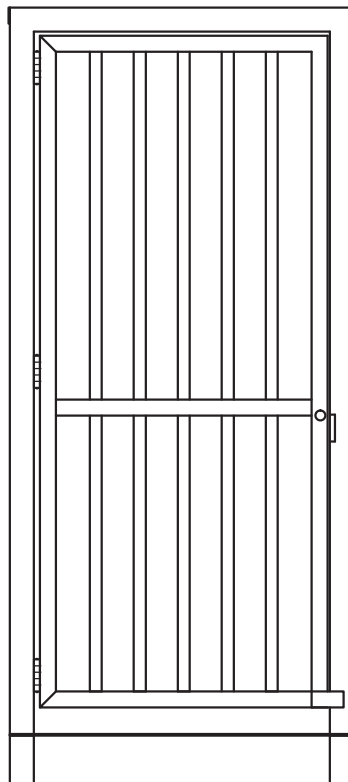


CA **Controlled Access, Inc.**
Turnstiles and ADA Gates
1535 Industrial Parkway South • Brunswick, OH 44212

HS300 Series Full Height ADA Gate

Service & Installation Manual



Note: Successful installation depends on reading this manual.

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. This book is required for maintenance, troubleshooting & repairs.

The High-Security Series

HS336-ADA | HS348-ADA

Manual or Electronic Passage Gate | Interior & Exterior Application



HS336 (stainless steel)

* All models available in stainless steel, powder coat or galvanized.

The Truly "Custom" ADA Gate:

Our HS336-ADA is our ADA solution to perimeter security. This self-closing, heavy duty swing gate provides a wheelchair accessible 36" passage width (with an overall width of 43.375"), or the HS348 (with an overall width of 55.375"). It's low voltage strike lock can be used mechanically or electronically depending on your needs. It features our hinging system that only requires 5ft. pounds of opening force. It is available in all of our standard finishes including stainless steel (304 or 316), carbon steel with powder coating, or hot-dipped galvanized, to match our turnstiles perfectly. Your choice of standard vertical bars or reach prevention mesh allows for a custom experience. A treadplate walkway adds additional rigidity and helps in preventing installation mishaps.



Panic hardware, guard and mesh should be used for Free Exit situations.

Panic bar not available without mesh.

HS336 - Front (powder coat with mesh)



HS336 - Back (stainless steel with mesh)

Standard powder coating color selections:

Additional colors available and can be quoted upon request.

60% Gloss Black	60% Gloss White	RAL 1013 Oyster White	RAL 9007 Grey Aluminum	RAL 5023 Distant Blue	RAL 5010 Gentian Blue	RAL 6002 Leaf Green	RAL 8028 Terra Brown



We're the #1 Choice of Top Architects, Security Pros and Engineers

For more than 30 years, Controlled Access has been the globally trusted name in pedestrian control equipment. Made in Ohio and shipped worldwide, we are the first choice of leading architects, facility managers, security consultants, and engineers. Whether your project requires high security full-height turnstiles, waist high units, or matching ADA accessible gates, Controlled Access is the secure choice. We're experienced in access control systems, from card readers to biometric scanning, to give you the power to control access.



HS430 with mesh filler barrier and HS336-ADA mesh gate.



HS348-ADA galvanized gate and turnstile

The High-Security Series

HS336-ADA | HS348-ADA

Manual or Electronic Passage Gate | Interior & Exterior Application



Applications:

Ideal for controlling orderly flow of foot traffic in both indoor and outdoor settings (matching gate to our High-Security Full-Height Single and Tandem Turnstiles)

Product Features:

Materials and Finishes available in your choice of:

- Hot dipped galvanized carbon steel
- Carbon steel with powder coating
(standard color is black/ other colors available upon request)
- Our signature 304 stainless steel, No. 4 satin finish

Design & Construction:

- Designed for secure operation with aesthetics in mind
- Featuring fully welded exterior components
- Minimal exposed hardware
- Heavy gauge materials meeting ASTM standards

Installation Methods:

- Core drilling of frame posts (preferred)
- 1/2" concrete anchors from tread plate (requires removing core legs from frame)

Operation:

- Field reversible electronic strike (24VDC) can be set to lock or open on power failure
- Gate can also be unlocked with no power by configuring the strike fail lock and using a key
- Gate automatically swings closed with standard hydraulic door closer
- Voltage for electronic strike can be taken from nearby turnstile power supply
- Opening force: 5ft. lbs.

Options:

- Panic bar (-ms only)
- Magnetic lock (replaces strike)
- Motorized gate opener for interior applications only (requires 110VAC, adds 3" to overall height of gate)
- Push buttons (wired or wireless)
- Variable passage widths (up to 40"); or you can choose our 48" option
- Additional options available upon request

Dimensions:

HS336-ADA/HS348-ADA

Size of opening (pedestrian clearance):

- HS336-ADA 36" (914.4mm)
- HS348-ADA 48" (1219.2mm)

Frame:

- 2" X 3" (50.8mm X 76.2mm) 11 gauge box tubing

Swing Gate:

- 2" X 2" (50.8mm X 50.8mm) 11 gauge box tubing

Exterior Height:

- 91" (2311.4mm)

Interior Height:

- 87.812" (2230.4mm)

Available Door Filler Materials:

- 1 1/2" Diameter 14 gauge (38.1mm)
- 1 3/4" Diameter 14 gauge (44.4mm) (HD Model) (16 gauge on stainless models)
- 3/4" #9 Expanded Metal Mesh (Flattened) (MS-Mesh Model)

* Dimensions are subject to change without notice

Standard Hardware:

Door Closer:

- Locinox Mammoth 180

Deadlatch:

- Adams Rite 4510 Series with 31/32" Backset

Strike:

- Adams Rite 7100 Series Electronic Strike, 24VDC

Cylinder:

- Schlage C keyway - standard
- SFIC available

Optional Hardware:

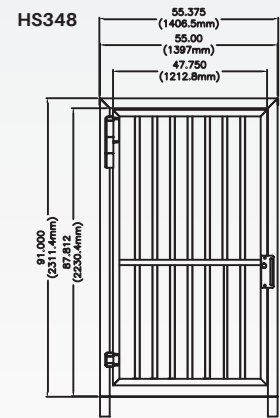
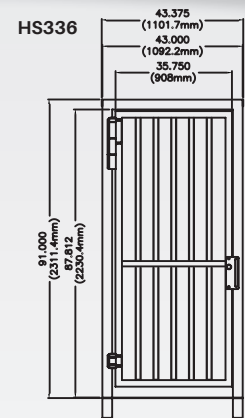
Door Opener:

- Norton 5730 Low Energy Operator, Aluminum

Push to Exit Panic Bar:

- Adams Rite 8400 Exit Device, Aluminum
- We can source additional custom hardware choices. Please provide your required specs for a quotation.

Matching Full-Height Turnstiles Available in Single (HS427-S, HS430-S, HS439-S, HS448-S) and Tandem (HS427-T, HS430-T) Designs.



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.

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

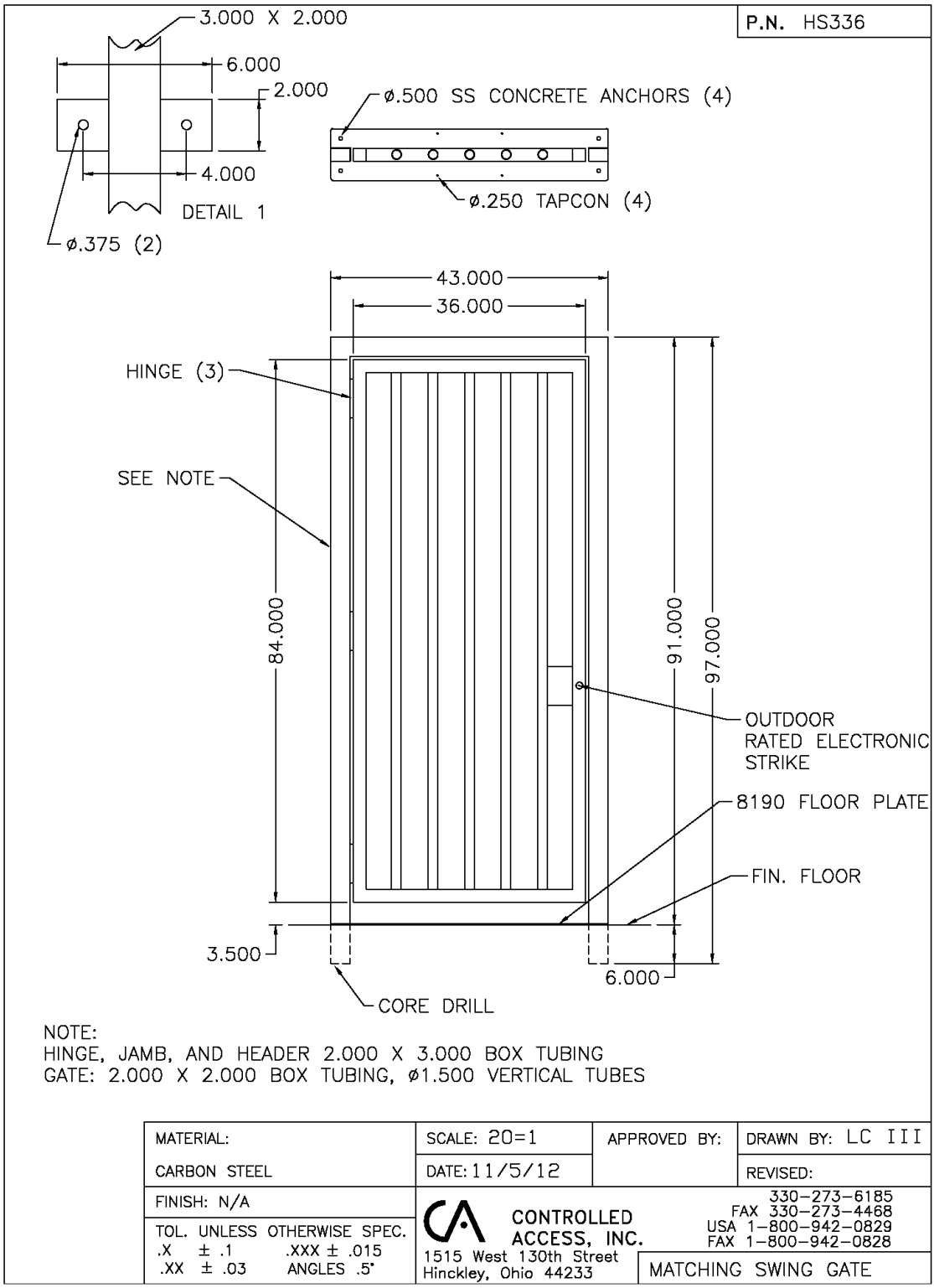
Hot dipped galvanizing:
ASTM A-143, ASTM A-153-80

All fasteners provided meet IFI ANSI/ASME Fastener Standards

American Welding Society (AWS)
Standard D 1.1



Controlled Access, Inc. is certified by Advantage International Registrar to be an ISO 9001:2015 company



Pre-installation Tips for the HS336 Full Height ADA Gate

Before installing the HS336 ADA Gate, make sure to review these pre-installation tips to ensure a successful installation.

Before you get started:

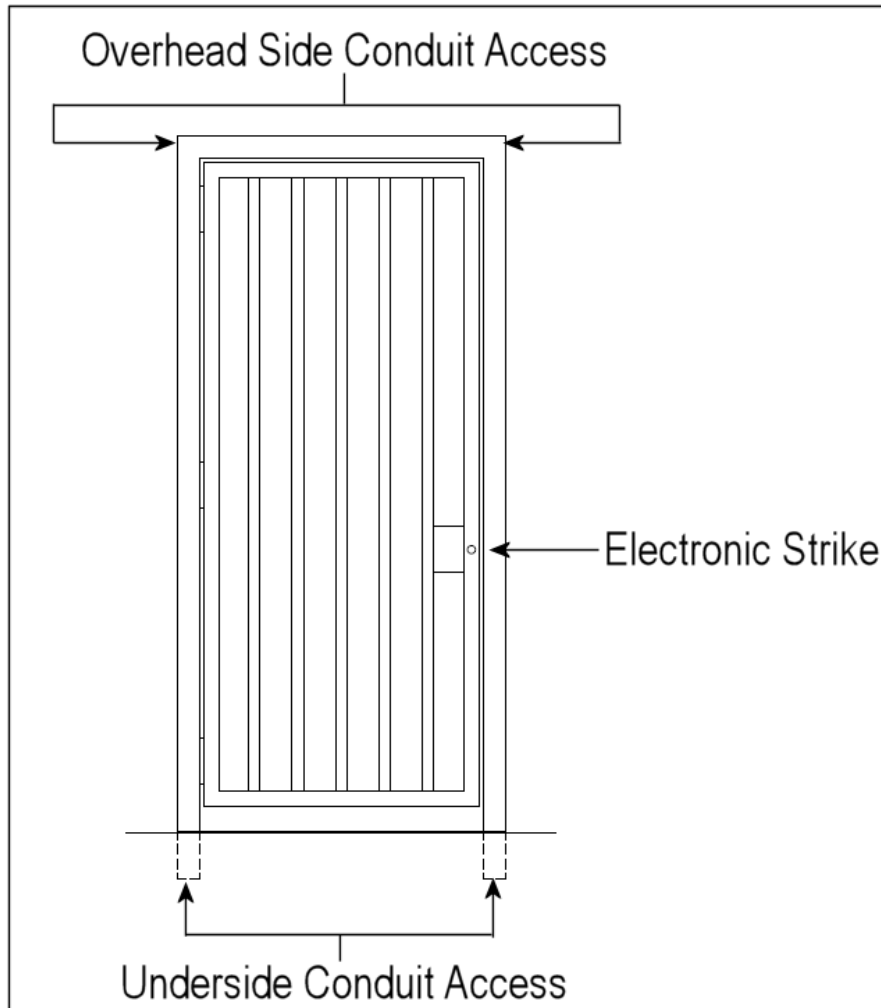
- We recommend core drilling to install the HS336 gate. Should you decide not to core drill, cutting the legs off underneath the tread plate is required.
- If you are electronically locking or unlocking the gate, be aware of the various methods to accessing the electronic strike before installing. Details 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. Take advantage of the provided spacers and floor plate when core drilling to ensure proper installation.

Electrical Information for the HS336 Full Height ADA Gate

Should your facility require it, the HS336 can easily be integrated into access control systems. Each gate has a bracket on each side of the top which has conduit access. This bracket can also be utilized to bolt onto a Controlled Access full height turnstile as well (the conduit holes align on the mainframe of the turnstile as well as the bracket on the gate). Additionally, the 2" x 3" frame can be utilized from the floor to provide conduit access to the electronic strike. The diagram below calls out these convenient locations.



If utilizing the strike electronically, provide 24VDC voltage to unlock it. Depending on whether the strike fails locked or fails open, a normally open or normally closed relay contact is required. Strikes configured to fail lock require voltage to unlock, while fail open strikes require voltage to lock. The key or optional panic bar can always be used to override this and manually unlock the gate.

Installation Instructions for the HS336 Full Height ADA Gate

Preferred Installation Method

1. Review pre-installation tips, verify gate swing direction & layout holes to be drilled.
2. Core drill 4" diameter holes 40" on center, 6" deep.
3. Fill core drilled holes with fast set mortar, following the manufacturer's instructions.
4. Lift the gate vertically and slide the legs into core drilled holes.
5. Install 3/16" flat head Tapcons™ into inner holes on the tread plate to secure the walk path.
6. Attach gate to turnstile or adjoining wall / structure utilizing mounting brackets on both sides of the gate.
7. Make electrical connections to the strike, if required.

Alternate Installation Method

1. Review pre-installation tips, verify gate swing direction & layout holes to be drilled.
2. Remove 2" x 3" x 6" legs from underside of floor plate with a band saw.
3. Utilizing the floor plate as a template, mark the outer holes for ½" concrete anchors
4. Drill ½" holes into the concrete pad for wedge type concrete anchors.
5. Install wedge type concrete anchors into ½" holes, following the manufacturer's directions for concrete anchor installation.
6. Place gate onto anchors.
7. Install nuts onto ½" anchors to ensure the gate is properly secured to the ground.
8. Install ¼" flat head Tapcons™ into inner holes on the tread plate to secure the walk path.
9. Attach gate to turnstile or adjoining wall / structure utilizing mounting brackets on both sides of the gate.
10. Make electrical connections to the strike, if required.

7100, 7101 Electric Strikes



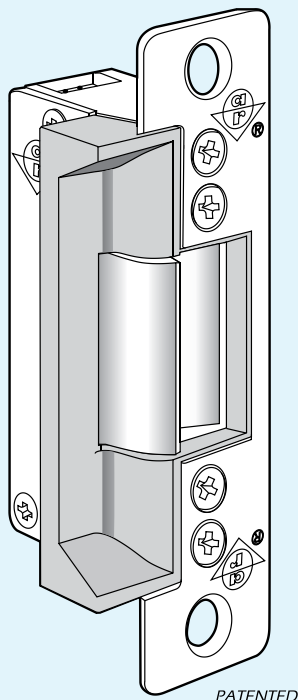
ALUMINUM

UL 1034
BURGLARY
LISTEDELECTRIFIED
PRODUCTGRADE 1
E09321

7100, 7101 Electric Strikes with 4-7/8" faceplates are designed for Adams Rite deadlatches or cylindrical locksets with 1/2" to 5/8" latchbolt projection. For use in aluminum jambs and stiles.

Function

Remote electrical control of any door equipped with an Adams Rite 4500, 4700, or 4900 Series (or similar) Deadlatch or cylindrical (key-in-knob/lever) type lockset with 1/2" to 5/8" latchbolt projection. 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 existing prep for discontinued Adams Rite 7000, 7500, 7800 Electric Strikes.



PATENTED

Specifications

FAIL-SAFE/FAIL-SECURE

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

CASE

- Approximately 1" x 3-3/8" x 1-5/8" deep.

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, lip extension kits are available, specified by last dash number. Not available on 7101.

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 4500, 4700 (discontinued), or 4900 Deadlatch or cylindrical 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.

VOLTAGE

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

CURRENT DRAW/AMPS

VOLTS	AC INTERMITTENT	DC CONTINUOUS
12	1.42	0.33
24	0.74	0.17

STANDARD PACKAGE

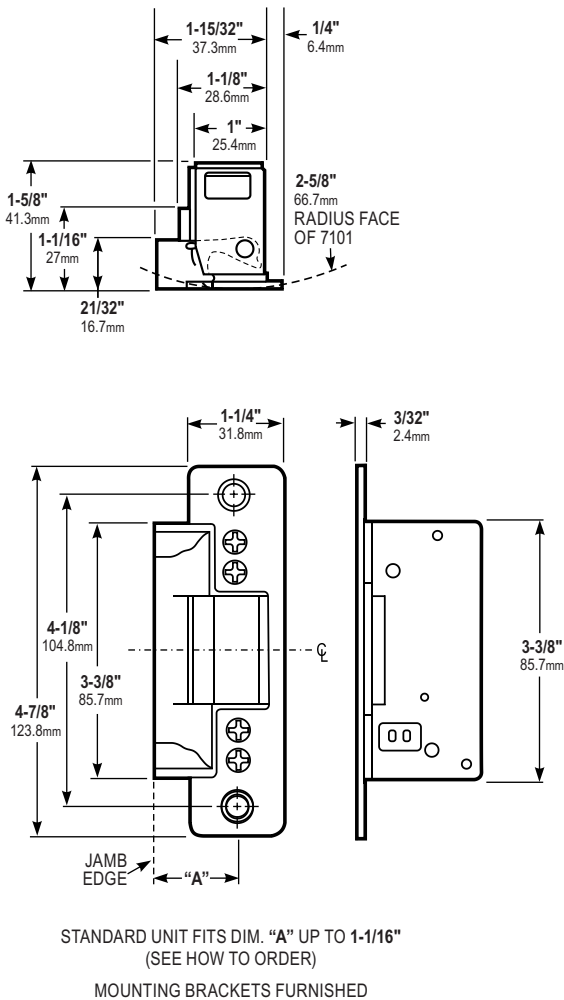
- Individually boxed with mounting screws, mounting clips, adhesive shims to accommodate jamb or stile extrusion thickness greater or less than nominal 1/8".

OPTIONS

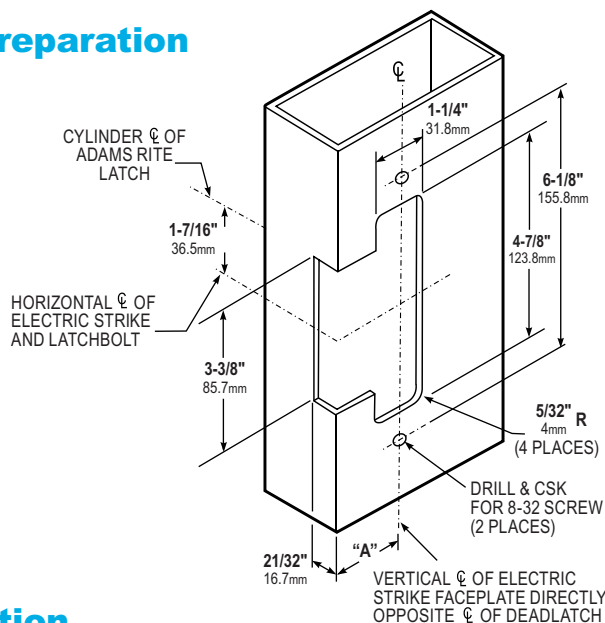
- Available with two monitoring signal switches which sense whether latchbolt is in strike and whether strike jaw is blocked. Choice of mounting in AC and DC for intermittent or continuous duty. 7100 Electric Strike (flat faceplate) available with extended strike lip. Specify assembled for either fail-secure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

All measurements are approximate and are provided for informational purposes only. Refer to the product Installation Instructions.

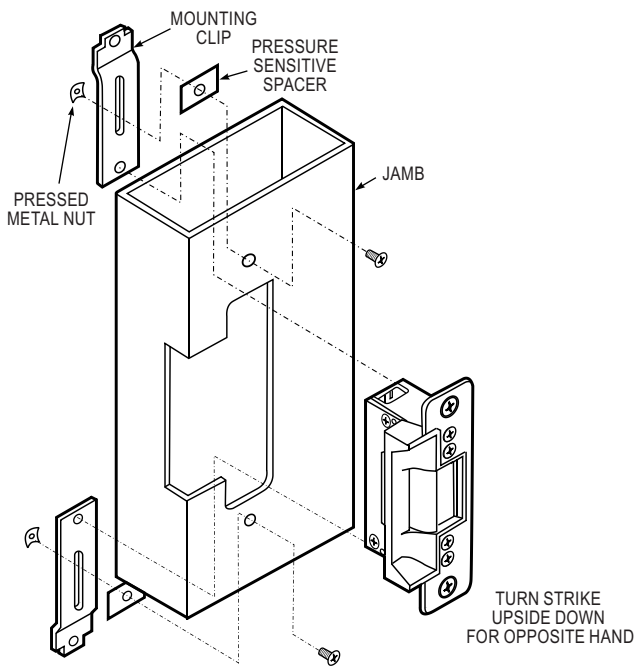
Dimensions



Jamb Preparation



Installation



HOW TO ORDER 7100, 7101 ELECTRIC STRIKE

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

PRODUCT NO.	FACEPLATE SHAPE	VOLTAGE	CURRENT AND DUTY	FEATURES*	FINISH**	LIP EXTENSIONS (DIM. A) (Door Centerline to Jamb Edge)
710	0	-3	1	0	-628	-00
	0 Flat	3 12 Volt	1 DC Continuous or Intermittent	0 Standard/Fail-Secure	313 Dark Bronze Anodized	00 1-1/16" or less 05 2"
	1 Radius	4 16 Volt	4 AC Intermittent	5 Fail-Safe	335 Black Anodized	01 1-1/2" 07 2-1/4"
		5 24 Volt		7 Monitored/ Fail-Safe	626 Satin Chrome	02 1-5/8" 09 2-1/2"
				9 Monitored/ Fail-Secure	628 Clear Anodized	03 1-3/4" 12 2-7/8"

*Fail-secure can be field converted to fail-safe or vice-versa. **7101 available in 628, 313, 335 only.

RELATED PRODUCTS

When purchasing this product, please consider the following related products, available separately:

Options

Lip extensions.

Power

4603 Rectifier, 4605/4606 Transformer, Piezo Horn audible indicator, PS-1.

Deadlatches

4500 and 4900 Series Deadlatches. Note that 4700 Deadlatch is discontinued and replaced by 4900 Deadlatch.

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.

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 A/R # 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

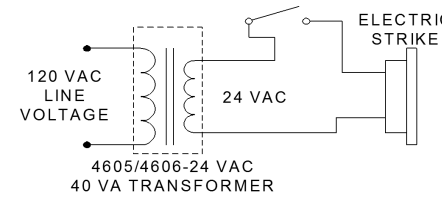
Warning !

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

Solenoid Data

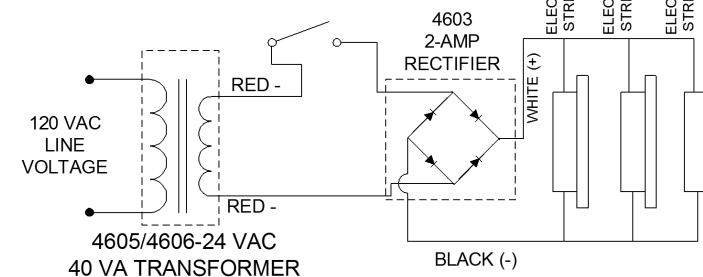
24 VDC CONT.	WHITE STRIPE ON BLACK	141.6	.170	.170	4.09	4.09
16 VDC CONT.	GREEN STRIPE ON BLACK	61.8	.222	.222	3.05	3.05
12 VDC CONT.	RED STRIPE ON BLACK	34.6	.332	.332	3.81	3.81
24 VAC INT.			.744	.431	19.15	6.43
16 VAC INT.	BLUE STRIPE ON BLACK	16.3	1.030	.636	17.30	6.60
12 VAC INT.	YELLOW STRIPE ON BLACK	8.8	1.420	.813	17.74	5.82
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)

Control Switch (N.O.)
(ex. Pushbutton, keypad, Card Reader)
DRY CONTACTS!



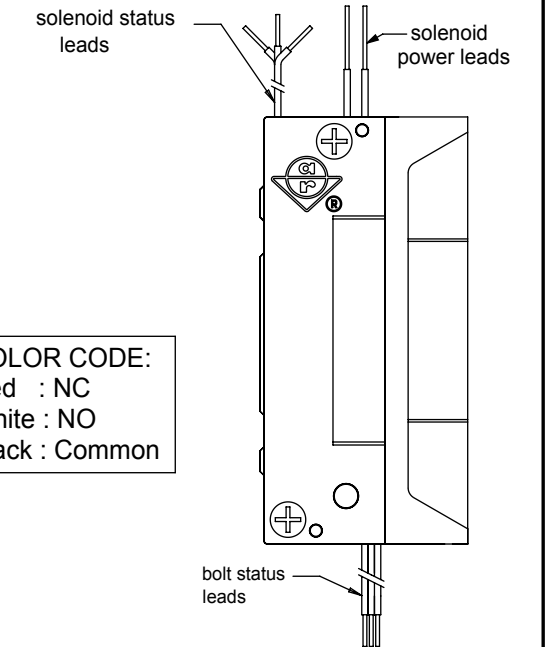
**TYPICAL ELECTRIC STRIKE WIRING DIAGRAM
INTERMITTENT DUTY FAIL-SECURE 24 VAC**

Control Switch (N.O.)
(ex. Pushbutton, keypad, Card Reader)
DRY CONTACTS!

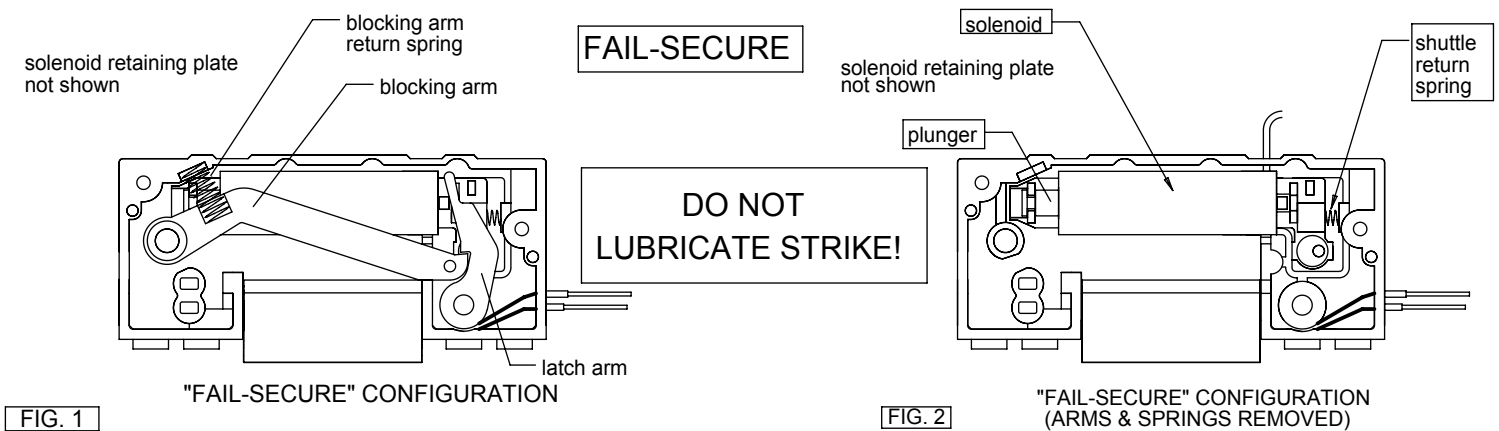


**TYPICAL ELECTRIC STRIKE WIRING DIAGRAM
INTERMITTENT/CONTINUOUS DUTY 24 VDC**

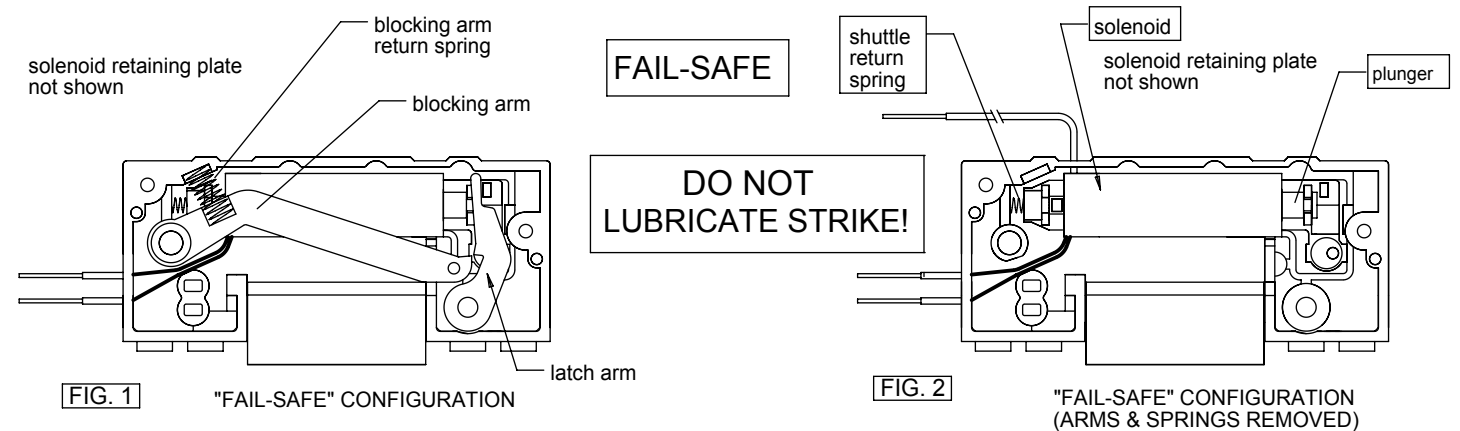
WIRE CODING (MONITORED VERSION)

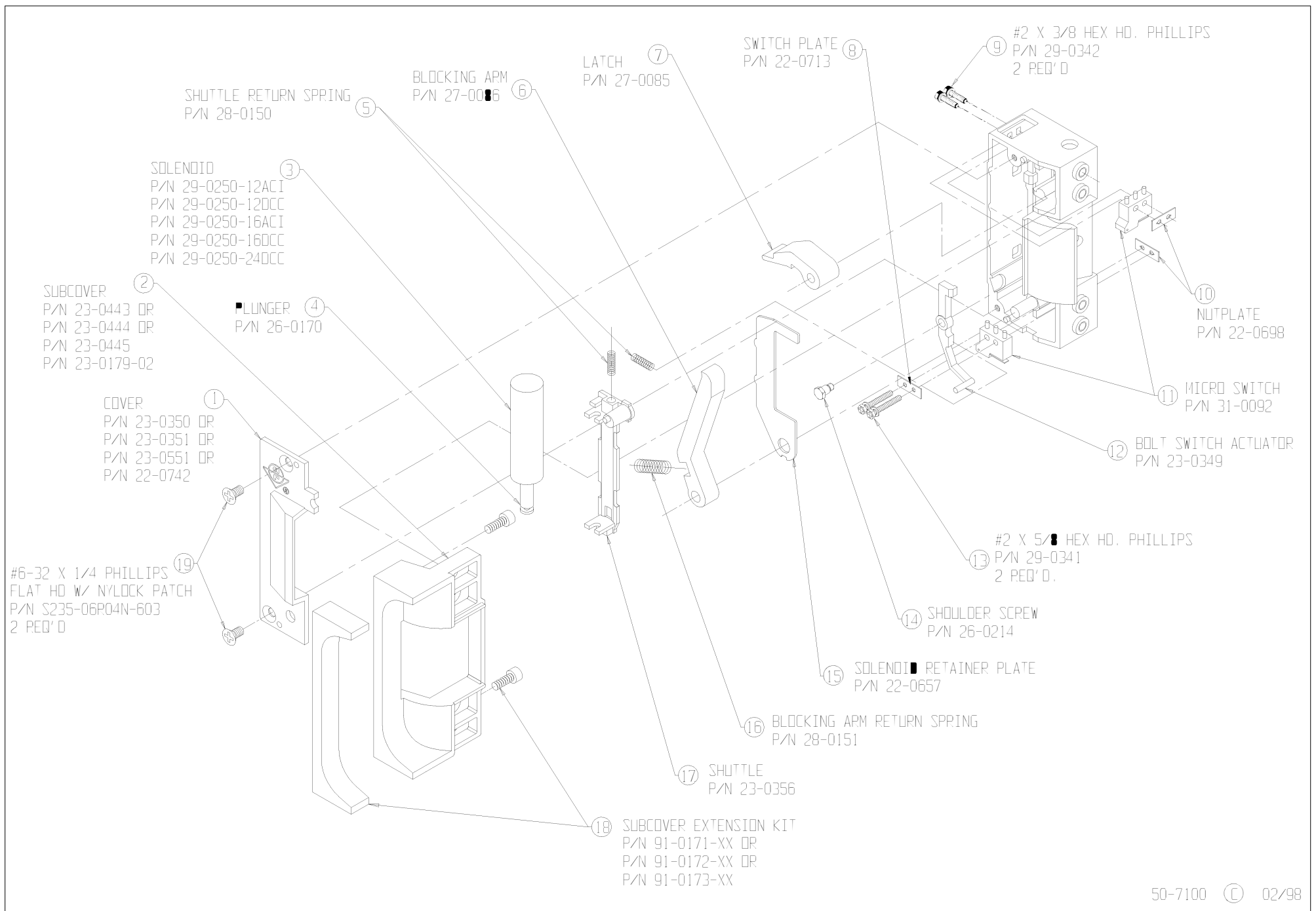


FIELD REVERSIBLE (FAIL-SECURE)



FIELD REVERSIBLE (FAIL-SAFE)





4510 Standard Duty Deadlatch



ALUMINUM

GRADE 1
E8231

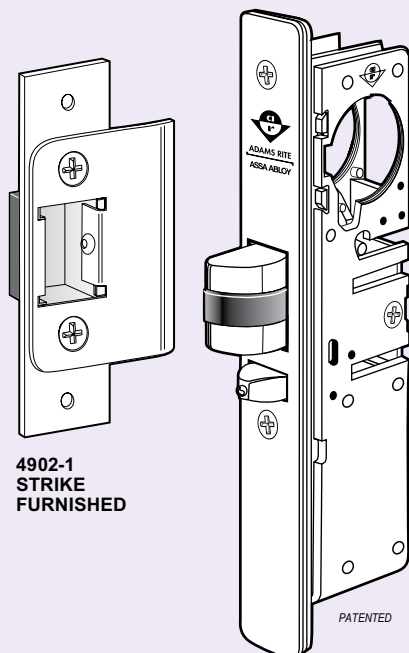
4510 Standard Duty Deadlatches provide flexible traffic control during and after business hours.

Function

The 4510 Standard Duty Deadlatch offers flexibility of traffic control during and after business hours. A reverse turn of the key while the bolt is held retracted retains the bolt to allow two-way traffic for hospitals, banks, stores, and other buildings which require free entrance at certain times and exit-only at other times. Interchangeable, without stile modification, with any MS1850A or MS1850S Deadlock of same backset and faceplate shape. Does not, however, provide the same maximum security level as the MS® Deadlock.

Operation

Turn key or operate handle to retract spring-loaded Latchbolt. To hold bolt retracted, push it in and secure by reverse turn of key. Uses any standard mortise cylinder with MS® dimensioned cam.



Specifications

BOLT HOLDBACK

- While bolt is held fully retracted, a reverse turn of the key retains the bolt, allowing the door to be free swinging.

CYLINDER BACKSET

- 7/8", 31/32", 1-1/8" or 1-1/2" only.

CASE

- Measures 1" x 5-13/16" x depth. Depth varies by backset (see table on back of page). Steel with corrosion-resistant plating.

LATCHBOLT

- 1/2" x 1" x 1/2" throw. All metal with hardened steel internal pins. Handing is reversible without special tools.

AUXILIARY BOLT

- All metal. Deadlocks latchbolt to prevent "loiding" or case-knife entry.

FACEPLATE

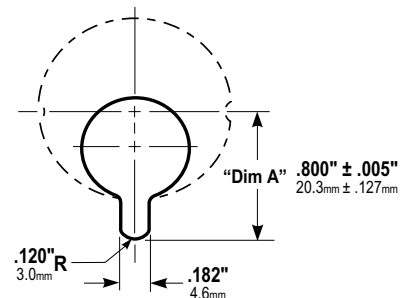
- Measures 1" x 6-7/8".

STRIKES

- Standard strike furnished is 4902-01 for flat jamb where door closes flush or nearly flush. Available separately: radius strike for opposite stile in paired doors; longer strike (4901) to cover slot strike of MS lock; long lip strikes for centerhung doors.

CYLINDER CAM

- 4510 Standard Duty Deadlatches are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See CYLINDERS section for cylinder make, thumbturn and trim ring information.

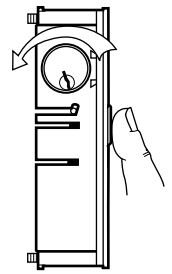


OPTIONS

- Backset, faceplate shape, strike, handing, and finish must be specified when ordering.

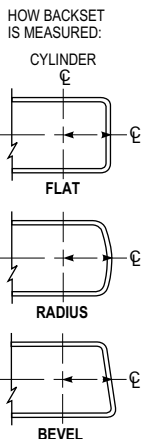
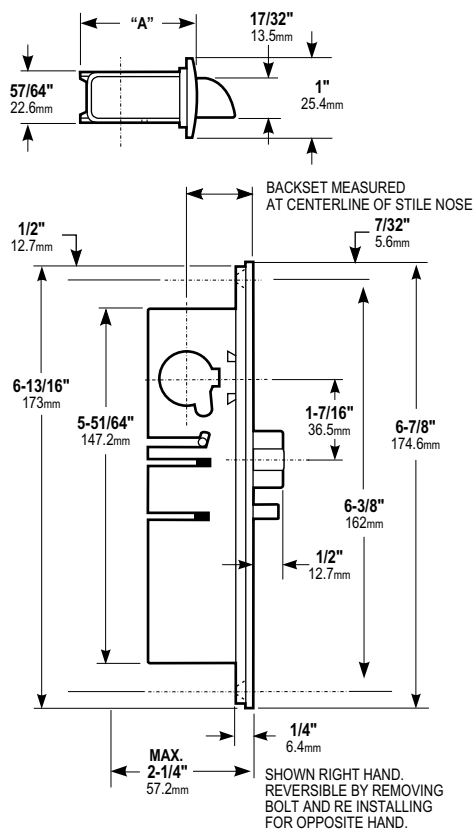
STANDARD PACKAGE

- Individually boxed with strike, and machine screws for mounting. Cylinders, paddles, and handles available separately. Shipping weight: 1-1/4 lbs.



All measurements are approximate and are provided for informational purposes only. Refer to the product Installation Instructions.

Dimensions

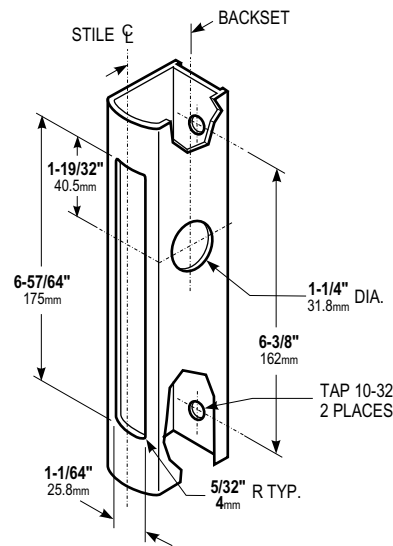


BACKSET	"A"
7/8" 22.2mm	1-33/64" 38.5mm
31/32" 24.6mm	1-19/32" 40.5mm
1-1/8" 28.6mm	1-49/64" 44.8mm
1-1/2" 38.1mm	2-9/64" 54.4mm

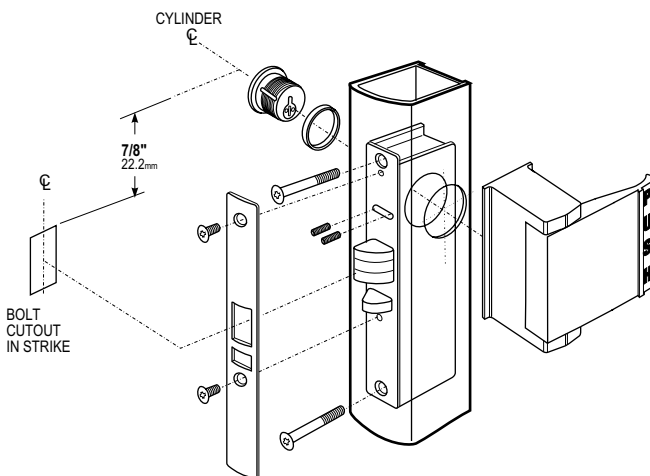
ARMORED FACEPLATE 1" X 6-7/8"
FLAT 4510
RADIUS 4511
RADIUS W/ WEATHERSTRIP 4511W
LH BEVEL 4512-X5
RH BEVEL 4512-x6

Stile Preparation

Identical to MS 1850A Series (See also prep for 4590 Paddle)



Latch Paddle & Cylinder Installation



HOW TO ORDER 4510 STANDARD DUTY DEADLATCH

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

Product No.	FACEPLATE	BACKSET	HANDING	STRIKE SIZE	STRIKE SHAPE/LIP LENGTH	FACEPLATE FINISH
451	1	-3	6	-2	01	-628
	0 Flat	1 7/8"	5 LH or RHR	1 Mortised (4901) 4-5/8"	01 Flat/Standard Jamb	313 Dark Bronze Anodized
	1 Radius	2 31/32"	6 RH or LHR	2 Mortised (4902) 2-5/8"	02 Radius/Standard Stiles	335 Black Anodized
	1W Radius with weatherstrip	3 1-1/8"			17 Flat/Center Hung 4" Jamb	628 Clear Anodized
	2 Bevel	4 1-1/2"			21 Flat/Center Hung 4-1/2" Jamb	

RELATED PRODUCTS When purchasing this product, please consider the following related products, available separately:

Accessories

Lock mounting accessories and options.

Cylinders

4510 Standard Duty Deadlatches are operable by any standard 1-5/32" diameter mortise cylinder with MS® cam.

Trim

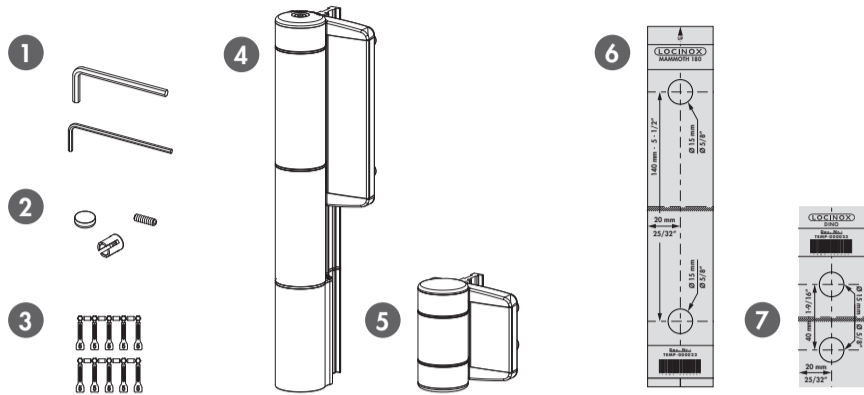
Entry trim, paddles, handles and lever operators.

Electric Strikes

Application specific.

MAMMOTH-180: INSTALLATION INSTRUCTION

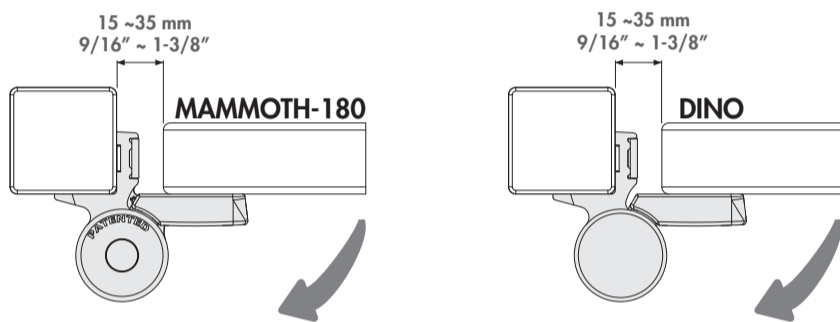
① Package content



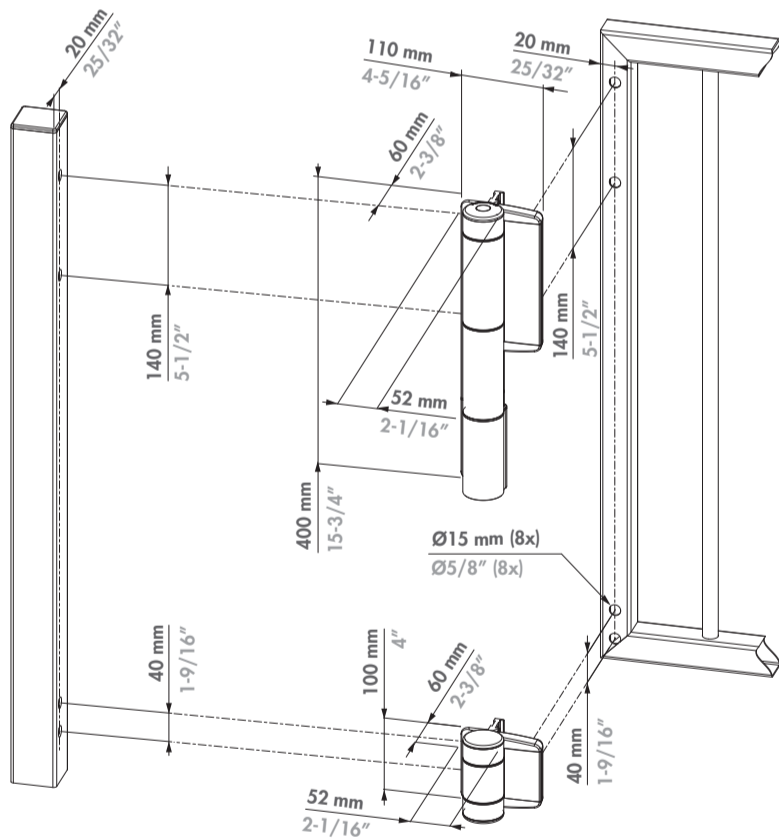
1	Allen keys 5 - 3
2	Cover cap (1x), Setscrew (2x), QF expanders (2x)
3	Hexplugs
4	Mammoth-180 gatecloser
5	Dino
6	Drilling template for Mammoth 180° (2x)
7	Drilling template for Dino (2x)

LEFT OPENING GATE

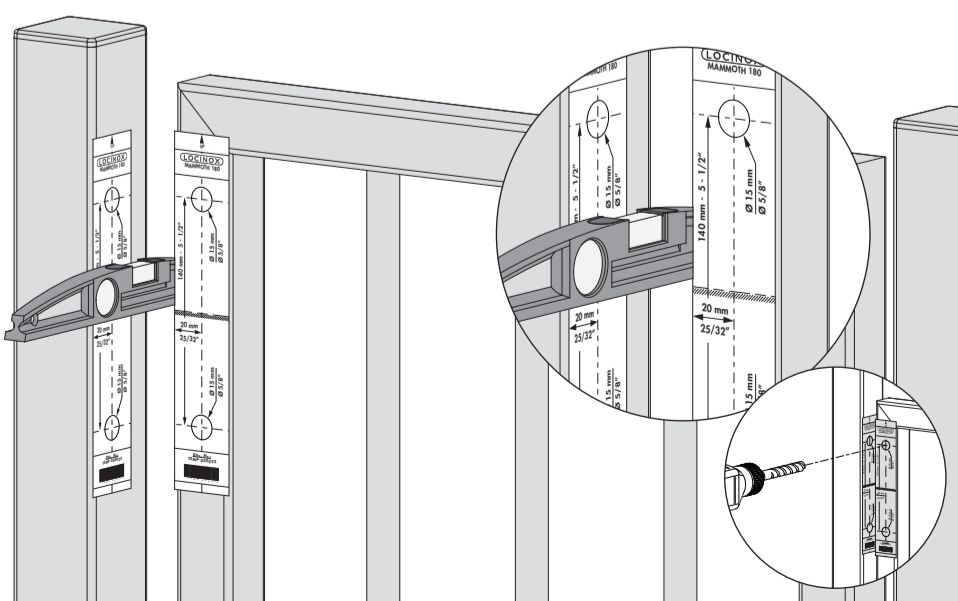
② Mounting Situation



③ Dimensions

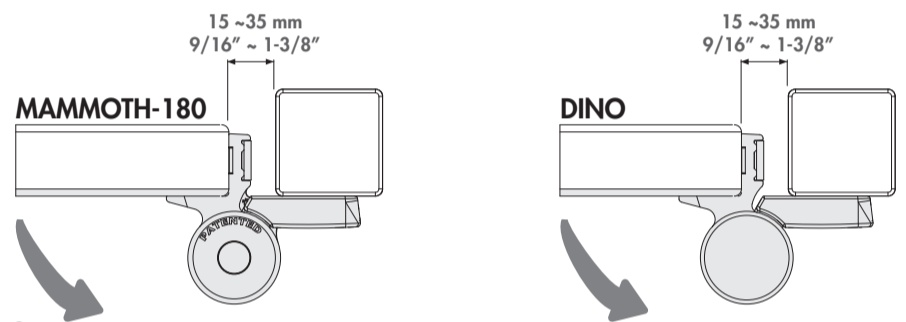


④ Profile and gate preparation for MAMMOTH-180 gatecloser

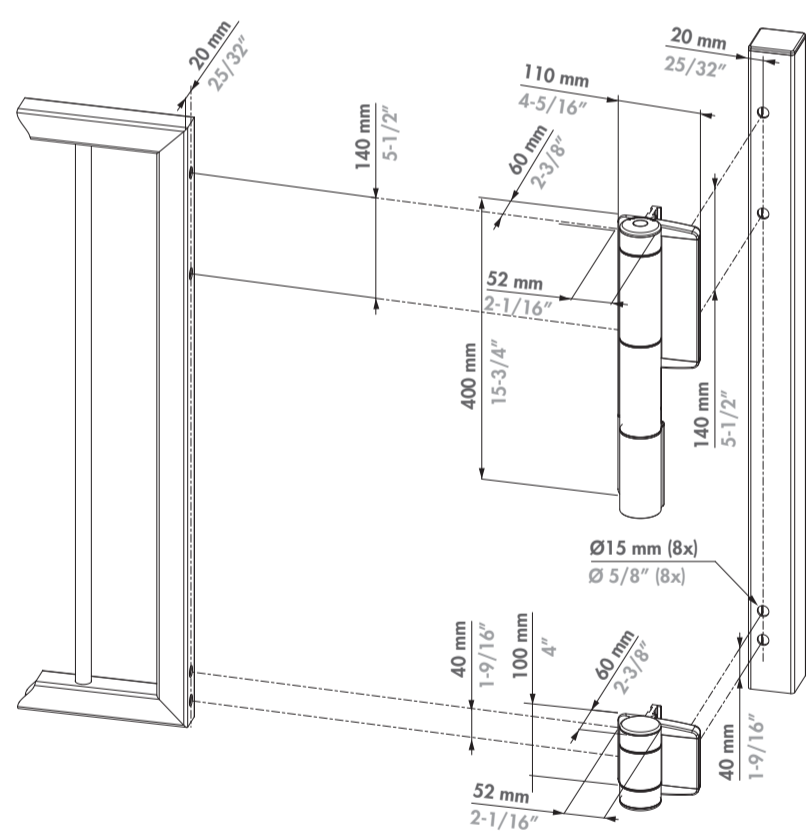


RIGHT OPENING GATE

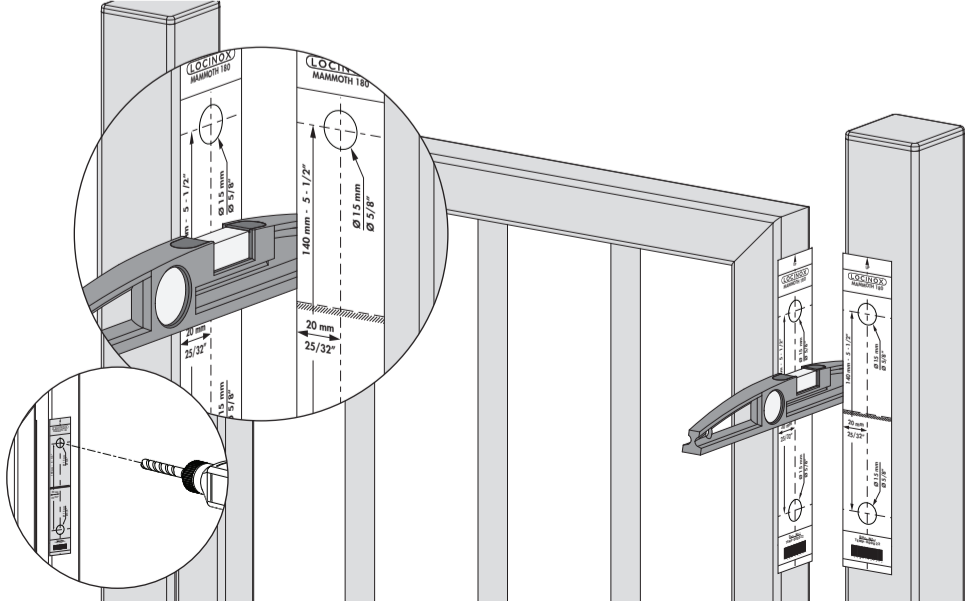
② Mounting Situation



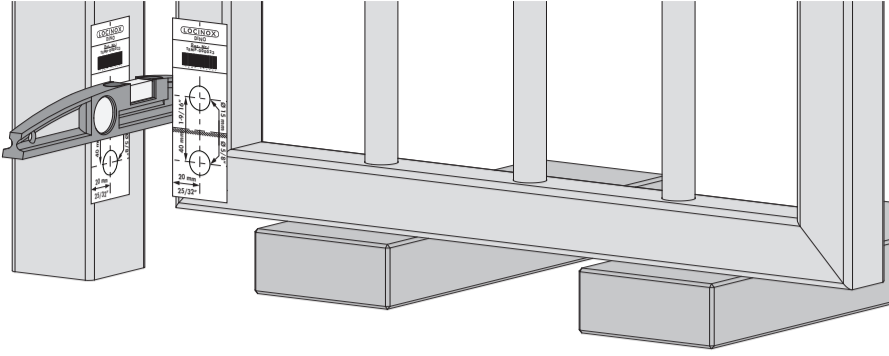
③ Dimensions



④ Profile and gate preparation for MAMMOTH-180 gatecloser

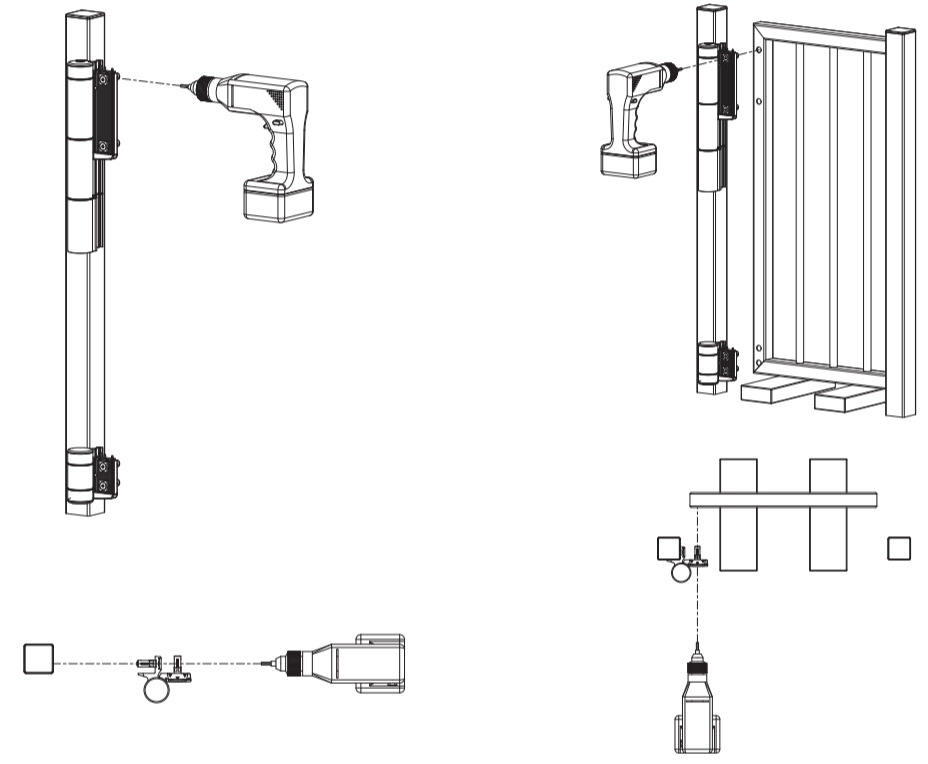
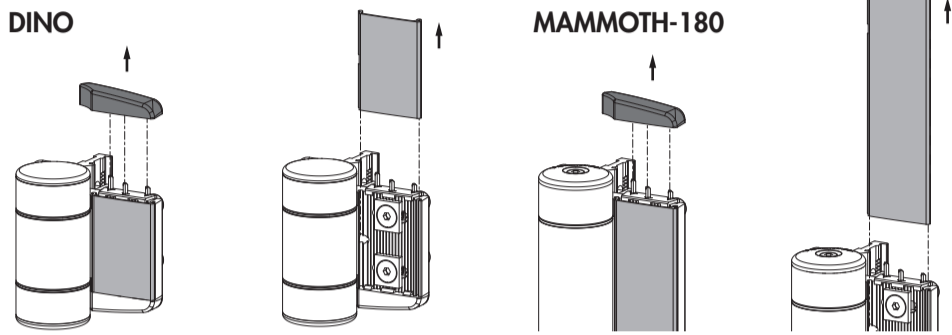


⑤ Profile and gate preparation for DINO hinge

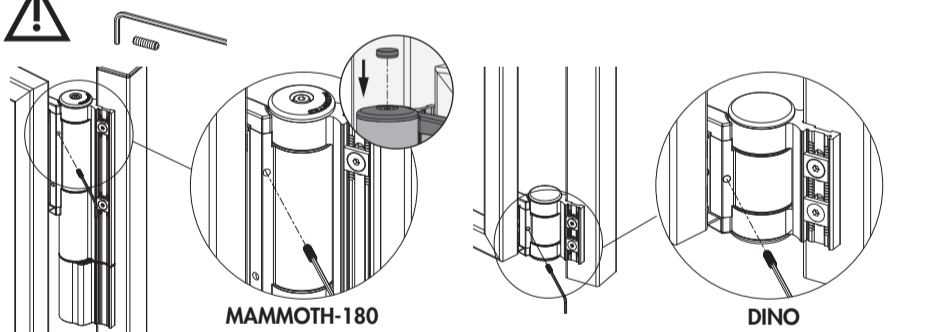


⑥ Mounting MAMMOTH-180 and DINO

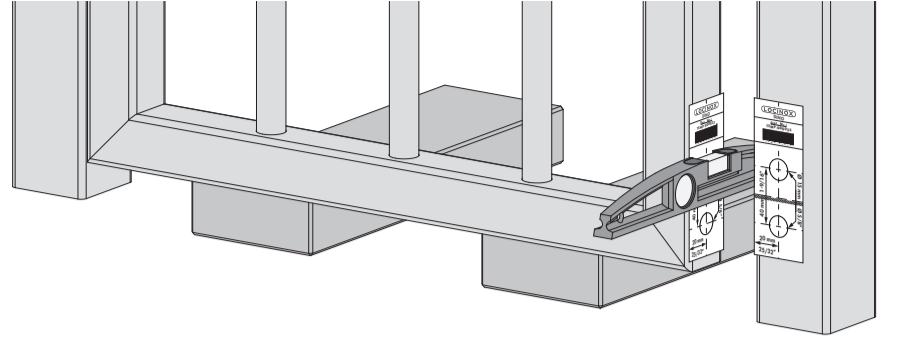
⚠ First remove the Quick-Fix cover caps



⚠ Re-install the cover caps and lock the Quick-Fix cover

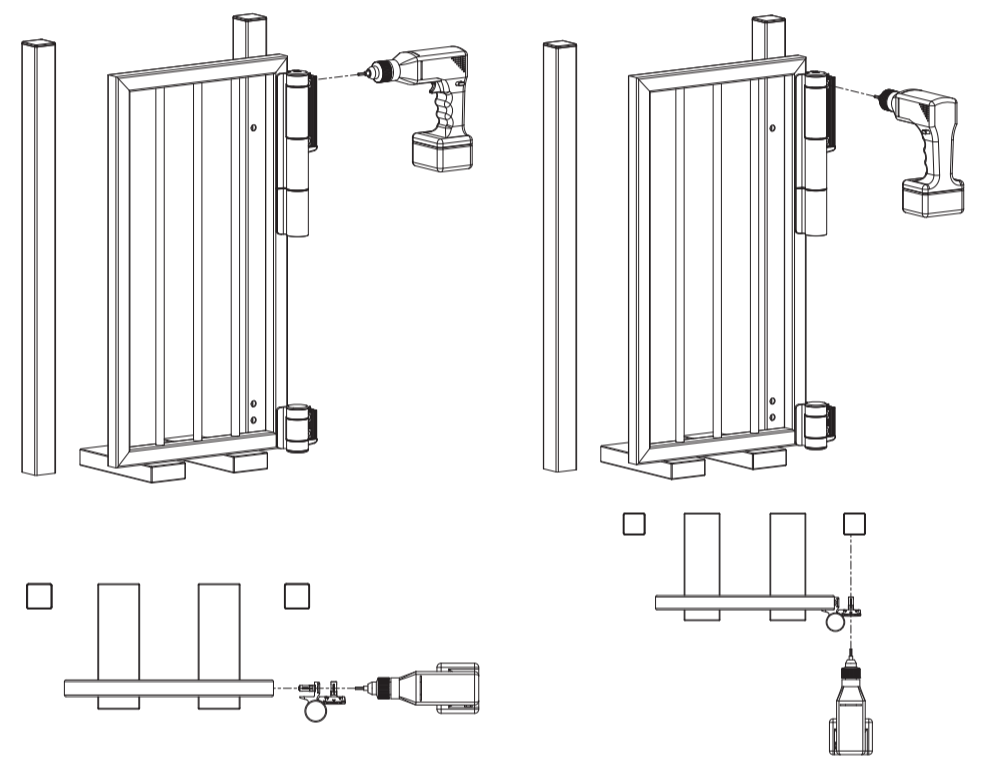
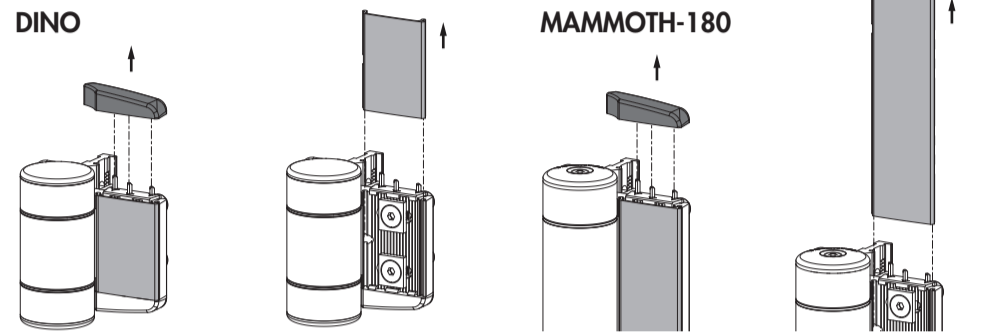


⑤ Profile and gate preparation for DINO hinge

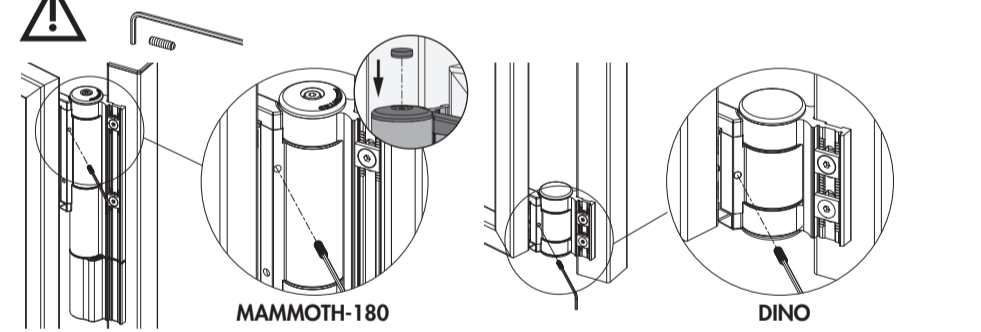


⑥ Mounting MAMMOTH-180 and DINO

⚠ First remove the Quick-Fix cover caps



⚠ Re-install the cover caps and lock the Quick-Fix cover



⑥ Adjusting

