

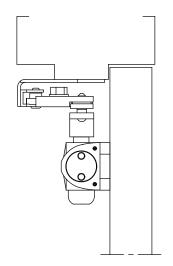
FOR 1/4-20 MACHINE SCREWS USE 7/32" DRILL FOR No.14 WOOD SCREWS USE 5/32" DRILL DPK FASTENERS DRILL 1/8" PILOT HOLE FOUR (4) HOLES IN FRAME FOR PA BRACKET

# 2 1/4" 12" [57] FOR 1/4-20 MACHINE SCREWS USE 7/32" DRILL FOR No.14 WOOD SCREWS USE 5/32" DRILL DPK FASTENERS DRILL 1/8" PILOT HOLE FOR SEX NUTS USE 3/8" DRILL FOUR (4) HOLES IN DOOR FOR CLOSER

FACE OF STOP

#### NOTES:

- 1. DO NOT SCALE DRAWING.
- 2. DIMENSIONS ARE IN INCHES/(MM).
- 3. LEFT HAND DOOR SHOWN.
- 4. CAUTION: 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.
- 5. MAX. OPENING IS 180°.
- 6. OPTIONAL DPK FASTENERS (DPK86) FOR STEEL DOOR & FRAME ONLY.



DOOR CLOSER MODELS: 8616 AFP OR ARP (NHO) PARALLEL ARM INSTALLATION (PUSH SIDE MOUNT)

[76]



# 8616 AF/AFJ/AFP

Flat arm for regular, top jamb and parallel mounts No hold open

## **Installation instructions**

08279001 - 01-2021

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# 1 Technical specifications

#### 1.1 Overview



Caution: 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.



Maximum door opening degree is 180°.



Maximum 4-1/2" reveal on top jamb mounts for 180° degree openings.



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



Verify closer spring size prior to installation.



Make sure door efficiently operates prior to installing closer.

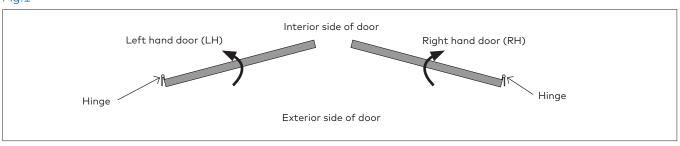
#### 1.2 Tools recommended

#### Table 1

Drill bits:	#3 Phillips screwdriver	
Metal: 7/32" drill bit; 1/4-20 tap	3/16" flat head screwdriver	
Wood: 3/8" and 5/32" bit	5mm hex key	
1/2" box wrench	7/16" box wrench	

## 1.3 Handing the door

Fig.1

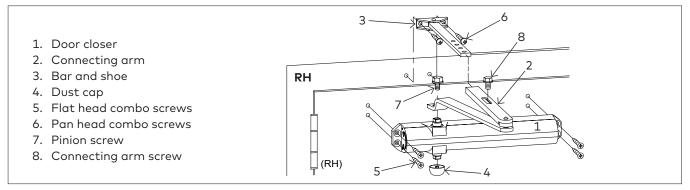


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# 2 Installation - regular mount

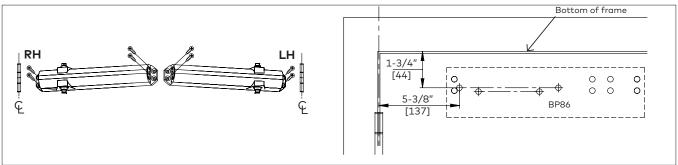
## 2.1 Surface closer system

Fig.2



## 2.2 Installing the surface closer and backplate (optional)

Fig.3

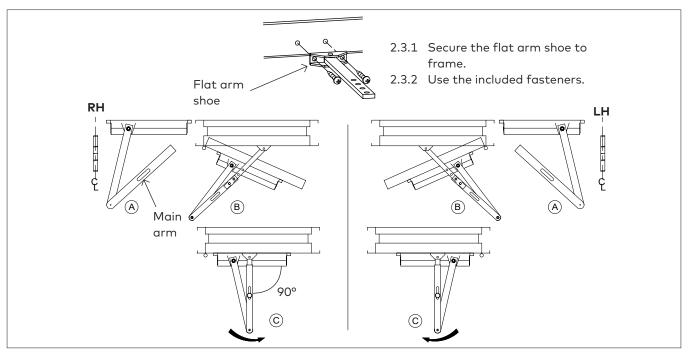


NOTE: Orient pinion toward the hinge.

2.2.1 Secure closer body and/or backplate to door.

## 2.3 Installing main arm

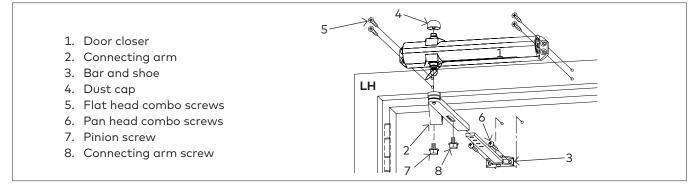
Fig.4



# 3 Instructions - top jamb mount

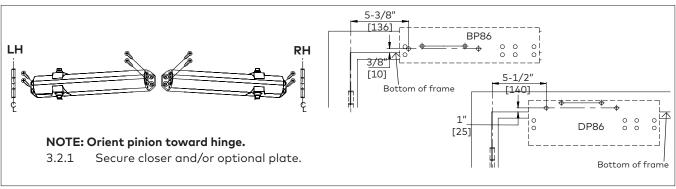
## 3.1 Surface closer system

Fig.5



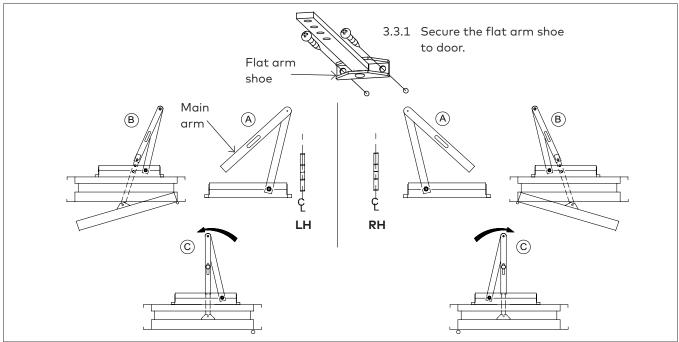
### 3.2 Installing the surface closer and (optional) plate

Fig.6



## 3.3 Installing main arm

Fig.7



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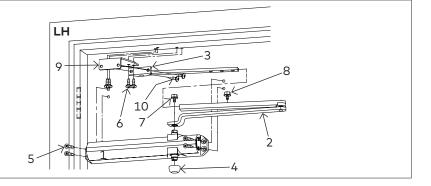


# Instructions - parallel mount

#### Surface closer system

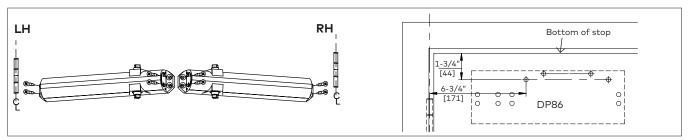
#### Fig.8

- 1. Door closer
- 2. Connecting arm
- 3. Bar and shoe
- 4. Dust cap
- 5. Flat head combo screws
- 6. Pan head combo screws
- 7. Pinion screw
- 8. Connecting arm screw
- 9. PA bracket
- 10. PA shoe screws



#### Installing the surface closer and drop plate (optional) 4.2

#### Fig.9

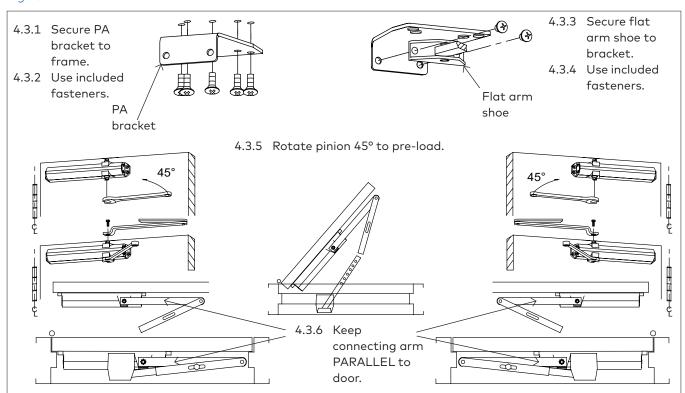


NOTE: Orient pinion away from hinge.

4.2.1 Secure closer body and/or drop plate to door.

#### Installing PA bracket and main arm 4.3

Fig.10



# 5 Adjustments

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

Do not back valve heads out beyond closer casting.

Backcheck positioning MUST be turned "ON" for parallel arm applications.

⋀ Backcheck position will advance approximately 15°.

↑ Check delayed action (DEL) function if supplied.

Maximum opening angle is 180°.

<u> </u>Do not close valves completely.

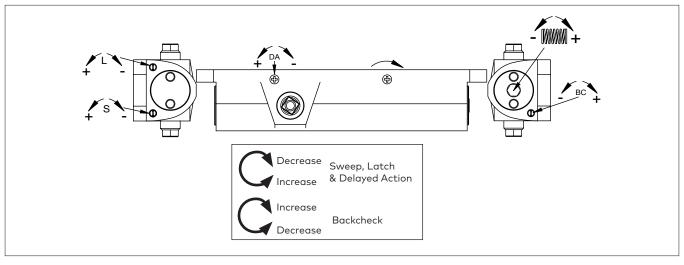
Ball bearing hinges and pivots should always be used.

8616 meets 5lb interior barrier-free requirements.

If necessary, adjust closer spring and test pull forces until proper forces are obtained.

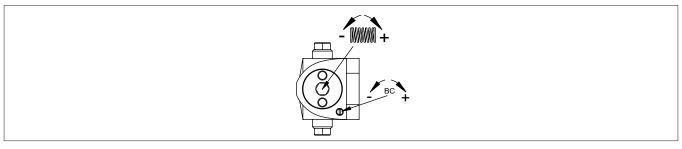
## 5.1 Adjust closing speeds: sweep, latch, backcheck, delayed action

Fig.11



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## 5.2 Fig.12 Adjust spring force



Regular and top jamb mounts								
	Closer size	Max door weight (lbs)	Door width		- Full turns			
			Interior	Exterior	Full turns			
	2	100	2'6"		-19			
	3	125	3'	2'6"	-11			
8916	4	150	3'6"	3'	0			
	5	200	4'	3'6"	+5			
	6	250		4'	+13			
Parallel mount								
	3	100	2'6"		-11			
8916	4	125	3'	2'6"	0			
9410	5	150	3'6"	3'	+5			
	6	200	4'	3'6"	+13			

# **Install covers**

Fig.13

