

Installation Instructions

SARGENT

ASSA ABLOY

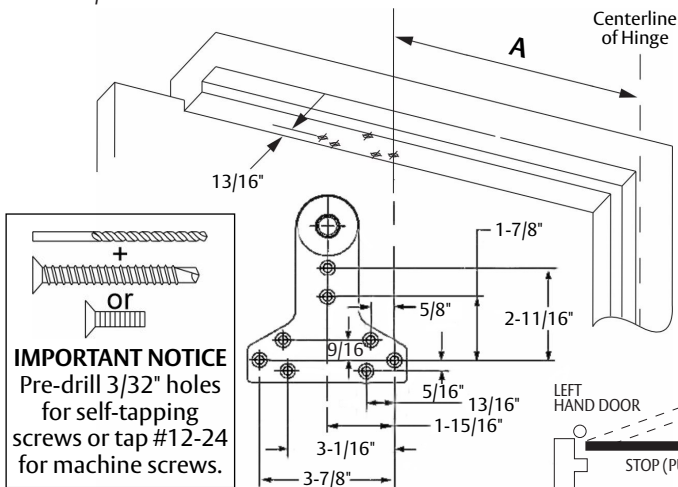
281 Series

Door Closer with CPS/CPSH Arms &

281 Series Adjustable from Sizes 1 thru 6

1. Prepare door and frame.

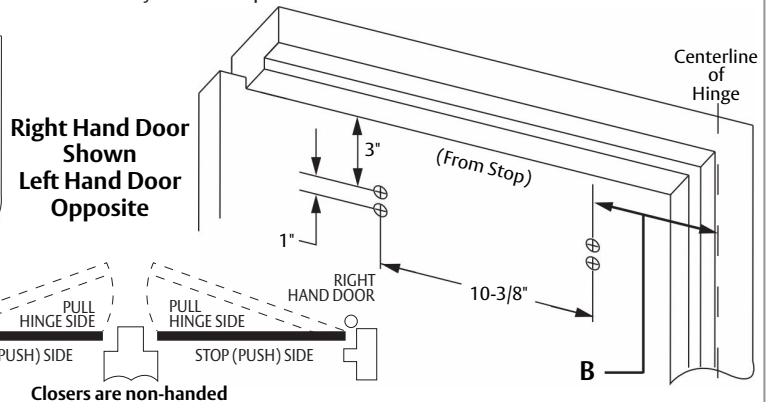
- Determine maximum degree of door opening or hold open (CPSH) required.
- Drill and tap door and frame for #12-24 machine screws. When using self tapping screws provided, pre-drill with 3/32" drill.



	Degree of Door Opening at Hold Open ■				
	85°	90°	95°	100° ●	105° ●
Dim A	9-7/16"	8-3/4"	8-1/8"	7-9/16"	7-1/16"
Dim B	4-9/16"	3-15/16"	3-5/16"	2-11/16"	2-3/16"

● Do not use with swing clear hinge for door openings greater than 95°. Use alternate type of hinges.

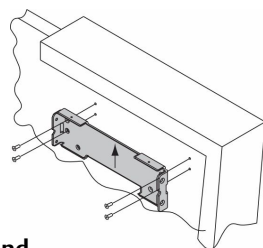
■ Dimensions for given degree based on 4-1/2" hinge. When 5-1/2" to 6" hinges are used, hold open angle will change by less than 1/2°. Dead stop occurs 3° beyond hold open.



2. Install mounting bracket and closer.

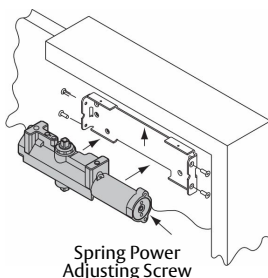
Use information provided in Step 1 above and the template provided on page 4 to locate and drill holes.

Install the mounting bracket with the arrow pointing up for both RH and LH doors.



Right Hand Door Shown

Install the closer with spring adjustment screw towards hinge.



Drill & Tap, use screws provided or use Mortise Nuts when required.

3. Install stop and foot bracket to door stop.

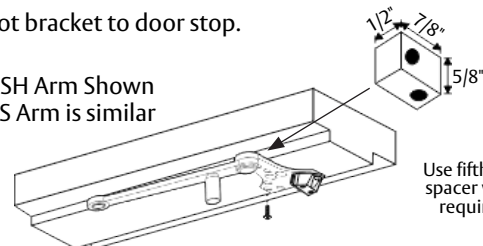
Arm must be the same hand as the door. Assemble holder with bumper and insert (CPSH only) to foot bracket. Location of these parts determines the "hand".

RH CPSH Shown

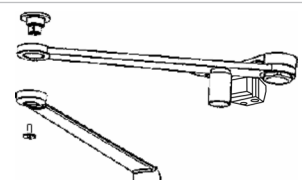
- Four (4) #12-24 x 5/8" MS or #12 x 1-3/4"
- Insert (CPSH only)
- Bumper & Holder
- 12-24 x 1" MS or #12 x 1-3/4"
- 12-24 x 1-3/4" MS or #12 x 2-1/2"

Mount foot bracket to door stop.

CPSH Arm Shown
CPS Arm is similar



3A. Alternate Option:
Pre-assemble arm prior to attaching stop.



281 Series

Door Closer with CPS/CPSH Arms

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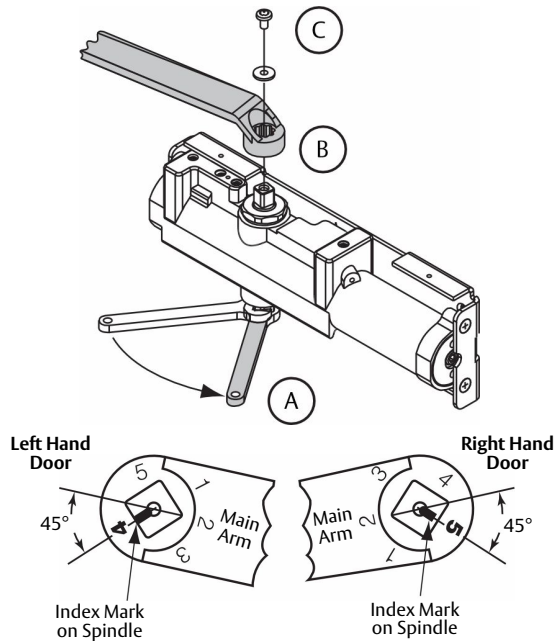
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4. Attach Arm to Spindle

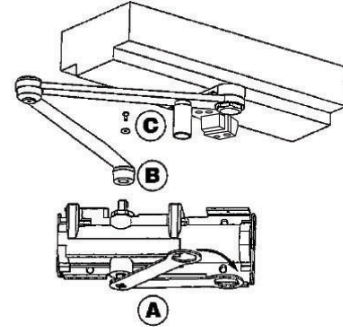
WARNING: If not properly indexed, door closer will not function properly.

- Rotate bottom spindle with wrench.
- Assemble main arm with index mark positioned as shown.
- Secure with screw and washer.



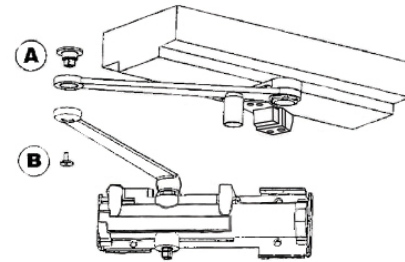
4A. Alternate Option:

Attach Pre-Assembled Arm to Spindle.



5. Install Pivot

- Open door and install pivot as shown.
- Use screw to secure pivot and arms.

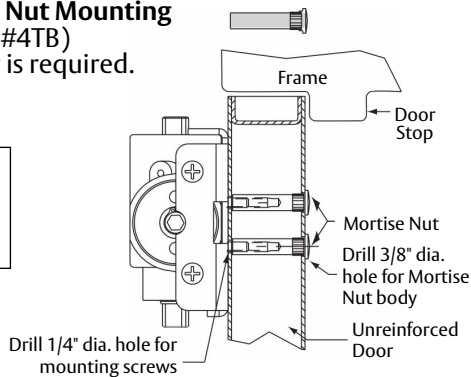


Accessories

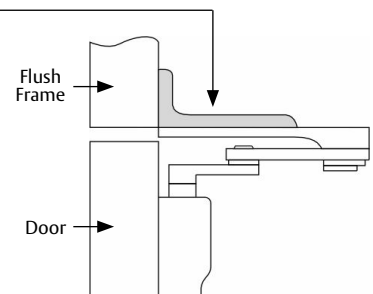
Optional: Mortise Nut Mounting

Use Mortise Nuts (#4TB) when thru-bolting is required.

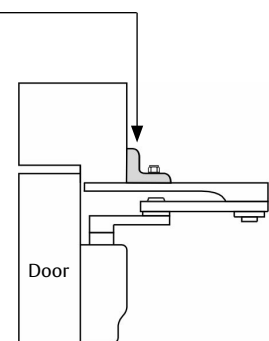
Refer to pages 1 and 4 for templating dimensions



125 VF Bracket For flush frame and door conditions.

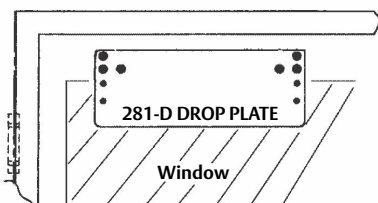


125 V Bracket For narrow frame conditions.



281 Drop Plate

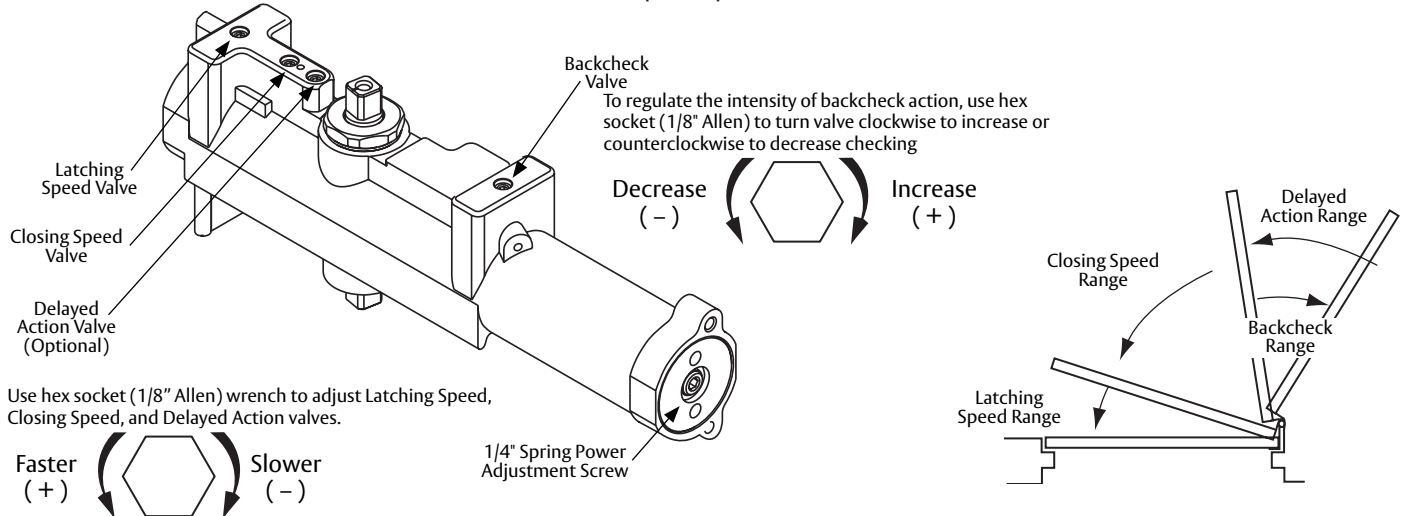
Used with narrow top rails.



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Final Adjustment and Regulating Procedures

- Recommend 6 second minimum from 90° to the closed position.
- **Closing and Latching Speeds:** Turn valves clockwise to slow down or counterclockwise to speed up door movement.
- **Backcheck:** To regulate the intensity of backcheck action, turn valve clockwise to increase or counterclockwise to decrease checking. **CAUTION:** Set valve for slight cushioning effect; Closer can be damaged if the checking action is too abrupt. Never use the backcheck as a door stop. Always use a door stop to stop the door.
- **Delayed Action Feature (Optional on some models):** Delayed action provides slow door closing through the delayed action range. Turn valve clockwise to slow down or counterclockwise to speed up door movement.



Adjust closing power to the minimum force required to reliably close and latch door.

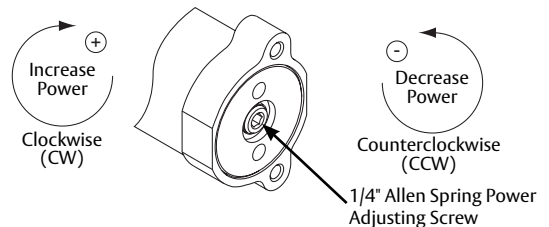
- If door is hard to open, decrease power slightly.
- If door does not latch, increase power as required.
- Use chart below as a starting point.
- Doors adjusted with high closing power to overcome strong draft conditions may exceed ADA standards.

Door Width in inches	Exterior Doors	Interior Doors * 
24 - 30	2 - 7 turns CW	1-5 turns CCW
30 - 36	7 - 11 turns CW	3-6 turns CCW
36 - 42	11 - 15 turns CW	Factory Set
42 - 48	15 - 17 turns CW	8 turns & Up CW

* If interior doors do not have to comply with ADA requirements, exterior settings are recommended. Where strong drafts exist, increase spring power as needed.

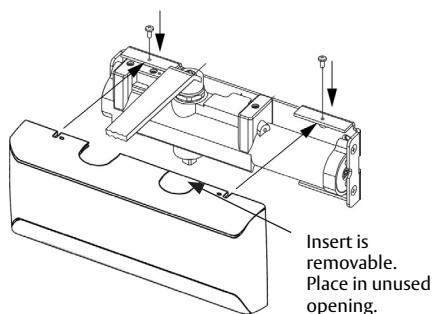
NOTES:

- Adjusting door to close due to high draft conditions may exceed ADA standards.
- Consult local ordinances when fire doors are involved.



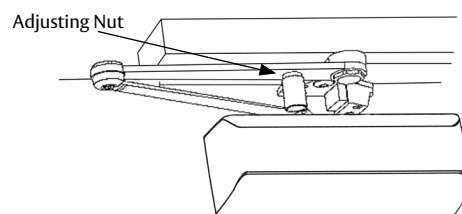
Install Cover

Install cover with two (2) security screws as shown.



To Adjust Holder Arm (CPSH Arm ONLY)

All CPSH arms are shipped in Non-Hold Open from the factory. To set in Hold Open, turn the adjusting nut approximately 1-1/2 turns clockwise.



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.

WARNING

Attention Installer: Improper installation may result in damage to the product and void the factory warranty.

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Template

