

STA 8916 AR/ARJ/ARP

Round arm for regular, top jamb, parallel mount
Stainless steel, corrosion resistant

Installation instructions

08279481 – 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.

 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.

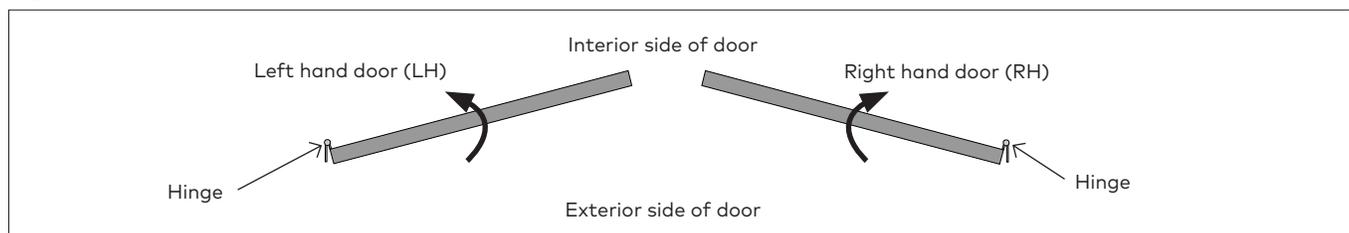
1.2 Tools recommended

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

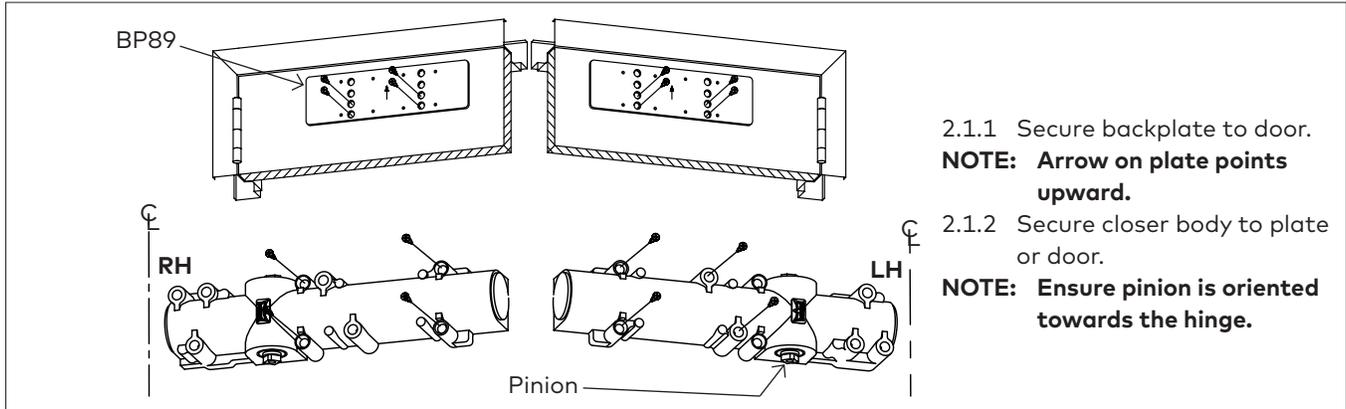
Fig.1



2 Instructions - AR regular mount

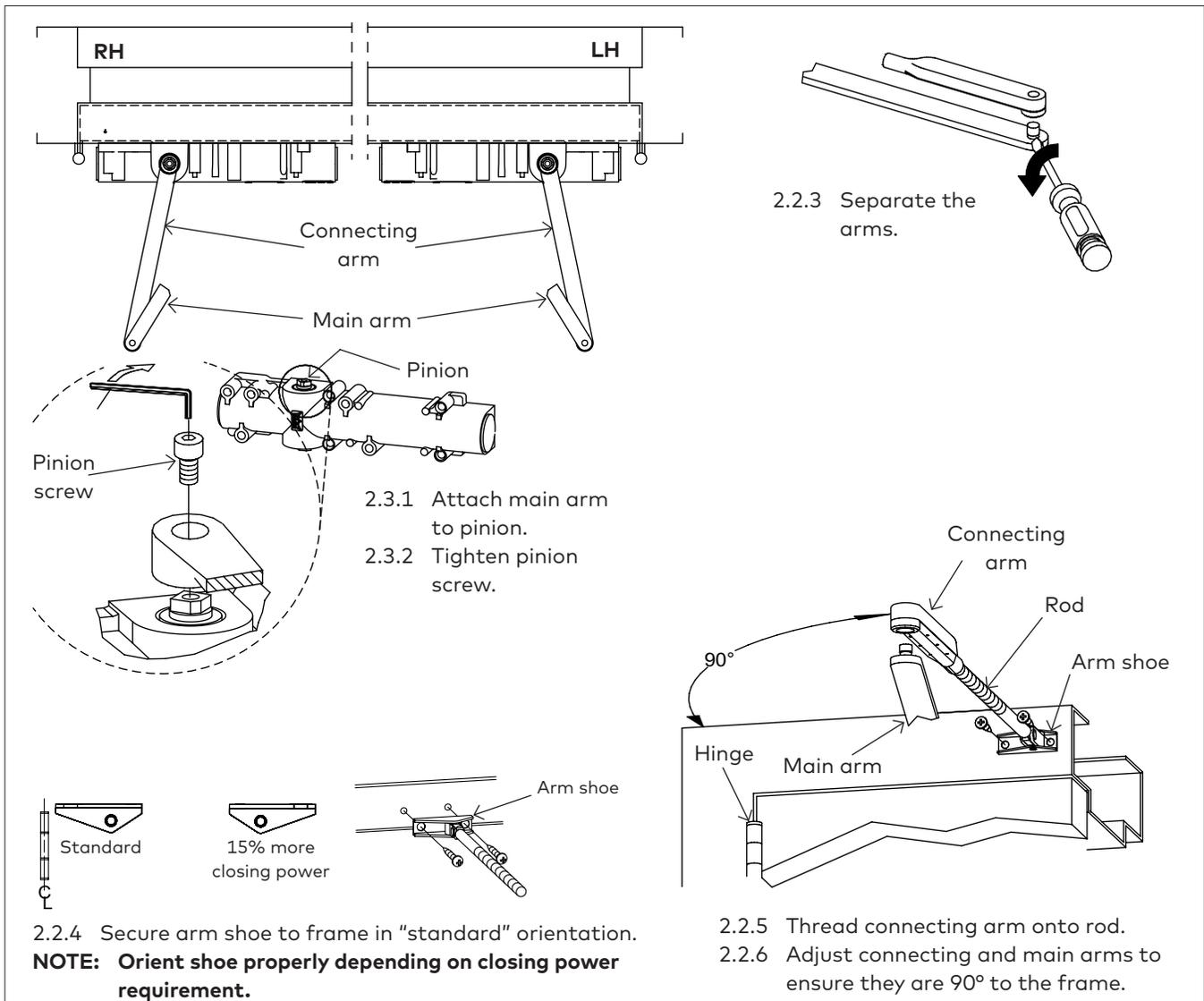
2.1 Installing backplate and surface closer

Fig.2



2.2 Installing arms (AR)

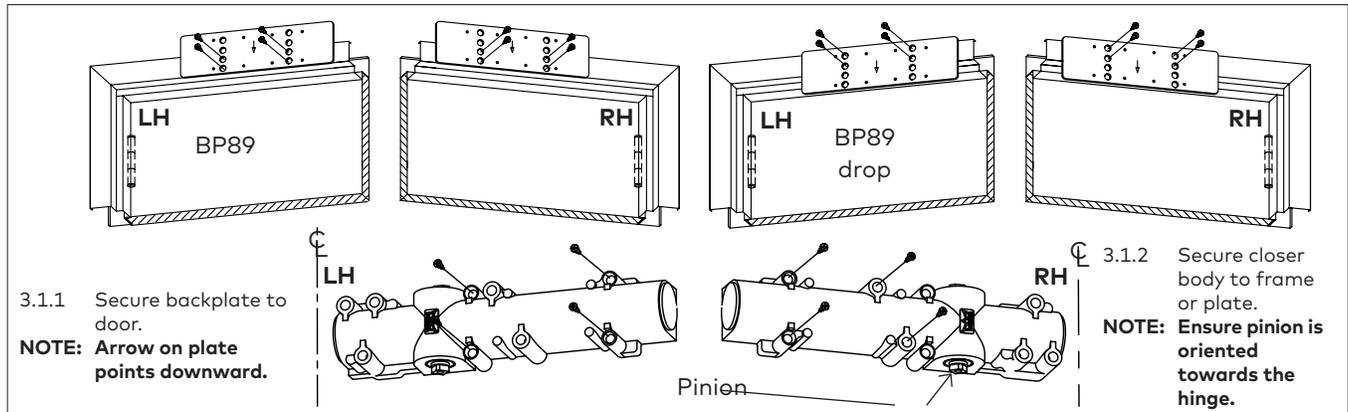
Fig.3



3 Instructions - AR top jamb mount

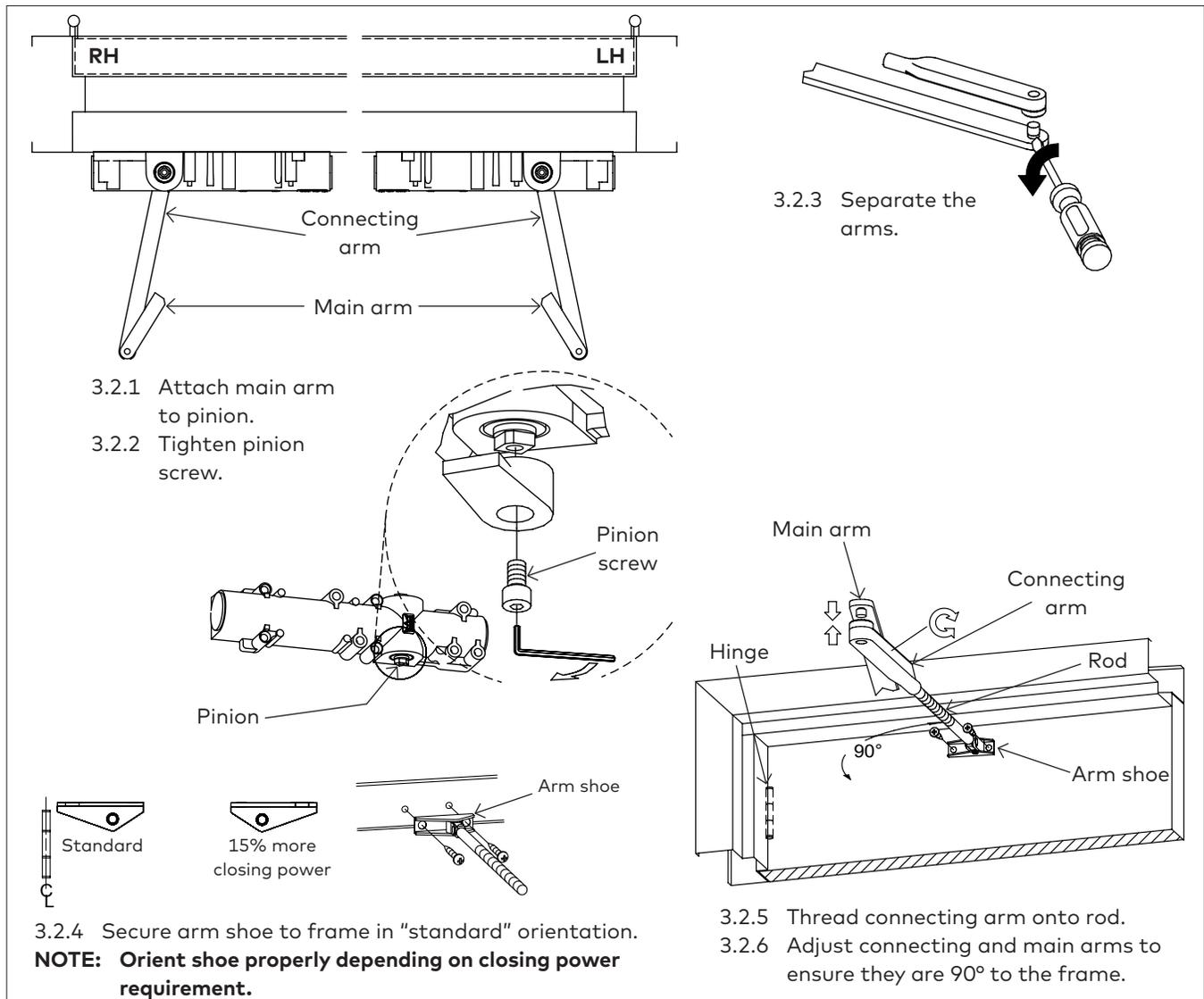
3.1 Installing plate and surface closer

Fig.4



3.2 Installing arms (AR)

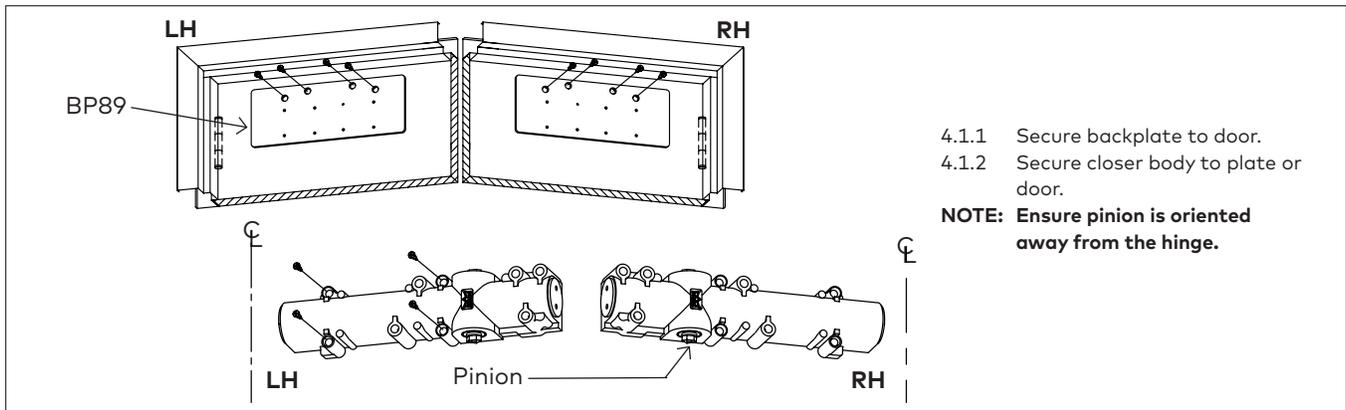
Fig.5



4 Instructions - AR parallel mount

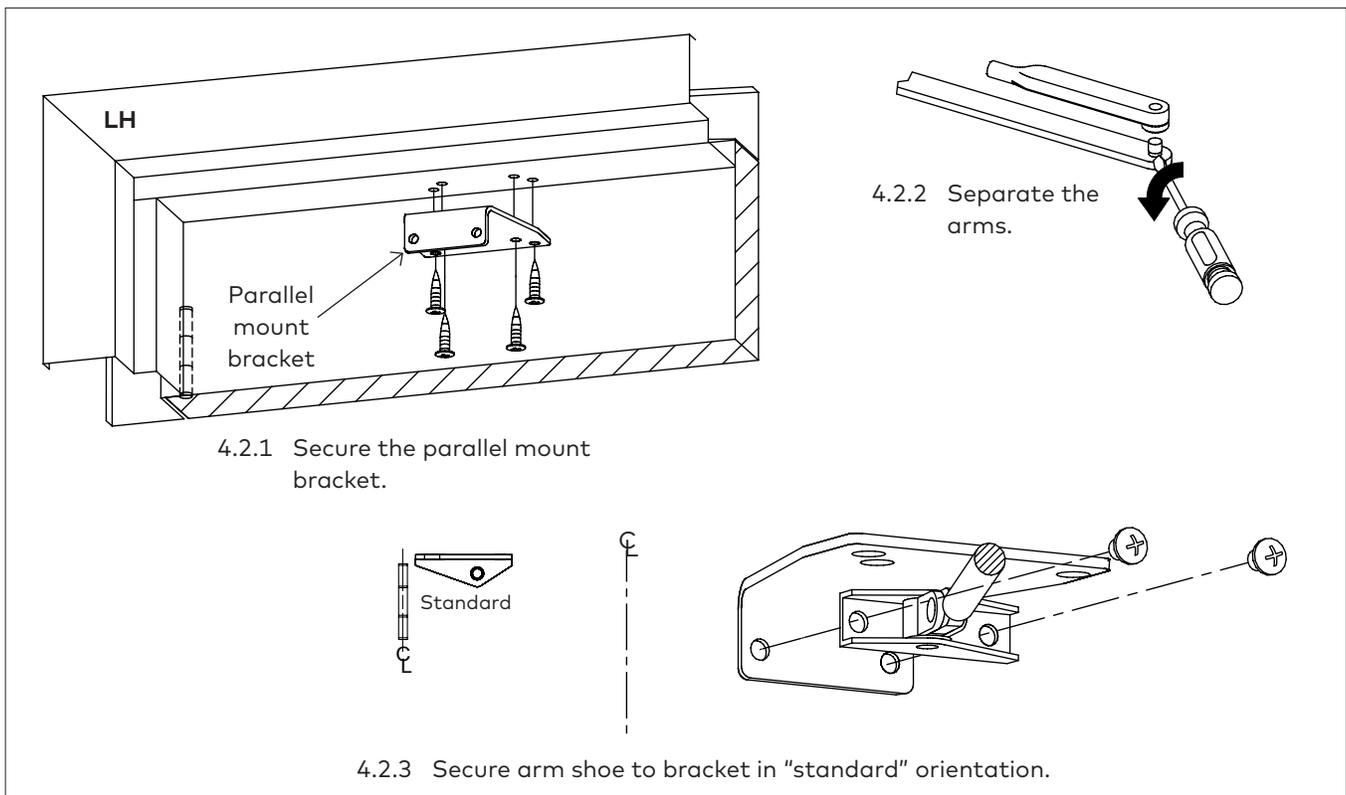
4.1 Installing drop plate and closer

Fig.6



4.2 Installing parallel mount bracket and arm shoe

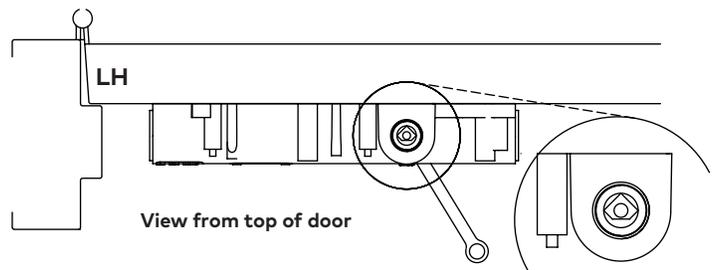
Fig.7



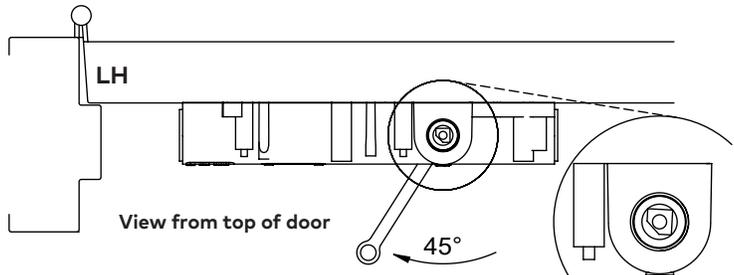
4.3 Securing main arm to closer

Fig.8

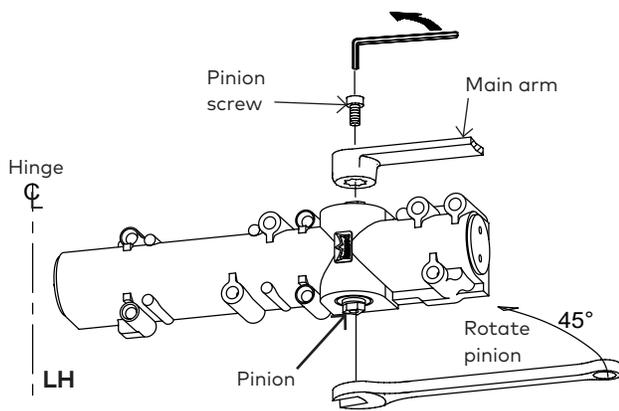
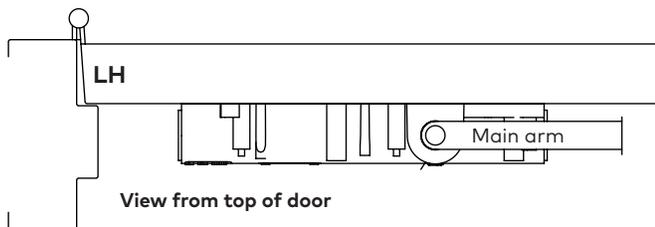
4.3.1 Preload arm by placing wrench on bottom pinion.



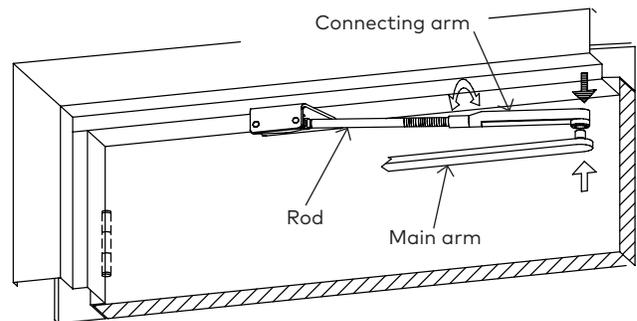
4.3.2 Rotate wrench 45° TOWARD hinge edge of door.



4.3.3 With main arm parallel to door, place main arm on top pinion.



4.3.4 Secure arm to closer with pinion screw.



4.3.5 Thread connecting arm onto rod.

4.3.6 Adjust main arm to ensure it is parallel to the door.

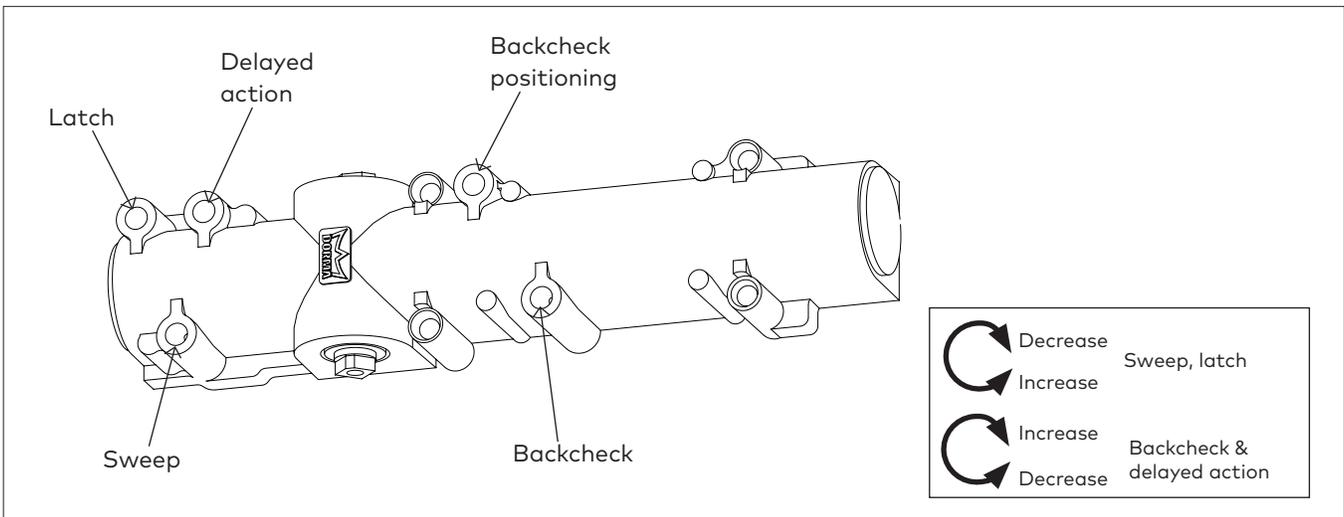
4.3.7 Snap main and connecting arms together.

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.9

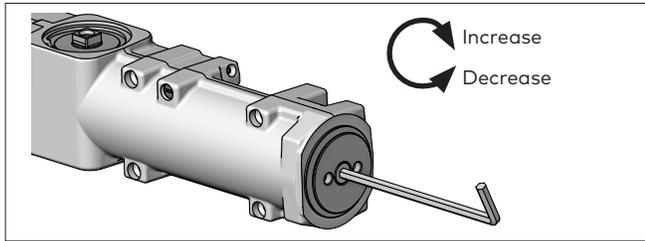


- 5.1.1 Adjust **closing sweep speed**: 90° to start of latch speed.
- Increase sweep speed: Turn valve counter-clockwise
 - Decrease sweep speed: Turn valve clockwise.
- 5.1.2 Adjust **closing latch speed**: 15° to close.
- Increase latch speed: Turn valve counter-clockwise

- 5.1.3 Adjust **opening backcheck**: beginning at 60°.
- Increase resistance: Turn valve clockwise
 - Decrease resistance: Turn valve counter-clockwise.
- 5.1.4 Adjust **closing delayed action**: beginning at 100°.
- Increase delayed action: Turn valve clockwise
 - Decrease delayed action: Turn valve counter-clockwise

5.2 Adjust spring force

Fig.10



8916 - supplied with a size 3

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.

Regular mount					
	Closer size	Max door weight (lbs)	Door width		Full turns
			Interior	Exterior	
8916	2	100	2'6"	----	-16
	3	125	3'	2'6"	-8
	4	150	3'6"	3'	0
	5	200	4'	3'6"	+8
	6	250	----	4'	+16
Top jamb mount					
8916	2	100	2'6"	----	-4
	3	125	3'	2'6"	0
	4	150	3'6"	3'	+4
	5	200	4'	3'6"	+9
	6	250	----	4'	+13
Parallel mount					
8916	3	100	2'6"	----	-8
	4	125	3'	2'6"	0
	5	150	3'6"	3'	+8
	6	200	4'	3'6"	+16

6 Install covers

Fig.11

