



INSTALLATION

&

SERVICE MANUAL

FOR

HIGH SECURITY SERIES

HS-336

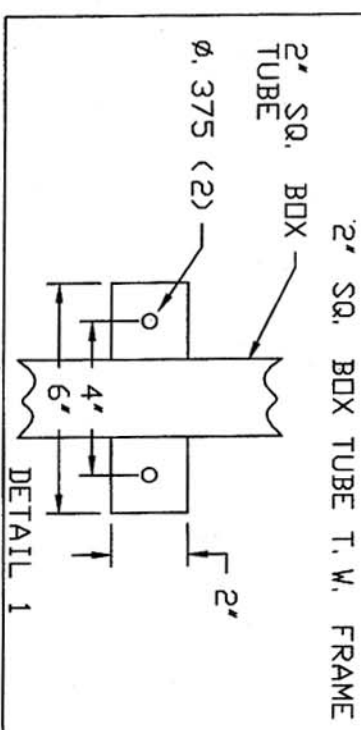
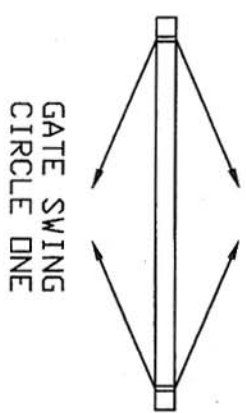
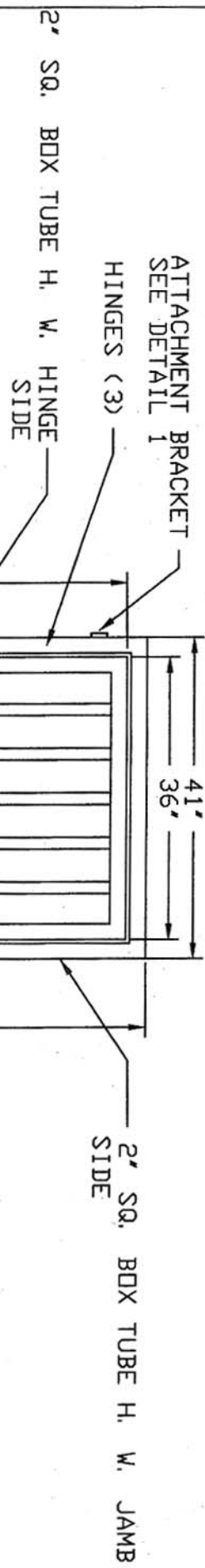
MANUAL PASSAGE MANGATE

IMPORTANT: Please save this booklet after installation. If installation is done by Construction Company, please give this booklet to customer when installation is complete. They will require it for maintenance and repairs.

Thank you.

8641 S. Warhawk Rd. Conifer, CO 80433
(303) 670-1099 x11 (303) 679-8949 fax
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P.N. HS336



MATERIAL: CARBON STEEL	SCALE: 20=1	APPROVED BY:	DRAWN BY: LC ³
FINISH: N/A	DATE: 1-7-99	REVISED:	
TOL. UNLESS OTHERWISE SPEC. .X ± .1 .XX ± .03	8641 S. Warhawk Rd. Conifer, CO 80433 (303) 670-1099 x11 (303) 679-8949 fax Patrick.McAllister@TURNSTILES.us MATCHING SWING GATE		



Installation instructions HS-336 ManGate

1. Verify gate swing and layout holes to be drilled.
2. Core drill holes 3" diameter holes 39" on center 6" deep
3. Install gate in holes. Attach gate to turnstile or adjoining wall / structure using the mounting brackets on both sides of the gate. Align alignment lines and square up gate.
4. Pour fast set mortar in holes, following manufactures instructions.
5. Make electrical connections if gate is so equipped.



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VOLTAGE

Available in 12, 16 or 24 volt AC and DC. DC and AC Continuous units are silent, AC intermittent units "buzz" on operation.

CURRENT DRAW/AMPS

Volts	AC Int.	DC or AC Cont.
12	1.42	.33
16	1.03	.22
24	.74	.17

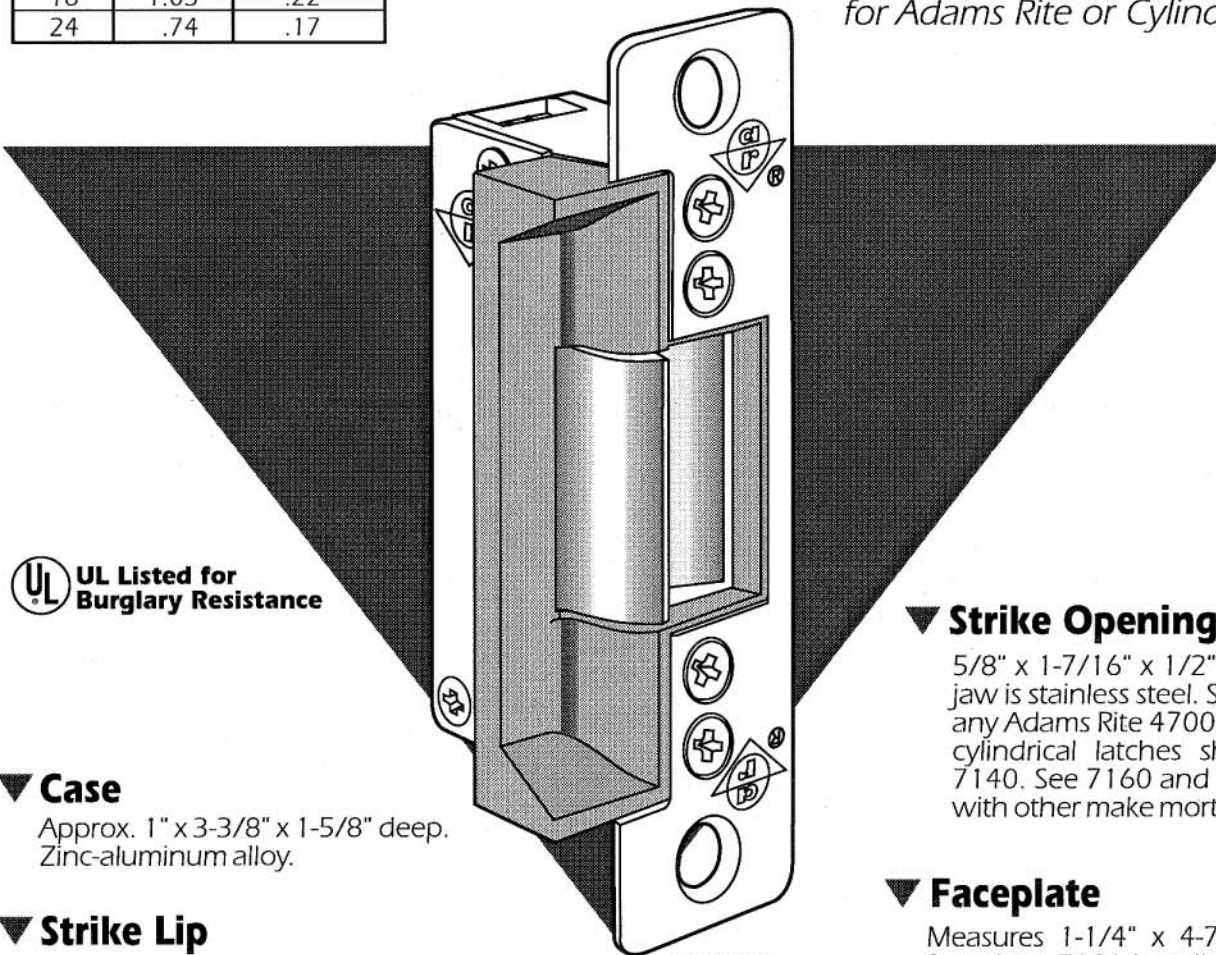
7100

Flat Faceplate for Aluminum Jambs

7101

Radiused Faceplate for Aluminum Stiles

ANSI/BHMA Type EO9321 (Grade 1)
for Adams Rite or Cylindrical Latches



 **UL Listed for Burglary Resistance**

▼ Case

Approx. 1" x 3-3/8" x 1-5/8" deep.
Zinc-aluminum alloy.

▼ Strike Lip

Basic 7100 strike has lip of proper length for 1-3/4" thick door that closes flush with jamb edge. Where door thickness or jamb shape differs from this standard relationship, extended lip available, specified by last dash number. (Not available on 7101.)

▼ Fail Safe/Fail Secure

Field convertible from one mode to the other. However, AC intermittent solenoid must not be used continuously in either.

▼ Strike Opening

5/8" x 1-7/16" x 1/2" deep. Bolt retainer jaw is stainless steel. Strike accepts bolt of any Adams Rite 4700 Series deadlatch or cylindrical latches shown with model 7140. See 7160 and 7170 strikes for use with other make mortise latches.

▼ Faceplate

Measures 1-1/4" x 4-7/8". 7100 has flat faceplate; 7101 is radiused to match nose on inactive leaf in a pair of narrow stile glass doors. Available in a wide range of architectural finishes.

▼ Function

Remote electrical control of any door equipped with an Adams Rite Series 4500 or 4700 (or similar) deadlatch or "key-in-knob" sets. Electrical actuation unlocks strike jaw, releasing latchbolt so door can be opened without operating latch itself. Extremely compact mechanism fits into aluminum jamb (or opposing door) sections as shallow as 1-5/8". Fits prep for 7500/7800/7000 Series.



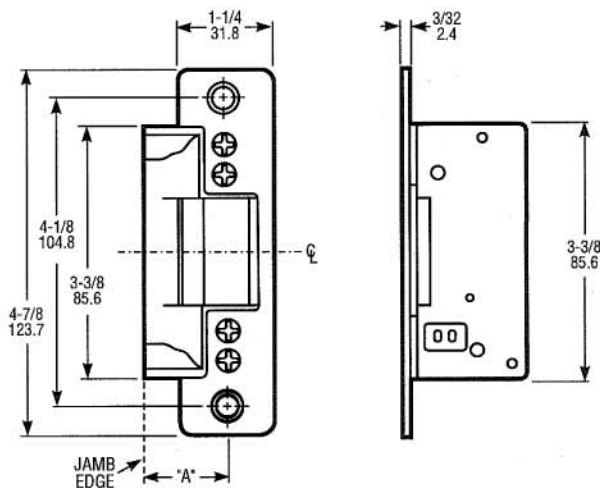
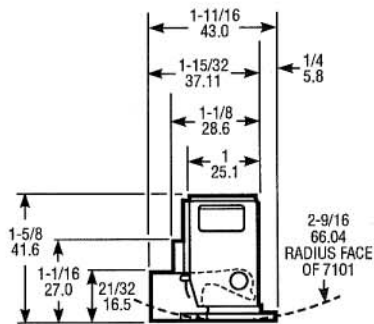
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7100, 7101 Electric Strike

DIMENSIONS

INCHES
MILLIMETERS

Nominal, subject to tolerance extremes.

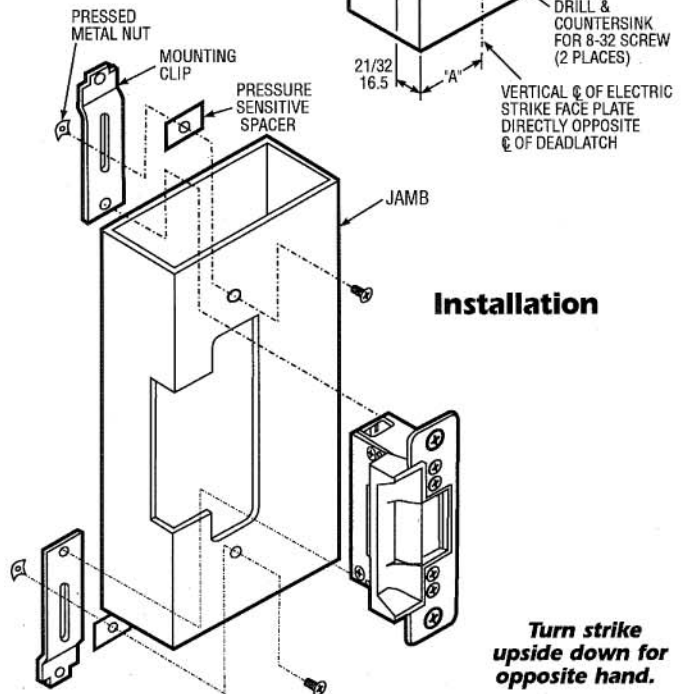
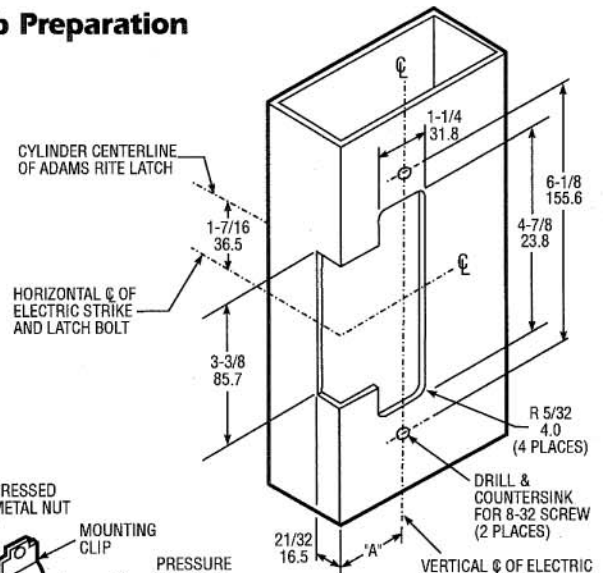


STANDARD UNIT FITS DIM. "A"
UP TO 1-1/16" (SEE DASH NO.)

MOUNTING BRACKETS
FURNISHED

INSTALLATION

Jamb Preparation



Installation

Turn strike
upside down for
opposite hand.

HOW TO ORDER

Specify quantity and the following information.
Order 4603 Rectifier and/or 4605 or 4606 Transformer separately.
(4603 included with AC Cont.)

Specify Model	Voltage	Current & Duty	Features**
7100 Flat	3 12 Volt	1 DC Continuous or Intermittent	0 Std/Fail-Secure
7101 Radius	4 16 Volt	2 AC Continuous*	5 Fail-Safe
	5 24 Volt	4 AC Intermittent	7 Monitor/Fail-Safe
			9 Monitor/Fail-Secure

7100-315-605-00

*A DC strike with rectifier attached for use on AC current.

**Fail-secure can be field converted to fail-safe or vice-versa.

***7101 available in 628, 313, 335 only.

020610 ES 7100, 7101

Finish***	
628	Clear Anodized
605	Bright Brass
612	Satin Bronze
613	Oil Rubbed Bronze
313	Dark Bronze Anod.
335	Black Anodized
625	Bright Chrome
626	Satin Chrome

7100 Lip Extension (Dim."A") (Door Centerline to Jamb Edge)			
00	1.06" or less	07	2.25"
01	1.50"	08	2.38"
02	1.63"	09	2.50"
03	1.75"	10	2.63"
04	1.88"	11	2.75"
05	2.00"	12	2.88"
06	2.13"	13	3.00"

STANDARD PACKAGE

Individually boxed with mounting screws, mounting brackets and adhesive shims to accommodate jamb or stile extrusion thickness greater or less than nominal 1/8 inch.

OPTIONS

Available with two monitoring signal switches which sense whether latch bolt is in strike and whether strike jaw is blocked. Choice of voltage in AC and DC for intermittent or continuous duty. Series 7100 (flat) available with extended strike lip (see chart). Specify assembled for either fail-secure (locked when unpowered) or fail-safe (locked when powered) operation, but can be field-converted to the other mode.

4603 Rectifier - Converts AC to DC, installs in low voltage line between transformer and strike. Rated 2 amps. (200 PIV).

4605 Transformer - Converts 120VAC to 24VAC. Rated 40 Volt-amp output assures plenty of power for strike release. Patented mounting bracket fits in knockout hole of standard junction boxes.

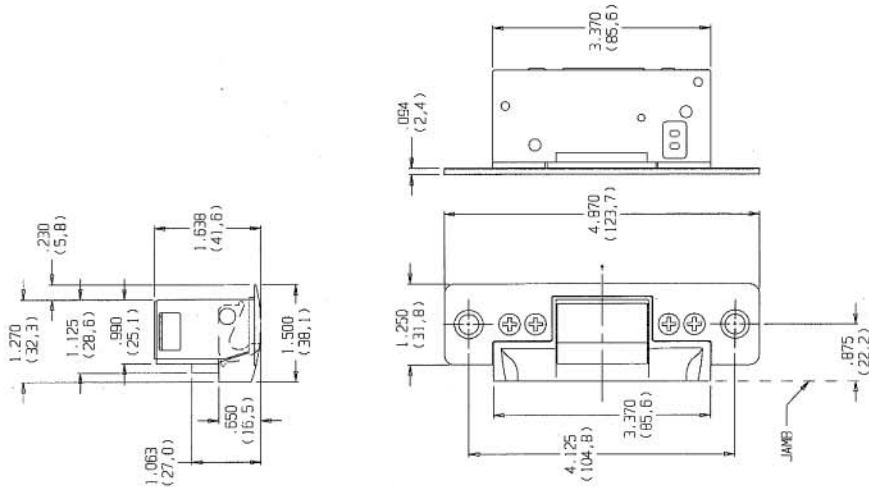
4606 Transformer - Plug-in version for standard wall outlet.

See separate specification sheet for more information on Strike options.

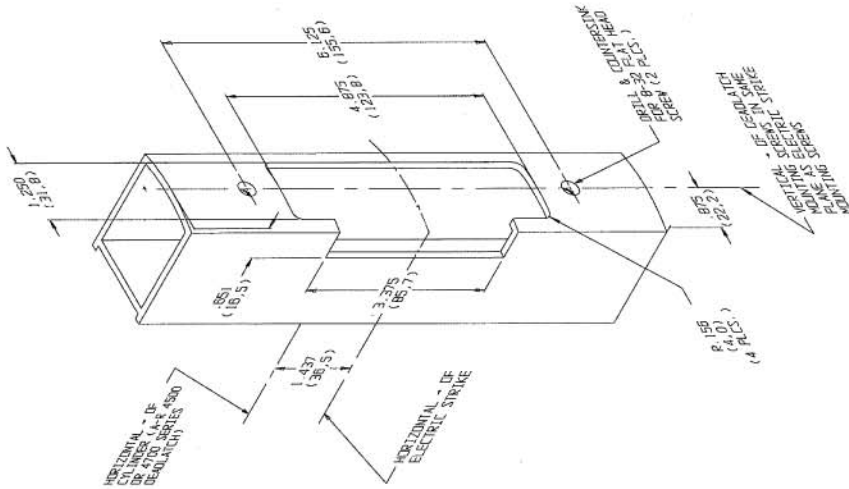


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ELECTRIC STRIKE DIMENSIONS



STILE PREPARATION



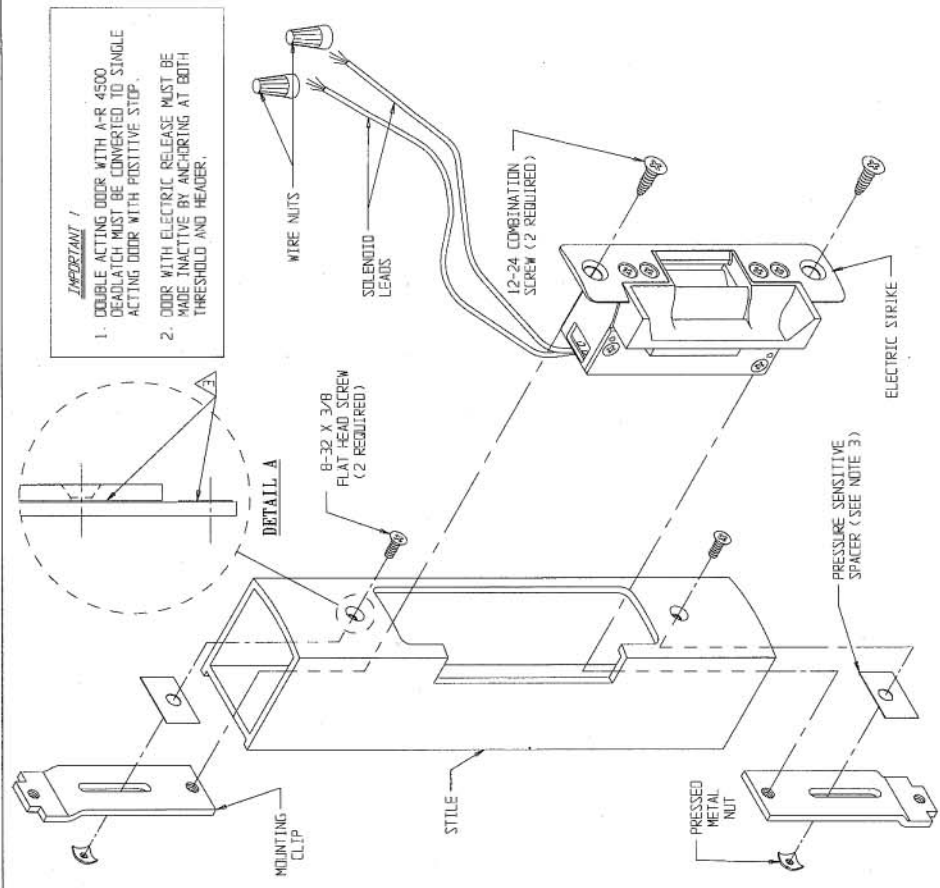
INSTALLATION INSTRUCTIONS

1. PREPARE DOOR STILE PER DRAWING.
2. INSTALL MOUNTING CLIPS TO STILE USING 8-32 X 3/8 SCREWS & PRESSED METAL NUTS. LEAVE SCREWS SLIGHTLY LOOSE TO PERMIT EASY ALIGNMENT OF CASE ASSEMBLY & CLIPS.
3. SPACERS ARE PROVIDED TO ASSURE FLUSH FINAL ASSEMBLY OF FACE PLATE & STILE. ADD ONE OR MORE SPACERS BETWEEN STILE & MOUNTING CLIP WHEN FACE PLATE EXTENDS BEYOND THE STILE. WHEN THE FACE PLATE SETS INSIDE THE STILE, SPACERS MUST BE ADDED BETWEEN THE MOUNTING CLIP & THE ELECTRIC STRIKE FACE PLATE. SEE DETAIL "A" TO ATTACH SPACER TO MOUNTING CLIP. REMOVE PROTECTIVE COATING FROM SPACER & PRESS TO DESIRED MOUNTING CLIP SURFACE. MAKE SURE CLEARANCE HOLE IN SPACER ALIGNS WITH HOLE IN MOUNTING CLIP.
4. ATTACH SUBCOVER AND FACE PLATE TO THE CASE ASSEMBLY USING FOUR 8-32 X 1/4 SCREWS.
5. USING WIRE NUTS PROVIDED, CONNECT WIRES COMING FROM THE STRIKE TO THE WIRES COMING FROM THE LOW VOLTAGE SIDE OF THE TRANSFORMER.
6. INSERT ELECTRIC STRIKE INTO STILE AND ATTACH TO THE CLIPS USING TWO #12 COMBINATION SCREWS.
7. SECURE 8-32 SCREWS HOLDING MOUNTING CLIPS TO STILE.

STATIC STRENGTH	DYNAMIC STRENGTH	ENDURANCE
1500 lbs.	70-foot-pound-force	250,000 cycles

IMPORTANT!

1. DOUBLE ACTING DOOR WITH A-R 4500 DEADLATCH MUST BE CONVERTED TO SINGLE ACTING DOOR WITH POSITIVE STOP.
2. DOOR WITH ELECTRIC RELEASE MUST BE MADE INACTIVE BY ANCHORING AT BOTH THRESHOLD AND HEADER.



7101 ELECTRIC STRIKE
FOR ALUMINUM STILE WITH
A-R 4500/4700 DEADLATCHES

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PART NO. : 80-0180-355
REV. : C
EON : 9580
DATE : 03-06-97

REF. TEMPLATE NO. : 52020-0

Notes:

Fail-Secure Operation - Unlocks when energized. If power fails the strike remains in a locked condition.

Fail-Safe Operation - Locks when energized. Used in applications requiring automatic unlocking in case of power failure.

Available Voltages: 12V AC Intermittent duty, 12V AC/DC Continuous duty, 16V AC Intermittent duty, 16V AC/DC Continuous duty, 24V AC Intermittent duty, 24V AC/DC Continuous duty.

Warning !

AC Intermittent duty solenoids are designed to be energized 30 seconds at a time. Energizing for longer periods will damage the solenoid.

AC Continuous duty strikes are supplied with a AVR # 4603 rectifier attached to the solenoid leads. These are silent operation strikes - without the "buzzing" sound. They use a DC solenoid with an externally attached, full-wave bridge rectifier.

Wiring

The number of wires will vary depending on features of the strike. The voltage and amperage ratings are marked on all strike labels. The solenoid wires are not polarized.

Monitoring (Optional)

Monitored strikes contain two, internally mounted, switches: one is activated by the latch bolt's penetration of the strike and the other indicates that the strike jaw is either locked or unlocked by the solenoid.

All unused leads from monitor switches should be insulated.

- Common contact -Black
- Normally open contact (NO) -White
- Normally closed contact (NC) -Red
- Maximum switching current -7 Amps @ 250 VAC

Warning !

Intermittent duty solenoids should not be converted to fail-safe configuration. Fail-safe units use only continuous duty solenoids.

Solenoid Data

DESCRIPTION	WIRE COLOR	COIL RESISTANCE (OHMS ±5%)	PEAK INSTANTANEOUS CURRENT (AMPS)	CONTINUOUS OR HOLD CURRENT (AMPS)	PEAK INSTANTANEOUS POWER (WATTS)	CONTINUOUS OR HOLD POWER (WATTS)
24 VDC CONT.	WHITE STRIPE ON BLACK	141.6	.170	.170	4.09	4.09
16 VDC CONT.	GREEN STRIPE ON BLACK	61.8	.222	.222	3.05	3.05
12 VDC CONT.	RED STRIPE ON BLACK	34.6	.352	.352	3.81	3.81
24 VAC INT.	BLUE STRIPE ON BLACK	16.3	1.030	.636	19.15	6.43
12 VAC INT.	YELLOW STRIPE ON BLACK	8.8	1.420	.813	17.74	5.82



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Rev. D

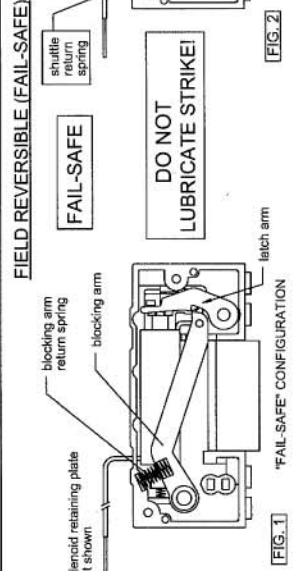
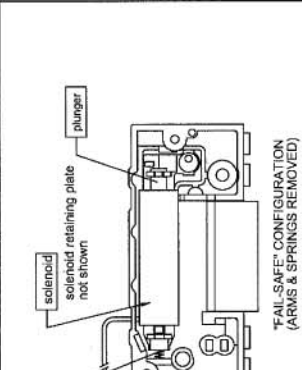
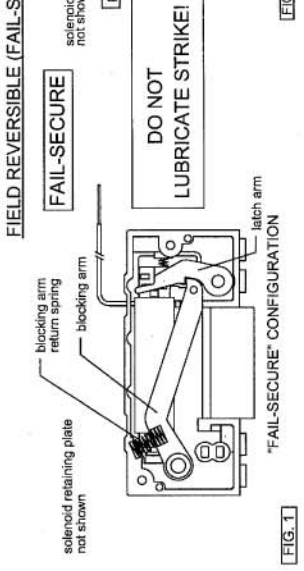
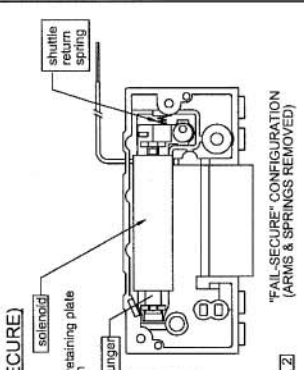
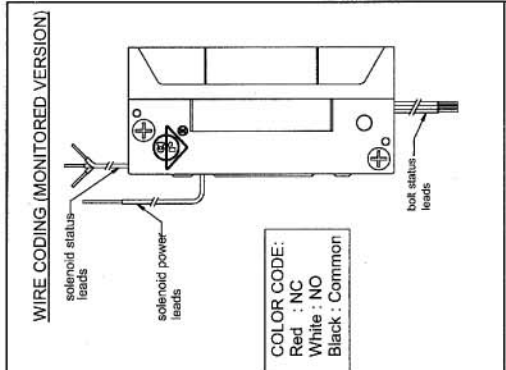
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Date: 08/05/2004

Page 1 of 1

Appvd:

7100 SERIES ELECTRIC STRIKE (DATA SHEET, WIRE CODING, FIELD REVERSIBLE)





Tri-Style 1600 Series

Non Handed Door Closer

Installation Instructions
80-9316-2502-020 (12-02)

Non Hold Open Models

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

Adjustable
(Sizes 3 thru 6)

Weaker
↓
Stronger
+

1602BC
1603BC
1604BC
1605BC
1606BC

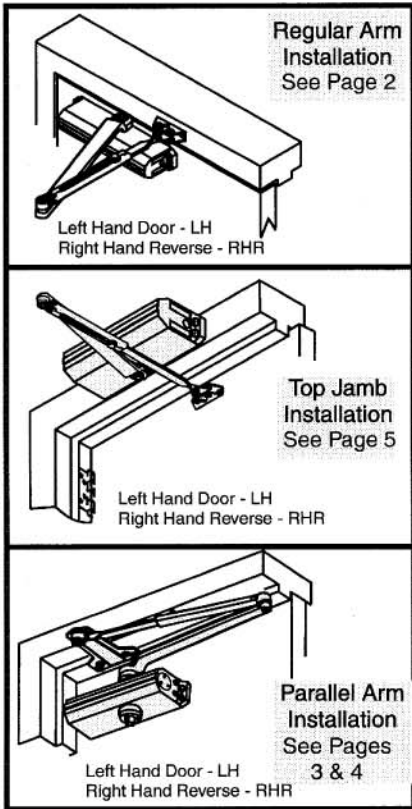
1601

(Sizes 1 thru 4)

1601BF



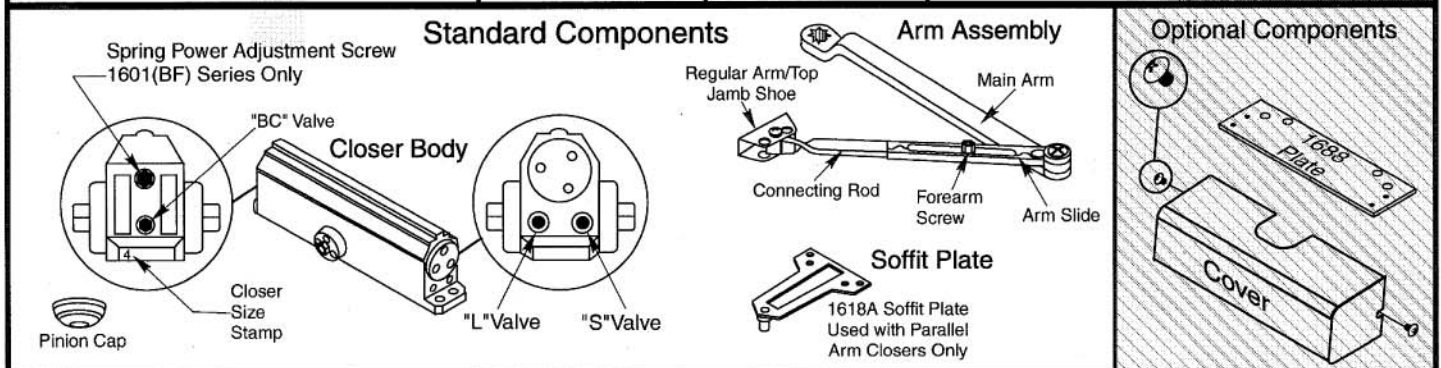
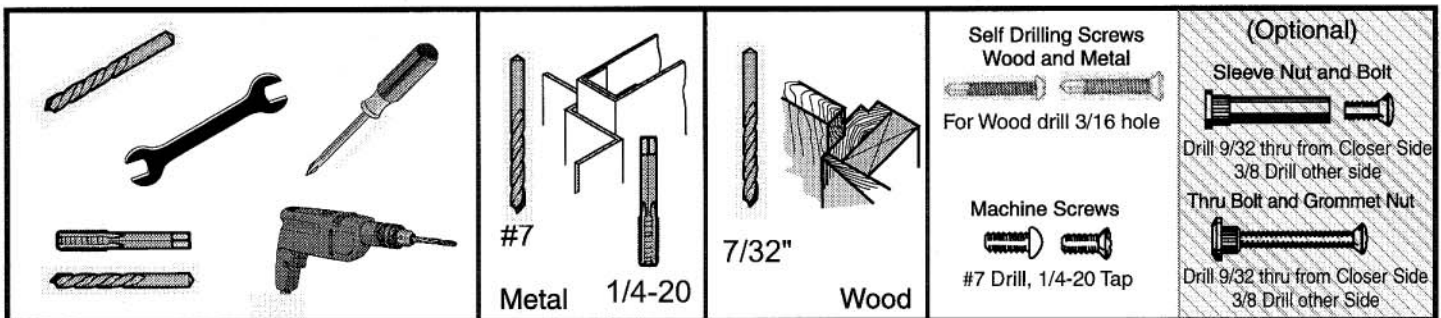
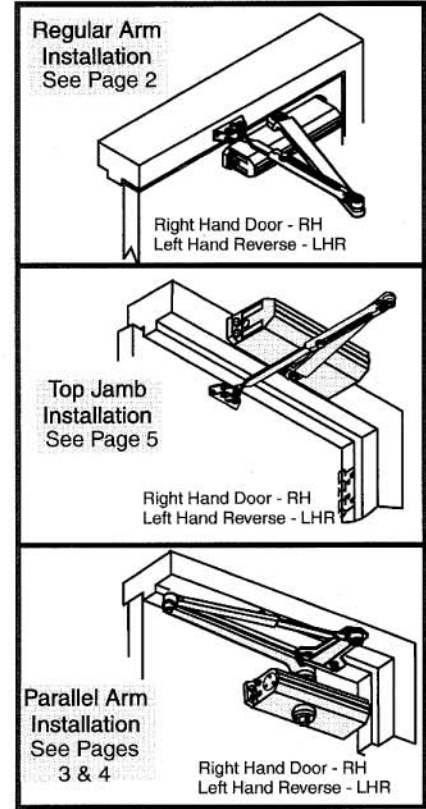
CAUTION An Incorrectly installed or improperly adjusted door closer can cause property damage or personal injury. These installation instructions should be followed to avoid the possibility of misapplication or misadjustment. **CAUTION**



"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.

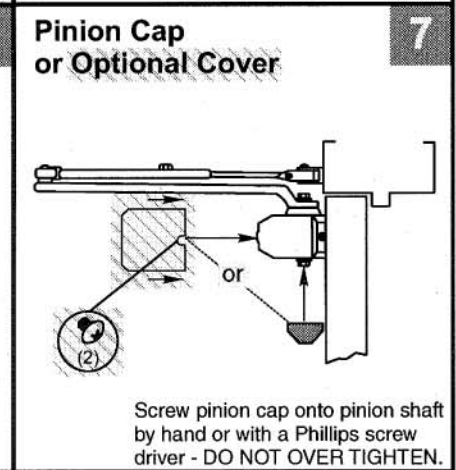
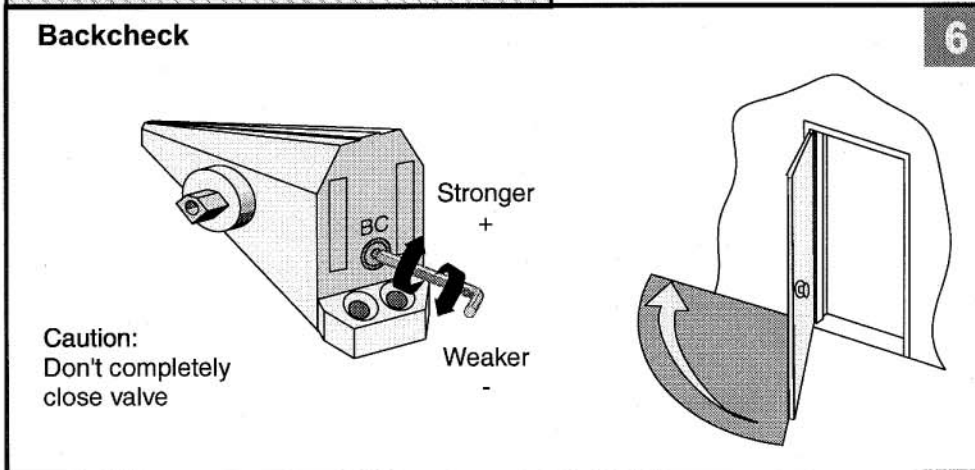
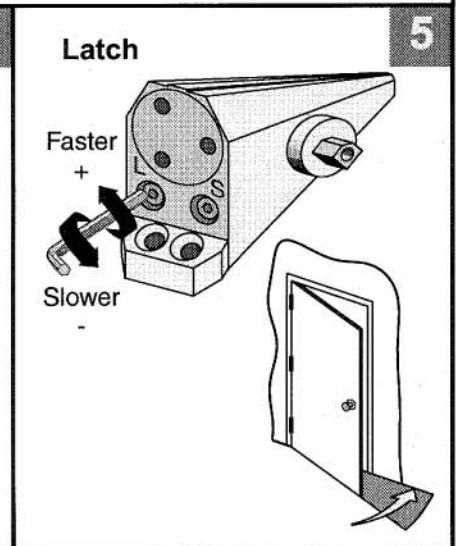
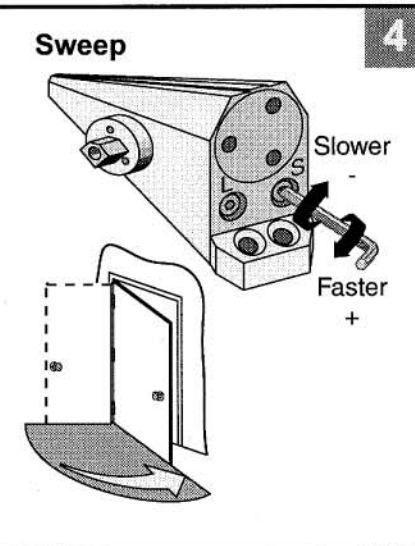
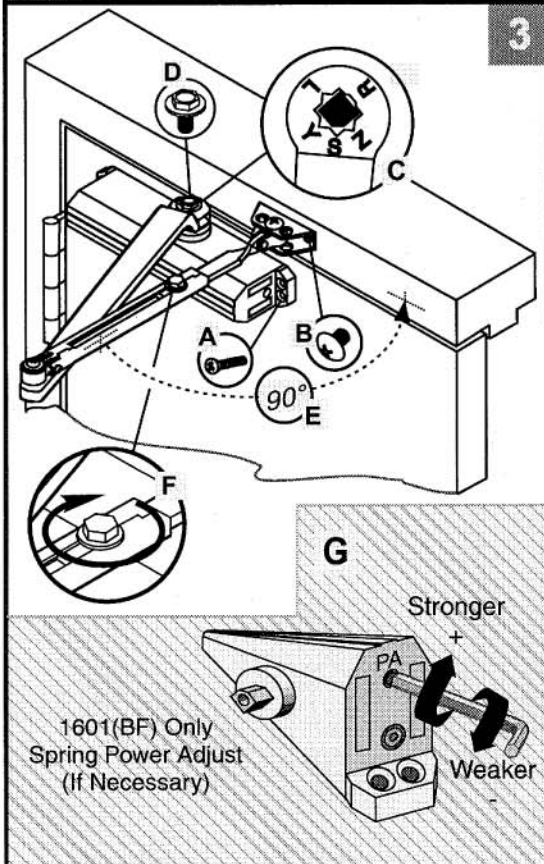
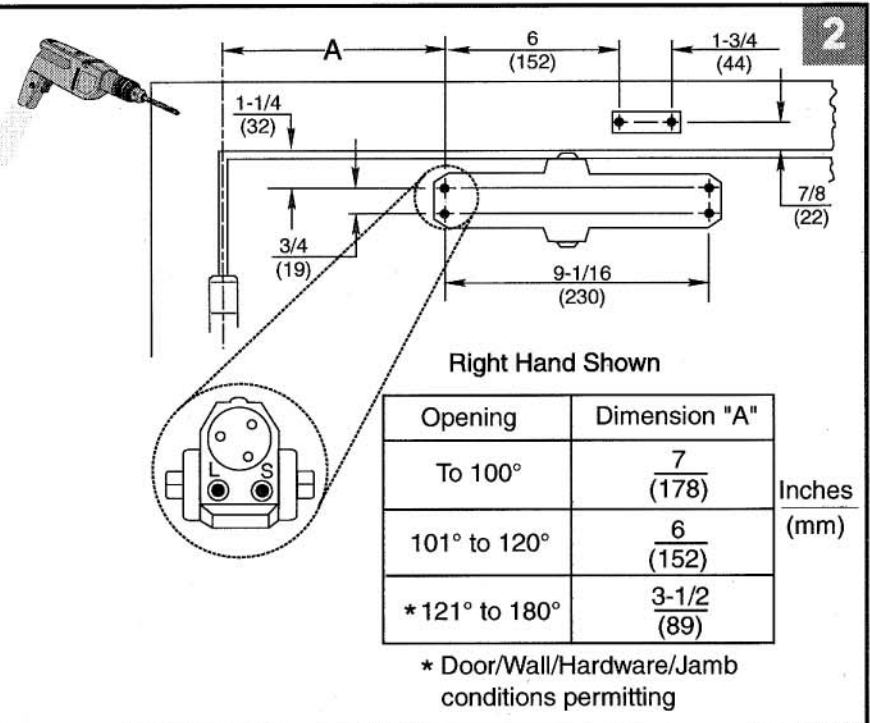
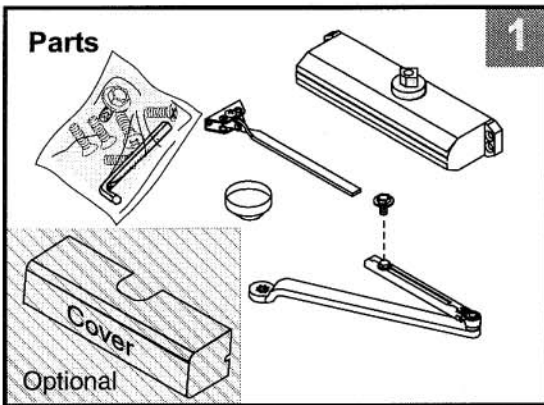
- Doors should be hung on ball bearing or anti-friction hinges.
- A separate door stop is recommended.
- Door and frame must be properly reinforced.
- Adjust closing time speed between 3 and 7 seconds from 90° to 0°.
- These door closers should NOT be installed on the exposed side (weather side) of exterior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



1600 Series

Non Hold Open Door Closers — Regular Arm

80-9316-2502-020 (12-02)

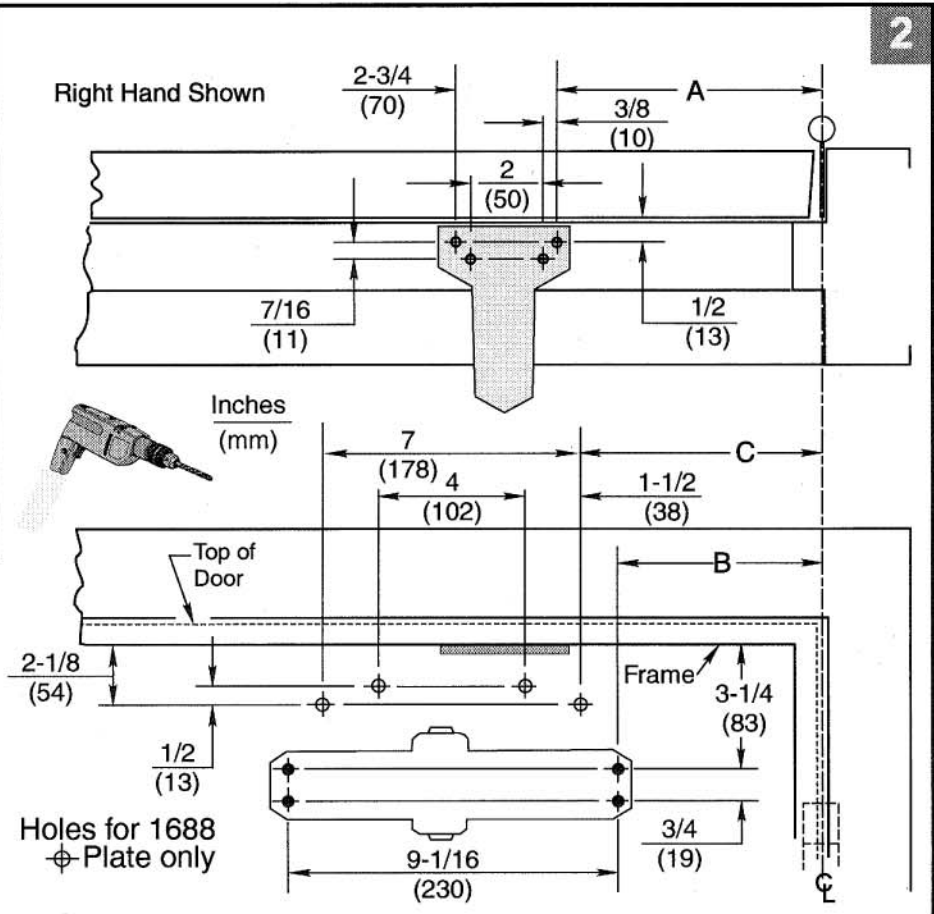
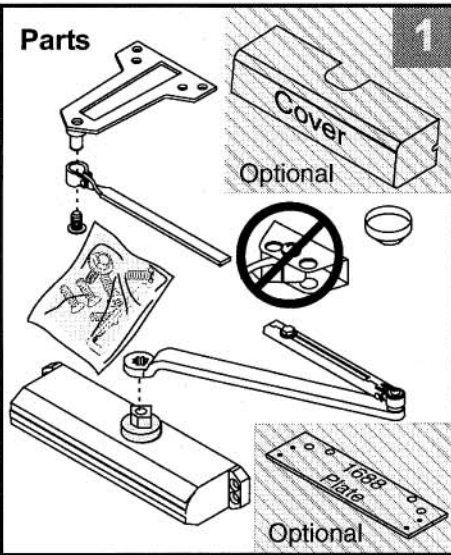


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1600 Series

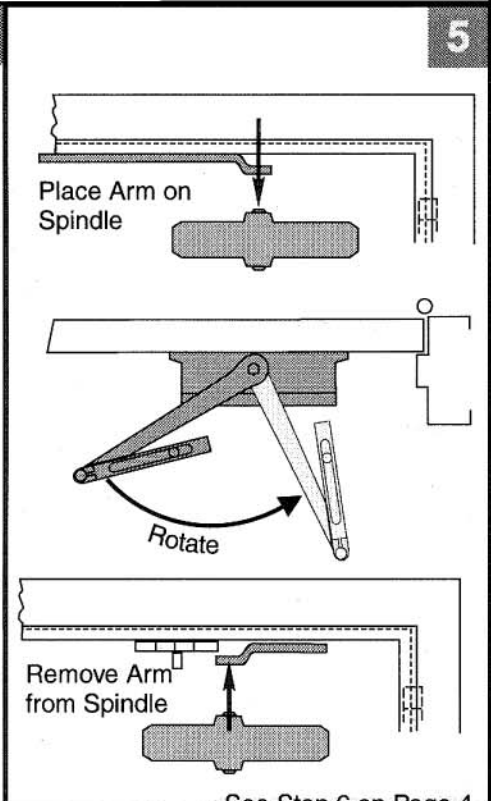
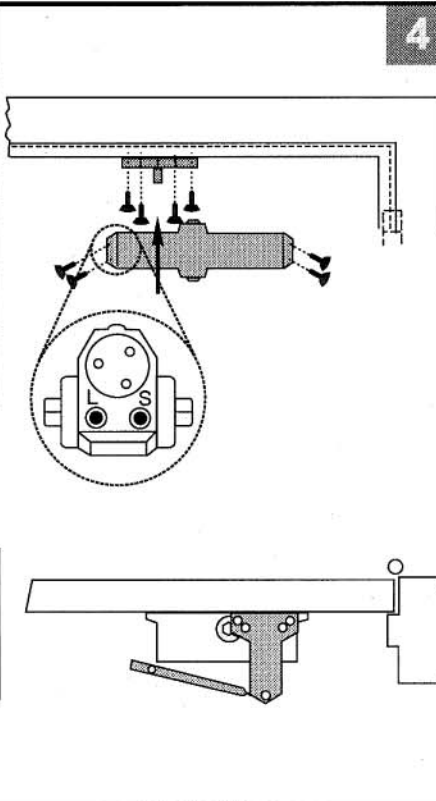
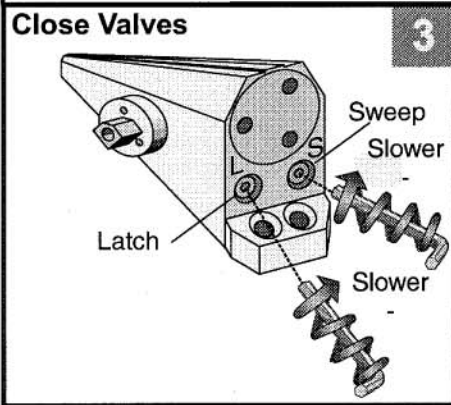
Non Hold Open Door Closers — Parallel Arm

80-9316-2502-020 (12-02)



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



1600 Series

Non Hold Open Door Closers — Parallel Arm

80-9316-2502-020 (12-02)

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

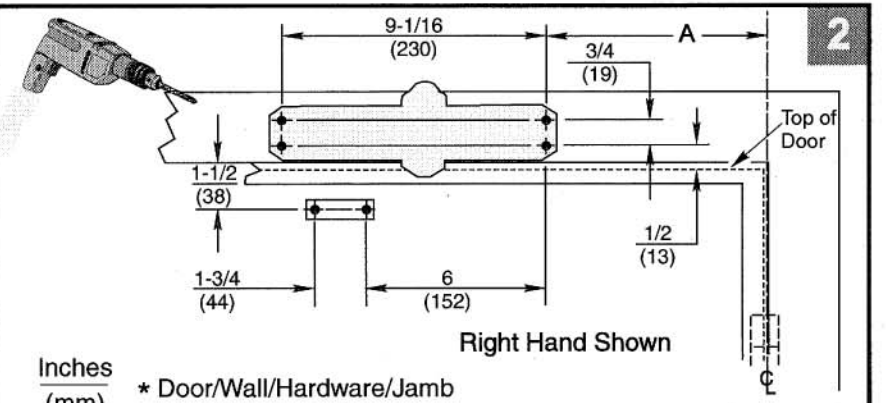
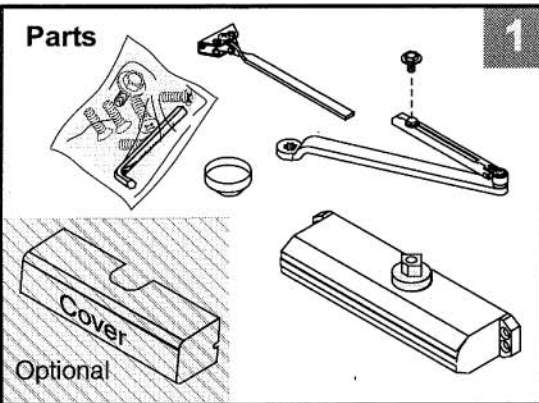


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1600 Series

Non Hold Open Door Closers — Top Jamb Arm

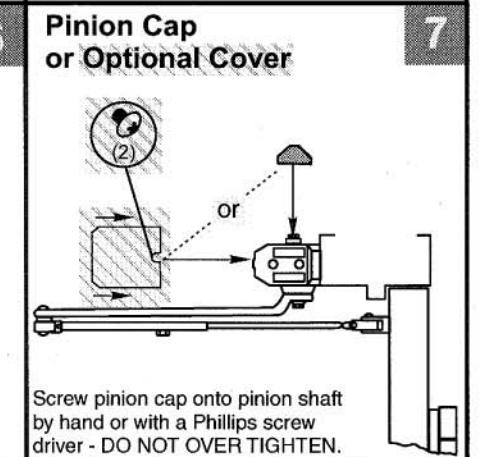
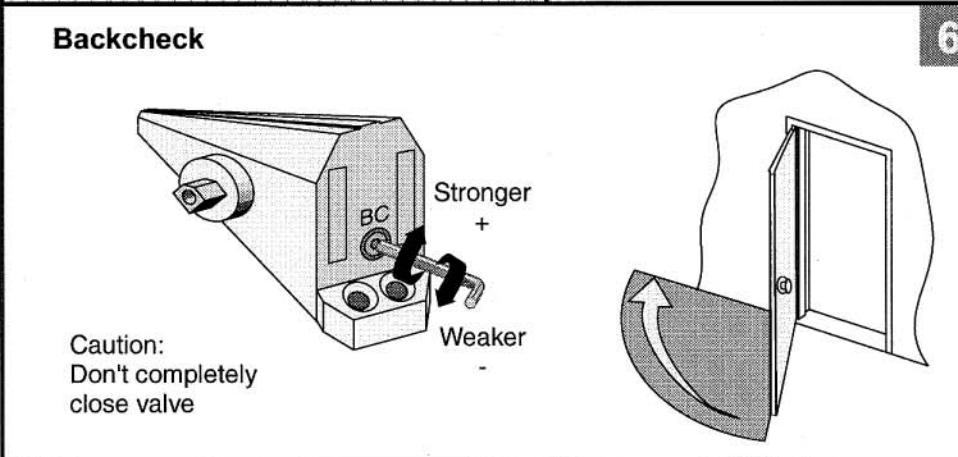
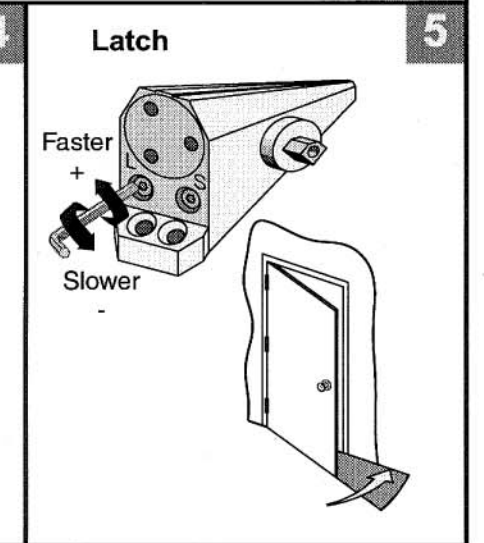
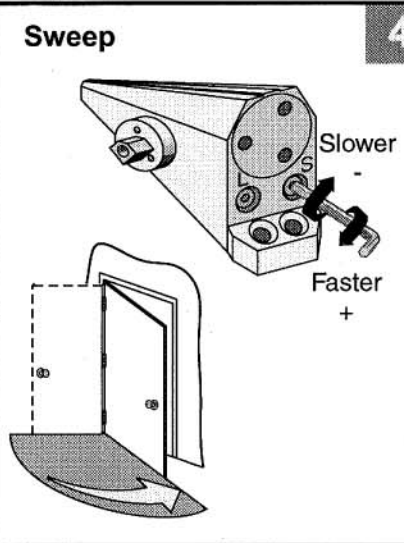
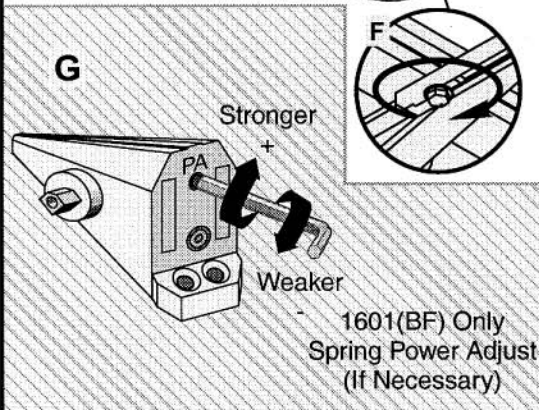
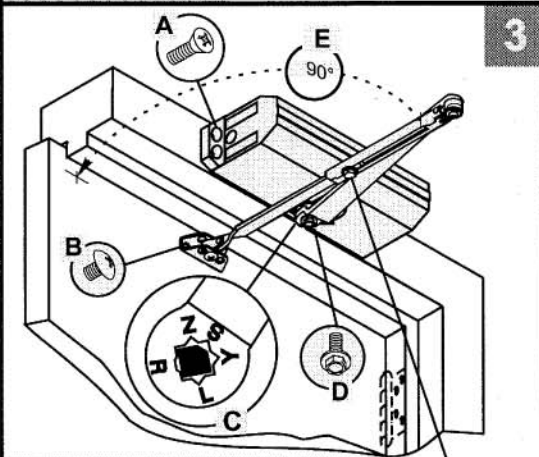
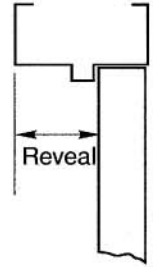
80-9316-2502-020 (12-02)



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)



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1600 Series Adjustments Page

80-9316-2502-020 (12-02)

Sweep

Slower -
Faster +

Latch

Faster +
Slower -

Backcheck

Stronger +
Weaker -

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

Spring Power Adjust 1601 (BF) only

Stronger +
Weaker -

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

Adjustment Chart				Number of Turns Required MAXIMUM DOOR SIZE				
DOOR	TYPE OF INST.	*	★	34" (0.85M)	36" (0.90M)	40" (1.00M)	44" (1.10M)	48" (1.20M)
				1601BF	INTERIOR	Regular Arm Top Jamb	FULL 360° TURNS OF 1/8" POWER ADJUSTMENT WRENCH	1
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: 13-6-EE

Date Code: 13-6-EE

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

Arm Placement in Shoe

7-1/2 % Stronger +
or
7-1/2 % Weaker -



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WARRANTY

Seller warrants the goods against defective workmanship and materials provided that Buyer notify Seller within one (1) year after receipt by Buyer of the goods of any claim under this Warranty. The liability of Seller shall be limited to replacing or repairing defective goods returned by Buyer and delivered to the factory of the Seller, transportation charges prepaid. Replaced or repaired goods will be redelivered freight prepaid to the address of Buyer shown hereon. Except for the Warranty contained herein, there shall be no other warranties, such as warranties of fitness and merchantability or otherwise; expressed or implied, written or verbal, and Seller shall not be liable for consequential damages in any event.

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