8600 PH/PHJ/PHP

Plunger hold open for regular, top jamb and parallel mounts

Installation instructions

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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 $180^{\circ}\,degree$ 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.

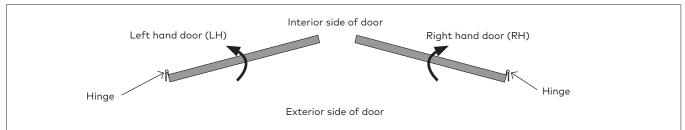
1.2 Tools recommended

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

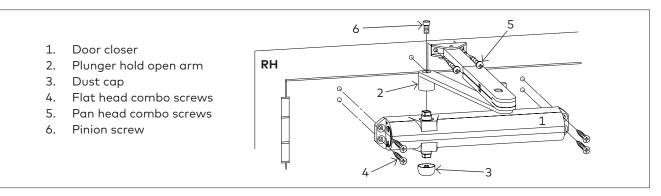


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2 Installation - regular mount

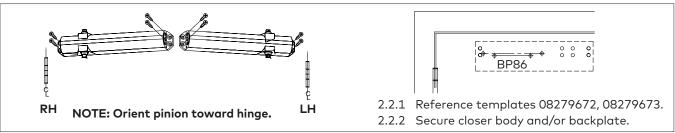
2.1 Surface closer system

Fig.2



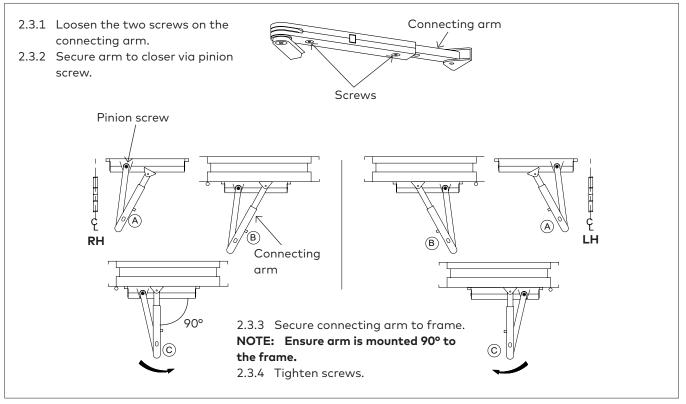
2.2 Installing the surface closer and (optional) backplate





2.3 Installing connecting arm

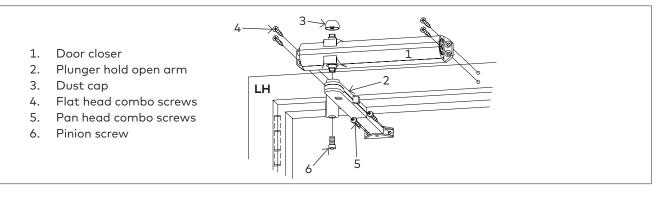




3 Instructions - top jamb mount

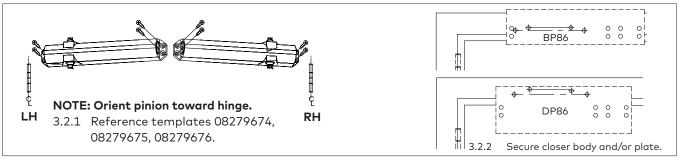
3.1 Surface closer system

Fig.5



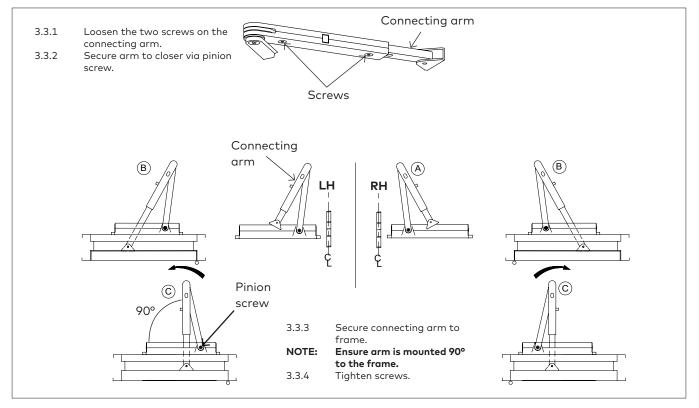
3.2 Installing the surface closer and (optional) plate

Fig.6



3.3 Installing connecting arm

Fig.7

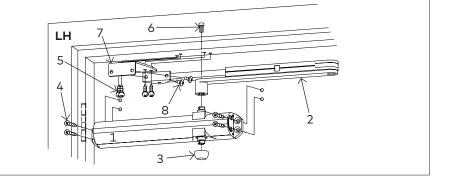


4 Instructions - parallel mount

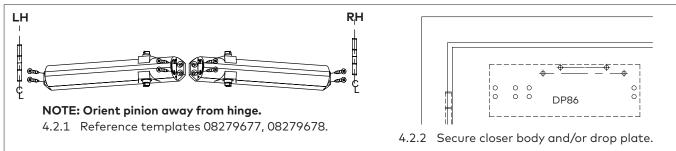
4.1 Surface closer system

Fig.8

- 1. Door closer
- 2. Plunger hold open arm
- 3. Dust cap
- 4. Flat head combo screws
- 5. Pan head combo screws
- 6. Pinion screw
- 7. PA bracket
- 8. PA shoe screws

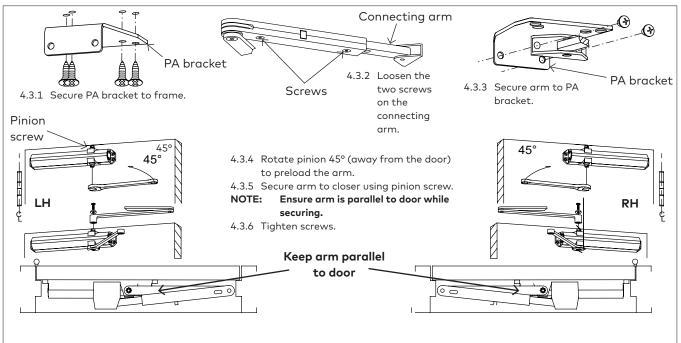


4.2 Installing the surface closer and (optional) drop plate $_{\rm Fig.9}$



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°.

🔨 Door should close in 3 to 6 seconds from 90°.

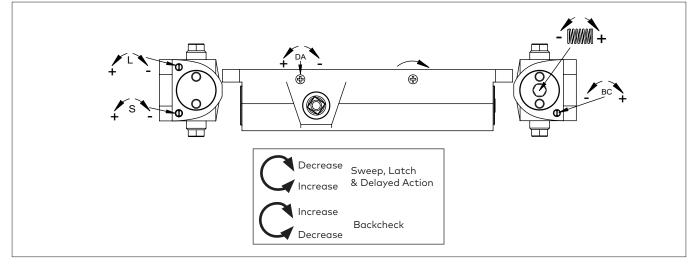
Do not close valves completely.

Ball bearing hinges and pivots should always be used.

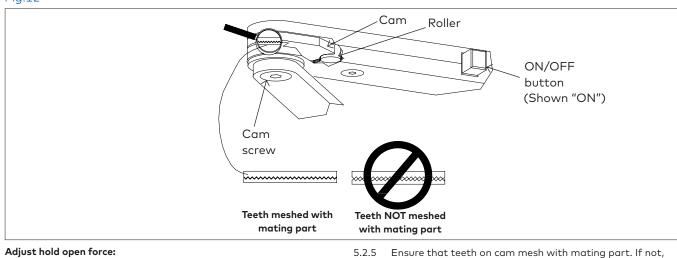


8616 meets 5lb interior barrier-free requirements. If necessary, adjust closer spring and test pull forces until proper forces are obtained.

Adjust closing speeds: sweep, latch, backcheck, delayed action 5.1 Fig.11



Adjust hold open (optional) 5.2 Fig.12



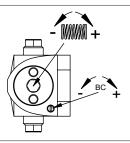
- Loosen cam screw with 6mm hex key. 5.2.1
- 5.2.2 Orient cam so detent aligns with roller.
- 5.2.3 Push button to "ON" position to engage roller in detent.
- 5.2.4 Open door to desired hold open position.

- move the door back and forth slightly until meshing occurs.
- 5.2.6 Tighten cam screw securely.
- To disengage hold open, pull door until hold open releases 5.2.7 allowing the door to close.

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

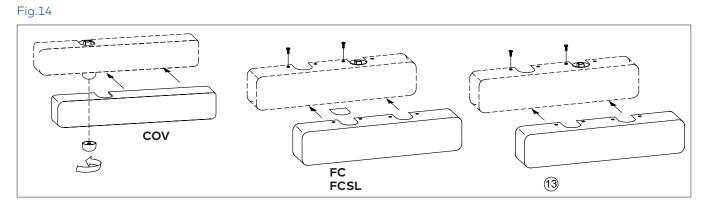
Adjust spring force 5.3 Fig.13





| Regular and top jamb mounts | | | | | | | | |
|-----------------------------|-------------|--------------------------|--------------|----------|------------|------------|--|--|
| | Closer size | Max door weight (lbs) | Door width | | Full turns | | | |
| CI | Closer size | | weight (lbs) | Interior | Exterior | Foil torns | | |
| | 2 | 100 | 2'6" | | -19 | | | |
| | 3 | 125 | 3' | 2'6" | -11 | | | |
| | 4 | 150 | 3'6" | 3' | 0 | | | |
| | 5 | 200 | 4' | 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 | | | |





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