1590 Touchbar Rim Exit Device

Applies to EL and standard 1590, 1591, 1592, 1593, 1594, 1595

1 Prepare door.

**NOTES**

Locate hole A first.
Dimensions shown are for 1-3/4” doors.

**Model Trim Package**

<table>
<thead>
<tr>
<th>Model</th>
<th>Trim Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 1590</td>
<td>None</td>
</tr>
<tr>
<td>EL 1591</td>
<td>9970 Pull Trim</td>
</tr>
<tr>
<td>EL 1592</td>
<td>NL Cylinder</td>
</tr>
<tr>
<td>EL 1593</td>
<td>HB Cylinder</td>
</tr>
<tr>
<td>EL 1594</td>
<td>9970 Pull Trim with NL Cylinder</td>
</tr>
<tr>
<td>EL 1595</td>
<td>9970 Pull Trim with HB Cylinder</td>
</tr>
</tbody>
</table>

**Dimensions shown are for 1-3/4” doors.**

**Figure 1-1**

- Pull side cylinder cutout (Figure 1-2)
- Edge of Strike or mullion
- Push side cylinder cutout (Figure 1-2)
- #16 drill, 12-24 tap, push side

**Figure 1-2**

- 9/32” offset
- 1-1/16” dia.
- Pull side cylinder cutout
- Push side retractor cutout
- 1/8” rad. typ.
2. Cut pushbar to length.

2.1. Measure $C_1$ to $C_2$ of mounting holes (“D” dimension in Figure 1-1).

2.2. Subtract 2-13/16” from “D” dimension to determine cut length (“B” dimension in Figure 2). See chart below for minimum “B” dimension.

<table>
<thead>
<tr>
<th>Device Length</th>
<th>“B” Dimension Supplied</th>
<th>Minimum “B” Dimension (non-EL)</th>
<th>Minimum “B” Dimension (EL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36” device</td>
<td>30-17/32”</td>
<td>19-1/2”</td>
<td>29-17/32”</td>
</tr>
<tr>
<td>42” device</td>
<td>36-17/32”</td>
<td>19-1/2”</td>
<td>29-17/32”</td>
</tr>
<tr>
<td>48” device</td>
<td>42-17/32”</td>
<td>28-1/2”</td>
<td>37-17/32”</td>
</tr>
</tbody>
</table>

2.3. Collapse pushbar, tape down in cutoff area, and mark “B” dimension on tape (see Figure 2).

2.4. Keep chips out of mechanism by stuffing a rag into end of pushbar before cutting. Keep rag out of the path of the saw. Cut pushbar and channel, deburr, and clean chips from pushbar and channel.

2.5. Pull the two rubber bumper strips from the screw grooves, cut off 1” so the bumper strips are 1” shorter than the pushbar, and reinstall bumper strips into screw grooves.

2.6. Tap #8-32 x 1” deep into each screw groove in end of pushbar.

![Figure 2](image-url)
3 Install device.

3.1. If using cylinder, cut tailpiece, assemble cylinder cartridge assembly, and install in door.
3.2. Install mounting plate (knobs facing stile) and channel end cap with #12-24 round head screws.
3.3. If installing an EL device drill 1/2” diameter electrical wiring hole through 3/8” diameter hole in mounting plate and through push side of door.
3.4. Slide pushbar assembly into mounting plate on hinge stile.
3.5. Attach latch side of pushbar assembly with #12-24 flat head screws.
3.6. Wire device (see Step 4), then install latch bolt cover and hinge side pushbar end cap.
3.7. If using pull trim, install pull trim.
3.8. Install pushbar end caps.

Figure 3-1

[Diagram showing cylinder cartridge assembly, pushbar assembly, mounting plate, channel end cap, and latch bolt cover.

NOTE

Dimension shown is for 1-3/4” doors.

Figure 3-2
If installing EL device, wire device.

**Electrical Specifications**

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

**NOTE**

The potted circuit board is a protection circuit. It disconnects power from the solenoid if the plunger does not seat within a specified time. To reset the protection circuitry, remove power from the solenoid and reapply.