

# E-Plex 1500 Series Installation Guide

for door thickness 1 3/8" to 2"

## WARNING

- 1- Please read and follow all directions carefully.
- 2- Carefully inspect glass, door frame, door etc... to ensure that the recommended procedures will not cause damage. Kaba Ilco standard warranty does not cover damages caused by installation.

## WARNING

- 3- Wear safety glasses when making the holes.
- 4- All the following operations and testing of the lock to be done with door open.

## WARNING

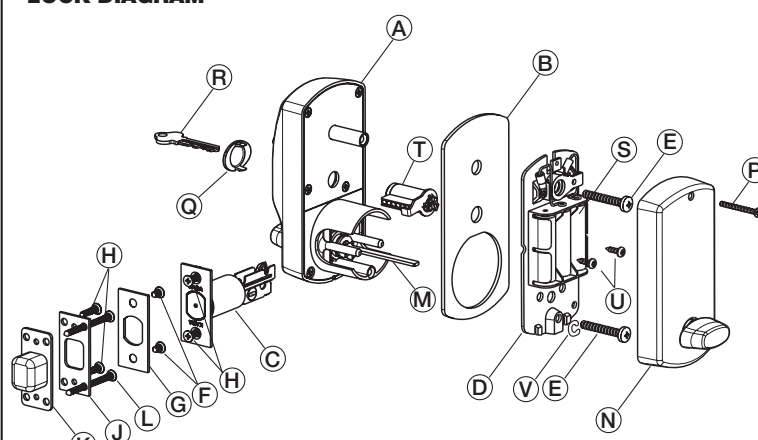
### PARTS LIST

- A- Outside Housing Assembly
- B- Gasket
- C- Dead Bolt Assembly
- D- Inside Trim Assembly
- E- 2 X Mounting Screws (12-24 X 1 5/8")
- F- 2 X Screws (8-32 X 7/32")
- G- Strike Plate
- H- 4 X Screws (8-32 X 3/4")
- J- Reinforcing Plate
- K- Dust Box
- L- 2 X Wood Screws 3" Long
- M- Tail Piece
- N- Inside Cover
- P- Screw (6-32 X 3/4", Flat Head)
- Q- Cylinder Cap
- R- Key (may be shipped separately)
- S- 3 Batteries "AA"
- T- Key Cylinder (may be shipped separately)
- U- 2 X Screw (6-32 X 3/4", Pan Head)
- V- 1 X Split Lock Washer

### TOOLS REQUIRED

- Safety Glasses
- 1/2" (13mm) Chisel
- 1/8" (3mm) Drill Bit
- 5/32" (4mm) Drill Bit
- 1/2" (13mm) Drill Bit
- 1" Drill Bit or Hole Saw
- 2 1/8" (54mm) Hole Saw
- Drill
- Awl or Center Punch
- Small Screwdriver (1/8" approx.)
- Phillips Screwdriver (#2)
- Adjustable Square
- Tape Measure

### LOCK DIAGRAM

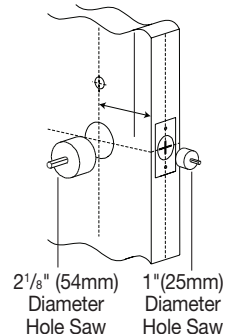


### 1 DOOR PREPARATION

2 3/8" (60mm) or 2 3/4" (70mm)

**NOTE:** Drill from both sides of the door to prevent unsightly damage.

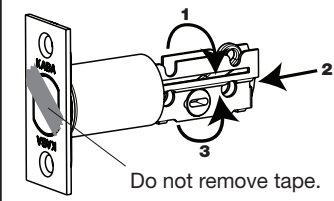
1. Determine which template fits your E1500 lock installation, either 2 3/8" (60mm) or 2 3/4" (70mm) backset. See note 2 on drilling template
2. Place appropriate template (supplied) onto door and mark holes.
3. Drill holes as per dimensions on the template. The 1" (25mm) hole to be on the center line of door thickness.
4. Mortise door edge for dead bolt face plate.



2 1/8" (54mm) Diameter Hole Saw  
1" (25mm) Diameter Hole Saw

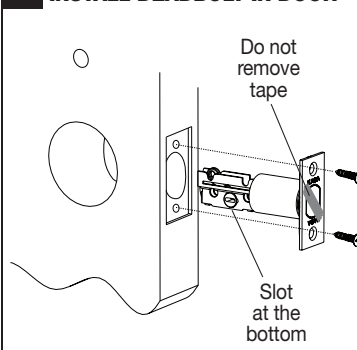
### 2 ADJUST BACKSET OF DEADBOLT

1. Do not remove tape.
2. The deadbolt is pre-set as 2 3/4" (70mm) backset.
3. Proceed as illustrated to change to 2 3/8" (60mm) backset, if required.

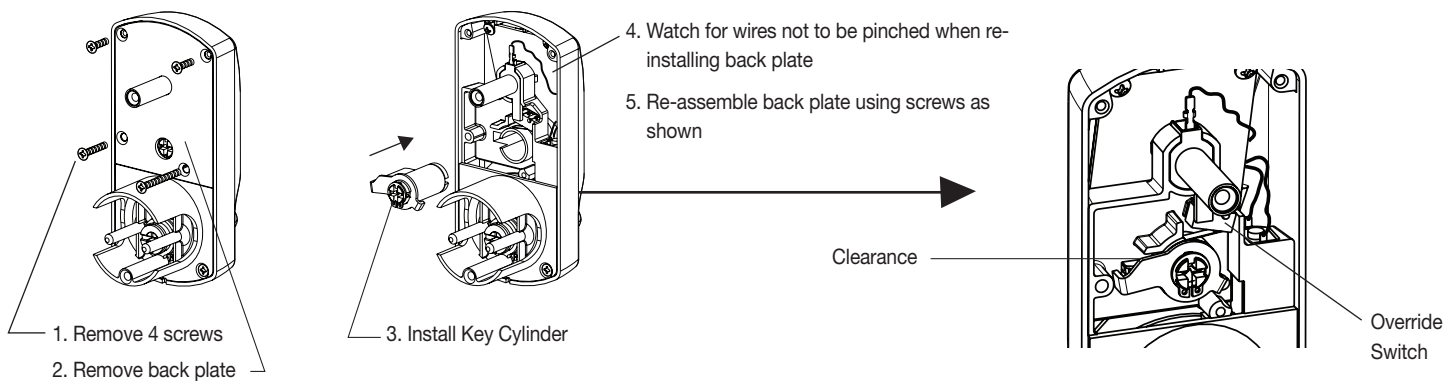


### 3 INSTALL DEADBOLT IN DOOR

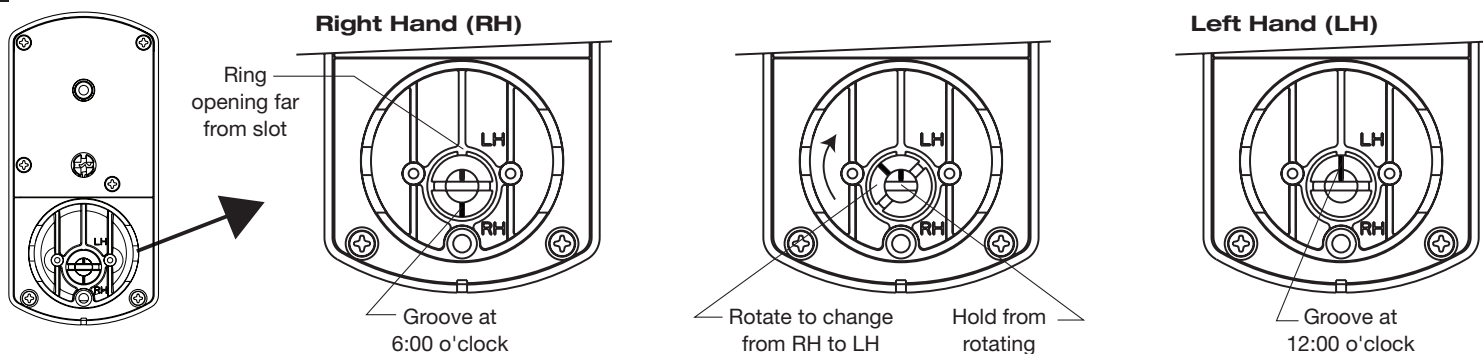
- Do not remove tape
- Slot at the bottom



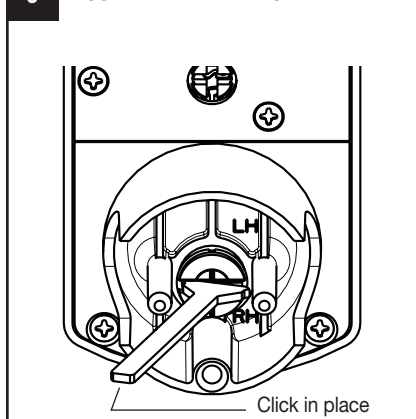
### 4 KEY OVERRIDE CYLINDER - If cylinder is not already assembled in the lock, proceed as follow:



### 5 ADJUST LOCK HANDING ON OUTSIDE HOUSING ASSEMBLY "A"

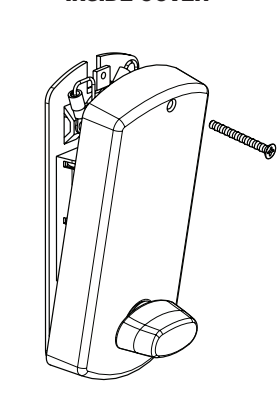


### 6 ASSEMBLE TAIL PIECE

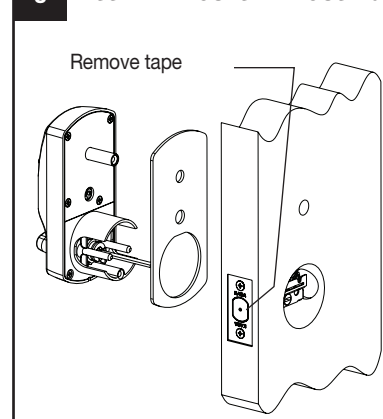


Click in place

### 7 REMOVE INSIDE COVER

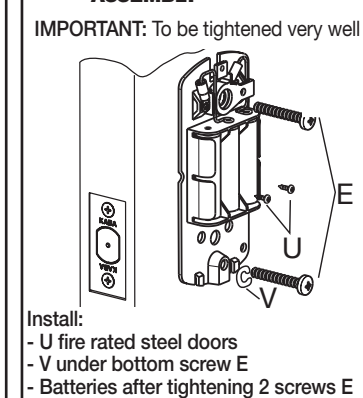


### 8 ASSEMBLE OUTSIDE HOUSING



Remove tape

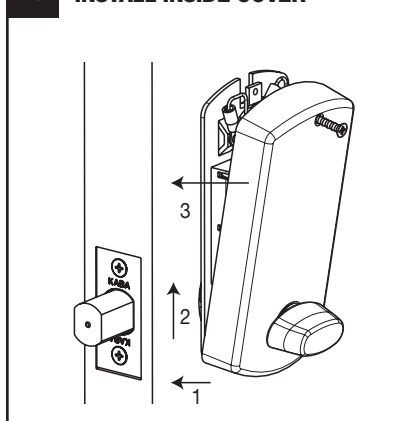
### 9 INSTALL INSIDE TRIM ASSEMBLY



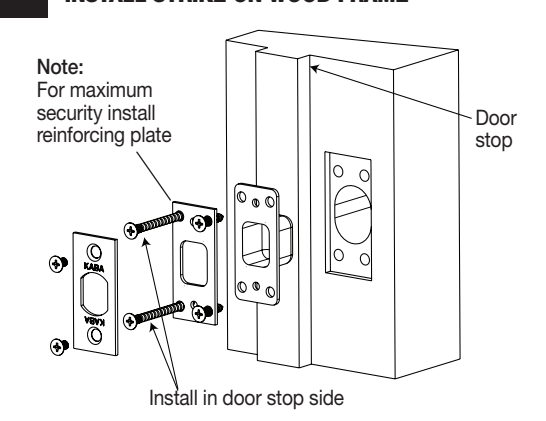
IMPORTANT: To be tightened very well

- Install:
- U fire rated steel doors
  - V under bottom screw E
  - Batteries after tightening 2 screws E

### 10 INSTALL INSIDE COVER



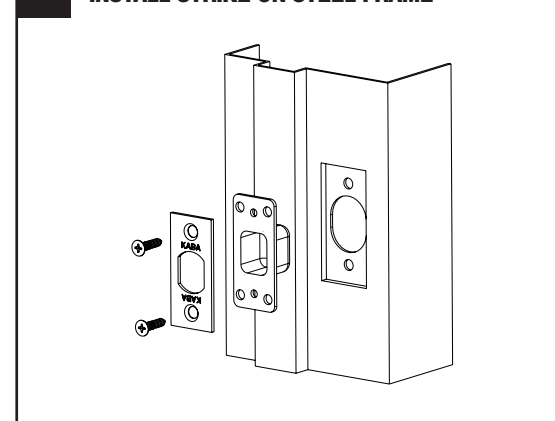
### 11 INSTALL STRIKE ON WOOD FRAME



Note: For maximum security install reinforcing plate

Install in door stop side

### 12 INSTALL STRIKE ON STEEL FRAME



### 13 STATES OF THE LOCK

#### Factory Mode

The factory mode is one of three primary states of the E-Plex Lock. The main characteristics of this state are:

- The E-Plex Lock opens only when the 8-digit default master combination (1-2-3-4-5-6-7-8) is keyed in.
- The visual indication for 'access granted' is green LED flashing once. A high-pitched tone is also generated while the green LED is on.
- The Master User must change the Master Code to be able to exit the factory mode, and switch to the access mode or pushbutton programming mode.

#### Access Mode

This mode refers to a lock that is operational for user access, and not in factory or Programming Mode.

#### Pushbutton Programming Mode

The E-Plex lock enters the Pushbutton Programming Mode when the user enters the master combination or one of the manager combinations, preceded and followed by the character '#' (ex: #12345678#). Once the E-Plex Lock is in the Pushbutton Programming Mode, the Master/Manager can enter one or more command sequences. Each command sequence ends with a '#' character that acts like an <enter> character. At the very end of all sequences of programming commands, enter one more # to remove the lock from the Pushbutton Programming Mode to return to normal access mode.

### 14 SEQUENCE OF OPERATIONS FOR START-UP PROGRAMMING

#### What is the recommended sequence of operations?

With the E-Plex Lock in the factory mode.

- Program the Access Code Length (default length is four digits). *The access code field length can only be changed when the lock is not activated (when still in the factory mode).*
- Change factory Master to your own Master Code (always eight digits) to place lock in access mode.

Put lock in Pushbutton Programming Mode.

- Set the Date / Time
- Program the Lock ID and Unlock time
- Program the Lock for the Duration of Passage Mode (if desired)
- Program the Lock for Tamper Time Settings
- Program the Lock for Buzzer Volume
- Add Access Codes as desired

### 15 GENERAL PROCEDURE FOR PUSHBUTTON PROGRAMMING

- a. Put the lock in Programming Mode by pressing # Master Code #
- b. Use the Summary of Commands Table (Section 16) of this guide to enter the three digit command sequence (Command Type + Function Code), followed by #.
- c. Enter the appropriate numbers as required.
- d. Press # to end Programming Mode.
- e. Once the lock is in programming mode, multiple command sequences can be entered without having to repeat the #mastercode#. However, if there is no activity for 15 seconds at the keypad, the lock will automatically exit from programming mode.

**SUMMARY OF PUSHBUTTON PROGRAMMING COMMANDS**

To Program Lock, Master Code must be changed.

**(100) Total User Codes; Four Different User Levels**

**(1) Master User** - The Master User is the top-level manager who performs the initial lock set up activities and can perform all lock functions.

**(0-99) Manager** - A Manager can program all lock functions except defining the Access User Code Length, resetting to default value, activating lockout mode, adding / deleting / enabling / disabling a Master or Manager User. The number of Managers is limited only by available user table space (99 maximum because one (000) is reserved for the Master Code).

**(0-99) Access User** - An Access user has the ability to open the lock.

**(0-99) Service User** - A user with an Access Code valid for a configurable period of time.

**Note:** If an invalid entry occurs, recover from the mistake by entering the (+) key.

	Command	Description of Command	Authorization	
Configure	000 # MMMMMMMM# MMMMMMMM#	'Modify Master User Access Code (lock's activation)' (Always 8 digits)	Master	
	004 # TT#	'Unlock time setup' (TT = 02 to 20 seconds)	Master, Mgr.	
	005 # TT#	'Passage Mode Timeout setup' (TT = 01 to 24 hours - duration time in hours; 00 = no time limit)	Master, Mgr.	
	006 # TT#	'Tamper time setup' (TT = 00 to 90 sec)	Master, Mgr.	
	007 # TT#	'Tamper wrong try setup' (TT = 03 to 09)	Master, Mgr.	
	008 # VV#	'Buzzer volume control' (VV = 00 to 03; 00 = off; 01 = Low; 02 = Normal; 03 = High)	Master, Mgr.	
	009 # LL#	'Modify access length' (LL = 04 to 08 digits)	Master	
	099 #	'Reset to factory default values', except access code length. (Master, manager and access user are retained if already programmed. Users are not reset.)	Master	
	Add/Modify Users	100 # NNN # UUUU {UUUU}# UUUU {UUUU}#	'Add/Modify User Access Code' NNN = specific User ID location (001 to 099) (Combination length can be 4 to 8 digits, depending on access length LL setting)	Master, Mgr.
		101 # NNN # UUUU {UUUU}# UUUU {UUUU}#	'Add/Modify Manager Access Code' NNN = specific User ID location (001 to 099) (Combination length can be 4 to 8 digits, depending on access length LL setting)	Master
102 # NNN # UUUU {UUUU}# UUUU {UUUU}# HH#		'Add/Modify Service User Access Code' NNN = specific User ID location (001 to 099) (HH = 01 to 24 hours - duration time in hours; 00 = one-time entry; Combination length can be 4 to 8 digits, depending on access length LL setting)	Master, Mgr.	
103 # UUUU {UUUU}# UUUU {UUUU}#		'Modify M-Unit User Code' (Combination length can be 4 to 8 digits, depending on access length LL setting). Must use 303 # command to enable.	M-Unit User	
Delete Users	200 # NNN#	'Delete User Access Code'	Master, Mgr.	
	201 # NNN#	'Delete Manager Access Code'	Master	
	202 # NNN#	'Delete Service User Access Code'	Master, Mgr.	
	299#	'Delete all User Access Codes' (except Master, and Manager User)	Master, Mgr.	

	Command	Description of Command	Authorization
Activate Users	300 # NNN#	'Activate User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	301 # NNN#	'Activate Manager Access Code' NNN = specific User ID location (001 to 099)	Master
	302 # NNN#	'Activate Service User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	303 #	'Activate M-Unit User Code'	M-Unit User
	398 #	'Activate all User Codes' (except Master and Manager)	Master, Mgr
	399 # P#	'Activate / De-Activate Passage Mode' (P = 0 or 1; 0 = disable Passage Mode; 1 = enable Passage Mode)	Master, Mgr
De-activate Users	400 # NNN#	'De-Activate User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	401 # NNN#	'De-Activate Manager Access Code' NNN = specific User ID location (001 to 099)	Master
	402 # NNN#	'De-Activate Service User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	403 #	'De-Activate M-Unit User Code'	M-Unit User
	498 #	'De-Activate all User Codes' (except Master and Manager)	Master, Mgr
	499 # L#	'Activate / De-Activate Lockout Mode' (Master User doesn't affect by Lockout Mode) (L = 0 or 1; 0 = disable Lockout Mode; 1 = enable Lockout Mode)	Master
Diagnostic	500 # 123456789*0#	'Manual diagnostic'	Master, Mgr

**Visual Feedback Message Definitions**

Condition	Parameters			
	Green LED	Red LED	Duration	Rate
Valid pushbutton pressed	ON	OFF	1/10 sec	Once
Timeout expired	OFF	ON	1 sec	Once
Valid access code keyed	ON	OFF	1 sec	Once
Access granted	ON	OFF	1/10 sec	1 sec
Access granted (battery low condition)	ON	ON	1/10 sec	1 sec
Access denied	OFF	ON	1 sec	Once
Valid programming entry	ON	OFF	1 sec	Once
Invalid programming entry (including duplicate access code)	OFF	ON	1 sec	Once
Tamper shutdown beginning	OFF	ON	2 sec	Once
Tamper shutdown state	OFF	ON	1 sec	10 sec
Tamper shutdown ending	ON	OFF	2 sec	Once

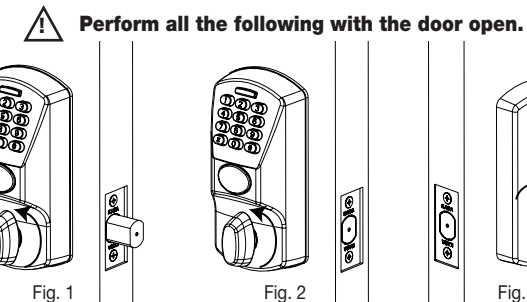
**17 CODE ENTRY AND ACCESS**

Enter the valid code on the lock keypad. A short beep can be heard and the green LED flashes for each key pressed. You will hear a longer beep and see a longer green LED flash when the code is accepted. The outside turn knob is then engaged for several seconds (5 to 15seconds, depending on the configuration). If a red LED flashes and a low-pitch beep is heard when the code is entered, this indicates that the code is refused. (See reverse for quick reference guide)

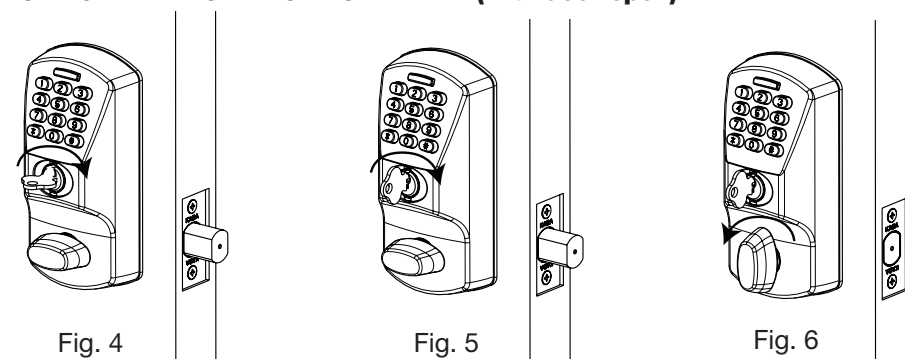
**IMPORTANT:** Make sure that the door is programmed properly and a valid code is accepted. If a valid code is not accepted, contact the Kaba Technical Support Hotline.

**18 TESTING THE OPERATION OF THE LOCK**

1. Project the dead bolt if it is not projected.
2. Turn outside thumbturn, the deadbolt must not retract. See fig.1
3. Enter code.
4. Retract dead bolt from outside. See fig.2
5. Wait 15 seconds.
6. Rotate outside thumbturn to project the dead bolt.
7. Rotate inside thumbturn to retract the dead bolt. See fig. 3



**19 TESTING THE MECHANICAL OVERRIDE (with door open)**



1. Project the dead bolt from outside or inside.
2. Insert key and rotate it clockwise until it stops. See fig. 4 & fig. 5
3. Rotate outside thumbturn to retract the dead bolt. See Fig. 6

**NOTE:** The key override always rotates clockwise.

**20 COVER THE KEY HOLE**



**21 HARD RESET PROCEDURE** will return the lock to factory mode including deleting all codes, putting the lock back to factory default values (4 digit access code length) and making the master code 1-2-3-4-5-6-7-8. A hard reset is performed as follows.

**A) User knows the Master code:**

1. Insert mechanical override key, turn clockwise and hold. Within 5 seconds, press # and turn key back counterclockwise.
2. You have up to 5 seconds to push '#' and release the override key. If 5-second timeout is reached without pressing '#', the lock continues its normal operation. As soon as the '#' is pressed, the lock exits the current state. If timeout is reached or if any other key is pressed after the '#' was pressed, the lock exits the sequence and stays in access state. If '#' is pushed and reset button is released within 5-second period, the lock goes in Reset Sequence State and the lock displays the 'Reset Sequence In Progress' message by flashing Green and Red LED alternatively once every second.
3. In this state, users have a 20-second period to enter the Master Code to perform a hard reset. If a bad Master Code is keyed-in, the lock exits the Reset Sequence State and goes back in access state. If the correct Master Code is entered within 20 seconds, the lock performs a hard reset and goes back in unprogrammed state. When an incorrect Master Code is entered, the Tamper Count decrements. After 4 unsuccessful attempts to Reset the lock with a bad Master code, the lock goes in the Tamper Shutdown state for 30 seconds. It will resume normal operations after this delay. If no master code is entered during the 20 seconds delay, the lock will enter a 15 minute wait period assuming the Master Code is unknown.

**B) User does not know the Master code:**

1. Insert mechanical override key, turn clockwise and hold. Within 5 seconds, press # and turn key back counterclockwise.
2. You have up to 5 seconds to push '#' and release the override key. If 5-second timeout is reached without pressing '#', the lock continues its normal operation. As soon as the '#' is pressed, the lock exits the current state. If timeout is reached or if any other key is pressed after the '#' was pressed, the lock exits the sequence and stays in access state. If '#' is pushed and reset button is release within 5-second period, the lock goes in Reset Sequence State and the lock displays the 'Reset Sequence In Progress' message by flashing Green and Red LED alternatively once every second.
3. In this state, users have a 20-second period to enter the Master Code to perform a hard reset. When the user does not know the master code, the user must not enter anything during that 20 seconds delay. The 'Reset Sequence In Progress' message will be displayed on the LEDs.
4. When the 20 seconds delay will be exhausted, a 15 minutes wait period will begin. During that state, any operation on the lock will be ignored (green LED will not blink when pressing keys) and the Green and Red LED will blink once a minute.
5. After the 15 minutes delay has exhausted, the 'Reset Sequence In Progress' message will be displayed on the LEDs again for 20 seconds. During this period, the user must enter the 1-2-3-4-5-6-7-8-# sequence and the lock will reset. If the user fails to do so, the sequence will abort and the lock will resume normal operation.