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INSTALLATION INSTRUCTIONS FOR THE EAX-500 EXIT ALARM (EAX-500 / 500W / 500SK)

The Detex EAX-500 is designed for applications that require an alarmed exit device on secured doors. The alarm, with approximately 100dB, will sound when someone attempts an unauthorized exit. The EAX-500, with its smaller size makes it the choice for quick and easy installations on emergency exit and restricted doors.

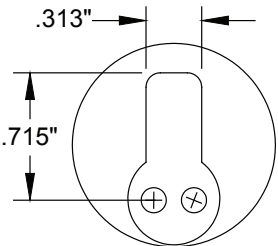
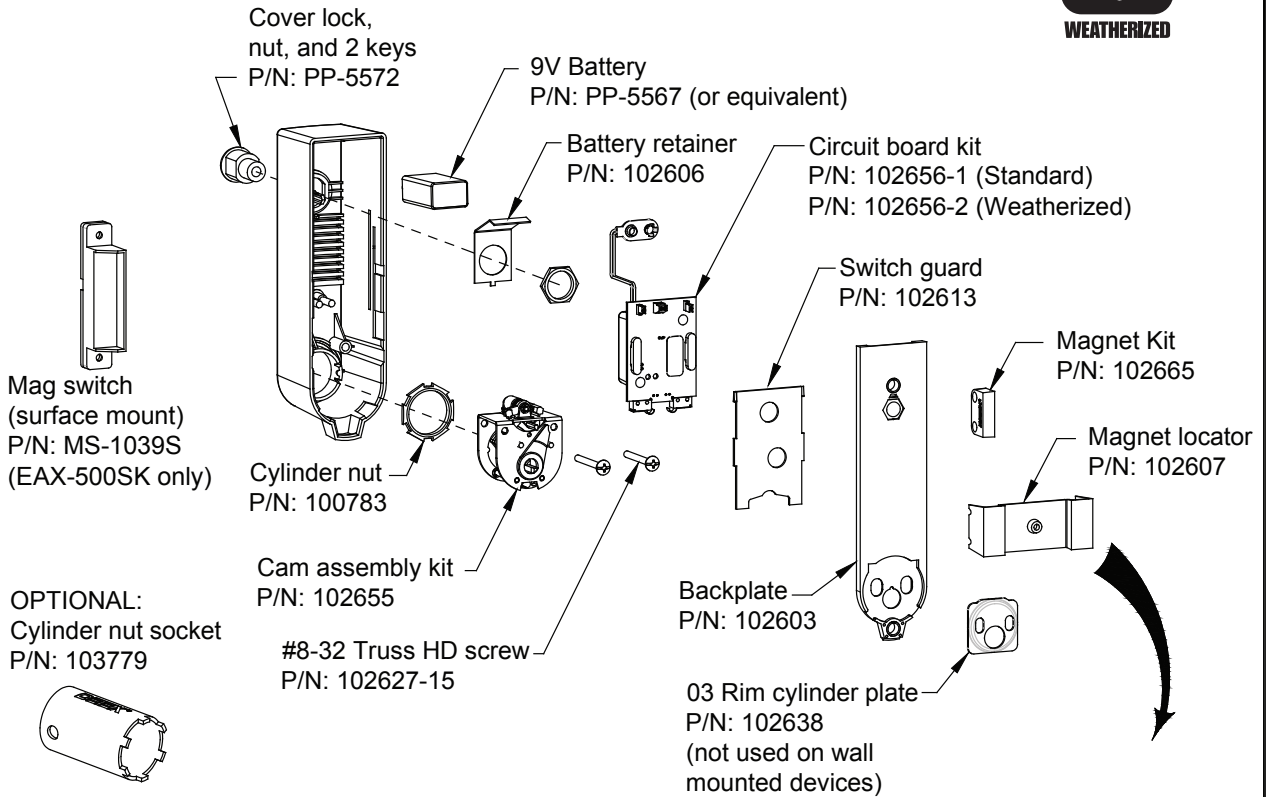
U.S. PATENT NUMBERS:

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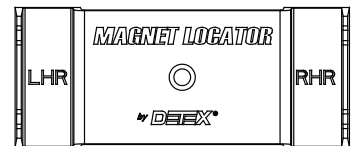
Drawing # 102600

Parts breakdown depiction (Mortise cylinder required)



Mortise Cylinder with standard Yale cam required

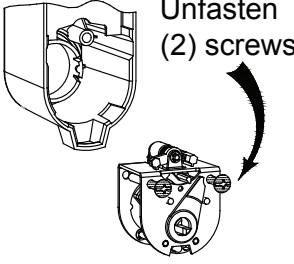
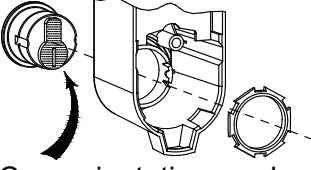
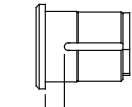
Hardware Kit P/N: 102633 (includes Keystop P/N: 102688)



Locate this component for Step 6

Device will vary based on configuration and order options.

STEPS 1-5: PREP DEVICE

1 Remove cam assembly from cover	2 Install mortise cylinder with cylinder nut provided NOTE: For "Key Stop", See Step 9
 <p>Unfasten (2) screws</p>	<div style="display: flex; justify-content: space-between;"> <div data-bbox="592 273 998 556"> <p>Mortise cylinder</p>  <p>Cam orientation as shown with key removed</p> </div> <div data-bbox="1015 273 1464 556"> <p>If 7-pin cylinder is used - OBSERVE</p>  <p>Collar required if distance is greater than 5/16". Optional collar can be ordered from Detex (p/n: ECL-1595)</p> </div> </div>

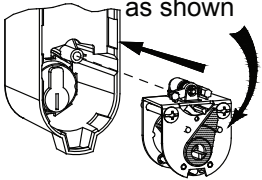
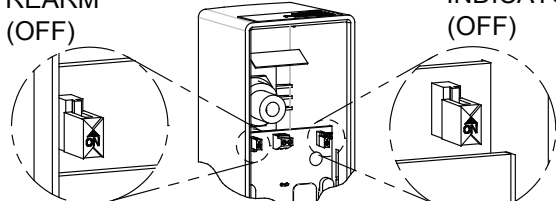
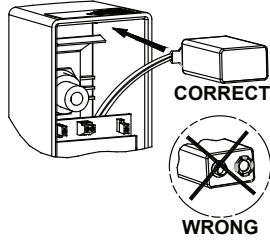
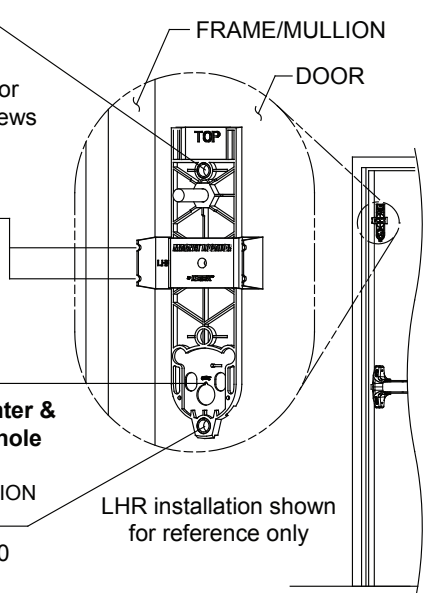
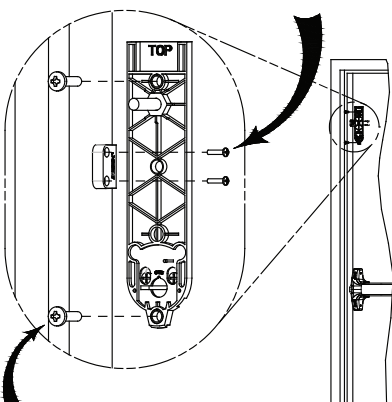
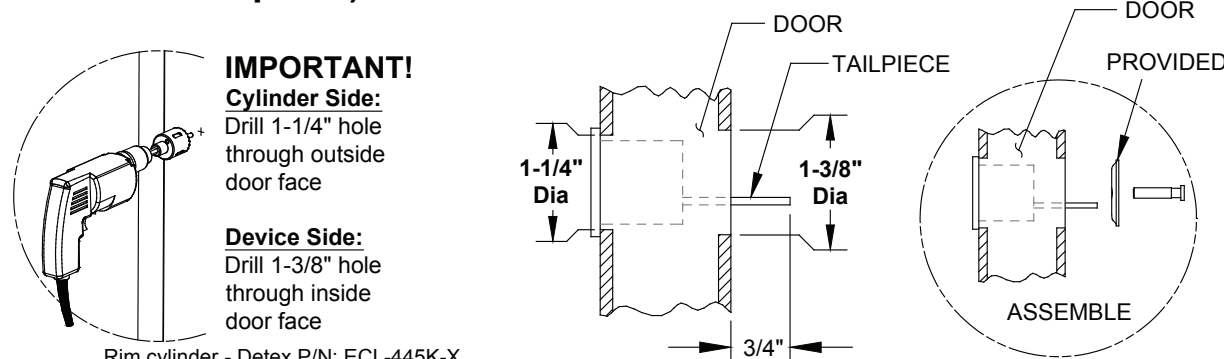
3 Re-install cam assembly	4 Set selector switch functions (See Table A)	5 Connect 9-volt battery and install as shown
 <p>Set OKC cam as shown</p>	<p>AUTO REARM (OFF) (Default settings shown) STATUS INDICATOR (OFF)</p> 	 <p>CORRECT</p> <p>WRONG</p>

Table A: Selector Switch Functions (*Default settings; **Will shorten battery life)		
STATUS INDICATOR	OFF*	No indication that device is armed or disarmed.
	ON	ARMED - red LED blinks approximately every 3 seconds.** DISARMED - green LED blinks approximately every 3 seconds.**
AUTO REARM	OFF*	Key required to reset the alarm after it has been activated. Extended Bypass (see OPERATIONS page)
	ON	Alarm will automatically rearm 2 minutes after alarm has been activated and door closed. Custom settings can be programmed by DETEX. Non-Extended (Timed) Bypass (see OPERATIONS page)

STEP 6: For all models except SK
DOOR PREP & BACKPLATE / MAGNET MOUNTING

<p>Mark/drill backplate and magnet holes on door and frame/mullion</p>	<p>Install magnet, backplate and cover</p>
<p>NOTE: Remove locator and backplate prior to drilling mounting holes</p> <p>Backplate Drill #7 for #1/4-20 machine screws Drill 7/32" or 3/16" for #14 sheetmetal screws</p> <p>Magnet Drill #43 for #4-40 machine screws Drill #44 for #4 sheetmetal screws</p> <p>OKC Where applicable, mark TOP hole center & drill 1/4" dia. pilot hole through door See OKC INSTALLATION</p> <p>Backplate Drill #7 for #1/4-20 machine screws Drill 7/32" or 3/16" for #14 sheetmetal screws</p> 	<p>Install magnet with (2) #4-40 or #4 screws</p>  <p>Install backplate with (2) #1/4-20 or #14 screws</p> <p>Skip to Step 8 to continue non SK installation</p>

Outside Key Control (OKC) Installation (if required)
(all models except SK)



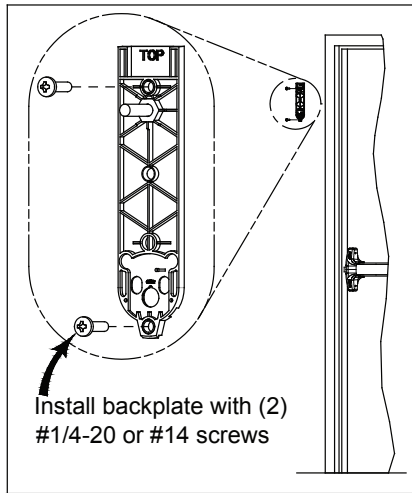
IMPORTANT!

Cylinder Side:
 Drill 1-1/4" hole through outside door face

Device Side:
 Drill 1-3/8" hole through inside door face

Rim cylinder - Detex P/N: ECL-445K-X

STEP 6: For SK models BACKPLATE MOUNTING

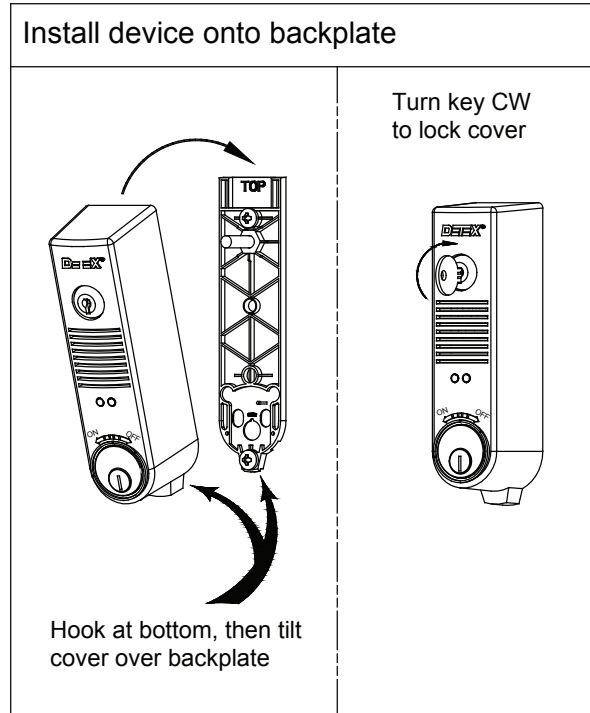


STEP 7: Multi-door & SK function wiring connection (if required)

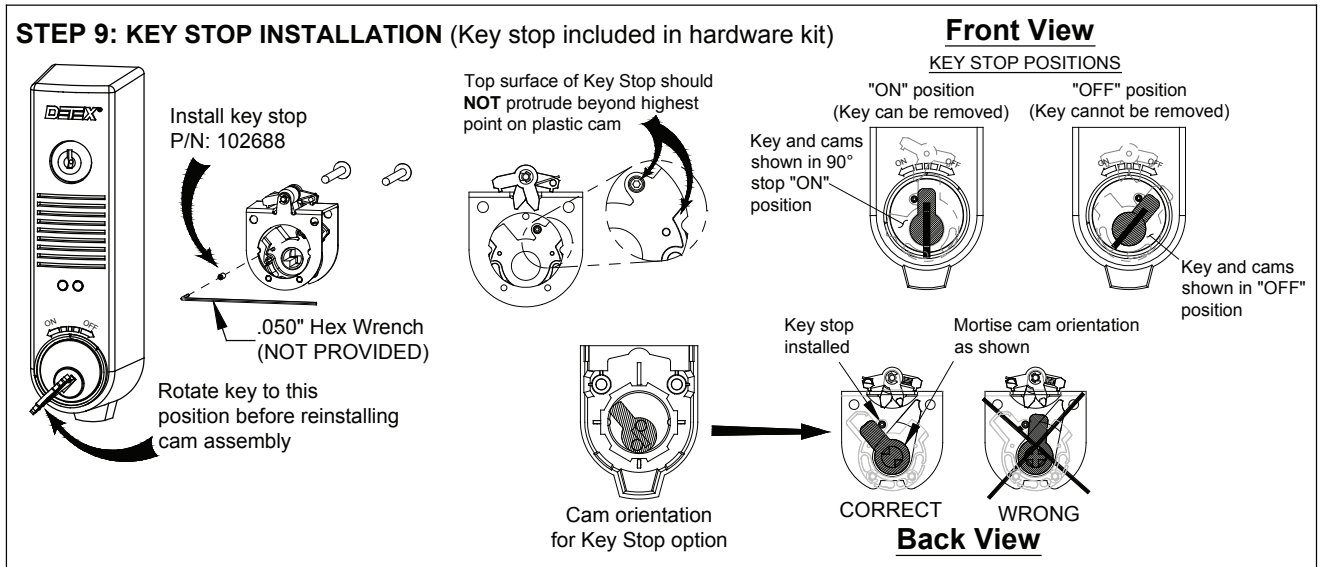
(Recommended installation)

<p>7a Flex walls outward to remove guard & board</p>	<p>7b Recommended hole size</p>	<p>7c Reassembly: Fitting or nut NOT included P/N: PP-5107</p>
<p>7d Screw wires to (P1) terminal block (18ga Max wire dia) (not available on weatherized)</p> <p>Disconnect power & cut (JP1) jumper (see note 3 below)</p> <p>NOTES:</p> <ol style="list-style-type: none"> 1. If wire runs longer than 10 feet, must use twisted pair 2. 1/16" slotted jeweler screwdriver required. 3. If internal contact is used DO NOT cut jumper (JP1) 	<p>Diagram shown typical for two door magnetic switches: MS-1039S & MS-1059S wire in series. MS-2049 (Red wire not used)</p> <p>Weatherized not available for SK installations</p>	

STEP 8: INSTALL DEVICE



STEP 9: KEY STOP INSTALLATION (Key stop included in hardware kit)



OPERATIONS

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 vertical position (home position).
4. Key function: counter clockwise (CCW) = Armed; clockwise (CW) = Disarmed
5. Outside Key Control (OKC)

The bottom left hand switch is only used when the outside key control function is used. This allows entry from outside. It bypasses the alarm & rearms in 15 seconds after the door closes. The OKC will not arm or completely disarm the alarm as the inside key does. When in Extended Bypass mode (Auto Rearm switch OFF) the unit will not rearm until 15 seconds after the door closes. The door can remain open if desired. When in the Timed Bypass mode (Auto Rearm switch ON) the unit will arm after 15 seconds & go into alarm if the door remains open.

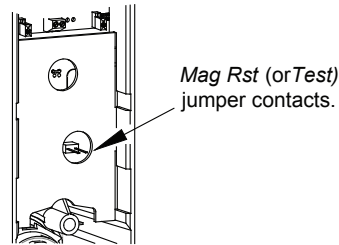
6. If re-handing is necessary, momentarily short across the *Mag Rst* (or *Test*) jumper contacts, remove battery and follow the handing steps below.

MAGNET HANDING PROCEDURE: Magnet handing is where the device determines if the left, right or an external reed switch will be used to indicate if the door is opened or closed. When the battery is initially installed, the device simultaneously flashes the LEDs and chirps the siren a total of five times.

This indicates that the device is in the magnet handing process:

- Step 1: Turn the key CW to the 'OFF' position and connect the battery.
- Step 2: With the door open, install the device on the door.
- Step 3: Turn the key CCW to the 'ON' position. The red LED blinks twice.
- Step 4: Close the door or bring the external magnet into position on the desired side of the device. The siren chirps and the LED flashes on the selected side of the device (red LED flashes for the left side or external; green LED flashes for right side).

The device will now operate normally, and the selected reed switch side is stored in memory so changing the battery does not require re-handing.



RE-HANDING: If re-handing is necessary, remove the unit from the door and momentarily short the *Mag Rst* (or *Test*) jumper contacts, remove the battery and repeat the steps above.

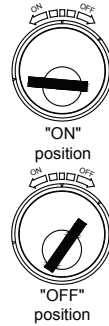
OPERATIONS: To arm the system, close the door and turn the key CCW to the 'ON' position. The red LED will blink twice followed by the green LED flashing for the remainder of the arming time (default 15 seconds). After the arming time, the green light will turn off and the siren chirps/ red LED flashes three times. The device is now armed and if the door is opened the alarm will sound and the red LED turns on.

DISARMING: To turn off the alarm or disarm the system, turn the key CW to the 2 o'clock position.

AUTO REARM: With the Auto Rearm switch 'ON', alarm shuts off two minutes after closing the door.

EXTENDED/NON-EXTENDED (TIMED) BYPASS: With the Auto Rearm switch in the 'OFF' position, the unit operates in the extended bypass mode. This mode prevents the unit from arming while the door is open. Conversely, with the Auto Rearm switch in the 'ON' position, the unit operates in the non-extended (timed) bypass mode. This mode allows the unit to arm regardless of the doors position. If the door is not closed at the end of the arming delay, the unit will go into alarm.

Key orientation
without Key Stop
installed



Key orientation
with Key Stop
installed



OPERATIONS (con't)

LOW BATTERY ALERT: Simultaneous siren chirps and red LED flashes occur at 45 second intervals when the battery reaches approximately 7 volts. The LV Opt jumper must be in place for this feature (default).

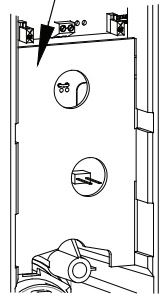
STATUS INDICATOR: With the Status Indicator switch 'ON', red LED flashes every three seconds when armed; green LED flashes every three seconds when disarmed.

AUTO REARM: With the Auto Rearm switch 'ON', alarm shuts off two minutes after closing the door.

ACTIVATE / DEACTIVATE SILENT ARMING: *NOTE: Device must be magnet handed.*

1. Turn the key CW to disarm and remove the unit from the door if installed.
2. Remove the battery.
3. Turn the key CCW to the 'ON' position. Hold the OKC switch lever (see Step 3) closed and install the battery. The unit chirps twice when silent arming is turned 'ON', and chirps once when silent arming is turned 'OFF'.
4. Release the OKC lever and turn the key CW. Reinstall the unit on the door.

LV Opt jumper
behind cover
(under AUTO
REARM switch)



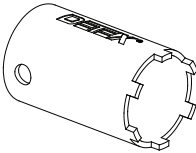
TROUBLESHOOTING

Problem	Probable Cause	Action
Device is not powering up	1) Battery not properly installed. 2) Cylinder microswitch lever broken. 3) Cylinder installed incorrectly.	1) Remove battery and firmly reinstall. 2) Microswitch needs to be replaced. Remove PCB and return to Detex repair. 3) Check cylinder installation. Make sure key is turned counter-clockwise all the way to ON.
Device not arming. Auto Rearm -OFF	1) Magnet not aligned correctly. 2) Battery is dead.	1) Use magnet locator to install magnet. See magnet handing. 2) Replace battery.
Chirp every 45 seconds	Low Battery.	Install new battery.
No status indicator	Status indicator is OFF.	Slide Status Indicator slide switch to the ON position.
Unit is not Auto Rearming	Auto Rearm is OFF.	Slide Auto Rearm slide switch to the ON position.
External magnet not working	1) Device is not set for external magnet. 2) MS-2049 not wired correctly.	Slide MagRst to ON then OFF, listen for three chirps. Disconnect battery, turn JP1 to the OFF position, install battery. 2) Use MS-2049 black and white wires to green connector.
One side does not work.	Unit is handed on the wrong side.	Rehanding needs to occur.
The alarm sounds after the time delay	1) Door not closed. 2) magnet not aligned.	1) Close door and rearm door. 2) Use magnet locator to install magnet. Shim as needed.
Chirps 5 times when battery is plugged in.	1) Device needs to be handed.	See magnet handing procedure

Technical Support 1-800-729-3839

Optional Accessories

Cylinder Nut Tool
P/N: 103779



Inswing Door Kit
P/N: 102644

