1-Point Latch (LBL)
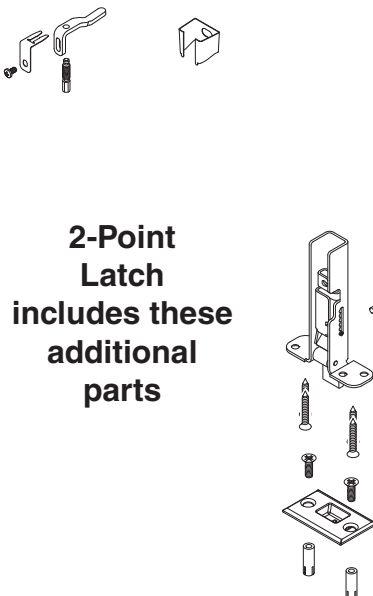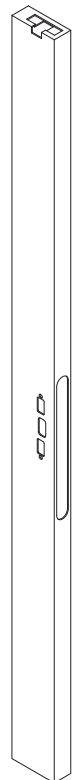
Fire-Rated Devices include these additional components
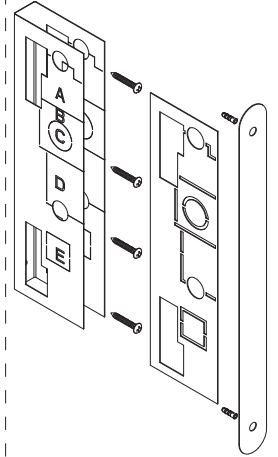
Metal Edge Wrap required for 60 and 90-minute applications

2-Point Latch includes these additional parts

⚠ **NOTE:** If door does not have a cutout for cabling inside lock stile, door must be routed. Refer to 33/3550AWDC wood door template #24731408.

33/3550AWDC

Instead of traditional rods, concealed vertical cables are utilized, making use of a proven technology that enables quick installation and allows for easy maintenance. Simplified sizing, ease of adjustment and greater door integrity make the Wood Door Concealed exit device a more secure solution, without the complexity associated with traditional concealed systems. Another key benefit of the system is the ability to make adjustments to the system by simply removing the scalp plate from the edge of the door.

If you have any questions or comments please visit the resources below or give us a call so we can help get you on your way. Thank you for your continued support of Von Duprin.

Technical Support hot line: 877-671-7011

Scan this QR code or visit us online at kc.allegion.com to access the Allegion Knowledge Center.

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TABLE OF CONTENTS

INSTALLATION

ADJUSTMENT

1a For 60 and 90-minute applications, install metal edge wrap.

1c If necessary, prepare center case mounting holes.

Device
$\mathcal{C}$L

Sex bolts Ø ¹³⁄₃₂" thru (Pre-prepped at factory)
Trim Ø ½" thru (Enlarge existing holes)
(2 places)

3⅛"

Device
$\mathcal{C}$L

3⅛"

1½" Backset

RHR shown
(LHR opposite)

1b With door laying flat, draw horizontal device center line ($\mathcal{C}$L).

$\mathcal{C}$L

RHR shown
(LHR opposite)

⚠ **NOTE:** Centerline is predetermined by cutout.
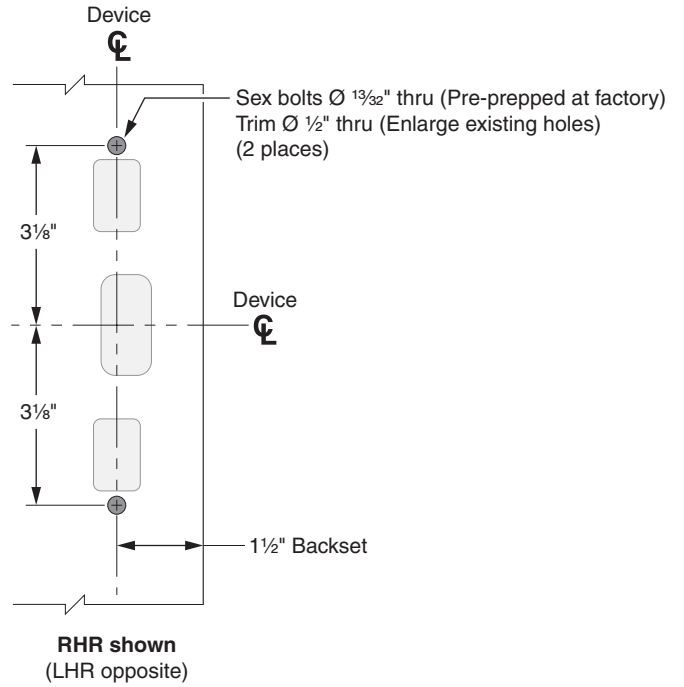
1d If necessary, prepare door for top strike cutout.

$\mathcal{C}$L Latch

2"

1³⁄₁₆"

⅝"

Cut out material this side only

Push side of door, RHR shown
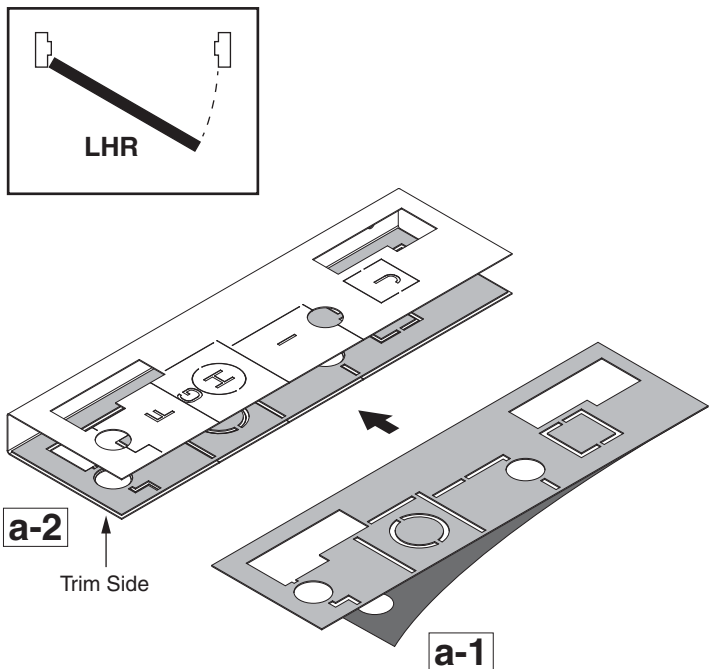
3
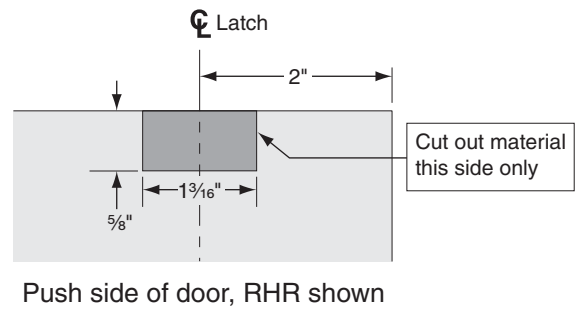
2   FIRE BARRIER

⚠ **Fire application only**
⚠ **Fire components must be installed to maintain fire rating of opening.**

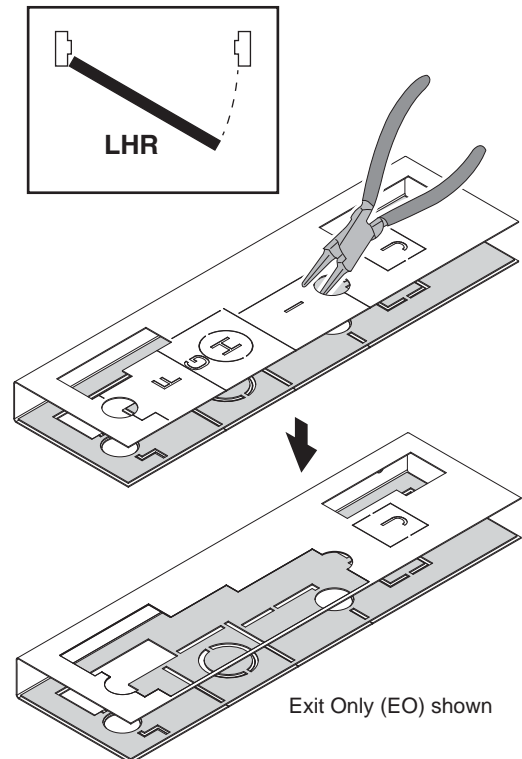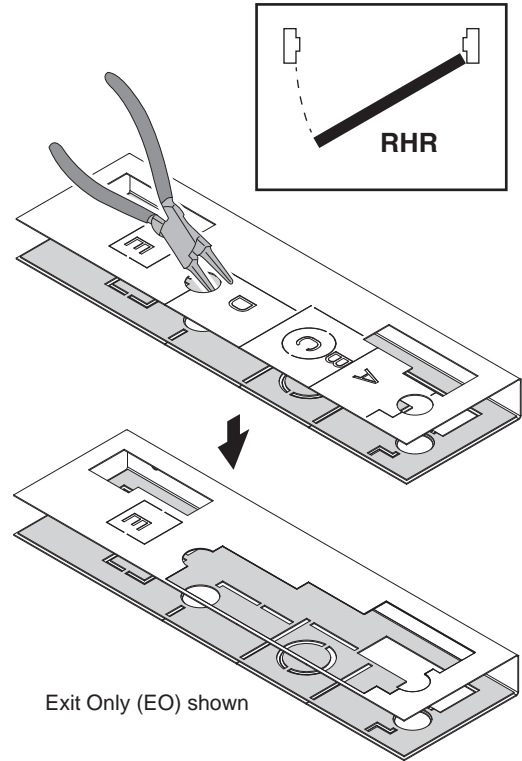### 2a Peel adhesive backing from intumescent and apply to trim side of fire barrier.

⚠ **Intumescent must be properly aligned before exposed adhesive contacts fire barrier. Adhesive is permanent and not repositionable.**
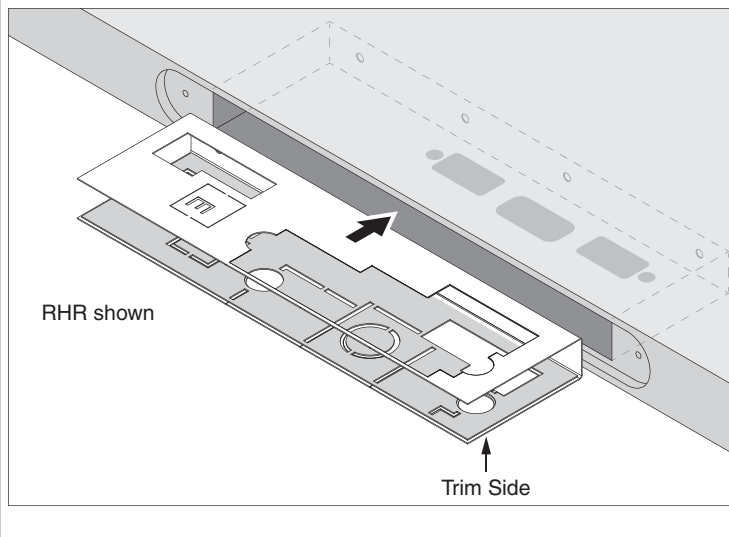
RHR

a-2

Trim Side

a-1

---------------------- OR ----------------------

LHR

a-2

Trim Side

a-1
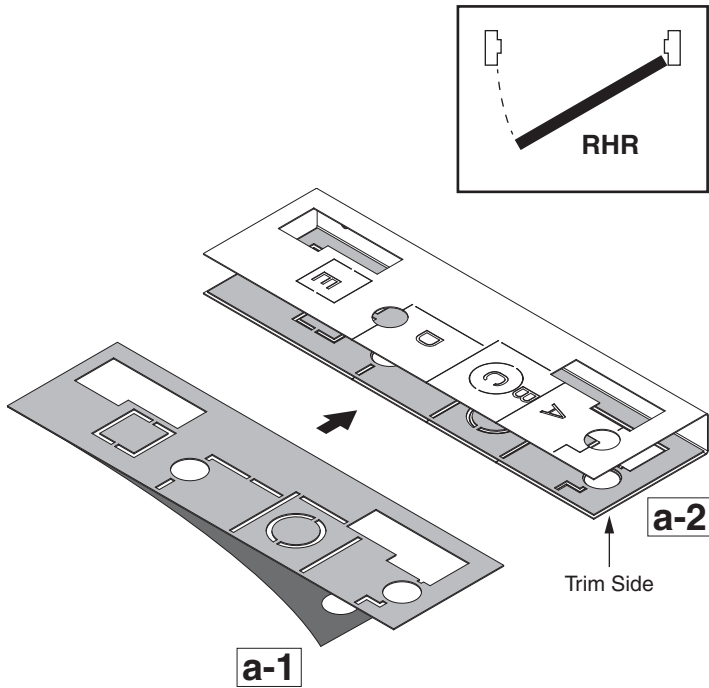
2b Remove appropriate knockouts for device and trim.

RHR

Exit Only (EO) shown

LHR

Exit Only (EO) shown

2c With fire barrier in correct orientation, slide barrier into door pocket.

RHR shown

Trim Side

2d Secure fire barrier to inside of pocket with 4 screws.
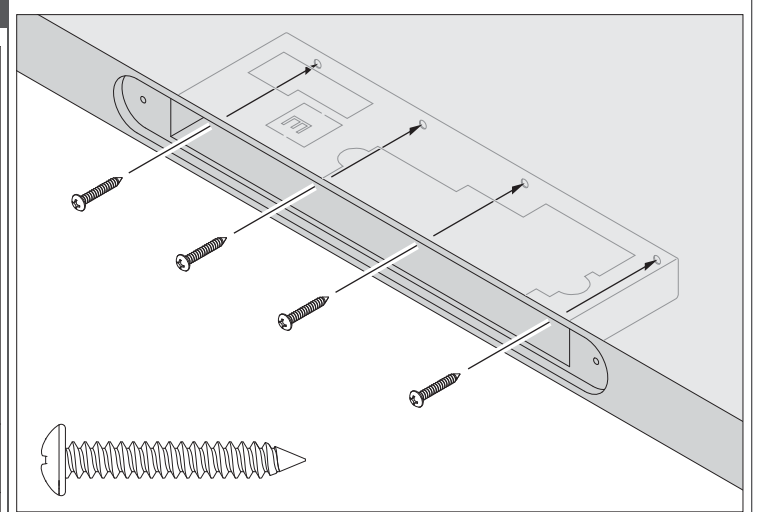
## FIRE BARRIER KNOCKOUT TABLE

Trim Model	Trim Function	Right Hand Reverse (RHR) Remove the knockouts listed below	Left Hand Reverse (LHR) Remove the knockouts listed below
		RHR	LHR
Exit Only	EO	A B C D	F G H I
386	DT	A B C D H	C F G H I
386	NL		
388	NL	A B C D G H	B C F G H I
550	DT	A B C D E J	E F G H I J
392-6	-	A B C D (If mounted below, remove E, J)	F G H I (If mounted below, remove E, J)
360	L	A B C D F G H	A B C F G H I
360	L-BE		
360	L-DT		
360	T		
360	T-BE		

3 LATCH INSTALLATION

3a Confirm top latch is marked for EXIT DEVICES ONLY, then remove label.

ATTENTION:
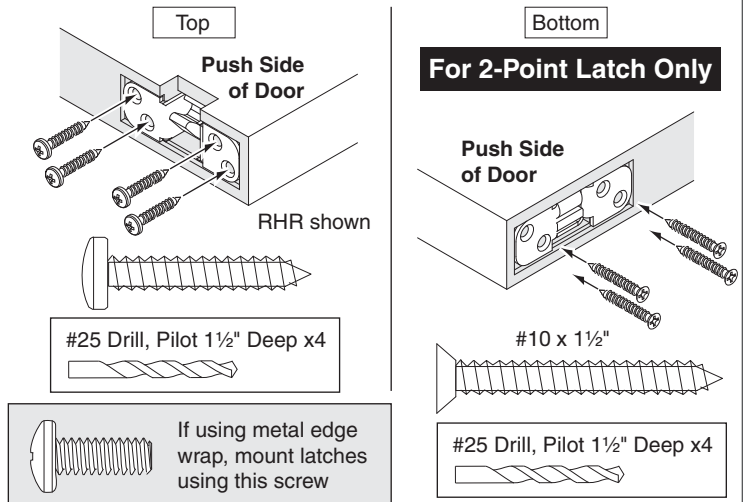FOR USE WITH
EXIT DEVICES ONLY
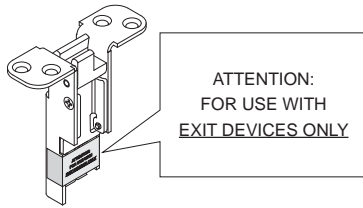
3b Connect cable end fitting(s) to latch(es).

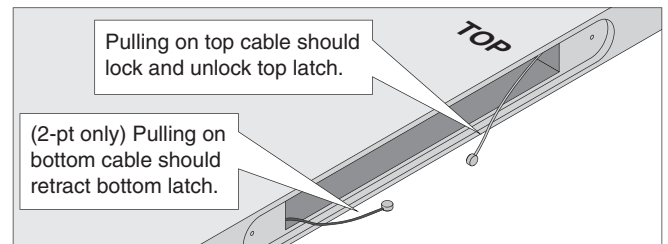⚠ **For 2-point latches, the top cable is the longer of the two cables. Top cable is silver, bottom cable is black.**
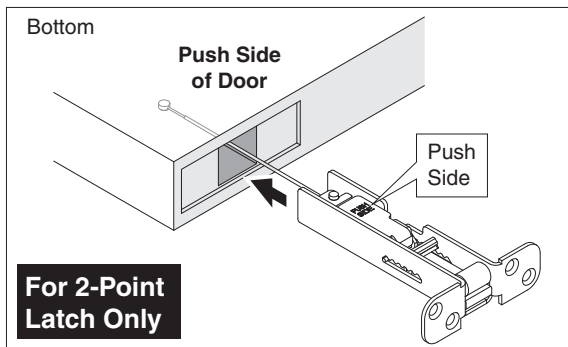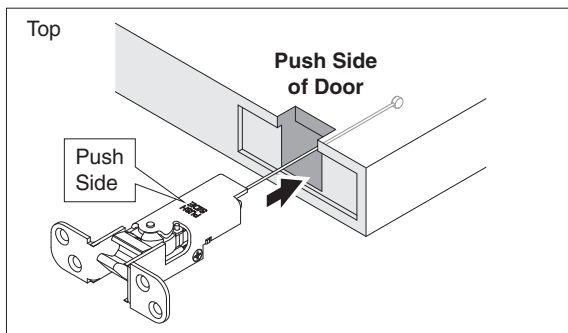
Top

Pull down on cable link

b-1

cable link

b-2

Slide cable end into cable link

Bottom

Bend cable slightly to access cable link, then install

cable link

For 2-Point Latch Only

3c Slide latch(es) into door pocket.

⚠ **Clear cable channel of debris first if necessary.**

Top

Push Side of Door

Push Side

Bottom

Push Side of Door

Push Side

For 2-Point Latch Only

3d Secure latch(es).

Top

Push Side of Door

RHR shown

#25 Drill, Pilot 1½" Deep x4

Bottom

For 2-Point Latch Only

Push Side of Door

#10 x 1½"

#25 Drill, Pilot 1½" Deep x4

If using metal edge wrap, mount latches using this screw

3e Perform cable binding check at mortise pocket.

Pulling on top cable should lock and unlock top latch.

TOP

(2-pt only) Pulling on bottom cable should retract bottom latch.
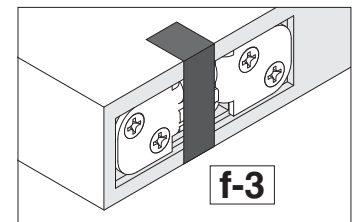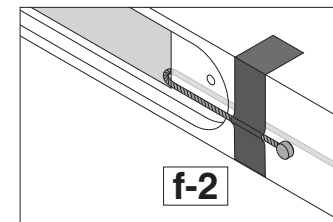
3f Prepare door for hanging.

Pull top cable taut and tape cable end to door edge (f-1).

f-1
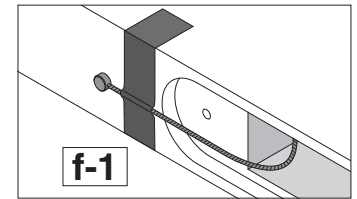
For 2-Point Latch Only

Pull bottom cable taut enough so bottom bolt will not drag against floor, and tape cable end to door edge (f-2). This holds cable in place, preventing it from dropping into door channel. Tape bottom bolt in place (f-3).
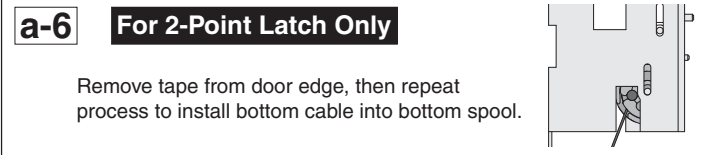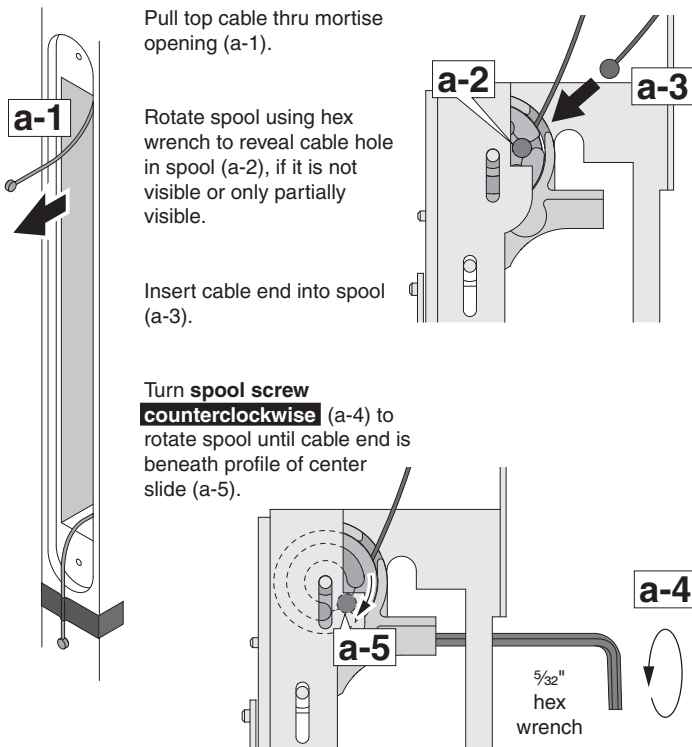
f-2

f-3

3g Hang door on frame.

⚠ **For 2-point latches, bottom latch cannot be in locked position while hanging door on frame. Latch must be retracted.**

4 CABLE INSTALLATION

4a Insert cable end fitting(s) into center slide.

⚠ **Be sure to attach top cable to top end of center slide (marked "Top")**

Pull top cable thru mortise opening (a-1).

a-1

a-2

a-3

Rotate spool using hex wrench to reveal cable hole in spool (a-2), if it is not visible or only partially visible.

Insert cable end into spool (a-3).

Turn **spool screw counterclockwise** (a-4) to rotate spool until cable end is beneath profile of center slide (a-5).

a-4

a-5

⁵⁄₃₂" hex wrench

a-6 **For 2-Point Latch Only**

Remove tape from door edge, then repeat process to install bottom cable into bottom spool.
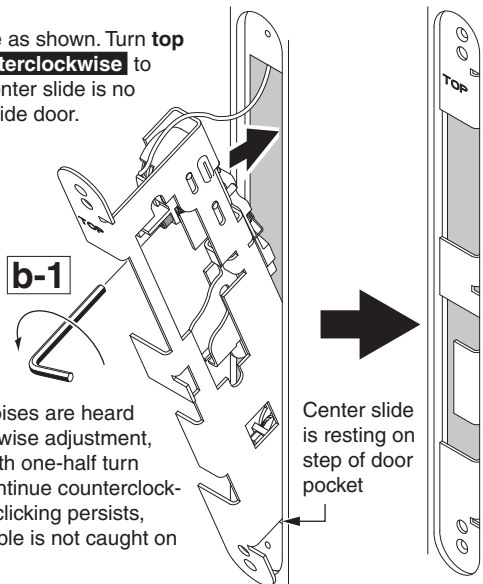
4b Take up top cable slack only.

⚠ **A flashlight would be useful during adjustment.**

Position center slide as shown. Turn **top spool screw counterclockwise** to tighten (b-1) until center slide is no longer hanging outside door.

⚠ Do not adjust bottom cable at this time.

b-1

⁵⁄₃₂" hex wrench

Center slide is resting on step of door pocket

⚠ **NOTE:** If clicking noises are heard during counterclockwise adjustment, unwind the cable with one-half turn clockwise. Then, continue counterclockwise adjustment. If clicking persists, check to be sure cable is not caught on an edge.
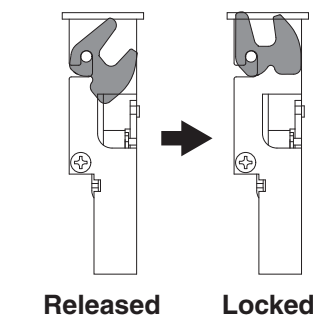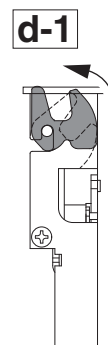
4c Secure center slide.

TOP

⅛" Drill, Pilot 1" Deep x2

#8 x 1"
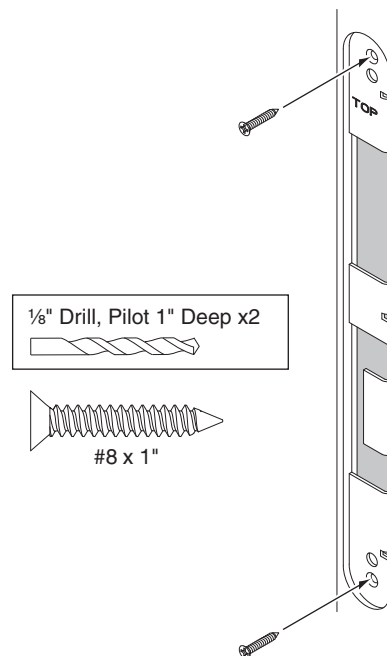
4d Adjust top spool.

⚠ **NOTE:** Top latch must be placed in locked position prior to making top adjustment.
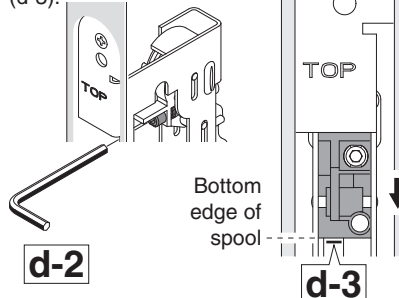
Released   **Locked**

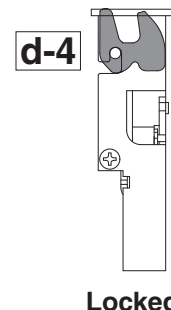Put top latch in locked position (d-1).

d-1

⚠ If latch won't lock, **top spool screw** was overtightened in Step 4b and needs to be backed out clockwise.

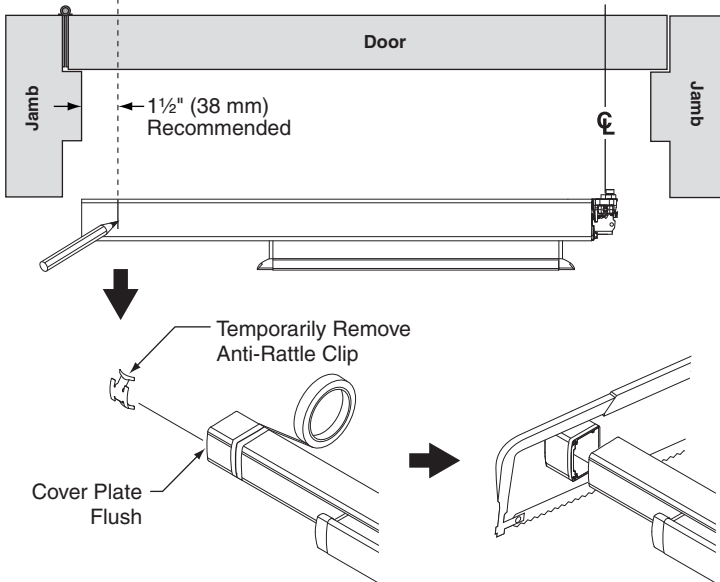Turn **top spool screw** (d-2) until bottom edge of spool is just above line (d-3).

d-2

TOP

Bottom edge of spool

d-3

Confirm top latch is still locked (d-4).

d-4

Locked

⚠ **NOTE:** No further top spool adjustment needed. Put hex wrench away until Step 8b.

7

5   DEVICE INSTALLATION

5a   If necessary, cut device.

Door

Jamb

1½" (38 mm) Recommended

℄

Jamb

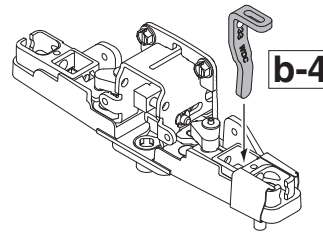Temporarily Remove Anti-Rattle Clip

Cover Plate Flush

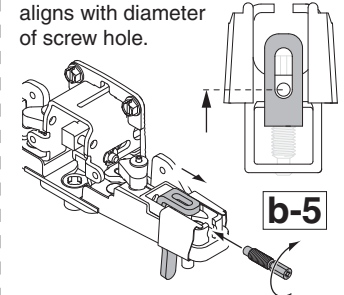### 5b   Install lift finger(s) and retainer clip(s).

Using tube of grease provided, apply grease to interior of rod connector sleeve in locations shown (b-1). With device center case hanging over edge of table, slide rod connector sleeve over top end of center case in orientation shown (b-2), then insert mounting screw thru hole in center case and slot in clip (b-3).


Block may need to be pushed down to insert screw

b-3

b-1

Top

b-2

(1¾" door)

(2¼" door)
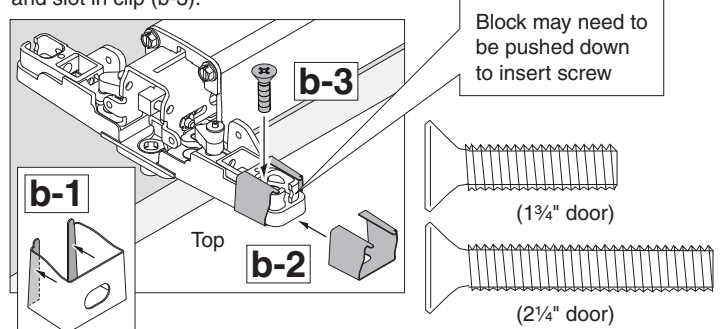
Slide L-shaped lift finger thru upper block on front of center case.

b-4

Insert **lift finger screw** and turn clockwise with screwdriver to raise lift finger until the slot aligns with diameter of screw hole.
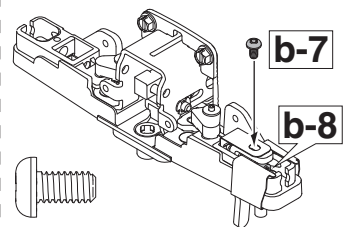

b-5

Install retainer clip against lift finger, snapping it into the slot of the **lift finger screw**.

b-6

slot
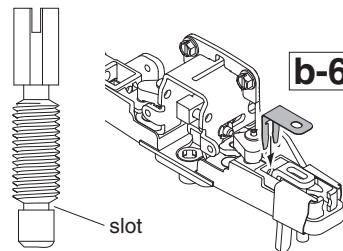
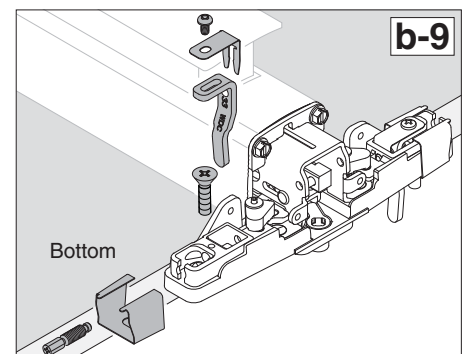Lightly tighten **locking screw** (b-7).

⚠ It may be necessary to rotate the **lift finger screw** to realign retainer clip and lift finger holes.

b-7

b-8

⚠ Confirm **lift finger screw** is free to rotate (b-8).

For 2-Point Latch Only

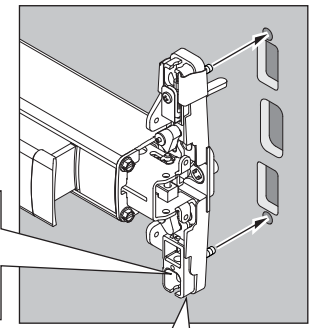Repeat steps b-1 thru b-8 for lower block of center case.
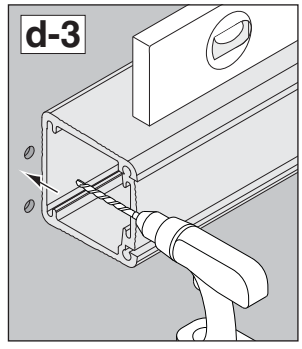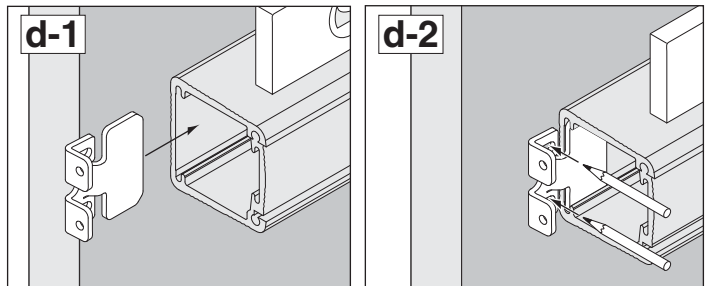

b-9

Bottom

5c Attach center case to door.

⚠ Do not overtighten center case to door (door edge cover plate won't fit).
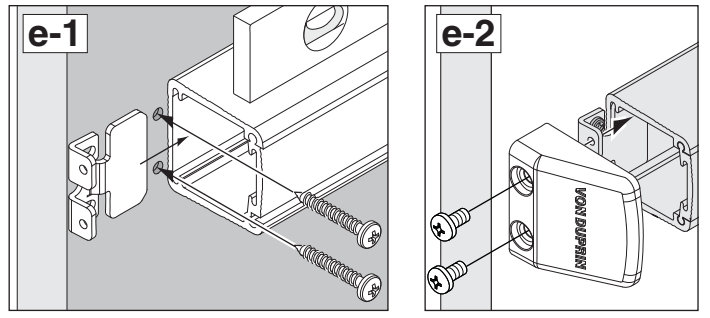
Block may need to be pushed up to access screw.

Thru-bolting Trim

(1¾" door)

(2¼" door)

OR

Sex Bolts

(1¾" door)

(2¼" door)

5d Mark and prepare 2 holes.

d-1

d-2

d-3

Surface Mount

⅛" Drill, Pilot 1" Deep

------- OR -------

Sex Bolts

13⁄32" Drill thru

5e Install end cap bracket and end cap.

e-1

e-2
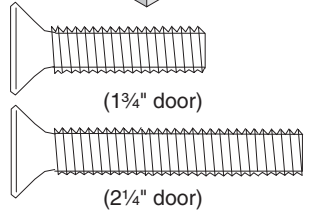
#10 x 1¼" Wood screw
(Surface mount WDC)

#10-24 x ¾"
(Sex bolts, 1¾" door)

#10-24 x 1⅛"
(Sex bolts, 2¼" door)

6 DEVICE ADJUSTMENT
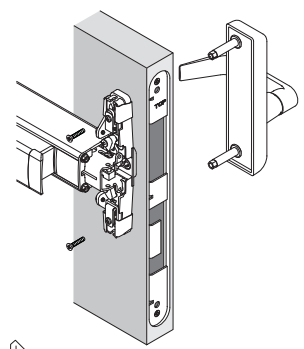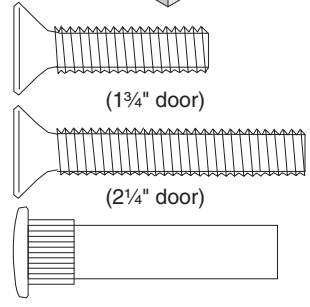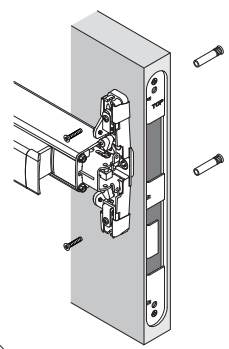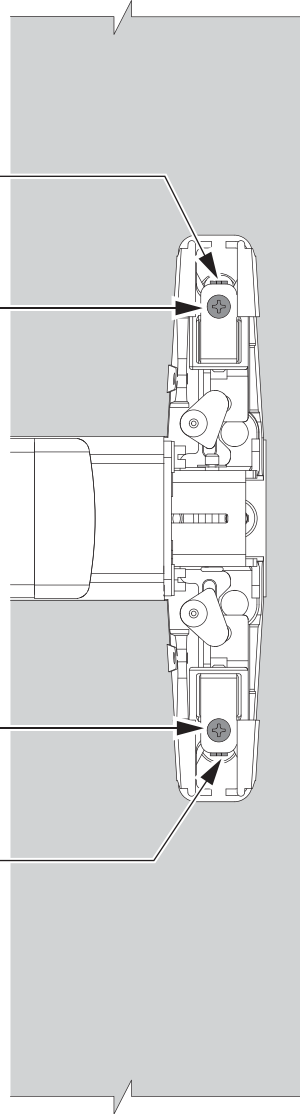
ADJUSTMENT COMPONENTS

Center Case

Top lift finger screw:
Adjusts release point of latches

Top locking screw:
Locks lift finger screw adjustment

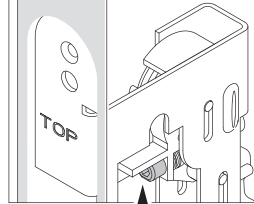**Bottom locking screw*:**
Locks lift finger screw adjustment

Bottom lift finger screw*:
Adjusts release point of latches

* For 2-point
latch only

Push Side of Door

Reverse Angle

TOP

Top spool screw:
Sizes cable to door height

Top lift finger:
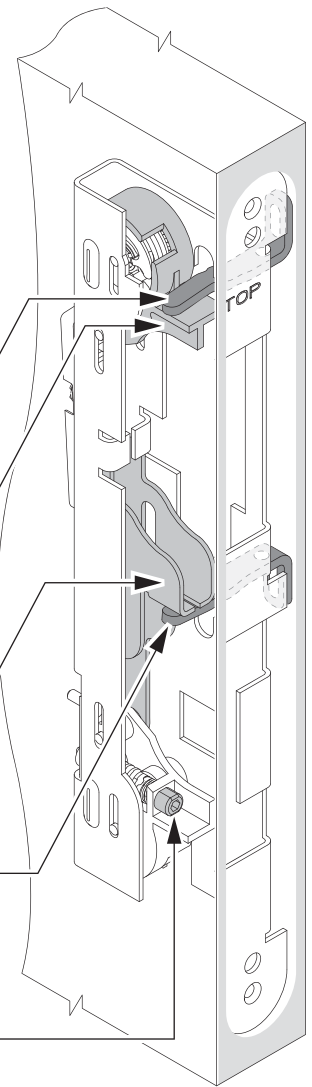Transfers motion from exit device
spool inputs

Top spool input:
Transfers motion from lift finger to
latch

Bottom spool input*:
Transfers motion from lift finger to
latch

Bottom lift finger*:
Transfers motion from exit device
spool inputs

Bottom spool screw*:
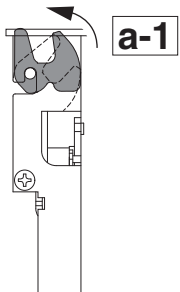Sizes cable to door height and
undercut

Center Slide

TOP

Pull Side / Edge of Door

6   (continued)

6a   Adjust device for top latch retraction position.
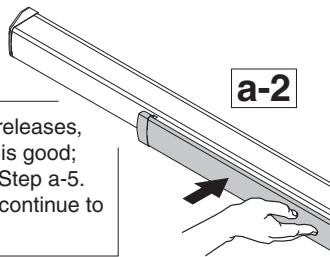
Steps marked with a ⭐ symbol are different if using 360L / 360T trim.
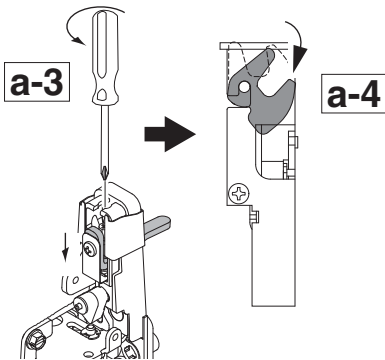
Put top latch in locked position.

a-1

Depress and **HOLD** push pad (or dog device) until Step a-6.

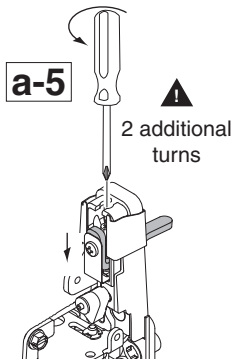⭐ If using 360L / 360T trim, turn and hold lever / thumb turn instead.

a-2

If top latch releases, adjustment is good; proceed to Step a-5. Otherwise, continue to Step a-3.

Maintain downward pressure on screwdriver and turn **top lift finger screw** counterclockwise to lower lift finger. With other hand, press on top latchbolt. STOP as soon as top latch releases.
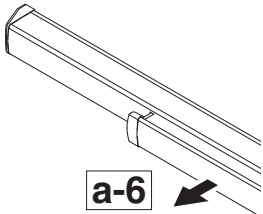

a-3   **a-4**

Turn **top lift finger screw** counterclockwise an additional 2 full turns.
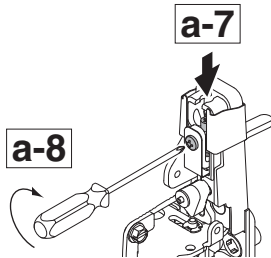

a-5   ⚠
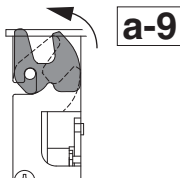2 additional turns

Release push pad.

⭐ If using 360L / 360T trim, release lever / thumb turn instead.

a-6

While pressing down on **top lift finger screw** (a-7) so it is seated, tighten **top locking screw** (a-8).
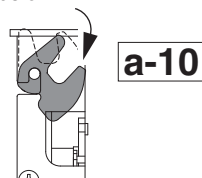

a-7
a-8

Using your finger, put top latch in locked position.

a-9

With pushpad depressed, you should be able to release top latch with your finger, as shown below.
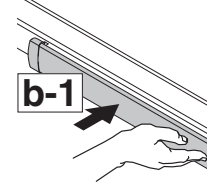

a-10

Locked   **Released**

### 6b   Adjust device for bottom latch retraction positon.

For 2-Point Latch Only

Depress and **HOLD** push pad (or dog device) until Step b-4.

⭐ If using 360L / 360T trim, turn and hold lever / thumb turn instead.

b-1

Maintain upward pressure on screwdriver and turn **bottom lift finger screw** (b-2) counterclockwise to adjust past point where **bottom lift finger** contacts **bottom spool input** (b-3). Continue adjusting until **bottom spool input** reaches end of travel or until **bottom lift finger** reaches max adjust.
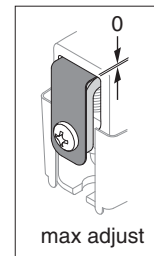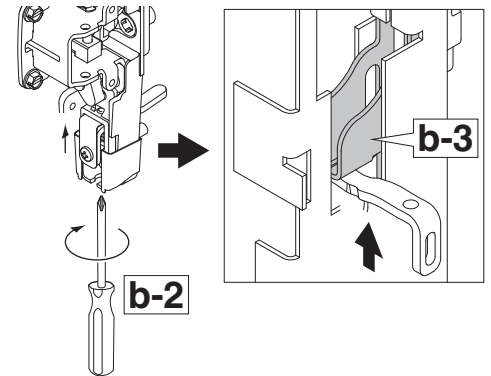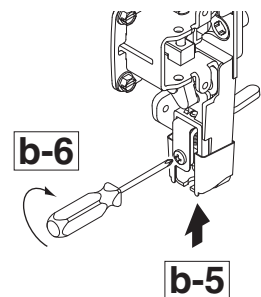

b-3
b-2

0
max adjust

Release push pad.

⭐ If using 360L / 360T trim, release lever / thumb turn instead.

b-4
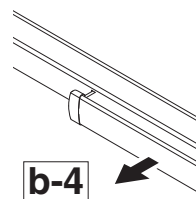
Push up on **bottom lift finger screw** so it is seated, and tighten the **bottom locking screw.**
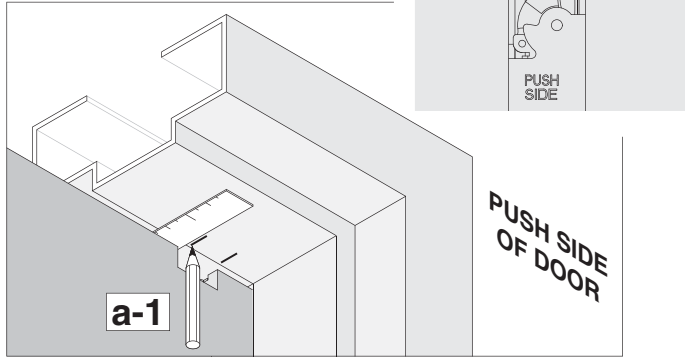

b-6
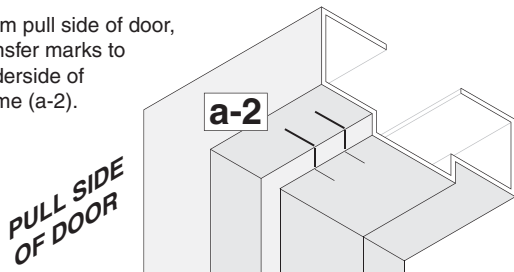**b-5**

7 STRIKES AND FIRE PIN

7a Prepare door frame for top strike.

⚠ If using a door seal or gasket, install first.

From push side of door, with door nearly closed, use straight edge to transfer location of inside edges of top latch housing to underside of stop (a-1).

PUSH SIDE

a-1

PUSH SIDE OF DOOR

From pull side of door, transfer marks to underside of frame (a-2).

a-2

PULL SIDE OF DOOR

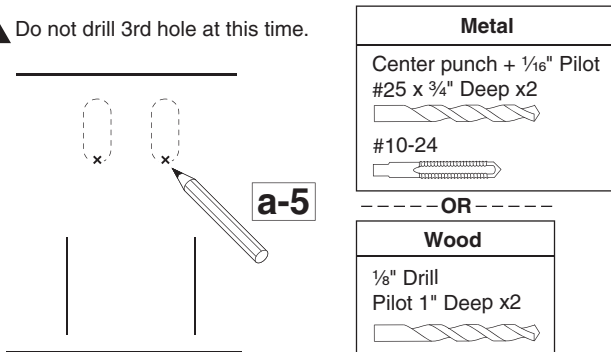With flat end of strike against stop, center strike to marks on frame (a-3). Use a pencil to trace contour of the two slotted holes (a-4).

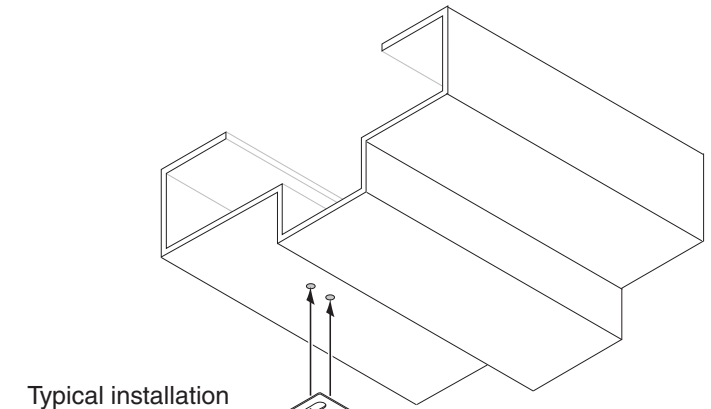Edge of stop or gasket

a-4

a-3
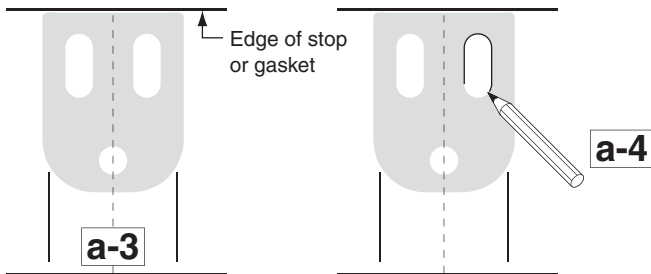
Mark the bottom center point of each slot (a-5) and prepare door frame as shown.

⚠ Do not drill 3rd hole at this time.

a-5

Metal
Center punch + $\frac{1}{16}$" Pilot #25 x $\frac{3}{4}$" Deep x2
#10-24

- - - - -OR- - - - -

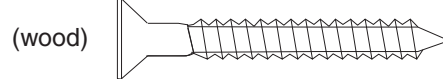| Wood |
|---|
| $\frac{1}{8}$" Drill Pilot 1" Deep x2 |

12

7b Install 2 top strike screws using the slot features on the strike.

Typical installation requires 1-thick and 1-thin shim. Adjust as necessary.

150 Top Strike

(metal)

(wood)
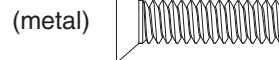
7c Perform top latch functional test.

c-1.   Close door.
c-2.   With door closed, top latch should be secure.
c-3.   If door fails to relatch, adjust top strike location.
c-4.   Depress pushbar. Door should begin to open when pushbar is nearly fully depressed. If necessary, refer to Step 6A to readjust top latch retraction position.

7 (continued)

7d Prepare floor for bottom strike.

For 2-Point Latch Only

Pull Side

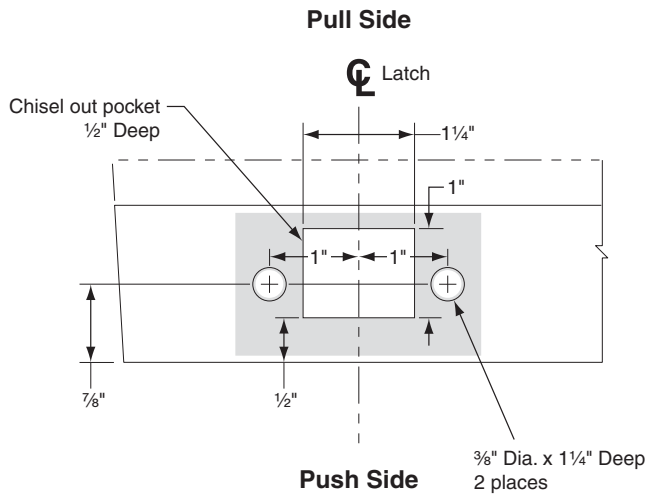C̶L Latch

Chisel out pocket ½" Deep

1¼"

1"

1"←→←1"→

7⁄8"

½"

⅜" Dia. x 1¼" Deep
2 places

Push Side

7e Install bottom strike.
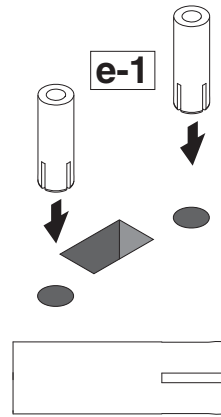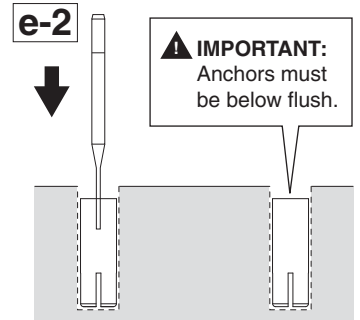
For 2-Point Latch Only

Clear holes of debris, then drop in anchors (slotted end first)

Secure the anchors using a hammer and punch

e-1

e-2

⚠ **IMPORTANT:**
Anchors must be below flush.

Install strike plate and secure with 2 screws

e-3

450 Bottom Strike
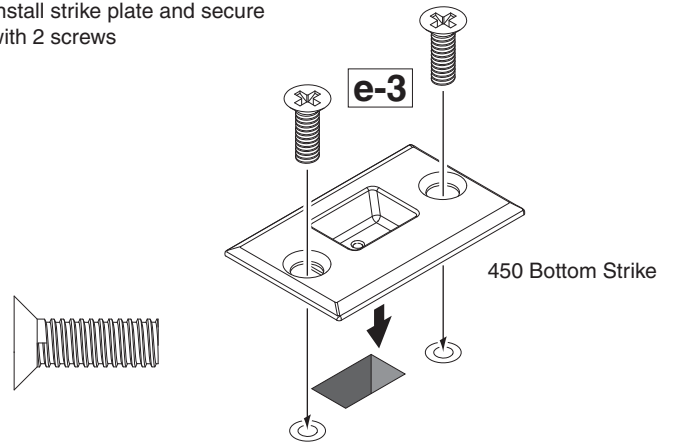
7f For Fire LBL applications only, install fire pin.

⚠ **See instructions packaged with fire pin.**

8   BOTTOM LATCHBOLT CLEARANCE

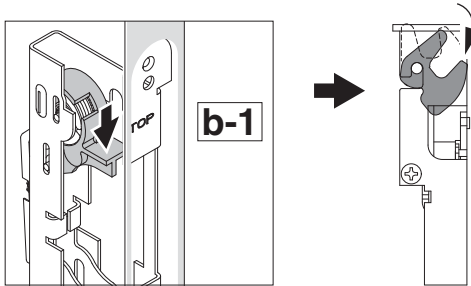**8a**   Remove tape holding bottom bolt in place from bottom of door.

For 2-Point Latch Only

**8b**   Adjust bottom latchbolt clearance.

⚠   **A flashlight would be useful during adjustment.**

For 2-Point Latch Only

Reach inside center slide and push downward on shelf of **top spool input** to release top latch, if not already retracted. Line shown in Step 4d-3 should no longer be visible.

b-1

Push **bottom spool input** upward until flat of input hits stop. Input should lock in place.

stop

b-2
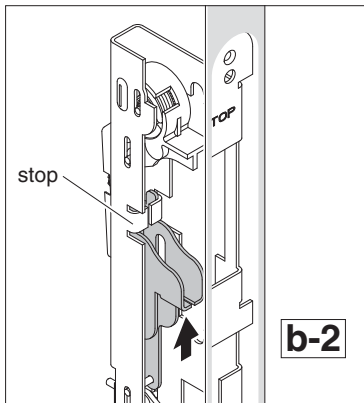
Turn **bottom spool screw** counterclockwise approximately 20 turns to remove slack. Continue turning until bolt just clears top of strike (b-4).
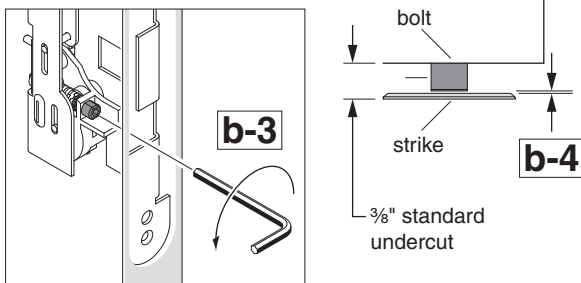
b-3

bolt

strike

b-4

⅜" standard undercut

⚠ **NOTE:** If clicking noises are heard during counterclockwise adjustment, unwind the cable with one-half turn clockwise. Then, continue counterclockwise adjustment. If clicking persists, check to be sure cable is not caught on an edge.
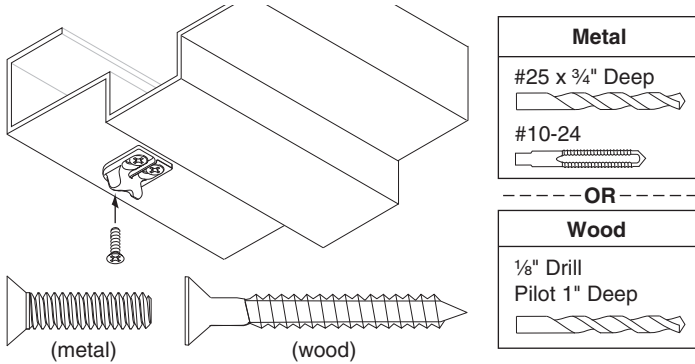
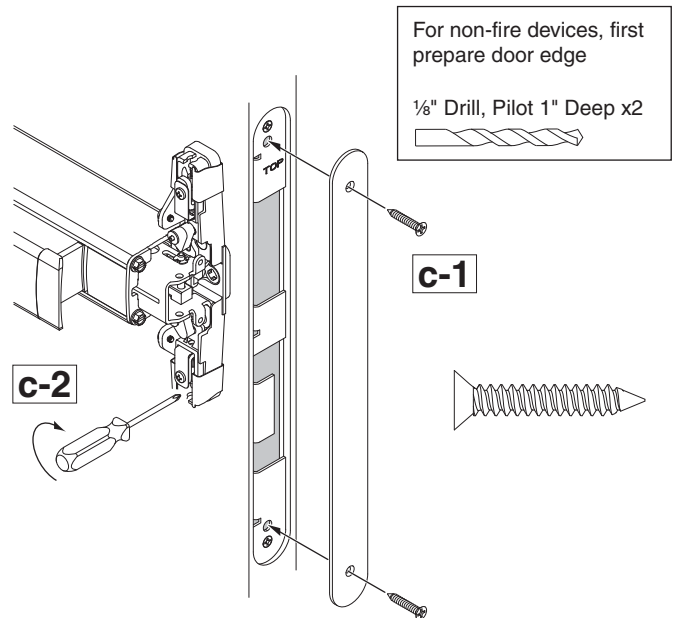**8c**   Perform bottom latch functional test.

For 2-Point Latch Only

c-1.   Confirm bottom latchbolt does not drag against floor when door is opened.
c-2.   With door closed, bottom latch should be secure.

9 TOP STRIKE AND COVERS

9a Adjust top strike as necessary, then install the third strike screw to fix the strike position.
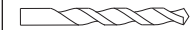
Metal
#25 x ¾" Deep
#10-24

----OR----

| Wood |
|---|
| ⅛" Drill Pilot 1" Deep |

(metal)   (wood)

9b For fire devices, prepare door edge and cover plate.

⚠ **Fire application only**

⚠ **Intumescent must be properly aligned before exposed adhesive contacts cover plate. Adhesive is permanent and not repositionable.**

³⁄₁₆" Drill, Pilot 1" Deep x2

Peel adhesive backing from intumescent and apply to back side of cover plate

b-1

Insert plastic anchors

b-2

b-1

9c Install cover plate to door edge, then completely tighten down center case screws.

For non-fire devices, first prepare door edge

⅛" Drill, Pilot 1" Deep x2

c-1

c-2
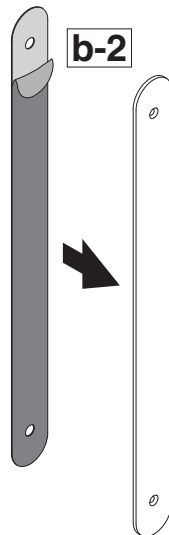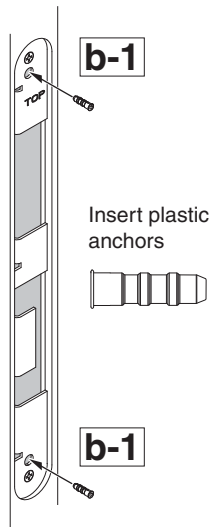
9d Install center case cover.

Remove protective film from pushbar

15
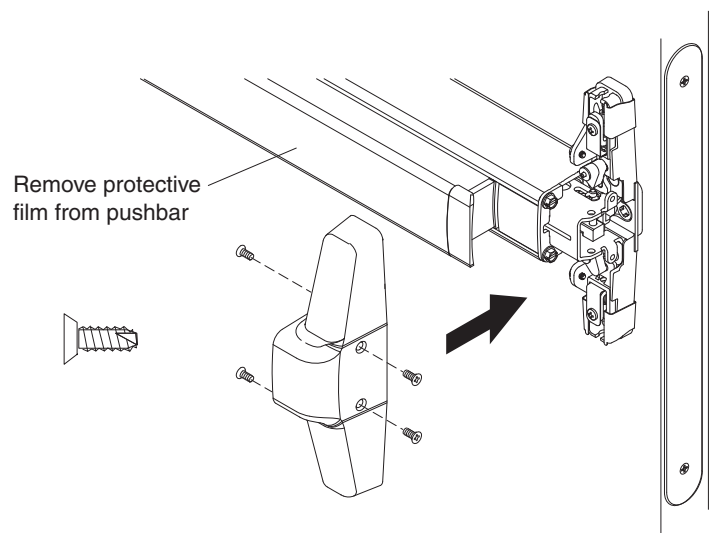
If latches do not retract when pushpad is depressed:

Remove cover plate from edge of door

Pull down on **top spool input**. If the top latch fails to actuate, readjust top spool (Steps 4d-1 thru 4d-4).

Pull up on **bottom spool input**. If the bottom latch fails to actuate, readjust bottom latch clearance (Steps 8b-1 thru 8b-4).

If both actuate and the door is not functioning, proceed to next check.

Remove center case cover

Check **lift finger screws** to ensure they are still fully seated. If unseated, loosen **locking screw**, and while applying pressure to the head of the **lift finger screw** to seat it, tighten locking screw. If door is not functioning, proceed to next step.

With both **lift finger screws** fully seated, loosen **top and bottom locking screws**, turn **lift finger screws** clockwise to end of travel, and repeat device adjustment, Step 6.

Seated   **Unseated**
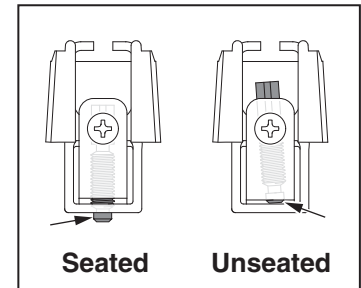
If bottom spool input does not move during Steps 6b-2 / b-3:

Loosen **bottom spool screw** 10 turns.

If the 33/3550AWDC center case cover is difficult to install:

Loosen bottom screw installed in Step 5c and lift rod connector sleeve until it will go no higher, then retighten screw.

Customer Service

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