Dogging Key
(use to lock down pushbar)
## Screw Chart

<table>
<thead>
<tr>
<th>Subassembly</th>
<th>Screw</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>#10-24 x 3/4” (19 mm)</td>
<td>Metal frame</td>
</tr>
<tr>
<td></td>
<td>#10 x 1 1/2” (38 mm) Wood screw</td>
<td>Wood frame</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>#10-24 x 1” (25 mm)</td>
<td>Surface mount or Sex bolts 1 3/4” (44 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1 1/2” (38 mm)</td>
<td>Sex bolts, 2 1/4” (57 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10 x 1 1/4” (32 mm) Wood screw</td>
<td>Surface mount (wood)</td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1 1/6” (35 mm)</td>
<td>1 3/4” (44 mm) door, 990 Trim</td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1 1/8” (48 mm)</td>
<td>2 1/4” (57 mm) door, 990 Trim</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>#10-24 x 3/4” (19 mm)</td>
<td>Surface mount or Sex bolts 1 3/4” (44 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10-24 x 1 1/6” (29 mm)</td>
<td>Sex bolts, 2 1/4” (57 mm) door</td>
</tr>
<tr>
<td></td>
<td>#10 x 1 1/4” (32 mm) Wood screw</td>
<td>Surface mount (wood)</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>#10-16 x 3/8” (10 mm) Thread cutting</td>
<td>End cap</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>#10-24 x 1” (25 mm)</td>
<td>Surface mount (metal)</td>
</tr>
<tr>
<td></td>
<td>#10 x 1 1/4” (32 mm) Wood screw</td>
<td>Surface mount (wood)</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>#8-18 x 5/8” (10 mm) Thread cutting</td>
<td>Center case cover</td>
</tr>
</tbody>
</table>
1. Draw horizontal device and strike center lines (¢).

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

3. Prepare 2 holes and install 2 screws.

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

5. If necessary, prepare cutouts for cylinder and trim.
6 Prepare 4 center case mounting holes.

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

7 Prepare 2 center case support holes.

- Two support holes
- Metal
  - 98/99 and 98/99-F
  - 1/4" (6 mm) Device Side
  - 13/32" (10 mm) Trim Side
  - 1/8" (3 mm) x 1" (25 mm) Deep
- Wood
  - #25
  - #10-24

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.
  - 996L
  - 696TP
  - 990TP
  - 996K

- 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

- 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.

- 1/4" (2 mm) Deep
10 If necessary, cut device.

11 Attach center case to door.

12 Mark and prepare two (2) holes.

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

- Remove protective film from pushbar

**15** Adjust strike as needed.

- Shim as needed

**16** Install strike support screw.

- OR

### 499F STRIKE INSTALLATION

<table>
<thead>
<tr>
<th>Prepare and install screws through two strike slots.</th>
<th>Install strike hook and additional strike screws.</th>
<th>Template aligns as shown.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

- **Metal**
  - #7 Drill
  - ¼" (6 mm)
  - 20 Tap
  - 2 places

- **Wood**
  - ⅝" (10 mm)
  - Drill thru for sex bolts
  - 2 places

- **Template**
  - (align on C and against strike)

- **#25 Drill**
  - #10-24 Tap
  - 2 places

- **#25 Drill**
  - #10-24 Tap
  - 3 places

If using a mullion, holes may be predrilled.
CD (Cylinder Dogging) Option
99-2 (Double Cylinder) Option

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.