

Access 700™ TCPWI1/TCPIP1

Installation Instructions

ML20700 TCPWI1 & TCPIP1 Series Mortise Lockset

Corbin
Russwin

ASSA ABLOY

FM324 11/18

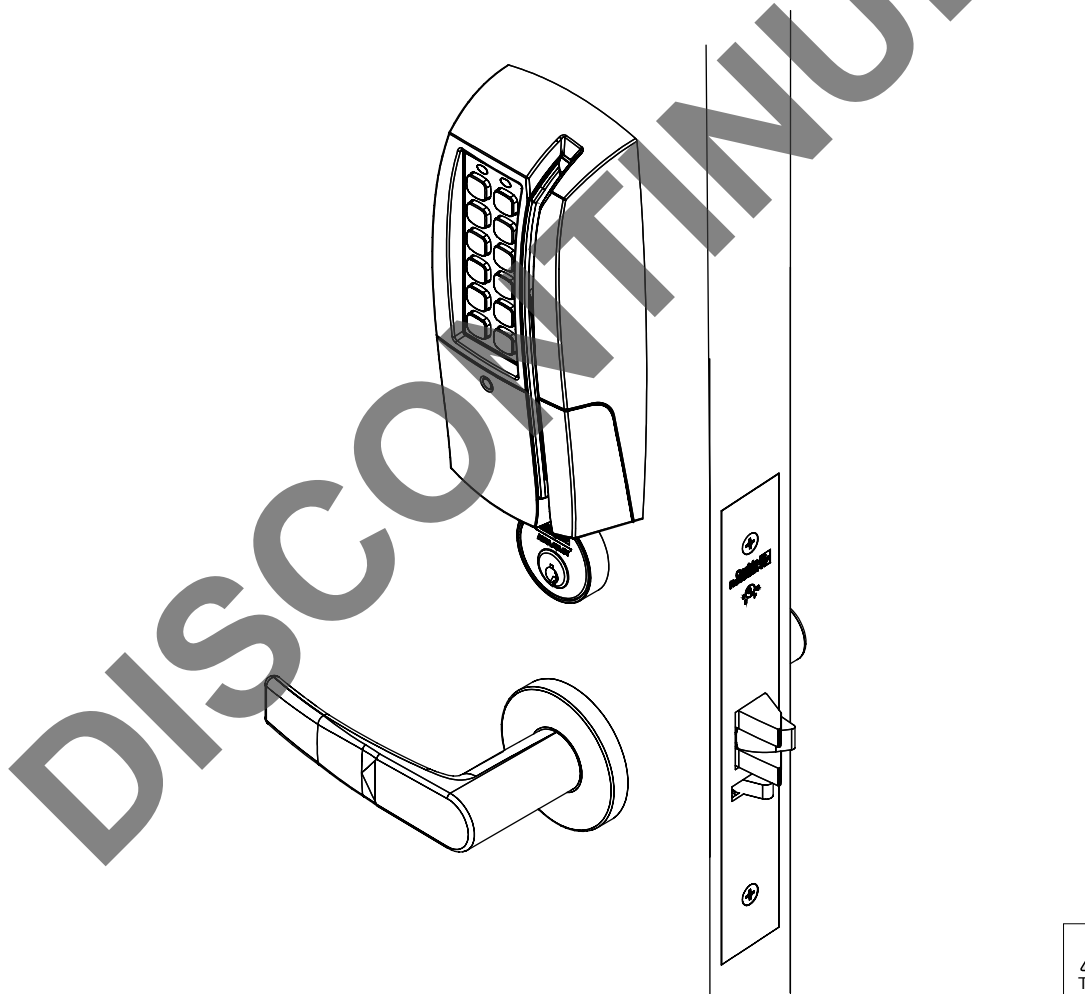
Attention Installer

Please read these instructions carefully to prevent missing important steps.

Please Note: Improper installations may result in damage to the lock and void the factory warranty.

Important: The accuracy of the door preparation is critical for proper functioning and security of this lock.

Misalignment can cause premature wear and a lessening of security.



WARNING

This product can expose you to lead which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

08/2018

For Technical Assistance call Corbin Russwin at 1-800-810-WIRE (9473)

Table of Contents

1) Warning	2
2) General Description	3
3) Specifications / Features	3
4) Product Illustration	4
5) Installation Instructions	5
6) TCPIP (PoE) Wiring Instructions	20
7) Operational Check	23

1) Warning

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

TCPW11 FCC NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Statement: The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareillage numérique de la classe B répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.

TCPIP1 FCC NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada: The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

This Class A digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareillage numérique de la classe A répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.



To comply with "Fire Listed" doors, the batteries must be replaced with alkaline batteries only.

2) General Description

Designed specifically for the campus market, the Corbin Russwin Access 700 series mortise locks are available in WiFi (PWI) and PoE (PIP) configurations. Coupled with third party software the PWI and PIP offers a complete, integrated access control system. The Access 700 may be used for both indoor and outdoor applications (weather-protective gasket supplied).

HID and iCLASS are registered trademarks of HID Global Corporation.

3) Specifications / Features

Hardware Specifications

- Latch – Stainless Steel (Easily field reversible without disassembling lockbody)
- Deadbolt – Stainless Steel
- Door Thickness – 1-3/4” Standard; can be furnished for other door thicknesses upon request. Consult factory.
- Case – 12 gauge heavy duty wrought steel
- Outside lever controlled by any combination of keypad, magnetic swipe, iCLASS reader, or mechanical key.
- Inside lever retracts latch
- BHMA Grade 1; UL Fire Listed

Electrical Specifications:

- HID® multiCLASS SE® technology offers support for the following credentials:
 - **2.4 GHz credential compatibility:**
 - Secure Identity Object™ (SIO) on Mobile IDs (Bluetooth Smart)
 - **13.56 MHz credential compatibility:**
 - iCLASS®
 - iCLASS SE® (SIO-enabled)
 - iCLASS Seos®
 - SIO on MIFARE® Classic
 - SIO on MIFARE® DESfire® EV1
 - MIFARE® Classic
 - DESfire® EV1
 - NFC-enabled mobile phones
 - **125 kHz credential compatibility:**
 - HID Prox®, AWID, EM4102
 - **Magnetic Stripe**
- Multiple time zone and holiday access scheduling
- First-in unlock or automatic unlock configuration, based on specified time schedule
- 2,400 users per lock; 10,000 event audit trail
- Privacy button
- Input Power: PoE Class 1 Device, as defined by IEEE 802.3af, requires up to 3.84 watts over structured cabling

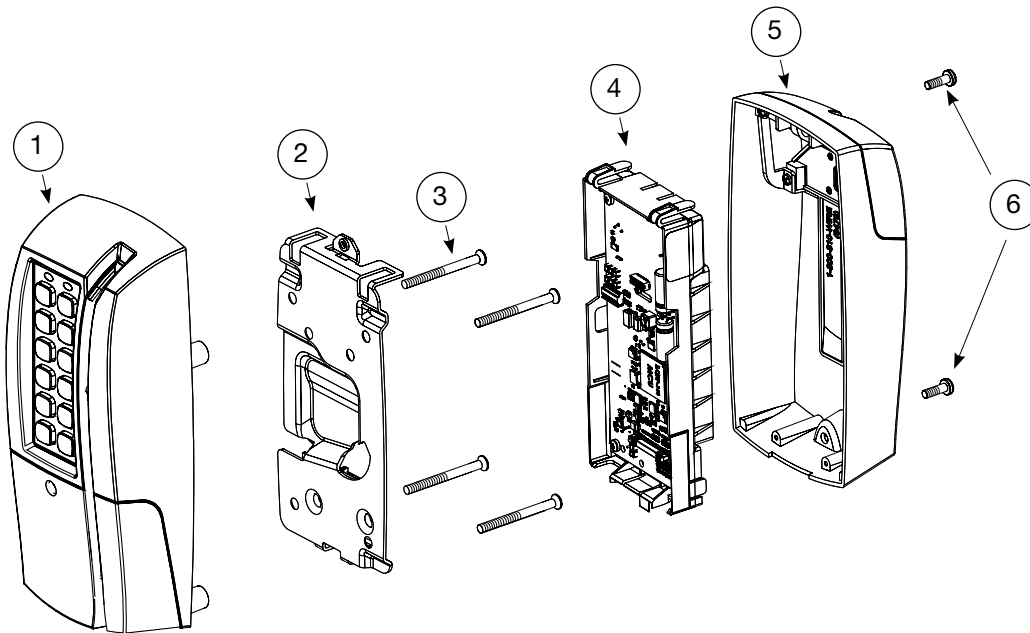
*For specific security information, please contact your local ASSA ABLOY Door Security Solutions sales consultant or call 800-810-WIRE.



To avoid possible damage from electrostatic discharge (ESD), some basic precautions should be used when handling electronic components:

- Minimize build-up of static by touching and/or maintaining contact with unpainted metal surfaces such as door hinges, latches, and mounting plates especially when mounting electronic components such as readers and controllers onto the door.
- Leave components (reader and controller) protected in their respective anti-static bags until ready for installation
- Do not touch pins, leads or solder connections on the circuit boards

4) Product Illustration



ITEM No.	PART No.	DESCRIPTION
1	784F565 FIN	Outside Escutcheon Assembly, Mag Swipe
	784F575 FIN	Outside Escutcheon Assembly, Mag Swipe and Keypad
	784585 FIN	Outside Escutcheon Assembly, Mag Swipe, Keypad, HID 125kHz Prox, and 13.56 MHz Prox
	784595 FIN	Outside Escutcheon Assembly, Mag Swipe, HID 125kHz Prox, and 13.56 MHz Prox
	784F605 FIN	Outside Escutcheon Assembly, Mag Swipe, Keypad, HID 125kHz Prox, and 13.56 MHz Felica
	784F615 FIN	Outside Escutcheon Assembly, Mag Swipe, HID 125kHz Prox, and 13.56 MHz Felica
	725F325 FIN*	Outside Escutcheon Assembly, Standard Reader and Keypad
	725F335 FIN*	Outside Escutcheon Assembly, Standard Reader
2	783F519	WiFi Controller Assembly
	783F509	PoE Controller Assembly
3	795F368	Screw Pack
4	782F788	Mounting Plate Assembly
5	784F515 FIN	Inside Escutcheon Assembly with Privacy Button

*Bluetooth® Smart option

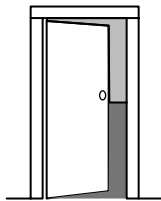
Tools Required:

- Phillips Screw Driver #2, #3
- Flat Blade Screw Driver (Standard size)
- 1/8" Security Allen Wrench
- 7/64" Allen Wrench
- T20 Security torx driver

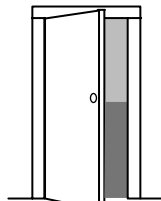
5) Installation Instructions

1. Verify Hand and Bevel of door:

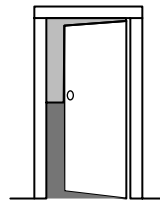
Illustrations shown are as viewed from the outside or secure side of opening.



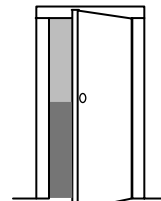
Left Hand
Hinges Left.
Open Inward.
"LH"



Left Hand
Reverse Bevel
Hinges Left.
Open Outward
"LHRB"



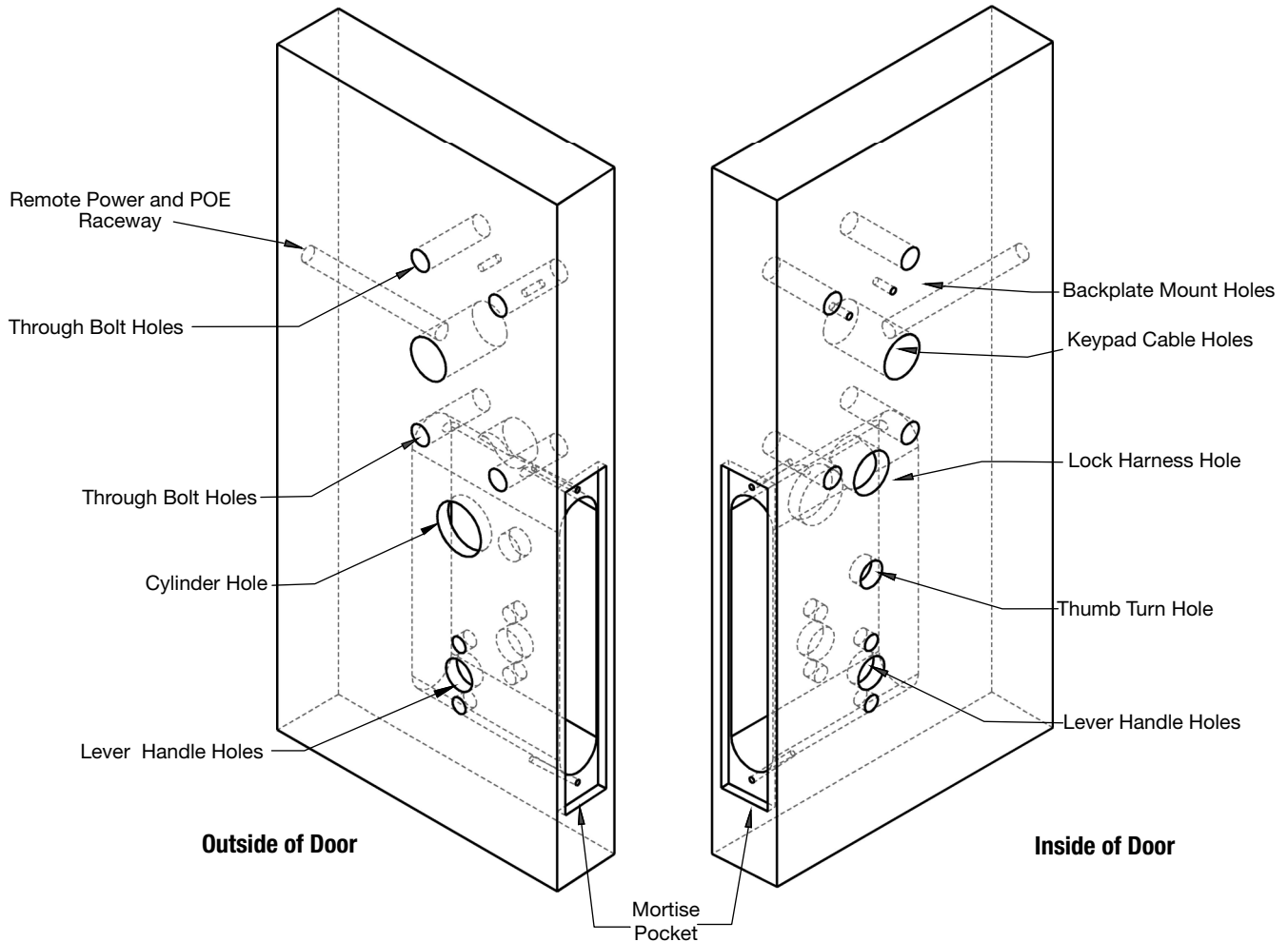
Right Hand
Hinges Right.
Open Inward.
"RH"



Right Hand
Reverse Bevel
Hinges Right.
Open Outward
"RHRB"

2. Door Preparation

Prep door according to door template T31167; visit www.corbinruswin.com



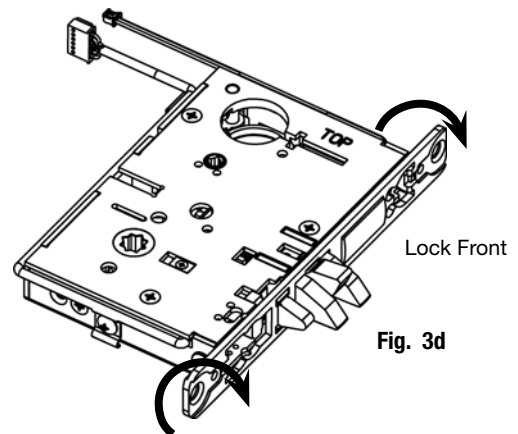
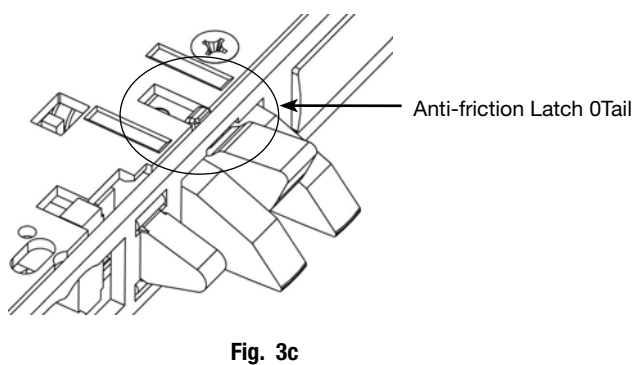
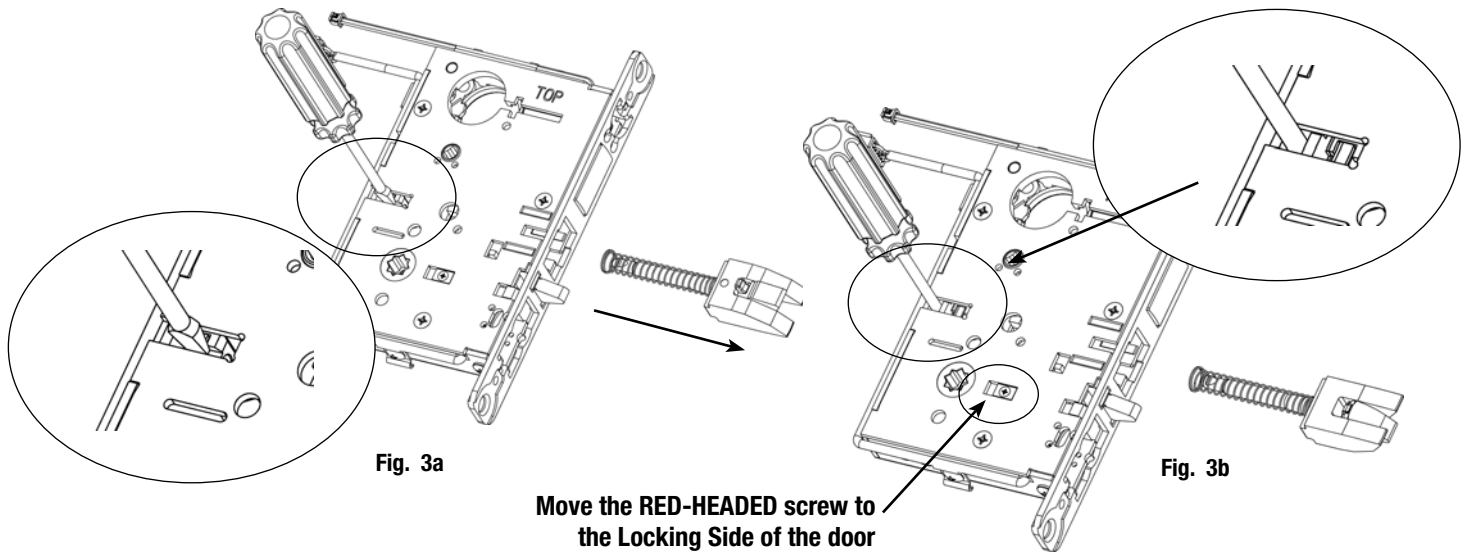
5) Installation Instructions (Continued)

3. Handing of Lock Body

- Push in latch while gently pushing on catch plate with screwdriver (Fig. 3a).
- Release latch and remove from lock body.
- Turn over latch and re-install in lock body; Be sure anti-friction latch tail hooks into front (Fig. 3c).
- Hold screwdriver behind tail socket while pushing in latch. Push latch until 'click' is heard (Fig. 3b).

Note: Pull on latch to make sure it is secure.

- Rotate lock front to match bevel of door by inserting screwdriver into lock mounting holes and twisting (Fig. 3d).

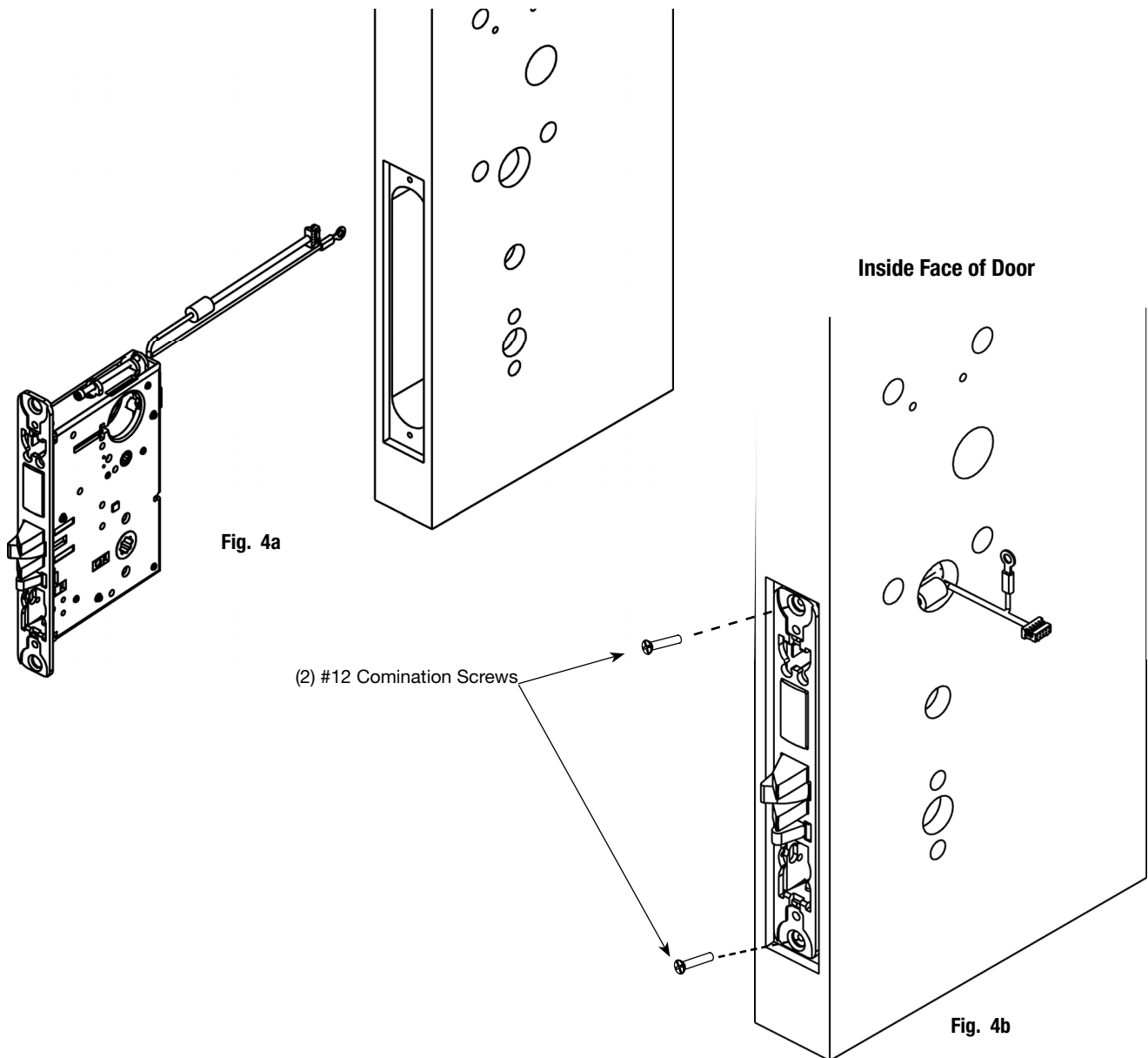


5) Installation Instructions (Continued)

4. Install Lock Body into Door:
 - a. Feed wires through hole on INSIDE of door while installing lock body (Fig. 4a).
 - b. Pull wires through hole while inserting lockbody (Fig. 4b).

DO NOT push wires back into cylinder hole.

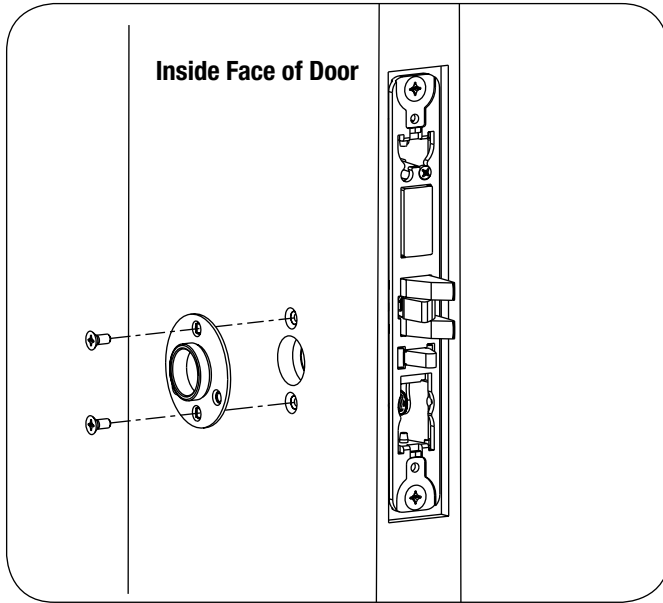
IMPORTANT: Door must remain open during installation. Use door stop.
 - c. Install, but do not tighten two #12 x 1" combination screws through lock body (Fig. 4b).



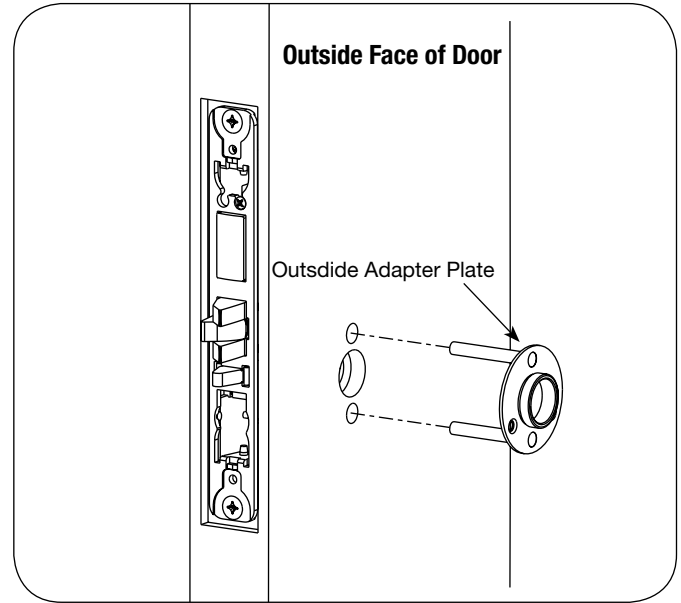
5) Installation Instructions (Continued)

5. Install Standard Lever Trim Instructions:

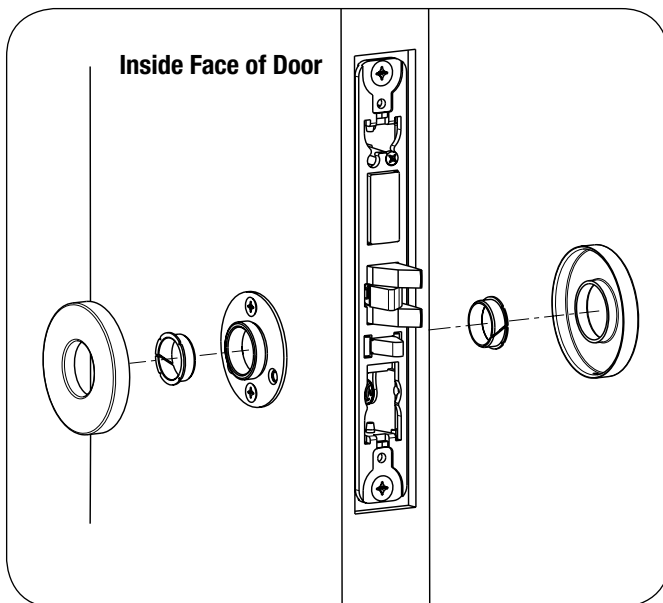
Step 1a



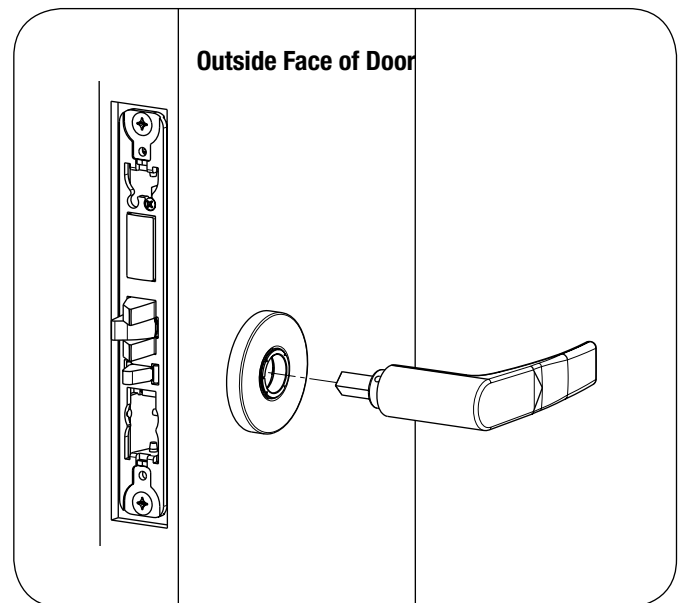
Step 1b



Step 2



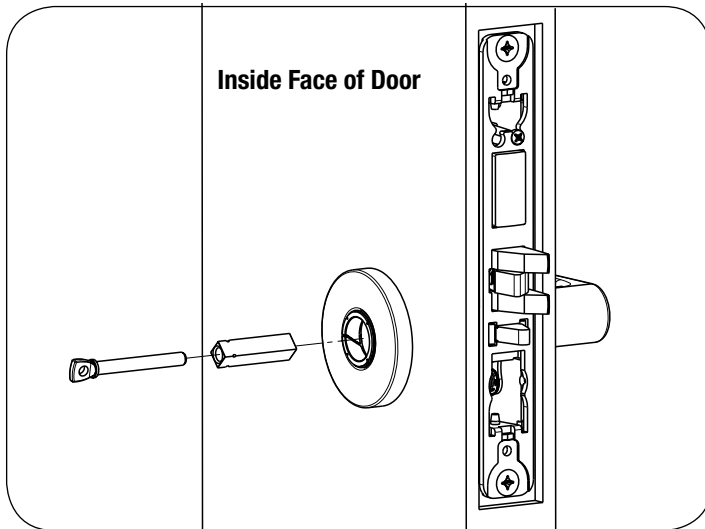
Step 3



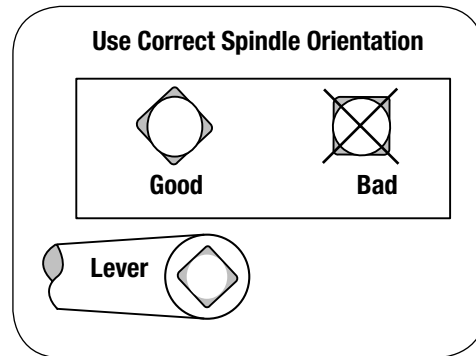
5) Installation Instructions (Continued)

5. Install Standard Lever Trim Instructions (continued):

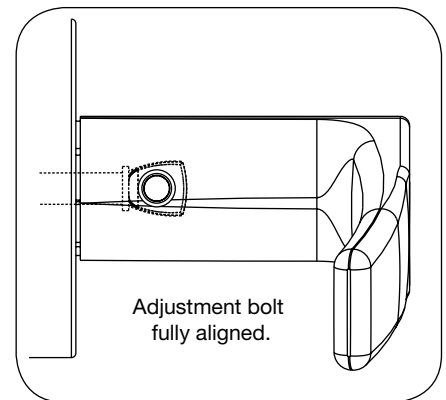
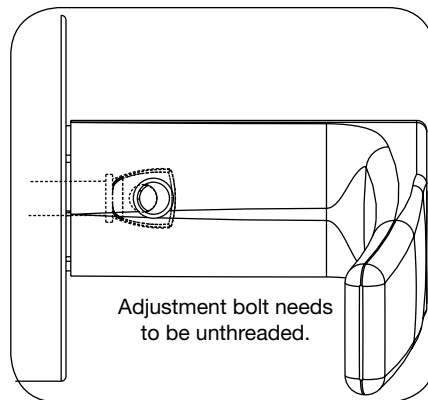
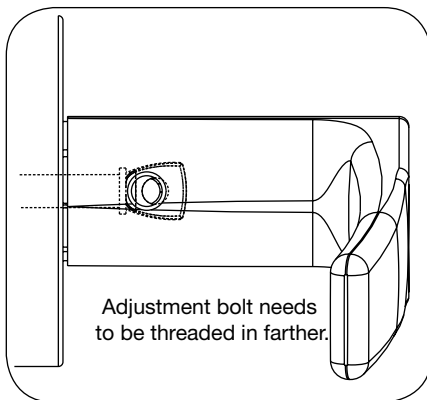
Step 4A



Step 4B



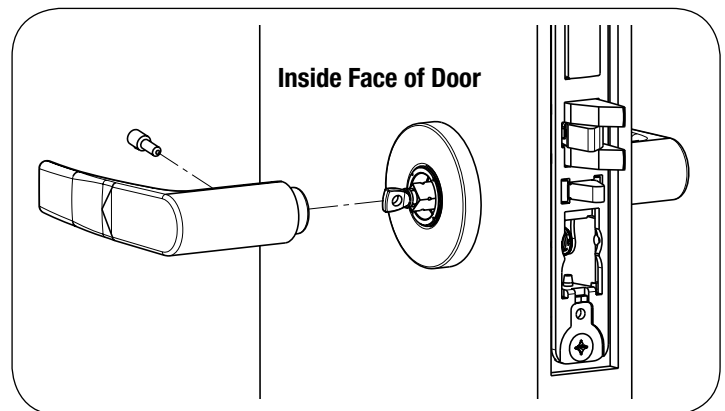
Step 5 - Align adjustment bolt with threaded hole in lever



Step 6

Notes:

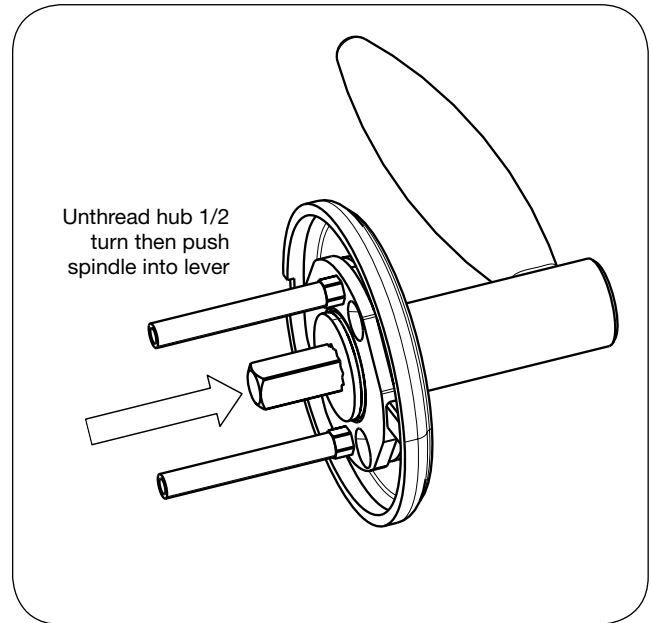
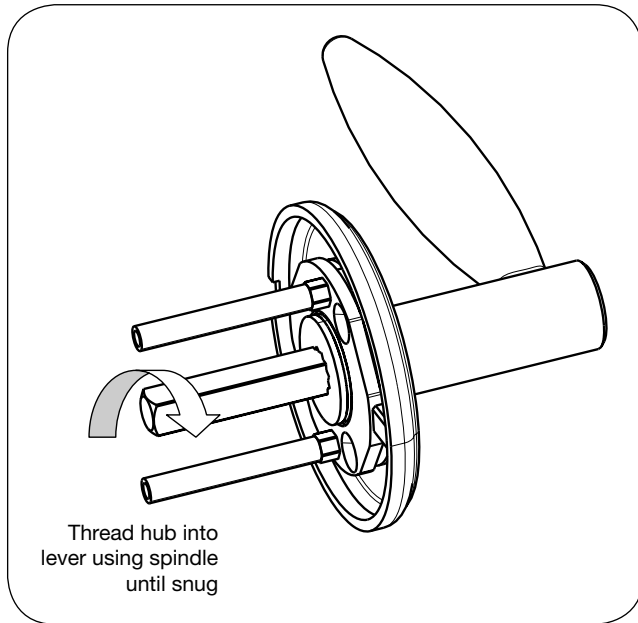
- Unthread Adjustment Bolt approximately four turns for a good starting point (After being fully tightened)
- Make sure O/S lever is fully inserted into adapter plate before aligning adjustment bolt.



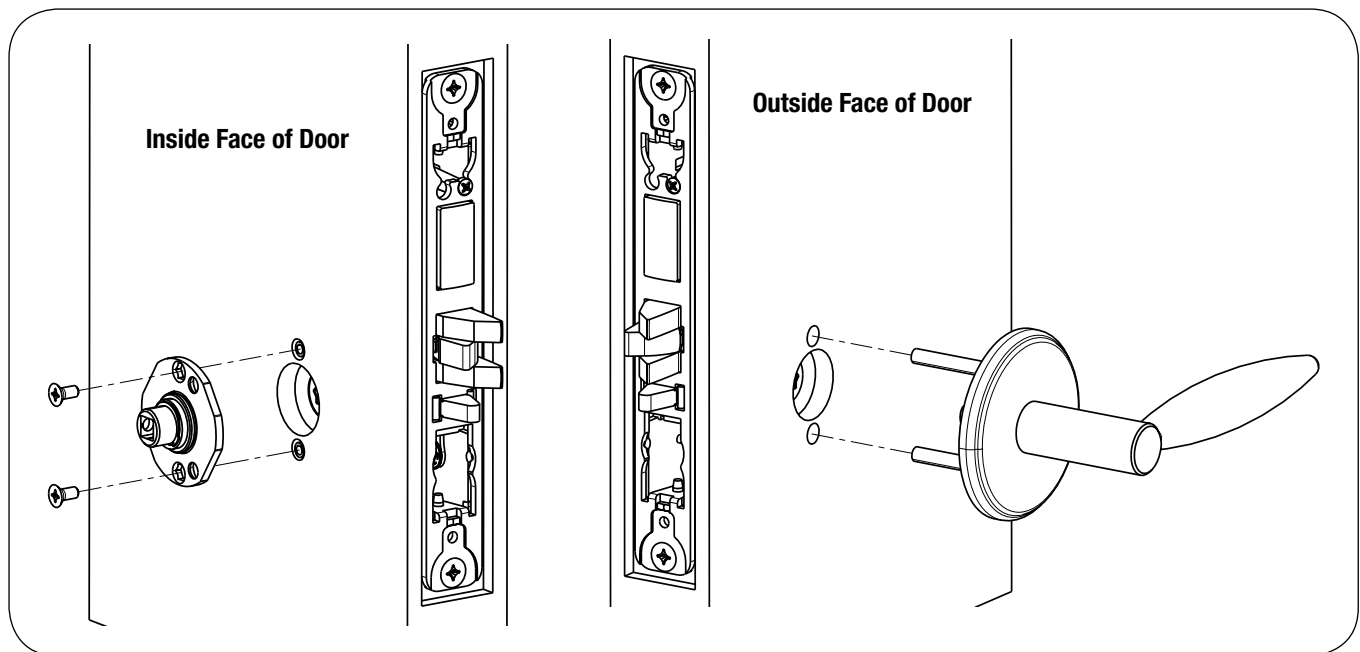
5) Installation Instructions (Continued)

7b. Install Museo® Trim:

Step 1

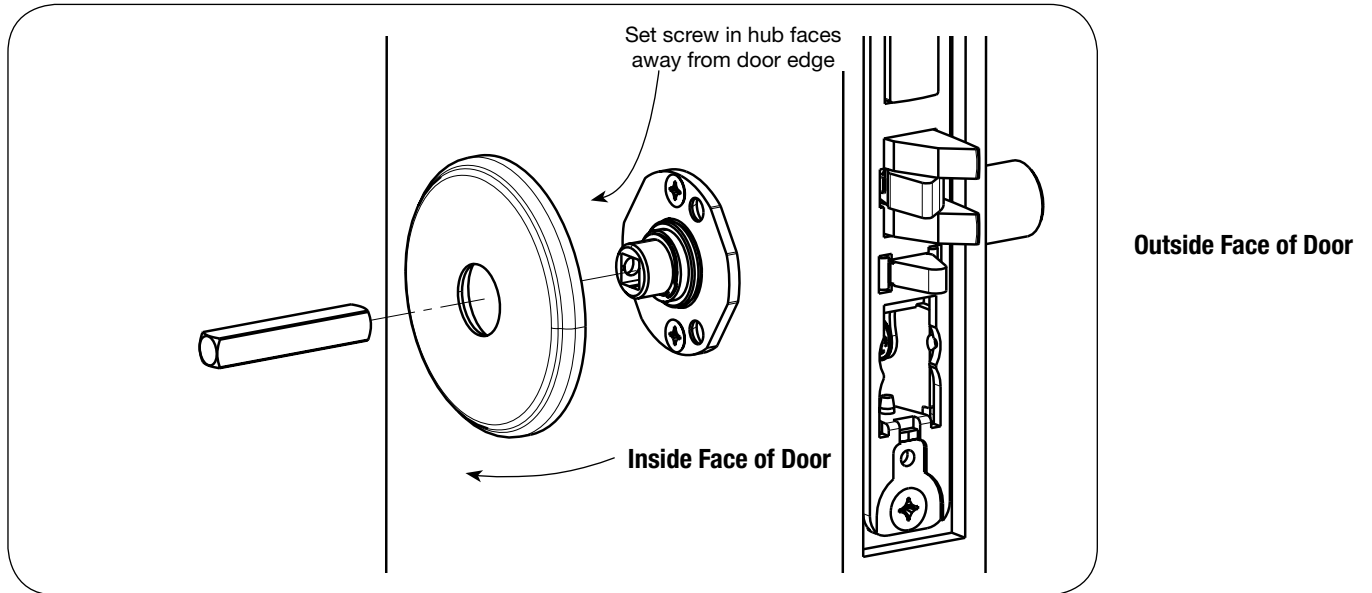


Step 2

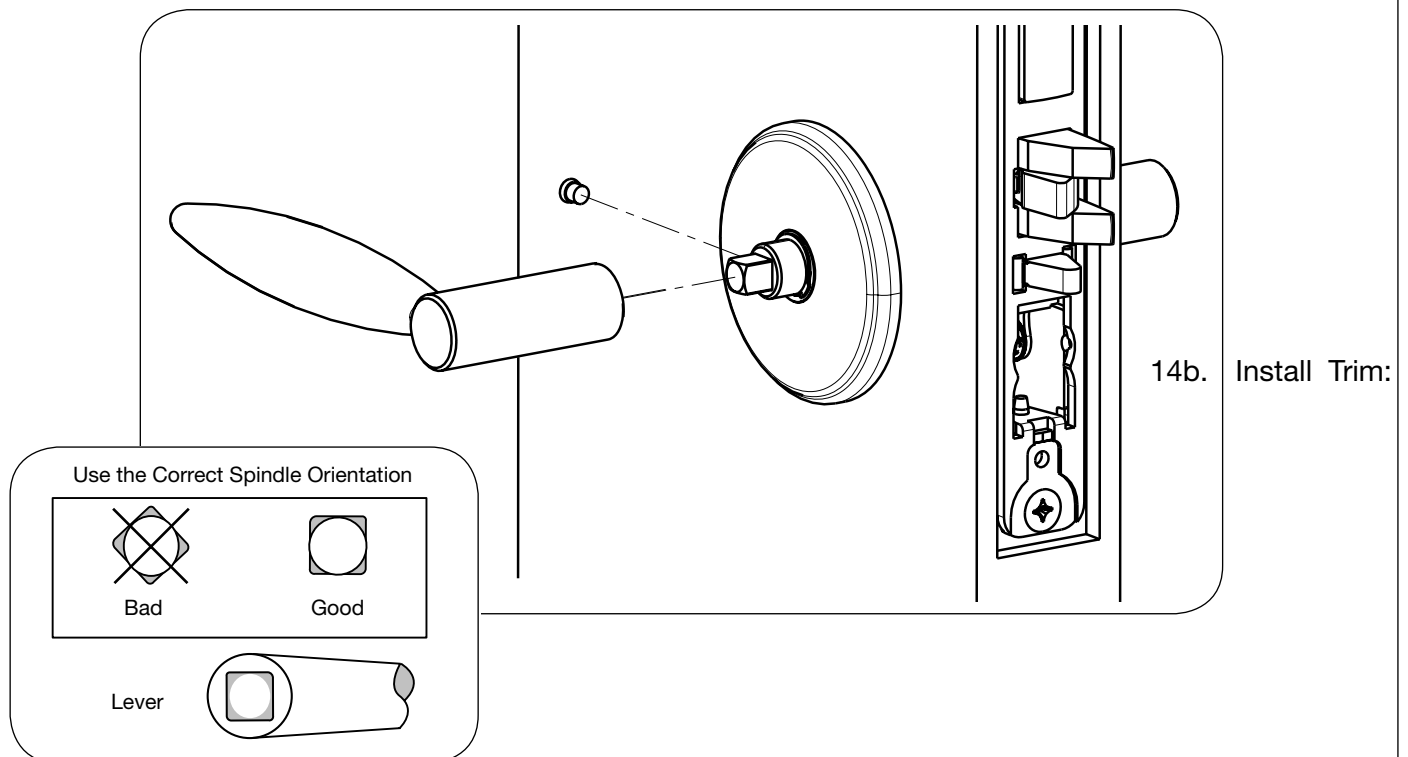


5) Installation Instructions (Continued)

Step 3



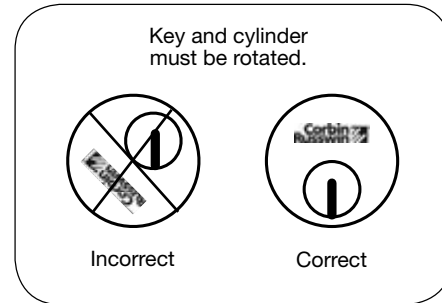
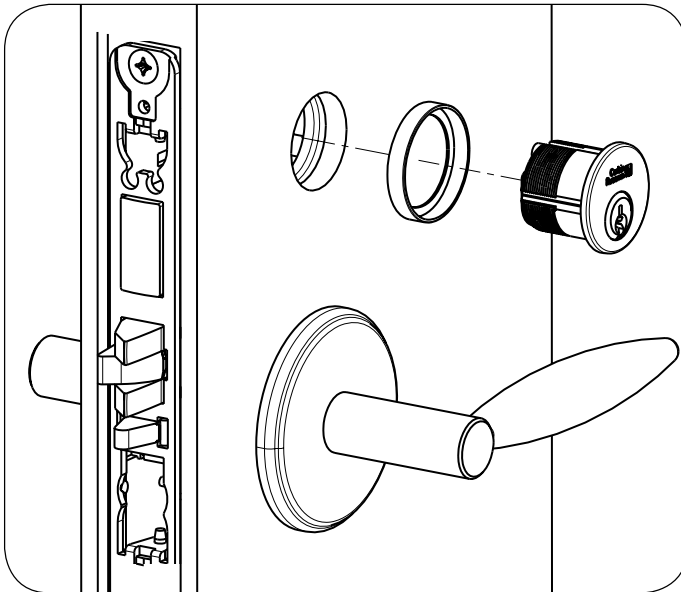
Step 4



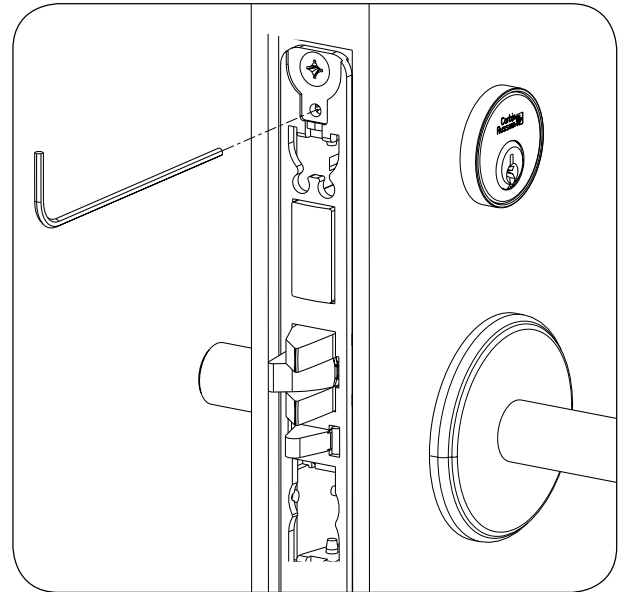
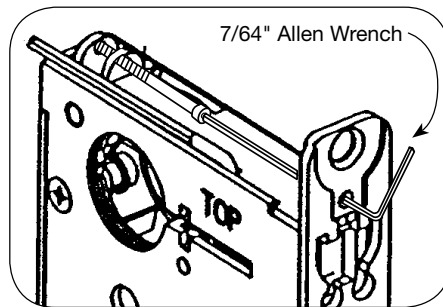
5) Installation Instructions (Continued)

7. Install Cylinder and Scalp:

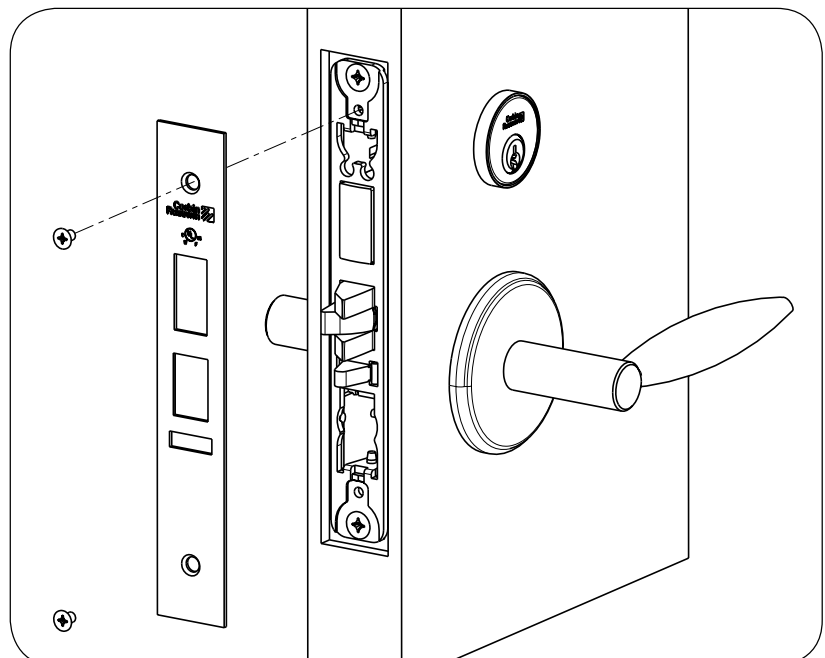
Step 1



Step 2



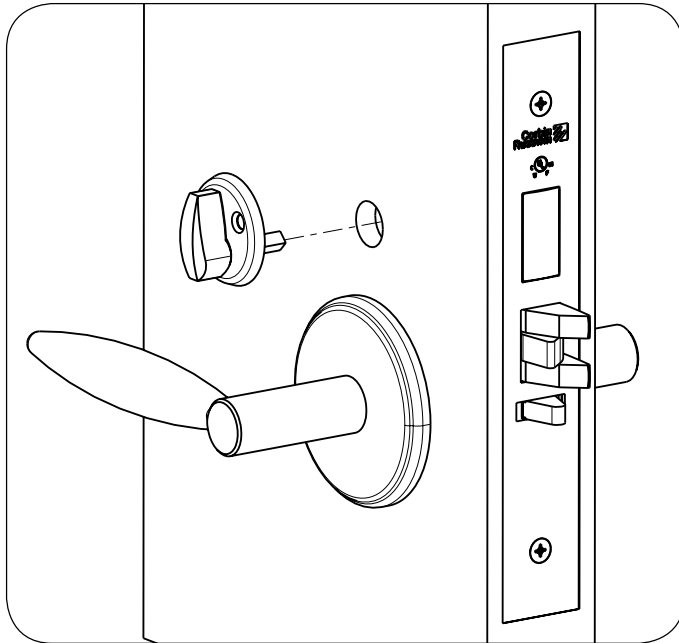
Step 3



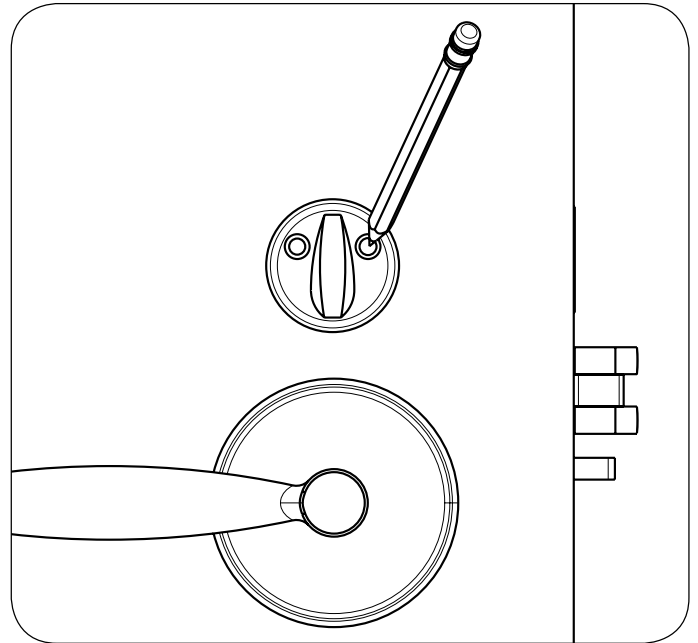
5) Installation Instructions (Continued)

8. Install Turn Piece:

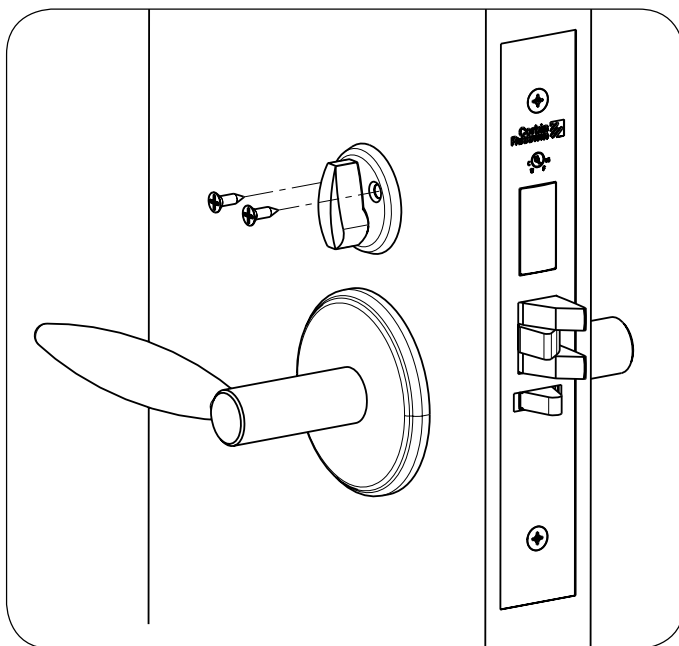
Step 1



Step 2



Step 3



ML20700 PWI/PIP Series Mortise Lock

9. Install (optional) Weatherseal Gasket:

For non-fire rated door applications, an optional gasket may be used as a weatherseal between the escutcheon and the outside door surface.

Peel off the adhesive backing on the gasket and install the gasket along the edge of the outside escutcheon assembly (Fig. 9).

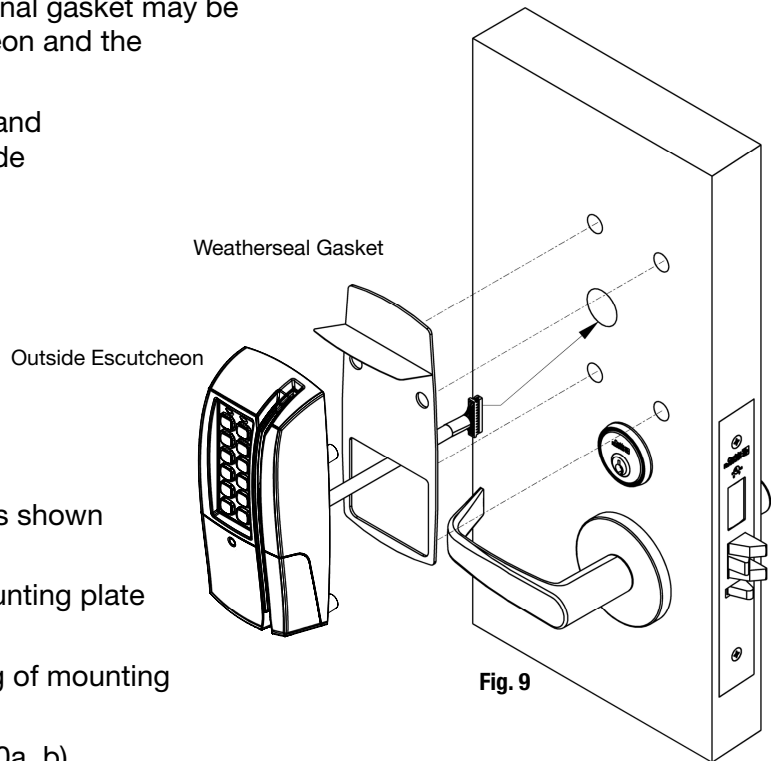


Fig. 9

10. Install Outside Escutcheon

1. Insert the mounting posts through holes as shown in (Fig. 9a).
2. On the inside of the door, position the mounting plate over the indicated holes (Fig. 10a).
3. Feed reader cable through central opening of mounting plate (Fig. 10a).

Lockbody cable feeds from bottom (Fig. 10a, b).

Ensure ground lug is positioned upright (Fig. 10a, b).

4. Insert other three #8-32 x 1-7/8" flat head machine screws and tighten, fastening the outside escutcheon to the door (Fig. 8B).

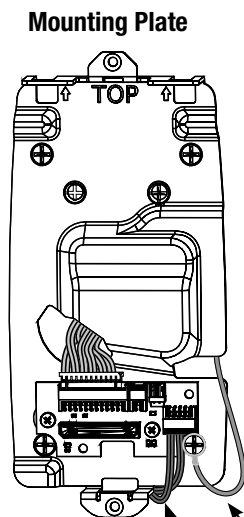


Fig. 10b

Lock body cable

Position ground ring terminal upright, then tighten screw.

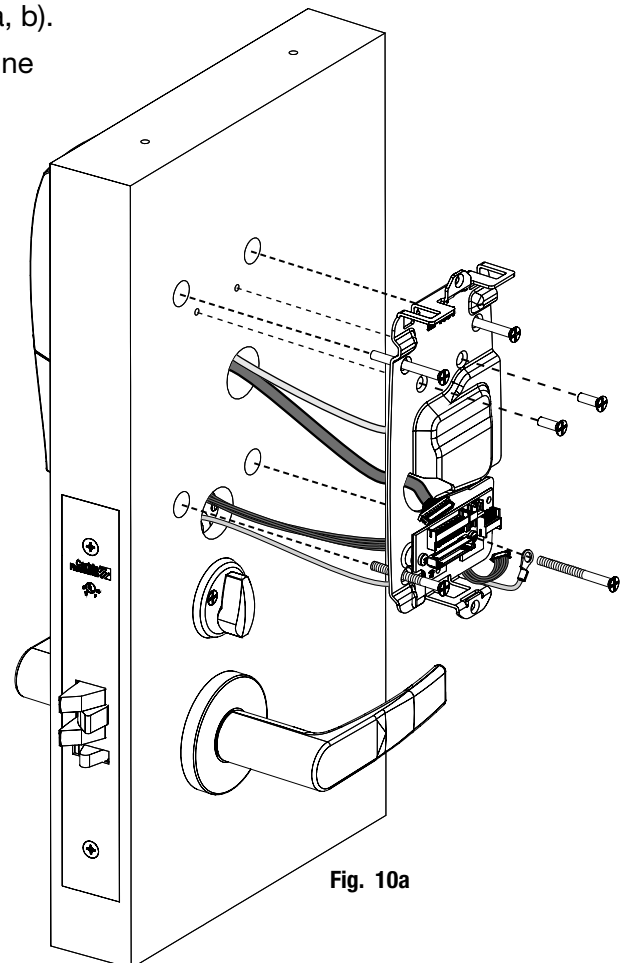


Fig. 10a

11. Installation of Connectors

CAUTION - Do not touch or allow debris to enter connector contacts.

Secure the following connectors to their respective terminals (Fig. 11a, b):

A. Secure the 10-pin lock body assembly connector.

*NOTE: Optional 2-pin external 9-24VDC power connector.

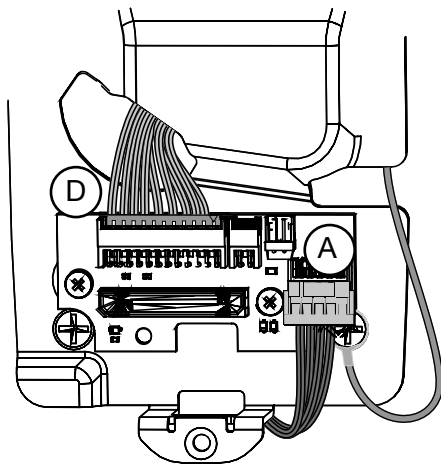
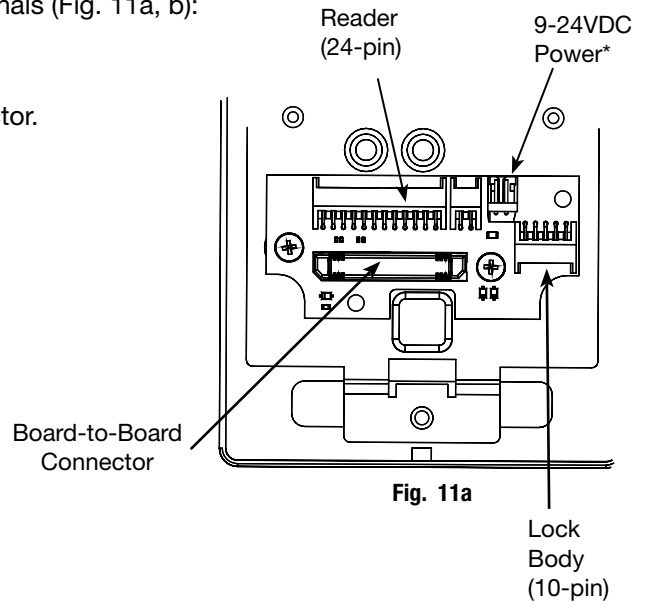


Fig. 11b



Wire Positioning:

Please follow these steps prior to installing inside escutcheon to prevent any damage caused by pinching wires:

- B. Tuck excess cable into wire holes on inside of door (Fig. 11c).
- C. Finish securing mounting plate and reader to door by fully tightening through-bolts on inside of door.
- D. Secure the 24-pin card reader connector (Fig. 11c).

*For more detail, refer to section (5) 'Installation Wiring', "A - Frame Harness Installation".

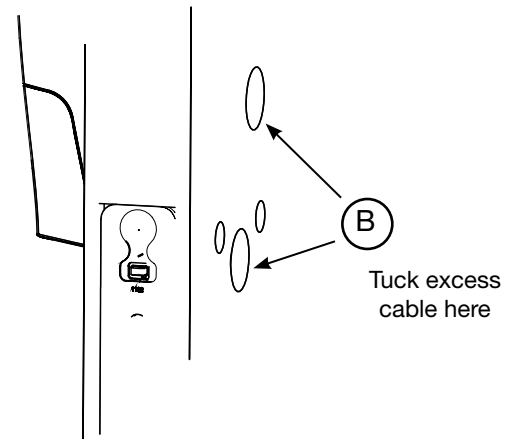
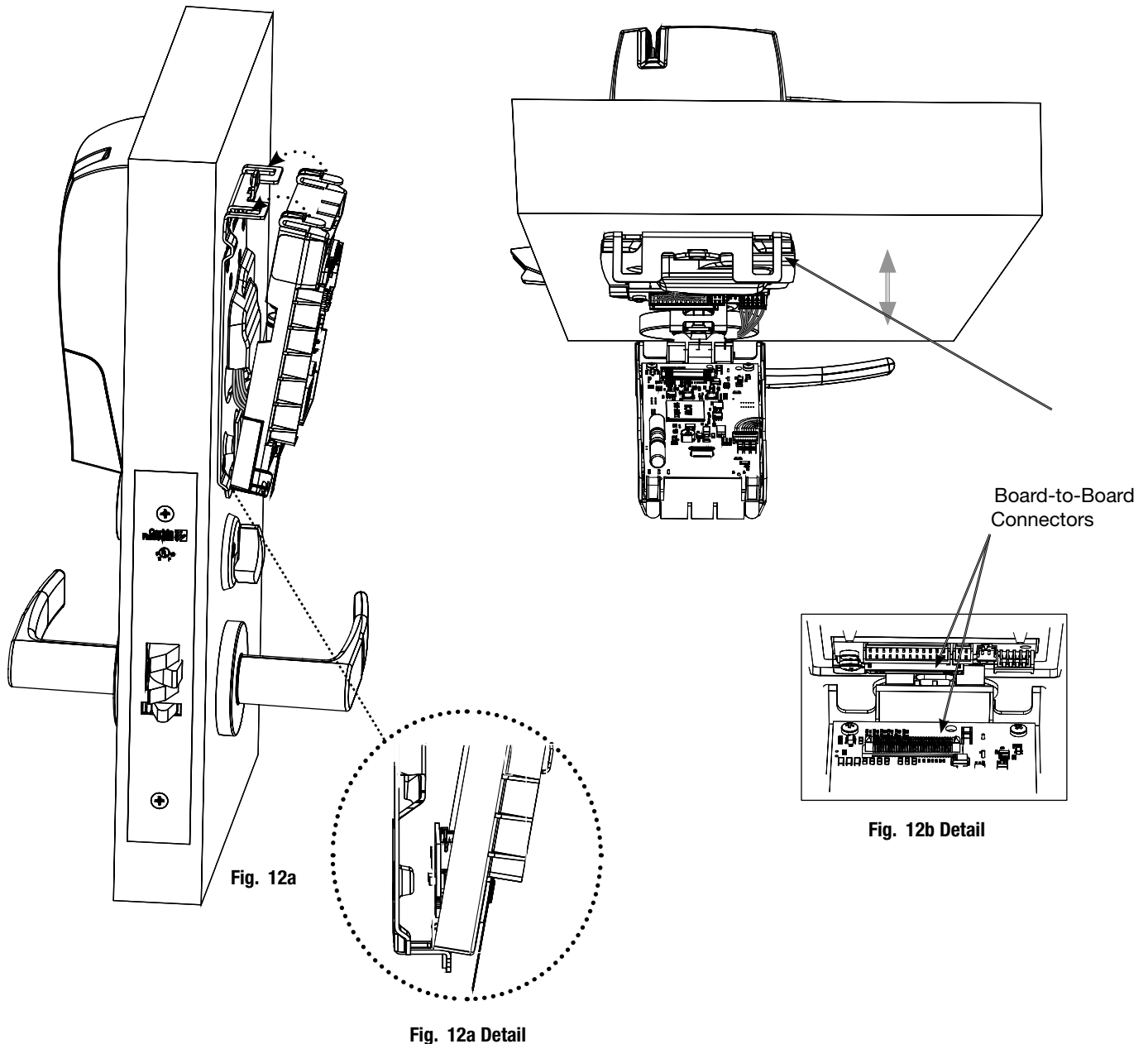


Fig. 11c

5) Installation Instructions (Continued)

- a. Insert bottom tab of controller into slot on mounting plate (Fig. 12a, b).
- b. Looking down from top of controller, ensure proper alignment of board-to-board connectors (Fig. 12b) while pivoting controller toward door until two tabs on top snap securely into place on mounting plate (Fig. 12a).

CAUTION: To avoid possible damage to board-to-board connectors, care should be taken when securing controller to mounting plate. If there is resistance when securing, detach controller to determine cause before re-attaching controller.



5) Installation Instructions (Continued)

Before installing batteries for the first time:

Remove **pull tab** from its position beneath the coin cell by pulling on tab in direction of arrows printed on tab (Fig. 13).

- a. Place (6) "AA" alkaline batteries in the compartment, being careful to align polarity properly.
- b. After batteries are installed, there is a slight delay; then an audible "beep" will sound and the lock motor will cycle.

For battery replacement:

When replacing the (6) "AA" alkaline batteries in the compartment, please note batteries must be replaced within five (5) minutes to prevent the internal clock from becoming inaccurate.

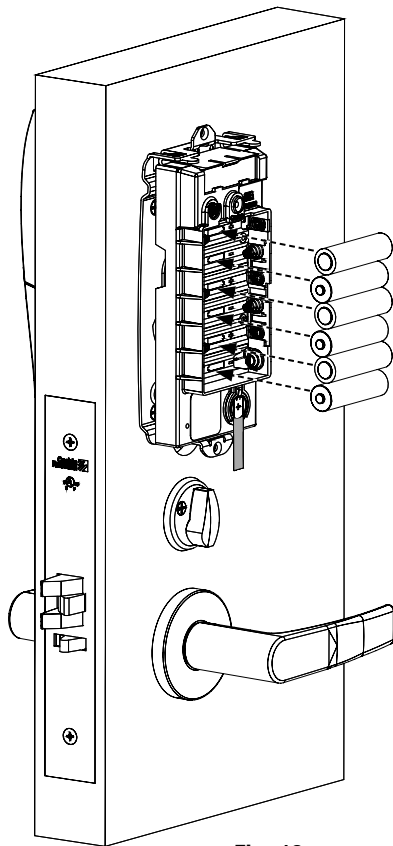


Fig. 13a

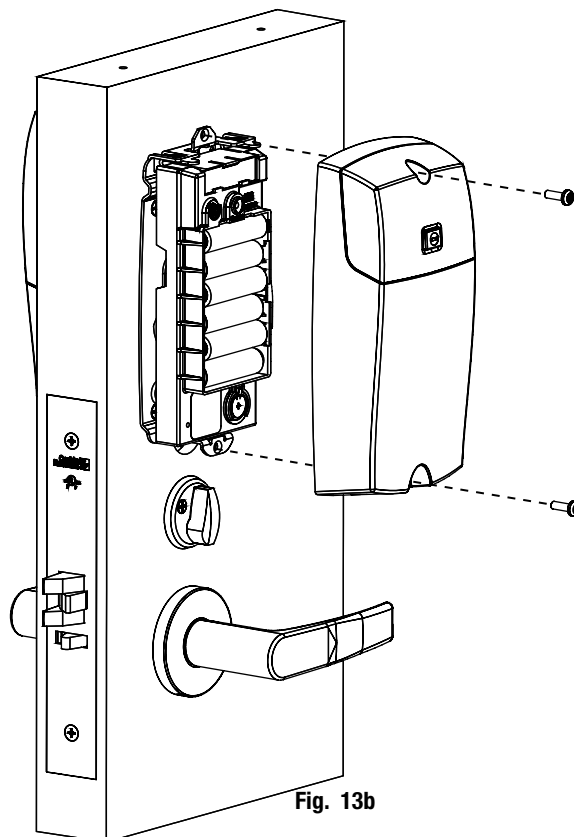


Fig. 13b

Important Note: Wiring Installation

If you are installing PIP (PoE) please go to Page 20 PIP Installation Wiring

If you are installing PWI please go to Page 23 Operational Check

Continue With Installation...

6) PIP (PoE) Installation Wiring

17. PIP (PoE) Installation Wiring:

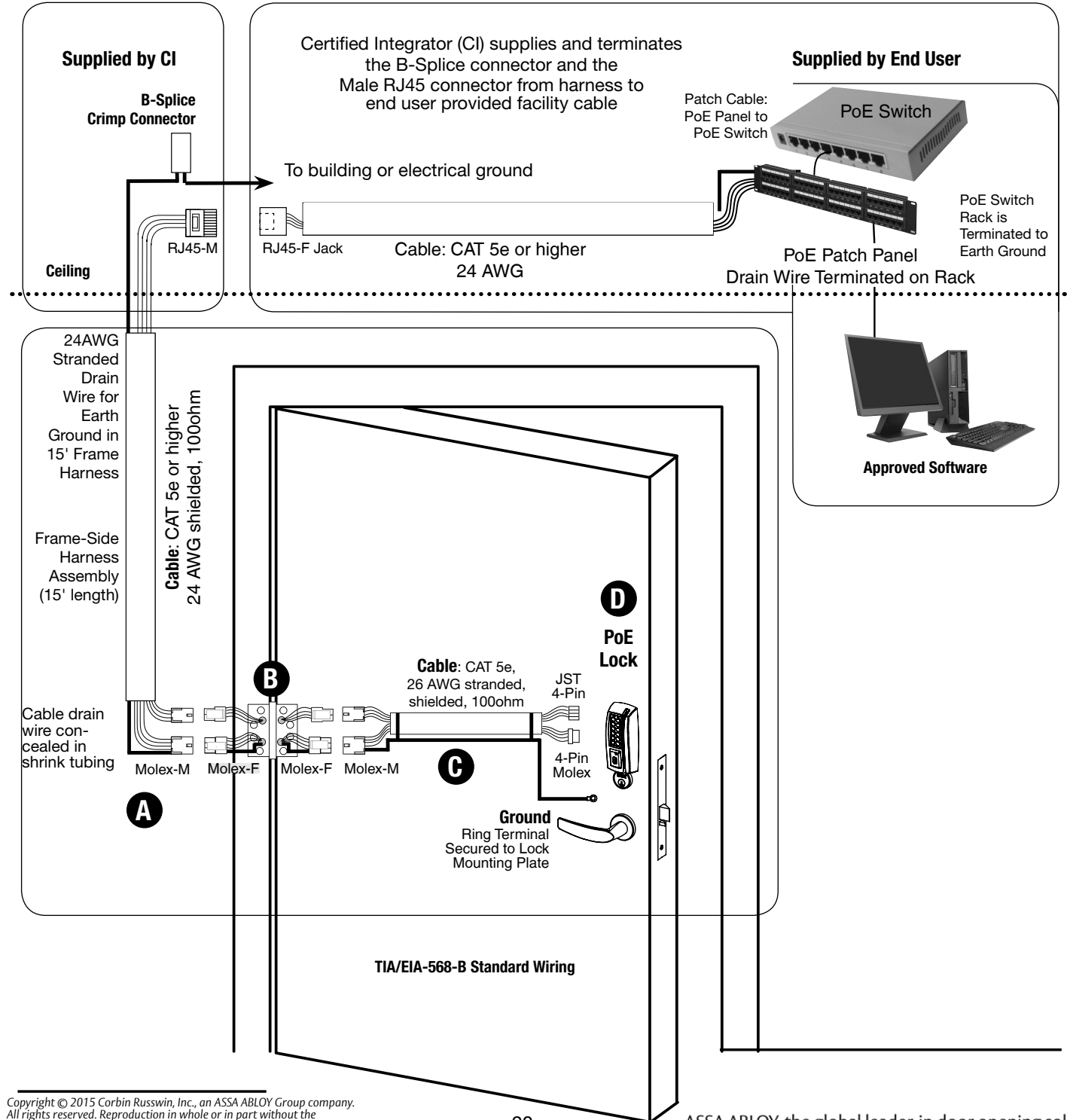
A PoE Frame harness assembly
(From McKinney)

B PoE data hinge (Patent Pending)
(From McKinney)

C PoE Door harness*
(From McKinney)

D Access 700 PIP (PoE Lock)

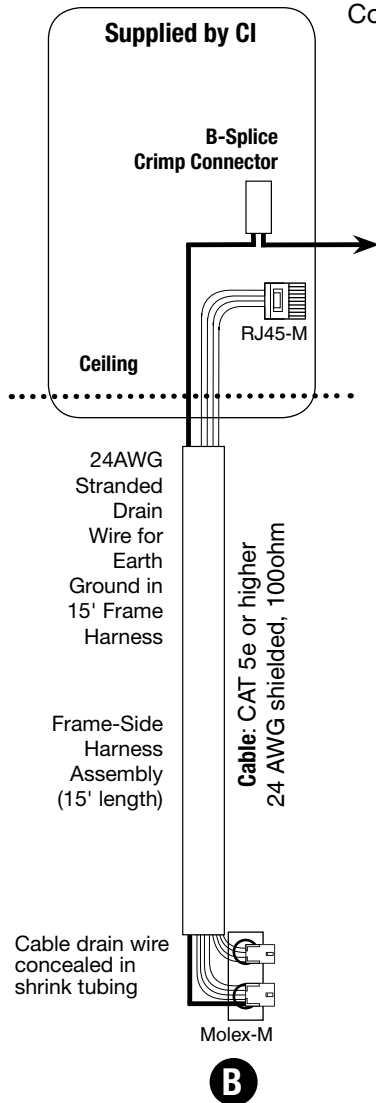
* Order of installation may vary.
Refer to appropriate sections for instructions.



6) PIP (PoE) Installation Wiring (Continued)

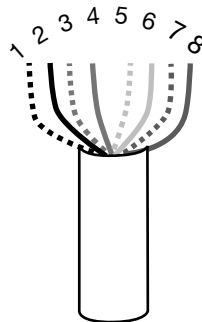
A Frame Harness Installation

Components and wire harness supplied by McKinney: Suggested installation.



Cut end / ceiling-side PoE harness:

TIA/EIB-568-B Standard Wiring



Pair Number	Wire	PIN
1	White/Blue	5
	Blue	4
2	White/Orange	1
	Orange	2
3	White/Green	3
	Green	6
4	White/Brown	7
	Brown	8

Do not confuse pair numbers with pin numbers. A pair number is used for reference only (eg: 10BaseT Ethernet uses pairs 2 & 3). The pin numbers indicate actual physical locations on the plug and jack.

Hinge side of PoE harness:

1. Feed cut end of harness into hole on hinge-side through single access hole.
2. Push one of the connectors back through hole and feed into separate access hole.

Each of the hinge-side harness connectors should end up threaded through a different access hole and matched to the same size pin connector from the door harness:

- 4-pin male Molex connector.
- 6-pin male Molex connector with ground wire.

Notes:

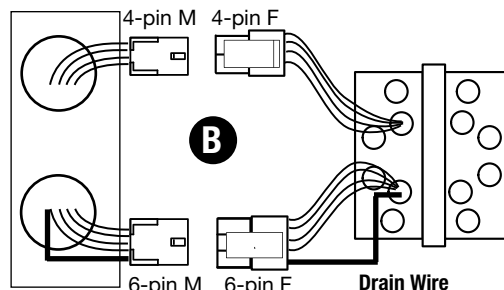
- Connectors only go on one way. They cannot be plugged to incorrect position.
- Do not force and do not offset connectors.
- Be sure they are completely seated (flush).

Hinge-side harness connectors:

- 4-pin male molex connector
- 6-pin male molex connector with ground wire

Lock-side harness connectors:

- Ring terminal
- (2) 4-pin connectors



Frame

PoE Hinge (Patent Pending)

6) PIP (PoE) Installation Wiring (Continued)

C Hinge Installation

Order of installation may vary. Refer to appropriate sections for instructions.

Hinge-side harness connectors:

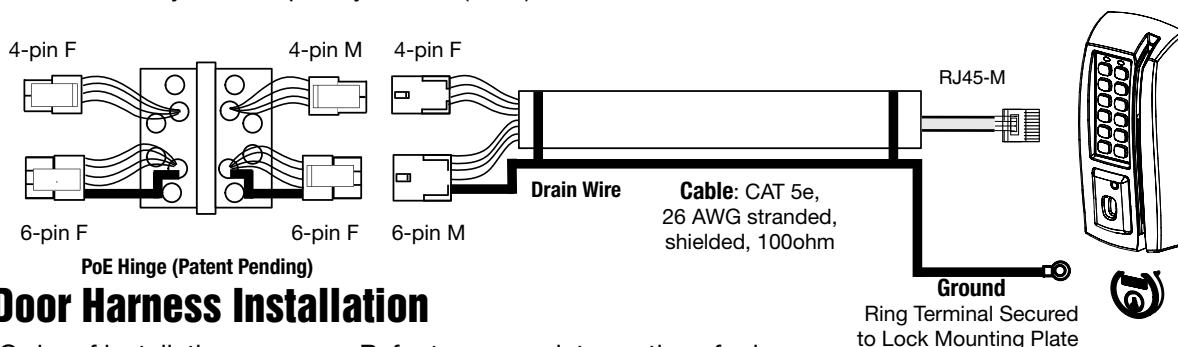
- 4-pin male Molex connector
- 6-pin male Molex connector with ground wire

Lock-side harness connectors:

- Ring terminal
- (2) 4-pin connectors:
 - 4-pin Molex connector
 - 4-pin connector

Notes:

- Connectors go on only one way. They cannot be plugged to incorrect position.
- Do not force and do not offset connectors.
- Be sure they are completely seated (flush).



D Door Harness Installation

Order of installation may vary. Refer to appropriate sections for instructions.

1. Prop door open.
2. Tape the two lock-side 4-pin connectors to the ring terminal.
3. Using the ring terminal, carefully route the assembly through the door channel to the lock.
4. Remove tape from ring terminal and door harness connectors.

Hinge-side harness connectors:

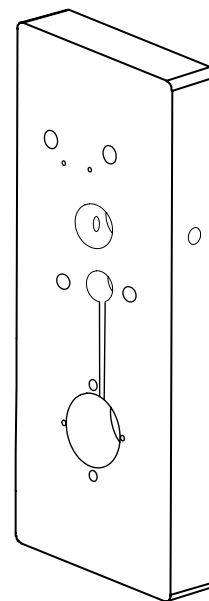
- 4-pin male Molex connector
- 6-pin male Molex connector with ground wire

Lock-side harness connectors:

- Ring terminal
- (2) 4-pin connectors:
 - 4-pin Molex connector
 - 4-pin connector

Notes:

- Connectors go on only one way. They cannot be plugged to incorrect position.
- Do not force and do not offset connectors.
- Be sure they are completely seated (flush).

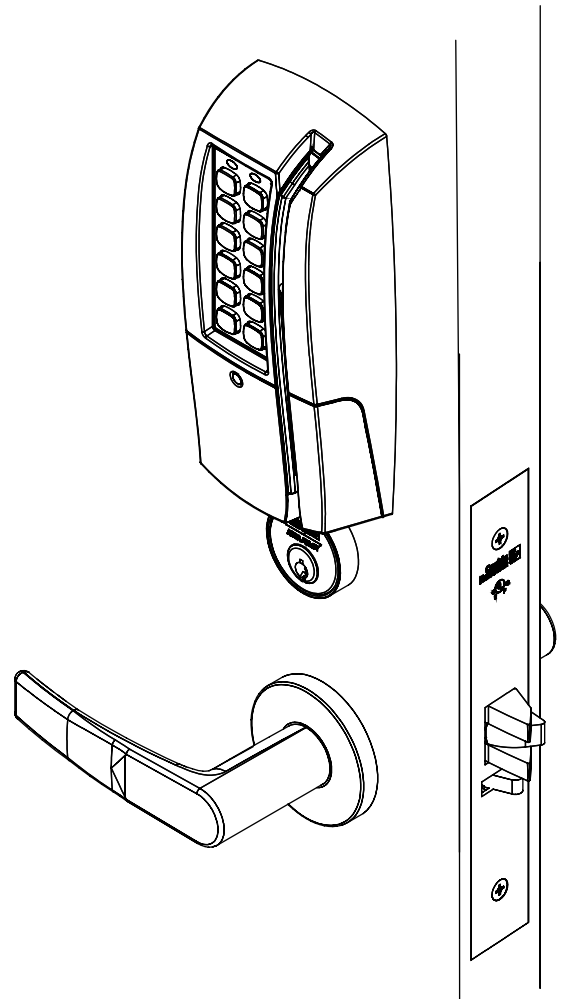


7) Operational Check

IMPORTANT: Be sure to test functions prior to closing door.

In all cases, perform the following checks:

1. Ensure that inside lever retracts latch (and deadbolt for deadbolt functions).
 - For units with cylinders, the following checks apply:
Insert key into cylinder and rotate
 - a. There should be no friction against lock case, wire harness, or any other obstructions. If friction or binding occurs, readjust cylinder and wiring harness to eliminate issues.
 - b. The key should retract the latch and the key should rotate freely.
 - c. The key should extend and retract the deadbolt.
 - For units without a keypad, add card using LCT software and test.
 - For units with a keypad, add pin and card using LCT software and test.
2. LED signalling:
 - After using a valid credential, a green flash followed by three fast amber flashes indicates a low power condition.
Check the input voltage.
If the input voltage is low, disconnect the lock from the power source and check the power source voltage. If the power source voltage is correct, inspect the lock wiring for a possible short.
 - If the lock loses power, it will flash rapid amber for approximately one minute.
After that, the lock will no longer be functional.
3. When you have completed the tests, close the door to ensure latchbolt and deadbolt fully extend into strike plate without binding.



ML20700 PWI/PIP Series Mortise Lock

