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INSTALLATION INSTRUCTIONS FOR THE ECL-8050 EXIT CONTROL LOCK

ITEMS REQUIRED

INTERNAL KEY CONTROL (IKC)

The IKC is a standard 5, 6 or 7-pin rim cylinder. A 5-pin cylinder is available from Detex, part number ECL-445K.

OPTIONAL FEATURES

The ECL-8050 includes the following optional features:

OUTSIDE KEY CONTROL (OKC) 'DOGGING'

180 DEGREE STOP

AUTOMATIC REARMING

OKC

The OKC is a bypass feature which allows entrance without setting off the alarm. A 5,6 or 7-pin rim cylinder is required. *A special cam is required, ECL-8329 (provided).*

DOGGING

Hardware is included to install a 'dogging' feature which is useful when there is a lot of traffic at a particular entrance and we want to leave the alarm in the BYPASS MODE.

NOTE

We do not recommend using the dogging feature if the 180 degree stop is installed.

180 DEGREE STOP

This feature provides extra security by preventing the removal of the arming key in the disarmed position. With key removed, the unit is always armed.

AUTOMATIC REARMING

As shipped, the alarm in the ECL-8050 will sound until the unit is rearmed with a key. For automatic rearming, see figure 1.

J2	J3	Sets Auto Rearming Feature:
Off	Off	Alarm will automatically rearm after 2 minutes
Off	On	Alarm will automatically rearm after 10 minutes
On	Off	Alarm will automatically rearm after 20 minutes
On	On	Alarm will sound continuously until it is reset.

TOOLS AND SUPPLIES

Tape measure

Tape for templates

Combination square

Pencil

Center punch

Hammer

Drill motor

Drill bit

Hole saw (if the OKC is to be installed).

Linesman's cutter (for rim cylinder tailpiece)

Screwdrivers. See the hardware kit for the types and sizes of screws provided.

If the dogging feature is to be installed, a small blade-type screwdriver, 1/16" wide is required. (Jeweler's screwdriver)

NOTE: The screws provided for installing this product are #10 type AB thread-forming, suitable for use on either sheet-metal or wood doors. The **MINIMUM** drill size for the lead holes in sheet-metal is #27 (0.144"). If there is reinforcement in the door where the holes are to be drilled, it may be advisable to use a larger size drill.

DOOR AND FRAME

PREPARATION

Unless otherwise required by the specifications or code authority, measure up 40-5/16" from the finished floor and draw a HORIZONTAL line on the door about 8" long. **Make sure that the door is butted against the stop.** Use the template provided and mark the location of the mounting holes in the door and frame and the OKC hole center. Remove the template and drill the holes for #10 screws. See note under tools required for drill size.

If the OKC is to be installed, bore a hole through the door for the OKC rim cylinder, (1-1/4" diameter for the DETEX rim cylinder).

MODULE ASSEMBLY

BATTERY INSTALLATION

Install the battery in the module assembly as shown in figure 1.

Connect the battery and secure it in place with the bracket.

The end of the battery should protrude about 1/2" from the edge of the housing.

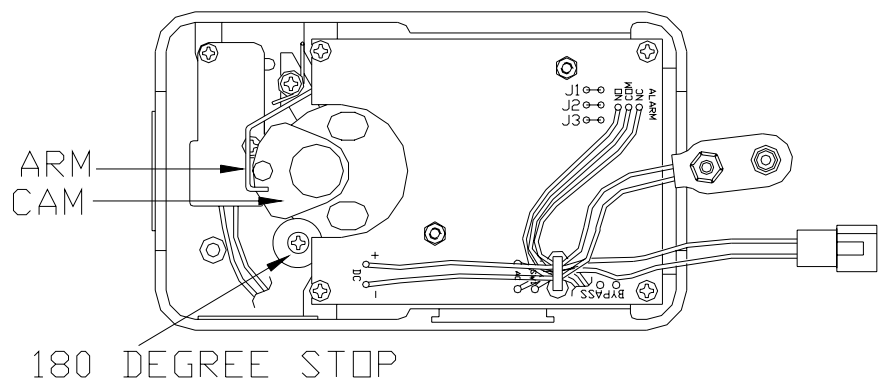


FIGURE 1

INTERNAL KEY CONTROL (IKC)
 The tailpiece of the rim cylinder must not exceed the dimension given below. This dimension includes provisions for a 1/4" thick escutcheon which must be used. The mounting screws should be about 3/4" long under the head.

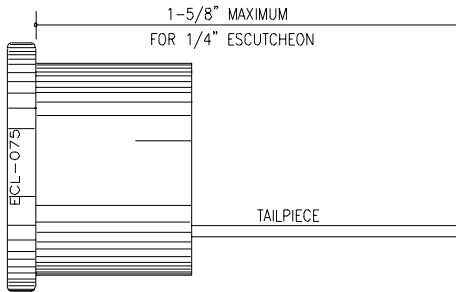


FIGURE 2

Make sure that the cam and arm are in the position shown in figure 1 and that the key is removed from the cylinder. Slide the escutcheon onto the cylinder and install the cylinder. Install lockwashers on the screws and fasten the cylinder.

When the cylinder has been installed (and the stop if used), insert the key in the cylinder and turn it in both directions to verify that it works freely. There must not be any friction or binding.

180 DEGREE STOP

The unit is shipped in the 'normal' mode. In this mode, the cylinder key can be removed in the **armed or disarmed** position. To prevent the removal of the key in the disarmed position, a 180° STOP (1/2" round Nylon roller) is provided in the hardware kit.

If the stop is to be used, refer to figure 1 and install it at this time.

Use a #6-32 x 5/8" screw.

NOTE

This feature should not be used if the dogging feature is used.

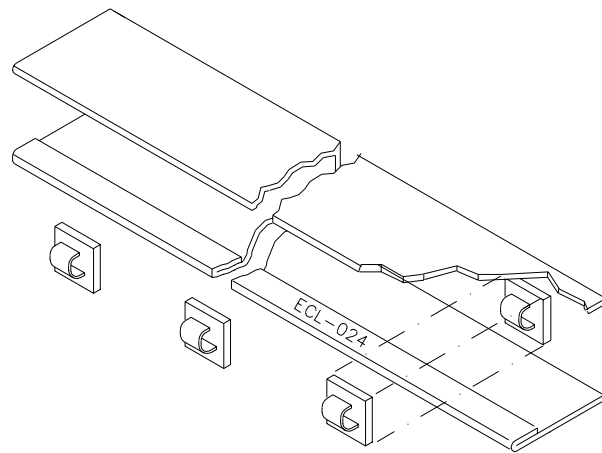


FIGURE 3.- SHIELD ASSEMBLY

Three wire clamps are provided in the packing kit. Remove the paper backing and install the clamps on the inside surface of the shield, equally spaced.

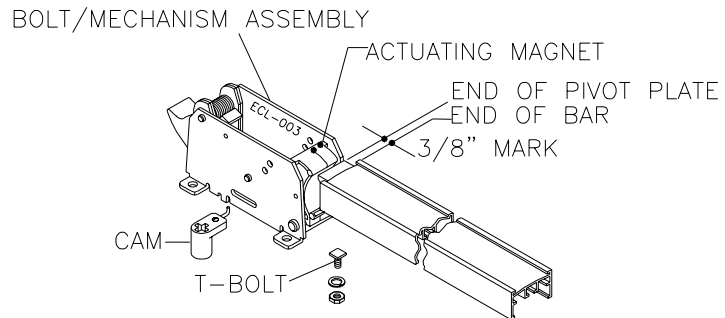


FIGURE 4.- BAR AND MECHANISM ASSEMBLY

Note: The bar is precut for a 36" door, for narrower doors, the bar must be cut to 9-1/4" less than the width between the door stops. The bar should be cut at the pivot assembly end (hinge side) and burrs should be removed from the inside of the slot for the T-bolt.

On "pivot plate" measure and mark a 3/8" dimension as shown above (Fig. 4). Assemble the bar on the bolt mechanism, using a T-bolt, washer and nut. **The tip of the bar should be positioned at the 3/8" mark.**

The recommended way to do this is to insert the T-bolt in the pivot plate and install the lockwasher and nut. Engage the nut on the T-bolt only enough to hold it in place temporarily. Engage the end of the actuating bar on the T-bolt and slide it to the specified position. Use the offset wrench provided to tighten the nut.

CAUTION

If you apply too much torque with the wrench, you may break the T-bolt. If the OKC is to be installed, insert the hook part of the cam in the side of the mechanism.

Note: The module will not arm if removed from door or if tip of push bar goes into module cover cut-out.

**BACKPLATE INSTALLATION
BOLT END**

Two backplates are provided. They are identical except that one, ECL-8308, has a tapped hole on one end for the dogging screw. Install this backplate as described below, oriented as shown in figure 5.

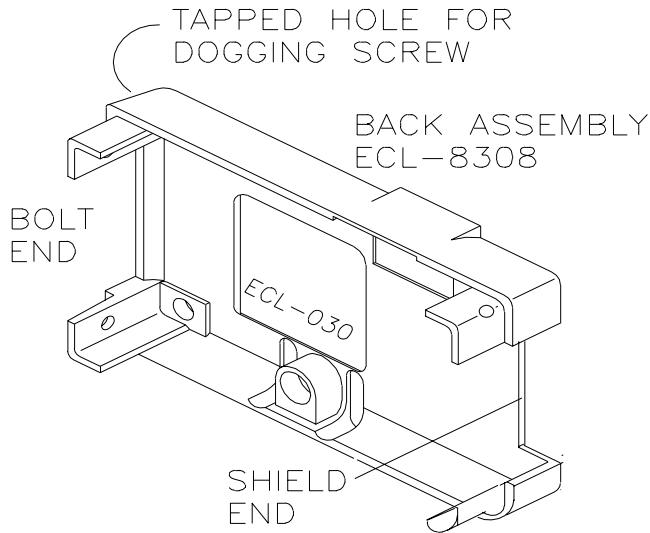


FIGURE 5.- BACKPLATE INSTALLATION

If the OKC is not used, install the backplate with two TEMPORARY screws.

If the OKC is to be installed, proceed as follows. Cut the rim cylinder tailpiece as shown in figure 6. The mounting screws should be about 1-1/4" long under the head.

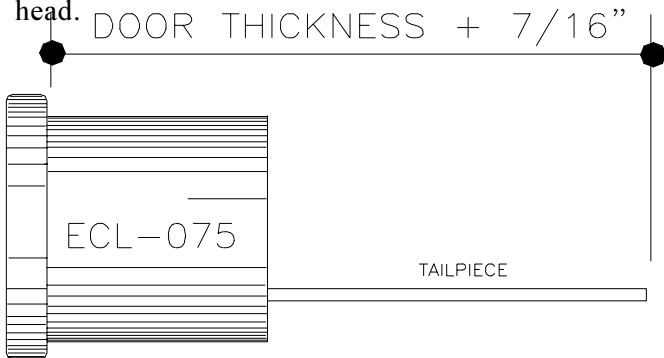


FIGURE 6.- RIM-CYLINDER, 5-PIN

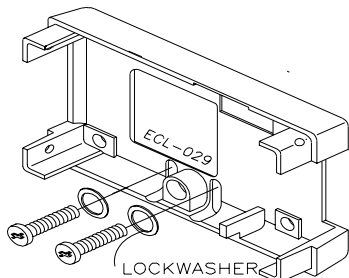


FIGURE 7.- BACKPLATE WITH OKC

Position the backplate on the door, with the screw holes aligned with the holes in the door. Remove the key and install the cylinder. Fasten the cylinder with two mounting screws and lockwashers. Make sure that the backplate is level.

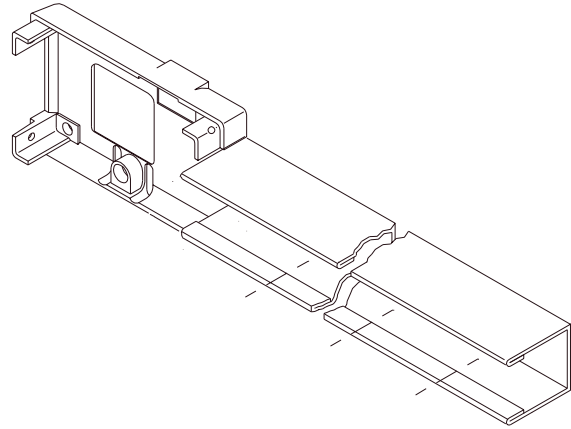


FIGURE 8.- SHIELD INSTALLATION

Note that the end of the shield fits in the notch in the backplate. Make sure that the shield is level and drill the mounting holes. Fasten the shield with #10 screws.

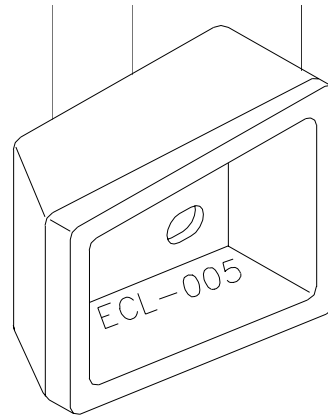
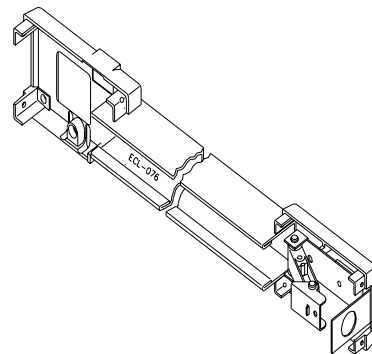


FIGURE 9.- KEEPER INSTALLATION

Install the keeper with #10 screws



**FIGURE 10.- BACKPLATE AND PIVOT
INSTALLATION**

Position the backplate, ECL-8276 at the end of the shield and push it onto the shield. Make sure that the plate is level and mark five hole centers. Remove the backplate and drill the five holes for #10 screws.

Install the backplate and the pivot assembly, #10 screws.

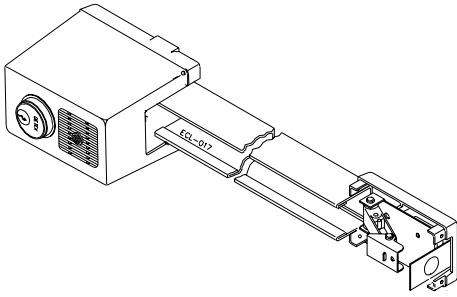


FIGURE 11.- HARNESS INSTALLATION

Connect the harness assembly to the module assembly connector.
 Install the module assembly temporarily with one screw.
 Run the harness through the shield and secure it in the clamps.
 Fasten the fuse-holder (part of the harness assembly) to the pivot assembly. Make sure that the fuse is not broken and install it in the fuseholder.

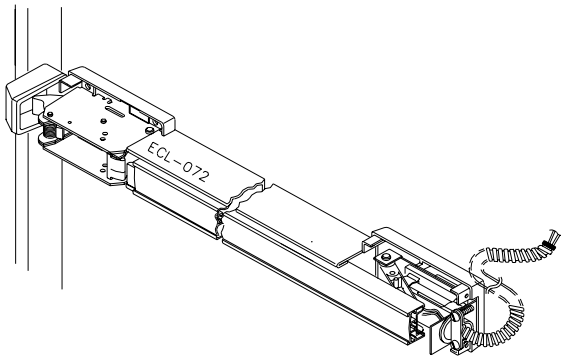


FIGURE 12

BAR/MECHANISM INSTALLATION

Remove the module assembly and remove the temporary screws in the backplate if they were installed. The backplate and mechanism must be installed together. If the OKC cam was installed in the mechanism, place the mechanism in the backplate and guide the cam into the hole in the backplate. Fasten the backplate and mechanism on the door using four #10 x 1" screws.
 Install a T-bolt in the bar at the pivot end and fasten the bar to the pivot assembly with a washer and nut. (Leave the nut loose). Raise or lower the pivot until the bar is parallel to the door. Tighten the nut.

POWER TRANSFER CABLE

Install the power transfer cable on the pivot assembly plate and connect it to the harness assembly.

NOTE: Before proceeding, check the operation of the lock. The pawl in the mechanism (see figure 13) must not fall into the keeper when the door is closed.

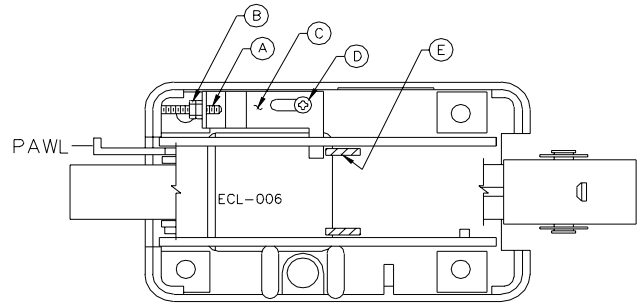


FIGURE 13.- BYPASS SLIDE INSTALLATION (OPTIONAL)

WE DO NOT RECOMMEND USING THIS FEATURE IF THE 180 DEGREE STOP IS INSTALLED.

If the dogging feature is to be installed, do it now as described below.

Obtain the following items from the hardware kit:

One #6-32 x 1" slotted headless setscrew, item A.

Two #6-32 nuts, item B.

Dogging slide, item C

Assemble the two nuts on the screw and lock them together about 1/8" from the unslotted end.

Install this assembly in the backplate from the inside out.

Remove the screw (item D) from the backplate and use it to secure the slide as shown. Note that the 'finger' part of the slide is inserted in the slot in the side of the mechanism assembly and butts against the lever, item E.

Fasten the slide with the screw but do not overtighten the screw. The slide must be free to move.

Test the assembly to verify that it works properly, locked and unlocked. Do this by turning the screw in until the bolt is free. In other words, the door can be opened from either direction. Back the screw out until the bolt is secure. Door cannot be opened unless bar is pushed.

CAUTION

The dogging screw must not be wound in too far or it will fall free of the threads in the backplate.

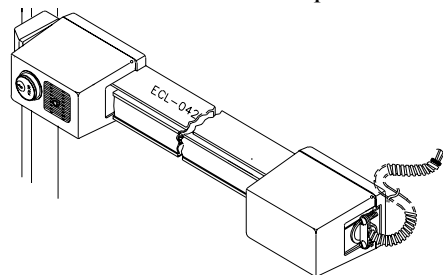


FIGURE 14.- COVER INSTALLATION

Connect the harness to the connector from the printed circuit board in the module assembly.

Install the module assembly with four #6-32 x 1/2" screws.

Install the end-cover assembly with four #6-32 x 1/2" screws.

Make sure that the power is off and install the transformer. Splice the wires from the transformer secondary, 12VAC, to the power transfer wires.

TEST AND TROUBLESHOOTING START

Make sure that the power is ON. (Circuit breaker). Close the door and make sure that it is locked. (Cannot be opened from the outside). If the door can be opened from the outside, check the dogging screw (if this feature was installed), and adjust it as required. Insert the key and turn it 1/2 turn CCW to disarm the unit. Now turn the key CW to a stop and remove the key. Wait 15/60 seconds for the unit to arm, LED "on". Make sure that there is no pressure on the bar. After 15/60 seconds, the unit will beep 3 times and the LED will turn off. Check that there is 12VAC out of the transformer, check the fuse and confirm that all the connectors are plugged in. If the LED still does not come on, call Detex. If the unit did not beep and the LED did not turn off in 15/60 seconds, this could be due to misalignment of the magnet and reed switch, or dead or weak battery. Disconnect and retry. Call Detex.

If the unit armed properly, push on the bar. The alarm should sound and the LED should be red. (To silence the alarm, turn the key CCW 1/2 turn). If the alarm did not sound, it may be due to a component failure. Contact Detex. Check the internal bypass. (IKC) With the system armed, (LED is off), turn the key 1/2 turn CCW and open the door. The LED should turn on and the alarm should not sound. Close the door and turn the key 1/2 turn CW. After 15/60 seconds, the unit should beep three times and the LED should turn off. Check the outside by-pass (OKC). If the OKC was installed, to bypass the alarm, turn the OKC key 1/2 turn CCW and open the door. Turn the key 1/2 turn CW, remove the key and close the door.

DOGGING

This feature permits passage in or out without setting off the alarm.

DISARM THE UNIT

If the unit is not disarmed, the alarm will sound if someone pushes on the bar.

To 'dog' the door open, turn the screw (item A, figure 13) clockwise (inward) until the bolt is free in both directions. To reset the system to normal, back the screw out until the bolt is locked. **Don't back it out any further than necessary.**

MAINTENANCE

This product requires very little care but, to ensure that the system continues to provide the intended security, a maintenance program should be established, as follows. KEYS

Keys should be issued to responsible people only and should be minimized.

FUNCTIONAL VERIFICATION

Periodically, (weekly or sooner as circumstances require), verify that the system is working properly by opening the door with the system armed.

BATTERY REPLACEMENT

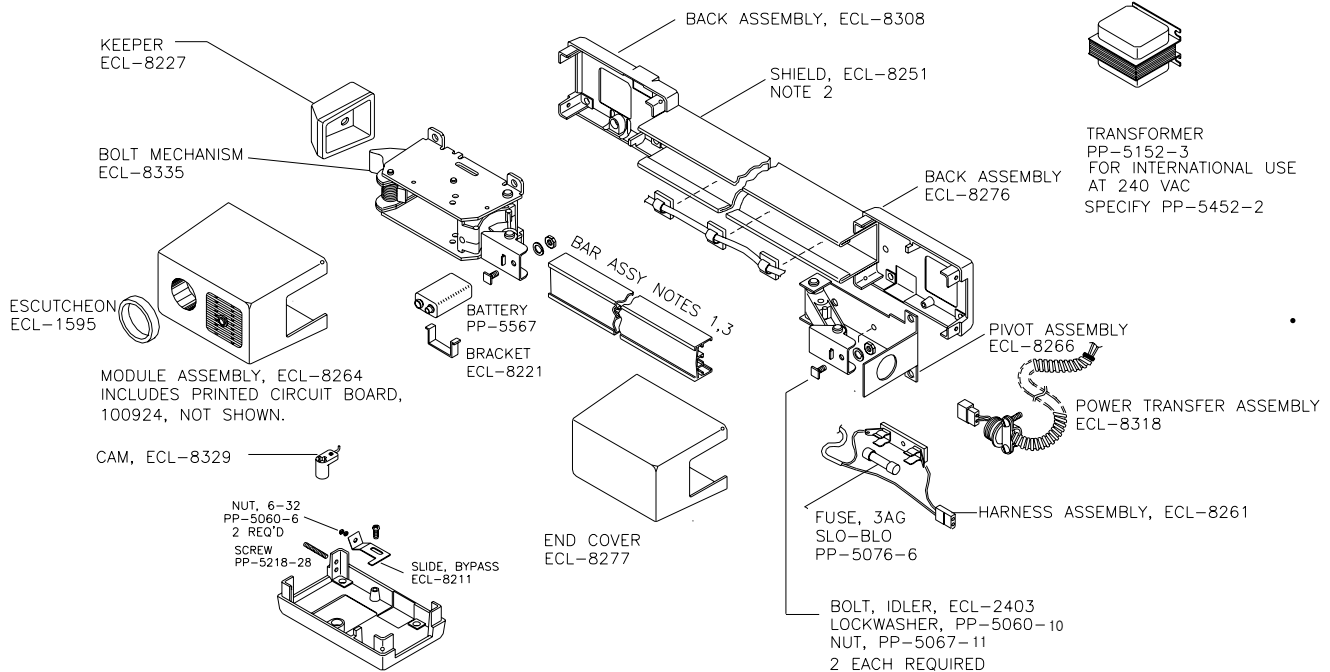
Replace the battery when the low-battery alert is on. Alkaline battery is recommended.

LUBRICATION

At least once per year, lubricate the moving parts with WD-40 or equivalent.

OPERATION AND STATUS INDICATION

FUNCTION	ACTION	LED
ARMING	KEY CW, TO A STOP	LED ON - THE GREEN LED TURNS OFF WHEN THE UNIT IS ARMED
BY-PASS	KEY CCW, TO A STOP THEN CW TO A STOP.	GREEN - LED TURNS OFF AFTER 15/60 SECONDS. (SEE FIGS. 1 & 16 FOR SETTINGS)
LOW BATTERY	REPLACE BATTERY	FLASHES RED EVERY 5 SECONDS AND THE UNIT BEEPS



NOTE 1.- SPECIFY LENGTH, 25-1/2" OR 40" (392 OR 1016mm)
 NOTE 2.- SPECIFY DOOR WIDTH, 36" OR 48"
 NOTE 3.- ACTUATING BAR PART NUMBER IS ECL-8240

ACAD DWG ECL-019

FIGURE 15.- ILLUSTRATED PARTS BREAKDOWN

WIRING

The recommended wiring from the transformer to the ECL is #16 stranded. #20 gage (minimum) is recommended for other wiring.

J1	Sets Alarm Delay
Off	The Device will be fully active 60 seconds after you turn the key cylinder.
On	The Device will be fully active 15 seconds after you turn the key cylinder.

FIGURE 16

NOTE:

Disarmed: Red LED will blink every 20-30 seconds to indicate that the unit is disarmed.

Equivalent metric dimensions

Inches	mm	Inches	mm
1/16	2	1-1/4	32
3/8	6	1-9/16	40
7/16	11	8	200
1/2	12	36	914
5/8	15	40-5/16	1024
1	25	48	1219
		0.144	4

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.**

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