

Yale® E5400LN

Cylindrical Keypad Lock

Installation Instructions

80-9150-8004-010 Rev. D

NOTE TO INSTALLER

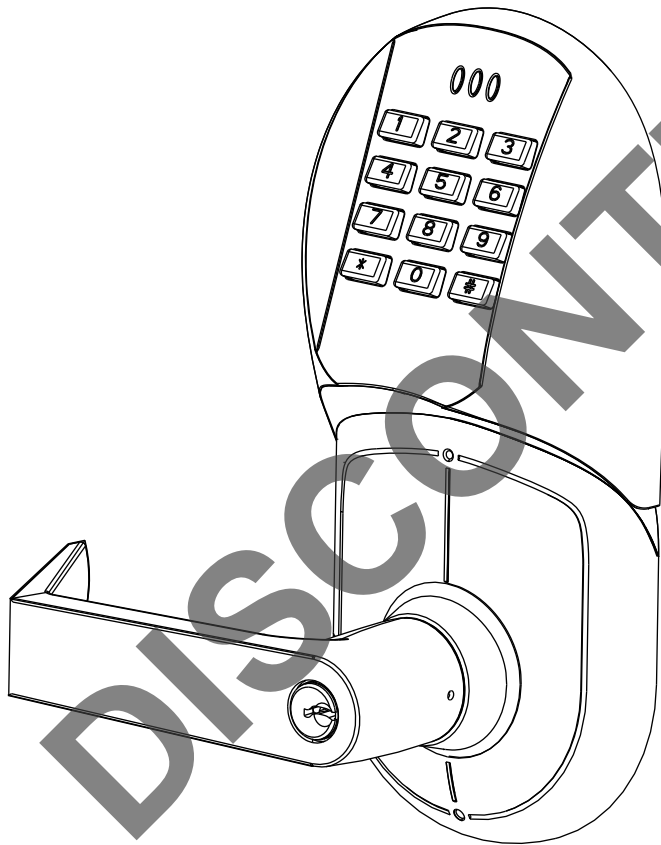
FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN DAMAGE TO THE LOCK AND VOID THE FACTORY WARRANTY.

e•boss™

Electronic Battery Operated Security Solution

FEATURES

- Battery Operated (Hardwire Capable)
- Motorized Grade 1 Cylindrical Lock
- 94 User Code Capacity
- All Metal Escutcheon and Pushbuttons
- LED Function Indicator
- 5400LN Patented Free-Wheeling Levers
- Weather Resistant, ADA Compliant 12-Button Keypad
- Modular Design (Simple Installation)
- Audible Pushbutton
- Patent Pending Keypad Blinders
- Request to enter input
- Emergency, Supervisor, Passage, Lockout and Master Codes



Operational Modes

Secure

Normal locked state. Any assigned user code can gain access. Lock/relocks automatically.

Lockout

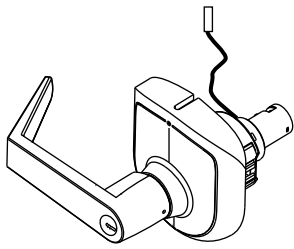
Lockset will not accept any assigned user codes except for the Supervisor and Emergency Codes.

Passage

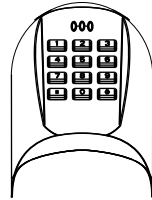
Maintains unlocked state. Relocks by entering passage code the second time

Finish Care

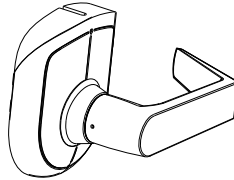
This lockset is designed to provide the highest standard of product quality and performance. Care should be taken to insure a long-lasting finish. When cleaning is required use a soft, damp cloth. Using lacquer thinner, caustic soaps, abrasive cleaners or polishes could damage the coating and result in tarnishing,



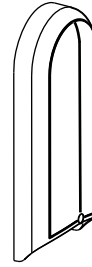
OUTSIDE
LOCK CHASSIS



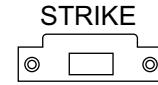
KEYPAD
ASSEMBLY



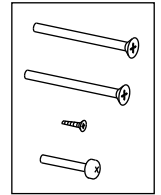
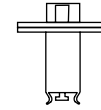
INSIDE
LEVER
ASSEMBLY



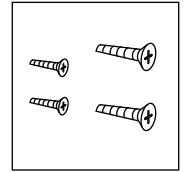
INSIDE
ESCUTCHEON
ASSEMBLY



LATCHBOLT



SCREW-PACK 1



SCREW-PACK 2



GROUNDING
STRIP
(See Template)

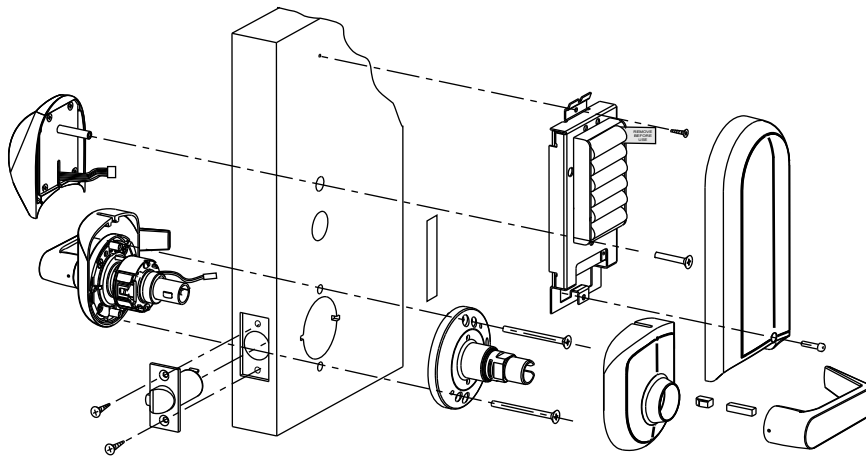


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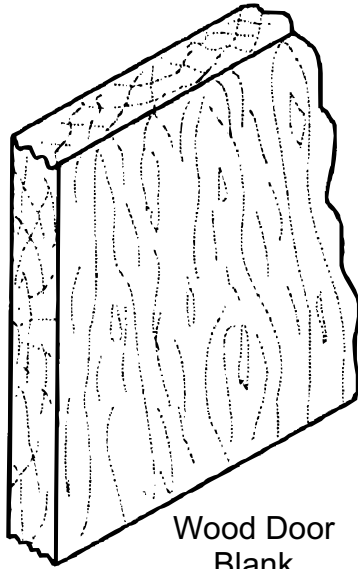
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IMPORTANT: The accuracy of the door preparation is critical for the proper functioning and security of this lever handle lock. Misalignment can cause premature wear and tear and a lessening of security.

SECTION I PREPARE THE DOOR

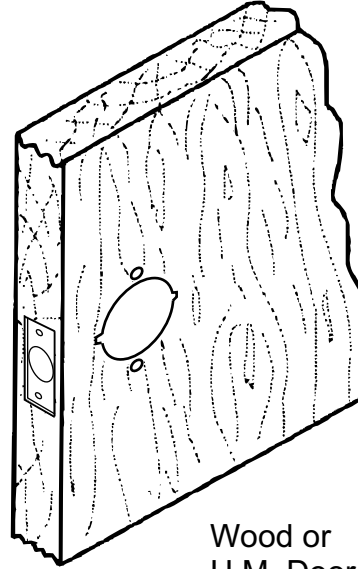
What does the door look like?

Tools Required	
*2-1/8" (54mm) hole saw	*Chisel & hammer
*1" (26mm) boring bit	*#2 Phillips screw driver
*5/16" (8mm) drill bit	*Handle removal tool (supplied)
*7/64" (2.5mm) drill bit	*3/8" or 1/2" drill
*3/8" (9.5mm) drill bit	



Wood Door
Blank

Refer to Section **IA** (Below)



Wood or
H.M. Door

Refer to Section **IB** (pg. 4)

I-A Prepare the Door for Lock Body & Latch

Blank Wood Door and Frame Preparation

1. Mark door and position template.

- Draw a horizontal centerline for the lock on the edge and on both sides of the door at the desired height above the finished floor. Standard height for horizontal centerline is 40-5/16" above finished floor. (See Figure 1.)
NOTE: If strike mortise already exist in frame, locate the horizontal centerline of the lock using strike mortise as reference.

- Align the door backset marker with horizontal centerline. Both sides of the door. (See Figure 1.)

- Draw a vertical line on center of door edge.

Caution:

Be sure to verify backset before marking & drilling door.

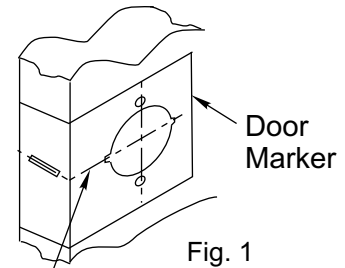


Fig. 1

Horizontal
Centerline

Note: When installing a new door in an existing frame, align centerline of lock prep with the centerline of the strike.

2. Drill door.

- Drill 2-1/8" (54mm) hole thru door. Cut notches as shown on template.
- Drill 1" (25mm) hole in edge of door
Cut out for latch front 5/32" (4mm) deep 1-1/8" (29mm) wide x 2-1/4" (57mm)"high.
- Drill (2) 5/16" (8mm) Dia. (C) Holes through door.
See Note in Fig. 2.

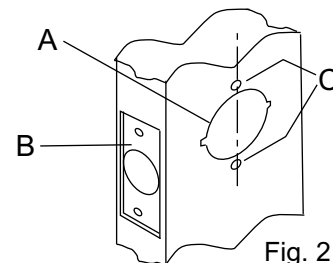


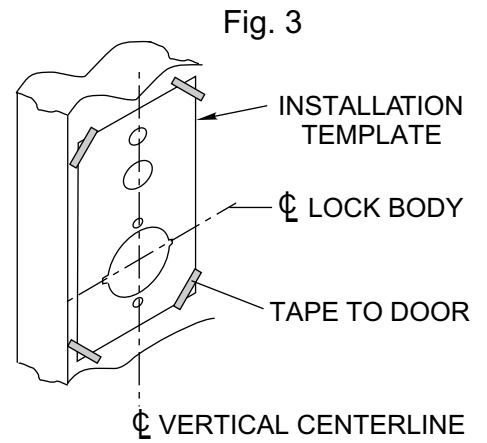
Fig. 2

Note:

To avoid splintering wood doors, drill holes from both sides.

I-B. Locate and Drill Holes for Electronic Components.

1. Mark door and position templates (Included).
 - a. Draw a horizontal centerline for the lock on both sides of the door at the desired height above the finished floor line. Standard height for horizontal centerline is 40-5/16" above finished floor (see Figure 1). (You may already have done this in Step A1a Fig.1 pg. 3.)
 - b. Line up installation template with 2-1/8" cross bore and vertical backset centerline.
 - c. Mark center point of additional holes to be drilled in door.
 - D. Repeat step 1B for inside of door.
2. Drill holes in both sides of door.



SECTION II Prepare Lock for Installation

What is the hand of the door?

Face the door from the outside to determine it's hand. The outside is the keypad side of an entrance door or the corridor side of a room door.



Left Hand Reverse: Hinges on left, opens outward. For handed locks, specify LHR.



Left Hand: Hinges on left, opens inward. For handed locks, specify LH.



Right Hand: Hinges on right, opens inward. For handed locks, specify RH.



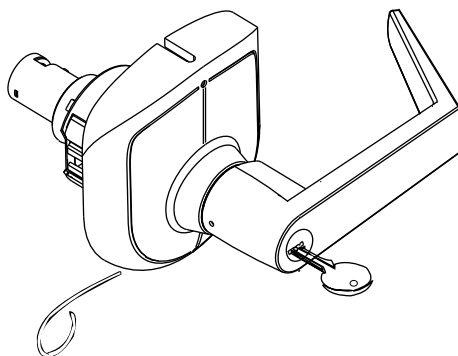
Right Hand Reverse: Hinges on right, opens outward. For handed locks, specify RHR.

If the lock body is not correct hand, See Section IIA Below.

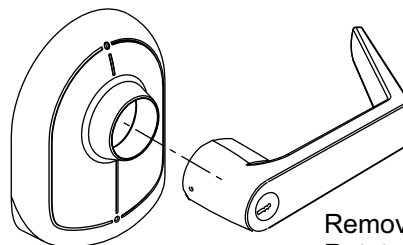
II-A How to change hands (Standard Cylinder Locks)

Remove Cylinder Handle

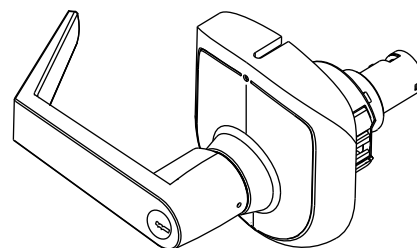
1. Insert key and rotate clockwise 70°.
2. Depress retainer with tool provided.
3. Slide lever off lock. (Also applies to inside lever).



RH, RHR SHOWN



Remove Handle & Escutcheon
Rotate Escutcheon 180°
Replace Handle



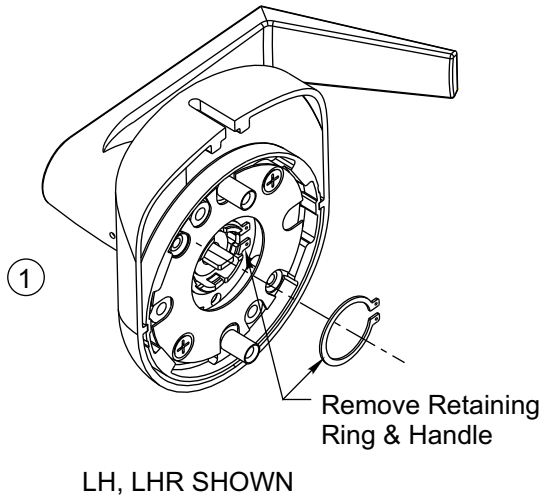
LH, LHR SHOWN

Opposite Hand shown in Up-right Position.

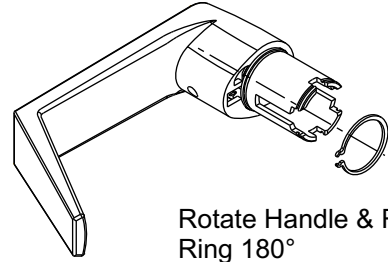
II-B How to change hands (Interchangeable Core Cylinder & Non Cylinder Locks)

Removable Core - Change Hands

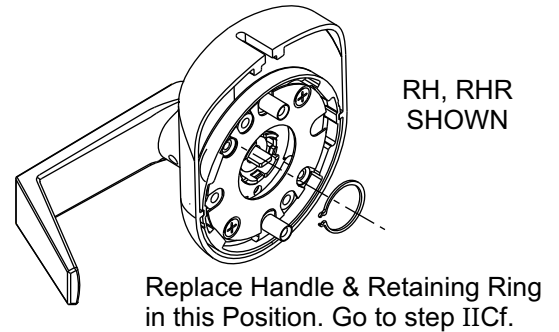
Refer to steps below to remove handle assembly from Lock Body.



②



③



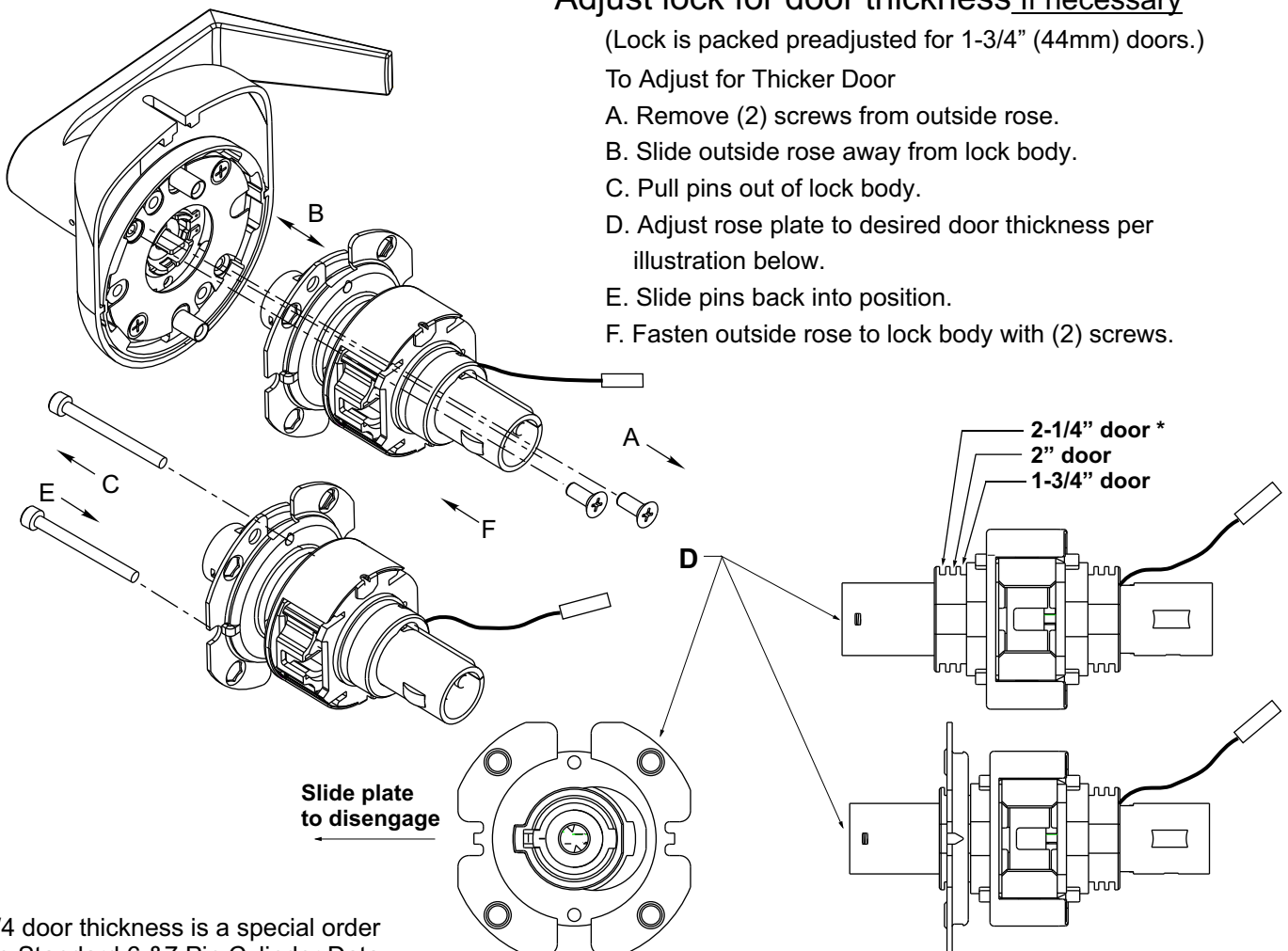
II-C

Adjust lock for door thickness If necessary

(Lock is packed preadjusted for 1-3/4" (44mm) doors.)

To Adjust for Thicker Door

- Remove (2) screws from outside rose.
- Slide outside rose away from lock body.
- Pull pins out of lock body.
- Adjust rose plate to desired door thickness per illustration below.
- Slide pins back into position.
- Fasten outside rose to lock body with (2) screws.



* 2-1/4 door thickness is a special order or see Standard 6 & 7 Pin Cylinder Data Section (Page 6)

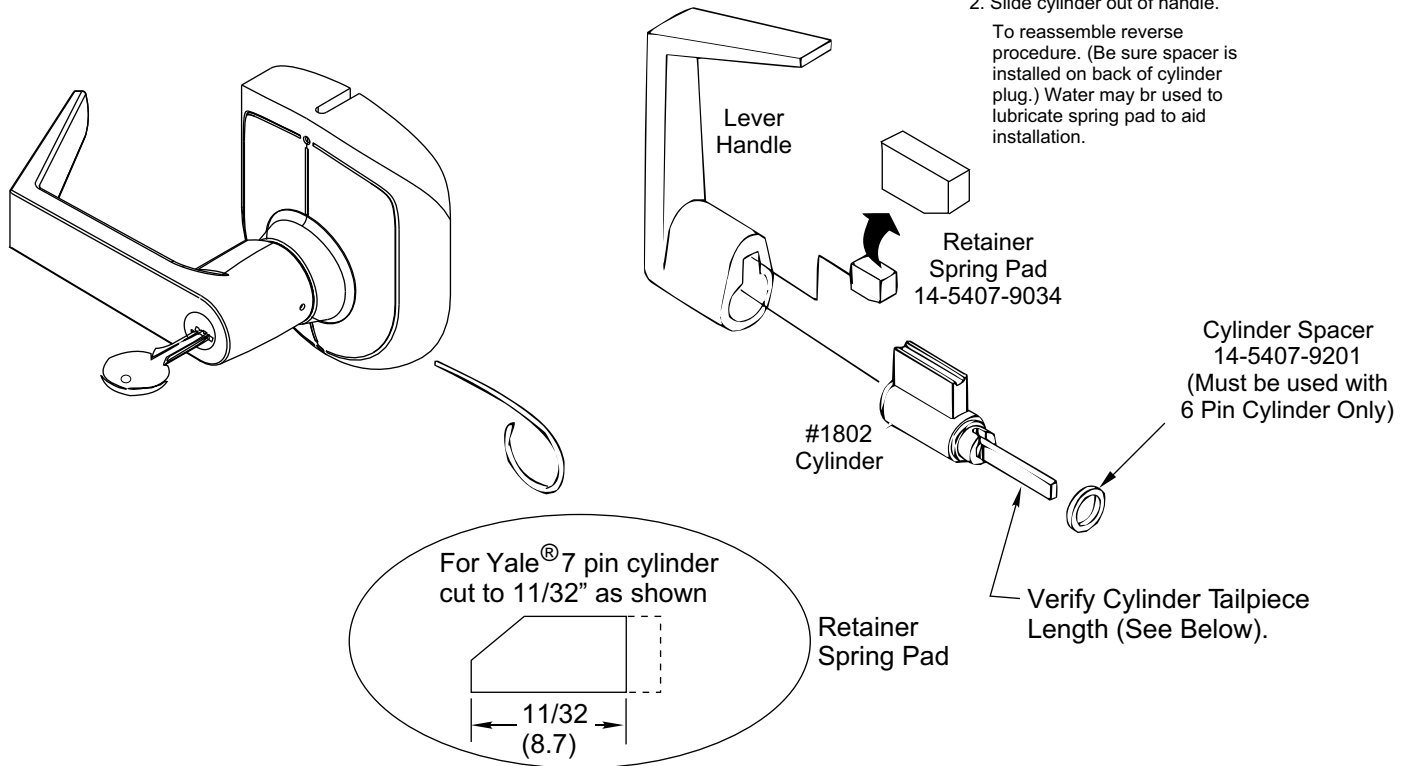
II-D Re-Keying

1. If the Standard Cylinder has to be Removed for Re-Keying see Below:

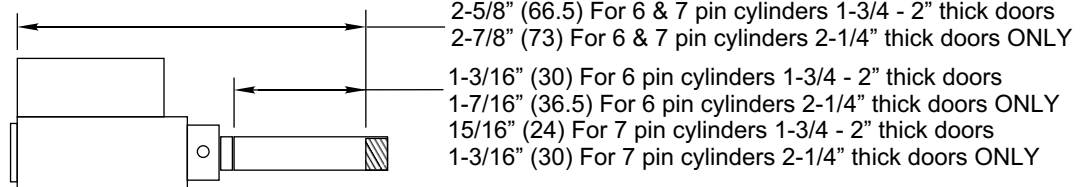
To Remove Cylinder from Handle

1. Remove retainer spring pad.
2. Slide cylinder out of handle.

To reassemble reverse procedure. (Be sure spacer is installed on back of cylinder plug.) Water may be used to lubricate spring pad to aid installation.



Standard 6 & 7 Pin Cylinder Data



CAUTION: The cylinders furnished with the E5496LN lock for use in 1-3/4 - 2" doors have a tailpiece that is 1/4" shorter than the standard cylinders that are furnished with 5400LN locks. Trying to install a standard cylinder in 1-3/4 - 2" thick doors with a E5496LN lock will DAMAGE the lock body. Standard 6 & 7 pin cylinders may only be used on 2-1/4" thick doors provided their overall length does not exceed 2-7/8".

Competitor Cylinders

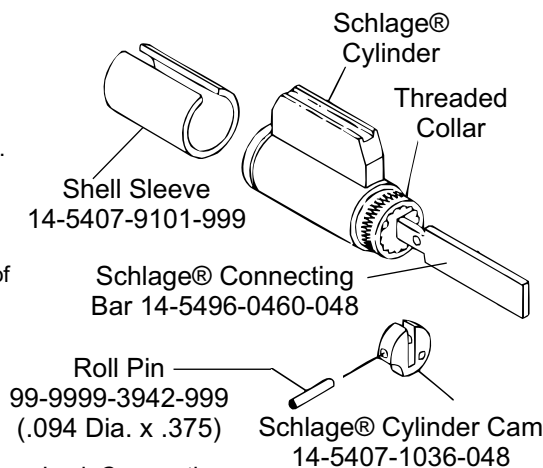
Yale Conversion Kit E107S For Schlage® Cylinders When used in 5496LN Locks

To Install Connecting Bar

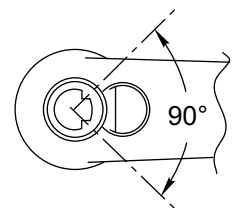
1. Remove threaded collar and Schlage® tailpiece.
2. Install Connecting Bar with threaded collar. (Adjust collar for proper end play of plug.)
3. Slide Cylinder Cam onto Bar. (Note orientation of notch.) Fasten with roll pin.
4. Slide shell sleeve onto cylinder.

Follow instructions on page 3 to install cylinder into lever handle.

Schlage® is a registered trademark of Schlage Lock Corporation

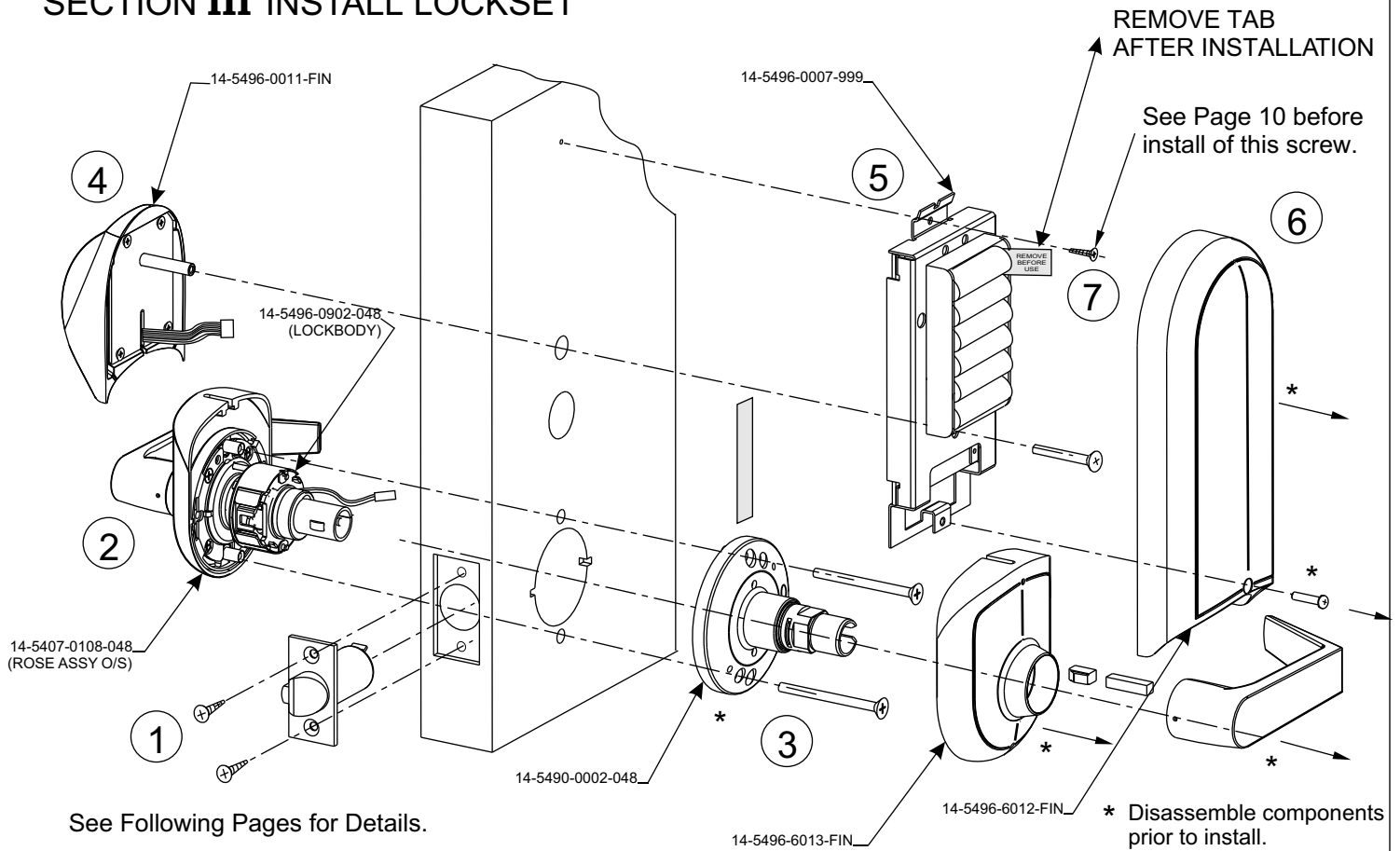


For Schlage® Removable Core match driver position in handle to the sketch below for proper alignment.



Correct position of Schlage® Connecting Bar when assembled toward free end of handle

SECTION III INSTALL LOCKSET

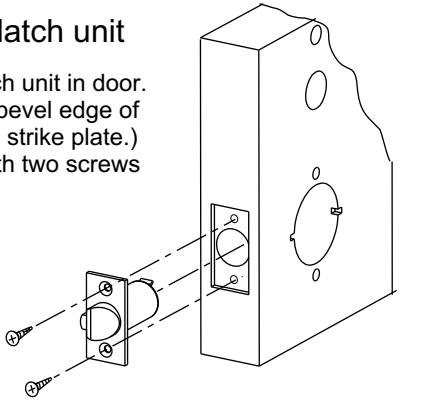


SECTION III INSTALL LOCKSET (CONTINUED)

III-A. INSTALL MECHANICAL COMPONENTS.

1. Install latch unit

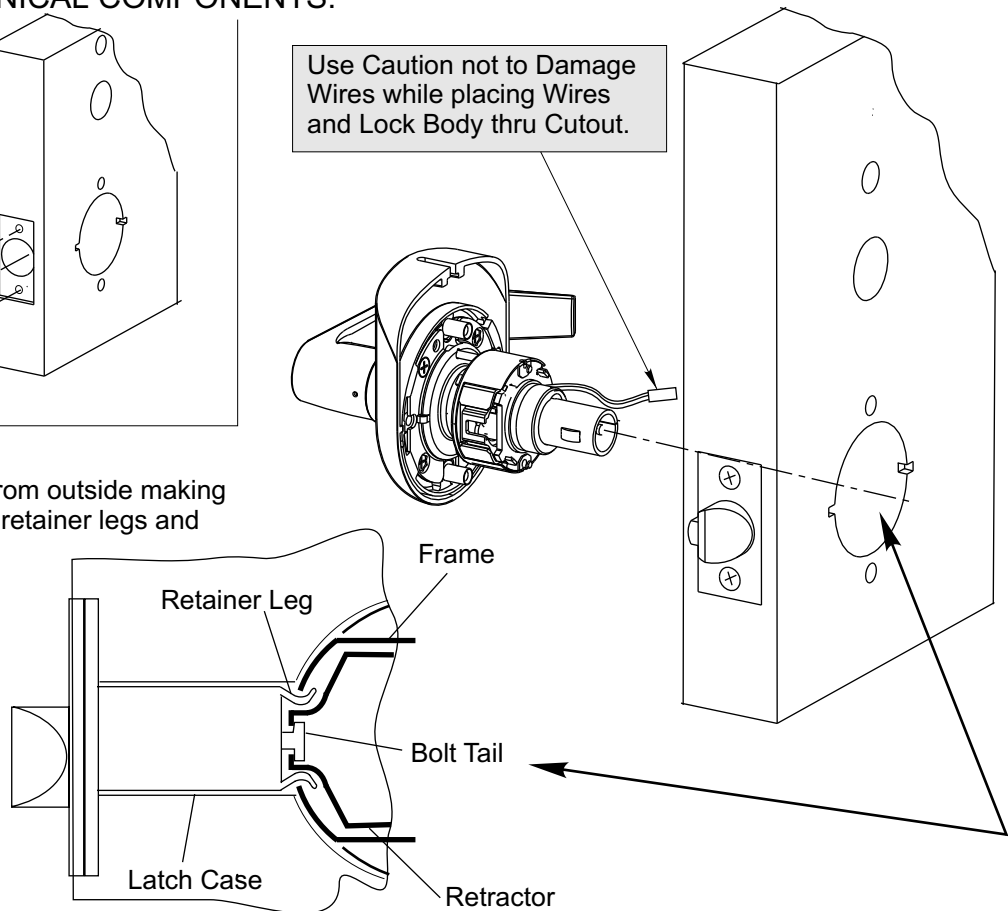
Insert latch unit in door.
(Be sure bevel edge of bolt faces strike plate.)
Attach with two screws supplied.



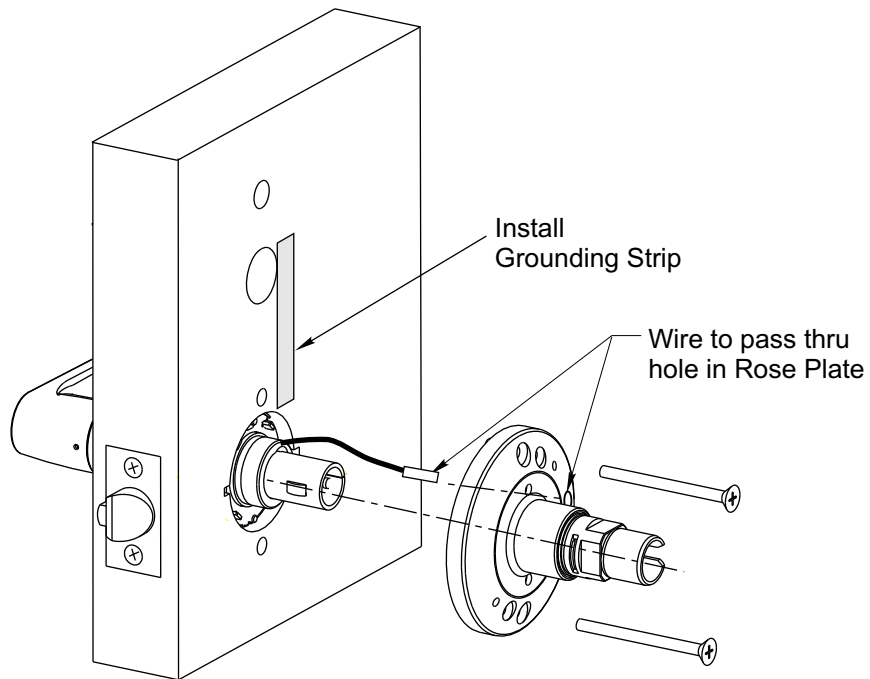
Use Caution not to Damage Wires while placing Wires and Lock Body thru Cutout.

2. Install lock

Insert lock body into door from outside making sure that lock frame hooks retainer legs and retractor engages bolt tail.
DO NOT FORCE.
(If lock body does not engage latch easily, check door preparation for error.)



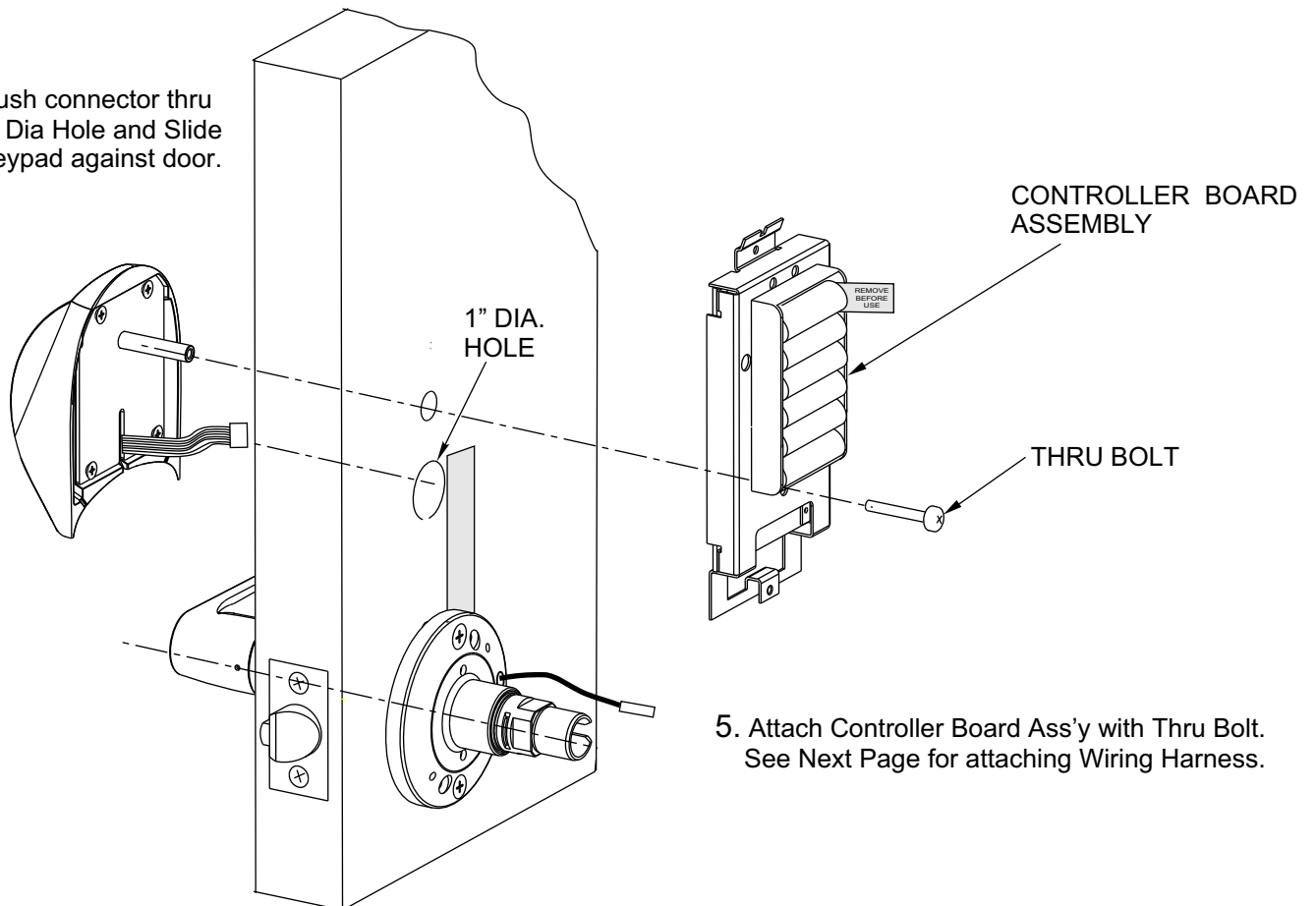
3. Installing Inside Trim



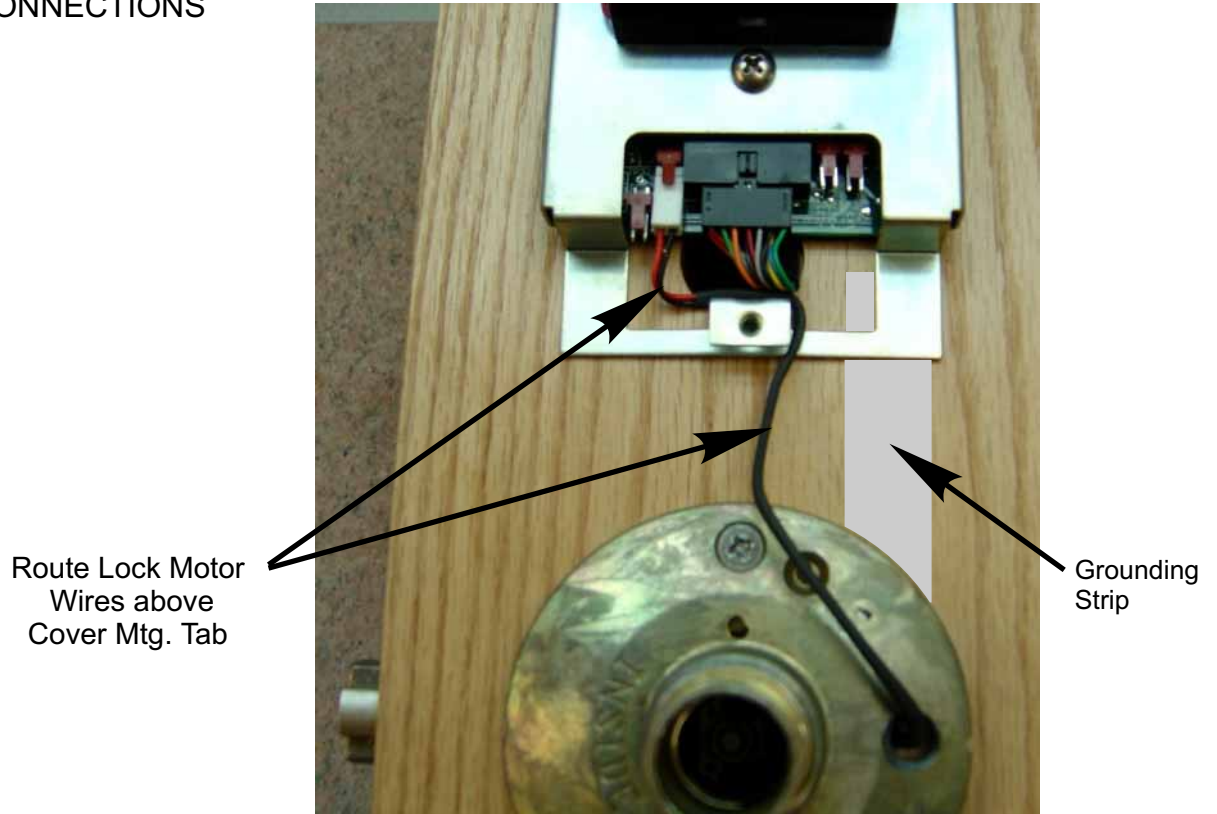
SECTION III INSTALL LOCKSET (CONTINUED)

III-B. INSTALL ELECTRONIC COMPONENTS

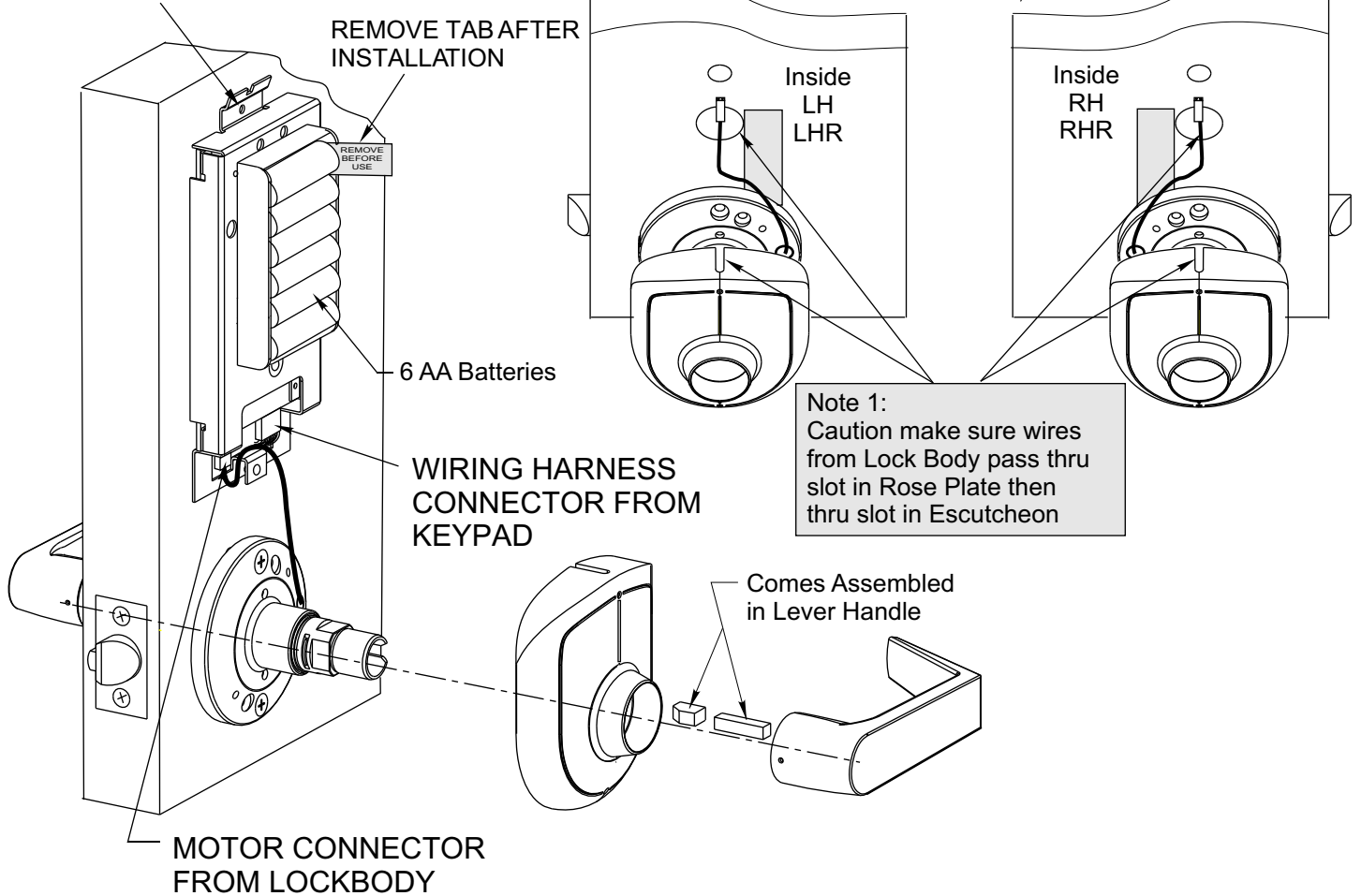
4. Push connector thru 1" Dia Hole and Slide Keypad against door.



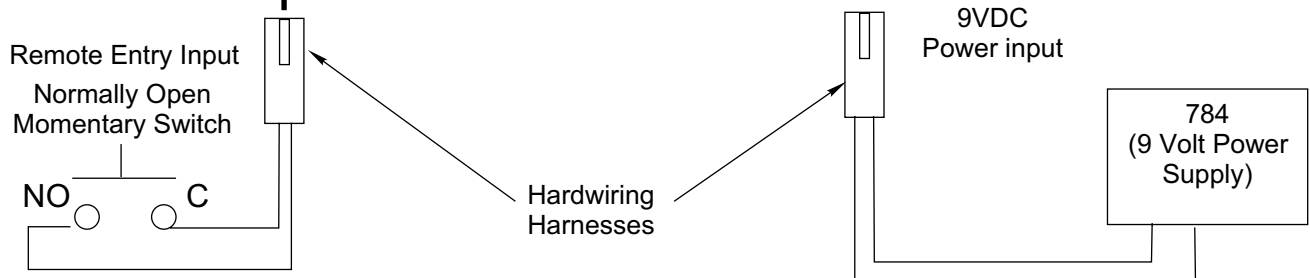
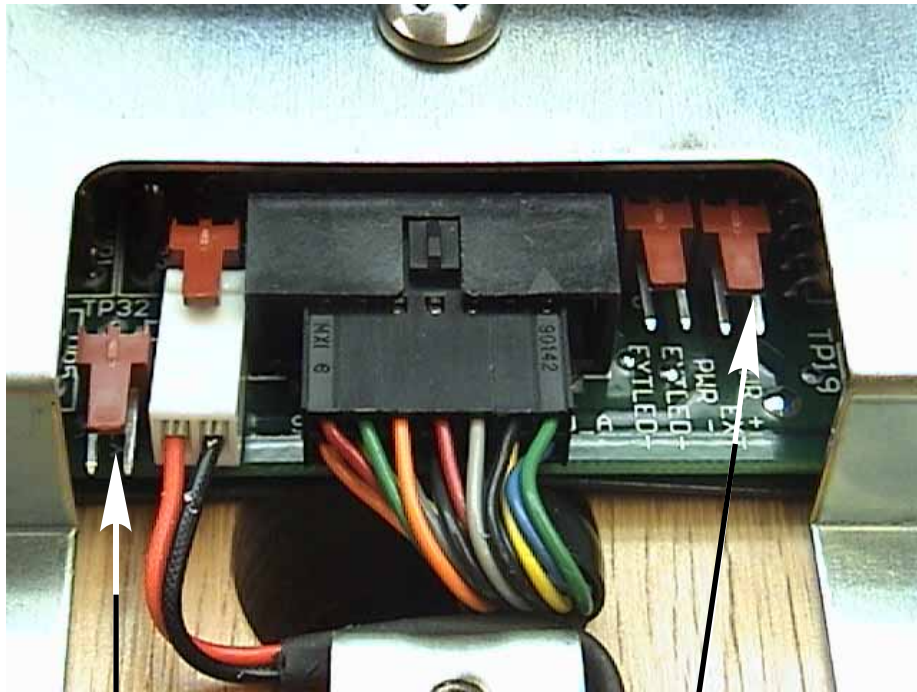
ELECTRICAL CONNECTIONS



See Page 10 for Screw Install

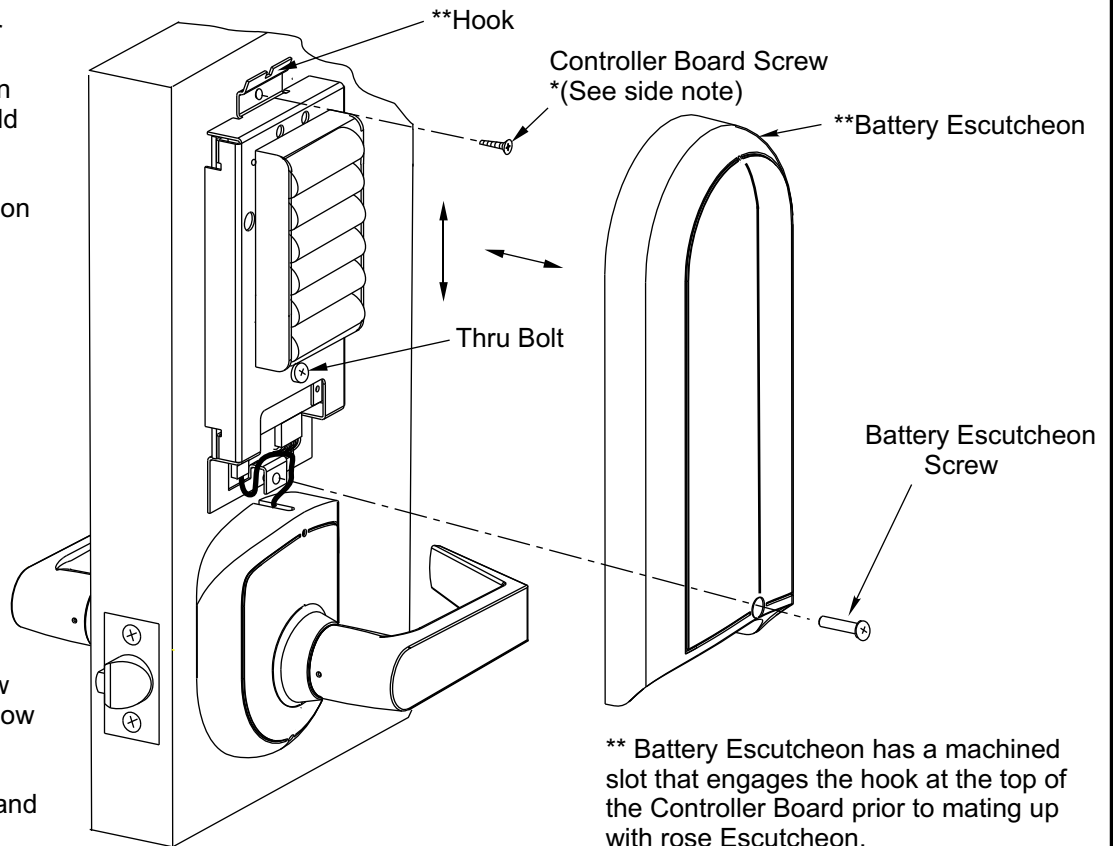


HARDWIRE OPTION DIAGRAM



*Prior to installing the Controller Board Screw the clearance between the Battery Escutcheon and the Rose Escutcheon should be checked.

1. **Dry fit the Battery Escutcheon to the Rose Escutcheon.
2. Check the clearance where the two meet. If the clearance is acceptable remove the Battery Escutcheon and proceed to step 4.
3. If the clearance is to great loosen the Thru Bolt and pull down on the Controller Board (with light pressure) while tightening the Thru Bolt. Recheck clearance.
4. Install Controller Board Screw at the bottom of the slot (to allow additional adjustment if reqd).
5. ** Install Battery Escutcheon and Battery Escutcheon Screw.



** Battery Escutcheon has a machined slot that engages the hook at the top of the Controller Board prior to mating up with rose Escutcheon.

Yale eBOSS E5400LN Series

Installation Template

Use with Door Marker
80-8150-0036-010

Grounding Strip
(can be installed
in either position)
Inside of Door

$\frac{7}{16}$ "
(11.1)

1"
(25.4)

$\frac{5-1}{16}$ "
(128.5)

$\frac{5}{16}$ (2 Holes)
(8) Thru Door

$\frac{3-5}{8}$ "
(92)

$\frac{2-3}{4}$ "
(70)

Horizontal

$\frac{5}{32}$ "
(4)

$\frac{2-1}{8}$ "
(54)

$\frac{2-15}{32}$ "
(62.7)

Vertical

Dimensions given in $\frac{\text{Inches}}{\text{(mm)}}$

CAUTION: Office copiers and facsimile machines may change the size of a drawing and make the template inaccurate to use as a door marker.

CUT LINE



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