



Installation Instructions

Parallel Rigid Arm (PR) CloserPlus (CLP)

ASSA ABLOY

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**

Model Numbers Included:

Series	Function	Sizing
Parallel Rigid Arm Units		
PR7500	NHO	1-6
PR7500H	HO	"
PR770X	NHO	2 THRU 6
PR770XH	HO	"
CloserPlus Arm Units		
CLP-7500	NHO	1-6
CLP-7500T	HO	"
CLP-770X	NHO	2 THRU 6
CLP-770XT	HO	"

"X" Designates closer size 2, 3, 4, 5, or 6

Additional Closer Options:

- "DA" indicates Delayed Action closing
- "H" indicates Hold-Open function. These components are handed
- "T" indicates Thumbturn actuated Hold-Open control, not handed

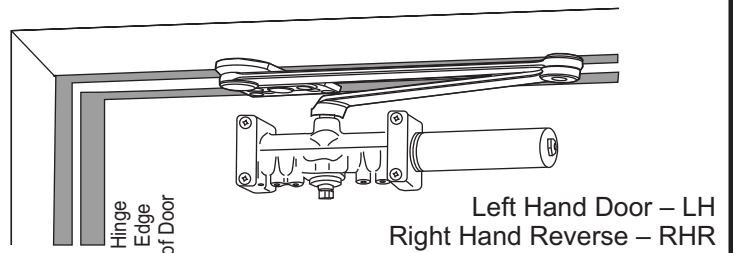
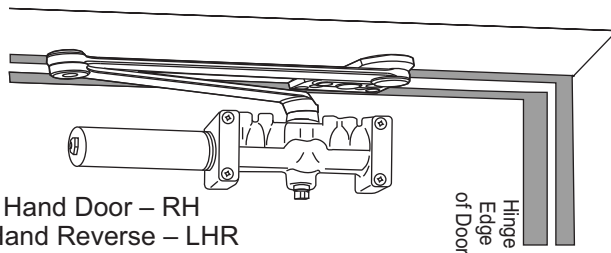
Optional Accessories:

- 7788 Drop Plate
- 2019L, 6890, 6891 Soffit Plate Accessories

NOTE: For special applications a separate door and frame preparation template is packed with these instructions. In those cases, use this instruction sheet for installation sequence and closer adjustments only.

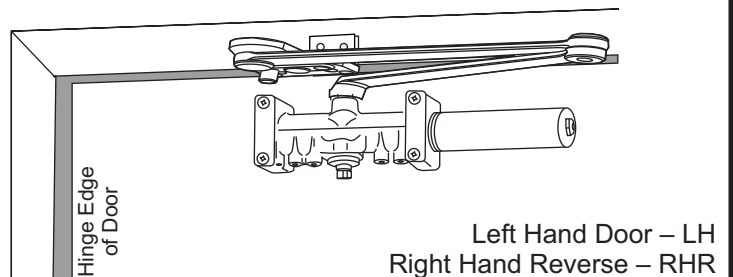
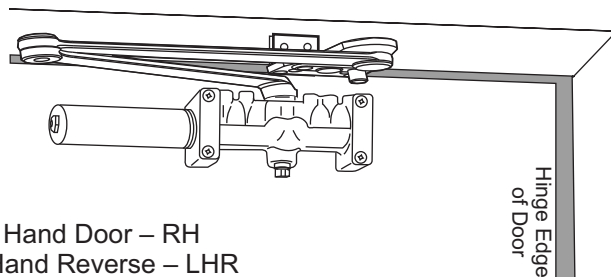
Standard Frame Installation

Closer mounts on opposite to hinge (push) side of door. PR7500 Parallel Rigid Non Hold Open arm illustrated. See Pages 3 and 4



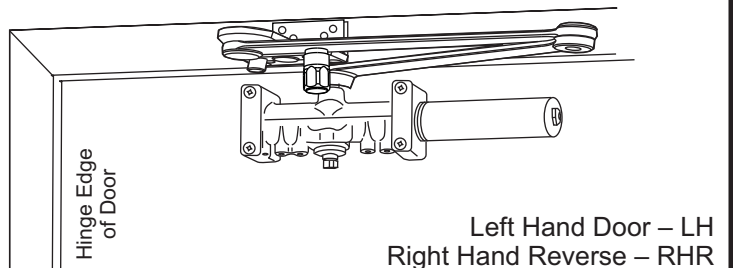
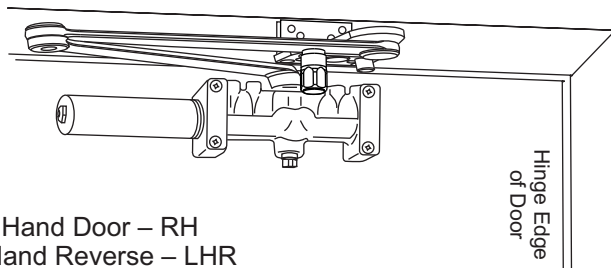
Narrow Frame Installation

Closer mounts on opposite to hinge (push) side of door. CLP7500 CloserPlus arm illustrated. 6890 and 6891 accessories required for this application (supplied separately). See Pages 3 and 4



Flush Partition Installation

Closer mounts on opposite to hinge (push) side of door. CLP7500T CloserPlus arm with Thumbturn Hold Open illustrated. 2019L accessory required for this application (supplied separately). See Pages 3 and 4



Components

Screw Pack

2019S Block (provided)

Optional Accessories

- For Blade Stop: 6891 Spacer
- For Frame or Blade Stop: 6890 Bracket
- For Flush Partition: 2019L Bracket

Arm Options

PR Arm Assembly

CLP Arm Assembly Stop only

PR Hold Open Arm Assembly

CLP Arm Assembly with Thumbturn

Cover Options

Plastic Cover (Standard)

Metal Cover (Optional)

Preparation for Fasteners			
	Fasteners	Door or Frame	Drill-Sizes
Standard	Self-Drilling Screw	Aluminum or Metal	No drill required
		Wood	3/16" (4.80 mm) Pilot hole required
	1/4" - 20 machine screw	Metal	Drill: #7 (0.201" dia.)(5mm) Tap: 1/4" - 20
Optional	Sleeve nuts and bolts	Hollow Metal	9/32" (7 mm) thru; 3/8" (9.5 mm) door face opposite to closer
		Aluminum or Wood	3/8" (9.5 mm) through
	Through-bolts and grommet-nuts	All	9/32" (7 mm) thru; 3/8" (9.5 mm) dia. x 3/8" (9.5 mm) deep on door opposite to closer

Note: Wood doors **MUST** be pre-drilled when using Self-Drilling Screws.

Installation Instructions



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- Select angle of opening and use dimensions shown on Page 4 and Dimension Chart below to locate 4 holes on door for closer body (or 4 holes for 7788 Drop Plate, Page 5, only if required) and 5 holes on stop/rabbit for Soffit Plate (or 4 holes on frame transom for 2019L bracket, only if required). For applications not covered in these instructions, a separate template will be required.

- Prepare door and frame for fasteners using "Preparation for Fasteners" chart on Page 2.
- Install closer body to door, or 7788 Drop Plate, with power adjustment shaft **away** from hinge edge of door and adjustment valves:

Down for Left Hand
Up for Right Hand

Mount 7788 Drop Plate to door ... only if used (see Page 5).

- Install Main Arm: Close valves ('S/D' or 'S') and 'L', then using a wrench, rotate the pinion shaft at least 50° to permit alignment of the **Pinion Flat** with the proper arm mark:

'Z' for Left Hand
'Y' for Right Hand

See below right for illustrations of this procedure.

- Reopen valves ('S/D' or 'S') and 'L', that were closed in previous step.

- With door closed, align soffit plate with holes in frame and fasten to frame with screws. Use 2019S and/or 6891 spacer blocks or 6890 reinforcing bracket as required.

- 7500 Series Closers only:
Closer is shipped from factory set at mid-range. Using "Power Adjustment" chart below, rotate power adjustment shaft with 1/8" allen wrench supplied:
Turn **CLOCKWISE** to **increase** power. Turn **COUNTER-CLOCKWISE** to **decrease** power
See Page 6 for the illustration of this step.

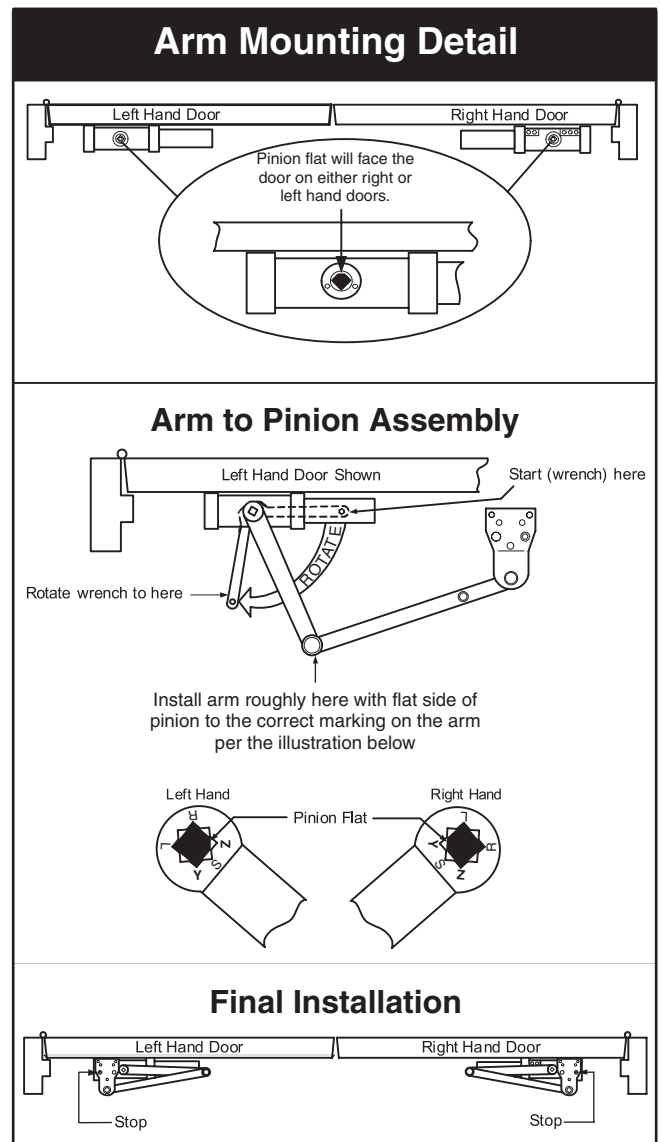
- Make adjustments to closer before installing cover. See Page 6 for closer adjustment instructions.
CAUTION: Do Not back valves out of closer body or a fluid leak will result.

- Install cover.

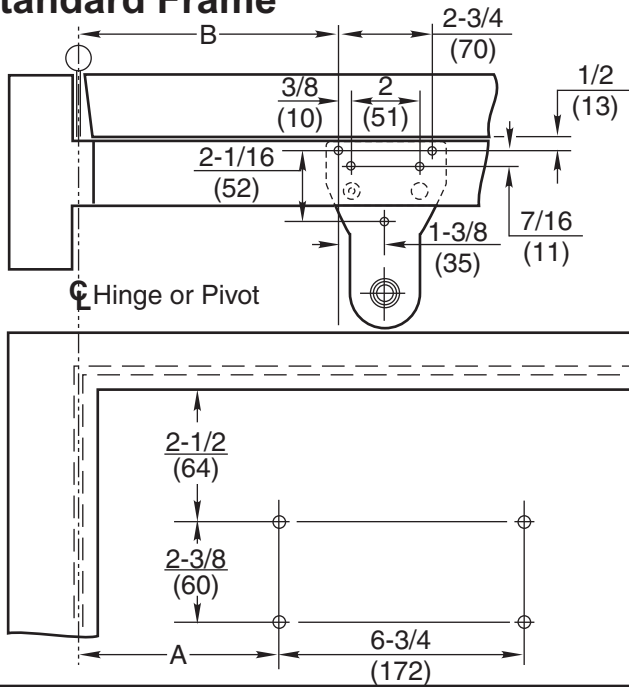
Power Adjustment Chart						
DOOR	PARALLEL ARM INSTALLATION	*	MAXIMUM DOOR SIZE			
			32" (0.81 m)	36" (0.9 m)	42" (1.1 m)	48" (1.2 m)
INT	PR7500/ CLP7500		0	3	5	8
EXT			4	6	8	12
INT	PR7500/ PR7700/ CLP7700		0	2	5	8
EXT			2	5	8	11

*16.5 -360° TURNS MAXIMUM AVAILABLE

Installation Dimensions Chart										
	Dim	Up to 90°	90°-95°	95°-100°	100°-105°	105°-110°	110°-115°	115°-130°	130°-150°	150°-180°
PR7500/ PR770X	A in. (mm)		8-3/4 (222)				7-1/4 (184)		6-1/4 (159)	5-1/4 (133)
	B in. (mm)		9-1/4 (235)				7-3/4 (197)		6-3/4 (171)	5-3/4 (146)
	C in. (mm)		9-3/8 (238)				7-7/8 (200)		6-7/8 (175)	5-7/8 (149)
CLP7500/ CLP770X	A in. (mm)	10-1/8 (257)	9-1/4 (235)	8-5/8 (219)	7-7/8 (200)	7-3/8 (187)	6-3/4 (171)			
	B in. (mm)	10-5/8 (270)	9-3/4 (248)	9-1/8 (232)	8-3/8 (213)	7-7/8 (200)	7-1/4 (184)			
	C in. (mm)	10-3/4 (273)	9-7/8 (251)	9-1/4 (235)	8-1/2 (216)	8 (203)	7-3/8 (187)			



Standard Frame



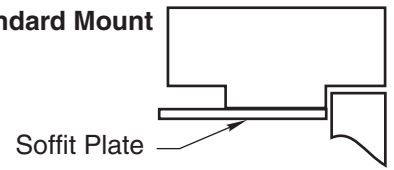
Notes:

Do Not Scale Drawing.
 Left Hand Door Shown.
 Same dimensions apply for Right Hand Door measured from centerline of pivot point.
 Dimensions are in inches (mm).
 See Page 3 for A, B, & C dimension values.

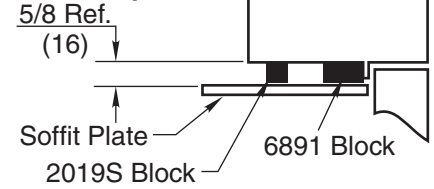


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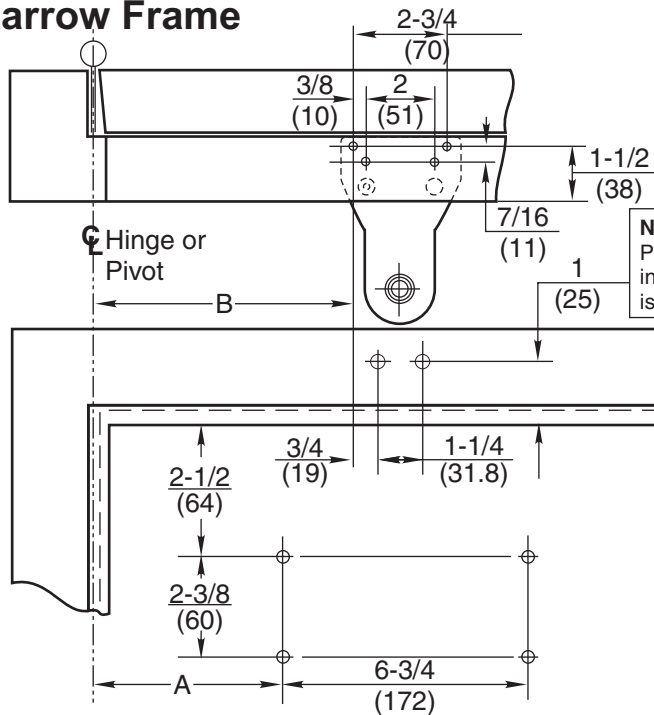
Standard Mount



Blade Stop Mount

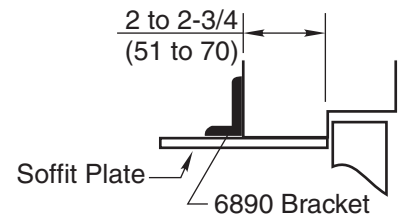


Narrow Frame

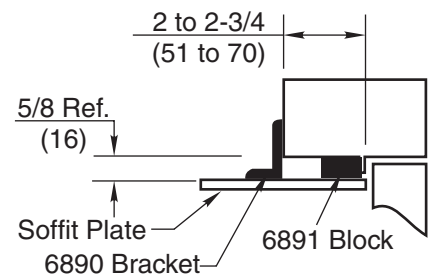


NOTE: For Blade Stop Mounting only.
 Prepare 2 holes for 6890 bracket after installing 6891 block. The 1" dimension is from the bottom of the 6891 block.

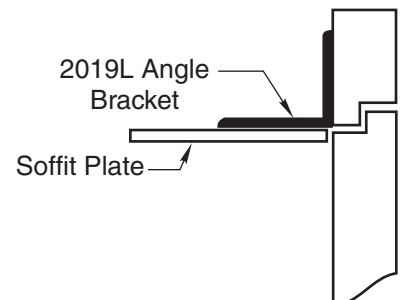
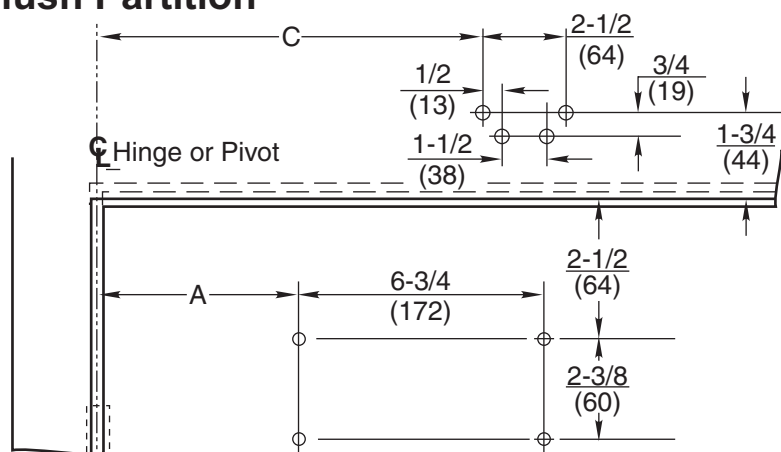
Narrow Frame Mount



Blade Stop Mount



Flush Partition



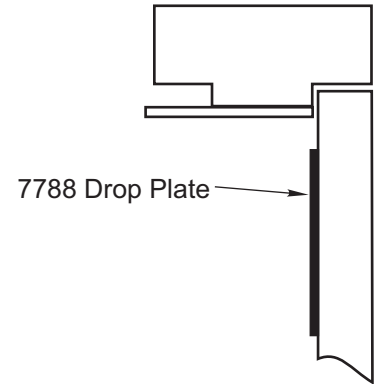
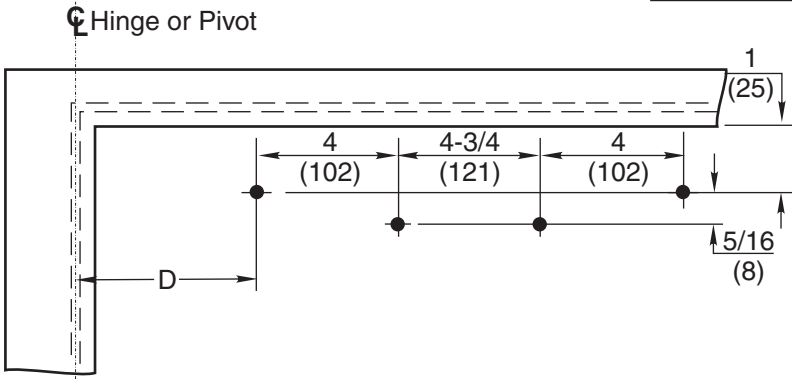
7788 Drop Plate Mounting Holes



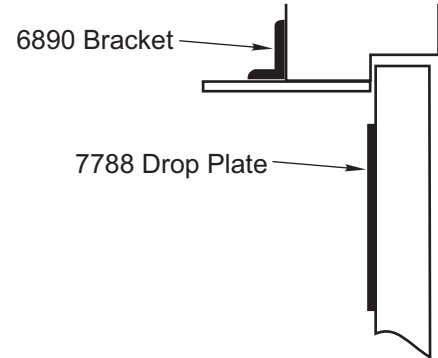
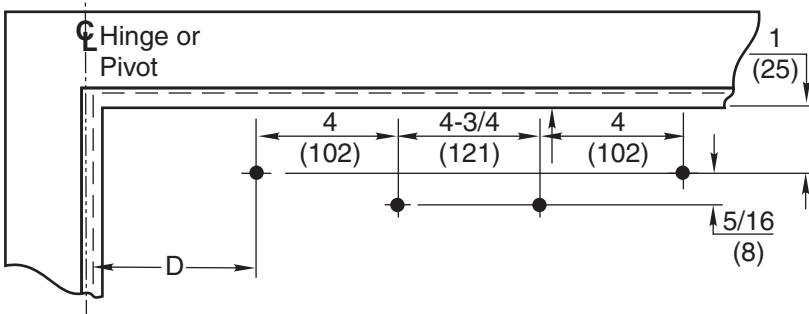
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Notes:
 Left Hand Door Shown.
 Same dimensions apply for Right Hand Door measured from centerline of pivot point.
 Dimensions are in inches (mm).
 See Chart below for A dimension values.

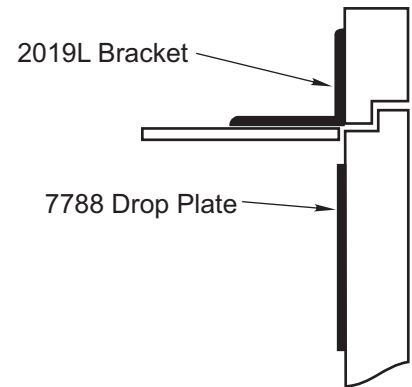
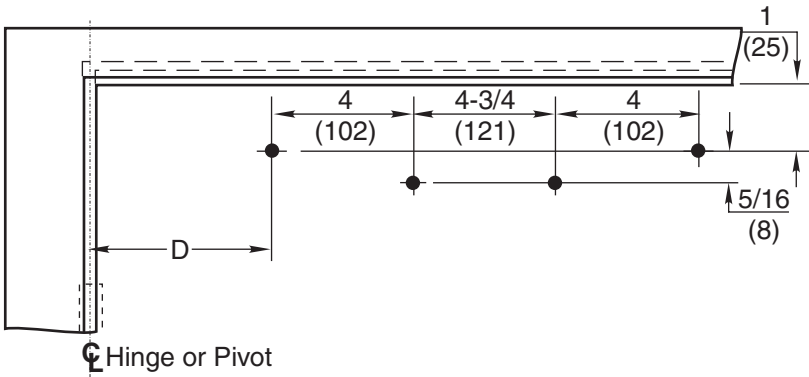
Standard Frame



Narrow Frame



Flush Partition



Installation Dimensions Chart										
Dim	Up to 90°	90°-95°	95°-100°	100° to 105°	105°-110°	110°-115°	115°-130°	130°-150°	150°-180°	
PR7500/ PR7500H/ PR770X/ PR770XH	8-1/2 (216)			7 (178)				6 (152)	5 (127)	
CLP-7500/ CLP-7500T/ CLP-770X/ CLP-770XT	9-7/8 (251)	9 (229)	8-3/8 (213)	7-5/8 (194)	7-1/8 (181)	6-1/2 (165)				

Unit Adjustment

Control Valve Adjustments

(See Figure 3.)

Closing Speed Controls (Figure 2A or 2B and 3.)

- Valve "S" Controls Sweep Range.
- Valve "L" Controls Latch Range.

Closing Power Control

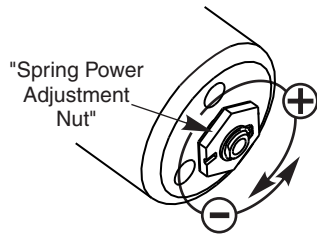
Figure 1

Power Adjustment Chart

Maximum Interior Door Size inches / (mm)	Maximum Exterior Door Size inches / (mm)	Turns from Zero
32 / (813)	28 / (711)	5
36 / (914)	34 / (864)	8-1/2
42 / (1067)	38 / (965)	11
52 / (1321)	42 / (1067)	13-1/2
60 / (1524)	48 / (1219)	16-1/2

NOTE: Maximum of 16-1/2 turns (360°) of Power Adjustment Nut.

Install closer per instructions with the proper pre-load applied to the arm then adjust spring power. The power adjustment will not work properly if the closer spring is not pre-loaded. To increase power, use 11/16" wrench to turn power adjustment nut clockwise. To decrease power, turn nut counter clockwise.

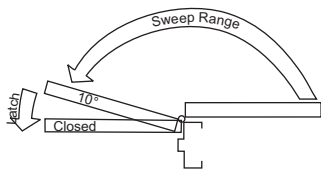


DO NOT use a power drill or driver to turn adjustment nut. This will damage closer and void warranty.

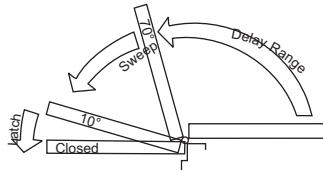


Closing Speed Controls

Figure 2



Standard Closing Cycle 2A

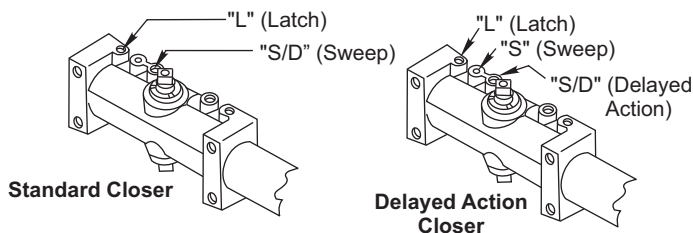


Delayed Action Closing Cycle 2B

Adjust Closing Speed Time to between 3 to 7 seconds from 90°. Use of the door by handicapped, elderly or small children may require greater closing time.

Closing Speed Controls

Figure 3



Do not force valves counter-clockwise out of closer body or a fluid leak will occur.

Slow
Fast

All Valves

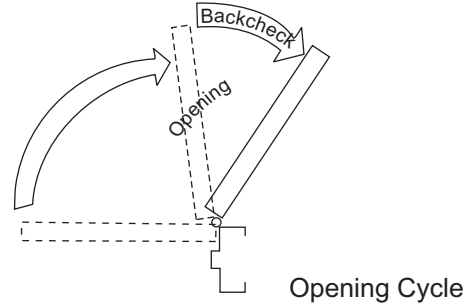


Opening Cycle

"Backcheck" valve controls the strength of cushioning in Backcheck Range. NEVER close this valve completely – it is not to provide a positive stop. (see Figure 4 and Figure 5).

Opening Door Controls

Figure 4



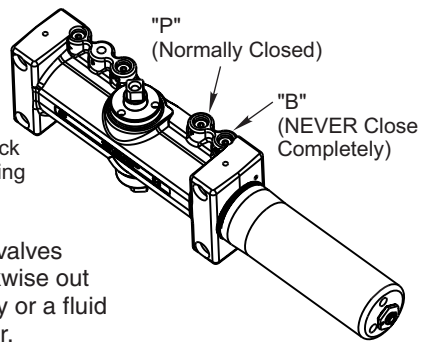
Backcheck

Figure 5

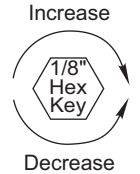
Backcheck Position



Open for backcheck later in door-opening cycle.



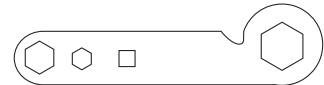
Backcheck Cushion Increase



Do not force valves counter-clockwise out of closer body or a fluid leak will occur.

Friction Hold-Open Feature

Hold door open to opening angle desired and tighten holder-adjustment-nut (wrench supplied) or use 1" Box or Open End wrench.

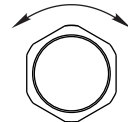


Thumbturn Hold-Open Feature

The Thumbturn Hold-Open feature is controlled by the knob located on the arm of the unit. Turning this knob clockwise will engage the Hold-Open mechanism and increase the Hold-Open force. Turning this knob counterclockwise will reduce the Hold-Open force and disengage the Hold-Open mechanism.

DECREASE - - INCREASE

Thumbturn Action (Units suffixed "T")



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