### HD8000 FH/FHJ/FHP

Friction hold open for regular, top jamb and parallel mounts

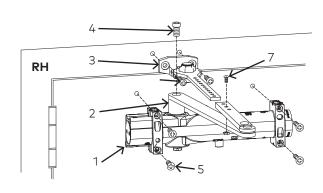
### **Installation Instructions**



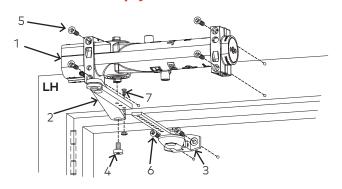
### **OVERVIEW**

- 1 Closer body
- 2 Connecting arm
- 3 Bar and shoe
- 4 Pinion screw
- 5 Flat head screws
- 6 Pan head screws
- 7 Connecting arm screw and nut
- 8 PA shoe screws
- 9 PA bracket
- 10 Cover
- 11 Plates
- 12 Full metal cover

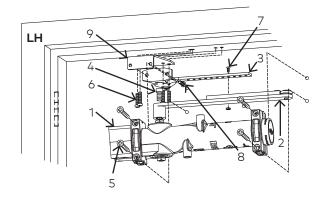
### Regular mount



### Top jamb mount



### **Parallel mount**



# **Table of contents**

| 1   | Technical specifications                                                     | 3   |
|-----|------------------------------------------------------------------------------|-----|
| 1.1 | Overview                                                                     | 3   |
| 1.2 | Tools recommended                                                            |     |
| 1.3 | Handing the door                                                             | 3   |
| 1.4 | Surface closer components                                                    | 3   |
| 2   | Installation - regular mount                                                 | 4   |
| 2.1 | Surface closer system                                                        | Z   |
| 2.2 | Installing the surface closer and (optional) backplate                       | 2   |
| 2.3 | Installing main arm                                                          | 4   |
| 3   | Instructions - top jamb mount                                                | 5   |
| 3.1 | Surface closer system                                                        | į   |
| 3.2 | Installing the surface closer and (optional) backplate                       |     |
| 3.3 | Installing main arm                                                          |     |
| 4   | Instructions - parallel mount                                                | é   |
| 4.1 | Surface closer system                                                        | ć   |
| 4.2 | Installing the surface closer and (optional) backplate                       | ć   |
| 4.3 | Installing main arm                                                          | ć   |
| 5   | Adjustments                                                                  | 7   |
| 5.1 | Adjust closing speeds: sweep, latch, backcheck, delayed action if applicable | -   |
| 5.2 | Adjust optional hold open                                                    | -   |
| 5.3 | Adjust spring force                                                          | - 7 |
| 6   | Install covers                                                               | 5   |

# 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.

#### 1.2 Tools recommended

#### Table 1

| Drill bits:                           | #3 Phillips screwdriver     |  |
|---------------------------------------|-----------------------------|--|
| Metal: 7/32" drill bit;<br>#12-24 tap | 3/16" flat head screwdriver |  |
| Wood: 3/8" and 5/32" bit              | 5mm hex key                 |  |
| 1/2" box wrench                       | 10" adjustable wrench       |  |



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



Verify closer spring size prior to installation.



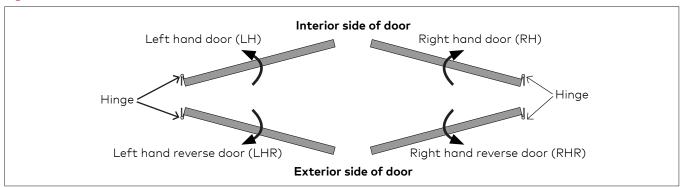
Make sure door efficiently operates prior to installing closer.



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

### 1.3 Handing the door

#### Fig.1



### 1.4 Surface closer components

The surface closer is comprised of the following components.

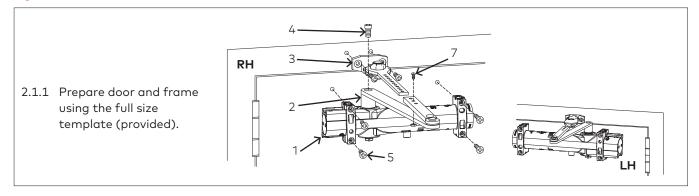
- 1. Closer body
- 2. Connecting arm
- 3. Bar and shoe
- 4. Pinion screw
- 5. Flat head screws
- 6. Pan head screws

- 7. Connecting arm screw and nut
- 8. PA shoe screws
- 9. PA bracket
- 10. Cover
- 11. Plates
- 12. Full metal cover

# 2 Installation - regular mount

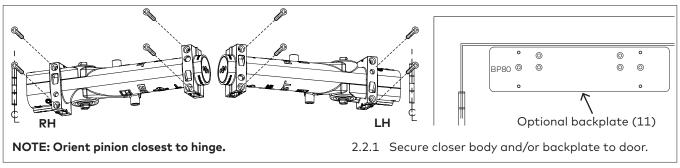
### 2.1 Surface closer system

Fig.2



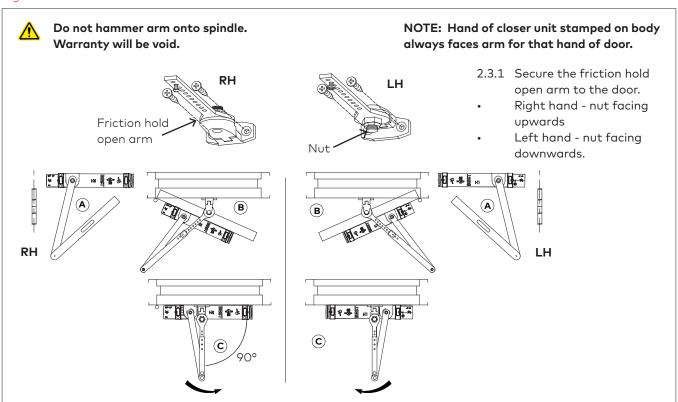
### 2.2 Installing the surface closer and (optional) backplate

Fig.3



### 2.3 Installing main arm

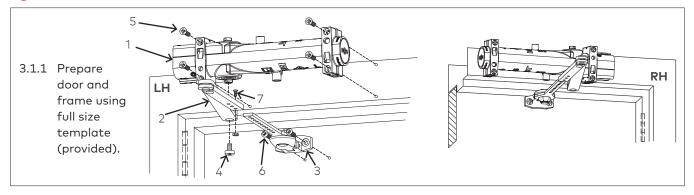
Fig.4



# 3 Instructions - top jamb mount

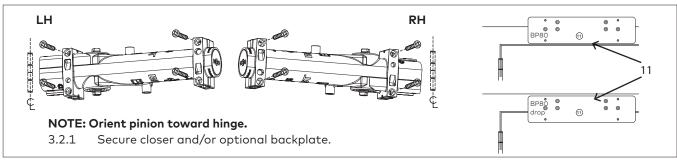
### 3.1 Surface closer system

Fig.5



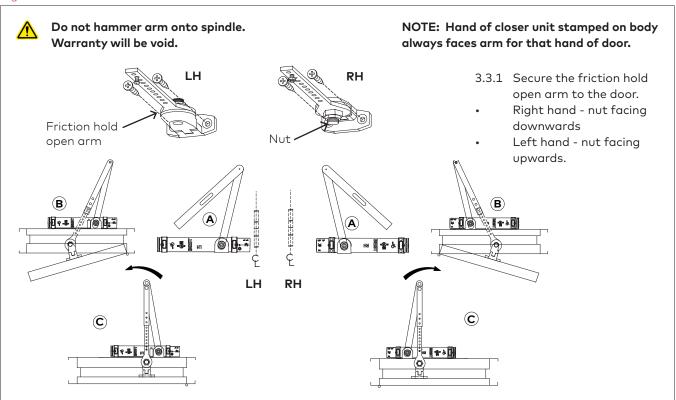
### 3.2 Installing the surface closer and (optional) backplate

Fig.6



### 3.3 Installing main arm

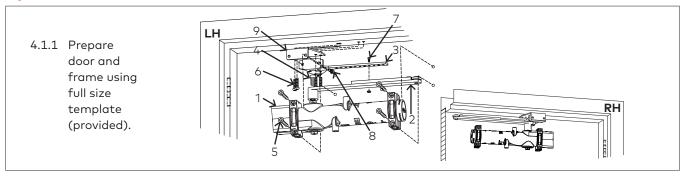
Fig.7



# 4 Instructions - parallel mount

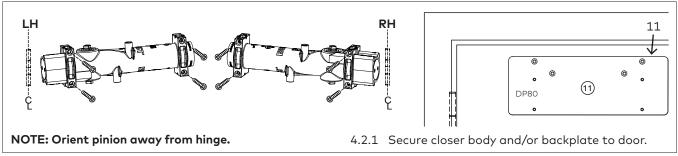
### 4.1 Surface closer system

Fig.8



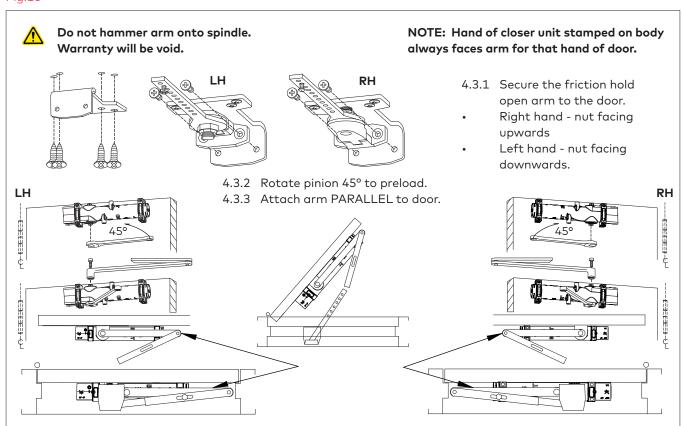
### 4.2 Installing the surface closer and (optional) backplate





### 4.3 Installing main 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.

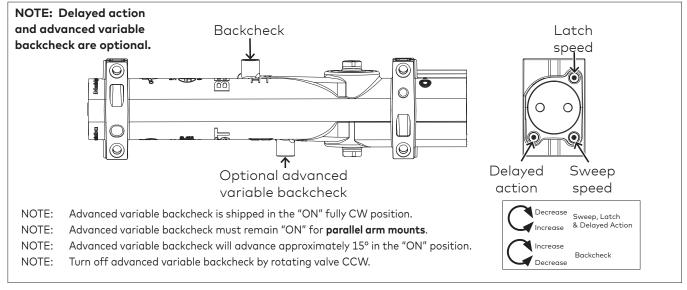
⚠ Maximum opening angle is 85° to 170°.

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

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

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

#### Fig.11

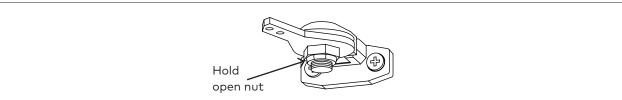


- 5.1.1 Adjust **closing sweep speed**: 70° to start of latch speed.
- Increase sweep speed: Turn valve counter-clockwise.
- Decrease sweep speed: Turn valve clockwise.
- 5.1.2 Adjust **closing latch speed:** 15° to close.
- Increase latch speed: Turn valve counter-clockwise.

### 5.2 Adjust optional hold open

Fig.12

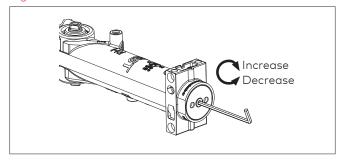
- 5.1.3 Adjust **opening backcheck:** beginning at 65°.
  - Increase resistance: Turn valve clockwise.
- Decrease resistance: Turn valve counter-clockwise.
- 5.1.4 If applicable, adjust **closing delayed action:** angle 180° to start of sweep.
- Increase delayed action: Turn valve counter-clockwise.
- Decrease delayed action: Turn valve clockwise.



- 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 securely.
- 5.2.4 Pull door closed.

### 5.3 Adjust spring force

#### Fig.13



- 5.2.5 Open door to hold open position.
- (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.

#### HD8016

**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.

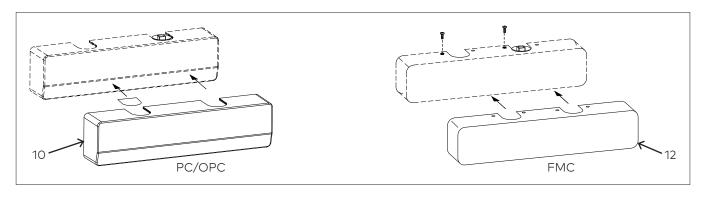
- **Decrease force:** Turn counter-clockwise.
- Increase force: Turn clockwise.

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 mounts |             |                          |            |          |            |  |  |  |  |
|-----------------------------|-------------|--------------------------|------------|----------|------------|--|--|--|--|
|                             | Closer size | Max door<br>weight (lbs) | Door width |          | Full towns |  |  |  |  |
|                             |             |                          | Interior   | Exterior | Full turns |  |  |  |  |
|                             | 2           | 100                      | 2'6"       |          | -20        |  |  |  |  |
|                             | 3           | 125                      | 3'         | 2'6"     | -12        |  |  |  |  |
| HD8016                      | 4           | 150                      | 3'6"       | 3'       | 0          |  |  |  |  |
|                             | 5           | 200                      | 4'         | 3'6"     | +4         |  |  |  |  |
|                             | 6           | 250                      |            | 4'       | +12        |  |  |  |  |
| HD8056                      | 5           | 200                      | 4'         | 3'6"     | -6         |  |  |  |  |
| HD8036                      | 6           | 250                      |            | 4'       | 0          |  |  |  |  |
| Parallel mount              |             |                          |            |          |            |  |  |  |  |
|                             | 3           | 100                      | 2'6"       |          | -12        |  |  |  |  |
| HD8016                      | 4           | 125                      | 3'         | 2'6"     | 0          |  |  |  |  |
| UD9010                      | 5           | 150                      | 3'6"       | 3'       | +4         |  |  |  |  |
|                             | 6           | 200                      | 4'         | 3'6"     | +12        |  |  |  |  |
|                             | 5           | 150                      | 3'6"       | 3'       | -6         |  |  |  |  |
| HD8056                      | 6           | 200                      | 4'         | 3'6"     | 6          |  |  |  |  |
|                             | 6+          | 250                      |            | 4'       | 6+         |  |  |  |  |

## **Install covers**

Fig.14





For Complete Online Instructions Visit: https://dhwsupport.dormakaba.com/hc/en-us

For Assistance or Warranty Information: Call 1-800-392-5209 or visit