

Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130 (830)629-2900 1-800-729-3839 FAX (830)620-6711  
 E-Mail: detex@detex.com Internet: www.detex.com

**INSTALLATION INSTRUCTIONS FOR THE EA-500 EXIT ALARM (POLYMER CASE)**  
**THIS PRODUCT IS NOT FOR USE ON FIRE RATED DOORS.**

**NOTE TO THE INSTALLER.**

These instructions contain information required by the owner. Please deliver them to the owner when the installation is complete.

Install the EA-500 on the latch side of an out-swinging door.

As-shipped, the EA-500 is assembled for installation on the right-hand side of the door (FIG. 2) To install on the left-hand side, (FIG 1) see the instruction in column 3, FIG. 5. Figure 3 shows a door using an EA-500 unit with a MS-2049SI (Inswinging door) or a MS-2049S (Outswinging door).

**OPTIONAL FEATURES**

- RESET/REARM\***
- REMOTE RELAY \***
- REMOTE BY-PASS/OUTSIDE KEY CONTROL**
- MULTI-DOOR MONITORING**

If these features (\*) are to be installed, contact Customer Service at 1-800-729-3839 for instructions.

**TIME DELAY ADJUSTMENT**  
 This feature is explained later..

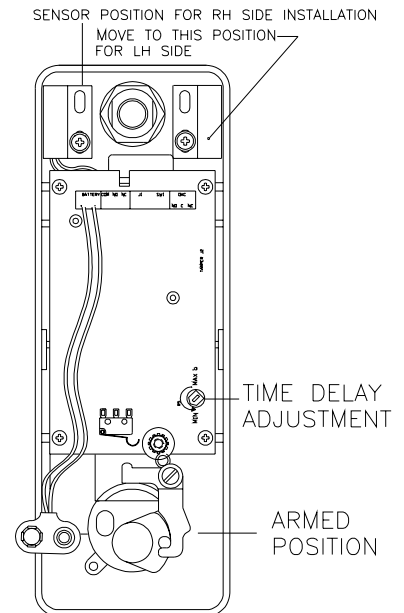
**TOOLS AND SUPPLIES**

- Screwdriver, blade type, 5/16"
- Screwdriver, blade type, 1/8"
- Screwdriver, Phillips, #1
- Linesman's pliers (to cut tailpiece)
- Tape for securing the template
- Drill motor and bits
- Hammer
- Center punch
- Pencil

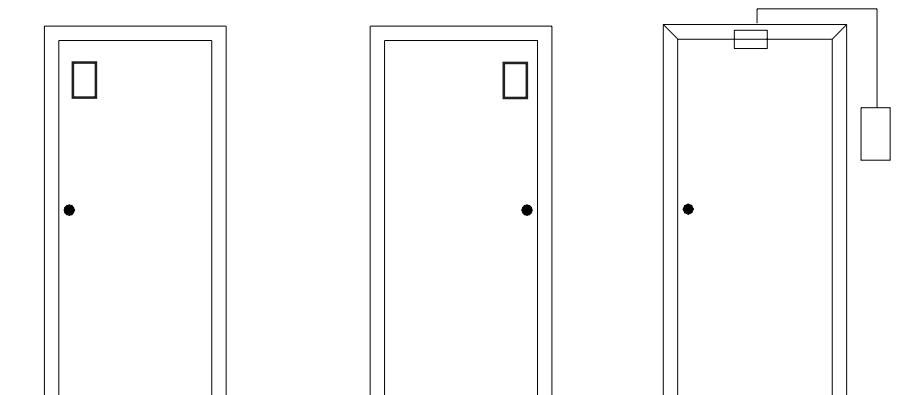
Use the faceplate lock key to unlock the faceplate. Turn it about eight turns CCW until the cylinder releases the internal locking stud. Rap the bottom edge upward to release it from the internal retainer. Pull the top of the faceplate away from the backbox.

**NOTE**

For installation on the left-hand side of the door, change the position of the magnetic sensor as follows.



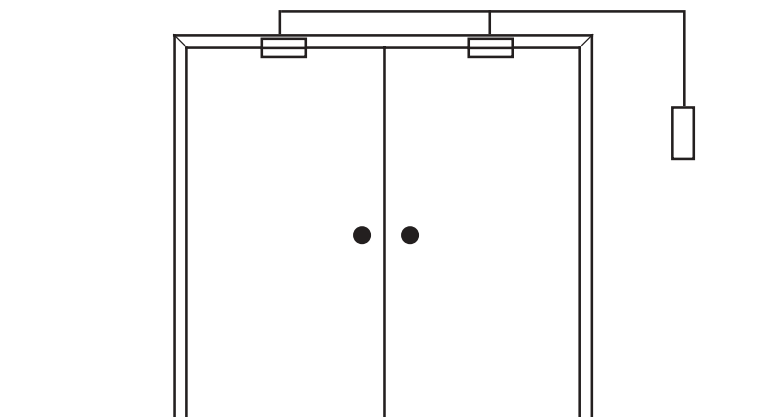
**FIGURE 5**



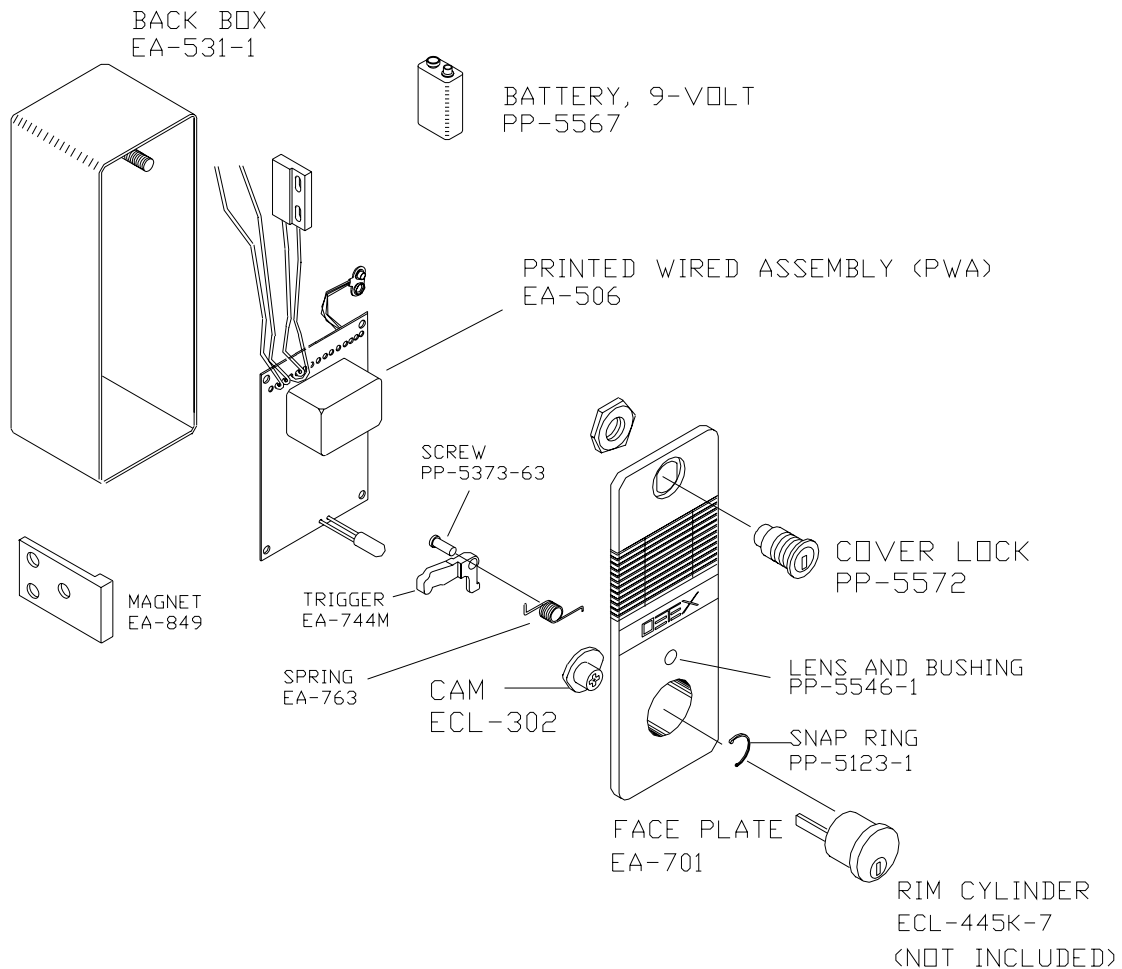
**FIGURE 1**

**FIGURE 2**

**FIGURE 3**



**FIGURE 4.- MONITORING TWO DOORS WITH ONE ALARM**  
 SEE PAGE 3 FIG. 11 FOR WIRING



**FIGURE 6.- ILLUSTRATED PARTS BREAKDOWN**

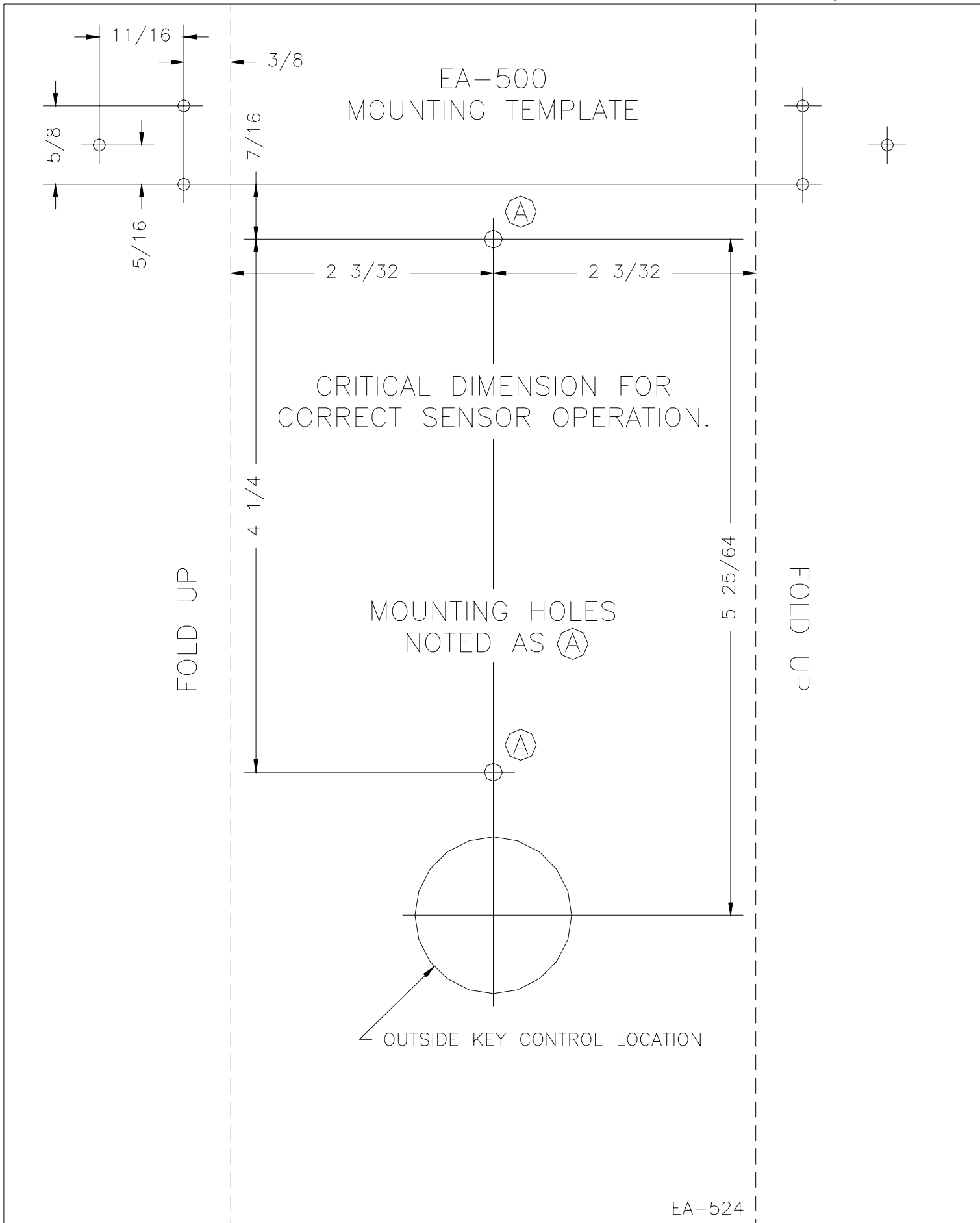
| <b>MAINTENANCE</b>  | <b>FUNCTIONAL VERIFICATION</b>   |   |
|---|--|---|
| <p>The EA-500 requires very little care but, to ensure that the system continues to provide the intended security, a maintenance program should be established, as follows:</p> <p><b>KEYS</b></p> <p>Two sets of keys are required; one to arm the system and one to lock the faceplate. Access to these keys should be limited to responsible people.</p> | <p>Periodically, weekly or more often as circumstances require, verify that the system is working properly by opening the door with the system armed. Unit should sound.</p> <p><b>BATTERY CHECK</b></p> <p>The EA-500 contains a low-battery indicator. As long as the battery is OK and the unit is armed, the LED on the faceplate will blink every 45 seconds. If the unit is armed and the voltage drops to about 7.5 volts, indicating a low battery, the unit will blink every 45 seconds and issue</p> | <p>an audible chirp. If the unit is not armed and the voltage drops to about 7.5 volts, the unit will beep every 45 seconds. To replace the battery, disarm the unit, insert the faceplate lock key in the cylinder and turn it COUNTER-CLOCKWISE about eight turns until it disengages the internal locking stud. With the palm of the hand, rap the bottom of the faceplate upward to disengage the internal retainer. The recommended battery is ALKALINE.</p> |

**WARRANTY**

The Detex security hardware product you have purchased is warranted to be free of defects in material and workmanship when properly installed, used and maintained according to instructions. We will, for a period of **one (1)** year from the date of purchase, repair or replace any part which, upon our examination, proves to be defective under normal use. This does not apply to batteries or to damage from battery leakage. 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 DEVICE.**

NOTE: DIMENSIONS MAY NOT BE ACCURATE WHEN PRINTING FROM WEBSITE  
PLEASE CONFIRM DIMENSIONS WITH RULER BEFORE USE

May 2, 2001



# TAPE TO DOOR FOR CONVENIENCE

## DOOR AND FRAME PREPARATION

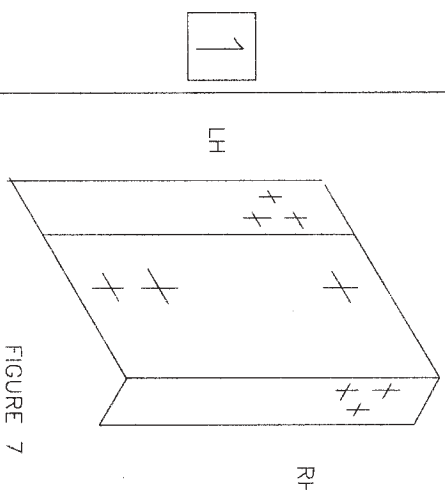


FIGURE 7

SEE TEMPLATE FOR IMPORTANT INFORMATION

INSTALL THE EA-500 ON THE LATCH SIDE OF AN OUTSWINGING DOOR.

FOLD THE TEMPLATE AS DIRECTED ON THE TEMPLATE. POSITION IT ON THE DOOR AND MARK THE HOLE CENTERS ON THE DOOR AND FRAME.  
DRILL TWO HOLES IN THE DOOR FOR #10 SCREWS, #27(0.144) AND THREE IN THE FRAME FOR #4 SCREWS, #39 (0.099)

IF THE OKC IS TO BE INSTALLED, BORE A 1-1/4" DIAMETER HOLE THROUGH THE DOOR.

INSTALL THE MAGNET ON THE DOOR FRAME

## BOX AND FACEPLATE INSTALLATION

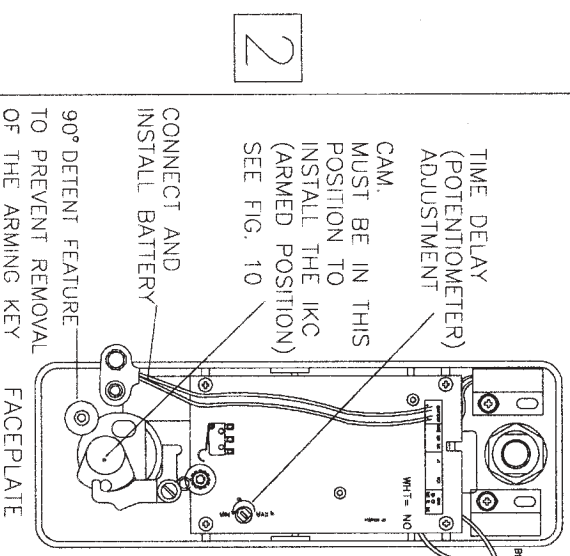
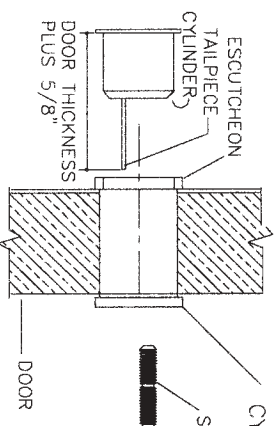


FIGURE 8

CAM MUST BE IN THIS POSITION TO ENGAGE THE TAILPIECE OF THE OKC RIM CYLINDER. IF THE OKC IS TO BE INSTALLED, SEE FIGURE 9, CLOSE AND LOCK THE FACEPLATE



CYLINDER CONNECTOR PLATE  
SCREW (2) CUT OR BREAK AS REQUIRED

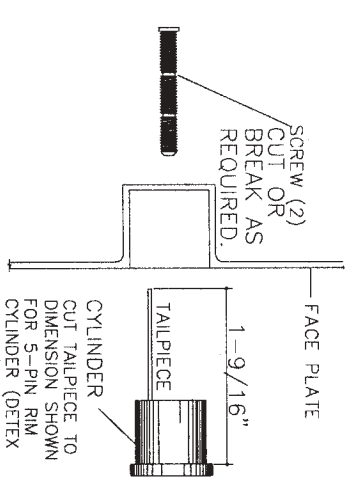
INSTALL BACKBOX  
GUIDE OKC TAILPIECE INTO CROSS  
SLOTTED CAM. SEE FIG. 8

FIGURE 9.--OKC INSTALLATION (OPTIONAL)

NOTE:  
INSTALL OKC CYLINDER  
REMOVE KEY

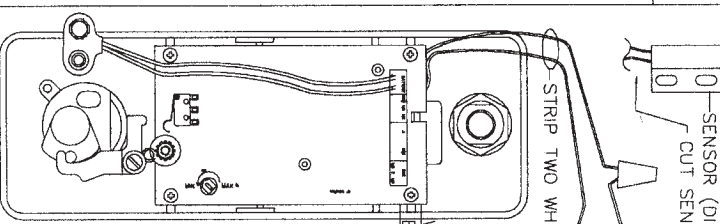
A 5 OR 6-PIN RIM CYLINDER CAN BE USED  
DETEX 5-PIN (P/N ECL-445K) AND SWITCH (DETEX P/N EA-523)

ACAD DWG EA-011



REMOVE THE KEY FROM THE CYLINDER  
INSTALL THE CYLINDER IN THE CAVITY AND ENGAGE THE TAILPIECE IN THE CAM SHAFT (SEE FIG 8 FACE PLATE FOR CAM POSITION). ONE HOLE FOR THE MOUNTING SCREW IS COVERED BY THE CAM. INSTALL A SCREW IN THE OPEN HOLE FIRST.  
INSERT THE KEY AND TURN IT CW TO EXPOSE THE SECOND HOLE. MOVE THE SPRING LOADED LEVER ARM OUT OF THE WAY AND INSTALL THE SECOND SCREW.  
TURN THE KEY IN BOTH DIRECTIONS. THERE MUST NOT BE ANY FRICTION OR BINDING.

FIGURE 10.-- IKC INSTALLATION



ACAD DWG EA-006

WIRING FOR EXTERNAL MAGNETIC DOOR SWITCHES (MS-2049)

FIGURE 11

NOTE: EA-500 MOUNTS ON WALL (SEE PG. 1 FIG. 4)

OPERATION  
INSERT THE KEY FOR INTERNAL CONTROL IN THE CYLINDER AND TURN IT CW UNTIL A STOP IS REACHED. REMOVE THE KEY. VERIFY THAT THE LED ON THE FACEPLATE IS ON. AFTER A SHORT DELAY, THE LED WILL GO OUT. THE UNIT IS NOW ARMED. THEREAFTER, THE LED WILL FLASH ABOUT EVERY 45 SECONDS.

TIME DELAY  
(AMOUNT OF TIME TO EXIT AND CLOSE THE DOOR BEFORE THE ALARM SOUNDS.) THE TIME DELAY IS PRESET AT THE FACTORY FOR ABOUT 22 SECONDS. IF MORE TIME (OR LESS) IS REQUIRED, ADJUST THE TIME-DELAY POTENTIOMETER SHOWN IN FIG. 8 (FACEPLATE)

### NOTE:

DO NOT OVERTIGHTEN THE LOCK  
The key can be removed at any one of four positions (12, 3, 6 & 9 o'clock).  
The key should be backed off to the nearest quarter point as soon as friction is felt. Install warning sign.  
TEST INSTALLATION

TEST INSTALLATION

### TROUBLESHOOTING

- 1) COVER KEY DOES NOT TURN
  - A) CONFIRM KEY # AND COVER LOCK CYLINDER # ARE THE SAME. ex: DT013
  - B) SPRAY WD40 OR ANY LIGHT LUBRICANT INTO CYLINDER OPENING AND SLIDE KEY IN AND OUT. LET SIT FOR APPROXIMATELY 2 TO 3 MINUTES. RETRY.
- 2) IKC AND/OR OKC KEY HARD TO TURN
  - A) CHECK DIMENSIONS ON CYLINDER CUT PG. 3 FIGS. 9 & 10
- 3) CAN'T REMOVE IKC/OKC KEY WITH UNIT ARMED
  - A) CHECK CAM ALIGNMENT (KEY REMOVED) PG. 3 FIG. 8
- 4) UNIT SOUNDS WITH DOOR SECURED
  - A) CONFIRM EXTERNAL MAGNET INSTALLATION
  - B) CONFIRM POSITION OF INTERNAL SENSOR RH/LH SEE PG. 3 FIG. 8 FACEPLATE
  - C) CONFIRM GAP BETWEEN EXTERNAL MAGNET AND SIDE OF BACKBOX (1/4" MAXIMUM) SHIM AS REQUIRED
  - D) ARE THE INTERNAL SENSOR AND EXTERNAL MAGNET PROPERLY ALIGNED?
  - E) CHECK MAGNET STRENGTH. USING A SMALL SCREW DRIVER TOUCH MAGNET. MAGNET SHOULD HOLD SCREW DRIVER.
  - F) IF EXTERNAL DOOR CONTACTS ARE BEING USED, CHECK WIRING. UNIT REQUIRES CLOSE LOOP CIRCUIT -- DOOR SECURED. SEE PG. 3 FIG. 11
  - G) CONTACT DETEX
- 5) UNIT DOES NOT SOUND -- "LED" OK
  - A) ARM UNIT. TURN KEY MAX. CCW
  - B) WAIT FOR "LED" TO TURN OFF
  - C) OPEN DOOR OR REMOVE FACEPLATE FROM BACKBOX. UNIT SHOULD SOUND. IF UNIT DOES NOT SOUND -- REPLACE BATTERY. USE ALKALINE ONLY.
  - E) CONTACT DETEX
- 6) UNIT DOES NOT SOUND & NO "LED"
  - A) CONFIRM ALKALINE BATTERY IS BEING USED.
  - B) CONFIRM INSTALLATION OF IKC CYLINDER SEE PG. 3 FIG. 8 FACEPLATE (KEY REMOVED). "TRIGGER ARM" MOVES FREELY MUST PUSH & RELEASE SWITCH LEVER. SW. DEPRESSED/OPENED UNIT ARMED
  - D) CONFIRM INSTALLATION OF OKC CYLINDER SEE PG. 3 FIG. 8 BACKBOX (KEY REMOVED).
  - E) REPLACE BATTERY
  - F) CONTACT DETEX

### PROBLEMS?

Contact Customer Service at  
1-800-729-3839