





# E-PLEX® E5x86 Entry/Exit Mortise Locks

Installation Instructions

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#### Warning

The Master Codes for both housings of this lock have been factory preset: 1,2,3,4,5,6,7,8. To activate lock functions, the master combination must be changed at time of installation.

### **Warnings and Cautions**

**Important**: Carefully inspect windows, doorframe, door, lights, etc. to ensure that the recommended procedures will not cause damage. Kaba Access Control's warranty does not cover damages caused by installation.

**Caution**: Wear safety glasses when preparing door.

#### Introduction

The purpose of this manual is to instruct the installer on the proper installation procedure for the E-Plex E5086 Mortise Lock.

#### **OPERATIONAL NOTE:**

The E-Plex E5086 Mortise lock is almost identical to the E-Plex 5000 Cylindrical lock with the following exceptions:

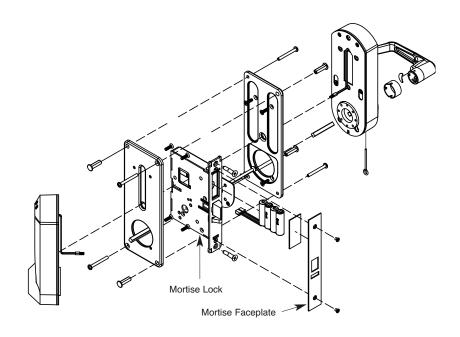
- 1. **Operation of the Lever** When the lock's handing is properly set, only a downward rotation of lever will actuate latch.
- 2. Key Override Use The key override differs in that rotating the key does not actuate the latch. To use the key override the key must be inserted into the cylinder and rotated counter clockwise until it stops (approximately 90 degrees) then while holding the key in this position with one hand use the other hand to rotate the lever downward to retract the latch. Once the lever has rotated a few degrees the key may be released.

#### **TOOLS REQUIRED**

- · Safety glasses
- 1/2" (13 mm) chisel
- 1/8" (3 mm) drill bit
- 1/4" (7 mm) drill bit
- ½" (13 mm) drill bit
- 21/8" (54 mm) hole saw
- Drill
- · Awl or center punch
- Hammer
- Small flat screwdriver
- Phillips screwdriver (#2)

- · Fine steel file
- Mortising machine
- Router
- Mortise faceplate router template
- · Adjustable square
- Tape measure
- Pencil
- Tape
- Cleaning supplies (drop cloth, vacuum)

### E-PLEX E5086 Entry/Exit Mortise Lock



The 1½" Mortise lock for the E-Plex series comes preassembled from the factory for a left-hand installation. It is field reversible.

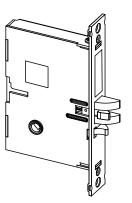
#### **Installation Qualifications**

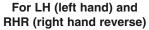
These instructions are designed for use by maintenance professionals or lock installers who are familiar with common safety practices and competent to perform the steps described. Kaba Access Control is not responsible for damage, injury or malfunction due to incorrect installation.

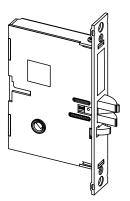


For technical assistance please call 1-800-849-TECH (8324) or 336-725-1331

#### A. Mortise Handing





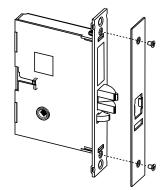


For RH (right hand) and LHR (left hand reverse)

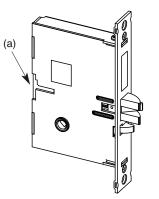
Compare the mortise with the figure. If the mortise is the correct handing for the door, you may skip the next section on reversing the Mortise Handing.

# **Reversing the Mortise Handing**

**A-1** Remove the mortise faceplate. Place the mortise on a flat surface for the following steps:

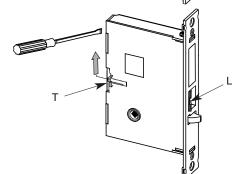


**A-2** Loosen button head socket screw (a) on rear of case using allen wrench supplied with lock.

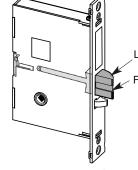


A-3 Push in the latch bolt (L) to the end of its stroke, and hold it there.

A-4 Hold the latch (L) inside the mortise, and slide up the tailpiece (T) using a small screwdriver.



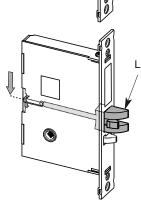
A-5 Release the latch bolt (L) and keep the anti-friction latch (F) toward the flat side of the latch bolt so that the bolt extends fully.



A-6 Pull out the latch bolt (L) until it just clears the front plate

Note: If you remove the bolt completely, you must turn it 90° to re-insert it.

A-7 Rotate the latch bolt (L) 180°. Reinsert it to the end of its stroke and hold.



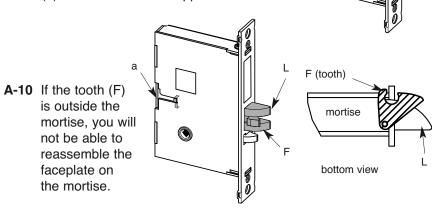
A-8 Re-engage tailpiece (T) with the latch bolt (L) by sliding tailpiece down using screwdriver. There may be some play required to align the parts.

A-9a Release the latch bolt (L). Position the latch bolt so that the bottom tooth of the anti-friction latch (F) remains inside the mortise case as shown.

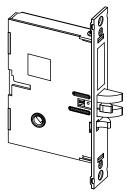
**A-9b** Tighten button head socket screw (a) with allen wrench supplied

faceplate on

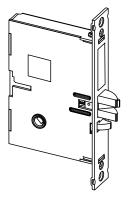
the mortise.



A-11 The mortise should look like the diagram below. (Check the orientation of the latch bolt and auxiliary latch.) Check the bevel of the mortise and change it if required.



For LH (left hand) and RHR (right hand reverse)



For RH (right hand) and LHR (left hand reverse)

# **B.** Door Preparation

If using the installation jig to prepare the door, refer to the instructions provided with the jig, then proceed with step 7.

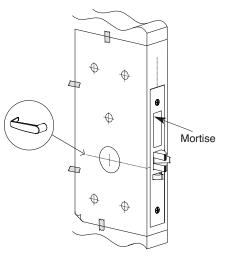
**B-1** Mark the handle height on the edge of the door, as determined directly from the strike.

Lever Centerline=
Bottom Edge of Strike lip

The axis of rotation of the handle is level with the bottom lip of the strike.

- **B-2** Align the template along the vertical center line of the mortise (CL) at the desired handle height, and tape it to the door.
- **B-3** Mark all holes and cutouts for the mortise in the edge of the door and remove the template.
- **B-4** Locate the two sets of vertical fold lines on the template allowing you to adjust the positioning of the template depending on the bevel of the door.

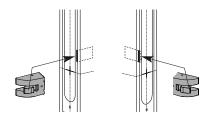
**Note**: Fold lines on template are for 1¾" door. Some thickness and bevel conditions may make it necessary to re-position the template for marking each side of the door.



11/4"

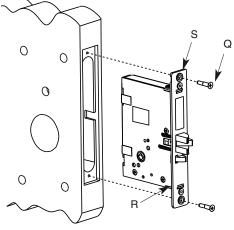
(C, r)

Door



RH/LHR (ASM shown) LH/RHR

- B-5 If the door has no bevel, fold the template along the solid lines. Align the fold with the edge of the door and mark the holes for the lock. Repeat on the other side of the door. If the door has a 3° bevel, fold and align the dashed line marked "H" on the template with the higher-beveled edge of the door and mark the lock holes on that side of the door. Repeat on the side with the lower-beveled edge using the dashed line marked "L."
- **B-6** Prepare the cutout for the mortise in the edge of the door using a mortising machine, router and chisel (for dimensions, refer to template). Ensure clearance is provided for moving latch parts as indicated on the template.
- **B-7** When making holes, drill from both sides of the door to prevent unsightly damage (for dimensions, refer to template).



- **B-8** Check the bevel of the inner mortise faceplate (S). If adjustment is required, loosen the bevel screw (R) and adjust mortise front plate angle to match the bevel of the door.
- B-9 Re-tighten screw (R).
- **B-10** Install the mortise with two 1" Phillips screws (Q) provided.

# 

#### KABA SIMPLEX®/E-PLEX® 5x86 SERIES LIMITED WARRANTY

Kaba Access Control warrants this product to be free from defects in material and workmanship under normal use and service for a period of one (1) year. Kaba Access Control will repair or replace, at our discretion, 5x86 Series Locks found by Kaba Access Control analysis to be defective during this period. Our only liability, whether in tort or in contract, under this warranty is to repair or replace products that are returned to Kaba Access Control within the one (1) year warranty period.

This warranty is in lieu of and not in addition to any other warranty or condition, express or implied, including without limitation merchantability, fitness for purpose or absence of latent defects.

ATTENTION: This warranty does not cover problems arising out of improper installation, neglect or misuse. All warranties implied or written will be null and void if the lock is not installed properly and/or if any supplied component part is substituted with a foreign part. If the lock is used with a wall bumper, the warranty is null and void. If a doorstop is required, we recommend the use of a floor secured stop.

The environment and conditions of use determine the life of finishes on Kaba Access Control products. Finishes on Kaba Access Control products are subject to change due to wear and environmental corrosion. Kaba Access Control cannot be held responsible for the deterioration of finishes.

#### **Authorization to Return Goods**

Returned merchandise will not be accepted without prior approval. Approvals and Returned Goods Authorization Numbers (RGA Numbers) for the 5x86 Series are available through our Customer Service department in Winston-Salem, NC (800) 849-8324. The serial number of a lock is required to obtain this RGA Number. The issuance of an RGA does not imply that a credit or replacement will be issued.

The RGA number must be included on the address label when material is returned to the factory. All component parts including latches and strikes (even if not inoperative) must be included in the package with return. All merchandise must be returned prepaid and properly packaged to the address indicated.

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES





POSTAGE WILL BE PAID BY ADDRESSEE

27199-3770 KABA ACCESS CONTROL 2941 INDIANA AVENUE WINSTON-SALEM, NC

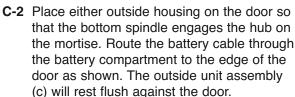
Who installed your lock?  ☐ Maintenance ☐ Other	OCK VIOLET NUTTION
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	Name of Dealer Purchased From
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What area is being secured with this lock? (e.g. Front Door, Common Door, Exercise Room)	egister online at www.kabaaccess.com.
tration	serve you in the future, please fill out this registration and return it to Kaba Access Control, or
☐ College/University ☐ Government/Military	protect your investment and to enable us to better
	hank you for purphasing our product in order t
This lock will be used in what type of facility?	REGISTRATION CARD
	Notes
	tes

# C. Installing Outside Unit Assemblys

Door Thickness	Screw and Spindle Kits	Description
1 <sup>3</sup> / <sub>4</sub> " to 2" (44 mm to 51 mm)	screw kit 64763	2 lower screws 2¾" (60 mm) 4 mounting screws 1¾" (44 mm)
2½" to 2½" (54 mm to 64 mm)	screw kit 64764	2 lower screws 2½ (73 mm) 4 mounting screws 2½ (57 mm)
1 <sup>3</sup> / <sub>4</sub> " to 2 <sup>1</sup> / <sub>8</sub> " (44 mm to 54 mm)	spindle kit 64778	2 spindles 111/16" (44 mm)
2½" to 2½" (57 mm to 64 mm)	spindle kit 64779	2 spindles 1 <sup>15</sup> / <sub>16</sub> " (49 mm)

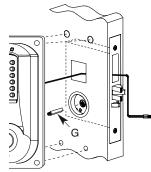
Pre-assemble rectangular mounting plates to both housings with 8, ½" (16 mm) mounting screws.

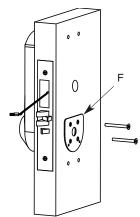
**C-1** For door thickness of  $1\frac{3}{4}$ " –  $2\frac{1}{8}$ ", insert the shorter square spindle (G) into the outside housing hub. Door thickness of  $2\frac{1}{4}$ " –  $2\frac{1}{8}$ ", insert the longer square spindle into each outside unit hub.



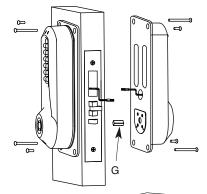
C-3 Place the mounting plate (F) flush against the door as shown. For door thicknesses  $1\frac{3}{4}$  " -2" insert diagonally (as shown) two  $2\frac{3}{8}$ " Phillips flat head screws (supplied in door kit). For door thickness  $2\frac{1}{8}$ "  $-2\frac{1}{8}$ " insert diagonally (as shown) two  $2\frac{7}{8}$ " Phillips flat head screws (supplied in thick door kit). Do not overtighten screws.

**Note**: The screws must line up with the two through holes in the mortise.

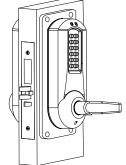




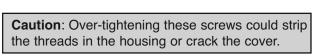
C-4 Insert the end of the square spindle into the remaining unit hub, routing the battery cable through and out of the mortise cavity as shown. Assemble to opposite housing using 4 sex bolts and 4 screws as shown.



**Warning**: If using a power drill, please be careful not to over-tighten as this could cause damage to the mounting screws and threads.



C-5 Connect one lock power cable to each of the two battery power cables. Push the cable into the mortise followed by the battery pack. Assemble the trim plate with the two screws provided as shown.

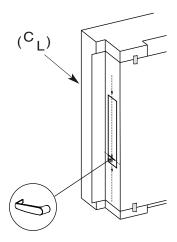


Note: See instructions for lever mounting on p.14

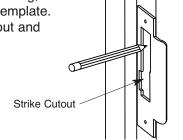
# D. Installing the Strike

**D-1** Align the paper template on the door-frame to match with the desired handle height, and along the vertical center line of the mortise (CL), which is also the center line of the door, allowing for any bumpers on the door frame.

Respect applicable building codes regarding handle height.



D-2 Select the strike for the desired handing, according to the depiction on the template. Mark the location of the strike cutout and mounting screws.

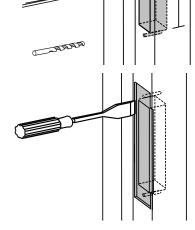


D-3 Drill pilot holes for the strike mounting screws. Mortise the door frame for the strike dimensions shown.

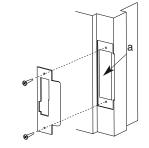
3%" (L) X 1" (D) X 1" (W)

**Note**: Make certain not to mortise over screw holes drilled earlier.

**D-4** Position the strike against the doorframe and align it with the mounting screw holes. Then mark the outline of the strike.



- **D-5** Remove any material from within the strike outline (a) so that the strike will be flush with the doorframe.
- **D-6** Install the strike using the screws provided.



# E. Changing Key-In-Lever Cylinder

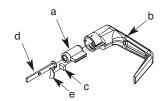
On key-in-lever models of the E-Plex 5000 series, the outside lever comes preassembled with Kaba's key-in-lever cylinder (Kaba 1599). To use a different key-in-lever cylinder follow remaining steps in this section.

- E-1 To remove KIL (key-in-lever) cylinder
  (a) from the outside lever (b). Remove
  the cylinder insert (e) and the cylinder
  retainer (c) using a small flat bladed
  screwdriver or small needle nose pliers.
- **E-2** Determine the proper tailpiece (d) from the chart below for your KIL cylinder.

You must use a Kaba tailpiece. The K 2 tailpiece is preassembled with the Kaba 1599.

TAILPIECE	KIL CYLINDER	
K1	Abloy 5277, Abloy 5477, Assa 65691, Kaba 1539, Kaba Gemini 4730	
K2 K2	Assa 65611, Australian: Kaba experT 107K5 & Boyd KC286, Corbin-Russwin 2000-03, Kaba 1599, Schlage 23-001, Schlage Primus 20-760, Kaba Peaks 1099	
K3	Medeco 20W200H1	
K4 K4	Arrow C100, Sargent 10 LINE	
K5	Marks	

**E-3** Assemble the required tailpiece (d) (from above) with your KIL cylinder. All tailpieces must be installed vertically (with key removed from cylinder) for proper installation.



E-4 Insert the KIL cylinder (a) into the outside lever and secure it with the cylinder retainer (c) and the cylinder insert (e) until the KIL cylinder is snug and unable to move freely.

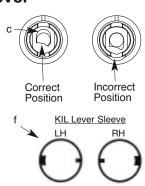
F. Installing / Removing Outside Lever

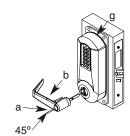
(Key-In-Lever models only)

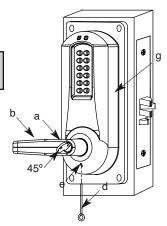
- F-1 Make certain the lever catch is up as shown (c). To successfully install the outside lever, the lever sleeve (f) tab must be positioned correctly with the respective notch on the lever. The lock comes shipped with the lever sleeve already installed in the lock housing. When installing lever, ensure it is oriented to engage the lever sleeve to accommodate desired lock handing as shown.
- **F-2** Insert one of the supplied keys (a) into the outside lever (b) and rotate key counterclockwise 45 degrees.
- F-3 Insert the outside lever (b) until it is flush to the outside unit assembly (g). Secure the outside lever by rotating the key (a) clockwise 45 degrees to horizontal position. Remove key.

**Note**: To remove the outside lever from the outside unit assembly, follow the step below.

F-4 Insert one of the supplied keys (a) into the outside lever and rotate it counterclockwise 45 degrees. Insert release tool (d) into the small hole (e) under lever as shown. Gently push lever catch up until it clicks. Remove tool, then remove outside lever (b).

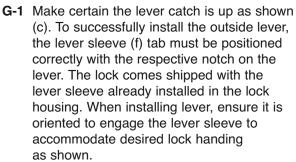


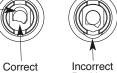




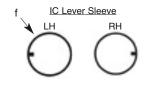
G. Installing / Removing Outside Lever

(Interchangeable / Removable Core Models)

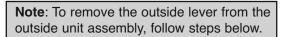




Position Position



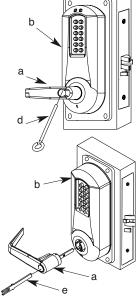
- GI-2 Insert the outside lever (a) until it is flush to the outside unit assembly (b). To secure the outside lever, insert the release tool (d) (or screwdriver) into the outside lever as shown, and slide the lever catch down until it clicks. Make certain lever is attached before installing the core.
- **G-3** Insert the supplied tailpiece (e) vertically into the outside lever as shown. Make certain that you rotate the tailpiece so that it will align with the interchangeable core. For screw cap type cylinders (Schlage) (g), the tailpiece must be assembled to the cylinder first as shown (vertical position). Insert the interchangeable core into the outside lever.



**G-4** Remove the interchangeable core (g). Then remove the tailpiece (e).

Note: You may want to use needle nose pliers for some tailpieces.

Insert the release tool (d) into the small hole (f) under the lever as shown. Gently push lever catch up until it clicks. Remove tool, then remove the outside lever (a).



vertical

**Note:** Do not shut door until installing batteries and testing operation as outlined in the following two sections.

**Warning**: If the lock goes without power for more than two minutes, you will lose the lock's current date and time only. If this happens, program the lock with the correct date and time. Refer to Operations Manual.

**Warning**: Do not install a 9V battery. Your lock operates on 4 alkaline <u>only</u> AA batteries (6V). A 9V will ruin the electronics in the lock, and void your warranty!

**Caution**: Over-tightening these screws could strip the threads in the housing or crack the cover.

### H. Testing the Operation Of The Lock

- **H-1** Rotate each lever and hold. Ensure that the mortise latch is fully retracted and flush with the mortise faceplate. Release the lever; the latch should be fully extended.
- **H-2** Enter the factory-set combination: 1,2,3,4,5,6,7,8. You should see a green light and hear a high-pitched tone as you push each button. When the lock opens you will briefly hear the sound of an electric motor. If 1,2,3,4,5,6,7,8 does not seem to work, please follow the steps to perform a hard reset by following the procedure in section I.
- H-3 The key override differs in that rotating the key does not actuate the latch. To use the key override the key must be inserted into the cylinder and rotated counter clockwise until it stops (approximately 90 degrees) then while holding the key in this position with one hand use the other hand to rotate the lever downward to retract the latch. Once the lever has rotated a few degrees the key may be released.

Note: Refer to the Operating Manual to set up lock operation.

#### I. Reset Function

**Warning**: When the lock is reset, all existing authorization and access codes are deleted, and the lock is configured to the factory default lock settings. The master code becomes 1,2,3,4,5,6,7,8.

If the Master Code is lost or forgotten and the number has not been recorded, the lock can be reset to the factory defaults by following this procedure:

- 1) Insert key, turn to "Open" position and hold.
- 2) Within five seconds, push "#" button on lock and then release the key.
- 3) Red and green lights should begin flashing.
- 4) Input 1,2,3,4,5,6,7,8,# at lock within 10 seconds.
- 5) You should hear the sound of lock resetting and a high-pitch tone.
- 6) Green light flashes. Lock is set to factory mode.

Note: For security reasons, all existing audit events are not deleted.

The lock is now set to the factory-configured setup with the default factory master code, 1,2,3,4,5,6,7,8. Important: Before you can program the lock, you must first enter a new 8-digit master code of your choice.

For example, if your new code is 1,2,,7,2,4,6,8, the correct buttons to press in the exact order are:

#1,2,3,4,5,6,7,8,#,0,0,0,#,1,3,5,7,2,4,6,8,#,#. To determine if you have successfully changed your master code, enter 1,3,5,7,2,4,6,8, and the lock should open. Now try the factory master code, 1,2,3,4,5,6,7,8 and the lock should not open.

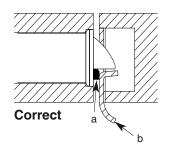
(Be sure to set-up new master codes on both sides of the door)

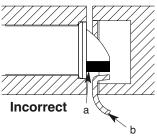
Refer to the included **Operations Manual** for further programming instructions.

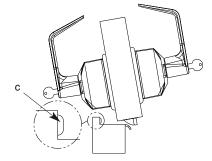
# J. Installing Rubber Bumpers

- J-1 Close the door and apply pressure making sure the deadlatch (a) rests on the strike plate (b) as shown. Standing on the frame (door stop) side of the door, check for gaps between the door and the frame on the three sides of the frame (left, right and top).
- J-2 Mark locations where the gaps are approximately 3/6" (5 mm). Make sure these locations are free from grease and dust. Peel the bumpers (c) (supplied) from their protective backing without touching the adhesive surface and stick them on the marked locations.

**Note**: Allow 24 hours for bumper adhesive to set before testing. The door may be operated manually during this time.







Notes		