



DST36-ADA Full Height ADA Swing Gate

Service & Installation Manual



Note: Successful installation depends on reading this manual.

Important Note: Please keep this service manual after installation. If an installation is done by a construction company or outside installer, please pass this book along to the end user.

Full Height Aluminum ADA Door

Manual or Electronic Passage Gate | Interior Application

DST36-ADA



The DST36-ADA is a solution for projects requiring an aesthetically pleasing interior security door. This self-closing unit provides wheelchair accessible 36" passage width (overall width 40"). It is a "heavy-duty" stile and rail door that can withstand high traffic and abuse. Its low voltage strike lock can be used mechanically or electronically depending on your needs. The DST36-ADA is normally paired with the DST80-Single, DST80-Tandem, DSP60 or DSRD70 aluminum-polycarbonate turnstile portals.



Sample Application:
DST80-T and DST36-ADA door



DST36-ADA



Hydraulic door
closer included



Optional Push Bar available for
Free exit configurations. Can be
ordered with a battery alarm or
electronic switch if needed



Full Height Aluminum ADA Door

Manual or Electronic Passage Gate | Interior Application

DST36-ADA



Applications:

Ideal for controlling orderly flow of foot traffic in indoor/outdoor settings where ADA passage width is required.

Product Features:

Materials & Finishes:

- Heavy duty anodized aluminum extrusions
- 1/4" tempered glass
- Door handle
- Finish: Standard anodizing finish is clear. Also available in dark bronze

Hardware:

- Hydraulic Closer: Norton 9300 Series with aluminum finish
- Electronic Strike: Adams Rite 7100 Series, 24VDC
- Deadlatch: Adams Rite 4510 Series with 1.5" Backset
- Cylinder: Schlage C keyway – standard (SFIC available)

Design & Construction:

- Designed for secure operation with aesthetics in mind
- Minimally exposed hardware
- Continuous hinge

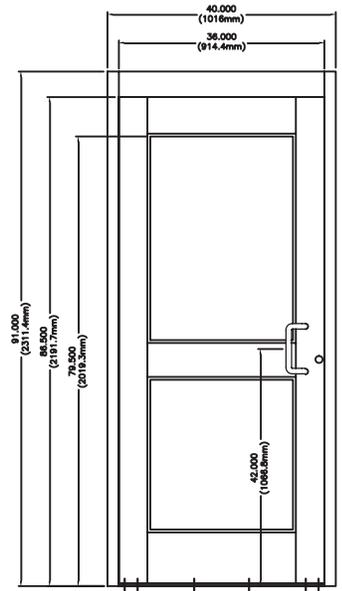
Options:

- Magnetic lock (replaces strike)
- Push buttons (wired or wireless)
- Motorized door opener (Norton 5730 Low Energy Operator, aluminum) (Interior applications only) (Requires 110V AC)
- Push to exit panic bar by Adams Rite 8400, aluminum

Dimensions:

- Size of opening (pedestrian clearance): 36" (914.4mm)
- Interior Height: 86.5" (2197.1mm)
- Exterior Height: 91" (2311.4mm)
- Overall Width: 40" (1016mm)

* Dimensions are subject to change without notice



* Dimensions are approximate

Warranty:

Units are warranted against defects in materials and workmanship for a period of one year from date of delivery. See warranty information for specific details.

Pairs well with our full-height aluminum turnstiles (see model DSRD70, DSP60, DST80-S, and DST80-T)

Electrical Specifications:

UL Listed Electronic Strike:
Input Voltage: 24VDC
Input Current: 170 mA

Standards and Codes:

Austenitic stainless steel:
ASTM A240, A249, A276

Hot rolled steel:
AISI C-1020, AISI C-1018

Hot dipped galvanizing:
ASTM A-143, ASTM A-153-80

All fasteners provided meet IFI ANSI/
ASME Fastener Standards

American Welding Society (AWS)
Standard D 1.1

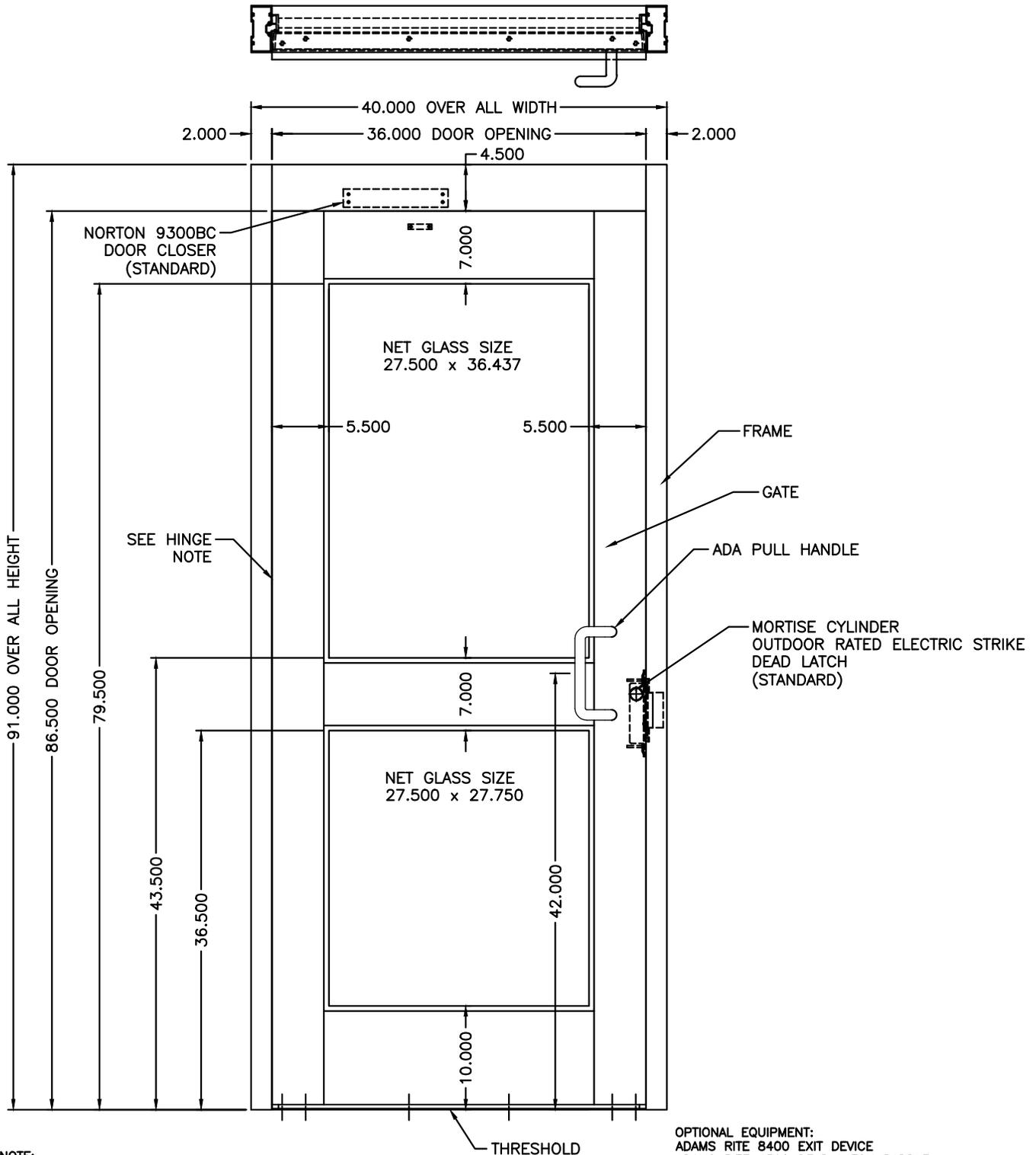


DSRD70 and DST36-ADA door



DSP60 and DST36-ADA door

REVISION HISTORY		
SYMBOL	DESC.	DATE



HINGE NOTE:
 HINGE TYPE: CONTINUOUS SPECIFY RH OR LH
 FASTENERS: STAINLESS STEEL PHILLIPS FLATHEAD SCREWS

OPTIONAL EQUIPMENT:
 ADAMS RITE 8400 EXIT DEVICE
 ADAMS RITE 4590 DEAD LATCH PADDLE
 NORTON 5700 POWER OPERATOR
 BRACKETS AVAILABLE FOR ATTACHING TO TURNSTILE OR WALL

MATERIAL: ALUMINUM EXTRUSION	SCALE: 1=14 DATE: 9/18/15	APPROVED BY:	DRAWN BY: LC III
FINISH: ANODIZED	REVISED:		
TOL. UNLESS OTHERWISE SPEC. .X ± .1 .XXX ± .015 .XX ± .03 ANGLES .5°	DST36-ADA ALUMINUM SWING GATE		

Pre-installation Tips for the DST36-ADA Full Height ADA Gate

Before installing the DST36-ADA Gate, make sure to review these pre-installation tips to ensure a successful installation.

Before you get started:

If you are electronically locking or unlocking the gate, be aware of the various methods to accessing the electronic strike before installing. Details are provided later in this manual.

Although the strike is field reversible, each gate comes pre configured to lock or open upon power failure. We configure these gates based on how they were ordered. Manual gates will always need to have the strike configured as fail lock.

It is crucial that the frame is installed squarely. The provided floor plate on the gate helps to ensure a square installation, but anchoring to unlevel concrete may throw this off.



Note: Failure to install the frame square can result in the gate failing to lock properly.

Installation Instructions for the DST36-ADA Full Height Gate

Installation Method

1. Place gate into entry way where it will be installed.
2. Screw the floor plate to the floor using 3/16" x 2.5" min. length Tapcon™ screws.
3. Utilizing the support brackets located near the top, secure gate to nearby turnstile and/or adjoining wall / structure with 3/8" x 1.5" bolts.
4. Make 24VDC electrical connections to the electronic strike, if required.

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

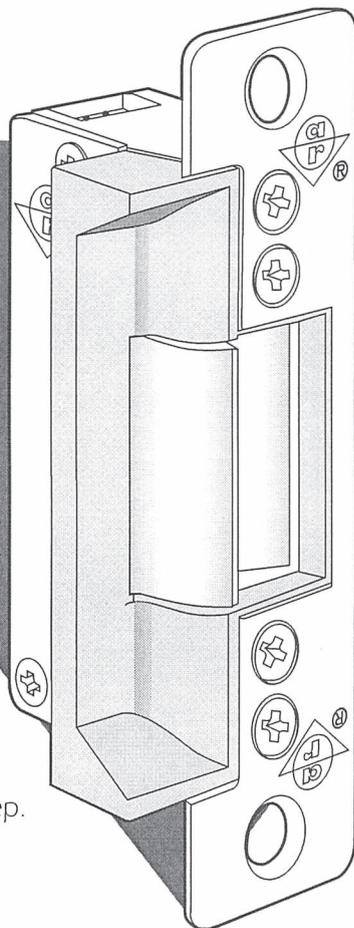
7100

Flat Faceplate for Aluminum Jambs

7101

Radiused Faceplate for Aluminum Stiles

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



PATENTED

 **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.



ADAMS RITE
MANUFACTURING CO.

260 Santa Fe Street
Pomona, California 91767
(800) 872-3267 Fax: (800) 232-7329
www.adamsrite.com

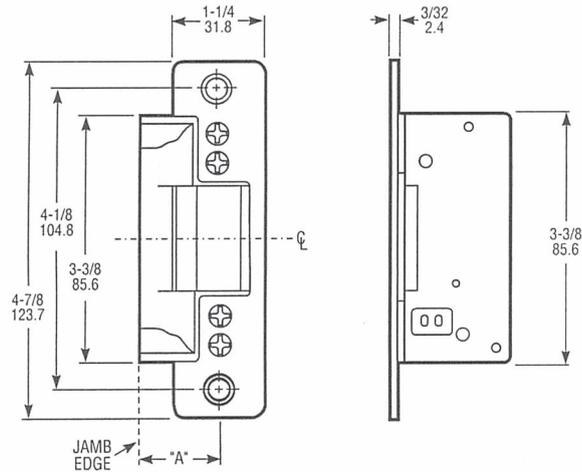
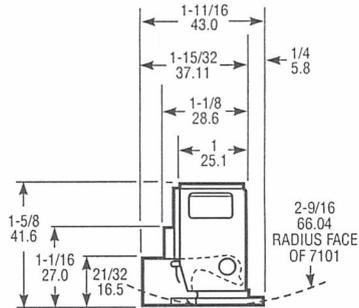


7100, 7101 Electric Strike

DIMENSIONS

INCHES
MILLIMETERS

Nominal, subject to tolerance extremes.

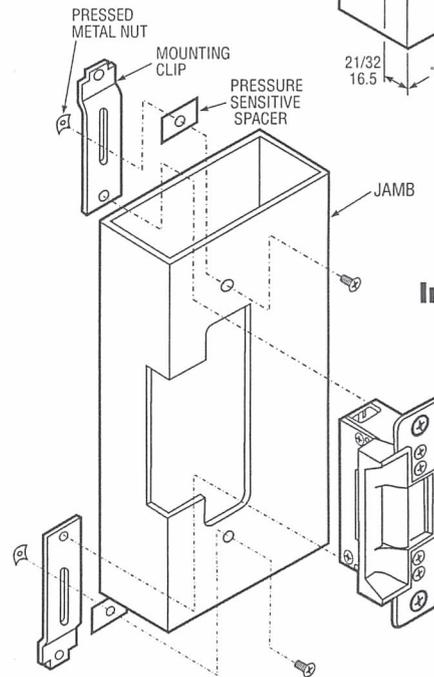
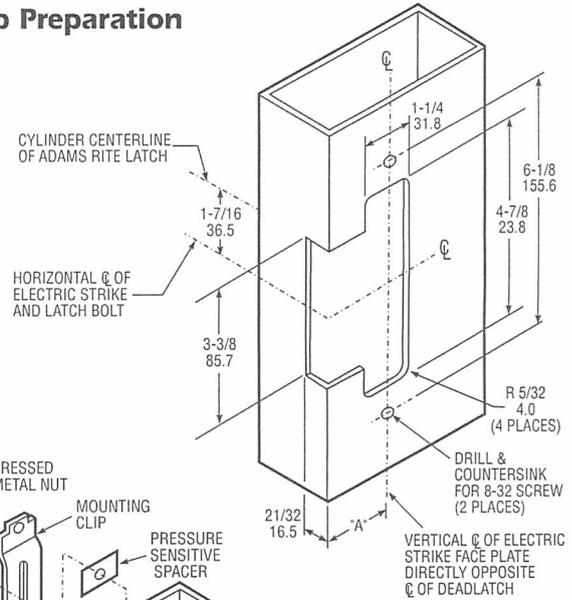


STANDARD UNIT FITS DIM. "A" UP TO 1-1/16" (SEE DASH NO.)

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.

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.

Changing From Fail-Safe to Fail-Secure & Vice-Versa:

- 1) Remove faceplate, subcover (2), & cover (1)
- 2) Remove latch (7), blocking arm (6), blocking arm return spring (16), & retainer plate (15)

Changing From Fail-Secure to Fail-Safe:

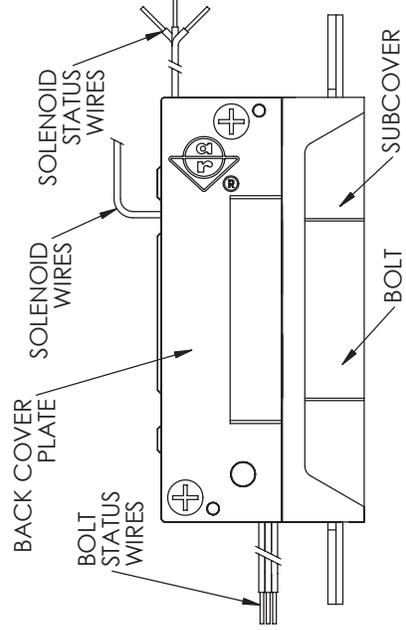
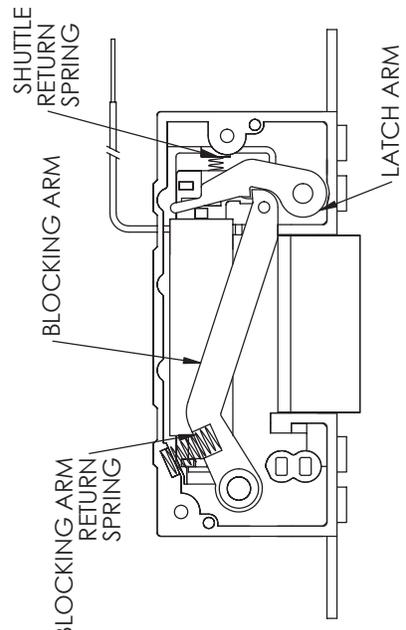
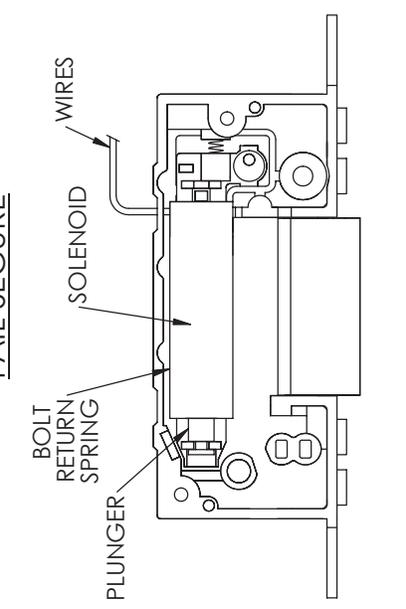
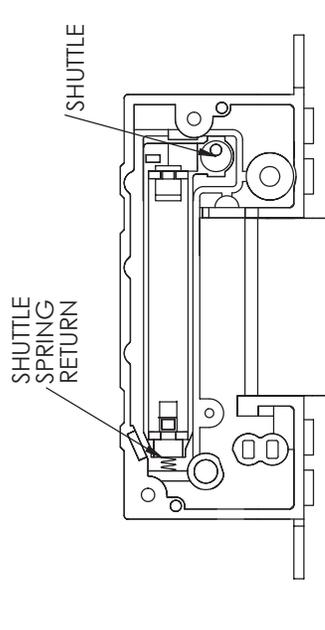
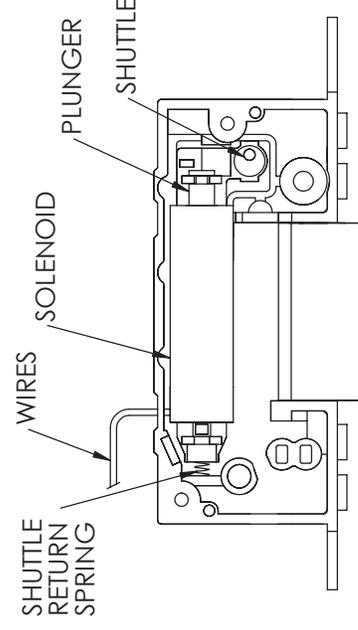
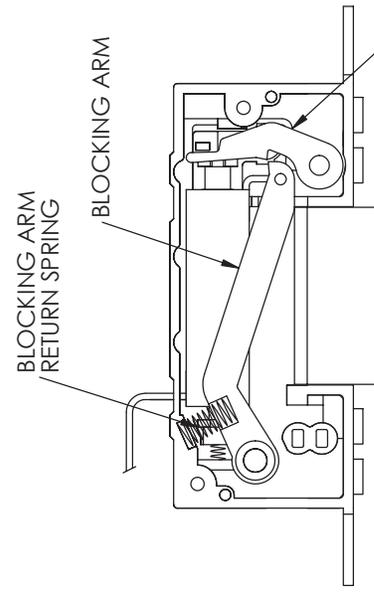
- 1) With bolt facing you remove solenoid (3), plunger (4), & shuttle return spring (5).
- 2) Place shuttle return spring (5) on left-hand side of shuttle (17). Place solenoid and plunger facing the side opposite of shuttle return spring into groove on the shuttle. (See page three for diagram)
- 3) Place retainer plate on top of solenoid and place latch, blocking arm & blocking arm return spring in original position.

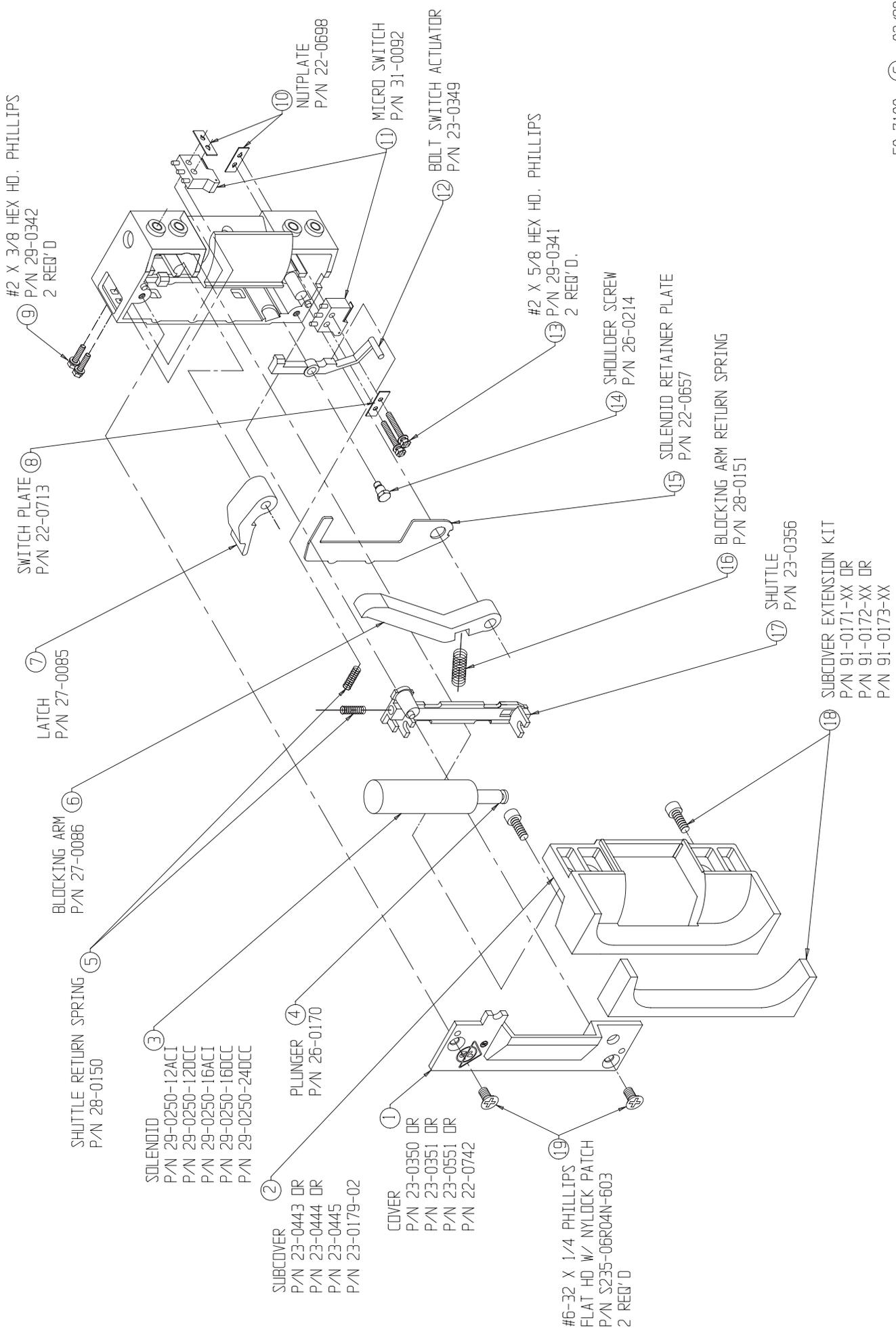
Note: Fail-safe must be continuous duty only.

Changing from Fail-safe to Fail-secure:

- 1) With bolt facing you remove solenoid (3), plunger (4) & shuttle return spring (5).
- 2) Place shuttle return spring (5) on right hand side of shuttle (17). Place solenoid and plunger facing the side opposite of shuttle return spring into groove on shuttle. (See page three for diagram)
- 3) Place retainer plate on top of solenoid and place latch, blocking arm & blocking arm return spring in original position.

Faceplate, subcover & cover can now be added to close strike.

<p>WIRE CODING FOR MONITORED VERSION</p>  <p>BACK COVER PLATE BOLT STATUS WIRES SOLENOID WIRES SOLENOID STATUS WIRES BOLT SUBCOVER</p>	<p>MONITOR WIRING</p> <p>NC: RED NO: WHITE COMMON: BLACK</p> <p>POWER INPUT WIRING</p> <p>12VAC: YELLOW/BLACK 12VDC, 24VAC: RED/BLACK 24VDC: WHITE/BLACK</p>	<p>STEP 1</p>  <p>BLOCKING ARM RETURN SPRING BLOCKING ARM SHUTTLE RETURN SPRING LATCH ARM</p>	<p>REMOVE SUBCOVER (ONE SCREW) REMOVE BACK COVER PLATE (TWO SCREWS) CAREFULLY REMOVE BLOCKING ARM SPRING REMOVE BLOCKING ARM AND LATCH ARM</p>	<p>STEP 2</p> <p><u>FAIL SECURE</u></p>  <p>BOLT RETURN SPRING PLUNGER SOLENOID WIRES</p>	<p>REMOVE SOLENOID</p>
<p>STEP 3</p> <p><u>FAIL SAFE</u></p>  <p>SHUTTLE SPRING RETURN SHUTTLE</p>	<p>TRANSFER SHUTTLE RETURN SPRING TO OPPOSITE END OF SHUTTLE. NOTE: WHATEVER THE FUNCTION, THE SHUTTLE RETURN SPRING SHOULD ALWAYS BE AT OPPOSITE END TO THE SOLENOID PLUNGER.</p>	<p>STEP 4</p>  <p>SHUTTLE RETURN SPRING WIRES SOLENOID PLUNGER SHUTTLE</p>	<p>REVERSE SOLENOID AND REPLACE, ENSURING CORRECT PLACEMENT AND ALIGNMENT. WITH THE SOLENOID SEATED PROPERLY THE SHUTTLE SHOULD MOVE FREELY.</p>	<p>STEP 5</p>  <p>BLOCKING ARM RETURN SPRING BLOCKING ARM LATCH ARM</p>	<p>REPLACE LATCH ARM AND BLOCKING ARM (WITH SPRING) REPLACE BACK COVER PLATE REPLACE SUBCOVER * TEST PRIOR TO INSTALLATION*</p>



7100 SERIES ELECTRIC STRIKE

ADAMS RITE MANUFACTURING COMPANY
 260 SANTA FE ST.
 POMONA, CA 91767
 OFFICE: (909) 632-2300 FAX: (909) 632-2369

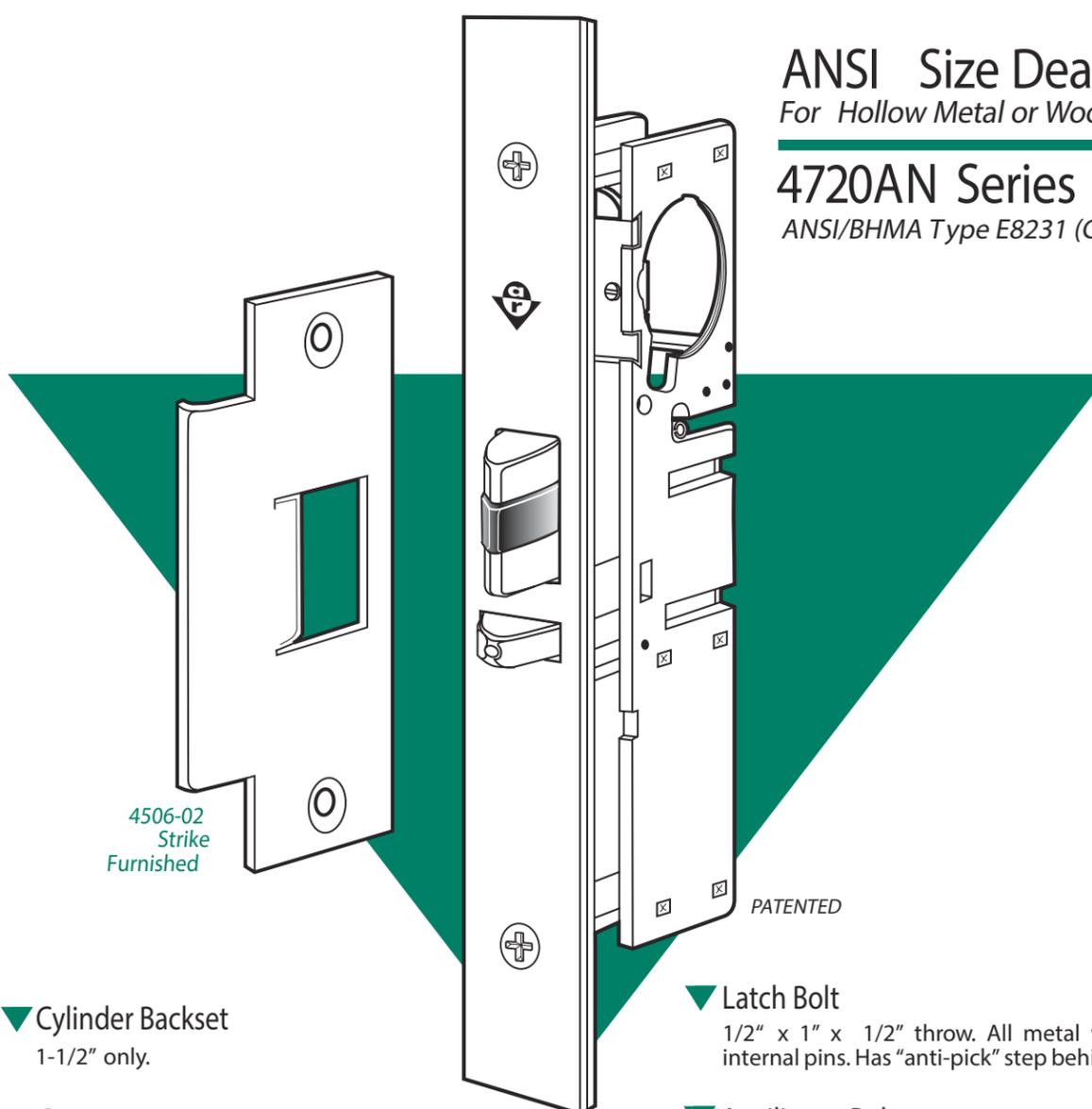




ANSI Size Deadlatch
For Hollow Metal or Wood Doors

4720AN Series

ANSI/BHMA Type E8231 (Grade 1)



4506-02
Strike
Furnished

PATENTED

▼ **Cylinder Backset**

1-1/2" only.

▼ **Case**

Steel with corrosion-resistant plating.
1" x 5-13/16" x 2-5/32".

▼ **Function**

For hollow metal or wood doors prepared for hardware according to the specifications of the American National Standards Institute, the 4720AN Deadlatches provide precise traffic control. A key-controlled bolt hold-back feature allows a door to be free-swinging part of the day and exit-only when the bolt is free to latch. This allows a "locked" entrance to be used as an exit by customers or visitors already in the building. Interchangeable, without stile or jamb modification, with any MS1850SN Deadbolt of same faceplate shape. Replaces 4520ANSI Deadlatch.

▼ **Latch Bolt**

1/2" x 1" x 1/2" throw. All metal with hardened steel internal pins. Has "anti-pick" step behind mounting face.

▼ **Auxiliary Bolt**

All metal with hardened steel pin. Deadlocks latch bolt to prevent "loiding" or case-knife entry.

▼ **Strikes**

Stainless steel, US32D Satin finish (630). Furnished to ANSI preparation specifications for flat jamb. (See also page SW-26 and Electric Strike section.)

▼ **Operation**

Turn key or operate handle to retract spring-loaded latch bolt. To hold bolt retracted, push it in and secure by reverse turn of key (see back page). Uses any standard mortise cylinder with MS[®] cam (see page SW-28).



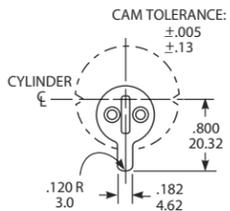
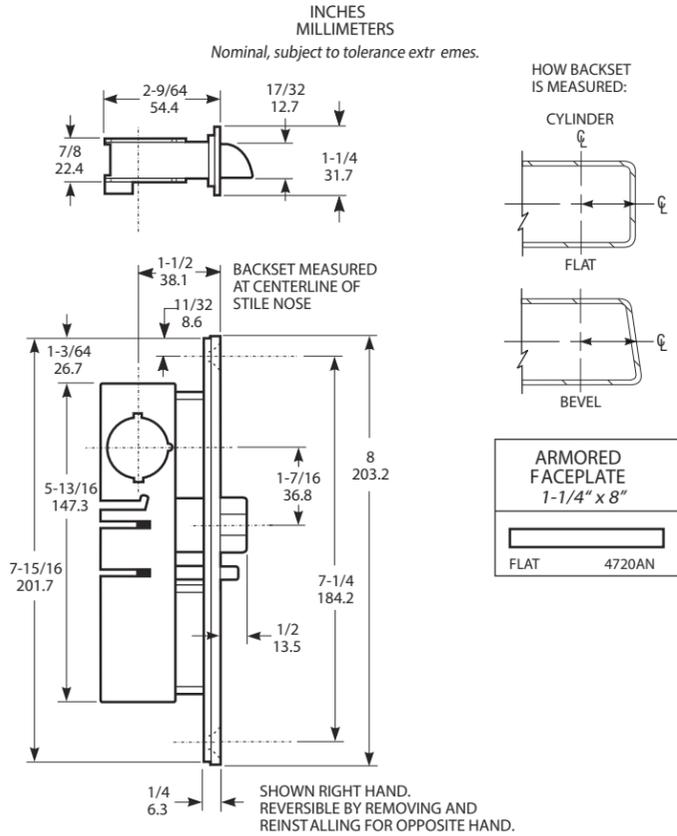
ADAMS RITE
MANUFACTURING CO.

260 Santa Fe Street
Pomona, California 91767
(800) 872-3267 Fax: (800) 232-7329
www.adamsrite.com



4720AN Series Deadlatch

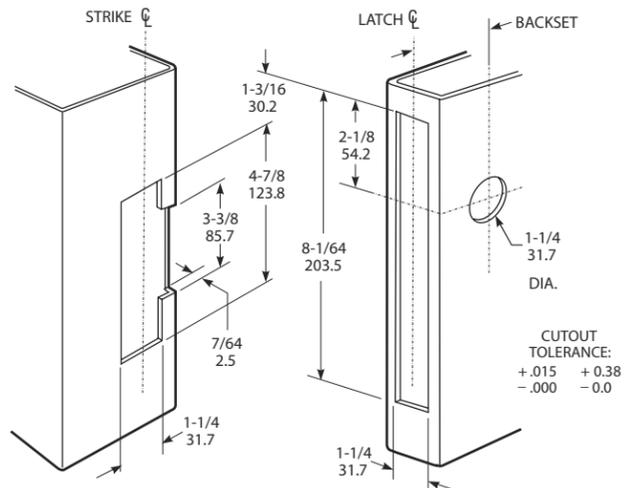
DIMENSIONS



Cylinder Cam

4720AN Series Deadlatches are operable by any standard 1-5/32" diameter mortise cylinder with special MS[®] cam dimensioned as shown. Cylinders with MS[®] cams can be readily obtained from most cylinder manufacturers. See page SW-28 for cylinder make and trim ring information.

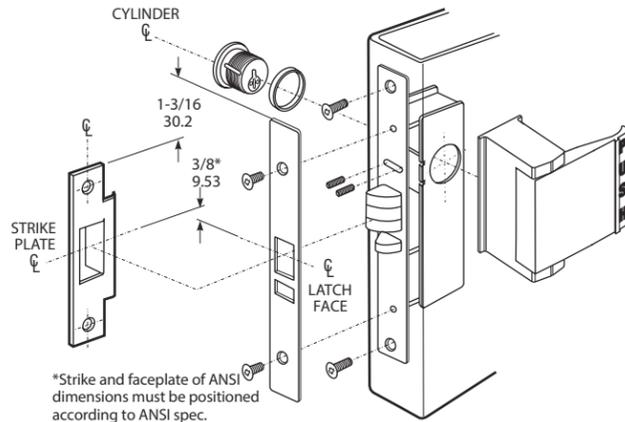
INSTALLATION



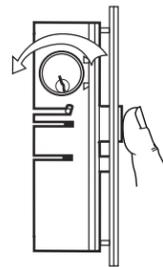
Jamb Preparation

Door Preparation

Identical to MS1850SN Series
(See also prep for 4590 Paddle)



Latch, Paddle & Cylinder Installation

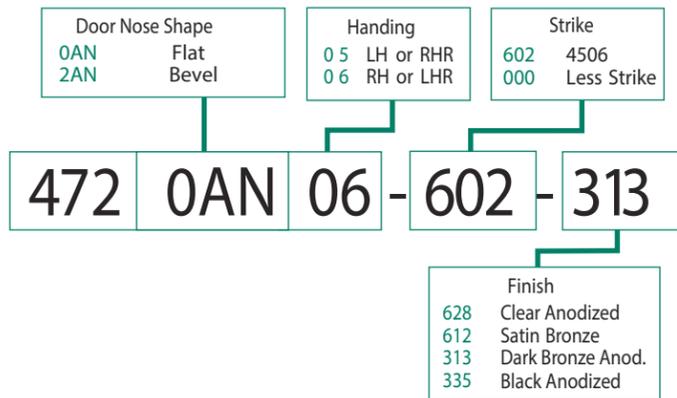


Bolt Holdback

A reverse turn of the key (while bolt is held fully retracted) retains the bolt, allowing the door to be free swinging.

HOW TO ORDER

Specify quantity and the following information.
Order related hardware separately.



OPTIONS

Door Nose Shape, Finish, Strike and Handing must be specified when ordering. For Handles, see page SW-25 & 26. For Paddles, see page SW-27.

STANDARD PACKAGE

Individually boxed with strike and machine screws for mounting. Cylinders, paddle or handle available at extra cost. Shipping weight: 1-1/4 lbs. Also available in a 20 unit pack for volume users.

Norton®

Tri-Style 1600 Series

Non Handed Door Closer

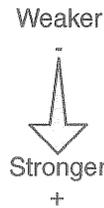
Installation Instructions

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

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



Non Hold Open Models
Sized (Sizes 2,3,4,5,6) | Adjustable (Sizes 3 thru 6)

1602BC
1603BC
1604BC
1605BC
1606BC

1601
(Sizes 1 thru 4)
1601BF



Official Supplier

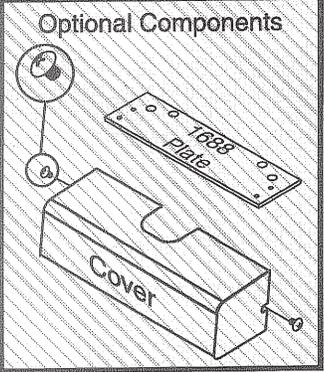
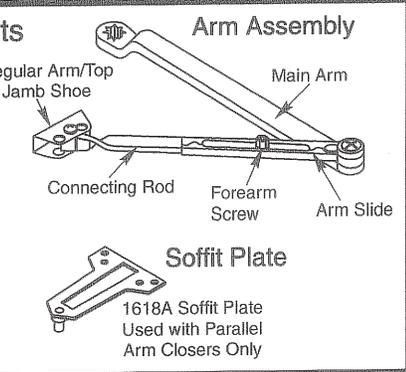
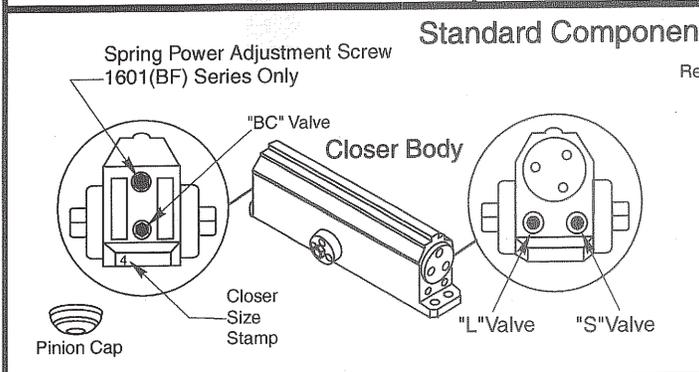
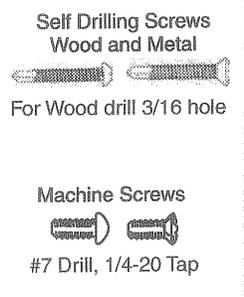
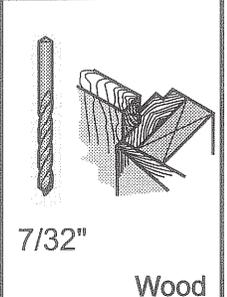
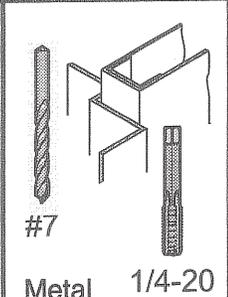
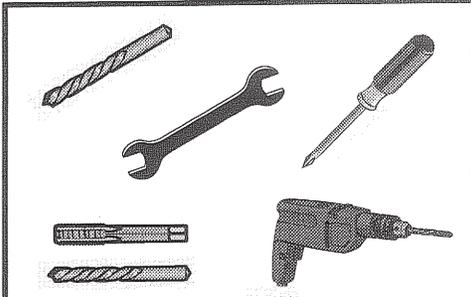
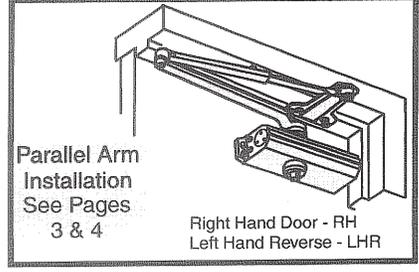
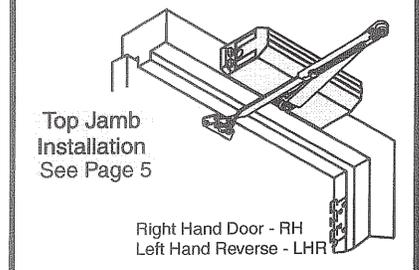
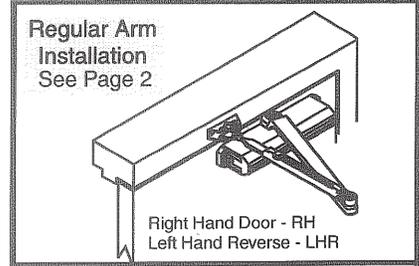
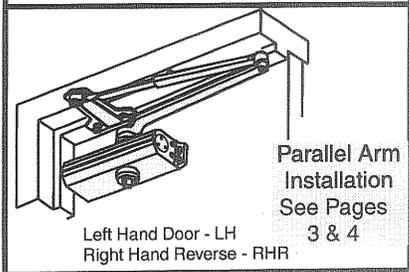
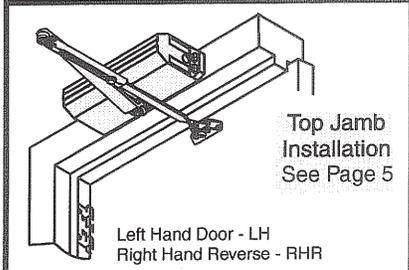
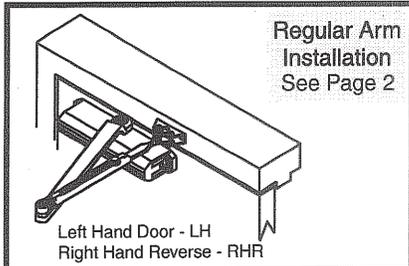


"DA" suffix (Delayed Action) is an optional feature. A separate sheet is supplied showing closer adjustments.

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)

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

3

90°

Stronger +
Weaker -

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

4

Sweep

Slower -
Faster +

5

Latch

Faster +
Slower -

6

Backcheck

Stronger +
Weaker -

Caution:
Don't completely
close valve

7

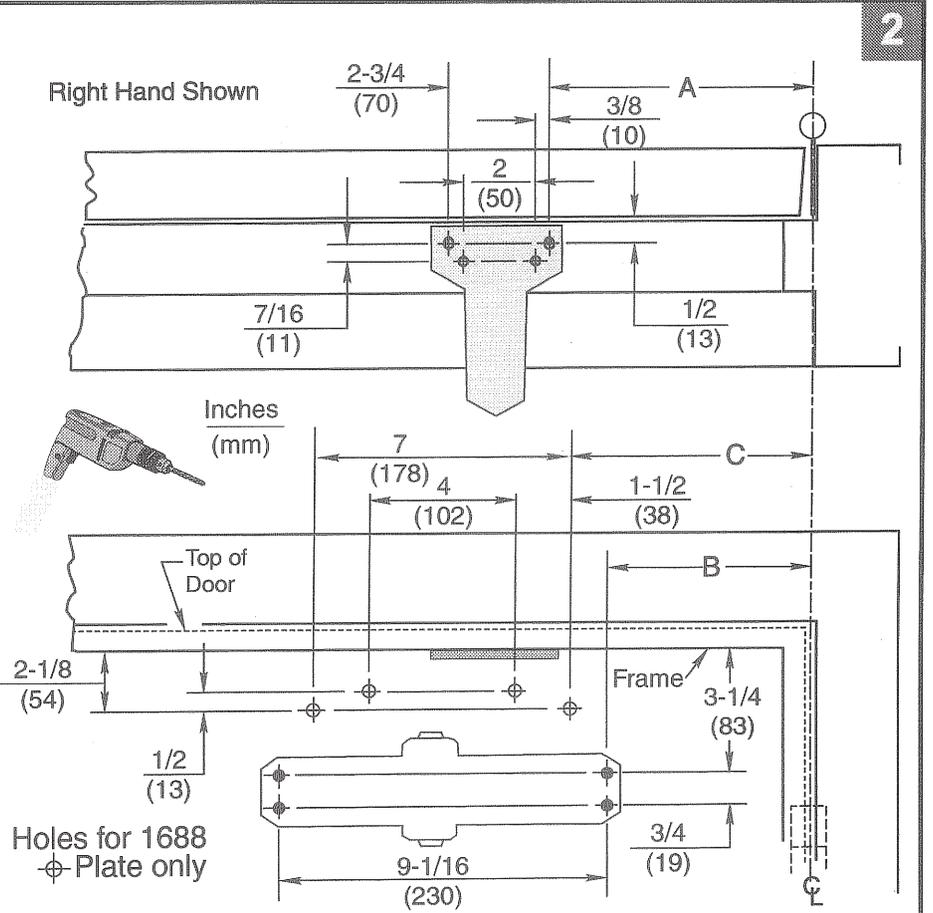
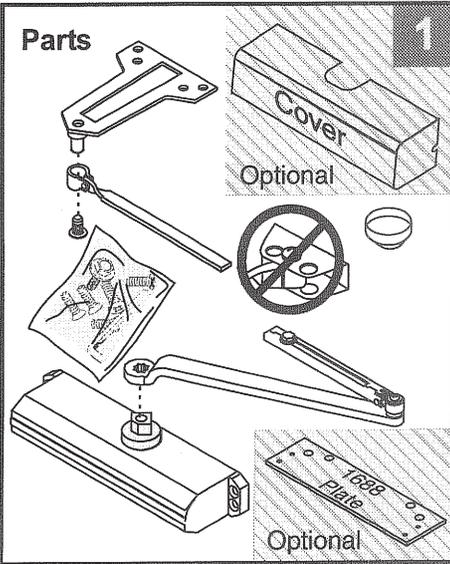
Pinion Cap or Optional Cover

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

1600 Series

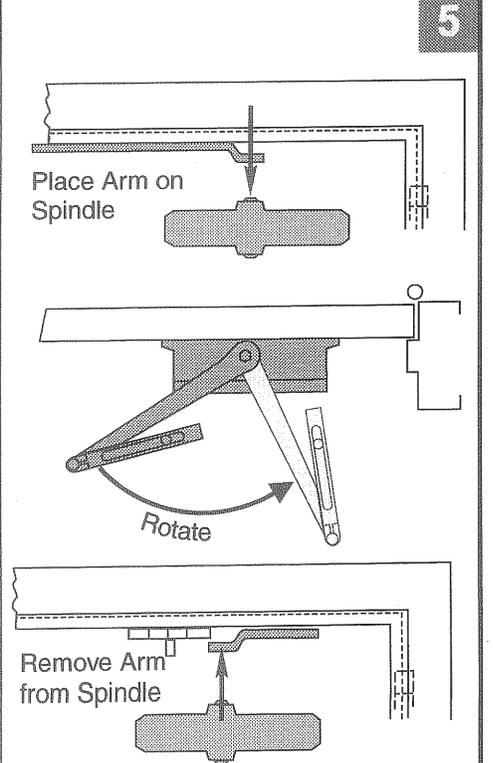
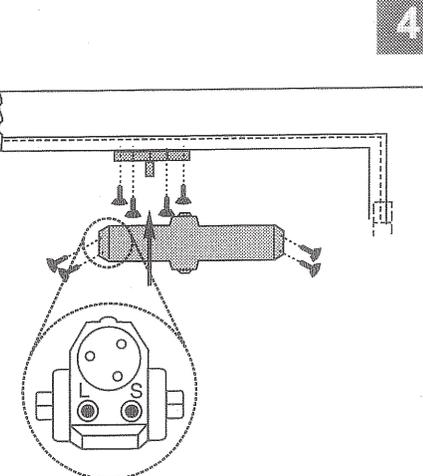
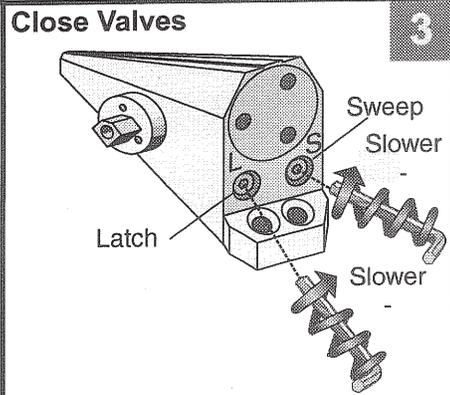
Non Hold Open Door Closers — Parallel Arm

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

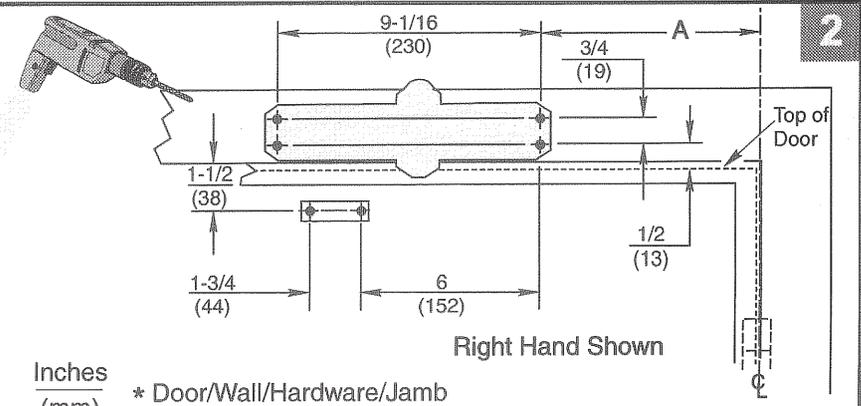
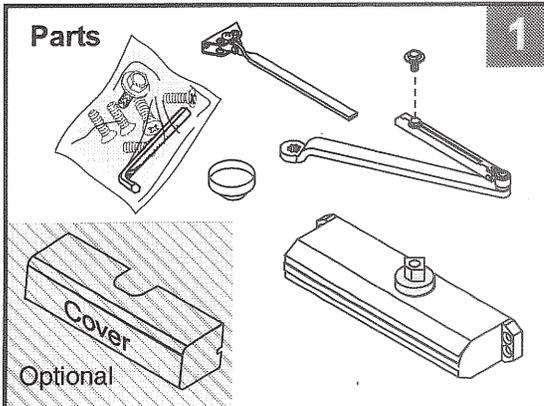
80-9316-2502-020 (12-02)

<p>6</p> <p>Right Hand Door or Left Hand Door</p> <p>Flat</p> <p>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>

1600 Series

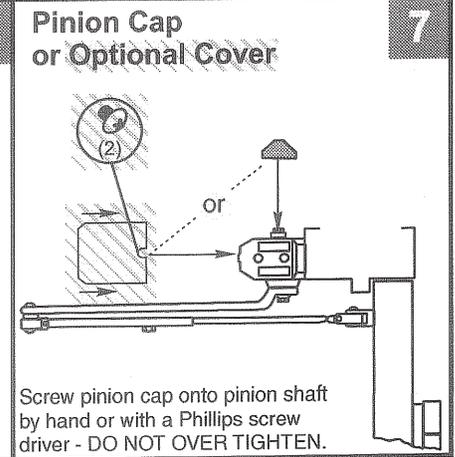
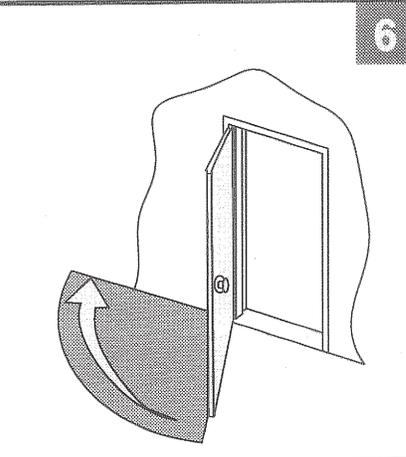
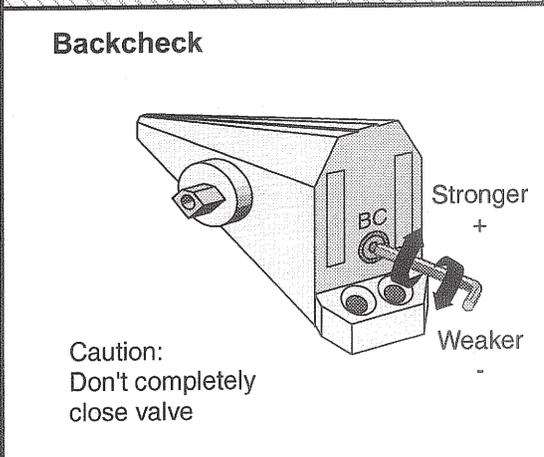
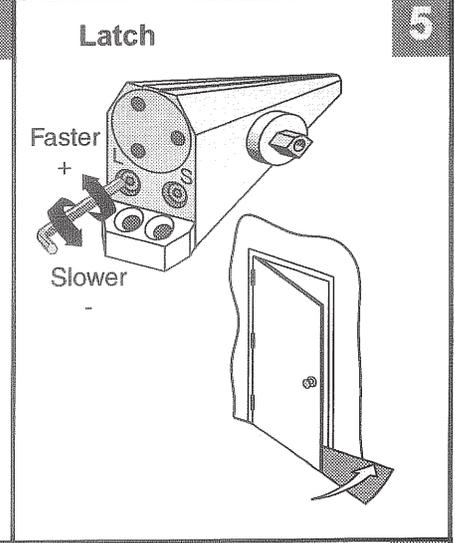
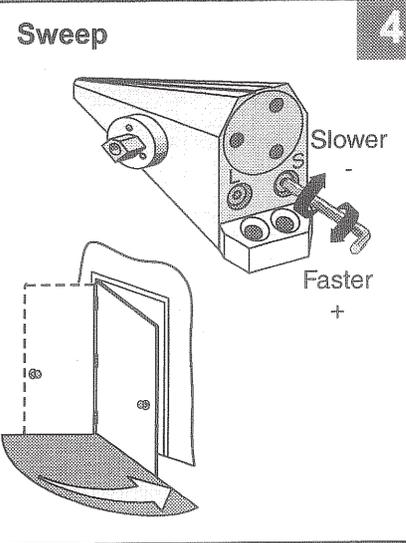
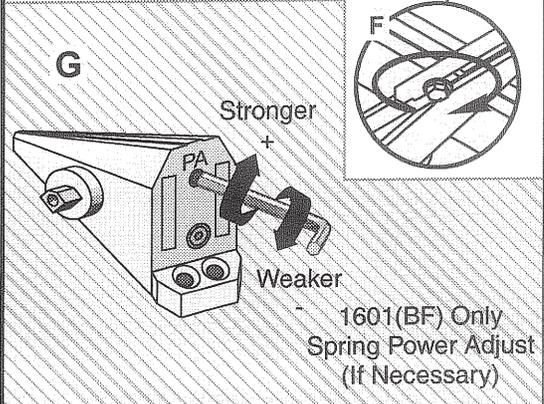
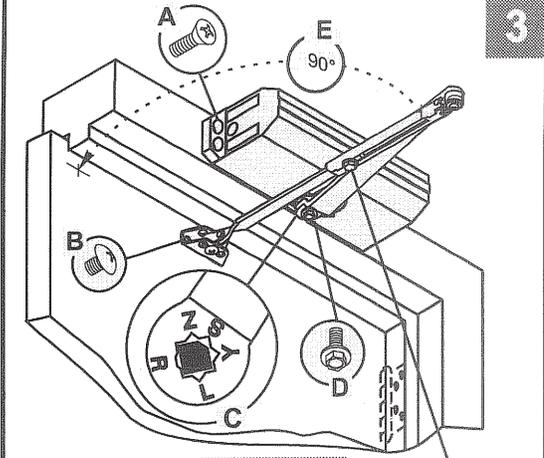
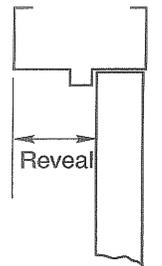
Non Hold Open Door Closers — Top Jamb Arm

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



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 Page

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

Norton Door Controls
 An ASSA ABLOY Group Co.
 1902 Airport Road, Monroe, NC
 Telephone: (800)-438-1951; Fax: (800)-338-0965
 www.nortondoorcontrols.com

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.	*	FULL 360° TURNS OF 1/8" POWER ADJUSTMENT WRENCH	34" (0.85M)	36" (0.90M)	40" (1.00M)	44" (1.10M)	48" (1.20M)
				1601BF	INTERIOR	Regular Arm Top Jamb	1	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	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 (BF)

Date Code: 13-6 (BF)

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

Arm Placement in Shoe



DESIGNED SECURITY, INC.

A Detex Company

Warranty Information

The DSI Product you have purchased is warranted to be free of defects in material and workmanship when properly installed, used, and maintained according to instructions. DSI will, for a period of one (1) year, three (3) years for Optical Turnstiles, from date of purchase repair or replace any part which, upon our examination, prove to be defective under normal use. **DSI SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL LOSS, OR DAMAGE ARISING OUT OF THE FAILURE OF THIS DEVICE.**