

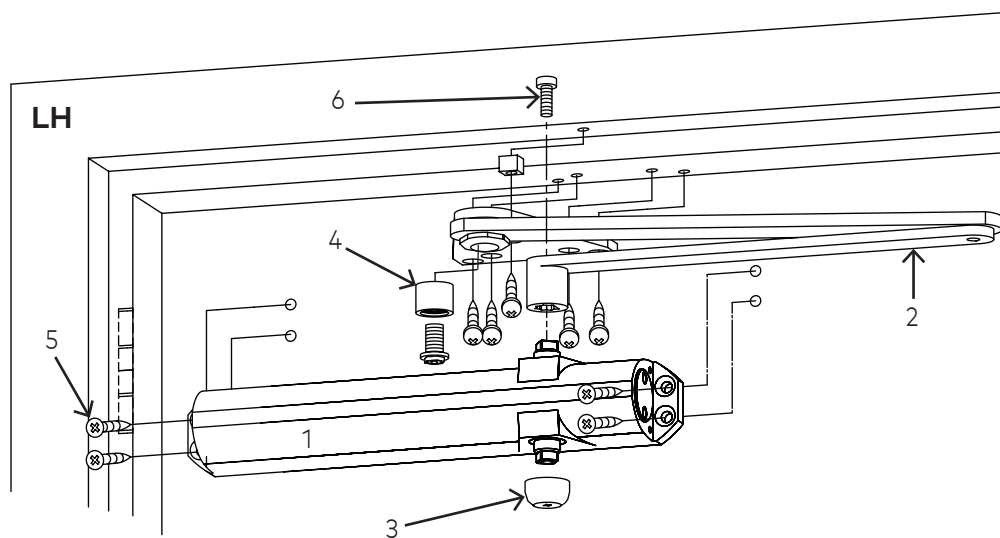
# HD7016 DS/DST/SDS/SDST

Door saver and spring door saver arm  
with thumb turn and key turn hold open

## Installation Instructions

### OVERVIEW

#### Closer system



**1** Door closer

**3** Dust cap

**5** Flat head combo screws

**2** Door saver arm

**4** Bumper and screw

**6** Pinion screw

# Table of contents

<b>1</b>	<b>Technical specifications</b>	<b>3</b>
1.1	Overview	3
1.2	Tools recommended	3
1.3	Handing the door	3
1.4	Closer system	3
<b>2</b>	<b>Instructions - parallel mount</b>	<b>4</b>
2.1	Installing (optional) drop plate and surface closer	4
2.2	Secure door saver arms (DS/DST or SDS/SDST)	4
2.3	Secure soffit plate to frame: spacer block, blade stop, or narrow frame bracket	5
2.4	Securing main arm to closer	6
2.5	Adjust hold open (DST unit only)	6
<b>3</b>	<b>Adjustments</b>	<b>7</b>
3.1	Adjust closing speeds: sweep, latch, backcheck, delayed action if applicable	7
3.2	Adjust spring force	8
<b>4</b>	<b>Install covers</b>	<b>8</b>

# 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 110°.
- ⚠ Hold open range is from 85° to 110° with optional hold open kit.
- ⚠ 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.

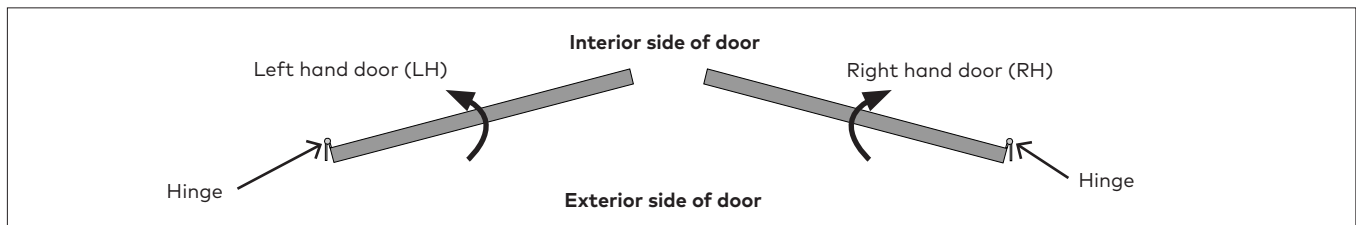
## 1.2 Tools recommended

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" box wrench

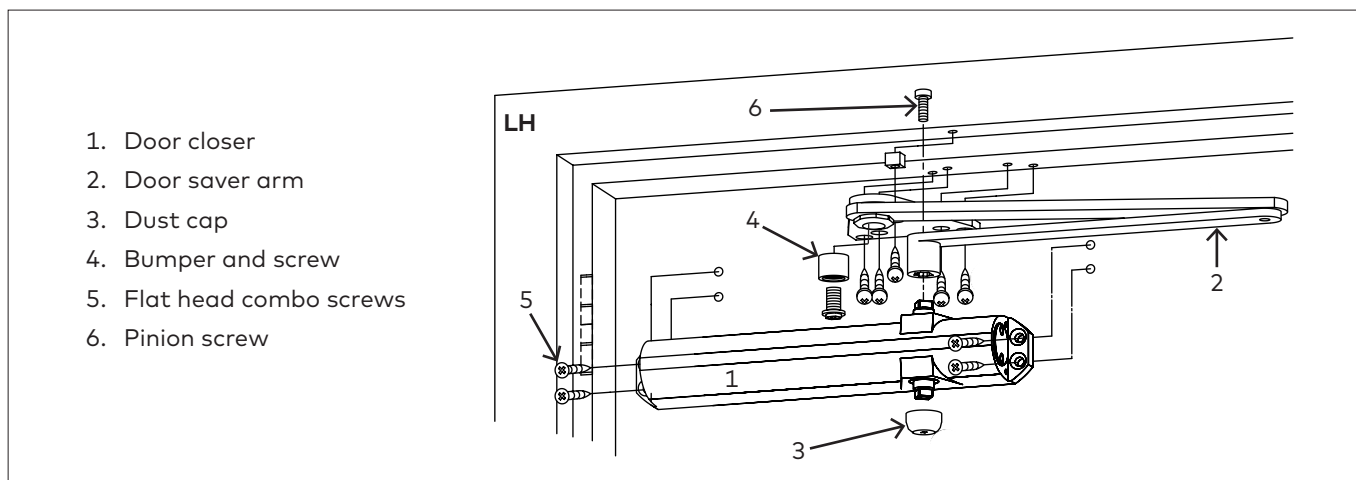
## 1.3 Handing the door

Fig.1



## 1.4 Closer system

Fig.2



# 2 Instructions - parallel mount

## 2.1 Installing (optional) drop plate and surface closer

Fig.3

2.1.1 Reference templates T91819, T91820, T91821, T91822, T91823, T91824, T91825, T91830.

2.1.2 Secure (optional) drop plate and/or closer body to door.

**NOTE: Ensure pinion is oriented away from hinge.**  
**NOTE: NFHD: Do not drill hole in frame for spacer block.**

## 2.2 Secure door saver arms (DS/DST or SDS/SDST)

Fig.4

**DS/DST units only**

2.2.1 Secure the bumper.

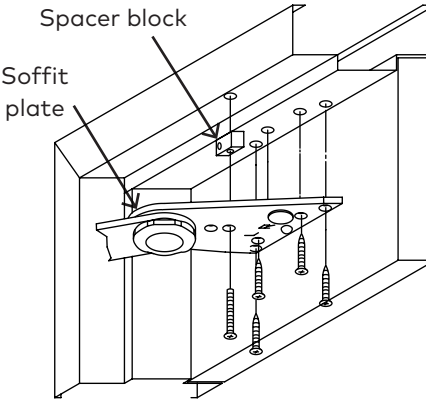
**SDS/SDST units only**

2.2.1 Secure spring door saver (SDS) mechanism.

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

Fig.5

### Standard with spacer block



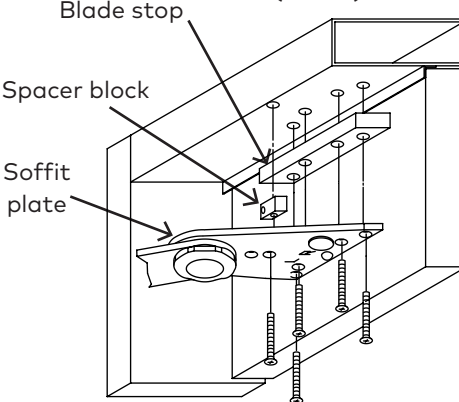
Spacer block

Soffit plate

2.3.1 Secure spacer block and soffit plate to frame.

2.3.2 Use included fasteners.

### With blade stop (optional) (BSHD)



Blade stop

Spacer block

Soffit plate

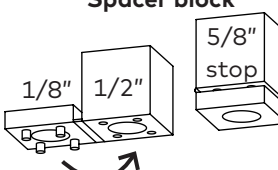
2.3.1 Secure blade stop, spacer block, and soffit plate to frame.

2.3.2 Use included fasteners.

2.3.3 Install spacer block using 1/2" height.

**NOTE: If frame width is 4-1/2" or less, NFHD bracket should be used.**

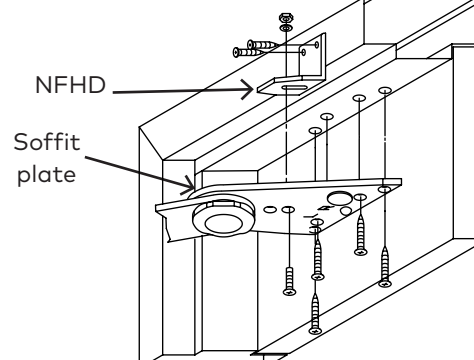
### Spacer block



1/8" 1/2" 5/8" stop

Deadstop	DIM "C"
85°	11-7/8" [302]
90°	11" [279]
100°	9-7/8" [251]
110°	8-3/4" [222]

### With heavy duty narrow frame bracket (optional) (NFHD)

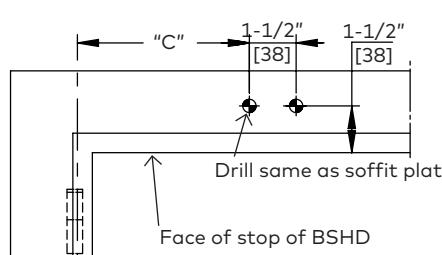


NFHD

Soffit plate

2.3.1 Secure NFHD bracket and soffit plate to frame.

2.3.2 Use included fasteners.



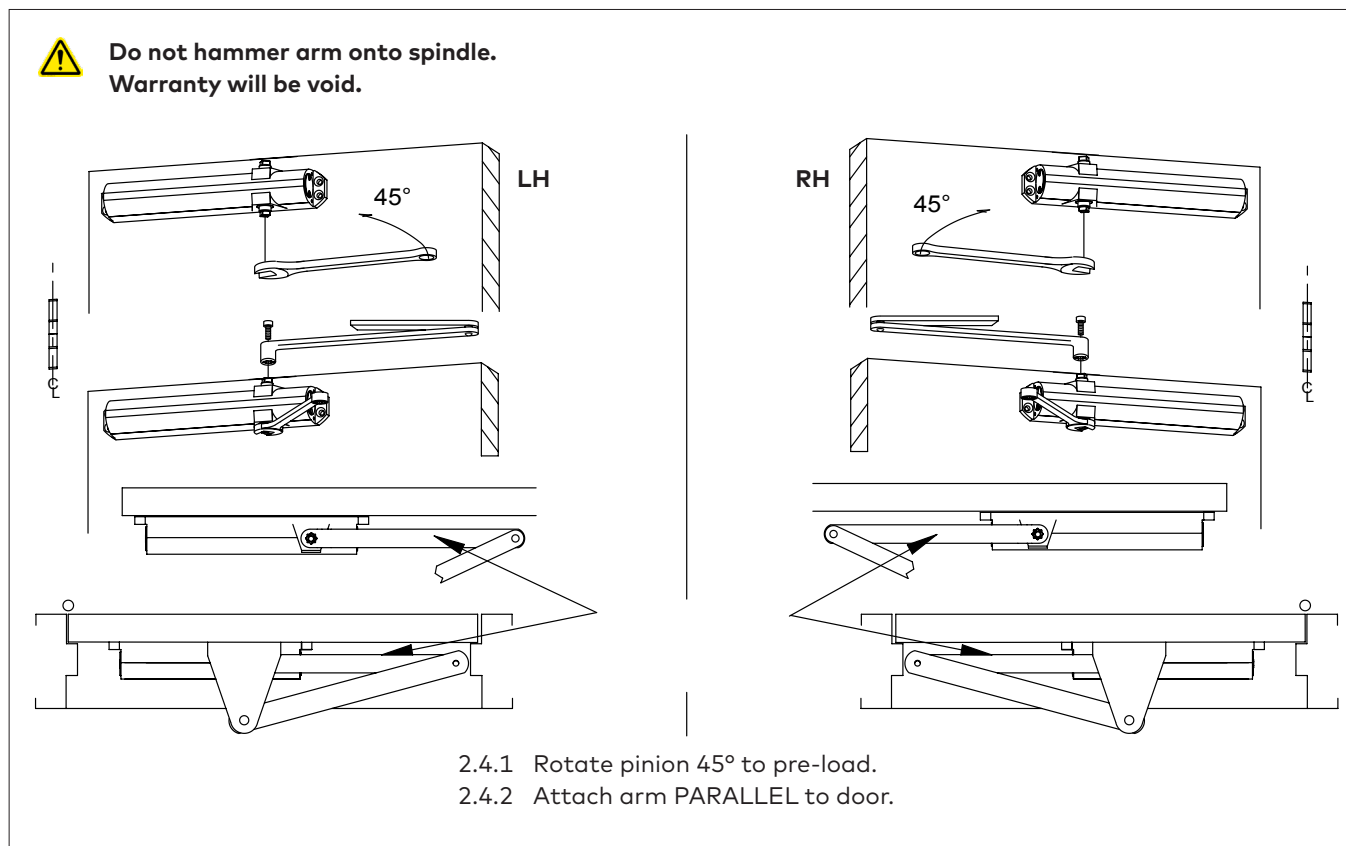
"C" 1-1/2" [38] 1-1/2" [38]

Drill same as soffit plate

Face of stop of BSHD

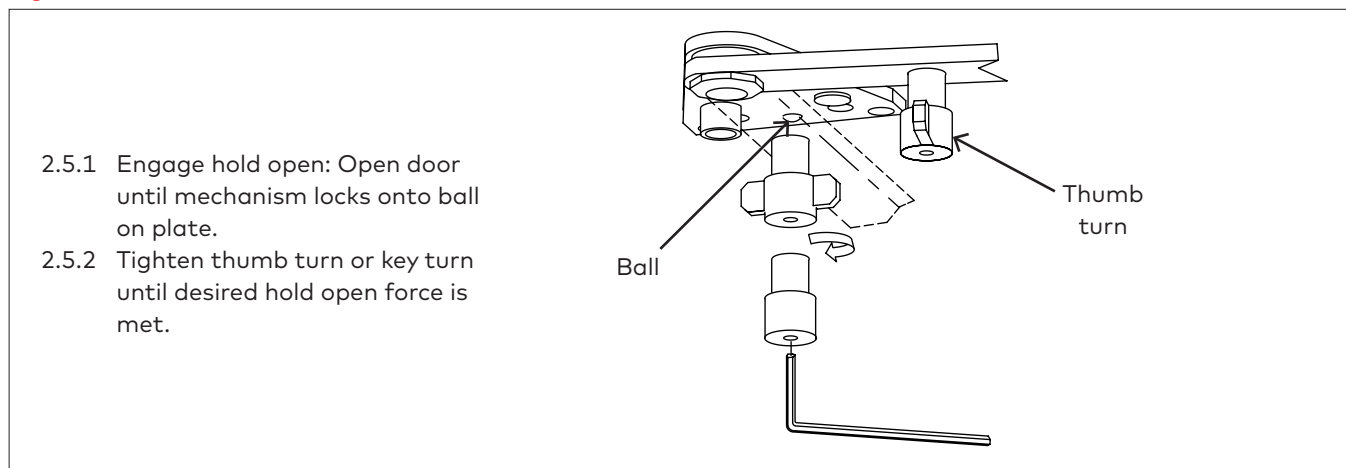
## 2.4 Securing main arm to closer

Fig.6



## 2.5 Adjust hold open (DST unit only)

Fig.7

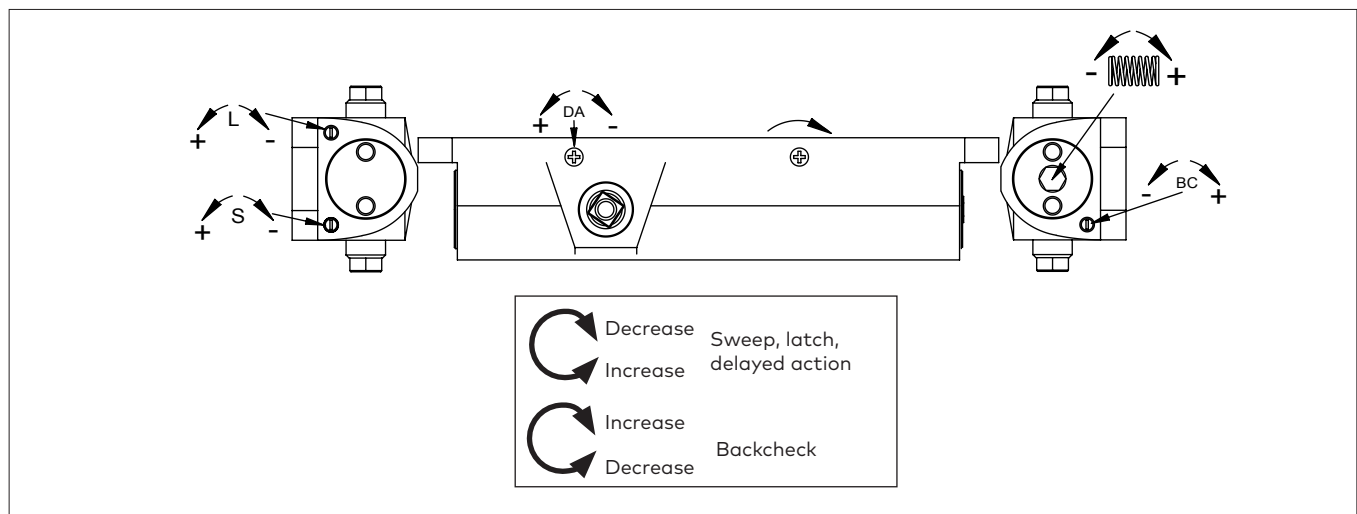


# 3 Adjustments

- ⚠ 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 (DA) function if supplied.
- ⚠ Maximum opening angle is 110°.
- ⚠ Door should close in 3 to 6 seconds from 90°.
- ⚠ Do not close valves completely.
- ⚠ Ball bearing hinges and pivots should always be used.
- ⚠ HD7016 meets 5lb interior barrier-free requirements. If necessary, adjust closer spring and test pull forces until proper forces are obtained.

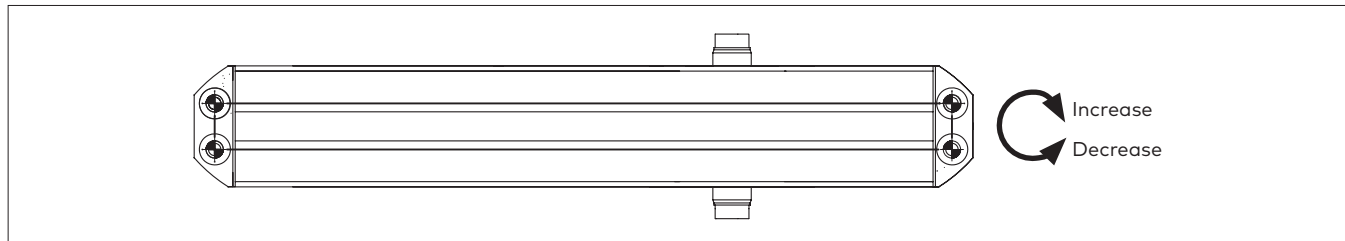
## 3.1 Adjust closing speeds: sweep, latch, backcheck, delayed action if applicable

Fig.8



## 3.2 Adjust spring force

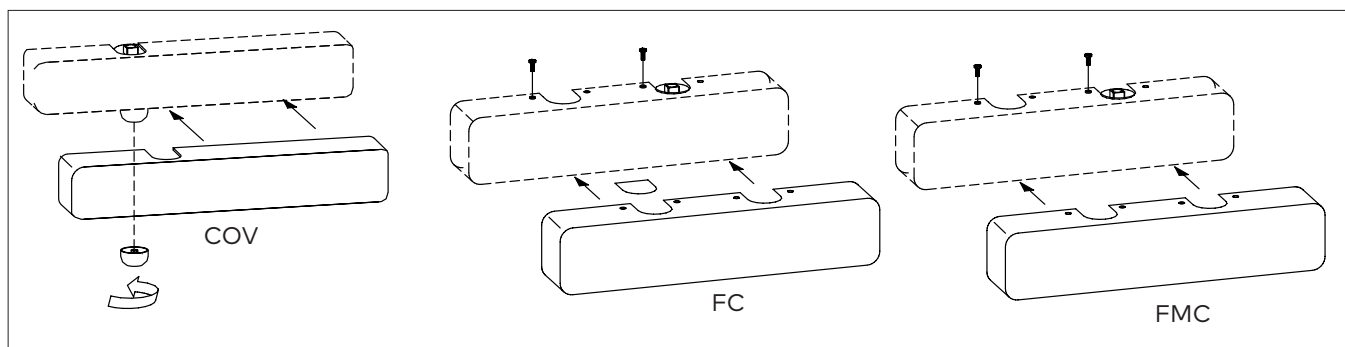
Fig.9



Parallel mount					
	Closer size	Max door weight (lbs)	Door width		Full turns
			Interior	Exterior	
HD7016	3	100	2'-6"	---	-11
	4	125	3'	2'6"	0
	5	150	3'6"	3'	+5
	6	200	4'	3'6"	+13

## 4 Install covers

Fig.10



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>