

# SARGENT Wiring Instructions for Solenoid Mortise Locks (7970,71,72,73 & 8270,71,72,73) for 12 or 24 Volts and Solenoid Mortise Locks with Monitoring Prefixes (RX, LX & DX) with the ElectroLynx® Connector System



For assistance, contact SARGENT at 800-810-WIRE (9473) or [www.sargentlock.com](http://www.sargentlock.com)

This instruction manual includes wiring instructions for all electromechanical 7900 or 8200 Series mortise locks with the ElectroLynx connector system. The correct wiring configuration must be selected depending on the prefix(es) and function of the mortise lock being installed. Multiple prefixes can be combined (ex: RX-LX-8270). Refer to table of contents to select appropriate wiring instruction for mortise product being installed.



## Important

- Disconnect all input power before beginning installation to prevent electrical shock and equipment
- Installer must be a trained, experienced service person
- All wiring must comply with applicable local electrical codes, ordinances and regulations

**CAUTION: The voltage applied to the lock solenoid must not exceed 10% of rated voltage. If the voltage exceeds this value, the solenoid may be damaged.**

## Specifications / Functions

### Rectifier

12 or 24 Volt Internal Bridge rectifier allowing 12/24 VAC/VDC input power +/- 10%

### Solenoid

Type: 24VDC, Intermittent or Continuous Duty

Current draw: .25AMP at 24VDC

Type: 12VDC, Intermittent or Continuous Duty

Current Draw: .50AMP at 12VDC

Fail Safe Models: 7970, 7972, 8270 and 8272 (each 12 or 24volts)

Fail Secure Models: 7971, 7973, 8271 and 8273 (each 12 or 24volts)

### RX-, LX-, and DX- Lock Switches

Switch contact rating for all switches: 2AMP max @ 24VDC

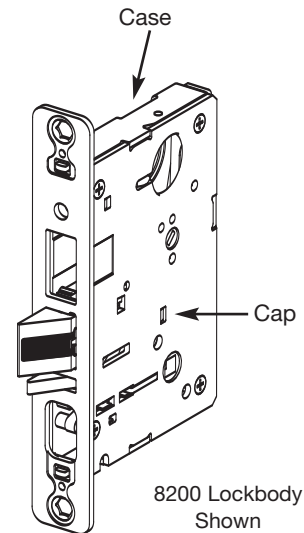
**RX- (lever monitor switches):** The RX-7900 or RX-8200 Series mortise lock is designed to allow independent monitoring of inside and outside lever rotation. The lock uses two independent switches to separately monitor the case side and the cap side lever hub.

For LH and LHR doors, outside monitor is case side and inside monitor is cap side.

For RH and RHR doors, outside monitor is cap side and inside monitor is case side.

**LX- (latch monitor switch):** The LX-8200 Series mortise lock provides positive indication of latch extension or retraction (when either lever is rotated retracting the latch, the latch is being retracted by key, or if the latch itself is depressed).

**DX- (deadbolt monitor switch):** The DX-8200 Series is designed to monitor the position of the deadbolt.



8200 Lockbody Shown

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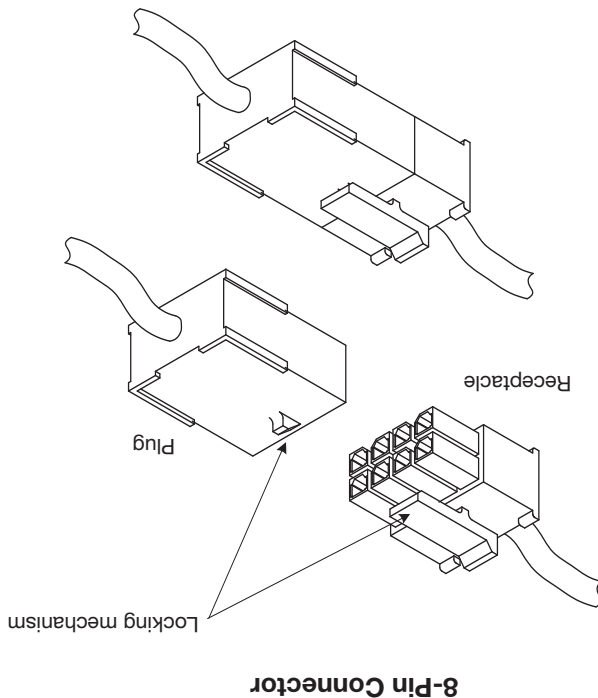
Important/CAUTION .....	1	Installing and wiring locks without solenoids	
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**Electrolynx®**  
As part of their promise to provide innovative, fast and effective, and higher security solutions to their customers, ASSA ABLOY Group companies offer Electrolynx, a universal quick-connect system that simplifies the electrification of the door opening.

**Look for the LYNX™**



**Hardwiring Made Easy™**



**Electrolynx® Connector System Notes**

The system is designed to be installation friendly with connectors from the electric hinge through the door to the lock. The only wiring is to the harness which plugs into the electric hinge.

**IMPORTANT:**

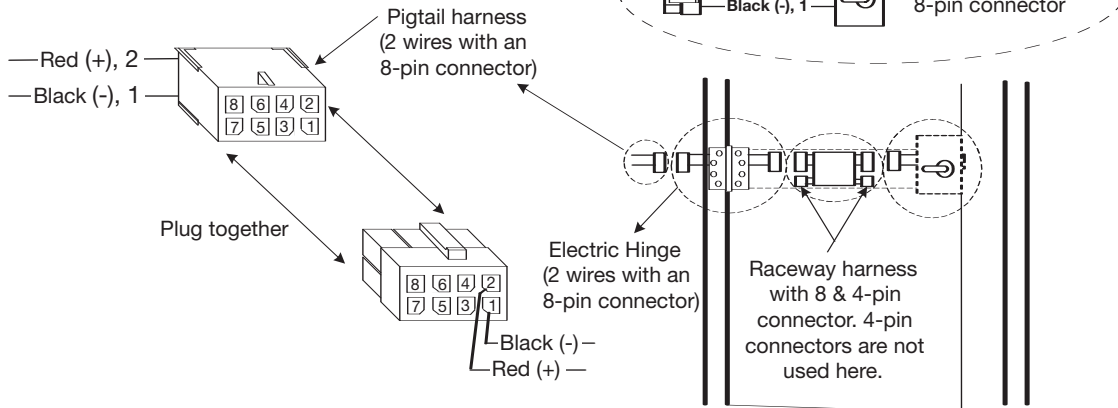
The plug and receptacle connectors are designed to mate and lock together as shown in the illustration. Plug the connectors into each other with the locking mechanism aligned as indicated.

**Do NOT force connectors on any other way.**

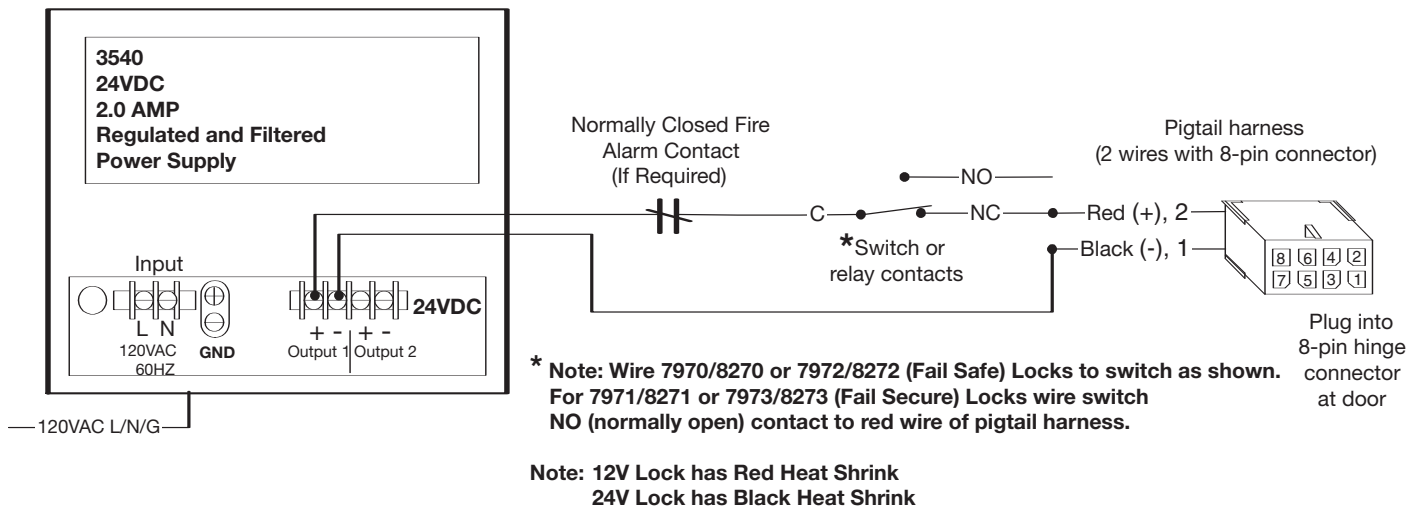
**Installation Notes**

1. Install mortise lock and electric hinge. With new applications, a raceway harness with 8 & 4-pin connectors will be pre-installed inside the door by ASSA ABLOY door manufacturer when specified during ordering process. Raceway harness kits are also available for retrofit applications.
2. If door does not have a raceway harness with connectors, either consult factory for raceway retrofit kit or cut the connectors off product and hardwire, as required.
3. Wiring to digital harness is per facility wiring requirement. Follow individual instructions below.

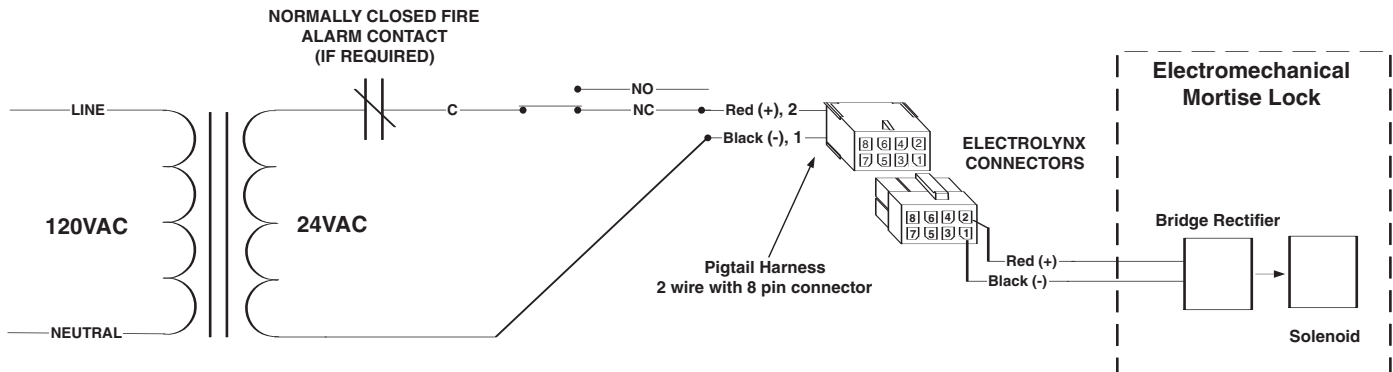
**7970, 71, 72 and 73  
8270, 71, 72 and 73  
(solenoid) installation  
and wiring instructions**



**Sample wiring 8270-24 Volt Series solenoid locks with a 24VDC Regulated and Filtered Power Supply.  
A 12V lock would use a 12 volt supply.**



**Sample wiring (8270-24 volt) Fail Safe solenoid with a 120/24VAC transformer**



**Solenoid with RX- (7900 & 8200 locks)**

The **RX**- switches are in the Normal Open position, when levers are untouched and the latch is extended.

**RX**- switches monitor inside and outside levers independently

**RX** - CAP Side

Connections

Switch

**RX** - CASE Side

Connections

Switch

**Solenoid**

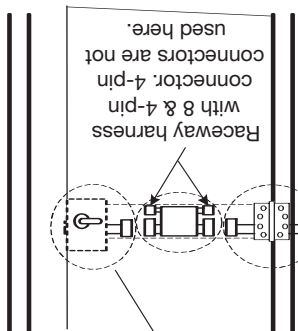
Connections



Pigtail harness with 8-pin connector with 8 wires

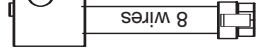
Electric Hinge with 8-pin connectors with 8 wires

Raceway harness with 8 & 4-pin connector. 4-pin connectors are not used here.



For LH and LHRB doors, outside monitor is the cap side and inside monitor is the case side.  
For RH and RHRB doors, outside monitor is the case side and inside monitor is the cap side.

Solenoid and RX- wiring (8 wires)



**Note: 12V Lock has Red Heat Shrink**  
**24V Lock has Black Heat Shrink**

RX-7970, 71, 72 or 73 or RX-8270, 71, 72 lock with 8-pin connector

**Solenoid with RX- and LX- wiring (8200 locks only)**

The **RX**- switches are in the Normal Open position, when levers are untouched and the latch is extended.

**RX**- switches monitor inside and outside levers independently

**RX** - CAP Side

Connections

Switch

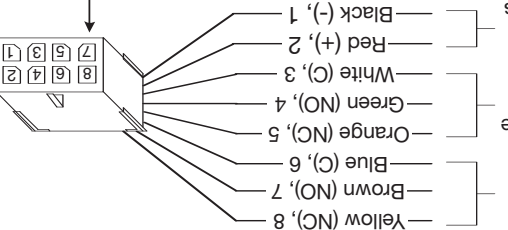
**RX** - CASE Side

Connections

Switch

**Solenoid**

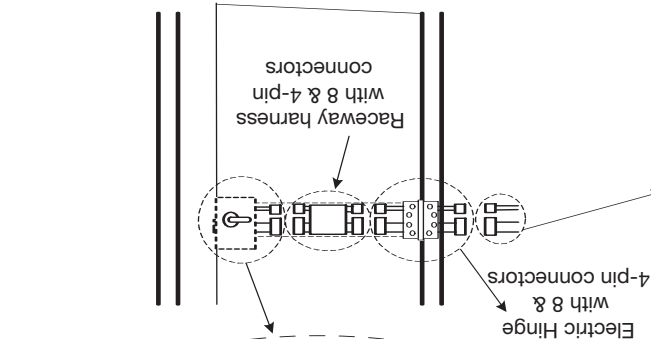
Connections



Pigtail harnesses with 8 & 4-pin connectors

Electric Hinge with 8 & 4-pin connectors

Raceway harness with 8 & 4-pin connectors



The **LX**- switch is in the Normal Open position, when the latch is extended.

**LX**- switch monitors latchbolt movement

**LX** -

Connections

Switch

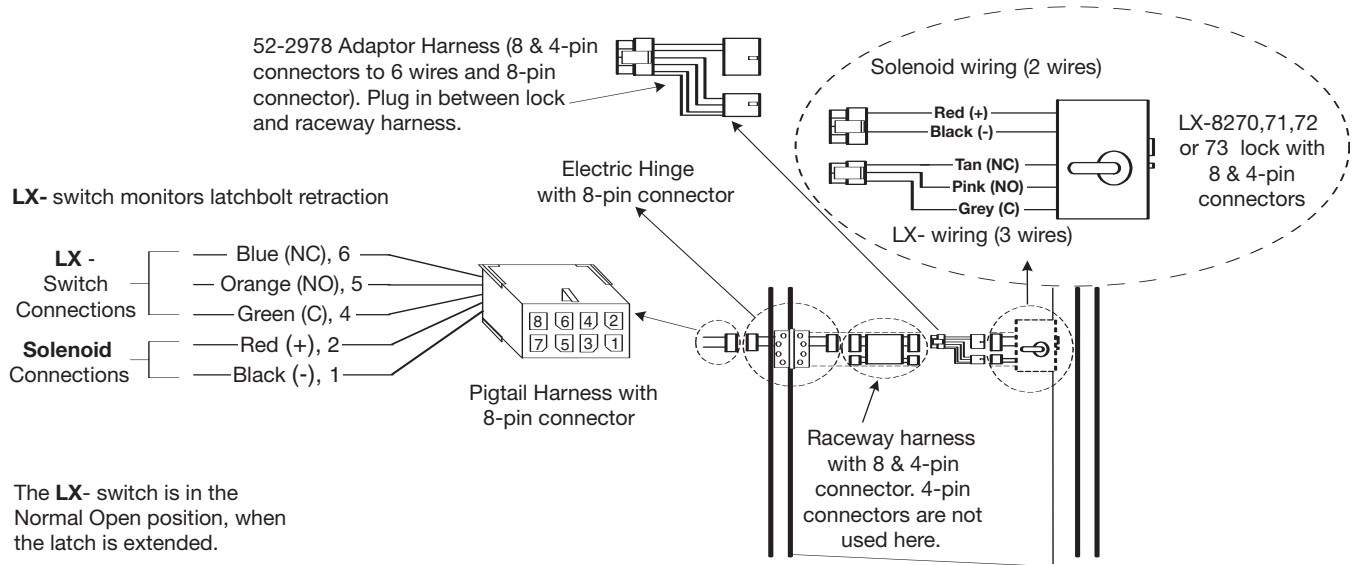
Tan (NC), 4

Pink (NO), 3

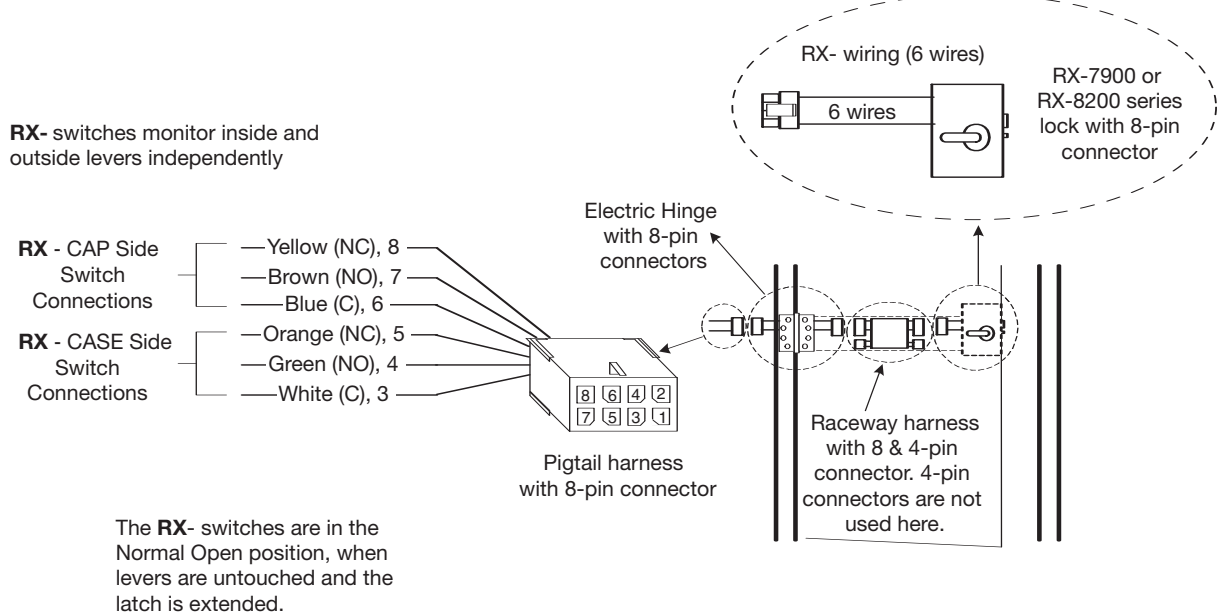
Grey (C), 2

For LH and LHRB doors, outside monitor is the case side and inside monitor is the cap side.  
For RH and RHRB doors, outside monitor is the cap side and inside monitor is the case side.

**Solenoid with LX- wiring (8200 locks only)**



**RX- wiring (7900 & 8200 locks)**



For LH and LHRB doors, outside monitor is the case side and inside monitor is the cap side.  
 For RH and RHRB doors, outside monitor is the cap side and inside monitor is the case side.

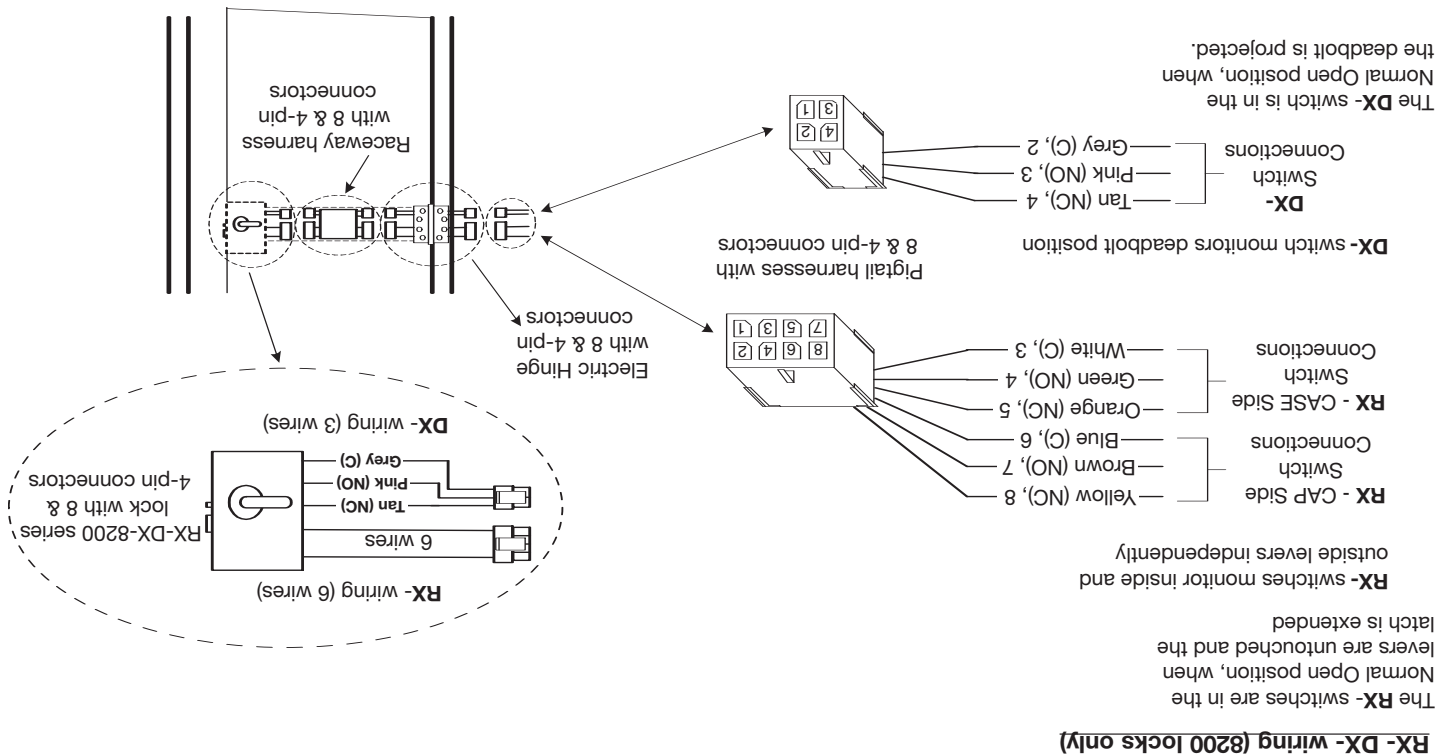
**SARGENT®**

**ASSA ABLOY**

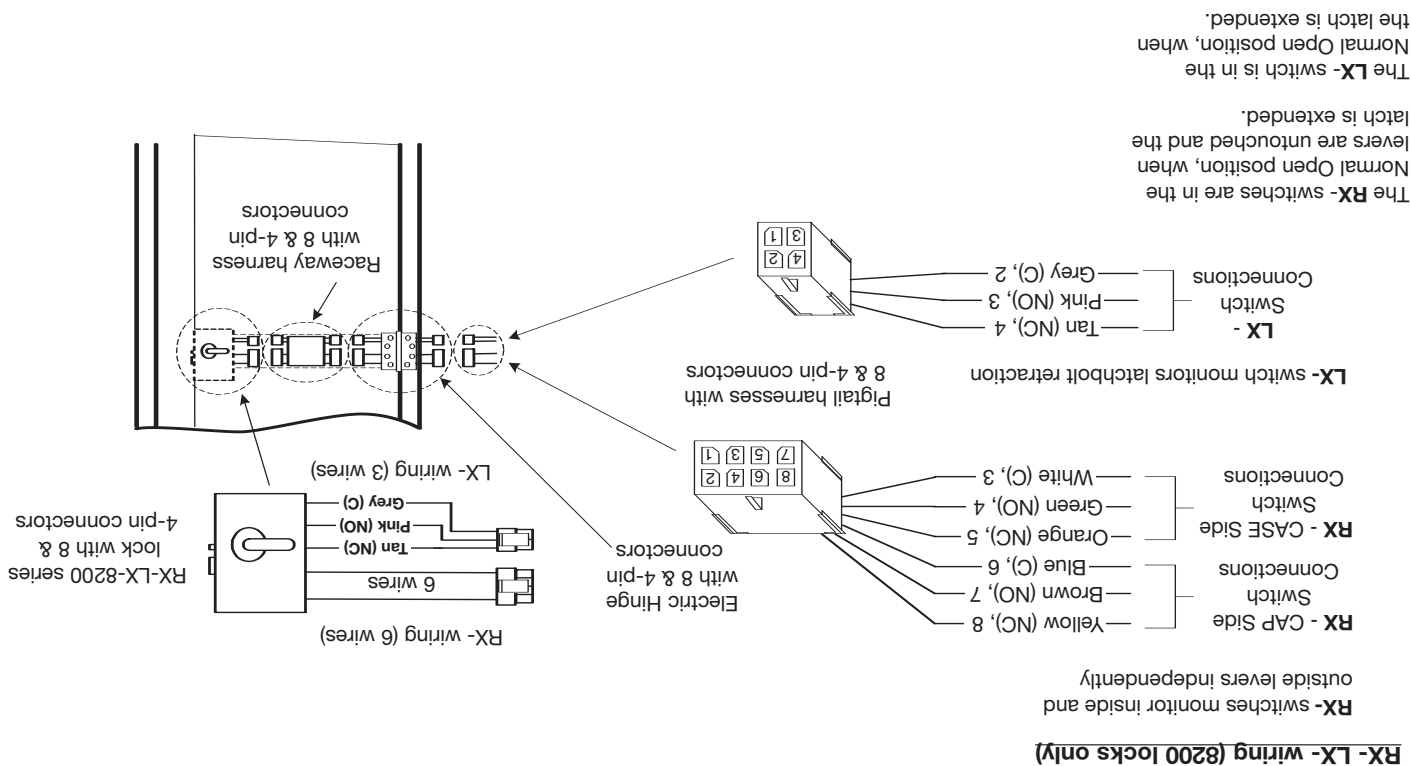
ASSA ABLOY, the global leader in door opening solutions

**SARGENT**

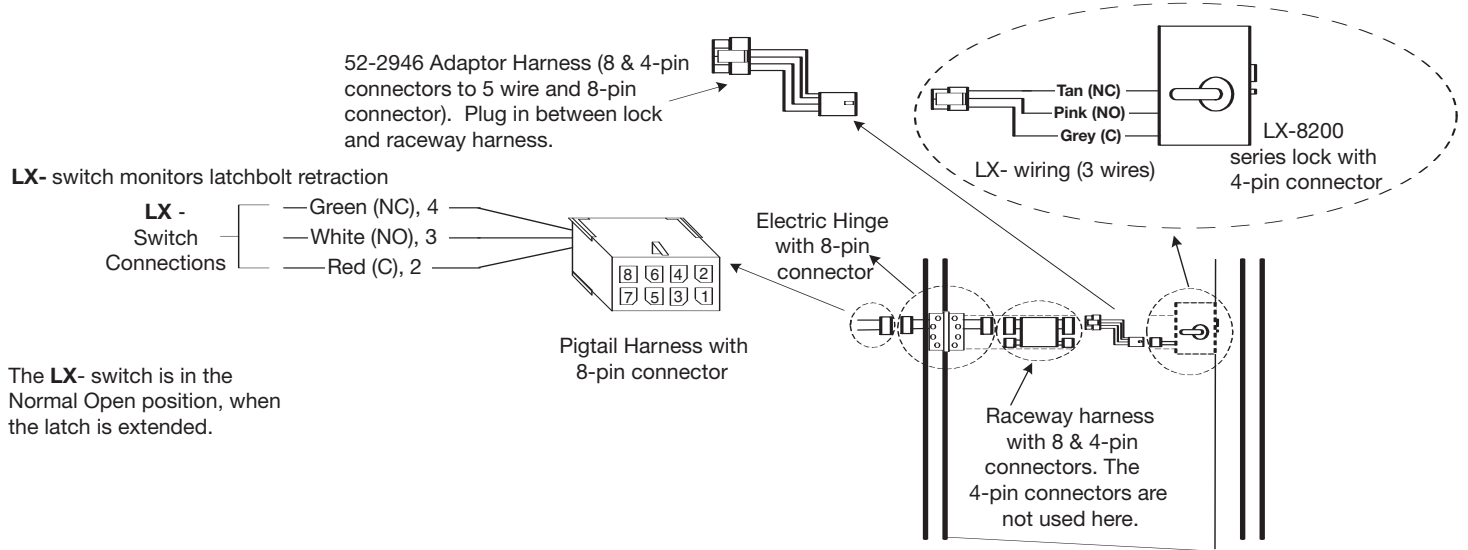
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**LX- wiring (8200 only)**



**DX- wiring (8200 locks only)**

