An incorrectly installed or improperly adjusted door closer can cause property damage or personal injury. These installation instructions should be followed to avoid the possibility of misapplication or misadjustment.

**NOTE:** For special applications, a separate door and frame preparation template is packed with these instructions. Use this instruction sheet for installation sequence and closer adjustments only.

- Dimensions are based on standard doors and frames with 1/8” clearance, 5/8” stops, and square edge doors.
- Door and frame must be properly reinforced.
- Non-Handed Door Closers.
- A mounting plate may be required for some applications.

**NOTE:** For Top Jamb Application

A longer connecting rod is required for reveals greater than 3” (76mm)

**Tools Required**

- **Metal**
  - #7
  - 1/4" - 20

- **Wood**
  - 3/16"
  - 1/4" - 20

**Self Drilling Screws**

- Wood and Metal
  - For wood, drill 3/16” hole

**Machine Screws**

- #7 Drill, 1/4" - 20 Tap

**Sleeve Nut and Bolt**

- Drill 9/32” thru from Closer Side
- 3/8” Drill other Side

Check building and fire codes to see if your application requires the use of sleeve nuts and bolts.

**Component Parts**

- Latch Valve
- Power Adjustment Shaft
- Sweep Valve
- Backcheck Valve
- Closer Body
- Parallel Arm Bracket
- Main Arm
- Forearm Screw
- Connecting Rod
- Regular Arm/Top Jamb Shoe
- Cover Insert
- Insert Cutouts
- Closer Arm
- Closer Cover
- Screw Pack
1. PARTS

2. MARK AND DRILL HOLES  (Right Hand Shown)

3. INSTALL CLOSER

4. INSTALL MAIN ARM

5. INSTALL MAIN ARM AND CONNECTING ROD

6. OPTIONAL HOLD-OPEN ARM

7. ADJUSTMENTS

8. INSTALL COVER

Identify direction of hold-open nut according to hand of door and mount arm.

Adjust by loosening hold-open nut, then open door to desired position and tighten hold-open nut securely.

Note: Hold open arms must NOT be installed on fire-rated doors.
1. PARTS

2. MARK AND DRILL HOLES (Right Hand Shown)

3. INSTALL CLOSER

BEFORE INSTALLATION:
Turn backcheck selector valve (found on back side of closer) all the way in (clockwise).

Remove template and use mounting screws to install the closer body to the door and the parallel arm bracket to the frame soffit. Closer body should be oriented so that the tube of closer is toward the lock stile of door.

4. INSTALL CONNECTING ROD

Attach connecting rod to the parallel arm plate.

5. INSTALL MAIN ARM

Use adjustable wrench to rotate spindle 45° counterclockwise for Right Hand Door or clockwise for Left Hand Door. Place main arm on spindle so that it is 45° or less from the tube end of the closer body. Secure main arm and spindle by tightening spindle bolt.
6. INSTALL MAIN ARM AND CONNECTING ROD

a) Slide connecting rod into forearm of main arm.

b) Rotate main arm until the pivot point is 1-1/2" from door surface.

c) While holding arm in this position, tighten down forearm screw.

7. OPTIONAL HOLD-OPEN ARM

Identify direction of hold-open nut according to hand of door and mount arm.

Adjust by loosening hold-open nut, then open door to desired position and tighten hold-open nut securely.

Note: Hold open arms must NOT be installed on fire-rated doors.

8. ADJUSTMENTS

See Adjustments on Page 6 for setting Spring Power, Sweep Speed, Latch Speed, and Backcheck.

NOTE: Do not fully unscrew valves or hydraulic fluid will leak and closer will no longer be functional.

9. INSTALL COVER

Slide cover over closer body and secure by tightening screws.
5100 Series Door Closer - Top Jamb Arm
Installation Instructions
Meets ANSI A156.4

1. PARTS

2. MARK AND DRILL HOLES (Right Hand Shown)

3. INSTALL CLOSER

4. INSTALL MAIN ARM

5. INSTALL MAIN ARM AND CONNECTING ROD

6. OPTIONAL HOLD-OPEN ARM

7. ADJUSTMENTS

8. INSTALL COVER

Identify direction of hold-open nut according to hand of door and mount arm.

Adjust by loosening hold-open nut, then open door to desired position and tighten hold-open nut securely.

Note: Hold open arms must NOT be installed on fire-rated doors.

See Adjustments on Page 6 for setting Spring Power, Sweep Speed, Latch Speed, and Backcheck.

NOTE: Do not fully unscrew valves or hydraulic fluid will leak and closer will no longer be functional.

Slide cover over closer body and secure by tightening screws.

An optional mounting plate is required where the head frame face is less than 3-1/2” (89mm). Plate requires 1-3/4” (44mm) minimum head frame.

A longer connecting rod is required for reveals greater than 3” (76mm)

Select hand of door. Separate template sections “A” and “B”. Fold template on the hinge edge of door line. Match this line with the hinge edge of door and attach template to door. Be sure “Frame” line on template lines up with the top edge of door. Using a square, project “Closer Projection Line” on section “A” of template onto frame and use to align and attach section “B”. Be sure to align bottom edge of section “B” with edge of frame. Mark, prep and drill/tap 1/4”-20 holes for connecting rod shoe and closer body mounting screws.

120˚ Door Opening

Orient main arm 90˚ from the closer body. Press arm down on spindle and secure with spindle bolt.

Remove template and use mounting screws to install the closer body to the top jamb and the connecting rod shoe to the door. Closer body should be oriented so that the tube end of closer is toward the hinge stile.

Slide connecting rod into forearm of main arm. Rotate main arm until connecting rod is at a 90˚ angle to frame. While holding arm in this position, tighten down forearm screw.

Tube end toward hinge.

1-1/16” (25mm)

11/16” (17mm)

1-15/16” (49mm)

10-3/4” (273mm)

1” (25mm)

3” (76mm)

6-5/16” (160mm)

2 holes for 1/4”-20 machine screws

2-1/4” (57mm)

An optional mounting plate is required where the head frame face is less than 3-1/2” (89mm). Plate requires 1-3/4” (44mm) minimum head frame.

11/16” (17mm)

11/16” (17mm)

10-3/4” (273mm)

1-1/16” (25mm)

1-15/16” (49mm)

4 holes for 1/4”-20 machine screws

1” (25mm)

3” (76mm)

6-5/16” (160mm)

11/16” (17mm)

11/16” (17mm)

2 holes for 1/4”-20 machine screws

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— 5 —
5100 Series Door Closer - Adjustments
Installation Instructions
Meets ANSI A156.4

ADJUSTMENTS (USE 5/32" HEX WRENCH FOR THESE ADJUSTMENTS)

**Sweep Speed**

- Use 5/32" Hex Wrench for this adjustment

**Latch Speed**

- Adjust latch speed so door completely closes and latches.

**Backcheck**

- Adjust backcheck accordingly to prevent excessive opening speed.

**Optional Delay Action**

- Adjust delay action accordingly to obtain desired delay time.

**Note:** Adjust closing time speed to between 3 and 7 seconds from 90 to 0. Greater closing times may be required for elderly or handicapped.

**Spring Power Adjust** (Sizing in accordance to BHMA/ANSI 156.4)

**Table of Sizes**

Closer is shipped set to size 3. To change the closer size, use a hex wrench to rotate the spring power adjust. Follow the chart to make the correct numbers of 360° turns to set the closer size appropriately for the door application.

The number of turns is an approximation and does not account for environmental or door hardware affects.

<table>
<thead>
<tr>
<th>Exterior (and Vestibule) Door Width</th>
<th>Minimum Door Width (24&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24&quot; - 30&quot; - 36&quot; - 42&quot; - 48&quot;</td>
<td>(610mm) - (762mm) - (914mm) - (1067mm) - (1219mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regular Arm &amp; Top Jamb</th>
<th>Size 3 (0)</th>
<th>Size 4 (5cw)</th>
<th>Size 5 (10cw)</th>
<th>Size 6 (15cw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel Arm</td>
<td>Size 3 (5cw)</td>
<td>Size 4 (9cw)</td>
<td>Size 5 (14cw)</td>
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</table>

<table>
<thead>
<tr>
<th>Interior Door Width</th>
<th>Minimum Door Width (24&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24&quot; - 30&quot; - 34&quot; - 38&quot; - 48&quot; - 54&quot; - 60&quot;</td>
<td>(610mm) - (762mm) - (865mm) - (965mm) - (1219mm) - (1372mm) - (1524mm)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Regular Arm &amp; Top Jamb</th>
<th>Size 1 (5ccw)</th>
<th>Size 2 (10cw)</th>
<th>Size 3 (15cw)</th>
<th>Size 4 (20cw)</th>
<th>Size 5 (25cw)</th>
<th>Size 6 (30cw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel Arm</td>
<td>Size 1 (4ccw)</td>
<td>Size 2 (8ccw)</td>
<td>Size 3 (12ccw)</td>
<td>Size 4 (16ccw)</td>
<td>Size 5 (20ccw)</td>
<td>Size 6 (24ccw)</td>
</tr>
</tbody>
</table>

**Adjustment Diagram**

Flip connecting rod as shown to increase closer strength.

**Shoe Placement**

- or