Dogging Key
(use to lock down pushbar)
<table>
<thead>
<tr>
<th>Subassembly</th>
<th>Screw</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>#10-24 x (\frac{3}{4})&quot; (19 mm)</td>
<td>Metal frame</td>
</tr>
<tr>
<td></td>
<td>#10 x 1(\frac{1}{2})&quot; (38 mm) Wood screw</td>
<td>Wood frame</td>
</tr>
<tr>
<td>B</td>
<td>#10-24 x 1&quot; (25 mm)</td>
<td>Surface mount or Sex bolts 1(\frac{3}{4})&quot; (44 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1(\frac{1}{2})&quot; (38 mm)</td>
<td>Sex bolts, 2(\frac{1}{4})&quot; (57 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10 x 1(\frac{1}{4})&quot; (32 mm) Wood screw</td>
<td>Surface mount (wood)</td>
</tr>
<tr>
<td></td>
<td>Packaged with 990 Trims:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1(\frac{3}{8})&quot; (35 mm)</td>
<td>1(\frac{3}{4})&quot; (44 mm) door, 990 Trim</td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1(\frac{7}{8})&quot; (48 mm)</td>
<td>2(\frac{1}{4})&quot; (57 mm) door, 990 Trim</td>
</tr>
<tr>
<td>C</td>
<td>#10-24 x (\frac{3}{4})&quot; (19 mm)</td>
<td>Surface mount or Sex bolts 1(\frac{3}{4})&quot; (44 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1(\frac{1}{4})&quot; (29 mm)</td>
<td>Sex bolts, 2(\frac{1}{4})&quot; (57 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10 x 1(\frac{1}{4})&quot; (32 mm) Wood screw</td>
<td>Surface mount (wood)</td>
</tr>
<tr>
<td>D</td>
<td>#10-16 x (\frac{3}{8})&quot; (10 mm) Thread cutting</td>
<td>End cap</td>
</tr>
<tr>
<td>E</td>
<td>#10-24 x 1&quot; (25 mm)</td>
<td>Surface mount (metal)</td>
</tr>
<tr>
<td></td>
<td>#10 x 1(\frac{1}{4})&quot; (32 mm) Wood screw</td>
<td>Surface mount (wood)</td>
</tr>
<tr>
<td>F</td>
<td>#8-18 x (\frac{3}{8})&quot; (10 mm) Thread cutting</td>
<td>Center case cover</td>
</tr>
</tbody>
</table>
1. Draw horizontal device and strike center lines (š). (*)

* 39 13/16" (101.1 cm) from finished floor

* For double doors with a mullion and strike already installed, use existing strike center line.

2. Align strike on š and mark the two slotted holes.

   For 499F strike installation, see page 6.

3. Prepare 2 holes and install 2 screws.

   See “Screw Chart” on previous page for screw types and sizes

<table>
<thead>
<tr>
<th>Material</th>
<th>Screw Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal</td>
<td>#25</td>
<td>#10-24</td>
</tr>
<tr>
<td>Wood</td>
<td>¹⁄₈&quot; (3 mm) x 1&quot; (25 mm) deep</td>
<td></td>
</tr>
</tbody>
</table>

OR

4. Position template against strike and on š and mark door.

5. If necessary, prepare cutouts for cylinder and trim.

   For outside cylinder applications:
   Mark with template and cut out
   Metal door (cut device side)
   Wood door (cut thru)

   For trim applications with working lever, thumbpiece, or knob:
   Mark with template and cut out (cut device side only)
6 Prepare 4 center case mounting holes.

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

**WOOD**

- #25
- #10-24

**METAL**

- 1/8" (3 mm) x 1" (25 mm) Deep

**SEX BOLTS or 990 TRIMS**

- 1/4" (6 mm) Device Side
- 13/32" (10 mm) Trim Side
- 13/32" (10 mm) Drill Thru

7 Prepare 2 center case support holes.

**WOOD**

- #25
- #10-24

**METAL**

- 1/8" (3 mm) x 1" (25 mm) Deep

8 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>Device</th>
<th>996L</th>
<th>696TP</th>
<th>990TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>996K</td>
<td></td>
<td></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  
- 996K-BE  
- 996TP-BE  
- 990TP-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.

9 If using a cylinder with a tailpiece, prepare device and cylinder.

9a Install tailpiece guide.

**Tailpiece guide**

**Tailpiece**

Rotate tailpiece guide to match tailpiece.

9b Cut tailpiece as needed.
10 If necessary, cut device.

- 1½" (38 mm) recommended

- Temporarily remove anti-rattle clip

- Cover plate flush

11 Attach center case to door.

12 Mark and prepare two (2) holes.

- Prepare holes after lock side of device is mounted and hinge side is leveled.

13 Install end cap bracket and end cap.
14 Install required support screws and center case cover.

15 Adjust strike as needed.

299/299F Strike

Shim as needed

16 Install strike support screw.

**499F STRIKE INSTALLATION**

<table>
<thead>
<tr>
<th>1. Prepare and install screws through two strike slots.</th>
<th>2. Install strike hook and additional strike screws.</th>
<th>3. Template aligns as shown.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Image of strike installation" /></td>
<td><img src="image" alt="Image of strike installation" /></td>
<td><img src="image" alt="Image of strike installation" /></td>
</tr>
<tr>
<td><strong>If using a mullion, holes may be predrilled</strong></td>
<td><strong>Metal</strong></td>
<td><strong>WOOD</strong></td>
</tr>
<tr>
<td><strong>#7 Drill</strong></td>
<td><strong>¼&quot; (6 mm)-20 Tap</strong></td>
<td><strong>⅞&quot; (3 mm) x 1&quot; (25 mm) Deep</strong></td>
</tr>
<tr>
<td><strong>⅞&quot; (10 mm)</strong></td>
<td><strong>Drill thru for sex bolts</strong></td>
<td><strong>2 places</strong></td>
</tr>
<tr>
<td><strong>⅛&quot; (1.6 mm)</strong></td>
<td><strong>Strike hook</strong></td>
<td><strong>2 places</strong></td>
</tr>
<tr>
<td><strong>1/8&quot; (3 mm) x 1&quot; (25 mm) Deep</strong></td>
<td><strong>模板</strong></td>
<td><strong>Align on C and against strike</strong></td>
</tr>
</tbody>
</table>
OPTIONAL EQUIPMENT

CD (Cylinder Dogging) Option

Dog

Undog
**OPTIONAL EQUIPMENT**

99-2 (Double Cylinder) Option

If using the -2SI with a keyed rim cylinder, remove the 2 stop screws from back of device prior to installing the cylinder.

For 98/99-2SI models with Classroom Security Indicator, apply supplied labels above and below cylinder to match door handing, and label on indicator.

⚠️ Manually affix the label:

Ensure surface is clean of dirt, dust, or oils. Clean with alcohol if necessary.

Peel the label from the paper backing and apply to the surface. Minimize handling when applying and use pressure to burnish label to surface. The adhesive will require up to 8 hours to achieve the proper bond.