The 5500 series lock is a stand-alone, microprocessor controlled, electro-mechanical locking system. The 5500 employs a heavy-duty mechanical design with fewer moving parts that a standard mechanical mortise lockset, for ease of installation and high reliability. The FSE and FSA solenoid-driven models are hard-wired to a 12 or 24 volt (AC or DC) power supply. They offer fail secure and fail safe operation, respectively. Operationally, the outside lever is normally locked and the inside lever always retracts the bolt to allow egress. Electronic access control is achieved by entering an"Access Credential" (magnetic stripe card, code of iButton Key, or HID Prox fob or card). Electronic access control capabilities are listed below by model. All models are designed to accommodate an emergency mechanical key override. Standard features of the CM models include up to 1000 user memory, real time features including time zones and holidays, and audit trail of up to 1000 events. Optional ATK (audit trail - key override) will note any use of the mechanical key on the audit trail report. Manual and computer programming is supported by all models. The PRO models are manually programmed to accept up to 100 codes.

Functions:

5590: Office Function (3/4" latch) - has "Lock" and "Unlock" buttons on inside escutcheon. Function not available on PRO

5596: Storeroom/Classroom Function (3/4" latch) - can be unlocked by "toggle" credential and relocked again by same. See programming guide for more information (form 57000).

5591: Office Function (1" Autobolt) - has "Lock" and "Unlock" buttons on inside escutcheon. Function not available on PRO

5594: Storeroom/Classroom Function (1" Autobolt) - can be unlocked by "toggle" credential and relocked again by same. See programming guide for more information (form 57000). Function not available on PRO

5593: Dormitory/Privacy Function (1" Autobolt) - Pushing either button on the inside escutcheon places lock in the "Privacy" mode: a "Lockout" credential or mechanical key is required to enter. Condition is cleared when the bolt is retracted from the inside. Function not available on PRO
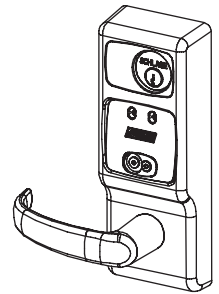
Models:

FSA: Solenoid operated clutch - fail safe
FSE: Solenoid operated clutch - fail secure
KPI: iButton reader and keypad
IBO: iButton reader only
MGK: Magnetic stripe card reader, iButton reader and keypad
MGI: Magnetic stripe card reader and iButton reader
PXK: Prox card reader, iButton reader, and keypad
PXI: Prox card reader and iButton reader
**PRO:** Keypad only - Manual programming only, 100 code memory

Options:

ATK: Audit trail of mechanical key use (not available on PRO)
HSS: High security screws on inside escutcheon
T3: Track 3 card reader (data must be ABA track 2 format) - MGI/MGK only
KD: Keyed Different, includes Schlage Everest cylinder
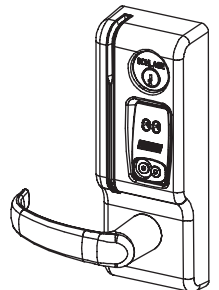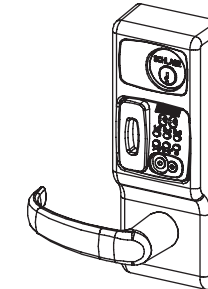**LC:** Less Cylinder
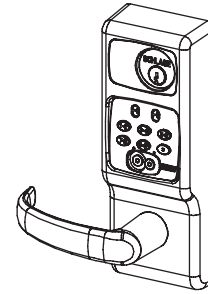
CM5500-FSA-KPI   CM5500-FSA-IBO
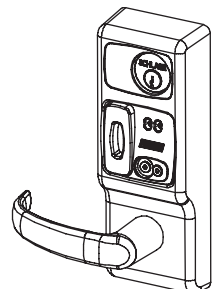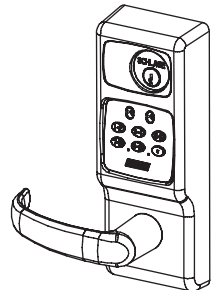CM5500-FSE-KPI   CM5500-FSE-IBO
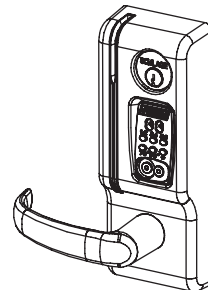
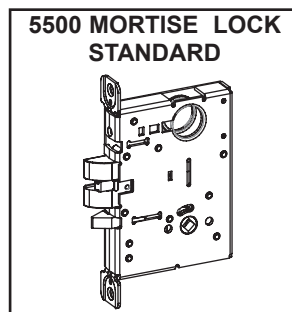CM5500-FSA-MGK CM5500-FSA-MGI
CM5500-FSE-MGK CM5500-FSE-MGI

CM5500-FSA-PXK CM5500-FSA-PXI
CM5500-FSE-PXK CM5500-FSE-PXI

PRO5500-FSA
PRO5500-FSE
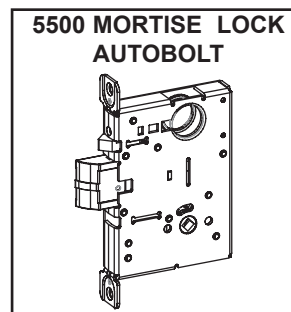
5500 MORTISE LOCK STANDARD

5500 MORTISE LOCK AUTOBOLT

ALLEGION

BEFORE YOU BEGIN:

Standard units are shipped from the factory to fit 1-3/4" doors. Verify the door thickness. If the door is not 1-3/4" thick, verify that the door thickness option was ordered or consult factory. Hard-wired units (FSE & FSA models) will require that wiring is brought to the door prep. In step 1, "PREP DOOR AND FRAME", there are some suggested ways of doing this. A door cord, electric hinge or some other form of wire transfer device will be required.

1. PREP DOOR AND FRAME (IF NOT ALREADY DONE):

A. Determine door hand.

B. Mark the horizontal and vertical centerlines for the lock case (on door edge), strike, lever, and inside escutcheon. Note that the backset is actually 2.813" (or 2 13/16"). This is very important for proper mounting.

C. Place template on *inside* of door (opposite the side that the keypad/reader will be on). Line up the correct reference lines on the template with the edge of the door, depending on the hand (see paper template). The centerline on the door should line up with the vertical centerline of the template. Use the paper template to mark all holes. (Though the paper template is the preferred way to prep the door, the dimensions below may be used if a paper template is not available.)

D. Drill required holes. Note that all holes are required except the 3/4" hole just below the 1" hole, this is only required if the lock has the privacy feature (model 5593).
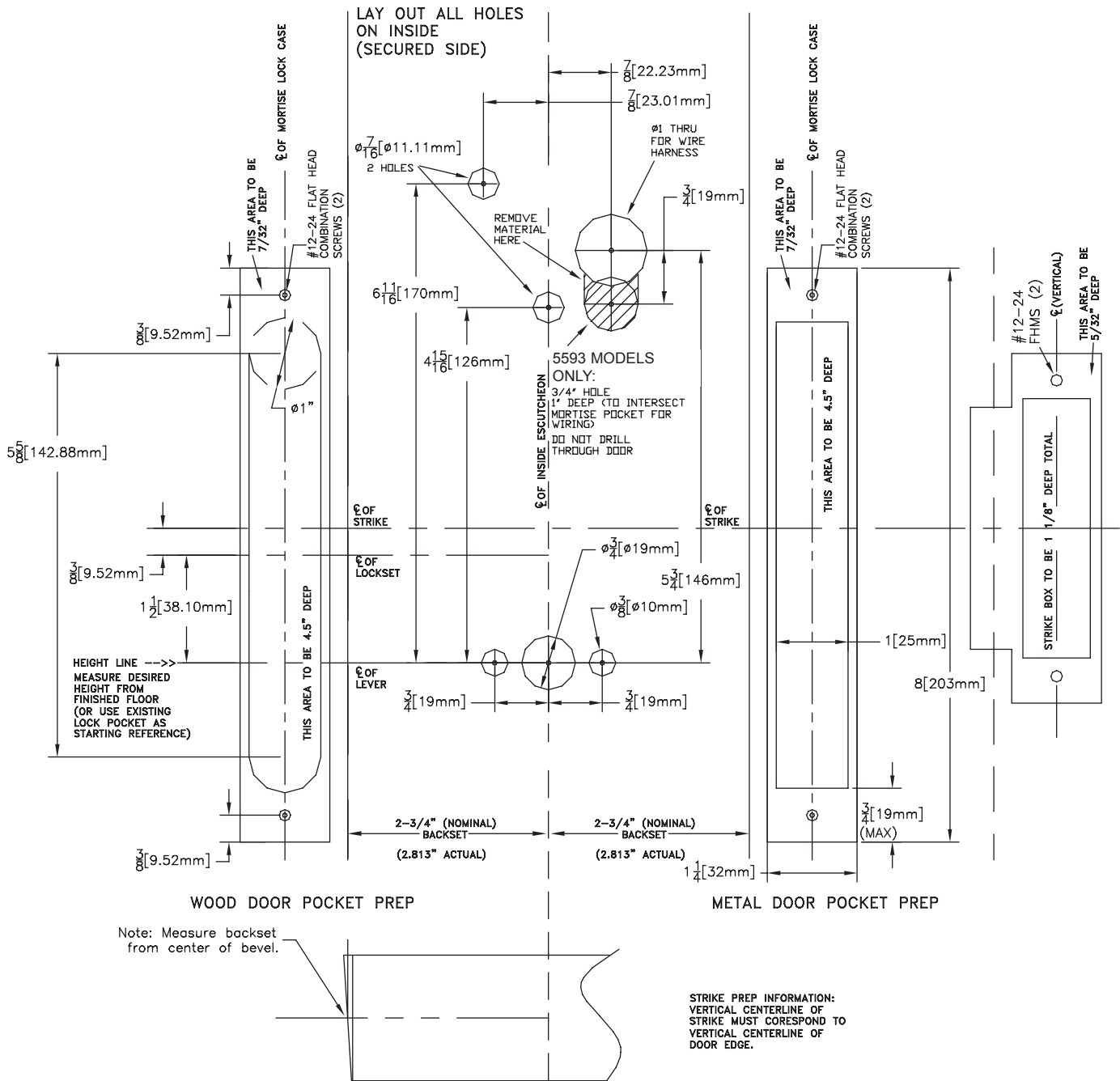
**FSE & FSA HARD WIRED MODELS REQUIRE WIRING TO BE RUN
TO THE MORTISE POCKET FROM THE HINGE SIDE. BELOW IS A
SUGGESTED WAY TO DO THIS. A DOOR CORD OR ELECTRIC
HINGE OR TRANSFER DEVICE IS USED TO GET WIRING FROM
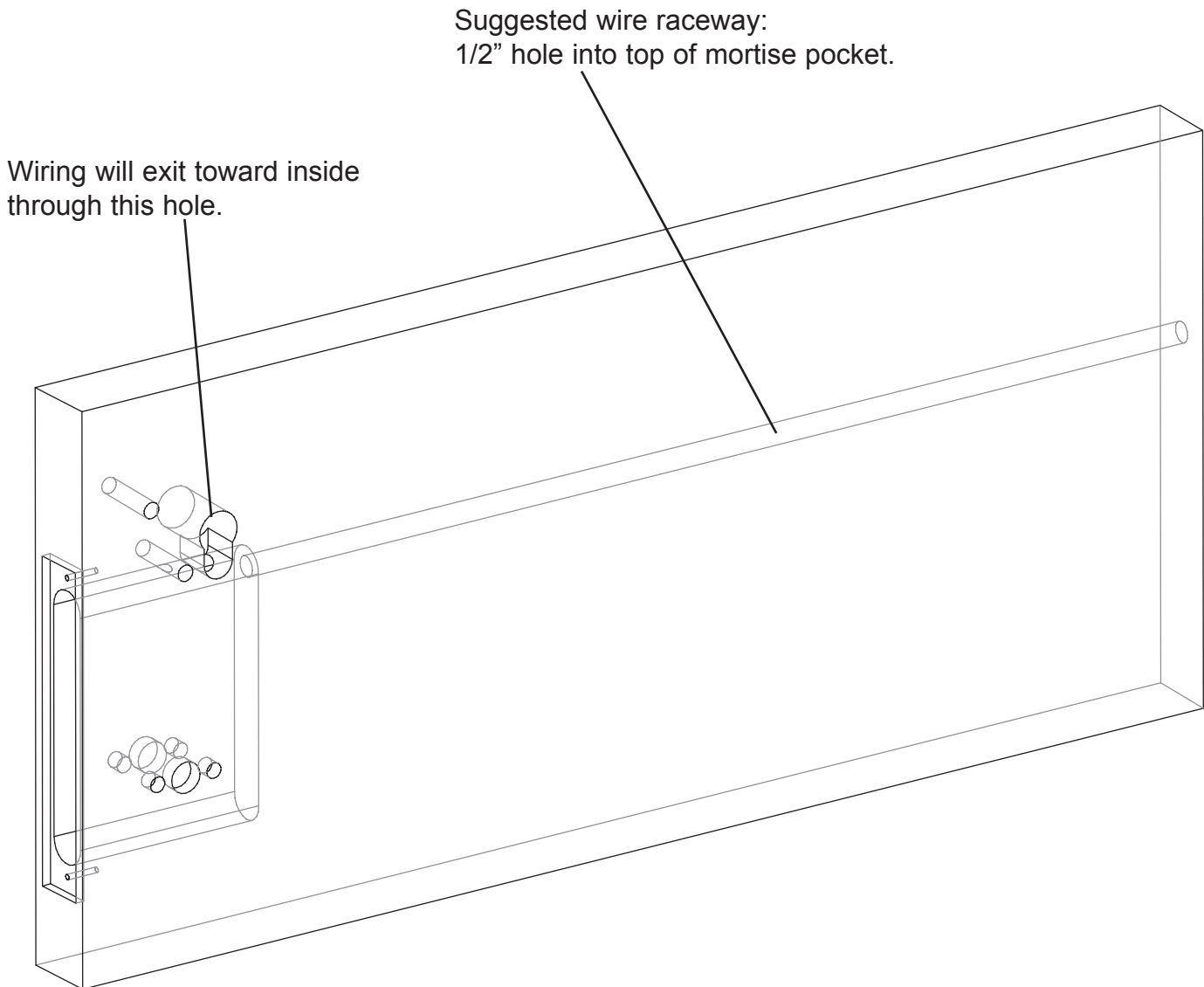THE FRAME TO THE DOOR.**

HARD WIRED LOCKS RATED AT:

0.5 AMPS @ 12 VDC
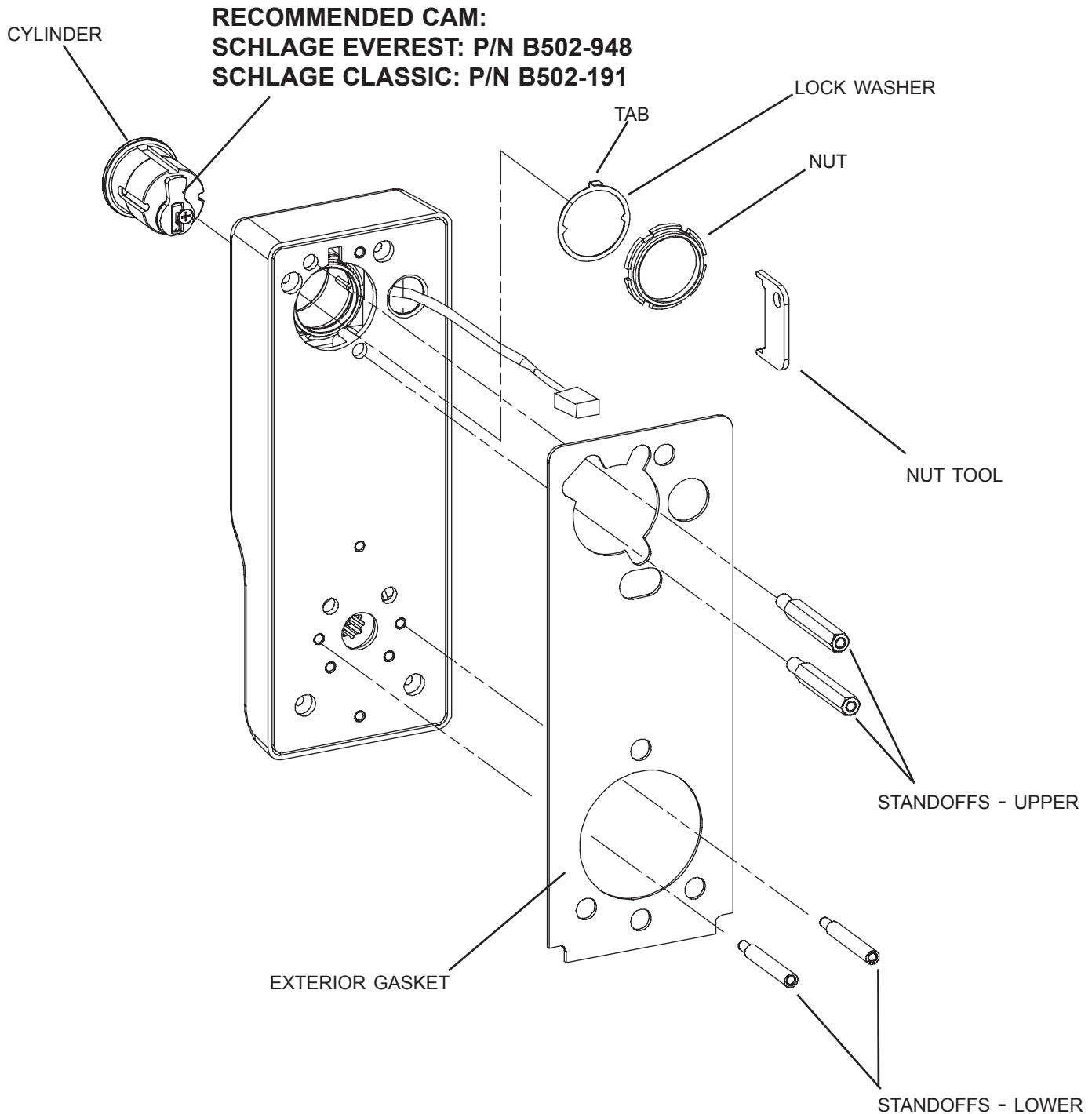**0.5 AMPS @ 12 VAC**
0.5 AMPS @ 24 VDC
0.5 AMPS @ 24 VAC

Suggested wire raceway:
1/2" hole into top of mortise pocket.

Wiring will exit toward inside
through this hole.

2. INSTALL CYLINDER, GASKET AND STANDOFFS:

A. Install cam onto cylinder. Cam can be either a cloverleaf (shown) or straight, 11/16" design (not shown).
B. Insert standard, 1-1/4" mortise cylinder into outside escutcheon from front (keypad/reader) side with keyway down.
C. Slide lock washer into place with tab on top facing out, as shown below.
D. Using nut tool (provided) tighten nut onto cylinder.
E. Line up nearest notch on nut with tab on lock washer and bend tab into notch using nut tool so nut is secure.
F. Install exterior gasket (if used).
G. Install upper and lower standoffs.

CYLINDER

RECOMMENDED CAM:
SCHLAGE EVEREST: P/N B502-948
SCHLAGE CLASSIC: P/N B502-191

TAB

LOCK WASHER

NUT

NUT TOOL

STANDOFFS - UPPER

EXTERIOR GASKET

STANDOFFS - LOWER

3. CHANGE HAND (IF NECESSARY):

NOTE: The locks are shipped as ordered from factory. If it is necessary to change the hand of the lock, follow the steps below:
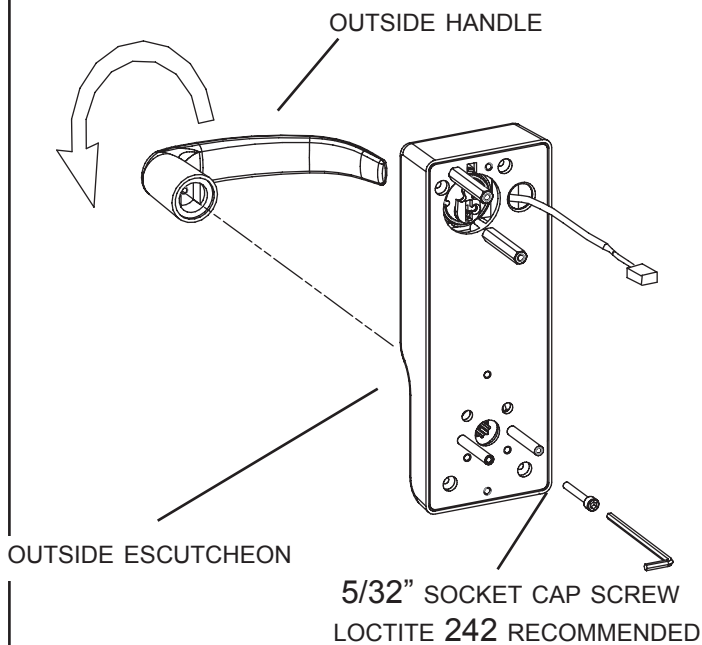
TO CHANGE HAND OF LOCK CASE:

A. With bolt fully extended, insert change pin (included in the hardware pack) into hole. (It will snap over a groove on the main shaft, holding it in place.)

B. Remove set screw in bolt so bolt can be removed.

C. Rotate bolt and reinstall on to shaft. Do not remove spring.

D. Apply thread locking compound to set screw.
        Loctite 242 recommended.

E. Install and tighten set screw (from other side, as shown).

F. Remove change pin.
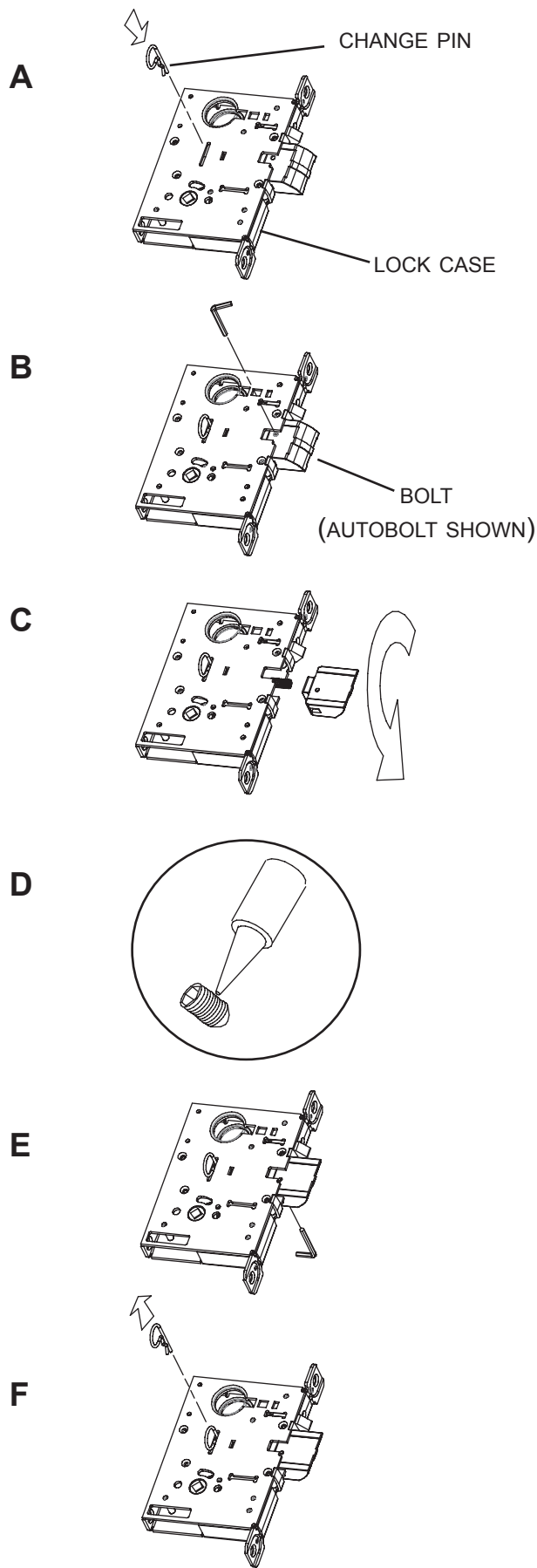
TO CHANGE HAND OF LEVERS:

A. Loosen 5/32" socket cap screw and remove lever.

B. Rotate handle to opposite position.

C. Apply thread locker to screw. Loctite 242 recommended.

D. Reinstall handle.

E. Repeat for inside escutcheon (not shown).

OUTSIDE HANDLE

OUTSIDE ESCUTCHEON

5/32" SOCKET CAP SCREW
LOCTITE 242 RECOMMENDED

A — CHANGE PIN / LOCK CASE

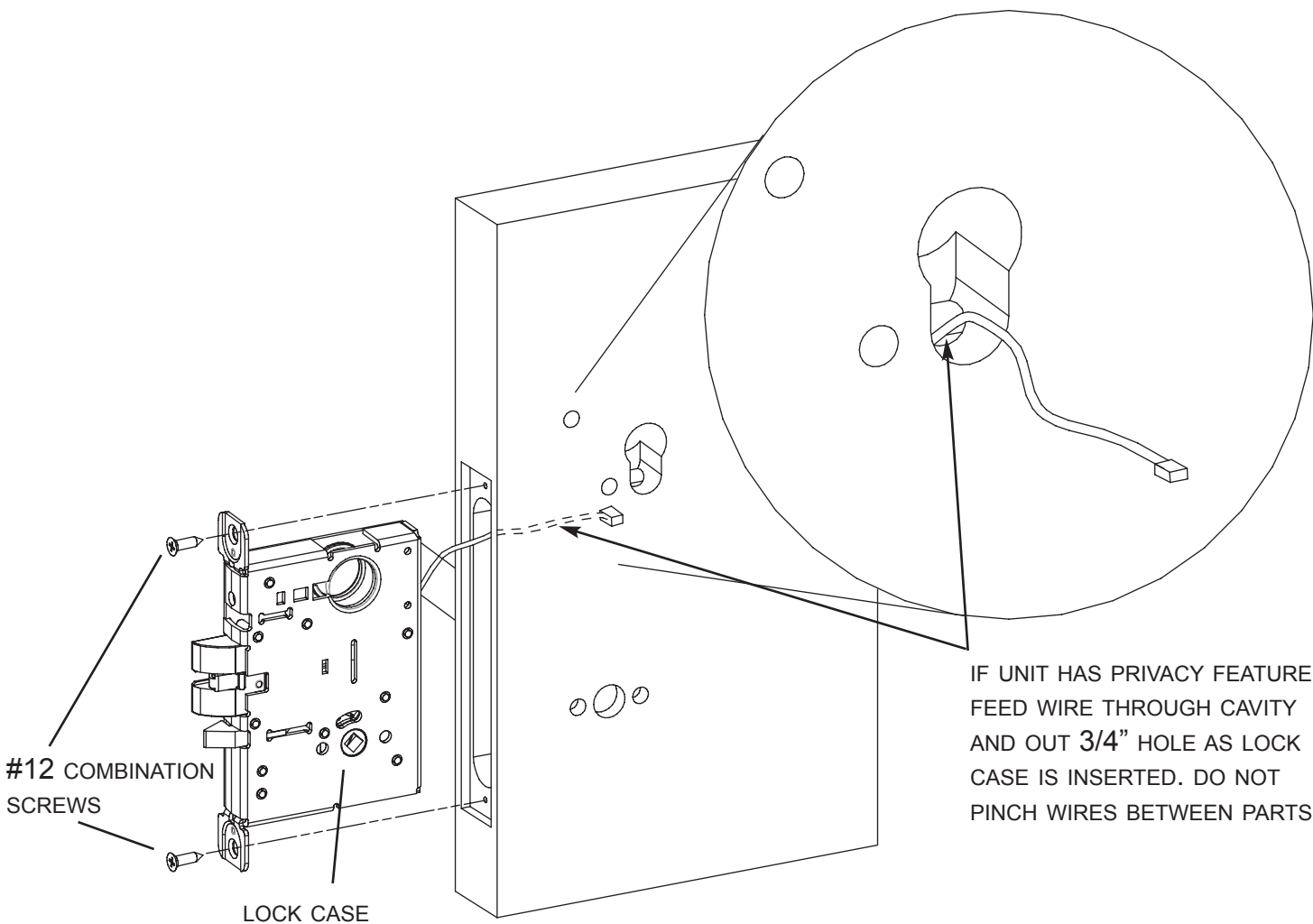B — BOLT (AUTOBOLT SHOWN)

C

D

E

F

4. INSTALL STRIKE BOX AND STRIKE:

IMPORTANT!
Strike included with lock MUST be used for proper operation of mortise lockset.
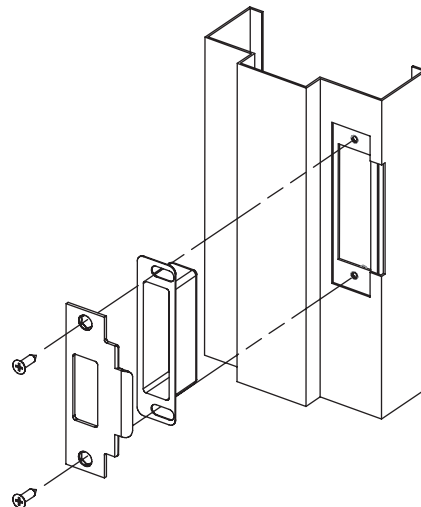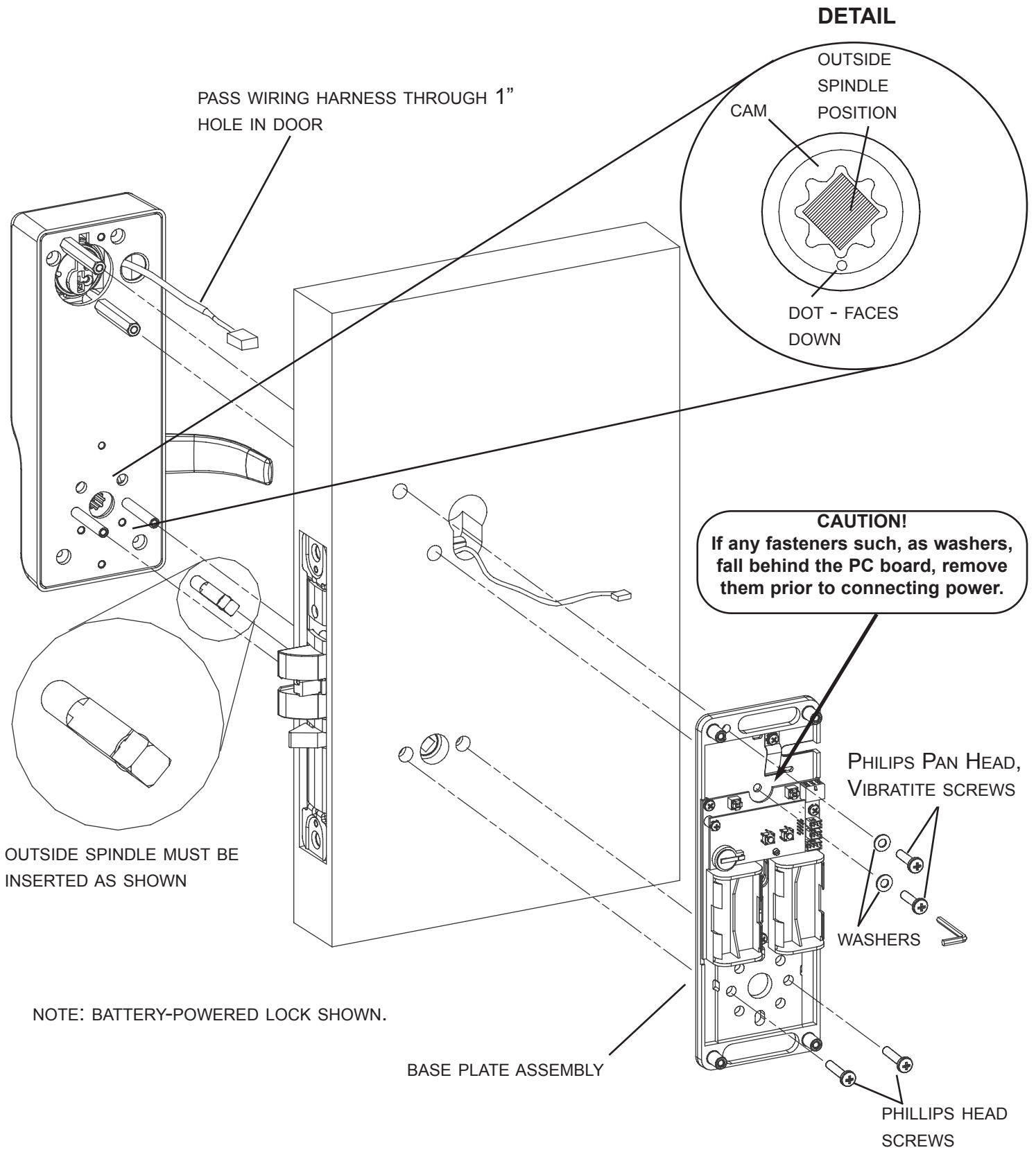
5. INSTALL LOCK CASE:

Install lock case into edge of door. If the lock has the Privacy option, feed the wire harness though the 3/4" hole as shown below. Secure to door with #12-24 combination screws.

IF UNIT HAS PRIVACY FEATURE, FEED WIRE THROUGH CAVITY AND OUT 3/4" HOLE AS LOCK CASE IS INSERTED. DO NOT PINCH WIRES BETWEEN PARTS.

#12 COMBINATION SCREWS

LOCK CASE

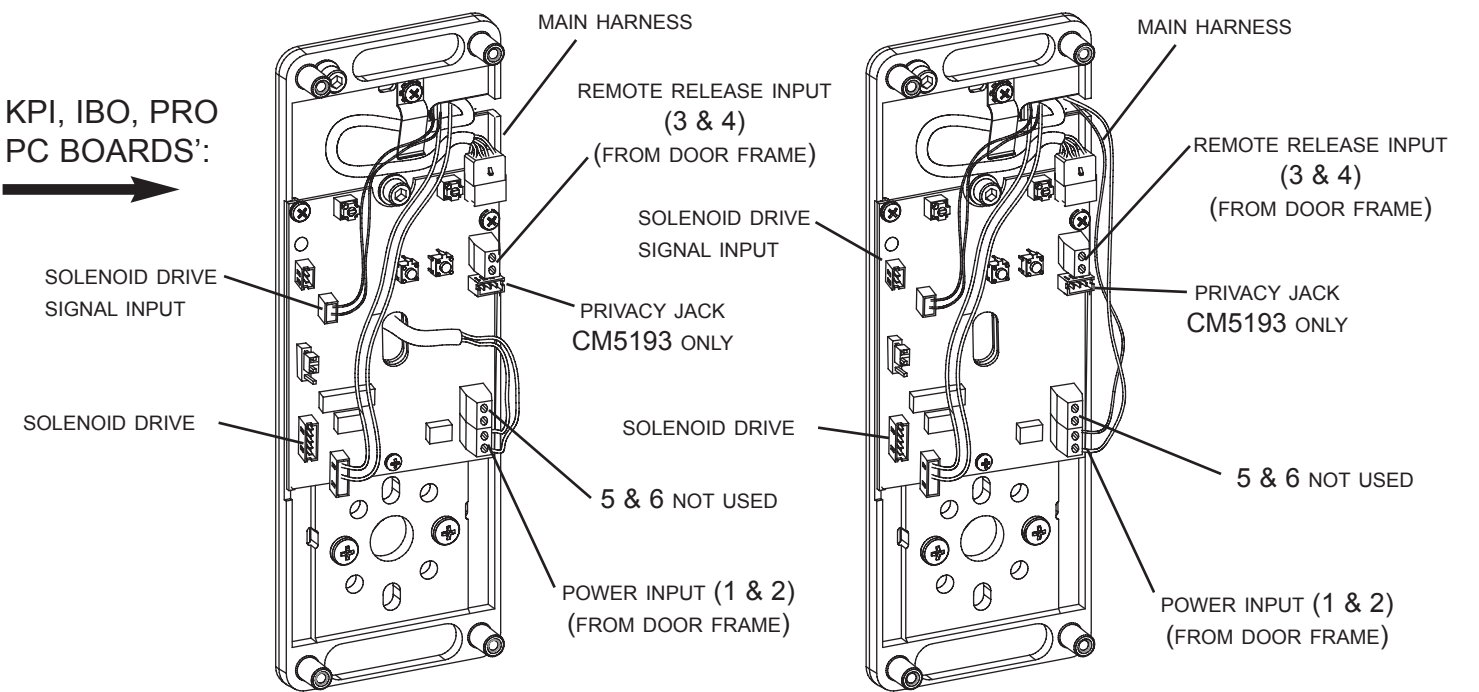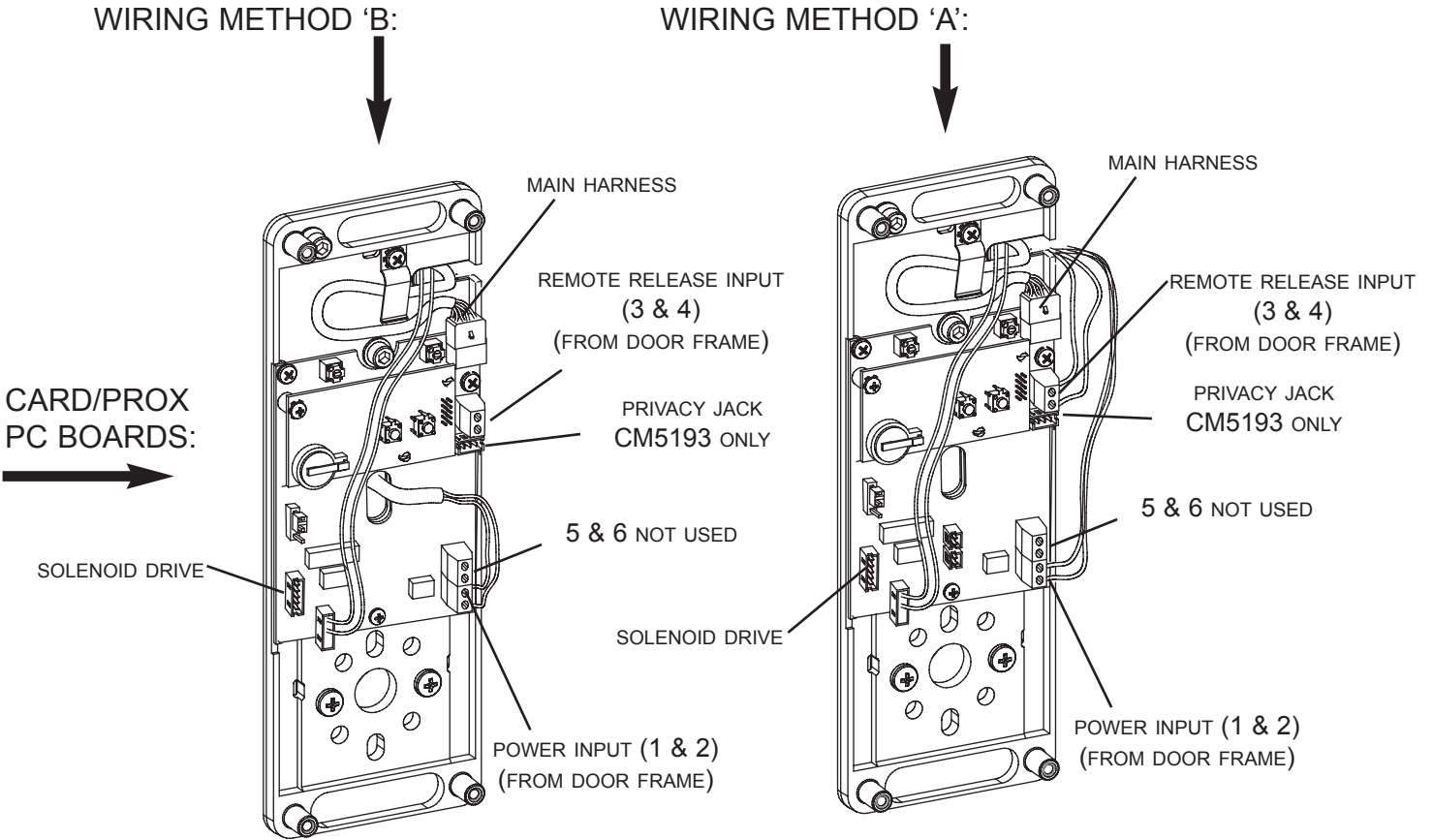## 6. INSTALL OUTSIDE SPINDLE, OUTSIDE ESCUTCHEON AND BASE PLATE ASSEMBLY:

Install base plate assembly onto inside of door. Use socket cap screws with washers on upper standoffs and phillips head screws on lower standoffs (bottom). Note that the spindle must be inserted as shown in details.

DETAIL

OUTSIDE SPINDLE POSITION

CAM

DOT - FACES DOWN

PASS WIRING HARNESS THROUGH 1" HOLE IN DOOR

OUTSIDE SPINDLE MUST BE INSERTED AS SHOWN

CAUTION!
If any fasteners such, as washers, fall behind the PC board, remove them prior to connecting power.

PHILIPS PAN HEAD, VIBRATITE SCREWS

WASHERS

NOTE: BATTERY-POWERED LOCK SHOWN.

BASE PLATE ASSEMBLY

PHILLIPS HEAD SCREWS
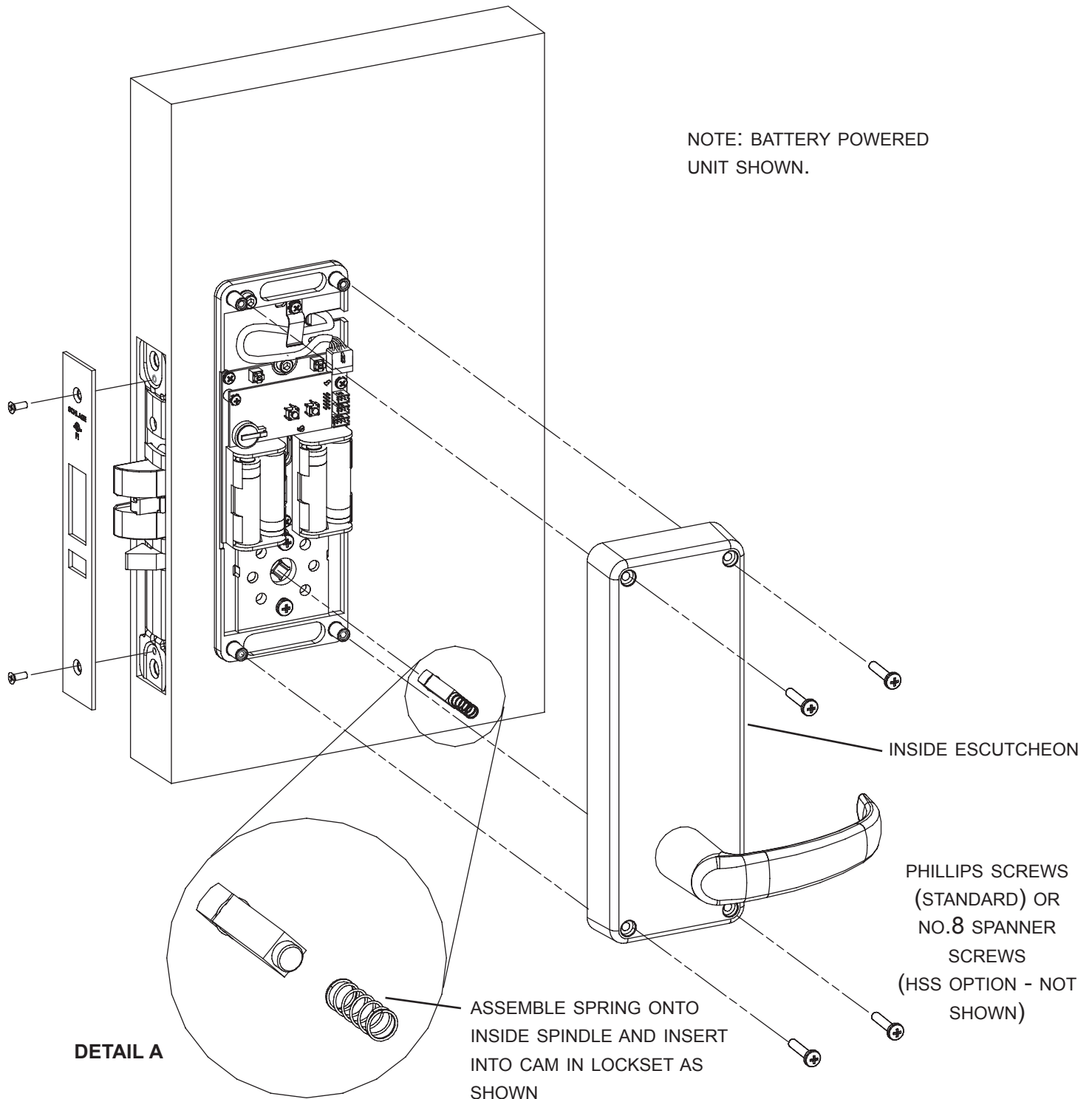
7. CONNECT WIRE HARNESS COMPONENTS (IF ANY):

Hard-wired units (FSE and FSA) will have additional wire harness components. If remote release is to be used, connect the RRK harness at this time - refer to instructions included with the kit.

WIRING METHOD 'B:

WIRING METHOD 'A':

CARD/PROX
PC BOARDS:

KPI, IBO, PRO
PC BOARDS':

MAIN HARNESS

REMOTE RELEASE INPUT
(3 & 4)
(FROM DOOR FRAME)

PRIVACY JACK
CM5193 ONLY

5 & 6 NOT USED

SOLENOID DRIVE

POWER INPUT (1 & 2)
(FROM DOOR FRAME)

SOLENOID DRIVE
SIGNAL INPUT

8. INSTALL INSIDE SPINDLE AND INSIDE ESCUTCHEON:

A. Plug wiring harness into PC board.
B. Tuck wiring harness under retaining clip as shown below.
C. Assemble spring onto inside spindle as shown in detail A. Install spindle into cam in lockset.
D. Install inside escutcheon, making sure that the inside spindle engages the lever cam.
E. Test operation of inside lever to make sure that latch retracts fully.

NOTE: BATTERY POWERED
UNIT SHOWN.

INSIDE ESCUTCHEON

PHILLIPS SCREWS
(STANDARD) OR
NO.8 SPANNER
SCREWS
(HSS OPTION - NOT
SHOWN)

ASSEMBLE SPRING ONTO
INSIDE SPINDLE AND INSERT
INTO CAM IN LOCKSET AS
SHOWN

DETAIL A

OPERATIONAL TEST:

1. Push down and up on *inside* lever: latch should retract.

2. Push down and up on outside lever. Lever should be disengaged and should not retract the latch.

3. Insert mechanical key into cylinder and turn counterclockwise until it stops (about 1/2 turn). Push down and up on the *outside* lever. The latch should retract. (On units with ATK option you should see the green LED flash on the keypad/reader when the key is turned.)

4. If the unit has a keypad, enter the factory default access code:

      1 - 3 - 5 - 7 - 9

as soon as "9" is pressed you should hear a quiet "click" and the green LED should flash green for about 10 seconds. During this time, push the handle down. The latch should retract. After the green LED stops flashing you should hear another quiet "click" and the lock should relock. Test the handle again to verify that it is locked.

Note: Refer to the Programming Guide for information on entering iButton keys or cards to test them. Note that some literature may refer to I-buttons as "TEKs" or "TouchEntry Keys".

TROUBLE SHOOTING:

PROBLEM:	POSSIBLE CAUSE:
Inside lever doesn't retract latch:	Inside spindle not installed
No response from keypad/reader:	Wiring harness not plugged in/external wiring problem. Electronics problem (consult tech. support)
Mechanical key not working:	Wrong cam installed or cam installed in wrong position. Outside spindle not installed properly. Cylinder upside down.

PROGRAMMING:

Please refer to the programming guide, shipped with the product, for instructions on manual programming and creating master programming credentials. If computer programming is required, please refer to the documentation and help files included with the software for more information.

OVERALL DIMENSIONS:
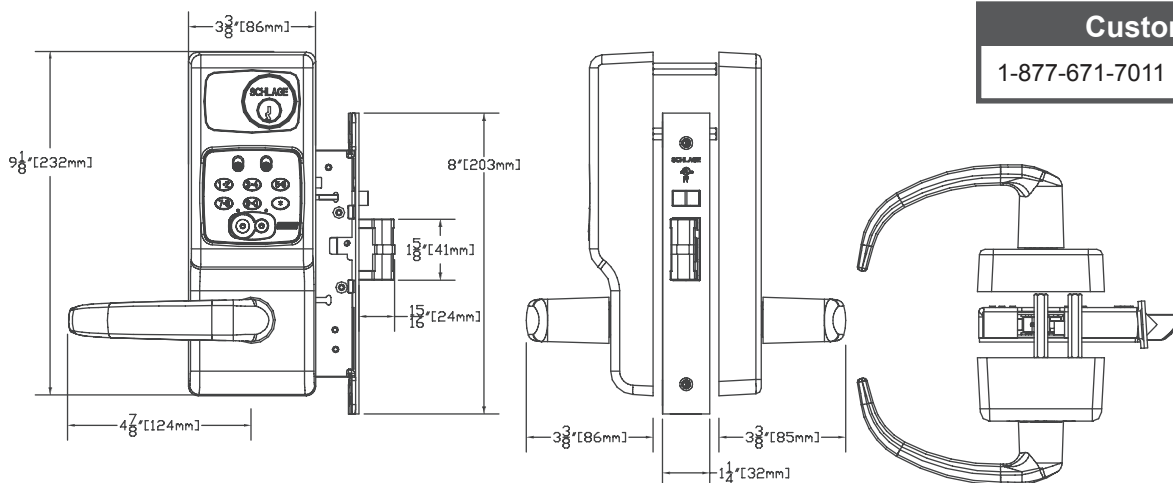
Customer Service

1-877-671-7011   www.allegion.com/us

ALLEGION