NOTE: If door does not have a cutout for cabling inside lock stile, door must be routed. Refer to 9949 wood door template.
1 Identify Cables and Locations.

<table>
<thead>
<tr>
<th>Door Opening Height</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>6' 8&quot;</td>
<td>24078495</td>
<td>23925761</td>
<td>24078453</td>
</tr>
<tr>
<td>7' 0&quot;</td>
<td>23925767</td>
<td>23925720</td>
<td>24078453</td>
</tr>
<tr>
<td>8' 0&quot;</td>
<td>23925662</td>
<td>23925605</td>
<td>24078453</td>
</tr>
<tr>
<td>9' 0&quot;</td>
<td>23925484</td>
<td>23925408</td>
<td>24078453</td>
</tr>
<tr>
<td>10' 0&quot;</td>
<td>23925423</td>
<td>24009334</td>
<td>24078453</td>
</tr>
</tbody>
</table>

NOTE: Cables A and B are red. Cable C is white.

NOTE: Cables B is 6" longer than Cable A.

NOTE: Cables B is 6" longer than Cable A.

2 Install Top Latch Cable Assembly.

a. Using Cable A, position cable end to clip on center slide, and snap it into place.

b. Push cable snap against center slide to secure cable.

c. Position opposite end of Cable A to the top latch in the position marked red. Pull cable into clip to snap it into place.

d. Push cable snap against latch to secure cable.

For 2-Point Latch Only

e. Snap cable link onto one end of Cable B.

f. Install Cable B to the top mounting bracket.

g. Install opposite end of Cable B to the remaining top latch position (marked as white).

3 Install Bottom Latch Cable Assembly.

For 2-Point Latch Only

One end of Cable C has an adjuster. Install this end to the bottom latch.

CABLE REMOVAL

A cable removal tool has been provided. Slot in tool fits over cable, holding tabs down. Pull on cable snap to loosen cable for removal.
4 Temporarily Attach Bottom Latch Cable Assembly to Center Slide.
For 2-Point Latch Only

- Position Cable C to bottom mounting bracket on center slide.
- Push cable snap against mounting bracket to secure cable.
- Pull on cable end to attach it to the cable link.

5 Determine if Bottom Latch Retraction Adjustment is Necessary.
For 2-Point Latch Only

a. Flex the cable into an L-shape as shown to simulate the installed condition of the latches.

b. To determine whether an adjustment is required, actuate the top latch to the hold-open position by pressing down on the connecting rod. Bottom latch should retract to within \( \frac{1}{16} \)" of flush. If it does not, an adjustment is necessary.

6 Adjust Bottom Latch Retraction (if necessary).
For 2-Point Latch Only

- **NOTE**: Adjustment must be made while the top latch is in the hold-open position, with cable flexed into an L-shape to simulate the installed condition of the latches.

- a. While holding the snap-fitting with a \( \frac{3}{8} \)" wrench, use a 10mm wrench to break loose the lock nut.

- b. While holding the lock nut in place, rotate the barrel of the snap-fitting clockwise by hand until the bottom latch is retracted to within \( \frac{1}{16} \)" of flush.

- c. While holding the conduit cap with a \( \frac{3}{8} \)" wrench, use a 10mm wrench to turn the locknut in a clockwise direction to close the gap between the lock nut and snap-fitting. Stop when the gap is closed and the snap-fitting begins to turn with the locknut.

- d. While holding the snap-fitting with a \( \frac{3}{8} \)" wrench, continue to tighten the locknut until it is secure.

If no adjustment is needed, proceed to Step 7.
7 Disconnect Bottom Latch Cable Assembly from Center Slide.

For 2-Point Latch Only

A cable removal tool has been provided. Slot in tool fits over cable, holding tabs down.

8 With Door Laying Flat, Draw Horizontal and Vertical Device Center Lines (Q).

RHR shown
(LHR opposite)

NOTE: Centerlines predetermined by cutout. If no cutout exists, refer to Step 10 to determine centerlines.

9 Align Plastic Template to Mark and Prepare Door, if Required.

NOTE: This hole is to be 1/2" diameter (disregard larger center hole of plastic template).
10 If Necessary, Prepare Door Cutouts.

- 3/8" to 3/4" Backset
- 7/8" to 2 1/2" Backset
- 5 7/8" to 39 5/8" to finished floor

Push side of door, RHR shown

11 Prepare 2 Center Slide Holes.

- 1 7/8" Dia.
- 1 7/8" Dia. x2

Push side of door, RHR shown
12 Prepare 4 Holes.

13 Prepare Access Hole for Bottom Latch Adjustment Pin.

For 2-Point Latch Only

14 If Necessary, Prepare Door for Top Strike Cutout.

15 Assemble Latch Mounting Bracket(s).

Top

1/4"

Bottom

For 2-Point Latch Only

16 Insert Center Slide Assembly Thru Top Door Pocket.

1-Point Latch (LBL)

Holes should face push side of door

2-Point Latch

Holes should face push side of door
**17 Secure Top Latch Mounting Bracket with 3 Screws.**

**NOTE:** It is normal for the cable to bend inside the door, forcing the latch outward as shown here.

**18 Install S-Hook.**

Reach into push side face of door and hold S-hook in place.

While holding onto S-hook, install finger screws through pocket in edge of door to secure S-hook.

**19 If Necessary, Remove NL Drive Screw.**

**NL drive screw**

Factory installed on back of center case

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

<table>
<thead>
<tr>
<th>996L</th>
<th>696TP</th>
<th>990TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>996K</td>
<td>697TP</td>
<td></td>
</tr>
</tbody>
</table>

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

**20 If Necessary, Cut Device.**

NOTE: It is normal for the cable to bend inside the door, forcing the latch outward as shown here.

![Correct Orientation (RHR shown)](image)

![Incorrect Orientation](image)

- **Top of Door**
- **Bottom of Door**
- **Temporarily Remove Anti-Rattle Clip**
- **Cover Plate Flush**

![1 1/2" (38 mm) Recommended](image)
21 Attach Center Case to Door.

Surface Mount

Sex Bolts

22 Install 2 Center Slide Mounting Screws.

23 Mark and Prepare 2 Holes.

Surface Mount

1/4" Drill, Pilot 1" Deep

Sex Bolts

13/32" Drill thru
24 Install End Cap Bracket and End Cap.

25 Install Bottom Latch Mounting Bracket Assembly to Bottom of Door with 3 Screws.

26 Slide Lower Cable / Bottom Latch Assembly Thru Bottom Latch Housing and into Bottom Door Pocket.

27 Insert Latch Adjustment Pin to Hold Bottom Latch in Place.

**For 2-Point Latch Only**

**NOTE:** Confirm bottom latch is in correct orientation before proceeding.

Holes should face push side of door

**NOTE:** Confirm correct orientation of assembly before proceeding. Open side of housing should face pull side of door.

Pin must go thru both sides of bracket

Bottom edge of latch housing should be flush with bottom of door (for \( \frac{3}{8} \)" standard undercut)

Assemble pin

Squeeze tabs on cap, then insert pin
28 Attach Lower Cable Assembly to Center Slide.
   For 2-Point Latch Only
Reach into door pocket to position cable end to bottom mounting bracket

Push cable snap against bracket to secure cable

Pull on cable end to attach it to cable link

29 Hang Door on Frame.

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

30 Prepare Door Frame for Top Strike.

31 Install 2 Top Strike Screws Using the Slot Features on the Strike.

249 Top Strike

Retrofit installation
32 Prepare Floor for Bottom Strike.
For 2-Point Latch Only

Chisel out pocket 1/2" Deep

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

Secure the anchors using a hammer and punch

Install strike plate and secure with 2 screws

33 Install Bottom Strike.
For 2-Point Latch Only

34 Install Lift Finger and Retainer Clip.

NOTE: The lift finger installation and adjustment must be performed while the latches are in the extended (latched) position.

Slide L-shaped lift finger thru block in device center case and then into center slide

Insert adjustment screw and rotate with screwdriver to raise lift finger until it is snug against block

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

Secure lift finger and retainer clip with screw

35 Adjust Lift Finger.

NOTE: Lift finger adjustment must be performed while the latches are in the extended (latched) position.

Loosen retainer clip screw

Loosen adjustment screw until the lift finger drops and you feel contact with the S-Hook

Tighten retainer clip screw
36 Perform Functional Test of Door.
   a. Depress pushbar. Door should begin to open when pushbar is nearly fully depressed. If necessary, refer to Step 35 to readjust lift finger.
   b. With door closed, top latch should be secure.
   For 2-Point Latch Only
   c. With door closed, bottom latch should be secure.
   d. Confirm that bottom latch does not drag against floor when door is opened. If this occurs, remove latch adjustment pin and raise latch, then reinsert pin in next notch.

37 Adjust Top Strike as Necessary, then Install the Third Strike Screw to Fix the Strike Position.

38 Install Center Case Cover and Door Cover Plate.

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.

CD function conversion

Figure 1

Dogging procedure

Figure 2