8600 PH/PHJ/PHP

Plunger hold open for regular, top jamb and parallel mounts

Installation instructions

08279671 - 10-2019





Table of contents

1	Technical specifications	3
1.1	Overview	3
1.2	Tools recommended	
1.3	Handing the door	3
2	Installation - regular mount	4
2.1	Surface closer system	4
2.2	Installing the surface closer and	
	(optional) backplate	4
2.3	Installing connecting arm	4
3	Instructions - top jamb mount	5
3.1	Surface closer system	5
3.2	Installing the surface closer and	
	(optional) plate	5
3.3	Installing connecting arm	5
4	Instructions - parallel mount	6
4.1	Surface closer system	6
4.2	Installing the surface closer and	
	(optional) drop plate	6
4.3	Installing PA bracket and connecting arm	6
5	Adjustments	7
5.1	Adjust closing speeds: sweep, latch, backcheck,	
	delayed action	7
5.2	Adjust hold open (optional)	
5.3	Adjust spring force	8
6	Install covers	8

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.



Hold open range is from 30° to 140° with optional hold open kit.



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.

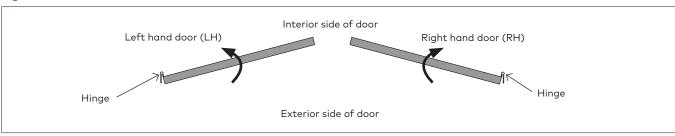
1.2 Tools recommended

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" & 7/16" box wrench	

1.3 Handing the door

Fig.1



8600 Surface Applied Closers 08279761 10-2019

2 Installation - regular mount

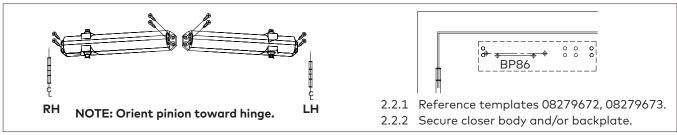
2.1 Surface closer system

Fig.2

1. Door closer
2. Plunger hold open arm
3. Dust cap
4. Flat head combo screws
5. Pan head combo screws
6. Pinion screw

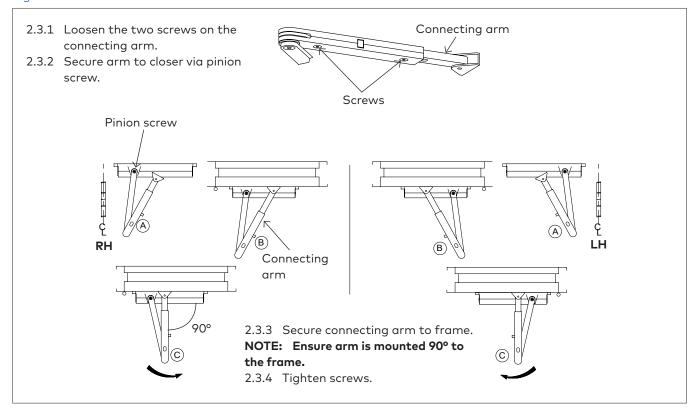
2.2 Installing the surface closer and (optional) backplate

Fig.3



2.3 Installing connecting arm

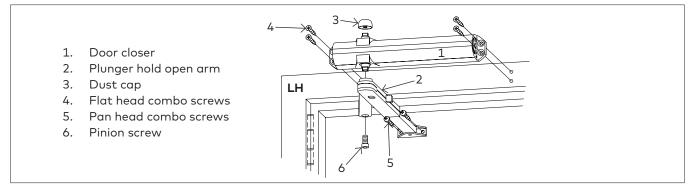
Fig.4



3 Instructions - top jamb mount

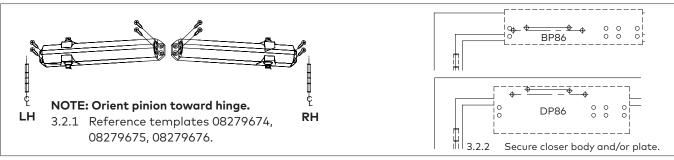
3.1 Surface closer system

Fig.5



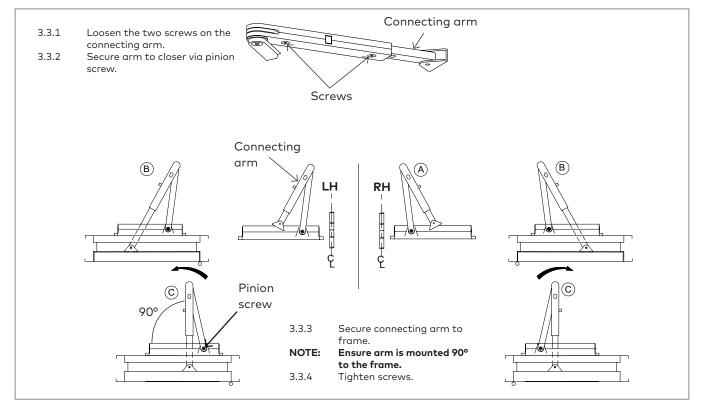
3.2 Installing the surface closer and (optional) plate

Fig.6



3.3 Installing connecting arm

Fig.7

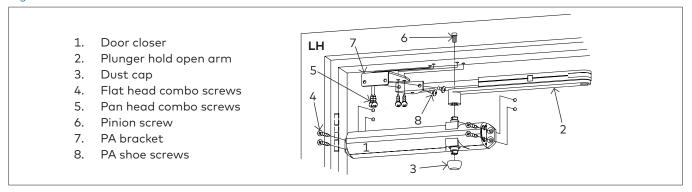


8600 Surface Applied Closers 08279761 10-2019

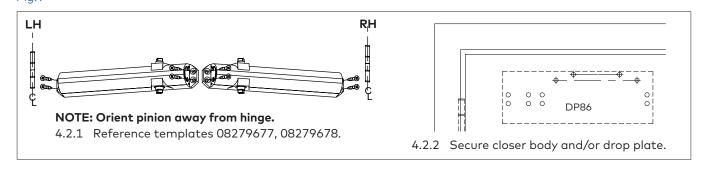
4 Instructions - parallel mount

4.1 Surface closer system

Fig.8

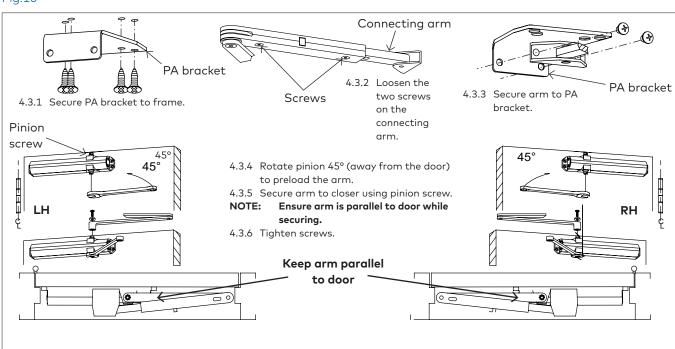


4.2 Installing the surface closer and (optional) drop plate Fig.9



4.3 Installing PA bracket and connecting arm

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°.

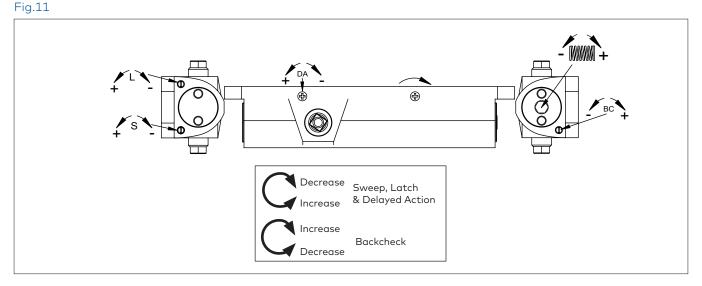
<u> No not close valves completely.</u>

Ball bearing hinges and pivots should always be

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



5.2 Adjust hold open (optional)

Cam Roller

ON/OFF button (Shown "ON")

Cam screw

Teeth meshed with mating part

Teeth NOT meshed with mating part

Adjust hold open force:

- 5.2.1 Loosen cam screw with 6mm hex key.
- 5.2.2 Orient cam so detent aligns with roller.
- 5.2.3 Push button to "ON" position to engage roller in detent.
- 5.2.4 Open door to desired hold open position.

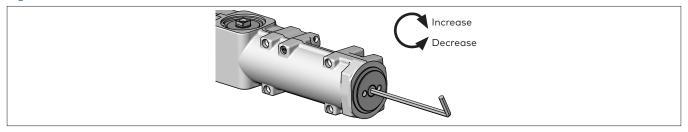
- 5.2.5 Ensure that teeth on cam mesh with mating part. If not, move the door back and forth slightly until meshing occurs.
- 5.2.6 Tighten cam screw securely.
- 5.2.7 To disengage hold open, pull door until hold open releases allowing the door to close.

NOTE: Failure to ensure teeth are meshing will damage the hold open function.

8600 Surface Applied Closers 08279761 10-2019 7

5.3 Adjust spring force

Fig.13



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			
	4	150	3'6"	3'	0			
	5	200	41	3'6"	+5			
	6	250		4'	+13			
Parallel mount								
	3	100	2'6"		-11			
	4	125	3'	2'6"	0			
	5	150	3'6"	3'	+5			
	6	200	4'	3'6"	+13			

6 Install covers

Fig.14

