## EHD9000 FH/FHJ/FHP

Friction hold open for regular, top jamb, and parallel mounts Installation Instructions



#### **OVERVIEW Components List Regular mount** З Closer body - 7 Ŷ-5 Main arm 2 6 4 Bar and shoe 3 H Pinion RH Pinion screw Top jamb mount Pan head screws 6 Connecting arm screw and nut 6 2 Flat head screws 8 5 7 З 9 PA shoe pan head screws RH 10 PA bracket **Parallel mount** PA bracket screws 11 11 5 7 10 3 С 8

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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.



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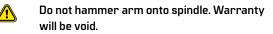
Maximum 7-1/4" reveal on top jamb mounts for 150° degree openings.

Hold open range is from 3 0° to 1 4 0° with hold open kit.

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



Make sure door efficiently operates prior to installing closer.



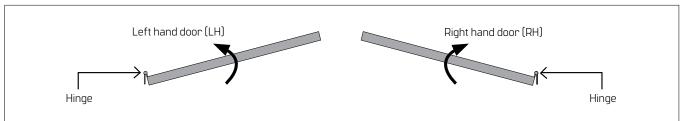
Adjust spring size by hand only. Do NOT use a drill or power tools. Warranty will be void.

## 1.2 Tools recommended

#### Table 1

Drill bits:	#3 Phillips screwdriver		
<b>Metal:</b> 13/64" or #7 drill bit; 1/4-20 tap	3/16" flat head screwdriver		
Wood: 3/8" and 5/32" bit	Hex Keys: 3mm, 5mm, 3/16"		
1/2" box wrench	1 O" adjustable wrench		

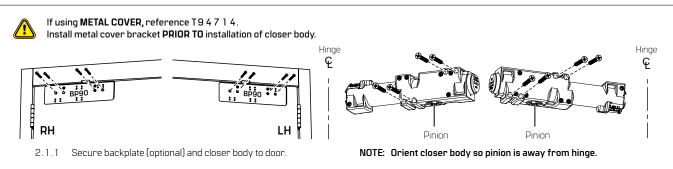
## 1.3 Handing the door



## 2 Instructions - regular mount

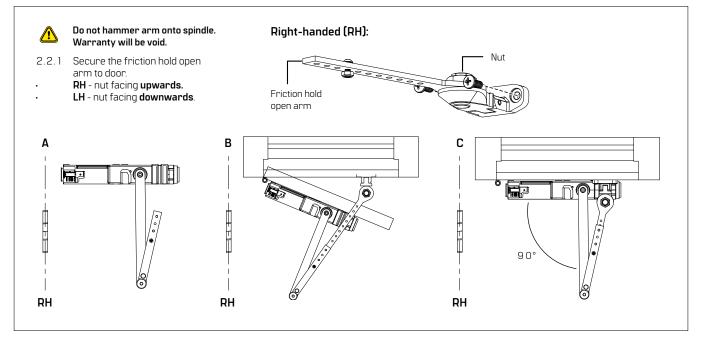
2.1 Installing the surface closer and backplate (optional)

#### Fig.2

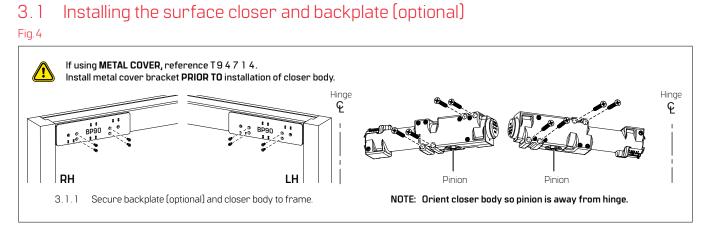


## 2.2 Installing main arm

#### Fig.3

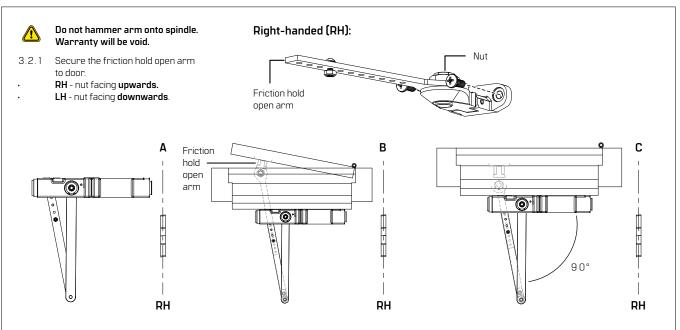


## 3 Instructions - top jamb mount



### 3.2 Installing main arm

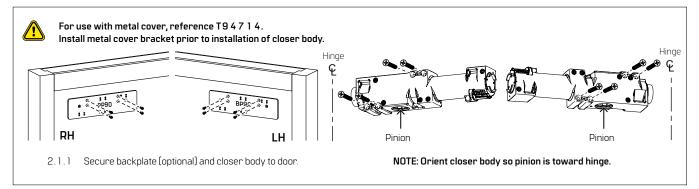
#### Fig.5



## **4** Instructions - parallel mount

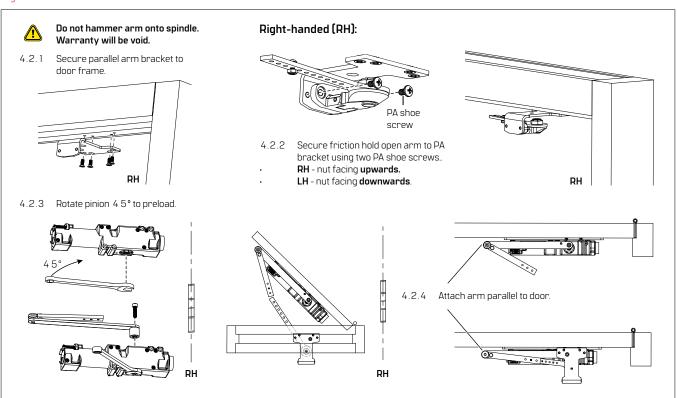
4.1 Installing the surface closer and backplate (optional)

#### Fig.6



## 4.2 Installing main arm





## 5 Adjustments

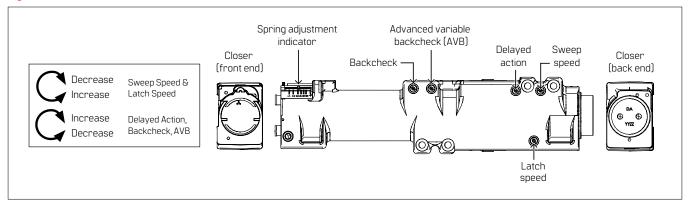


Confirm closer spring size prior to making any closing speed adjustments. Do not back valve heads out beyond closer casting.

Door should close in 5 to 7 seconds from 90°. Do not close valves completely.

### 5.1 Adjusting closing speeds: sweep, latch, backcheck, delayed action (if applicable)

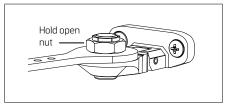
Fig.8



- 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.
- $\label{eq:alpha} 3.1.3 \quad \mbox{Adjust} \mbox{ opening backcheck: } \mbox{beginning at } 8 \ 0^{\circ}\!.$
- 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.

## 5.2 Adjusting optional hold open

Fig.9



- 5.2.1 Loosen hold open nut.
- 5.2.2 Open door 3° 5° before desired hold open position.
- 5.2.3 Tighten hold open nut until secure.

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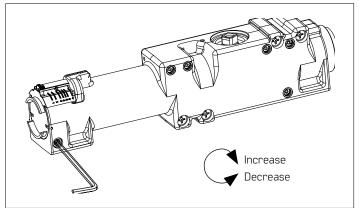
- 5.2.4 Pull door closed.
- 5.2.5 Open door to hold open position.

NOTE: Do not push door beyond hold open position. An auxiliary stop must be used to limit door swing.

5.2.6 **To disengage:** Pull door closed until hold open releases and door closer takes over.

### 5.3 Adjusting spring force

Fig. 1 0

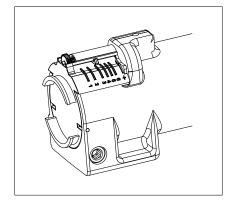


#### Adjust spring size by hand only. Do NOT use a drill or power tools. Warranty will be void.

NOTICE: EHD 90 1 6 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.



Regular and Top jamb mount								
	Closer size	Max door weight (lbs)	Door width		E.I.I.A.			
			Interior	Exterior	Full turns			
EHD 90 1 6	1	ADA	Ŀ.		-55			
	2	100	2'6"		-30			
	3	125	3,	2'6"	0			
	4	150	3'6"	3'	+19			
	5	200	4'	3'6"	+37			
	6	250		4'	+52			
	6+	250		4'	+70			

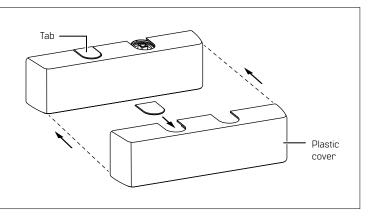
#### Parallel mount

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

# 6 Installing covers

Fig. 1 1

- 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



Español

Para ver las instrucciones en línea, visite: https://dhwsupport.dormakaba.com/hc/en-us Para recibir asistencia o información sobre la garantía: Llame al 1-800-392-5209 o visite https://dhwsupport.dormakaba.com/hc/en-us



Francais

Pour obtenir des instructions complètes en ligne, consultez le site : https://dhwsupport.dormakaba.com/hc/en-us Pour obtenir de l'aide ou des renseignements sur la garantie : Composez le 1-800-392-5209 ou rendez-vous sur le site https://dhwsupport.dormakaba.com/hc/fr-ca