

# 8000ST Slide Track Door Closer

Pull or Push Side

## Installation Instructions

Non Hold Open and Hold Open Models, With or without DA suffix (Delayed Action)

**! WARNING**

This product can expose you to lead which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to: [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov).

**Non Hold open Arm Models:**

8301ST - 8501ST Series  
PS8301ST - PS8501ST

**Hold open Arm Models:**

8301ST-H - 8501ST-H Series  
PS8301ST-H - PS8501ST-H

READ AND FOLLOW ALL INSTRUCTIONS. SAVE THESE INSTRUCTIONS.



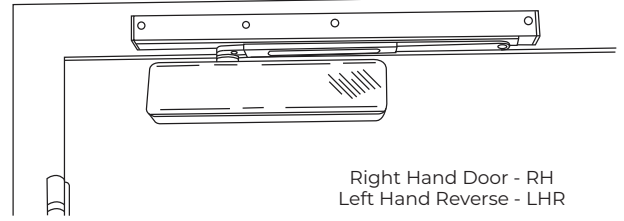
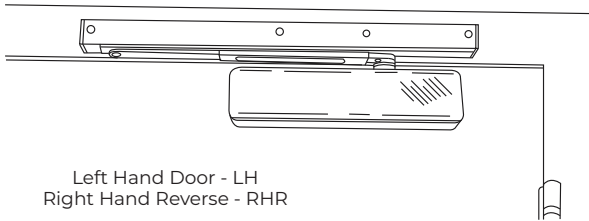
The closing force for series 8000ST door closers is adjustable from a size 1 to a size 6, as outlined in ANSI Standard A156.4. When these series of door closers are installed and adjusted to conform to ADA reduced opening force requirements (5 lbs max.) for interior doors, they may not have adequate closing force to reliably close and latch the door. Power adjustments charted on page 4 are recommended where possible, to ensure proper door control.

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

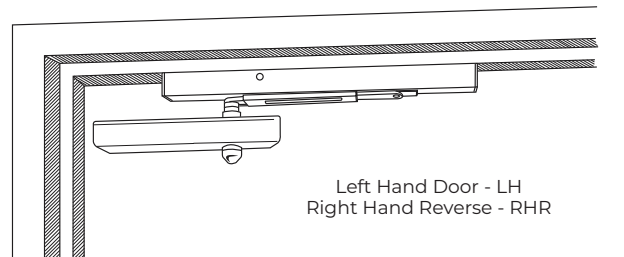
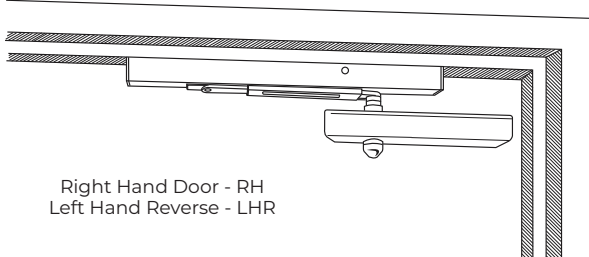
**NOTES:**

- 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.
- Use of an auxiliary door stop is always recommended.

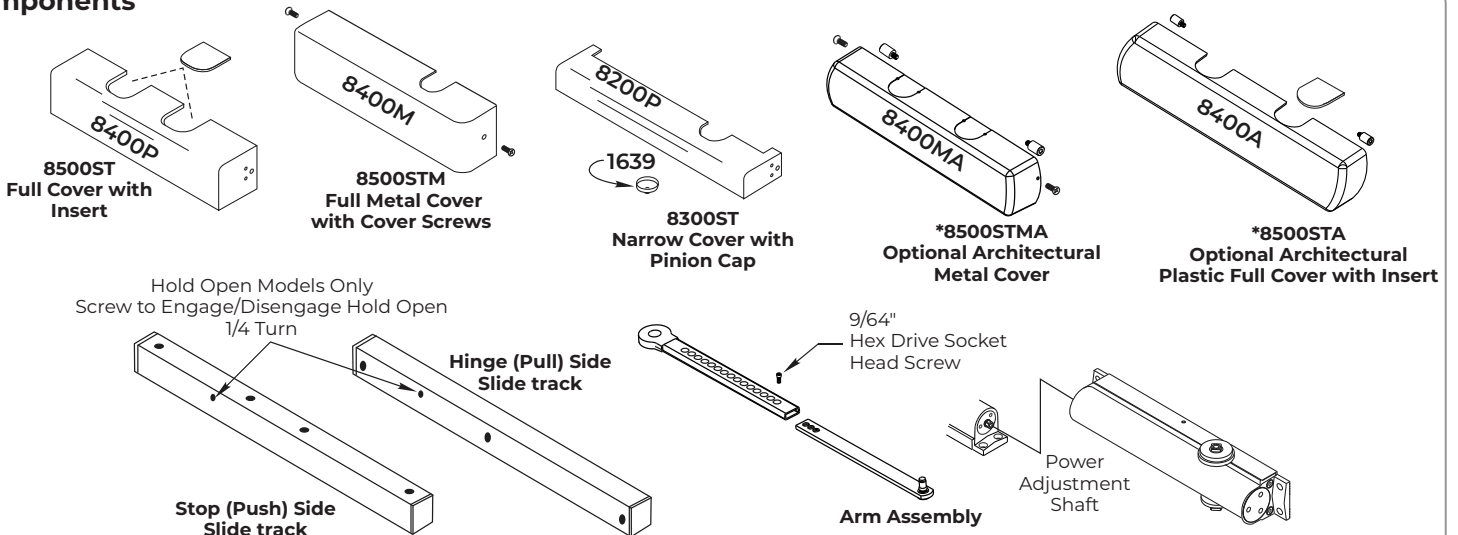
**Pull Side**  
Refer to page 2



**Push Side**  
Refer to page 3

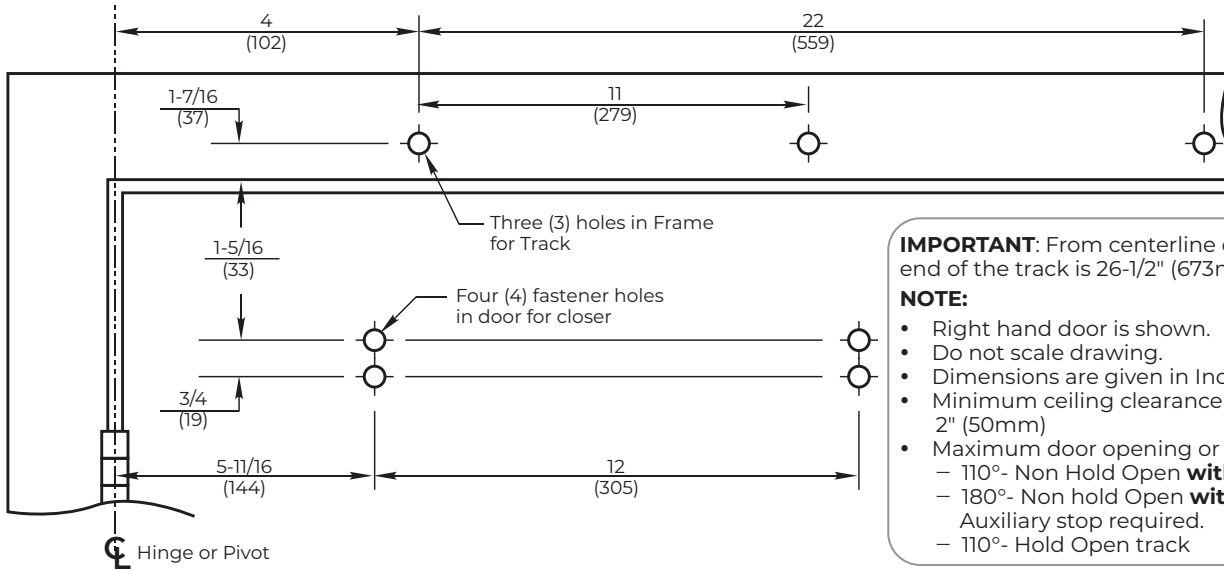


**Components**



\*Not available for PUSH SIDE, PS Prefixed Applications

**Pull Side Installation**



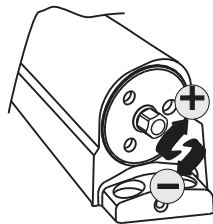
**IMPORTANT:** From centerline of pivot point to the end of the track is 26-1/2" (673mm)

**NOTE:**

- Right hand door is shown.
- Do not scale drawing.
- Dimensions are given in Inches/(mm)
- Minimum ceiling clearance for unit is 2" (50mm)
- Maximum door opening or hold open angle:
  - 110°- Non Hold Open **with** spring buffer in track
  - 180°- Non hold Open **without** spring buffer: Auxiliary stop required.
  - 110°- Hold Open track

**Installation Instructions**

1. Use template to locate holes on door and frame:  
4 on door for closer  
3 on frame face for track assembly
2. Prepare door and frame for fasteners using chart on this page.
3. **FOR 8301/8501 & 8311/8511 SERIES MODELS ONLY:**  
Set closer power for door size using chart below:



**Power Adjust**

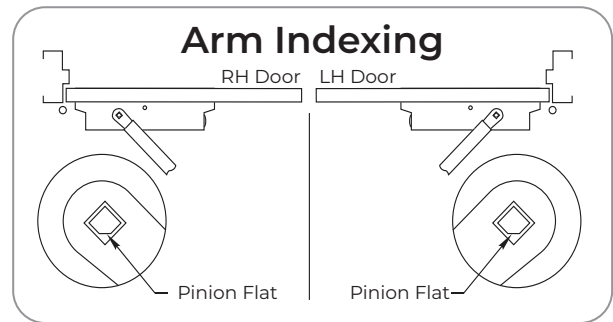
Use 5/16" Socket or Adjustable Wrench for this adjustment.

**Power Adjustment Chart for 8301/8501, 8311/8511 ONLY**

DOOR	Number of Turns Required			
	MAXIMUM DOOR SIZE			
	32" (81cm)	36" (91cm)	42" (107cm)	48" (122cm)
Interior Door	2	3	5	7
Exterior Door	3	5	7	9

**NOTE:** Maximum of 20 turns (360°) of Power Adjust Shaft. Closer is shipped set at 10 turns.

4. Fasten closer body to door with power adjustment shaft toward lock edge of door.  
**NOTE:** If application has a full metal cover, 8500M, slide mounting clips under each end of closer before tightening screws.
5. Fasten slide track to frame face with open side facing down and spring buffer end toward hinge edge of door.
6. Adjust arm to shortest length and install 9/64" hex drive socket head screw from screw pack.

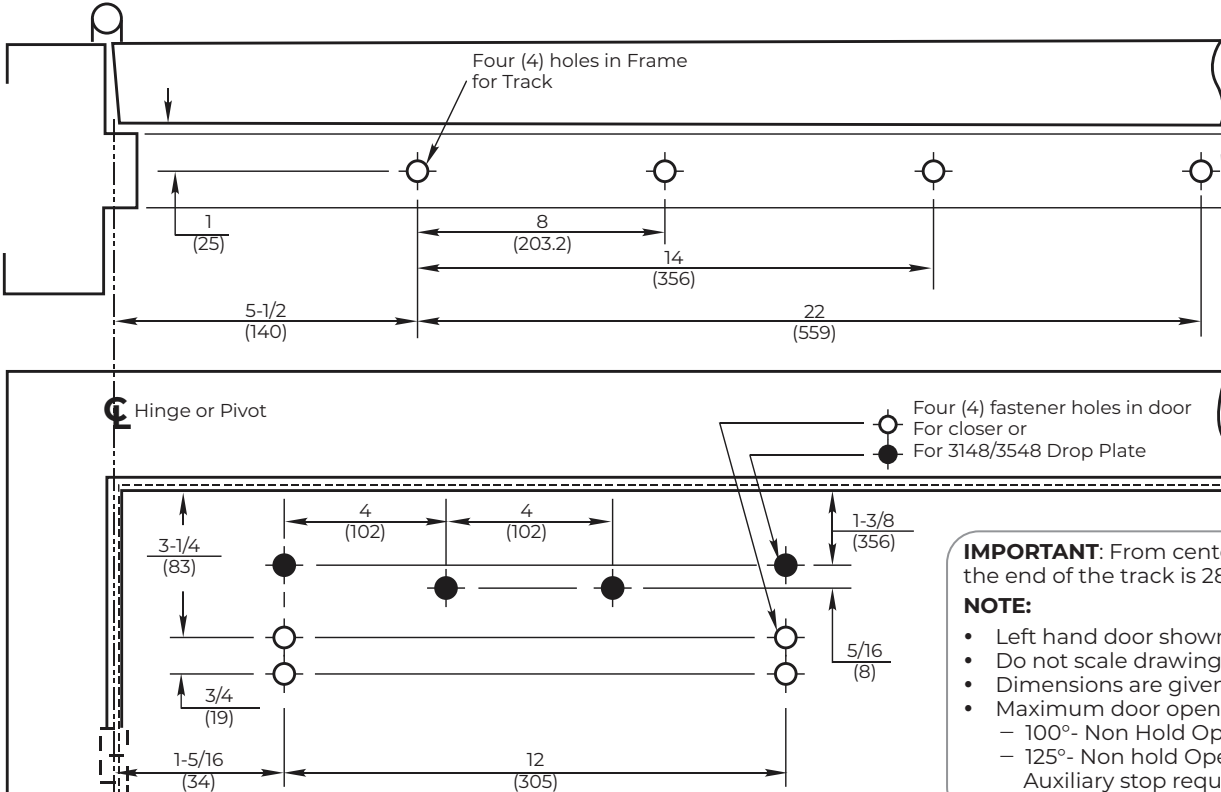


**Preparation for Fasteners**

Fasteners	Door or Frame	Drill-Sizes
Standard	Self-Drilling Screw	Aluminum or Metal No Drill Required
	1/4"-20 Machine Screw	Wood 3/16" (4.30mm)
Optional	Sleeve nuts and bolts	Hollow Metal 9/32" (7mm) through; 3/8" (9.5mm) door face opposite of closer
		Aluminum or Wood 3/8" (9.5mm) through
	Through-bolts and grommet-nuts	All 9/32" (7mm); 3/8" (9.5mm) dia. x 3.8" (9.5mm) deep on door face opposite of closer

7. Place slide arm on pinion shaft using Arm Indexing instructions above.
8. Secure arm with arm washer and arm screw.
9. Insert arm stud into slide block in track assembly. Secure by pushing in on the retainer clip that extends from the slide block in the track, until it is flush with the slide block.
10. Adjust closer. (Refer to page 4)

## Push Side Installation



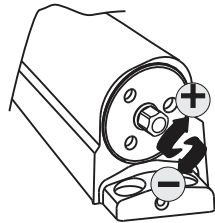
**IMPORTANT:** From centerline of pivot point to the end of the track is 28" (711mm)

**NOTE:**

- Left hand door shown.
- Do not scale drawing.
- Dimensions are given in Inches/(mm)
- Maximum door opening or hold open angle:
  - 100°- Non Hold Open **with** buffer in track
  - 125°- Non hold Open **without** buffer: Auxiliary stop required.
  - 100°- Hold Open track

## Installation Instructions

1. Use template to locate holes on door and frame:
  - 4 on door for closer or drop plate
  - 4 on frame soffit for track assembly
2. Prepare door and frame for fasteners using chart on page 2.
3. **FOR PS8301/PS8501 & PS8311/PS8511 SERIES MODELS ONLY:** Set closer power for door size using chart below:



### Power Adjust

Use 5/16" Socket or Adjustable Wrench for this adjustment.

**Power Adjustment Chart for PS8301/PS8501, PS8311/PS8511 ONLY**

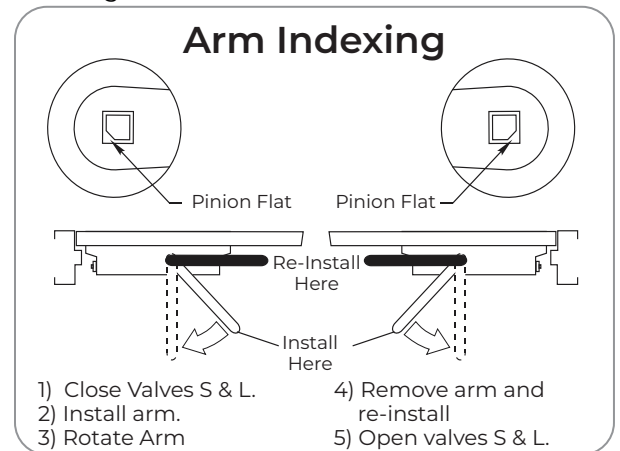
DOOR	Number of Turns Required			
	MAXIMUM DOOR SIZE			
	32" (81cm)	36" (91cm)	42" (107cm)	48" (122cm)
Interior Door	2	3	5	7
Exterior Door	3	5	7	9

**NOTE:** Maximum of 20 turns (360°) of Power Adjust Shaft. Closer is shipped set at 10 turns.

4. Fasten closer body to door with power adjustment shaft toward lock edge of door.
 

**NOTE:** If application has a full metal cover, 8500M, slide mounting clips under each end of closer before tightening screws.

5. Fasten slide track to frame face with open side facing down and spring buffer end toward hinge edge of door.
6. Adjust arm to shortest length and install 9/64" hex drive socket head screw from screw pack.
7. Place slide arm on pinion shaft using Arm Indexing instructions below.

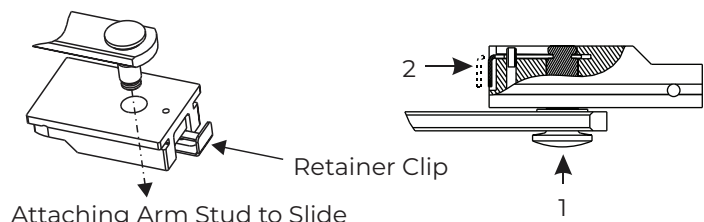


6. Secure arm with arm washer and arm screw.
7. Insert arm stud into slide block in track assembly. Secure by pushing in on the retainer clip that extends from the slide block in the track, until it is flush with the slide block.
8. Adjust closer. (Refer to page 4)

The ASSA ABLOY Group is the global leader in access solutions. Every day we help people feel safe, secure and experience a more open world.

## Closer Adjustments

**Figure 1 - Attach Arm Stud to Slide**



### Arm Attachment to Track:

Insert arm stud into slide block in track. Secure by pushing in on the retainer clip that extends from the slide block, until it is flush with the slide block. See **Figure 1**.

### Door Opening Angle and/or Hold Open Angle:

Remove 9/64" hex drive socket head screw from arm. Open door to desired angle and install hex-drive socket head screw into hole in adjusting rod that is aligned with the hole in the adjusting tube.

8301ST/8501ST Models are fully adjustable. For proper sizing see chart on page 2 for Pull Side, or page 3 for Push Side.

To adjust closer power – See **Figure 2**. Increase or decrease power as necessary.

### Closing Cycle (hydraulic control) See **Figure 3A**.

Valve "L" controls door speed in Latch range. Valve "S" controls door speed in Sweep range. Valve "D"–Optional–controls door speed in the Delay range.

Use 1/8" hex-key furnished and adjust as shown in **Figure 4**.

### Opening Cycle (hydraulic control) See **Figure 3B**.

Valve cushions (slows) door opening in the backcheck range. **NOTE:** Never close this valve completely or damage to closer may occur.

Use 1/8" hex-key furnished and adjust as shown in **Figure 5**.

### Installation of Cover:

- **Full cover:** Slide cover insert into the un-used cutout in cover. Install cover using screws provided.
- **Narrow cover:** Install cover using screws provided. Install pinion cap onto pinion shaft by hand or with a Phillips screw driver - **DO NOT OVER TIGHTEN.**
- **Architectural plastic cover:** Slide cover insert into the unused cutout in cover. Install standoffs in ends of closer. Snap cover onto standoffs.

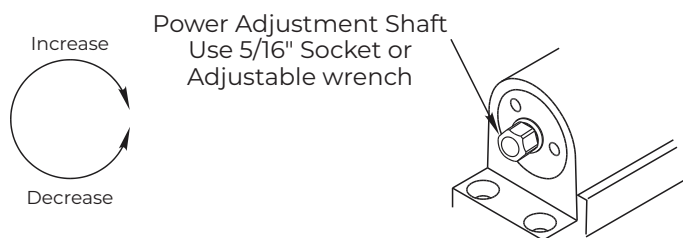
### On/Off Hold Open Feature:

Slotted screw, accessible thru hole in face of track, engages or disengages the hold open feature with 1/4 turn of the screw. See page 1 for location of screw.

### Hold Open Power Adjustment:

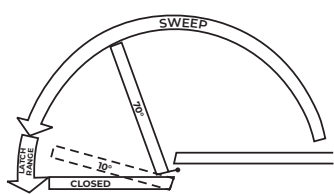
If more hold open power is required, the power may be increased by turning the adjustment shaft in the end of the track nearest the hinges. Use 9/64" hex wrench provided and rotate adjustment shaft clockwise to increase holding power.

**Figure 2 - Closing Power Control**

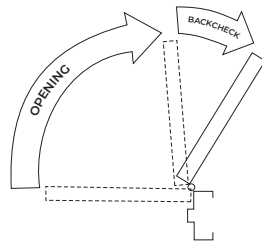


## Hydraulic Controls

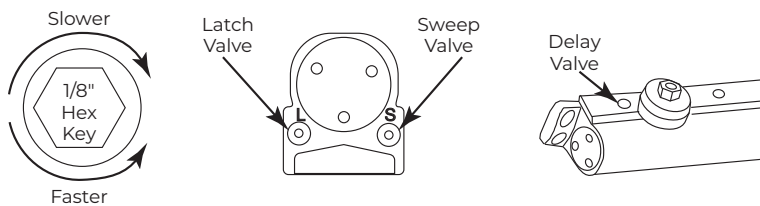
**Figure 3A - Closing Cycle**



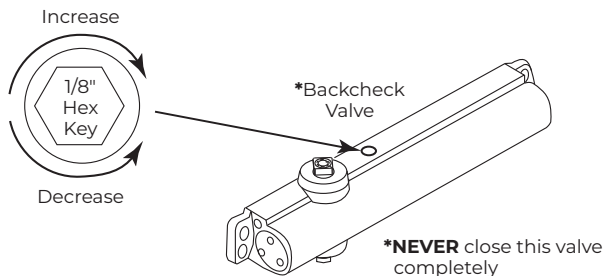
**Figure 3B - Opening Cycle**



**Figure 4 - Closing Speed**



**Figure 5 - Backcheck**



Technical Product Support:  
Monroe, NC 28112 USA  
Phone: 877.974.2255 ext: 2  
Techsupport.NortonRixson@assaabloy.com  
NortonRixson.com

Norton Rixson is a brand associated with ASSA ABLOY Accessories and Door Controls Group, Inc., an ASSA ABLOY Group company. Copyright © 2005, 2014, 2023 ASSA ABLOY Accessories and Door Controls Group, Inc. All rights reserved. Reproduction in whole or in part without the express written permission of ASSA ABLOY Accessories and Door Controls Group, Inc. is prohibited.