

English

Installation Instructions

Pushbutton Lock

7 1 0 2
7 1 0 8
SERIES

Please keep these instructions. The combination of this lock has been factory preset: 2 and 4 pressed together, then 3.

WARNING

For your own safety, you must change the combination at the time of installation.

PLEASE READ AND FOLLOW ALL DIRECTIONS CAREFULLY

Since every installation is unique, carefully check windows, frame, door, etc. to ensure that the recommended procedures will not cause damage. KABA ILCO is not responsible for any damage caused by installation.

Tools Required

- 1/4" (6 mm) Drill Bit
- 1" (25 mm) Wood Chisel
- 3/4" (19 mm) Hole Saw
- Phillips-head Screwdriver
- 1" (25 mm) Drill Bit or Hole Saw
- 1 5/8" (41 mm) Hole Saw
- 2 Pairs of Pliers
- Hacksaw
- Hammer
- Center Punch
- Drill (variable speed)

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Checklist

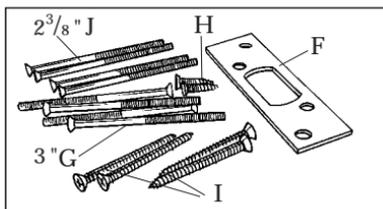
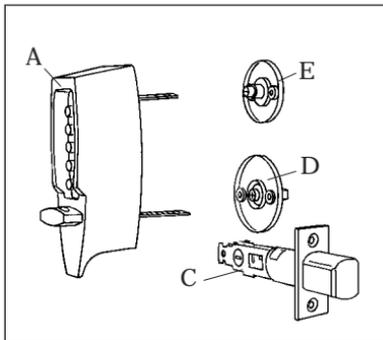
Use this checklist to make sure that everything has been included.

- A - Front Lock
- C - Dead Bolt (7102-2 $\frac{3}{4}$ " , 7108-2 $\frac{3}{8}$ ")
- D - Inside Thumbturn Assembly
- E - Inside Combination Change Assembly
- F - Strike Plate

Screw Pack:

- G - 4 thru-bolts (3")
- H - 2 (bolt) combination wood/metal screws
- I - 4 combination wood/metal screws
- J - 4 Thru bolts (2 $\frac{3}{8}$ ")

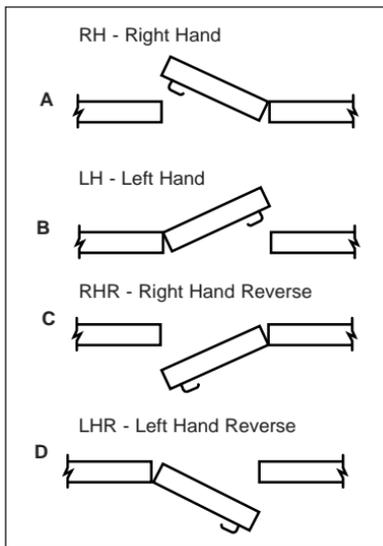
Templates (in center of booklet)



Determine the hand of your door

Many of the installation instructions refer to the handing of your door. The hand of the door is determined with the door in the closed position, from the exterior or pushbutton side of the door .

- A) Right Hand Door. Door opens inward (push). Hinged on the right side.
- B) Left Hand Door. Door opens inward (push). Hinged on the left side.
- C) Right Hand Reverse Door. Door opens outward (pull). Hinged on the right side.
- D) Left Hand Reverse Door. Door opens outward (pull). Hinged on the left side.

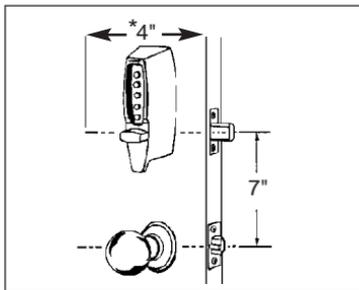


1

Determining the Lock Location

Install the lock with the exterior thumbturn hole at least 7" (18 cm) above your primary lockset so it is comfortable to operate and not in the way when you turn the door knob.

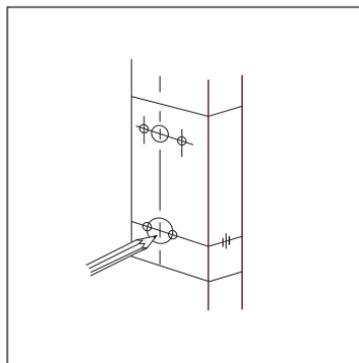
*A minimum stile width of 4" (10.16 cm) is required for mounting, **figure 1-1**.

**1-1.****2**

Marking the Door

NOTE: Be sure to use the correct template (right-hand or left-hand door - 2³/₈" or 2³/₄").

- 1) Carefully fold the template on 2³/₈" or 2³/₄" line (found in the center of this booklet) as indicated in **figure 2-1**.
- 2) Tape the template securely to the outside of the door so that all the indicated folds are properly aligned with the edge of the door.
- 3) Use a center punch to make the marks for drilling the seven holes precisely at the points indicated on the template. The center punch mark in the edge of the door must be centered based on the thickness of the door.
- 4) Remove the template.

**2-1.**

3 Drilling Holes in the Door

CAUTION: Positioning and drilling must be done straight to ensure trouble free operation of the 7100 Series lockset. Improper drilling may result in excessive force being exerted on the lock which may result in the premature wearing of its mechanical parts.

You must do Step 1 first otherwise it will be impossible to drill the 1/4" (6 mm) holes.

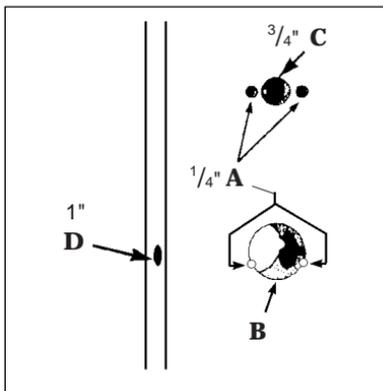
- 1) Use a 1/4" (6 mm) drill bit to drill the four holes marked **A**, **figure 3-1**.

Begin drilling at a slow speed and increase the speed gradually until the tip of the drill bit emerges from the other side of the door. Repeat this procedure from the opposite side of the door. This technique will prevent splintering of the door or breaking the drill bit.

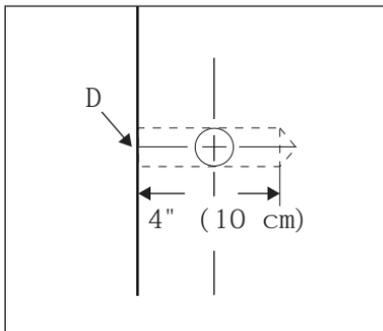
- 2) Use a hole saw with pilot bit to make the 1 5/8" (41 mm) hole (B). Apply pressure evenly until the circular blade cuts the first side of the door and the tip of the pilot bit emerges through the other side, then stop. Drill from the other side until the 1 5/8" (41 mm) hole is completed.

- 3) Repeat Step #2 for the 3/4" (19 mm) hole, (C).

- 4) The final 1" (25 mm) hole (**D**) is cross-bored through the edge of the door. Carefully bore 4" (10 cm) deep, 1/4" **figures 3-1 & 3-2**.



3-1.

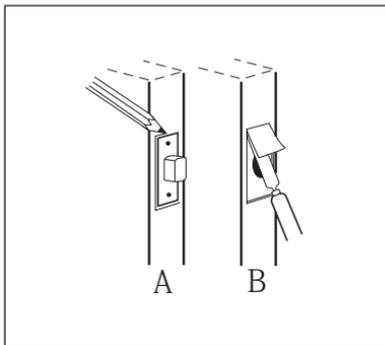


3-2.

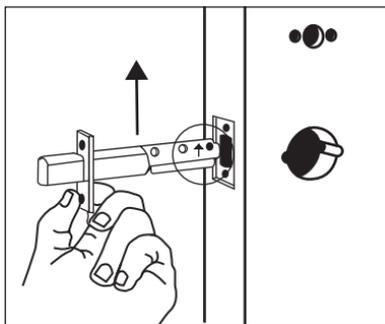
4 Making the Bolt Face Plate Cutout

This procedure is applicable to wood doors.

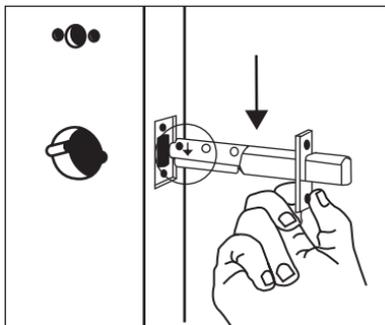
- 1) Insert the bolt into the 1" (25 mm) hole until the face plate butts up against the door edge. Draw a line around the face plate. Remove the bolt from the door, **figure 4-1, A**.
- 2) For doors without a beveled edge, use a sharp 1" (25 mm) wood chisel to remove approximately $\frac{1}{8}$ " (3 mm) of material or enough so the face plate is perfectly flush with the edge of the door, **figure 4-1, B**.
- 3) For doors with a beveled edge, follow Step 2 except the face plate will not be flush with the edge of the door, but rather square to the face of the door. In order to accomplish this, you must remove more wood from the higher edge of the door.



4-1.



5-1.



5-2.

5 Installing the Bolt

RIGHT HAND DOOR

(see template)

- 1) Insert the bolt, **with the arrow pointing up**, into the 1" (25 mm) hole, **figure 5-1**.
- 2) Secure the bolt face plate to the door with the two Phillips-head screws provided.

LEFT HAND DOOR

(see template)

- 1) Insert the bolt, **with the arrow pointing down**, into the 1" (25 mm) hole, **figure 5-2**.
- 2) Secure the bolt face plate to the door with the two Phillips-head screws provided (pg.7, H).

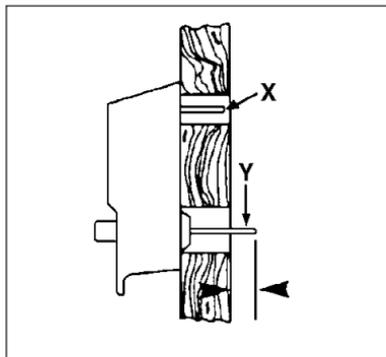
6 Adjusting the Lock

The lock has been pre-assembled to accommodate doors up to 2 1/4" (57 mm) thick.

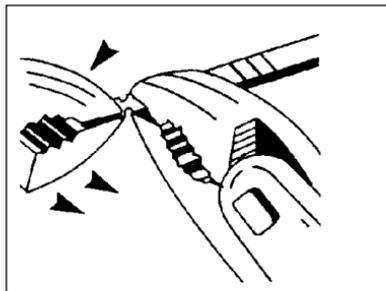
If your door is 1 3/8" to 2" (35 mm to 51 mm) thick, you must shorten both tailpieces

X & Y, figure 6-1.

- 1) Shorten the combination change tailpiece **X** according to your door thickness. Tailpiece **X** has been premarked for various door thicknesses for accuracy and convenience, **figure 6-1.**
 - 1a. After determining the breakoff point, hold the tailpiece firmly with a pair of pliers on the lock side of the tailpiece, just beside the desired break line.
 - 1b. With a second pair of pliers, grip the tailpiece at the other side of the line and bend it up and down until it breaks, **figure 6-2.**
- 2) While holding the lockset firmly against the outside surface of the door, **figure 6-1**, mark tailpiece **Y** at the point where it extends 1/2 - 5/8" beyond the interior surface of the door. Shorten tailpiece **Y** using the procedure described in Steps 1a & 1b.



6-1.

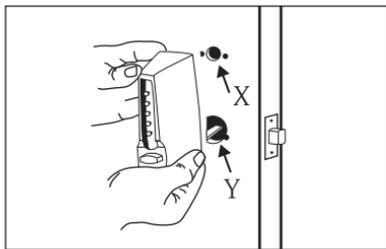


6-2.

Installing the Lock

- For 1³/₈" - 1³/₄" (35 mm - 44 mm) thick doors, use the 2³/₈" (44 mm) thru bolts.
- For 2" - 2¹/₄" (51 mm - 57 mm) thick doors, use the 3" (76 mm) thru bolts.

- 1) With the bolt extended in the locked position, mount the lock from the outside of the door. Insert the tailpiece **Y** into the vertical cutout of the bolt assembly and the tailpiece **X** into the ³/₄" (19 mm) hole, **figure 7-1**.
- 2) Hold the exterior lock assembly firmly against the door. Try the factory-set combination. Press buttons #2 and #4 together, release, press button #3, and release. A distinctive click must be felt to indicate that the button has been correctly depressed. Turn the outside thumbturn to the right (clockwise) to the stop position and release (the bolt should be fully retracted). If not, turn the thumbturn to the left (counterclockwise) to the stop position and repeat Step 2.
- 3) While holding the lock firmly against the outside surface of the door with one hand, use the other to mount the inside thumbturn assembly to the interior side of the door with two thru-bolts finger tight, **figure 7-2**. Make sure that tailpiece **Y** is engaged into the vertical cutout of the inside thumbturn assembly.
- 4) Insert tailpiece **X** into the horizontal slot of the combination change assembly. It may be necessary to use a screwdriver to align tailpiece **X** with the combination change assembly, **figures 7-2 & 7-3**. Once aligned, secure with two thru-bolts, but do not tighten, **figure 7-4**.

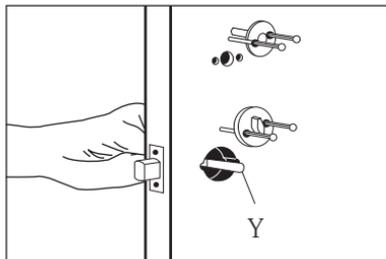


7-1.

Note: The inside thumbturn is shown in a vertical position to show the two thru-bolts. It may be assembled either vertically or horizontally.

IMPORTANT: Tailpiece **X** must be inserted in the horizontal slot in order to change your combination.

- 5) Make sure that both assemblies are correctly centered over the holes. Tighten the thru-bolts evenly. Uneven tension could cause a malfunction of the lock.



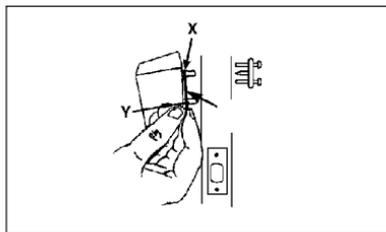
7-2.

8 Checking the Lock's Operation

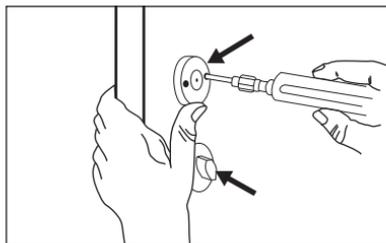
IMPORTANT: The following steps **MUST** be performed while the door is open.

Note: Turning the outside thumbturn to the left (counterclockwise) to the stop position and releasing extends the bolt to the locked position. To retract the bolt from the outside, depress the buttons of your preset combination, then turn the thumbturn to the right (clockwise) to the stop position.

- 1) Turn the outside thumbturn to the left (counterclockwise) until it stops, then release it.
- 2) Press the preset factory combination (2 and 4 pressed together, release, then 3, and release). A distinctive click must be felt to indicate that the buttons have been correctly depressed.
- 3) Turn the **outside** thumbturn to the right (clockwise) until it stops; the bolt should fully retract, **figure 8-1**. If the bolt does not retract, turn the thumbturn to the left (counterclockwise) until it stops. This will clear previously depressed buttons. Release it and repeat Step 2.



7-3.

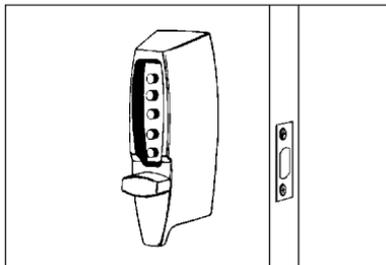


7-4.

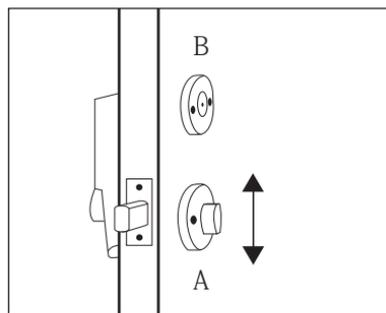
- 4) Release the **outside** thumbturn; the bolt will stay in the retracted position.
- 5) Turn the **inside** thumbturn **A** to the stop position; the bolt will extend to its locked position, **figure 8-2**.
- 6) If the bolt does not retract or extend fully, loosen the two thru-bolts of the inside thumbturn assembly **A**, **figure 8-2**. Move the inside thumbturn assembly upward or downward to properly center the inside thumbturn assembly with the tailpiece, then tighten the thru-bolts, and repeat Steps 1 to 5.
- 7) If the bolt still does not fully retract or extend after repeating Step 6, loosen the two thru-bolts of the inside thumbturn assembly **A** and combination change assembly **B**. Move the lock upward or downward to properly align both tailpieces of the inside thumbturn assembly and combination change assembly. Tighten the four thru-bolts and repeat Steps 1 to 5 to ensure proper operation.

Verify the Combination Change Assembly

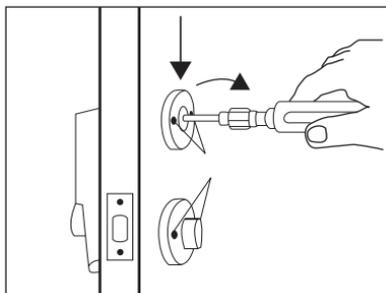
- 1) Insert the tip of a Phillips-head screwdriver into the combination change assembly **B**, **figure 8-3**.
- 2) Turn the central piece to the right (clockwise) until it stops, **DO NOT FORCE**, (approximately 30° degrees).
- 3) Remove the screwdriver; the central piece should automatically return to its initial position.



8-1.



8-2.

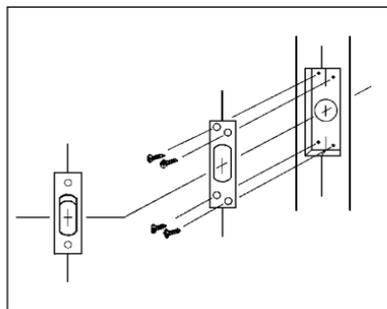


8-3.

- 4) If the central piece jams and does not return to its initial position, loosen the two thru-bolts and push the combination change assembly **B** upward or downward to properly center the tailpiece of the combination change assembly, then tighten the two thru-bolts, and repeat Steps 1 to 3.

9 Installing the Strike

- 1) Mark the vertical and horizontal center lines of the strike on the door frame by using the center line of the bolt. Make sure the vertical and horizontal center lines are well aligned with the bolt center lines.
- 2) Where the center lines meet, drill a 1" (25 mm) diameter by 1 1/8" (28 mm) deep hole to guarantee that the bolt will be completely extended in the door jamb, **figure 9-1**.
- 3) Mortise (chisel out) the marked area to 1/8" (3 mm) deep so that the strike will be flush with the door frame.
- 4) Secure the strike with the four screws provided.
- 5) Close the door and turn the thumbturn to extend the bolt to ensure proper alignment with the strike plate hole.



9-1.

10 Setting a New Combination

IMPORTANT: The following steps must be performed while the door is open.

The factory-set code is 2 and 4 pressed simultaneously, followed by 3. This code should be changed as soon as the lock is installed.

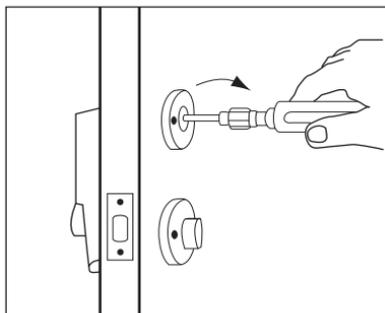
- 1) Turn the outside thumbturn to the left (counterclockwise) to the stop position and return it to the right (clockwise) slowly to the horizontal position. This will clear any random buttons previously depressed.
- 2) Enter the existing code.
- 3) Insert a Phillips-head screwdriver into the center of the combination change sleeve. Gently turn to the right (clockwise) approximately $\frac{1}{8}$ " (3 mm), **figure 10-1**. A slight click should be felt. **Do not force.**

IMPORTANT: When removing the screwdriver, the central piece must return to its initial position, if not, set it back to its original position using the screwdriver; see Section 9. *Verify the Combination Change Assembly.*

- 4) Turn the outside thumbturn to the left (counterclockwise) to the stop position, once only, and slowly return it to the right (clockwise) to the horizontal position to clear the existing code from the mechanism.
- 5) Select a new code and write it down (some or all of the buttons may be used for your new code, pressed individually or simultaneously).

NOTE: A button may be used only once.

- 6) With the **door open**, enter your new code. Depress each button fully and release. A slight click should be felt.

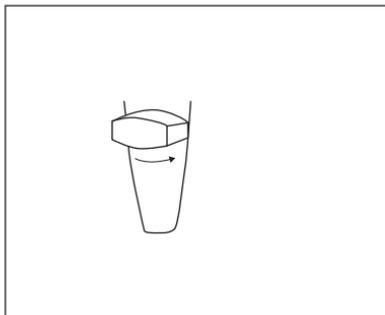


10-1.

- 7) Turn the outside thumbturn to the right (clockwise) to the stop position. The bolt should retract. Now release the thumbturn. Try to turn the thumbturn to the right (clockwise). The thumbturn will not turn clockwise unless the correct combination is entered. If it turns and retracts the bolt without depressing any of the buttons, see Step 9 below.

NOTE: Excessive force will result in slipping the thumbturn 180° degrees. The slipping mechanism, or force-proof clutch, protects the lock's internal mechanism from forced entry.

- 8) If a wrong combination is entered after the desired combination has been programmed into the lock, turn the outside thumbturn to the left (counterclockwise) to the stop position and release, **figure 10-2**. This will clear any previously depressed buttons. Enter the correct new combination. Turn the thumbturn to the right (clockwise) to the stop position and release, figure 11-2. The thumbturn should rotate. The bolt will be retracted flush with the face plate. The correct combination must be entered each time you want to unlock the door.
- 9) If, without entering the combination, you can retract the bolt by turning the outside thumbturn to the right, it means that a step was done out of order and therefore no combination was entered. In this case, you must repeat Steps 1 to 7 but omit Step 2, as the lock does not have a combination.



10-2.

- ? Lock fails to open when combination is entered and outside thumbturn is rotated clockwise.
- Buttons were not fully depressed when the combination was entered.
Lock not cleared of previous attempts to enter access codes.
- ☞ Turn the outside thumbturn to the left to clear the wrong entry. Enter the combination making sure you feel each button click to know that it was depressed fully.
- ? Turning outside thumbturn clockwise always retracts latch without depressing any buttons.
- Lock is in zero combination.
- ☞ Follow the procedure for setting a new combination (Section 9, but omit Step 2).
- ? Inside thumbturn only retracts bolt partially or not at all, in either clockwise or counterclockwise direction.
- Bolt was not properly installed.
- ☞ Remove and re-install the bolt. Review and follow instructions in Section 6.
- ? After setting a new combination, the lock works one time only, then fails to open.
- Buttons of intended combination were not fully depressed when changing combination.
- ☞ This is a lost combination situation. Please call our Technical Service Dept. at (800) 849-TECH. (8324) or (336) 725-1331

ONE YEAR WARRANTY

This KABA ILCO 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 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 ILCO factory, shipping charges prepaid to the address shown within the one (1) year warranty period.

Our warranty shall only apply if the item returned is found by analysis by KABA ILCO 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.



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