KABA®

SIMPLEX®

7104 SERIES

Installation Instructions

Important: 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 is not responsible for any damage caused by installation.

Tools Required

- ¼" (6 mm) Drill Bit
- 1" (25 mm) Wood Chisel
- ¾" (19 mm) Hole Saw
- Phillips-head Screwdriver
- 1" (25 mm) Drill Bit or Hole Saw
- 1 ⅜" (35 mm) Hole Saw
- 2 Pairs of Pliers
- Hacksaw
- Hammer
- Center Punch
- Drill (variable speed recommended)

Caution: Wear safety glasses when preparing door.

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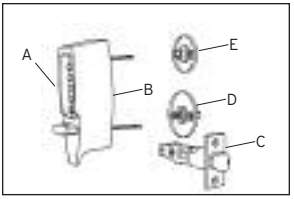
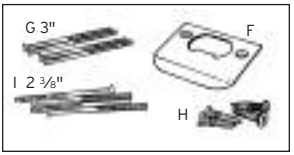
KABA®

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

CHECKLIST

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





- ❑ **A –** Front lock
- ❑ **B –** Trim Plate
- ❑ **C –** 2 ¾" Backset Latch (7004)
  – Adjustable Latch (7104)
- ❑ **D –** Inside Thumbturn Assembly
- ❑ **E –** Inside Combination Change Assembly
- ❑ **F –** Strike Plate

Screw Pack:

- ❑ **G –** 4 thru-bolts (3")
- ❑ **H –** 4 combination wood/metal screws
- ❑ **I –** 4 thru-bolts (2 ⅜")
- ❑ Template (in center of booklet)

DETERMINE THE HAND OF YOUR DOOR

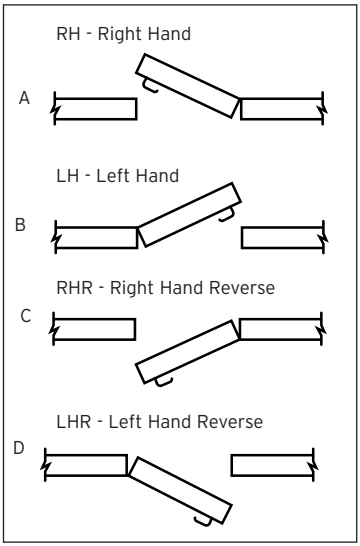
Many of the installation instructions refer to the handing of your door. The hand of the door is determined with the door in the closed position, from the exterior or pushbutton side of the door.

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.

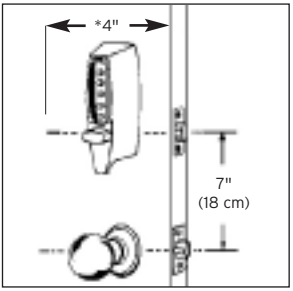
C) Right Hand Reverse Door. Door opens outward (pull). Hinged on the right side.

D) Left Hand Reverse Door. Door opens outward (pull). Hinged on the left side.



A. DETERMINING THE LOCK LOCATION

Install the lock with the exterior thumbturn at least 7" (18 cm) above your primary lock set 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, **(See Figure 2-1)**.

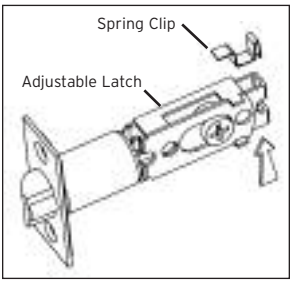


1-1

B. ADJUSTING THE LATCH

(Model 7014 only)

This latch has been secured in the 2 ¾" back set position with a spring clip. If your application requires a 2 ⅜" back set, remove the spring clip by utilizing a small screw driver (or similar) and inserting the tip through the latch as indicated by the arrow, and gently pressing on the spring clip until is removed from the latch.



2-1

C. MARKING THE DOOR

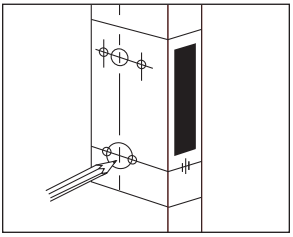
NOTE: Be sure to use the correct template (right-hand or left-hand door - 2 ⅜" or 2 ¾").

C-1 Carefully fold the template (found in the center of this booklet) as indicated **(See Figure 3-1)**.

C-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.

C-3 Use a center punch to make the marks for drilling the seven holes precisely at the points indicated on the template. The cen-ter punch mark in the edge of the door must be centered based on the thickness of the door.

C-4 Remove the template.

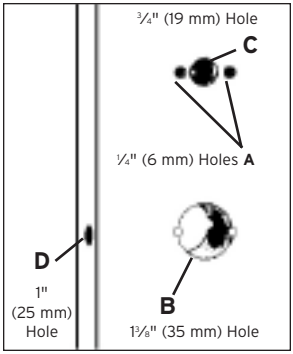


3-1

D. DRILLING HOLES IN THE DOOR

CAUTION: Positioning and drilling must be done straight to ensure troublefree operation of the 7000 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.

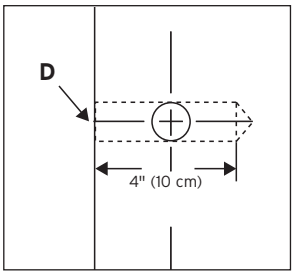
You must do Step 1 first otherwise it will be impossible to drill the ¼" (6 mm) holes.



4-1

D-1 Use a ¼" (6 mm) drill bit to drill the four holes marked A **(See Figure 4-1)**. 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.

D-2 Use a hole saw with pilot bit to make the 1 ⅜" (35 mm) hole. 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 ⅜" (35 mm) hole is completed.



4-2

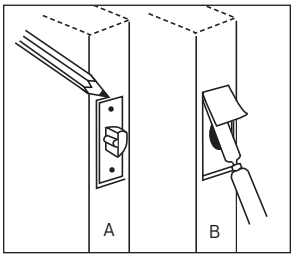
D-3 Repeat Step #2 for the ¾" (19 mm) hole, (C).

D-4 The final 1" (25 mm) hole (D) is cross-bored through the edge of the door. Carefully bore 4" (10 cm) deep **(See Figure 4-1 and 4-2)**.

E. MAKING THE LATCH FACE PLATE CUTOUT

This procedure is applicable to wood doors.

E-1 Insert the latch into the 1" (25 mm) hole until the face plate butts up against the door edge. Draw a line around the face plate, **(See Figure 5-1)**, A. Remove the latch from the door.

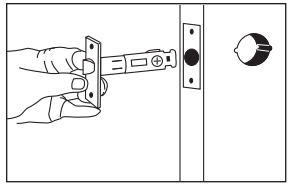


5-1

E-2 For doors without a beveled edge, use a sharp 1" (25 mm) wood chisel to remove approximately ⅛" (3 mm) of material or enough so the face plate is perfectly flush with the edge of the door, **(See Figure 5-1)**, B.

E-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.

F. INSTALLING THE LATCH



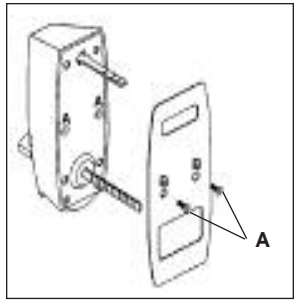
6-1

F-1 For doors that swing outward, the curved edge of the latch should be facing inward towards the room. For doors that swing inward, the curved edge of the latch should be facing outward away from the room.

F-2 Put the latch into the 1" (25 mm) hole, **(See Figure 6-1)**.

F-3 Secure the latch face plate to the door with the two Phillips-head screws provided, pg.7, H.

G. INSTALLING THE TRIM PLATE



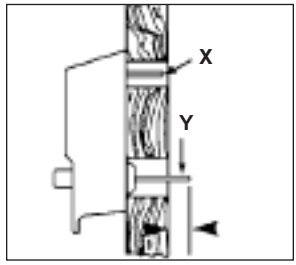
7-1

G-1 Remove the two screws (A) from the back of the lock, **(See Figure 7-1)**.

G-2 Place the trim plate (pg.7,B) on the back of the lock housing so that the large hole is at the bottom. Make sure that the counter sunk sides of the holes B are facing out, **(See Figure 7-1)**.

G-3 Secure the trim plate to the housing with the two screws.

H. ADJUSTING THE LOCK



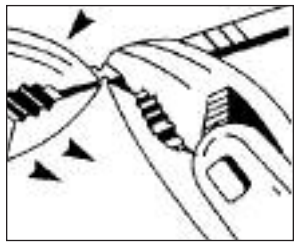
8-1

The lock has been pre-assembled to accommodate doors up to 2 ¼" (57 mm) thick.If your door is 1 ⅜" to 2" (35 mm to 51 mm) thick, you must shorten both tailpieces X & Y **(See Figure 8-1)**.

H-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 **(See Figure 8-1)**.

a. 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.

b. 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 **(See Figure 8-2)**.



8-2

H-2 While holding the lockset firmly against the outside surface of the door, **(See Figure 8-1)**, mark tailpiece Y at the point where it extends ½ - ⅝" beyond the interior surface of the door. Shorten tailpiece Y using the procedure described in Steps 1a & 1b.

KABA SIMPLEX®
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, 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.

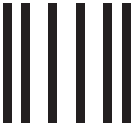
This warranty is in lieu of and not in addition to any other warranty or condition, express or implied, including without limitation merchantability, fitness for purpose or absence of latent defects.

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.

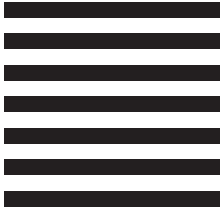
The environment and conditions of use determine the life of finishes on Kaba Access Control products. Finishes on Kaba Access Control products are subject to change due to wear and environmental corrosion. Kaba Access Control cannot be held responsible for the deterioration of finishes.

Authorization to Return Goods
Returned merchandise will not be accepted without prior approval. Approvals and Returned Goods Authorization Numbers (RGA Numbers) 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



BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 1563 WINSTON-SALEM, NC

POSTAGE WILL BE PAID BY ADDRESSEE

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

REGISTRATION CARD

Thank you for purchasing our product. In order to protect your investment and to enable us to better serve you in the future, please fill out this registration card and return it to Kaba Access Control, or register online at **www.kabaaccess.com**.

Name

Position

Company

Address

City

State ZIP (Postal Code) Country

Phone

Email

Name of Dealer Purchased From

Date of Purchase

Lock Model Number

This lock will be used in what type of facility?

❑ Commercial Building ❑ Industrial / Manufacturing ❑ Airport

❑ College/University ❑ Government/Military ❑ School/Educational

❑ Hospital/Healthcare ❑ Other (please specify) _____

What area is being secured with this lock? (e.g. Front Door, Common Door, Exercise Room)

_____

This lock is:

❑ New Installation

❑ Replacing a conventional keyed lock

❑ Replacing a Kaba Mechanical Pushbutton Lock

❑ Replacing a Kaba Electronic Access Control

❑ Replacing a Keyless Lock other than Kaba

How did you learn about Kaba Access Control Pushbutton Locks?

❑ Advertisement ❑ Previous Use ❑ Internet / Web ❑ Another Use

❑ Locksmith ❑ Maintenance ❑ Training Class ❑ Other (please specify)

What was your reason for buying this lock? _____

_____

Who installed your lock?

❑ Locksmith ❑ Maintenance ❑ Other _____

❑ **Check here if you would like more information on Kaba Access Control locks.**

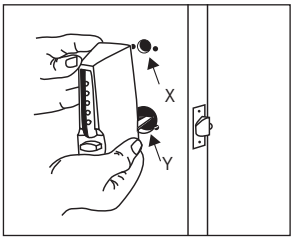
I. INSTALLING THE LOCK

- For 1 3/4" - 1 3/4" (33 - 44 mm) thick doors, use the 2 3/8" (45 mm) thru bolts.

- For 2"- 2 1/4" (51- 57 mm) thick doors, use the 3" (76 mm) thru bolts.

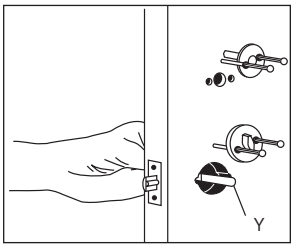
Mount the lock from the outside of the door.

I-1 Insert the tailpiece Y into the horizontal cutout of the latch assembly and the tail piece X into the 3/8" (19 mm) hole **(See Figure 9-1)**.



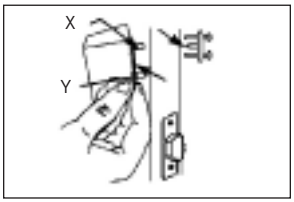
9-1

I-2 Hold the exterior lock assembly (pg.7, A) 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 (the lach should be fully retracted). If not, turn the thumbturn to the left (counter clockwise) to the stop position and repeat Step 2.



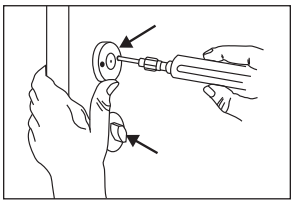
9-2

I-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 (pg.7, D) to the interior side of the door with two thru-bolts finger tight **(See Figure 9-2)**. Make sure that tailpiece Y is engaged into the horizontal cutout of the inside thumbturn assembly.



9-3

I-4 Insert tailpiece X into the horizontal slot of the combination change assembly, (pg.7, E). It may be necessary to use a screwdriver to align tailpiece X with the combination change assembly **(See Figure 9-2 and 9-3)**. Once aligned, secure with two thru-bolts, but do not tighten, **(See Figure 9-4)**.


9-4

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

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

I-5 Make sure that assemblies A and B are correctly centered over the holes **(See Figure 9-4)**. Tighten the thru-bolts evenly. Uneven tension could cause a malfunction of the lock.

J. CHECKING THE LOCK'S OPERATION

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

J-1 Turn the outside thumbturn to the left (counterclockwise) until it stops, then release it.

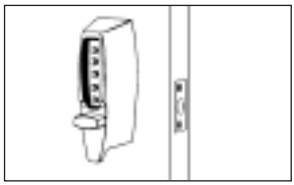
J-2 Press the preset factory combination (2 and 4 pressed together, release, then 3, and release). A distinctive click must be felt to indicate that the buttons have been correctly depressed.

J-3 Turn the outside thumbturn to the right (clockwise) until it stops; the latch should fully retract **(See Figure 10-1)**. If the latch does not retract, turn the thumbturn to the left (counterclockwise) until it stops. Release it and repeat Step 2.

J-4 Release the outside thumbturn; the latch will return to its fully extended position.

J-5 Turn the inside thumbturn A in either direction until it stops; the latch will retract as in Step 3.

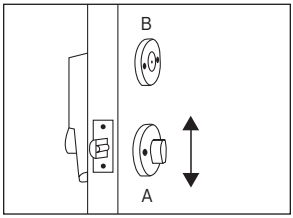
J-6 Release the inside thumbturn and the latch will return to its initial fully extended position.



10-1

J-7 If the latch does not fully retract, loosen the two thru-bolts of the inside thumbturn assembly. Move the inside thumbturn assembly upward or downward to properly center the inside thumbturn assembly with the tailpiece, **(See Figure 10-2)** then tighten the thru-bolts, and repeat Steps 1 to 5.

J-8 If the latch **(See Figure 10-2)** still does not fully retract after repeating Step 7, loosen the two thru-bolts of the inside thumbturn assembly A and combination change assembly B **(See Figure 10-2)**. 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.



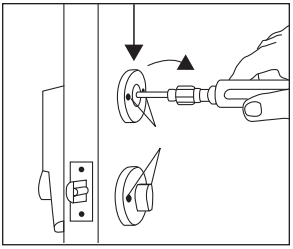
10-2

Verify the Combination Change Assembly

J-9 Insert the tip of a Phillips-head screwdriver into the combination change assembly B **(See Figure 10-3)**.

J-10 Turn the central piece to the right (clockwise) until it stops, DO NOT FORCE, (approximately 30˚ degrees).

J-11 Remove the screwdriver; the central piece should automatically return to its initial position.

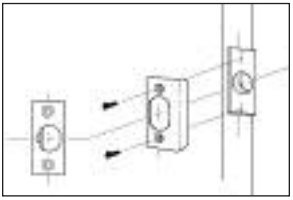


10-3

J-12 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, tighten the two thru-bolts, and repeat Steps 1 to 3.

K. INSTALLING THE STRIKE

K-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 latch bolt center lines.



11-1

K-2 Where the center lines meet, drill a ⅛" (2.5 mm) diameter by ⅝" (16 mm) deep hole to guarantee that the latch will be completely extended in the door jamb **(See Figure 11-1)**.

K-3 Mortise (chisel out) the marked area to 1⁄16" (1.5 mm) deep so that the strike will be flush with the door frame.

K-4 Secure the strike, (PG.7, F) with the two screws provided, (PG.7, H).

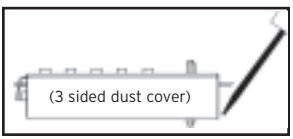
K-5 Close the door to ensure proper alignment of the latch with the strike plate hole.

L. INSTRUCTIONS FOR RESETTING UNKNOWN COMBINATIONS

Remove and set aside the back plate held by on 4 screws. Remove the drive cam assembly located on the control shaft on the back of the chamber. Remove the combination chamber, held by 2 screws, from the lock.

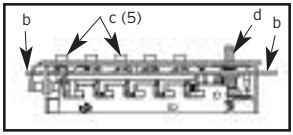
To remove the 3-sided dust cover marked "Kaba Simplex," place the combination chamber in the position below.

L-1 Place a small screwdriver on the edge of the 3-sided dust cover and push down on the screwdriver **(See Figure 12-1)**. The cover should pop loose. Once it does, pull the cover off of the combination chamber.



12-1

L-2 Hold the chamber in one hand by the screw tab (b) on each end with the key-stems (c) facing you and the control shaft (d) at the bottom **(See Figure 12-2)**.

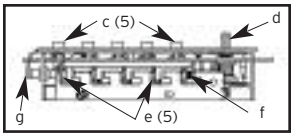


12-2

L-3 Rotate the control shaft (d) counter-clockwise and release to clear the chamber **(See Figure 12-2)**.

L-4 Look at the 5 code gears (e). If any code gear pockets (f) are already at the shear line (open position), ignore them. They are not used in the combination **(See Figure 12-3)**.

L-5 Find the code gear pocket/s (f) that is farthest away from the shear line (open position). Depress that key-stem/s (c) and release **(See Figure 12-3)**.



12-3

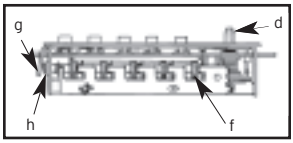
L-6 Find the code gear pocket/s (f) that is the next farthest away from the shear line (open position). Depress that key-stem/s (c) and release **(See Figure 12-3)**.

L-7 Repeat step K-6 until all code gear pockets (f) are at the shear line (open position).

L-8 If all the code gear pockets (f) are not lined up at the shear line (open position), start over at step K-3.

L-9 Depress the lockout slide (g) at the top of the chamber and release. (looks like one end of a spark plug) **(See Figure 12-4).**

L-10 Rotate the control shaft (d) counter-clockwise to clear the chamber and release. The lockout slide (g) should pop out (button will not move yet) **(See Figure 12-4)**.



12-4

L-11 Depress the key-stem/s (c) that you want in your new combination, releasing each after it is depressed **(See Figure 12-2)**.

L-12 Once you have depressed all the digits in your new combination, turn the control shaft (d) clockwise **(See Figure 12-4)**. The code change button (h) under lockout slide (g), should pop up **(See Figure 12-4)**. Your new combination is now set.

L-13 Look at the code gear pockets (f). The numbers in you new combination should not be at the shear line (open position) **(See Figure 12-3)**.

Reinstallation: Replace the 3-sided dust cover marked "Kaba Simplex." Make sure the staked joints on both end plates fit through the slots on the dust cover. Stake the end 2 plate joints. Replace the combination chamber into the lock using the same 2 screws removed earlier. Slip the drive cam assembly back on the control shaft of the chamber assuring it is in the same position as prior to removal. Re-secure the back plate, assuring the tailpieces are seated correctly using the same 2 screws removed earlier.

Testing: Enter the combination you preset during the reset process. Turn the outside thumbturn to the right (clockwise). The latch should retract. If the latch does not retract, turn the outside thumbturn left (counter-clockwise) and release, then enter the code again.

M. TROUBLESHOOTING

? 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 outside thumbturn to the left to clear the wrong entry. Enter the combination making sure you feel each button click to know it was depressed fully.

? Turning outside thumbturn clockwise always retracts latch without depressing any buttons.

➔ Lock is in zero combination.

☞ Follow the procedure for changing a combination (Section 11, Steps 3-7, on pages 22 & 23).

? Inside thumbturn only retracts latch partially or not at all, in either clockwise or counterclockwise direction.

➔ Latch has not been properly installed.

☞ Take the lock off of the door. Re-install the latch. Review and follow instructions in Section 8, Steps 1-5 on pages 16 & 17.

? After inserting the new combination, the lock works one time only, then fails to open.

➔ Buttons of intended combination are not fully depressed when changing combination.

☞ This is a lost combination situation. Please call our Technical Service Dept. For further information at (800) 849-TECH. Outside U.S.A. and Canada, please call your ILCO UNICAN dealer.

? Adjustable latch (model 7014) will not retract fully in the 2 ¾" back set position.

➔ 1" diameter hole is not bored to depth of at least 4".

☞ Re-drill hole to 4" depth minimum.

KABA®

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

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