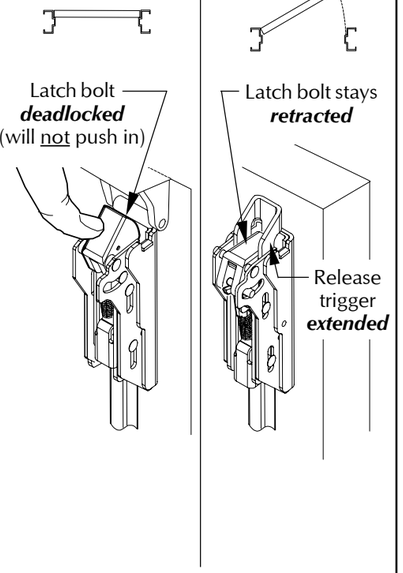


499F strike (for LBR Fire devices)

See instruction 911009

9 Adjust top rod (screw rod into or out of latch) until adjusted as shown.

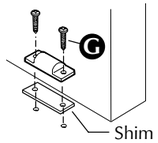
With door closed:



With door open:

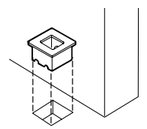
10 Install bottom strike, latch, and rod.

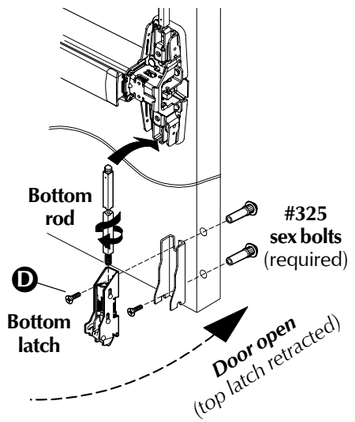
248L-4 strike



304L strike

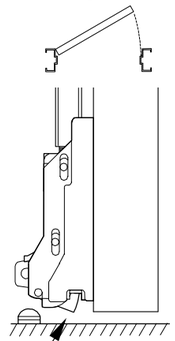
Grout strike into floor



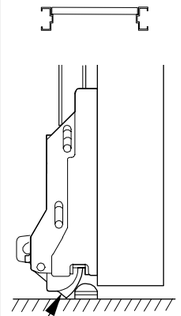


11 Adjust bottom rod with door open (top latch retracted).

With door open:



With door closed:



Open and close door a few times and check for deadlatching when door is closed

Readjust rods if needed

12 Install rod guides, and covers.