



INSTALLATION INSTRUCTIONS

4000/4400/610 SERIES

Electronic Pushbutton Lock
Cylindrical Drive

PK2470-T



Before You Start

! 4000 LOCK

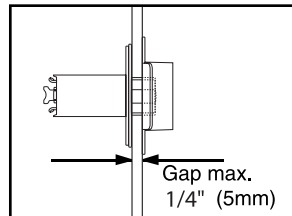
The service access code of this lock has been factory preset to 4000, and the master authorization code has been factory preset to 12345678. **The end user must change these codes once the lock is installed (refer to the user guide).**

ORACODE 610/4400

(see the user operation manual)

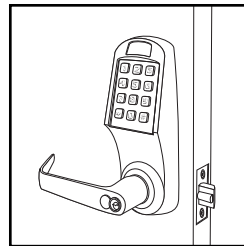
! Carefully inspect windows, frame, door, etc. to ensure the recommended procedures will not cause any damage. **Kaba Ilco is not responsible for damage caused by installation.**

! Check the alignment of the door and door frame. The maximum allowable distance between the latch plate and the strike plate is $\frac{1}{4}$ ". **Greater distances may not depress the deadlocking pin sufficiently to deadlock the latch bolt.**

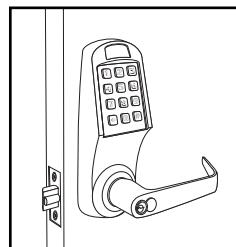


! The lock handing is set at the factory, and cannot be reversed in the field. *If the lock is not the correct handing for the door, stop now and order the correct lock.*

The warranty is void if the seal on the inside housing is removed. DO NOT attempt to disassemble the lock.



Left-Hand
(hinges on left)



Right-Hand
(hinges on right)

Table of Contents

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Cylindrical Drive

Door Preparation

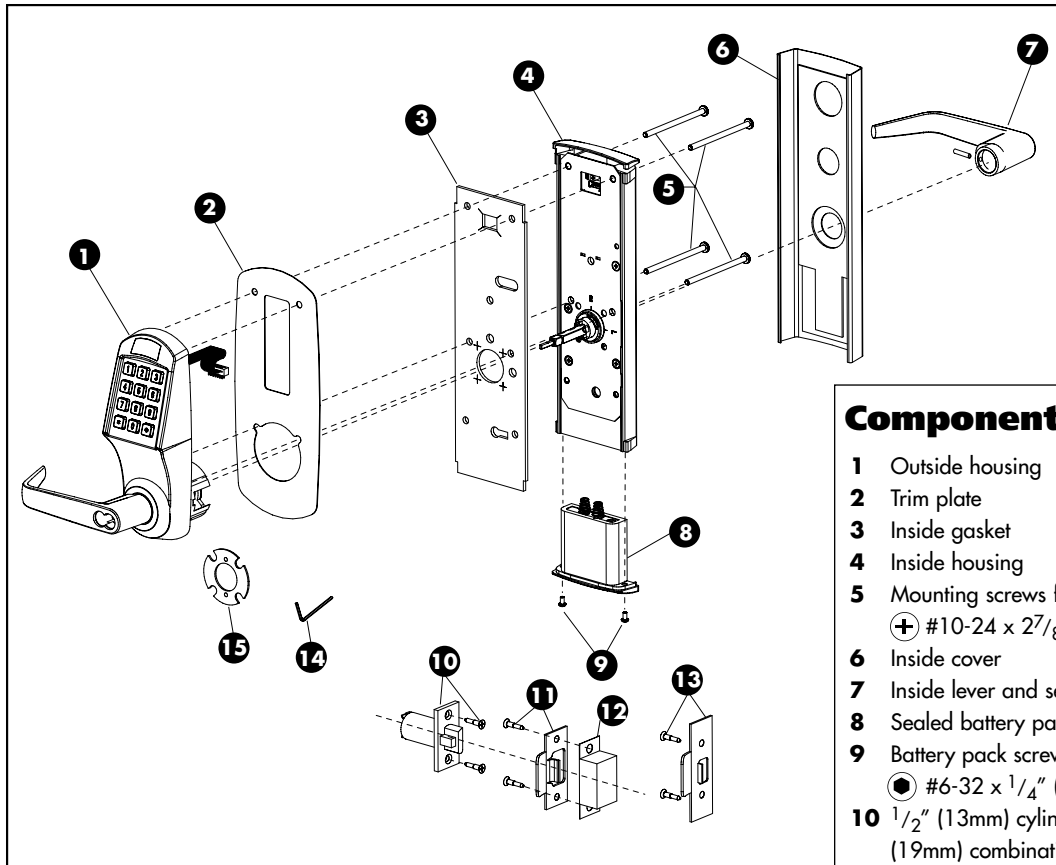
Latch $\frac{1}{2}$ "

Backset $2\frac{3}{4}$ " and $2\frac{3}{8}$ "

Door Thickness $1\frac{3}{8}$ " to 2"

Exploded View	2
Installing The Strike	3
Door Preparation	4
Door Thickness Adjustments	6
Lock Installation	8
Testing The Lock	15
Troubleshooting	16
CE Statement	17
Warranty Information	17

Exploded View



Components Supplied

- 1 Outside housing
- 2 Trim plate
- 3 Inside gasket
- 4 Inside housing
- 5 Mounting screws for 1³/₄" (44mm) doors
⊕ #10-24 x 2⁷/₈" (73mm)
- 6 Inside cover
- 7 Inside lever and set screw
- 8 Sealed battery pack
- 9 Battery pack screws
● #6-32 x 1¹/₄" (6mm)
- 10 1¹/₂" (13mm) cylindrical latch and 3³/₄" (19mm) combination screws
- 11 TS strike plate and 3³/₄" (19mm) combination screws
- 12 Strike box
- 13 ASA strike plate and 1" (25mm) combination screws
- 14 5¹/₆₄" (2mm) Allen key
- 15 Additional 1¹/₂₅" (1mm) spacer

Tools Required

Safety glasses
 Electric drill
 Awl or center punch
 1¹/₄" (31mm) and 2¹/₈" (54mm) hole saw
 1" (25mm) and 1¹/₄" (6mm) drill bits
 1" (25mm) wood chisel
 Mallet
 Phillips screwdriver
 Flat blade screwdriver
 1¹/₈" (3mm) Allen key
 Needle-nose pliers

For 1³/₈" (35mm) doors only:

Fine metal file
 Hacksaw

16 For a 1³/₈" (35mm) door

4x #10-24 x 2¹/₂" (64mm)
 4x #10-24 x 3³/₈" (10mm)
 1¹/₂₅" (1mm)

17 For a 2" (35mm) door

4x #10-24 x 3¹/₈" (79mm)
 4x #10-24 x 7⁷/₈" (22mm)
 1¹/₈" (3mm)

18 Operation manual

19 Installation manual

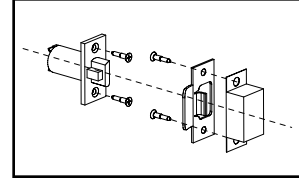
20 Drilling Template (inside installation manual)

Installing the Strike

- 1 Mark the location of the strike plate on the doorframe. Use the supplied template.

! Follow any building codes that apply and measure the desired vertical position of the lock from the top of the door.

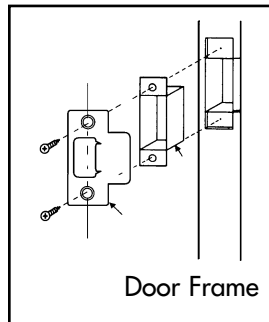
TIP: Center of the strike will be the center of the lock.



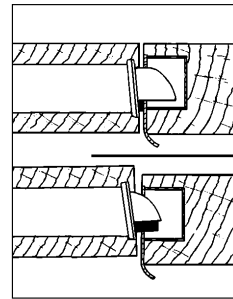
- 2 Make the strike box cutout, slightly deeper than required for the strike to sit flush.



- 3 Install the strike with the combination screws provided.



! The deadlocking pin must NOT slip inside the strike opening when the door is closed. This situation may result in a total lockout.



✓
Right

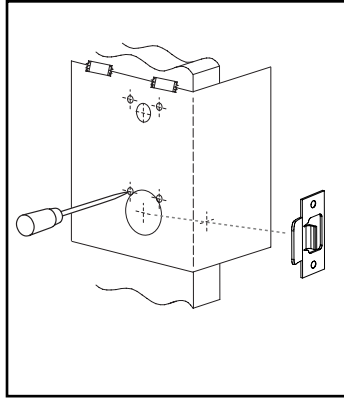
✗
Wrong

You MUST use the TS or ASA strike provided. Using other strikes will cause premature latch wear.

Failure to observe either of these warnings will cancel the warranty of the complete lock mechanism.

Door Preparation

1 Mark location of holes.



Use the template that matches the backset of the latch, 2³/₈" (60mm) or 2³/₄" (70mm).

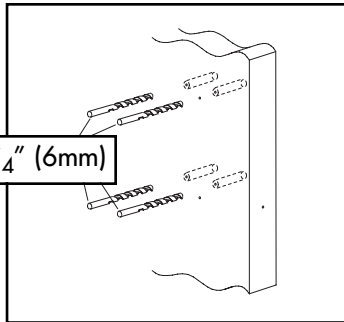
TIP: For 90° doors, fold template on "high beveled edge" line for both sides of door.

For doors with a 3° bevel, fold low side along "low beveled edge" line, and high side along "high beveled edge" line.

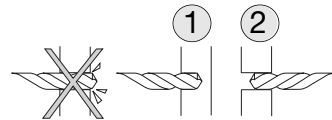
2 Drill 1/4" (6mm) holes.



∅ = 1/4" (6mm)



Drill from both sides of door to avoid surface damage.



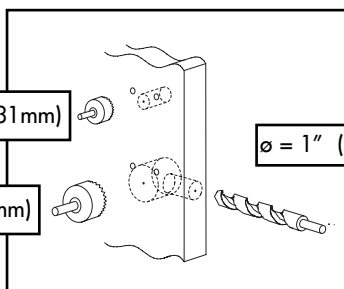
3 Drill remaining holes.



∅ = 1 1/4" (31mm)

∅ = 1" (25mm)

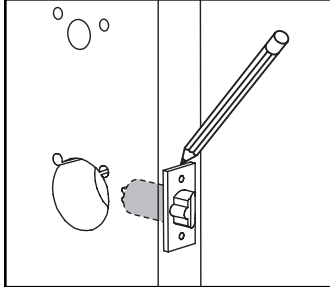
∅ = 2 1/8" (54mm)



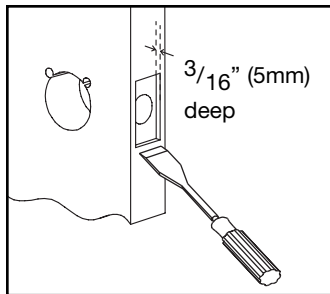
TIP: If the 2 1/8" (53mm) hole is pre-cut, start the two 1/4" (6mm) holes that touch it with a 1/8" (3mm) drill, then enlarge the holes to 1/4" (6mm). These holes must NOT exceed 3/8" (9mm) in diameter.

Door Preparation (cont)

- 4** Trace the outline of the latch plate.



- 5** Chisel clearance for latch plate to lie flush.

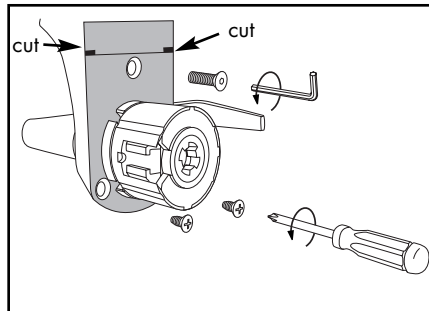


Door Thickness Adjustment

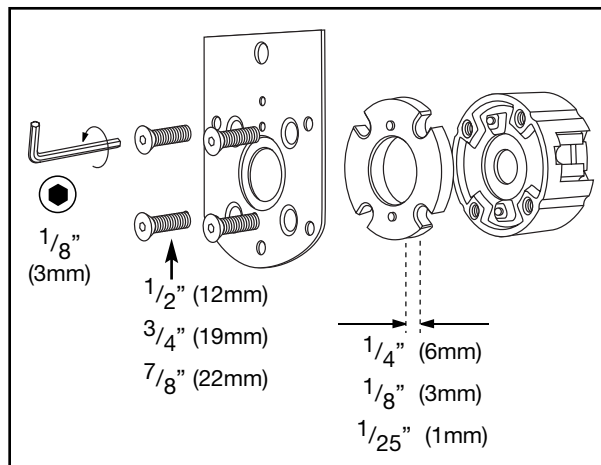
- 1** Place outside housing and template on door and check alignment.



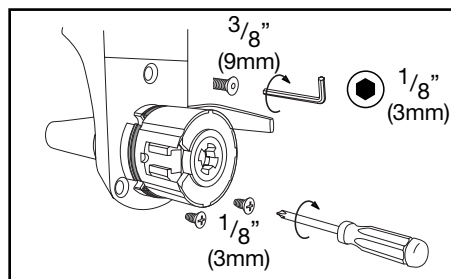
- 1a** To adjust alignment, unscrew attachment plate and cut gasket with a knife.



- 1b** Unscrew drive unit and spacer. Replace desired spacer and use proper screw length to re-assemble.

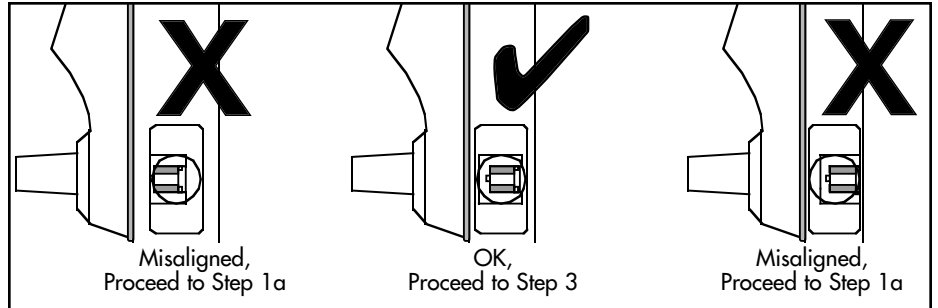


- 1c** Re-mount attachment plate.

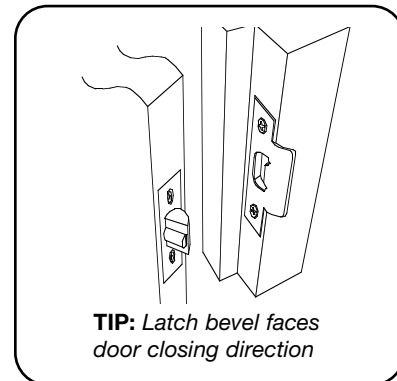
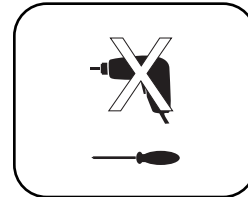
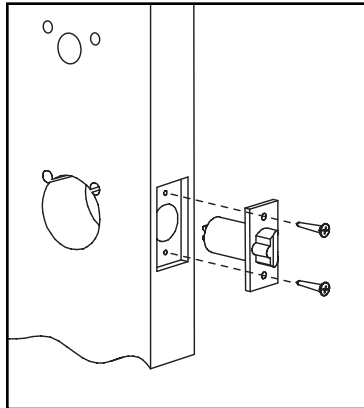


Door Thickness Adjustment (cont)

- 2** Verify alignment on door.

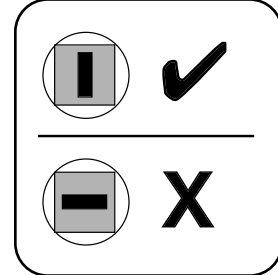
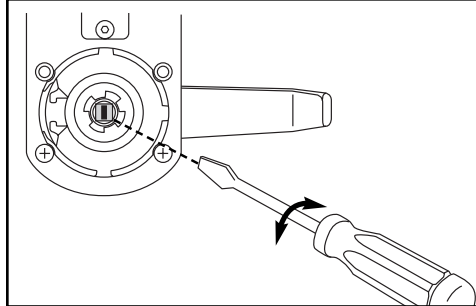


- 3** Install latch with screws provided.

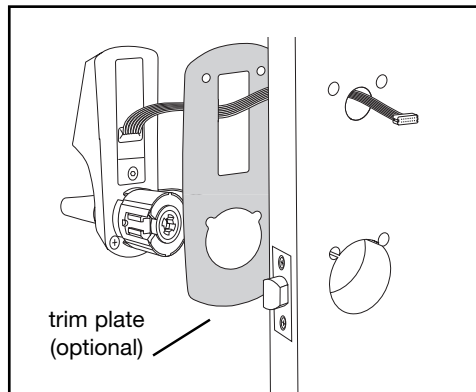


Lock Installation

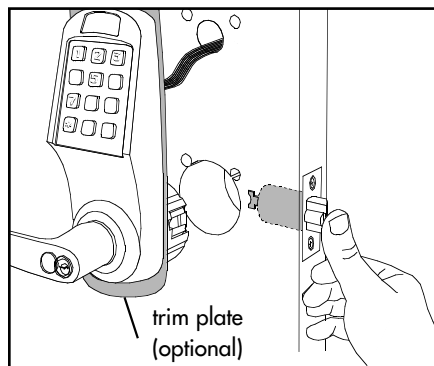
- 1** Turn override slot in outside housing to a vertical position.



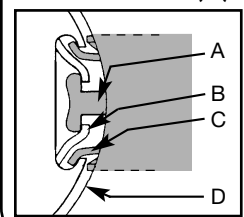
- 2** Feed cable through trim plate and door from outside.



- 3** Lightly press the latch bolt, and place outside housing on the door.

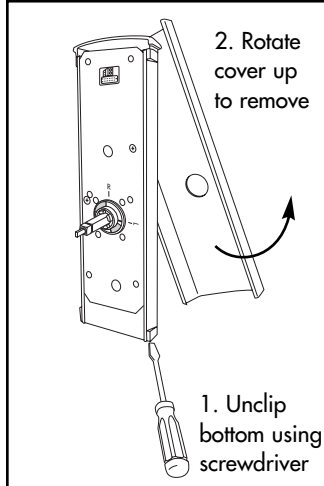


Tailpiece (A) engages retractor shoe (B), and prongs (C) engage drive unit case (D).

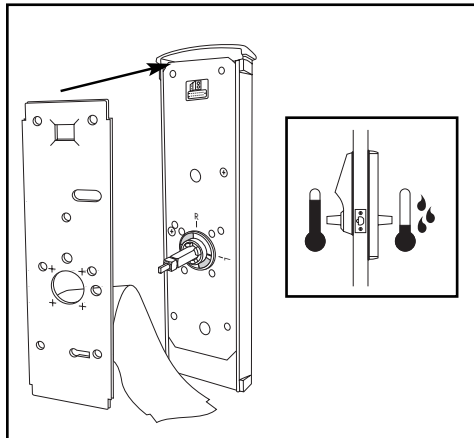


Lock Installation (cont)

- 4** Remove cover from inside housing.



- 5** Apply gasket to inside housing (optional).

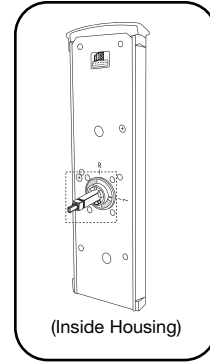
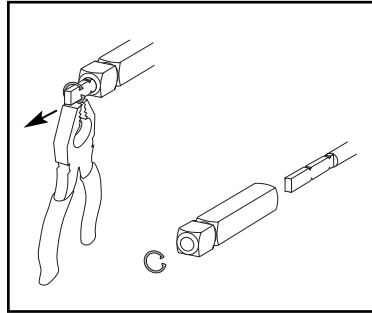


TIP: Use gasket for condensing environments, such as a room that opens to an outdoor space.

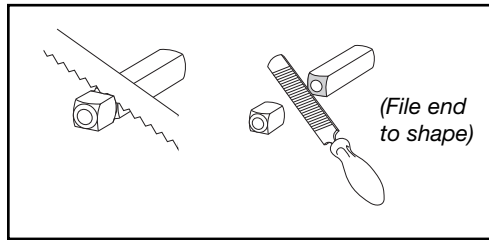
Lock Installation (cont)

- 6** If door is $1\frac{3}{4}$ " (44mm) thick or more, proceed to step 7.
If door is $1\frac{3}{8}$ " (35mm) thick, you must cut the adjustable spindle as follows:

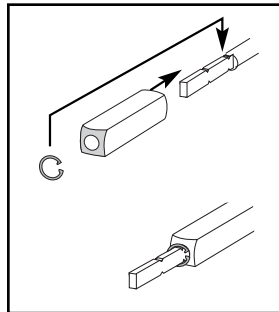
- 6a** Remove the spindle.



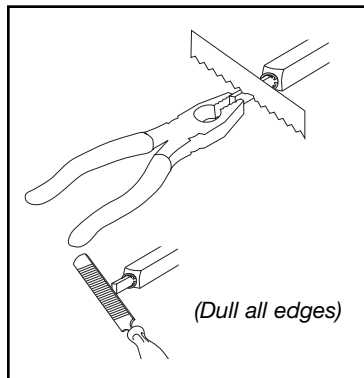
- 6b** Cut spindle at notch.



- 6c** Reassemble spindle and clip.

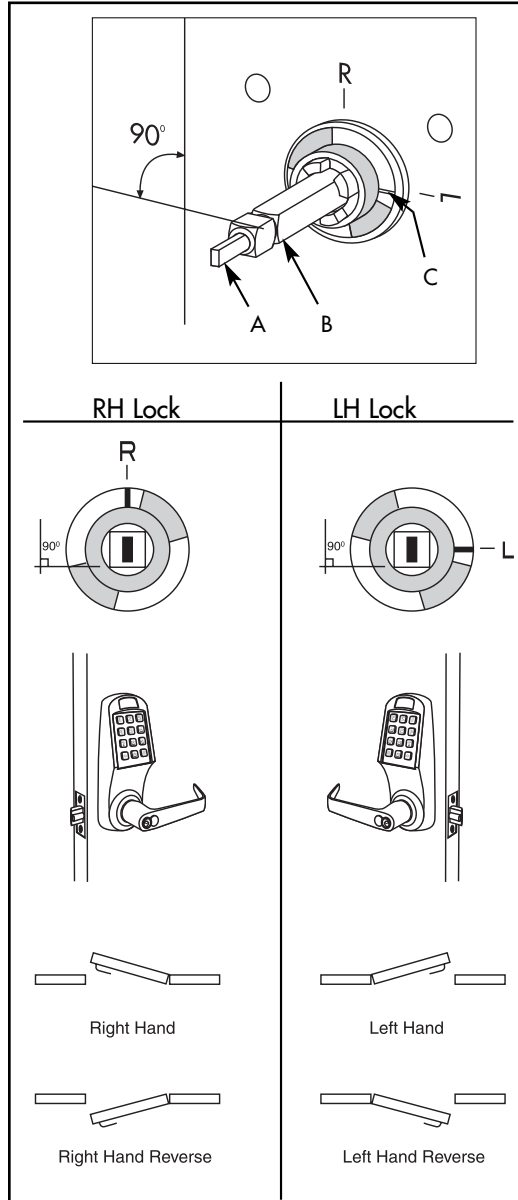


- 6d** Cut override shaft at first notch.



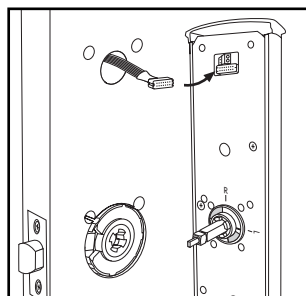
Lock Installation (cont)

- 7** Turn the override shaft (A) and spindle (B) on inside housing to a vertical position, and turn the drive disc until the mark (C) lines up with "R" for a right-hand door, or "L" for a left-hand door.

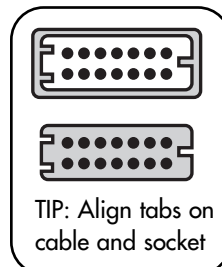


Only **ONE** hand (R or L) will align correctly. If the marks will not align, check the lock handing printed on the box.

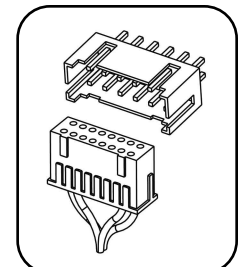
- 8** Connect cable to inside housing. Take care not to change the alignment of parts from Step 7.



Model 4000

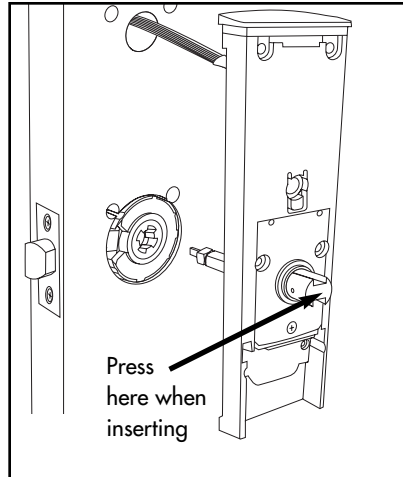


Model 4400/610



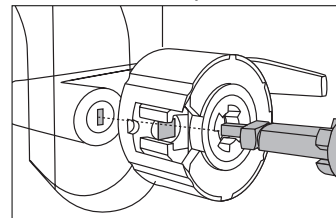
Lock Installation (cont)

- 9** Press on the inside handle shaft so part alignment do not change and place the inside and outside housing on the door.

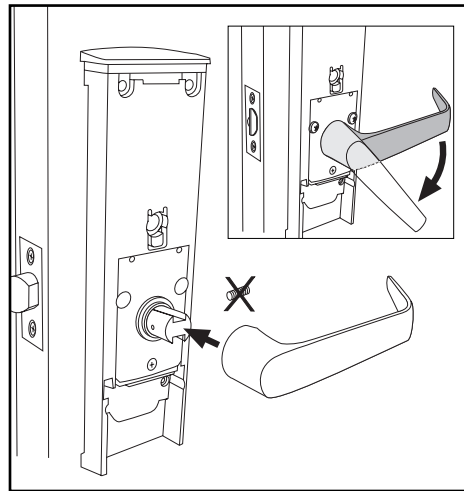


All parts must engage.
(DO NOT FORCE).

- If the lock is not seated snugly on the door, return to step 7 and re-align the parts.
- If the lock still will not sit snugly on the door, return to the Door Thickness Adjustment section.

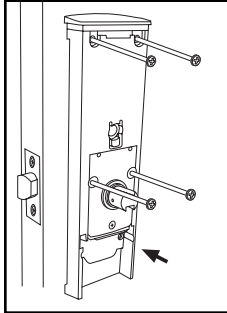


- 10** Hold the inside and outside housings on the door with one hand and slide the inside handle temporarily in place. Turn the handle. If the latch doesn't retract, check that the parts have engaged properly. If the handle still does not retract the latch, add the $\frac{1}{25}$ " spacer. (see Door Thickness Adjustment section).

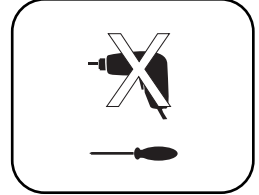


Lock Installation (cont)

- 11** Insert mounting screws. Hold down the top plastic cap on the inside housing. Tighten the screws by hand. DO NOT OVERTIGHTEN.



If the latch retracts but the lever is hard to turn, loosen the bottom mounting screws slightly.

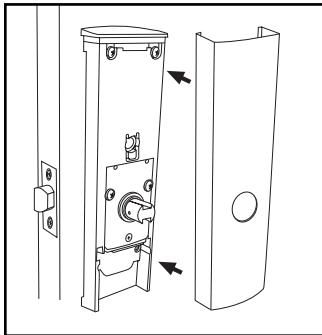


Use correct length mounting screws for door thickness:

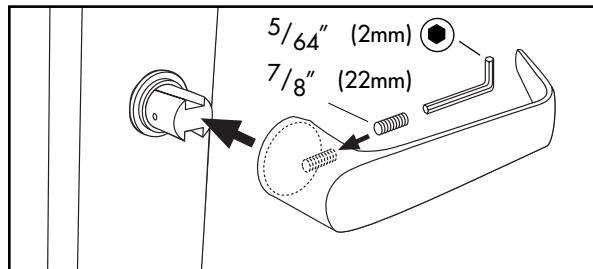
Door	Screw (actual size)
1 ³ / ₈ " (35mm)	2 ¹ / ₂ " (64mm)
1 ³ / ₄ " (44mm)	2 ⁷ / ₈ " (73mm)
2" (51mm)	3 ¹ / ₈ " (79mm)

Over 2"
Screws provided with lock.

- 12** Snap the cover onto the inside housing.

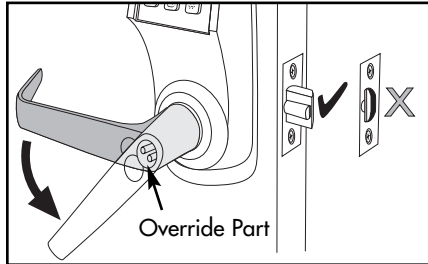


- 13** Install the inside lever and set screw.



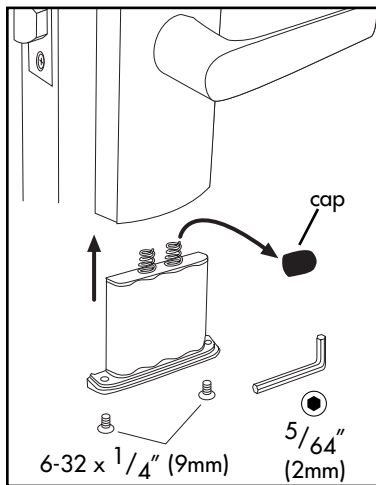
Lock Installation (cont)

- 14** Turn the outside lever and check the position of the latch bolt.

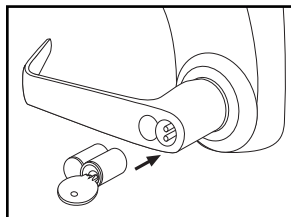


If the latch retracts, turn the override parts (pins, protrusions or slots) to the position where the latch does not retract.

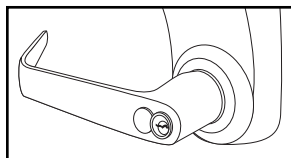
- 15** Remove battery cap and install battery pack and screws.



- 16** Install override core using control key.



TIP: Matching parts may be pins, protrusions or slots.



Testing the Lock

Perform these tests with the door open to avoid a potential lockout.

1. Test the unlocking and re-locking of the lock several times with the factory code (4000 Lock) or programmed code (Oracode 610/4400):
 - 4000 lock. Enter **4000** on the keypad.
 - Oracode 610/4400 lock. Enter the programmed code on the keypad.
 - The **green** LED will flash during the unlock period, and you will hear the motor engage the clutch.
 - Turn the outside handle (while the green LED flashes). **The latch bolt will retract.**
 - When you release the lever, the motor disengages the clutch.
 - Turn the lever again. **The latch bolt should not retract again without re-entering the code.**

2. Test the override by repeating the following steps several times:
 - Insert the override key, and turn it 90°, then turn the handle to retract the bolt. You will notice that both handles move together when the override is engaged.
 - Remove the override key. Turn the outside handle to ensure the override is disengaged (the latch bolt should not retract).

NOTE: The override key does not retract the bolt without turning the lever.
DO NOT force the override key.

Troubleshooting

❓ When I turn the inside lever, why doesn't the latch retract?

- ➡ The four prongs on the drive disc are not turning the cylindrical drive to move the latch.
- 🔧 Remove the inside housing and latch from the door. Check the position of the cylindrical unit as per step 1 of the Door Thickness Adjustment section. Correction may involve changing the spacer as per step 1a to 1c of the Door Thickness Adjustment section.

❓ Why won't the outside and inside housings fit snugly together when I assemble the lock on the door?

- ➡ The square spindle, override shaft and drive disc on the inside housing are not properly aligned.
- 🔧 Check that the mechanical override slot in the outside handle is completely vertical. Position the parts on the inside housing (square spindle, override shaft and drive disc) as shown in step 7 of the Lock Installation section. Press on the inside handle shaft when you assemble the two housings on the door, to hold the parts in position.

- ➡ The spindle is too long (for a 1 3/8" door only).

- 🔧 Shorten the spindle as directed in step 6 of the Lock Installation section.

❓ When I press the buttons on the keypad, why doesn't the lock work (no lights or beeps)?

- ➡ The cable connector is not inserted properly.
- 🔧 Remove the lock from the door and firmly re-insert the connector as shown in step 8 of the Lock Installation section.

❓ When a valid code is entered, the lock beeps and the green light or the red light flashes. Why doesn't the motor engage?

- ➡ The lock is in Passage mode, or in Lockout mode.
- 🔧 See the User Guide for instructions to remove the Passage mode or Lockout.

❓ When I turn the outside lever, why do both the inside and outside levers turn together automatically, without entering a code?

- ➡ The mechanical key override is activated.
- 🔧 Use a screwdriver to rotate the override mating parts (pins, protrusions or slots) in the outside handle, until the outside lever does not retract the latch bolt.

❓ Why does the latch stick when the inside lever is turned?

- ➡ The inside and outside housing are misaligned, the door was poorly prepared (hole drilling), or the mounting screws were incorrectly tightened. Alternatively, the door thickness is not correct for the screws and cylindrical spacers used.
- 🔧 Loosen the mounting screws and realign the inside and outside housing. Tighten the mounting screws to completely compress the inside housing. If necessary, change hardware such as cylindrical spacers and screws to match the door thickness.

❓ Why doesn't the latch fully retract when the inside or outside lever is turned?

- ➡ The door was poorly prepared (hole drilling), the backset (distance from the edge of the door) is incorrect, or the bevel angle of the door was not taken into account when the door was marked for drilling.
- 🔧 Slightly loosen the latch screws and turn the lever to check the retraction. Remove the lock and adjust the holes.

❓ Why, after tightening the four mounting screws, is the outside lever hard to turn?

- ➡ The 2 bottom mounting screws are too tight.
- 🔧 Remove the back cover and loosen the bottom screws.

CE Statement

American User's information
FCC compliance statement



Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

European user's information – Declaration of Conformity

This device complies with the EMC Directive 89/336/EEC (amended by 92/31/EEC and 93/68/EEC for a class A digital device. It has been tested and found to comply with EN50081-1:1992 (EN55022:1994) and EN50082-1:1992 (IEC801-2:1991 & HD481.3:1987).

One Year Warranty

THE KABA PRODUCT IS WARRANTED TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USE AND SERVICE FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF PURCHASE, HOWEVER, THIS WARRANTY DOES NOT COVER PROBLEMS ARISING OUT OF IMPROPER INSTALLATION OR USE. OUR ONLY LIABILITY, WHETHER IN TORT OR IN CONTRACT, UNDER THIS WARRANTY IS TO REPAIR OR REPLACE PRODUCTS WHICH ARE RETURNED TO THE KABA FACTORY, SHIPPING CHARGES PREPAID WITHIN THE ONE (1) YEAR WARRANTY PERIOD.

OUR WARRANTY SHALL ONLY APPLY IF THE ITEM RETURNED IS FOUND BY ANALYSIS BY KABA FACTORY PERSONNEL TO BE DEFECTIVE.

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.



Your Total Access Partner

Contact our office for the name of the sales representative
or dealer/distributor in your region.



www.kaba-ilco.com

Technical Support: 1-888-217-5654 ext.1

1-514-735-5411 ext. 644