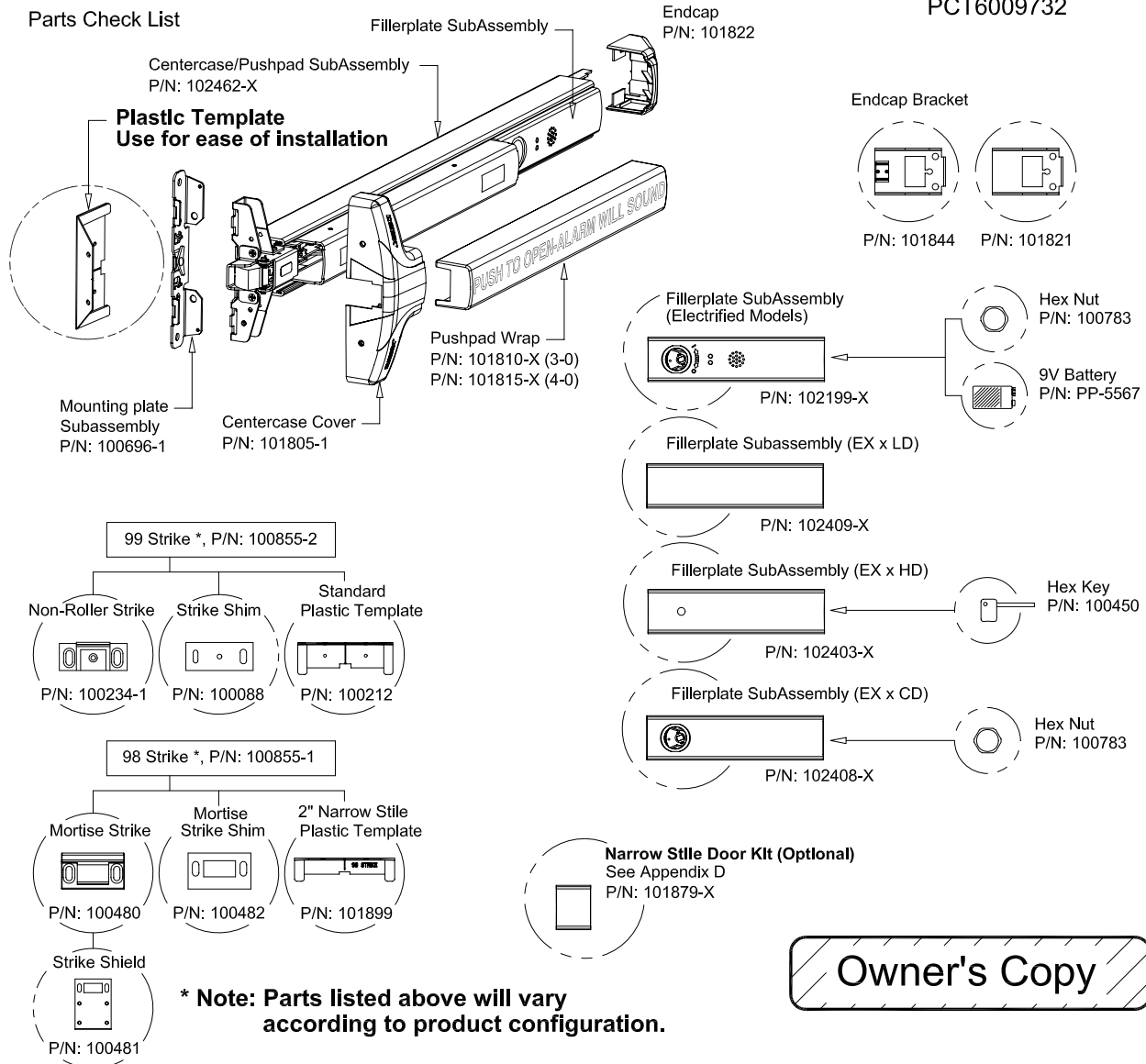


Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
 (830)629-2900 / 1-800-729-3839 / Fax (830)620-6711
 E-MAIL: detex@detex.com INTERNET: www.detex.com
**INSTALLATION INSTRUCTIONS FOR DETEX VALUE SERIES[®] V40 RIM PANIC HARDWARE,
 FV40 RIM FIRE EXIT HARDWARE AND "H" MODELS (HURRICANE)**

V40 Loss Prevention **VALUE SERIES[®] Exit Device**

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

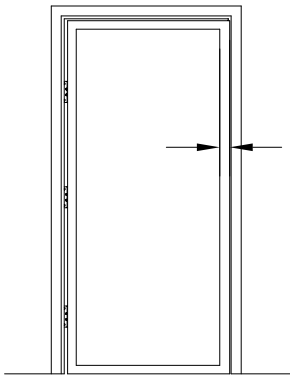
Parts Check List



Owner's Copy

Detex Value Series[®] panic hardware, when properly installed, used and maintained, is warranted to be free of defects in material and workmanship. We will, for a period of three (3) years from the date of purchase, repair or replace any part which, upon our examination, proves to be defective under normal use. Electrical components, when properly installed, used and maintained, are warranted to be free of defects in material and workmanship for a period of one (1) year. This warranty will be honored only upon presentation of proof that the product covered thereby was purchased directly from an authorized Detex distributor. WE SHALL NOT BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE ARISING OUT OF THE FAILURE OF THIS PANIC HARDWARE TO OPERATE.

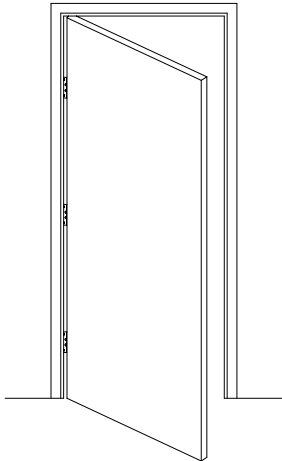
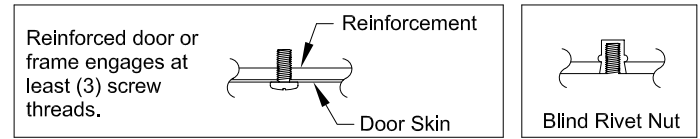
!!!CHECK BEFORE STARTING!!!



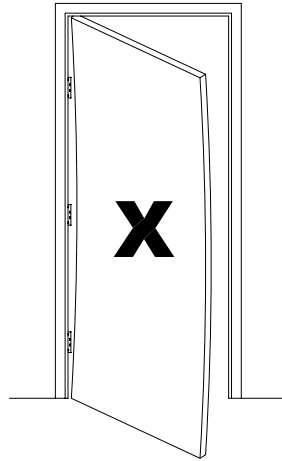
Wide Stile (Surface Strike)
Minimum door stile 4-1/2" (114 mm) Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.
Narrow Stile
Minimum door stile 2" (51mm) Surface strike possible Mortise strike recommended

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.

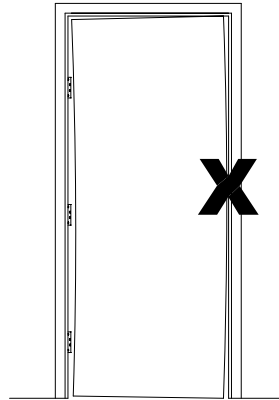
Unreinforced Doors: Use Sex Nuts and Bolts
Unreinforced Frames: Use Blind Rivet Nuts (see sketch)
Fasteners for unreinforced openings are not supplied by Detex.



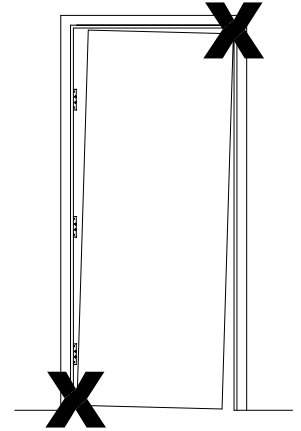
Door Must Swing Freely



Door Must Not be Warped

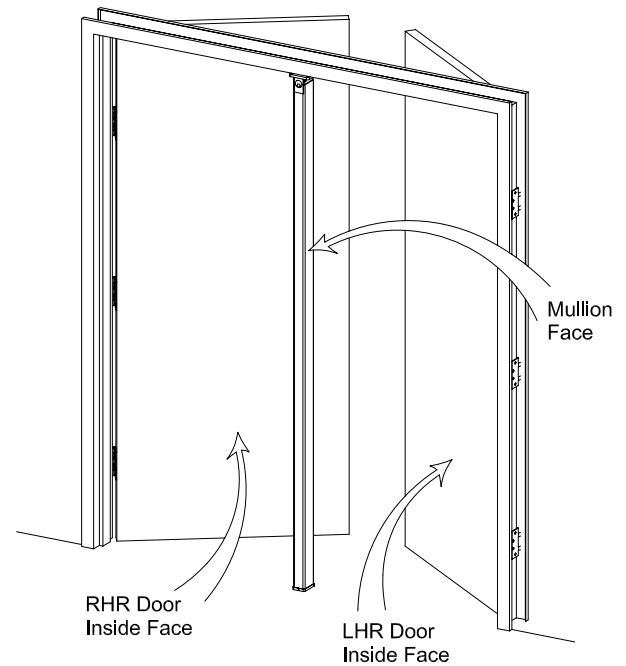
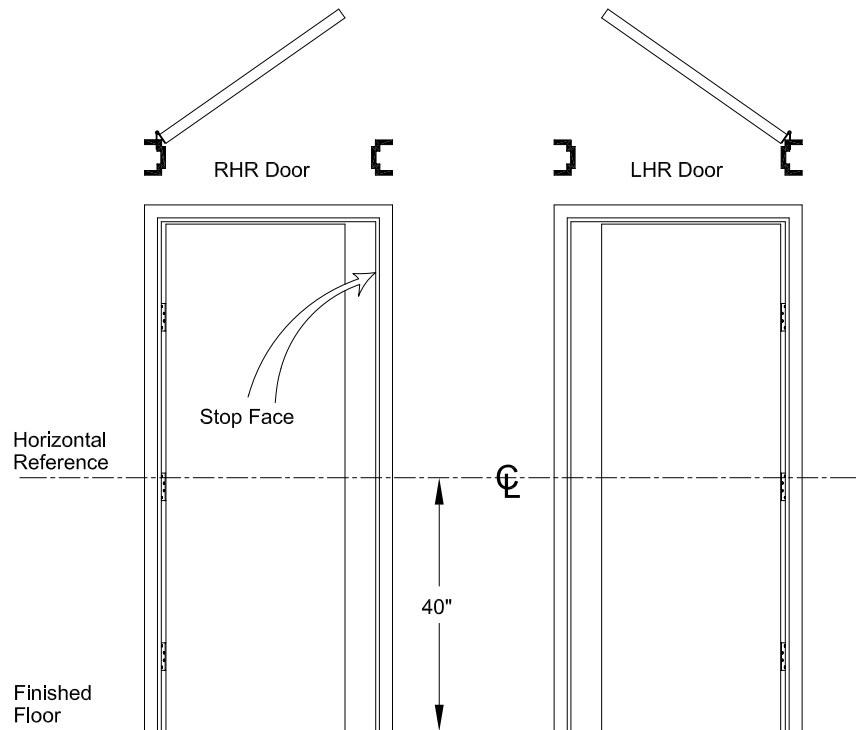


Door Must Not Bind


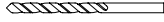
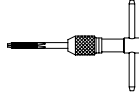


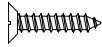
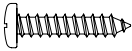
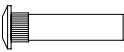


Door Must Not Sag

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.

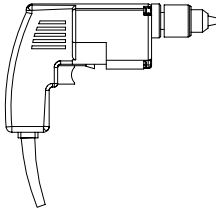

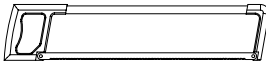
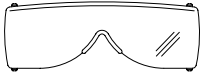
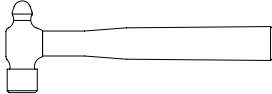
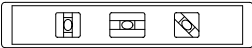

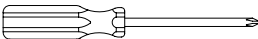



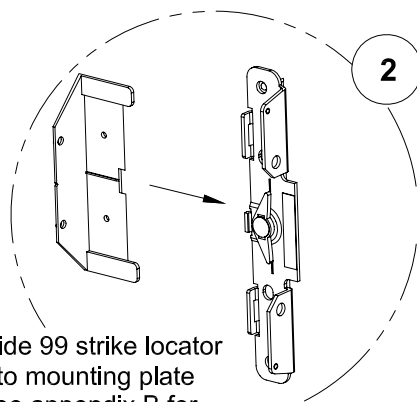
Fastener Table

			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"	PPH	9/64"	----	Used on 98 Strike Shield Mounting Holes
	#10 x 1"	PPH	#22 or 5/32"	----	Used on 99 Strike Center Mounting Hole
	#14 x 1-1/4"	PPH	7/32"	----	Metal Applications Used on Strike, Mounting plate, and Endcap Mounting Holes
		PPH	3/16"	----	Wood Applications Used on 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	----	

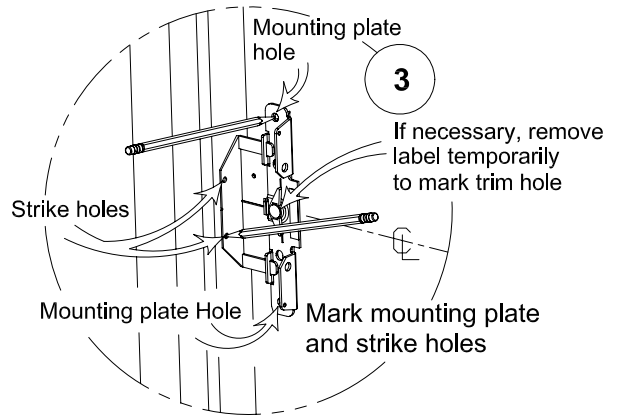
Note: (1) Fastener selection will vary per catalog configuration and kits ordered.
 (2) Mortise Cylinder NOT Provided.

Tools Required

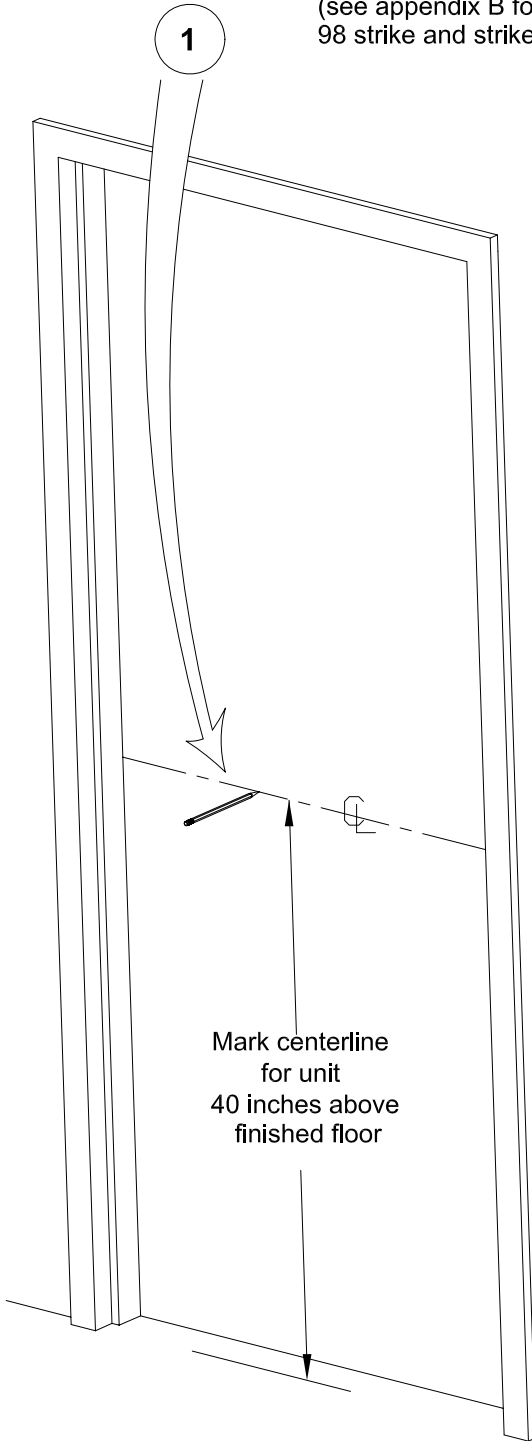
Power Drill 	Pencil 
	Hack Saw 
Safety Glasses 	Hammer 
Level 	Tape Measure 
Screw Driver 	Center Punch 



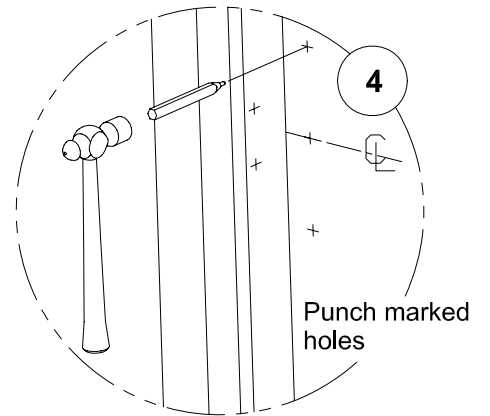
2
Slide 99 strike locator into mounting plate (see appendix B for 98 strike and strike hook installation)



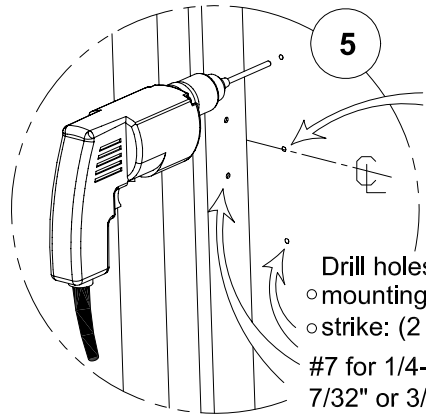
3
If necessary, remove label temporarily to mark trim hole
Mark mounting plate and strike holes



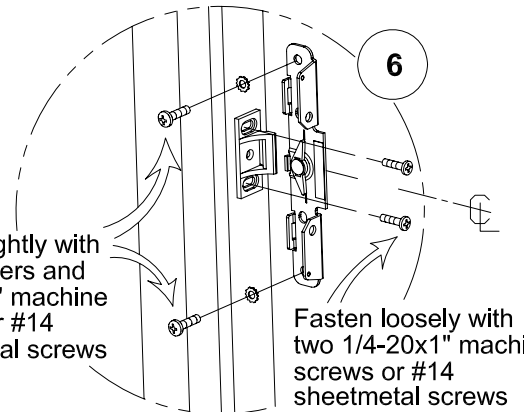
1
Mark centerline for unit 40 inches above finished floor



4
Punch marked holes



5
Trim input hole if necessary. (see outside trim instructions)
Drill holes
○ mounting plate: (2 pl)
○ strike: (2 pl)
#7 for 1/4-20 machine screws
7/32" or 3/16" for #14 sheetmetal screws
(see fastener table)



6
Fasten tightly with lockwashers and 1/4-20x1" machine screws or #14 sheetmetal screws
Fasten loosely with two 1/4-20x1" machine screws or #14 sheetmetal screws

Depress pushpad when installing

1

Position cam as shown

Insert centercase guides into slots of mounting plate

2

Rotate device toward door

3

Fasten rim device to mounting plate with 1/4-20 x 1/4" PPH

HURRICANE MODELS

NOTE: Hurricane models require TWO additional screws (See hurricane kit)

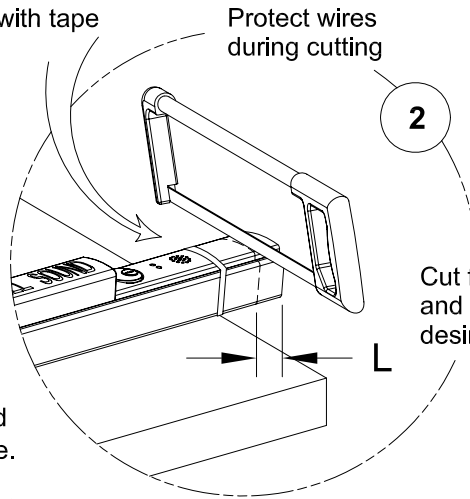
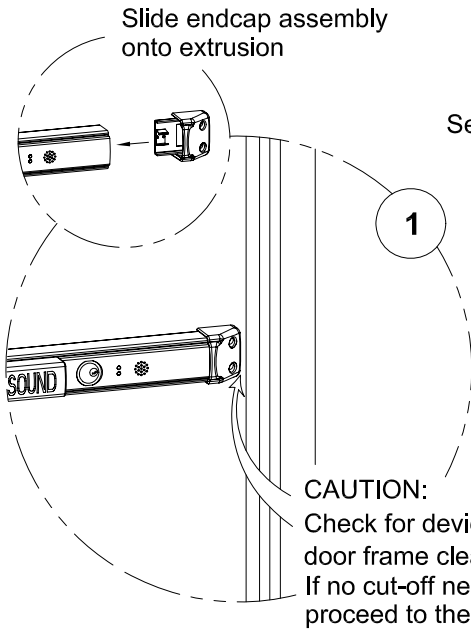
Fasten rim device to mounting plate and door with 1/4-20x1" machine screws or #14 sheetmetal screws

4

Install Pushpad Wrap. Verify wrap is secured by snapping in place.

IMPORTANT:
Verify handing before installing wrap.
(LHR handing shown)

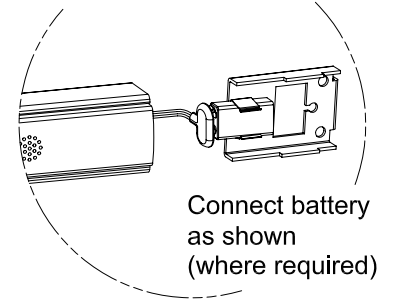
CHECKING FOR DEVICE CLEARANCE (Cut-Off procedure if required)



Standard Cut-Off		
Type	Length (L)	
	36" Unit	48" Unit
Electrified Model *	2 in	8 in
EX	6 in	12 in

***NOTE:**
For additional cut down lengths,
See Appendix C or call factory
at (800) 729-3839 for assistance.

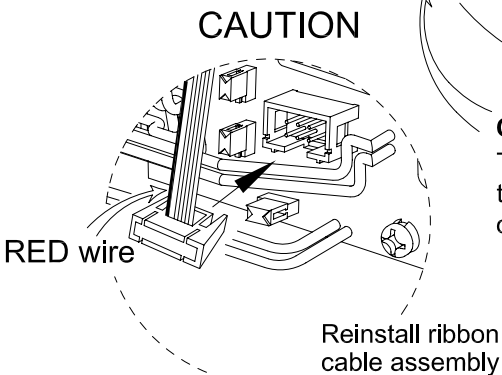
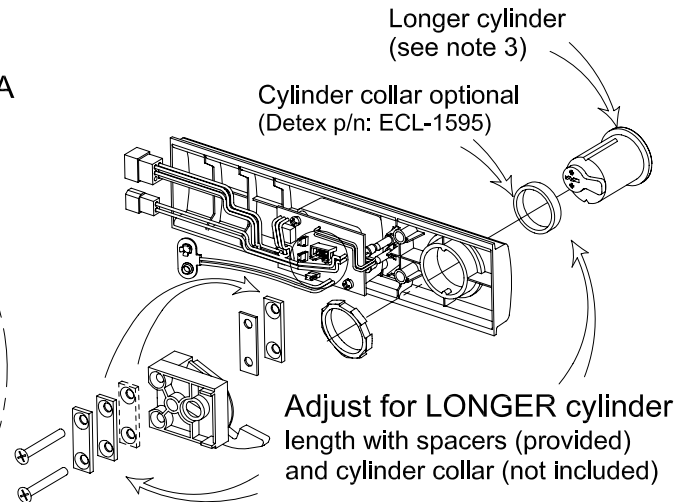
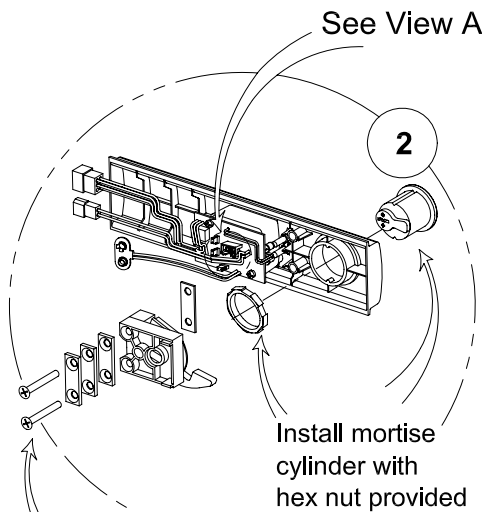
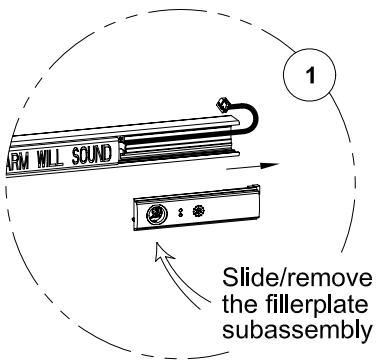
BATTERY INSTALLATION



MORTISE CYLINDER INSTALLATION

PRECAUTIONARY NOTES:

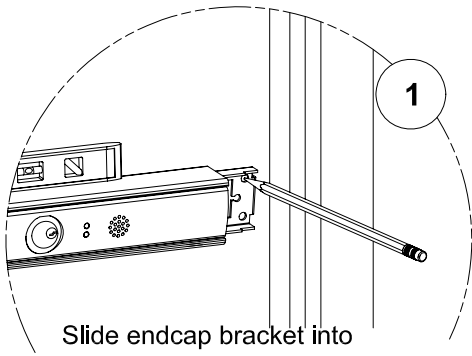
1. Be careful when installing fillerplate assembly not to damage ribbon cable



CAUTION:
Tighten with hand tools only. Do not overtighten

- 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

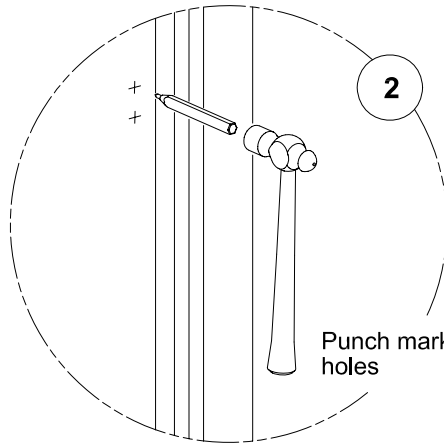
View A



1

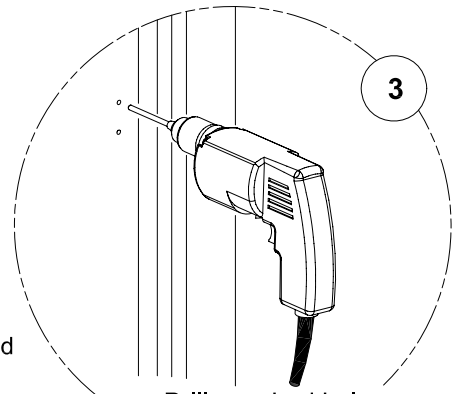
Slide endcap bracket into extrusion, level pushpad assembly, and mark (3) holes

Note: Endcap bracket must bottom-out on extrusion before marking holes.



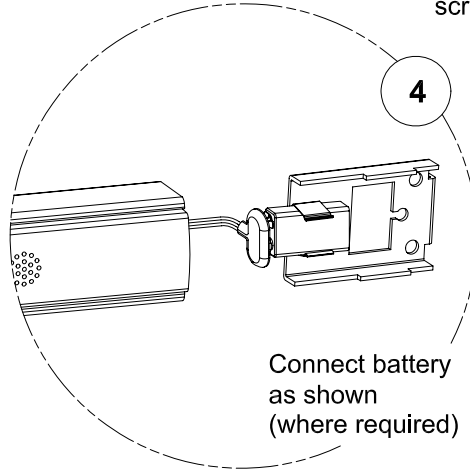
2

Punch marked holes



3

Drill punched holes #7 for 1/4-20 machine screw, 7/32" or 3/16" for #14 sheetmetal screw



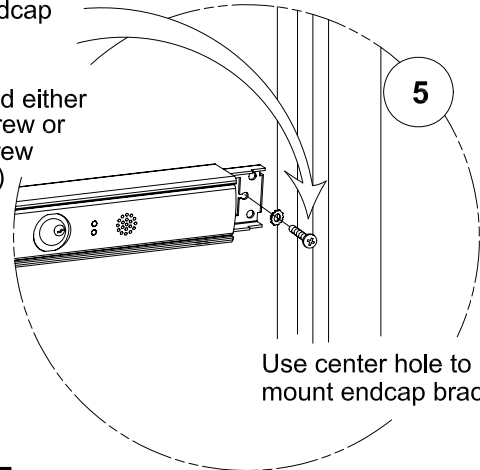
4

Connect battery as shown (where required)

IMPORTANT NOTE:

Screw prevents endcap Tampering.

Loosely fasten with lockwasher and either 1/4-20 machine screw or #14 sheetmetal screw (see fastener table)

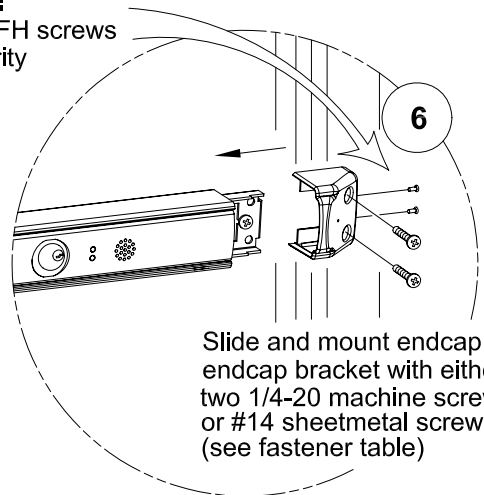


5

Use center hole to mount endcap bracket

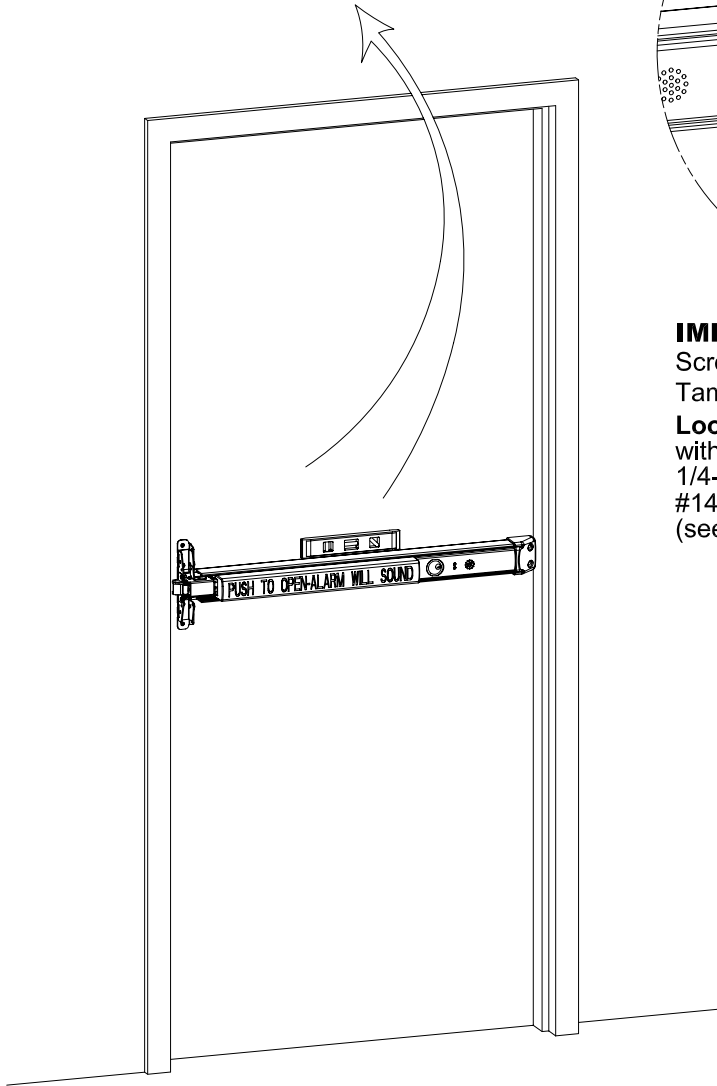
IMPORTANT:

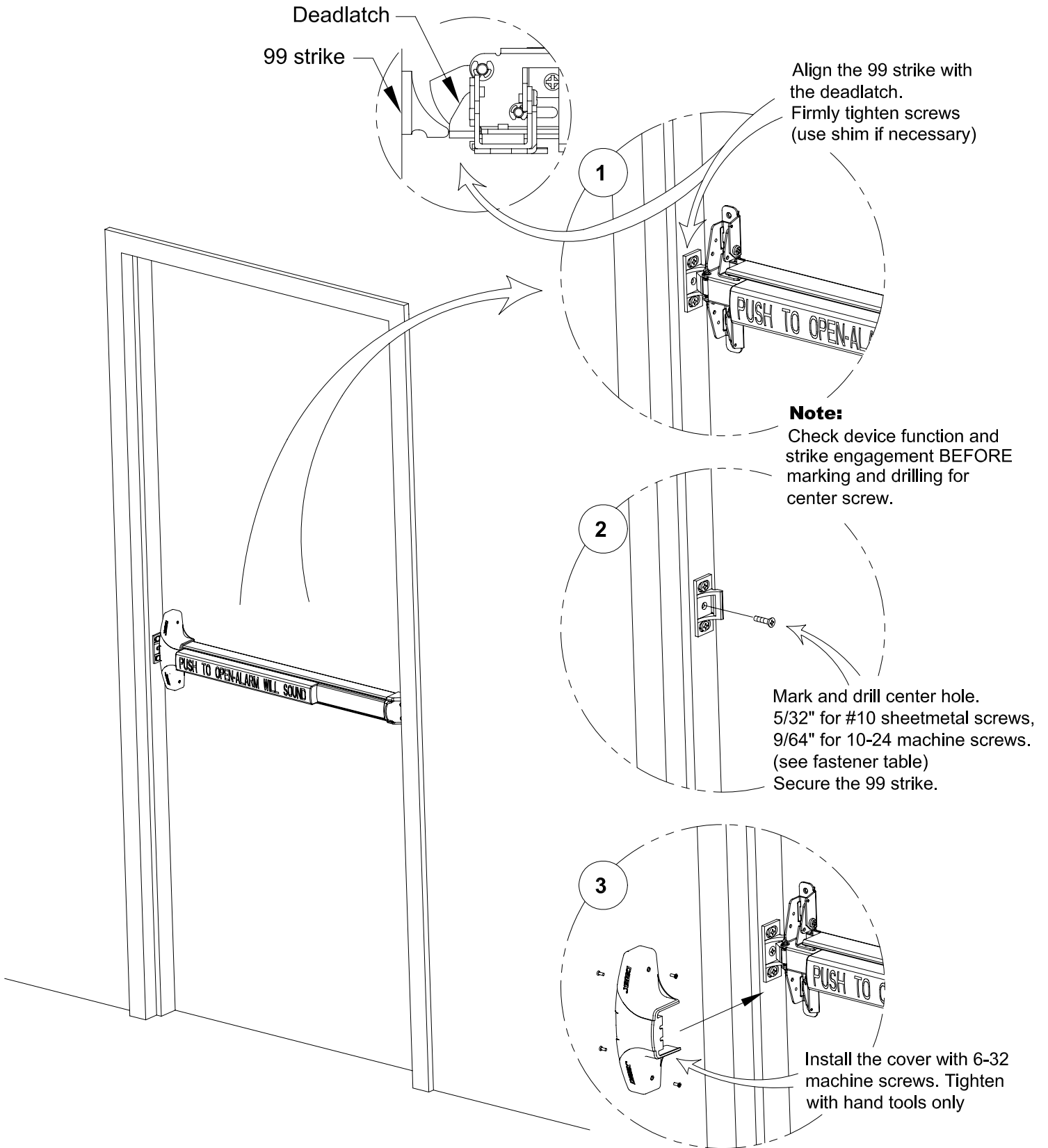
Install (2) 6-32 FH screws for added security



6

Slide and mount endcap to endcap bracket with either two 1/4-20 machine screws or #14 sheetmetal screw (see fastener table)





ALARM OPERATIONS

Note: Unit is shipped with Disable Auto Rearm turned ON and Status Indicator turned OFF

Refer to tables 1, 2 & 3 on page 10

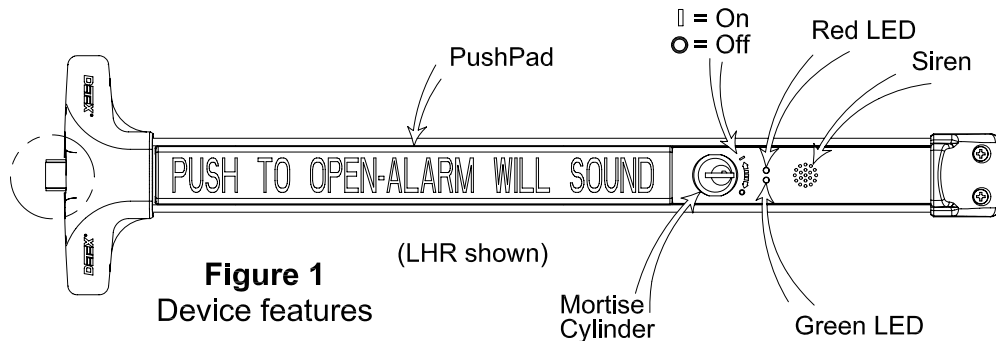
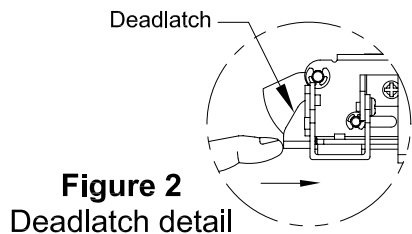


Figure 1
Device features

For BENCH TESTING:
push and hold deadlatch while
performing unit arming test.

SPECIAL NOTES and DEFINITIONS

1. The door needs to be closed to test the unit.
2. When operating the ON/OFF switch, there is a slight delay.
3. The key is inserted and removed only in the horizontal position (home position).
4. Key function: counter clockwise (CCW) = Armed; clockwise (CW) = Disarmed
5. 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
 - c. Dis Lo Bat INDicator (EH units only)

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 15 seconds.
3. If the unit is disarmed, the green LED will blink every 15 seconds.

Disable AUTO REARM

1. When the unit is in full alarm and the door closes, 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.

Appendix A

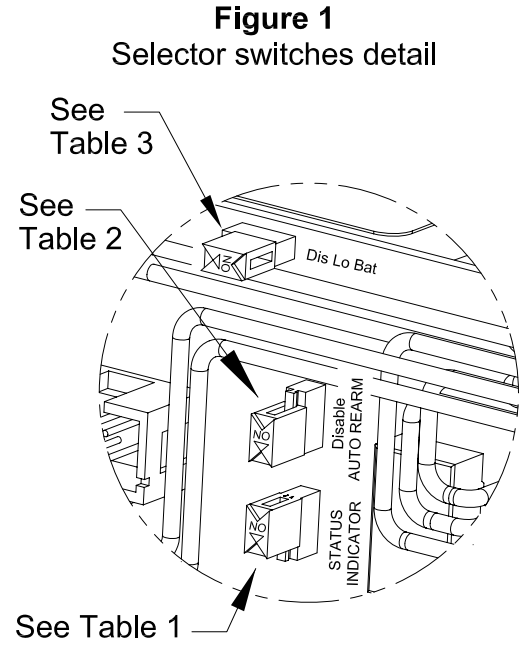
EB/EH SWITCH OPTIONS

Switch selections must be made before applying power or 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 15 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 as long as door is open. Alarm turns off 2 minutes after door is closed

Table 3 (EH models only)	
Note: AC power must be applied	
Disable Low Battery	Status Description
Off *	The device flashes one red LED and one beep about every 45 seconds
On	The Device gives no indication of battery being low.



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

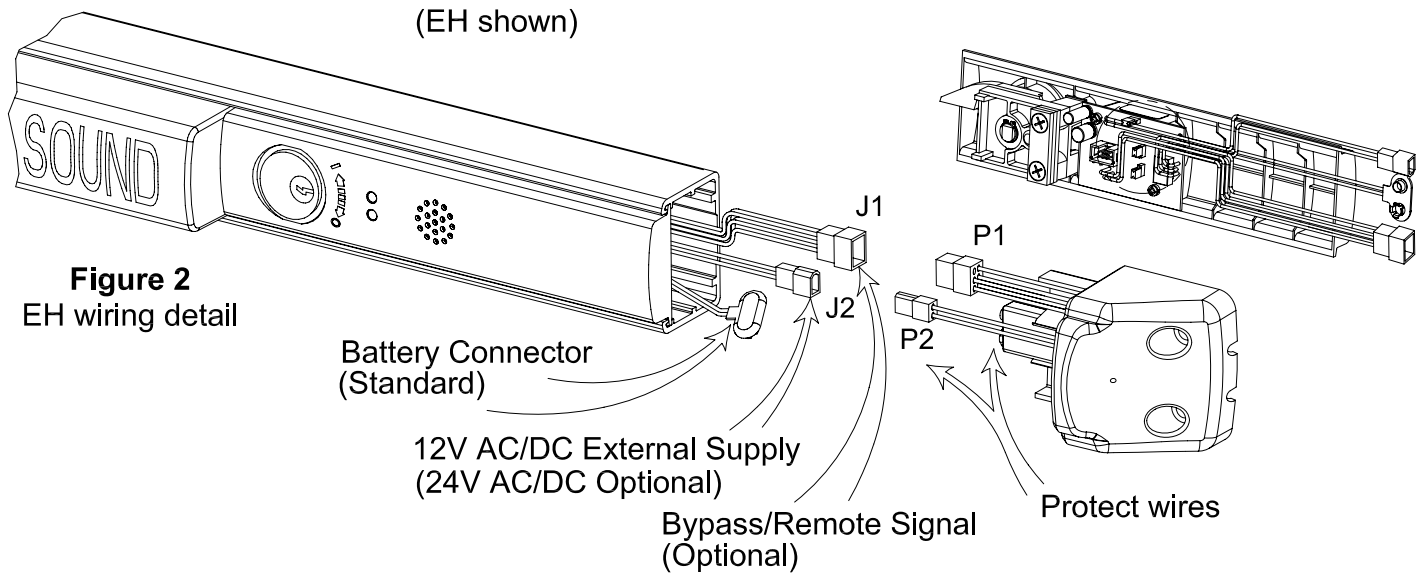
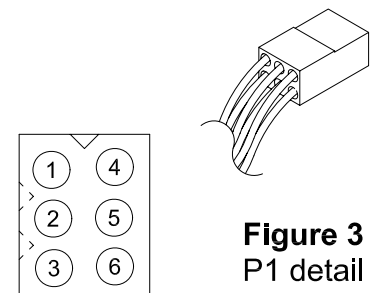
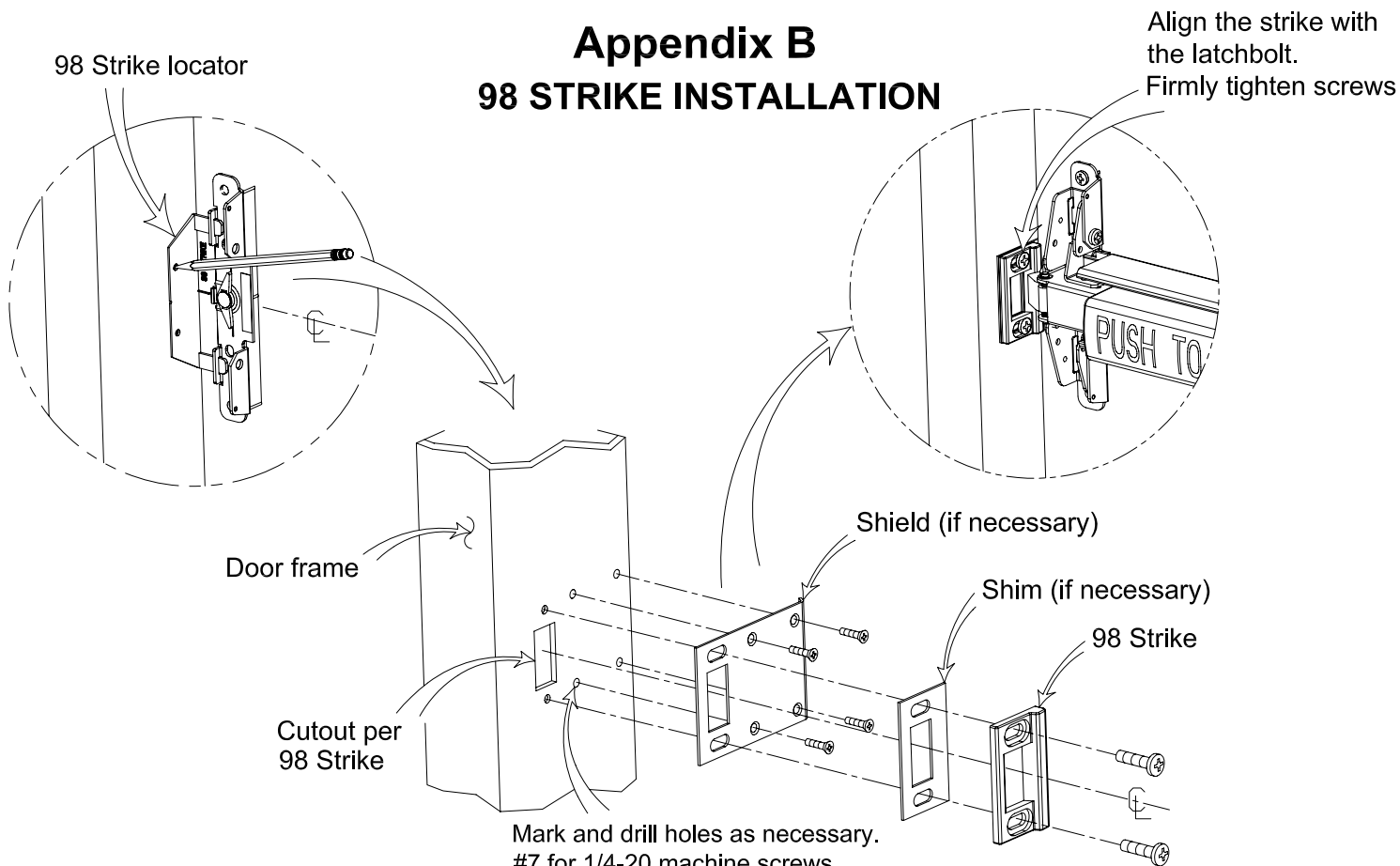


Table 4 (P1 wire usage)					
Remote Signal			Remote Bypass		
Pin 1	Brown	Common	Pin 4	Violet	N.O. contact
Pin 2	Yellow	Normally Open	Pin 5	Violet	N.O. contact
Pin 3	Green	Normally Closed	Pin 6	----	---
Contacts rated at 1.0A @ 30VDC or 0.5A @ 125VAC					



Appendix B

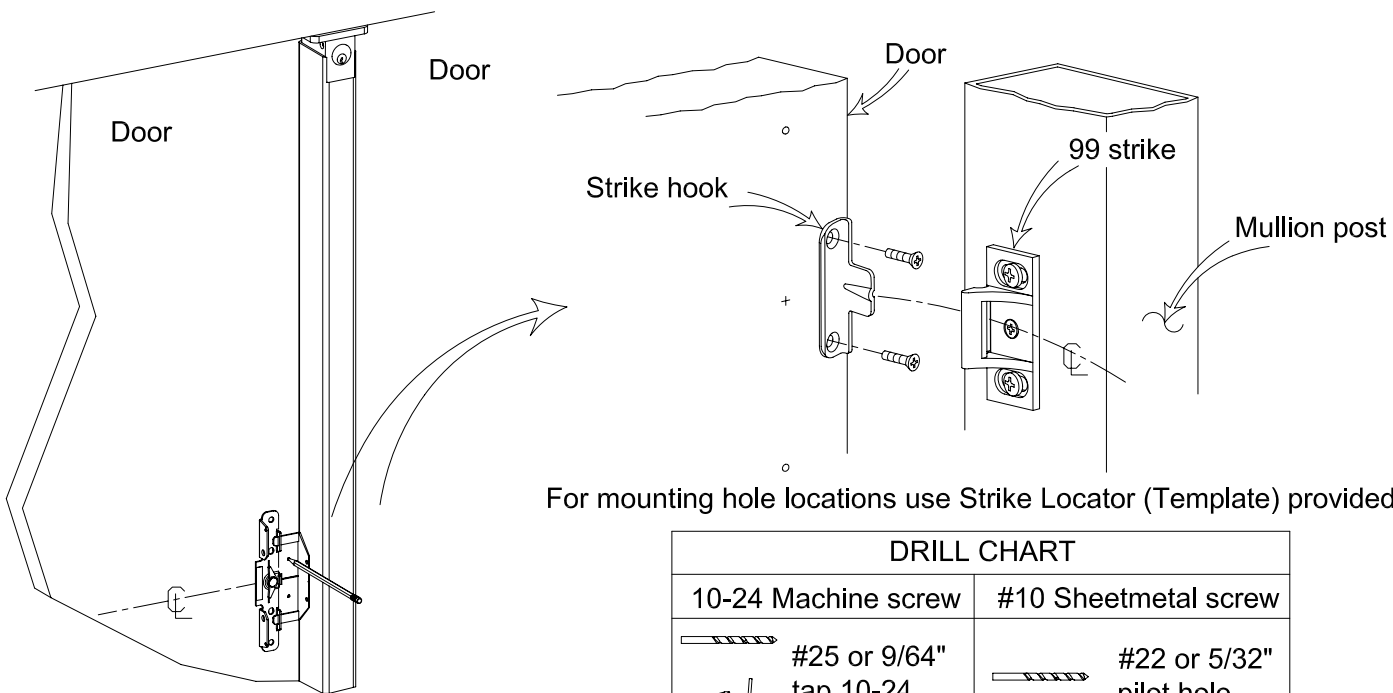
98 STRIKE INSTALLATION





Mark and drill holes as necessary.
 #7 for 1/4-20 machine screws,
 7/32" or 3/16" for #14 sheetmetal screws
 7/64" for 6-32 machine screws,
 9/64" for #6 sheetmetal screws
 (see fastener table)

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.

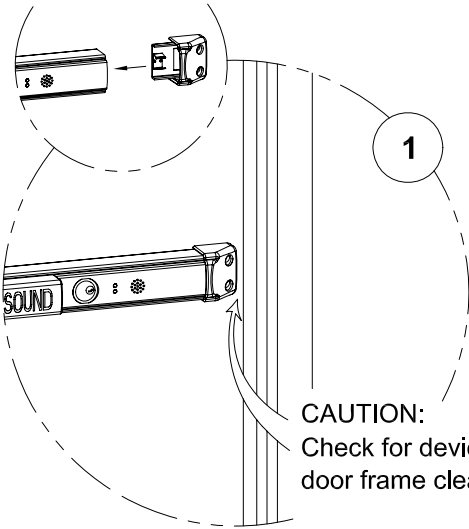
DRILL CHART	
10-24 Machine screw	#10 Sheetmetal screw
 #25 or 9/64" tap 10-24	 #22 or 5/32" pilot hole

Appendix C

Procedures for Additional Cut Down Lengths

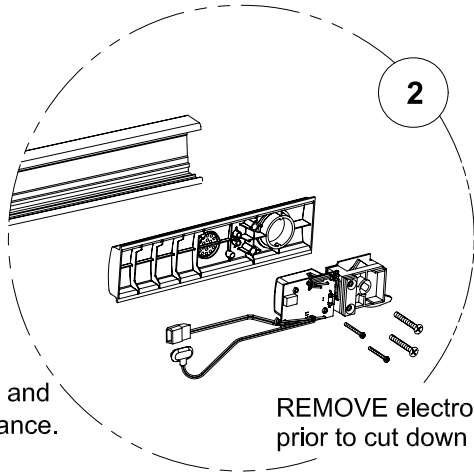
Caution Required-Special Handling

Slide endcap assembly onto extrusion



1

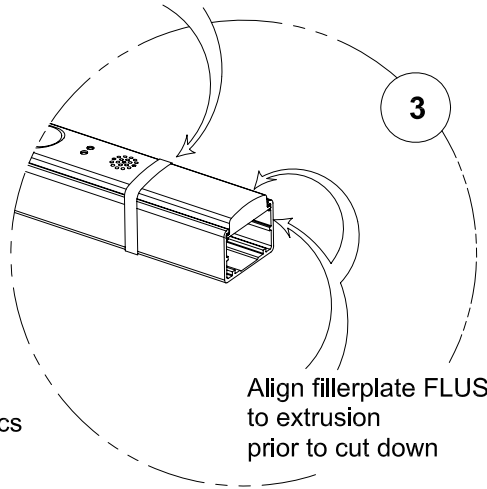
CAUTION:
Check for device and door frame clearance.



2

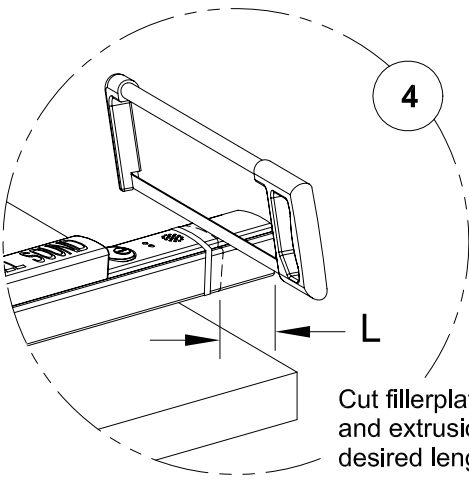
REMOVE electronics prior to cut down

Secure with tape



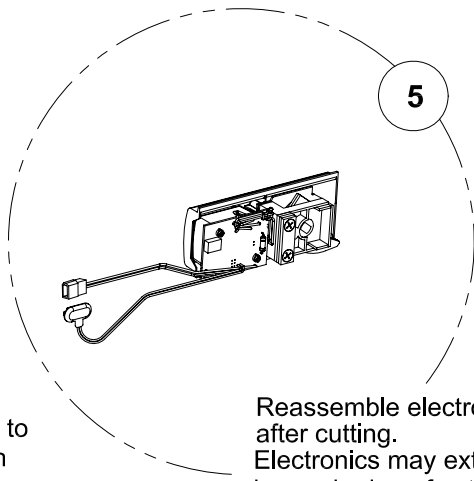
3

Align fillerplate **FLUSH** to extrusion prior to cut down



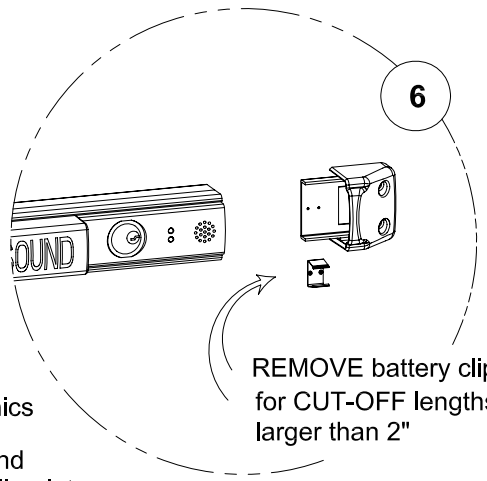
4

Cut fillerplate and extrusion to desired length



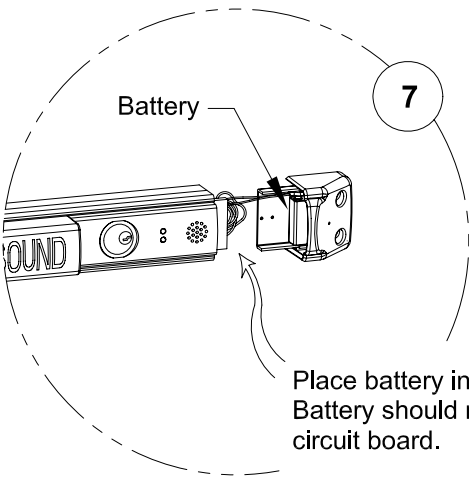
5

Reassemble electronics after cutting. Electronics may extend beyond edge of cut fillerplate.



6

REMOVE battery clip for CUT-OFF lengths larger than 2"



7

Place battery in endcap. Battery should not contact circuit board.

Max. Cut-Off	
Length (L) inches	
36" Unit	48" Unit
4"	10"

Appendix D

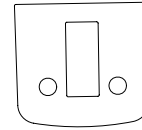
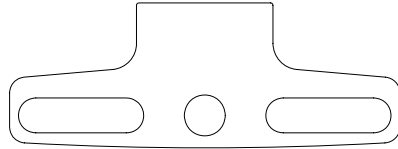
Optional Accessories

Glass Bead Kit

Catalog No: GB15

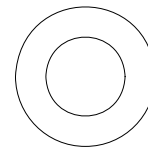
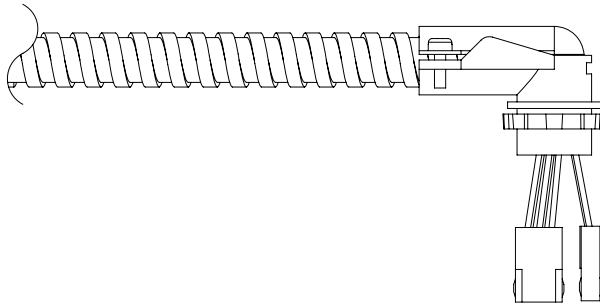


#1/4-20 X 1-1/2" Screw
(4) Included

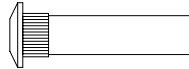


Flex Conduit Kit

Catalog No: FCV-3
FCV-10



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

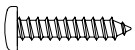
The #1/4-20 kit is available in (4) finishes:

- 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

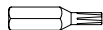
Tamper Kit

(Security Kit)

Catalog No: SSK3



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 (628 Finish, Clear)

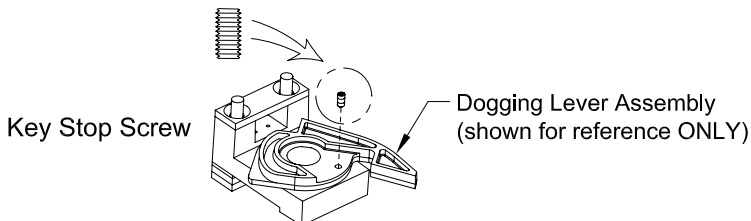
Catalog No: NSK1 (711 Finish, Black)



Key Stop Kit

(Momentary Shunt)

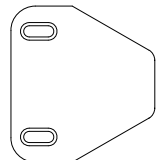
Catalog No: KS



Double Door Strike Kit

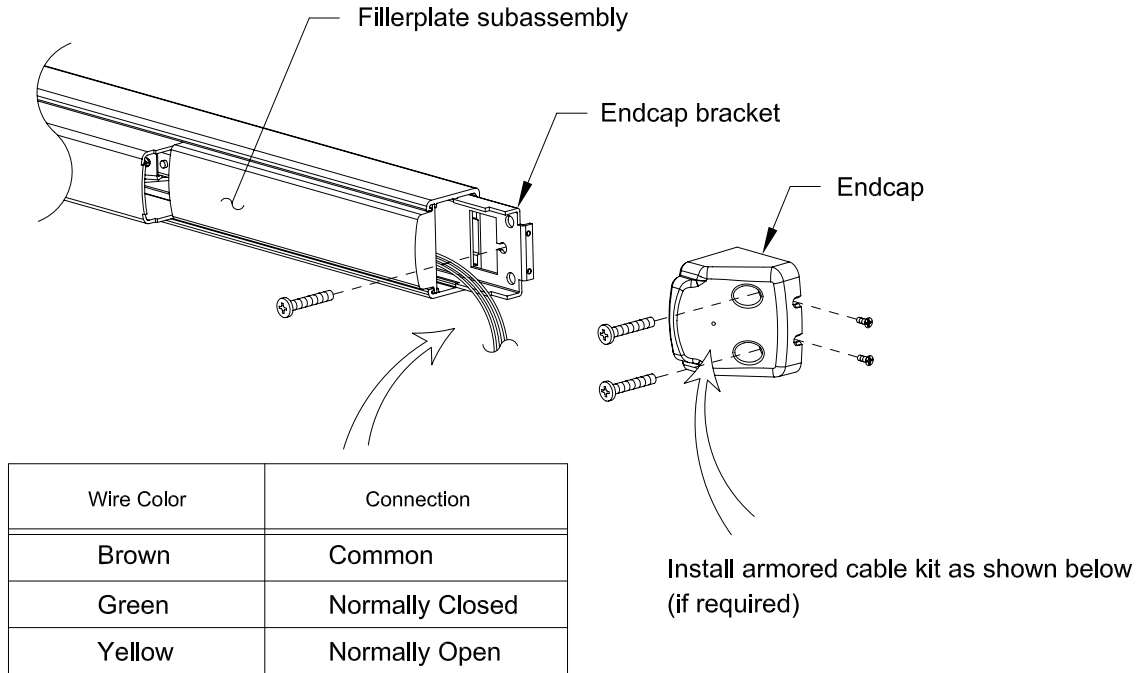
Catalog No: 94 with security screws

Catalog No: 95 with standard screws

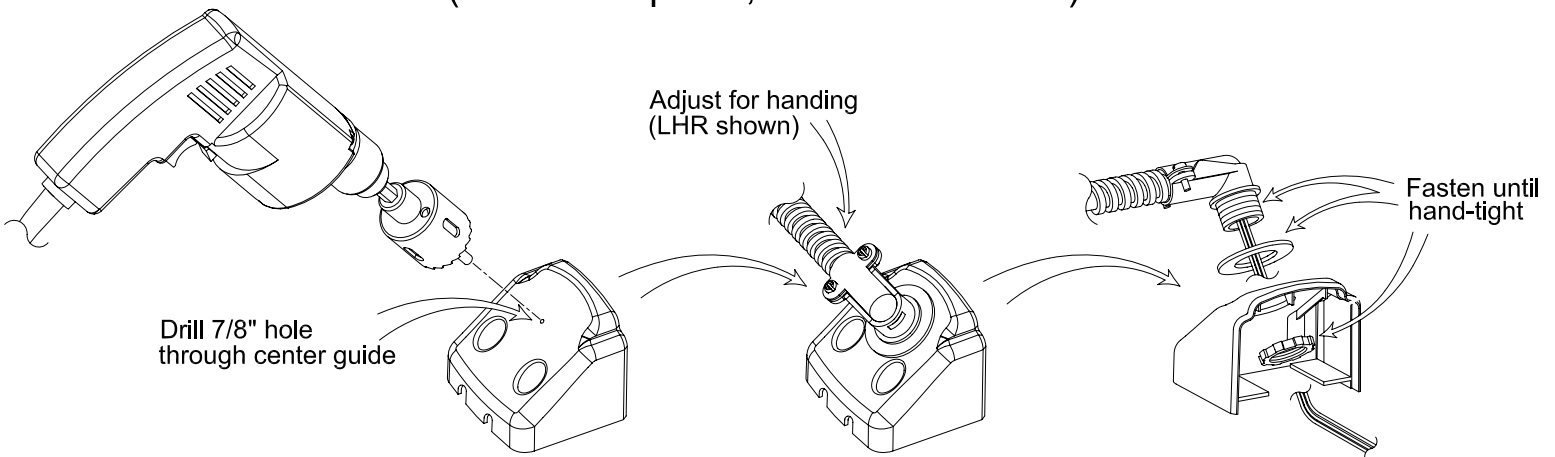


Appendix E

V40 x EX Wiring Assembly



FLEX CONDUIT INSTALLATION (Where Required, See note 1 below)



Note: (1) For high traffic areas an electric through-wire hinge or power transfer is recommended.

V40 (with Alarm) Troubleshooting Tips for Default Setting

PROBLEM	PROBABLE CAUSE	ACTION
<p>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.</p>	<p>Deadlatch not in proper position.</p> <p>Ribbon cable not properly seated.</p> <p>The ribbon cable is damaged.</p>	<p>Close door. Door not fully closed. Press deadlatch manually as shown in Figure 2 on Page 5. If unit operates properly, check unit's backset and adjust unit or add shims to strike as needed.</p> <p>Make sure the ribbon cable is firmly seated onto the circuit board.</p> <p>Visually inspect cable and if the cable is damaged, replace push pad assembly P/N 102462-X.</p>
<p>No LED activity when key is turned ccw to armed position.</p>	<p>Dead or weak battery.</p> <p>Battery not secured to connector correctly.</p> <p>Battery connector or wires damaged.</p> <p>No AC power (EH models).</p>	<p>Install new battery, LED's should flash and the siren beep once.</p> <p>Secure battery correctly.</p> <p>Call Detex. 1-800-729-3839</p> <p>Verify power from transformer and check for correct voltage at connector P2.</p>
<p>AC powered unit (EH, EHxR) give a low battery indication.</p>	<p>Battery not installed.</p>	<p>Install battery. If battery is not desired, disconnect power and slide the 'Dis Lo Bat IND' switch to 'ON' position.</p>
<p>LED's do not flash to indicate armed or disarmed status.</p>	<p>Status Indication switch in off position.</p>	<p>Remove AC (P2) and battery power from unit. Slide 'Status Indicator' switch to 'ON' position. Reinstall battery and AC power on EH models.</p>