



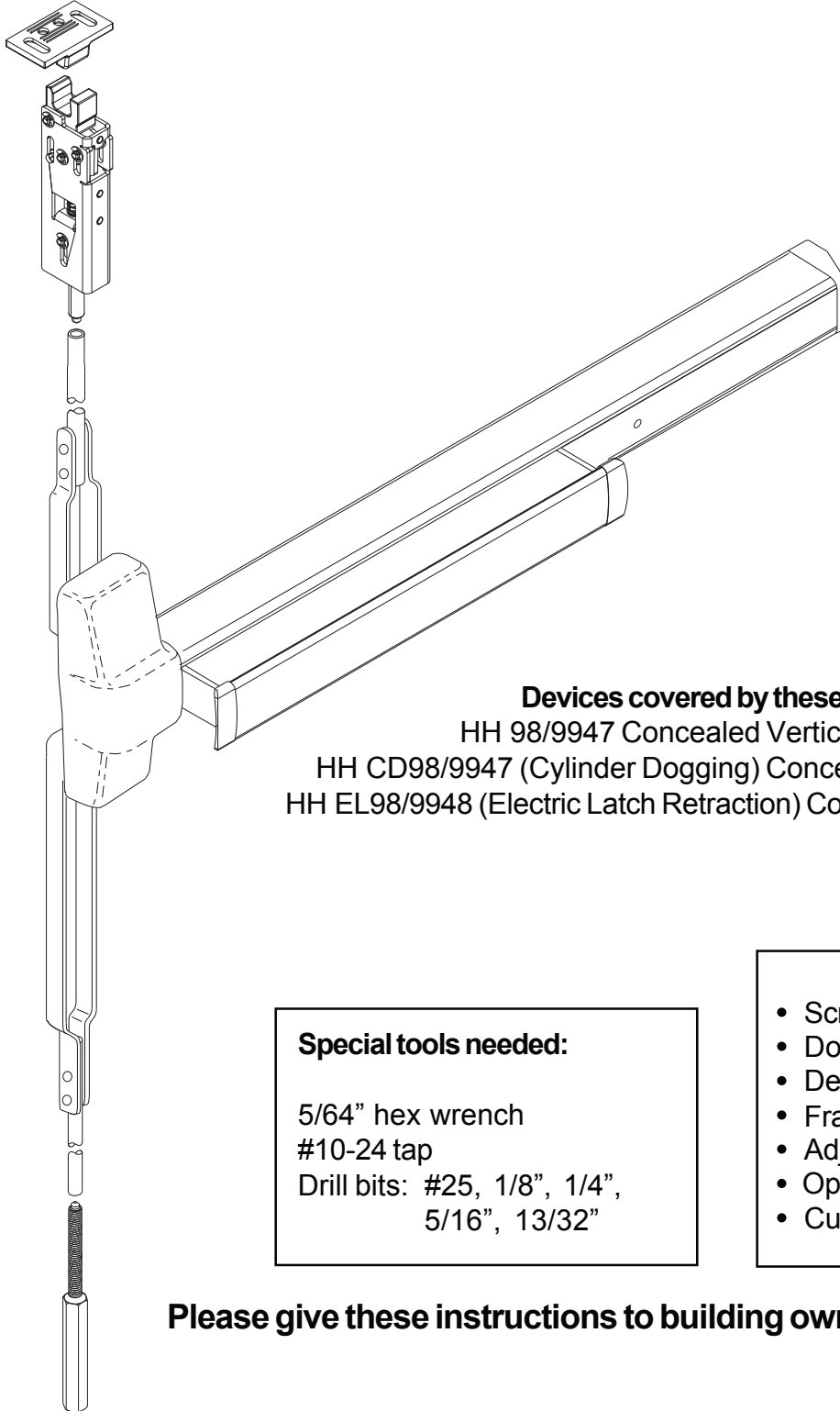
24203424

HH (KAW) 98/9947

VON DUPRIN®

Concealed Vertical Rod Exit Device for Metal Door Applications

Installation Instructions



Devices covered by these instructions:

- HH 98/9947 Concealed Vertical Rod Exit Device
- HH CD98/9947 (Cylinder Dogging) Concealed Vertical Rod Exit Device
- HH EL98/9948 (Electric Latch Retraction) Concealed Vertical Rod Exit Device

Special tools needed:

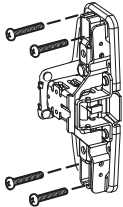
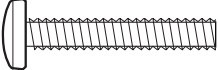
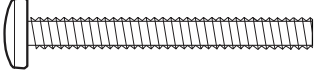
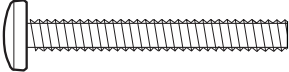
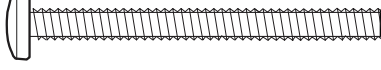
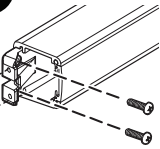
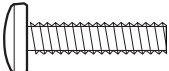
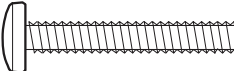


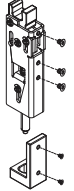

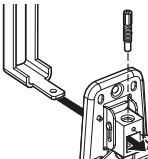
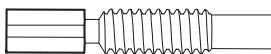
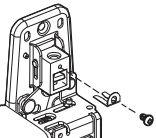

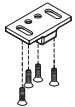
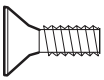


5/64" hex wrench
 #10-24 tap
 Drill bits: #25, 1/8", 1/4",
 5/16", 13/32"

Index:

- Screw chart 2
- Door preparation chart..... 3
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- Frame preparation 5
- Adjust rods 6
- Optional equipment 7-8
- Cut device 8

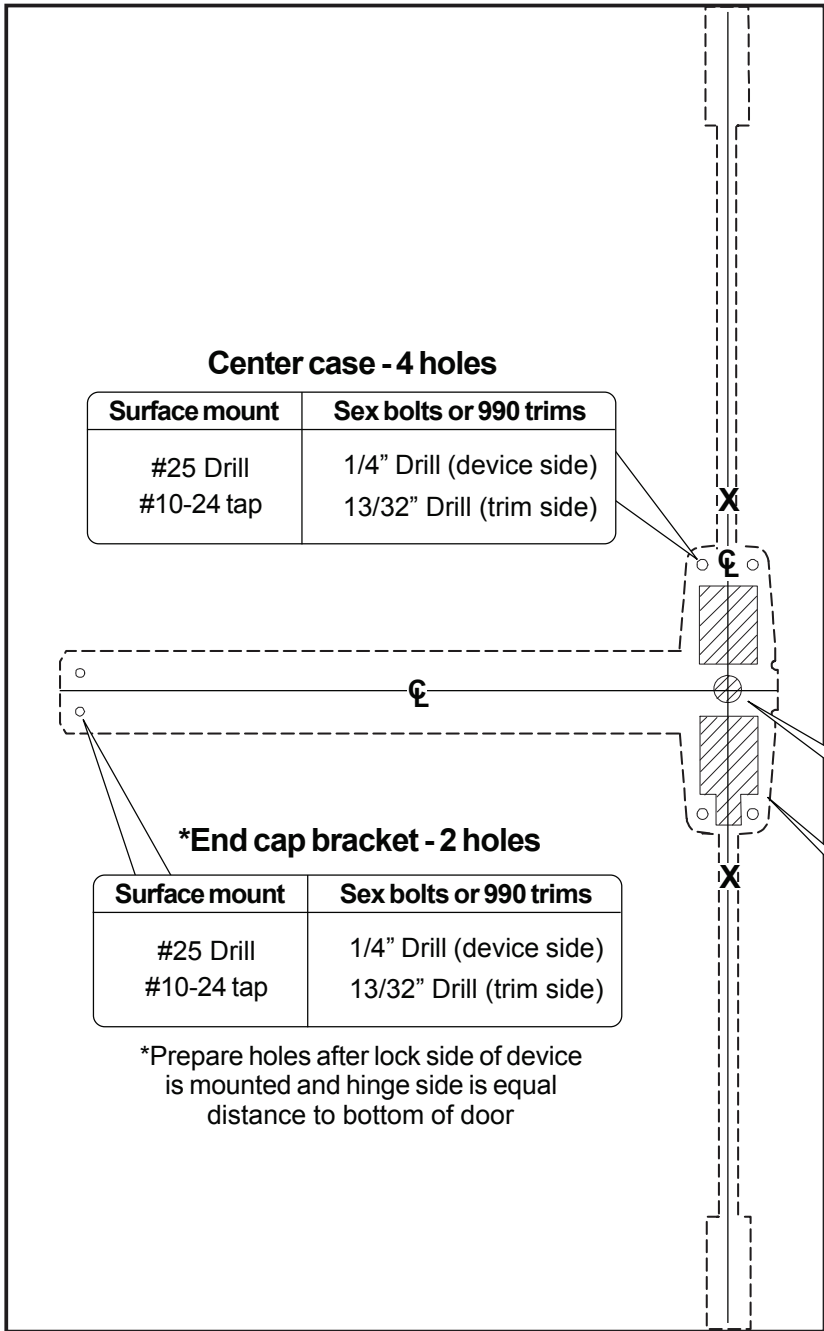
Please give these instructions to building owner after device is installed

SCREW CHART

A		 #10-24 x 1"  #10-24 x 1-1/2" <hr/> - Packaged with trim -  #10-24 x 1-3/8"  #10-24 x 1-7/8"	Surface mount or Sex bolts (1-3/4" door) Sex bolts (2-1/4" door) 990 trims (1-3/4" door) 990 trims (2-1/4" door)
B		 #10-24 x 3/4"  #10-24 x 1-1/8"	Surface mount or Sex bolts (1-3/4" door) Sex bolts (2-1/4" door)
C		 #10-16 X 3/8" Thread cutting	End cap
D		 #10-32 X 3/8"	Latch screw HH guide
E		 Rod adjusting screw	Retaining clip
F		 #8-32 X 5/16"	Retaining clip
G		 #12-24 X 1/2"	HH strike
H		 #8-18 x 3/8" Thread cutting	Center case cover

DOOR PREPARATION CHART

Go to instructions on next page before using preparation chart



Center case - 4 holes

Surface mount	Sex bolts or 990 trims
#25 Drill #10-24 tap	1/4" Drill (device side) 13/32" Drill (trim side)

***End cap bracket - 2 holes**

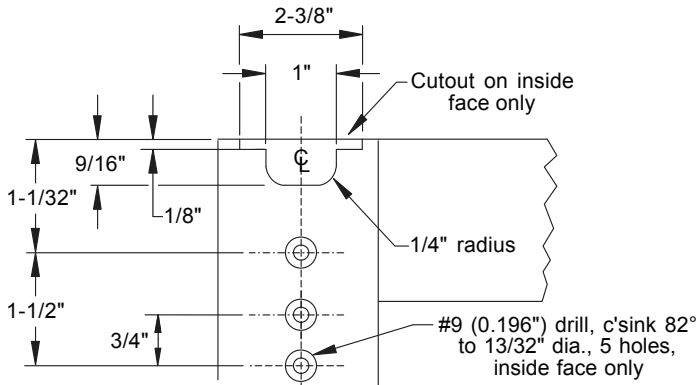
Surface mount	Sex bolts or 990 trims
#25 Drill #10-24 tap	1/4" Drill (device side) 13/32" Drill (trim side)

*Prepare holes after lock side of device is mounted and hinge side is equal distance to bottom of door

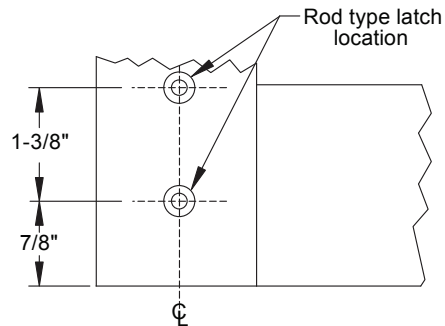
Door Cut-outs

- Outside cylinder applications:
Mark with template and cut-out:
Metal door (cut device side)
Wood door (cut thru)
- For HH 98/9947
- Trace cut-outs from plastic template (cut device side only)

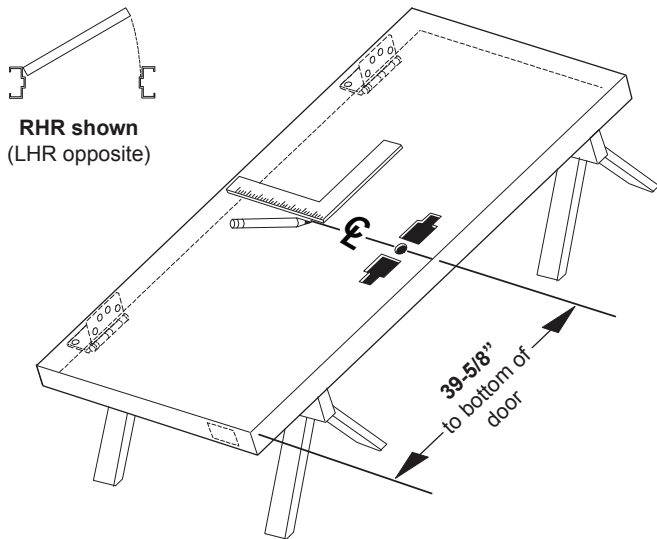
Top Preparation



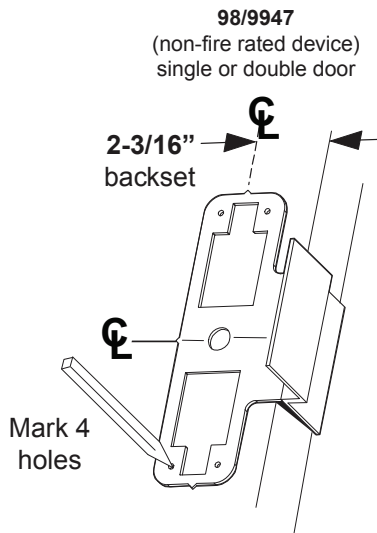
Bottom Preparation



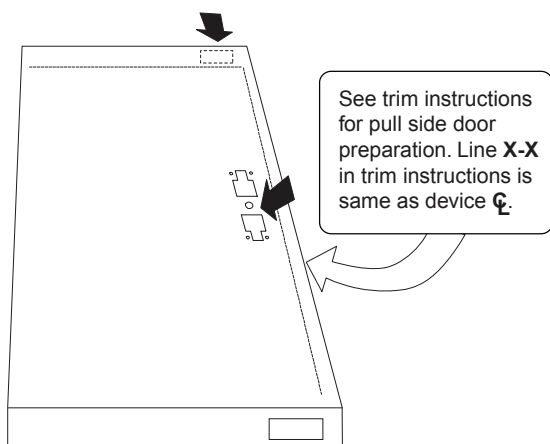
1 Draw Horizontal Device Center Line (☉)



2 Determine Correct Backset, then Mark 4 Holes for Device Center Case Using Template



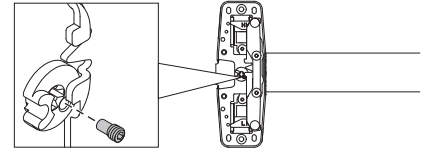
3 Prepare Door per Preparation Chart on Page 3



4 If Using an Outside Cylinder, Check NL Drive Screw and Install Tailpiece Guide

NL drive screw

Factory installed on back of center case



With NL drive screw removed, key locks and unlocks lever, knob, or thumb piece. For trims listed below, **REMOVE** NL drive screw.

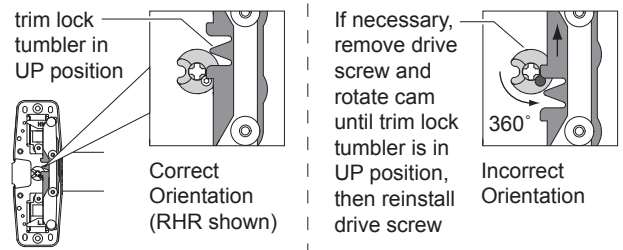
996L	696TP	990TP
996K	697TP	

With NL drive screw installed, key retracts latch bolt. **DO NOT** remove NL drive screw for the following applications:

NL, EO, DT trims and 98/99-2 double cylinder devices (i.e. TP-2, L-2, and K-2).

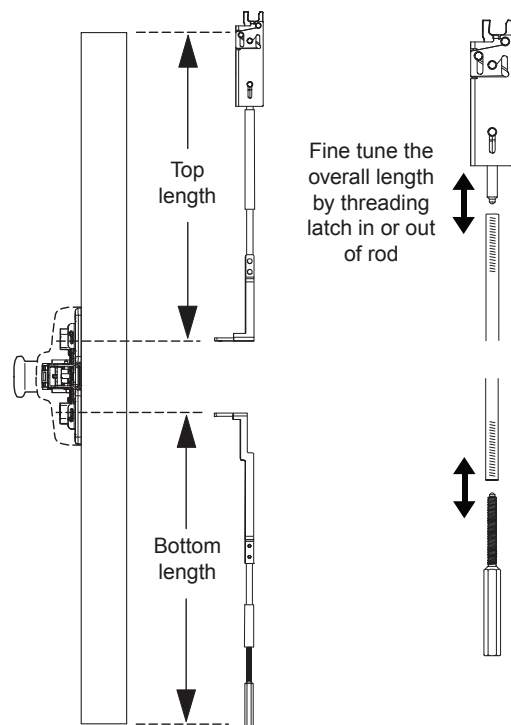
*996L-BE	*E996L	*696TP-BE	*990TP-BE
*996K-BE	*E996L-BE	*697TP-BE	

*If trim being installed is "BE" (i.e. 996L-BE), trim lock tumbler on back of device must be in **UP** position before device is installed. This allows trim to be unlocked at all times.

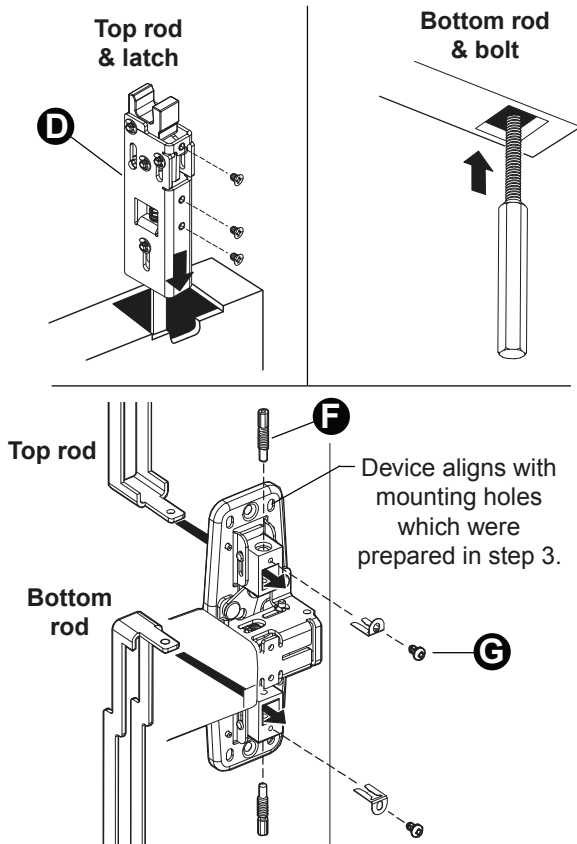


5 Assemble Rods and Latches and Adjust Length for Proper Door Height

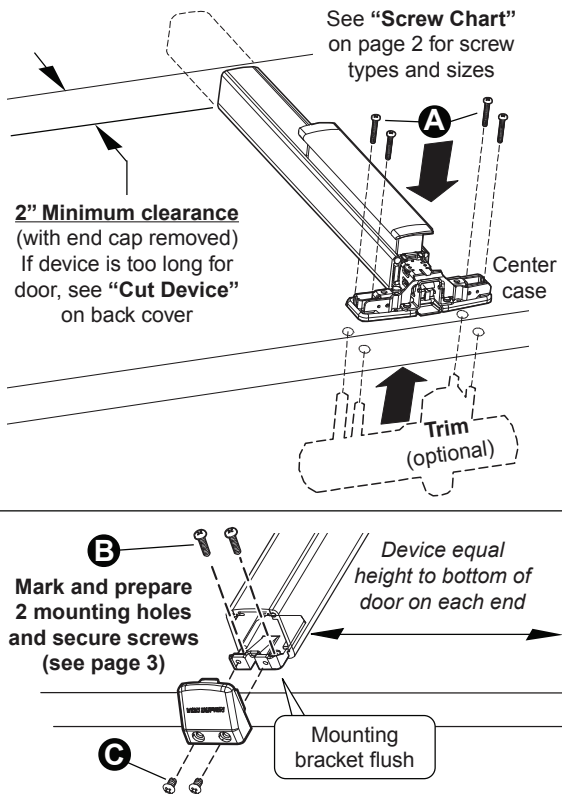
Follow red and blue instruction cards with rods to set initial rod length



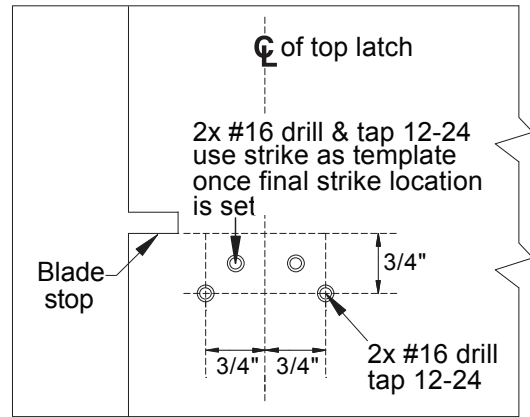
6 Install Rods and Latches as Shown



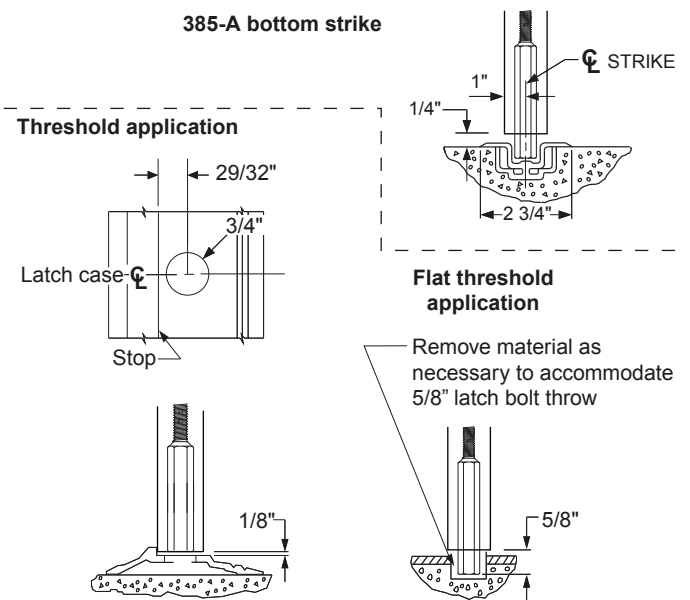
7 Secure Device to Door as Shown, then Hang Door on Frame



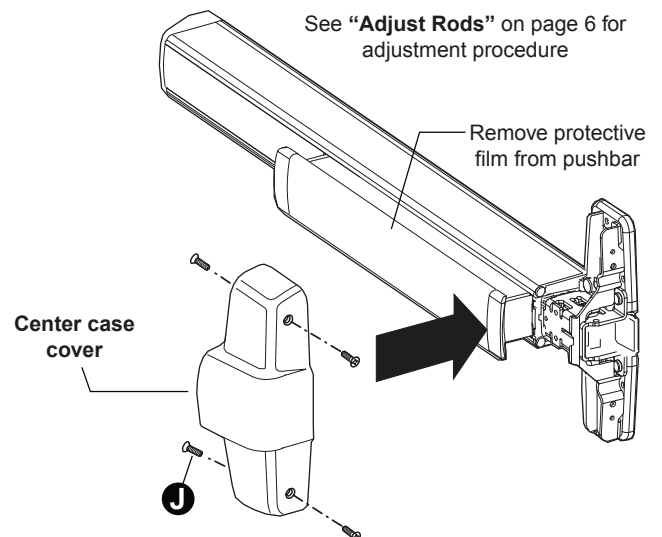
8 Prepare and Install Top Strike



9 Install bottom strike or prepare threshold.



10 Adjust Rods and Install Center Case Cover



ADJUST RODS

1. Open door and verify top latch bolt is fully extended (Figure 1).

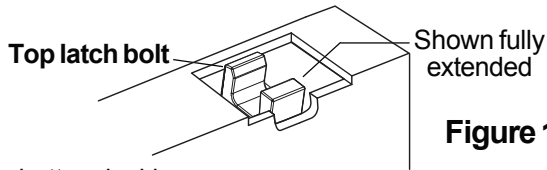


Figure 1

2. Loosen bottom locking screw (Figure 2).
3. Disconnect bottom vertical rod by removing bottom adjusting screw.
4. Loosen top locking screw.
5. Depress pushbar and dog device
6. Rotate top adjusting screw clockwise until top latch bolt drops (Figure 3).

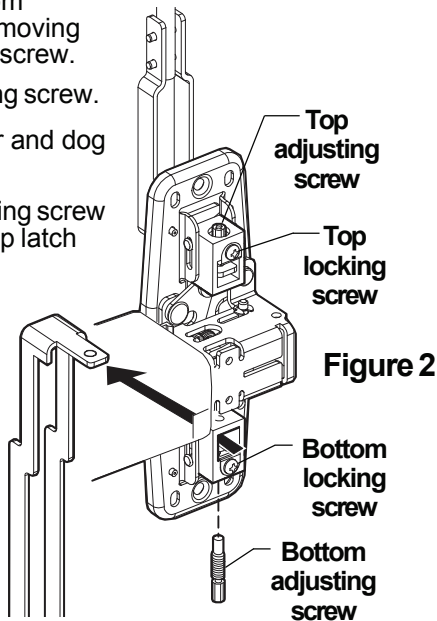


Figure 2

7. Turn top locking screw in. Do not over-tighten

8. Release pushbar.
9. Depress pushbar and ensure latchbolt falls.

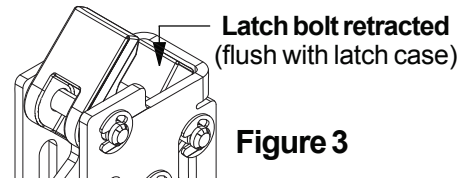


Figure 3

10. Install bottom adjusting screw through bottom rod (Figure 2).
11. With top latch bolt still retracted, adjust bottom bolt so that bolt clears floor and bottom strike.

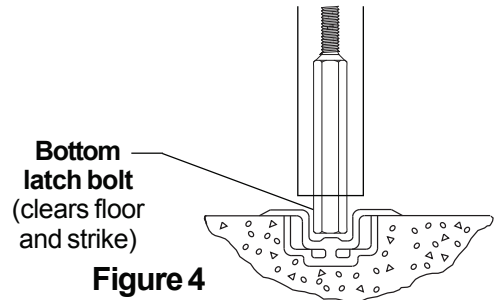


Figure 4

12. Turn bottom locking screw in. Do not over-tighten.
13. Check device operation by opening and closing door several times from the inside.

Redo adjustment procedure if :

- Top latchbolt does not retract
- Bottom bolt does not clear floor and bottom strike

CD (CYLINDER DOGGING)

1. Remove mortise cylinder cam and reinstall in reverse (Figure 6).
2. Insert key and rotate cam to install the cylinder to the cover plate (Figure 7).
3. Remove key to slide cover plate in position in the mechanism case.

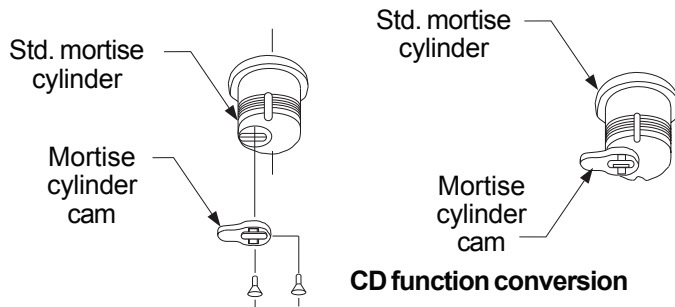


Figure 6

Dogging procedure

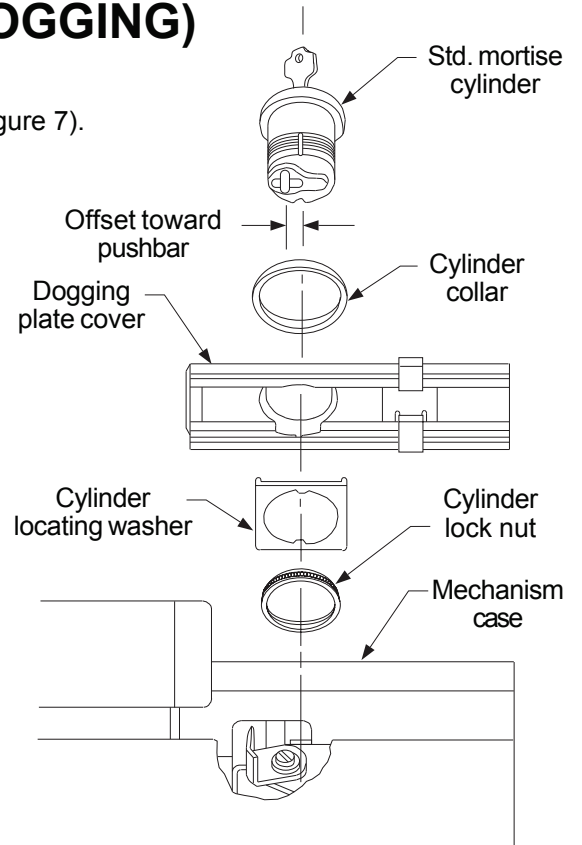
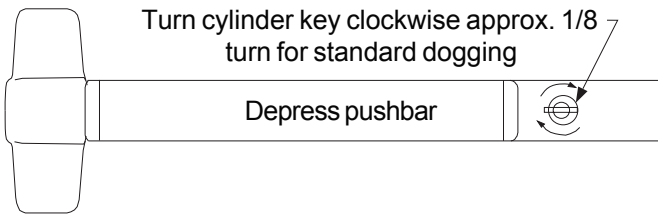
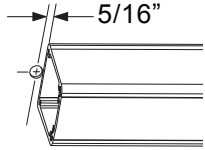
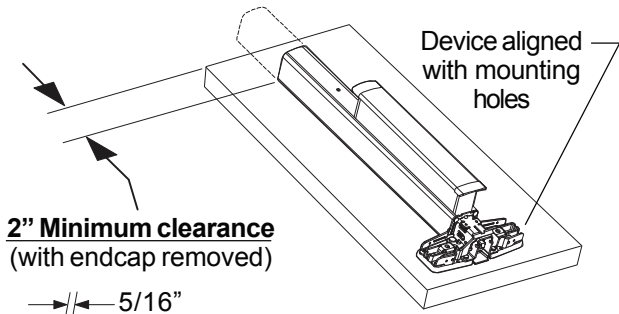


Figure 7

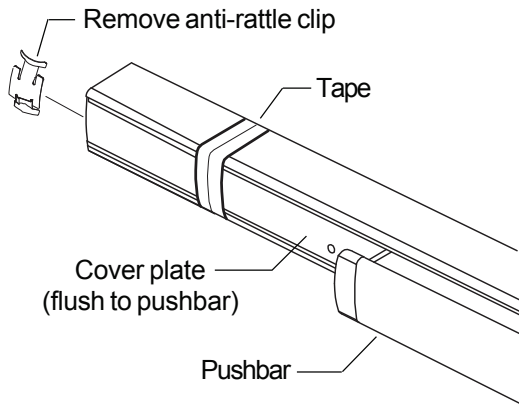
CUT DEVICE

1 Measure amount to cut off device.

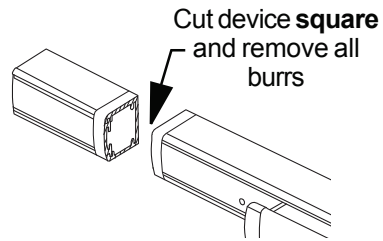


Note
If 5/8" diameter wire access hole has been predrilled in door, cut device 5/16" from center of hole.

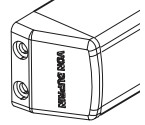
2 Tape and mark area being cut.



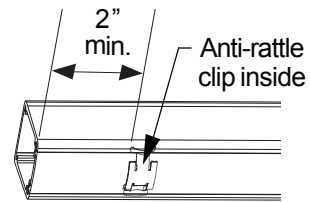
3 Cut device square.



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



4 Slide anti-rattle clip into device.



Customer Service

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24203424 Rev. 02/18-c