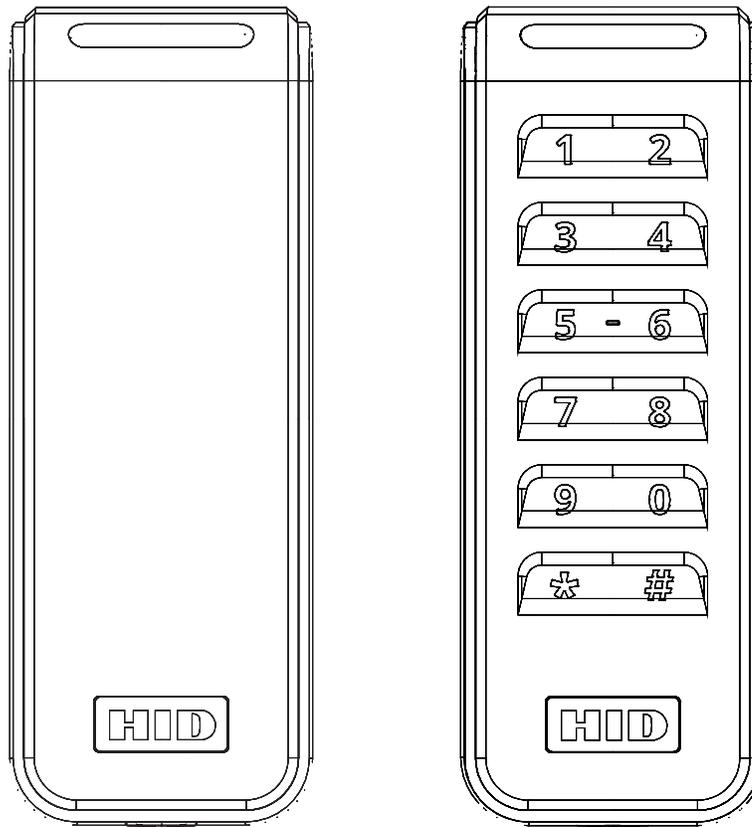


Installation Instructions

SN200 Wiegand SN210 OSDP

ED5000 Series 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.

For specific security information, please contact your local ASSA ABLOY Door Security Solutions sales consultant or call 800-810-9473.

Contents

| | |
|---|----|
| 1. Regulatory Compliance | 3 |
| 2. General Description | 4 |
| 3. Specifications / Features | 4 |
| 4. Product Illustrations | 7 |
| 5. Wiring Diagrams | 9 |
| 6. Install Door | 13 |
| 7. MELR Exit Device Configuration and Operational Check | 26 |
| 8. Install Door Position Switch | 27 |
| 9. Operational Check | 27 |

1. Regulatory Compliance

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.

Innovation, Science and Economic Development Canada:

Under Innovation, Science and Economic Development 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'Innovation, Sciences et Développement économique 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). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Ce dispositif contient des émetteurs/récepteurs exemptés de licence conformes aux RSS d'Innovation, Sciences et Développement économique Canada. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée à le dispositif.

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 ASSA ABLOY Access and Egress Hardware Group, Inc. 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. General Description

The Corbin Russwin SN200/210 Series brings the latest in security and versatility to our Integrated Wired access control solutions. Featuring Signo Reader Technology from HID Global®, the SN200/210 Series is ideal for mixed credential environments and enables easy migration to higher security credentials and mobile access. Available with either a keypad or non-keypad reader, the SN200/210 offers the convenience of using card or PIN for authentication; or for added security, card plus PIN allowing dual-factor authentication.

The SN200 is available with Wiegand communication protocol while the SN210 communicates via Open Supervised Device Protocol (OSDP) allowing for secure channel serial communication between the reader and the access control system.

The SN200/210 reader provides visual (LED) and audible indicators of lock state (locked/unlocked). Backed by Corbin Russwin's Grade 1 hardware, the exit device comes with touch bar monitoring (REX) and is provided with an external Door Position Switch (DPS).

3. Specifications/ Features

- Door Thickness – 1-3/4" Standard; Can be furnished for other door thicknesses upon request. Consult factory.
- Outside lever controlled by reader or key allows lever to retract latch.
- Inside push bar produces REX (request to exit) signal and retracts latch.
- Fail Safe or Fail Secure Operation (must specify).
- UL fire listed available.
- UL Listed* - UL 294 Indoor Use.
- CUL Listed - S319: Class 1.
- ANSI/BHMA A156.25 Listed Grade 1 Compliant.
- *UL294, S319, & BHMA A156.25 not applicable to SN200 with Non-UL294 Configuration option.
- UL294 Access Control Ratings.

| | |
|--------------------|----------|
| Destructive Attack | Level I |
| Line Security | Level I |
| Endurance | Level IV |
| Standby Power | Level I |

***UL testing was conducted on product powered by
UL Listed model 9001GR/AC injector; manufactured by Microsemi Corp.**

- Wires directly to EAC panels
- Wire from EAC Panel to door must be shielded with a drain. Drain terminated at EAC Panel controller.



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.

3. Specifications/ Features (continued)

2.4 GHz credential compatibility

• Secure Identity Object™ (SIO) on Mobile IDs (Bluetooth Smart)

• 13.56 MHz credential compatibility

• Secure Identity Object™ (SIO) on iCLASS Seos, iCLASS SE/SR, MIFARE DESFire EV1/EV2/EV3 and MIFARE Classic (on by default).

• Standard iCLASS Access Control Application, ISO14443A (MIFARE) CSN, ISO14443B CSN, and ISO15693 CSN

• Apple Wallet

• NFC-enabled mobile phones

125 kHz credential compatibility

HID Prox®, AWID, EM4102

For Mobile Credential-Enabled versions of this electronic lock (Indicated by “BIPS or BIKPS” in the product order string)

Supports multiple credential formats

• 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 on Google Play or from the App Store.

Electrical Specifications

- 12/24VDC System

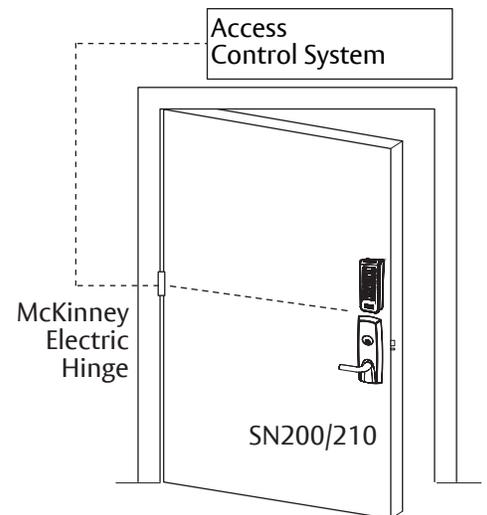
| 12/24VDC System | | | | |
|-----------------|---------|-------|---------|-------|
| | 12V | | 24V | |
| | Average | Peak | Average | Peak |
| Reader** | 75mA | 250mA | n/a | n/a |
| Actuator | 15mA | 500mA | 15mA | 500mA |

**Maximum AVG-RMS current draw during continuous card reads

Not evaluated by UL.

Peak- highest instantaneous current draw during RF communication

Note: The reader requires 12VDC for power, while the lock accepts either 12 or 24VDC.



3. Specifications/ Features (continued)

Electrical Specifications (continued)

- Wire Gauge Chart 12VDC

| Total One-Way Length of Wire Run (ft) | Load Current @ 12VDC | | | | | | | |
|---------------------------------------|------------------------|------|------|----|--------|--------|----|----|
| | Wire Gauge Chart 12VDC | | | | | | | |
| | 1/4A | 1/2A | 3/4A | 1A | 1-1/4A | 1-1/2A | 2A | 3A |
| 100 | 20 | 18 | 16 | 14 | 14 | 12 | 12 | 10 |
| 150 | 18 | 16 | 14 | 12 | 12 | 12 | 10 | — |
| 200 | 16 | 14 | 12 | 12 | 10 | 10 | — | — |
| 250 | 16 | 14 | 12 | 10 | 10 | 10 | — | — |
| 300 | 16 | 12 | 12 | 10 | 10 | — | — | — |
| 400 | 14 | 12 | 10 | — | — | — | — | — |
| 500 | 14 | 10 | 10 | — | — | — | — | — |
| 750 | 12 | 10 | — | — | — | — | — | — |
| 1,000 | 10 | — | — | — | — | — | — | — |
| 1,500 | 10 | — | — | — | — | — | — | — |

| Total One-Way Length of Wire Run (ft) | Load Current @ 24VDC | | | | | | | |
|---------------------------------------|------------------------|------|------|----|--------|--------|----|----|
| | Wire Gauge Chart 24VDC | | | | | | | |
| | 1/4A | 1/2A | 3/4A | 1A | 1-1/4A | 1-1/2A | 2A | 3A |
| 100 | 24 | 20 | 18 | 18 | 16 | 16 | 14 | 12 |
| 150 | 22 | 18 | 16 | 16 | 14 | 14 | 12 | 10 |
| 200 | 20 | 18 | 16 | 14 | 14 | 12 | 12 | 10 |
| 250 | 18 | 16 | 14 | 14 | 12 | 12 | 12 | 10 |
| 300 | 18 | 16 | 14 | 12 | 12 | 12 | 10 | — |
| 400 | 18 | 14 | 12 | 12 | 10 | 10 | — | — |
| 500 | 16 | 14 | 12 | 10 | 10 | — | — | — |
| 750 | 14 | 12 | 10 | 10 | — | — | — | — |
| 1,000 | 14 | 10 | 10 | — | — | — | — | — |
| 1,500 | 12 | 10 | — | — | — | — | — | — |

**Recommended wire specifications for OSDP: Four (4) conductor twisted pair overall shield such as UL approved, Belden 3107A or equivalent is recommended to remain fully TIA-485 compliant at maximum supported baud rates and cable distances. Belden 82842, Liberty Wire & Cable 24-29_P485-WHT, West Penn Wire D254852, and CAT6 cable have been found to be suitable in typical applications and installations, including lower baud rates and cabling distances.

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

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.

Both reader and actuator current must be taken into account when determining wire length and gauge. OSDP installations may be more limited due to fewer cable options.

For OSDP cable lengths greater than 200 ft (61 m) or EMF interference, install 120Ω +/- 2Ω resistor across RS-485 termination ends.

SN200 Wiegand SN210 OSDP

ED5000 Series Exit Device

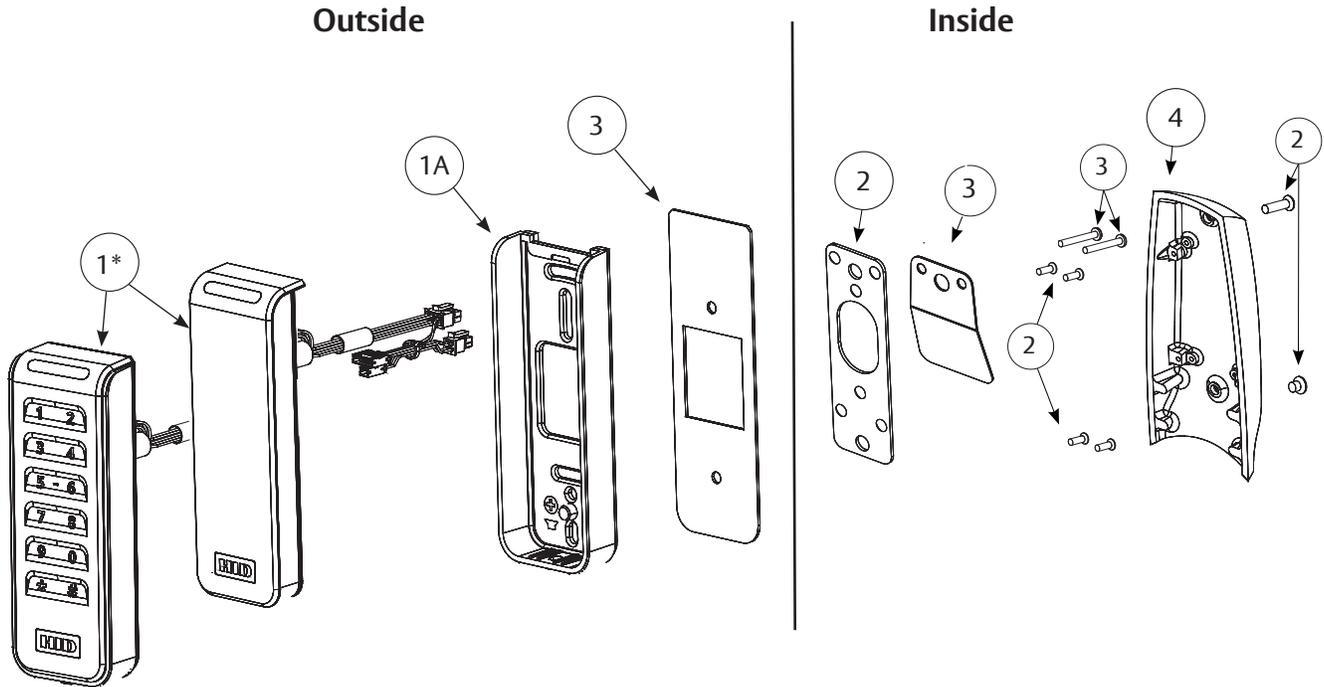
Installation Instructions



ASSA ABLOY

4. Product Illustrations

Rim/CVR/Mortise

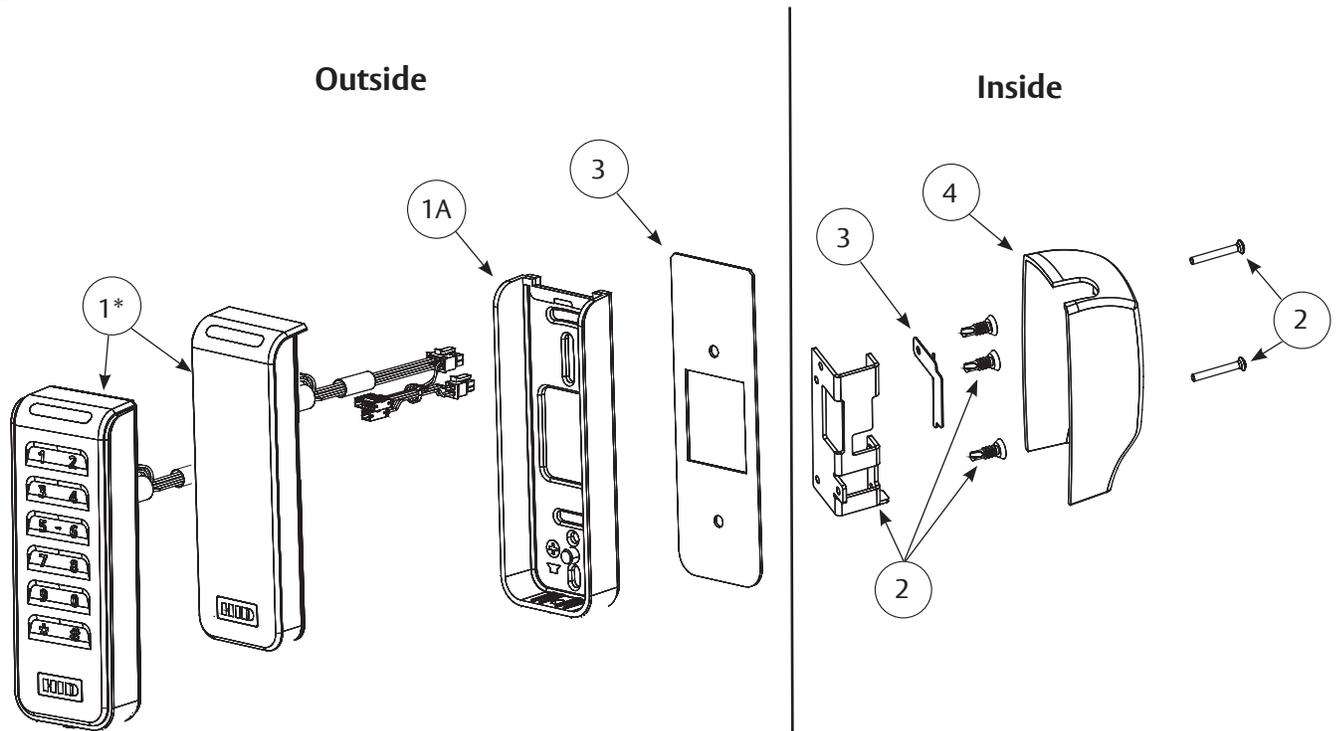


| Item | Description | |
|-------------------------------------|--|---|
| 1* | SN200 Reader & Harness Assembly (Wiegand/OSDP) | 1 |
| 1A | Signo Reader Back Plate | 1 |
| 2 | Mounting Packet | 1 |
| 3 | Fire Plate Packet | 1 |
| 4 | Inside Escutcheon | 1 |
| See document FM643 for part numbers | | |

- Tools Required:
 - a. #2 Phillips Screwdriver (Standard size)
 - b. Flat Blade Screwdriver (Standard size)
 - c. 1/8" Allen Wrench
 - d. TR10 Torx Security Screwdriver

4. Product Illustrations (continued)

SVR



| Item | Description | |
|-------------------------------------|--|---|
| 1* | SN200 Reader & Harness Assembly (Wiegand/OSDP) | 1 |
| 1A | Signo Reader Back Plate | 1 |
| 2 | Mounting Packet | 1 |
| 3 | Fire Plate Packet | 1 |
| 4 | Inside Escutcheon | 1 |
| See document FM643 for part numbers | | |

- Tools Required:
 - a. #2 Phillips Screwdriver (Standard size)
 - b. Flat Blade Screwdriver (Standard size)
 - c. 1/8" Allen Wrench
 - d. TR10 Torx Security Screw Driver

5. Wiring Diagrams

| Product | 8 PIN CONNECTOR | | | | | | | | 4 PIN CONNECTOR | | | |
|---|-----------------|--------|--------------------|--------------|-----------|---------|----------|-----------|-----------------------|---------|---------|--------|
| | 1-Black | 2- Red | 3- White | 4- Green | 5- Orange | 6- Blue | 7- Brown | 8- Yellow | 1- Violet | 2- Gray | 3- Pink | 4- Tan |
| ACCESS CONTROL DEVICES: SN200/210 Lockset, Electrolynx wire Color/ Function assignments | | | | | | | | | | | | |
| | 12 VDC (Reader) | | Communication Type | | RX | RX | EGND | Function* | 12/24VDC (LOCK RELAY) | | DPS | DPS |
| SN200 (UL294) | NEG | POS | WIEGAND DATA_1 | | NO | COM | EGND | TAMPER | NEG | POS | NC | COM |
| SN200 | | | GREEN RED | | | | | | | | | |
| SN210 | | | n/a | | | | | | | | | |
| | | | OSDP RS-485B | OSDP RS-485A | | | | | | | | |

Note: If your lock is configured with End of Line Resistors, reference instruction sheet FM406 for the wiring of RX & DPS outputs.

Wiegand Operation Mode

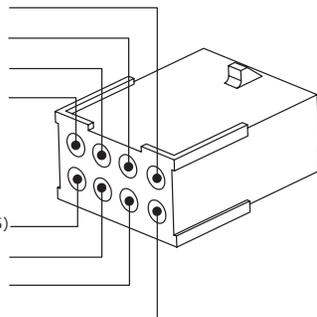
- Red LED 'ON' when powered.
- Presenting a 13.56MHz or 125 kHz credential causes LED to briefly turn green and then return to red state.

UL294/ TAMPER Configuration

- Connect Yellow TAMPER wire from Electrolynx cable to desired EAC panel control line. Reference Diagram #1.
- As appropriate, use the configuration card to activate desired mode on reader.

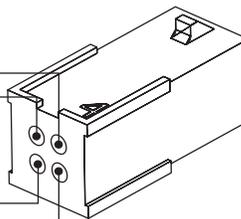
PIN 8 (Yellow – TAMPER)
 PIN 6 (Blue – RX COM)
 PIN 4 (Green – DATA_0)
 PIN 2 (Red – Reader POS)

PIN 1 (Black – Reader NEG)
 PIN 3 (White – DATA_1)
 PIN 5 (Orange – RX NO)
 PIN 7 (Brown – EGND)



PIN 4 (Tan – DPS COM)
 PIN 2 (Gray – Lock POS)

PIN 1 (Violet – Lock NEG)
 PIN 3 (Pink – DPS NC)



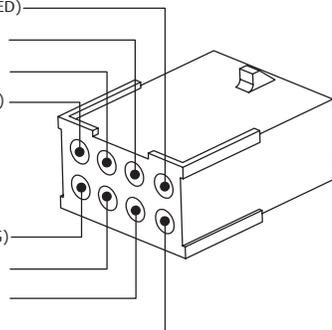
Note: NC= Normally Closed
 NO= Normally Open

Non-UL294 Configuration

- Connect GREEN_LED input to switch controlled by panel. Shorting GREEN_LED to READER_NEG (Black) with panel switch will override reader LED to keep it green.

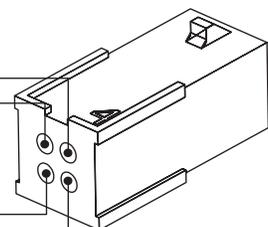
PIN 8 (Yellow – GREEN_LED)
 PIN 6 (Blue – RX COM)
 PIN 4 (Green – DATA_0)
 PIN 2 (Red – Reader POS)

PIN 1 (Black – Reader NEG)
 PIN 3 (White – DATA_1)
 PIN 5 (Orange – RX NO)
 PIN 7 (Brown – EGND)



PIN 4 (Tan – DPS COM)
 PIN 2 (Gray – Lock POS)

PIN 1 (Violet – Lock NEG)
 PIN 3 (Pink – DPS NC)



5. Wiring Diagrams (continued)

SN200 Wiegand UL294/TAMPER Configuration Application Diagram #1

Note: Tamper will trigger when reader is removed from door and tamper wiring is connected at the panel.

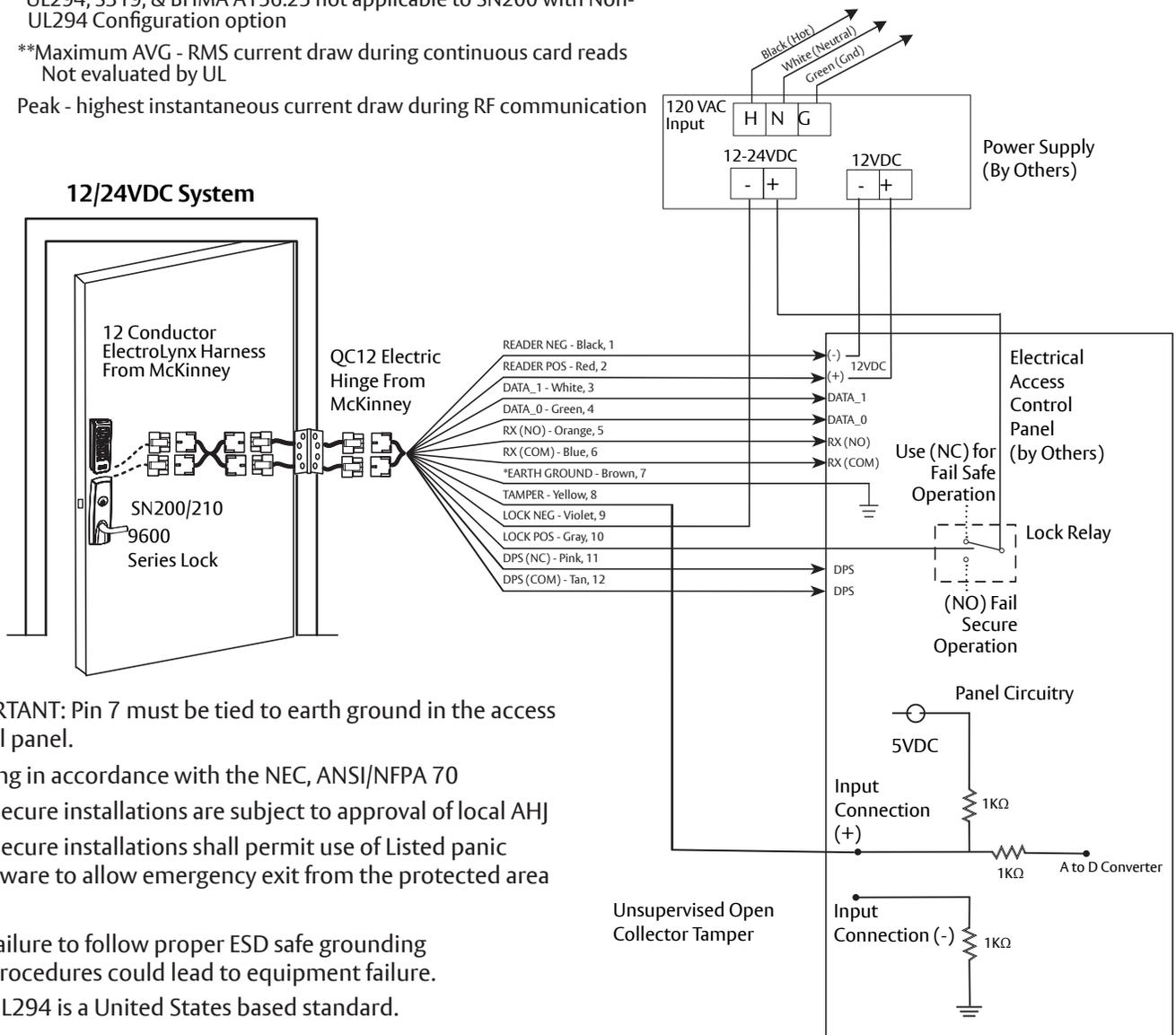
Reader Electronics Requires 12VDC Filtered and Regulated

| | 12V | | 24V | |
|---------------|---------|-------|---------|-------|
| | Average | Peak | Average | Peak |
| Reader** | 75mA | 250mA | n/a | n/a |
| Actuator (ET) | 15mA | 500mA | 15mA | 500mA |

*UL294, S319, & BHMA A156.25 not applicable to SN200 with Non-UL294 Configuration option

**Maximum AVG - RMS current draw during continuous card reads
Not evaluated by UL

Peak - highest instantaneous current draw during RF communication



***IMPORTANT:** Pin 7 must be tied to earth ground in the access control panel.

- Wiring in accordance with the NEC, ANSI/NFPA 70
- Fail secure installations are subject to approval of local AHJ
- Fail secure installations shall permit use of Listed panic hardware to allow emergency exit from the protected area



Failure to follow proper ESD safe grounding procedures could lead to equipment failure. UL294 is a United States based standard.

SN200 Wiegand SN210 OSDP

ED5000 Series Exit Device

Installation Instructions



ASSA ABLOY

5. Wiring Diagrams (continued)

SN200 Wiegand UL294/TAMPER Configuration Application Diagram #2

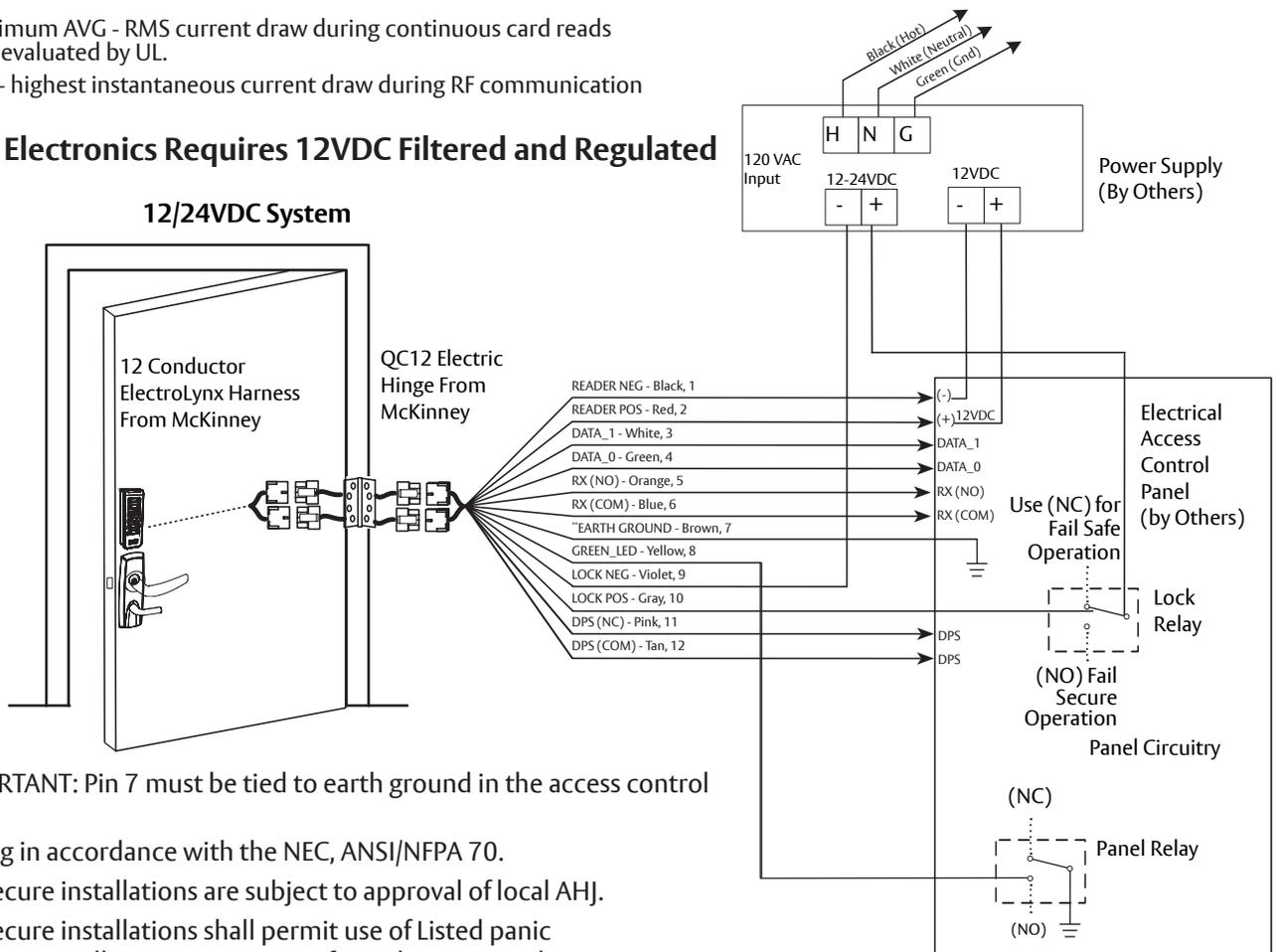
- Connect GREEN_LED input to switch controlled by panel. Shorting GREEN_LED to READER_NEG (Black) with panel switch will override reader LED to keep it green.

| | 12V | | 24V | |
|---------------|---------|-------|---------|-------|
| | Average | Peak | Average | Peak |
| Reader** | 75mA | 250mA | n/a | n/a |
| Actuator (ET) | 15mA | 500mA | 15mA | 500mA |

*Maximum AVG - RMS current draw during continuous card reads
Not evaluated by UL.

Peak - highest instantaneous current draw during RF communication

Reader Electronics Requires 12VDC Filtered and Regulated



**IMPORTANT: Pin 7 must be tied to earth ground in the access control panel.

- Wiring in accordance with the NEC, ANSI/NFPA 70.
- Fail secure installations are subject to approval of local AHJ.
- Fail secure installations shall permit use of Listed panic hardware to allow emergency exit from the protected area.
- UL294 is a United States based standard.



Failure to follow proper ESD safe grounding procedures could lead to equipment failure.
UL294 is a United States based standard.

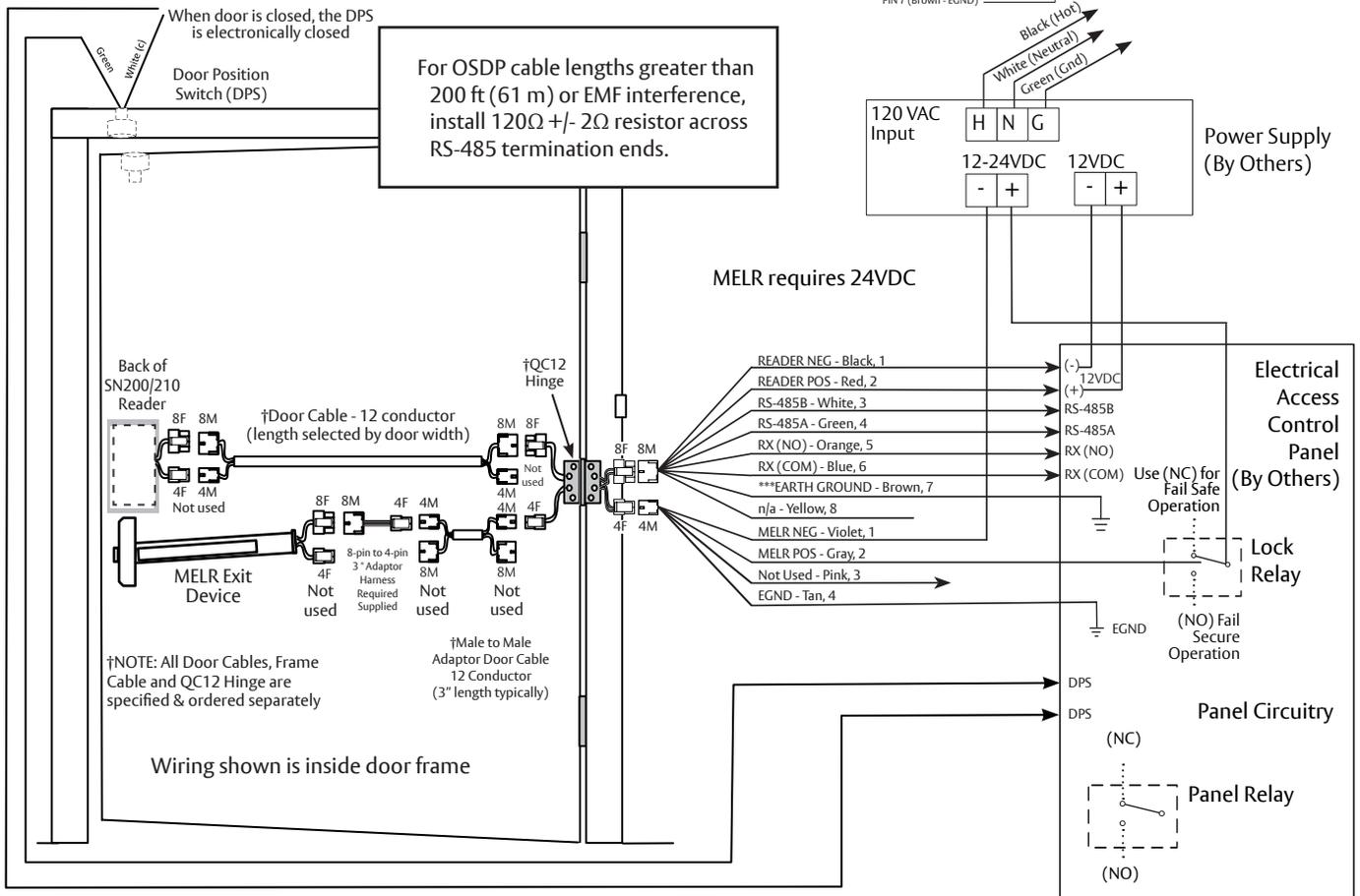
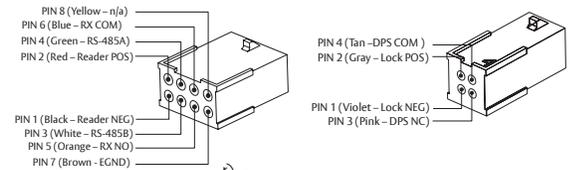
5. Wiring Diagrams (continued)

SN210 OSDP (MELR) Application Diagram #3 (12/24VDC System)

| | 12V | | 24V | |
|---------------|---------|-------|---------|-----------------------------------|
| | Average | Peak | Average | Peal |
| Reader** | 75mA | 250mA | n/a | n/a |
| Actuator (ET) | 15mA | 500mA | 15mA | 500mA |
| MELR | n/a | n/a | 250mA | 1A inrush 600mA during retraction |

OSDP Operation Mode*

*LED/Sounder control and Tamper status communicated over OSDP serial protocol



***IMPORTANT: Pin 7 must be tied to earth ground in the access control panel.

- Wiring in accordance with the NEC, ANSI/NFPA 70
- Fail secure installations are subject to approval of local AHJ
- Fail secure installations shall permit use of Listed panic hardware to allow emergency exit from the protected area.

For OSDP cable lengths greater than 200 ft (61 m) or EMF interference, install 120Ω +/- 2Ω resistor across RS-485 termination ends.



Failure to follow proper ESD safe grounding procedures could lead to equipment failure.

6. Install Door

Verify Hand Bevel of Door

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

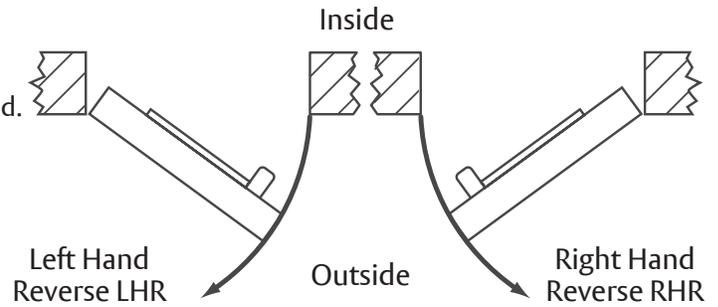


Figure 1

Prep Door according to Door Marker

- Outside
 - FM382 for Rim/SVR/CVR
 - FM386 for Mortise.
- Inside
 - FM387

Note: Reference the following instructions for rail installation:

- FM156 Rim (standard)
- FM532 Rim (Secure Bolt®)
- FM164 SVR
- FM171 CVR
- FM168 Mortise

| TEMPLATES* | | |
|------------|--------|--------|
| Rim | T31215 | T31216 |
| CVR | T31215 | T31216 |
| SVR | T31218 | T31219 |
| Mortise | T31217 | |

*For door manufacturer templates visit www.corbinrusswin.com and reference template numbers.

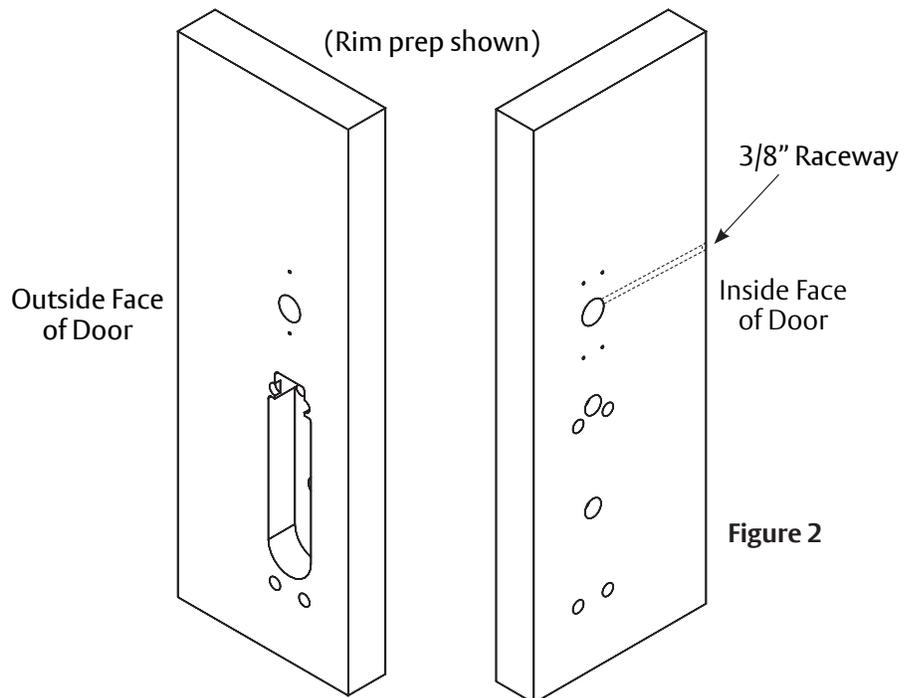


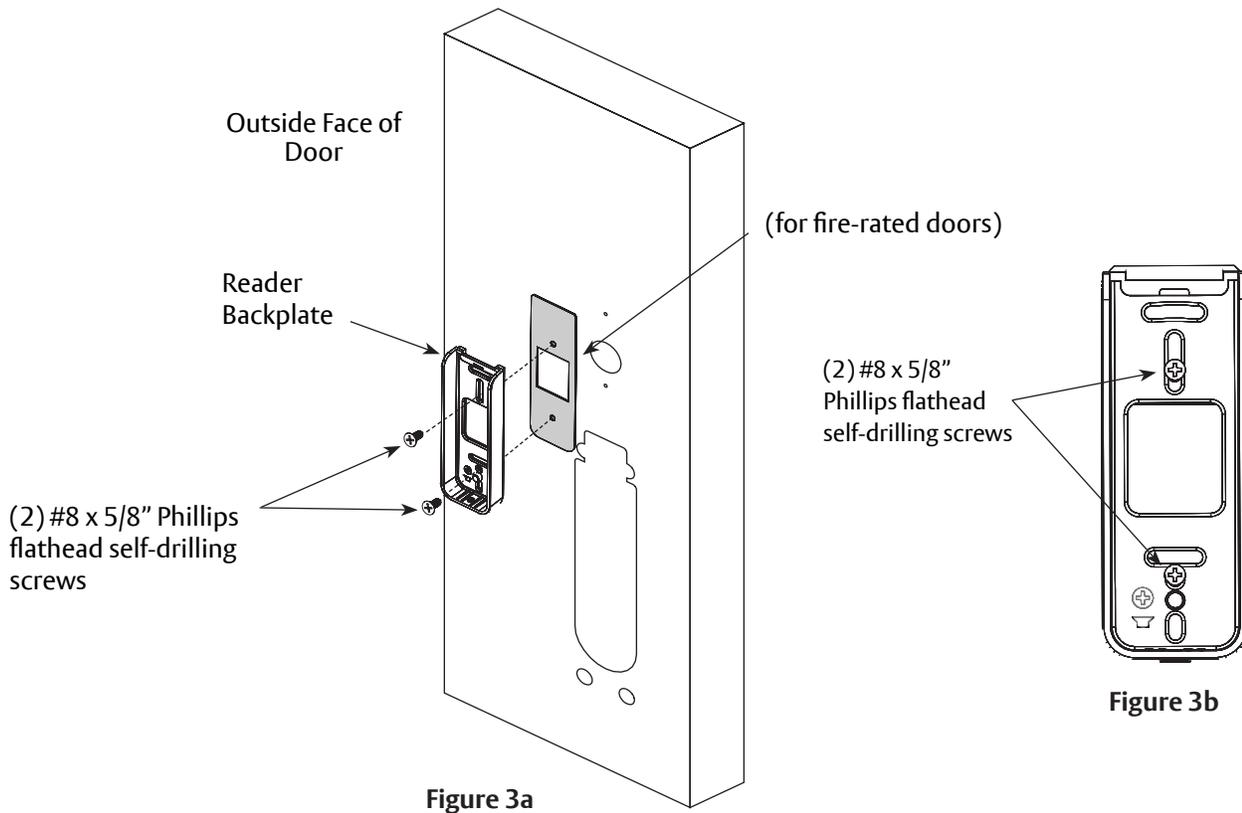
Figure 2

6. Install Door (continued)

Install Reader Backplate and (optional*) Fire Shield

For fire-rated doors only

1. Install reader backplate and fire shield to door using two (2) #8-18 x 5/8" Phillips flat head self-drilling screws (Figure 3a and 3b).



6. Install Door (continued)

Install SN200/210 Reader



Observe precautions for handling electrostatic sensitive devices.

1. Hook the top of the reader on the top of the mounting plate.
2. Align the bottom of the reader with the bottom of the mounting plate.
3. Secure the reader to the mounting plate using the supplied 0.138-32 x 0.375" screw (Figure 4c).

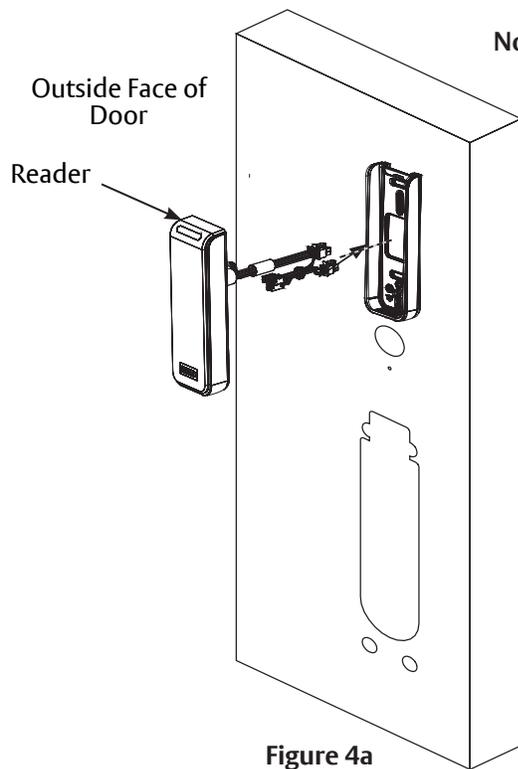


Figure 4a

Note: Rim/SVR/CVR shown, assembly is same for mortise.

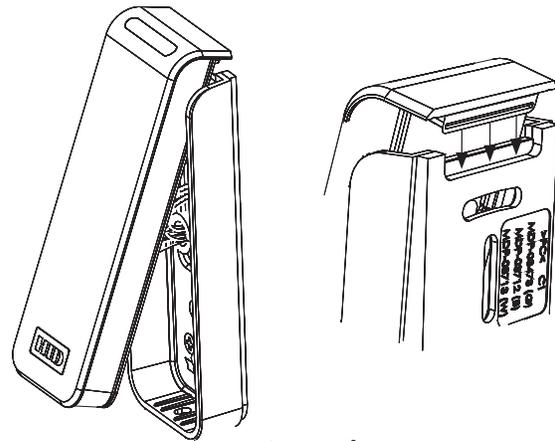


Figure 4b

Bottom View of Reader



Detail

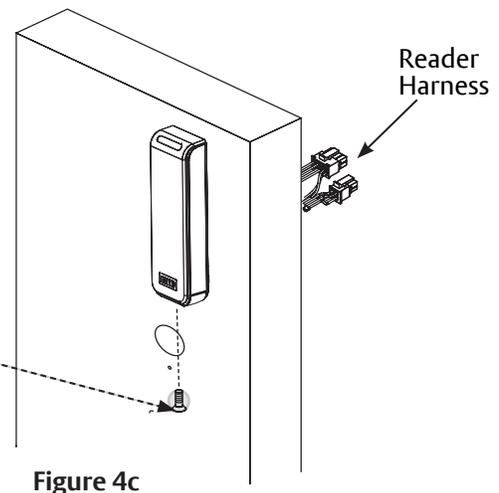


Figure 4c

6. Install Door (continued)

Trim Assembly Instructions

1. Check cylinder components:
 - Cylinders longer than 1-1/8" (29mm) require collars.
 - Refer to Cylinder Collar Chart.

Note: For Mortise, skip to page 18.

| Corbin Russwin Cylinder Collar Chart | |
|---|-------------|
| Cylinder Length in (mm) | Collar |
| 1-1/8" (29) | None |
| 1-1/4" (32) | 422F88M FIN |
| 1-1/2" (38) | 686F98M FIN |

2. If required, modify by cutting cylinder tailpiece:

Spindle comes with breakaway features to accommodate door thickness from 1 3/4" to 2 1/4".

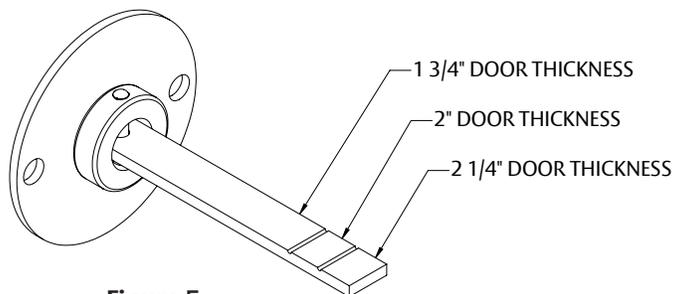


Figure 5

3. Key Override Installation:
 - a. Insert cylinder housing prongs into matching notch.
 - b. Insert Key Override Ring into cylinder with "smaller leg" between cam as shown in Figure 6.

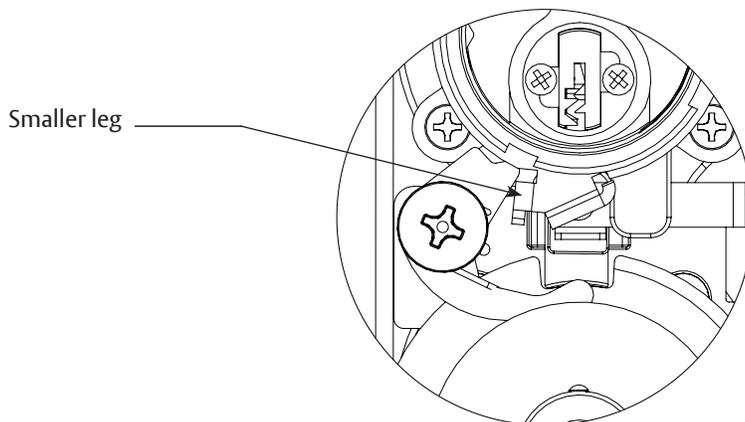
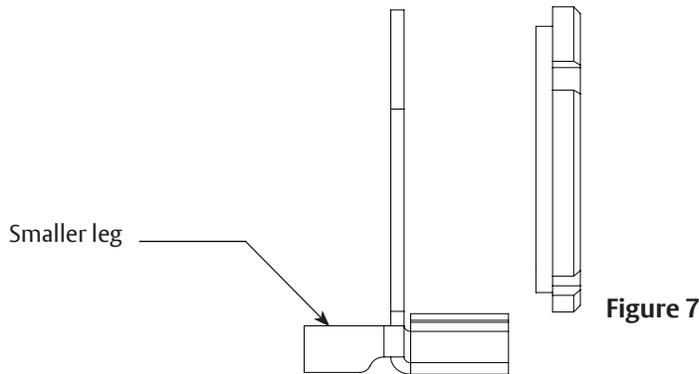


Figure 6

6. Install Door (continued)

Trim Assembly Instructions

- c. Tighten cylinder nut into escutcheon, making sure stepped side of nut goes inside key override ring as shown in Figure 7.

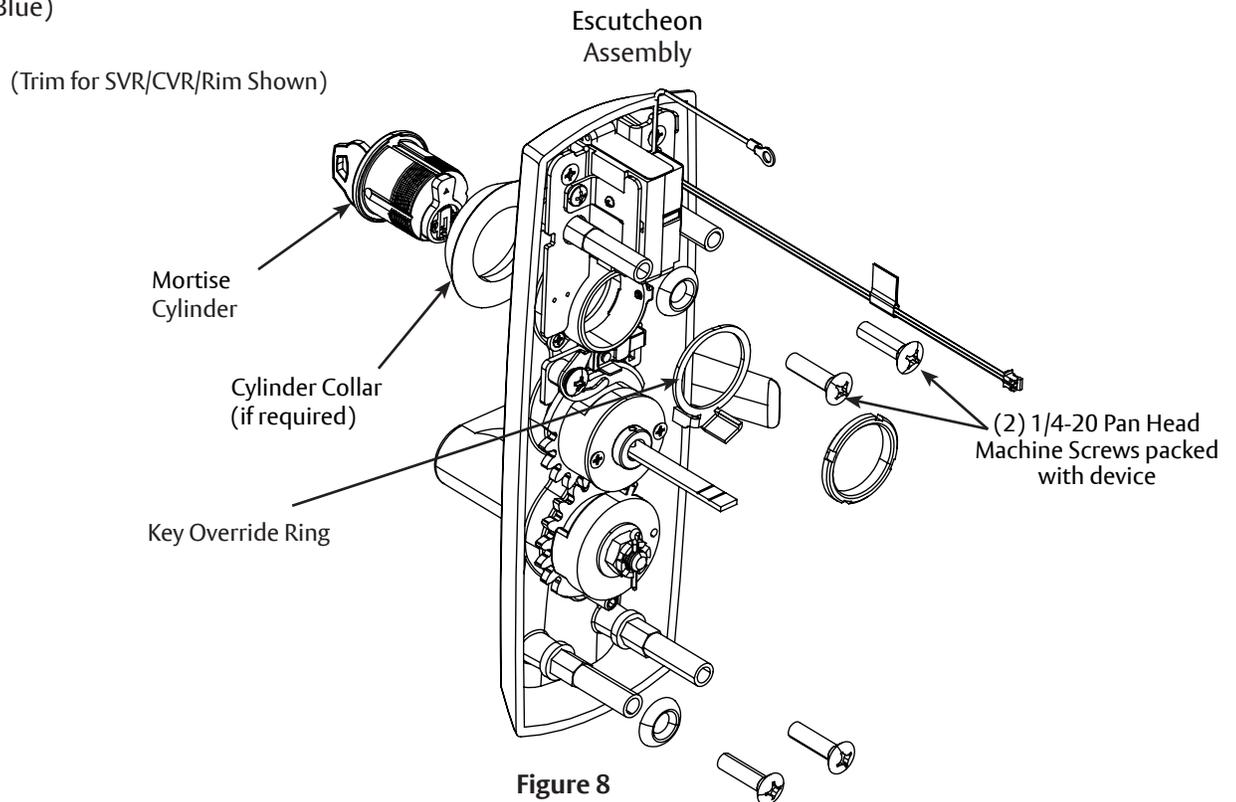


- d. Escutcheon Assembly (Figure 8):

The lever is handed (LHR shown).

Note: Lever Return Spring handing can be identified by color or the spring:

- LHR: (Red)
- RHR: (Blue)



6. Install Door (continued)

Install Mortise and Outside Trim Assembly

Note: Install mortise lock following FM168 instructions, but do not install armored front at this time.

1. Feed lock wire through wire harness hole; seat lockbody firmly into mortised pocket (Figure 9a).
2. Mount trim to door.
3. Fasten trim assembly to door using (2) 1/4-20 oval head screws and (2) finish washers (Figure 9b).

Note: Finger tighten only.

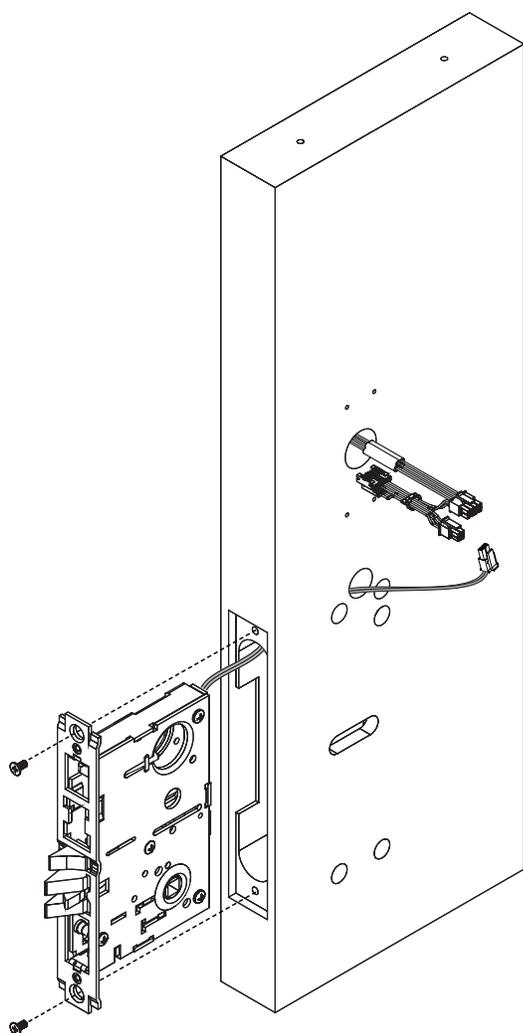


Figure 9a

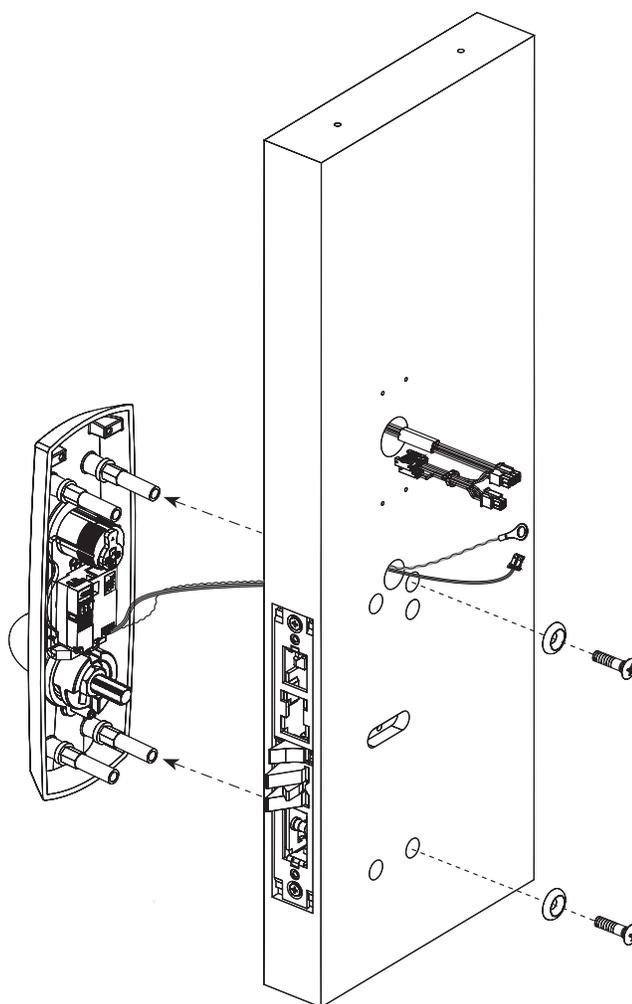


Figure 9b

6. Install Door (continued)

Install Mortise and Outside Trim Assembly (continued)

4. Tighten down set screw to prevent cylinder movement (Figure 9c).
5. Install armored front (Figure 9d).

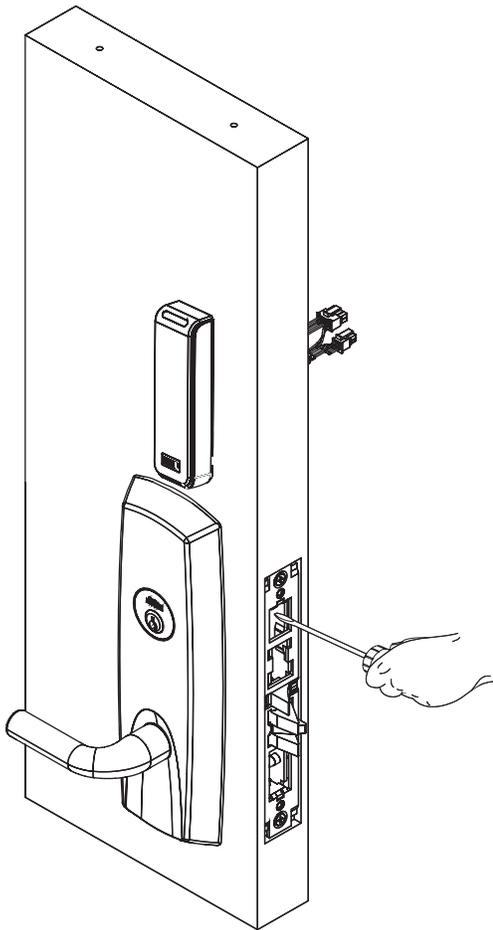


Figure 9c

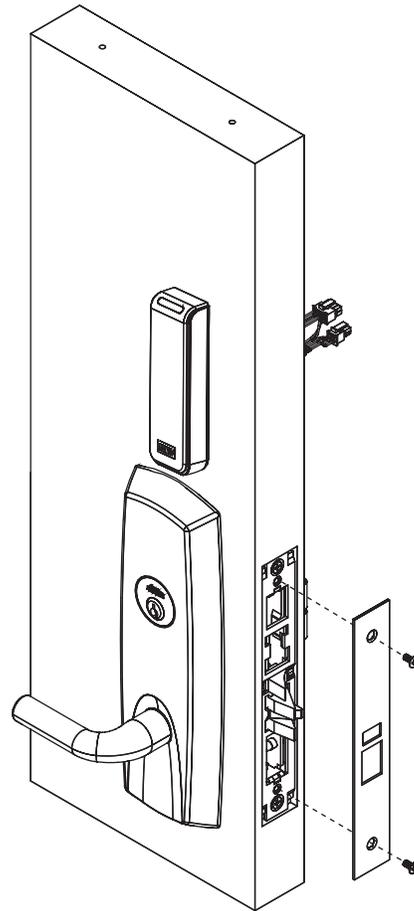


Figure 9d

6. Install Door (continued)

Install Outside Trim Assembly (Rim/CVR/SVR)

1. Make sure tailpiece is oriented vertically.
2. Feed trim wire harness through wire harness hole (Figure 10).
3. Mount trim assembly to door pulling slack wire towards device side of door.

Note: Be careful not to pinch wire harness.

4. When mounting trim, lift tailpiece to pass through hole on device side (Figure 10).

Note: Ensure tailpiece is still oriented vertically.

5. Fasten trim assembly to door using (2) 1/4-20 oval head screws and (2) finish washers (Figure 10).

Note: Finger tighten only.

 When installing trim, pull wires completely through door to avoid contacting motor assembly, as this may cause loss of function.

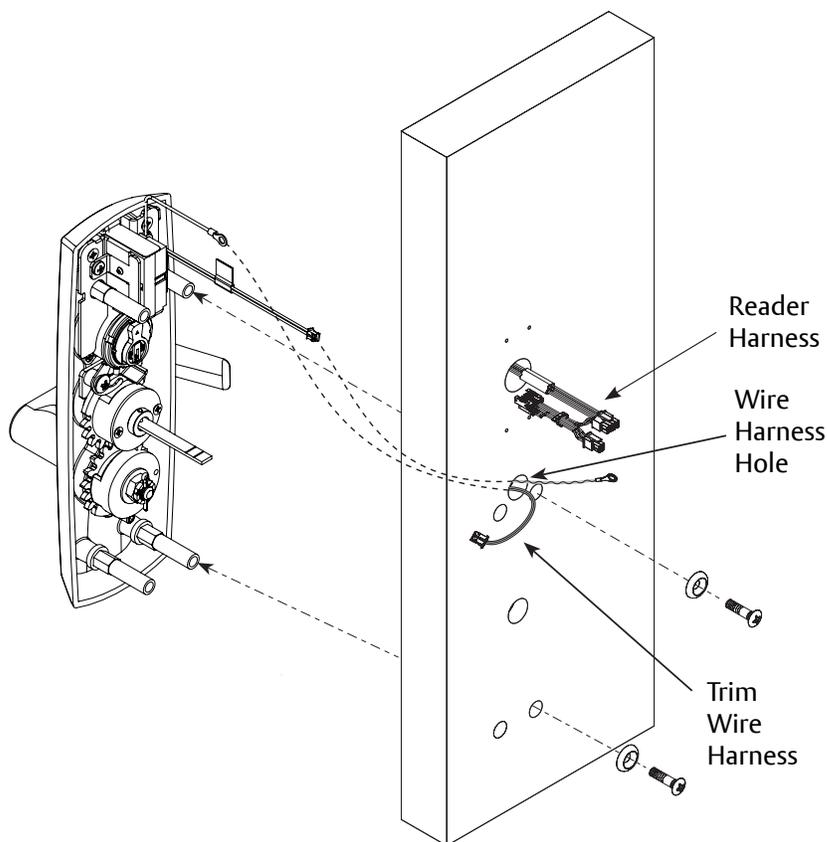


Figure 10

6. Install Door (continued)

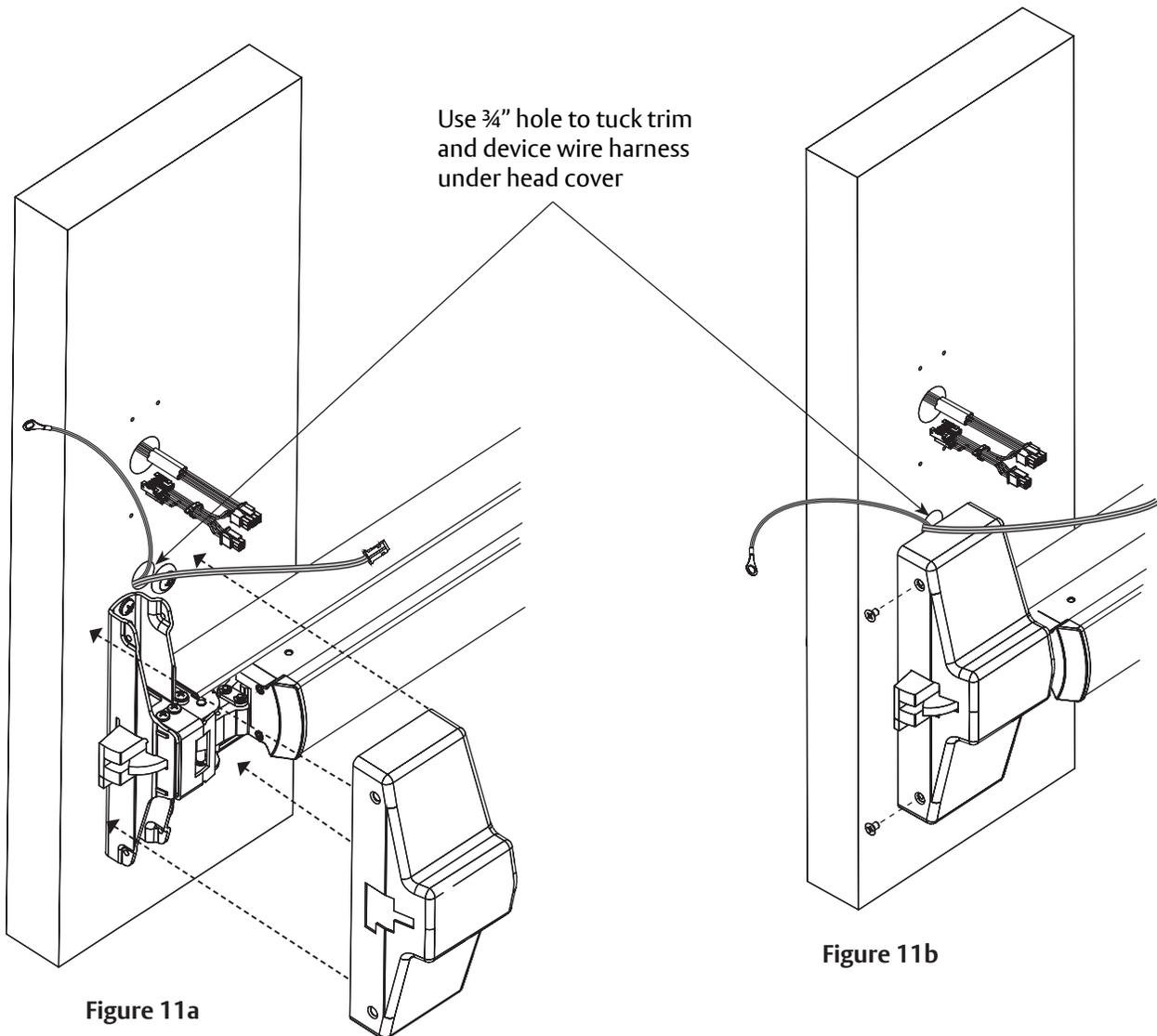
Install Exit Device/ Head Cover

Install Exit Device

Note: To install the Exit Device, follow instructions packed with device to secure device to door.

Install Head Cover

1. Lay wire device harnesses across $\frac{3}{4}$ " hole (Figure 11a).
2. Tuck wires into hole when installing cover so that wires are not pinched between head cover and door.
3. Attach head cover using (2) #8-32 flat head screws (Figure 11b).



6. Install Door (continued)

Install Mounting Plate

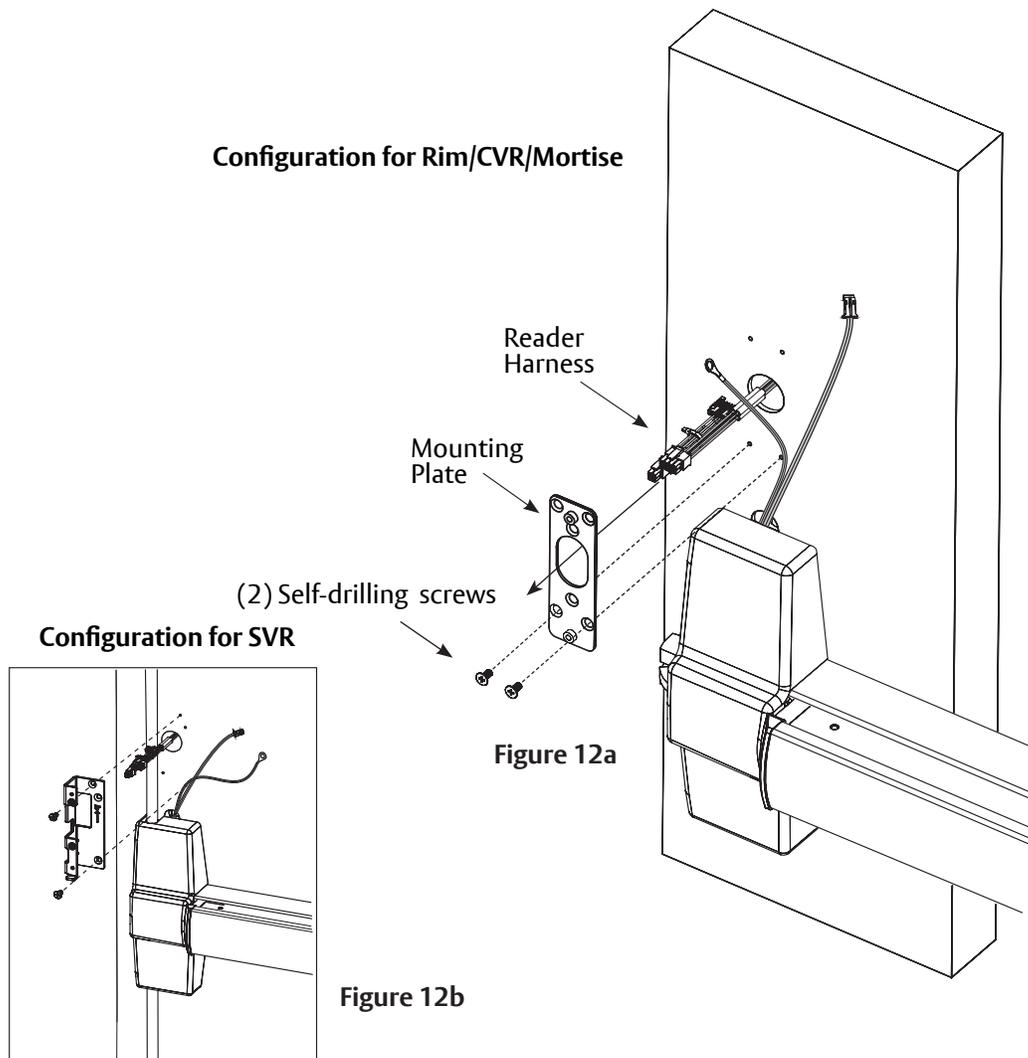
1. Feed reader harness through mounting plate (Figure 12a, 12b).

Rim, CVR and Mortise:

- Begin to secure mounting plate to inside door surface by fastening (2) Phillips flat head machine screws to lower right and left holes on mounting plate (Figure 12a).

SVR:

- Secure mounting plate to inside door surface by fastening (2) Phillips flat head machine screws to holes on mounting plate (Figure 12b)



6. Install Door (continued)

Connector Attachments

1. Connect 6-pin connector from exit device to 6-pin connector on reader harness (Figure 13a, 13b).
2. Connect 2-pin connector from exit device to 2-pin connector on reader harness (Figure 13a, 13b).

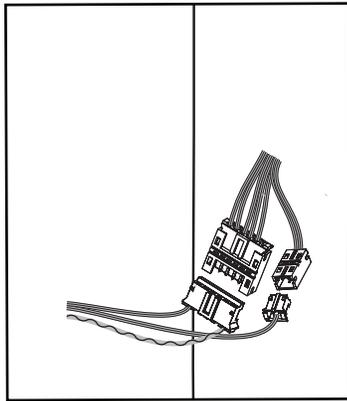


Figure 13a

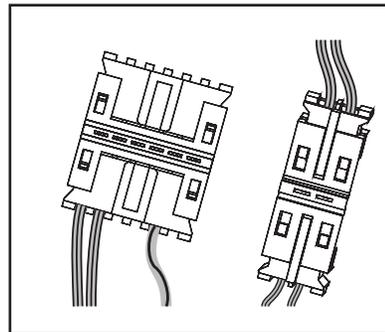


Figure 13b

Note: For the following refer to page 9 for ElectroLynx door harness and lock interface.



Do not offset connectors and be sure they are completely seated.

3. Connect ElectroLynx 4- and 8-pin connectors from the door harness to (black) 4- and 8-pin connectors of the reader harness (Figure 13c).
4. Carefully tuck connected harnesses into one-inch hole in door.

Note: Neatly fold the wires into the remaining space to prevent pinching wires when mounting inside escutcheon.

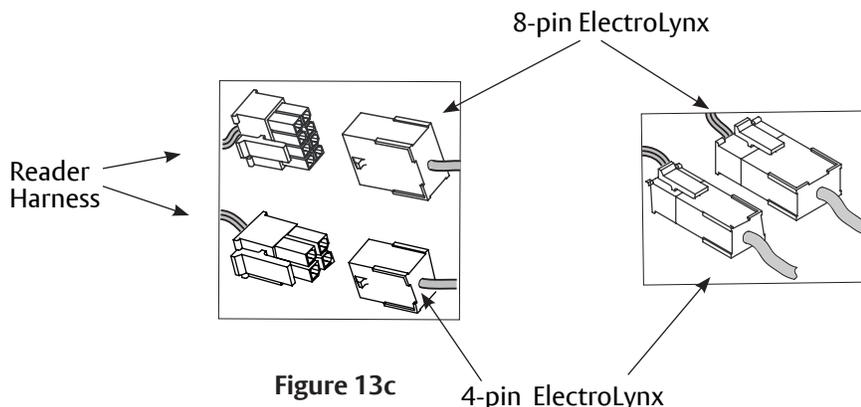


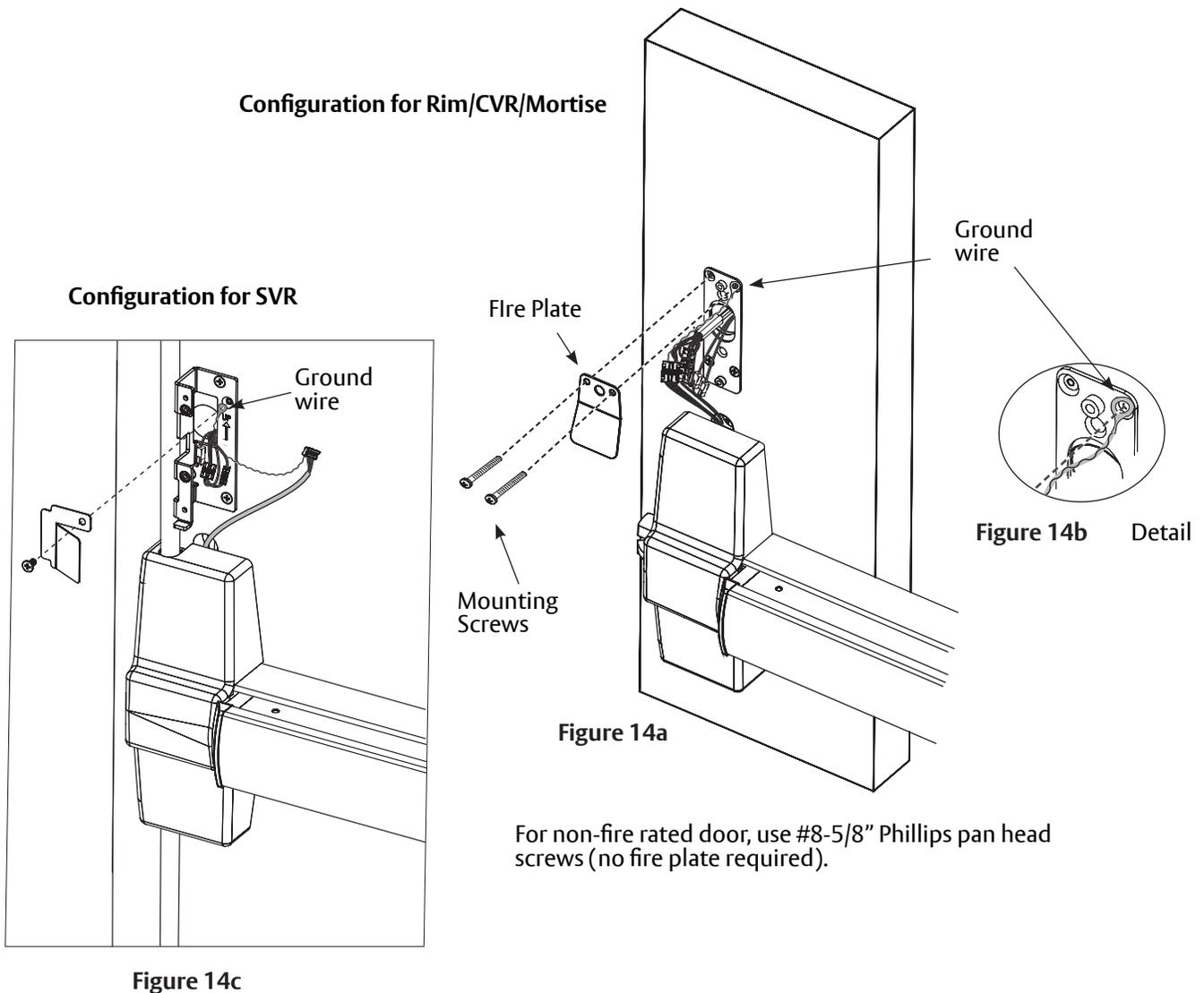
Figure 13c

6. Install Door (continued)

Install Mounting Plate and (optional) Fire Plate

Note: For fire-rated doors only.

1. Secure mounting plate and fire plate using (2) #8 1-1/4" Phillips pan head self-drilling screws provided (Figure 14a). Ensure wires from reader are properly routed under flap of fire plate.
2. Secure mounting plate using (2) remaining Phillips flat head self-drilling screws provided. Ensure wires from reader are properly routed under flap of fire plate.
3. Place ground wire eyelet between upper right mounting plate hole and screw when securing mounting plate (and fire plate if used) to door (Figure 14a, 14b).



6. Install Door (continued)

Install Inside Escutcheon

Note: Check electrical connections.

1. Feed excess ElectroLynx wire harness back into door.
2. Feed excess trim and exit device harnesses under head cover.
3. Install inside escutcheon using (2) #8-32 x 5/8" oval head screws (Figure 15a).

Note: Be careful not to pinch wires between escutcheon and door surface.



Neatly fold wires onto themselves and into the remaining space to prevent pinching wires when mounting escutcheon.

Configuration for SVR

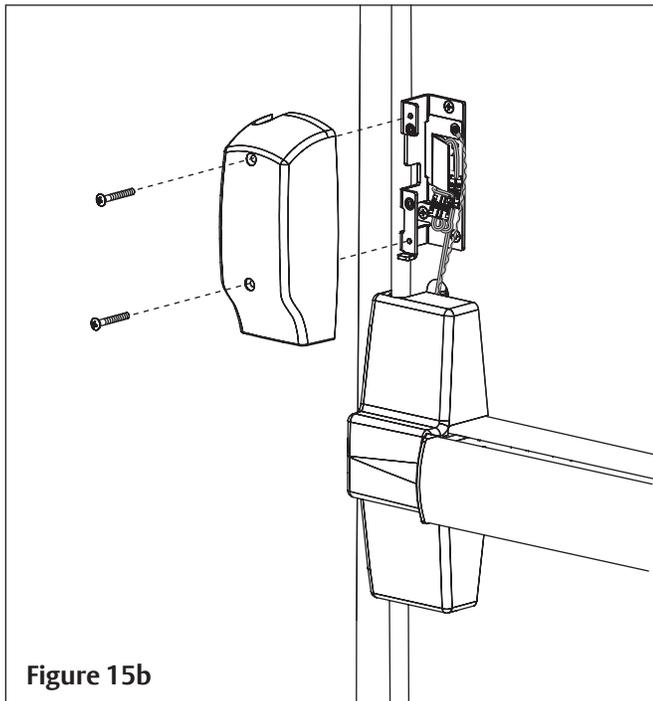


Figure 15b

Configuration for Rim/
CVR/Mortise

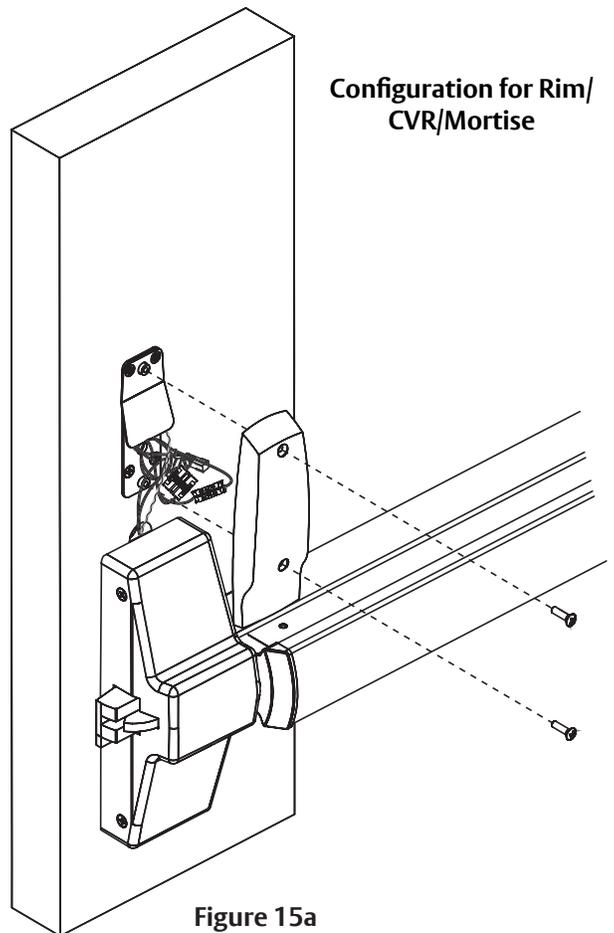


Figure 15a

7. MELR Exit Device Configuration and Operational Check

Note: This step is only necessary if the MELR option is included in the exit device. Continue to Step 8 if the exit device does not include the MELR option.

Configuration Check



Do not install the end cap until electrical operation is verified in order to confirm LED signalling.

Do not discard the end cap and hardware.

1. Locate controller at end of rail (Figure 16a).
2. Ensure 'Power Mode' is set to ON (Figure 16b).

Note: For more information, refer to FM434A MELR Exit Devices Installation & Wiring Instructions.

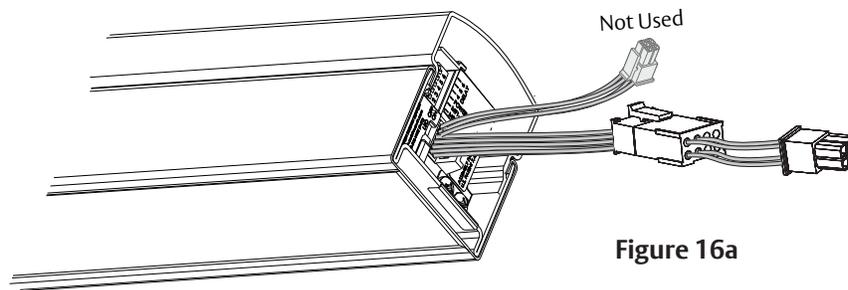


Figure 16a

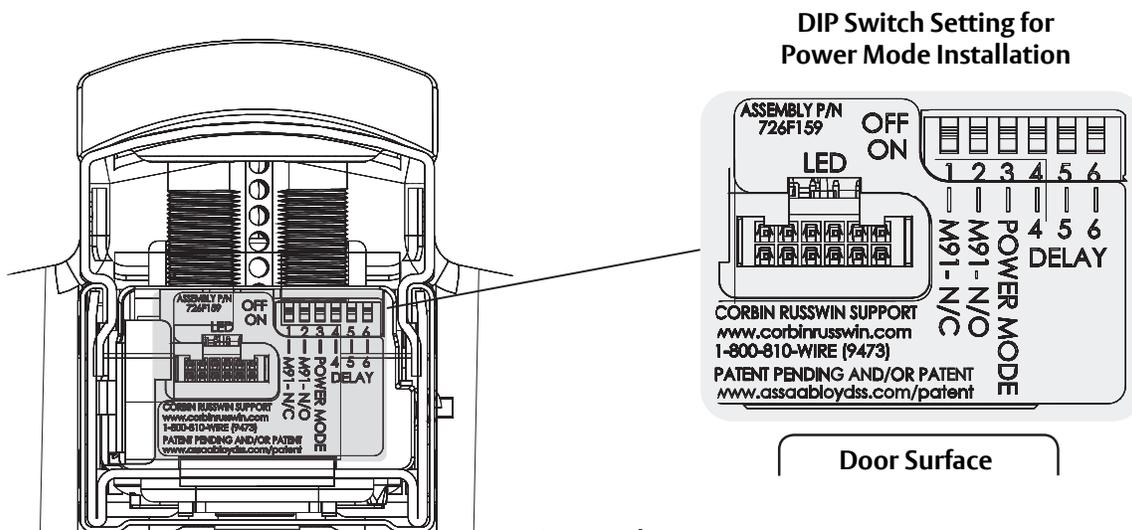


Figure 16b

8. Install Door Position Switch

Install Door Position Switch supplied with product

1. Drill 1" hole in door for magnet.
2. Drill 1" hole in frame for switch.
3. Wire to ElectroLynx frame harness as shown in wiring diagram on previous page.

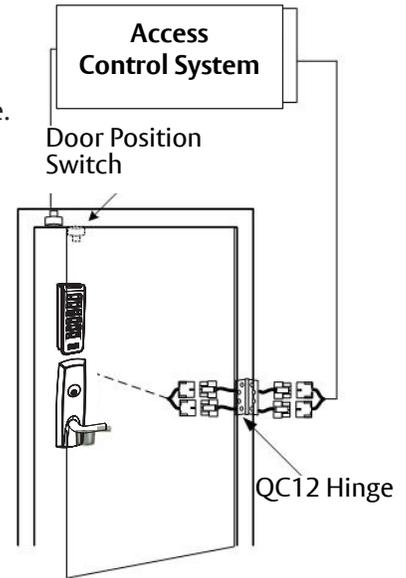


Figure 17

9. Operational Check

1. Insert key into cylinder and rotate.
2. With key rotated turn lever and check that latch retracts.
3. Check that push bar fully retracts the latch.
4. Close door: Ensure latch fully extends into strike and does not bind.

Note: For fail safe trim cylinder will have to be tested after wiring is complete and power is turned on.

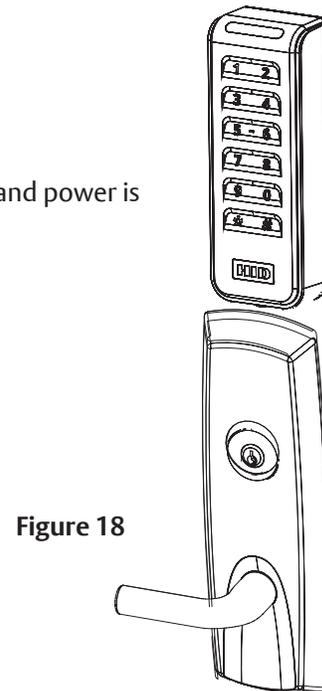


Figure 18

9. Operational Check (continued)

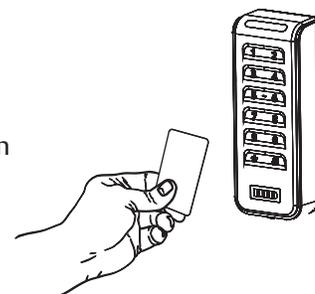
Note: Ensure LED operates as configured:

For SN200, LED remains green when panel asserts GREEN_LED signal.

For SN210, Tamper, LED and sounder, are controlled by OEM software.

Once electrical wiring has been successfully completed according to proper application perform the following:

1. Turn power ON.
2. Verify LED located on reader is ON (Red or Green) depending on reader configuration.
3. Present valid credential and verify LED and sounder activity.
4. Verify valid card read at the EAC panel.
5. Verify system operation functions, i.e., when credential is presented to reader, the door should unlock.



Wiegand Test Unit

The ASSA ABLOY Wiegand Test Unit verifies your installation in the field*. The test unit checks for proper wiring, card reader data integrity, lock functionality including lock/unlock, door position status, and request-to-exit (REX) status.

In addition, this tool provides product demonstration abilities to highlight the product's features and capabilities**.

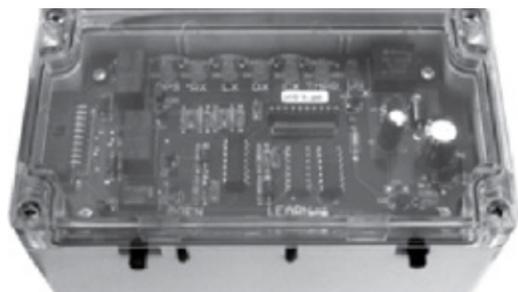
| Feature | WT1 | WT2 |
|--|-----|-----|
| 12 or 24VDC solenoid lock voltage adjustable | X | X |
| Operates as Fail Safe or Fail Secure | X | X |
| "Learn" mode allows testing of specific cards without programming at panel level | X | X |
| Card reader data integrity is validated at test unit | X | X |
| Displays detailed Wiegand data, including hexadecimal string and total bits received | | X |
| Displays measured end-of-line resistor values (if applicable) | | X |
| Displays key-press data from keypad readers† | | X |

Note:

*For directions on use, see operating instructions provided with unit.

**SN200/210 keypad version works only with WT2

† WT2 unit with 1.03 firmware or later is required



Wiegand Test Unit - WT1



Wiegand Test Unit - WT2

9. Operational Check (continued)

- The SNT1 is an adapter harness that connects and converts OSDP lock signalling to work with a Wiegand Test Box (WTB).
- If using the OSDP adapter, the WT1 will unlock on credential read or any key press, regardless of what credential is learned (OSDP reader only).
- When connected to a Wiegand reader or using OSDP adapter: the WT2 will unlock on credential read and display credential value. Credentials can be learned, as usual. Individual key press will be displayed for any key press, but they cannot be learned.

Note: Once electrical wiring has been successfully completed according to proper application, perform the following steps:

1. Ensure lock is interfaced with Wiegand Test Unit to verify installation and wiring up to (frame side) point of hinge.
2. Turn power ON.
3. Wait for LED to turn RED and then present compatible credential and verify LED and sounder activity.
4. Verify valid card read on Wiegand Test Unit or at the EAC panel.
5. Verify system operation functions, i.e., when credential is presented to reader, the door should unlock.

Note: Ensure LED operates as configured:

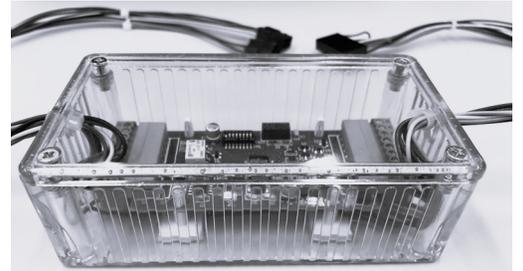
- LED remains green when panel asserts GREEN_LED signal or issues OSDP command.

If the lock fails to operate when DC voltage is applied:

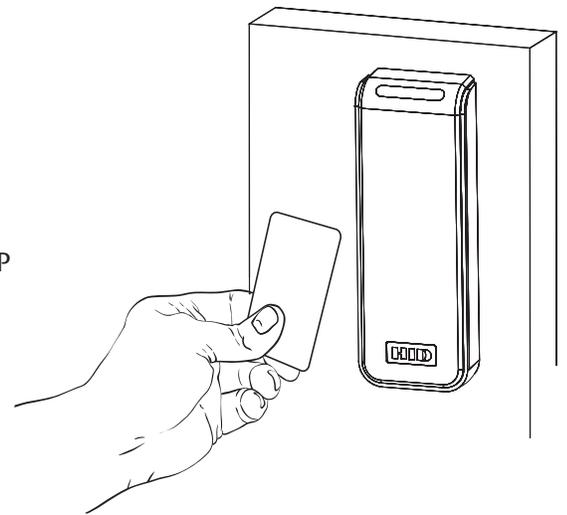
1. Remove power.
2. Confirm the polarity of the supply (i.e., '+' is positive).

If the lock is functioning opposite to the desired fail-safe or fail-secure operation:

1. Remove power and check the "Fail" condition by attempting to rotate the outside lever (e.g. if fail-secure, the outside lever should be rigid with power removed).
2. If the function is incorrect, remove the lock and repeat section 6, step 3 (DIP Switch configuration).



(SNT1) WTB OSDP adapter wiring harness



SN200 Wiegand SN210 OSDP

ED5000 Series Exit Device

Installation Instructions



The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, mechanical and smart locks, access control and service.

