

# Norton®

## Tri-Style 1600H Series

### Non Handed Door Closer

## Installation Instructions


80-9316-2504-020 (12-09)

## Hold Open Arm Models

Sized (Sizes 2,3,4,5,6) Adjustable (Sizes 3 thru 6)  
**1601H**

Weaker  
↓  
Stronger +  
**1602BC-H**  
**1603BC-H**  
**1604BC-H**  
**1605BC-H**  
**1606BC-H**

(Sizes 1 thru 4)  
**1601BF-H**



**CAUTION** An Incorrectly installed or improperly adjusted door closer can cause property damage or personal injury. These installation instructions should be followed to avoid the possibility of misapplication or misadjustment. **CAUTION**



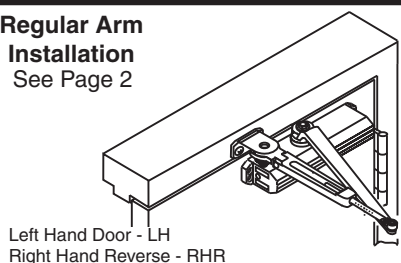
"DA" suffix (Delayed Action) is an optional feature. A separate sheet is supplied showing closer adjustments.

**NOTE:** For special applications a separate door and frame preparation template is packed with these instructions. Use this instruction sheet for installation sequence and closer adjustments only.

- Doors should be hung on ball bearing or anti-friction hinges.
- A separate door stop is recommended.
- Door and frame must be properly reinforced.
- Adjust closing time speed between 3 and 7 seconds from 90° to 0°.
- These door closers should NOT be installed on the exposed side (weather side) of exterior doors.

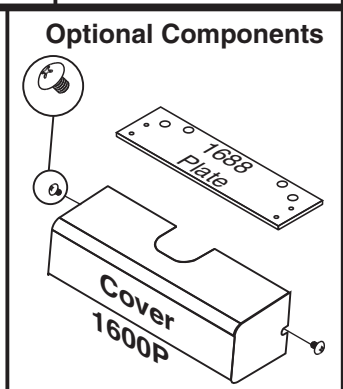
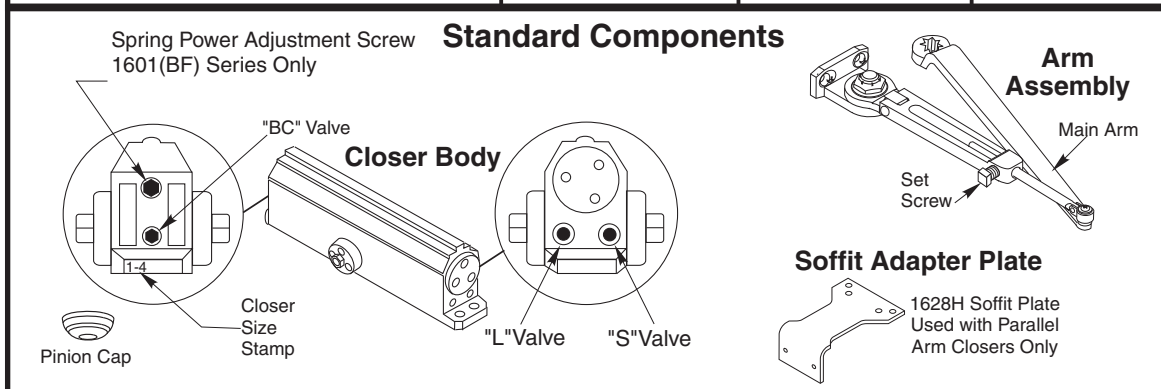
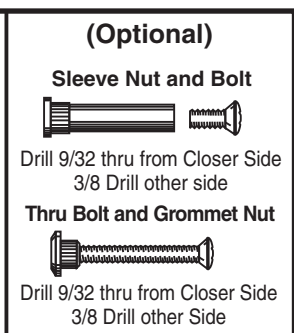
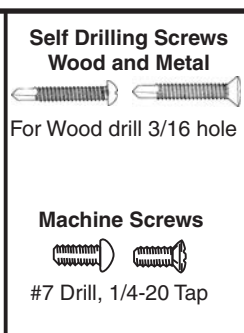
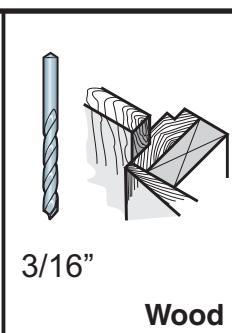
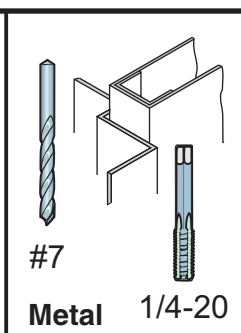
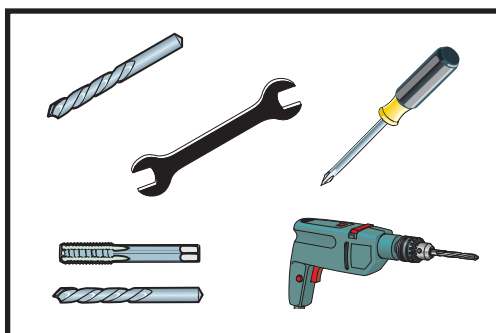
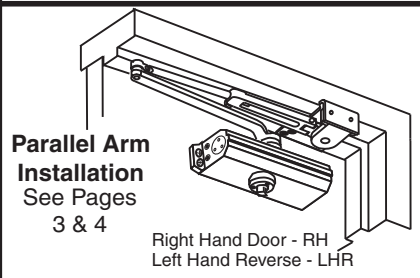
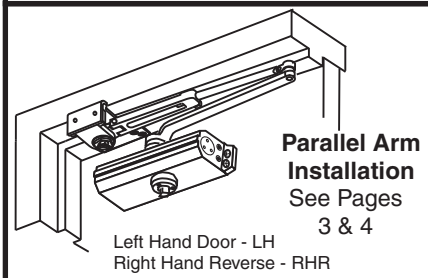
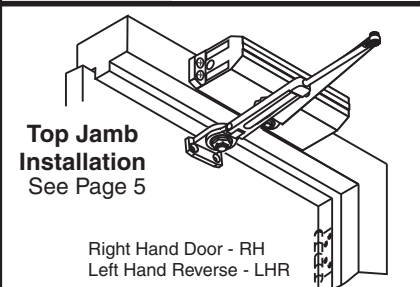
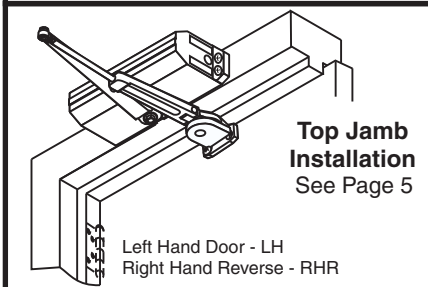
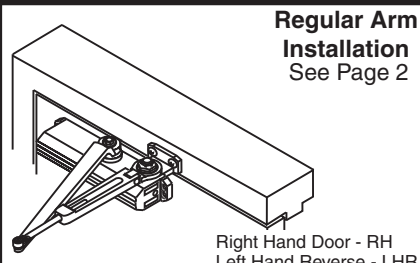
### Regular Arm Installation

See Page 2



### Regular Arm Installation

See Page 2



# 1600H Series

## Hold Open Arm Door Closers — Regular Arm

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### 1 Parts

Optional Cover

### 2

**Right Hand Shown**

Opening	Dimension "A"	Inches (mm)
To 100°	$\frac{7}{178}$	
101° to 120°	$\frac{6}{152}$	
* 121° to 180°	$\frac{3-1/2}{89}$	

\* Door/Wall/Hardware/Jamb conditions permitting

"L" and "S" valves toward hinge

### 3

Left Hand Nut Down

### 4 Sweep

### 5 Latch

### G

1601(BF) Only Spring Power Adjust (If Necessary)

### 6 Backcheck

**Caution:** Don't completely close valve

### 7 Set Hold Open

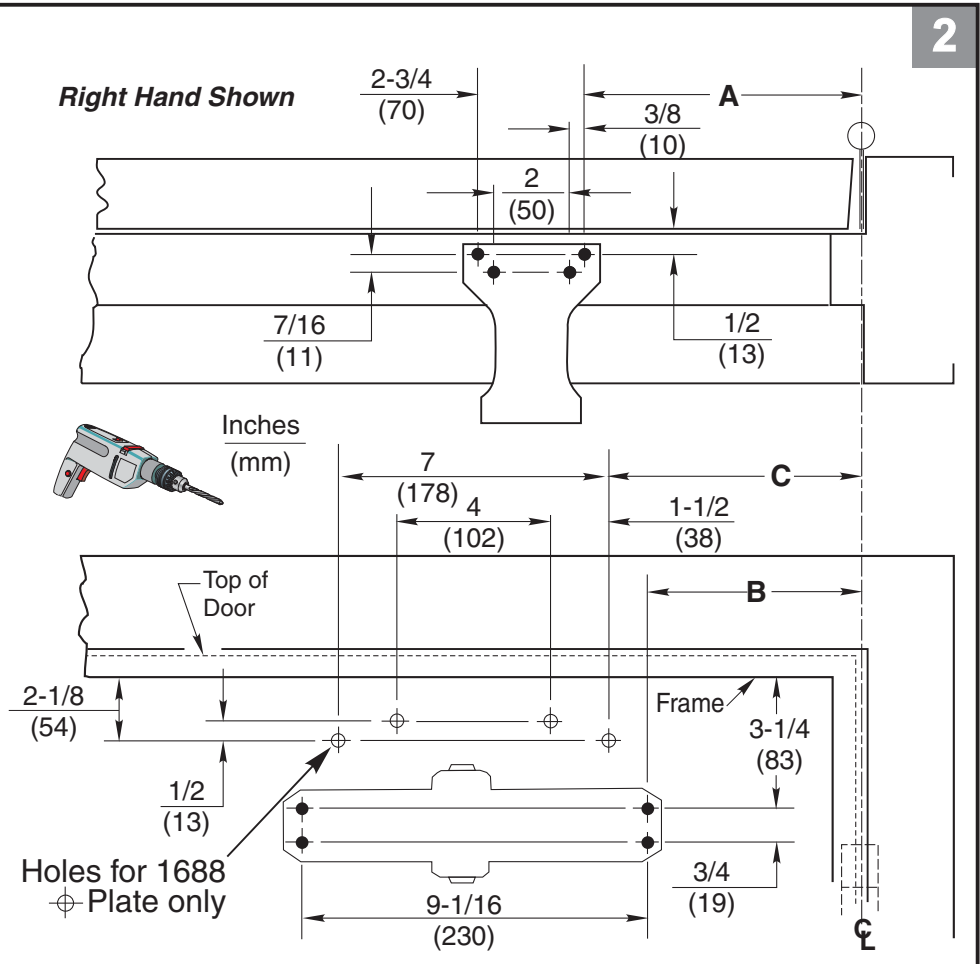
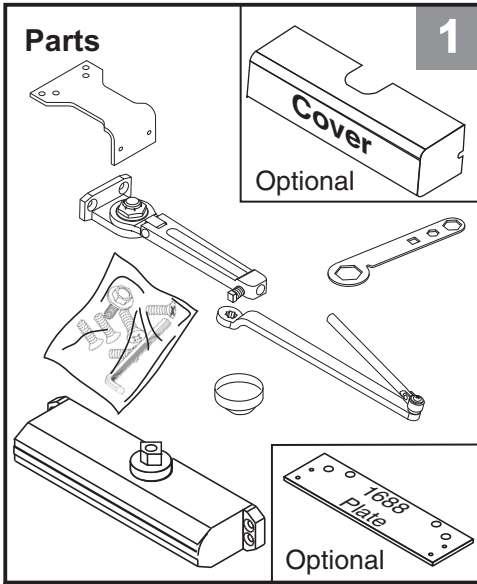
### 8 Pinion Cap or Optional Cover

Screw pinion cap onto pinion shaft by hand or with a Phillips screw driver - DO NOT OVER TIGHTEN.

# 1600H Series

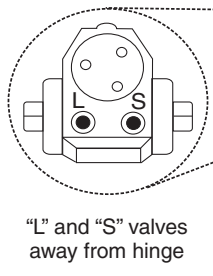
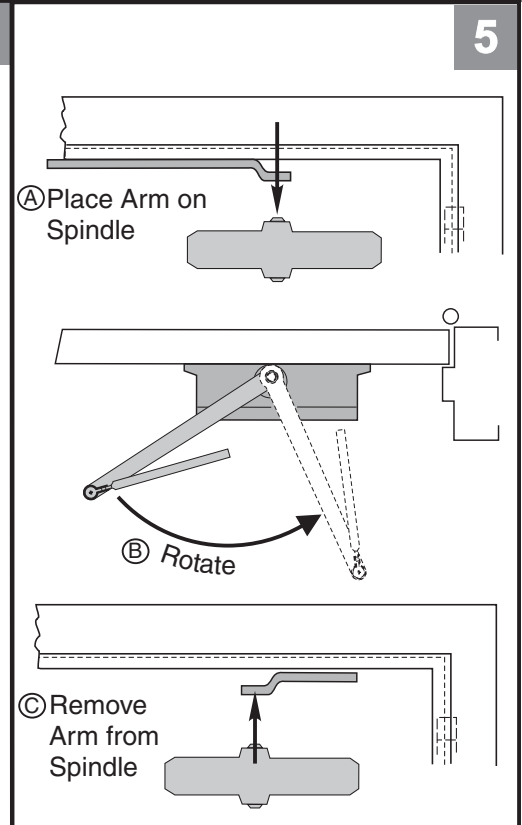
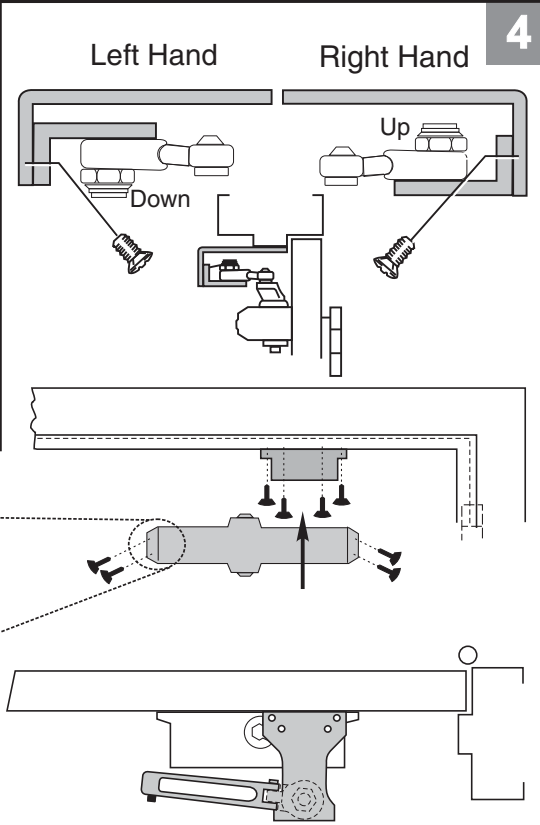
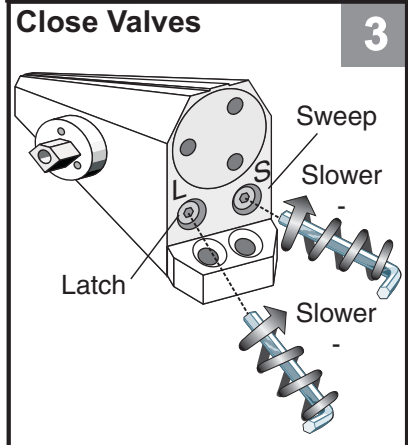
## Hold Open Arm Door Closers — Parallel Arm

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Door Opening	A	B	C
To 100°	9-1/4 (235)	7-5/8 (194)	8-5/8 (219)
101° to 130°	7-3/4 (197)	6-1/8 (156)	7-1/8 (181)
* 131° to 180°	5-3/4 (146)	4-1/8 (105)	5-1/8 (130)

\* Door/Wall/Hardware/Jamb conditions permitting



See Step 6 on Page 4

# 1600H Series

## Hold Open Arm Door Closers — Parallel Arm

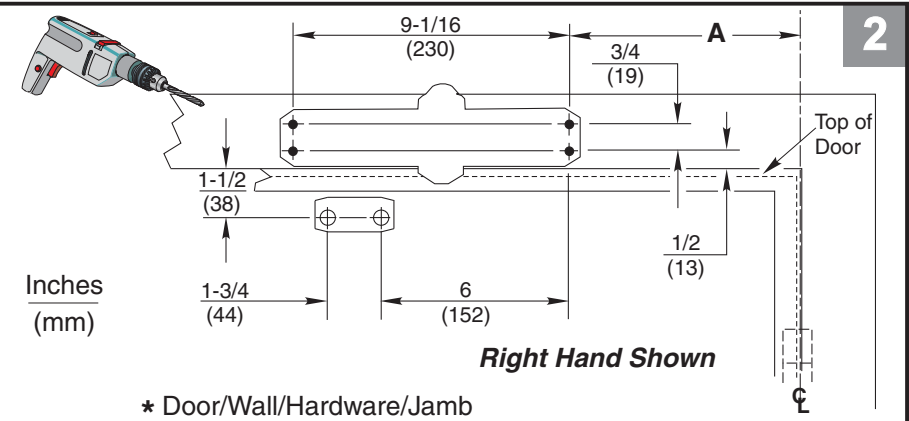
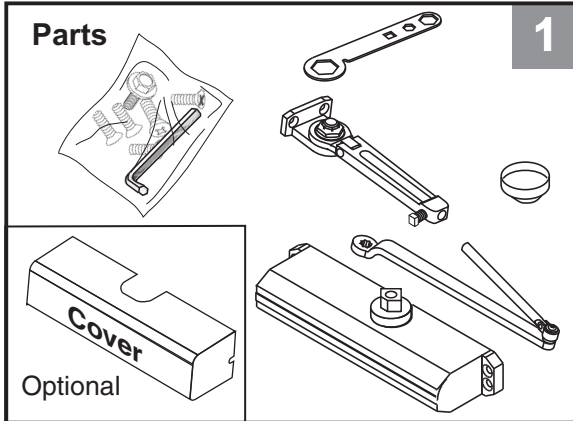
80-9316-2504-020 (12-09)

<p><b>6</b></p> <p>Right Hand Door or Left Hand Door</p> <p>Flat</p> <p>Flat</p> <p>A</p> <p>B</p>	<p><b>Open Valves</b></p> <p><b>7</b></p> <p>Caution: Do Not Back Valves out Completely</p>	<p><b>Assemble Arm</b></p> <p><b>8</b></p>	
<p><b>Arm Screw</b></p> <p><b>9</b></p> <p>1-1/2 (38)</p>	<p><b>Spring Power Adjust</b></p> <p><b>10</b></p> <p>1601(BF) only (If necessary)</p> <p>Stronger + PA Weaker -</p>	<p><b>Sweep</b></p> <p><b>11</b></p> <p>Slower - Faster +</p>	<p><b>Latch</b></p> <p><b>12</b></p> <p>Faster + Slower -</p>
<p><b>Backcheck</b></p> <p><b>13</b></p> <p>Stronger + BC Weaker -</p> <p>Caution: Don't completely close valve</p>	<p><b>Set Hold Open</b></p> <p><b>14</b></p> <p>70° to 180°</p> <p>A</p> <p>B</p>	<p><b>Pinion Cap or Optional Cover</b></p> <p><b>15</b></p> <p>(2)</p> <p>OR</p> <p>Screw pinion cap onto pinion shaft by hand or with a Phillips screw driver - DO NOT OVER TIGHTEN.</p>	

# 1600H Series

## Hold Open Arm Door Closers — Top Jamb Arm

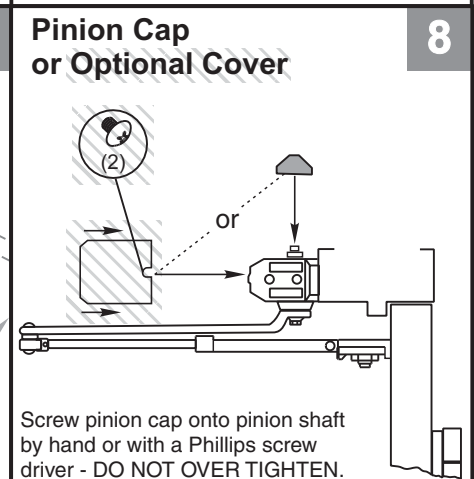
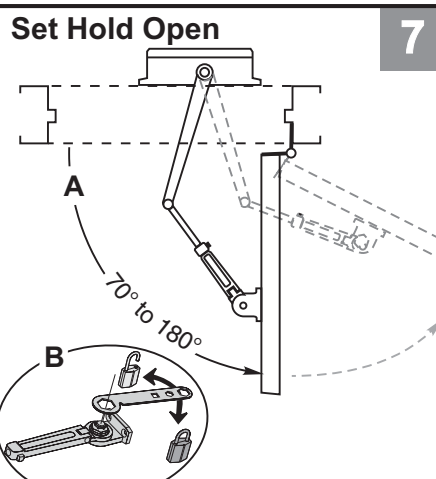
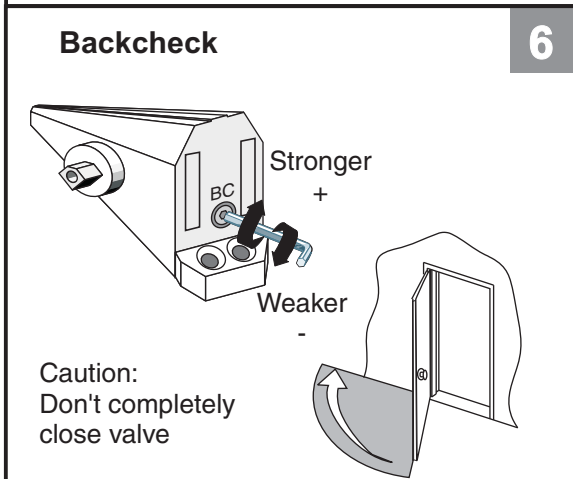
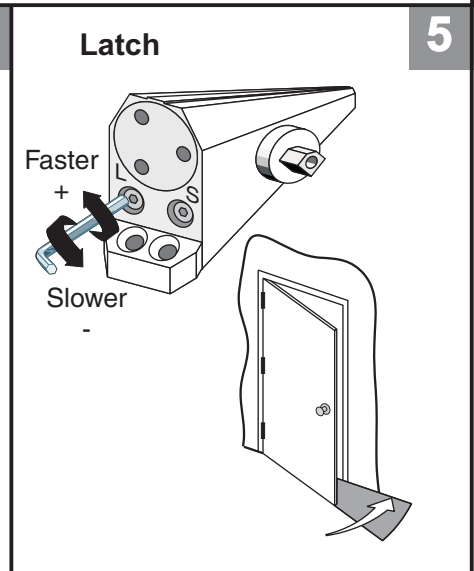
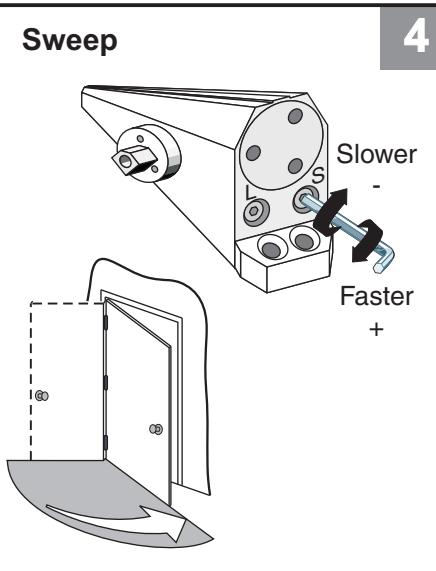
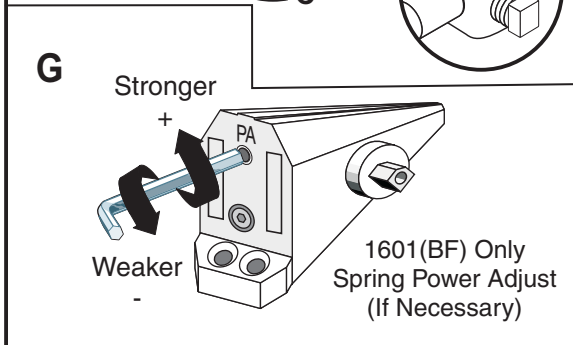
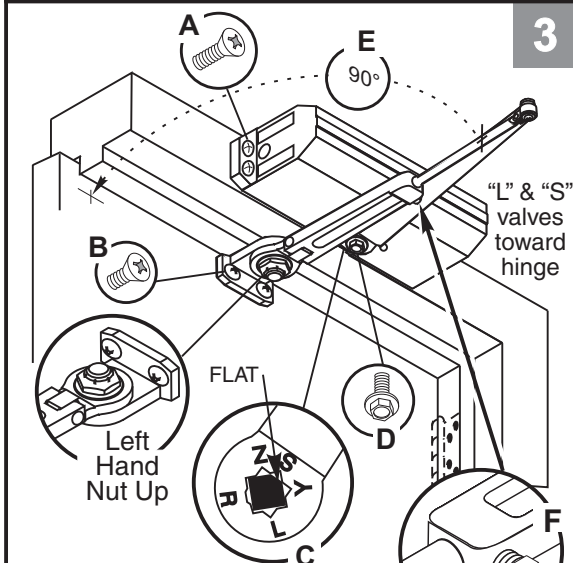
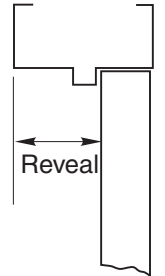
80-9316-2504-020 (12-09)



\* Door/Wall/Hardware/Jamb conditions permitting

Opening	Dimension "A"
To 100°	7-1/2 (191)
101° to 120°	6 (152)
*121° to 180°	3-1/2 (89)

Longer connecting rod 7701-31A is required for reveals greater than 3" (76)





# 1600H Series Adjustments Page

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### Sweep

### Latch

### Backcheck

(Use 1/8" Hex Wrench for these Adjustments)

## Spring Power Adjust 1601 (BF) only

(Use 1/8" Hex Wrench for this Adjustment)

Adjustment Chart				Number of Turns Required MAXIMUM DOOR SIZE					
	DOOR	TYPE OF INST.	*	34"	36"	40"	44"	48"	
				(0.85M)	(0.90M)	(1.00M)	(1.10M)	(1.20M)	
1601BF	INTERIOR	Regular Arm Top Jamb	FULL 360° TURNS OF 1/8" POWER ADJUSTMENT WRENCH	1	1	2	3	3	
		Parallel Arm		2	2	3	4	5	
	EXTERIOR	Regular Arm Top Jamb		5	6	8	NOT RECOMMENDED USE 1601		
		Parallel Arm		8	9	12			
1601	INTERIOR	Regular Arm Top Jamb		FULL 360° TURNS OF 1/8" POWER ADJUSTMENT WRENCH	2	4	6	9	11
		Parallel Arm			3	5	7	10	13
	EXTERIOR	Regular Arm Top Jamb			3	5	7	10	13
		Parallel Arm			5	7	10	14	16

\*18 FULL (360°) TURNS MAXIMUM AVAILABLE  
 = 8 Turns As Shipped

### To identify your model:

Size Code

2=1602BC

3=1603BC

4=1604BC

5=1605BC

6=1606BC

Date Code

3-6=1601

1-4=1601BF

### To Set Hold Open

Open Door to Desired Angle

Use 1" Wrench