



**ASSA ABLOY**

## Installation Instructions

# Tri-Style 1600 Series

Non Handed Door Closer

## Non Hold Open Models

Sized  
(Sizes 2,3,4,5,6)

Adjustable  
(Sizes 3 thru 6)

Weaker  
↓  
Stronger  
+

**1602BC**  
**1603BC**  
**1604BC**  
**1605BC**  
**1606BC**

**1601**

(Sizes 1 thru 4)

**1601BF**



**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.

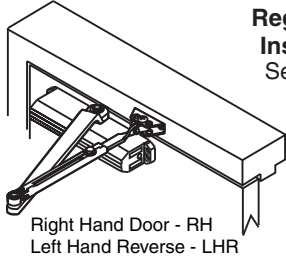
**CAUTION**

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

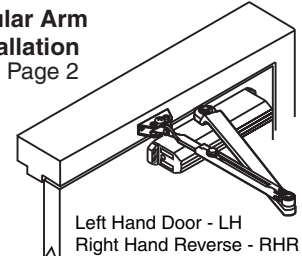
**NOTE:** For special applications a separate door and frame preparation template is packed with these instructions. Use this instruction sheet for installation sequence and closer adjustments only.

- 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.

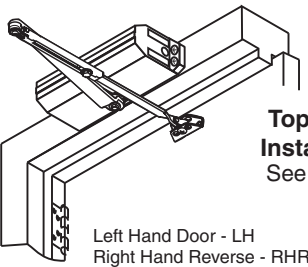
### Regular Arm Installation See Page 2



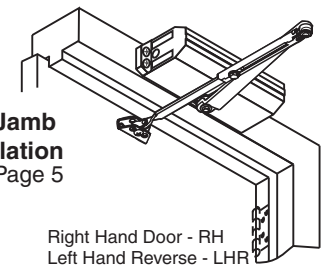
### Regular Arm Installation See Page 2



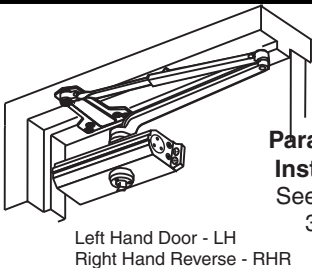
### Top Jamb Installation See Page 5



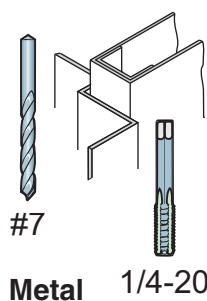
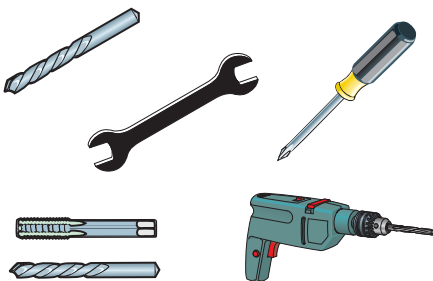
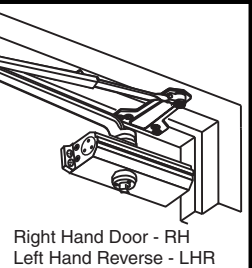
### Top Jamb Installation See Page 5



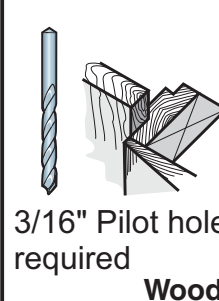
### Parallel Arm Installation See Pages 3 & 4



### Parallel Arm Installation See Pages 3 & 4



**#7 Metal 1/4-20**



**3/16" Pilot hole required Wood**

**Self Drilling Screws  
Wood and Metal**  
For Wood drill 3/16 hole

**Machine Screws**  
#7 Drill, 1/4-20 Tap

### (Optional)

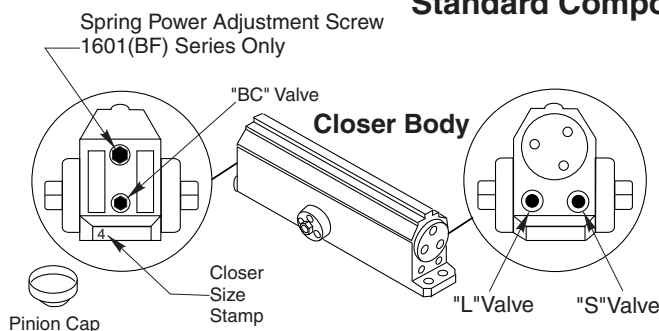
#### Sleeve Nut and Bolt

Drill 9/32 thru from Closer Side  
3/8 Drill other side

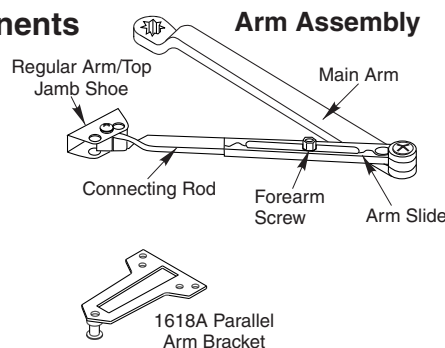
#### Thru Bolt and Grommet Nut

Drill 9/32 thru from Closer Side  
3/8 Drill other Side

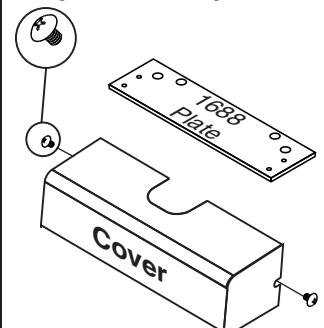
## Standard Components



## Arm Assembly



## Optional Components



# 1600 Series

## Non Hold Open Door Closers — Regular Arm

**Norton**

**ASSA ABLOY**

### 1 Parts

**Optional**

### 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

### 3

**Stronger +**  
**Weaker -**

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

### 4 Sweep

### 5 Latch

### 6 Backcheck

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

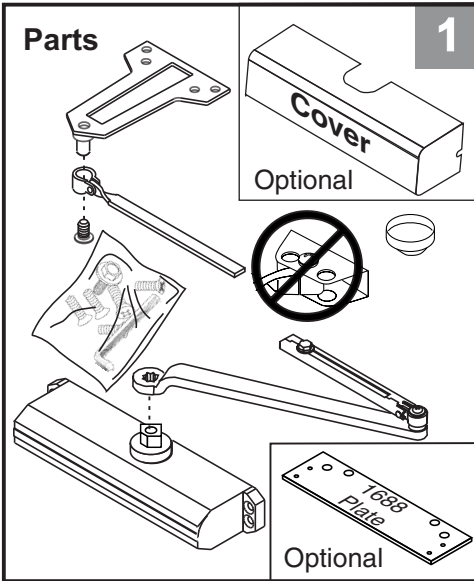
### 7 Pinion Cap or Optional Cover

# 1600 Series

## Non Hold Open Door Closers — Parallel Arm

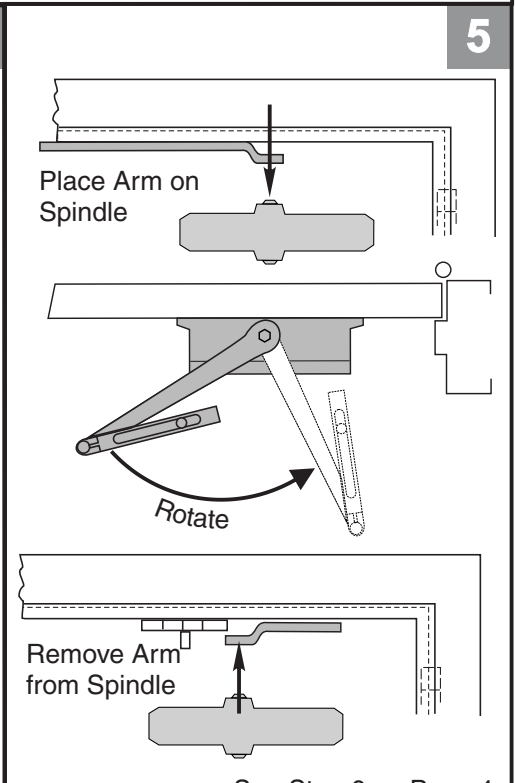
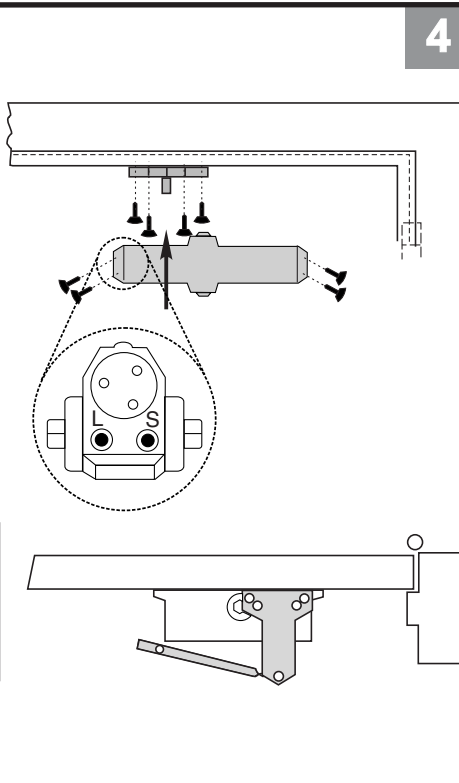
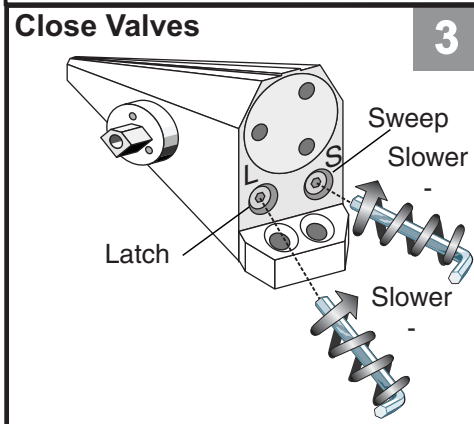
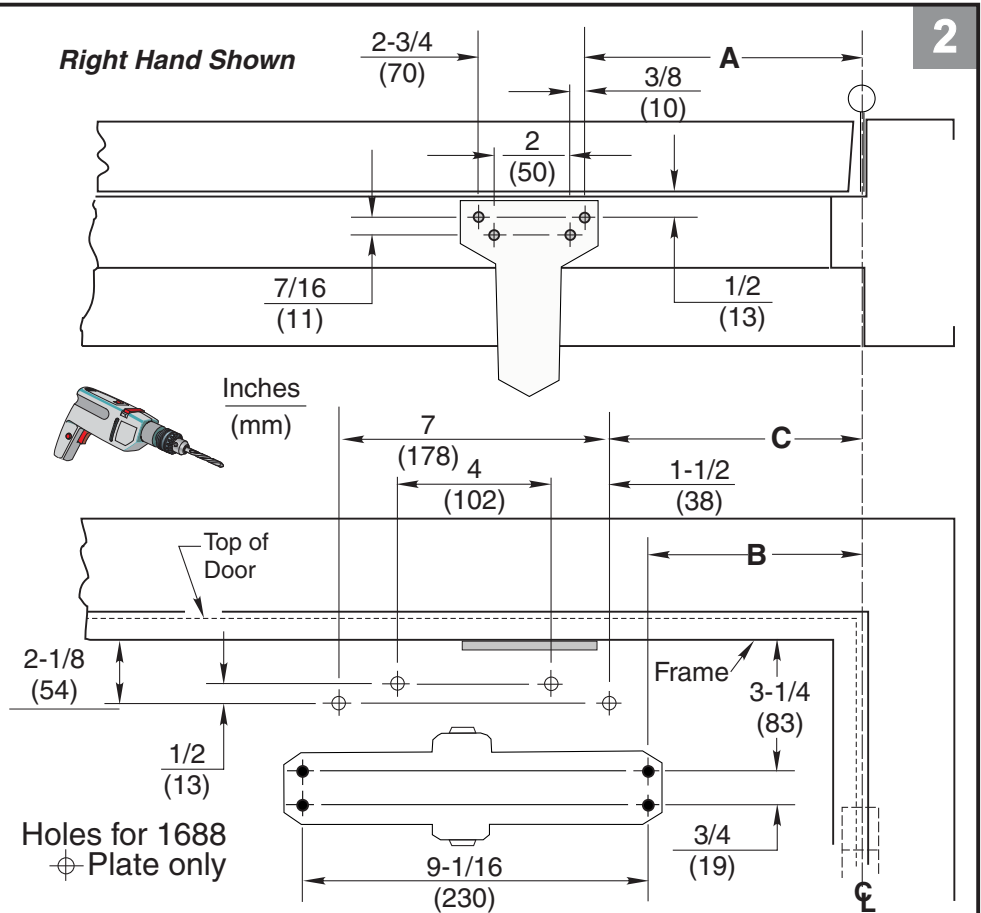
**Norton**

**ASSA ABLOY**



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

\* Door/Wall/Hardware/Jamb conditions permitting



See Step 6 on Page 4

# 1600 Series

## Non Hold Open Door Closers — Parallel Arm

**Norton**

**ASSA ABLOY**

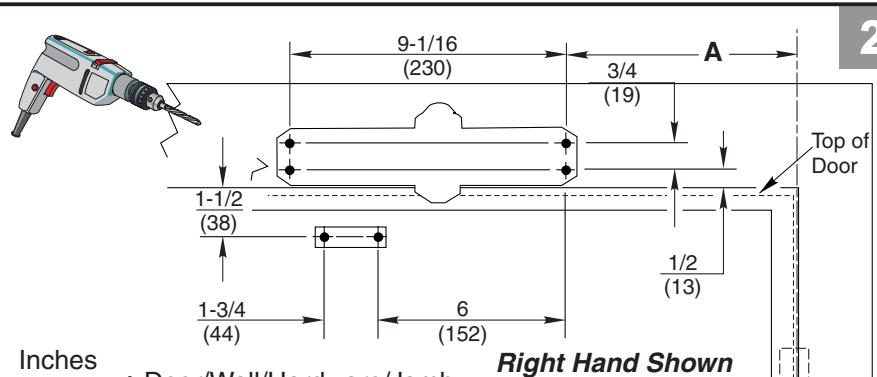
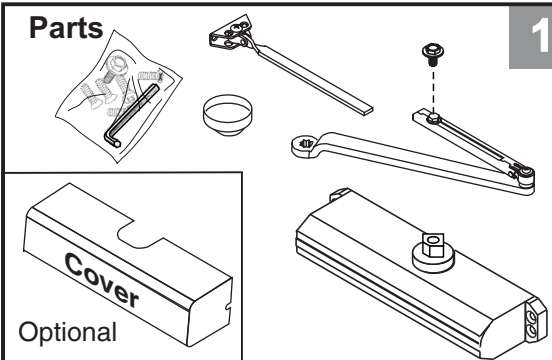
|                                                                                                |                                                                                                                                       |                                                                                      |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <p><b>6</b></p> <p>Right Hand Door<br/>or<br/>Left Hand Door</p> <p>Flat</p> <p>A</p> <p>B</p> | <p><b>7</b></p> <p><b>Open Valves</b></p> <p>Caution:<br/>Do Not Back<br/>Valve Out<br/>Completely</p>                                | <p><b>8</b></p> <p><b>Assemble Arm</b></p>                                           |
| <p><b>9</b></p> <p><b>Arm Screw</b></p> <p>1-1/2<br/>(38)</p>                                  | <p><b>10</b></p> <p><b>Spring Power Adjust<br/>1601(BF) only<br/>(If necessary)</b></p> <p>Stronger<br/>+<br/>PA<br/>Weaker<br/>-</p> | <p><b>11</b></p> <p><b>Sweep</b></p> <p>Slower<br/>-<br/>Faster<br/>+</p>            |
| <p><b>12</b></p> <p><b>Latch</b></p> <p>Faster<br/>+<br/>Slower<br/>-</p>                      | <p><b>13</b></p> <p><b>Backcheck</b></p> <p>Stronger<br/>+<br/>Weaker<br/>-</p> <p>Caution:<br/>Don't completely<br/>close valve</p>  | <p><b>14</b></p> <p><b>Pinion Cap<br/>or Optional Cover</b></p> <p>(2)</p> <p>or</p> |

# 1600 Series

## Non Hold Open Door Closers — Top Jamb Arm

**Norton**

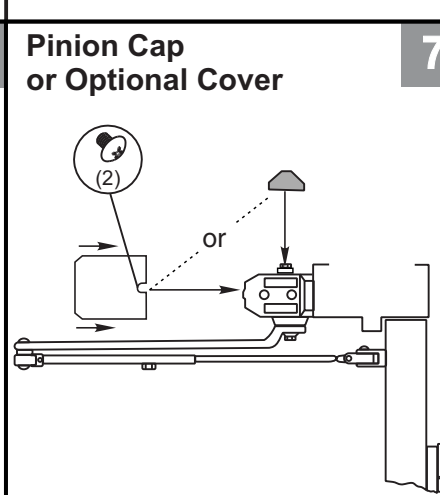
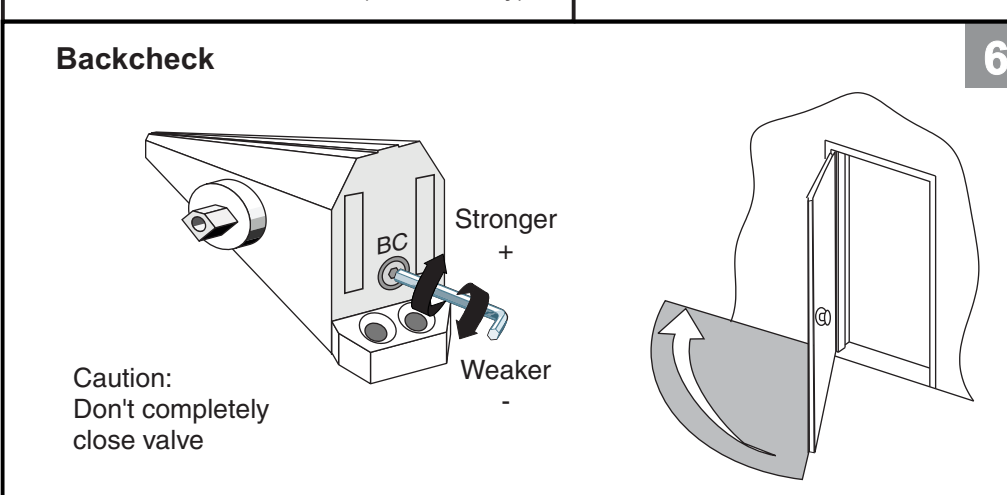
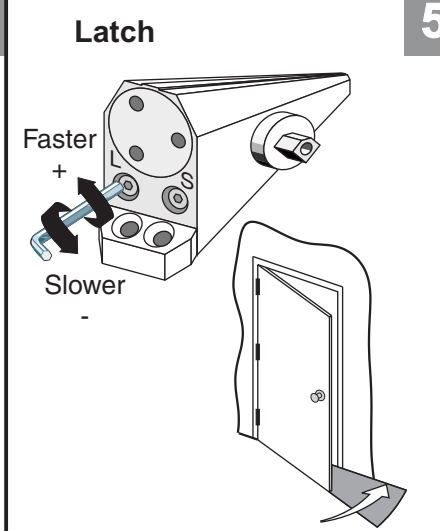
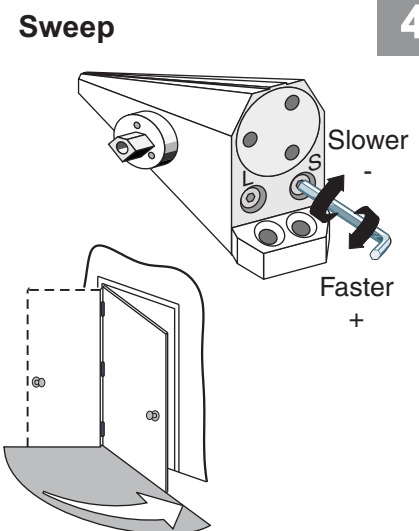
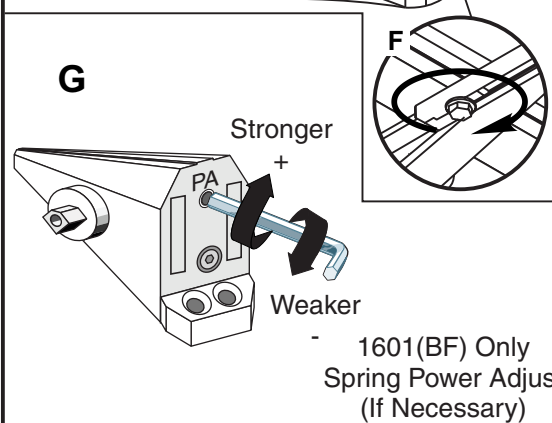
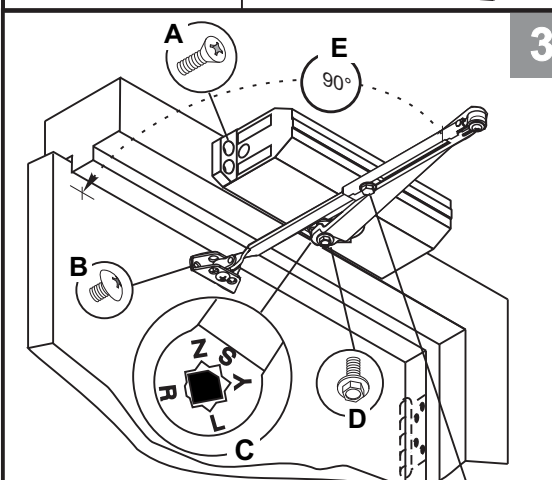
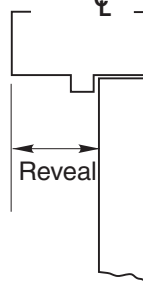
**ASSA ABLOY**



Inches (mm) \* 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)    |

A longer connecting rod is required for reveals greater than 3" (76)



# 1600 Series Adjustments

**Sweep**

Slower -  
Faster +

**Latch**

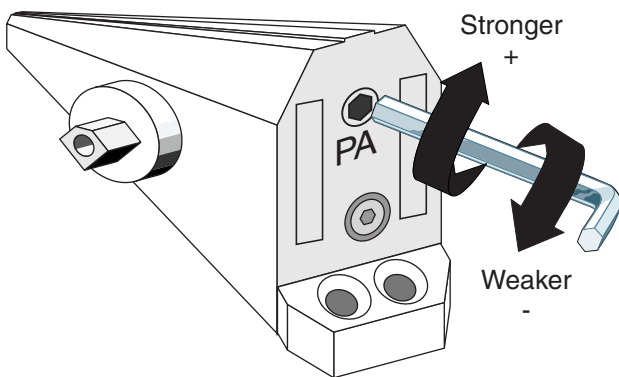
(Use 1/8" Hex Wrench for these Adjustments)

Faster +  
Slower -

**Backcheck**

Stronger +  
Weaker -

## Spring Power Adjust 1601 (BF) only



(Use 3/16" Hex Wrench for this Adjustment)

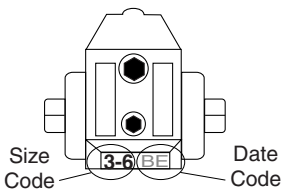
### Adjustment Chart

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

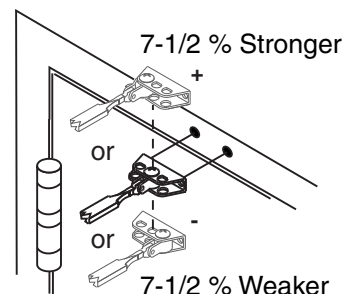
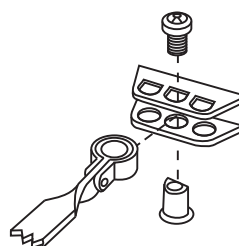
= 8 Turns As Shipped

### To identify your model:



2=1602BC    3-6=1601  
3=1603BC    1-4=1601BF  
4=1604BC  
5=1605BC  
6=1606BC

### Arm Placement in Shoe



**Norton**  
**ASSA ABLOY**

3000 Highway 74 East • Monroe, NC 28112  
Tel: (877)-974-2255 • Fax: (800)-338-0965  
[www.nortondoorcontrols.com](http://www.nortondoorcontrols.com)