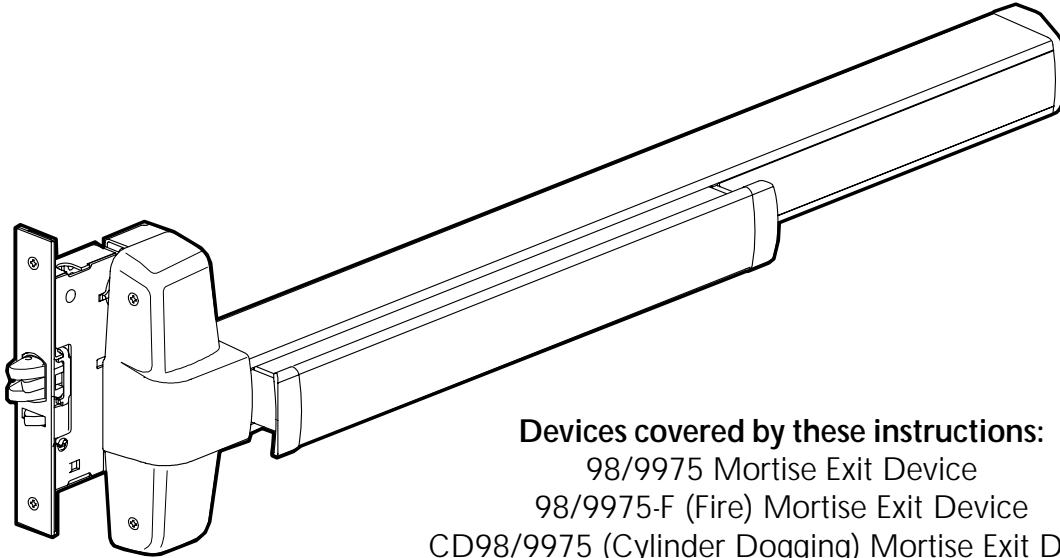


VON DUPRIN®

Installation Instructions



98/9975 Series Mortise Exit Device



Devices covered by these instructions:

- 98/9975 Mortise Exit Device
- 98/9975-F (Fire) Mortise Exit Device
- CD98/9975 (Cylinder Dogging) Mortise Exit Device
- EL98/9975 (Electric Latch Retraction) Mortise Exit Device
- 98/9975-2 (Double Cylinder) Mortise Exit Device

Please give these instructions to building owner after device is installed

Special tools needed:

- #10-24 tap
- #12-24 tap
- Drill bits: #25, 1/8", 1/4",
5/16", 13/32"

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

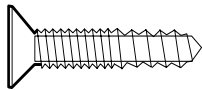
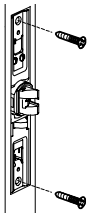
Index:

- Screw chart 2
- Preparation chart 3
- Device installation 4-5
- Optional equipment 6-7
- Cut device 8



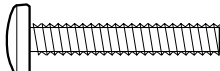
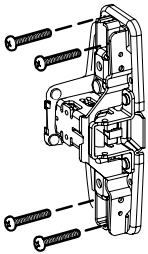
SCREW CHART

A

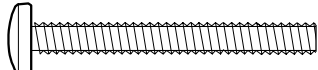


#12-12 x 12-24 x 1" Combination ————— Metal or wood door

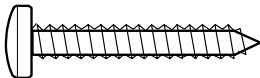
B



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

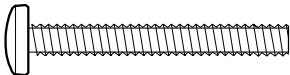


#10-24 X 1-1/2" ————— Sex bolts (2-1/4" door)

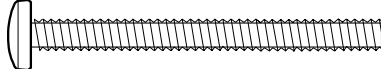


#10 x 1-1/4" Wood screw ————— Surface mount (wood)

- PACKAGED WITH TRIM -

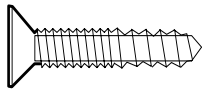
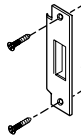


#10-24 X 1-3/8" ————— 990 Trims (1-3/4" door)



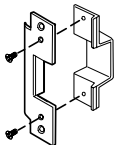
#10-24 X 1-7/8" ————— 990 Trims (2-1/4" door)

C



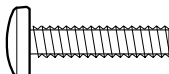
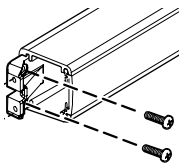
#12-12 x 12-24 x 1" Combination ————— Metal or wood frame

D

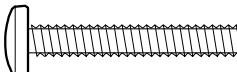


#8-32 X 1/4" ————— Strike plate

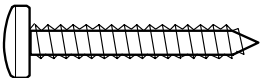
E



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

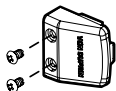


#10-24 X 1-1/8" ————— Sex bolts 2-1/4" door



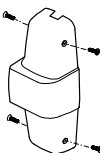
#10 x 1-1/4" Wood screw ————— Surface mount (wood)

F



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

G



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

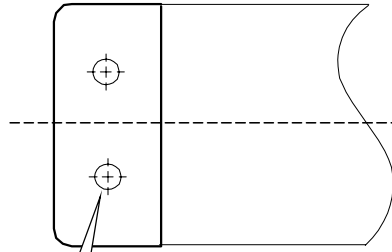
PREPARATION CHART

Go to instructions on next page before using Preparation Chart

Center case - 4 holes

Surface mount		Sex bolts or 990 trims	
Metal	#25 Drill #10-24 tap	Metal	1/4" Drill (device side) 13/32" Drill (trim side)
Wood	1/8" Drill pilot 1" deep	Wood	13/32" Drill thru

1/2" dia. hole for 98/9975-2 double cylinder devices only

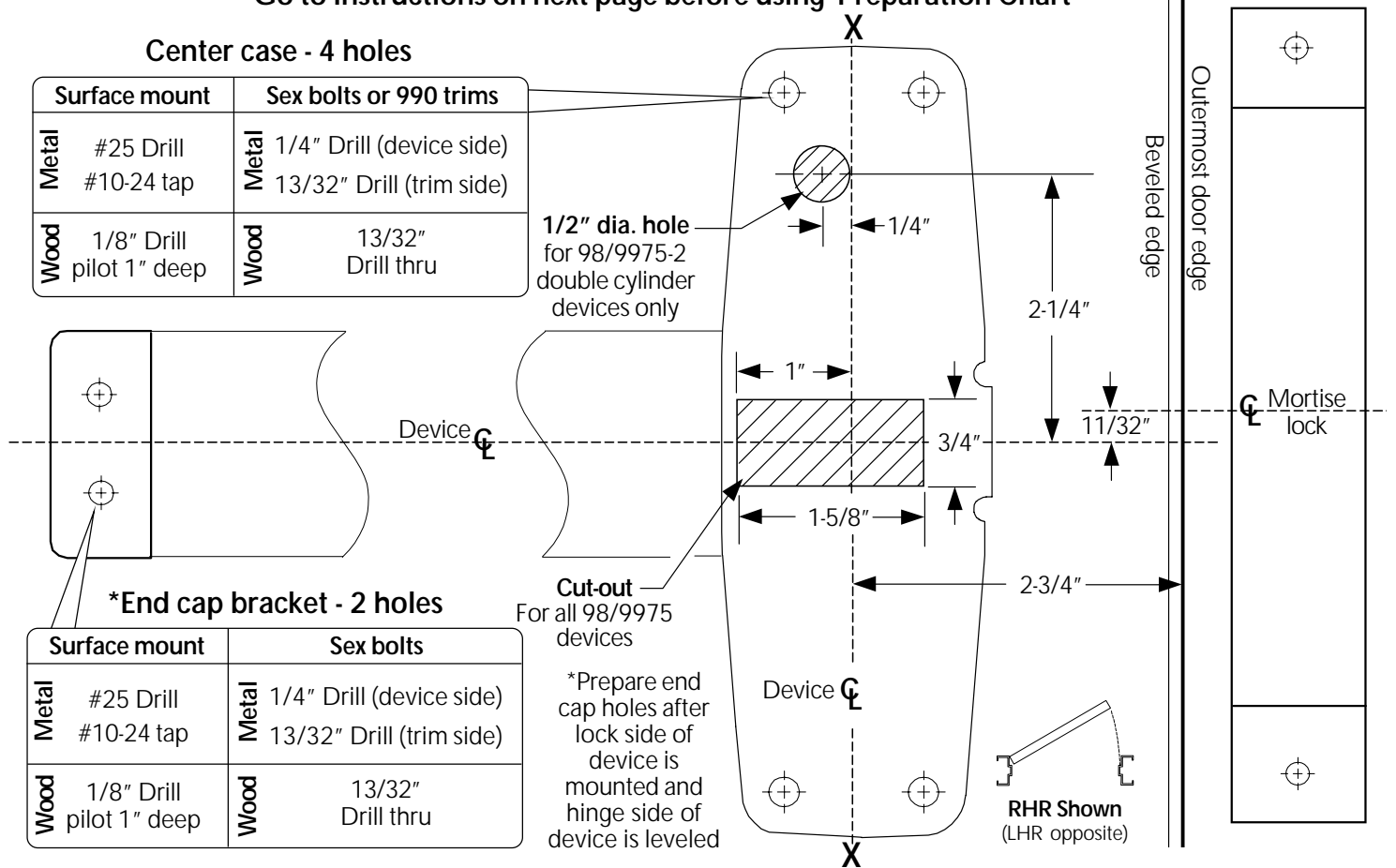


*End cap bracket - 2 holes

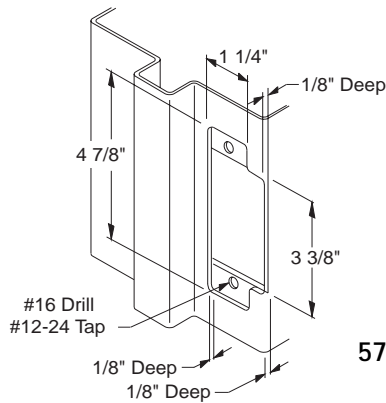
Surface mount		Sex bolts	
Metal	#25 Drill #10-24 tap	Metal	1/4" Drill (device side) 13/32" Drill (trim side)
Wood	1/8" Drill pilot 1" deep	Wood	13/32" Drill thru

Cut-out For all 98/9975 devices

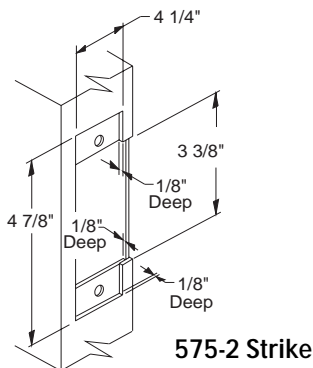
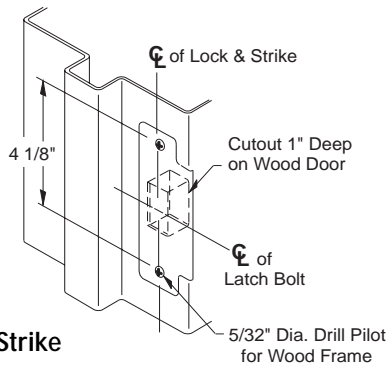
*Prepare end cap holes after lock side of device is mounted and hinge side of device is leveled



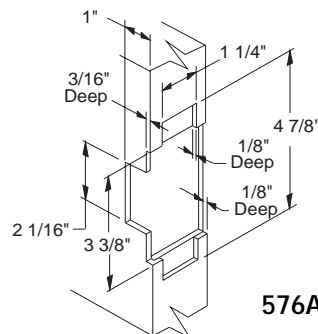
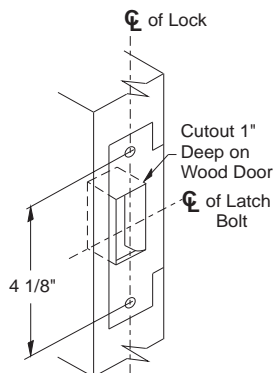
STRIKE PREPARATION



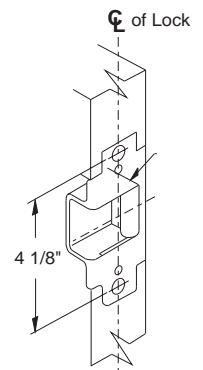
575 Strike

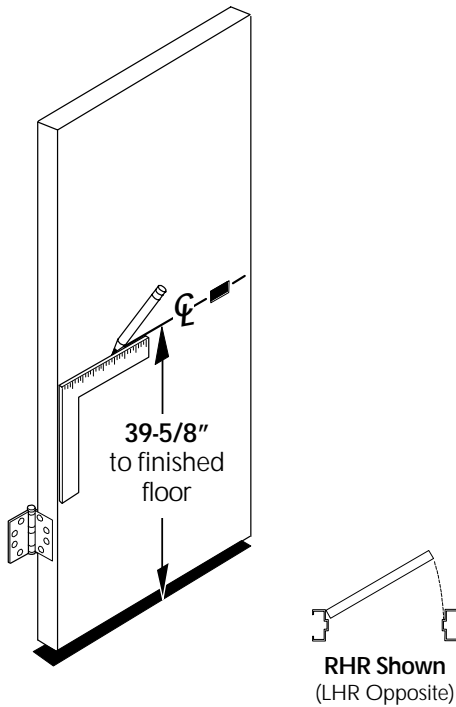
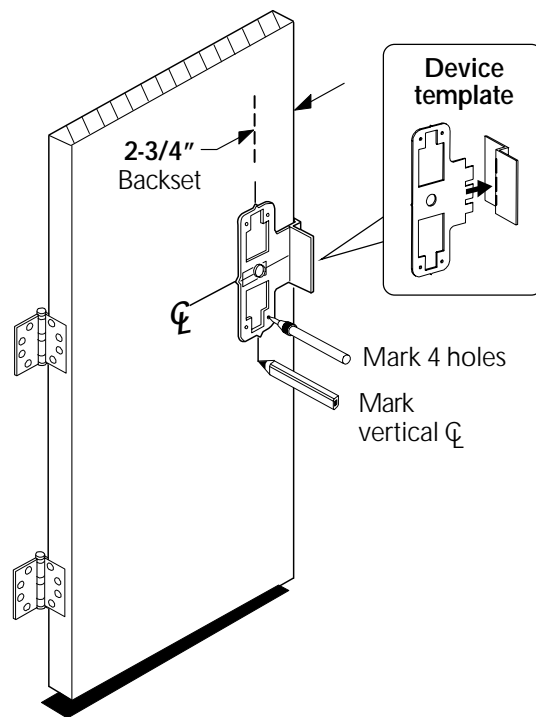


575-2 Strike



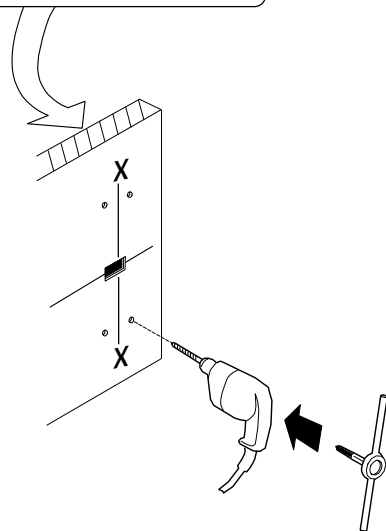
576A/B Strike



1**Draw horizontal device center line (C).****2****Align template along center line (C) and mark door.****3****Prepare 4 center case holes and cutouts.**

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

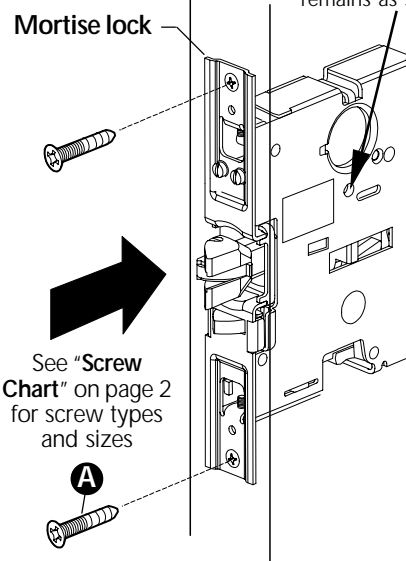
See trim instructions for pull side door preparation.

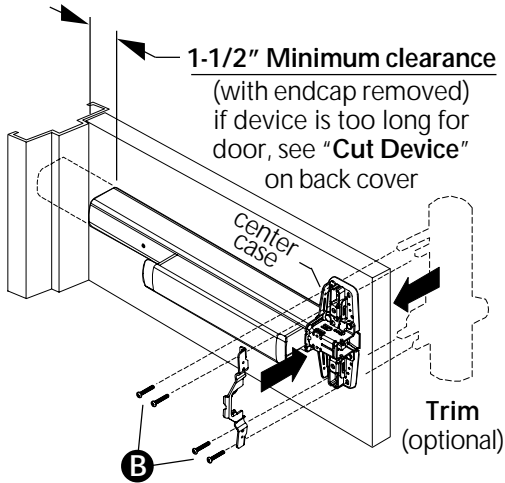
**4****Install mortise lock into door.**

See "#941019, 7500 mortise lock instructions"

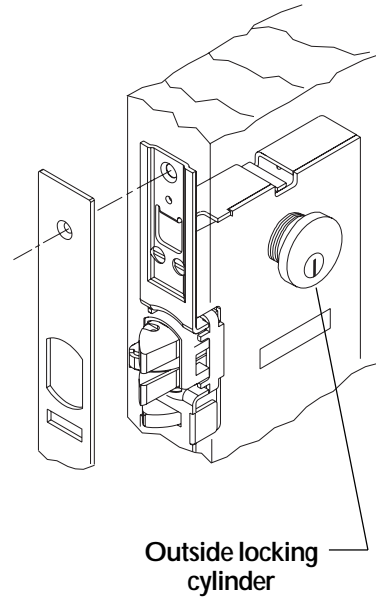
With TP, K, and L trims with outside cylinder to lock and unlock trim function, turn this set screw all the way in

With EO, DT, NL, and "double cylinder" applications, screw remains as shipped

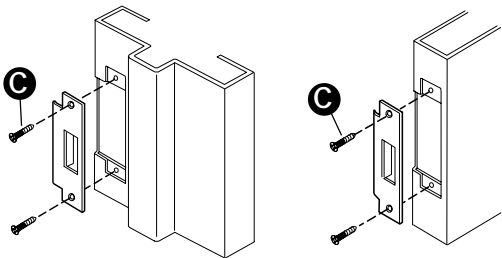
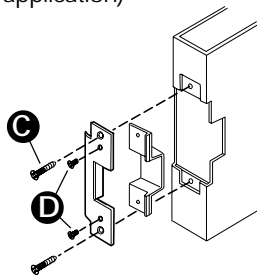
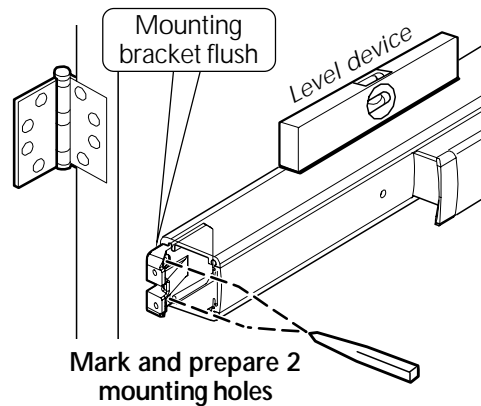


5**Install trim (if using) and secure device center case to door.****6****Install outside locking cylinder (if using) and finish installing mortise lock.**

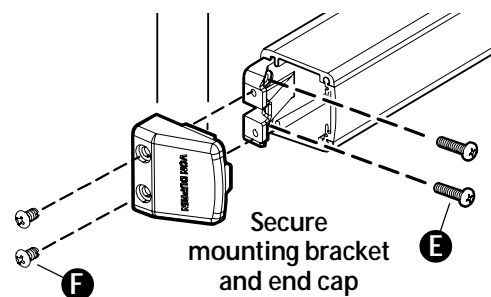
See 7500 Mortise Lock Instructions #941019

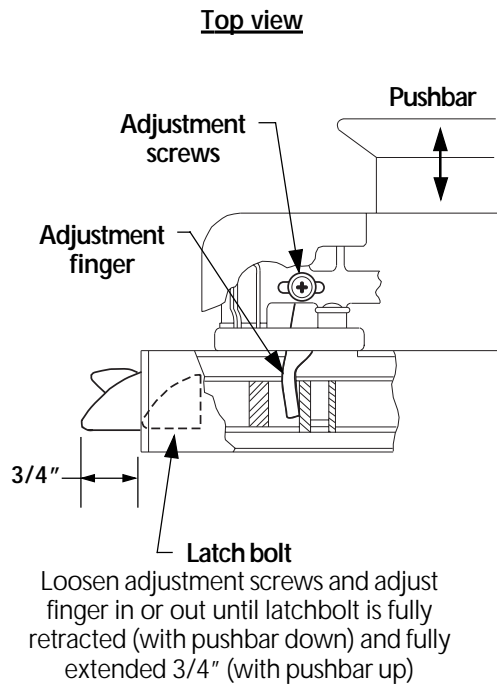
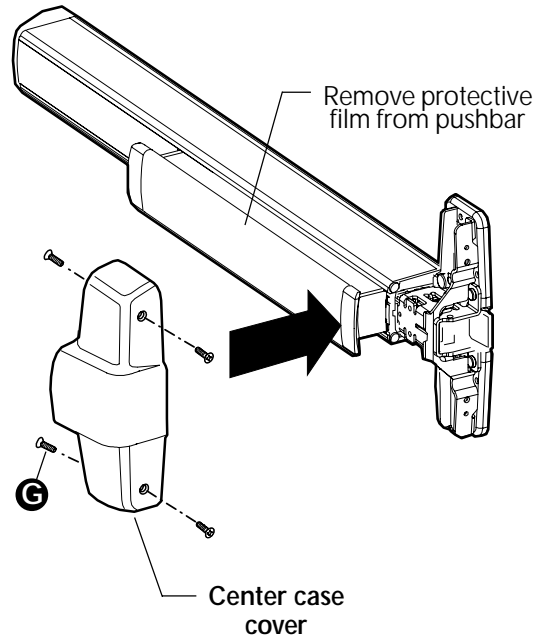
**7****Install supplied strike to frame or other door.**

See "Strike Preparation" on page 3 for preparation information

**575 Strike**
(single door application)**575/575-2 Strike**
(double door application)**576A/576B Strike**
(double door application)**8****Install mounting bracket and end cap.**

See "Preparation Chart" on page 3 for preparation information

**Secure mounting bracket and end cap**

9**Adjust latch bolt.****10****Install center case cover.**

OPTIONAL EQUIPMENT

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.

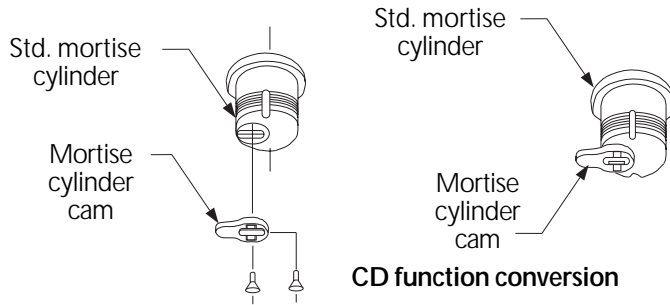


Figure 1

Dogging procedure

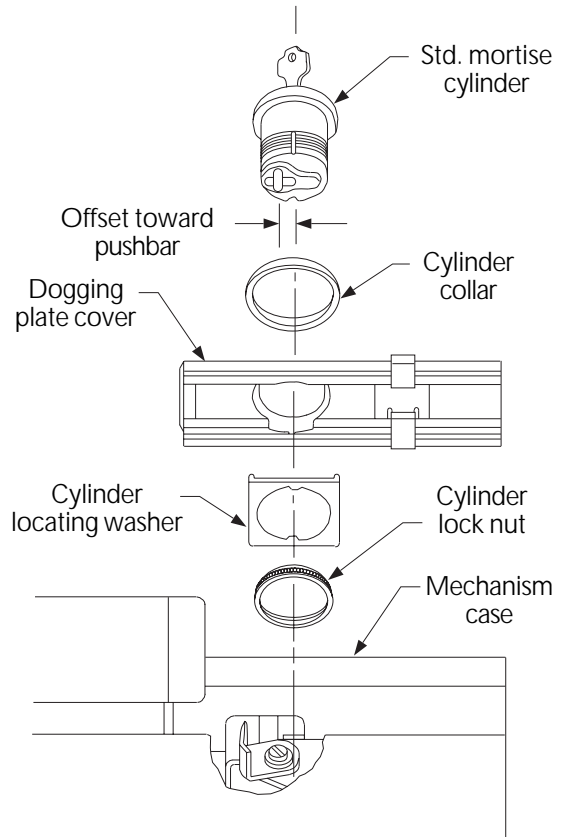
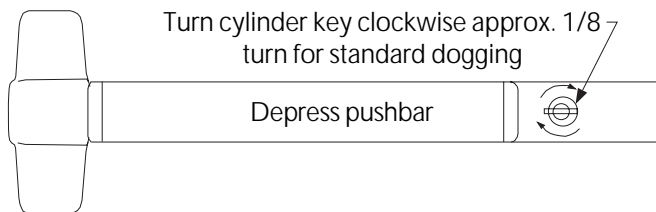
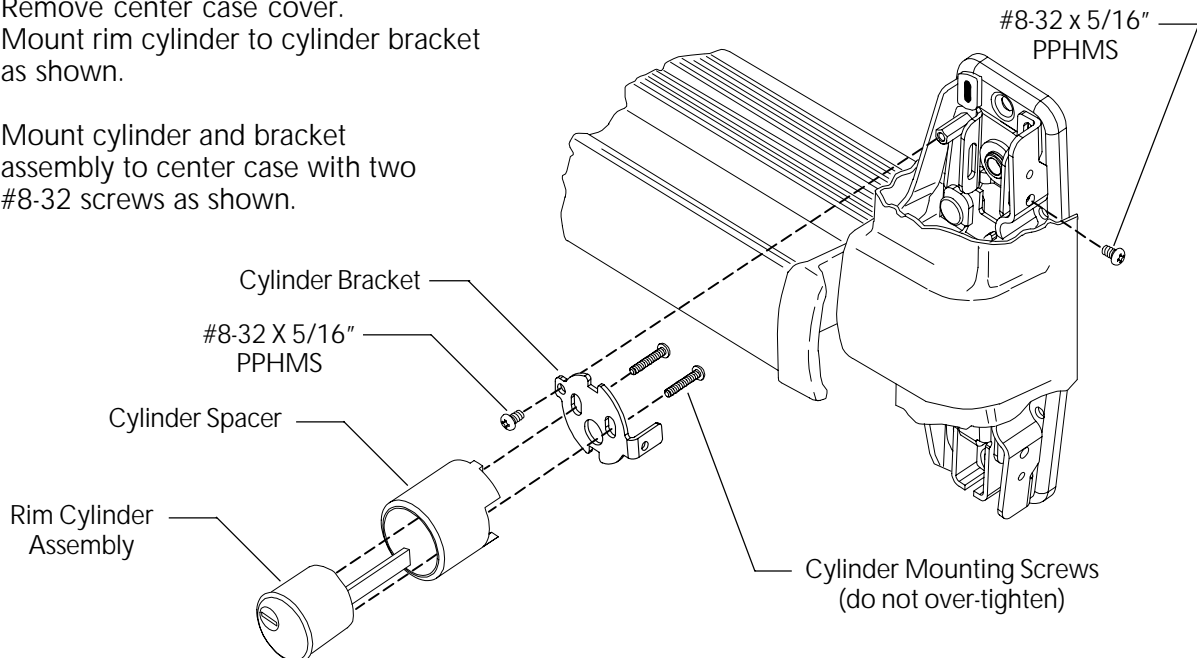


Figure 2

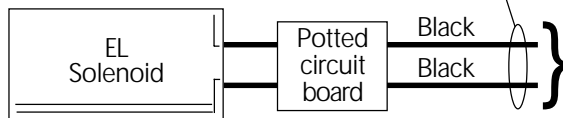
99-2 (DOUBLE CYLINDER)

1. Remove center case cover.
2. Mount rim cylinder to cylinder bracket as shown.
3. Mount cylinder and bracket assembly to center case with two #8-32 screws as shown.



OPTIONAL EQUIPMENT - CONTINUED

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



ELECTRICAL SPECIFICATIONS

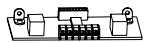
Voltage: 24 VDC
Current: 16 A inrush (0.3 sec.)
0.25 A holding

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.

EL WIRING

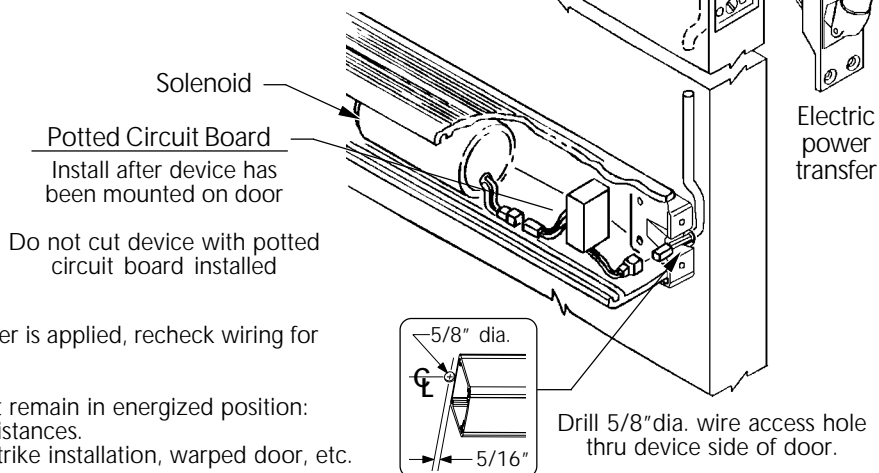
Solenoid draws 16 A inrush current from PS873. Solenoid must be wired to a PS873 logic board:



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



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



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, gauge, 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 retract and extends fully (see page 5, step 9).
3. Electrically energize solenoid and hold.
4. Check latch bolt(s) for full retraction (must clear strike (see page 5, step 9).
5. Release solenoid and check latch bolt extension (see page 5, step 9).
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).
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.

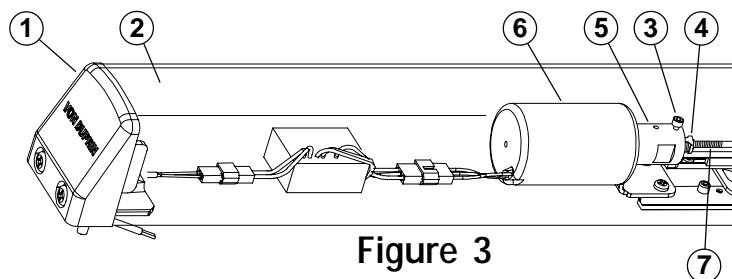


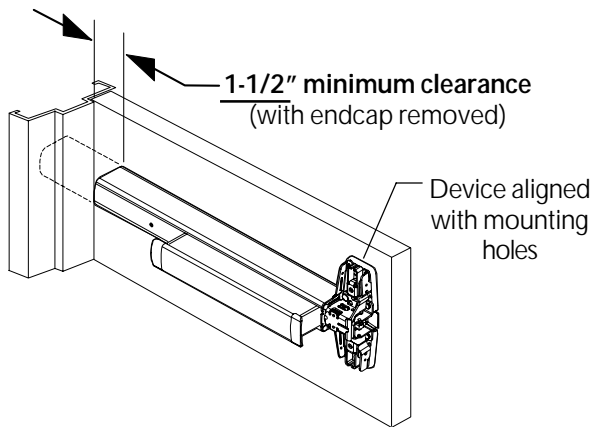
Figure 3

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.

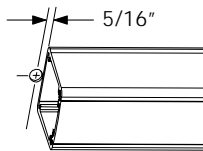
CUT DEVICE

1 Measure amount to cut off device.

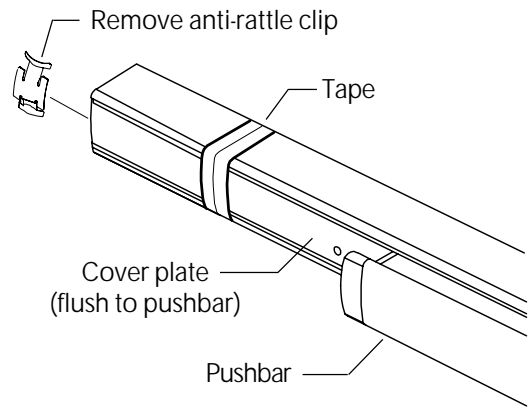


Note

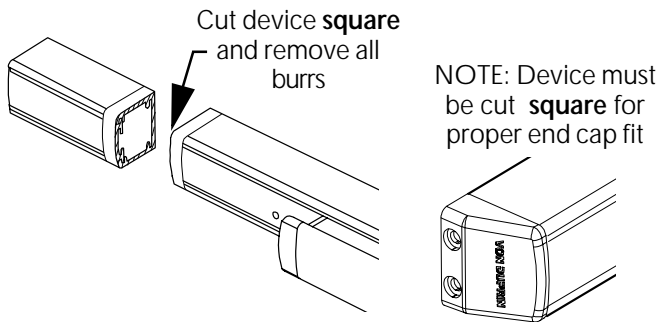
If 5/8" diameter wire access hole has been predrilled in door, cut device 5/16" from center of hole.



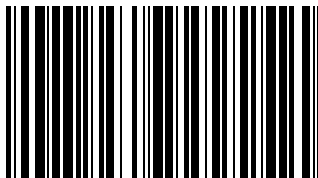
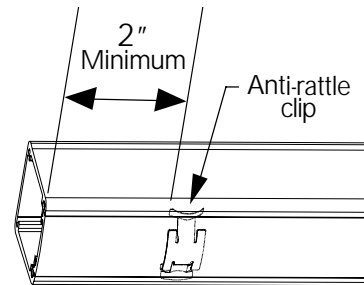
2 Tape and mark area being cut.



3 Cut device square.



4 Slide anti-rattle clip into device.



911374-00