

Series ELR Multi-Point Lock with SE LP10 Reader Installation Instructions





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1 Regulatory Compliance

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.

FCC:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Industry Canada:

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter 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 définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps. Cet émetteur ne doit pas être co-localisé ou fonctionner en conjonction avec une autre antenne ou un autre émetteur.

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

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

2

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.

Ce produit peut vous exposer au plomb qui, dans l'état de la Californie, est reconnu pour causer le cancer, des anomalies congénitales ou d'autres problèmes de reproduction.

Pour plus d'informations, visitez: www.P65warnings.ca.gov.



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



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

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

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3 General Description

The SARGENT SE LP10 brings flexibility to our Integrated Wired access control solutions for the 7000 series multipoint locks. Featuring multiCLASS SE® Technology from HID Global®, the SE LP10 is ideal for mixed credential environments and enables easy migration to higher security credentials and mobile access. Backed by SARGENT's Grade 1 hardware, SE LP10 multipoint locks include an external Door Position Switch (DPS) for door position monitoring, and other monitoring options, such as latchbolt and lever monitoring, are available as add-ons. The SE LP10 reader provides visual (LED) and audible indicators of lock state (locked/unlocked).

4 Specifications / Features

All SE LP10 Multi Point Locks

- Fire rated devices available
- Multi point lock furnished for 1-3/4" doors
- Fail safe or fail secure* available
- Door Position Switch (DPS 3287) supplied for monitoring
- 24VDC motor-operated ET Trim available
- Wire from EAC Panel to door must be shielded with a drain terminated at EAC Panel controller

SE LP10 7000 Series Multi Point Lock

 Cylinder override available for 7000 CVR with 106 Series Auxiliary Control

*WARNING: 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.

- Outside lever can be controlled by multiple credential formats:
 - 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 and MIFARE Classic (on by default)
 - Standard iCLASS Access Control Application, ISO14443A (MIFARE) CSN, ISO14443B CSN, and ISO15693 CSN
 - ISO14443A/B (PIV-compatible Transparent FASC-N read) available with SE LP10-F (**not available with Alternate Indicator Configuration)
 - NFC-enabled mobile phones
 - 125 kHz credential compatibilty:
 - HID Prox®, AWID, EM4102

For Mobile Credential-Enabled versions of this electronic lock

(Indicated by "BIPS" in the product order string):

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

Compliance with IEEE 802.3 (at or af) specifications was not verified as part of UL294/B.

^{**}not available with Alternate Indicator Configuration

SE LP10 7000 Series Multi Point Lock



4 Specifications / Features (Continued)

- UL Listed* UL 294 Indoor Use
- CUL Listed S319: Class 1
- ANSI/BHMA A156.25 Listed Grade 1 Compliant

UL 294 Access Control Ratings:

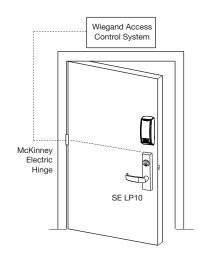
Destructive Attack	Level 1
Line Security	Level 1
Endurance	Level 4
Standby Power	Level 1

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

Electrical Specifications 12/24VDC System

	12\	1	24V	
	Average Peak		Average	Peak
Reader	100mA	220mA	n/a	n/a
Actuator 15mA		500mA	15mA	500mA

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



Total One-Way	Wir	re Gai	uge C	hart '	12VD	C Load	d Current @	2 12VDC
Length of Wire Run (ft)	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	Wire Gauge Chart 24VDC Load Current @ 24VD							
Length of Wire Run (ft)	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	_	_	_	_	_	

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.

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

^{*}UL294, S319, & BHMA A156.25 currently not applicable to Alternate Indicator option

Wiring Diagrams 5

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: SE LP10 7000 MP Lock, ElectroLynx wire Color / Function assignments											
		/DC	WIEGAND	WIEGAND	RX	RX	EGND	TAMPER	12/24 VDC		DPS	DPS
	(Reader)							GREEN_LED*	(LOCK I	RELAY)		
SARGENT - SE LP10	NEG	POS	DATA_1	DATA_0	NO	COM	EGND	OPEN COLLECTOR	NEG	POS	NC	COM
7000 MP								INPUT				

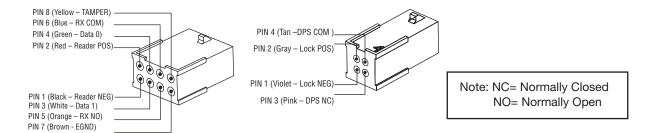
^{*}Diagrams on following pages

Default 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.
- Presenting a FIPS 201 PIV credential causes LED to turn amber as credential is authenticated. Reader emits a short beep when credential is successfully read. Reference Diagram #1.

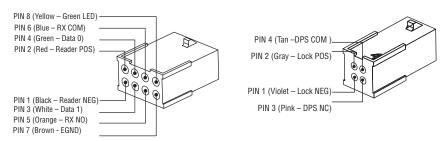
Optional TAMPER Operation Mode:

- 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.



Optional Alternate Indicator Mode:

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.



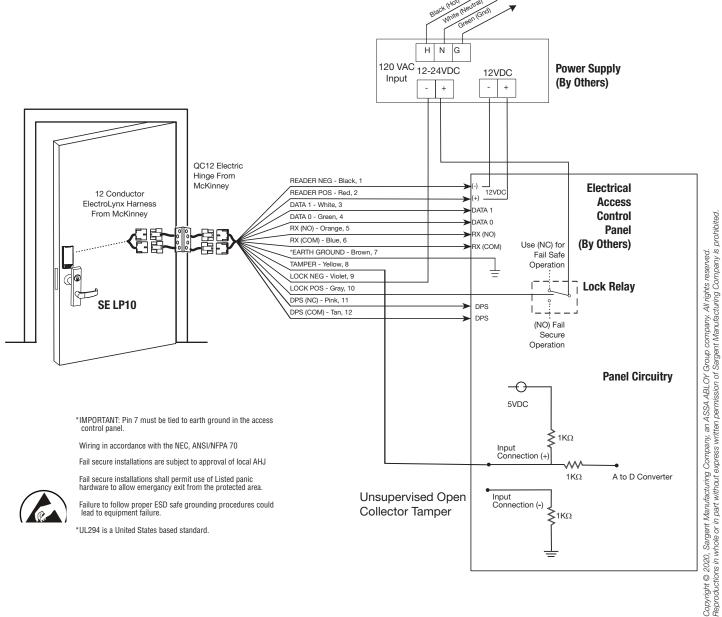


Typical (UL294-Compliant) SE LP10 7000 Multi Point Lock Application Diagram #1

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

12/24VDC System

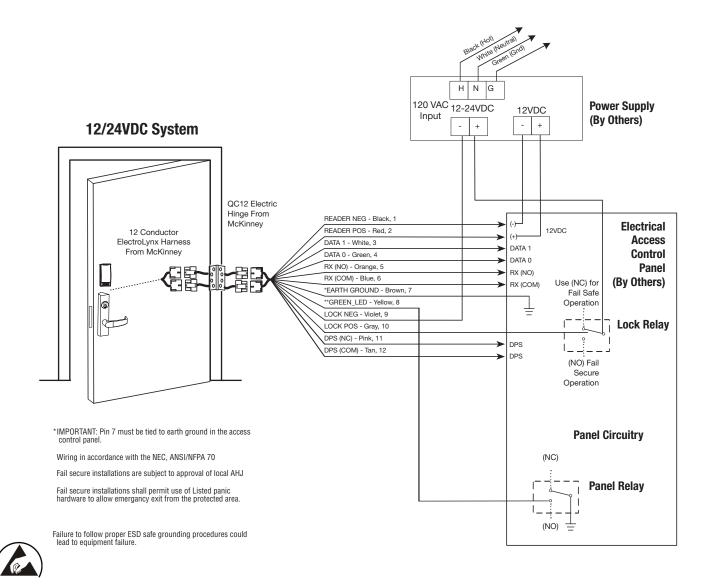
	12V	1	24V	1
	Average Peak		Average	Peak
Reader	100mA	220mA	n/a	n/a
Actuator	15mA	500mA	15mA	500mA



Alternate Indicator Application Diagram #2 (12/24VDC System)

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.

Reader Electronics Requires 12VDC Filtered and Regulated



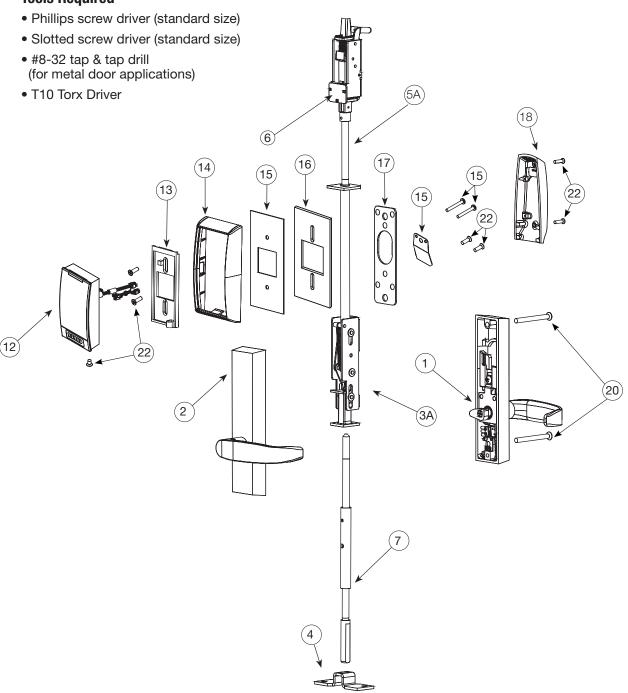
^{**}UL294, S319, & BHMA A156.25 currently not applicable to Alternate Indicator option

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6 Parts Breakdown

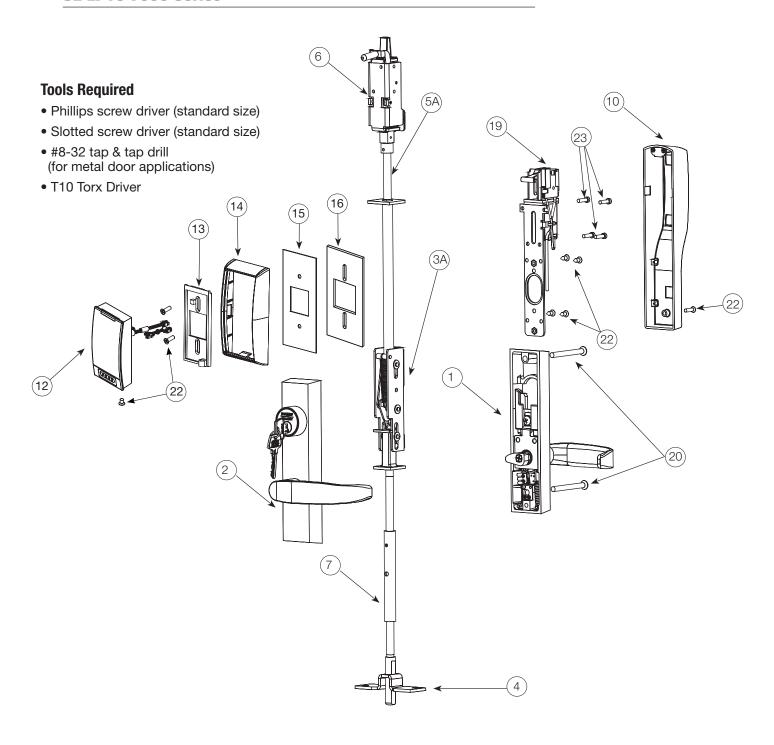
SE LP10 7000 Series

Tools Required



6 Parts Breakdown (Continued)

SE LP10 7000 Series



SE LP10 7000 Series Multi Point Lock



6 Parts Breakdown (Continued)

SE LP10 7000 Series

ITEM	PART #	Description	Req.
1		WD/MD/AD Inside Trim Assembly	1
2		Outside Trim Assembly	1
3A	94-2411	MD/AD Inner Chassis Assembly	1
	94-2412	MD/AD Inner Chassis Assembly, Fire (12-)	
	94-2414	MD/AD Monitoring Inner Chassis, Fire (53-/12-53-)	
3B	94-2423	WD Inner Chassis Assembly (Not shown)	1
	94-2424	WD Monitoring Inner Case (53-) (Not shown)	
4	68-0888	Bottom Case	1
5A	MD694T	MD/AD Top Rod and Bolt Assembly	1
5B	WD694T	WD Top Rod and Bolt Assembly (Not shown)	1
6	68-5374	Top Case Assembly	1
7	694B	Bottom Rod and Bolt Assembly	1
8	97-0825	Standard Plate (Rectangular) (Not shown)	2
	97-0826	Scultped Plate (Optional) (Not shown)	1
9	68-1264	WD Top Case Bracket (Not shown)	1
10	97-4056	I/S ELR Escutcheon Assembly	1
11	650	Top Strike Pack (not shown)	
	606	Bottom Strike Pack, Fire (12-)(HC)(WS) (not shown)	
	652	Top and Bottom Strike Pack, STD (not shown)	
12	52-4922	BIPS-03 Reader and Harness Assembly - Bluetooth (Standard Indicator Configuration)	1
	52-4528	FIPS-03 Reader & Harness Assembly - 200 bit Wiegand output	
	52-4567	FIPS-04 Reader & Harness Assembly - 75 bit Wiegand output	
	52-4524	IPS-03 Reader & Harness Assembly (Standard Indicator Configuration)	
	52-5998	IPS-0E Reader & Harness Assembly (Alternate Indicator Configuration)	
	52-5999	BIPS-0E Reader & Harness Assembly - Bluetooth (Alternate Indicator Configuration)	
13	-	SE Mounting Plate	
14	52-1359	Trim Bezel	1
15	52-4542	Fire Block Kit	1
16	52-1711	Gasket (for non-fire-rated doors)	1
17	52-5219	I/S Mounting Plate	1
18	97-0801	I/S SE LP10 Escutcheon	1
19	52-4722	ELR Assembly	1
20	94-2415	MD/AD Screw Pack	1
21	94-2431	WD Screw Pack (shown as Item 20)	1
22	52-4539	Screw Pack, SE Series	1
23	52-4723	MD/AD Mounting Hardware	1
24	52-4724	WD Mounting Hardware (shown as Item 23)	
25	01-9241	#3 - 48 x 1/8" Pan head Machine Screw (Not shown)	

1 Installation Instructions

1 Door Preparation

A. Verify Hand and Bevel of Door

- Check hand of door. The Multi-Point lock may be handed.
- · Door should be fitted and hung.
- Verify box label for size of the Multi-Point lock, function and hand.

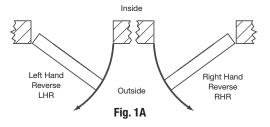
B. Door Preparation

Prepare door according to appropriate template. If necessary, refer to **www.intelligentopenings.com**.

- Metal door (MD/AD): A7860
 - Templates: 4582
- Wood door (WD): A7971
 - Templates: 4624



Important: If manufacturer has not pre-drilled door, refer to instructions **A8147B** to prepare ELR mounting holes in door, using plastic template included with the device. Screw hole orientation is not affected by handing.



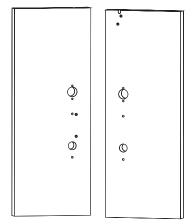


Fig. 1B Metal Door Shown

2 Rod and Inner Case Installation

- 1. Refer to instruction sheet A7860 for rod and inner case installation on metal doors.
- 2. Refer to instruction sheet A7971 for rod and inner case installation on wood doors.

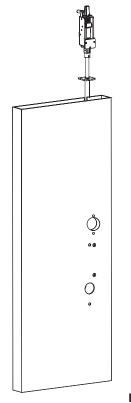


Fig. 2

3 Install Outside Trim and Inside Trim

A. Outside Trim

- 1. For exterior applications, use ET gasket (52-0263) to seal ET escutcheon and outside door surface (Fig. 3A).
- 2. Feed wire through the through hole and attach the outside exit trim to the door.

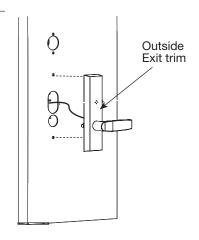
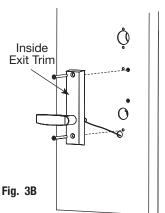


Fig. 3A

B. Inside Trim

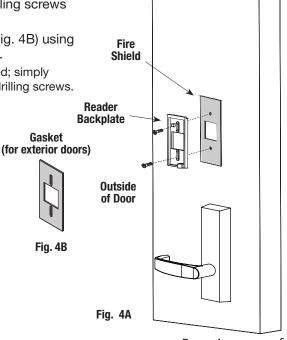
- 1. Position ET carefully onto the inside door surface the inside of the door. Be careful not to pinch wire harness.
- 2. Mount inside trim lever using (2) # 1/4" -20 x 3" Philips oval head machine screws. (Fig. 3B).



4 Install Reader Backplate and (Optional*) Fire Shield or Gasket

- For fire-rated doors only, install reader backplate and fire shield to door using two (2) #8-18 x 5/8" Phillips flat head self-drilling screws (Fig. 4A).
- 2. For exterior doors, install reader backplate and gasket (Fig. 4B) using two (2) #8-18 x 5/8" Phillips flat head self-drilling screws.

*For non-fire rated interior doors, no fire shield or gasket is required; simply install backplate using two (2) #8-18 x 5/8" Phillips flat head self-drilling screws.



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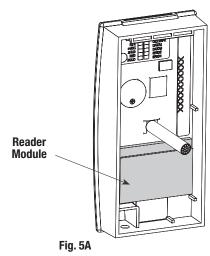


5 Installation of SE LP10 Reader & Trim Bezel

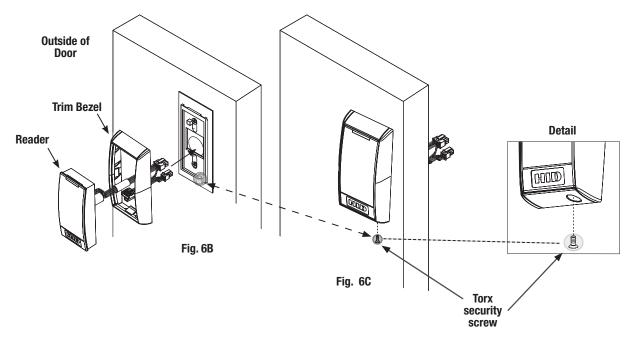


Observe precautions for handling electrostatic sensitive devices.

If the SE LP10 reader is installed with a module (Fig. 5A), make sure that the reader is powered down when inserting/removing the module; i.e., do not "hot-plug" (remove/insert while reader is powered) module as it may damage the reader.

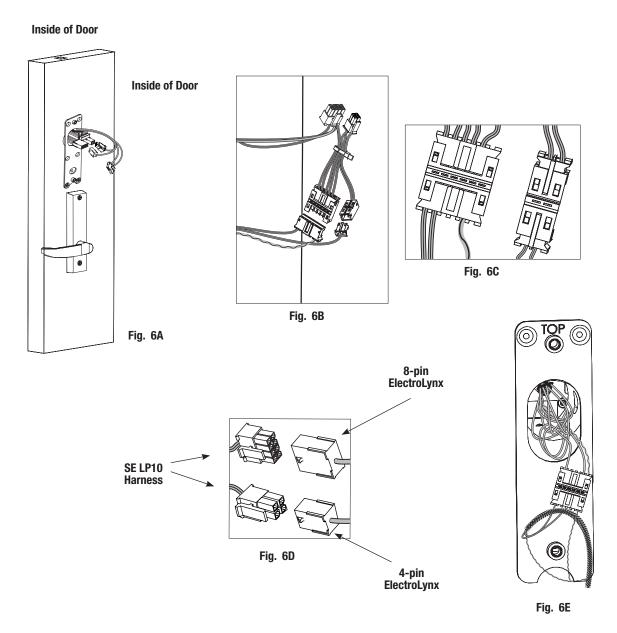


- 1. Fit trim bezel around the reader. Ensure access hole in the bezel aligns with screw hole on reader. The reader should be mounted so the holes face the bottom of door (Fig. 5B).
- 2. Align top of reader with top of backplate. Pivot reader down until seated. Guide wires as needed to avoid pinching.
- 3. Secure the reader with (1) #6-32 x 3/8" Phillips or anti-tamper security torx screw to the mounting plate (Fig. 5C).



6A Inside Mounting Plate and Wire Connections (Non-ELR)

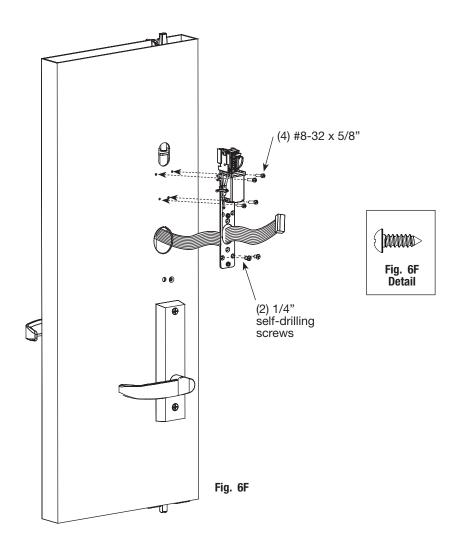
- 1. Attach mounting plate using (2) #8 x 1/2" self-drilingl screws (Fig. 6A).
- 2. Connect 6- and 2-pin connectors from device to 6- and 2-pin connectors on reader harness (Fig. 6B, C).
- 3. Connect ElectroLynx 4- and 8-pin connectors from the door harness to (black) 4- and 8-pin connectors of the SE LP10 harness (Fig. 6D).



NOTE: Neatly fold excess wires into remaining space to prevent pinching wires when mounting inside escutcheon (Fig. 6E).

6B Inside Mounting Plate and Wire Connections (ELR)

- 1. Install the upper left mounting screw, #8 32 x 5/8 Fillister for metal door or #8 x 5/8 self-drilling Fillister for wood doors (Figure 6F).
 - Note: Leave the screw loose enough to slide the ELR assembly on.
- 2. Snake the wire through opening in ELR assembly.
- 3. Slide the mounting clip of the ELR assembly underneath the installed screw and tighten it to secure the assembly in place.
 - Note: Be careful not to pinch or disconnect the wire located in that area.
- 4. Install the remaining three (3) mounting screws: 8-32 x 5/8 Fillister for metal doors or #8 x 5/8 self-tapping Fillister for wood doors.
- 5. Install two (2) #8 x 1/2" self-drill screws in the bottom-most pair of holes in the mounting plate (Fig. 6F).
- 6. Connect 6- and 2-pin connectors from device to 6- and 2-pin connectors on reader harness (Fig. 6B, C in previous step).
- 7. Connect ElectroLynx 4- and 8-pin connectors from the door harness to (black) 4- and 8-pin connectors of the SE LP10 harness (Fig. 6D in previous step).



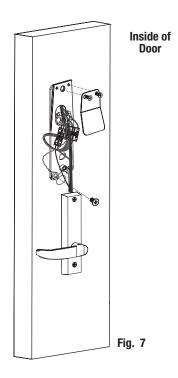
SE LP10 7000 Series Multi Point Lock



Fire Plate Installation and Earth Ground Connection

- 1. Remove lower left screw from mounting plate. Feed screw through green/yellow ground wire ring terminal. Reinstall screw. Ensure that green/yellow wire points toward top of door in order to avoid interference with escutcheon.
- 2. Fasten plate with two #8 x 1 1/4" Phillips pan head self-drilling screws.

Note: For non-fire rated doors, omit fire plate.



8A Position Inside Escutcheon & Wires (Non-ELR)

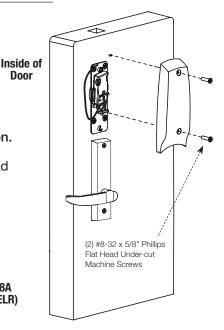
- 1. Carefully and neatly fold lock body wires onto themselves. ElectroLynx connectors should be positioned side-by-side under the fire block plate. Device connectors should be positioned side-by-side on top of the ElectroLynx connectors.
- 2. Position inside escutcheon in order to ensure wires are not pinched. Adjust wires as necessary to ensure they are clear of rear escutcheon. Seat inside escutcheon against door.

Note: Be sure to cover, but not pinch wires when mounting escutcheon.

3. Insert two (2) #8-32 x 5/8" Phillips flat head escutcheon screws and thread into mounting plate.



Door

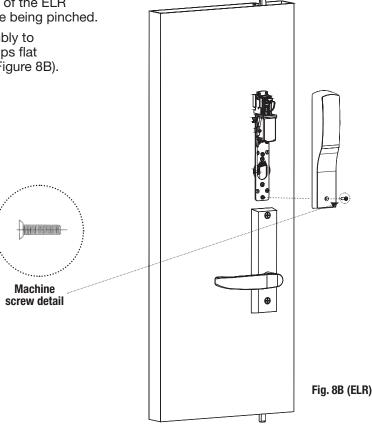


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8B Position Inside Escutcheon & Wires (ELR)

 Position escutcheon against door by hooking the top edge on the top of the ELR assembly. Verify that no wires are being pinched.

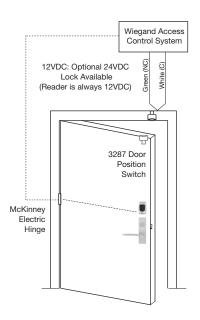
2. Mount inside escutcheon assembly to plate using (1) #8-32 x 5/8" Phillips flat head undercut machine screw (Figure 8B).



8 Concealed Door Position Switch Instructions (3287)

Use SARGENT 3287 Concealed Door Position Switch with this product:

- 1. Concealed Door Position Switch Model 3287 is included with this product. System integrator shall determine use and installation location.
- If Sargent 3287 Concealed Door Position Switch installation is specified, use SARGENT template A7448B to prepare door and frame at desired location.
- 3. Connect the common wire of the switch to the common input terminal of the EAC.
- 4. Connect the normally open wire of the switch to the normally open input terminal of the EAC.



DIDDE

Operational Check (Continued)

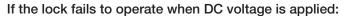
Note: Once electrical wiring has been successfully completed according to proper application, perform the following steps:

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



LED remains green when panel asserts GREEN LED signal

*For configurations with GREEN_LED override enabled (Alternate Indicator Configuration); see Application Diagram #2 in Section 6.



- A. Remove power.
- B. 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:

A. 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).

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 lock voltage adjustable	Х	Х
Operates as Fail Safe or Fail Secure	Х	Х
"Learn" mode allows testing of specific cards without programming at the panel level	X	X
Card reader data integrity is validated at test unit	Х	Х
Displays detailed Wiegand data, including hexadecimal string and total bits received		х
Displays measured end- of-line resistor values (if applicable)		х

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, locks, perimeter fencing, access control and service.



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Founded in the early 1800s, SARGENT® is a market leader in locksets, cylinders, door closers, exit devices, electro-mechanical products and access control systems for new construction, renovation, and replacement applications. The company's customer base includes commercial construction, institutional, and industrial markets.

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