

ELECTRICAL INSTRUCTIONS FOR DETEX ADVANTEX[®] EE DELAYED EGRESS MODELS

ADVANTEX[®]

RIM, SVR, CVR & MORTISE

Dwg #: 101900 RIM (SS)
104600 RIM (AL)
103000 SVR (SS)
104690 SVR (AL)
103300 MORTISE (SS)
104695 MORTISE (AL)
105260 CVR (60)
105280 CVR (70/80)



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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.

Should you have a Question/Problem with your Detex device please call Detex Technical Support from the job site at 1-800-729-3839 and choose option 2 on our menu. Please do not return the product to the distributor.

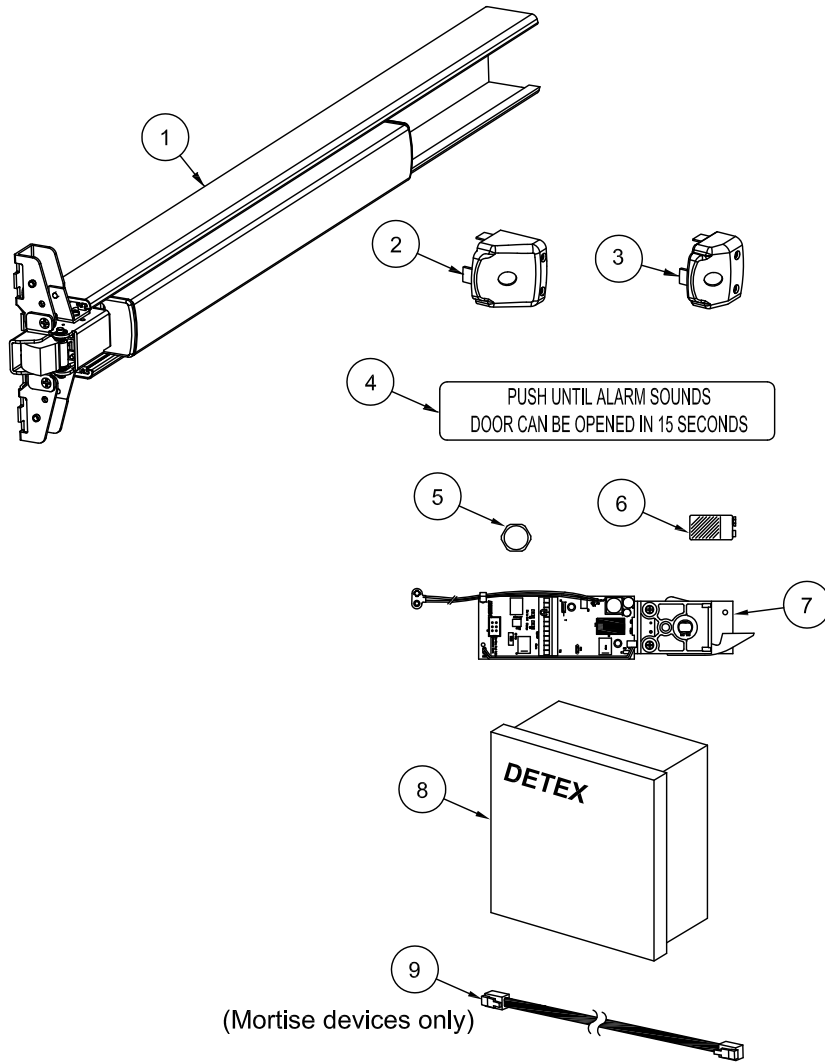
For **WARRANTY** information,
scan code below or go to
www.detex.com/warranty



Owner's Copy

For device installation videos,
scan code below or go to
www.detex.com/videos





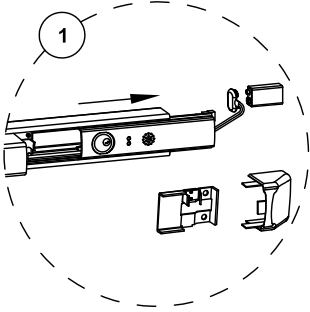
PARTS BREAKDOWN		
Item	Order Part #	Description
1	105500-17	Centercase/Pushpad SubAssembly, 10 series, 36", 630 finish, CD
	105500-111	Centercase/Pushpad SubAssembly, 10 series, 48", 630 finish, CD
	105500-30	Centercase/Pushpad SubAssembly, RHR 20 series, 36", 630 finish, CD
	105500-34	Centercase/Pushpad SubAssembly, RHR 20 series, 48", 630 finish, CD
2	102095-9	EC1 Endcap, 630 finish (drilled for Flex Conduit)
3	104686-1	EC2 Endcap, Aluminum, Aluminum painted (drilled for Flex Conduit)
	104317-9	EC2 Endcap, Stainless Steel, 630 finish (drilled for Flex Conduit)
4	ECL-395	Door Sign, 15 second delayed egress
	ECL-395-1	Door Sign, 30 second delayed egress
5	100783	Hex Nut (for cylinder installation)
6	PP-5567	9V Battery
7	104494-2	Advantex EE dogging assembly, Rim, 15/15
	104494-8	Advantex EE dogging assembly, Rim, 1/15 SA
	105035-2	Advantex EE dogging assembly, SVR, CVR, 15/15
	105035-7	Advantex EE dogging assembly, SVR, CVR, 15/15 SA
	105035-8	Advantex EE dogging assembly, SVR, 1/15 SA
	105034-2	Advantex EE dogging assembly, Mortise, 15/15
	105034-7	Advantex EE dogging assembly, Mortise, 15/15 SA
8	90-800	90-800 Power Supply
9	103306-2	Raceway cable, 3-0 (Mortise device only)
	103306-3	Raceway cable, 4-0 (Mortise device only)

Your particular part or configuration may not be shown:
 Contact Detex technical support at 800-729-3839 (option 2)

MORTISE CYLINDER INSTALLATION

PRECAUTIONARY NOTES:

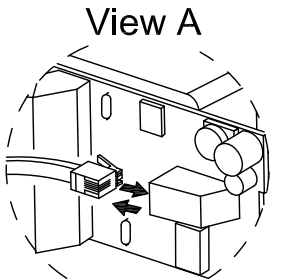
1. Be careful when installing fillerplate assembly not to damage modular cable.
2. See "EE ELECTRICAL OPTIONS" before reinstalling filler plate.



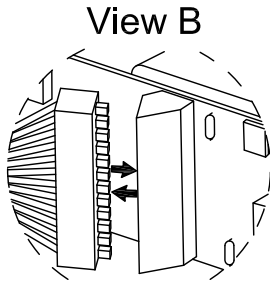
Remove endcap, endcap bracket & fillerplate subassembly.

Disconnect the following:

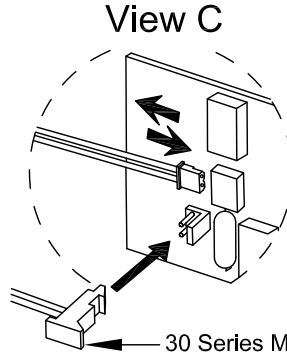
- Cable assembly (view A),
- 12 pin connector (view B),
- Magnet connection (view C),
- Mortise device plug (view C if applicable),
- Surface Vertical Rod (SVR) device plug (view D if applicable)
- Battery connection



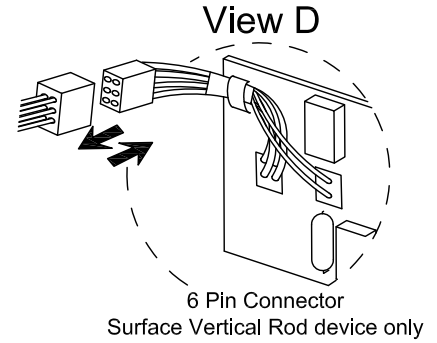
Modular Cable Connection



12 Pin Connection



30 Series Mortise device only



6 Pin Connector
Surface Vertical Rod device only

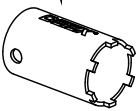
(note: board layout may differ slightly from layout shown)

2 INSTALLING MORTISE CYLINDER Install mortise cylinder onto new fillerplate subassembly

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

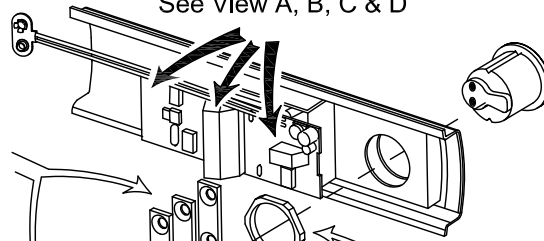
Cylinder nut socket
p/n 103779
(sold separately)



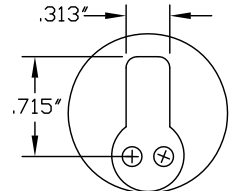
CAUTION:

Tighten with hand tools only.
Do not overtighten

See View A, B, C & D



Install mortise cylinder
with hex nut provided

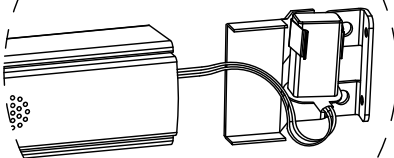


Mortise Cylinder with
standard Yale cam
required

Dogging lever should be in "ON"
(CCW) position before sliding
back into extrusion

3

RE-INSTALL FILLERPLATE



Re-connect in the following order:

- 1) Cable assembly (view A),
- 2) Battery,
- 3) 12 pin connector (view B),
- 4) 2 pin connector (view C),
- 5) Mortise plug (view C) or SVR plug (view D) if applicable.

Install fillerplate subassembly & endcap bracket.

EE Cable/Wire connections IMPORTANT!

Refer to pages 4 & 5 for EE wiring instruction

STEPS 1 THRU 5 BELOW FOR MORTISE DEVICE ONLY

1 Use backplate for marking & drilling cable hole
Mark and drill 1/2" dia hole thru device side of door

LHR RHR

CAUTION!
Mortise lock should NOT be installed when drilling

2 Route modular cable thru door (Cable packaged with Mortise Lock)

Small end

(LHR SHOWN)

Route cable thru mortise lock cutout

Route cable thru drilled hole

3 Plug modular cable to mortise lock

CAUTION:
Be careful when feeding lock and cable back into door

Plug cable to mortise lock BEFORE installing lock to door

4 Install device

Fillerplate
See previous page

See step 5

5

LHR

Plug cable to coupler

RHR

Plug cable to coupler

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

Slide endcap assembly onto extrusion

1

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

Minimum Fillerplate Length	
Type	Length (L)
EE	9-3/8"

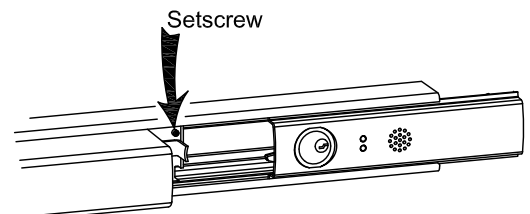
www.detex.com/cutdown

2

Cut fillerplate and extrusion STRAIGHT & SQUARE to desired length and deburr
Secure with tape before cutting

L

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.

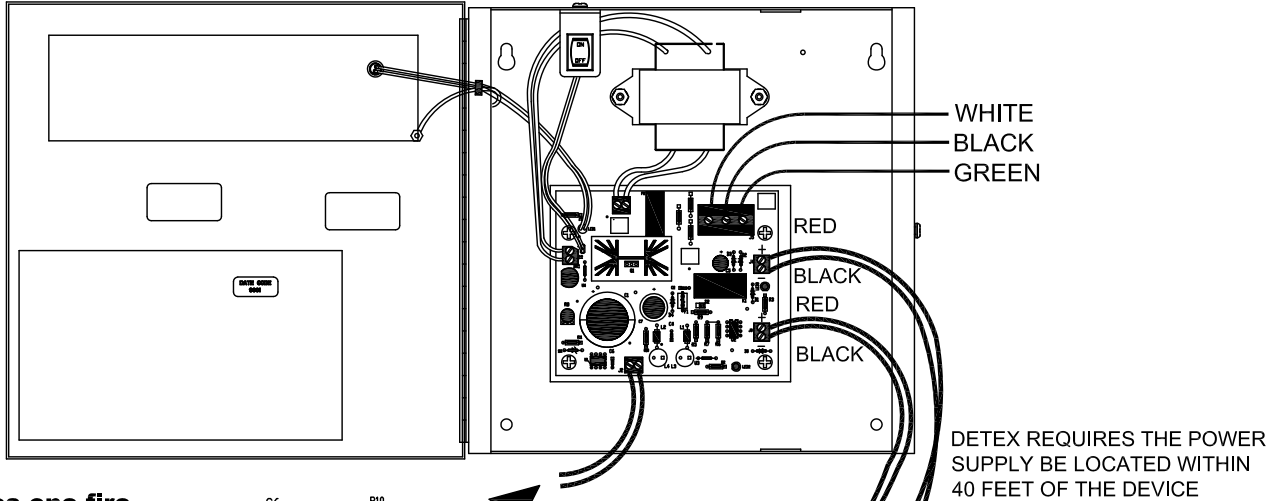


ELECTRICAL OPTIONS

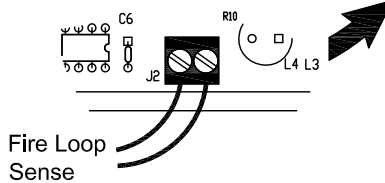
REQUIRES DETEX POWER SUPPLY

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



Detex requires one fire alarm relay per power supply. Closed Fire Alarm Loop (must be supplied for power output)



To Exit Device Door #2 (if req'd)

To Exit Device Door #1

From (+) terminal to pin #1 on exit device

From (-) terminal to pin #2 on exit device

RED/BLK WIRES TO 24 VOLT

BLK
RED

BLK
RED

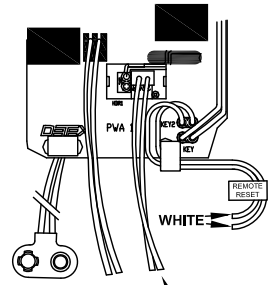
FACTORY INSTALLED JUMPER

To disable the low-battery indication, slide the Dis Lo Bat switch to 'ON'

9V Alkaline Battery

Red wires to internal solenoid DO NOT ADD POWER!

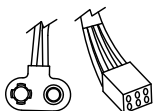
(PC BOARD ASSEMBLY INSIDE DELAYED EGRESS DEVICE)



NOTE:

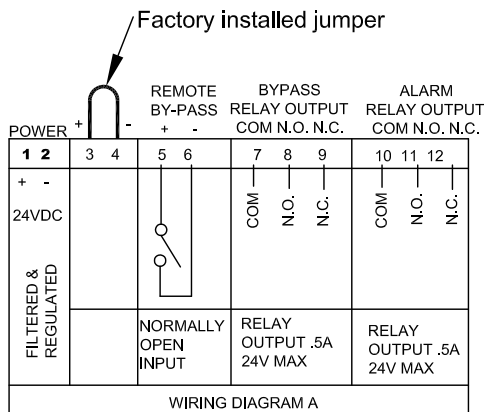
Mortise devices ONLY (PVA p/n 104576) will have this additional plug-in connector

NOTE: Surface Vertical Rod & Concealed Vertical Rod device will have battery plug-in & 6 pin plug in place of battery plug-in & 2 red wires



RIM EE BOARD SHOWN ELECTRICAL OPTIONS

L9= Less 9V battery
SI= Status Indicator
SA= Silent Arming



**POWER REQUIREMENT:
.5 AMPS @ 24 VDC**

The key cylinder arming switch must be set to "OFF". To prevent the alarm from sounding during installation, attach battery AFTER main power is applied.

Delayed Egress Device requires a connection to the Fire Alarm System. The fire alarm connection needs to be made **Externally** at the Power Supply. During a fire alarm condition the delayed egress will be deactivated.

MAIN POWER CONNECTION: (1 AND 2)
See Power Supply instructions

DETEX REQUIRES USING THE FIRE ALARM CONNECTION IN THE POWER SUPPLY:
CLOSED connection is provided from the fire alarm system when not in-alarm and OPEN when in-alarm. See power supply instructions for details.

REMOTE BY-PASS: (5 AND 6)
Connect normally open (N.O.) contact. When the contact is closed momentarily, this will allow the door to open without the alarm sounding. The unit will re-arm in 15 seconds after the **door is closed**.

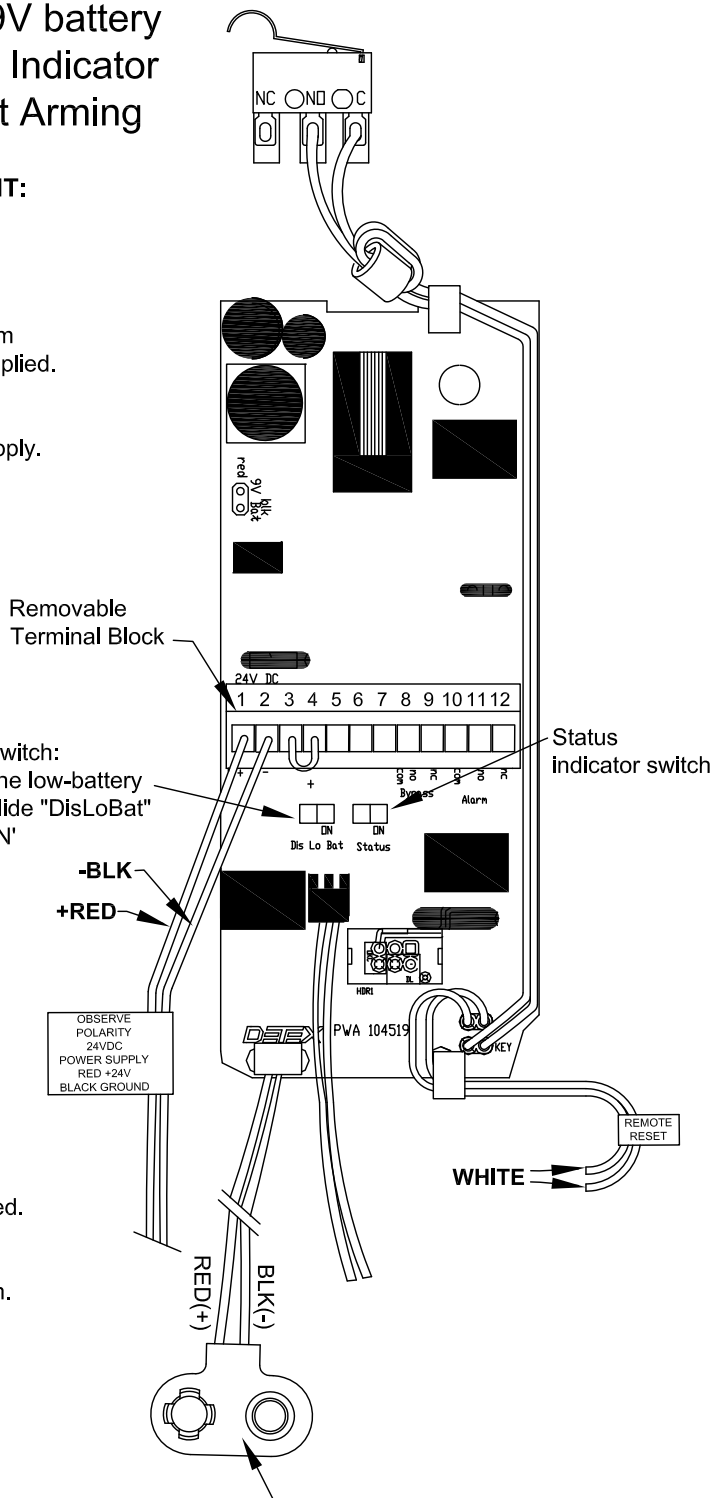
BY-PASS RELAY: (7,8 AND 9) DRY contact output. The BY-PASS relay is energized when the unit is disarmed by the KEY or REMOTE BY-PASS to indicate to a remote indicator that the door is not armed.

ALARM RELAY: (10, 11 AND 12) DRY contact output. The ALARM relay is energized when the unit is sounding its alarm to indicate to a remote indicator that an unauthorized exit has been attempted.

OUTSIDE KEY CONTROL:
If the OKC option is used, the outside key bypasses and rearms the alarm.

STATUS INDICATOR (SLIDE SWITCH):
ON: Green LED blinks every three seconds when the unit is disarmed.
Red LED blinks every three seconds when the unit is armed.
OFF: No status indication

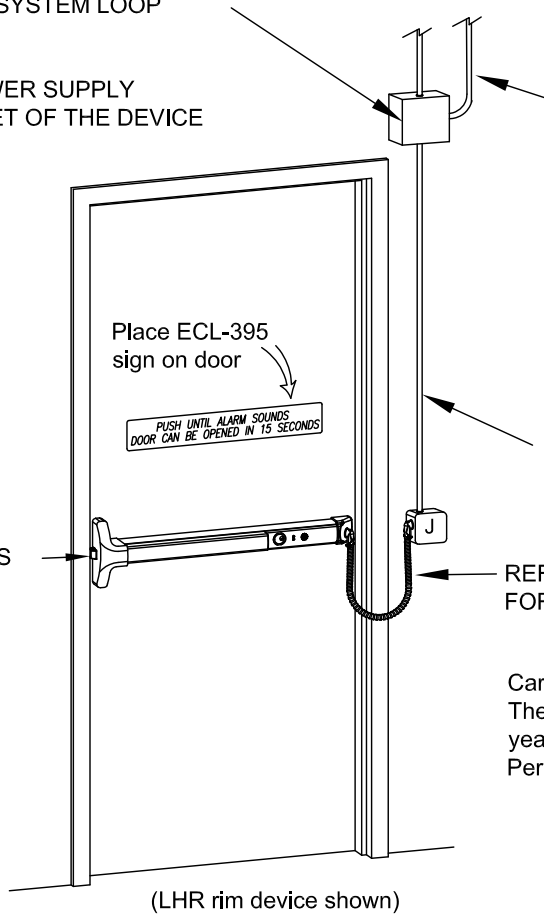
REMOTE RESET (WHITE WIRES):
Connect normally open (N.O.) contact. When the contact is closed momentarily, this will allow alarm reset or the door to open without alarm sounding. The unit will arm in 15 seconds (default) after the door is closed.



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



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

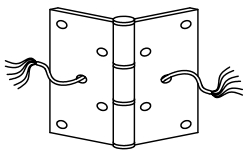
REQUIREMENTS:
MIN. 22 GA STRANDED WIRE FOR SIGNALING
MIN. 18 GA STRANDED WIRE FOR POWER

REFER TO WIRING & FIRE ALARM DIAGRAMS FOR WIRING INSTRUCTIONS

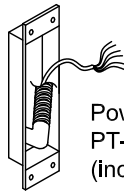
Care and Maintenance:

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

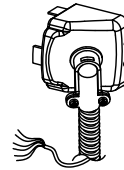
HARDWIRE TRANSFER OPTIONS



Electric Hinge
p/n: EWH8-626

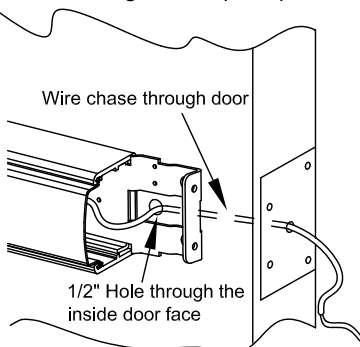


Power Transfer p/n:
PT-5 or PT-56C
(includes cable)

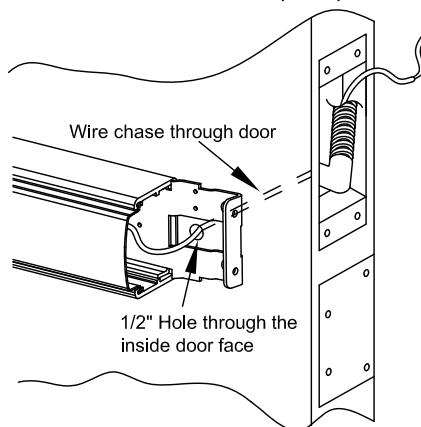


Flex Conduit/End Cap Kit
p/n: FC3EC1 (EC1 shown)
(specify finish when ordering)

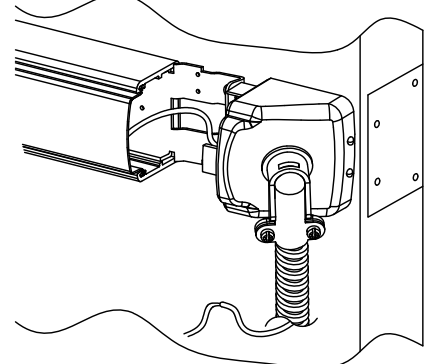
Electric Hinge Endcap Prep



Power Transfer Endcap Prep

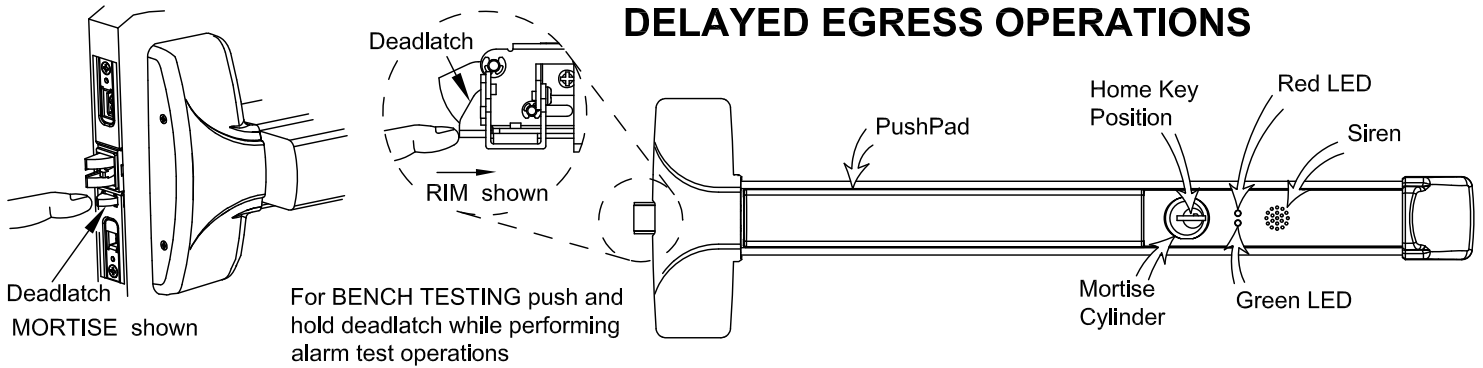


Flex Conduit Endcap Prep (EC1 shown)



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

DELAYED EGRESS OPERATIONS

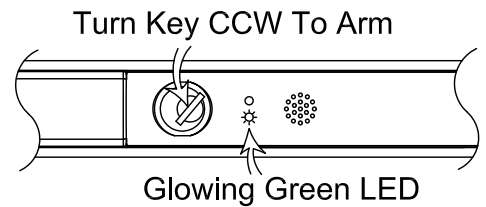


ARMING AND AUTHORIZED EXIT

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 the arming delay. After a 15 second (default) arming period, alarm issues three quick beeps and LED goes off, indicating that the unit is armed.

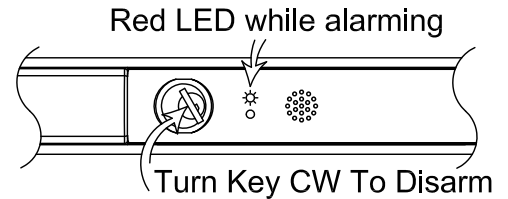
DISARMING

Insert key, turn CW to a stop. Green LED will blink twice to indicate the unit is disarmed.



EXITING UNDER ALARM

To exit, push and maintain pressure on the pushpad. After a one-second delay, (nuisance delay) LED flashes RED and alarm pulses on and off for 15 seconds. After 15 seconds, alarm issues short and long pulses to indicate that one 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.



NUISANCE DELAY

When pushpad is depressed for less than 1 second, alarm will emit a single pulse but will not start delay function.

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 3 & 4 terminals
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 - status ON

BATTERY BACKUP FOR ALARM (configurable)

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 the Dis Lo Bat switch to 'ON'. See page 9 for location.

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 when power is applied:	Turn key clockwise to OFF position.
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(+) & 2(-).</p> <p>Confirm closed fire loop connection on power supply.</p> <p>Confirm cable is plugged in properly.</p> <p>Confirm the mortise cylinder is functioning correctly.</p> <p>For RIM: Confirm the 2 pin connector on the latch end coming from the pushpad switch is plugged in properly.</p> <p>For MORTISE: Confirm the 2 pin connector from the pushpad is plugged into the fillerplate PWA properly.</p>
No delayed egress:	<p>Confirm closed fire loop connection on power supply.</p> <p>Confirm the 2-pin header with the two red wires are plugged into the delayed egress main board.</p> <p>Confirm 24VDC power on the delayed egress device main board terminals 1&2.</p>
Both red and green lights on:	Factory installed jumper removed from terminals 3 and 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.