

Access
600™



Cylindrical Lockset Installation Instructions
CL33600 TCRNE1 Series
M812 - iCLASS SE® Reader Option

**Corbin
Russwin**

ASSA ABLOY

FM313 10/18

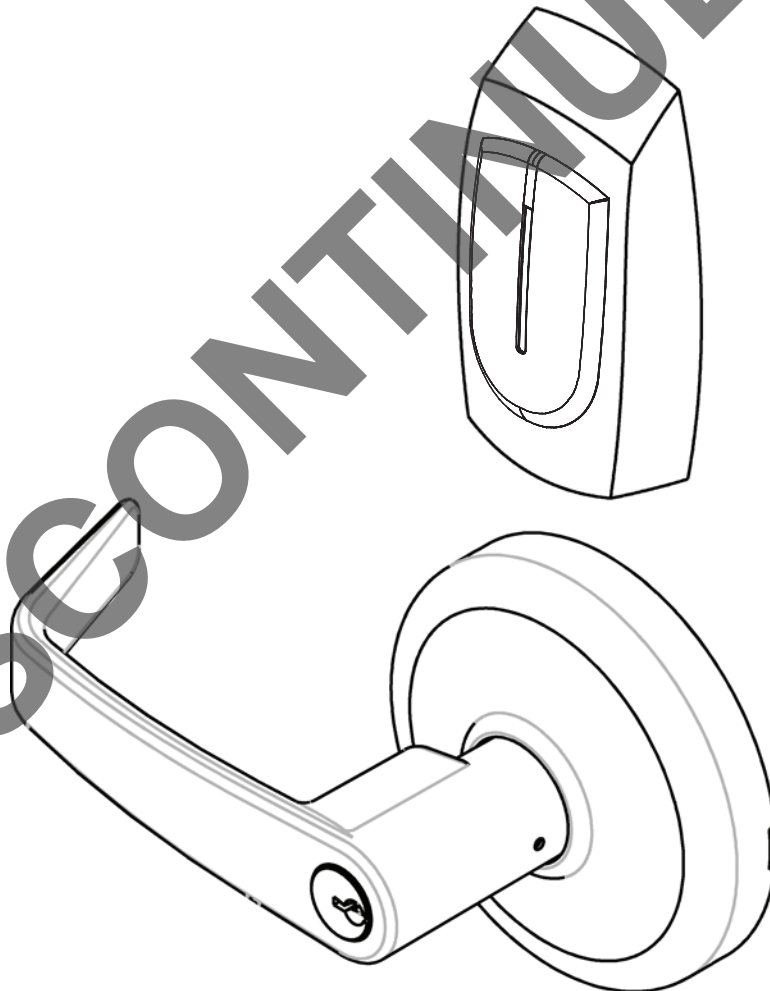
Attention Installer

Please read these instructions carefully to prevent missing important steps.

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

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

Misalignment can cause premature wear and a lessening of security.



WARNING

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

08/2018

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

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1) Warning

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

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.

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

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the 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 technician for help

Contains FCC ID: U4A-SCSEHF

Contains IC: 6982A-SCSEHF

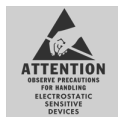
The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met. This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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



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



*Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Corbin Russwin, 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.

2) General Description

The Corbin Russwin Access 600 TCRNE1 Series cylindrical lock is designed to interface with existing Wiegand Electrical Access Control (EAC) panels. The reader requires 12 or 24VDC for power and is compatible with HID iCLASS SE® 13.56 MHz technology. The Access 600 technology is designed around Corbin Russwin's Grade 1 hardware. The cylindrical lock (with external DPS, Door Position Switch) comes with complete inside REX (request to exit) monitoring and is available in 12VDC or 24VDC. Weatherseal gaskets are also included for outdoor applications.

The Access 600 reader provides visual (LED) and audible indication of lock state (locked/unlocked).

3) Features

- Latch – Stainless steel, 1/2" (13mm) throw
Optional: 3/4" (19mm) throw deadlocking fire latch for pairs of doors
- Deadlocking latch prevents manipulation when door closed
- Door Thickness – 1-3/4" (44mm) to 2" (50mm) standard
Optional 2" (50mm) to 2-1/4" (57mm) optional
- Outside lever controlled by reader or key retracts latch
- Inside Lever produces REX (request to exit) signal
- Fail Safe or Fail Secure operation (must specify)
- UL fire listed
- Wire from EAC Panel to door must be shielded with a drain.
Drain terminated at EAC Panel controller
- Complete monitoring of door (External DPS supplied)
- Wires directly to EAC Panels
- McKinney QC12 Hinge with ElectroLynx® plug and play
- Supported credentials:
 - iCLASS®
 - iCLASS SE® (SIO-enabled)
 - iCLASS® Seos®
 - HID SIO on MIFARE® Classic
 - HID SIO on MIFARE DESFire® EV1
 - NFC-enabled mobile phones

4) Regulatory Specifications

12VDC System

- Reader Draw = 150mA
- 12VDC Solenoid Draw = 500mA
- Total System Draw = 650mA

24VDC System

- Reader Draw = 150mA (maximum)
- 24VDC Solenoid Draw = 250mA (normal state)
- Total System Draw = 400mA

• UL 294 Access Control Performance Ratings:

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

- UL294 6th Edition (Access Control System Units)
- This product meets the requirements of CAN/ULC-S319-05 Equipment Class I
- ANSI/BHMA A156.25 Listed Grade 1 Compliant ANSI/BHMA A156.25 Listed Grade 1 Compliant

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.

5) Product Illustration

*If you are replacing iCLASS-only product:

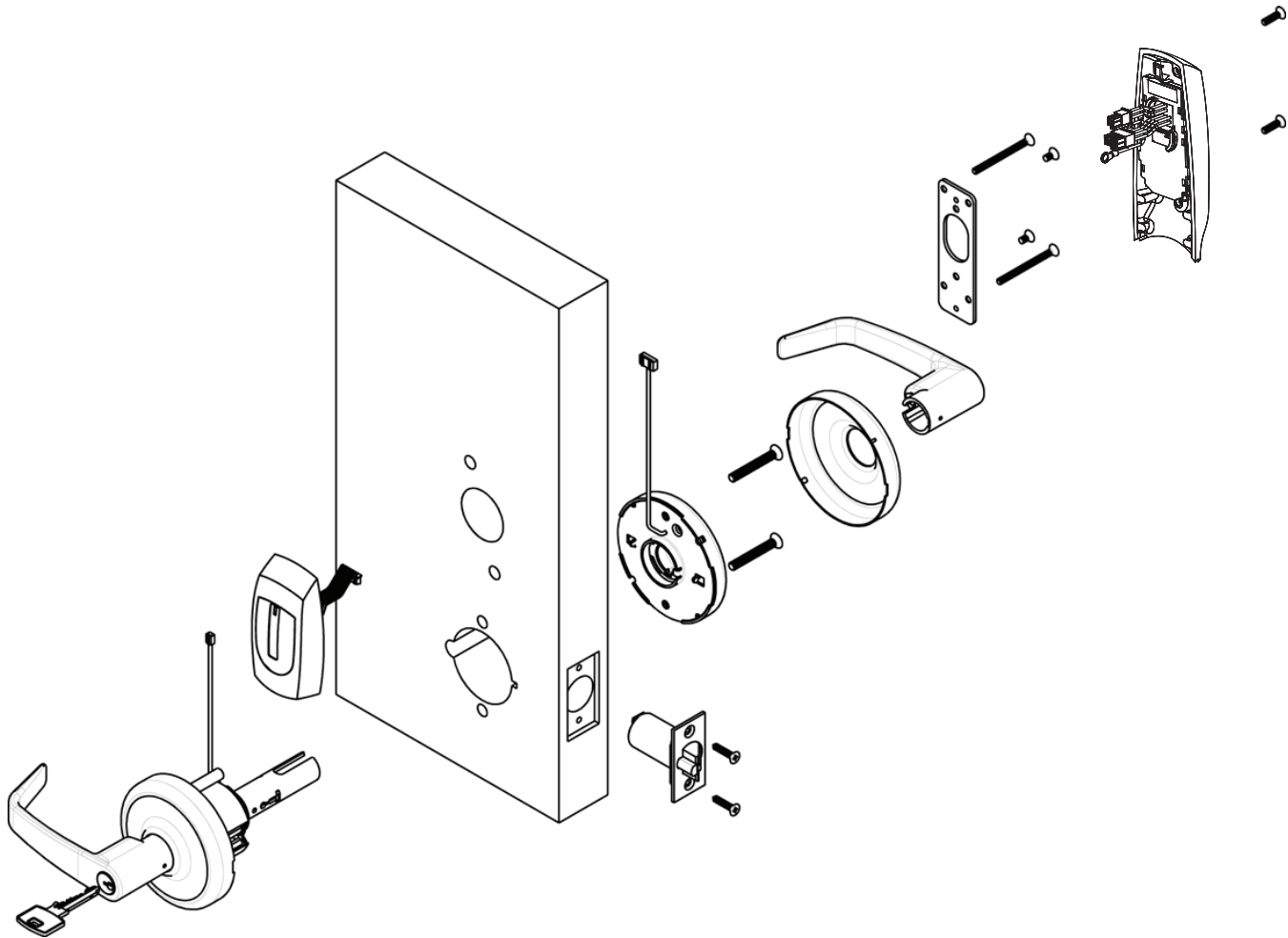
- Replace **both** reader & controller with SE products
- Consult factory for details

If you are replacing an iCLASS SE product:

- Reader or controller can be ordered separately

Tools Required:

- Phillips Screw Driver (Standard size)
- Flat Blade Screw Driver (Standard size)
- 1/8" Allen Wrench



1	743F352 FIN	Esc SA, M812 - Cylindrical Functions (CL33603, CL33605)	1
2	744F859	Controller (M812)	1
3	785F528	CL33603 Fixed Core 24V	1
	785F538	CL33605 Fixed Core 24V	
	785F548	CL33603 Fixed Core 12V	
	785F558	CL33605 Fixed Core 12V	
	785F568	CL33603 Removable Core 24V	
	785F578	CL33605 Removable Core 24V	
	785F588	CL33603 Removable Core 12V	
	785F598	CL33605 Removable Core 12V	

6) 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: Access 600 Mortise, ElectroLynx wire Color / Function assignments												
Corbin Russwin Mortise Lock	12/24VDC (Reader)		WIE-GAND	WIE-GAND	RX	RX	EGND	LED	12/24 VDC (LOCK RELAY)		DPS (NC)	DPS (COM)
	NEG	POS	DATA_1	DATA_0	NO	COM	REF. *DIA-GRAMS	REF. *DIA-GRAMS	NEG	POS	DPS	DPS
Cylindrical/Exits	NEG	POS	DATA_1	DATA_0	NO	COM			NEG	POS	-	-

*Diagram on following page

Reader LED Configuration

The Harmony Series reader can be configured for (3) modes of LED operation. Call 1-800-810-WIRE for details.

Mode 1:

- Red LED 'ON' when powered.
- Presenting a valid credential causes LED to 'FLICKER' green and return to red state.

Mode 2:

- Green LED "ON" when powered.
- No Flicker after presenting valid valid credential.

Note: LED wire must be connected to circuit GROUND of the system's power supply.

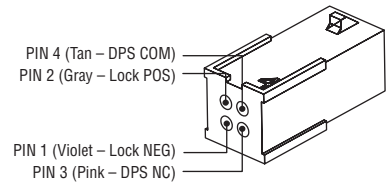
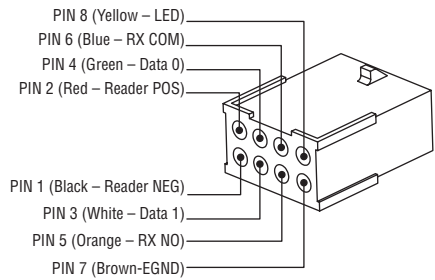
Mode 3:

- EAC Panel controls LED operation.

Note: Control of LED is a function of the EAC panel equipment (i.e. relay) to toggle between green and red.

Note: When LED wire is tied directly into EAC panel relay, no AC signals should be applied on wire or door reader performance will be impacted.

Wire from EAC panel to door must be shielded with drain terminated at EAC panel controller



Wire Gauge Charts

Total One-Way Length of Wire Run (ft)	Load Current @ 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							
	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	—	—	—	—	—	—

6) Wiring Diagrams (Continued)

Typical CL33600 x M812 Series Lock Application Diagram (12/24VDC Lock)

MODE 1: LED WIRE NOT USED = RED LED 'ON' WHEN POWERED

Standard Application Shown - For Alternative Applications Contact 1-800-810-WIRE (9473)

Reader Electronics Require 12 or 24VDC UL294 Listed, Power Limited Power Supply (or UL603)

12/24VDC SYSTEM

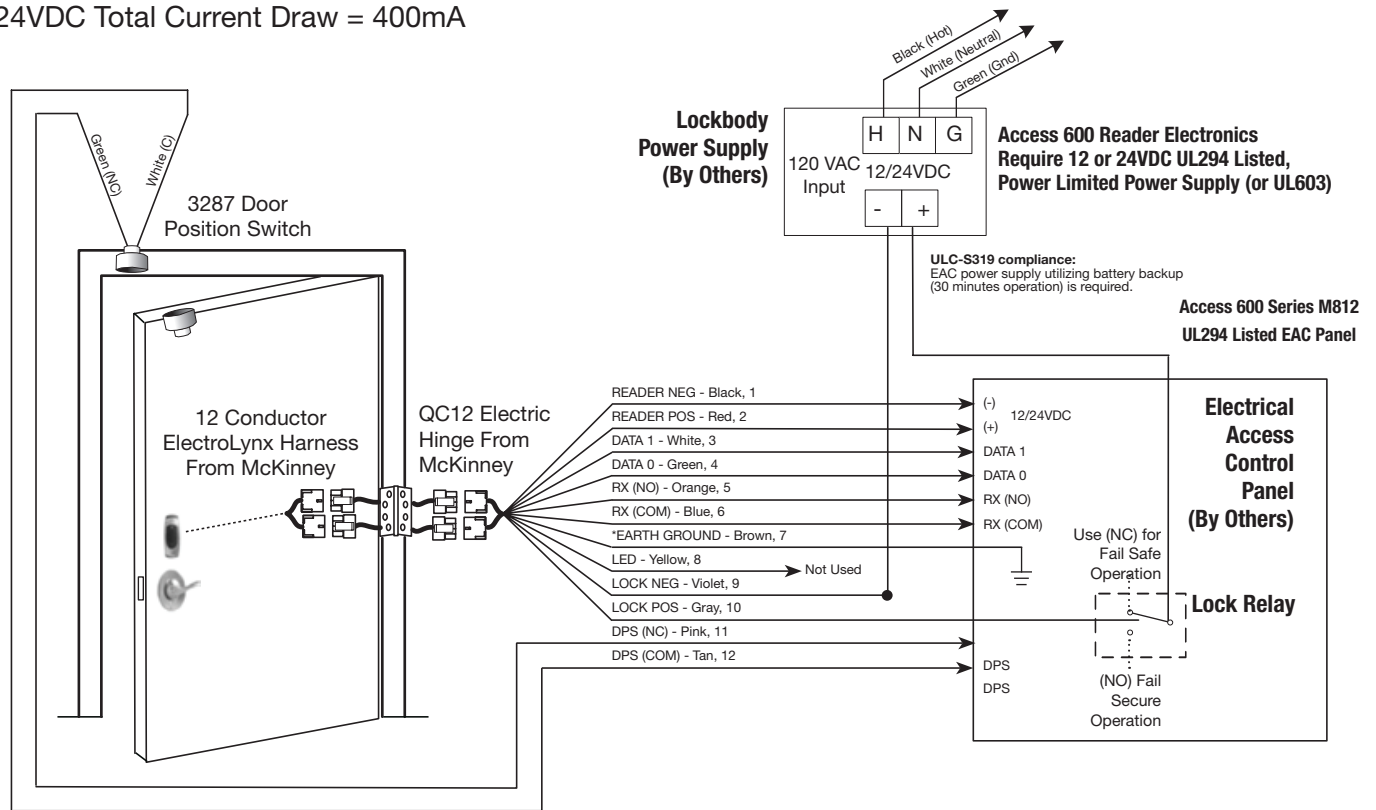
Reader Draw = 150mA

12VDC Solenoid Draw = 500mA

12VDC Total Current Draw = 650mA

24VDC Solenoid Draw = 250mA

24VDC Total Current Draw = 400mA



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

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

7) Installation Instructions

- Verify Hand and Bevel of door.** Illustrations shown are as viewed from the outside or secure side of opening.

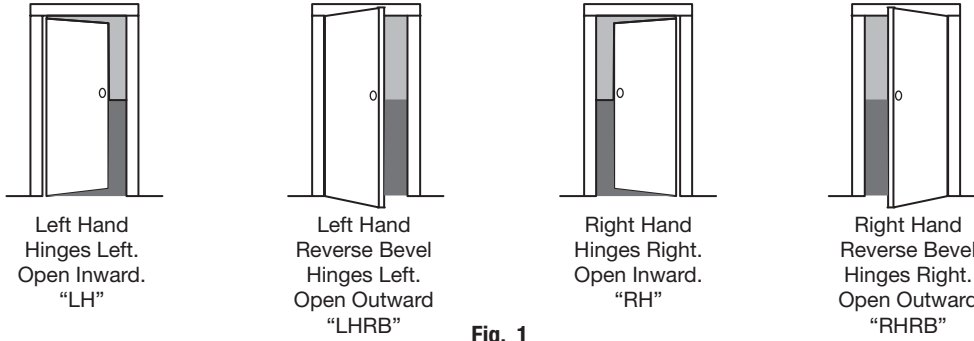


Fig. 1

- Prep door according to supplied door marker (FM291).** For door manufacture templates visit www.corbinruswin.com and reference template # T31071.

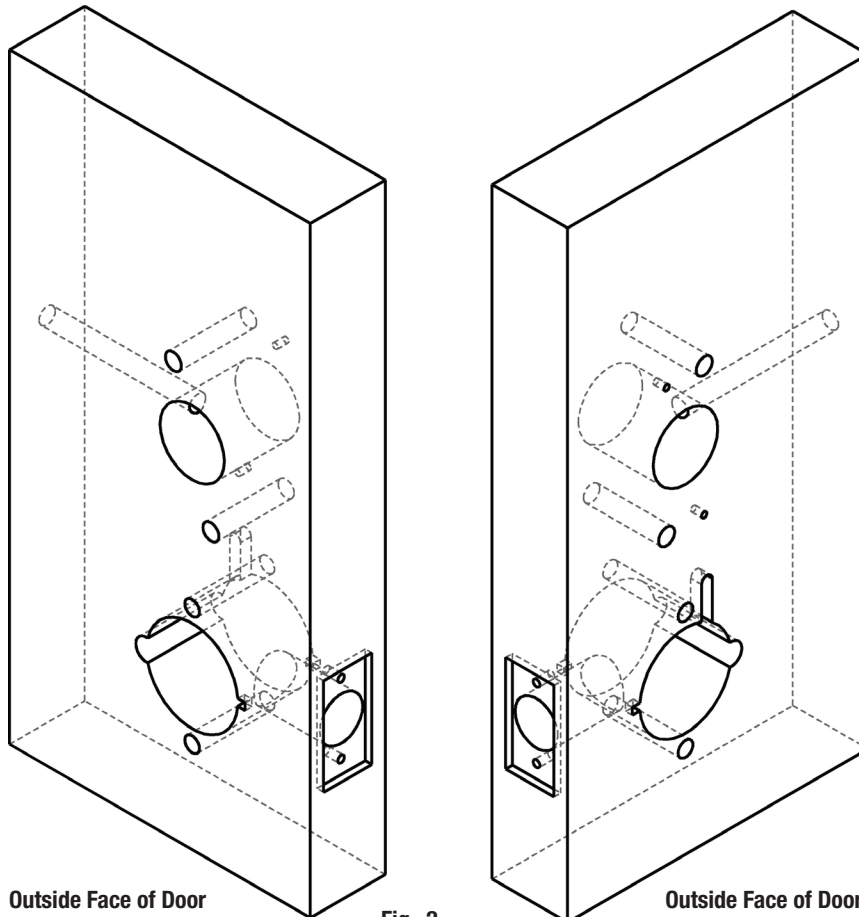
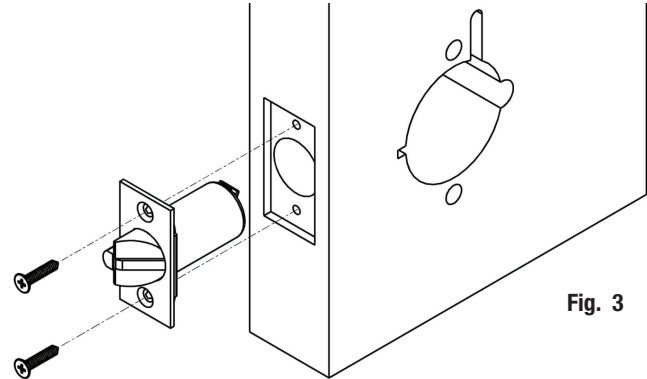


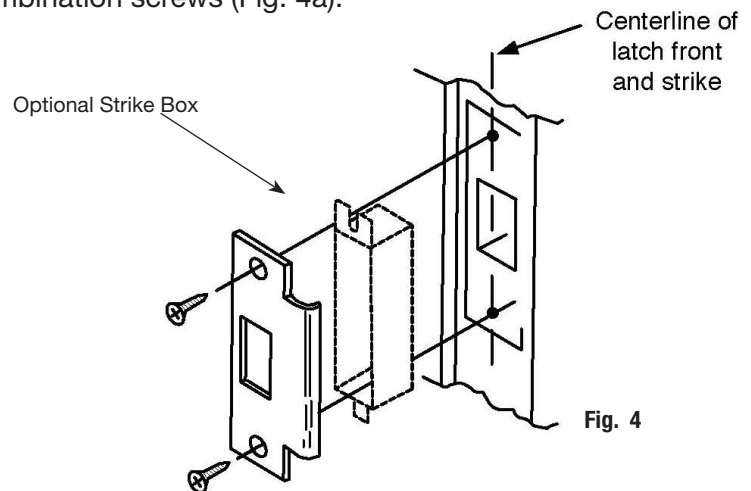
Fig. 2

7) Installation Instructions (Continued)

3. **Install Latch Bolt** with beveled bolt facing the strike using two #8 x 3/4" combination screws (Fig. 3):



4. **Install Strike Plate** using two #12 x 1" combination screws (Fig. 4a):

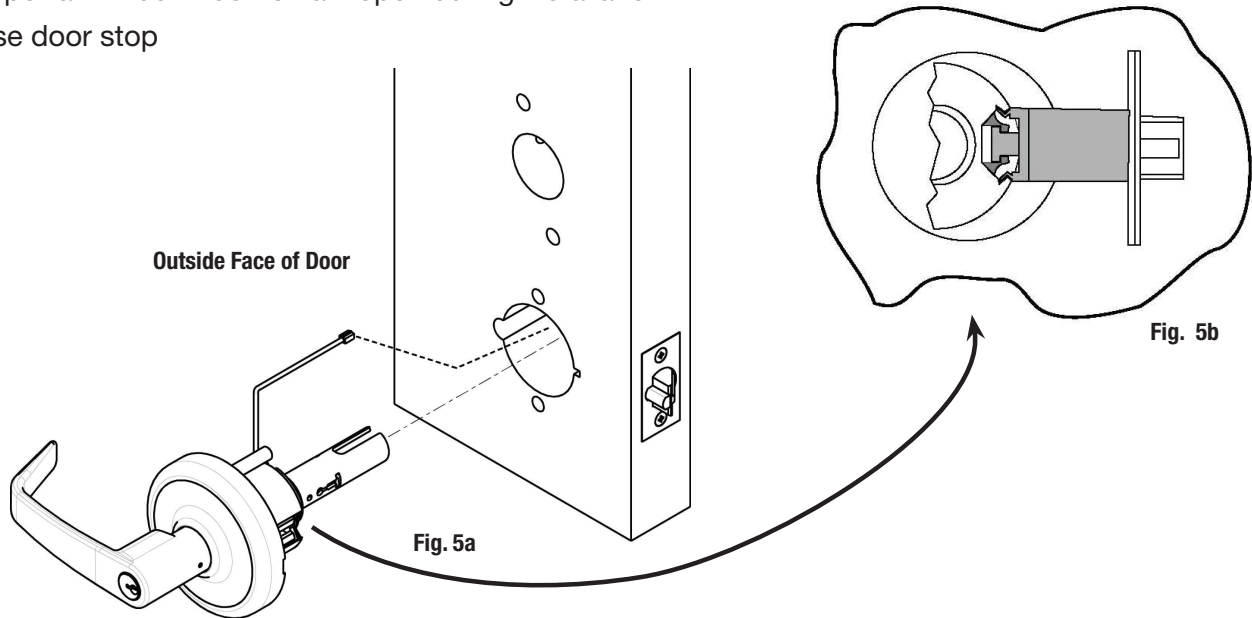


7) Installation Instructions (Continued)

5. **Installing Lock** - Feed lock body and wire through 2-1/8" diameter hole from outside of door (Fig. 5a). Be sure latch engages lock body as shown (Fig. 5b):

Important: Door must remain open during installation.

Use door stop



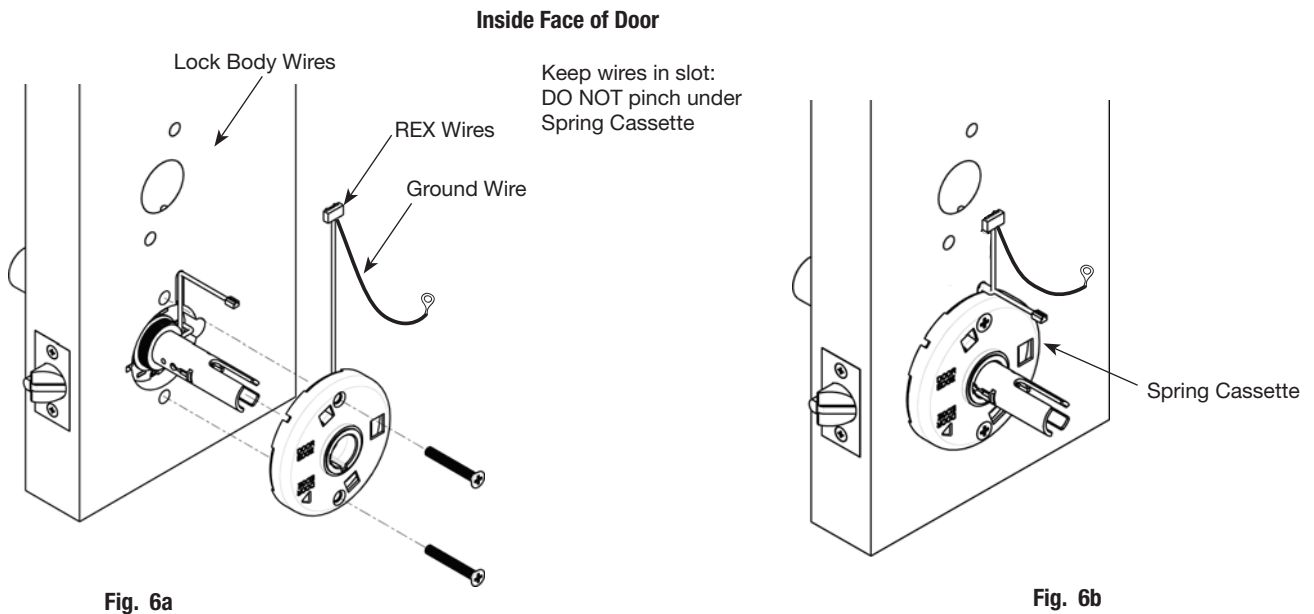
6. **Install Inside Spring Cassette:**

- a. Feed lock body wires and cassette (REX) wires in slot on face of door (Fig. 6a)

Note: Be careful to keep wires in slot cut into door.

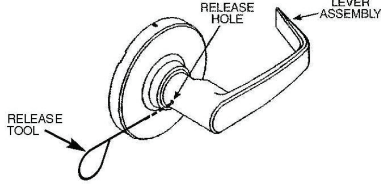
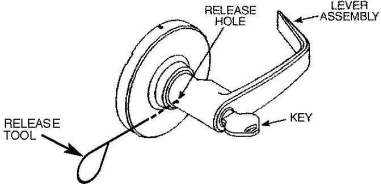
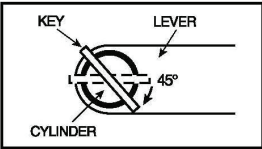
- b. Tightening using two #12-24 screws.

Note: DO NOT PINCH wires when tightening.



7) Installation Instructions (Continued)

7. Installation and Removal of Lever and Standard Cylinder:

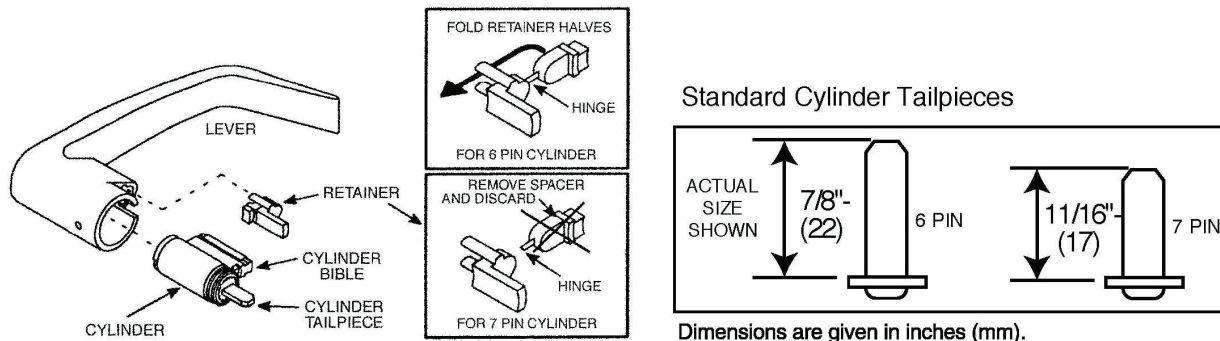
LEVER STYLE	REMOVAL	INSTALL
<p>PLAIN LEVER</p> 	<p>PUSH RELEASE TOOL</p> <p>Push release tool into release hole, Remove lever</p>	<p>SLIDE LEVER OVER</p> <p>Slide lever over Lever catch Pull on lever. <i>Make sure lever will not pull off</i></p>
<p>CYLINDER LEVER</p> 	<p>ROTATE KEY</p> <p>Rotate key 45° clockwise (from shed position), Push in release tool into Release hole, remove lever</p> 	<p>INSERT KEY AND ROTATE</p> <p>Insert key and rotate 45° (from Shed position), slide lever on <i>Make sure lever will not pull off</i></p>

Install Standard Cylinder

Make sure cylinder tailpiece is aligned in same direction as cylinder bible. Slide cylinder all the way into lever.

For 6 pin cylinder: Fold retainer at hinge and press fit retainer halves together as shown.

For 7 pin cylinder: Break retainer at hinge and discard spacer section. Also remove black cylinder spacer from inside of chassis rollback for clearance.

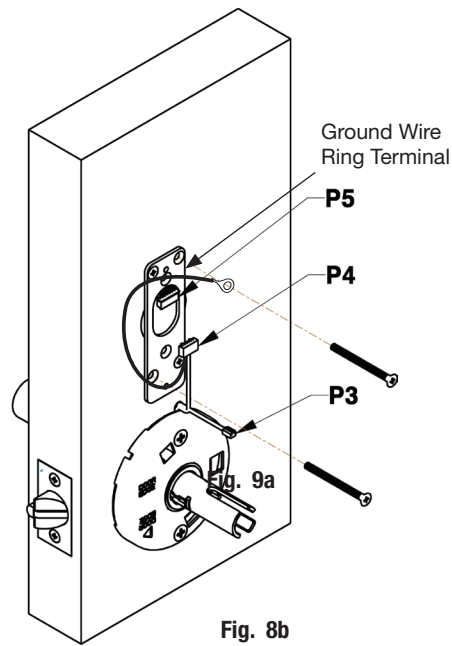
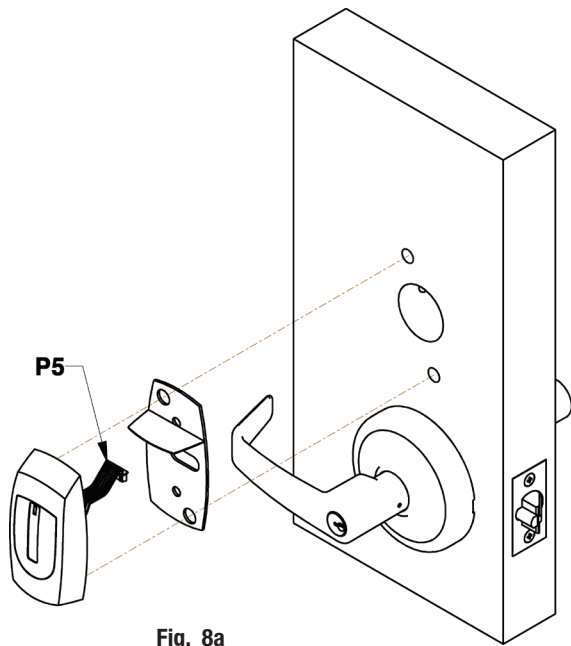


Dimensions are given in inches (mm).

7) Installation Instructions (Continued)

8. Installing Outside (Reader) Escutcheon and Ground Wire:

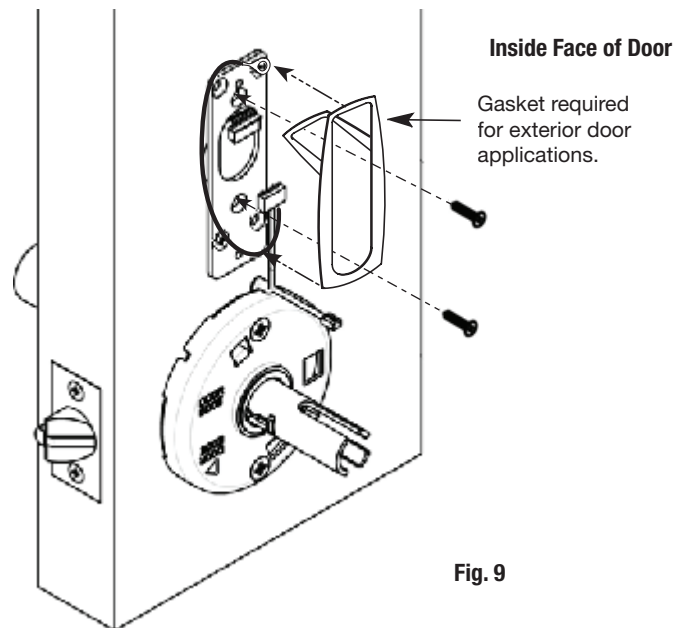
- a. Insert reader assembly and route wires through door (Fig. 8a).
- b. Install two #8-32 x 1-3/4" flat head screws (Fig. 8b).



9. Secure Mounting Plate using two #8 x 3/4" combination surface mount screws.

Add Gasket (if necessary):

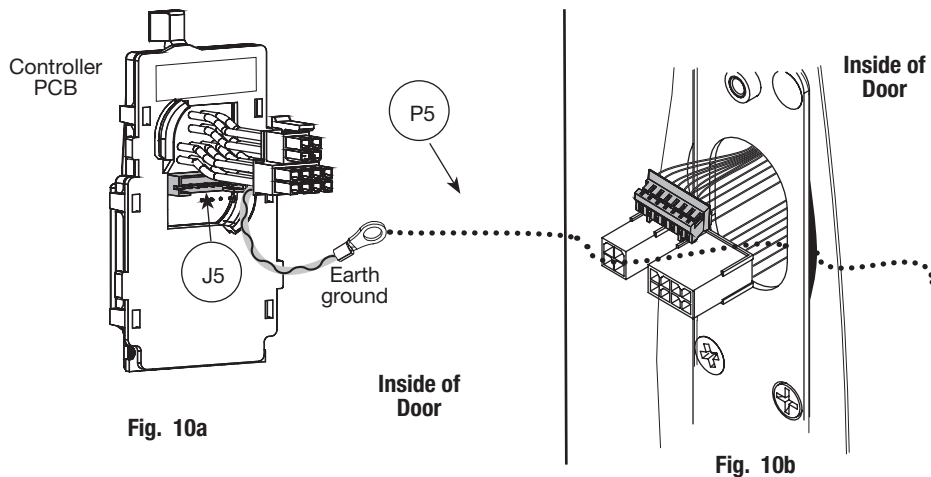
Remember an inside gasket must be used when installing in an outdoor application.



7) Installation Instructions (Continued)

10. Installing Controller

- a. Feed controller harness earth ground into and around behind rim of large upper hole of the mounting plate (Fig. 10a, b).



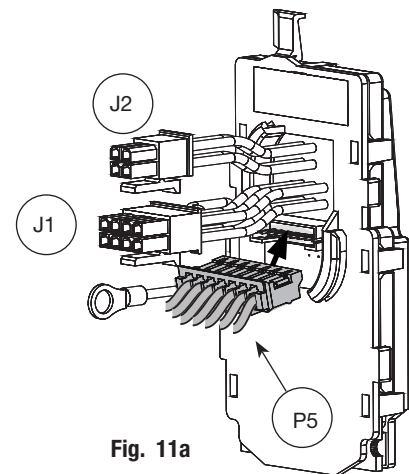
11. Connect ElectroLynx®

- a. Connect P5 (7 Pin Connector) from reader board to J5 on interior escutcheon PCB assembly (Fig. 11a).
- b. Connect ElectroLynx harness (4 and 8-pin) from door harness to ElectroLynx harness on interior PCB assembly (Fig. 11a, b).

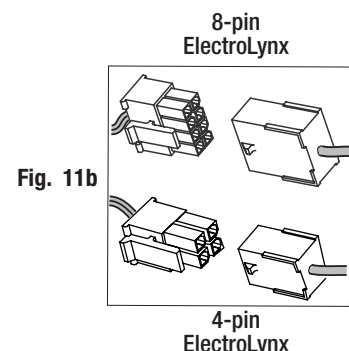
NOTES: Neatly fold the wires into the remaining space to prevent pinching wires when mounting escutcheon.

Connectors go on only one way.

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



PCB Layout - Wire Assignments - ElectroLynx Assembly (Molex)					
J2		J1			
1-Violet Lock Neg Actuator (+) Solenoid (-)	3-Pink DPS (NC)	1- Black PWR NEG	3-White DATA 1	5-Orange RX (NO)	7-Brown EGND
2-Gray Lock Pos Actuator (+) Solenoid (-)	4-Tan DPS (COM)	2-Red PWR POS	4-Green DATA 0	6-Blue RX (COM)	8-Yellow LED



8) Operational Check

Mechanical

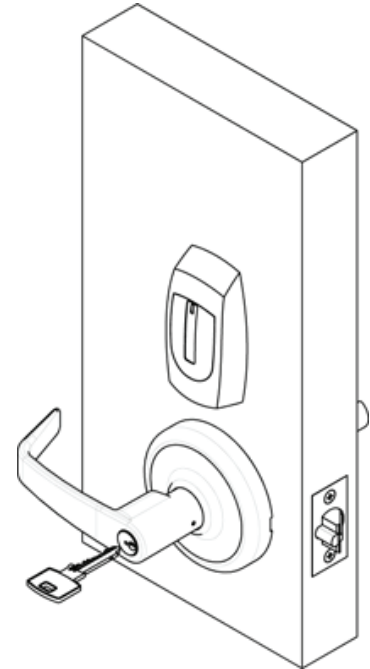
Before closing door test for cylinder function of lock cylinder and Inside lever:

- a. Insert key into cylinder and rotate.
- b. The key will retract the latch. Key should rotate freely.
- c. Inside lever retracts latch.
- d. Close door, ensure latch fully extends into strike and does not bind.

Electrical

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

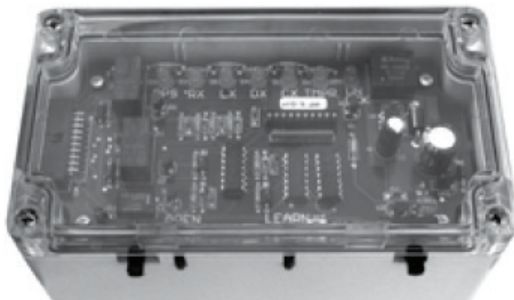
- a. Turn power ON.
- b. Verify LED located on reader is ON (Red or Green depending on reader configuration (See reader LED Configuration)).
- c. Present proximity credential and verify LED and sounder activity.
- d. Verify valid card read at EAC Panel.
- e. Verify system operation functions; i.e., when prox credential is presented to reader that the door unlocks.



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 the panel level	X	X
Card reader data integrity is validated at test unit	X	X
Works with SE LP10	X	X
Displays detailed Wiegand data, including hexadecimal string and total bits received		X
Displays measured end-of-line resistor values (if applicable)		X

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end-user needs for security,
safety and convenience