

SARO®

SARO GLOBAL®

Installation Instructions

Non Handed Door Closer Non Hold Open Models

Adjustable
(Sizes 1 thru 6)
BD1-6



CAUTION

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

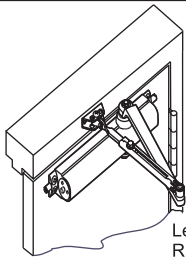
CAUTION

"DA" suffix (Delayed Action) is an optional feature.

NOTE: 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.

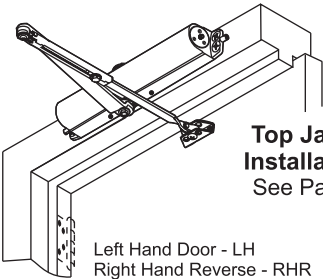
- Doors should be hung on ball bearing or anti-friction hinges.
- A separate door stop is recommended.
- Door and frame must be properly reinforced.
- Always adjust spring power before adjusting control.
- Adjust closing time speed between 3 and 7 seconds from 90° to 0°. Greater closing times may be required for elderly or handicapped.
- These door closers should NOT be installed on the exposed side (weather side) of exterior doors.

Regular Arm Installation See Page 2



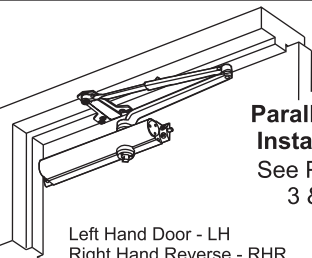
Left Hand Door - LH
Right Hand Reverse - RHR

Top Jamb Installation See Page 5



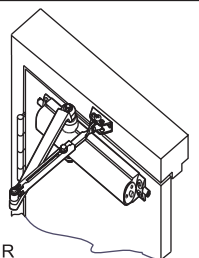
Left Hand Door - LH
Right Hand Reverse - RHR

Parallel Arm Installation See Pages 3 & 4



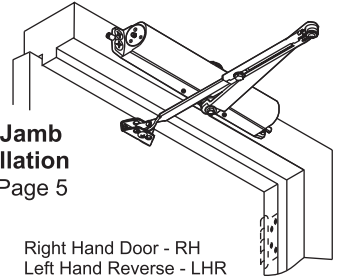
Left Hand Door - LH
Right Hand Reverse - RHR

Regular Arm Installation See Page 2



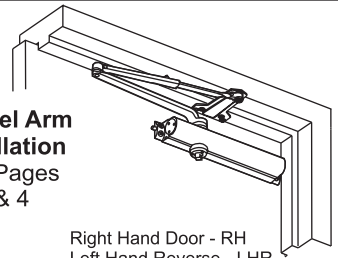
Right Hand Door - RH
Left Hand Reverse - LHR

Top Jamb Installation See Page 5

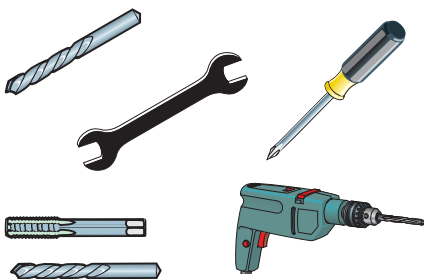


Right Hand Door - RH
Left Hand Reverse - LHR

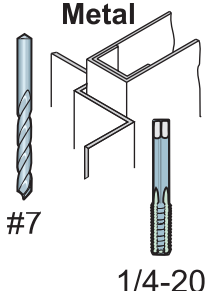
Parallel Arm Installation See Pages 3 & 4



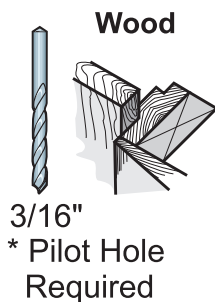
Right Hand Door - RH
Left Hand Reverse - LHR



Metal



Wood

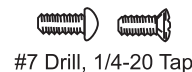


Self Drilling Screws Wood and Metal



For Wood drill 3/16 hole

Machine Screws



#7 Drill, 1/4-20 Tap

(Optional)

Sleeve Nut and Bolt

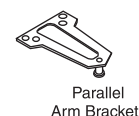
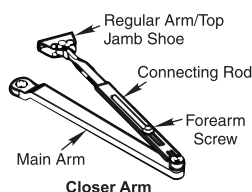
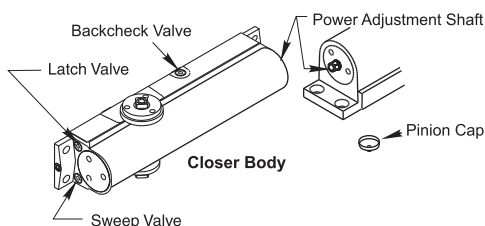


Drill 9/32 thru from Closer Side
3/8 Drill other side

Thru Bolt and Grommet Nut



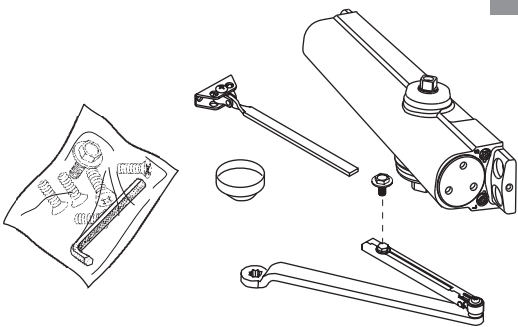
Drill 9/32 thru from Closer Side
3/8 Drill other Side



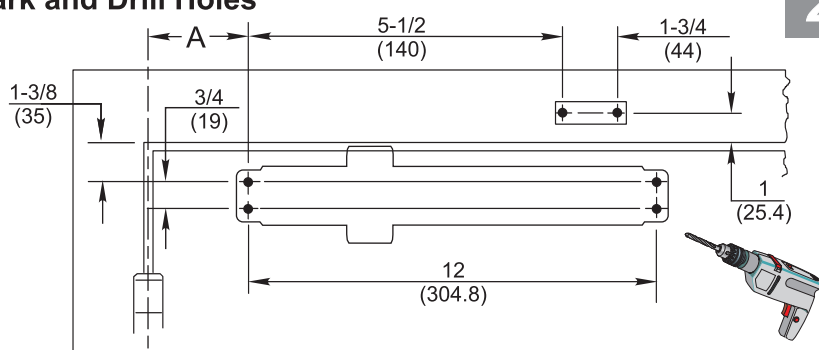
BD1-6

Non Hold Open Door Closers — Regular Arm

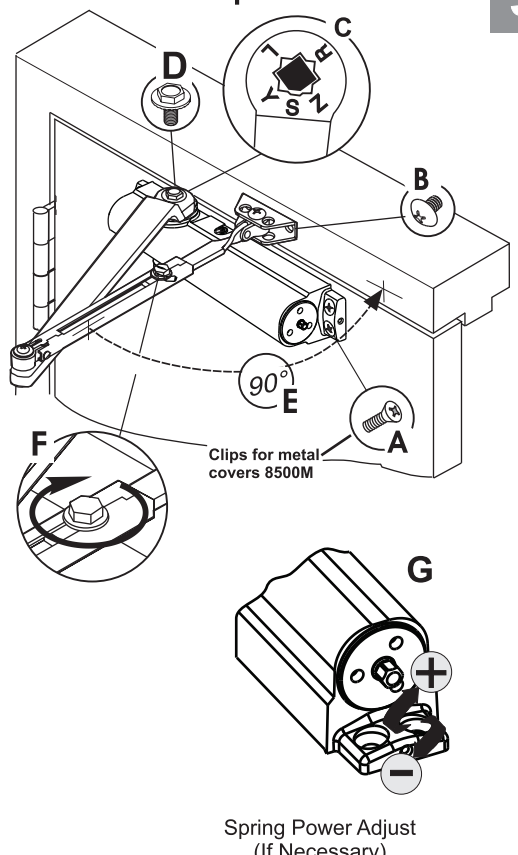
Parts



Mark and Drill Holes



Installation Sequence

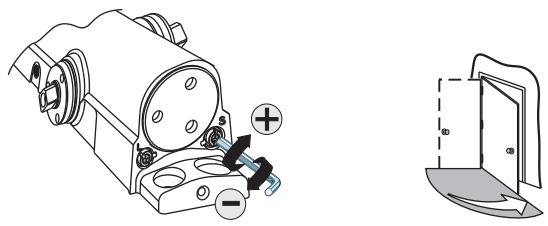


Right Hand Shown

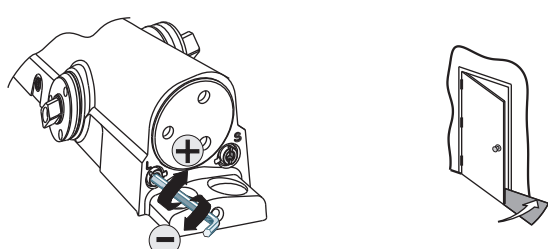
Opening	Dimension "A"
To 100°	7-1/2 (191)
101° to 130°	6 (152)
131° to *180°	4-1/2 (114)

* Door/Wall/Hardware/Jamb conditions permitting

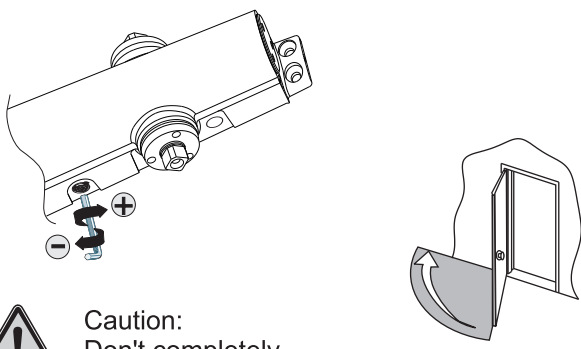
Sweep



Latch



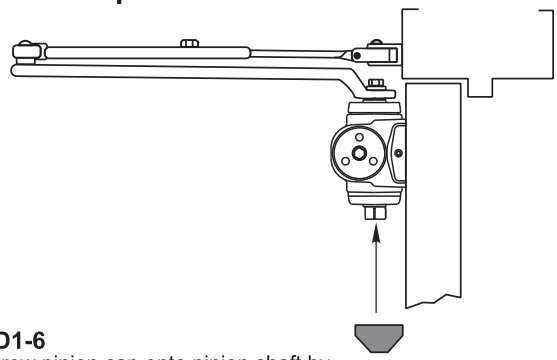
Backcheck





Caution:
Don't completely close valve

Pinion Cap

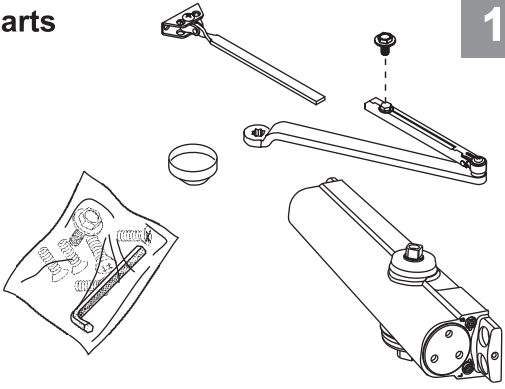


BD1-6
Screw pinion cap onto pinion shaft by hand or with a Phillips screw driver - DO NOT OVER TIGHTEN.

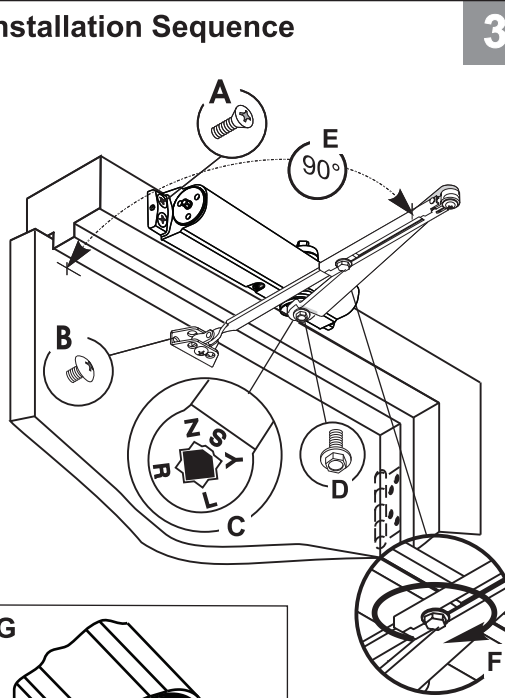
BD1-6

Non Hold Open Door Closers — Top Jamb Arm

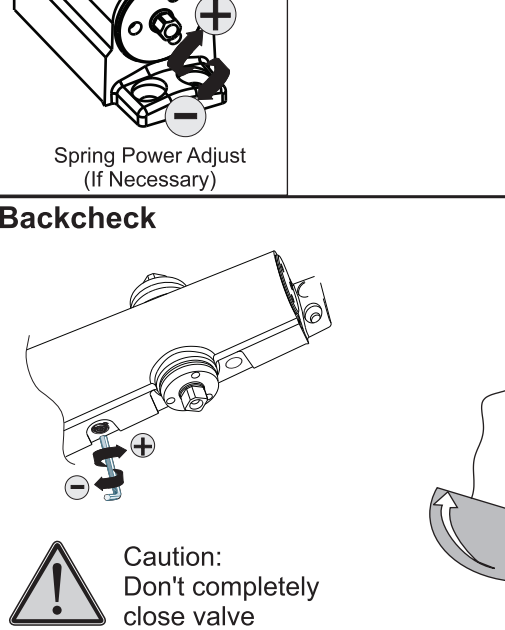
Parts



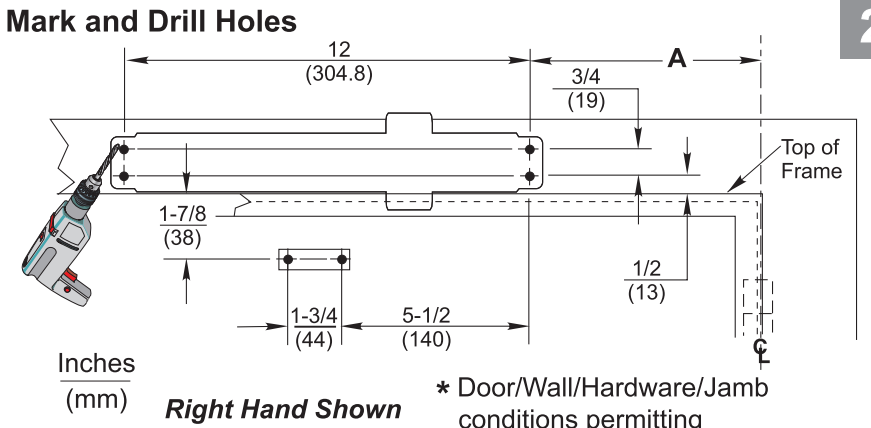
Installation Sequence



Backcheck



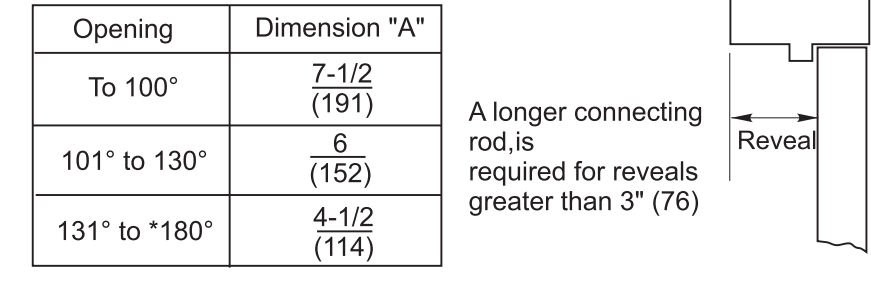
Mark and Drill Holes



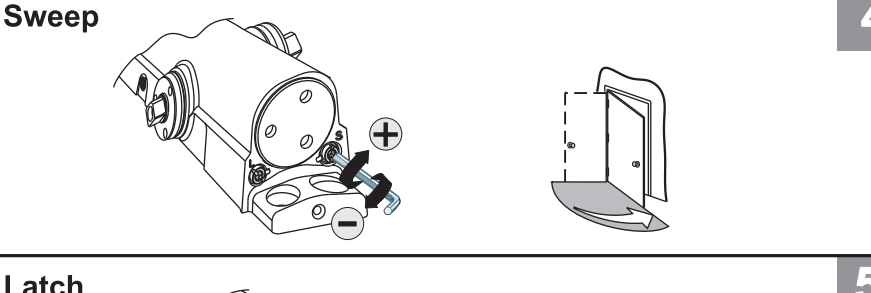
Opening	Dimension "A"
To 100°	7-1/2 (191)
101° to 130°	6 (152)
131° to *180°	4-1/2 (114)

A longer connecting rod, is required for reveals greater than 3" (76)

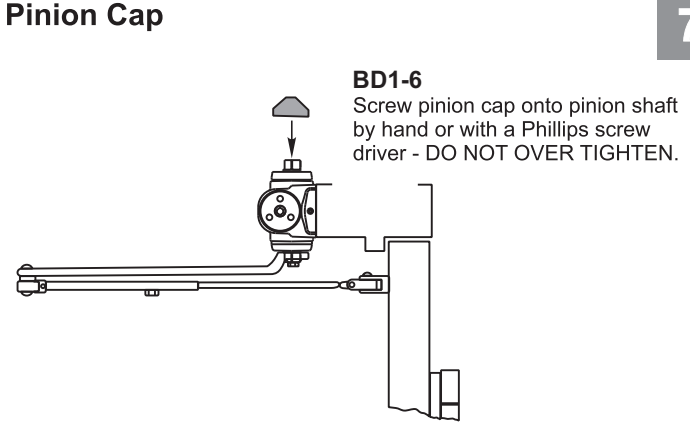
Sweep



Latch



Pinion Cap



BD1-6
Screw pinion cap onto pinion shaft by hand or with a Phillips screw driver - DO NOT OVER TIGHTEN.

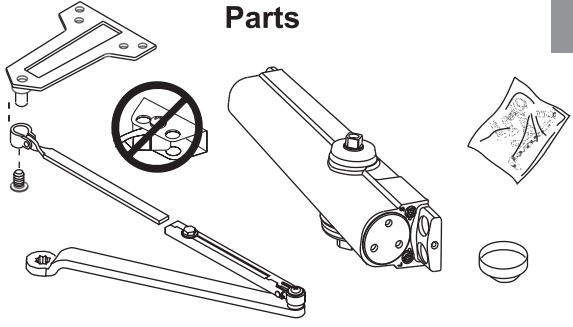
3

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BD1-6

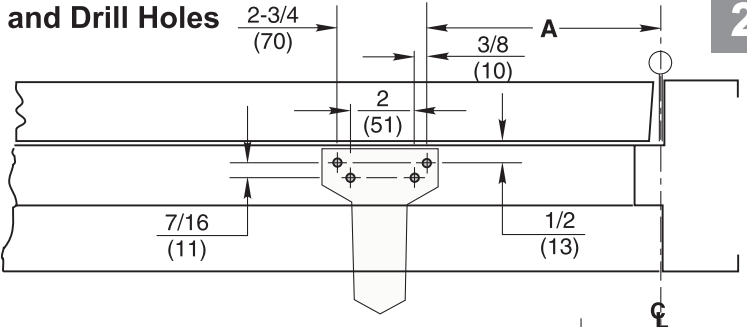
Non Hold Open Door Closers — Parallel Arm

Parts



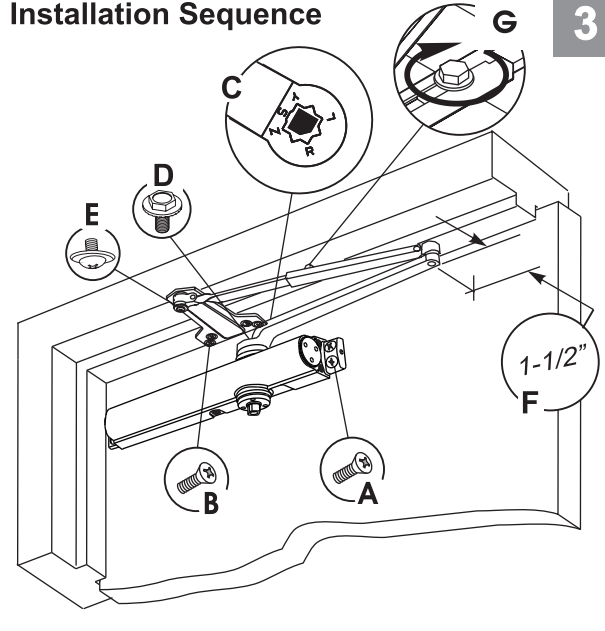
1

Mark and Drill Holes



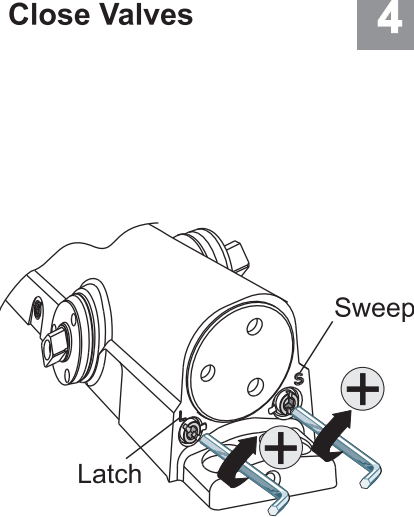
2

Installation Sequence



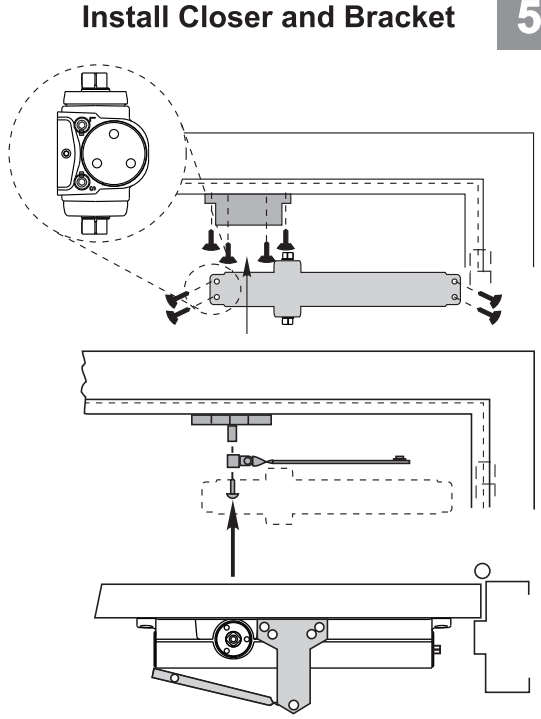
3

Close Valves



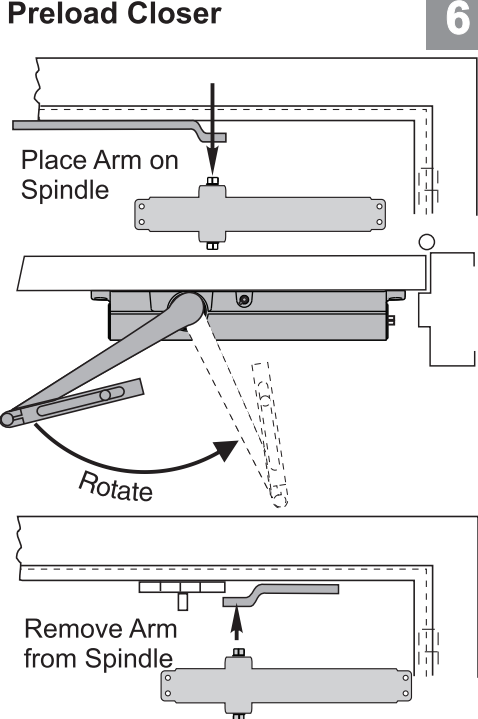
4

Install Closer and Bracket



5

Preload Closer



6

Door Opening	A	B
To 120°	9-1/2 (241)	3-3/4 (95)
*121° to 180°	7 (178)	1-1/4 (32)

4

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BD1-6

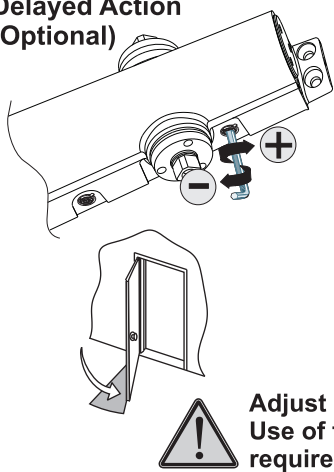
Non Hold Open Door Closers — Parallel Arm

7 Right Hand Door or Left Hand Door Flat Flat B	8 Open Valves Sweep Latch Caution: Don't remove valves	9 Assemble Arm
10 Arm Screw 1-1/2 (38)	11 Spring Power Adjust (If necessary) (Use 5/16" socket or adjustable wrench for this Adjustment)	12 Sweep 13 Latch
14 Backcheck Caution: Don't completely close valve	15 Pinion Cap BD1-6 Screw pinion cap onto pinion shaft by hand or with a Phillips screw driver - DO NOT OVER TIGHTEN.	

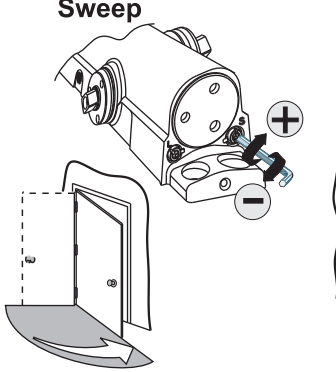
BD1-6

(Use 1/8" Hex Wrench for these Adjustments)

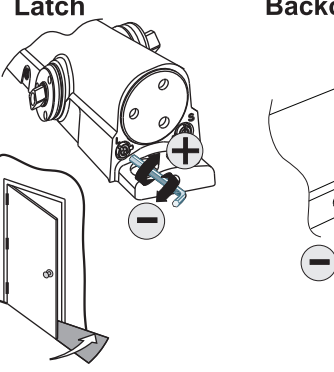
Delayed Action (Optional)



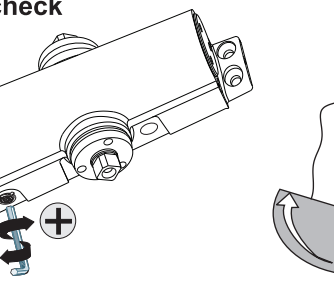
Sweep



Latch

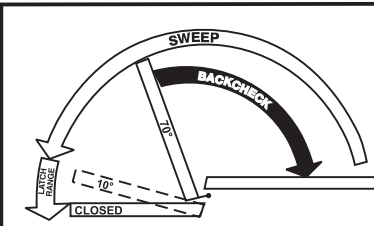


Backcheck

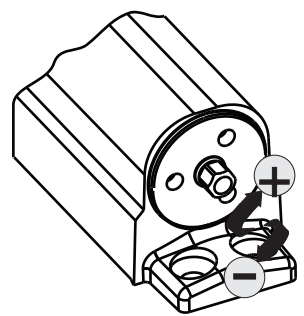


Adjust Closing Speed Time to between 3 to 7 seconds from 90°.
Use of the door by handicapped, elderly or small children may require greater closing time.





Spring Power Adjust



(Use 5/16" Socket or Adjustable Wrench for this Adjustment)

Adjustment Chart (BD1-6)

	DOOR	TYPE OF INST.	*	Number of Turns Required			
				MAXIMUM DOOR SIZE			
				32" (0.85M)	36" (0.90M)	42" (1.00M)	48" (1.20M)
BD1-6	INTERIOR	Regular Arm Top Jamb	FULL 360° TURNS OF 5/16 POWER ADJUSTMENT WRENCH	5	8	11	13
		Parallel Arm		7	10	13	16
	EXTERIOR	Regular Arm Top Jamb		7	10	13	16
		Parallel Arm		9	12	15	18

*20 FULL (360°) TURNS MAXIMUM AVAILABLE
Closer is shipped set at mid range setting = 10 turns

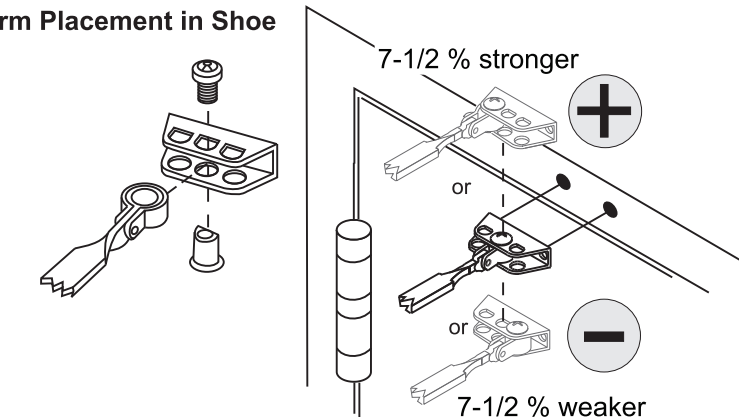


The closing force for BD1-6 door closers is adjustable from a size 1 to a size 6, as outlined in ANSI Standard A156.4. When these series of door closers are installed and adjusted to conform to ADA reduced opening force requirements (5 lbs max.) for interior doors, they may not have adequate closing force to reliably close and latch the door. Power adjustments charted on this page are recommended where possible, to ensure proper door control.



By law the Americans with Disabilities Act (ADA) may require that door closer installation comply with accessibility guidelines.

Arm Placement in Shoe



7-1/2 % stronger

7-1/2 % weaker