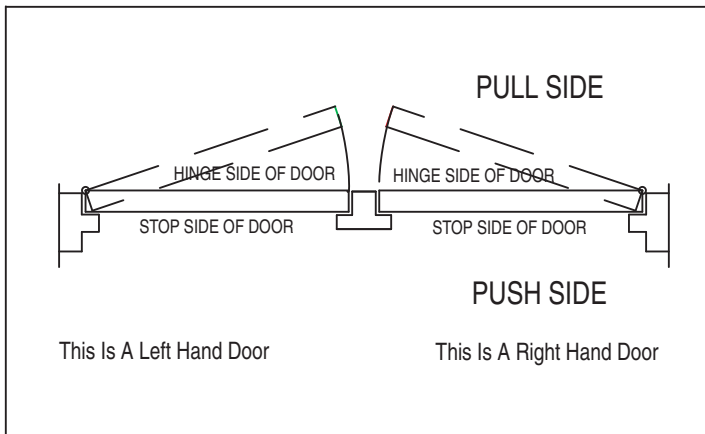


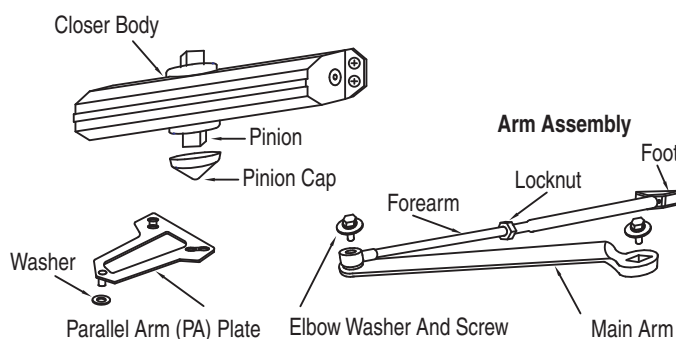
DOOR CLOSER

INSTALLATION INSTRUCTIONS

■ Chart To Determine Hand Of Door



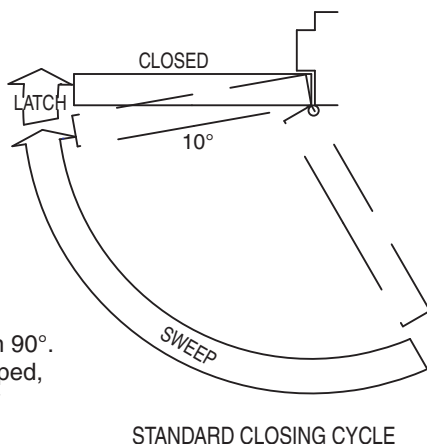
■ Components



■ Control Function

Closing Speed Control

CAUTION
DO NOT BACK VALVES OUT OF CLOSER OR A LEAK WILL RESULT

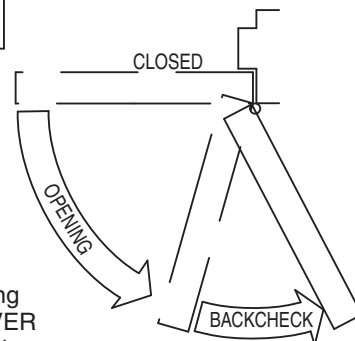


ATTENTION:

Adjust closing speed time to between 4 to 6 seconds from 90°. Use of the door by handicapped, elderly or small children may require longer closing time.

Opening Door Control

CAUTION
DO NOT BACK VALVES OUT OF CLOSER OR A LEAK WILL RESULT



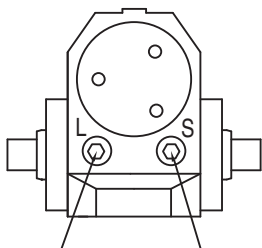
ATTENTION:

Backcheck ("BC") valve controls the hydraulic resistance to door opening in backcheck range. NEVER close this valve completely. It is not to provide a positive stop.

■ Final Adjustment And Regulating Procedures

Regulating Door Speed And Latching Speed

Turn speed regulating valve clockwise to slow down or counter clockwise to speed up door movement.



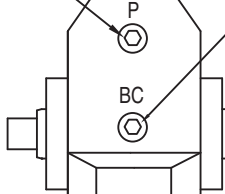
This valve controls Latching Speed

This valve controls Door Sweep Speed

* Regulating Spring Power Regulating BC Power

Turn this screw clockwise to increase or counter clockwise to decrease.

Power Adjustment Screw

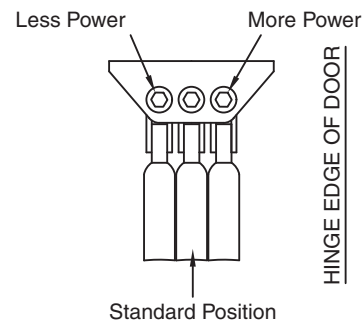


Turn BC Regulating Valve clockwise to increase or counter clockwise to decrease. NEVER close this valve completely.

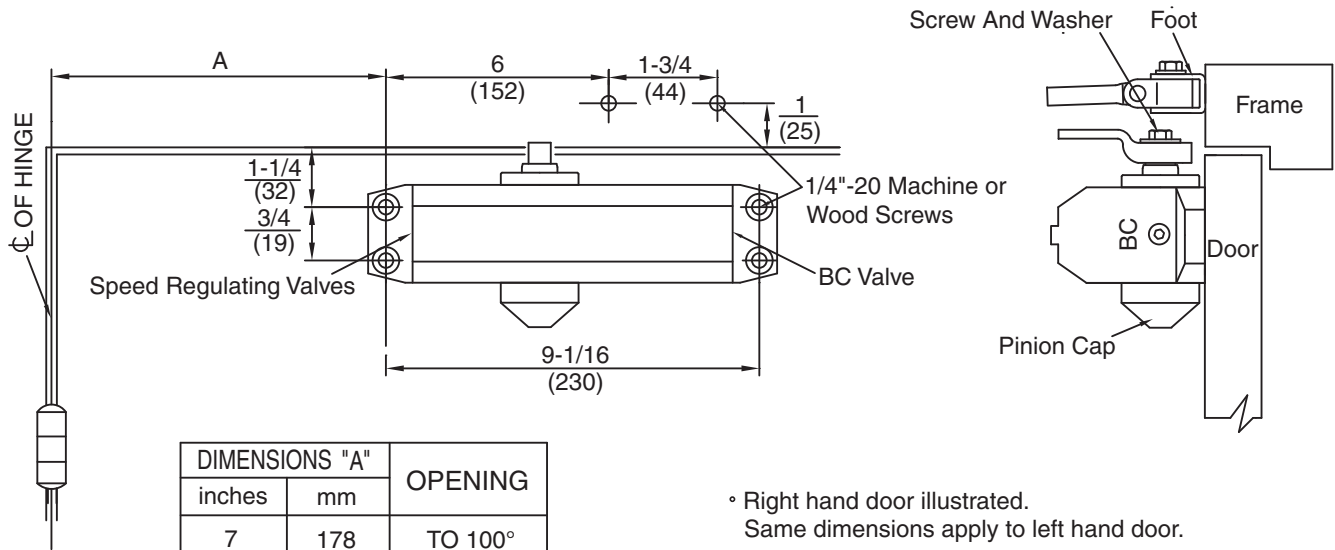
*Regulating Spring Power for Multi sized closer only - not valid for fixed sized closers.

Adjusting Foot For Closing Power

Move foot pivot to hole as illustrated below



REGULAR ARM INSTALLATION

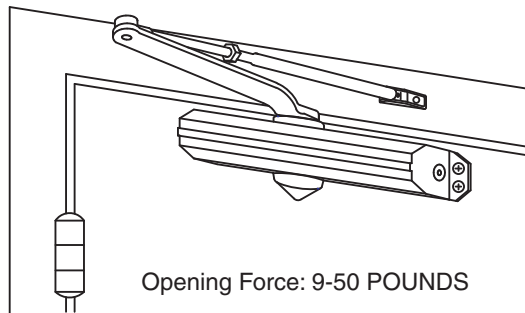
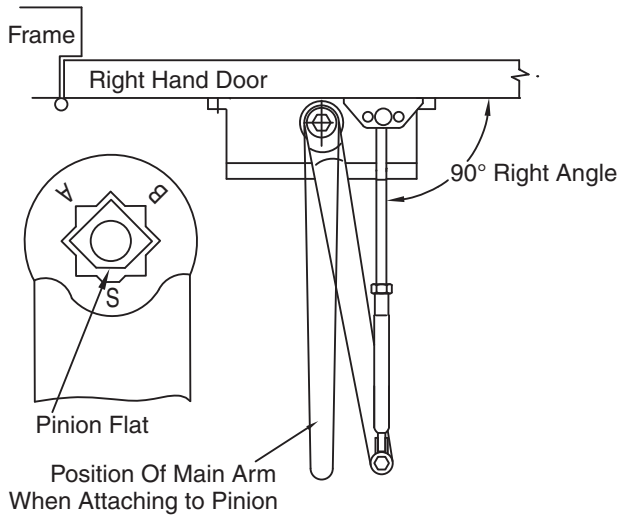


DIMENSIONS "A"		OPENING
inches	mm	
7	178	TO 100°
6	152	101° TO 120°
3-1/2	89	*121° TO 180°

*Door/Wall/Hardware/Jamb conditions permitting

- Right hand door illustrated. Same dimensions apply to left hand door.
- Measured from hinge centerline. Dimensions are in inches (mm).
- Do not scale drawing.

Position Of Arms And Index Settings



INSTALLATION INSTRUCTIONS

1. Select degree of door opening. Use dimensions shown in chart to mark location of attaching screws on door and frame. Prepare holes.
2. Assemble main arm to closer.
3. Attach closer to door with speed regulating valves toward hinge.
4. Attach the foot of the forearm to frame.
5. Adjust length of forearm to position forearm at right angle to frame. When connected to main arm at elbow, use washer and screw provided to secure pivot connection. Tighten locknut on forearm.
6. Snap pinion cap over pinion at bottom of closer.
7. Adjust closer.

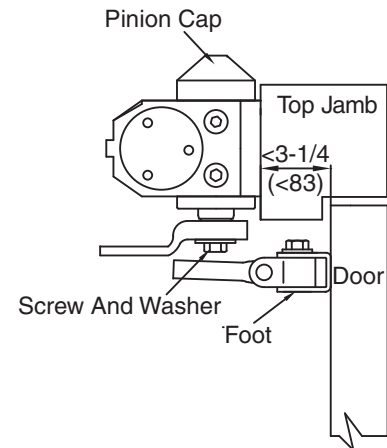
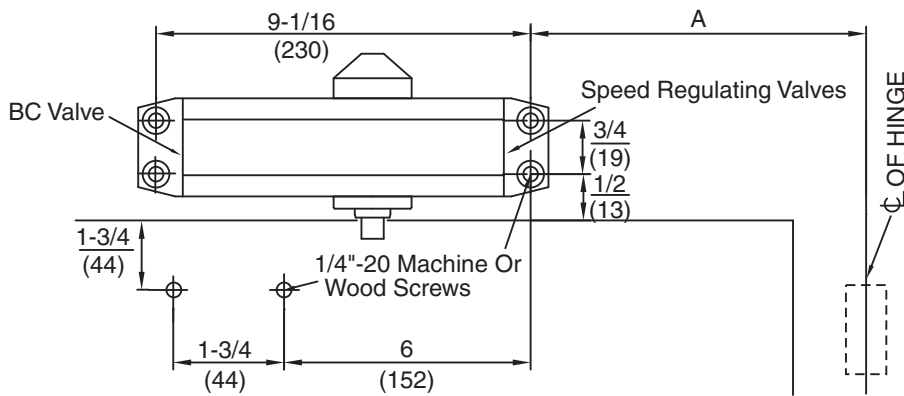
** Power Adjustment Chart

DOOR	TYPE OF INSTALLATION	*	MAXIMUM DOOR SIZE				
			34" 0.85M	36" 0.90M	40" 1.00M	44" 1.10M	48" 1.20M
INTERIOR	REGULAR ARM TOP JAMB	FULL 360° TURNS OF POWER ADJUSTMENT SHAFT	2	4	6	9	11
	PARALLEL ARM		3	5	7	10	13
EXTERIOR	REGULAR ARM TOP JAMB		4	6	8	11	14
	PARALLEL ARM		6	8	10	15	17

* 18-360° TURNS MAXIMUM AVAILABLE

**Regulating Spring Power for Multi sized closer only - not valid for fixed sized closers.

TOP JAMB INSTALLATION

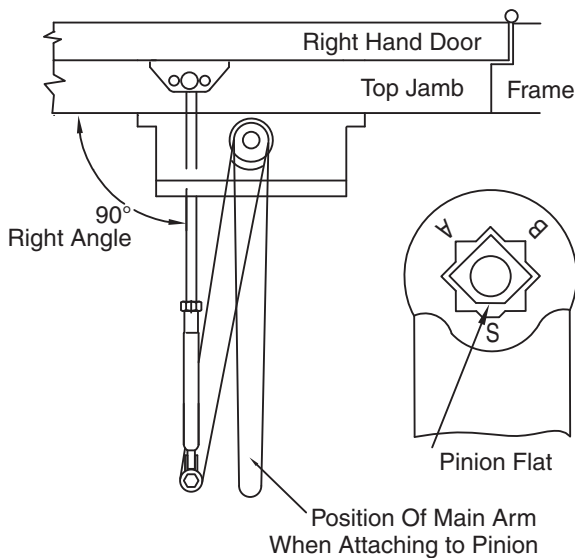


DIMENSIONS "A"		OPENING
inches	mm	
7	178	TO 100°
6	152	101° TO 120°
3-1/2	89	121° TO 180°

*Door/Wall/Hardware/Jamb conditions permitting

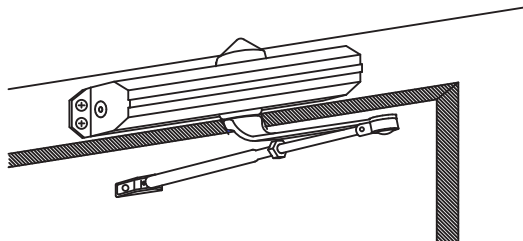
- Right hand door illustrated. Same dimensions apply to left hand door.
- Measured from hinge centerline. Dimensions are in inches (mm).
- Do not scale drawing.

Position Of Arms And Index Settings



INSTALLATION INSTRUCTIONS

1. Select degree of door opening. Use dimensions shown in chart to mark location of attaching screws on door and frame. Prepare holes.
2. Assemble main arm to closer.
3. Attach closer to frame with speed regulating valves toward hinge.
4. Attach the foot of the forearm to door.
5. Adjust length of forearm to position forearm at right angle to frame. When connected to main arm at elbow, use washer and screw provided to secure pivot connection. Tighten locknut on forearm.
6. Snap pinion cap over pinion at bottom of closer.
7. Adjust closer.



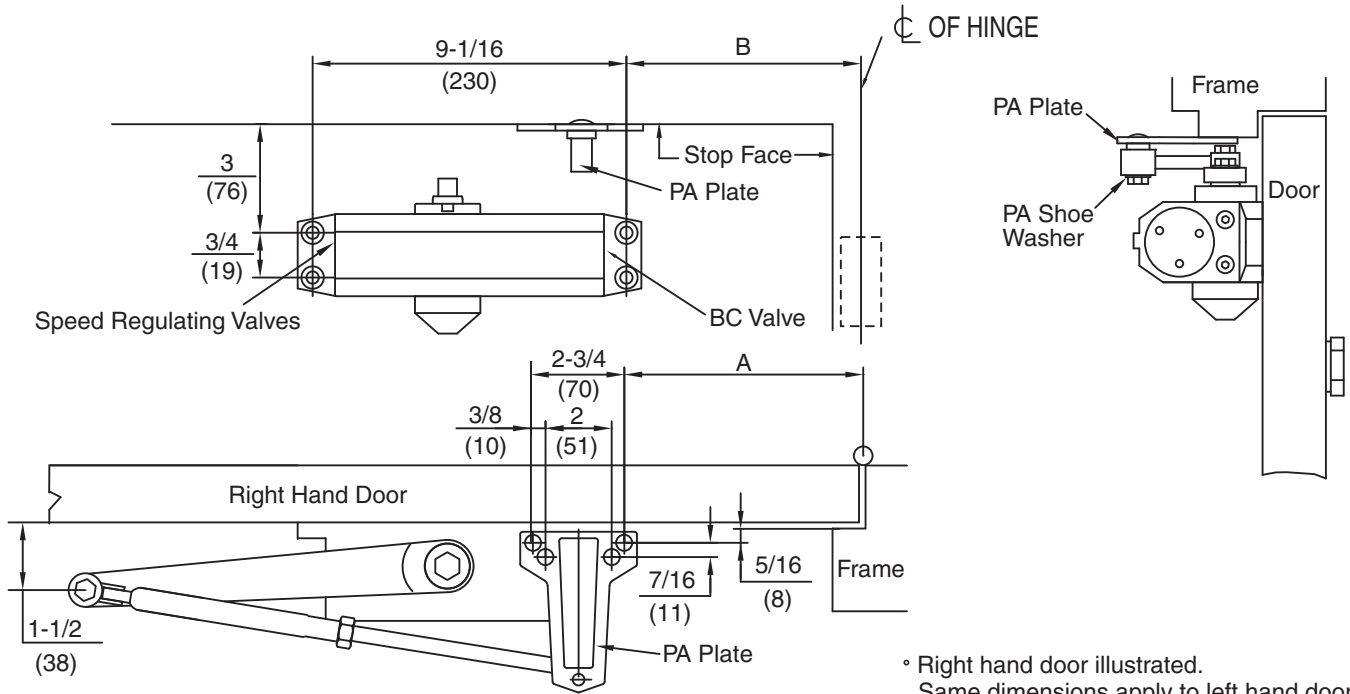
About Power Adjustment

Before installation, adjust the spring power as recommended on chart. DO NOT exceed the maximum number of turns.

Spring power is set at 0 turns from the factory.

Regulating Spring Power for Multi sized closer only - not valid for fixed sized closers.

PARALLEL ARM INSTALLATION



- Right hand door illustrated. Same dimensions apply to left hand door.
- Measured from hinge centerline. Dimensions are in inches (mm).
- Do not scale drawing.

DIMENSIONS "A"		DIMENSIONS "B"		OPENING
inches	mm	inches	mm	
9-1/4	235	7-5/8	194	TO 100°
7-3/4	197	6-1/8	156	101° TO 130°
5-3/4	146	4-1/8	105	OVER 131°

INSTALLATION INSTRUCTIONS

1. Select degree of door opening. Use dimensions shown in chart to mark location of attaching screws on door and frame. Prepare holes.
2. Attach closer to door with speed regulating valves away from hinge.
3. Attach PA plate to top frame as shown.
4. Remove foot from forearm and discard.
5. Install arm on pinion shaft. Rotate pinion 45° toward hinge edge of door to align main arm.
"B" (right hand door) or
"A" (left hand door)
Fasten with arm screw.
6. Fasten forearm to PA plate using screw removed from foot in Step 4 and PA shoe washer included in screw pack.
7. Adjust forearm length to set arm elbow about 1-1/2" (38mm) from door. When connected to main arm, use washer and screw provided to secure pivot connection. Tighten locknut.
8. Snap pinion cap over spindle at bottom of closer.
9. Adjust closer.

