

# 8900 AF89P x MJ

Flat arm for parallel arm mount  
with mortised jamb bracket and drop plate (DP89)

## Installation instructions

08279741 – 09-2019

| 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.

 Maximum door opening degree is 180°.

 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.

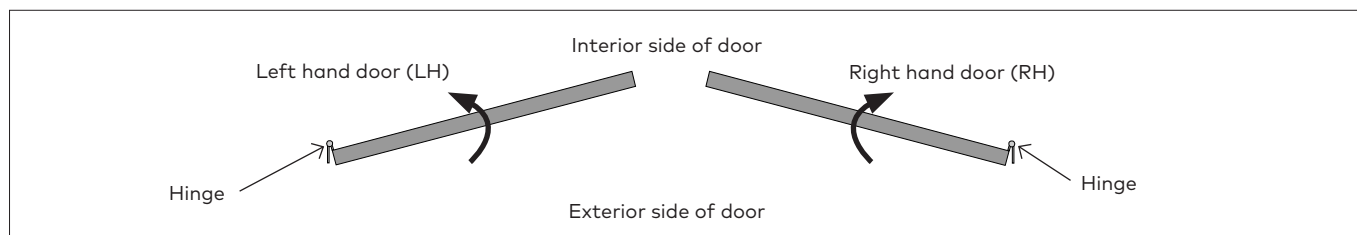
## 1.2 Tools recommended

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	

## 1.3 Handing the door

Fig.1



# 2 Instructions - parallel mount

## 2.1 Installing drop plate and surface closer

Fig.2

2.1.1 Reference template 08279742 and 08279743.

2.1.2 Secure drop plate.

2.1.3 Secure closer body.  
**NOTE: Ensure pinion is oriented away from hinge.**

## 2.2 Installing mortise jamb bracket

Fig.3

2.2.1 Secure mortise jamb bracket with included fasteners.

Mortise jamb bracket (MJ)

## 2.3 Installing and securing main arm

Fig.4

2.3.1 Slide bar into connecting arm.

2.3.2 Secure with hex bolt.  
**NOTE: Leave bolt loose.**

2.3.3 Secure arm shoe to mortise jamb bracket.

2.3.4 Preload pinion by placing wrench on bottom pinion and rotate pinion 45° TOWARD HINGE.

Bar

Connecting arm

Hex bolt

Secure into THIS hole.

Mortise jamb bracket (MJ)

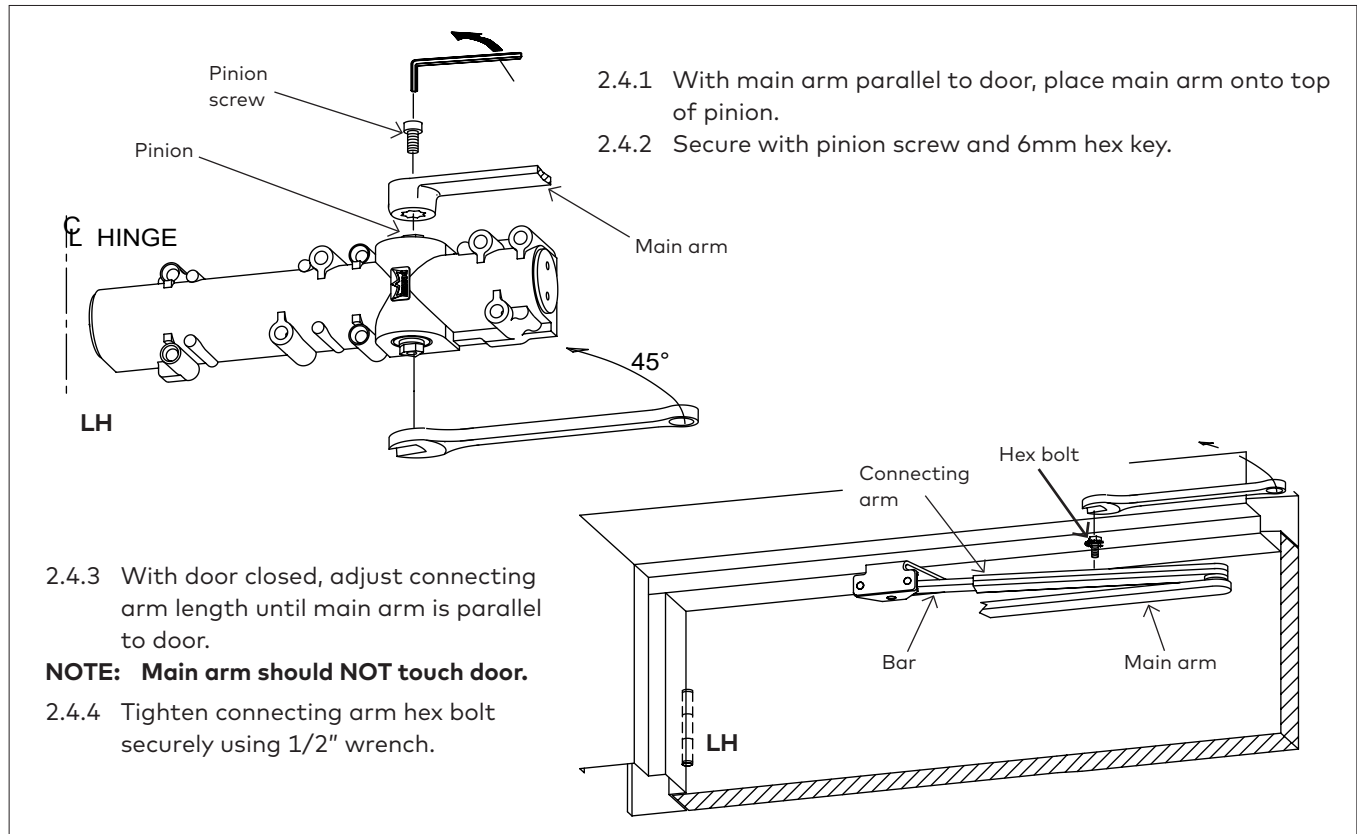
Arm shoe

Pinion



45°




## 2.4 Securing main arm (continued)

Fig.5



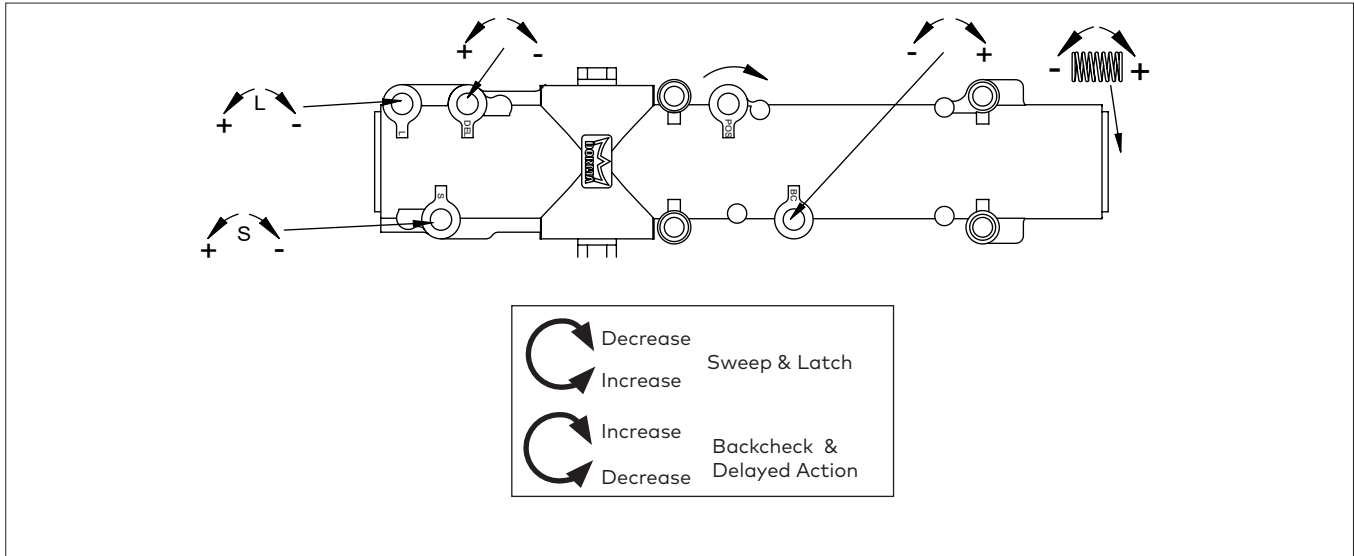
# 3 Adjustments

-  Confirm closer spring size prior to making any closing speed adjustments.
-  Do not back valve heads out beyond closer casting.

-  Maximum opening angle is 180°.
-  Door should close in 3 to 6 seconds from 90°.
-  Do not close valves completely.

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

Fig.6

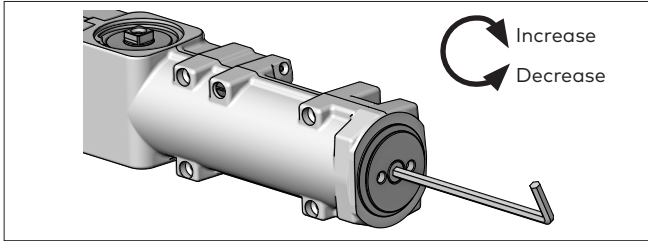


- 3.1.1 Adjust **closing sweep speed**: 90° to start of latch speed.
- Increase sweep speed: Turn valve counter-clockwise
  - Decrease sweep speed: Turn valve clockwise.
- 3.1.2 Adjust **closing latch speed**: 15° to close.
- Increase latch speed: Turn valve counter-clockwise

- 3.1.3 Adjust **opening backcheck**: beginning at 180°.
- Increase resistance: Turn valve clockwise
  - Decrease resistance: Turn valve counter-clockwise.
- 3.1.4 Adjust **closing delayed action**: angle 70° to start of sweep.
- Increase delayed action: Turn valve clockwise
  - Decrease delayed action: Turn valve counter-clockwise

### 3.2 Adjust spring force

Fig.7



**8916 ONLY - 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; 8 turns max.
- **Increase force:** turn clockwise; 14 turns max.

Depending on opening conditions, a door adjusted to meet barrier-free forces may not have sufficient power to reliably close and latch the door.

Parallel mount					
	Closer size	Max door weight (lbs)	Door width		Full turns
			Interior	Exterior	
8916	3	100	2'6"	----	-12
	4	125	3'	2'6"	0
	5	150	3'6"	3'	+4
	6	200	4'	3'6"	+12
8956	5	150	3'6"	3'	-6
	6	200	4'	3'6"	0
	6+	250	---	4'	6+

## 4 Install covers

Fig.8

4.1.1 Place tab in cover slot, opposite main arm.

4.1.2 Place cover over closer and fasten securely with screws provided.

**Snap valve adjustment wrench inside cover.**

LH

