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 E-MAIL: detex@detex.com INTERNET: www.detex.com  
**ELECTRICAL INSTRUCTIONS FOR DETEX ADVANTEX<sup>®</sup> EM  
 DELAYED EGRESS MODELS**

## ADVANTEX<sup>®</sup> EM Delayed Egress RIM

Dwg #: 102500 RIM (SS)  
 104600 RIM (AL)



U.S. PATENT NUMBERS:

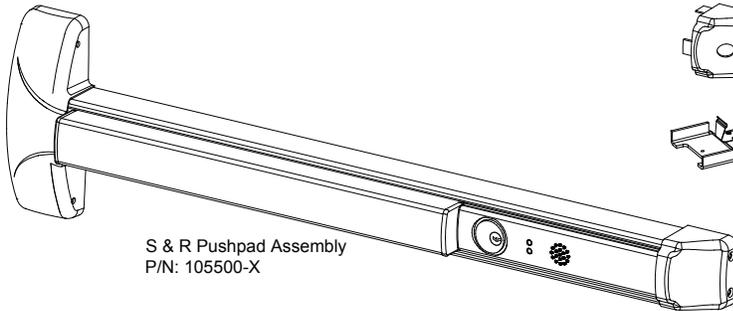
6009732

6205825B1

6532777B2

INTERNATIONAL PATENT NUMBER:

PCT6009732



S & R Pushpad Assembly  
 P/N: 105500-X



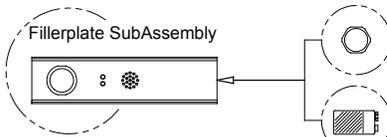
EC1 Endcap P/N: 101642-X



EC1 Endcap (for FCA) P/N: 102095-X



EC1 Endcap Bracket P/N: 100147 (shown)  
 EC1 Endcap Bracket with 9V battery holder P/N: 101093



Fillerplate SubAssembly

Hex Nut  
 P/N: 100783

9V Battery  
 P/N: PP-5567



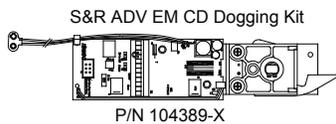
EC2 Endcap (S.S.) P/N: 104304-X  
 EC2 Endcap (AL) P/N: 104612-X



EC2 Endcap (AL) (for FCA) P/N: 104686-X  
 EC2 Endcap (S.S.) (for FCA) P/N: 104317-X

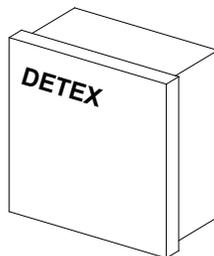


EC2 Endcap Bracket P/N: 104303  
 EC2 Endcap Bracket with 9V battery holder P/N: 104636



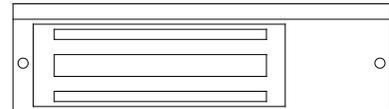
S&R ADV EM CD Dogging Kit

P/N 104389-X



Detex Power Supply Catalog No: 90-800  
 (80-800 Battery back-up power supply available)

Electromagnetic Lock  
 P/N: 102450-X



Door Sign  
 P/N: ECL-395-X

PUSH UNTIL ALARM SOUNDS  
 DOOR CAN BE OPENED IN 15 SECONDS

**\* Note: Parts listed above will vary according to product configuration. Mortise cylinder available as an option. Standard Yale type cam required. See Mortise cylinder installation page.**

**Owner's Copy**

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

**FOR SPECIAL LOCKING ARRANGEMENT:**

THIS PRODUCT MUST BE CONNECTED INTO A FIRE ALARM SYSTEM PER NFPA CODE OR OTHER REGULATIONS SO THAT, IN THE EVENT OF FIRE, THE TIME DELAY WILL BE BYPASSED. CONTACT YOUR LOCAL CODE AUTHORITY TO VERIFY COMPLIANCE WITH FIRE AND BUILDING CODES. THE DELAYED EGRESS DEVICE SHOULD BE ROUTINELY CHECKED FOR PROPER OPERATION AND COMPLIANCE WITH FIRE AND BUILDING CODES

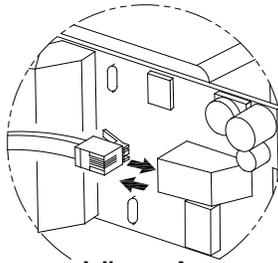
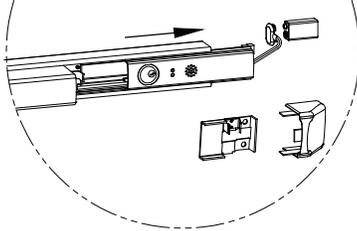
# MORTISE CYLINDER INSTALLATION

## PRECAUTIONARY NOTES:

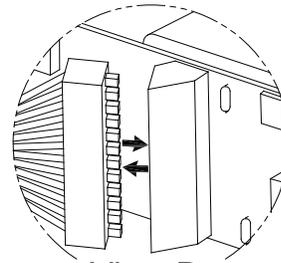
1. Be careful when installing fillerplate assembly not to damage modular cable.
2. See "EM ELECTRICAL OPTIONS" before reinstalling filler plate.

### 1 REMOVE FILLERPLATE

Remove endcap, endcap bracket & fillerplate subassembly. Disconnect cable assembly (view A), 12 pin connector (view B), and battery



View A  
Modular Cable Connection



View B  
12 Pin Connection

(note: board layout may differ slightly from layout shown)

### 2 INSTALL MORTISE CYLINDER

Cylinder nut socket  
p/n 103779  
(sold separately)

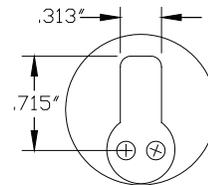
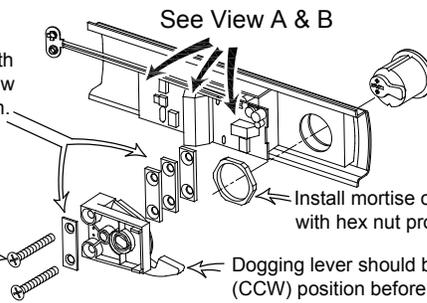


#### NOTE:

- (1) Move placement of spacers to match length of cylinder used to allow smooth rotation of cam.
- (2) All cylinder spacers must be used, either on top or bottom

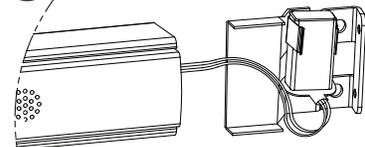
#### CAUTION:

Tighten with hand tools only.  
Do not overtighten



Mortise Cylinder with  
standard Yale cam  
required

### 3 RE-INSTALL FILLERPLATE

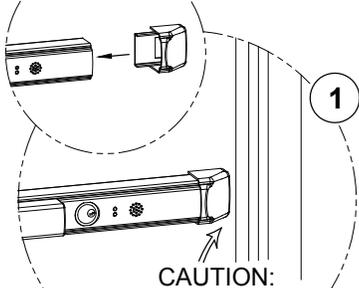


Re-connect in the following order:

- 1) Cable assembly (view A),
  - 2) Battery,
  - 3) 12 pin connector (view B),
- Install fillerplate subassembly & endcap bracket.

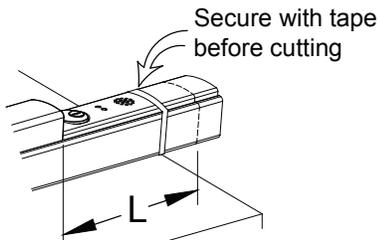
## CHECKING FOR DEVICE CLEARANCE (Cut-Off procedure if required)

Slide endcap assembly  
onto extrusion



CAUTION:  
Check for device and door  
frame clearance.  
If no cut-off needed,  
proceed to the next page.

- 2 Cut fillerplate and extrusion  
STRAIGHT & SQUARE to  
desired length and deburr



Minimum Fillerplate Length	
Type	Length (L)
EM	9"

**For aluminum Advantex finish cutdown applications: After cutting, the baseplate extrusion can be reversed to place the cut end inside the head cover. To do so, loosen the setscrew inside the aluminum baseplate extrusion and slide extrusion out, reverse, & slide back in. Tighten setscrew.**

# ELECTRICAL OPTION

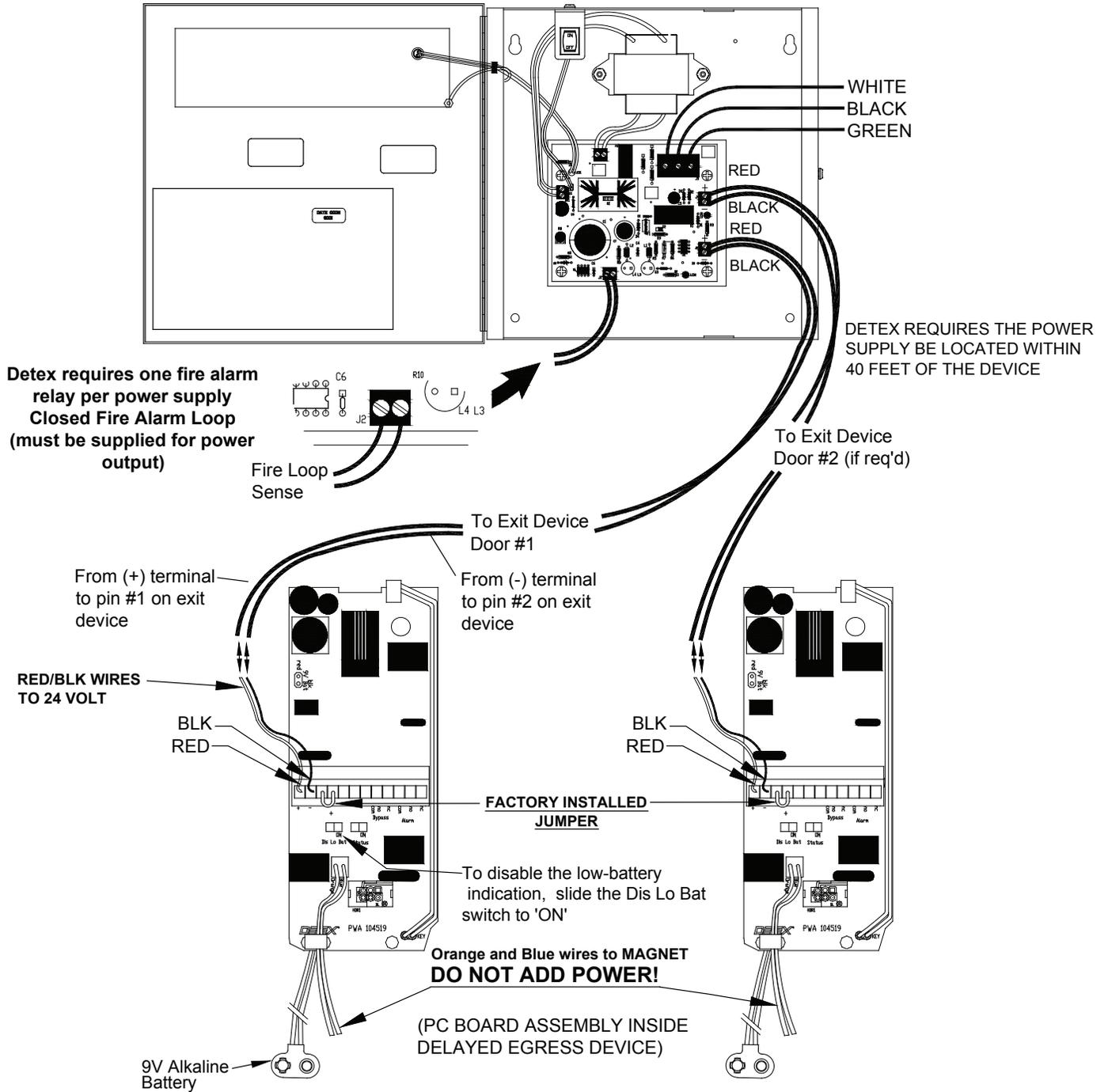
## REQUIRES DETEX POWER SUPPLY

REQUIRED WIRE SIZES:

STRANDED WIRE GAUGE: 18 AWG MIN

MAXIMUM LENGTH OF TWO CONDUCTOR CABLE: 40 FEET

90-800 Power Supply with Detex Delayed Egress device





## RISER DIAGRAM

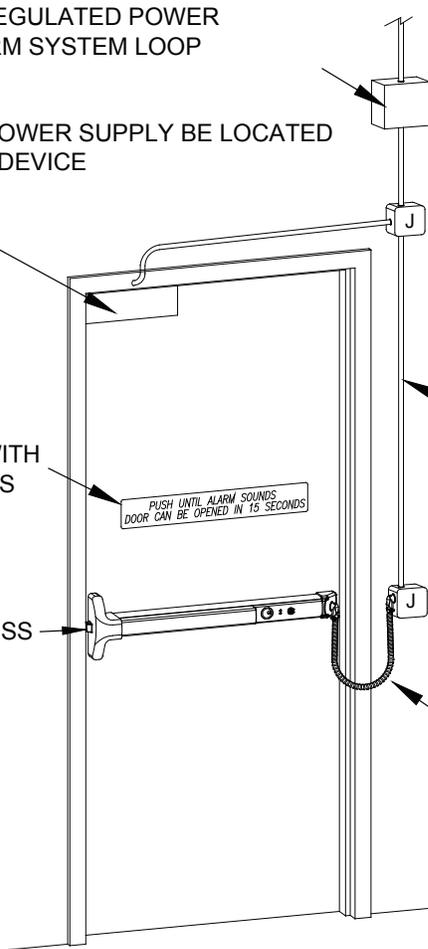
DETEX FILTERED AND REGULATED POWER SUPPLY WITH FIRE ALARM SYSTEM LOOP  
24 VDC @1 AMP min.

DETEX REQUIRES THE POWER SUPPLY BE LOCATED WITHIN 40 FEET OF THE DEVICE

DETEX MAG LOCK SUPPLIED WITH DETEX DELAYED EGRESS PANIC HARDWARE

DOOR SIGN SUPPLIED WITH DETEX DELAYED EGRESS PANIC HARDWARE

DETEX DELAYED EGRESS PANIC HARDWARE INSTALLED BY TRAINED TECHNICIAN



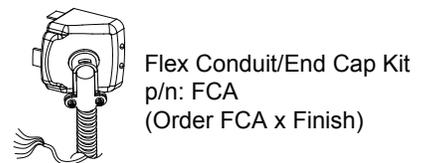
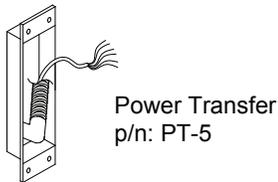
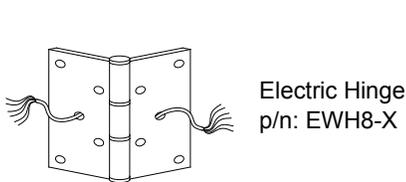
PROVIDE WIRING CONDUIT, CONNECTOR, ETC BETWEEN DETEX POWER SUPPLY AND FIRE ALARM CONTROL PANEL AS REQUIRED TO ALLOW THE FIRE ALARM SYSTEM TO OVERRIDE THE DETEX DELAYED EGRESS FEATURE DURING A FIRE ALARM

THE LOSS OF POWER OR OPEN FIRE ALARM CIRCUIT WILL ELIMINATE THE DELAY EGRESS OPERATIONS

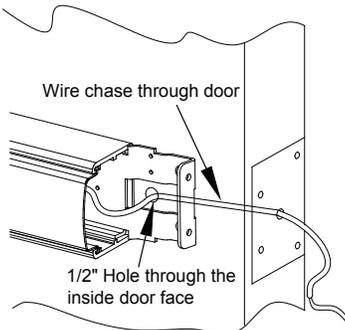
REQUIREMENTS:  
MIN. 22 GA STRANDED WIRE FOR SIGNALING  
MIN. 18 GA STRANDED WIRE FOR POWER

REFER TO WIRING & FIRE ALARM DIAGRAMS FOR WIRING INSTRUCTIONS

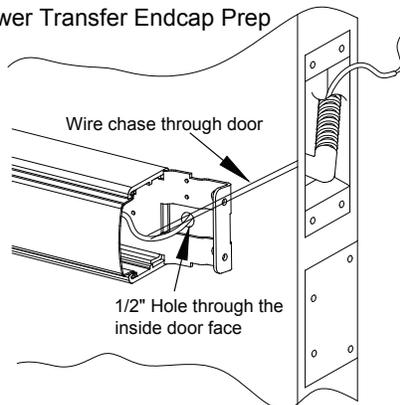
## HARDWARE TRANSFER OPTIONS



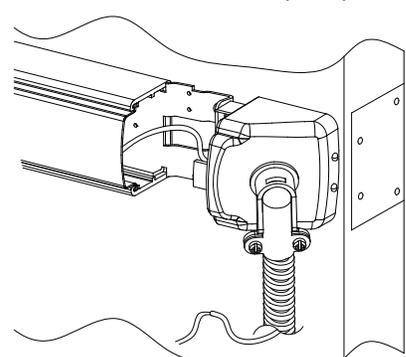
### Electric Hinge Endcap Prep



### Power Transfer Endcap Prep

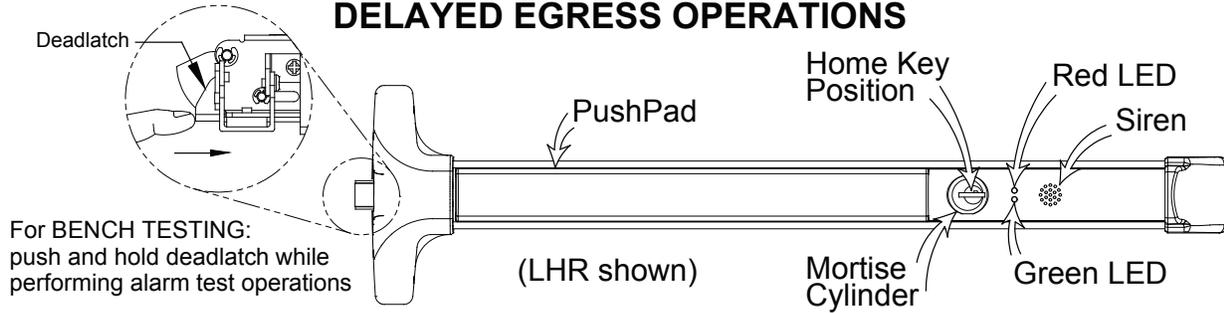


### FCA Flex Conduit Endcap Prep



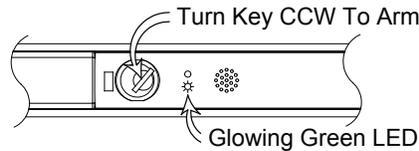
Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.

## DELAYED EGRESS OPERATIONS



### ARMING AND AUTHORIZED EXIT

With door closed, insert key in the cylinder, turn CCW then back to the home key position and remove it. LED glows green. Authorized personnel can exit the door during this rearm cycle. After a 1, 5 or 15-second arming period, alarm issues three quick beeps and LED goes off, indicating that the unit is armed.

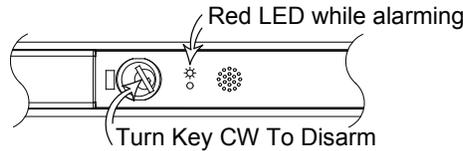


### DISARMING

Insert key, turn CW to a stop. Green LED will blink twice to indicate the unit is disarmed, then BOTH LED's will turn off.

### EXITING UNDER ALARM

To exit, push and maintain pressure on the pushpad. LED flashes RED and alarm pulses on and off for 15 seconds. After 15 seconds, alarm issues short and long pulses to indicate that you can exit by depressing the pushpad. Alarm sounds continuously and LED is steady RED. Turn key CW to stop alarm. In case of fire, the fire alarm over-rides the 15 second delay and the door opens without delay when the pushpad is pushed.



### NORMAL OPERATION

LED COLOR		SIREN SOUNDS	FUNCTION
RED	GREEN		
OFF	ON	THREE CHIRPS	Indicates the unit is in process of arming. The siren will chirp three times to indicate the unit is armed and green LED will turn off
OFF	OFF		This indicates either armed or disarmed
ON	ON		Factory installed jumper removed from terminals 3 & 4
SLOW BLINKING	OFF	SLOW PULSE	Pushpad is depressed, delay to open started
FAST BLINKING	OFF	FAST PULSE	Delay to open expired
ON	OFF	ON	Delay to open expired, door has been opened
DOUBLE BLINK	OFF	DOUBLE CHIRP	Low Battery - every 45 seconds
BLINK	OFF		Armed - status ON
OFF	BLINK		Disarmed - ON

### BATTERY BACKUP FOR ALARM

A 9-volt battery is included as a backup power source for the alarm siren if power is lost.

To disable low battery indication, slide "DisLoBat" switch to 'ON'. See EM ELECTRICAL OPTIONS page.

### LOW BATTERY INDICATION

If battery voltage is low (7 volts or less), unit remains armed but LED flashes RED and unit beeps twice every 45 seconds. Replace battery as soon as possible.

# TROUBLESHOOTING

Problem	Probable cause
Alarm sounds immediately when power is applied:	Make sure the key cylinder arming switch is set to 'OFF'.
No green light when key is turned CCW:	<p>Confirm strike is pushing in dead latch, door must be closed.</p> <p>Confirm 24VDC power on the delayed egress device main board terminals 1(+) &amp; 2(-).</p> <p>Confirm closed fire loop connection on power supply.</p> <p>Confirm the two black wires on the center case are plugged into the 2-pin header on the center case circuit board.</p> <p>Confirm cable is plugged in properly.</p> <p>Confirm the mortise cylinder is functioning correctly.</p>
No delayed egress:	<p>Confirm closed fire loop connection on power supply.</p> <p>Confirm 24VDC power on the delayed egress device main board terminals 1(+) &amp; 2(-).</p> <p>With the unit armed there should be 30-38VDC without load on the orange (+) and blue (-) wires.</p> <p>The armature plate needs to float. See mag-lock instructions.</p> <p>The orange wire needs to be wired to terminal 1 in the mag-lock. The blue wire needs to be wired to terminal 3 in the maglock.</p>
No magnetic lock engagement, both red and green lights on:	Factory installed jumper removed from terminals 3 & 4.
Low battery signal- Two chirps every 45 seconds:	Check battery. If no battery is needed, slide DisLoBat switch on delayed egress main board to 'ON'. See electrical pages of instructions.

## Optional Accessories

### **Tamper Kit**

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



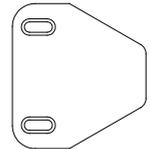
Security Screws



Security Pin TORX® Bits provided

### **Double Door Strike Kit**

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

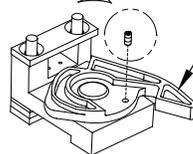


### **Key Stop Kit**

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



Key Stop Screw



Dogging Lever Assembly  
(shown for reference ONLY)

The following models in the series were evaluated by UL: Controlled Exit Panic Devices; Models 10, 20, 21, 30, 40, 50, 51, 60, 61, 62, 63, 70, 71, 80, 81, 82, 83, F10, F20, F21, F30, F40, F50, F51, F60, F61, F62, F63, F70, F71, F80, F81, F82 & F83. Refer to U.L. listing files for additional information.