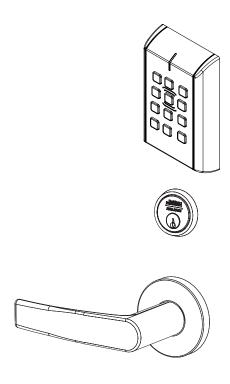
# **Installation Instructions**



# IN120 WiFi/ IN220 PoE

# Mortise Lockset ML20100 and ML20200 Series



#### **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.



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.

#### $1\text{-}800\text{-}810\text{-}9473 \bullet tech support.corb in russ win @assaabloy.com$

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Experience a safer and more open world





Mortise Lockset

Installation Instructions

# Mortise Lockset

# **Installation Instructions**



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**Mortise Lockset** 

#### Installation Instructions

#### 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.
- The card reader shall be installed and used such that parts of the user's body other than the hands are maintained at a distance of approximately 20 cm (8 inches) or more.

#### 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/réceptuers exemptés de licence conformes aux RSS d'Innovation, Sciences et Développment 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 a 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.

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.

#### **Mortise Lockset**

#### Installation Instructions



### 2. Regulatory and Power Specifications

#### **Electronic Authentication Specifications (Mobile Credentials)**

- 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 (if applicable) available from Google Play or on the App Store.

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 UL294/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 Outdoor Use
- CUL Listed ULC-60839-11-1, Grade 1, Environmental Class: Outdoor Use
- UL 294 Access Control Ratings:

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

Reader with HID® OMNIKEY® reader core 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 SE
- DESFire EV1
- DESFire EV2/EV3 (EV1 Compatibility)

#### NFC & BLE-enabled Mobile Phones:

- HID Mobile Access® (BLE and NFC)
- Supports the use of employee badge and/or Student ID in Apple Wallet
- Android Wallet (MIFARE 2GO)

#### Low Frequency (125 kHz):

HID Prox®

#### PIV/PIV-1:

- 40-bit BCD
- 64-bit BCD
- 75-bit output
- 128-bit output
- 200-bit output

#### **Optional Keypad:**

 PIN-only usage or dual authentication

# **Power Supply Specifications**

#### IN120 (WiFi 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, 200mA

**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.

#### 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

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. Equipment installed in outdoor use applications shall employ NEC Class 3 wiring methods.

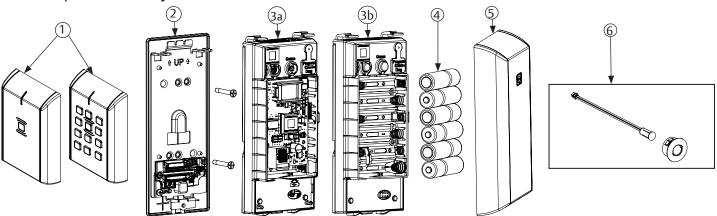


**Mortise Lockset** 

### Installation Instructions

### 3. Product Illustrations

### IN120/220 Assembly



#### **Tools Required:**

- #2 Phillips screwdriver
- Flat head screwdriver
- 1/8" Security hex key

See document FM646 for part numbers.

Item No.	Description
1*	Reader Assembly (keypad version optional)
2	Mounting Plate Assembly (includes gasket)
3a	PoE Controller Assembly
3b	WiFi Controller Assembly* (Batteries Included)
4	AA Alkaline Batteries (6)
5	Inside Escutcheon Assembly with Privacy Button
6	Door Position Switch (optional)

Prior to installation, please confirm receipt of all parts.



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

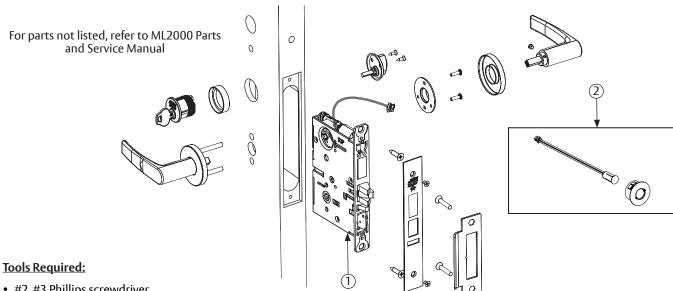
# **Mortise Lockset**

### Installation Instructions



#### 3. **Product Illustrations (continued)**

#### **Mortise Lock**



- #2, #3 Phillips screwdriver
- Flat Blade Screwdriver (Standard size)
- 7/64" Allen Wrench
- 1/8" Security Allen Wrench

Item No.	n No. Description	
1*	ML20133/ML20134 Lock Case - No Deadbolt	1
	ML20135/ML20136 Lock Case - With Deadbolt	
	ML20233/ML20234 Lock Case - No Deadbolt (not shown)	
	ML20235/ML20236** Lock Case - With Deadbolt (not shown)	
2	Door Position Switch (Optional)	1

<sup>\*</sup>Replacing with handing (L, LR, R, RR)

<sup>\*\*</sup>Required for Escape Return Functionality (a residential requirement in canada)

<sup>\*\*\*</sup>Not required for ML202xx

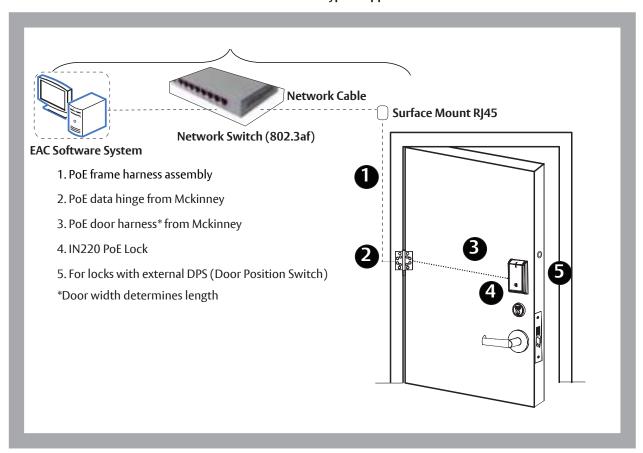


**Mortise Lockset** 

### Installation Instructions

### 4. IN220 PoE Installation Wiring

#### **Corbin IN220 PoE Typical Application**



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.

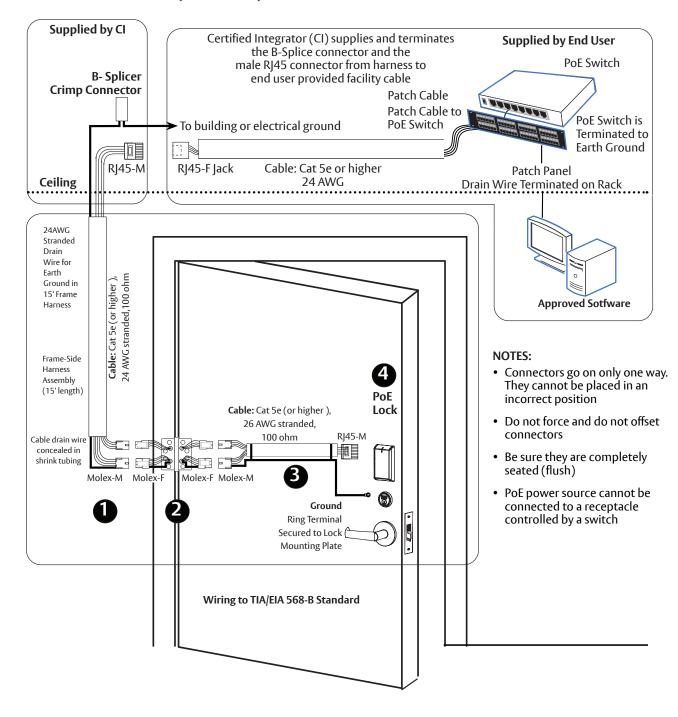
### **Mortise Lockset**

### Installation Instructions



### 4. IN220 PoE Installation Wiring (continued)

#### **Installation Overview (continued)**



# 4. IN220 PoE Installation Wiring (continued)

# 1 Frame Harness Installation

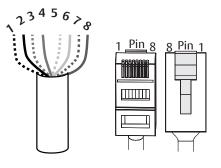
Supplied by CI **B-Splicer** Crimp Connector RJ45-M Ceiling 24AWG Stranded Drain Wire for Earth Cable: Cat 5e (or higher), 24 AWG stranded,100 ohm Ground in 15' Frame Harness Frame-Side Harness Assembly (15' length) Cable drain wire concealed in shrink tubing

Molex-M

Components and wire harness supplied by McKinney. Suggested installation:

#### Cut end / ceiling-side PoE harness:

#### TIA/EIA 568-B Standard Wiring



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

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 (Frame) harness:

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

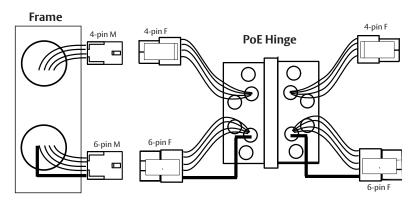
### **Mortise Lockset**

# **Installation Instructions**



## 4. IN220 PoE Installation Wiring (continued)

# 2 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

# **3** PoE Door Harness

Order of installation may vary. Refer to appropriate sections for instructions. **Hinge-side harness connectors:** 

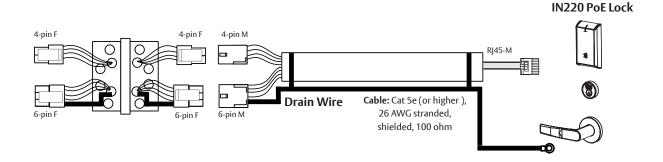
- 4-pin male molex connector
- 6-pin male molex connector with ground wire

#### Lock-side harness connectors:

- Ring terminal
- Male R|45 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)





Installation Instructions

# 4. IN220 PoE Installation Wiring (continued)

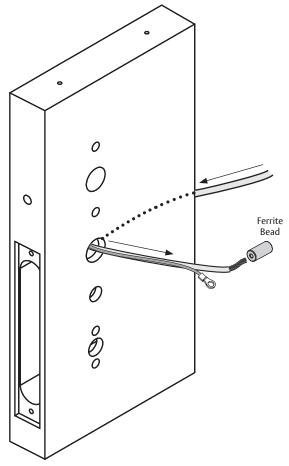
# 4 PoE Lock

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 toward lock.

**IMPORTANT:** DO NOT TERMINATE POE HARNESS (WITH RJ45 M) UNTIL CABLE HAS BEEN ROUTED THROUGH DOOR AND INSIDE MOUNTING PLATE ASSEMBLY.

See Section 6.3, Installation of Connectors.



#### Installation Instructions



#### Lock Installation

#### 1. Prepare Door

Illustrations shown are as viewed from outside or secure side of opening. (Figure 5-1A)



Left Hand Hinges Left. Open Inward. "I H"



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



Right Hand Hinges Right. Open Inward. "RH"

Figure 5-1A



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

A. Verify Hand and Bevel of Door.

- · Check hand of door. (Stand on outside of locked door when determining door hand)
- Door should be fitted and hung
- B. Verify exit device is correct hand for door.
- C. Verify Product Label.
- D. Door Preparation: mark and drill door.

If mullion is used, install prior to installing hardware.

Prior to installation, all holes must be free of burrs, debris, and sharp edges.

Prepare door according to appropriate template (www.corbinrusswin.com)

• Field Template (ships with product): FM457

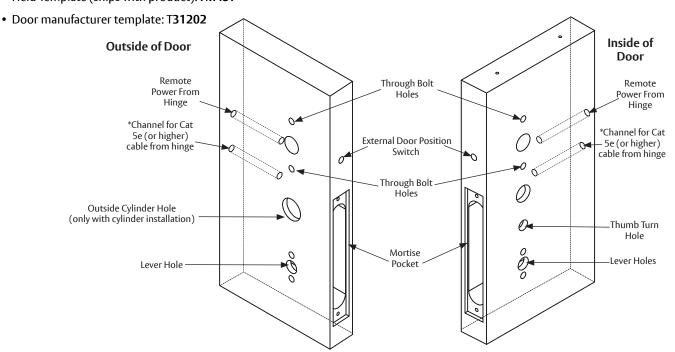


Figure 5-1B Wood Door Preparation

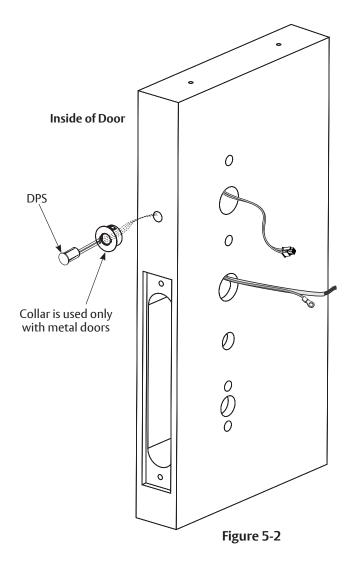
### 5. Lock Installation (continued)

#### 2. Install Door Position Switch (DPS)

Wood doors have 3/8" raceway to controller cutout and metal doors have 3/4" raceway to the controller cutout. Refer to template (ships with product): MEFT18 (MEFT26 for EA option)

- 1. Insert connector end of DPS through the raceway on the latch edge of the door. (Figure 5-2) **NOTE:** For metal doors, use DPS Collar.
- 2. Push DPS firmly into place by hand.

IMPORTANT: DO NOT USE ANY TOOLS TO TAP THE SWITCH; DOING SO MAY CAUSE DAMAGE.



### **Mortise Lockset**

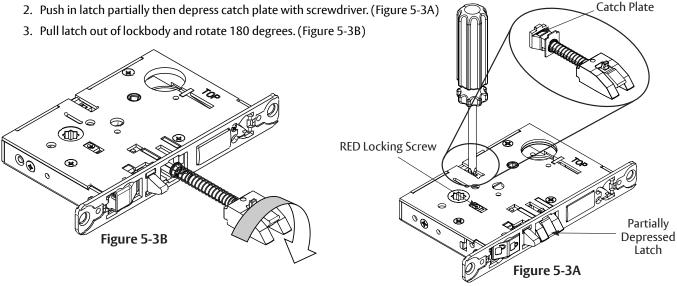
#### Installation Instructions



### 5. Lock Installation (continued)

#### 3. Prepare Lock Body

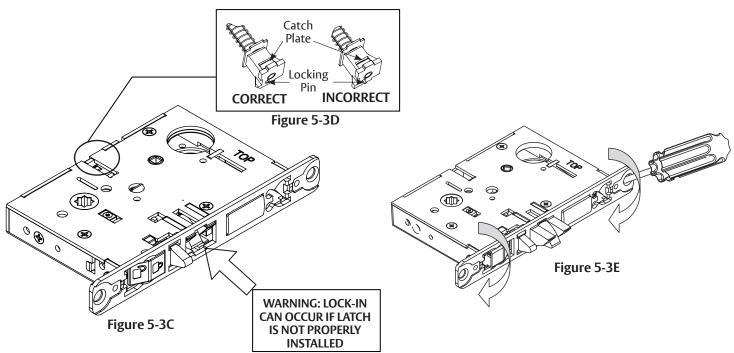
1. Move red locking to side of lockbody being locked. (Figure 5-3A)



4. Push in latch until tailpiece hits back of case. (Figure 5-3C)

**NOTE:** Make sure catch plate is even with top surface and locking pin is not projected. (Figure 5-3D) If not, depress catch plate with screwdriver and repeat step 4.

5. Rotate lock front to match bevel of door as shown. (Figure 5-3E)



Installation Instructions

### 5. Lock Installation (continued)

#### 4. Install Lock Body

- 1. Feed wires through 1-5/16" diameter hole on inside of door while installing lockbody. (Figure 5-4A)
- 2. Pull wires through hole while inserting lockbody. Do not push wires back into cylinder hole. (Figure 5-4B) **IMPORTANT:** Door must remain open during installation. Use door stop.
- 3. Install, but do not tighten two (2) #12 x 1" combination screws through lockbody. (Figure 5-4A)

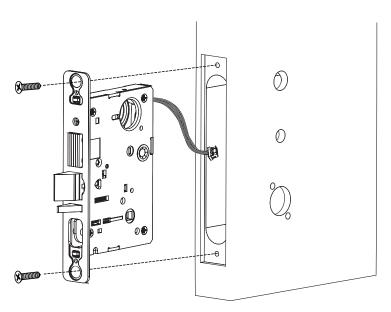


Figure 5-4A

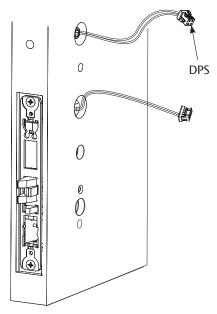


Figure 5-4B

### **Mortise Lockset**

#### Installation Instructions



### 5. Lock Installation (continued)

#### 5. Install Outside Cylinder

- 1. Slide cylinder through collar. Thread cylinder into lockbody. (Figure 5-5B)
- 2. Rotate the cylinder into cylinder hole with fingers.
- 3. Insert key 75% of the way and utilize the key to rotate the cylinder into the rest of the cylinder hole.

IMPORTANT: Do not attempt to tighten all the way

- 4. Verify that orientation of cylinder has the Corbin Russwin logo as depicted in Figure 5-5A.
- 5. Hand tighten the cylinder clamp screw with Phillips screwdriver to prevent unscrewing of the cylinder (Figure 5-5C).
- 6. Test cylinder function:
  - Key retracts latchbolt and deadbolt (7976 & 82276 function)
  - Key retracts latchbolt (7978 & 82278 function)
  - Cylinder not present for 7977, 7979, 82277 or 82279 functions

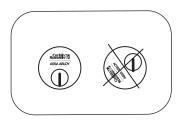
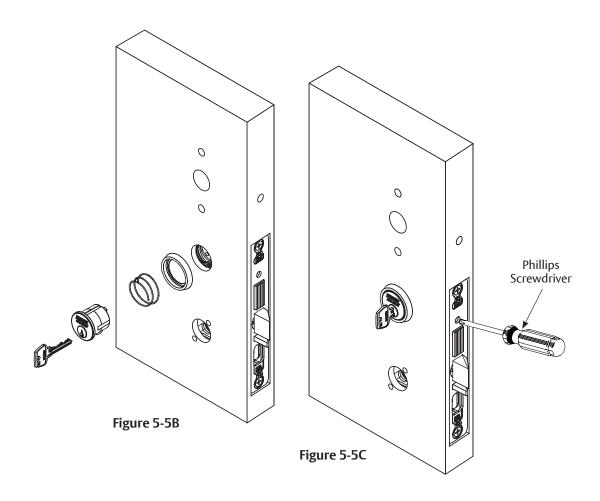


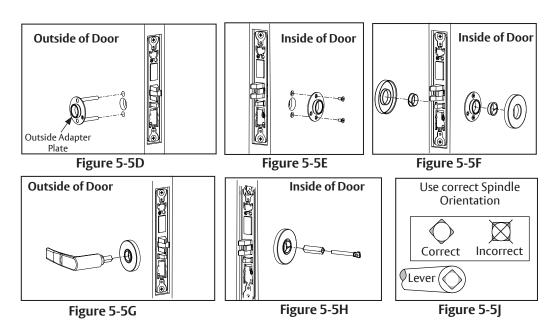
Figure 5-5A



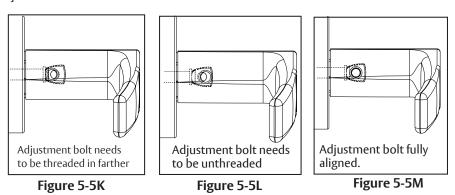
### Installation Instructions

### Lock Installation (continued)

#### For Standard Lever Trim



7. Align adjustment bolt with threaded hole in lever.



8. Install I/S lever with set screw.

#### NOTE:

- Unthread adjustment bolt approximately four (4) turns for a good starting point (after being fully tightened)
- Make sure O/S lever is fully inserted into adapter platebefore aligning adjustment bolt

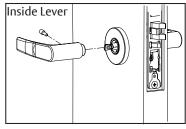


Figure 5-5N

#### Installation Instructions



### 5. Lock Installation (continued)

#### For Museo® Trim

- 1. Thread adapter plate hub into lever and fully tighten. (Figure 5-5P) **NOTE:** Spindle can be used to help thread hub into lever.
- 2. Align adapter plate hub with square hole in lever; keeping hub as tight as possible. (Figure 5-5Q)
- 3. Install outside trim assembly and inside adapter plate. (Figure 5-5R)

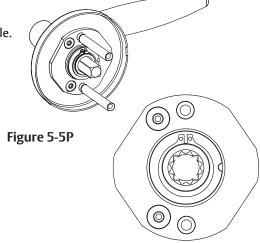
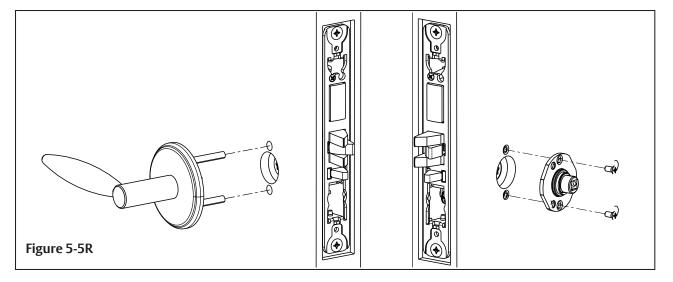


Figure 5-5Q



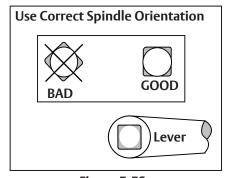


Figure 5-5S

### Installation Instructions

### 5. Lock Installation (continued)

- 4. Install spindle and rose by aligning studs on rose with bushings in adapter plate. (Figure 5-5T)
- 5. Install inside lever with set screw. (Figure 5-5U)
- 6. Install armored front. Tighten two (2) screws through lockbody then attach armored front with two (2) #8x 1/4" screws. (Figure 5-5V)

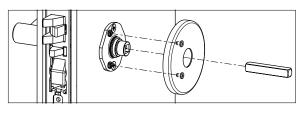


Figure 5-5T

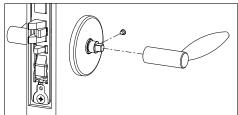


Figure 5-5U

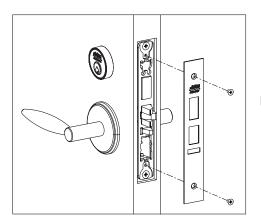
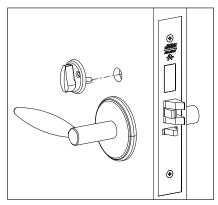


Figure 5-5V

#### 6. Install Turn Piece



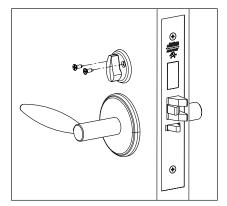


Figure 5-6A

Figure 5-6B

Figure 5-6C

# Mortise Lockset

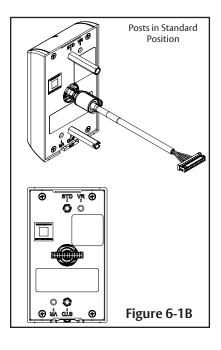
### Installation Instructions

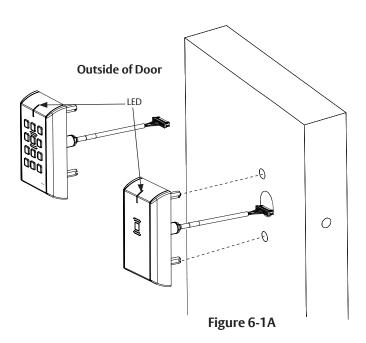


### 6. IN120/220 Installation

#### 1. Outside Reader Installation

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







Installation Instructions

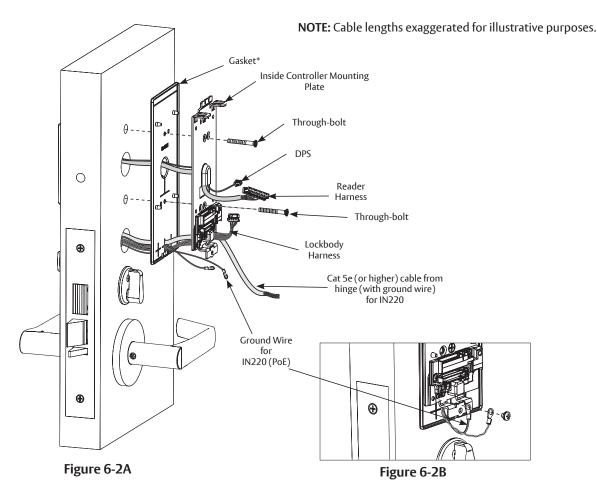
### 6. IN120/220 Installation (continued)

#### 2. Inside Mounting Plate Installation

- 1. Feed cables/connectors through the inside controller mounting plate assembly (and gasket if required\*).
- IMPORTANT: Door must remain open during installation. Use door stop.
- 2. Tuck excess cable into wire hole on inside of door.
- 3. Insert and partially tighten two (2) through-bolts prior to installation of connectors.
- 4. Secure ground lug(s) with #6-32 machine screw. (Figure 6-2A)
- \*Gasket is required for outdoor installations.

**NOTE:** Do not use gasket for fire-rated openings.

**NOTE:** If installing with gasket, separate gasket from controller mounting plate to feed cables/connectors through holes as indicated (Figure 6-2B). Once cables/connectors are fed through, reattach gasket to controller mounting plate.



\*\*Only required on ML201xx lockbody (ML202xx has an integrated DPS)

#### Installation Instructions



### 6. IN120/220 Installation (continued)

#### 3. Installation of Connectors

#### **CAUTION:**

- Do not touch or allow debris to enter connector contacts
- Ensure connectors are covered with silicone dielectric compound (grease)\*
- 1. Snip end of packet to dispense grease.
- 2. Ensure all connector pins and contacts (Figure 6-3A) 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 flange hole in plate - it will damage wires and controller connector. Route wires around flange (See Figures 6-3A - 6-3B).

- 3. Secure the following connectors (Figure 6-3B, Figure 6-3C).
  - A. Secure the 4-pin DPS connector.
  - B. Secure the 10-pin lock body assembly connector.
- 4. 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
  - C. Secure the 24-pincard reader connector. (Figure 6-3B, Figure 6-3C)
  - D. Ensure all openings on back of secured reader connector are covered completely with grease. (Figure 6-3C)

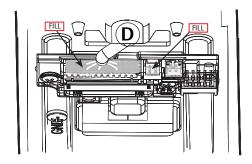


Figure 6-3C



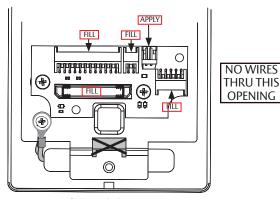


Figure 6-3A

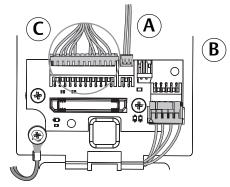


Figure 6-3B

#### Installation Instructions

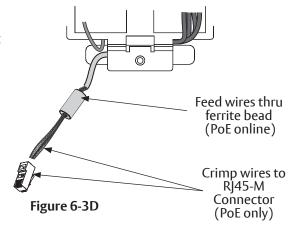
### 6. IN120/220 Installation (continued)

#### If installing IN220 (PoE)\*

- 1. Strip Ethernet cable jacket (3) inches.
- 2. Seperate (untwist) and straighten (8) Ethernet wires before carefully feeding through ferrite bead (Figure 6-3D).
- 3. Crimp RJ45 (male) connector on end of wires.

\*For more detail, refer to Section 4 IN220 PoE Installation Wiring

"1 - Frame Harness Installation".



#### 4. Installing the Controller

#### **CAUTION:**

- Do not touch or allow debris to enter connector contacts
- Ensure connectors are covered with silicone dielectric compound (grease)\*
- 1. Insert bottom tab of controller (ensure a clear path) into slot on mounting plate (Figure 6-4D, Figure 6-4E).
- 2. Ensure proper alignment of board-to-board connectors (Figure 6-4E) while pivoting controller toward door until two tabs on top click securely into place on mounting plate. (Figure 6-4D)

**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.

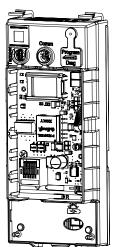
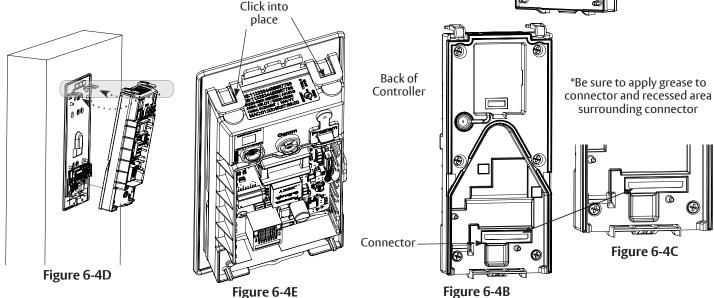


Figure 6-4A



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#### Installation Instructions



### 6. IN120/220 Installation (continued)

#### 5. Supplying Power to the Controller

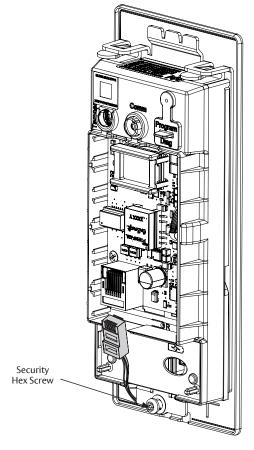
**NOTE:** Before inserting PoE plug into connector, apply dielectric grease to top of plug, covering the pin area. (Figure 6-5A)

#### A. IN220 (PoE)

- 1. Once controller is securely in place, connect RJ45 male connector to female RJ45 port on controller board. (Figure 6-5A)
- 2. If power is enabled, LED will flash, and lock motor will cycle.

#### B. IN120 (WiFi)

- 1. Once controller is securely in place, place (6) "AA" alkaline batteries in the compartment, being careful to align polarity properly. (Figure 6-5B)
- 2. After batteries are installed, there is a slight delay; LED will flash and the lock motor will cycle.





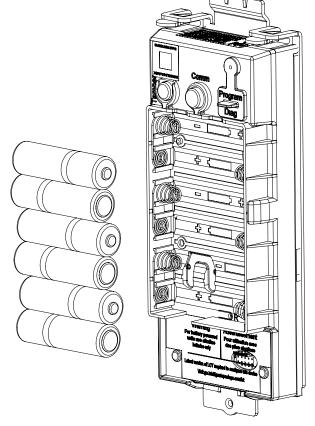


Figure 6-5B

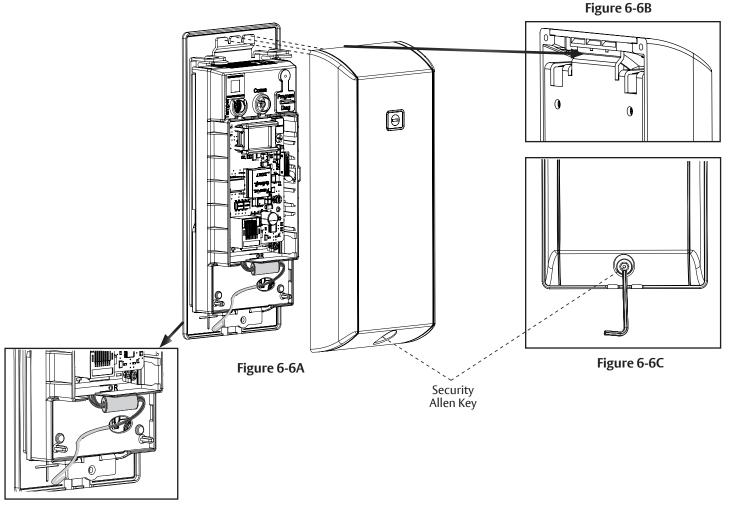
Installation Instructions

# 6. IN120/220 Installation (continued)

#### 6. Inside Cover Installation

- 1. Assemble cover by hooking top edge on inside mounting plate taking care not to pinch gasket (top edge goes between plate and gasket). (Figure 6-6A)
- 2. Carefully press bottom of cover toward door without pinching any wires.
- 3. Secure the cover with a Security Allen key. (Figure 6-6A)

**NOTE:** Use of power tools on this step is strongly discouraged. Over-torquing security pin hex screw will result in battery cover damage.



#### **Mortise Lockset**

#### Installation Instructions



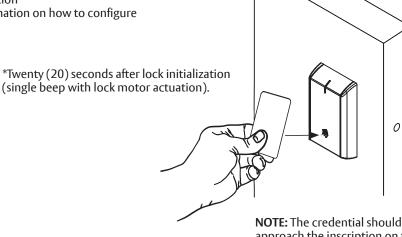
### **Operational Check**

When lock is fully installed, perform the following steps:

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

- 1. Insert key into cylinder and rotate. There should be no friction against lock case, wire harness or any other obstructions.
- 2. Check that the key retracts the latch; the key should rotate freely.
- 3. Throw the deadbolt (if present); check that the key retracts both the deadbolt and the latch.
- 4. Try the inside lever; ensure it retracts latch (if installed).
- 5. Use a valid credential\* set up with the Lock Configuration Tool to unlock outside lever and retract latch.

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



approach the inscription on the reader as indicated to ensure that the credential is read properly. Do not wave credential.

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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 signalling:

- 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 rapidly 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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