

TROUBLESHOOTING

Problem:	Possible cause:	Solutions:
Door does not lock	No power	<ul style="list-style-type: none"> • Check to make sure the wires are connected properly. • Check that the power supply is connected and operating • Make sure the lock switch is wired correctly
Door locks, but can be easily forced open	Poor contact between electromagnet and armature plate	<ul style="list-style-type: none"> • Make sure the electromagnet and armature plate are properly aligned • Make sure the contact surfaces of the electromagnet and armature plate are clean and free from rust
	Insufficient voltage	<ul style="list-style-type: none"> • Check the power leads with a meter, and make sure power is supplied between 12-24VDC.
Delay in door releasing	A secondary diode was installed across the electromagnet	<ul style="list-style-type: none"> • The electromagnet is fitted with a metal oxide varistor to prevent interference, so do not install a secondary diode

REGULAR MAINTENANCE

- Clean the contact surfaces of the electromagnet or armature plate with a soft cloth and non-abrasive, non-corrosive cleaner.
- Apply a light coat of a silicon lubricant and wipe away the excess to prevent rust.
- Check that the armature plate is securely attached to the door, yet can pivot slightly around the armature screw.
- Check that the electromagnet is securely attached to the door frame.

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This lifetime limited warranty is for products sold and installed in the United States and Canada. For all other countries the warranty is 1 (one) year.

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Installation Manual

SECO-LARM

E-941SA-80Q

80-LB. MINIATURE ELECTROMAGNETIC LOCKS



Also available:

- E-941SA-300RQ** 300-lb Holding force
- E-941SA-300** 300-lb Holding force, weatherproof
- E-941SA-600** 600-lb Holding force 
- E-941SA-600PQ** 600-lb Holding force, bond sensor, LED 
- E-941SA-1200** 1,200-lb Holding force 
- E-941SA-1K2PD** 1,200-lb Holding force, bond sensor, LED 
- E-941DA-600** Double-door, 600-lb holding force 
- E-941DA-600PQ** Double-door, 600-lb holding force 
- E-941DA-1K2Q** Double-door, 1,200-lb holding force 
- E-941DA-1K2P** Double-door, 1,200-lb holding force, bond sensors, LED 
- E-941DA-1K2PD** Double-door, 1,200-lb holding force, bond sensors, LED, timer

HOW THEY WORK

When power is applied to the electromagnetic lock, it turns on the unit's powerful built-in electromagnet. This electromagnet is attracted to the steel armature plate which is mounted on a door, holding the door fast against unauthorized entry. When power to the magnetic lock is turned off, the electromagnet releases the armature plate, allowing the door to open.

SPECIFICATIONS

Power	12-24VDC
Magnet Size	2 ³ / ₄ x 1 ¹ / ₄ x 1 ³ / ₁₆ in. (70 x 31 x 20 mm)
Armature Size	2 ³ / ₈ x 1 ¹ / ₄ x 2 ³ / ₆₄ in. (60 x 31 x 9 mm)
Holding Force	80 lb. (36kg.) @ 12VDC 110lb.(51Kg.) @ 24VDC
Current Drain	85mA @ 12VDC 165mA @ 24VDC
Voltage Tolerance	± 10%
Housing	Aluminum
Temperature	14°F to 131°F (-10°C to 55°C)
Weight	0.90 lb. (410 grams)

MOUNTING THE E-941SA-80Q

- A. Drill holes for the mounting plate and armature plate (see fig. 1 and 2) by doing the following:
 1. Fold the mounting template along the dotted line
 2. Close the door. Find a mounting location on the door frame near the upper free-moving corner of the door, as close to the corner of the door frame as possible.
 3. Place the template against the door and frame.
 4. Drill two holes in the door frame for the mounting plate and three holes in the door as indicated on template.
 5. Only from the sexnut bolt side of the door, enlarge the 5mm hole to 9mm.
- B. Mount the armature plate to the door using the two steel and one rubber washer (fig. 2):

NOTE — Actual installation varies according to door style.

 1. Secure the two guidepins into the two side holes of the armature plate.
 2. Insert the armature screw into the armature plate, then put the rubber washer between two steel washers, and place them over the armature screw between the armature plate and the door. This will allow the armature plate to pivot slightly around the armature screw in order to compensate for door misalignment.
- 2. Insert the sexnut bolt into the 9mm hole, then tighten the sexnut bolt and the armature screw, just enough so the armature plate can withstand the force of someone attempting to break down

the door while the electromagnet is engaged.

- 3. Do not tighten the armature plate against the door. The plate must be able to pivot around the armature screw.
- C. Screw the mounting plate to the door frame:
 1. Remove the L-shaped mounting plate from the magnet.
 2. Insert the provided two 1/8" x 1" (4 x 25.4 mm) screws into the L-shaped mounting plate and screw it to the door frame. The armature plate and the mounting plate must be concentric or align with each other.
- D. Drill the power cable access hole.
- E. Mount the electromagnet to the door frame (fig. 1) — Use the Allen wrench to screw the socket-head mounting screws through the bottom of the electromagnet into the mounting bracket.

- F. Connect the power leads (fig. 3):
 1. Run two power leads from the power supply through the power cable access hole into the electromagnet.
 2. Connect the power leads to the red and black power input wires of the unit. Observe correct polarity, red for positive and black for negative.

- G. Test the unit.

FIG.1 Standard Mounting

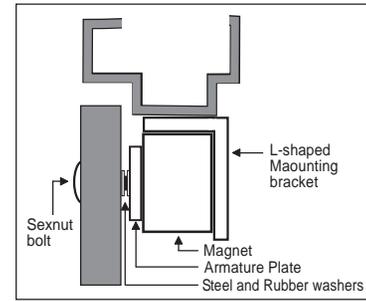


FIG. 2 Types of armature plate mounting

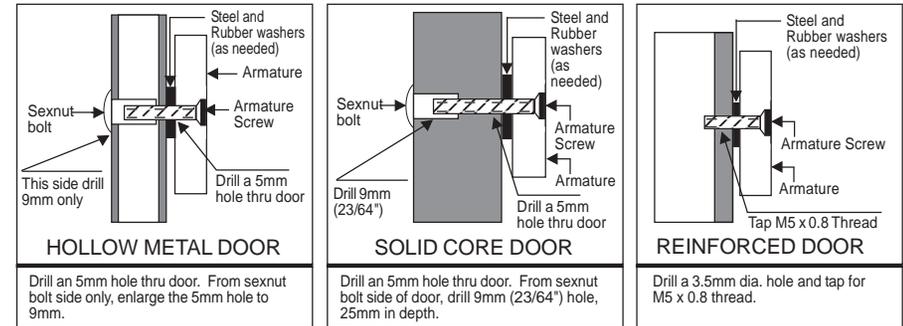


FIG. 3 Wiring diagram

