IMPORTANT:

- An improperly installed or incorrectly adjusted door closer may cause property damage or personal injury; and will void product warranty.
- To avoid personal injury, DO NOT DISASSEMBLE THIS DOOR CLOSER BODY.
- Door closers must be securely fastened to a properly reinforced door and frame with fasteners provided.
- Door closers with the “A1” HOLD OPEN ARM option are not permitted to be installed in fire door assemblies.

BEFORE INSTALLING:

- The Americans with Disabilities Act (ADA) requires that doors having door closers have an opening force not to exceed 5 lbf.
- Use standard templating for regular arm and parallel arm applications. Jamb mounted applications use the template for 140° door opening to achieve the required opening force.
- The door closer’s power size adjustment feature may require adjustment to its lowest setting to comply with ADA opening force guidelines.
- An auxiliary door stop, by others, is strongly recommended to avoid damage to the door closer and adjacent property.
- Doors should be hung on ball bearing or anti-friction hinges/pivots.
- Door closer must not be installed on the exterior of a door in an exterior wall of a building.
- ADA compliant closers are: DC8200, DC8210, DC8220,

### Size of Door & Door Closer

<table>
<thead>
<tr>
<th>Type of Installation</th>
<th>Interior</th>
<th>Exterior In-swinging</th>
<th>Exterior Out-swinging</th>
<th>Recommended Closer Size</th>
<th><strong>Max. Opening Force lbs/ft</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular &amp; Top Jamb</td>
<td>2'4&quot;</td>
<td>2'6&quot;</td>
<td>3'0&quot;</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3'6&quot;</td>
<td>3'0&quot;</td>
<td>3'6&quot;</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>4'0&quot;</td>
<td>3'6&quot;</td>
<td>4'0&quot;</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>4'6&quot;</td>
<td>4'0&quot;</td>
<td></td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>5'0&quot;</td>
<td></td>
<td></td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Parallel Arm</td>
<td>2'4&quot;</td>
<td>2'6&quot;</td>
<td>3'0&quot;</td>
<td>1</td>
<td>8</td>
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<tr>
<td></td>
<td>2'6&quot;</td>
<td>3'0&quot;</td>
<td>3'6&quot;</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>3'0&quot;</td>
<td>3'6&quot;</td>
<td>4'0&quot;</td>
<td>3</td>
<td>16</td>
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<tr>
<td></td>
<td>3'6&quot;</td>
<td>4'0&quot;</td>
<td></td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>4'0&quot;</td>
<td></td>
<td></td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>4'6&quot;</td>
<td></td>
<td></td>
<td>6</td>
<td>26</td>
</tr>
</tbody>
</table>

**NOTE:** These forces are for standard templating with bearing type hinges and do not account for pressure differentials and draft.
**A Template**

Mark Door and Jamb (for QUIK-INSTALL® bracket and arm bracket)

If top rail is 3" (76) or greater, use the template for the QUIK-INSTALL BRACKET provided.
If top rail is 1-3/4" (45) to 2-15/16 (75), use DROP PLATE (754F20) DIMENSIONS denoted by *

- Template
  - Mount Bracket
  - QUIK-INSTALL
  - Mount Closer Body to Bracket

**B Mount QUIK-INSTALL Bracket**

- Start the four mounting screws into the four closer mounting holes.
- Place the closer onto the QUIK-INSTALL bracket with the four mounting screws inserted into the four QUIK-INSTALL bracket slots.
- Tighten the four mounting screws to fasten the closer body to the QUIK-INSTALL bracket.

**C Mount Closer Body to QUIK-INSTALL Bracket**

- Drill thru 9/32 (7) Enlarge to 3/8 (10) Dia. This Side Only (4 Places)

**Mounting Screw Specifications**

ARM AND CLOSER BRACKET

<table>
<thead>
<tr>
<th>Door Thickness</th>
<th>Sex Nut Length “L”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3/8 (35)</td>
<td>1-9/32 (33)</td>
</tr>
<tr>
<td>1-3/4 (44) &amp; OVER</td>
<td>1-21/32 (42)</td>
</tr>
</tbody>
</table>

#12-14 self-drilling screw. 1/8 (3) diameter pilot hole required for Wood Applications.

- #12-14 X 1-1/2 FH SELF-DRILLING (4) OR 1/4-20 X 3/4 FHMS W/ SEX NUTS (4)

**NOTES:**
- Check hand of door, see page 1.
- Right Hand Application Shown. Left Hand Opposite.
- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed in a true horizontal plane to ensure proper closer performance.
- Door opening (up to 180°) is dependent upon door, frame, wall and hinge/pivot conditions permitting.
- Minimum clearance required over door:
  - Non-Hold Open: 1-1/2 (39)
  - Hold Open: 1-1/16 (43)

**CD8200 Regular Arm Installation Instructions**

**Regular Arm**
DC8200 Regular Arm Installation Instructions

**D** Attach Arm Bracket to Frame

**NON-HOLD OPEN ARM ONLY:**
- Pivot (away from hinge)

**HOLD OPEN ARM (A1 OPTION ONLY):**
- Position arm mounting bracket so that pivot point is toward hinge.

**E** Position Arm on Closer

**NON-HOLD OPEN ARM ONLY:**
- Main arm projects straight out at 90° angle to door.
  - Install and tighten arm screw & washer assembly.

**HOLD OPEN ARM ONLY:**
- Main arm projects straight out at 90° angle to door.
  - Remove arm screw and washer from elbow joint and disassemble arm. Thread the rod into the Arm Bracket as shown below. Install and tighten arm screw & washer.

**F** Preload and Adjust Arm

**NON-HOLD OPEN ARM ONLY:**
- Open door and slide arm rod into arm loop. Close door, swing arms so adjusting arm is 90° to frame. With 7/16 wrench INSTALL and TIGHTEN SCREW SECURELY.

**HOLD OPEN ARM ONLY:**
- While door is closed, adjust the Threaded Arm in the Arm Bracket until the bearing fits back onto the elbow joint on the Main Arm at 90° as shown below. RE-INSTALL AND TIGHTEN SCREW SECURELY.

---

Extended Maintenance
Lubricate Arm periodically at shaded points with a drop or two of appropriate lubricant.

**NOTE:** When lubricating a Hold Open Arm, DO NOT use any lubricant on the Holding Surface components.

**G** Adjust Door Closer: See Page 8
**A Template**

**Mark Door and Jamb** (for QUIK-INSTALL® and adapter plate)

If top rail is 5-1/4 (133) or greater, use the template for the QUIK-INSTALL BRACKET provided.

If top rail is 1-3/4 (44) to 5-1/8 (130), use DROP PLATE (754F25) DIMENSIONS denoted by +.

---

**B Mount QUIK-INSTALL Bracket**

- Start the four mounting screws into the four closer mounting holes.
- Place the closer onto the QUIK-INSTALL bracket with the four mounting screws inserted into the four QUIK-INSTALL bracket slots.
- Tighten the four mounting screws to fasten the closer body to the QUIK-INSTALL bracket.

---

**C Mount Closer Body to QUIK-INSTALL Bracket**

- Check hand of door, see page 1
- Right Hand Application Shown. Left Hand Opposite.
- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed in a true horizontal plane to ensure proper closer performance.
- Door opening (up to 180°) is dependent upon door, frame, wall and hinge/pivot conditions permitting.

---

**NOTES:**

- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed in a true horizontal plane to ensure proper closer performance.
- Door opening (up to 180°) is dependent upon door, frame, wall and hinge/pivot conditions permitting.

---

**Mounting Screw Specifications**

**Arm and Closer Bracket**

- #12-14 self-drilling screw.
- 1/8 (3) diameter pilot hole required for Wood Applications.

- Sex nuts, furnished when ordered

**Door Thickness** | **Sex Nut Length "L"**
--- | ---
1-3/8 (35) | 1-9/32 (33)
1-3/4 (44) | 1-21/32 (42)

---

**Mounting Holes**

- #12-24 x 5/8 FHMS (4)
D Mount Adapter Plate Bracket on Jamb

Using holes spotted on soffit or stop in Step A mount adapter plate bracket.

E Mount Arm Bracket

NON-HOLD OPEN ARM: HOLD OPEN ARM ONLY (A1 Option)

Install with dial screw facing down.

F Position Arm onto Closer

Using hex wrench provided, turn closing speed and latching speed valves clockwise until completely closed. DO NOT OVER TIGHTEN. Using wrench, turn under side of spindle 45° toward the closer tube until it reaches the diamond position (fig. 2). Immediately place arm on spindle so that it is parallel to the closer body. Reopen valves.

G Connect and Position Arms

Open door and slide arm rod into arm loop. Close door, swing arms so that they form a “V” position, as in Step 8. With 7/16" wrench, INSTALL AND TIGHTEN SCREW SECURELY.

H Power Adjustment

To increase the power of the closer, re-adjust the arm so it is nearer the door. To decrease power, re-adjust the arm so it is farther away from the door and then secure screw in arm loop (non-hold open) or elbow joint (hold open).

I Adjust Door Closer: See Page 6

Extended Maintenance

Lubricate Arm periodically at shaded points with a drop or two of appropriate lubricant.

NOTE: When lubricating a Hold Open Arm, DO NOT use any lubricant on the Holding Surface components.
DC8220 Jamb Mount Installation Instructions

A Template

Mark Door and Jamb (for QUIK-INSTALL® bracket and adapter plate) use dimensions in template below.

DO NOT USE THIS TEMPLATE WITH A DROP PLATE (754F24). Use the template addendum (80-9380-8009-152) included with 754F24 Drop Plate orders.

**NOTES:**
- Check hand of door, see page 1.
- Right Hand Application Shown. Left Hand Opposite.
- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed in a true horizontal plane to ensure proper closer performance.
- All degrees of door opening are dependent upon door, frame, wall and hinge/pivot conditions permitting.

**Mount QUIK-INSTALL Bracket to Jamb**

Mount Closer Body to QUIK-INSTALL Bracket

- Start the four mounting screws into the four closer mounting holes.
- Place the closer onto the QUIK-INSTALL bracket with the four mounting screws inserted into the four QUIK-INSTALL bracket slots.
- Tighten the four mounting screws to fasten the closer body to the QUIK-INSTALL bracket.
**D** Attach Arm Bracket to Door

**NON-HOLD OPEN ARM ONLY:**

Standard Position
Normal mounting position. Position with pivot point away from hinge.

For Additional 15% Closing Force
Reposition arm mounting bracket so that pivot point is toward hinge.

**E** Position Arm on Closer

**NON-HOLD OPEN ARM ONLY:**
Main arm projects straight out at 90° angle to door. Install and tighten arm screw & washer assembly.

**HOLD OPEN ARM ONLY (A1 Option):**
Main arm projects straight out at 90° angle to door. Install and tighten arm screw & washer assembly. Remove main arm screw from elbow joint and disassemble arm. Thread the rod into the Arm Bracket as shown below.

**F** Preload and Adjust Arm

**NON-HOLD OPEN ARM ONLY:**
Open door and slide arm rod into arm loop. Close door, swing arms so adjusting arm is 90° to frame. With 7/16" wrench, **INSTALL and TIGHTEN SCREW SECURELY.**

**HOLD OPEN ARM ONLY (A1 Option):**
While door is closed, adjust the Threaded Arm in the Arm Bracket until the bearing fits back onto the elbow joint on the Main Arm at 90° as shown below. **RE-INSTALL and TIGHTEN SCREW SECURELY.**

**G** Adjust Door Closer: See Page **8**
DC8000 Installation Instructions - Closer Adjustment

Spring Power Adjustment
Locate spring power adjuster from Illustration below
DC8200 Size 1 thru 6 Adjustment See Chart

DC8200 SPRING POWER ADJUSTMENT CHART
• All DC8200 closers are factory set at an approximate Size 3.
• Adjust closer as necessary for door size using this chart.
• Readjustment may be required to suit prevailing conditions.

<table>
<thead>
<tr>
<th>Size of Door</th>
<th>Spring Power Adjustment No. Full Turns Clockwise</th>
<th>Equivalent Closer Size (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior</td>
<td>Exterior In Swing Exterior Out Swing</td>
<td>Regular &amp; TJ Mounting Parallel Arm Mounting</td>
</tr>
<tr>
<td>2'4&quot; (712)</td>
<td>2'6&quot; (764)</td>
<td>1-5</td>
</tr>
<tr>
<td>2'6&quot; (764)</td>
<td>3'0&quot; (915)</td>
<td>5-8</td>
</tr>
<tr>
<td>3'0&quot; (915)</td>
<td>3'6&quot; (1067)</td>
<td>8-13</td>
</tr>
<tr>
<td>3'6&quot; (1067)</td>
<td>4'0&quot; (1219)</td>
<td>13-15</td>
</tr>
</tbody>
</table>

Date Stamp
(on end of closer)
MM-YY
MM = Month
YY = Year

LATCHING SPEED VALVE

CLOSING SPEED VALVE

BACKCHECK INTENSITY VALVE

OPTION M71 DELAYED ACTION VALVE

SPRING POWER ADJUSTER
(1/4" ALLEN WRENCH)

Backcheck Intensity Valve
Turn valve COUNTER-CLOCKWISE to reduce backcheck or CLOCKWISE to increase backcheck. (Backcheck should be set to give a soft cushioning action, not a sudden stop.)

Installing Cover
• Slip cover over closer.
• Hold tightly against QUIK-INSTALL® Bracket surface.
• Secure on each side with 6-32 x 1/4" PBHMS screws.

Insert is removable. Place in unused opening.

Plastic Cover
(Standard)

To Adjust Hold Open (A1 Option)
Open the door to desired position and tighten the hold open screw firmly (For RH application, turn screw on underside CLOCKWISE. For LH application, turn screw COUNTER-CLOCKWISE.) Place the hold open dial over the hex head of the bracket screw so that one of the slots in the dial is directly over small screw hole tapped in bracket. Seat the dial tightly over the bracket. INSERT DIAL SCREW AND TIGHTEN SECURELY.

Closing Speed Valve (1/8 Allen Wrench Provided)
To adjust speed of door closing from fully open to a position 2" to 5" from closed, turn Closing Speed Valve CLOCKWISE to SLOW closing, COUNTER-CLOCKWISE to SPEED closing.

Latching Speed Valve (1/8 Allen Wrench Provided)
After closing speed has been obtained, turn latching speed valve CLOCKWISE to SLOW latching or COUNTER-CLOCKWISE to SPEED latching for last 2" to 5" of door travel.

NOTE: Set combination of CLOSING and LATCHING speeds to between 3 and 7 seconds Use of door by handicapped, elderly or small children may require even greater closing time.

Delayed Action Valve (1/8 Allen Wrench Provided)
Turn valve CLOCKWISE to SLOW closing, COUNTER-CLOCKWISE to SPEED closing. Delayed action may be adjusted from 20 seconds to 90 seconds, depending on degree of door swing. Delay occurs at the beginning of the door closing cycle from fully open down to 70°, where the closing speed valve then begins its control.