For technical assistance, call 1-800-849-TECH (8324) or 336-725-1331 between 8 AM & 5 PM EST Monday through Friday (Excluding Holidays)



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**E-PLEX**<sup>®</sup> 2 0 0 0



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## Please read and follow all directions carefully.

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 or malfunction due to incorrect installation.

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

## **CHECKLIST**

#### **Parts and Tools List**

#### Each E-Plex 2000 lockset includes:

- Outside lock housing
- Inside lock assembly
- Outside lever
- Gasket for outside lock housing
- Cylindrical latch
- Cylinder drive unit
- Battery holder with 3 AA batteries
- Drilling template
- Hardware bag, includes:
  - Square spindle
  - Philips screw (6-32 x 5/16")
  - Strike kit
  - (3) mounting screws (10-24, 1/8" hex head)
  - Allen Key 1/8"
  - (2) 1" (25 mm) Phillips mounting screws
  - (1) extension spring
  - (4) pairs of Flat Head screws 10-24
  - (3) spacers
- Key Override (Optional)
  - (1) cylinder with 2 keys for override
  - (1) cylinder plug
  - (1) cylinder cap

**Warning**: The Master Code of this lock has been factory preset: 1,2,3,4,5,6,7,8. To activate lock functions, the master combination must be changed at the time of installation.

#### **TOOLS REQUIRED:**

- Safety glasses
- 1/2" (13 mm) chisel
- 1/8" (3 mm) drill bit
- ½" (13 mm) drill bit
- 7/8" (22 mm) drill bit or hole saw
- 1" (25 mm) drill bit or hole saw
- 21/8" (54 mm) hole saw
- Drill
- Awl or center punch
- Rubber mallet
- Small flat screwdriver (less than 1/8")

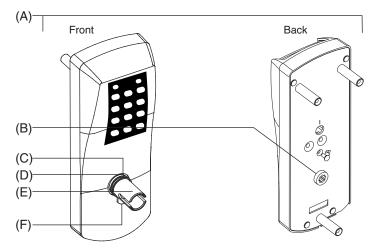
- Phillips screwdriver (#2)
- Fine steel file
- Router
- Adjustable square
- Tape measure
- Pencil
- Tape
- Cleaning supplies (drop cloth, vacuum)
- Spanner screwdriver #6

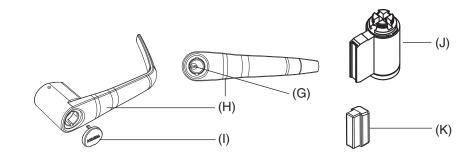
**Important**: For doors more than  $2\frac{1}{2}$ " (64 mm) thick, order the appropriate hardware bag to receive the correct length of spindles and mounting screws.

Door thickness >2 $\frac{1}{2}$ " to 3 $\frac{3}{4}$ " (64 mm to 95 mm), part# 062-510189-XXX; (XXX = choice of finish).

#### Diagram of lock:

- (A) Lock housing
- (B) Inside drive hub
- (C) Nylon washer
- (D) Spring washer
- (E) Drive tube
- (F) Lever catch
- (G) Countersink
- (H) Outside Lever
- (I) Cap
- (J) Cylinder
- (K) Cylinder plug





## A. DOOR PREPARATION

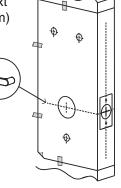
Note: Drill from both sides of the door to prevent unsightly damage.

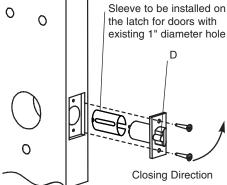
**A-1** Determine which template fits your E-Plex 2000 installation (either the 23/4" [60 mm] Backset or the 23/4" [70 mm] Backset).

**A-2** Place appropriate paper template (supplied) onto door and mark for holes. Drill the three  $\frac{1}{2}$ " (13 mm) holes first. Next drill the 2 $\frac{1}{8}$ " (54 mm) cross bore hole. Drill the 1" (25 mm) hole last.

A-3 Mortise door edge for latch unit faceplate  $\frac{3}{16}$ " (5 mm) deep to dimensions shown. Insert latch unit into the 1" (25 mm) hole, making certain that the latch bolt bevel faces direction of closing door.

A-4 Secure the latch to the door using two 1" (25 mm) Phillips Mounting screws supplied. Latch unit face-plate must be flush with door (for doors with 1" diameter hole, use sleeve on latch).





## **B. LOCK HANDING**

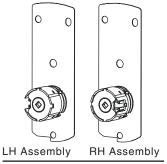
The E-Plex 2000 is a non-handed lock that is preassembled for left-hand door installations.

**B-1** Determine the hand of your door. For Left Hand doors, proceed to section C. For Right Hand doors, follow steps below.





**B-2** Remove the two connecting screws from the cylindrical drive unit. Rotate cylindrical drive unit 180°. Reposition spacer(s) as found before disassembly. Remount drive unit with the two connecting screws.

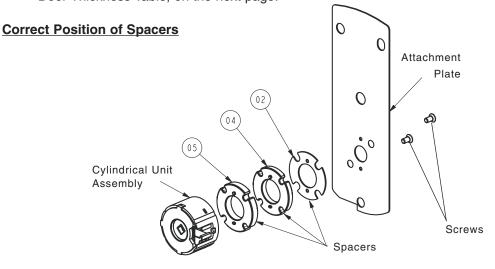


Cylindrical Drive Unit Position

## C. DOOR THICKNESS

The cylindrical unit and plate assembly is shipped assembled in factory for  $1^3/4$ " (44 mm) door thickness ( $1^{11}/_{16}$ " [43 mm] to less than  $1^{7}/_{8}$ " [48 mm]) with 2 spacers "04"; 1 spacer "02" and 2 flat head screws  $5^{7}/_{8}$ " (16 mm) LG. For other door thicknesses, use door thickness table for appropriate spacers and screws included in the hardware bag.

C-1 Prepare attachment plate and cylindrical drive unit for door thicknesses less than 1<sup>11</sup>/<sub>16</sub>" (43 mm) or 1<sup>7</sup>/<sub>8</sub>" (48 mm) and above according to the Door Thickness Table, on the next page.



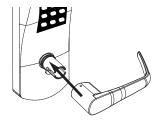
#### **Door Thickness Table**

Door Thickness	Spacer 02 thin	Spacer 04 125	Spacer 05 328	Screw length
1 <sup>3</sup> / <sub>8</sub> " (35 mm) up to 1 <sup>9</sup> / <sub>16</sub> " (40 mm)	-	1	-	<sup>3</sup> / <sub>8</sub> " (10 mm)
Over 1 <sup>9</sup> / <sub>16</sub> " (40 mm) to less than 1 <sup>11</sup> / <sub>16</sub> " (43 mm)	-	2	-	½" (13 mm)
1 <sup>3</sup> / <sub>4</sub> " (44 mm) Door 1 <sup>11</sup> / <sub>16</sub> " (43 mm) to less than 1 <sup>7</sup> / <sub>8</sub> " (48 mm)	1	2	-	<sup>5</sup> / <sub>8</sub> " (16 mm)
1 <sup>7</sup> / <sub>8</sub> " (48 mm) to 1 <sup>15</sup> / <sub>16</sub> " (49 mm)	1	-	1	5/8" (16 mm)
2" (50 mm) Door over 1 <sup>15</sup> / <sub>16</sub> " (49 mm) to less than 2 <sup>1</sup> / <sub>8</sub> " (54 mm)	2	ı	1	<sup>3</sup> ⁄ <sub>4</sub> " (19 mm)
2½" (54 mm) to 2½16" (56 mm)	-	1	1	<sup>3</sup> / <sub>4</sub> " (19 mm)
2 <sup>1</sup> / <sub>4</sub> " (57 mm) Door over 2 <sup>3</sup> / <sub>16</sub> " (56 mm) to 2 <sup>3</sup> / <sub>8</sub> " (60 mm)	2	1	1	½" (22 mm)
Over 23/8" (60 mm) to 21/2" (64 mm)	-	-	2	<sup>7</sup> / <sub>8</sub> " (22 mm)

Screw Length	Full Scale
Length 3/8" (10 mm)	
Length ½" (13 mm)	
Length 5/8" (16 mm)	
Length 3/4" (19 mm)	<b>——</b>
Length 7/8" (22 mm)	

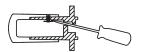
# D. INSTALLING OUTSIDE LEVER ON NON-MECHANICAL OVERRIDE

Assemble the lever on the outside housing in the horizontal rest position appropriate to the handing of the door. Simply push the lever onto the tube until it clicks in place. If more force is required, use a rubber mallet. Test the attachment of the handle by pulling on it to make sure it is securely fastened.



# E. REVERSING THE OUTSIDE LEVER FOR SERIES WITHOUT MECHANICAL OVERRIDE

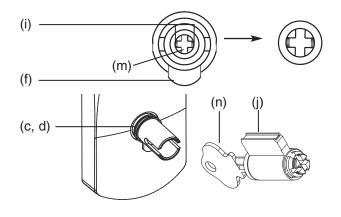
The lever is field reversible. If the handing is incorrect, insert a small pick or flat screwdriver in the hole in the hub as shown. Gently pry back the spring clip inside the hub, and remove the handle.



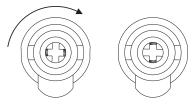
# F. INSTALLING OPTIONAL KEY OVERRIDE AND OUTSIDE LEVER

**Important**: Assemble the lever, cylinder and lock components before affixing the entire unit to the door.

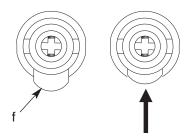
- F-1 Upon unpacking, the lock housing with mechanical override should look like the diagram below with:
  - The small indents (i) on the cross of the override shaft (m) in line horizontally
  - The nylon washer (c) and the spring washer (d) on the drive tube
  - The lever catch (f) in the out position
  - Cylinder (j) and 2 keys (n) included in the hardware bag



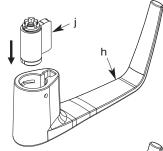
**F-2** Turn the override shaft 90° clockwise so that the two small indents on the cross are now vertically in line. (The cylinder can be used to turn override shaft.)



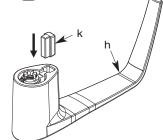
F-3 Push in the lever catch firmly.



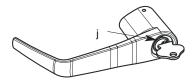
**F-4** Insert the cylinder (j) into the lever handle (h).



**5-5** Put the cylinder plug (k) into the lever (h).



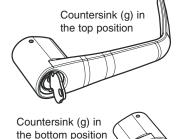
F-6 Making sure that the cylinder plug (k) does not fall out, insert the key into the cylinder (j). The key will be horizontal.



**Caution**: The position of the key is very important. If the lever is not assembled with the key in the correct position before placing the lever on the housing, the inside mechanism of the lock could be damaged if the lever is rotated and forced.

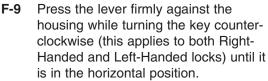
F-7 For Right-Handed Levers: Turn the key approximately 90° clockwise so that it is in the vertical position and the countersink (g) is in the top position.

For Left-Handed Levers: Turn the key approximately 90° clockwise so that it is in the vertical position and the countersink (g) is in the bottom position.



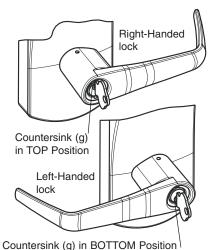
F-8 Fit the lever handle (h) onto the drive tube. It should rest approximately ½16" (2 mm) from the body of the housing. If it can't be pushed that close to the housing, the lever catch (f) is probably not pushed in. Push it in.

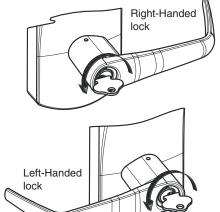
If the lever catch (f) is stuck, the override shaft is in the wrong position. The two small indents on the cross of the override shaft must be vertically aligned.



**Important**: If it is not possible to turn the key counter-clockwise to complete this step, the spring washer (d) may be too tense:

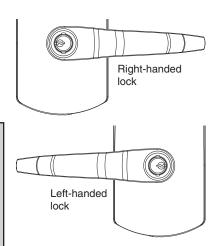
Tap the lever carefully with a rubber mallet to loosen the spring washer (d). Cover the lever handle with a cloth or other material to protect the finish of the metal.





- **F-10** Remove the key. The lock will look as shown at right.
- **F-11** Gently check the rotation of the lever handle. It should easily rotate approximately 45°.

**Troubleshooting**: If you have assembled the lever and housing with the key in the wrong position, the key will get stuck. To remove the key, turn it so that it is in the vertical position and insert a small flat screwdriver into the hole under the lever handle to push the lever catch in (f). Remove key. If it is still stuck, turn the key 90° clockwise to the horizontal position and push the Lever Catch in again with the small screwdriver. Remove key.



**Troubleshooting**: Right-Handed Lock: Turn the lever handle clockwise without forcing it. If it stops at approximately 15°, it was not assembled correctly. Do not try to force it to turn - this will damage the inside mechanism of the lock. Release the lever handle. Insert the small screwdriver into the small hole on the underside of the lever handle and push in the lever catch.

Re-do steps in section D

<u>Left-Handed Lock</u>: Turn the lever handle counter-clockwise without forcing. The drive hub should not rotate when the lever handle is turned. If it does, it was not assembled correctly. Release the lever handle. Insert the small screwdriver into the small hole on the underside of the lever handle and push in the lever catch.

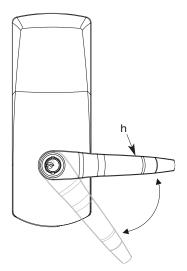
Re-do steps in section D

## G. TESTING THE OPERATION OF THE OUTSIDE LEVER

- **G-1** Verify that the lever has been correctly attached to the housing:
  - a. Remove key.
  - b. Insert a small flat screwdriver into the hole on the underside of the lever handle and push in the lever catch.
  - c. Pull on the lever.

You should not be able to remove the lever. If the lever comes off of the housing, the lock is not assembled correctly. Return to steps in section D and repeat this verification process.

- **G-2** Test the Movement of the Lever (without the key in cylinder)
  - a. Turn the lever (h) clockwise for a Right-Handed lock or counter-clockwise for a Left-Handed lock
  - b. Release the lever slowly. It should return freely to its horizontal position.
  - c. If the lever doesn't easily return to its original position, the spring washer (d) is probably too tight. Use a rubber mallet to tap the lever carefully against the housing to reduce the tension of the spring washer (d), until the lever moves freely back to its horizontal position when turned slowly.

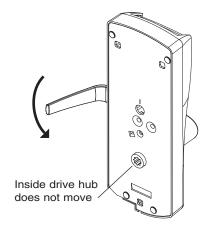


## H. TESTING THE MECHANICAL KEY OVERRIDE

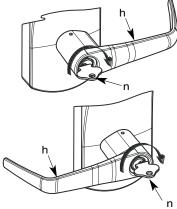
**Important**: The Key Override itself does not retract the latch or deadbolt. Do not use too much force when turning the key as this may damage the unit. To retract the latch, turn the key clockwise until it stops, release the key and turn the lever.

**Note**: The lever must stay in the horizontal position when turning the key (do not try to turn the key while turning the lever) or the override mechanism will not work.

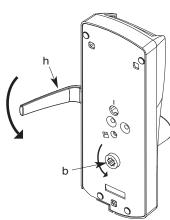
H-1 Without using the key, turn the lever clockwise for Right-Handed locks or counter-clockwise for Left-Handed locks. The inside drive hub should not rotate when the lever turns.



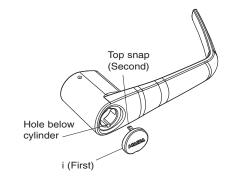
H-2 With the lever (h) in the horizontal position, insert the key (n) into the cylinder and turn it clockwise until it stops. (This applies to both Right and Left-Handed locks.)



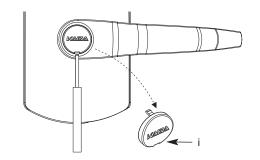
H-3 Let go of the key, and again turn the lever handle (h) clockwise for Right-Handed locks or counter-clockwise for Left-Handed locks. Now the inside drive hub (b) should rotate in the same direction as the lever handle when it is turned.



H-4 Install cap (i) to cover key hole. The cap has a small groove on one edge (to allow ease of removal). This should be facing down. Insert bottom snap of cap in lever hole below the cylinder. With a small screwdriver, push top snap of cap down while pushing the cap into place.

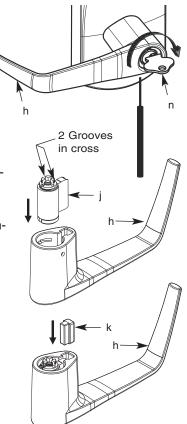


H-5 To remove the cap (i), insert a small flat screwdriver into this groove and gently pry the cap off, being careful not to damage it. Cover the bottom of the lever to protect the finish from being scratched through the process of removing the cap.



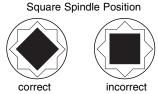
## I. CHANGING LOCK CYLINDERS

- **I-1** Remove the cap from the outside lever (h).
- **I-2** Insert key (n).
- I-3 Turn the key clockwise until it stops.
- I-4 Release key (n).
- Use a small flat screwdriver to push in the lever catch through the small hole underneath the outside lever
- -6 Pull the outside lever (h) off of the lock housing (be careful not to lose the cylinder plug).
- I-7 Replace the old cylinder with the new one in the lever handle. Only the same kind of cylinder with 2 grooves in cross in the end of the cylinder plug can be used on the lock.
- **I-8** Re-insert the cylinder plug (k).
- **-9** While holding the cylinder (j) and plug (k) in place, insert the key.
- I-10 Follow steps in section D, 7-11.

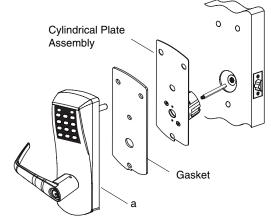


#### J. INSTALLING LOCK HOUSINGS

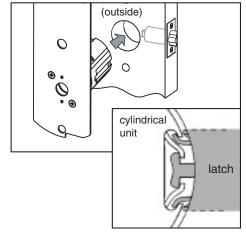
J-1 Insert the slotted end of the square spindle into the outside lever hub until it locks, at an angle of 45°. (The spindle can be removed by pulling on it, if oriented incorrectly.)



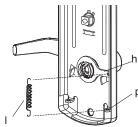
J-2 Assemble gasket onto the outside housing (a). Assemble cylindrical plate assembly onto the outside lock housing.



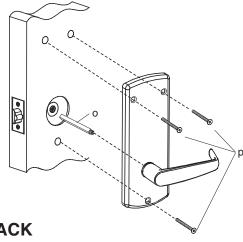
J-3 Place the outside housing (a) and cylindrical plate assembly on the door so that spindle engages hub of cylindrical unit of latch.



J-4 On the inside trim assembly, turn the lever to the correct horizontal rest position for the handing of the door. Install the tension spring (I) between the handle (h) and the post (p).



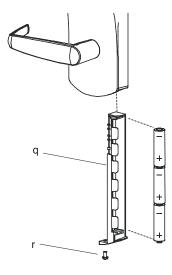
J-5 Place the inside trim assembly on the door so that the spindles (o) engage the inside lever. Fasten to the outside housing using the three ½" (3 mm) hex drive mounting screws (p).



## K. INSTALLING BATTERY PACK

**Note**: If the lock makes a continuous buzzing noise or the red LED lights continuously, reset the electronics by removing the battery holder for ten seconds, then reinsert it.

- **K-1** Three AA batteries should already be installed in the battery holder (q).
- K-2 Insert the battery holder into the outside housing and secure it using the 6-32 x <sup>5</sup>/<sub>16</sub>" (8 mm) screw (r).



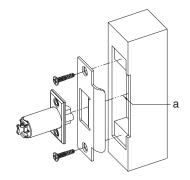
## L. TESTING THE OPERATION OF THE LOCK

- **L-1** Rotate inside lever and hold. Ensure that the latch is fully retracted and flush with the latch faceplate. Release the inside lever; the latch should be fully extended.
- L-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 electronic motor. Rotate outside lever and hold. Ensure that the latch is fully retracted and flush with the latch faceplate. Release the outside lever; the latch should be fully extended. When the lock re-locks, you will again hear the motor.
- L-3 With the the door open, verify functionality of the mechanical Key Override as detailed in Section F.

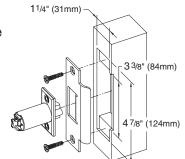
#### M. INSTALLING THE STRIKE

**Note**: Use only the strike and strike box supplied. The use of non-approved parts will result in a functionality problem and may void the warranty.

**M-1** Mark location of strike on the door frame, making certain that the strike opening is aligned with latch bolt.



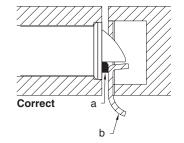
M-2 Mortise doorframe for strike <sup>3</sup>/<sub>32</sub>" (3 mm) deep minimum to dimensions shown. Secure strike to the door frame using two 1" (25 mm) combination screws.



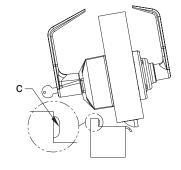
<u>Caution</u>: Check the operation of the latch by making sure that the deadlatch stops against the strike as shown and does not slide into the strike opening when the door is closed. If that situation occurs, then a total lockout may occur. This will void our warranty of the complete lock mechanism. If necessary, correct the door over-travel by using the rubber bumpers as described in Section L (Installing Rubber Bumpers).

## N. INSTALLING RUBBER BUMPERS

N-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).



N-2 Mark locations where the gaps are approximately 3/16" (5 mm). Make sure these locations are free from grease and dust. Peel the bumpers (c) from their protective backing without touching the adhesive surface and stick them on the marked locations.



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