SCHLAGE ®

The VIP 5500 series lock is a microprocessor controlled, electromechanical locking system. It is an open architecture product designed to interface with 3rd party panels encompassing all the features of the lock, reader, door status and egress (rex/request to exit) indication in one fire-rated piece of hardware. The 5100 employs a heavy-duty mechanical design tested and complying with ANSI/BHMA grade 1 standards for performance and reliability. It is powered by 12 or 24 volts DC with only four wires required - two for power and two for communications. The lock communicates with a PIB (panel interface board) which communicates with the panel as if it were separate components of an access control system.

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 or Prox fob or card). The panel controls the lock through the PIB.

PX   **MG**

Please refer to all instruction manuals involved in the installation before you begin.
Functions:

VIP 5594-FSA: (1" AutoBolt) - Fail Safe (unlocked)
VIP 5594-FSE: (1" AutoBolt) - Fail Secure (locked)
VIP 5596-FSA: (3/4" latch) - Fail Safe (unlocked)
VIP 5596-FSE: (3/4" latch) - Fail Secure (locked)

Models:
MG: Magnetic stripe card reader
PX: HID Prox card reader

PIB

Standard Monitoring Switches:
DSM: Provides door status via data link to panel interface
KSM: Provides mechanical key use events via data link to panel interface
REX: Provides indication of inside lever use for request to exit input via data link to panel interface

Options:
T3:   Track 3 card reader (data must be ABA track 2 format) - MG only
EXT: exterior use option - MG only (PX model has this standard)
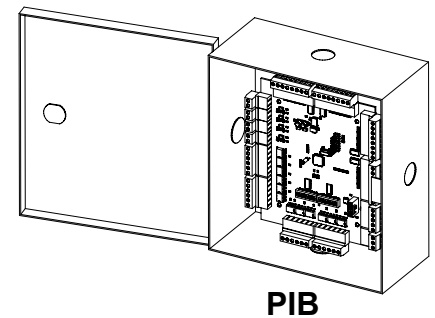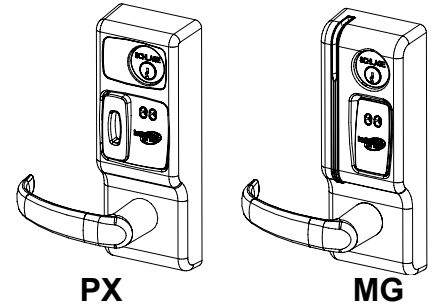**KD:**   Keyed Different, includes Schlage Everest cylinder
KA: Keyed Alike, includes Schlage Everest cylinder
LC: Less Cylinder
SLB: 2-3/4" backset, 1/2" latch bolt
OLB: 2-3/8" backset, 1/2" latch bolt
ELB: 2-3/4" backset, 3/4" latch bolt

Door Thickness Kits:
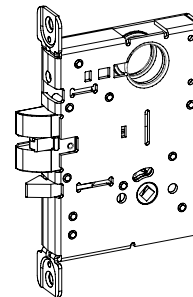Available in 1/8" increments from 1-3/8" to 2-1/2"

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.
**PRE-INSTALLATION CHECK:**
AN OPEN ARCHITECTURE SYSTEM REQUIRES AT LEAST THREE COMPONENTS - A PANEL INTERFACE BOARD (PIB), AN ACCESS CONTROL PANEL (BY OTHERS) TO WHICH THE PIB IS CONNECTED AND THE VIP LOCK. SEE DOCUMENTATION FOR THE ACCESS CONTROL PANEL/SOFTWARE THIS LOCK WILL BE USED WITH FOR ANY PRE-INSTALLATION TESTING REQUIREMENTS AND REMEDIES. REFER TO THE WIRING INFORMATION INCLUDED WITH THE PIB FOR MORE INFORMATION.

**5500 MORTISE LOCK STANDARD**   **5500 MORTISE LOCK AUTOBOLT**
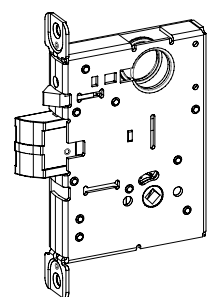
1. PREP DOOR AND FRAME (IF NOT ALREADY DONE):

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.
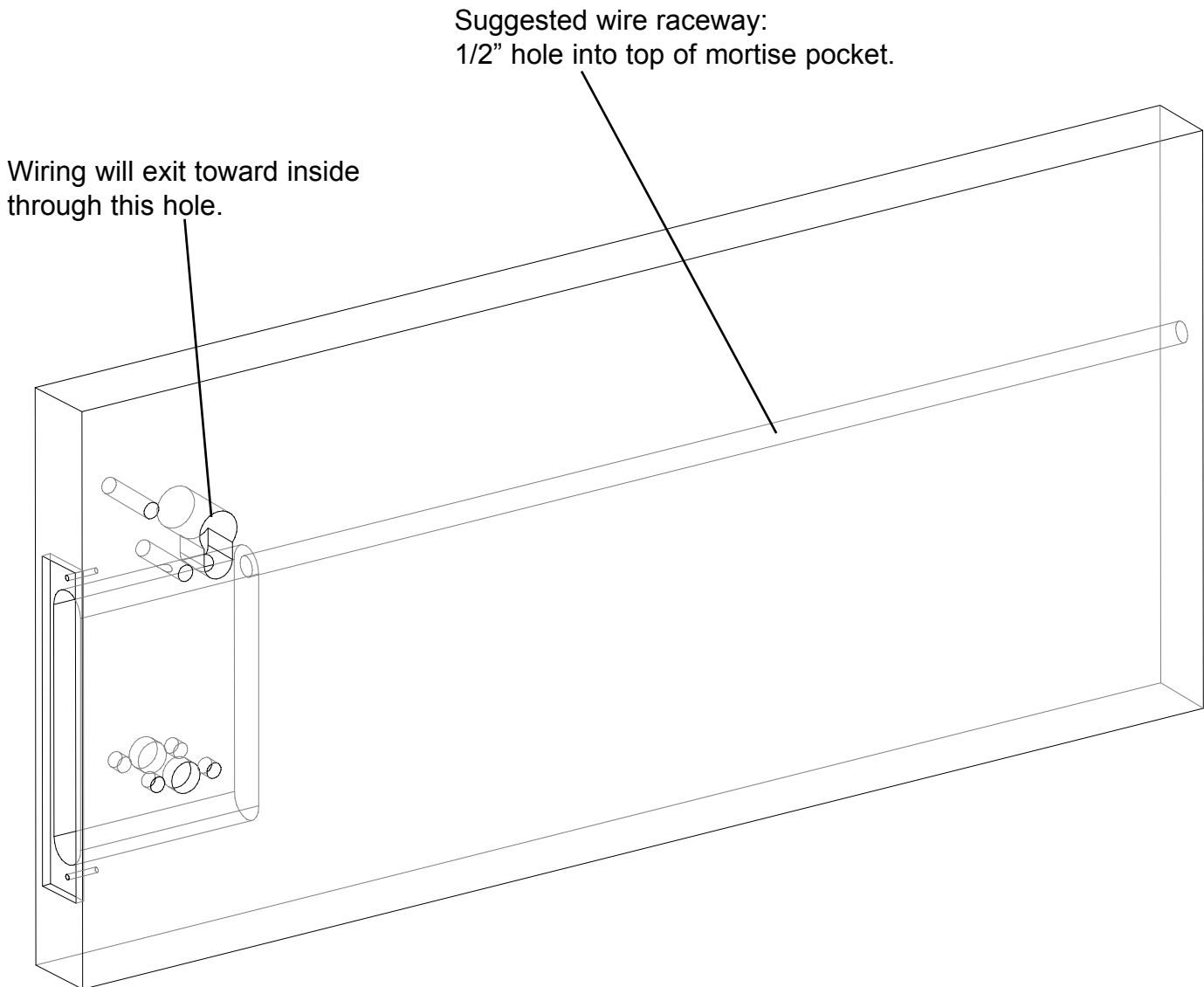
C. Place template on *inside* of door (opposite the side that the keypad/reader will be on). Line up the correct reference lines on the template with the edge of the door, depending on the hand (see paper template). The centerline on the door should line up with the vertical centerline of the template. 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 DSM (door status) switch.

WOOD DOOR POCKET PREP

METAL DOOR POCKET PREP

Note: Measure backset from center of bevel.
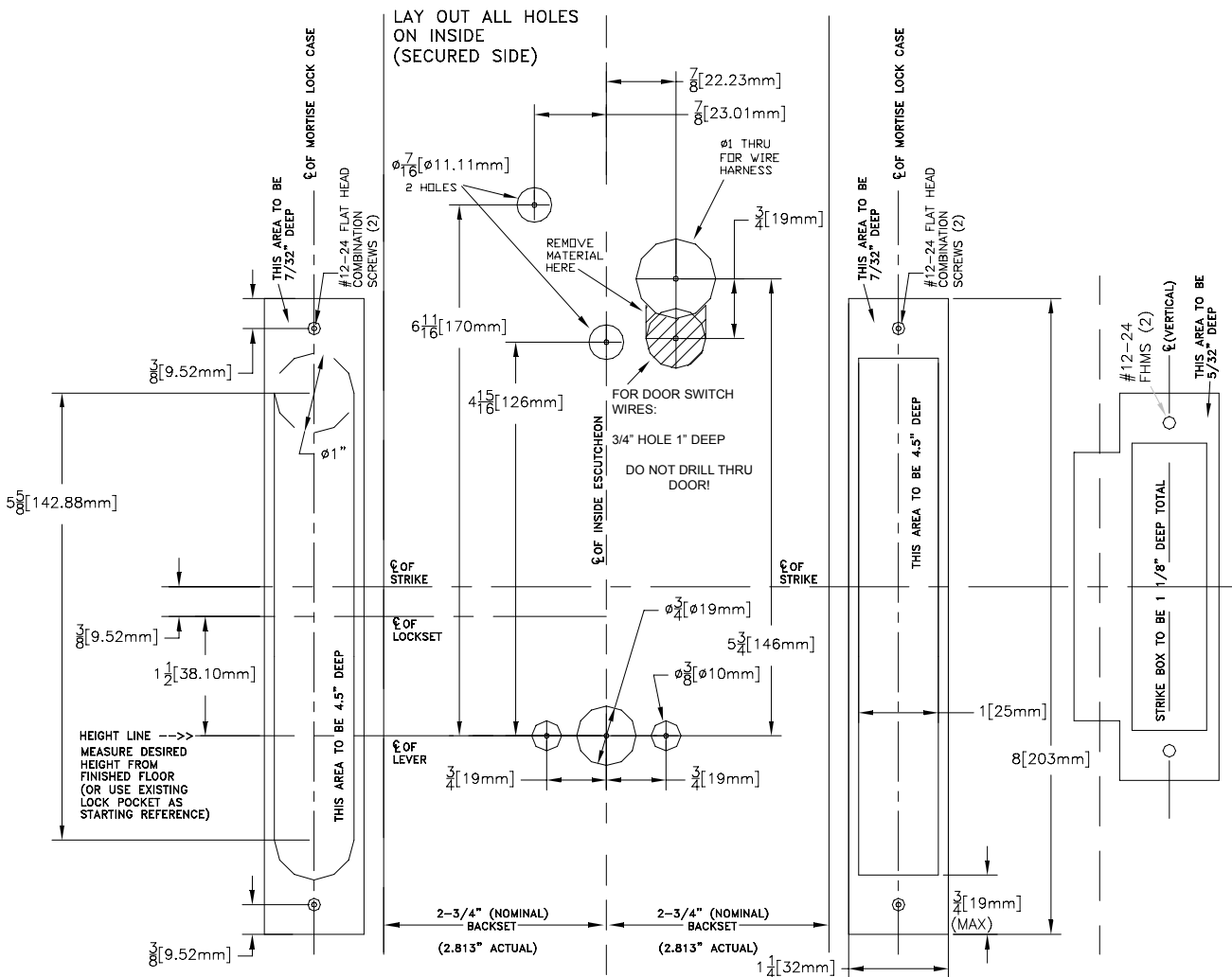
STRIKE PREP INFORMATION:
VERTICAL CENTERLINE OF STRIKE MUST CORESPOND TO VERTICAL CENTERLINE OF DOOR EDGE.

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 MUST BE USED TO GET WIRING FROM THE FRAME TO THE DOOR. NOTE THAT WHEN USING AN ELECTRIC HINGE IT IS RECOMMENDED THAT THE POWER WIRES BE DOUBLED OR TRIPLED UP (ON BOTH THE POSITIVE AND GROUND LEGS) TO AVOID SIGNIFICANT VOLTAGE DROP THROUGH THE THIN WIRES IN THE HINGE.

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 (not shown) or straight, 11/16" design (shown).
B. Insert standard, 1-1/8" 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

LOCK WASHER

TAB

NUT

NUT TOOL

STANDOFFS - UPPER

NOTE:
BLOCKING RING REQUIRED FOR CYLINDER
LENGTH GREATER THAN 1-1/8".
**THICKNESS = CYLINDER LENGTH -1 1/8"**

EXTERIOR GASKET

STANDOFFS - LOWER
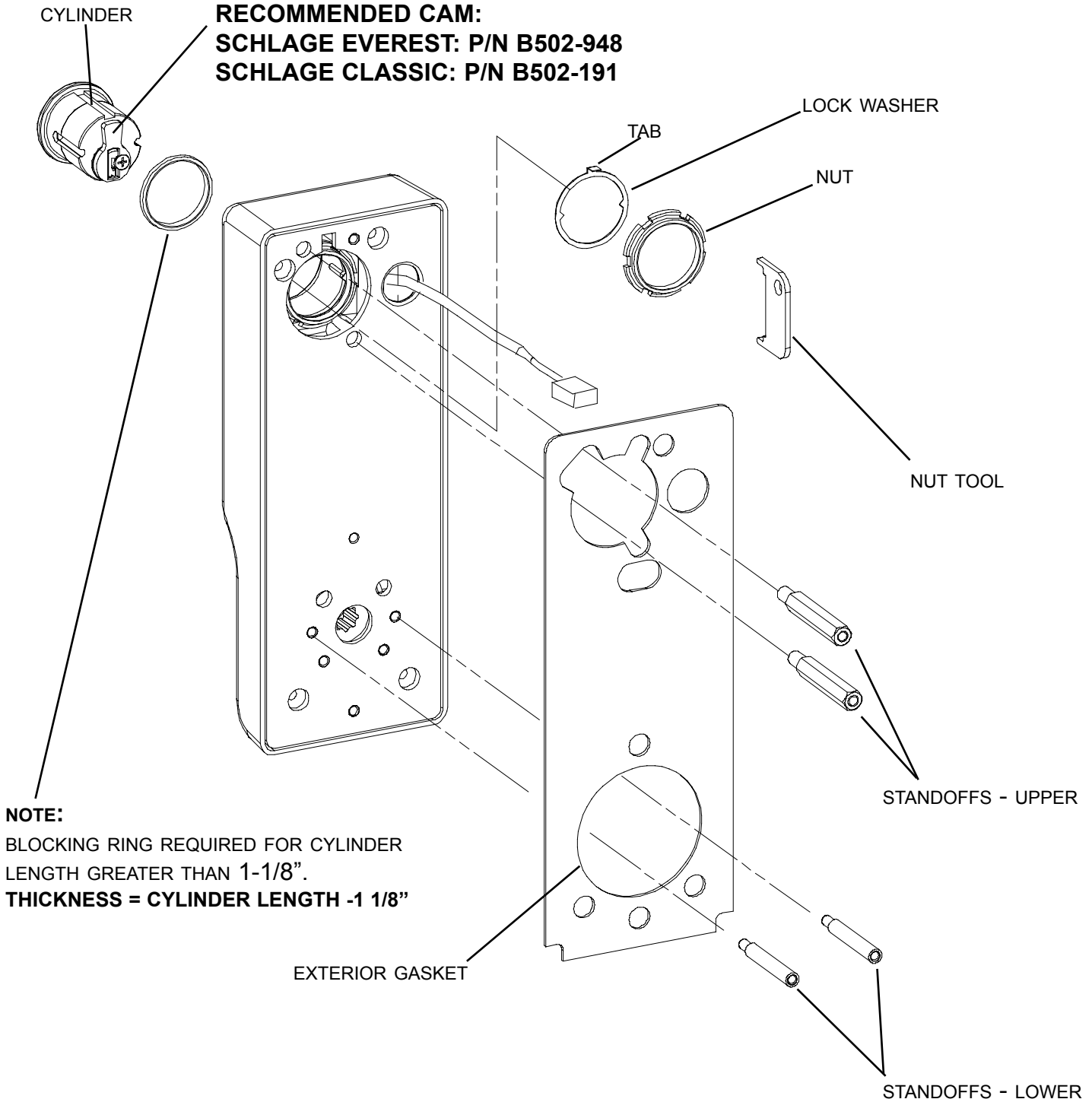
3. CHANGE HAND (IF NECESSARY):

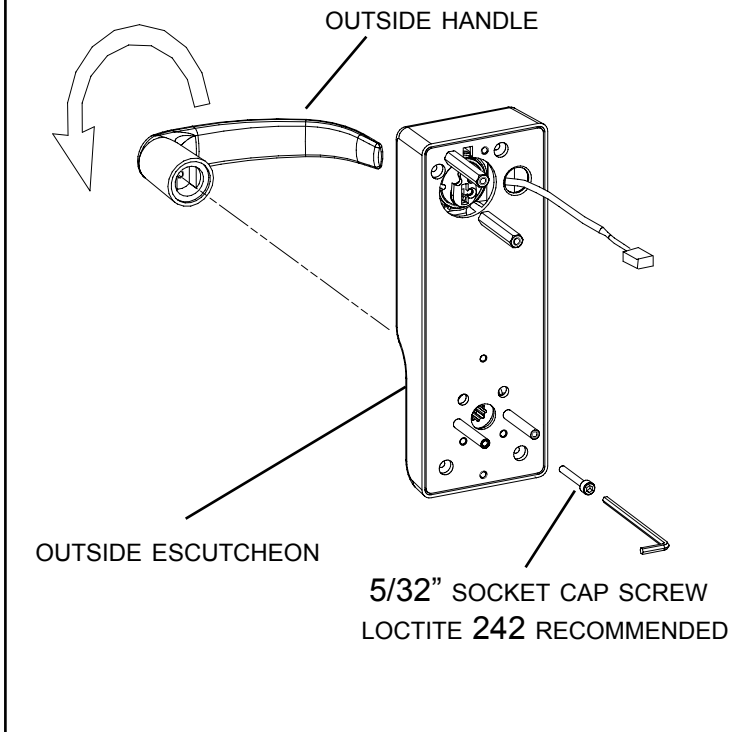NOTE: The locks are shipped as ordered from factory. Follow the steps below to reverse handing:

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.
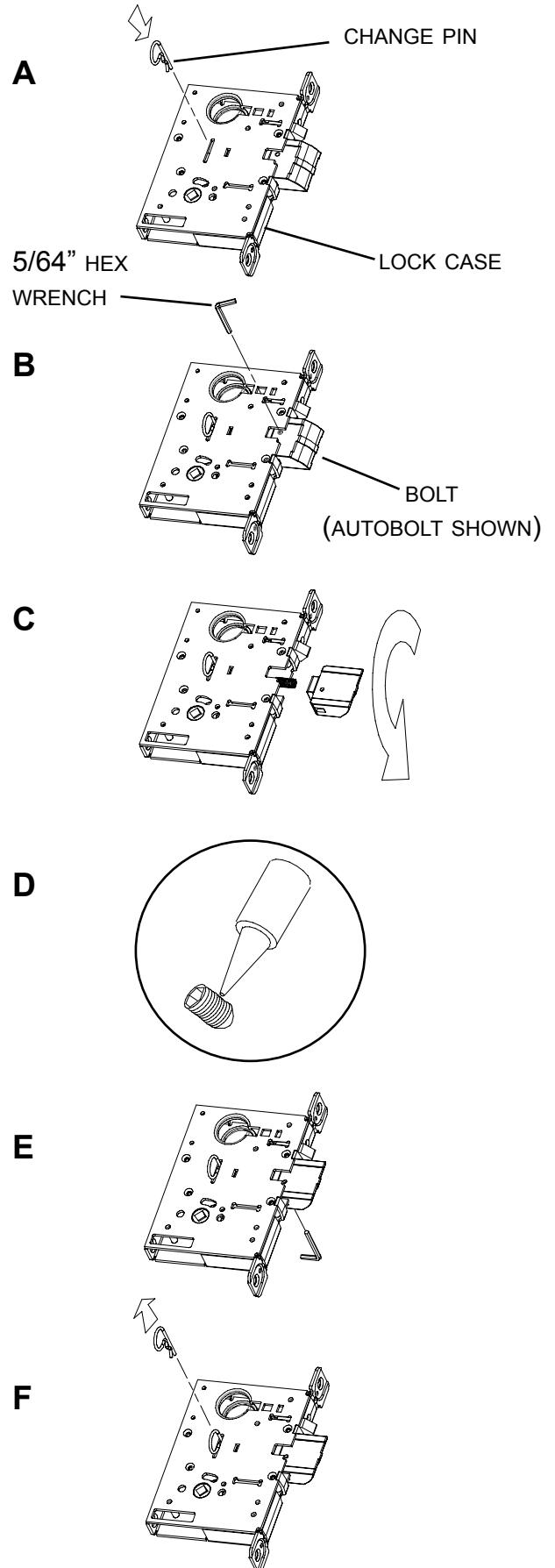
TO CHANGE HAND OF LEVERS:

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

5/64" HEX
WRENCH

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.**
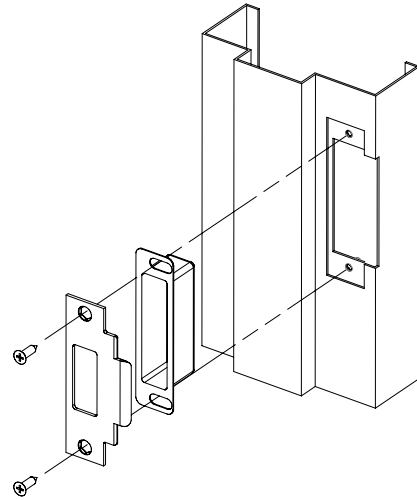
5. INSTALL LOCK CASE:

Install lock case into edge of door. If the lock has the DSM switch, feed the wire harness though the 3/4" hole as shown below. Secure to door with #12-24 combination screws.
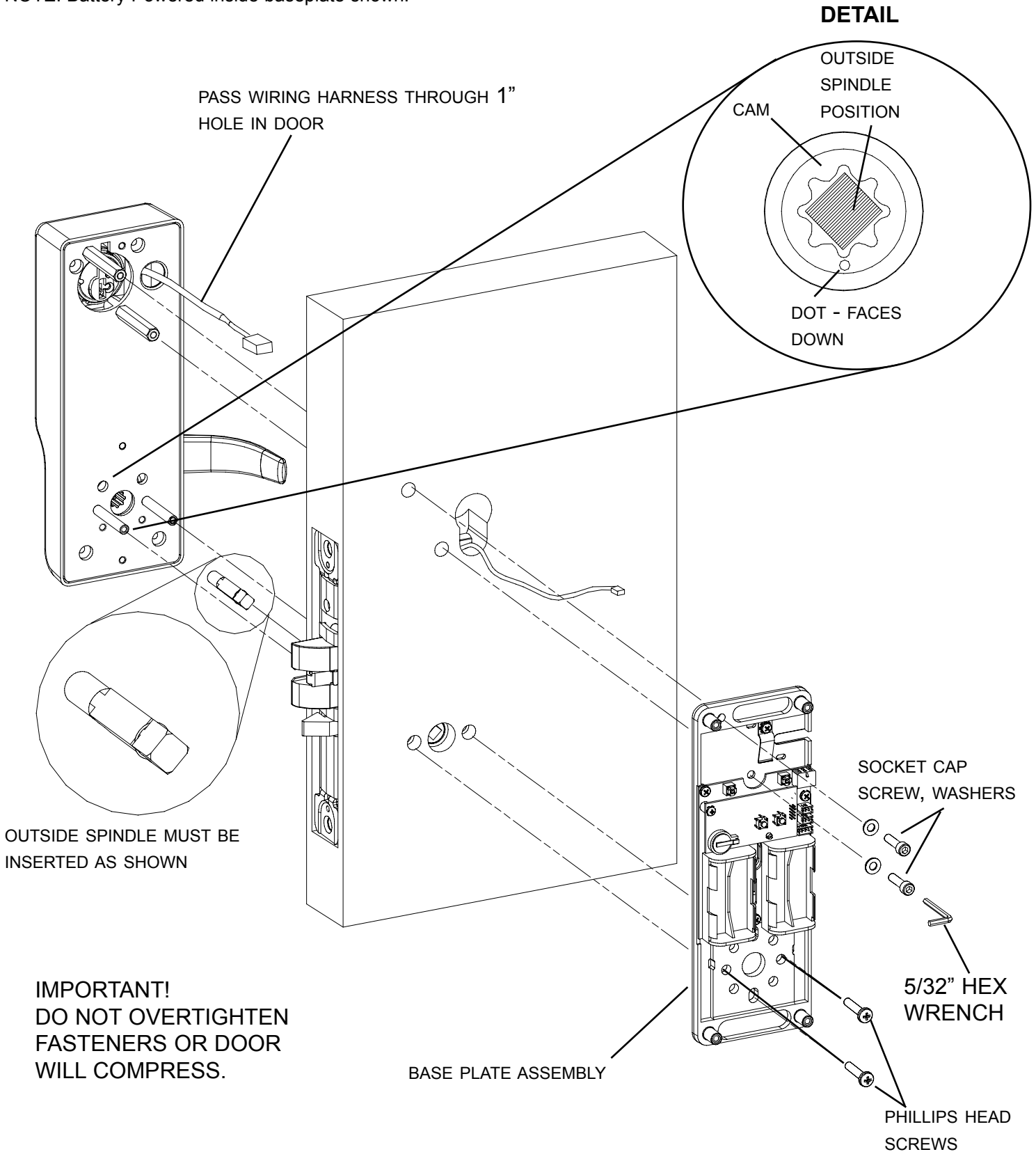
FOR PROPER MONITORING OF DOOR STATUS, FEED WIRE THROUGH WIRE HOLE TOWARD INSIDE OF DOOR AS SHOWN.

#12 COMBINATION SCREWS

LOCK CASE
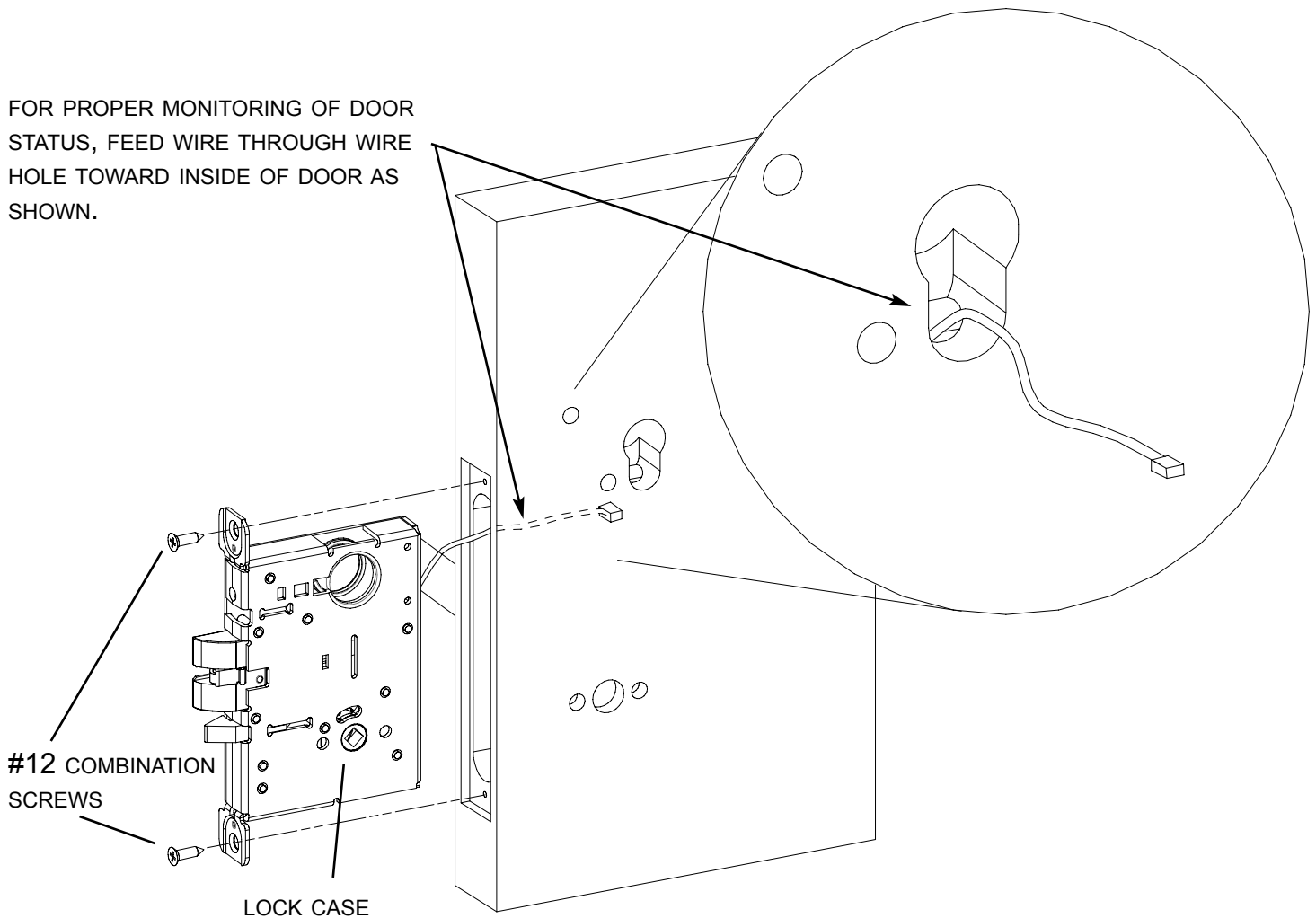
7. INSTALL OUTSIDE SPINDLE, OUTSIDE ESCUTCHEON AND BASE PLATE ASSEMBLY:

Install outside escutcheon and spindle then install base plate assembly onto inside of door. Use socket cap screws with washers on top standoffs and phillips head screws on lower standoffs. Note that the cam on the outside escutcheon must be positioned with the dot at the 6 o'Clock position and outside spindle must be inserted as shown in details.
NOTE: Battery Powered inside baseplate shown.

DETAIL

PASS WIRING HARNESS THROUGH 1"
HOLE IN DOOR

OUTSIDE
SPINDLE
POSITION

CAM

DOT - FACES
DOWN

OUTSIDE SPINDLE MUST BE
INSERTED AS SHOWN

SOCKET CAP
SCREW, WASHERS

5/32" HEX
WRENCH

IMPORTANT!
DO NOT OVERTIGHTEN
FASTENERS OR DOOR
WILL COMPRESS.

BASE PLATE ASSEMBLY

PHILLIPS HEAD
SCREWS

8. MAKE WIRING HARNESS CONNECTIONS :

A. Plug MAIN WIRING HARNESS into PC board.
B. Plug MAKE FIELD CONNECTIONS TO TERMINAL BLOCK.
C. Pug in DOOR STATUS SWITCH as shown.
D. Verify correct lock type setting (FSE/FSA) - see dip switch setting. Note: as ordered from the factory.
E. If lock is the one farthest away from PIB set termination resistor to "on". All others should be in the "off/parked" position.
F. Test operation of inside lever to make sure that latch retracts fully.

IMPORTANT! *See PIB manual for additional connecting instructions.*

OUTSIDE
MAIN HARNESS
CONNECTION

TERMINATION
RESISTOR:

OFF   ON
(PARKED)

DOOR SWITCH

SHIELD
DATA A
DATA B
GROUND
V+   1.0A @ 12VDC
          0.5A @ 24VDC

REX INPUT
(PLUG IN WHEN INSIDE
ESCUTCHEON IS
INSTALLED)

FIELD WIRING FROM
PANEL AND POWER
SUPPLY.
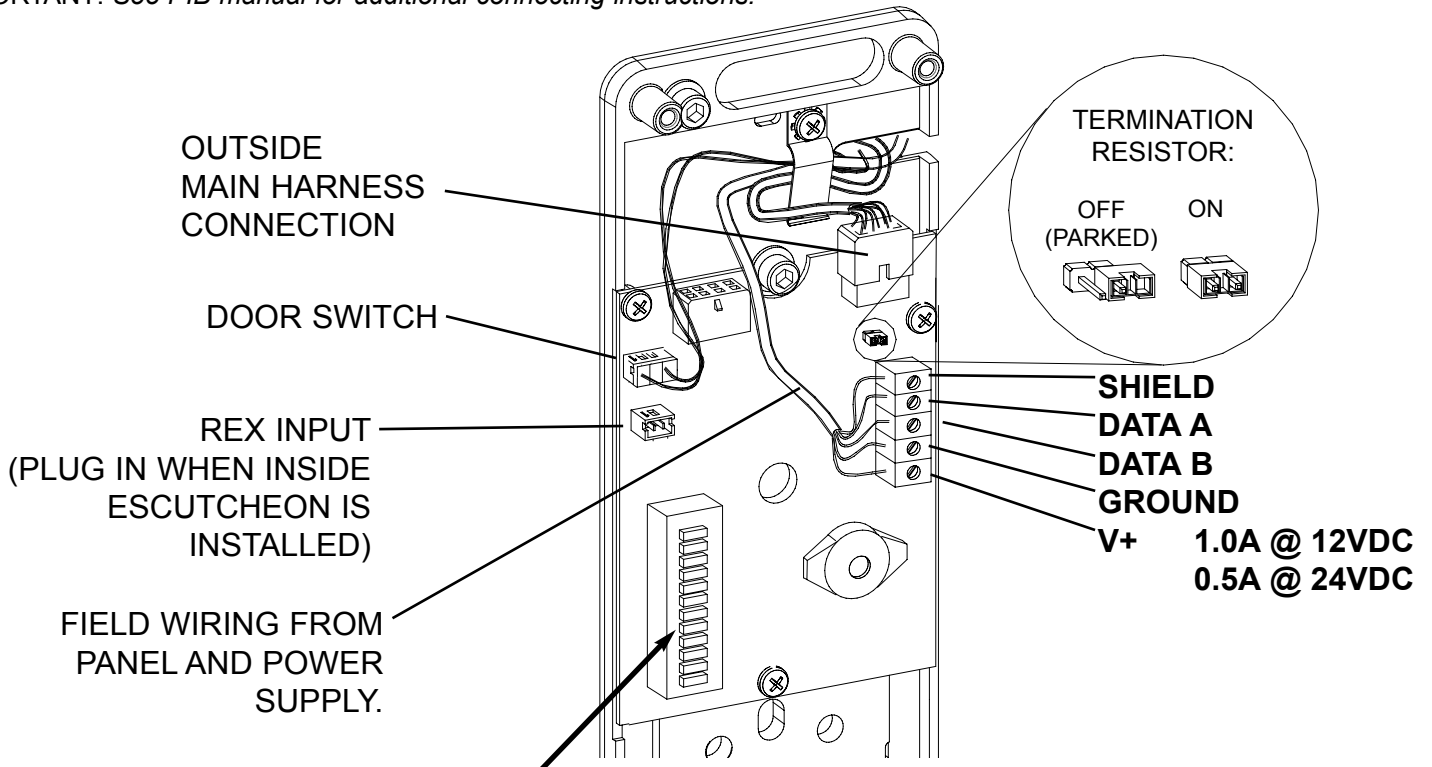
DIP SWITCH NUMBER:		LOCK ADDRESS 1	LOCK ADDRESS 2	LOCK ADDRESS 3	LOCK ADDRESS 4
1:	LOCK ADDRESS (SEE CHART)				
2:	LOCK ADDRESS (SEE CHART)	DIP SWITCH 1 — OFF	ON	OFF	ON
3:	ALWAYS SET TO OFF				
4:	ALWAYS SET TO OFF	DIP SWITCH 2 — OFF	OFF	ON	ON

5:   OFF = FAIL SECURE (FSE)
      ON = FAIL SAFE (FSA)

6:   OFF = ALL **MG** LOCKS
      ON = ALL **PX** LOCKS
7:   ALWAYS SET TO OFF
8:   ALWAYS SET TO OFF
9:   ALWAYS SET TO OFF
10: ALWAYS SET TO OFF

Note:
Lock addresses must be used in sequence and cannot be the same for any two locks connected to a PIB. For example, if the system has three locks, use addresses 1, 2, and 3 (but not 4). Lock address will correspond to panel address on the PIB.

9. INSTALL INSIDE SPINDLE, BATTERIES, AND INSIDE ESCUTCHEON:

A. Assemble spring onto inside spindle as shown. install spindle into cam in lockset. Note that the flat side faces away from the door (See detail).

B. Install inside escutcheon, making sure that the inside spindle engages the lever cam. While installing, plug in REX switch connector.

C. Test operation of inside lever to make sure that latch retracts fully.

D. Install armor front. (Center lock case using shims if necessary.)

PLUG IN REX SWITCH WHEN INSTALLING INSIDE ESCUTCHEON ASSEMBLY

INSIDE ESCUTCHEON

INSTALL ARMOR FRONT. SHIM LOCK CASE IF NECESSARY TO CENTER IT IN THE POCKET.

DETAIL

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

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