Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
(830)629-2900 / 1-800-729-3839 / Fax (830)620-6711
E-MAIL: detex@detex.com INTERNET: www.detex.com

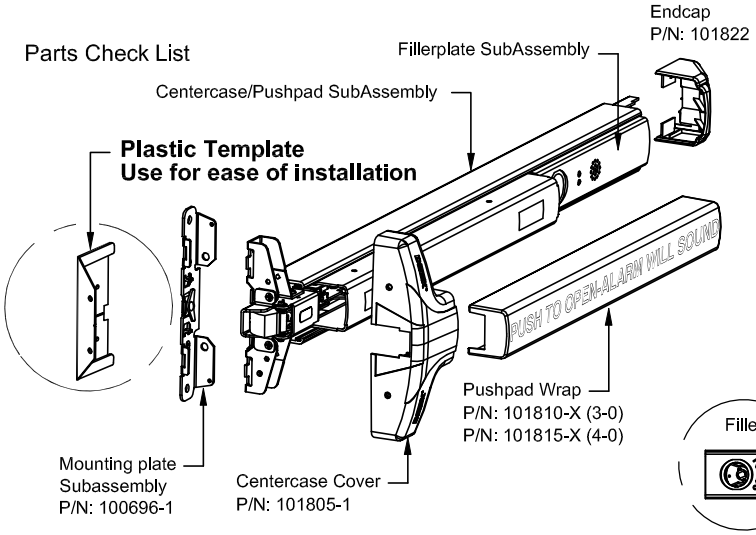
INSTALLATION INSTRUCTIONS FOR DETEX VALUE SERIES® V40 RIM PANIC HARDWARE, FV40 RIM FIRE EXIT HARDWARE AND "H" MODELS (HURRICANE) - "W" WEATHERIZED

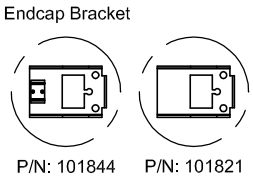
FV40/ V40 x EB x W
V40 x EX x W
VALUE SERIES® Exit Device

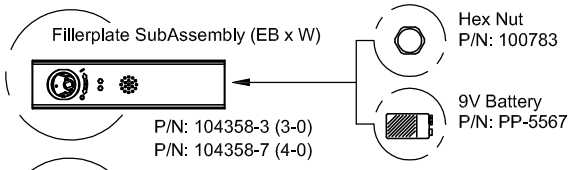
WEATHERIZED

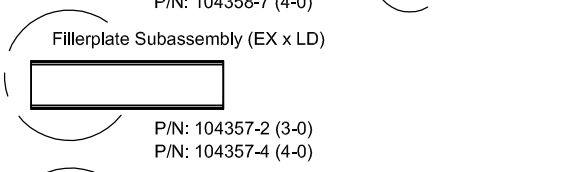
L9 = Less 9v Battery
SI = Status Indicator "ON"

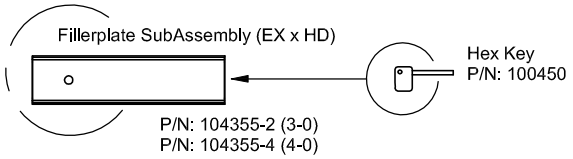
Parts Check List

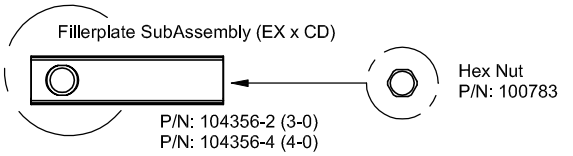


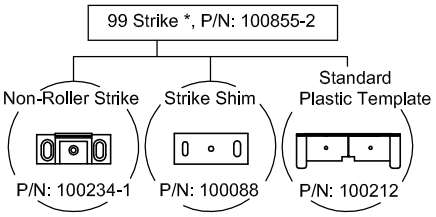


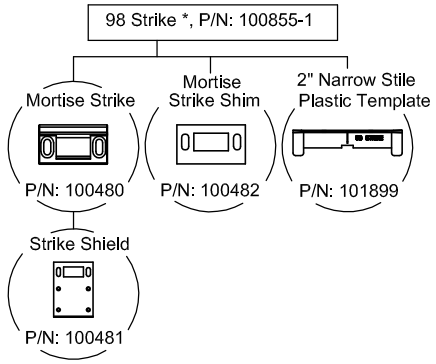












U.S. PATENT NUMBERS:
6009732
6205825B1
6532777B2
INTERNATIONAL PATENT NUMBER:
PCT6009732

See Optional Accessories For:
- **Glass Bead Kit**
- **Sex Nuts**
- **Tamper Kit**
- **Double Door Strike Kit**
- **Key Stop Kit**
- **Narrow Stile Kit**

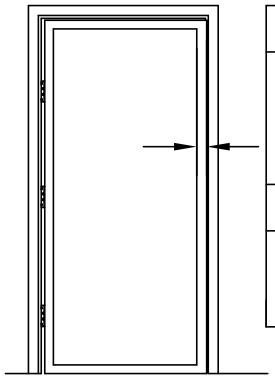
Note: Parts listed above will vary according to product configuration.

***Narrow Stile "NS" option**

Mortise cylinder not included with device. Standard Yale type cam required.

Owner's Copy

!!!CHECK BEFORE STARTING!!!

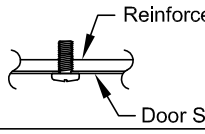


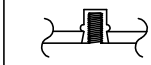
Wide Stile (Surface Strike)
Minimum door stile 4-1/2" (114 mm) Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.
Narrow Stile
Minimum door stile 2" (51mm) Surface strike possible Mortise strike recommended

Doors and frames with walls having a structural thickness (metal skin plus reinforcement, or solid wood) to engage less than (3) full screw threads, are considered unreinforced for hardware.

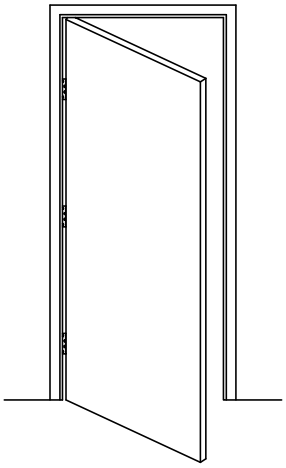
Unreinforced Doors: Use Sex Nuts and Bolts
Unreinforced Frames: Use Blind Rivet Nuts (see sketch)
Fasteners for unreinforced openings are not supplied by Detex.

Reinforced door or frame engages at least (3) screw threads.

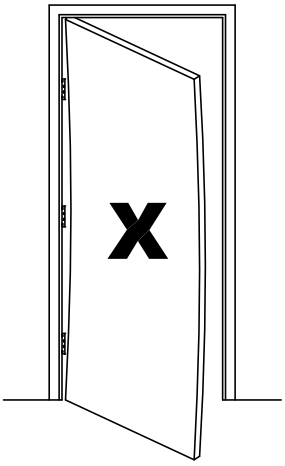




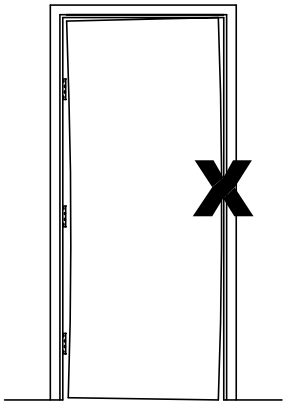
Blind Rivet Nut



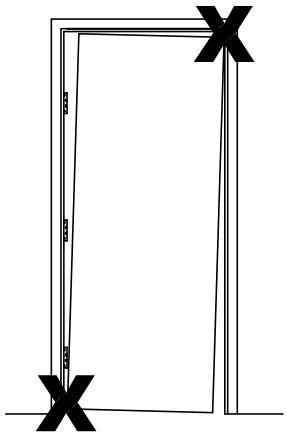
Door Must Swing Freely



Door Must Not be Warped

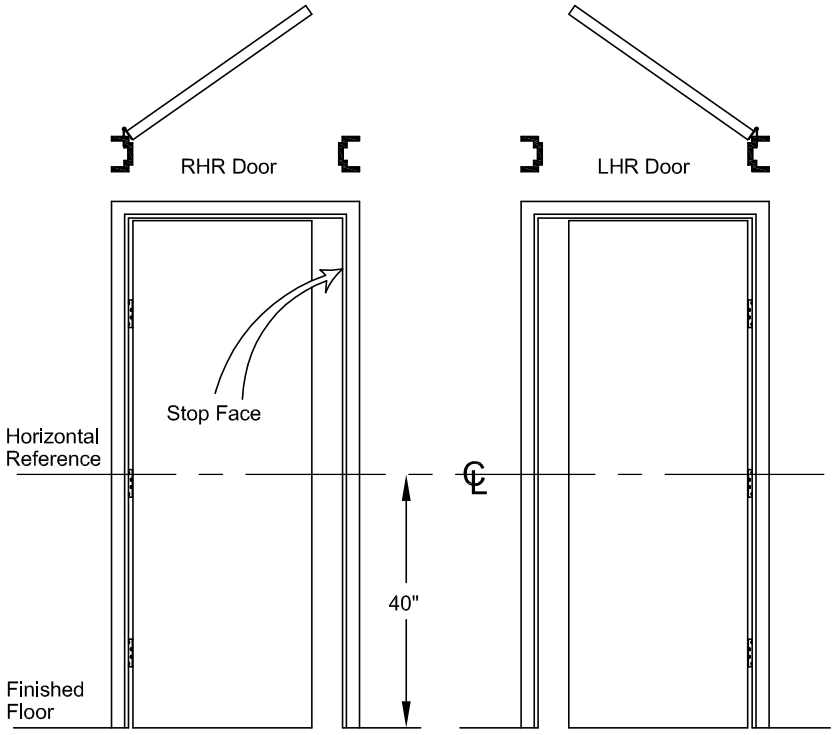


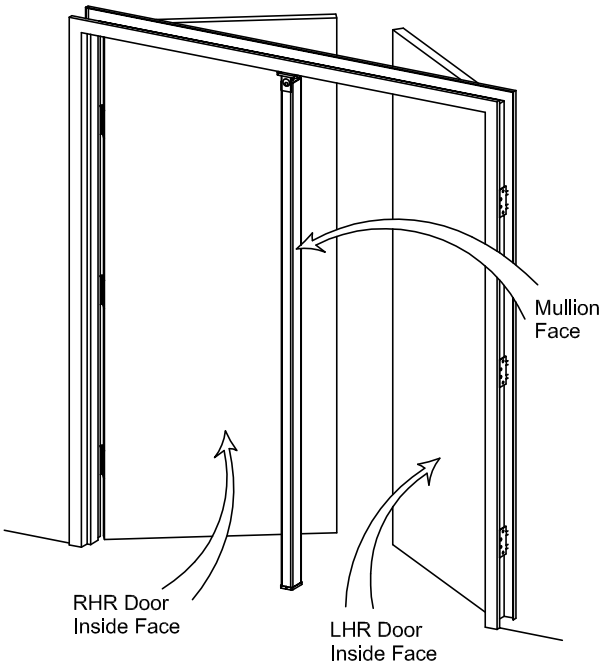
Door Must Not Bind



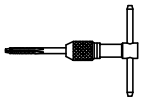
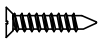
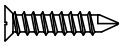
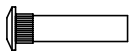
Door Must Not Sag

NOTE: 750mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 36" DEVICE
(1000mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 48" DEVICE)
THE SAFETY FEATURES OF THIS PRODUCT ARE ESSENTIAL TO ITS COMPLIANCE WITH EN 1125.
NO MODIFICATION OF ANY KIND, OTHER THAN THOSE DESCRIBED IN THESE INSTRUCTIONS ARE PERMITTED.



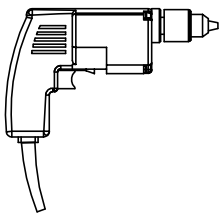
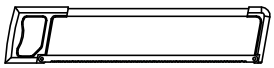
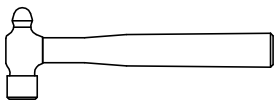
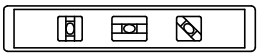
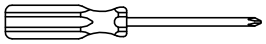
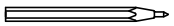


Fastener Table

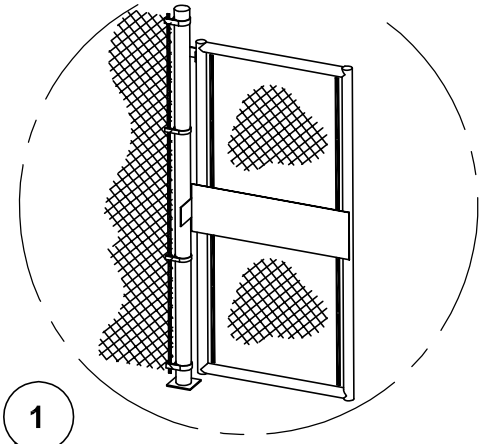
			Drill Bit	Tap Wrench	Comments
					Use Either Machine Screws, Sheetmetal Screws, or Sex Nuts
Machine Screws 	#6-32 x 5/8"	PPH	#36 or 7/64	#6-32 Tap	Used on 98 Strike Shield Mounting Holes
	#6-32 x 3/8"	PPH	-----	-----	Used to Mount Centercase Cover and Endcap
	#10-24 x 5/8"	PPH	#25 or 9/64"	#10-24 Tap	Used on 99 Strike Center Mounting Hole
	#1/4-20 x 1/4"	PPH	-----	-----	Used to Fasten Centercase Unit onto Mounting plate
	#1/4-20 x 1"	PPH	#7 or 13/64"	#1/4-20 Tap	Used on Strike, Mounting plate, and Endcap Mounting Holes
Sheetmetal Screws 	#6 x 1"	PFH	9/64"	-----	Used on 98 Strike Shield Mounting Holes
Self-drilling Screws 	#10 x 1"	PFH	No pilot hole necessary for self-drilling screws	-----	Used on 99 Strike Center Mounting Hole
	#14 x 1"	PPH		-----	Metal Applications Used on Strike, Mounting plate, and Endcap Mounting Holes
Sex Nut 	#1/4-20	---	9/32" Interior Door Face	-----	Recommended on Fire Rated Wood and Unreinforced Hollow Metal Doors Used on Mounting plate and Endcap Mounting Holes
		---	3/8" Exterior Door Face	-----	
	#10-32	---	13/64" Interior Door Face	-----	Recommended on Fire Rated Wood and Unreinforced Hollow Metal Doors Used on Strike Hook Mounting Holes
		---	5/16" Exterior Door Face	-----	

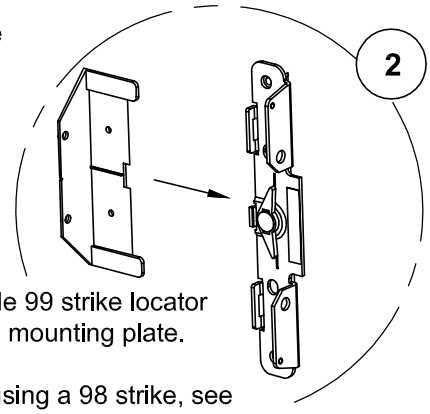
Note: (1) Fastener selection will vary per catalog configuration and kits ordered.
(2) Mortise Cylinder NOT Provided.

Tools Required

Power Drill 	Pencil
	Hack Saw 
Safety Glasses 	Hammer 
Level 	Tape Measure 
Screw Driver 	Center Punch 

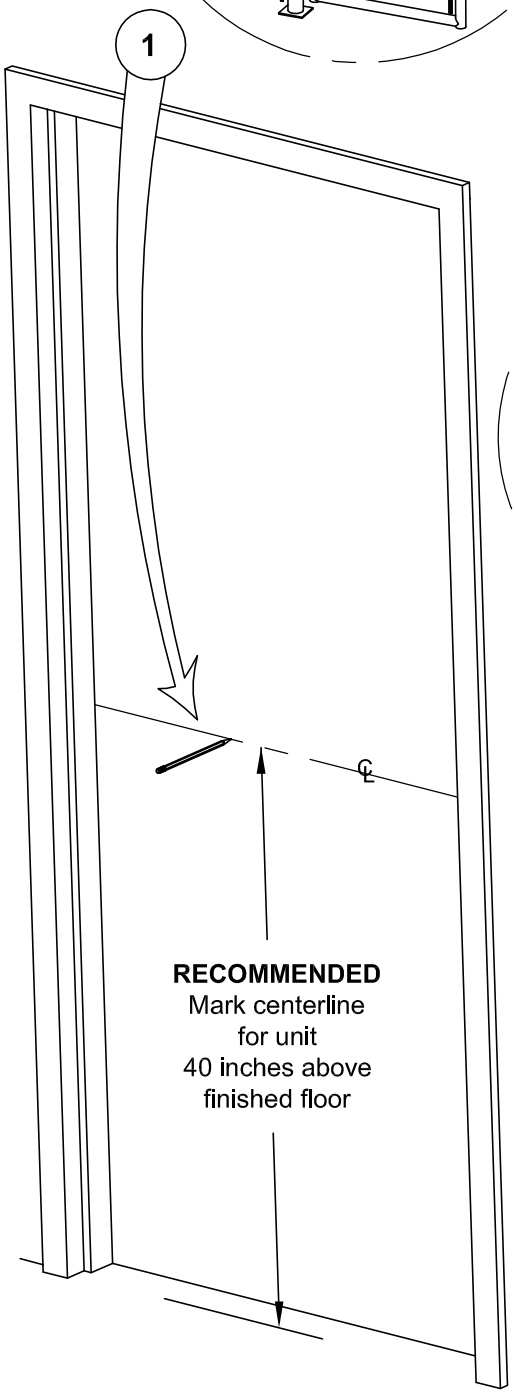
For GATE installation
see GATE INSTALLATION EXAMPLE page

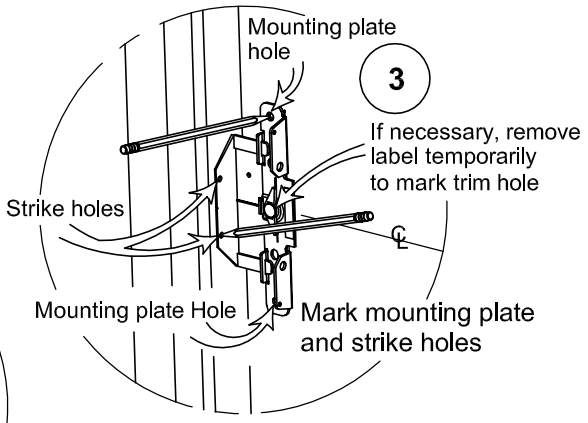


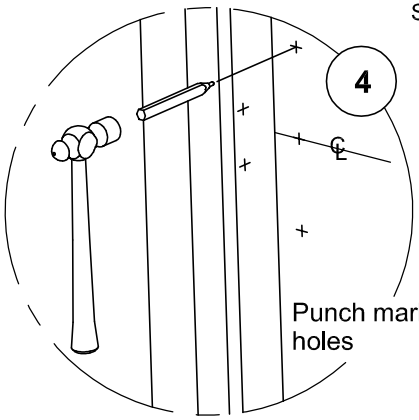


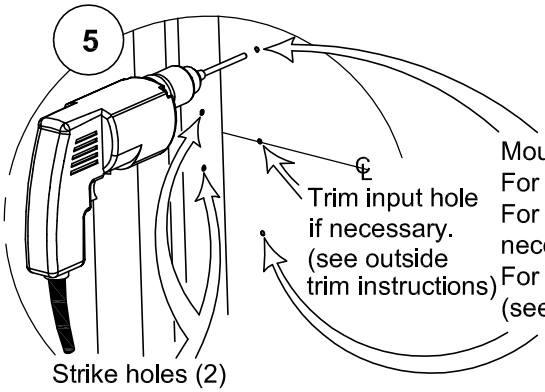
Slide 99 strike locator
into mounting plate.

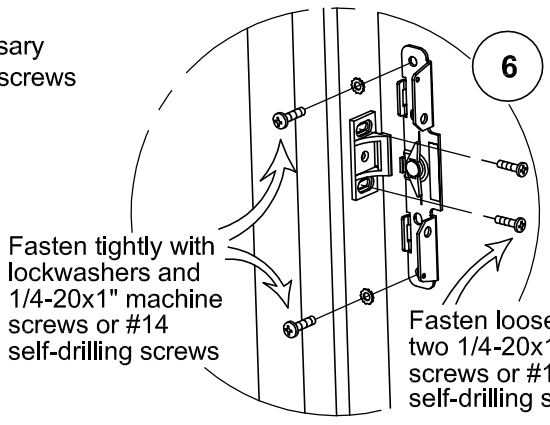
(if using a 98 strike, see
98 STRIKE INSTALLATION page)

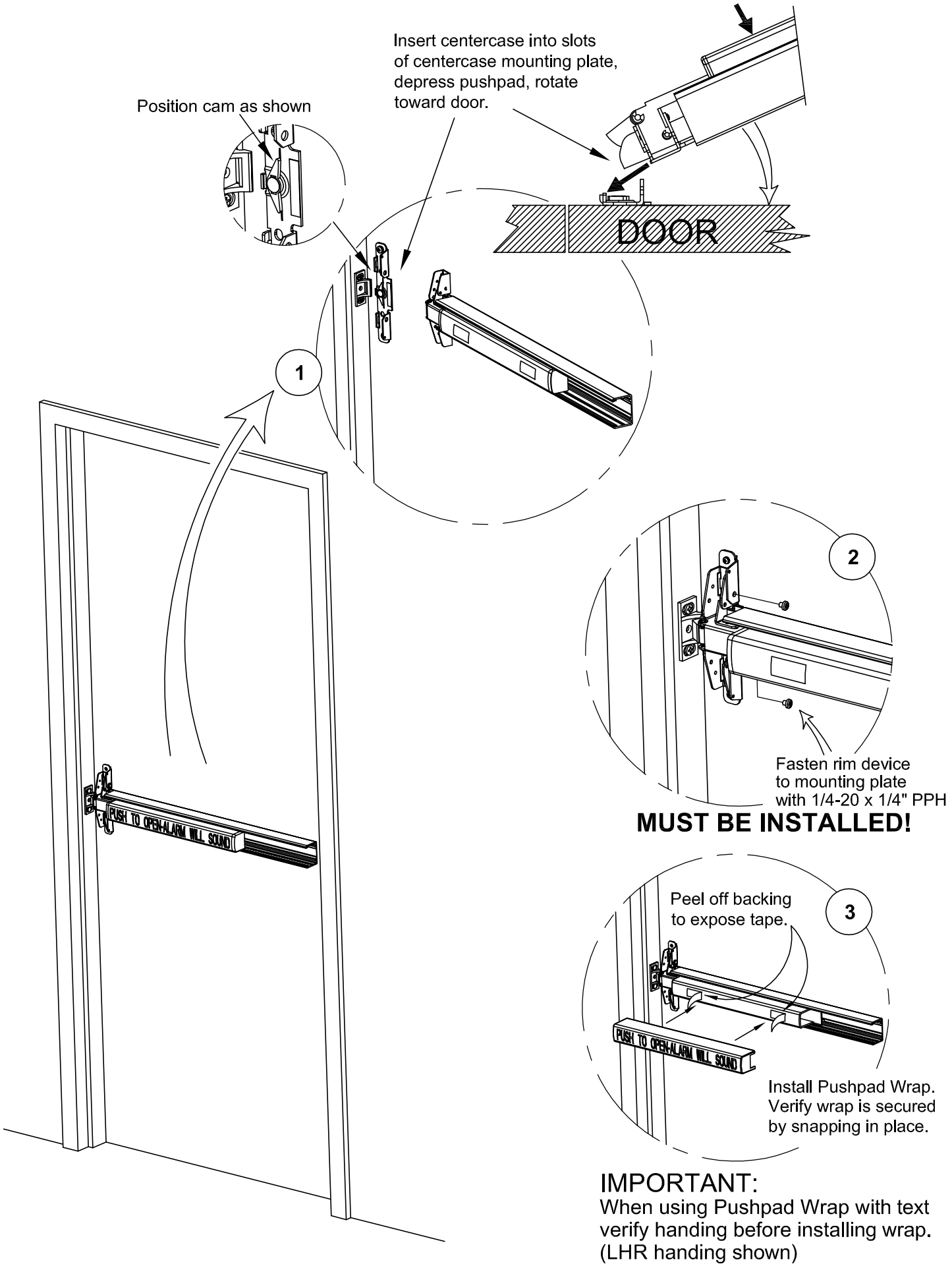






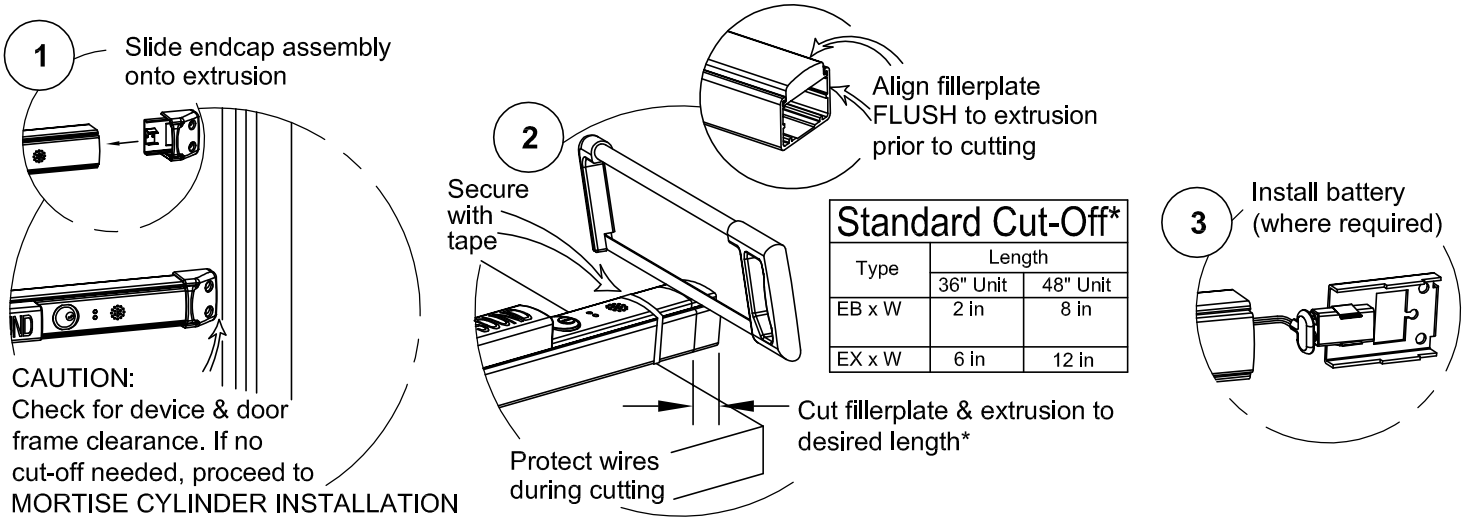






IMPORTANT:
When using Pushpad Wrap with text verify handing before installing wrap. (LHR handing shown)

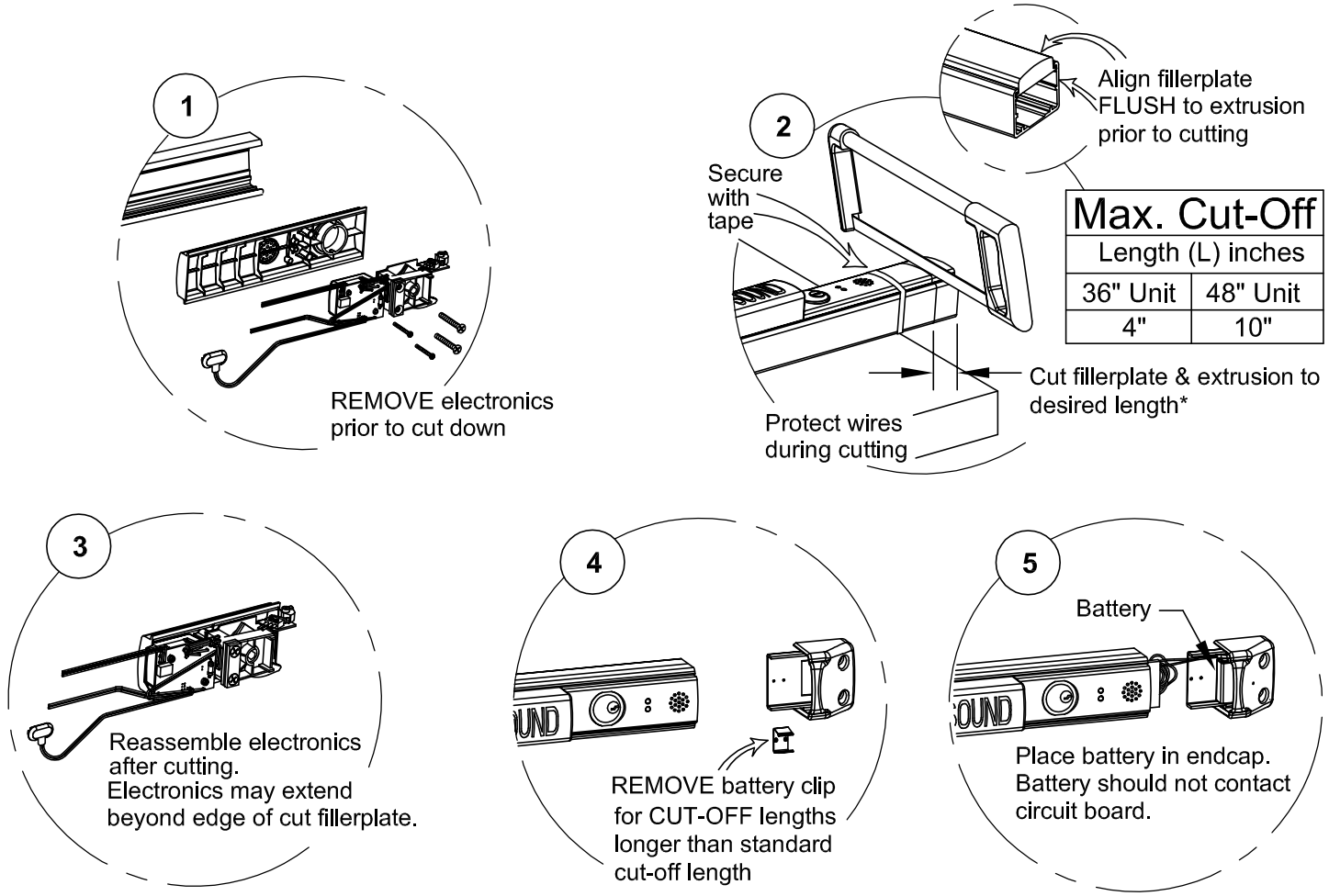
CHECKING FOR DEVICE CLEARANCE
(Cut-Off procedure if required)



Standard Cut-Off*

Type	Length	
	36" Unit	48" Unit
EB x W	2 in	8 in
EX x W	6 in	12 in

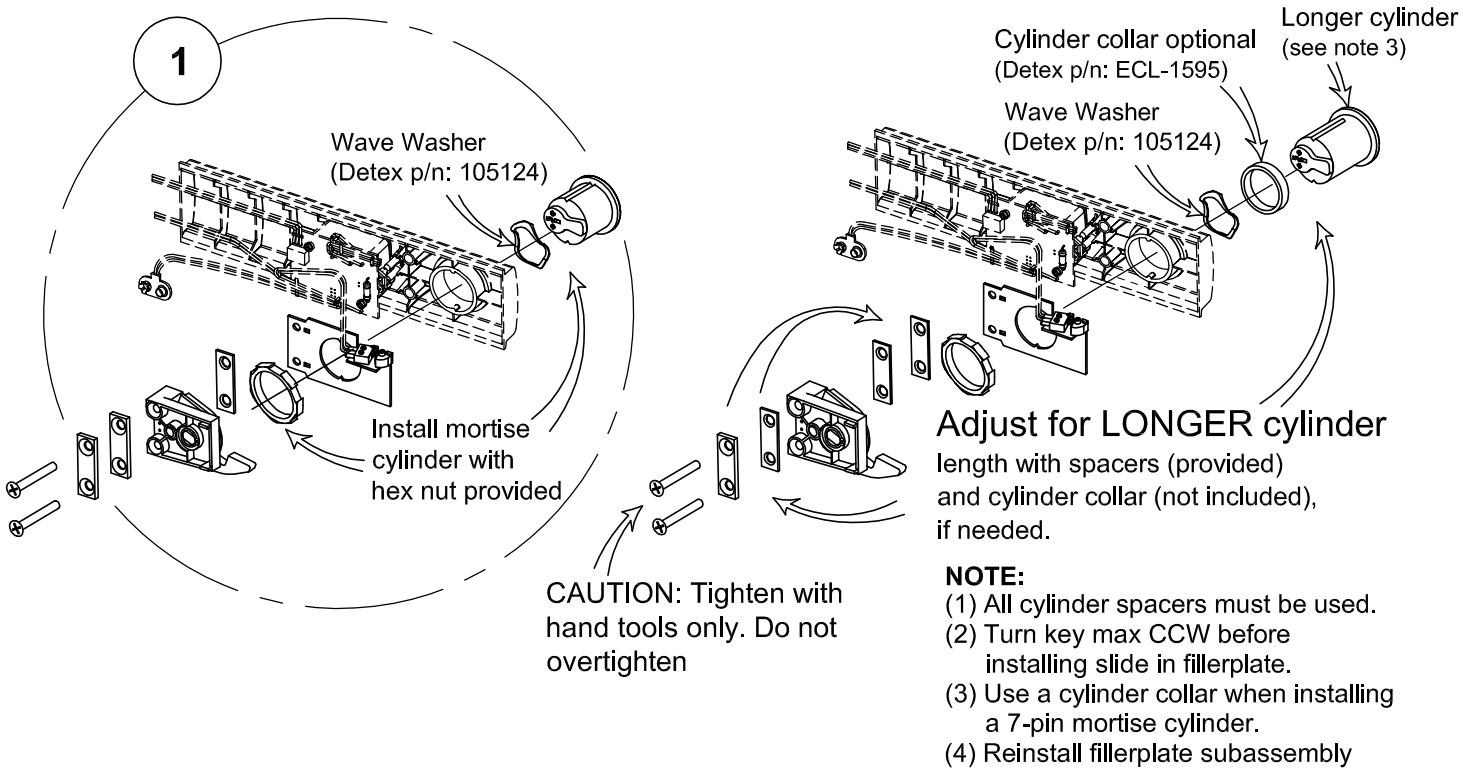
Procedures for Maximum Cut Down Lengths
Caution Required-Special Handling
(Call factory at (800) 729-3839 for assistance)



Max. Cut-Off

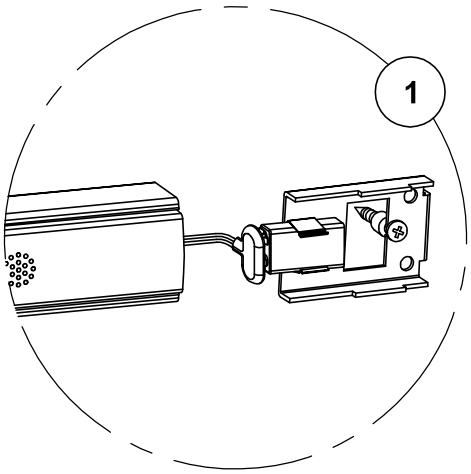
Length (L) inches	
36" Unit	48" Unit
4"	10"

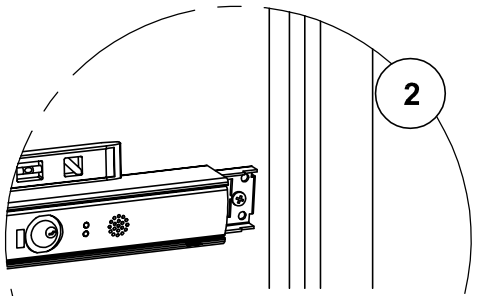
MORTISE CYLINDER INSTALLATION



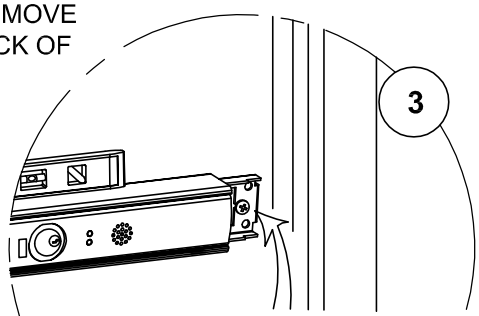
NOTE:
(1) All cylinder spacers must be used.
(2) Turn key max CCW before installing slide in fillerplate.
(3) Use a cylinder collar when installing a 7-pin mortise cylinder.
(4) Reinstall fillerplate subassembly

Refer to switch options pages

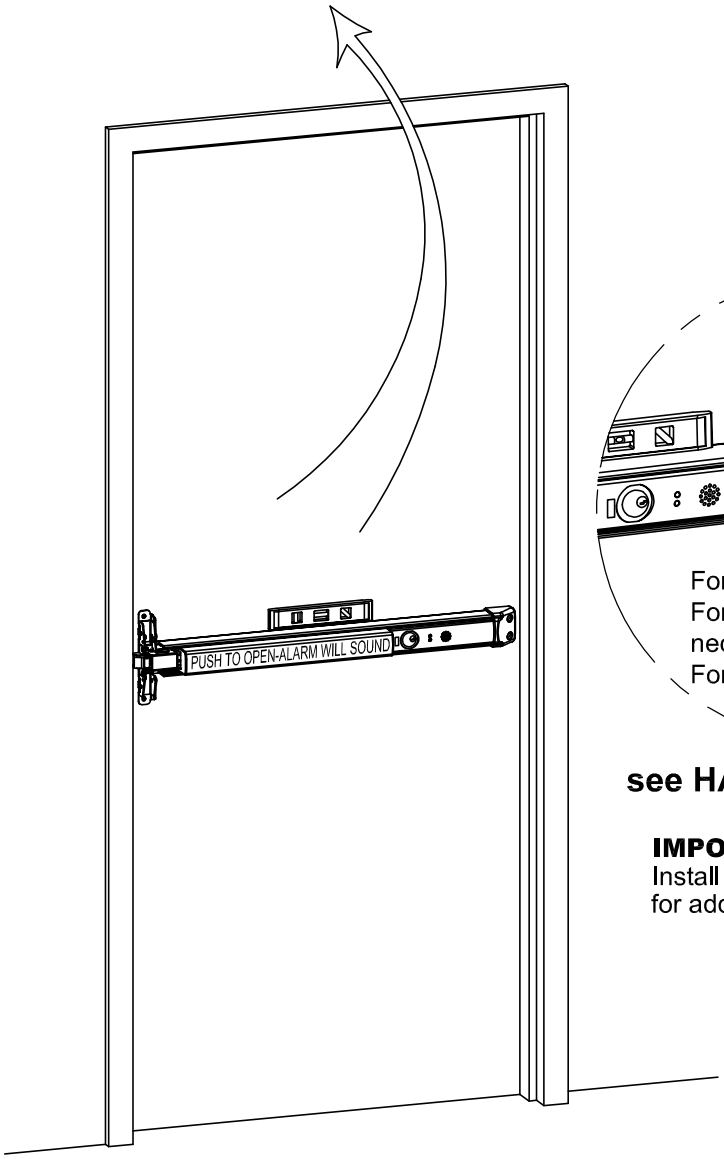


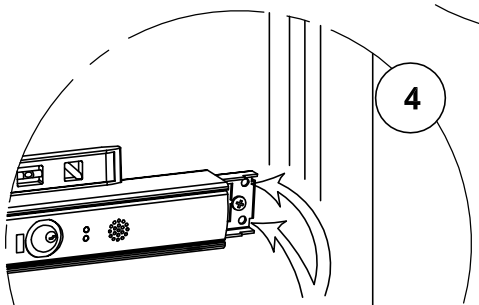


Slide fillerplate & endcap bracket into extrusion & level pushpad assembly.
Note: Endcap Bracket must bottom-out on extrusion. DO NOT REMOVE NYLON SPACER ON BACK OF BRACKET!



With pushpad assembly level, secure the endcap bracket to door by tightening the factory installed self-drilling screw.

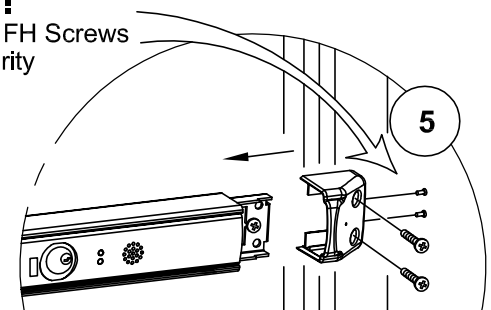




For 1/4-20 machine screws drill #7 holes.
For #14 self-drilling screws no pilot holes necessary.
For sex nuts drill 3/8" holes.

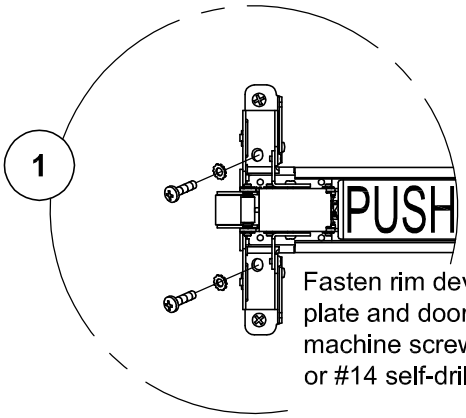
see HARDWIRE TRANSFER OPTIONS page

IMPORTANT:
Install (2) 6-32 FH Screws for added security

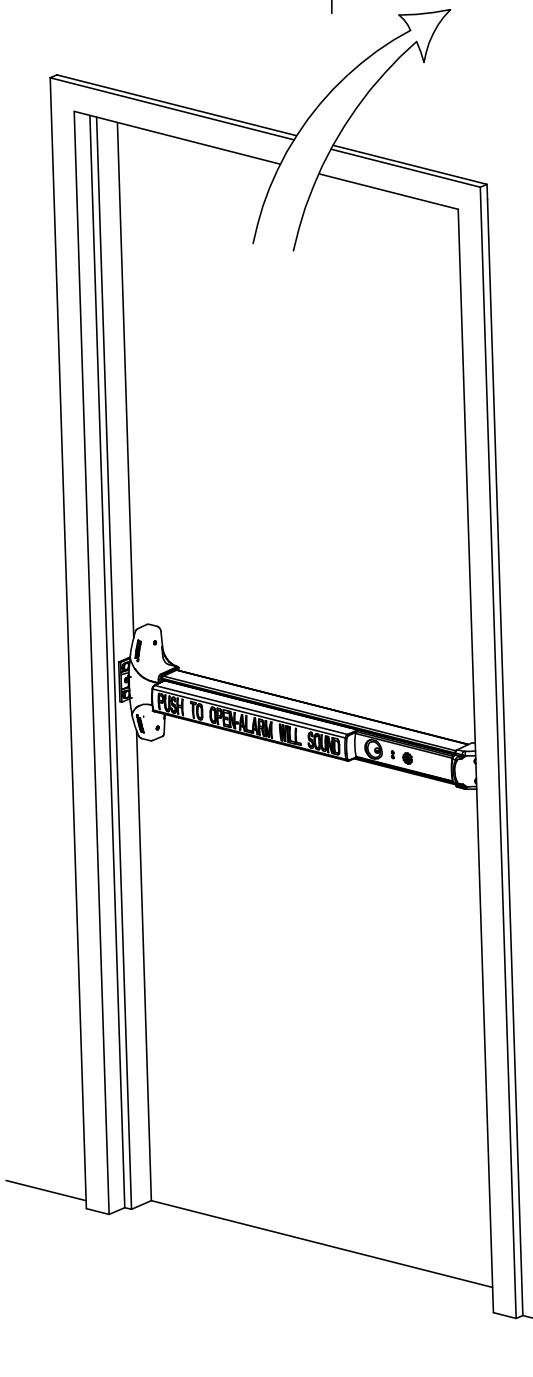


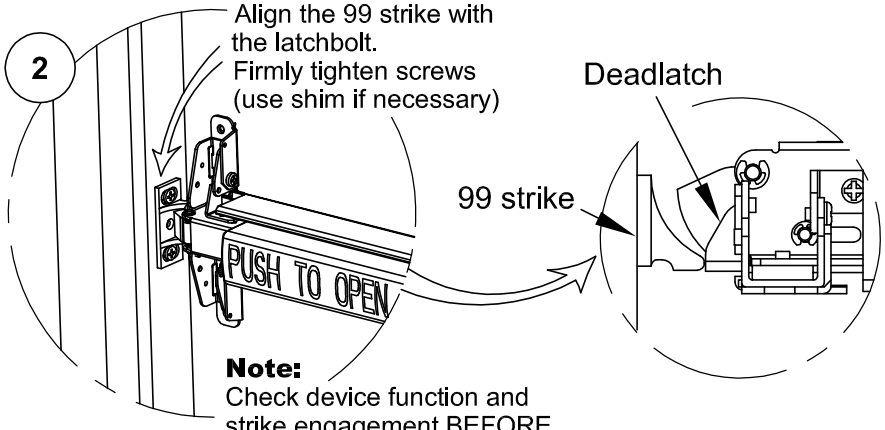
Slide and mount endcap to endcap bracket with two 1/4-20x1" PPH machine screws or #14 self-drilling screws.
DO NOT OVERTIGHTEN

For Hurricane Models
(see Hurricane kit)



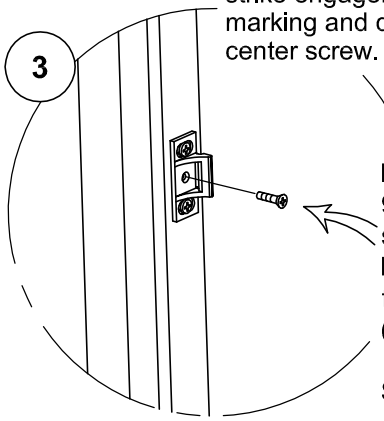
Fasten rim device to mounting plate and door with 1/4-20x1" machine screws(drill #7 holes) or #14 self-drilling screws





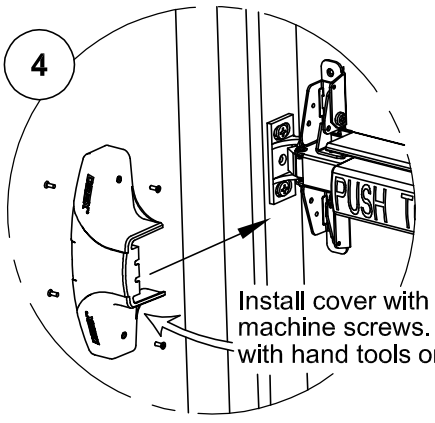
Align the 99 strike with the latchbolt.
Firmly tighten screws (use shim if necessary)

Note:
Check device function and strike engagement BEFORE marking and drilling for center screw.



Mark and drill center hole.
9/64" for 10-24 machine screws.
No pilot hole necessary for #10 self-drilling screws.
(see fastener table)

Secure the 99 strike.



Install cover with 6-32 machine screws. Tighten with hand tools only.

Care and Maintenance: The Detex Value Series® devices are designed to provide many years of maintenance free service under normal usage. Periodically inspect and lubricate the unit to extend its life.

SWITCH OPTIONS

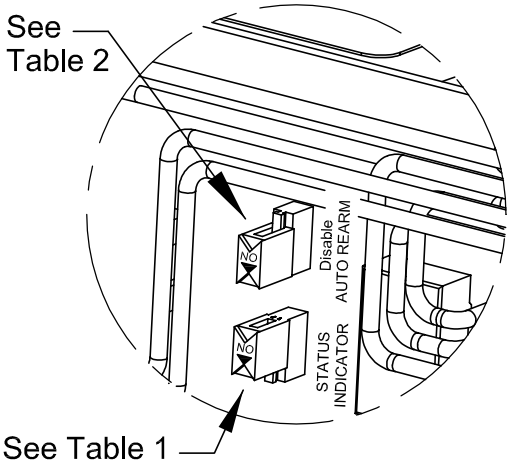
Switch selections must be made before installing battery (See Figure 1)

Table 1	
Status Indicator	**Status Description**
Off *	The Device gives no indication of armed or disarmed status.
On	The Device flashes red or green LED every 3 seconds. Red indicates armed status and green indicates disarmed.

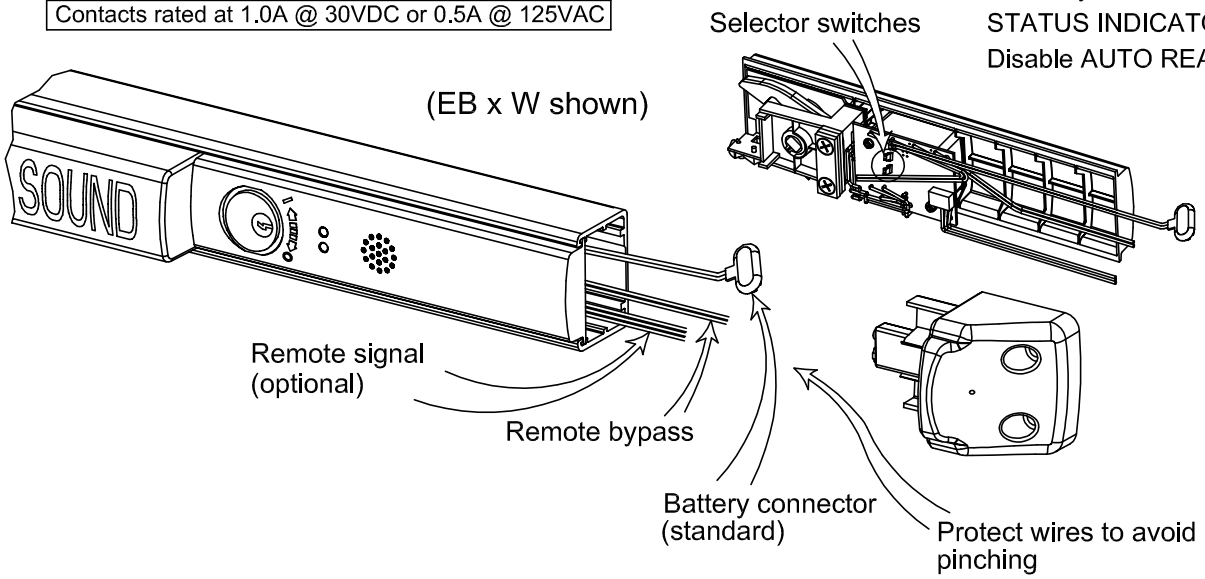
Table 2	
Disable Auto rearm	**Auto Rearming Feature Setting**
On *	Alarm sounds until turned off with key. Extended bypass is enabled.
Off	Unit sounds alarm for 2 minutes after bar is released. Alarm will automatically rearm after 2 minutes

Table 3			
Remote Signal		**Remote Bypass**	
Brown	Common	Violet	N.O. contact
Yellow	Normally Open	Violet	N.O. contact
Gray-Green	Normally Closed	----	----
Contacts rated at 1.0A @ 30VDC or 0.5A @ 125VAC			

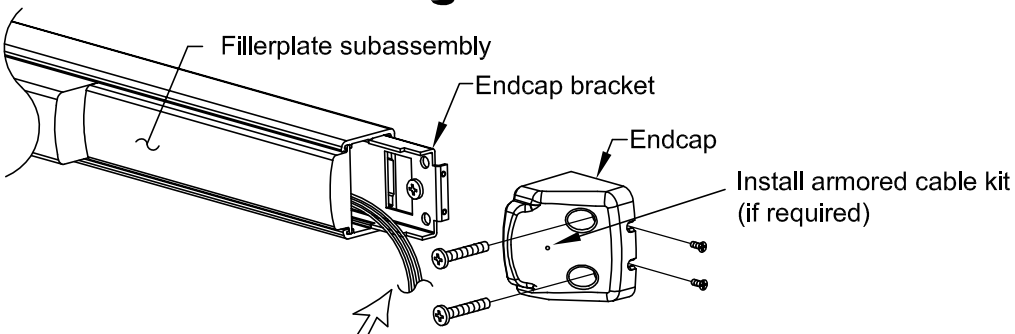
Figure 1
Selector switches detail



* Factory default settings:
STATUS INDICATOR switch set to "OFF"
Disable AUTO REARM switch set to "ON"



V40 EXxW & EXVxW Wiring Assemblies



EX, EXxW (0.1A) for signaling applications

Wire Color	Connection
Brown	Common
Gray	Closed
Yellow	Open

EXV (3A), EXVxW (5A) for power applications

Wire Color	Connection
Brown/Red	Common
Gray/Red	Closed
Yellow/Red	Open

L9SI SWITCH OPTIONS
L9 = Less 9v battery
SI = Status indicator

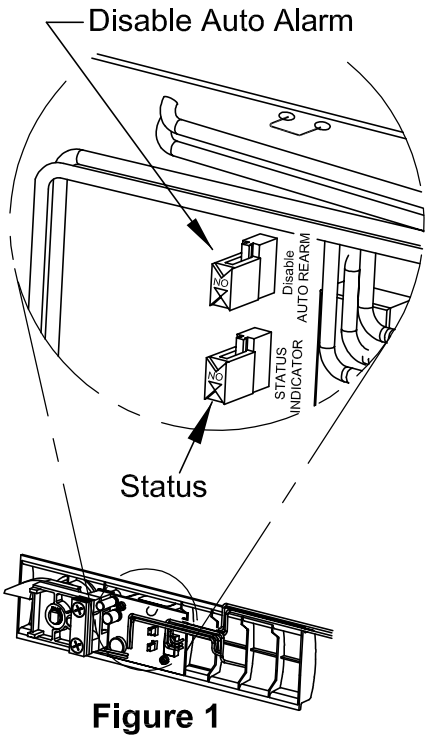
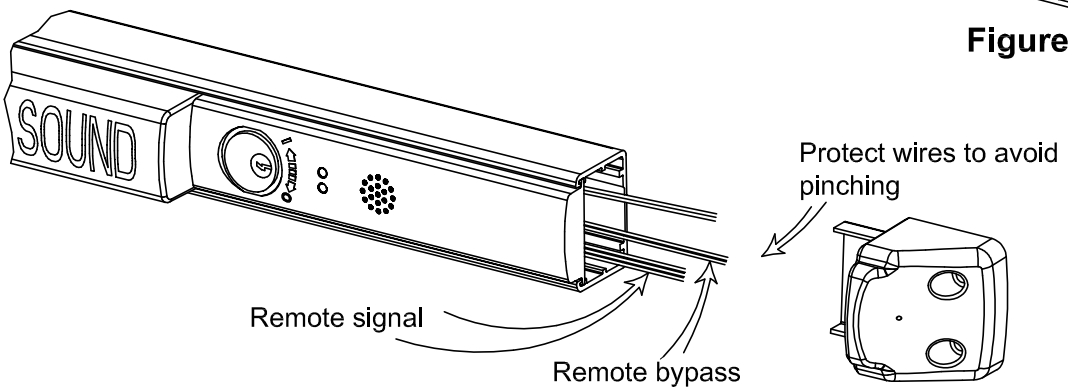


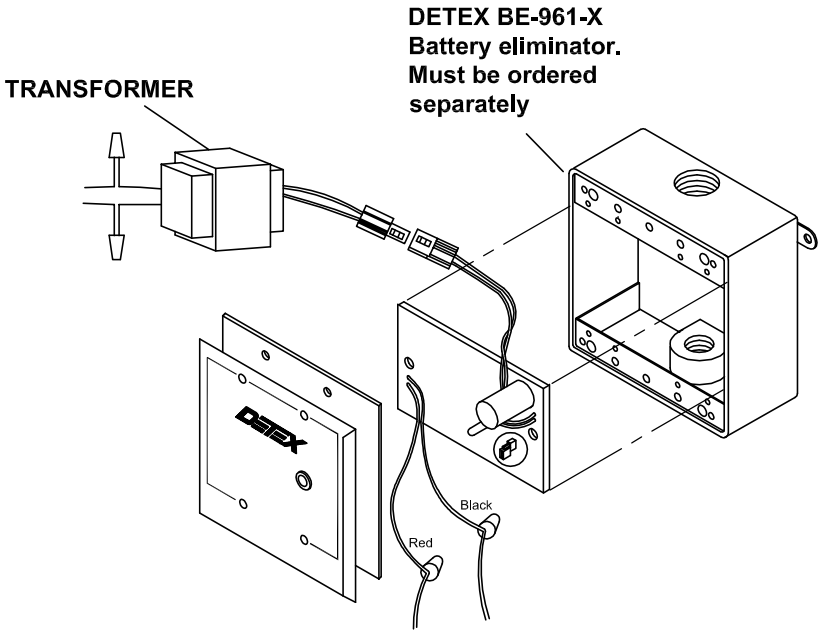
Figure 1

Switch selections must be made before applying power.

L9SI factory presets		
Status Indicator	On	The Device flashes red or green LED every 3 seconds.
Disable Auto rearm	On	Alarm sounds until turned off with key.
Disable Low Battery	Jumper	(No battery or leads on device)

Table 3			
Remote Signal		**Remote Bypass**	
Brown	Common	Violet	N.O. contact
Yellow	Normally Open	Violet	N.O. contact
Gray-Green	Normally Closed	----	----
Contacts rated at 1.0A @ 30VDC or 0.5A @ 125VAC			





To Panic Device	
Red	Positive
Black	Negative

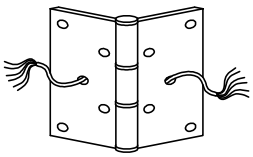
Cut battery clip from device to make connections to the battery eliminator

HARDWIRE TRANSFER OPTIONS

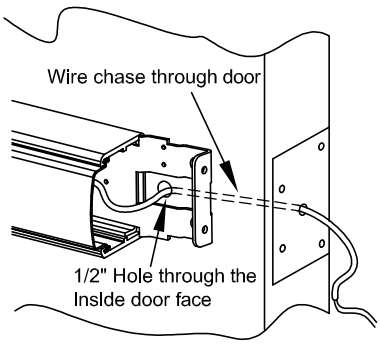
(Requirements: Minimum 6 Conductor Wires, Maximum 12 Conductor Wires)

Electric Hinge

Order by finish
p/n: EWH8-X

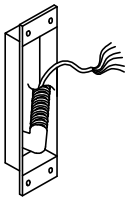


Electric Hinge Endcap Prep

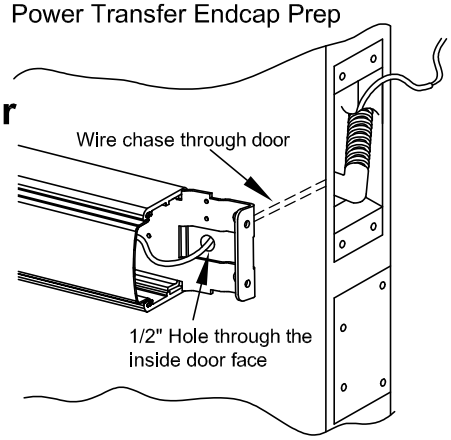


Power Transfer

p/n: PT-5



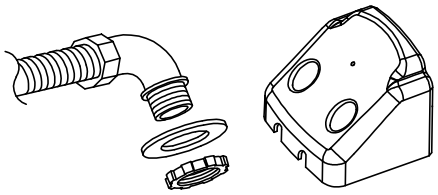
Power Transfer Endcap Prep

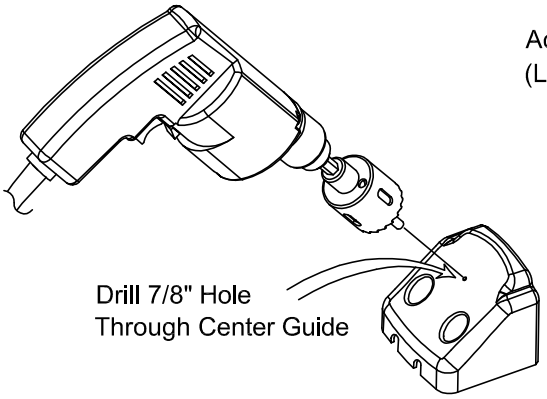


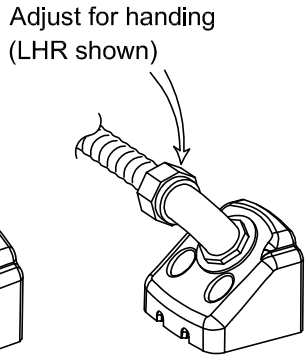
Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.

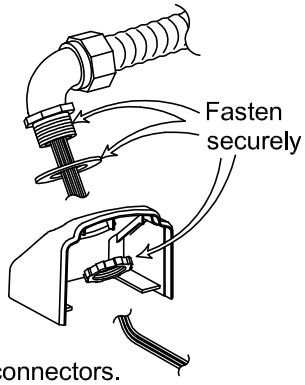
Value Series Weatherized Flex Conduit/End Cap Kit

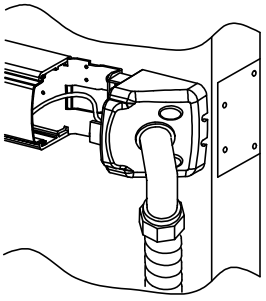
Catalog #: FCV-W-3 or FCV-W-10
p/n: 101858-5 or 101858-6









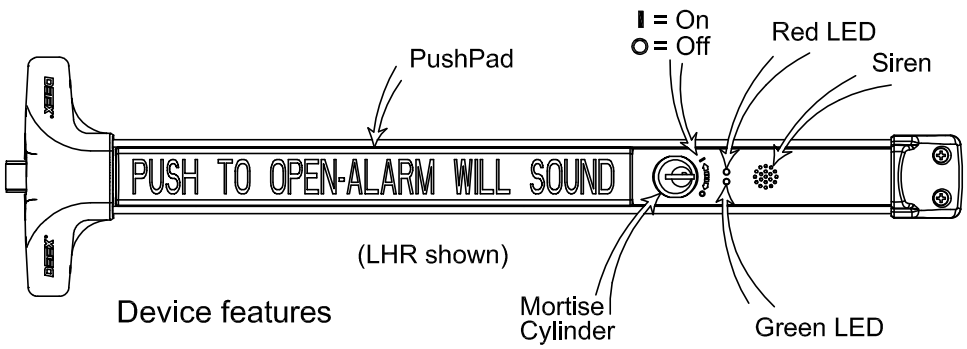


Note: (1) Use enclosed waterproof wire connectors.

Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.

ALARM OPERATIONS

Refer to switch options pages



SPECIAL NOTES and DEFINITIONS:

1. When operating the ON/OFF switch, there is a slight delay.
2. The key is inserted and removed only in the horizontal position (home position).
3. Key function: counter clockwise (CCW) = Armed; clockwise (CW) = Disarmed.
4. The power needs to be removed to register changes in the slide switches.
   a. Status Indicator (This will affect battery life)
   b. Disable Auto Rearm
5. Arming delay mode and auto rearm timers vary by order.

UNIT ARMING TEST:

1. Turn key counterclockwise (CCW) (key is removable after rotating back to horizontal position).
2. Red LED will flash twice, then green LED will illuminate for the 15 second delay time, then turn off. The siren will sound three short beeps indicating the unit is armed.
3. Depress Pushpad (Siren will sound and red LED will illuminate).
4. Turn key clockwise (CW). Turns alarm off.

LOW BATTERY ALERT:

1. Siren will beep and red LED will blink at approximately 45 second intervals when battery is low.

DOGGING FEATURE: (non-fire rated units only)

1. Depress Pushpad.
2. While holding Pushpad depressed, turn key clockwise (CW). Pushpad should remain depressed (Key is removable after rotating back to horizontal position).
3. Unit is now disarmed.

STATUS INDICATOR:

1. Slide the switch to ON and apply power.
2. If the unit is armed, the red LED will blink every 3 seconds.
3. If the unit is disarmed, the green LED will blink every 3 seconds.

Disable AUTO REARM (Off):

1. When the unit is in full alarm and the bar is released, the alarm will shut off after 2 minutes.

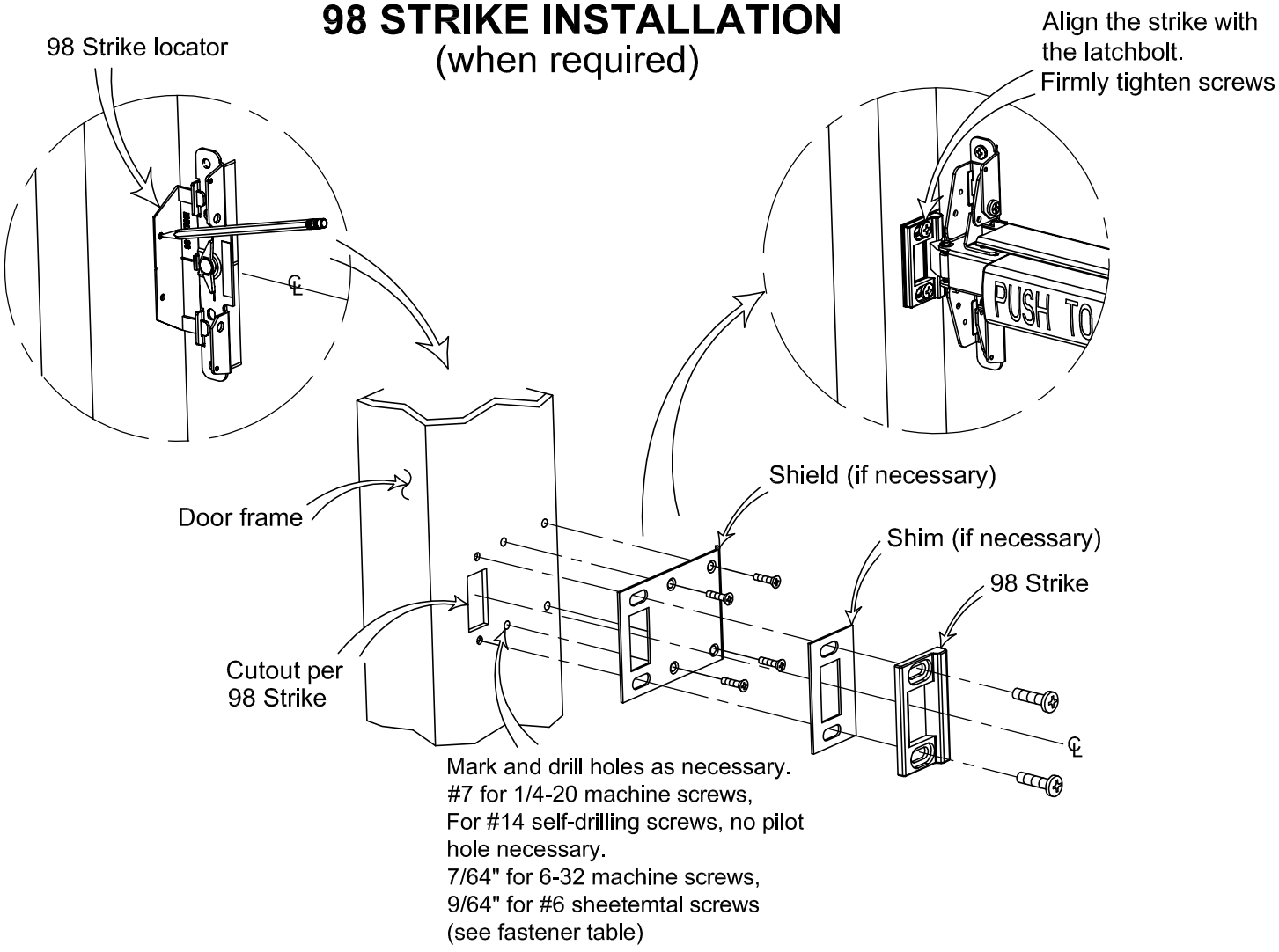
Care and Maintenance:

The Detex Value Series® devices are designed to provide many years of maintenance free service under normal usage. Periodically inspect and lubricate the unit to extend its life.

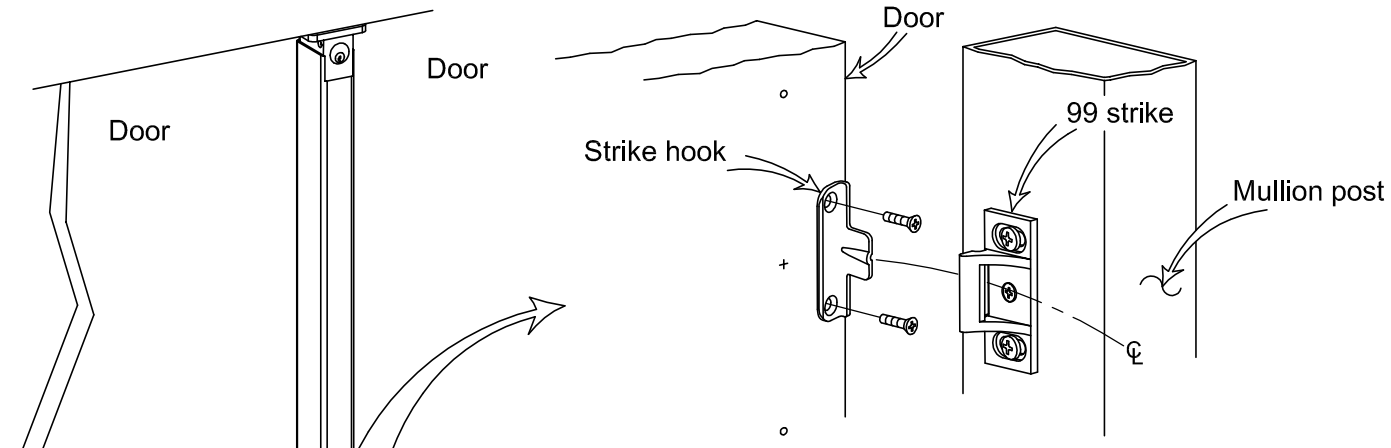
V40xEBxW Troubleshooting Tips for Default Setting

PROBLEM	PROBABLE CAUSE	ACTION
When unit is armed, red LED flashes twice, green LED is on for 15 seconds, but the unit does not give three beeps after the green LED goes off.	The actuator is sticking to the micro switch.	Verify plastic actuator is functioning correctly. Check spring on actuator.
No LED activity when key is turned ccw to armed position.	Dead or weak battery. Battery not secured to connector correctly. Battery connector or wires damaged. No external power.	Install new battery, LED's should flash and the siren beep once. Secure battery correctly. Call Detex. 1-800-729-3839 Check for loose connections or power turned off. LED's should flash and the siren beep once.
Gives a low battery indication.	Low battery.	Install new battery, LED's should flash and the siren beep once.
LED's do not flash to indicate armed or disarmed status.	Status indicator switch in off position.	Remove battery power from unit. Slide 'Status Indicator'switch to 'ON' position. Reinstall battery. (or if L9 option ordered) Turn power to unit off. Slide status indicator switch to the ON position. Reconnect power.

98 STRIKE INSTALLATION
(when required)



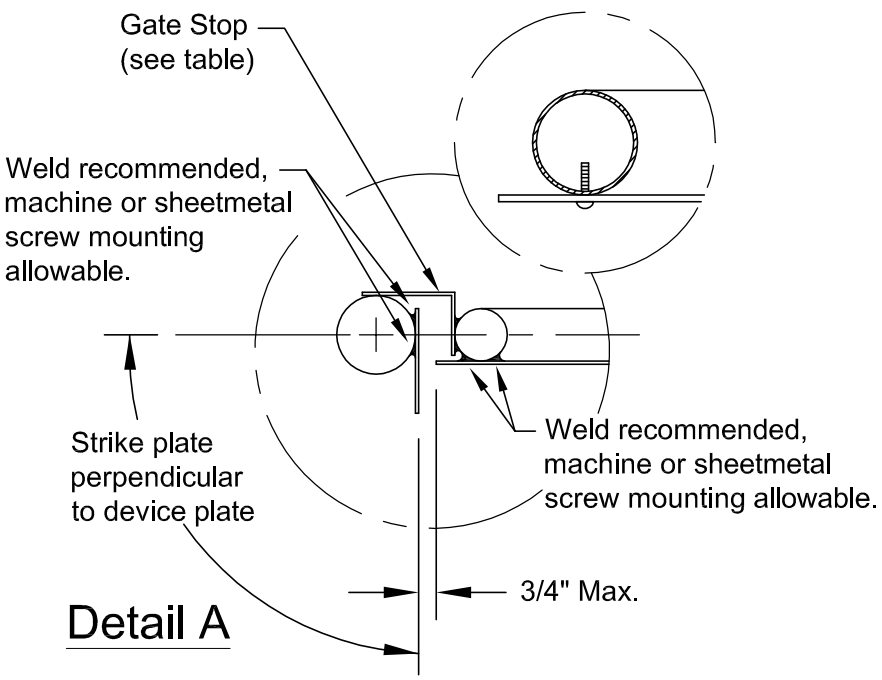
STRIKE HOOK INSTALLATION
(Caution: This installation is required on fire rated door openings with removable mullion.)



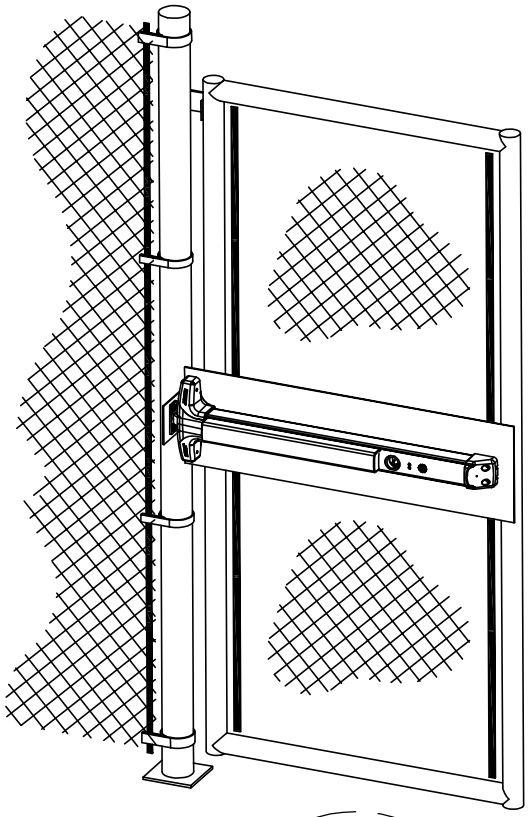
For mounting hole locations use Strike Locator (Template) provided.

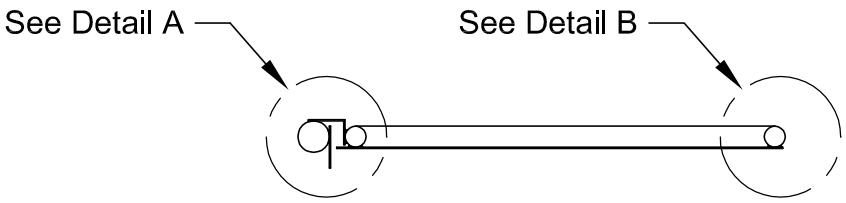
DRILL CHART	
10-24 Machine screw	#10 Sheetmetal screw
#25 or 9/64" tap 10-24	#22 or 5/32" pilot hole

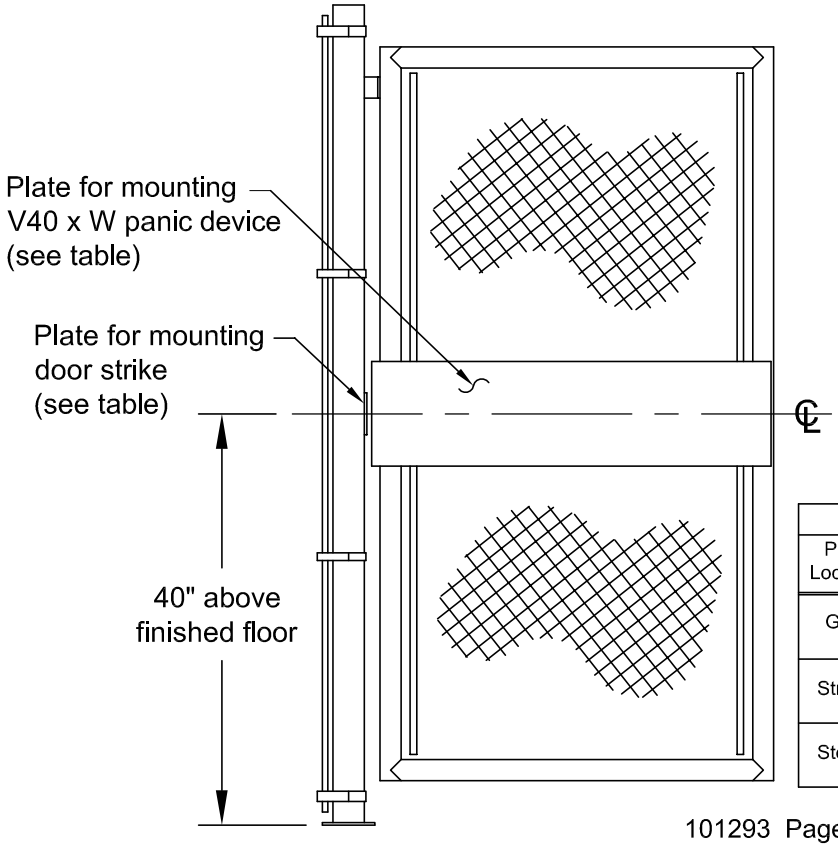
GATE INSTALLATION EXAMPLE
(Actual installation will vary)

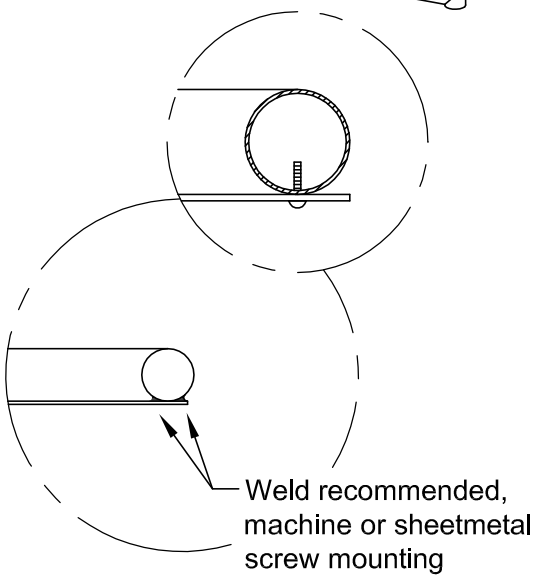


Detail A









Detail B

Recommended Plate Slze		
Plate Locatlon	Thickness (Min.)	Height (Min.)
Gate	1/8" thick plated, galvanized, or painted steel OR 1/4" thick aluminum plate	10"
Strike	1/8" thick plated, galvanized, painted steel plate, angle Iron, or 1/4" thlck alumlnum plate	5"
Stop	1/8" thick plated, galvanized, or painted angle iron OR 1/4" thick aluminum angle plate	2"

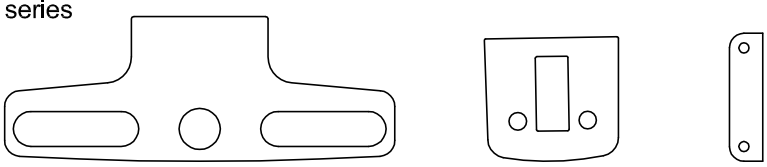
Optional Accessories

Glass Bead Kit

Catalog No: GB2 - Glass Bead Kit, 40 series
p/n: 101644

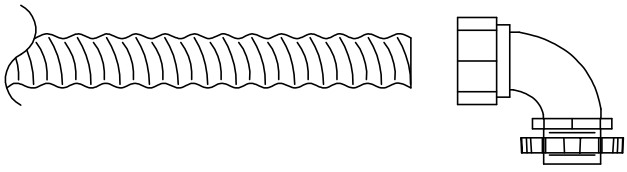


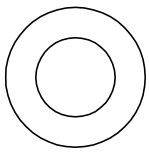
#1/4-20 X 1-1/2" Screw
(4) Included

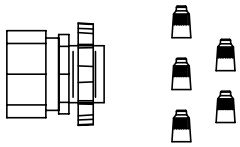


Flex Conduit Kit

Catalog No: FCV-W-3
or FCV-W-10

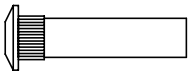






Waterproof
Connectors
Provided

Sex Nut



The #10-32 kit is available in (4) finishes:

Catalog No: SN2 Brushed Brass BHMA 606 Finish
Catalog No: SN2 Oil Rubbed Bronze BHMA 613 Finish
Catalog No: SN2 Brushed Chrome BHMA 626 Finish
Catalog No: SN2 Stainless Steel BHMA 630 Finish

p/n: 101617-X

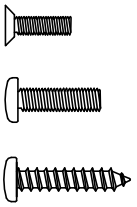
The #1/4-20 kit is available in (4) finishes:

Catalog No: SN1 Brushed Brass BHMA 606 Finish
Catalog No: SN1 Oil Rubbed Bronze BHMA 613 Finish
Catalog No: SN1 Brushed Chrome BHMA 626 Finish
Catalog No: SN1 Stainless Steel BHMA 630 Finish

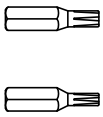
p/n: 101616-X

Tamper Kit

(Security Kit)
Catalog No: SSK3
p/n: 101233



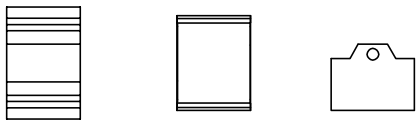
Security Screws



Security Pin TORX® Bits provided

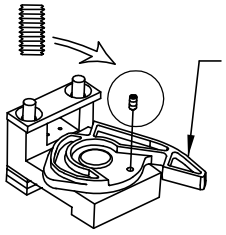
Narrow Stile Door Kit

(Splice Kit may be used with either 3-0 or 4-0 units)
Catalog No: NSK1
p/n: 101879-1 (628 Finish, Clear)
p/n: 101189-2 (711 Finish, Black)



Key Stop Kit

(Momentary Shunt)
Catalog No: KS
p/n: 101867



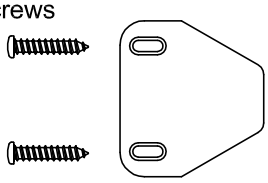
Key Stop Screw

Dogging Lever Assembly
(shown for reference ONLY)

Double Door Strike Kit

Catalog No: 94 Security screws
p/n: 102212-1

Catalog No: 95 - Standard screws
p/n: 102212-2



The following Models in the series were evaluated by UL: Controlled Exit Panic Devices; Model V40. These devices may be suffixed with 01, 02, 03, 08, 09, or 14 followed by A, AN, BN, CN, DN, DNT, DNU, MN, P, PN, or WS followed by BP2 or BP8 followed by 605, 606, 611, 612, 613, 625, 626, 628, 629, 630, or 711 followed by the RHR or LHR, followed by EBxW or EXxW, which may be followed by LD or CD, followed by 628 or 711, followed by 98 or 99, followed by 36 or 48.