## **1600H Series Non-Handed Door Closer**

Arm Models 1601H, 1603BC-H, and 1604BC-H

#### Installation Instructions

Hold Open arm models, adjustable size 1-6 (model 1601H &) and size 3 & 4 (models 1603BC-H and 1604BC-H).





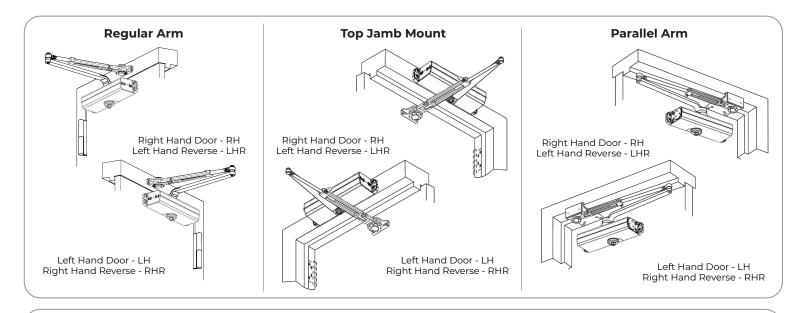


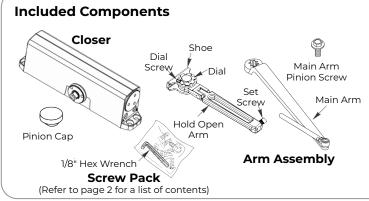
#### / WARNING

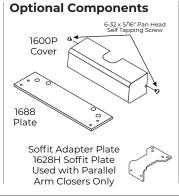
This product can expose you to lead which is known to the state of California to cause cancer and birth defects or other reproductive harm.

For more information go to: www.P65warnings.ca.gov.

READ AND FOLLOW ALL INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

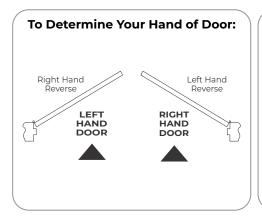


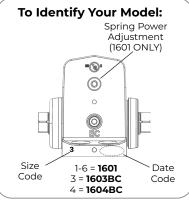






installation orientation. Refer to document number 80-9300-0003-000 for details.









#### **1600H Series** Non-Handed Door Closer

#### ATTENTION:

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.

- 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.
- Always consult door/frame manufacturer for fastener compatibility.
- · 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 exposed side (weather side) of exterior doors.
- Dimensions are given in inches (millimeters).

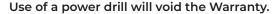
#### **Supplied Hardware**

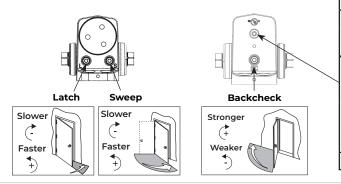
	Mounting Hardware	Door or Frame	Drill
	Closer, Holder Shoe, Holder, PA Bracket: 1/4-14 x 1-1/2 Oval Flat Head Self Drilling. Screw Wood/Metal 3/16" (4.8mm) for wood/Metal		3/16" (4.8mm) for wood
	Closer, Holder Shoe, Holder, PA Bracket: 1/4-20 x 3/4 Oval Flat Head Mach. Screw	Metal	Drill #7 (.201 dia. or 5.1mm) Tap 1/4-20
	<b>H/O Shoe to Holder, PA Bracket:</b> 1/4-20 x 1/2 Oval Flat Head Mach. Screw	All	N/A
	<b>Closer:</b> Sleeve Nut and Bolt (SNB) (optional)	Hollow Metal	9/32" (7.0mm) thru 3/8" (9.5mm) door face opposite to closer
	with 1/4-20 x 3/4 Oval Flat Head Mach. Screw (recommended)	Aluminum or Wood	3/8" (9.5mm) thru
December of the state of the st	<b>Closer:</b> Thru Bolt and Grommet Nut (TBGN) (optional)	All	9/32" (7.0mm) thru 3/8" (9.5mm) dia. x 3/8" (9.5mm) deep, door face opposite to closer

### **Closer Adjustments**



Use provided hex wrench to turn valves. NEVER force valves out of closer. NEVER completely close backcheck valve. Door must be open to adjust spring closing power. Refer to the chart.



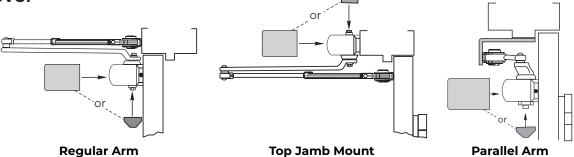


Spring Closing Power			Number of Turns Required					
	٦٢	T of		Maximum Door Size				
	Door	Type of Installation	*	34" (0.85M)	36" (0.90M)	40" (1.00M)	44" (1.10M)	48" (1.20M)
1601	Interior	Regular Arm Top Jamb	Full 360° Turns	2	4	6	10	12
		Parallel Arm		3	5	8	11	14
	Exterior	Regular Arm Top Jamb		3	5	8	11	14
		Parallel Arm		5	8	11	16	19
*30	*30 Full (360°) turns maximum available = turns as shipped						pped	

# **Pinion Cap or Cover**



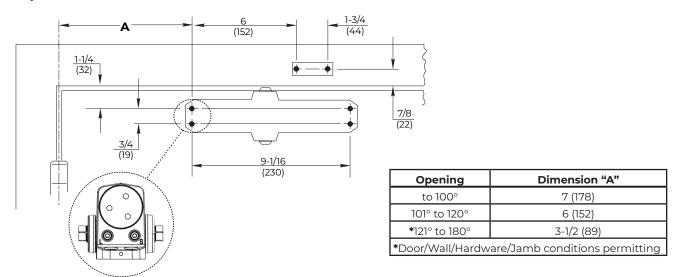
Do not over tighten cap or cover screws.



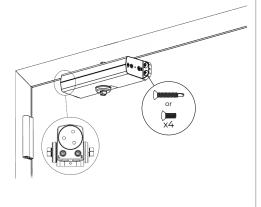


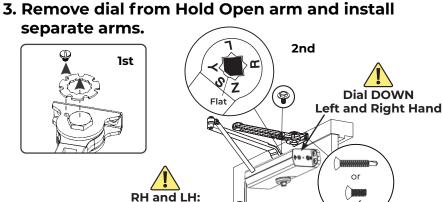
# 1600H Regular Arm Installation (Right Hand Shown)

1. Prepare door and frame.

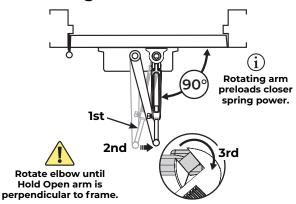




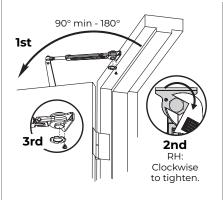




#### 4. Connect arms, preload spring, and tighten set screw.

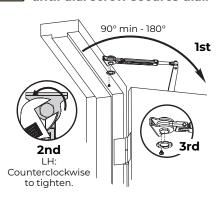


# 5. Set Hold Open.



Position flat at S

#### Keep door open in position until dial screw secures dial.



The 1600H Hold Open Closer - Regular Arm has now been installed.

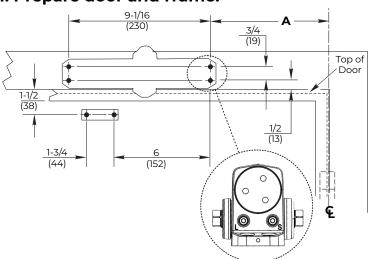
• Go to page 2 for closer adjustments and decorative cap or cover installation.



#### **1600H Series** Non-Handed Door Closer

## 1600H Top Jamb Arm Installation (Right Hand Shown)

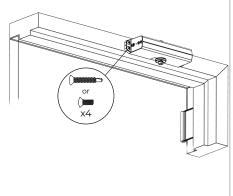
#### 1. Prepare door and frame.



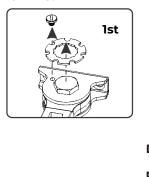
Opening	Dimension "A"			
to 100°	7-1/2 (191)			
101° to 120°	6 (152)			
*121° to 180°	3-1/2 (89)			
*Door/Wall/Hardware/Jamb conditions permitting				

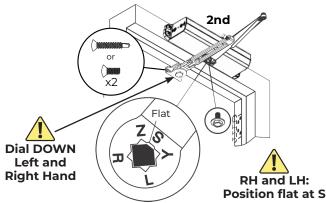
A longer connecting rod is required for reveals greater than 3" (76mm)

#### 2. Mount closer to frame.

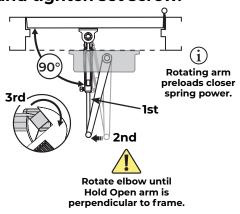


# 3. Remove dial from Hold Open arm and install separate arms.

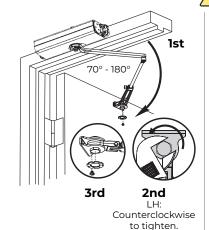




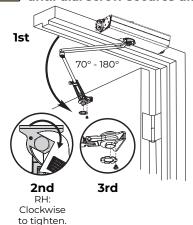
# 4. Connect arms, preload spring, and tighten set screw.



### 5. Set Hold Open.



Keep door open in position until dial screw secures dial.



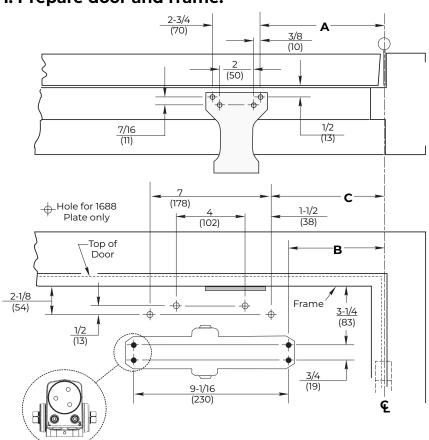
The 1600H Hold Open Closer - Top Jamb Mount has now been installed.

Go to page 2 for closer adjustments and decorative cap or cover installation.



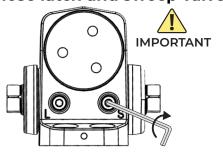
## 1600H Parallel Arm Installation (Right Hand Shown)

1. Prepare door and frame.

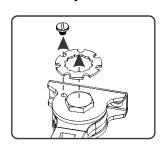


Door Opening	Dimension "A"	Dimension "B"	Dimension "C"		
to 100°	9-1/4 (235)	7-5/8 (194)	8-5/8 (219)		
101° to 130°	7-3/4 (197)	6-1/8 (156)	7-1/8 (181)		
*131° to 180° 5-3/4 (146) 4-1/8 (105) 5-1/8 (130)					
*Door/Wall/Hardware/Jamb conditions permitting					

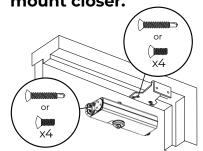
2. Close latch and sweep valves.



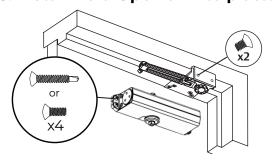
3. Remove dial from Hold Open arm.



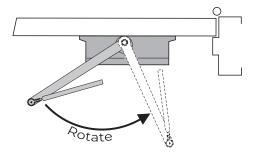
4. Install soffit plate and mount closer.



5. Install Hold Open arm to plate.



6. Place main arm on closer spindle and rotate.

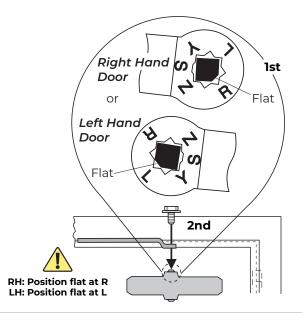


The ASSA ABLOY Group is the global leader in access solutions. Every day we help people feel safe, secure and experience a more open world.

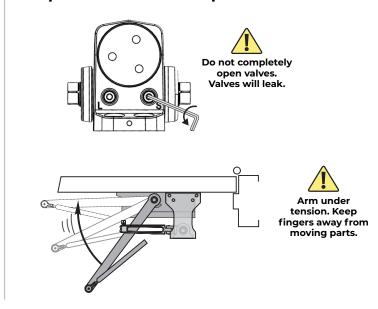


# 1600H Parallel Arm Installation (Right Hand Shown) cont.

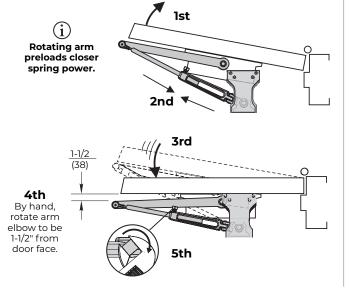
#### 7. Remove arm and attach as shown.



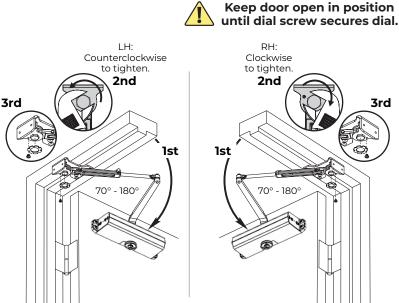
#### 8. Open latch and sweep valves.



# 9. Connect arms, preload spring, and tighten set screw.



# 10. Set Hold Open.



The 1600H Hold Open Closer - Parallel Arm Mount has now been installed.

• Go to page 2 for closer adjustments and decorative cap or cover installation.

Technical Product Support: Monroe, NC 28112 USA Phone: 877.974.2255 ext: 2

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NortonRixson.com