Installation instructions
Pull side stop IS arm regular mount
Push side stop ISJ arm top jamb mount
Pull side stop ISH arm regular mount, with hold open
Push side stop ISJH arm top jamb mount, with hold open

8900 IS, ISJ
ISH, ISJH

Surface closer
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## Technical specifications

### Size selection chart

<table>
<thead>
<tr>
<th>Arm</th>
<th>Closer</th>
<th>Door Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS, ISH, ISJ, ISJH</td>
<td>8916</td>
<td>2'-0&quot; 2'-6&quot; 3'-0&quot; 3'-6&quot; 4'-0&quot; 4'-6&quot; 5'-0&quot;</td>
</tr>
<tr>
<td>IS, ISH, ISJ, ISJH</td>
<td>8956</td>
<td>Interior NA NA NA NA Exterior NA NA NA NA</td>
</tr>
</tbody>
</table>

### Spring size chart

<table>
<thead>
<tr>
<th>Closer size</th>
<th>Maximum size of door width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28°</td>
</tr>
<tr>
<td>2</td>
<td>34°</td>
</tr>
<tr>
<td>3</td>
<td>38°</td>
</tr>
<tr>
<td>4</td>
<td>54°</td>
</tr>
<tr>
<td>5</td>
<td>60°</td>
</tr>
</tbody>
</table>
Follow included template to properly prepare door frame for all accessories of the closer installation.

Know the swing of the door which is being installed prior to installation.

Verify closer spring size prior to installation. See “Spring size chart” on page 2.

Make sure door efficiently operates prior to installing closer.

Surface closer system
The closer is comprised of the following components.

1. Cover
2. Pinion
3. Delayed action adjustment
4. Latch speed adjustment
5. Closer body
6. Closing/sweep speed adjustment
7. Backcheck adjustment
8. Optional backplate
9. Bar/shoe assembly
10. Main arm
11. Connecting arm
12. Backcheck positioning

Handing of the door

Tools recommended

- Drill Bits
  - Metal: 7/32" & 1/4-20 tap
  - Wood: 5/32"
  - DPK: 1/8"
  - Sex nut: 3/8"

- #3 Phillips screwdriver
- 1/2" or 13mm box wrench
- 10" adjustable wrench
- 3/16" hex key
- 5mm hex key (supplied)
8900 IS, ISH
PULL SIDE, REGULAR MOUNT

Installation Instructions

Mounting the surface closer & arm assembly (reg mnt)

1.1 Secure closer body to door.
   - Use four 1/4-20 x 2" PH flat head screws [#14 x 2-3/4" PH flat head wood screws] provided.

1.2 Secure the bar/shoe assembly to frame.
   - Use two 1/4-20 x 5/8" Phillips round head screws [#14 x 1-1/4" round head wood screws] provided.

1.3 Secure main arm to operator pinion.
   - Use a torque wrench (25 ft-lbs) and provided pinion screw [M8 x 30 socket head cap screw].

1.4 NOTE: To disassemble hold open plate:
   - Remove both screws from bottom of plate using a 3/16" hex key.
   - Keeping all washers in place, flip plate over to orient as per image above.
   - Re-secure plate with both screws.

2.1 Slide end of connecting arm into end of bar/shoe assembly.

2.2 Secure connecting arm and bar/shoe assembly.
   - Use provided fastener [5/16-18 x 3/8 hex bolt].

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8900 ISJ, ISJH
PUSH SIDE, TOP JAMB MOUNT

Mounting the surface closer & arm assembly (top jamb mnt)

2.1 Secure plate (BP89) to frame.
- Use four 1/4-20 x 5/8" flat head screws [#14 x 1-1/2 Phillips flat head wood screws] provided.

2.2 Secure closer body to plate.
- Use four 1/4-20 x 1-3/4" Phillips flat head screws provided with plate itself.

2.3 Secure bar/shoe assembly to mounting surface.
- Use two 1/4-20 x 5/8" PH round head screws [#14 x 1-1/4" round head wood screws] provided.

2.4 Secure main arm to operator pinion.
- Use a torque wrench (25 ft-lbs) and provided pinion screw [M8 x 30 socket head cap screw].

NOTE: To disassemble hold open plate:
- Remove both screws from bottom of plate using a 3/16" hex key.
- Keeping all washers in place, flip plate over to orient as per image above.
- Re-secure plate with both screws.

3.1 Slide end of connecting arm into end of bar/shoe assembly.

3.2 Secure connecting arm and bar/shoe assembly.
- Use provided fastener [5/16-18 x 3/8 hex bolt].
8900 IS, ISH, ISJ, ISJH
CLOSER ADJUSTMENTS

Adjustments

⚠ Confirm closer spring size prior to making any closing speed adjustments.
⚠ Do not back valves out beyond closer casting.
⚠ Maximum opening angle is 110°.
⚠ Door should close in 3 to 6 seconds from 90°.

Setting the hold open (ISH and ISJH)

1.1 Enabling or disabling hold open.
   • Twist hold open handle up or down to loosen or tighten, respectively, the hold open capacity.

1.2 Engaging or disengaging hold open.
   • Engaging hold open: Push door open until hold open ball connects with detent in handle.
   • Disengaging hold open: Pull door to pop hold open ball out of detent.

Adjusting the closing speeds: sweep, latch, and backcheck

2.1 Adjust sweep speed from 70° - 10°.
   • Increase sweep speed: Turn valve counter-clockwise
   • Decrease sweep speed: Turn valve clockwise

2.2 Adjust latch speed from 10° - 0°.
   • Increase latch speed: Turn valve counter-clockwise
   • Decrease latch speed: Turn valve clockwise

2.3 Adjust backcheck for the area from 110° - 70°.
   • Increase resistance: Turn valve clockwise
   • Decrease resistance: Turn valve counter-clockwise

2.4 Adjusting Backcheck positioning will advance approximately 15° in the 'ON' position. Shipped from factory fully "ON".
   • Turn OFF: Rotate counter-clockwise
   • Turn ON: Rotate clockwise

2.5 Adjust Delayed Action for the area from 110° - 75°.
   • Increase delay: Turn valve counter-clockwise
   • Decrease delay: Turn valve clockwise

Installing the closer cover

Installing the full cover (only)

1.1 Snap cover over closer body.