EHD9000 DS/DST/SDS/SDST

Heavy duty parallel door saver (DS) and spring door saver (SDS) arms with optional hold open (DST/SDST)

Installation Instructions



OVERVIEW Surface closer components 2 З 6 5 9 11 10 12 6 6 ୢୄୄ 8 6 0 0 15 ۵ 0 a c 14 13 6 000 **©** ° ° 6 6 6 6 16 000 000 *DS arm components shown Pinion Cover Bumper stop 13 Heavy duty narrow frame Spring adjustment indicator Latch speed 8 14 bracket Backcheck Drop plate (optional) 9 15 3 Heavy duty blade stop spacer Backplate (optional) Advanced variable backcheck Spacer block 10 16 Delayed action Heavy duty parallel arm 11 Soffit plate Sweep speed 6 12

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1 Technical specifications

1.1 Overview



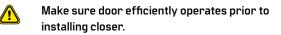
Sex nuts are required for attachment of components to unreinforced doors and to wood or plastic faced composite type fire doors, unless an alternative method is identified in the individual door manufacturer's listings.



Do not hammer arm onto spindle. Warranty will be void.



Adjust spring size by hand only. Do NOT use a drill or power tools. Warranty will be void.





<u>/!</u>\

Verify closer spring size prior to installation.

Know the swing of the door which is being installed prior to installation.

Maximum door opening degree is 110°.

Hold open range is from 85° or 110°.

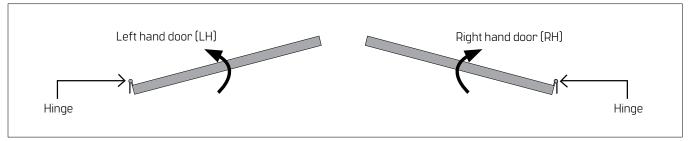
1.2 Tools recommended

Table 1

Drill bits:	#3 Phillips screwdriver		
Metal: 1 3/64" or #7 drill bit; 1/4-20 tap	3/16" flat head screwdriver		
Wood: 5/32" bit	Hex keys: 3mm, 5mm, 3/16"		
1/2" box wrench			

1.3 Handing the door

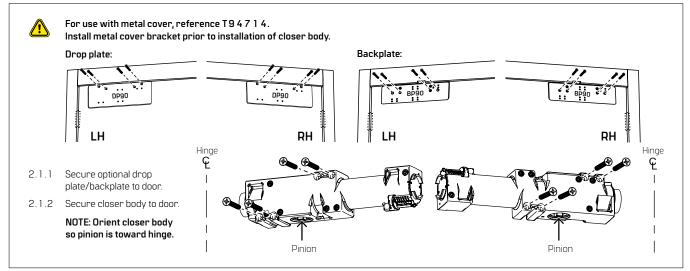




2 Instructions - parallel mount

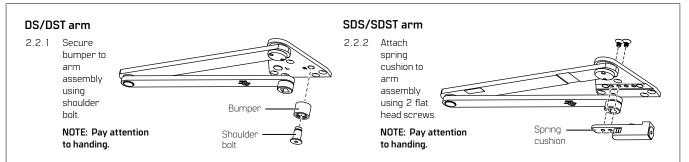
2.1 Installing drop plate/backplate (optional) and surface closer

Fig. 2



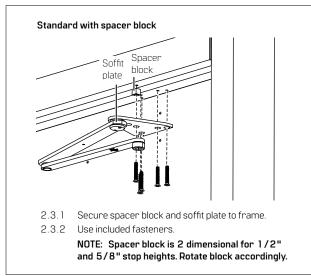
2.2 Securing bumper and spring cushion to arm assembly





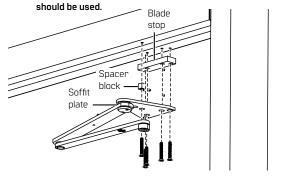
2.3 Securing soffit plate to frame: spacer block, blade stop

Fig. 4



With optional blade stop (BSHD)

- 2.3.3 Secure blade stop, spacer block, and soffit plate to frame.
- 2.3.4 Use included fasteners.
- 2.3.5 Install spacer block using 1/2" height. NOTE: If frame width is 4-1/2" or less, NFHD bracket



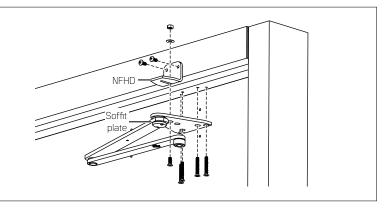
2.4 Securing soffit plate to frame: narrow frame bracket

Fig. 5

Fig.6

With optional heavy duty narrow frame bracket (NFHD)

- 2.4.1 Secure NFHD bracket and soffit plate to frame.
- 2.4.2 Use included fasteners.



2.5 Securing main arm to closer

Do not hammer arm onto spindle. <u>/!</u>\ Warranty will be void. Preload arm by placing wrench View from top of door 2.5.1 on bottom pinion. NOTE: Bottom pinion is not visible from top view 12 **O**H RH of door. 2.5.2 Rotate wrench 4 5° TOWARD View from top of door hinge edge of door. Þ RH 45 2.5.3 With main arm parallel to door, View from top of door place main arm on top pinion. RH Ø Main arm Hinge Pinion screw 2.5.4 Secure arm to closer with pinion Main arm screw. Pinion 45 Ç TH.

3 Adjustments



Confirm closer spring size prior to making any closing speed adjustments.



Do not back valve heads out beyond closer casting.



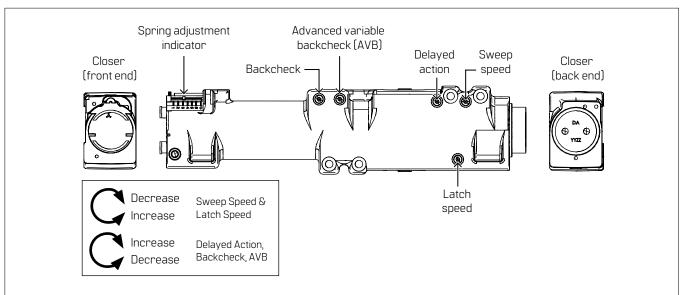
Maximum opening angle is 110°.

Door should close in 5 to 7 seconds from 90°.

Do not close valves completely.

3.1 Adjusting closing speeds: sweep, latch, backcheck, delayed action

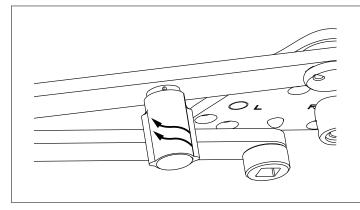
Fig.7



- 3.1.1 Adjust closing sweep speed: 9 0° to start of latch speed.
 Increase sweep speed: Turn valve counter-clockwise.
 Decrease sweep speed: Turn valve clockwise.
- 3.1.2 Adjust **closing latch speed:** 1.5° to close.
- Increase latch speed: Turn valve counter-clockwise.
 - Decrease latch speed: Turn valve clockwise.
- 3.1.3 Adjust opening backcheck: beginning at 8 0°.
 Increase resistance: Turn valve clockwise.
- Decrease resistance: Turn valve counter-clockwise.
- 3.1.4 Adjust closing delayed action: beginning at 6 0°.
 Increase delayed action: Turn valve clockwise.
 - Decrease delayed action: Turn valve counter-clockwise.

3.2 Adjusting thumb hold open (optional), setting hold open DST/SDST

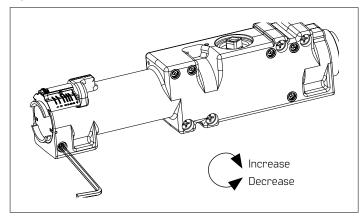
Fig.8



- 1.5.1 Twist thumb turn clockwise or counter-clockwise to rotate up or down, until desired hold open capacity is met.
 - Activate: Thumb turn detent will sit proud of connecting arm.
 - Engage hold open: Swing door open until thumb turn detent locks over ball on plate.
 - **Disengage hold open:** Pull door to unlock thumb turn detent from ball on plate.

3.3 Adjusting spring force

Fig. 9





Adjust spring size by hand only. Do NOT use a drill or power tools. Warranty will be void.

NOTICE: EHD 9016 is adjustable size 1 through 6. Supplied with a size 3.

NOTE: Barrier free openings:

Take an opening force reading from the pull on the door. If required, adjust the spring force to meet the barrier-free requirement. Depending on opening conditions, a door adjusted to meet barrier-free forces may not have sufficient power to reliably close and latch the door.

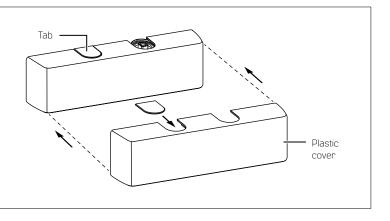
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Parallel mount									
	Classes size	Max door	Door width		Full turns				
Closer size	weight (lbs)	Interior	Exterior						
	1	50	2'6"		-55				
	2	80	3'	2'6"	-30				
	3	100	3'6"	3'	0				
EHD 9 0 1 6	4	125	3'	2'6"	+19				
	5	150	3'6"	3'	+37				
	6	200	4'	3'6"	+52				
	6+	200		4'	+70				

4 Installing covers

Fig. 1 O

- 4.1.1 Place tab in cover slot, opposite main arm.
- 4.1.2 Place cover over closer and snap into place.





For Complete Online Instructions Visit: https://dhwsupport.dormakaba.com/hc/en-us For assistance or warranty information: Call 1-800-392-5209 or visit https://dhwsupport.dormakaba.com/hc/en-us



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