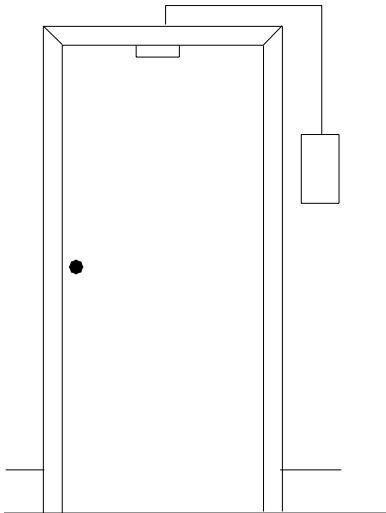


**WARNING:** WHEN PRINTING TEMPLATES FROM THE  
WEB SITE, CHANGE PRINTER SETTINGS TO “PRINT TO  
FULL SIZE” (100%). **DO NOT SCALE TO FIT.**

**INSTALLATION INSTRUCTIONS FOR THE EA-2500 EXIT ALARM (POLYMER CASE)**

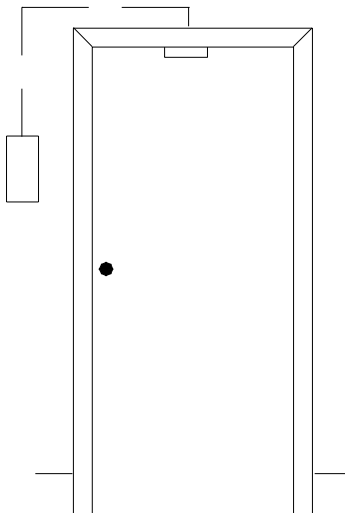
Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130 (830) 629-2900 / 1-800-729-3839 / FAX (830) 620-6711  
 E-Mail: detex@detex.com Internet: www.detex.com

NOTE: The EA-2500 can be installed on either side of the door.



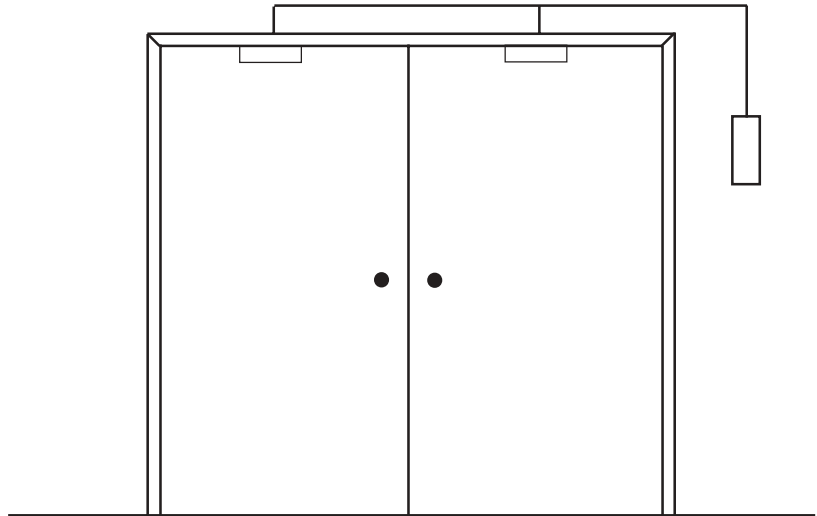
ACAD DWG EA-002

**FIG. 1 SURFACE MOUNT  
SURFACE WIRING**



ACAD DWG EA-002

**FIG. 2 FLUSH MOUNT  
IN-WALL WIRING**



**FIG. 3.- MONITORING TWO DOORS WITH ONE ALARM  
SEE PAGE 5 FOR WIRING**

EQUIVALENT METRIC DIMENSIONS			
ENGLISH	MILLIMETERS	ENGLISH	MILLIMETERS
1/8"	3	7/8"	22
1/4"	6	1"	25
5/16"	8	1-1/4"	32
3/8"	10	1-9/16"	40
1/2"	13	1-3/4"	44
5/8"	16	3-3/4"	95
3/4"	19	8-3/4"	222

E:\PM4\TABLES\METRICS.TBL

**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 TO THE INSTALLER**

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

**FEATURES**

The EA-2500 Exit Alarm includes the following features.

**COMMUNICATIONS TO A REMOTE INDICATING PANEL (RIP)**

When the system is armed and a protected door is opened, a signal is sent to the RIP. (Optional)

**REMOTE BY-PASS**

By installing an optional remote by-pass switch, (Detex part # CS-915A), authorized personnel can enter without setting off the alarm.  
N/O Dry Contact.

**MULTIPLE DOORS**

Several doors can be monitored with one alarm. Wiring for multi-door installations is given on page 5 Figs. 12/13.

**CALL BELL**

This feature (optional), uses a conventional door bell (N/O Dry contact) to trigger the alarm in the EA-2500 (Detex part # EA-803).

**ADJUSTABLE TIME DELAY**

When the system is by-passed by an authorized person, that person has a limited amount of time to exit and close the door before the alarm sounds. The time delay is preset at the factory to approximately 8 seconds (minimum time). If more time is desired, an adjustment is provided in the alarm (See page 5 Fig. 6).

**ALARM BY-PASS (EXTENDED)**

When it is necessary to by-pass the alarm for extended periods of time, such as when deliveries are being made through a protected door, an adjustment is provided in the alarm for this situation as described on page 5 Fig. 6.

**ALARM BY-PASS AUTO-REARM**

With this feature, the unit will sound when the door is opened by unauthorized personnel, stop when the door is closed and automatically rearm the alarm. (See page 5 Fig. 6)

**90 DEGREE DETENT**

To prevent removal of the arming key in the disarmed position, a detent is provided in the hardware kit. (See page 5 Fig. 6)

**MOUNTING SCREWS**

Two types of screw are supplied with the EA-2500; #10-32 machine screws and #10 thread-forming screws. The machine screws are required for installing the flush unit and the thread-forming screws are for the surface unit.

**TOOLS AND SUPPLIES REQUIRED**

Screwdriver, blade type, 5/16"  
Screwdriver, blade type, 1/8"  
Screwdriver, Philips, #1  
Linesman's pliers to cut the cylinder tailpiece.  
Drill motor and bits  
Punch for knockouts  
Hammer  
Pencil  
Hole saw

**OTHER ITEMS REQUIRED**

Rim cylinder, 5, 6 or 7-pin.  
A 5-pin cylinder is available from Detex as part number ECL-445K  
- For 6-pin or 7-pin cylinder, a spacer is required (Detex part # ECL-1595)

Transformer, 12 VAC, 25VA  
Detex part number PP-5152-3  
For international applications at 240 VAC, use  
Detex p/n PP-5452-2

Magnetic switch, Form "C" switch  
Detex p/n MS-2049

**NOTE**

These instructions cover the surface mounted EA-2500S and the flush-mounted unit, EA-2500F. Many of the steps involved in installing this product are common to both units. When a step applies to a specific unit, that information is so noted.

Insert the faceplate lock key in the faceplate lock cylinder and turn it about eight turns counter-clockwise until the cylinder releases the internal locking stud.

The bottom edge of the faceplate is held captive by an internal retainer. Push the bottom edge upward to release it.

**Install the internal key control (IKC)** (See page 5 Fig. 8)

**ARMING**

Turn the IKC key maximum counter-clockwise (Switch Lever released). The "LED" will be turned off. The door may be opened & closed during this time without the unit sounding. Once the "LED" turns back "ON" the unit will sound instantly when opening the door and continue to sound until the unit is re-set with the key.

---

## TROUBLESHOOTING

---

**A) Cover Key does not turn**

- 1) Confirm key# with cover lock cylinder - # should be the same (EX: DT011)
- 2) Spray WD40 or any lite lubricant into cylinder opening and slide key in and out. Let sit for approximately 2-3 minutes - Retry.

**B) IKC hard to turn**

- 1) Check dimensions on cylinder cut (See pg. 5 Fig. 2) 8).
- 2) Confirm you are using correct key.

**C) Can't remove IKC key with unit armed**

- 1) Check CAM alignment - key removed (See pg. 5 Fig. 6).
- 2) Cam mis-aligned - remove cylinder. Align IKC cam as per drawing (see page 5 Fig. 6). Remove key from cylinder - reinstall.

**D) No LED, no sound**

- 1) Check voltage on transformer - should be 12 - 14 VAC. If OK
- 2) Check voltage on white & black wires on Intermediate Power Cable - should be 12 - 14 VAC.
- 3) Check CAM position/ installation of IKC cylinder (see page 5 Fig. 6)
- 4) If "Remote By-Pass Feature" is used, check wiring & switch (N/O Dry Contact).
- 5) Check Circuit Breaker

**E) Unit sounds after delay - door closed/door open**

- 1) Check door contact. Close loop when door secure.
- 2) If monitoring multiple doors, wire switches in series.
- 3) Check door contact wiring to orange and gray wires.
- 4) Unit has Magnet/Switch Tamper feature. When closing unit make sure no wires rest between magnet on back box and tamper switch on PC Board.
- 5) Secure faceplate to back box to close tamper switch circuit.
- 6) Confirm tamper magnet is in place. As you look into back box, magnet on left side (see page 5 Fig. 7).

**F) "LED" OK, but unit does not sound when door is opened**

- 1) With unit armed ("LED" on) remove face - unit should sound. Re-set . Replace faceplate. Piezo/Tamper Switch OK.
- 2) Check for "Open Circuit" between frame and orange and gray wires.
- 3) Disconnect orange and gray wires from door switch. Splice orange and gray wires. Arm unit, when "LED" turns on - unit should not sound, separate orange and gray wires - unit should sound. If OK, door switch is defective. Replace.

**G) Unit emits a chirp approximately every 45 seconds**

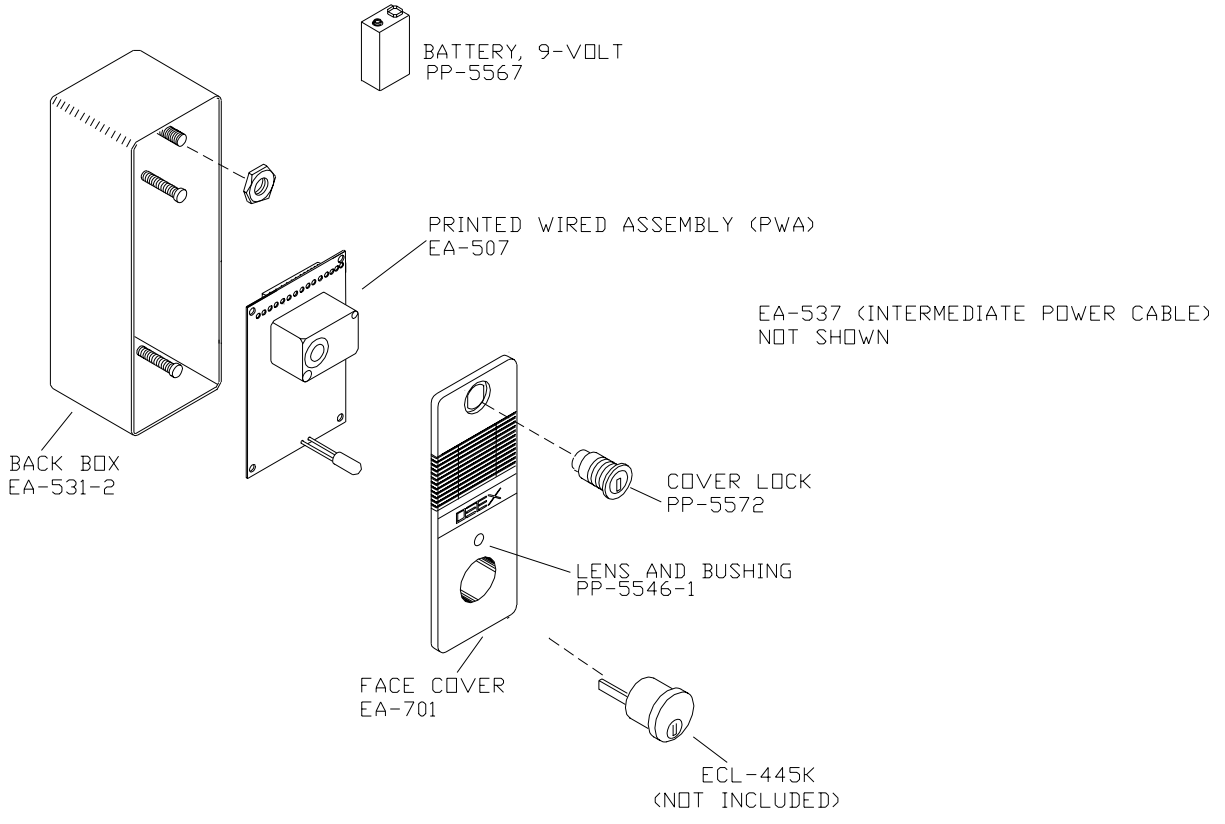
- 1) Confirm 9V battery is connected
- 2) Replace 9V battery. (Use ALKALINE only)

**H) Low db level (volume)**

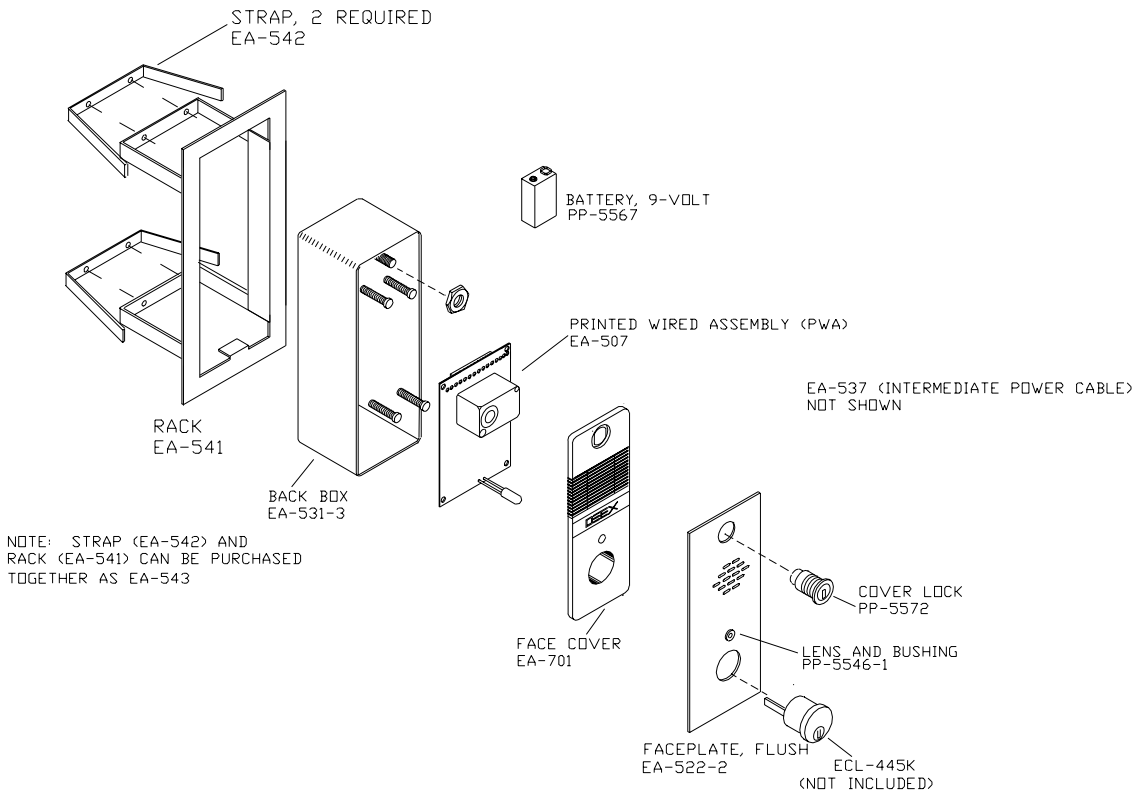
- 1) Contact Detex

**PROBLEMS?**

Contact Customer Service at  
1-800-729-3839

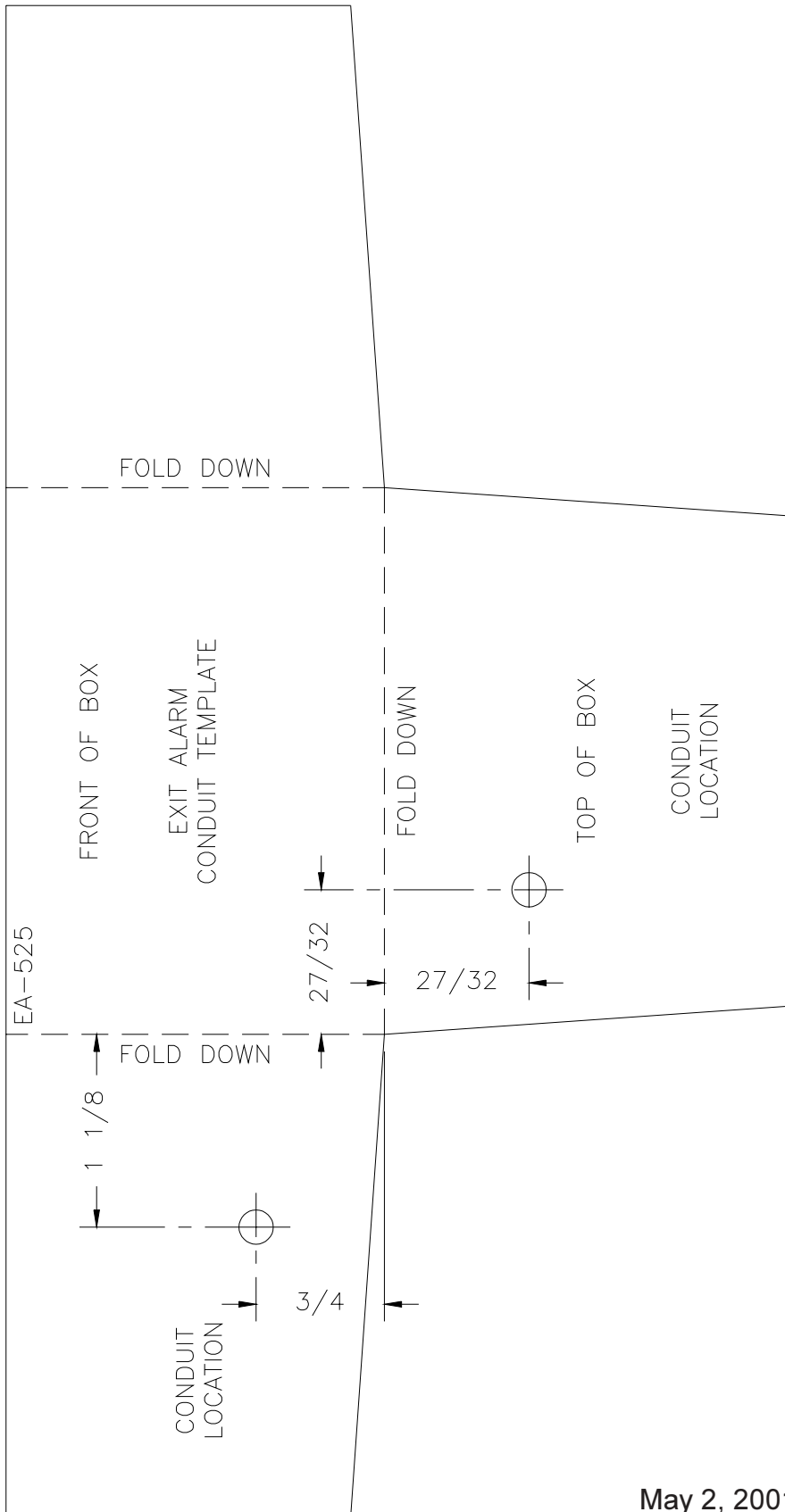


**FIGURE 4.-PARTS BREAKDOWN, SURFACE UNIT**



**FIGURE 5.- PARTS BREAKDOWN, FLUSH UNIT**

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



May 2, 2001

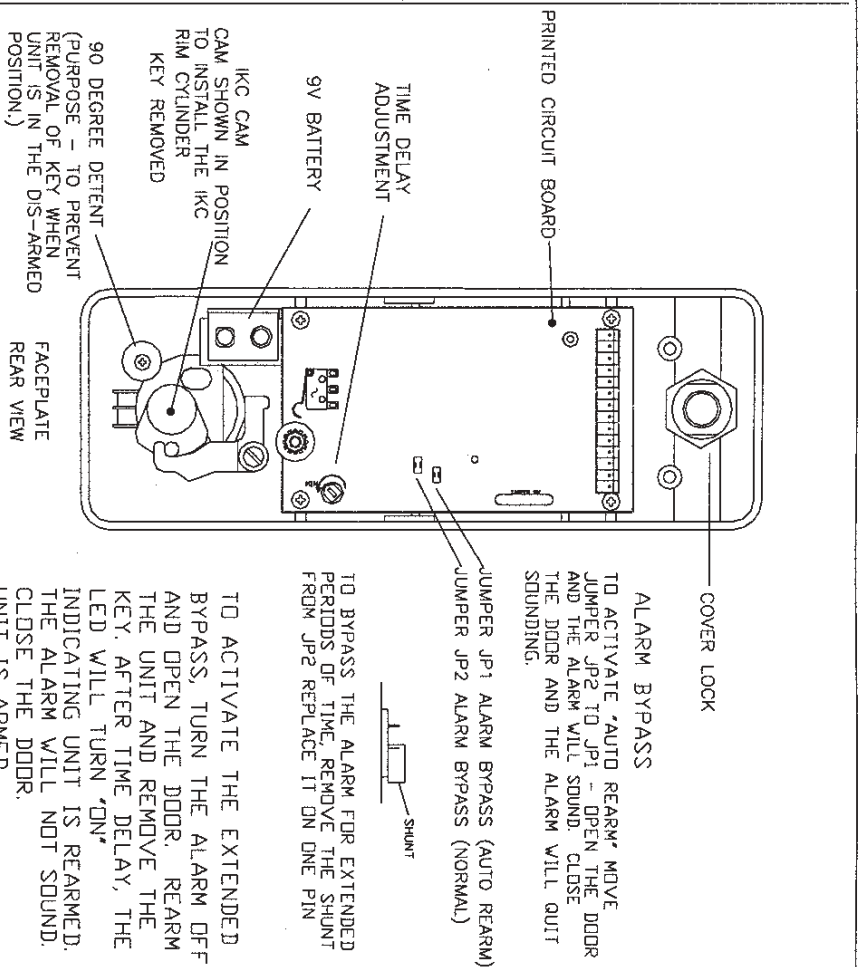


FIG. 6

TO BYPASS THE ALARM FOR EXTENDED PERIODS OF TIME, REMOVE THE SHUNT FROM JP2 REPLACE IT ON ONE PIN

TO ACTIVATE THE EXTENDED BYPASS, TURN THE ALARM OFF AND OPEN THE DOOR. REARM THE UNIT AND REMOVE THE KEY. AFTER TIME DELAY, THE LED WILL TURN 'ON' INDICATING UNIT IS REARMED. THE ALARM WILL NOT SOUND. CLOSE THE DOOR. UNIT IS ARMED.

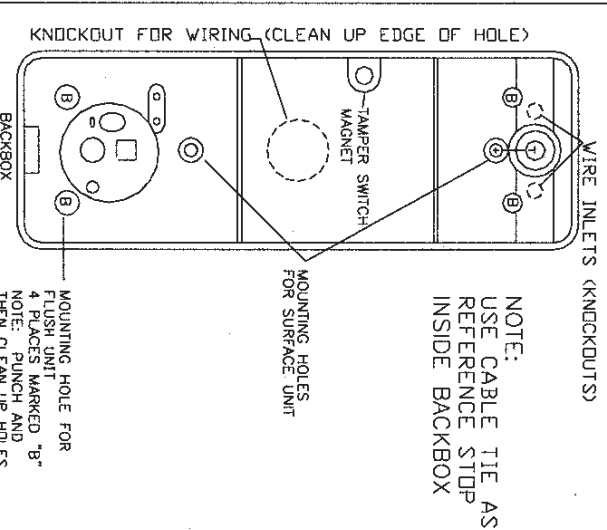


FIG. 7

NOTE: USE CABLE TIE AS REFERENCE STDP INSIDE BACKBOX

NOTE: MOUNTING HOLE FOR FUSION MOUNT. 4 PLACES MARKED 'B'. NOTE: PINCH AND THEN CLEAN UP HOLES

PREPARE THE BACKBOX

WIRING CAN BE BROUGHT INTO THE BACKBOX THROUGH A DRILLED OUT KNOCK-OUT HOLE IN THE BACK OF THE BOX (USE A 5/16" DRILL BIT). A CONDUIT CONNECTOR HOLE CAN BE DRILLED IN THE TOP OR SIDES. USE THE TEMPLATE PROVIDED TO MARK THE HOLE CENTER, OR WIRE INLETS... INSTALL THE BACK BOX SEE TEMPLATE

NOTE: DRESS CABLE CONNECTOR TO RIGHT SIDE OF BACK BOX DO NOT OBSTRUCT TAMPER SWITCH MAGNET

FACEPLATE MUST BE SECURED TO BACK BOX TO CLOSE THE TAMPER SWITCH CIRCUIT.

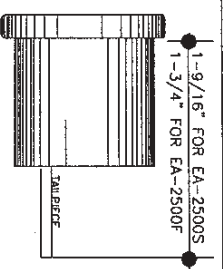


FIG. 8

NOTE: IF USING A 6 OR 7 PIN RIM CYLINDER, CUT THE TAILPIECE AND SCREWS AS REQUIRED. IF USING A 7 PIN RIM CYLINDER A SPACER IS REQUIRED (DETEX PART # ECL-1595)

CUT HOLE IN WALL AT SELECTED LOCATION. SEE FIGURE 10 BELOW FOR HOLE POSITION

INSTALL THE INTERNAL KEY CONTROL (IKC)

CUT THE TAILPIECE TO DIMENSION SHOWN (FOR A 5-PIN RIM CYLINDER DETEX PART # ECL-445K) THE MOUNTING SCREWS ARE TOO LONG FOR THIS APPLICATION. CUT OR BREAK THEM TO THE REQUIRED LENGTH.

INSERT A BLADE SCREWDRIVER IN THE CROSS-SLOTTED SHAFT AT THE BOTTOM OF THE CYLINDER CAVITY. TURN IT COUNTER-CLOCKWISE UNTIL A STOP IS REACHED. THIS WILL PLACE THE INTERNAL CAM IN THE CORRECT POSITION TO RECEIVE THE CYLINDER (SEE FIG. 6).

REMOVE THE KEY FROM THE CYLINDER TO ENSURE THAT THE TAILPIECE IS IN THE PROPER POSITION. INSTALL THE CYLINDER IN THE CAVITY AND ENGAGE THE TAILPIECE IN THE SHAFT. ONE HOLE FOR THE MOUNTING SCREWS IS COVERED BY THE CAM. INSERT A SCREW IN THE OPEN HOLE FIRST. INSERT THE KEY IN THE CYLINDER AND TURN IT CLOCKWISE 180 DEGREES. DISPLACE THE SPRING-LOADED LEVER ARM TO INSTALL THE SECOND SCREW.

ARRANGE THE STRAPS, RACK AND BACKBOX AS SHOWN AND FASTEN WITH FOUR SCREWS. RUN THE SCREWS IN UNTIL THEY JUST BREAK OUT OF THE NUTS ON THE STRAPS.

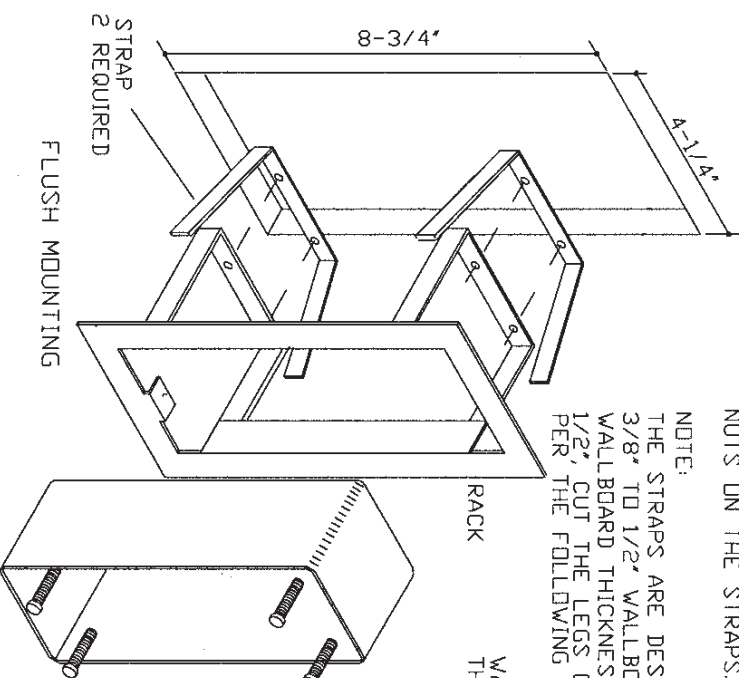


FIG. 9

WALLBOARD THICKNESS	CUT LENGTH
3/8"	N/A
1/2"	N/A
5/8"	1/8"
3/4"	1/4"
7/8"	3/8"
1"	1/2"

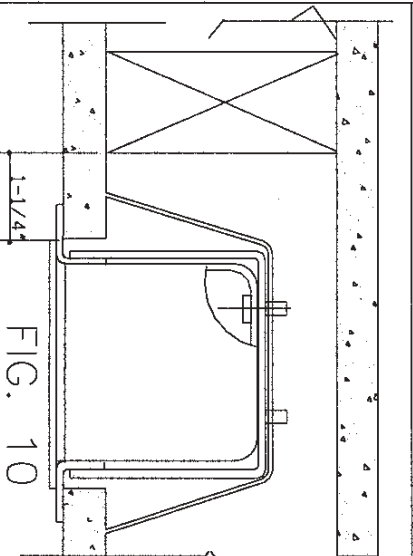


FIG. 10

POSITION THE ASSEMBLY IN THE HOLE IN THE WALL AND THREAD THE WIRING INTO THE BOX. PUSH ON THE FOUR SCREWS TO FORCE THE STRAPS THROUGH THE WALLBOARD. THE STRAPS WILL SPRING BACK AFTER CLEARING THE INSIDE SURFACE OF THE WALLBOARD. TIGHTEN THE FOUR SCREWS UNTIL THE RACK IS PULLED UP TO THE WALL.

FOR INSTALLATION IN CONCRETE BLOCK, CUT THE STRAPS AS REQUIRED.

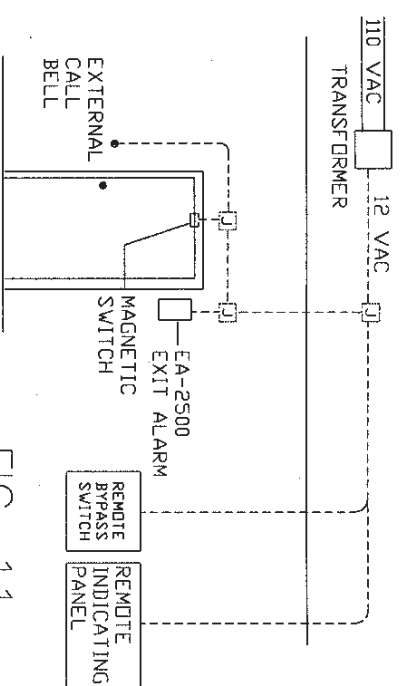


FIG. 11

WIRE	FUNCTION
GREEN	CASE GROUND. CONNECT TO EARTH GROUND
WHITE	12 VAC
BLACK	12 VAC
BROWN	RIP COMMON
YELLOW	RIP COMMON
RED	RIP NC
ORANGE	RIP NO
GRAY	SW1 (MAGNETIC DOOR SWITCH) CONNECT TO WHITE WIRE FROM SWITCH
PINK	COMMON, REMOTE BYPASS
VIOLET	REMOTE BYPASS N/O DRY CONTACT
TAN	COMMON, CALL BELL
BLUE	CALL BELL N/O DRY CONTACT
RED	BATTERY +
BLACK	BATTERY -

NOTE:

- 1- THIS IS A CLOSED-LOOP SYSTEM
- 2- WIRE COLORS FOR THE MAGNETIC DOOR SWITCH ARE FOR DETEX MODEL MS-2049
- 3- INSTALL WARNING SIGN ON DOOR

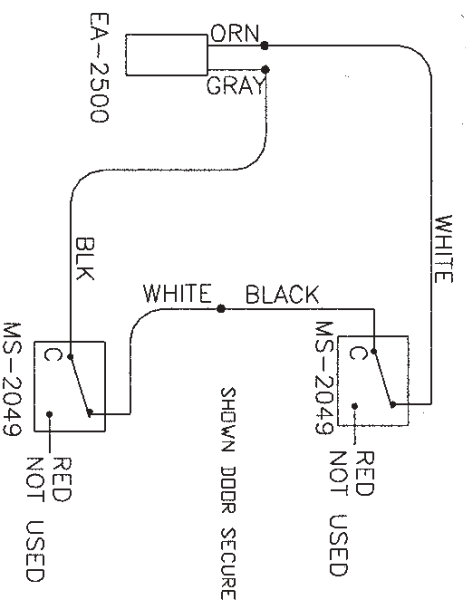


FIG. 12

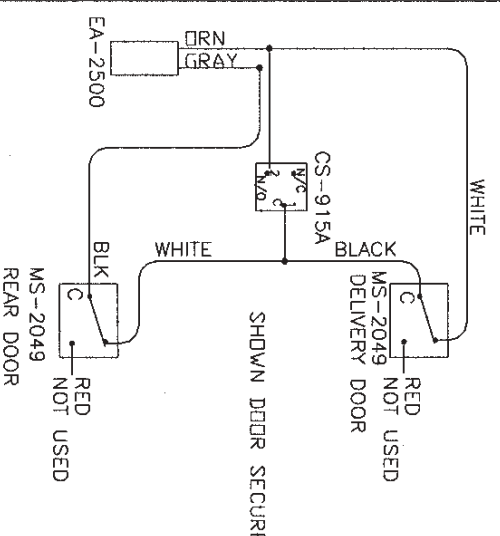


FIG. 13

MONITOR TWO DOORS WITH ONE EA-2500 AND ONE DETEX CS-915A BYPASS SWITCH THIS FEATURE BY-PASSES THE 'DELIVERY DOOR', KEEPING THE 'REAR DOOR' ACTIVE.

TAPE THIS PAGE TO DOOR FOR CONVENIENCE