

Instructions for Wiring **SARGENT®** 970 and 971 Electromechanical Mortise Exit Solenoid Locks to ElectroLynx™ Connector System



For assistance, contact SARGENT at 800-810-WIRE (9473) or www.sargentlock.com

This instruction manual includes wiring instructions for the 970 (Fail Safe) and 971 (Fail Secure) mortise exit locks to ElectroLynx connector system. These locks are used with 8300 and 8900 mortise 80 series exit devices.

Important

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

CAUTION: The DC voltage applied to the lock solenoid must not exceed 26.2VDC. If the voltage exceeds this value the solenoid may be damaged.

Specifications / Functions

Solenoid

Type: 24VDC, Intermittent or Continuous Duty

Current draw is .25Amp at 24VDC

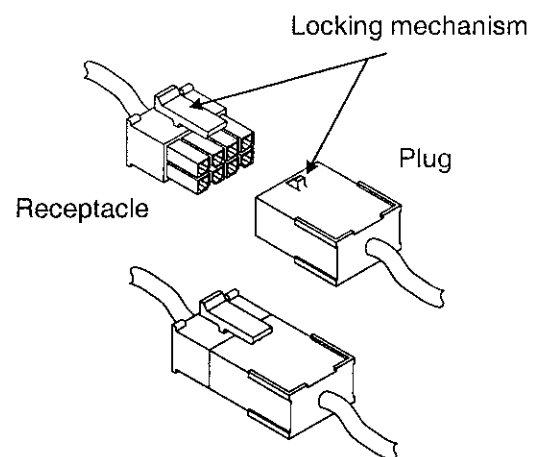
Fail Safe: Model 970

Fail Secure: Model 971

The system is designed to be installation friendly with pluggable connectors from the electric hinge through the door to the rail. The only wiring required is to the loose wires on the pigtail harness assembly on the frame side of the electric hinge.

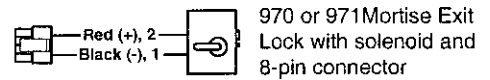
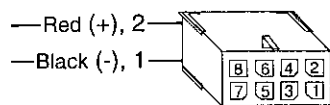
IMPORTANT:

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



Installation Notes

1. With new applications a raceway harness with 8 and 4 pin connectors will be pre-installed inside door by Assa Abloy door manufacturer when specified during ordering process. Raceway harness kits are also available for retrofit applications. For retrofit applications refer to retrofit instructions.
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 hard wire as required.
3. Wiring to pigtail harness is per facility wiring requirement. The rail, raceway, electric hinge and pigtail connector terminations and wire colors all match.



970 & 971 Mortise Exit Solenoid Lock Installation and wiring instructions

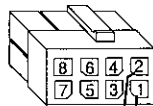
Lock, raceway, electric hinge and pigtail 8-pin terminations/wire colors all match

1. Install door. Plug electric hinge and lock 8-pin connectors into raceway 8-pin connectors during lock and hinge installation.
2. Wire option A, B or other wiring requirement to pigtail harness.
3. Ensure proper supply voltage is being applied at pigtail harness.

CAUTION: The DC voltage must not exceed 26.2 VDC to the lock. If voltage exceeds this value the lock solenoid may be damaged.

4. Plug pigtail harness 8-pin connector into electric hinge 8-pin connector.
5. Test lock - Applying 24VDC unlocks fail secure lock and locks fail safe lock.

Plug in here

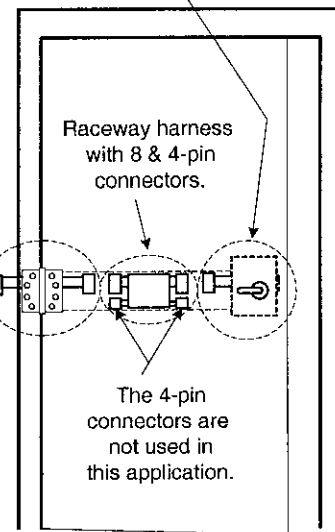


Pigtail harness (2 wires with 8-pin connector).

Black (-), 1
Red (+), 2

8-wire Electric Hinge with 8-pin connectors

Note: Typical raceway location is shown. Other locations may exist depending on door type.

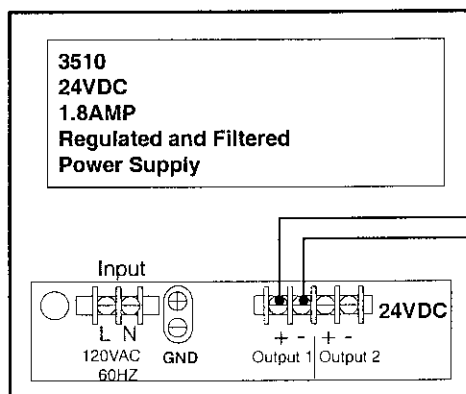


Raceway harness with 8 & 4-pin connectors.

The 4-pin connectors are not used in this application.

Option A

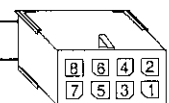
Sample wiring 970 & 971 solenoid locks with a 24VDC Regulated and Filtered Power Supply



Normally Closed Fire Alarm Contact (If Required)

NO
NC
* Switch or relay contacts

Pigtail harness (2 wires with 8-pin connector)

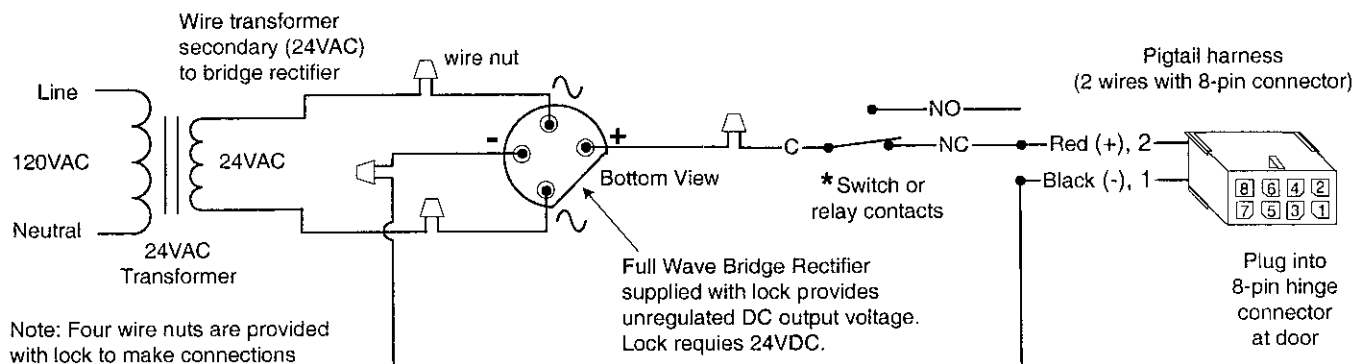


Plug into 8-pin hinge connector at door

* Note: Wire 970 (Fail Safe) Lock to switch as shown. For 971 (Fail Secure) Locks wire switch NO (normally open) contact to red wire of pigtail harness.

Option B

Sample wiring 970 & 971 solenoid locks with a 24VAC Transformer and Bridge Rectifier



Note: Four wire nuts are provided with lock to make connections to bridge rectifier if used.