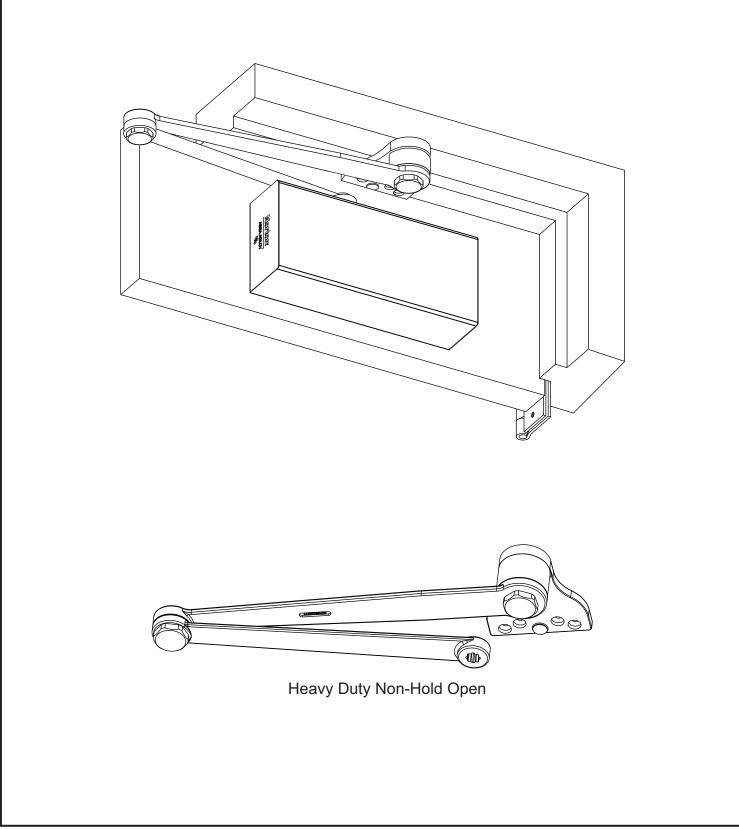


# 9510 Series Installation Instructions

Multi-Sized 1 thru 6 with Heavy Duty Non-Hold Open Parallel Rigid Offset Arm For use with Auxiliary Holders

80-9395-9518-020 (08-13)





## **IMPORTANT:**

- An improperly installed or incorrectly adjusted door closer may cause property damage or personal injury; and will void product warranty.
- To avoid personal injury, DO NOT DISASSEMBLE THIS DOOR CLOSER BODY.
- Door closers must be securely fastened to a properly reinforced door and frame with fasteners provided.
- An auxiliary door stop, BY OTHERS, is required for this Installation.

## BEFORE INSTALLING:

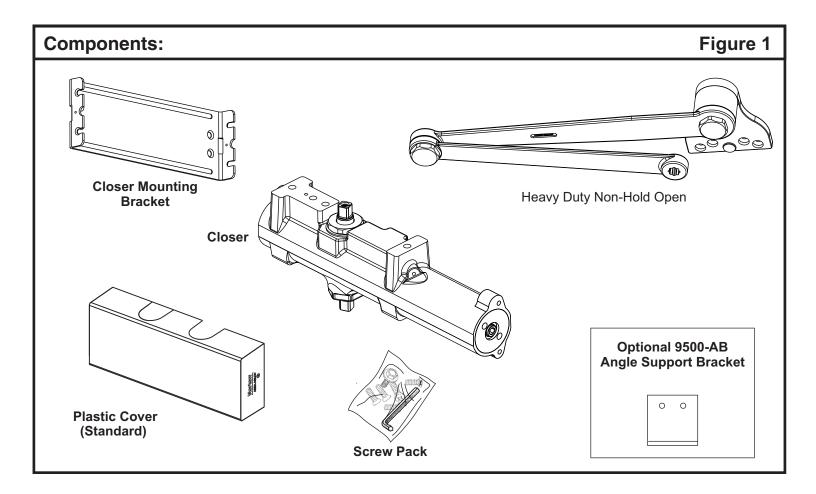


- The Americans with Disabilities Act (ADA) requires that doors having door closers have an opening force not to exceed 5 lbf.
- The door closer's power size adjustment feature may require adjustment to its lowest setting to comply with ADA opening force guidelines.
- ADA compliant closers are: 9510.

Size of Door & Door Closer						ERMINE	
Type of Installation	Interior	Exterior In-swinging	Exterior Out -swinging	Recommended Closer Size	**Max. Opening Force Ibs/f		D OF DOOR:
	2'4" 2'6"			1 2	8 14	RHR	LHR
Parallel Arm	3'0" 3'6" 4'0"		2'6" 3'0" *3'6"	- 3 4 5	16 22 24	LEFT HAND DOOR	RIGHT HAND DOOR
	4'6"		*4'0"	6	24 26		

\*\*NOTE: These forces are for standard templating with bearing type hinges and do not account for pressure differentials and draft.







	Preparation for Fasteners	Figure 2		
	Fasteners	Door or Frame	Drill-Sizes	
Standard	#40.14 Solf Drilling Serou	Aluminum or Metal	No drill required	
	#12-14 Self-Drilling Screw	Wood (see Note)	3/16" (4.30 mm)	
	1/4" - 20 machine screw	Metal	Drill: #7 (0.201" dia.) Tap:  1/4" - 20	
Optional	Sleeve nuts and bolts 1-9/32" (33) = 1-3/8" (35) Door Thk. 1-21/32 (42) = 1-3/4" (44) & Over Dr. Thk.	Hollow Metal	9/32" (7 mm) through; 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); 3/8" (9.5 mm) dia. x 3/8" (9.5 mm) deep on door opposite to closer	

Note: Wood doors/frames: drill 1/8" (3.2) pilot hole when using Self-Drilling Screws.

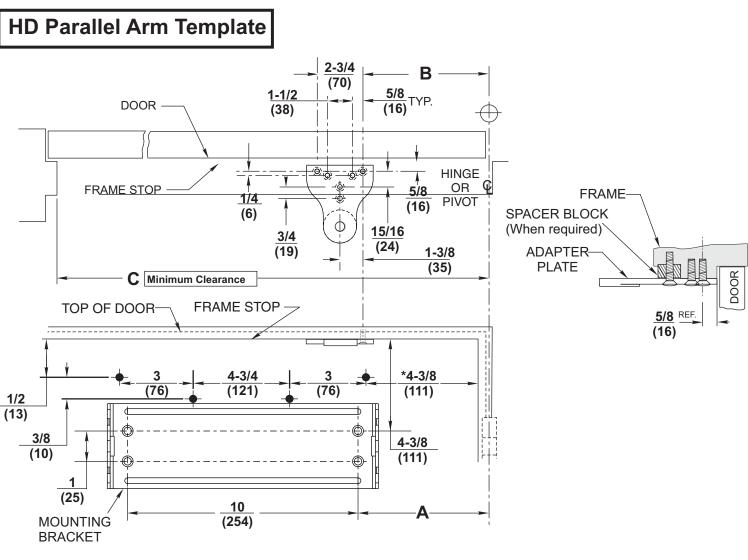
Always consult door/frame manufacturer for fastener compatibility with the material of their door/frame.

• It is recommended that the door, on which the door closer will be installed, be hung on ball bearing hinges. Door must swing freely.

• A separate door stop, supplied by others, is recommended to prevent damage to the door closer, closer arm; or to the door, frame or adjacent walls.

Door and Frame must be properly reinforced, or use of special fasteners employed, to prevent the mounting screws from pulling out.
All dimensions are given in inches with corresponding metric dimensions (millimeters) in parentheses.

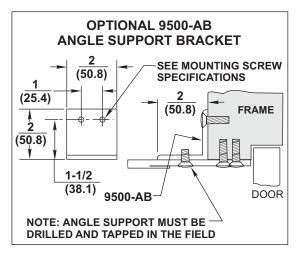




MAXIMUM OPENING	A Mounting Bracket	B Soffit Bracket	C Clearance	Application
90°	7-1/4 (184)	11 (279)	27 (686)	NON A.D.A.
180°	3-1/4 (83)	7 (178)	23 (584)	Ġ

### NOTES:

- Check hand of door, see page 2.
- Right Hand Application Shown. Left Hand Opposite.
- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed mounted level to ensure proper closer performance.
- Friction Hold Open arms are handed and not reversible. See handing marks on soffit plate.

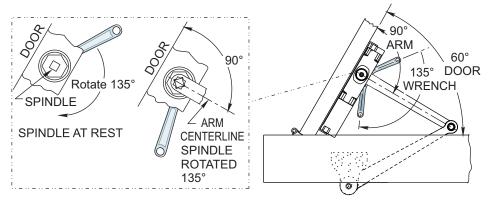




## **HD Parallel Arm Installation Sequence**

- Select angle of opening and use dimensions shown in template to locate 4 holes 

   on door for Closer Mounting Bracket and 6 holes on jamb for arm bracket (2 holes for optional angle support bracket).
   For applications that are different from above, a separate template will be supplied for door and frame preparation.
- Prepare door and frame for fasteners using "Preparation for Fasteners" chart, Figure 2, Page 4.
- Fasten Closer Mounting Bracket to door. Fasten optional drop plate to door, only if it is required for the door conditions.
- Install closer body with tube end away from hinge, with valves: Down for Left Hand door
   UP for Right Hand door.
- Attach arm to door frame.
- Connect arm to closer. Using hex wrench provided, turn closing speed and latching speed valves clockwise until completely closed. DO NOT OVER TIGHTEN. Open door to approximately 60°. Using wrench on underside of spindle, rotate spindle approximately 135° toward hinge edge of door. Install arm on spindle at an approximate 90° angle to door. Reopen CLOSING SPEED VALVE. Install and tighten 5/16 Hex Head Arm Washer and Screw Assembly.



#### ALL ANGLES SHOWN ARE APPROXIMATE

• Make closer adjustments using information on page 7, then install closer cover.



# **Unit Adjustment**



## Spring Power Adjustment

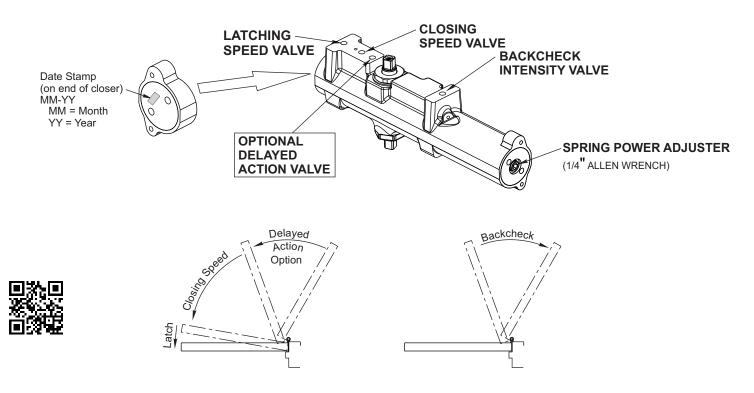
Locate spring power adjuster from Illustration below

Size 1 thru 6 Adjustment See Chart

## SPRING POWER ADJUSTMENT CHART

- All 9500 closers are factory set at an approximate Size 3.
- Adjust closer as necessary for door size using this chart.
- Readjustment may be required to suit prevailing conditions.

	Size of D	Spring Power	Equivalent Closer Size (Approx.)	
Interior	nterior Exterior In Swing			Adjustment No. Full Turns Clockwise
2 4" (712)	2 <b>'6"</b> (764)		2-7	3
2'6" (764)	3'0" (915)		7-11	4
3 0" (915)	3'6" (1067)	2'6" (764)	11-15	5
3'6" (1067)	4 <b>'</b> 0 <b>''</b> (1219)	3'0" (915)	15-17	6



### Closing Speed Valve (1/8 Allen Wrench Provided)

Factory preset for typical doors.

To adjust speed of door closing from fully open to a position 2" to 5" from closed, turn Closing Speed Valve CLOCKWISE to SLOW closing, COUNTER-CLOCKWISE to SPEED closing.

### Latching Speed Valve (1/8 Allen Wrench Provided)

#### Factory preset for typical doors.

After closing speed has been obtained, turn latching speed valve CLOCKWISE to SLOW latching or COUNTER-CLOCKWISE to SPEED latching for last 2" to 5" of door travel.

NOTE: Set combination of CLOSING and LATCHING speeds to between 3 and 7 seconds Use of door by handicapped, elderly or small children may require even greater closing time.

### Delayed Action Valve (1/8 Allen Wrench Provided)

Factory preset for typical doors.

Turn valve CLOCKWISE to SLOW closing, COUNTER-CLOCKWISE to SPEED closing. Delayed action may be adjusted from 20 seconds to 90 seconds, depending on degree of door swing. Delay occurs at the beginning of the door closing cycle from fully open down to 70°, where the closing speed valve then begins its control.

## **Backcheck Intensity Valve**

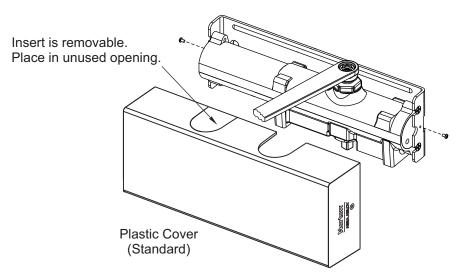
#### Factory preset for typical doors.

Turn valve COUNTER-CLOCKWISE to reduce backcheck or CLOCKWISE to increase backcheck. (Backcheck should be set to give a soft cushioning action, not a sudden stop.)

## **Installing Cover**



- Slip cover over closer.
- Hold tightly against Closer Mounting Bracket surface.
- Secure on each side with 6-32 x 1/4" screws.





ASSA ABLOY, the global leader in door opening solutions 80-9395-9518-020 (08-13)