

8600 FH/FHJ/FHP

Friction hold open for
regular, top jamb and parallel mounts

Installation instructions

08279004 – 10-2019

| EN |







dormakaba 

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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.
-  Know the swing of the door which is being installed prior to installation.
-  Maximum door opening degree is 180°.
-  Verify closer spring size prior to installation.
-  Maximum 4-1/2" reveal on top jamb mounts for 180° degree openings.
-  Make sure door efficiently operates prior to installing closer.

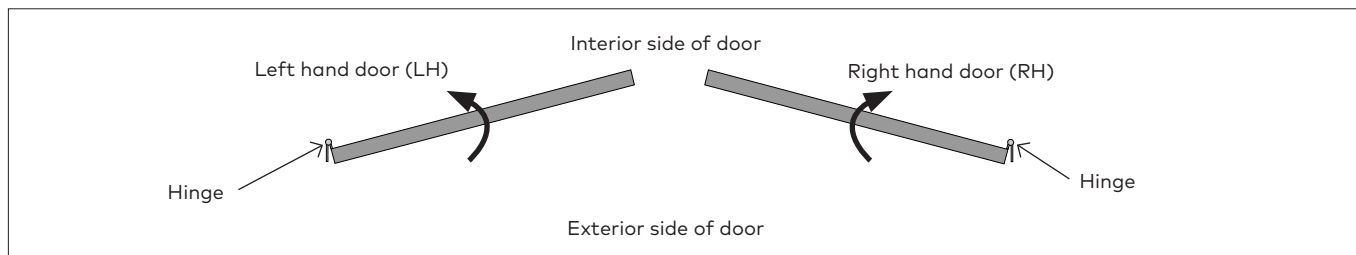
1.2 Tools recommended

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	10" adjustable wrench

1.3 Handing the door

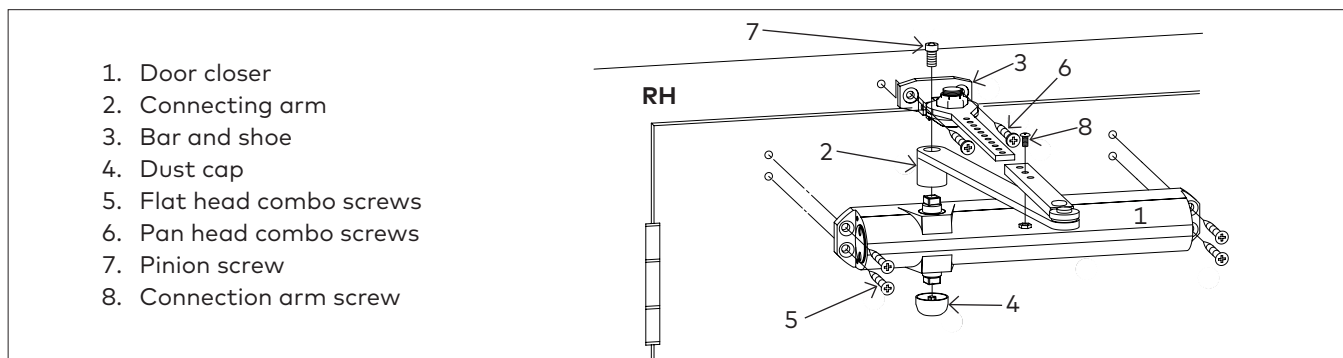
Fig.1



2 Installation - regular mount

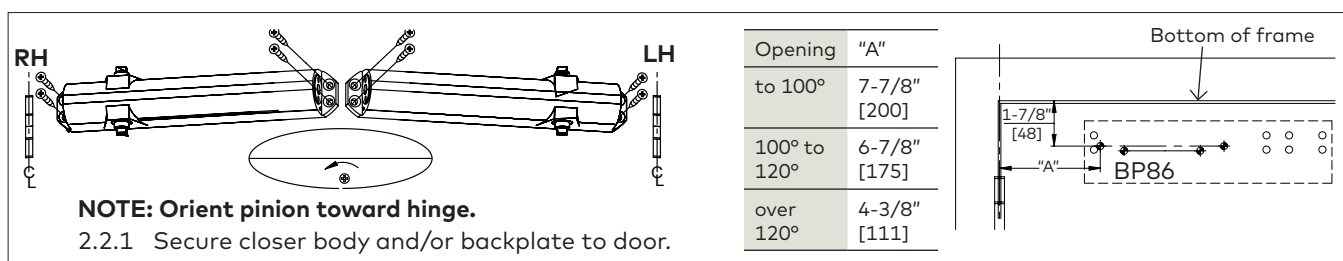
2.1 Surface closer system

Fig.2



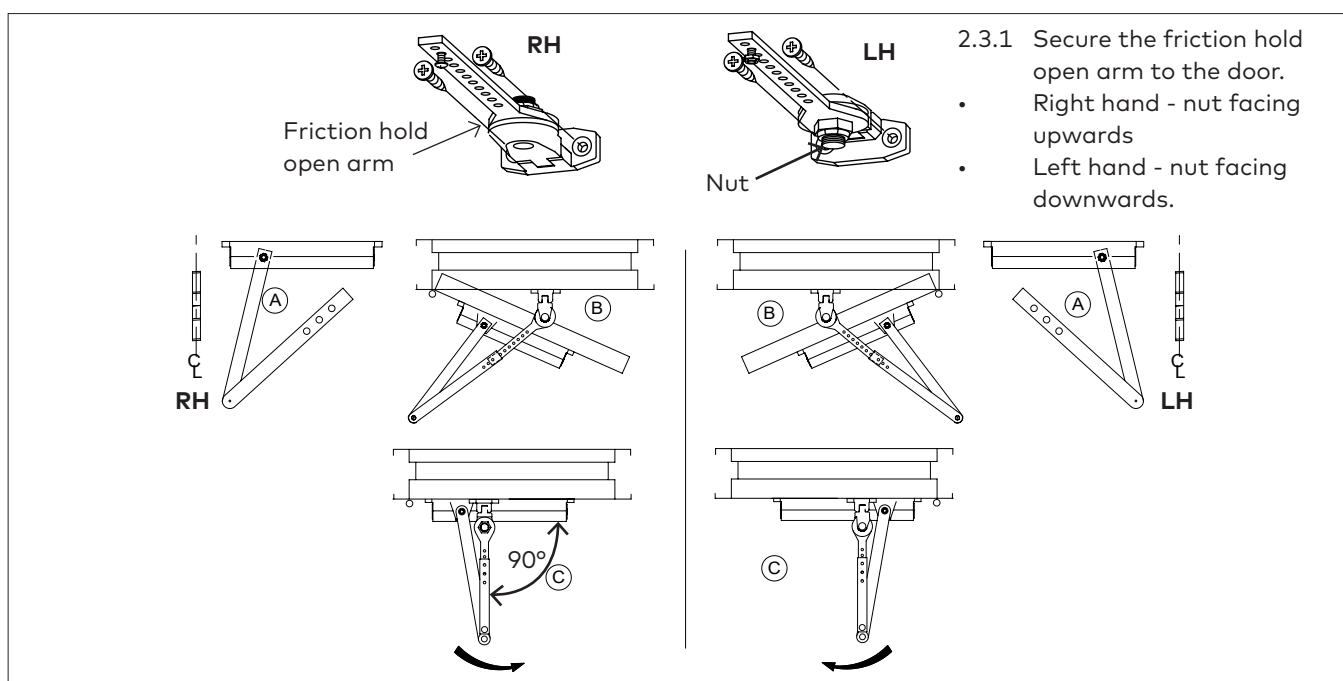
2.2 Installing the surface closer and (optional) backplate

Fig.3



2.3 Installing main arm

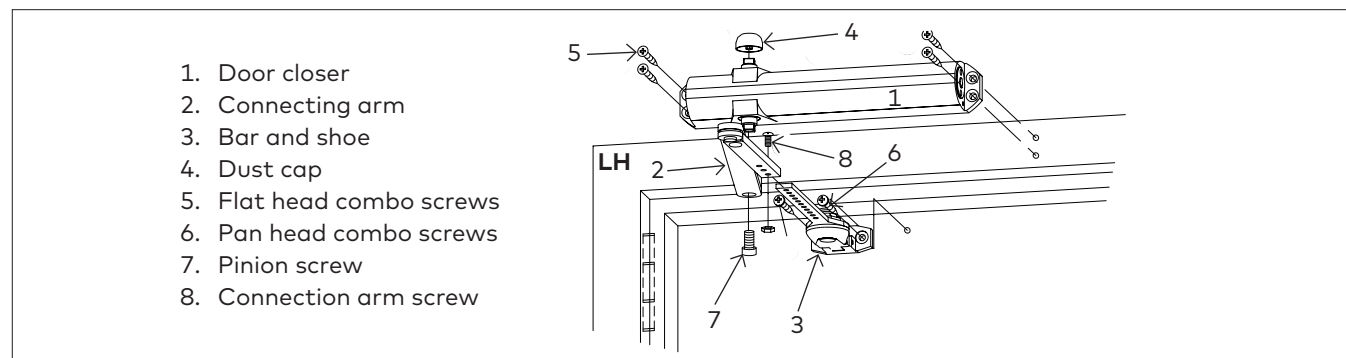
Fig.4



3 Instructions - top jamb mount

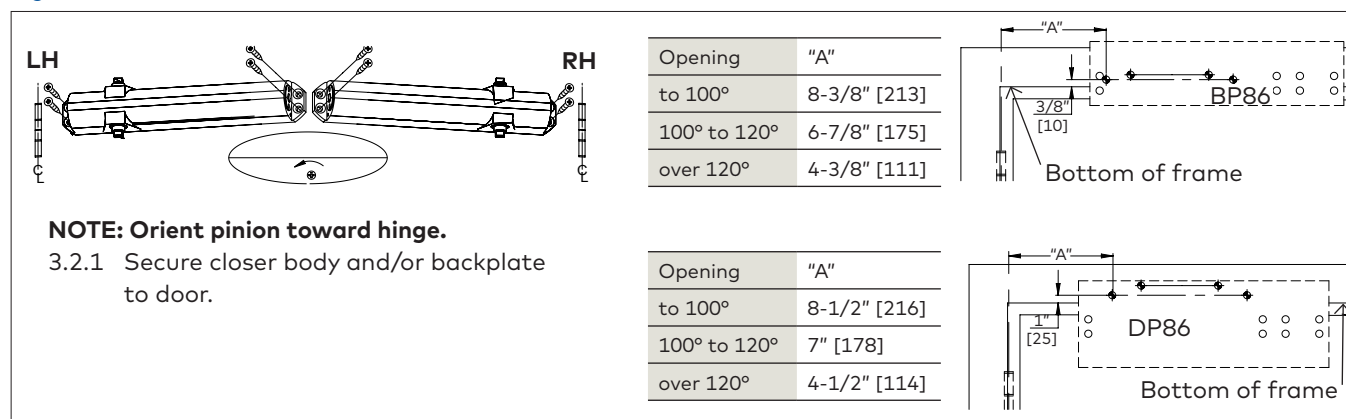
3.1 Surface closer system

Fig.5



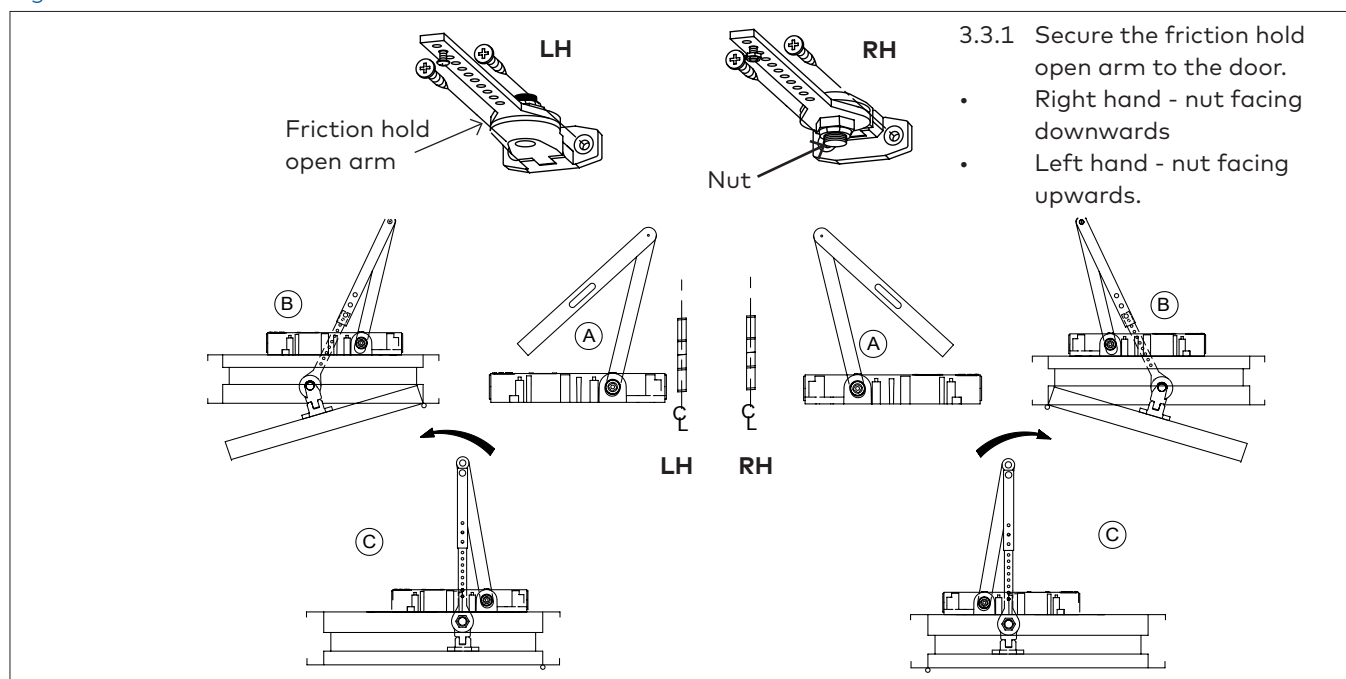
3.2 Installing the surface closer and (optional) plate

Fig.6



3.3 Installing main arm

Fig.7

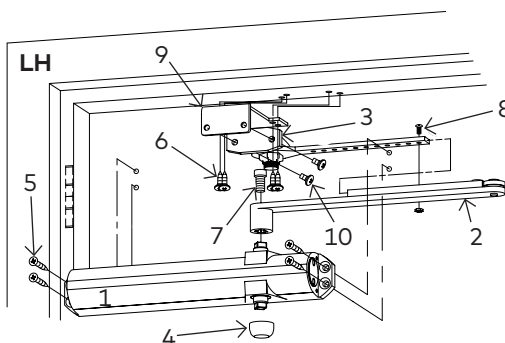


4 Instructions - parallel mount

4.1 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. Connection arm screw
9. PA bracket
10. PA shoe screws



4.2 Installing the surface closer and (optional) drop plate

Fig.9

LH

NOTE: Orient pinion away from hinge.

Opening	"A"
to 100°	8-5/8" [219]
100° to 120°	7-1/8" [181]
over 120°	6-1/8" [155]

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

4.3 Installing main arm

Fig.10

LH

RH

4.3.1 Secure parallel bracket to frame.

4.3.2 Secure the friction hold open arm to the door.












- Right hand - nut facing upwards
- Left hand - nut facing downwards.

4.3.3 Rotate pinion 45° to pre-load.

4.3.4 Attach arm PARALLEL to door.

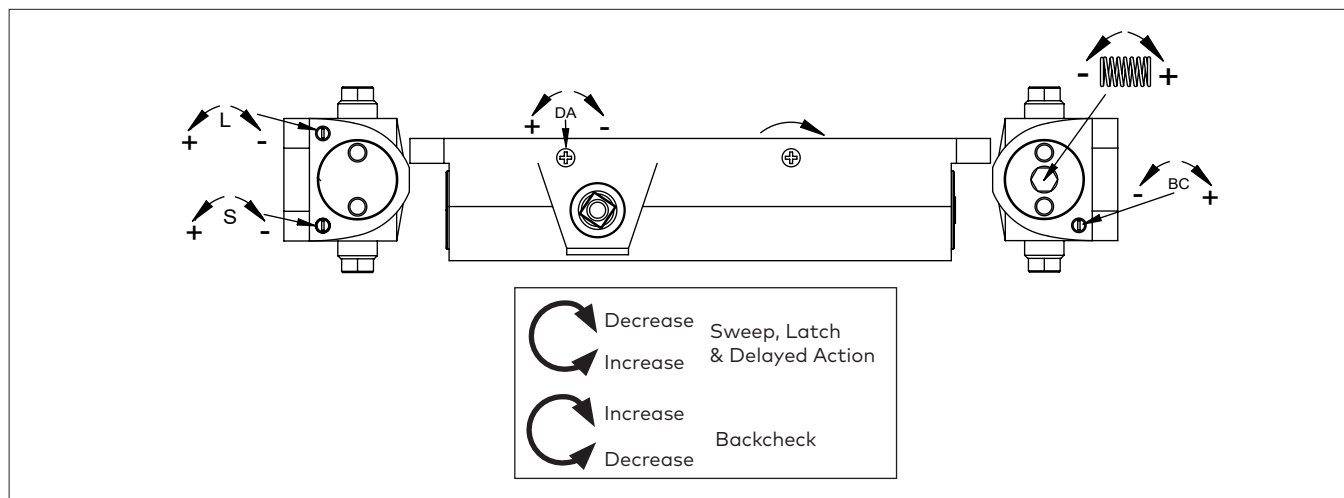
Keep arm parallel

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.

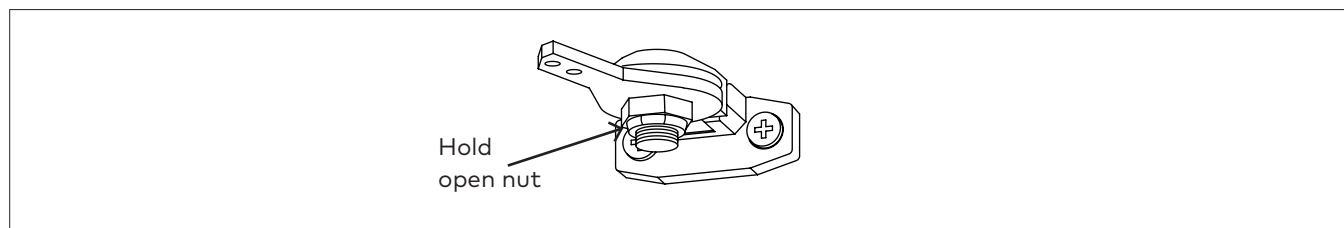
5.1 Adjust closing speeds: sweep, latch, backcheck, delayed action

Fig.11



5.2 Adjust optional hold open

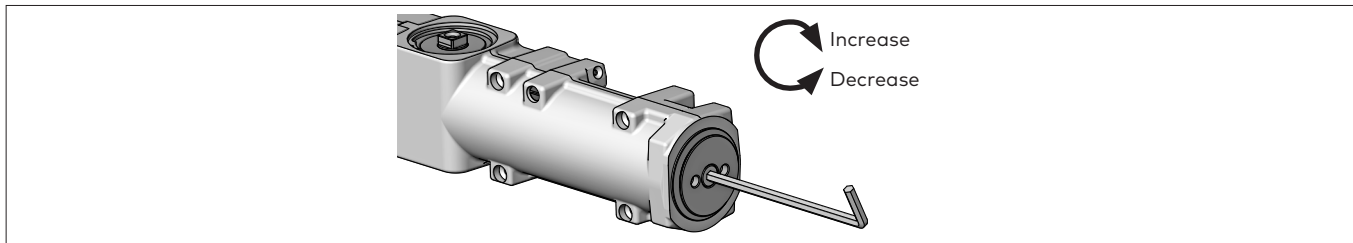
Fig.12



- 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.
- 5.2.5 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.

5.3 Adjust spring force

Fig.13



Regular and top jamb mounts					
	Closer size	Max door weight (lbs)	Door width		Full turns
			Interior	Exterior	
	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

6 Install covers

Fig.14

