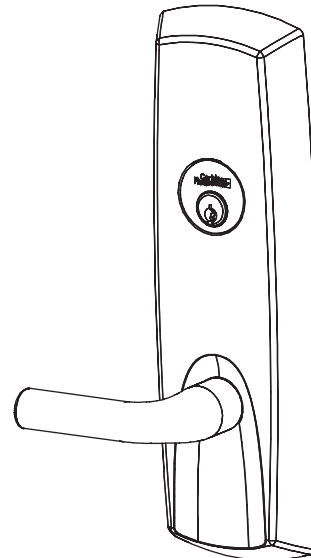
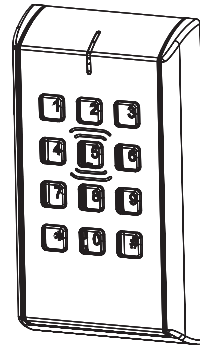


IN120 WiFi IN220 PoE

ED5200(S)N & ED5600N Series

(Includes: Rim & Mortise)

Exit Device



Attention Installer:

Please read these instructions carefully to prevent missing important steps.

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

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.

TOC	Table of Contents
1	Warning.....4
2	Regulatory and Power Specifications.....5
3	General Description6
4	Specifications / Features6
5	Parts Breakdown6
6	IN220 Wiring and Installation Instructions.....8
7	RIM Exit Installation Instructions.....12
8	Mortise Exit Installation Instructions.....18
9	IN120 / IN220 Installation Instructions.....24
10	Operational Check30

1

Warning

Changes or modifications to this device not expressly approved by ASSA ABLOY could void the user's authority to operate the equipment.

FCC:

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.

Industry Canada:

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

General Regulatory Compliance:

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). This device complies with part 15 of the FCC Rules. 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 appareil contient des émetteurs/récepteurs exemptés de licence conformes aux RSS d'Innovation, Sciences et Développement économique Canada. Cet appareil est conforme à la section 15 de la réglementation de la FCC.

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.

This equipment complies with FCC and IC radiation exposure limits set forth for general population (uncontrolled environment). This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux radiations de la FCC et IC définies pour la population générale (environnement non contrôlé). Cet appareil ne doit pas être co-localisé ou fonctionner en conjonction avec une autre antenne ou un autre émetteur.



CAUTION: When using hard power, DO NOT install batteries.
AVERTIR: Ne pas installer de batteries si vous utilisez l'alimentation électrique.



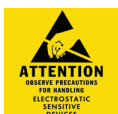
CAUTION: Risk of Explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
AVERTIR: Risque d'explosion si la batterie est remplacée par un type incorrect. Jetez le batteries usagées conformément aux instructions.

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.

Ce produit peut vous exposer au plomb qui, dans l'état de la Californie, est reconnu pour causer le cancer, des anomalies congénitales ou d'autres problèmes de reproduction.
Pour plus d'informations, visitez: www.P65warnings.ca.gov.



Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and SARGENT Manufacturing makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.



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

2

Regulatory and Power Specifications

Electronic Authentication Specifications (Mobile Credentials)

For Mobile Credential-Enabled versions of this electronic lock
(Indicated by the credential code in the product order string):

- Mobile Credentials are transmitted to the lock via Bluetooth Smart or NFC ISO/IEC14443 and must use a mobile device enabled with these technologies.
- Credential and mobile device versions are specified by the credential provider.
- User must acquire the latest HID “Mobile Access” application available from Apple iStore or Android PlayStore.

This product is not intended for outside wiring as covered by Article 800 in the National Electrical Code, NFPA 70.

Compliance with IEEE 802.3 (at or af) specifications was not verified as part of UL 294/B.

The system shall not be installed in the fail-secure mode unless permitted by the local authority having jurisdiction and shall not interfere with the operation of Listed panic hardware.

- UL Listed - UL 294 Indoor Use
- CUL Listed - ULC-60839-11-1, Grade 1

• **UL 294 Access Control Ratings:**

Destructive Attack	Level 1
Line Security	Level 1
Endurance	Level 4
Standby Power	Level 1

Power Supply Specifications

IN220 (PoE version):

- Power over Ethernet:
Use UL 294 Listed, PoE Injector or Class 2 power limited power supply (55VDC, 90mA)
- UL testing was conducted on product powered by UL listed model POE20U-560(G) PoE Injector, manufactured by Phihong

IN120 (Wi-Fi version):

- Battery Power:
Alkaline AA Batteries (6): 9V, 300mA
(To comply with “Fire Listed” doors, batteries must be replaced with alkaline batteries only)
- Optional Hard Power (UL 294 Listed Power Supply Required):
9-24VDC, 300mA
CAUTION: When using Hard Power, DO NOT install batteries.
CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.



Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), CSA 22.1, Canadian Electrical Code (CEC), Part I, Safety Standard for Electrical Installations, local codes and the authorities having jurisdiction.

3

General Description

The Corbin Russwin IN120 (Wi-Fi) & IN220 (PoE) series locks offer HID® multiCLASS SE® technology in a streamlined design, setting a new standard for aesthetics and performance, providing heightened identity security and multiple credentials, including mobile access.

The IN120 cylindrical lock uses IEEE 802.11 Wi-Fi communication and a flexible feature set for easier, more cost-effective installations, allowing facilities to leverage their IT infrastructure to expand access control coverage to more doors.

With the energy efficiency and streamlined architecture of Power-over-Ethernet (PoE) access control, the IN220 cylindrical lock allows for enhanced security and easier, more cost-effective installations.

4

Specifications / Features

Hardware Specifications

- Latch – Stainless steel, 3/4" (19mm) throw deadlocking fire latch
- Deadlocking latch prevents manipulation when door is closed
- Door Thickness – 1-3/4" (44mm) to 2" (50mm)
Optional 2" (50mm) to 2-1/4" (57mm)
- ADA Compliant
- ANSI/BHMA A156.25 Listed Grade 1 Compliant
- May be used for indoor and outdoor applications

Electrical Specifications:

HID® multiCLASS SE® technology offers support for the following credentials:

High Frequency (13.56 MHz)

- HID iCLASS®
- HID iCLASS SE® (SIO-enabled)
- HID iCLASS Seos™
- HID MIFARE® SE
- HID DESFire EV1 SE
- HID MIFARE® Classic
- DESFire EV1
- PIV/PIV-I**

** (40-bit BCD, 64-bit BCD, 75 bit, 128-bit or 200-bit outputs)

Low Frequency (125 kHz):

- HID Prox®

NFC & BLE-enabled mobile phones

- HID Mobile Access® (BLE & NFC)
- Apple Wallet Seos or DESFire® (NFC)

- Optional keypad:
 - PIN-only usage or dual authentication*
- Multiple time zone and holiday access scheduling
- First-in unlock or automatic unlock configuration, based on specified time schedule
- 10,000 per lock; 10,000 event audit trail
- Privacy button
- Wi-Fi (IEEE 802.11 b/g/n)
- PoE (IEEE 802.3af)

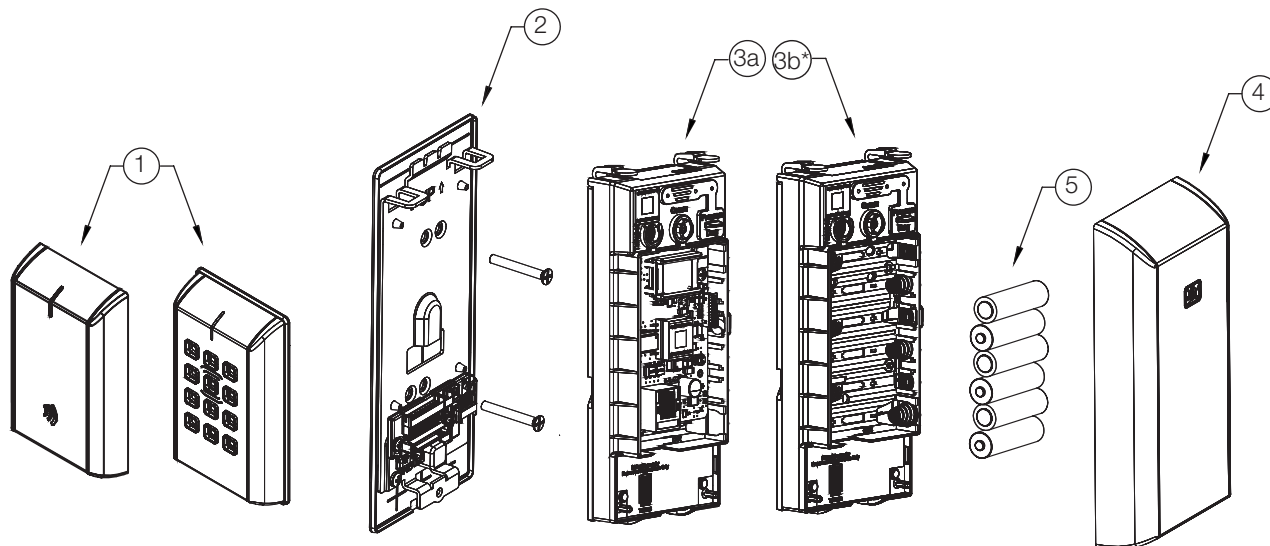
Power requirements:

- Alkaline AA Batteries: 9V, 300mA
- PoE - 55VDC, 90mA
- Optional Hard Power :
9-24VDC, 300mA

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

5

Parts Breakdown



ITEM No.	DESCRIPTION
1*	Outside Escutcheon Assembly
2	Inside Mounting Plate Assembly (includes Gasket)
3a	PoE Controller Assembly
3b	Wi-Fi Controller Assembly* (batteries included)
4	Inside Escutcheon Assembly with Privacy Button
5	AA alkaline batteries (6)

*Consult catalog for electronic replacement part numbers

IN120 & IN220 Series

ED5200N / ED5600N Series Exit Devices for 9100/9M100

Important Note: If you are installing IN220 (PoE)

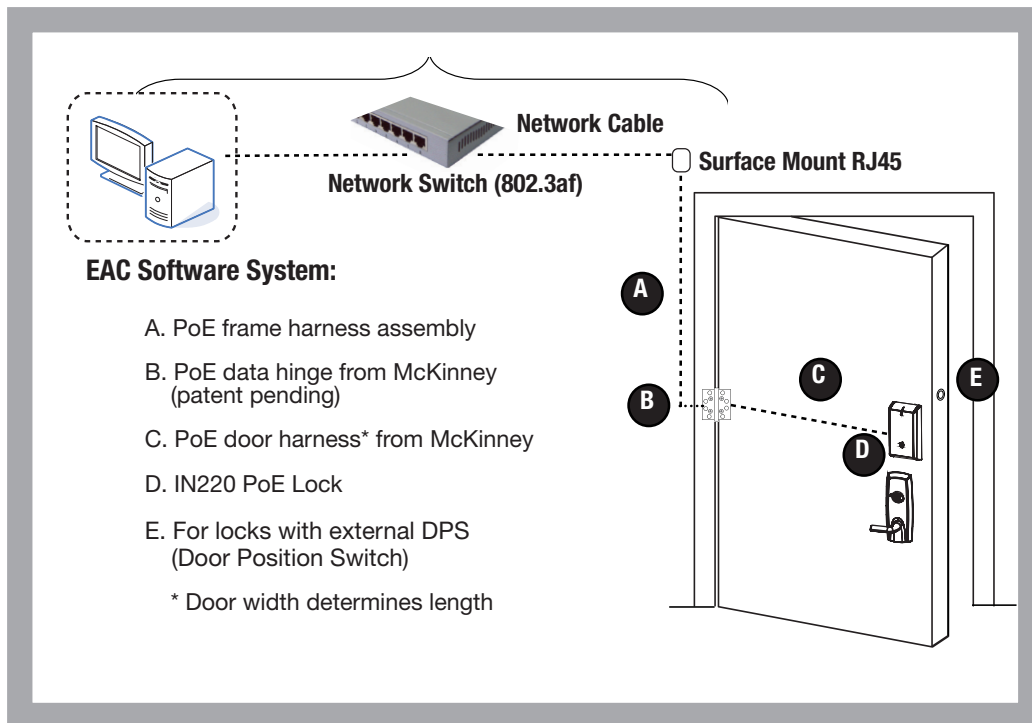
Before installing IN220 (PoE) cylindrical device, please read the following section:
- IN220 (PoE) Wiring & Installation

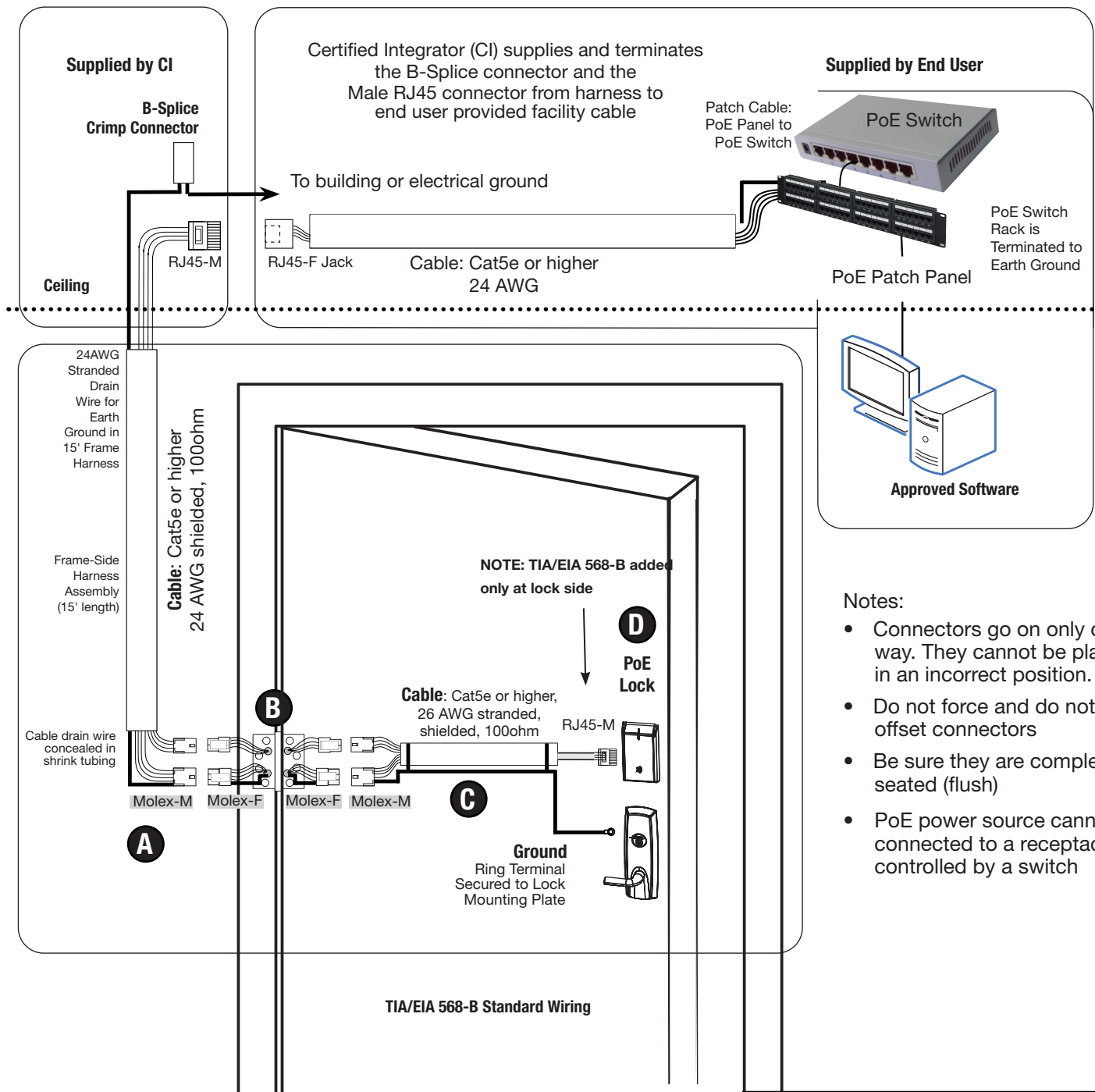
6

IN220 (PoE) Wiring and Installation Instructions

Overview

Corbin Russwin IN220 PoE Typical Application





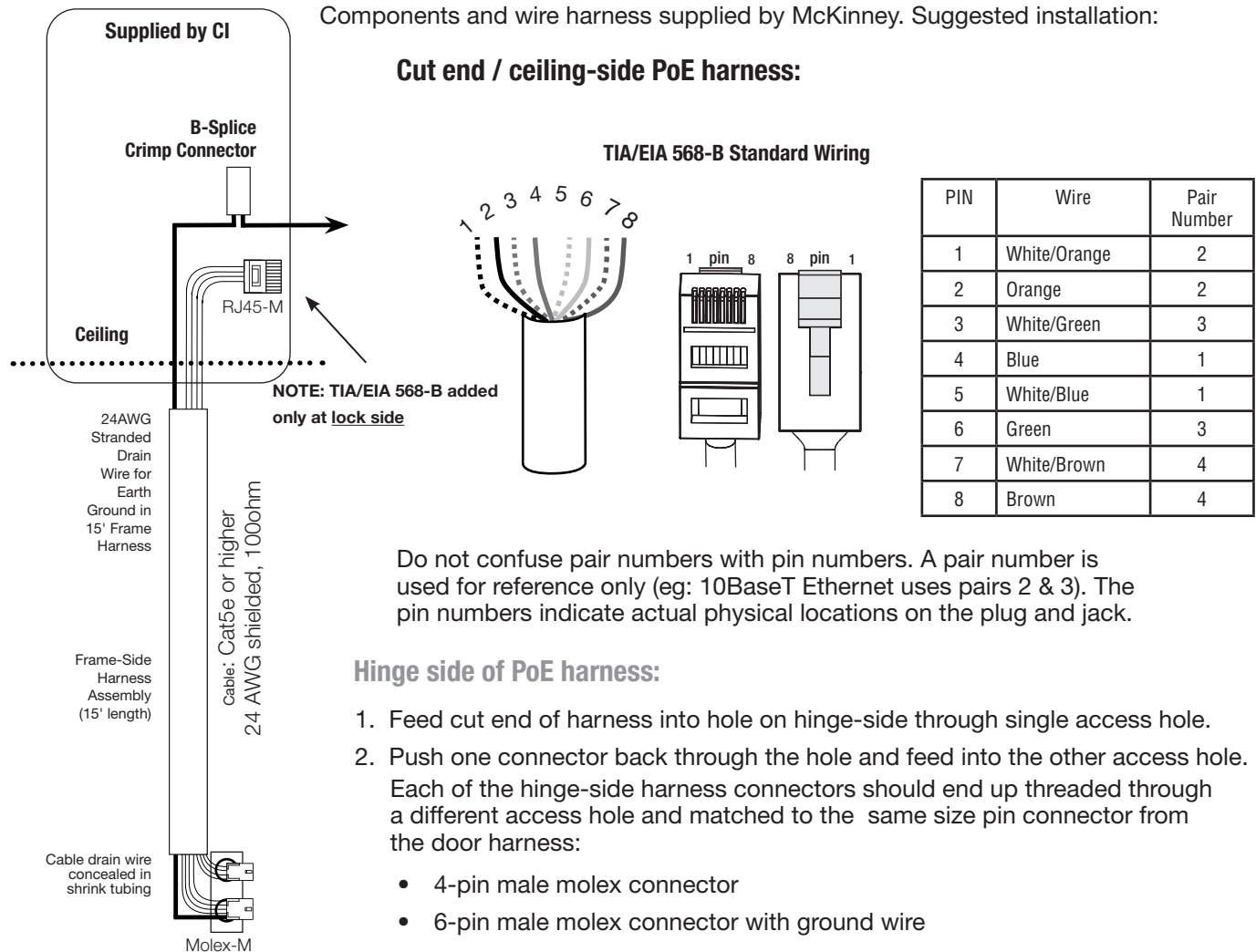
Notes:

- Connectors go on only one way. They cannot be placed in an incorrect position.
- Do not force and do not offset connectors
- Be sure they are completely seated (flush)
- PoE power source cannot be connected to a receptacle controlled by a switch

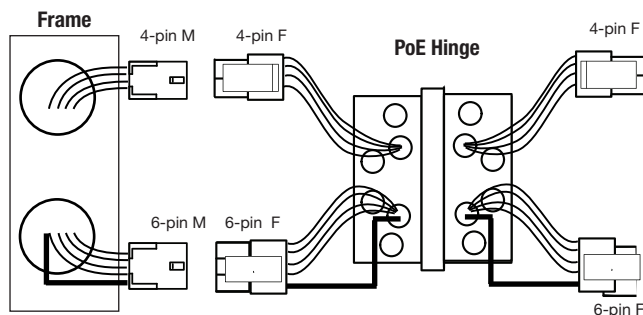
6

IN220 (PoE) Wiring and Installation Instructions (Continued)

A Frame Harness Installation



B PoE Data Hinge



Hinge-side harness connectors:

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

Lock-side harness connectors:

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

6

IN220 (PoE) Wiring and Installation Instructions (Continued)

C Hinge Installation

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

Hinge-side harness connectors:

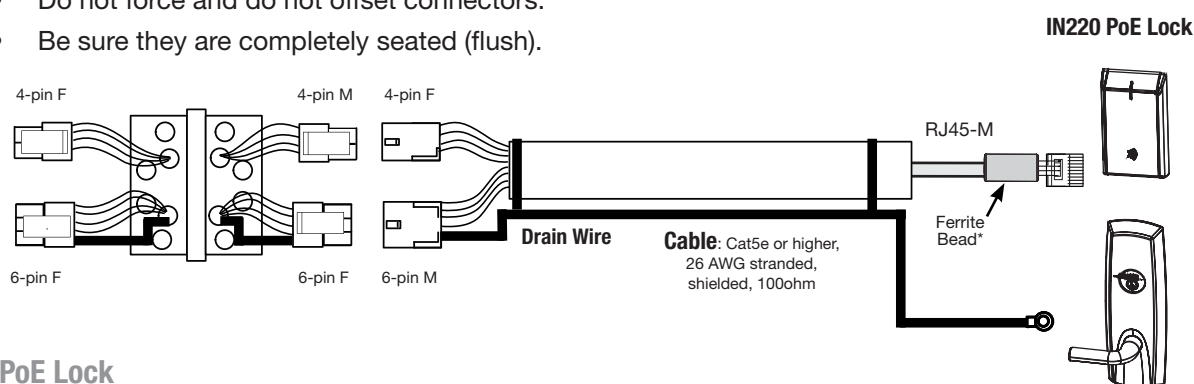
- 4-pin male Molex connector
- 6-pin male Molex connector with ground wire

Lock-side harness connectors:

- Ring terminal
- Male RJ45 connector (crimped after cable is fed through door)

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).

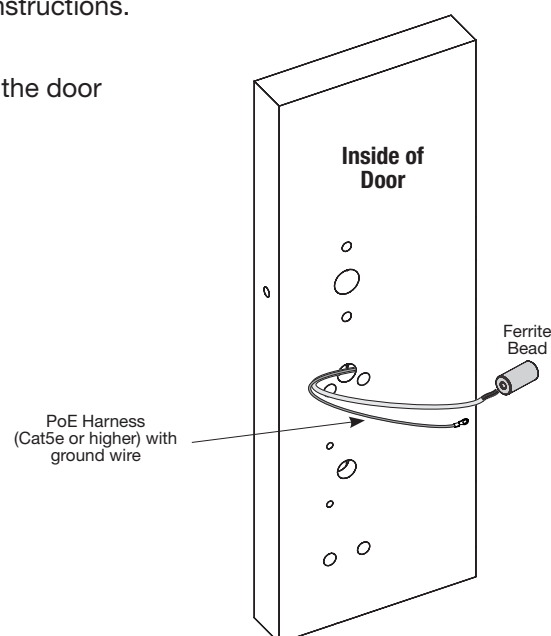


D PoE Lock

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

1. Prop door open.
2. Using the ring terminal, carefully route the assembly through the door channel to the lock.

***Do not terminate PoE harness (with RJ45 M) until cable has been routed through door and inside mounting plate assembly.
See Section 8, STEP 10 - Installing the Connectors.**



IN120 & IN220 Series

ED5200N / ED5600N Series Exit Devices for 9100/9M100



7

Rim Exit Installation Instructions

1

Verify Hand and Bevel of Door

Door should be fitted and hung.
Verify box label for size of exit device,
function and hand.

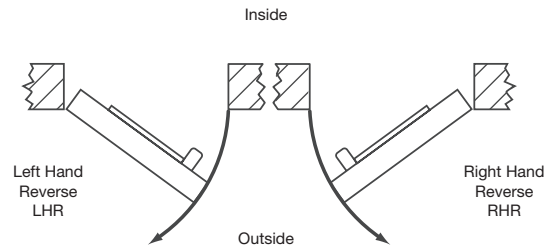


Fig. 1

2

Prep door according to Door Marker (FM429)

For door manufacturer templates visit www.corbinrusswin.com
and reference template #'s T31235 & T31236.

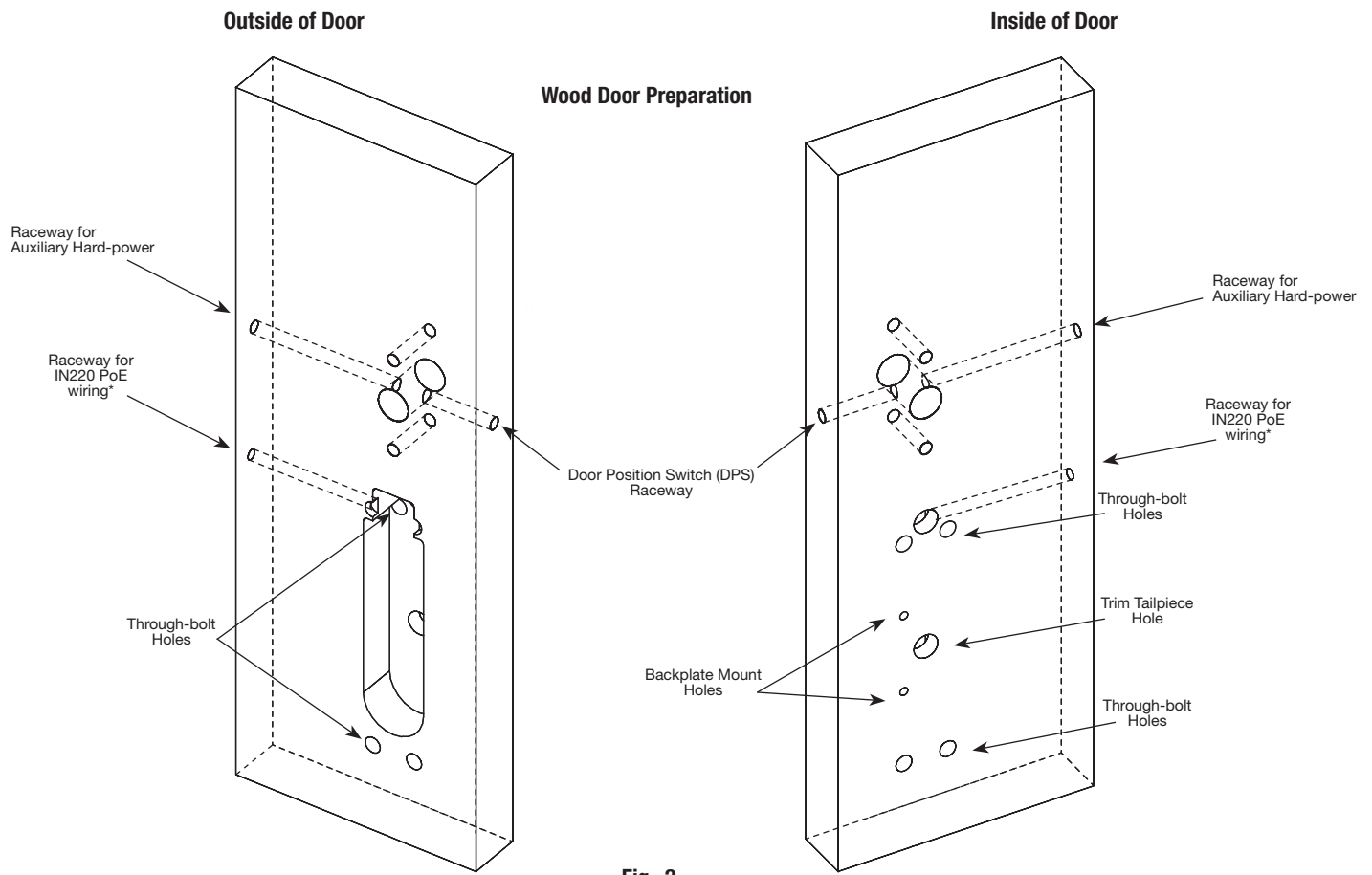


Fig. 2

***See Section IN220 (PoE) Wiring and Installation**

7

Rim Exit Installation Instructions (Continued)

3

Install Door Position Switch (DPS)

- a. Insert DPS into the raceway on the latch edge of the door.
- b. Push wires through raceway toward lock prep.
- c. Push DPS firmly into place by hand.
Note: **DO NOT TAP SWITCH WITH ANY TOOL.**
- d. Install magnet into door frame. Push firmly into place by hand.
See instruction A7983.

CAUTION: if DPS is not installed or is installed improperly, door status monitoring features will not function.

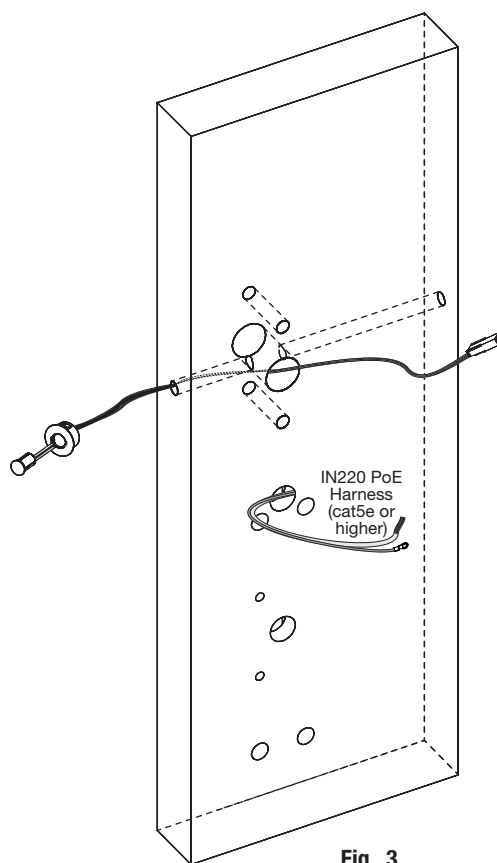


Fig. 3

4

7 Rim Exit Installation Instructions (Continued)

5 Install Exit Device

- a. Feed trim harness through upper hole in cutout (Fig. 5a).
- b. Seat device against door being careful to align vertical trim tailpiece to engage with cross hole of device cam - **see Figure 5b.**
- c. Fasten device to trim assembly using (2) 1/4-20 pan head screws (Fig. 5c).
- d. Follow instructions packed with device to secure device to door.
- e. Tighten all (4) screws (Fig. 5d).

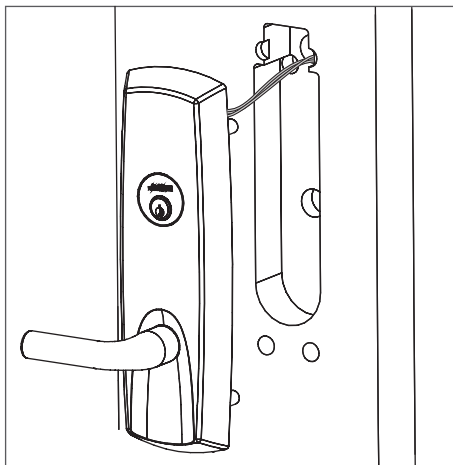


Fig. 5a

**Outside Face of
Door**

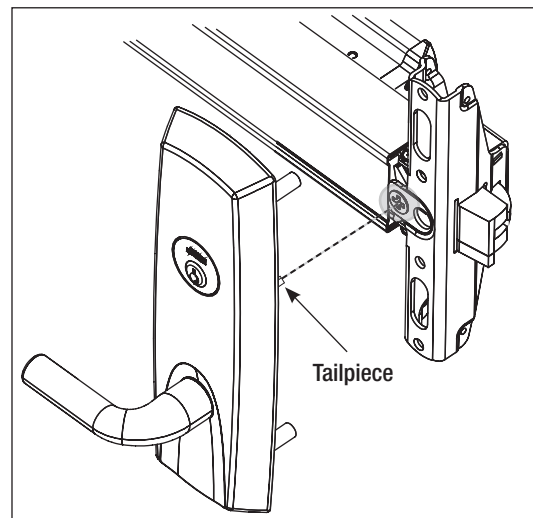


Fig. 5b (door not shown)

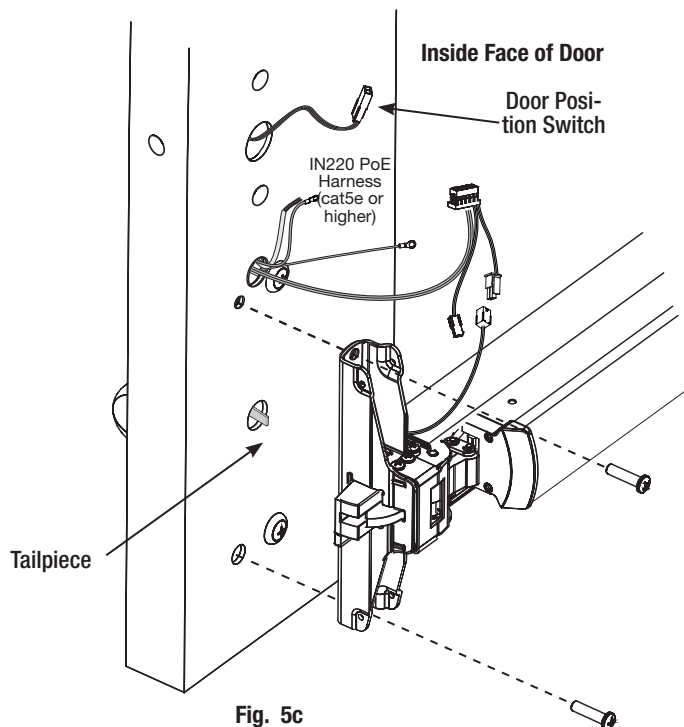


Fig. 5c

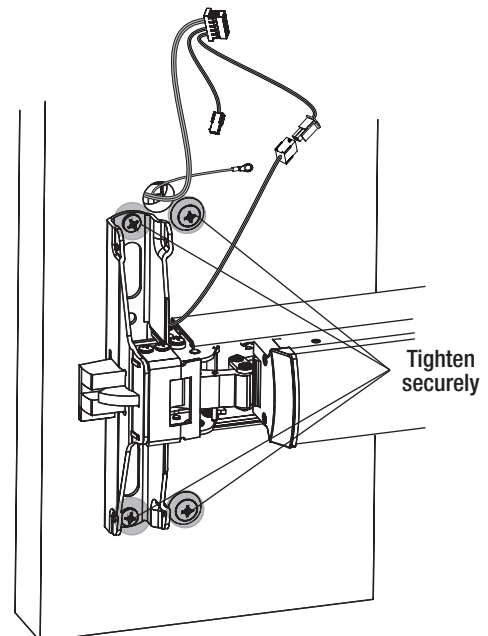


Fig. 5d

7

Rim Exit Installation Instructions (Continued)

6

Harness Connections

- Connect motor harness adapter to chassis harness connector (Fig. 6).
- Connect rail assembly harness adapter to chassis harness connector (Fig. 6).

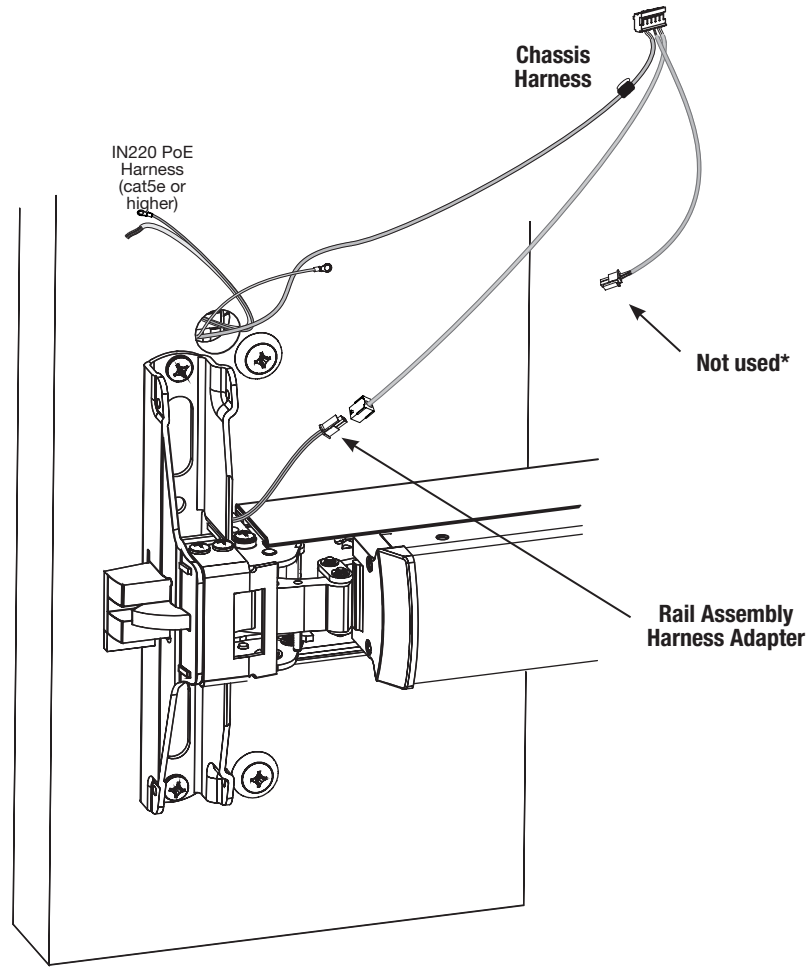


Fig. 6

*Not used in typical installation

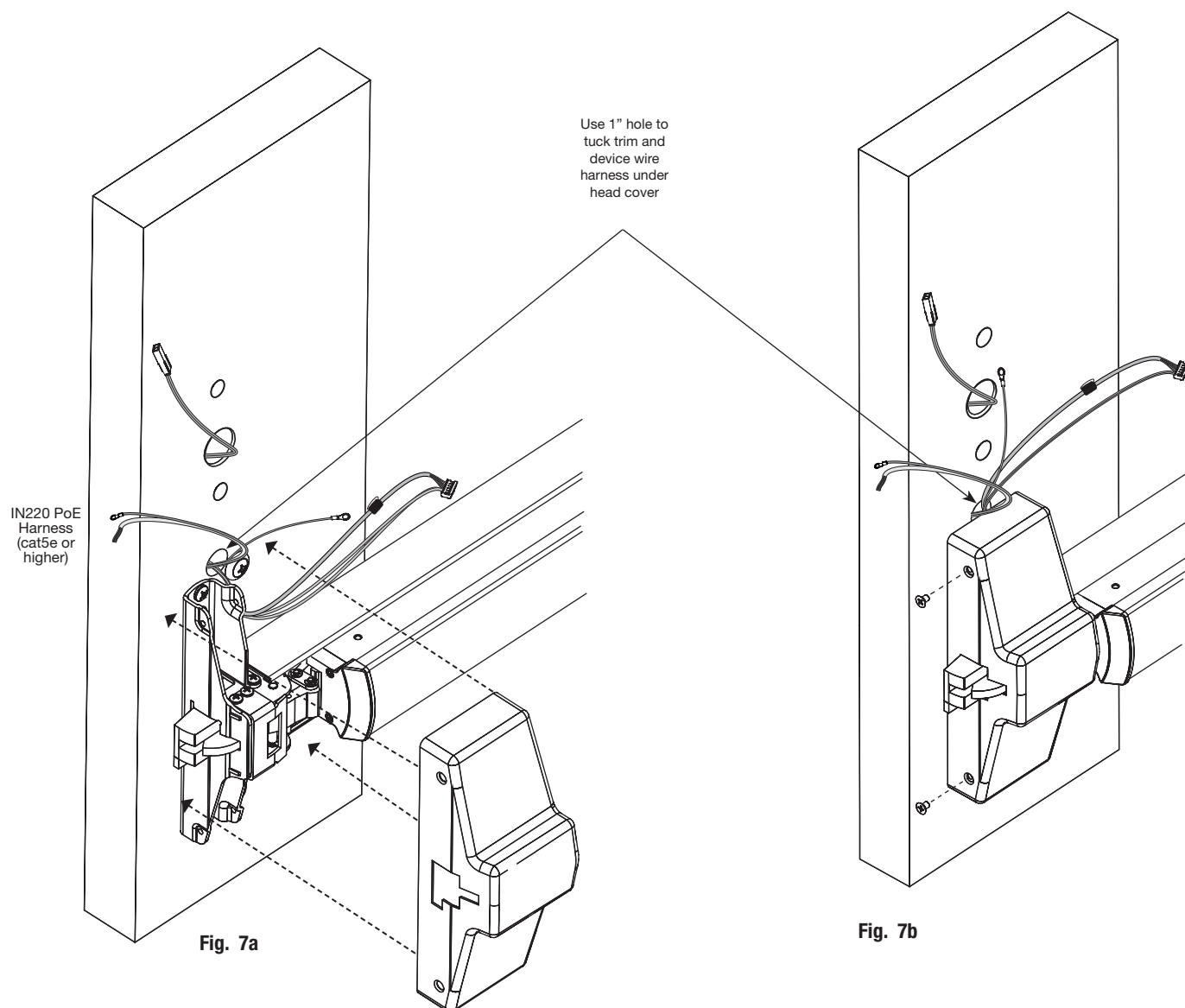
7

Rim Exit Installation Instructions (Continued)

7

Install Head Cover

- a. Lay device wire harnesses across 1" hole (Fig. 7a).
- b. Tuck wires into hole when installing cover so that wires are not pinched between head cover and door.
- c. Attach head cover using (2) #8-32 flat head screws (Fig. 7b).



To complete installation, continue to Section 9 - IN120 / IN220 Installation Instructions

8

Mortise Exit Installation Instructions

1

Verify Hand and Bevel of Door

Door should be fitted and hung.

Verify box label for size of exit device, function and hand.

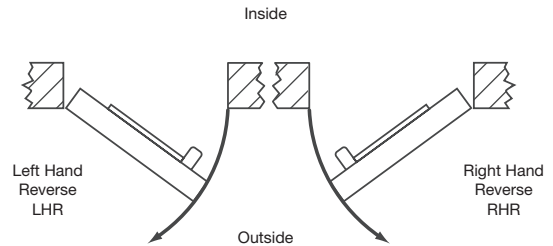


Fig. 8

2

Prep Door

For door manufacturer templates visit www.corbinrusswin.com and reference template # T31237 (Wood).

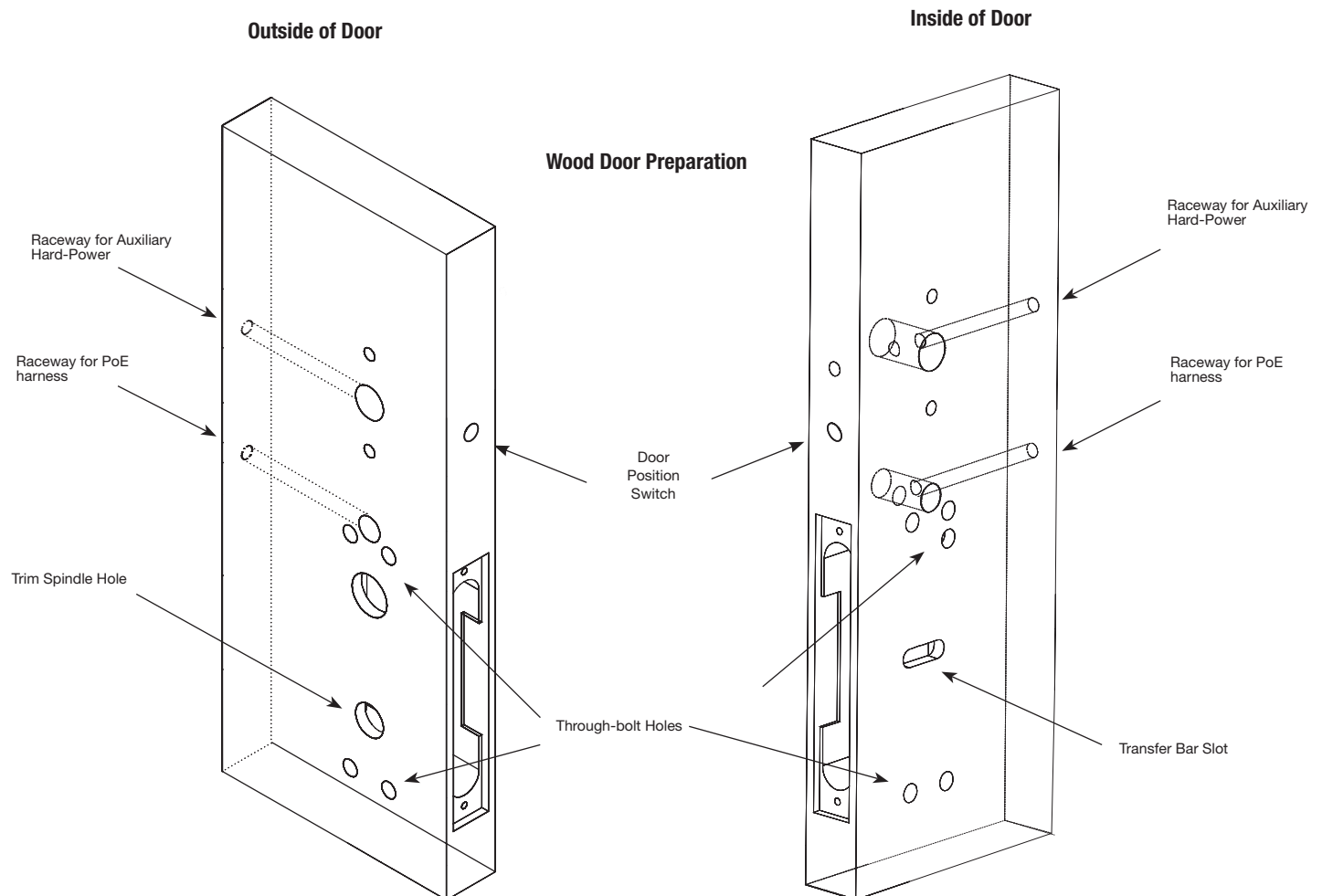


Fig. 9

8

Mortise Exit Installation Instructions (Continued)

3

Install Door Position Switch (DPS)

- a. Insert DPS into the raceway on the latch edge of the door.
- b. Push wires through raceway toward lock prep.
- c. Push DPS firmly into place by hand.
Note: **DO NOT TAP SWITCH WITH ANY TOOL.**
- d. Install magnet into door frame. Push firmly into place by hand.
See instruction **A7983**.

CAUTION: if DPS is not installed or is installed improperly, door status monitoring features will not function.

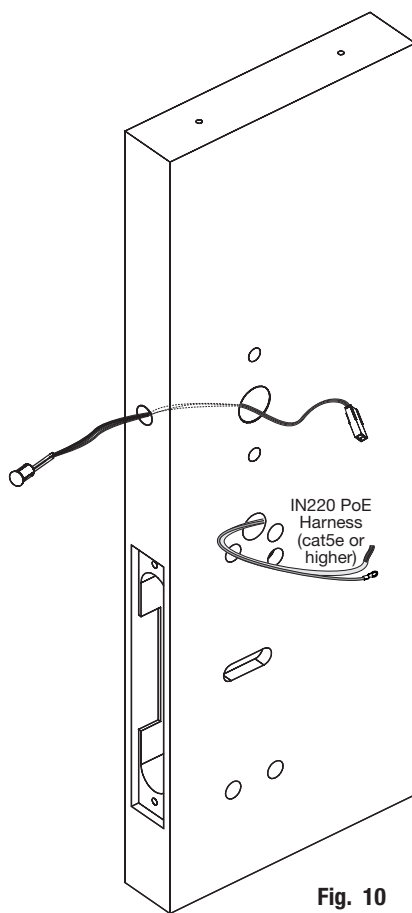


Fig. 10

8

Mortise Exit Installation Instructions (Continued)

4

Install Mortise and Outside Trim Assembly

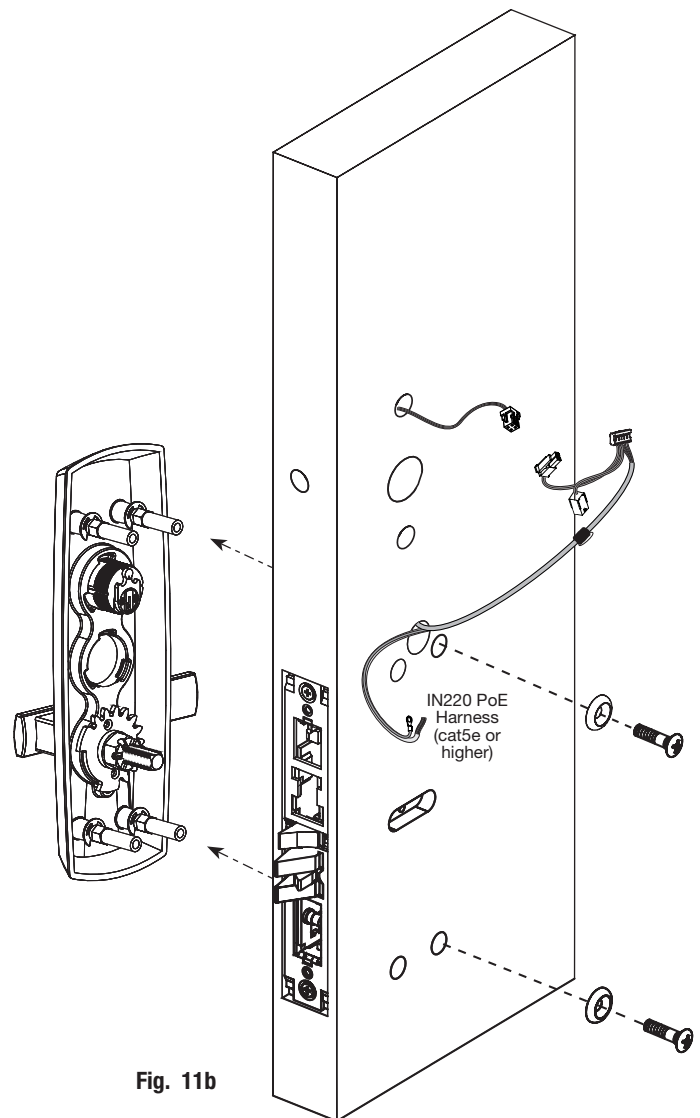
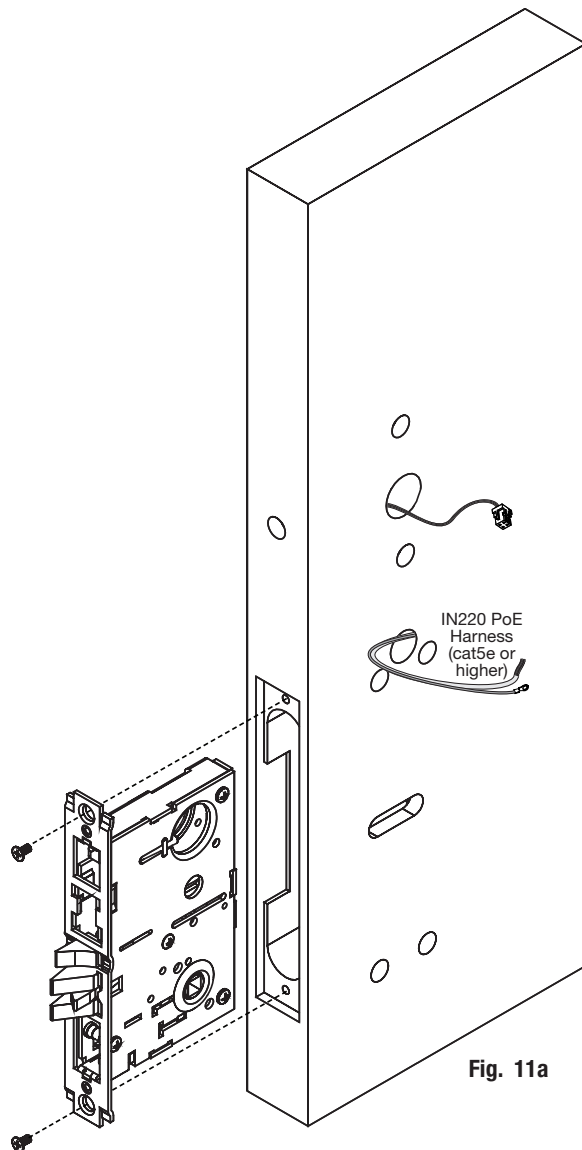
- Insert lock body (Fig. 11a) .
- Feed trim wire harness through wire harness hole.
- Mount trim assembly to door pulling slack wire towards device side of door.

Note: Be careful not to pinch wire harness.

Note: Ensure tailpiece is still oriented vertically.

- Fasten trim assembly to door using (2) 1/4-20 oval head screws and (2) finish washers (Fig. 11b).

Note: Finger tighten only.



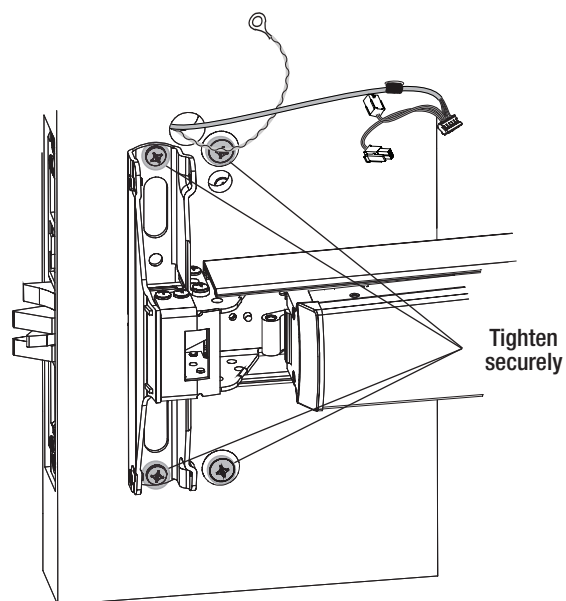
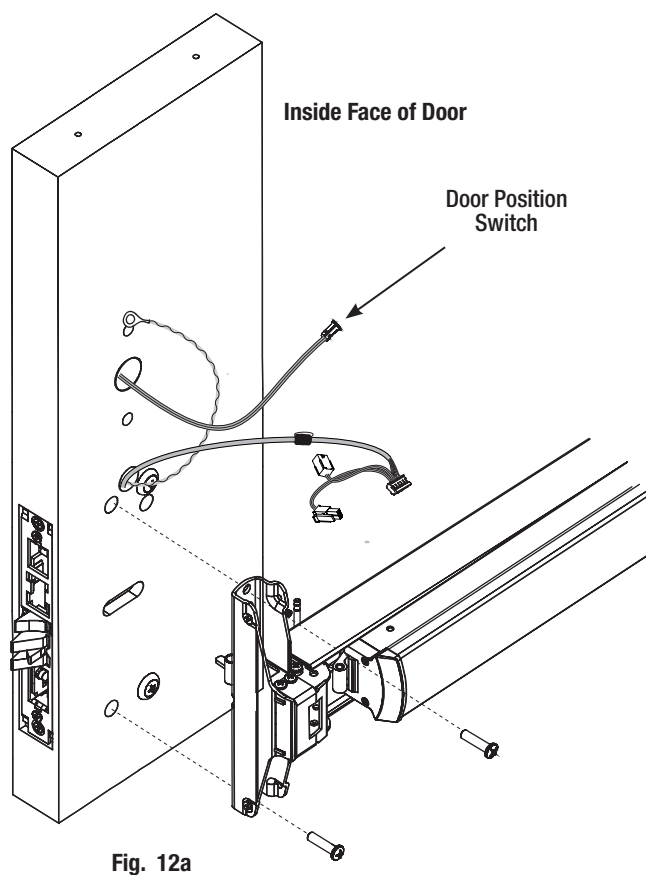
8

Mortise Exit Installation Instructions (Continued)

5

Install Exit Device

- a. Seat device against door being careful to align transfer bar with retractor in lock body - see **Figure 12a**.
- b. Fasten device to trim assembly using (2) 1/4-20 pan head screws (Fig. 12a).
- c. Follow instructions packed with device to secure device to door.
- d. Tighten all (4) screws (Fig. 12b).



8

Mortise Exit Installation Instructions (Continued)

6

Harness Connections

- Connect motor harness adapter to chassis harness connector (Fig. 13).
- Connect rail assembly harness adapter to chassis harness connector (Fig. 13).

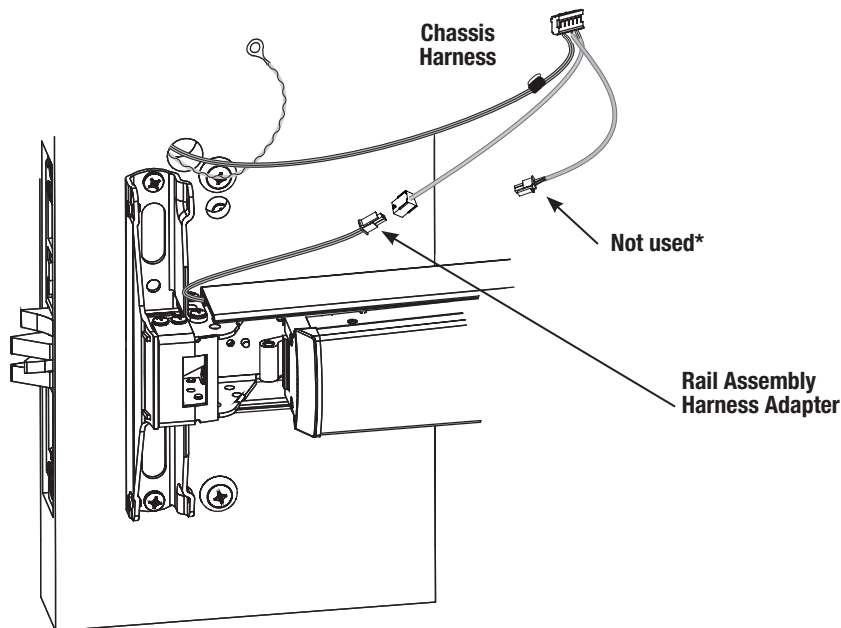


Fig. 13

*Not used in typical installation

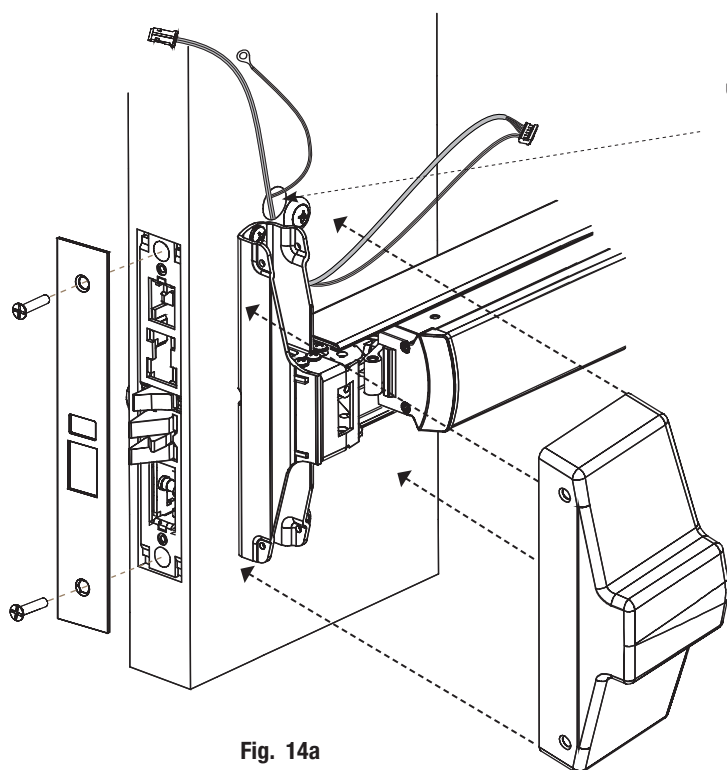
8

Mortise Exit Installation Instructions (Continued)

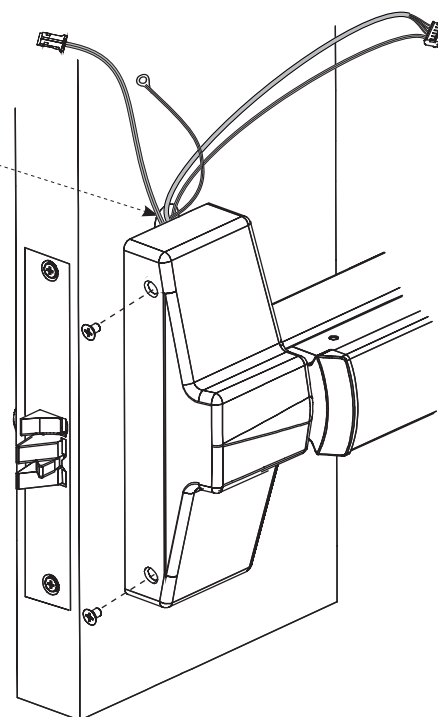
7

Install Head Cover

- a. Lay device wire harnesses across $\frac{3}{4}$ " hole (Fig. 14a).
- b. Tuck wires into hole when installing cover so that wires are not pinched between head cover and door.
- c. Attach head cover using (2) #8-32 flat head screws (Fig. 14b).
- d. Install scalp using (2) 8-32 flat head screws.



Use $\frac{3}{4}$ " hole to
tuck trim and
device wire
harness under
head cover



To complete installation, continue to Section 9 - IN120 / IN220 Installation Instructions

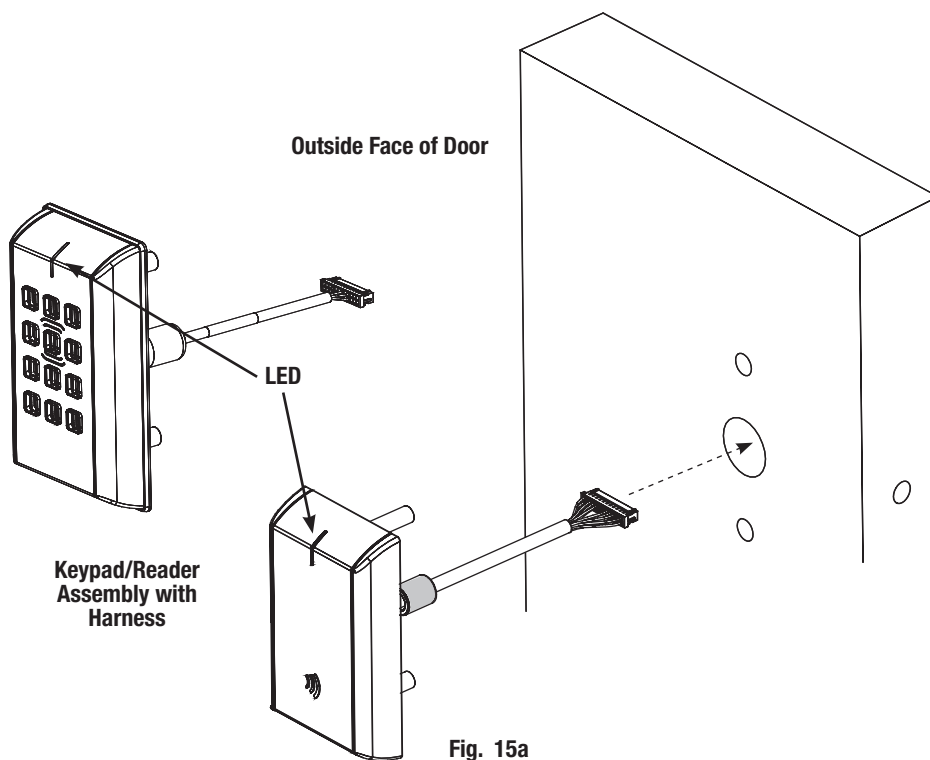
9

IN120 /IN220 Installation Instructions

1

Install Outside Reader

- Orient the reader so the LED lens is at the top.
- Feed the reader harness through the door (from outside to inside).
- Install the reader to the outside of door by aligning the mounting posts with the door preparation holes. Hold the reader flush against door while ensuring proper alignment.



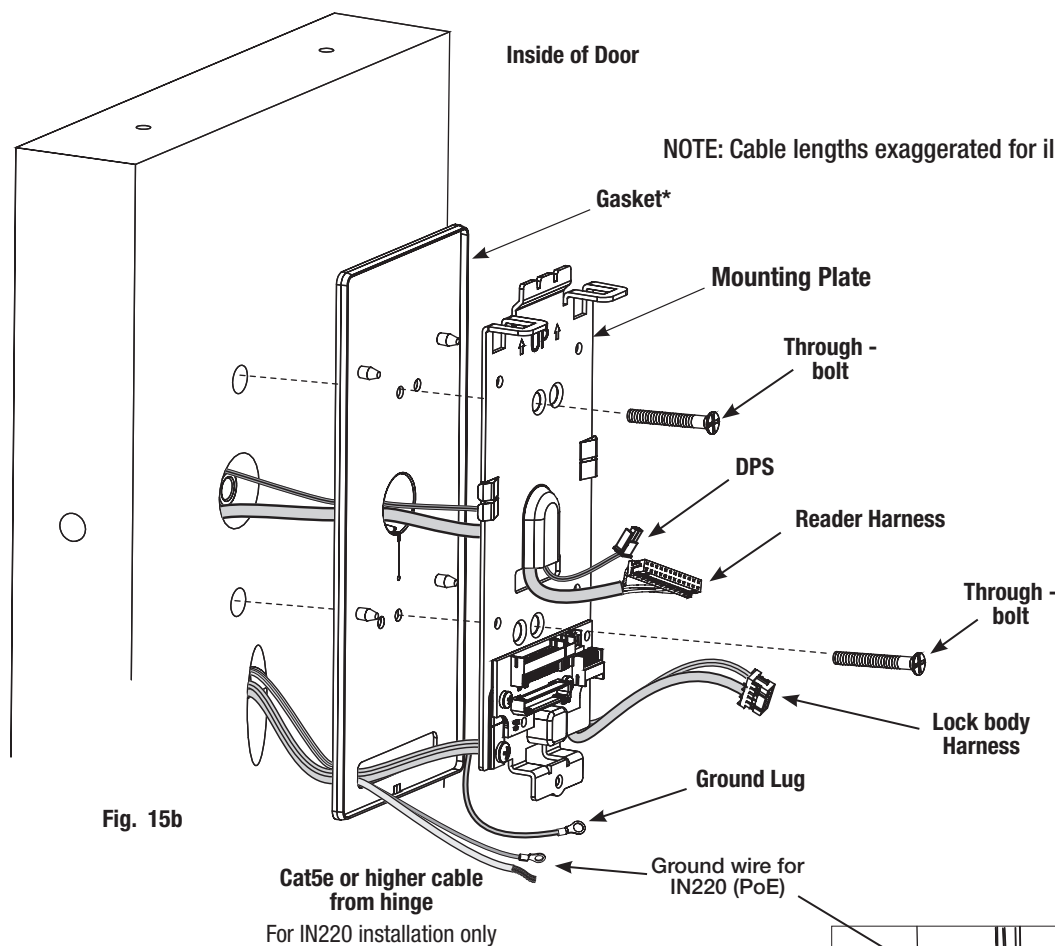
9

IN120 /IN220 Installation Instructions (Continued)

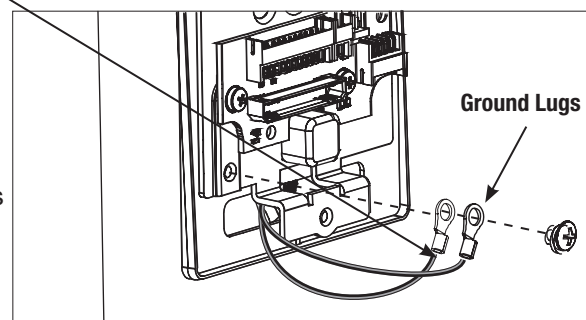
1

Install Outside Reader (Continued)

d. Feed cables/connectors through the inside mounting assembly (and gasket if required*).



- e. When all connections have been made, tuck ferrite bead and excess cable into wire hole on inside of door.
- f. Secure the mounting assembly while ensuring proper alignment of outside reader and tighten the (2) through-bolts on the inside of the door to secure the reader (Fig. 15b).
- g. Secure ground lug(s) with #6-32 machine screw (Fig.15c).



*Gasket is required for outdoor installations.

If installing with gasket; separate gasket from mounting plate to feed cables through holes as indicated (Fig. 1b). Once cables/connectors are fed through, reattach gasket to mounting plate.

Important Note: Before you secure the connectors

CAUTION - Do not allow debris to enter connector contacts

Ensure connectors are covered with silicone dielectric compound (grease)*



- Snip end of packet to dispense grease
- Ensure all connector pins and contacts (Fig. 16a) are covered - **do not overfill or over-apply****

*Supplied tube contains 5 grams of silicone dielectric compound (grease)

**Evenly distribute grease; full application requires approximately 2.5 grams

IMPORTANT: Do not run wires through bottom hole in plate (Fig. 16a, b) - it will damage wires and the controller connector. Route wires around flange, do not route wires through the flange hole (Fig. 16b).

Secure the following connectors (Fig. 16b, c):

- Secure the 4-pin DPS connector.
- Secure the 10-pin lock body assembly connector.

Secure Mounting Plate

- Tuck excess cable into wire hole on inside of door
- Secure the mounting assembly while ensuring proper alignment of outside reader and fully tighten the (2) through-bolts on the inside of the door to secure the reader and plate to the door

- Secure the 24-pin card reader connector (Fig. 16b, c).

- Ensure all openings on back of secured reader connector are covered completely with grease (Fig. 16c).

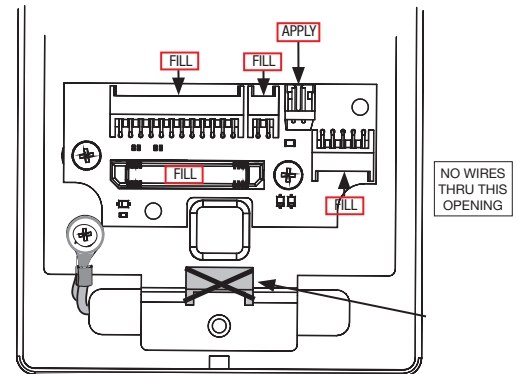


Fig. 16a

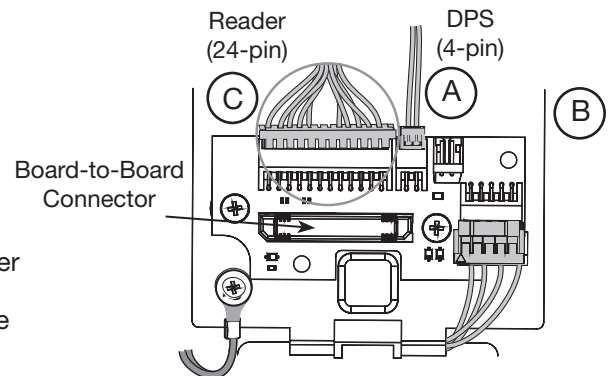


Fig. 16b

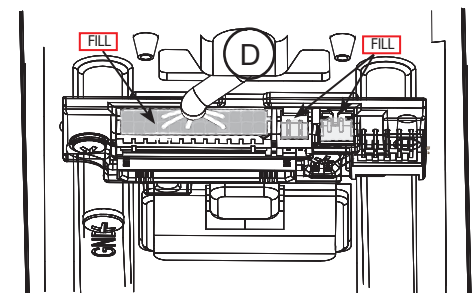


Fig. 16c

9

IN120 /IN220 Installation Instructions (Continued)

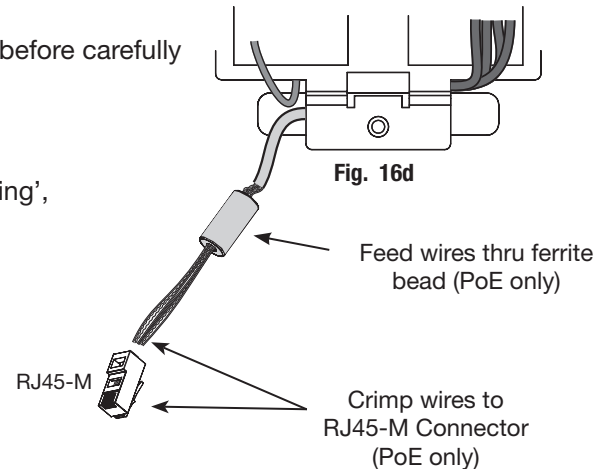
2

Installation of Connectors (Continued)

Important Note: If you are installing IN220 (PoE)*:

- E. Strip Ethernet cable jacket (3) inches.
- F. Separate (untwist) and straighten (8) Ethernet wires before carefully feeding through ferrite bead (Fig.16d).
- G. Crimp RJ45 (male) connector on end of wires.

*For more detail, refer to section (7) 'Installation Wiring',
"A - Frame Harness Installation".



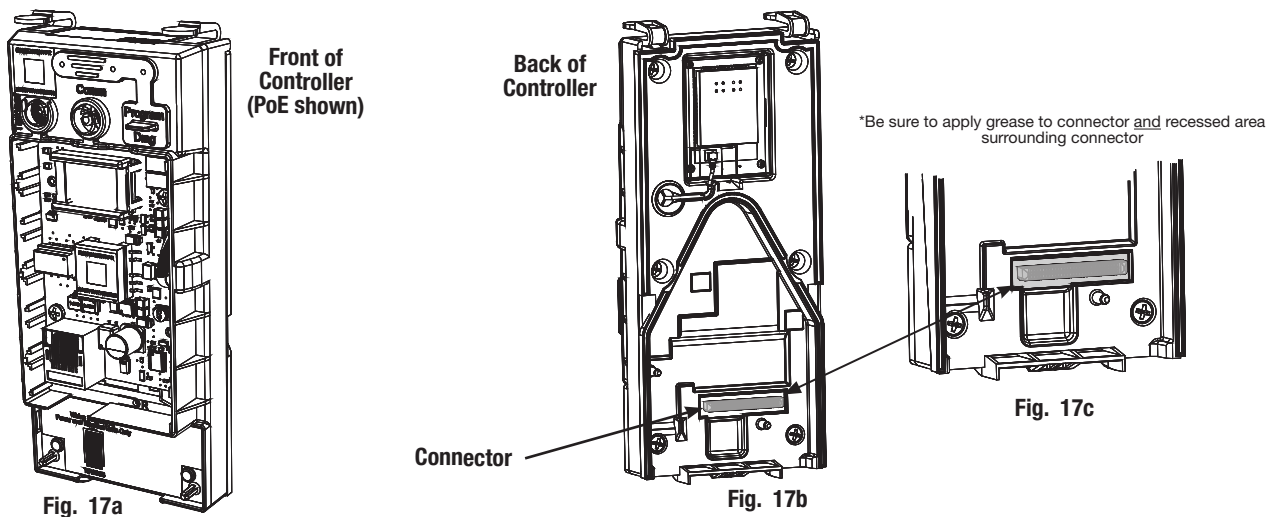
3

Installing the Controller

Important Note: Before you install the controller

Apply dielectric grease to connector* located on back of Controller (FIG. 17b, c).

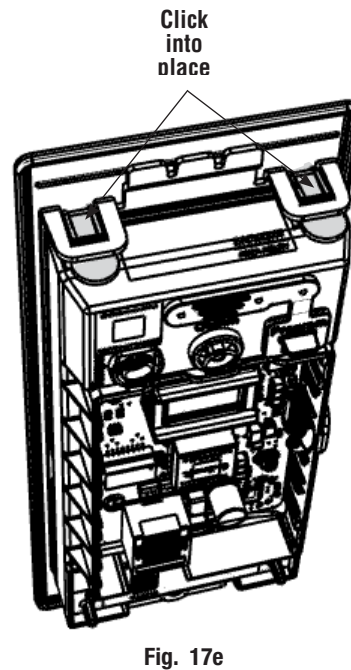
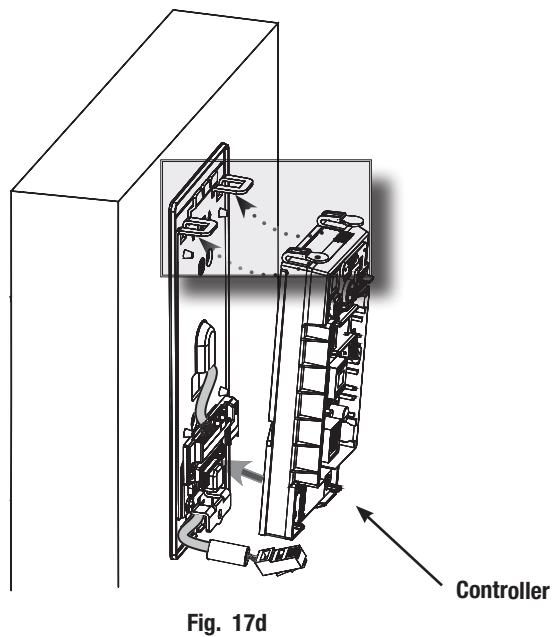
CAUTION - Do not allow debris to enter connector contacts.



Installing the Controller (Continued)

1. Insert bottom tab of controller (ensure a clear path) into slot on mounting plate (Fig. 17d, e).
2. Ensure proper alignment of board-to-board connectors (Fig. 17e) while pivoting controller toward door until two tabs on top click securely into place on mounting plate (Fig. 17d).

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.



9

IN120 /IN220 Installation Instructions (Continued)

4

Supplying Power to the Controller

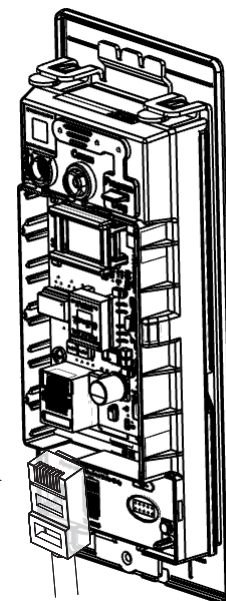
Important - before inserting PoE plug into PoE connector, apply dielectric grease to top of plug, covering the pin area (Fig. 18a).

A. IN220 (PoE)

1. Once controller is securely in place, connect RJ45 male connector to female RJ45 port on controller board (Fig. 18a).
2. If power is enabled, LED will flash and lock motor will cycle.

Apply grease

Fig. 18a



B. IN120(Wi-Fi)

1. Once controller is securely in place, place (6) “AA” alkaline batteries in the compartment, being careful to **align polarity properly**.
2. After batteries are installed, there is a slight delay; LED will flash and the lock motor will cycle.

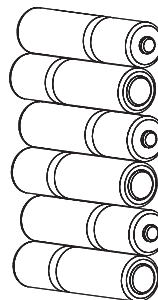
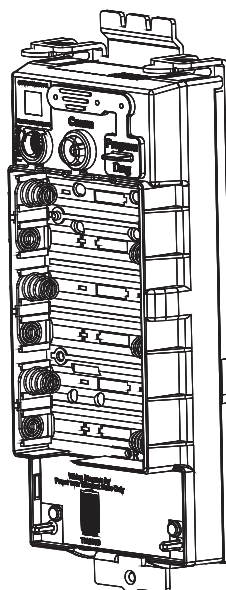


Fig. 18b



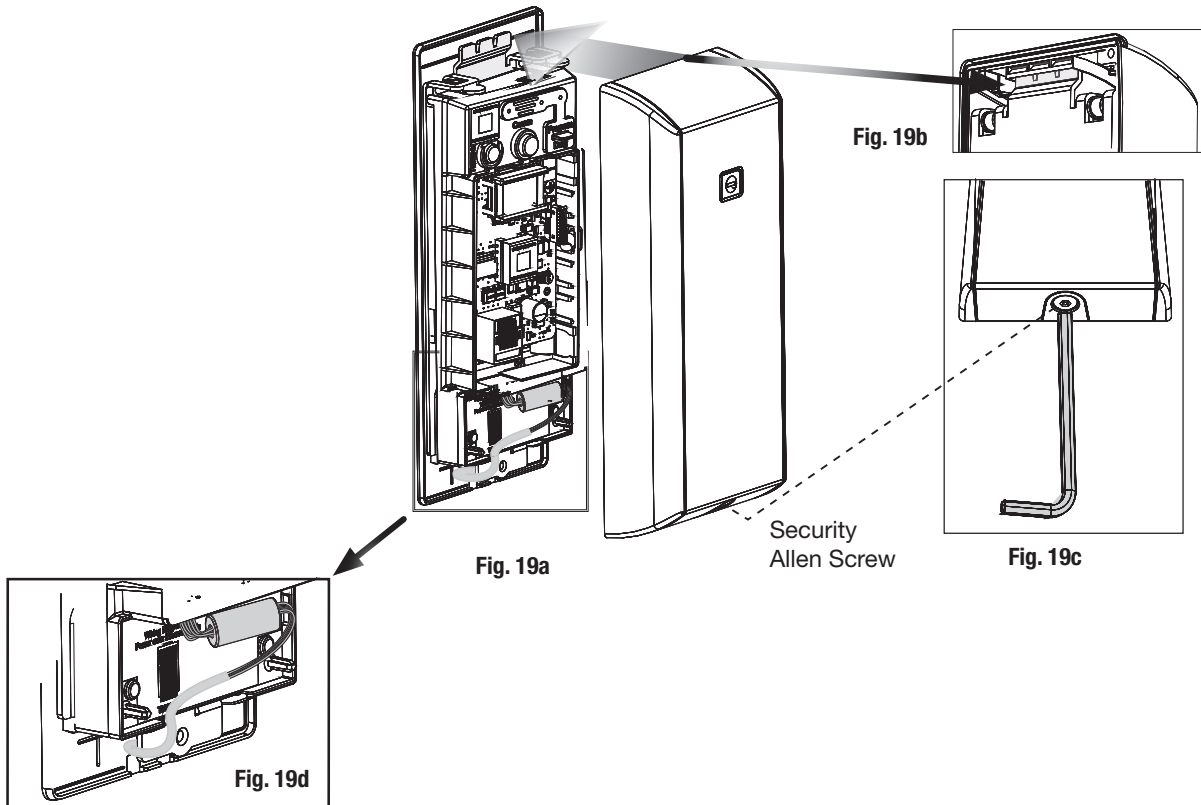
9

IN120 /IN220 Installation Instructions (Continued)

5

Inside Cover Installation

- Assemble cover by hooking top edge on inside mounting plate taking care not to pinch gasket (top edge goes between plate and gasket).
- Carefully press bottom of cover toward door without pinching any wires.
- Secure the cover with a security allen wrench.



10

Operational Check

When lock is fully installed, perform the following steps:

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

- a. Insert key into cylinder and rotate.
- b. There should be no friction against lock case, wire harness or any other obstructions.
- c. Check that the key retracts the latch.
- d. The key should rotate freely.
- e. Try the inside lever; ensure it retracts latch.

Note: The credential should approach the inscription on the reader as indicated (Fig. 15) to ensure that the credential is read properly.

Do not wave credential.

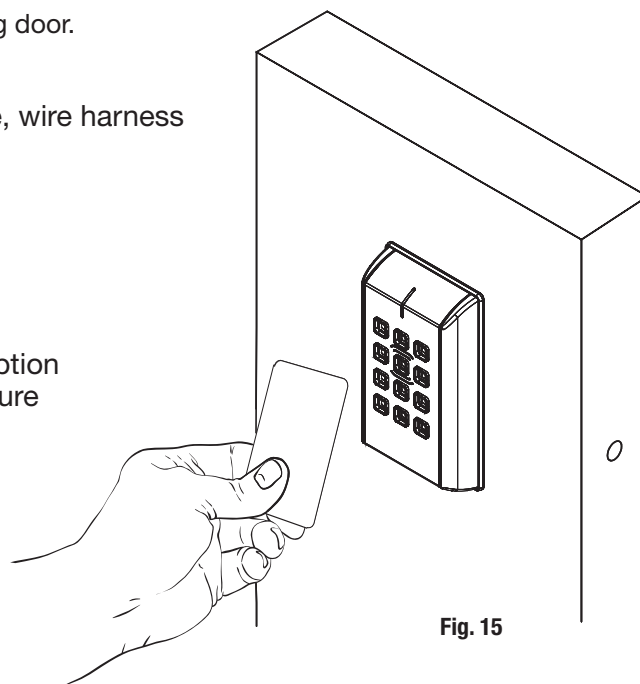


Fig. 15

In all cases, perform the following checks:

- 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.

LED signaling:

- After using a valid credential a green flash followed by motor unlock indicates normal operation (lock unlocks)
- After using a valid credential a green flash followed by 4 beeps and 4 fast purple flashes – indicates low power. Check the input voltage.
- If the input voltage is low, disconnect lock from power source and check power source voltage. If power source voltage is correct, inspect lock wiring for a possible short.
- If the lock loses power, it will flash rapid blue for approximately one minute. Lock will default to programmed fail safe or fail secure.
- After that, the lock will no longer be functional.

When you have completed the tests, close the door, ensuring latchbolt fully extends into strike plate without binding.

*Refer to Lock Configuration Tool user manual (WFMN1) for information on how to configure and program locks.

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