

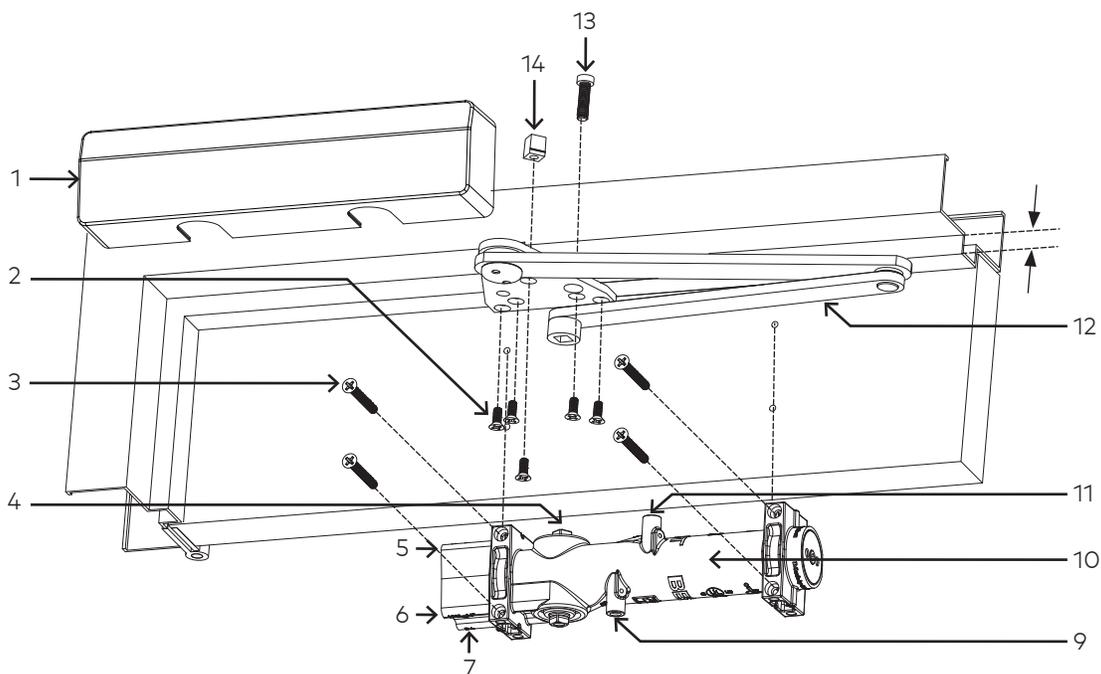
HD8000 SPA/SPAT

Heavy duty super parallel arm mount and DP80 drop plate (optional BSHD blade stop and NFHD bracket)

Installation Instructions

OVERVIEW

Surface closer components



1 Cover

2 PA bracket screws

3 Closer body screws

4 Pinion

5 Latch speed adjustment

6 Closing/sweep speed adjustment

7 Delayed action adjustment

8 Optional backplate (not pictured)

9 Advanced variable backcheck

10 Closer body

11 Backcheck adjustment

12 Arm

13 Pinion screw

14 Spacer block

Table of contents

1	Technical specifications	3
1.1	Overview	3
1.2	Size selection chart	3
1.3	Tools recommended	3
1.4	Handing the door	3
1.5	Surface closer components	4
2	Installation instructions	5
2.1	Installing the surface closer	5
2.2	Secure soffit plate to frame: spacer block, blade stop, or narrow frame bracket	5
2.3	Securing main arm to closer	6
2.4	Optional hold open	7
3	Adjustments	7
3.1	Adjust closing speeds: sweep, latch, backcheck, delayed action if applicable	7
3.2	Adjust spring force	8
4	Install covers	8

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°.**

 Arrow on backplate points downward.

 **Minimum door with 24".**

 **Hold open range is from 30° to 140° with optional hold open kit.**
-  Follow template to properly prepare door and frame for all accessories of the closer installation.

 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.

1.2 Size selection chart

Table 1

Door Width								
Closer	Interior/ Exterior	2'-0" min.	2'-6" min.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
HD8016	Interior	•	•	♿	♿	♿	♿	NA
	Exterior	•	•	•	•	•	NA	NA
HD8056	Interior	NA	NA	NA	NA	•	•	•
	Exterior	NA	NA	NA	•	•	•	NA

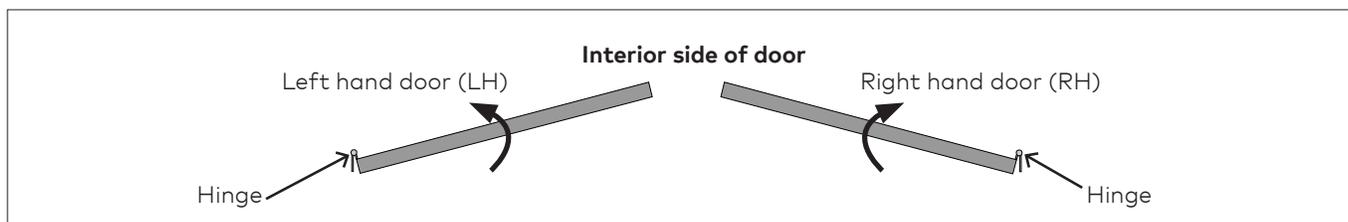
1.3 Tools recommended

Table 2

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

1.4 Handing the door

Fig.1



1.5 Surface closer components

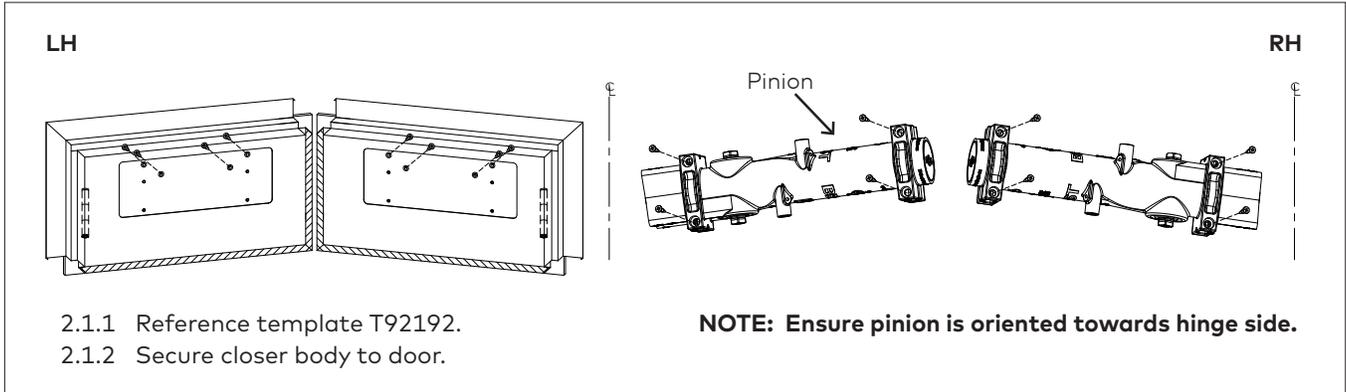
The surface closer is comprised of the following components.

1. Closer body
2. Thumb turn hold open arm (SPAT only)
3. Pinion screw
4. Flat head self-tapping and self-drilling screws (metal and wood) #12
5. PA bracket
6. PA shoe screws: flat head (metal and wood) #14
7. Cover
8. Plates
9. Full metal cover (optional)

2 Instructions - parallel mount

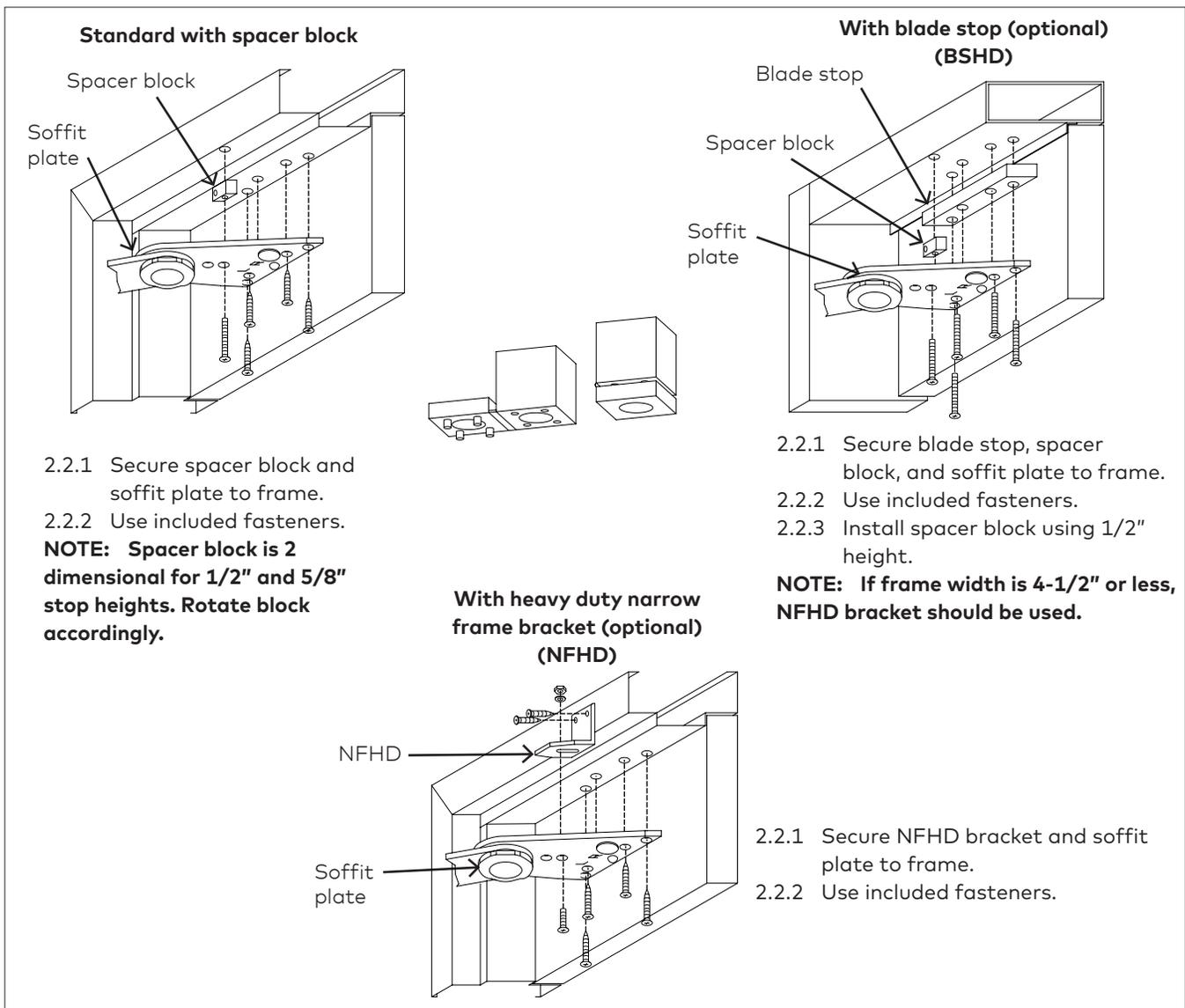
2.1 Installing surface closer

Fig.2



2.2 Secure soffit plate to frame: spacer block, blade stop, or narrow frame bracket

Fig.3



2.3 Securing main arm to closer

Fig.4

NOTE: Hand of closer unit stamped on body always faces arm for that hand of door.

2.3.1 Preload arm by placing wrench on bottom pinion.

2.3.2 Rotate wrench 45° TOWARD hinge edge of door.

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

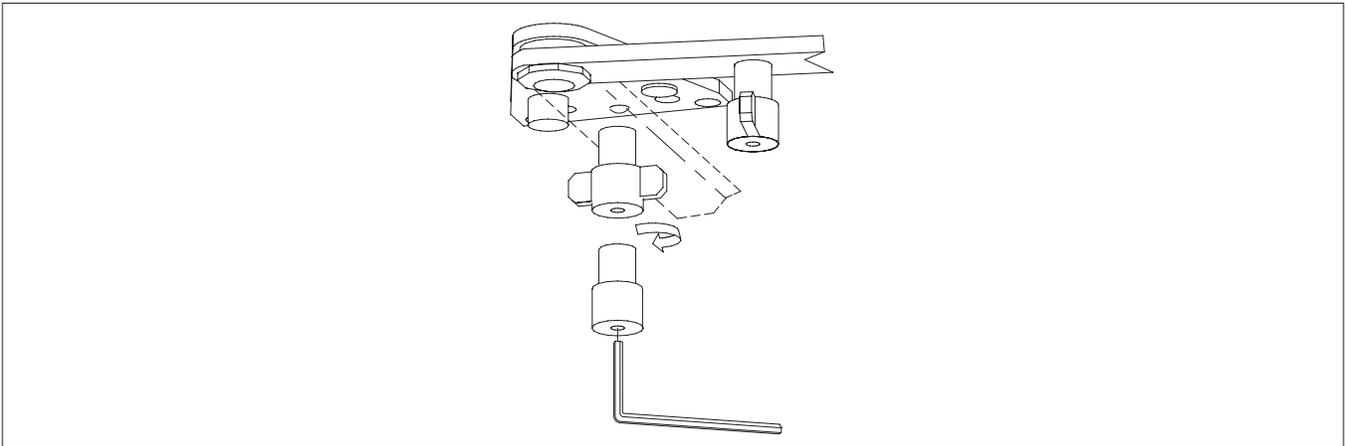
⚠ Do not hammer arm onto spindle. Warranty will be void.

2.3.4 Secure arm to closer with pinion screw.

The diagram illustrates the four steps of securing the main arm to the closer. Step 2.3.1 shows a wrench on the bottom pinion. Step 2.3.2 shows the wrench rotated 45 degrees. Step 2.3.3 shows the connecting arm being placed on the top pinion. Step 2.3.4 shows the main arm being secured to the pinion with a pinion screw. Labels include LH, View from top of door, Connecting arm, Pinion screw, Hinge, Main arm, Pinion, and Rotate pinion 45°.

2.4 Optional hold open

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 if applicable

Fig.6

NOTE: Delayed action and advanced variable backcheck are optional.

Backcheck

Optional advanced variable backcheck

Latch speed

Delayed action Sweep speed

Decrease Sweep & Latch

Increase

Increase Backcheck & Delayed Action

Decrease

NOTE: Advanced variable backcheck is shipped in the "ON" fully CW position.

NOTE: Advanced variable backcheck must remain "ON" for **parallel arm mounts**.

NOTE: Advanced variable backcheck will advance approximately 15° in the "ON" position.

NOTE: Turn off advanced variable backcheck by rotating valve CCW.

3.1.1 Adjust **closing sweep speed**: 70° to start of latch speed.

- Increase sweep speed: Turn valve counter-clockwise.
- Decrease sweep speed: Turn valve clockwise.

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 70°.

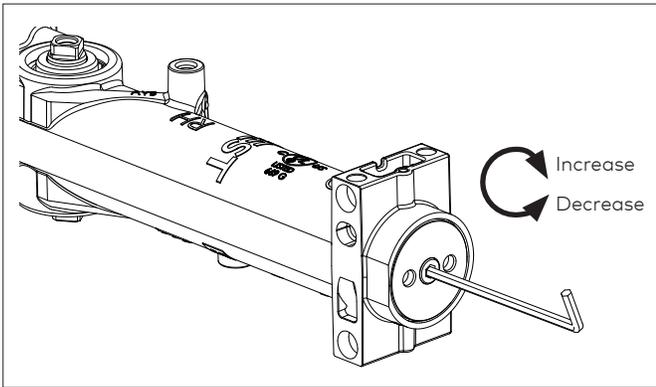
- Increase resistance: Turn valve clockwise.
- Decrease resistance: Turn valve counter-clockwise.

3.1.4 If applicable, adjust **closing delayed action**: angle 90° to start of sweep.

- Increase delayed action: Turn valve clockwise.
- Decrease delayed action: Turn valve counter-clockwise.

3.2 Adjust spring force

Fig.7



HD8016 - supplied with a size 4

HD8056 - supplied with a size 5

HD8016 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.

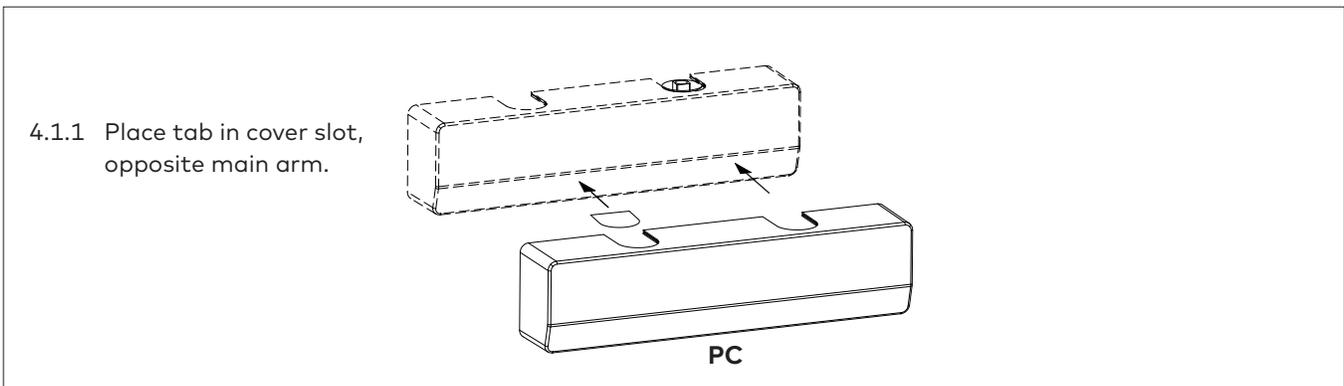
- **Decrease force:** Turn counter-clockwise; 8 turns max.
- **Increase force:** Turn clockwise; 14 turns max.

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	
HD8016	3	100	2'-6"	---	-12
	4	125	3'	2'6"	0
	5	150	3'6"	3'	+4
	6	200	4'	3'6"	+12
HD8056	5	150	3'6"	3'	-6
	6	200	4'	3'6"	0
	6+	250	---	4'	6+

4 Install covers

Fig.8



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

For Assistance or Warranty Information:
 Call 1-800-392-5209 or visit
<https://dhwsupport.dormakaba.com/hc/en-us>