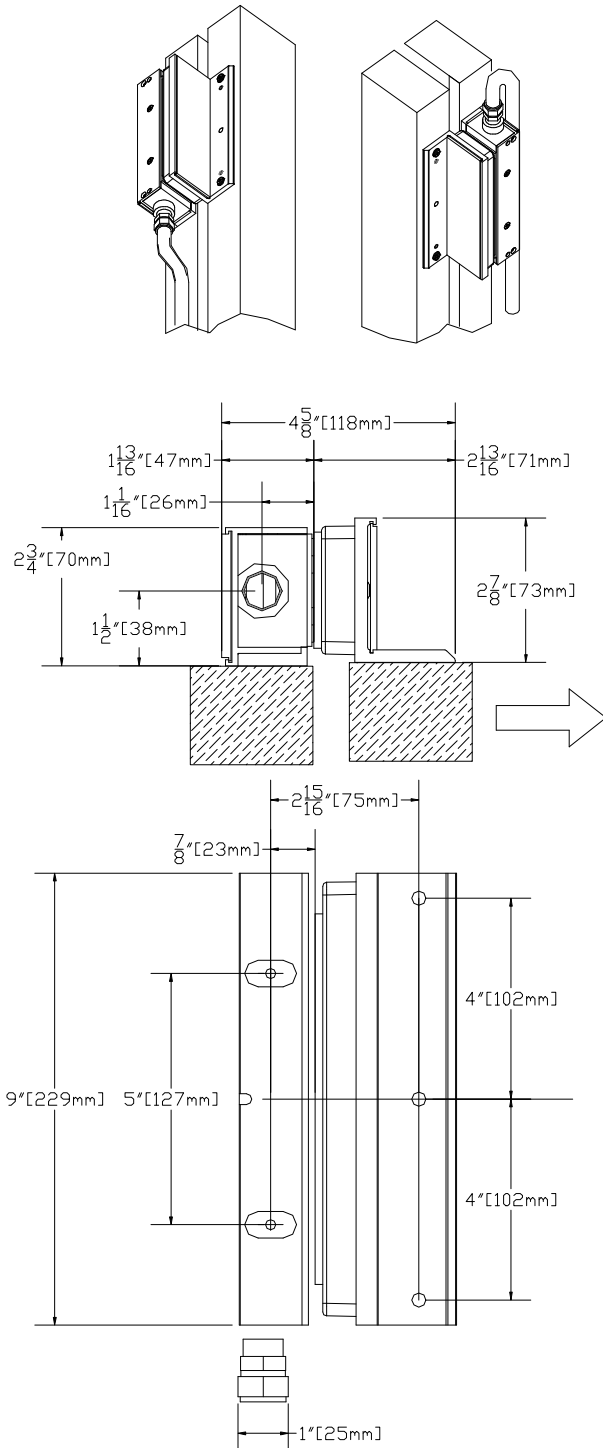


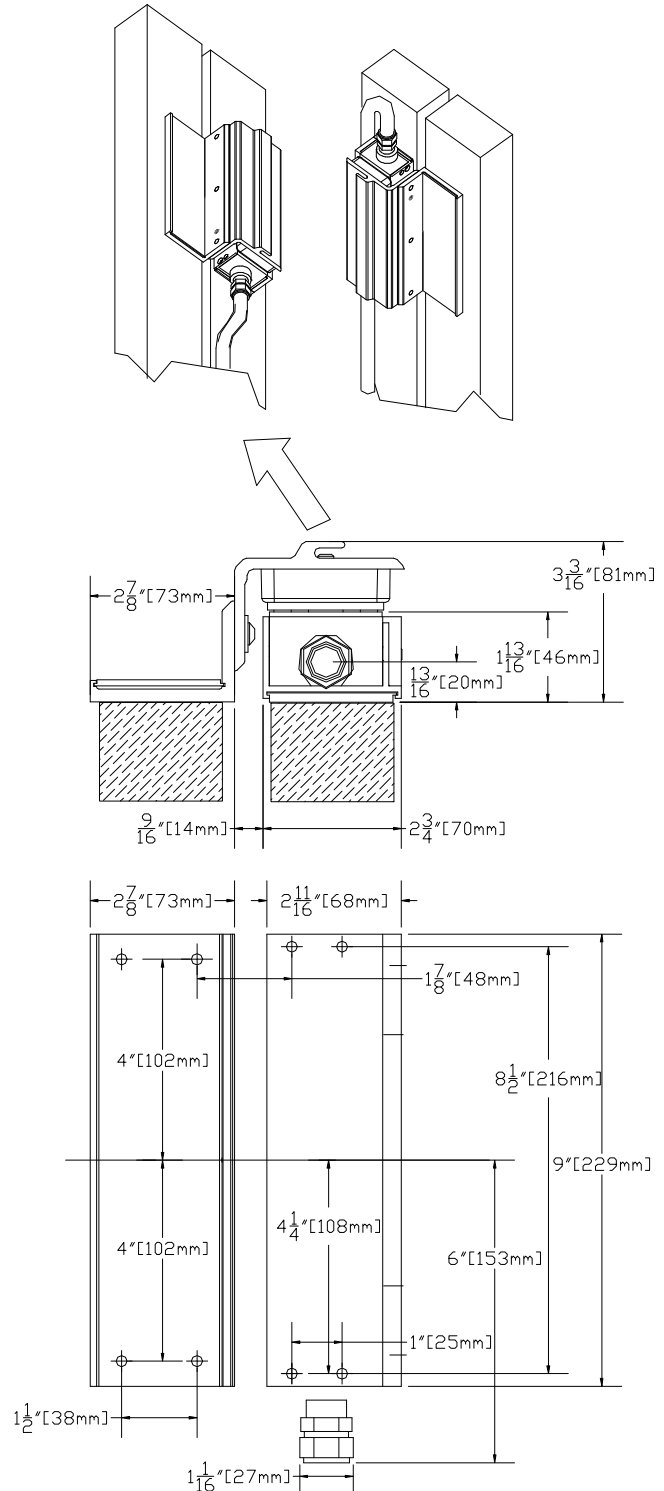
INSTALLATION CONSIDERATIONS:

The 390G+ is an electromagnetic lock designed for use on exterior gate applications, though it can be used indoors under circumstances where conduit-enclosed wiring is desirable or unavoidable. These instructions cover two basic mounting situations: swinging and sliding. Other mounting situations may be encountered which may necessitate fabrication of custom brackets or reinforcements to accommodate the lock. Wiring should be protected by conduit. Wire leads provided are 24 inches long and provisions should be made for connections within that distance. You must determine which type of mounting screws provided will best suit your installation. For light-gauge metal frames, self tapping screws may be used. If the frame is heavy gauge metal, machine screws may be required to adapt the lock to a particular post or frame. Armature mounting hardware is provided for direct mounting. The sex nut (provided) can be used instead of the TJ brackets, if mounting the armature on a standard, 1-3/4" door. Other sex nuts, of different lengths, are available from Locknetics distributors. Refer to the last page for parts list with pictures.

SLIDING GATE APPLICATION TEMPLATE:

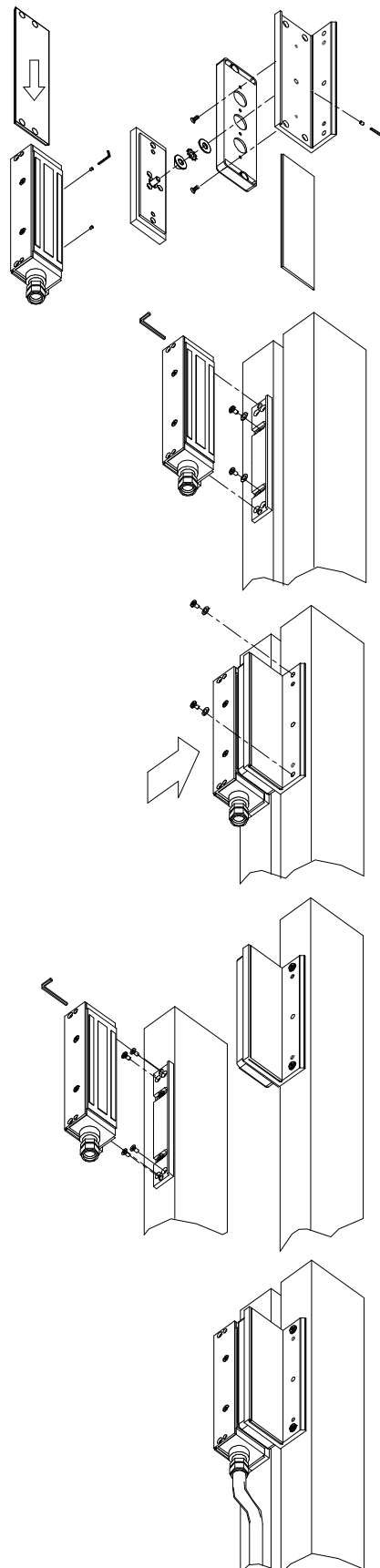


SWINGING GATE APPLICATION TEMPLATE:



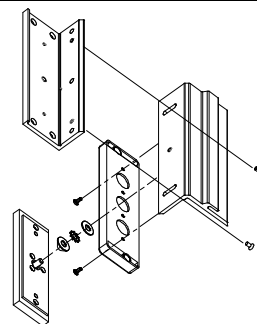
SLIDING GATE INSTRUCTIONS:

- 1.** Prep the gate and post according to the instructions or in accordance with the requirements of the situation. Note that some installations may require additional brackets, hardware, or reinforcement for a sound installation. Loosen the socket cap screws which secure the standard mounting bracket to the magnetic lock assembly and remove the bracket. (The socket head cap screws are captured in the magnetic lock assembly.) Slide the TJ mounting plate onto the magnetic lock assembly. Center it and secure with two #6-32 set screws. Install the armature housing to the lower TJ bracket using the two #6-32 flat head machine screws. Do not remove the foam rubber compression pads. Pre assemble the armature assembly to the lower TJ bracket as shown (left). Note that the tapered washer assembles with the pointed side toward the armature, then the external tooth washer, followed by the flat washer. Next, slide the dress plate into the lower TJ bracket and secure in position with one of the #6-32 set screws.
- 2.** Mount the standard mounting plate onto the gate post using either the two #10 pan head self tapping screws and washers or the 10-24 pan head machine screws. Do not completely tighten them at this time because the position of the bracket must be adjustable in the next step. Fasten the magnetic lock assembly to the mounting plate using the 2/16 hex wrench provided.
- 3.** Mount armature/lower TJ bracket assembly to moving part of gate using two 1/4-20 button head socket cap screws and washers. (Alternate hardware may be substituted if necessary.) Close the gate and secure it (if such mechanical means exists). With the gate in its closed position, push the magnetic lock toward the armature so that it comes to rest completely engaged, with no air gap. (If a temporary power supply is available to power up the lock do so in order to ensure that the lock will properly engage.) Mark the position of the magnetic lock assembly. Remove the magnetic lock and tighten the two pan head screws.
- 4.** Open gate. Using the standard mounting bracket as a template, drill the four remaining holes for #10 self tapping or #10-24 machine screws as appropriate. Install screws, tightening completely. Install magnetic lock, tightening socket screws completely.
- 5.** Run conduit to lock and make wiring connections for the voltage being used. See page 1 for wiring and monitor switch information. If the lock is used in a particularly corrosive environment such as near salt water or in a climate where salt is applied on the roads apply a thin film of grease (supplied) to the mating surfaces of the magnet and the armature.

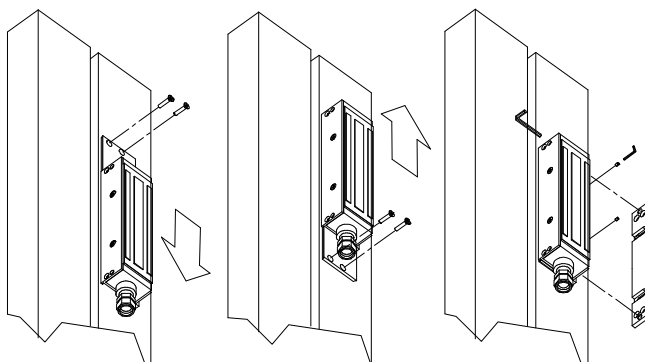


SWINGING GATE INSTRUCTIONS:
1.

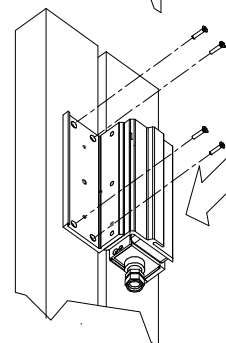
Prep the gate and post according to the instructions or in accordance with the requirements of the situation. Note that some installations may require additional brackets, hardware, or reinforcement for a sound installation. Install the armature housing to the upper TJ bracket using the two #6-32 flat head machine screws. Do not remove the foam rubber compression pads. Install the armature to the upper TJ bracket using the tapered washer, external tooth washer and flat washer. Note that the tapered washer assembles with the pointed side toward the armature, then the external tooth washer, followed by the flat washer. Pre assemble the armature assembly to the upper TJ bracket as shown (right) using the 1/4-20 button head socket cap screws and washers. Do not completely tighten them at this time.


2.

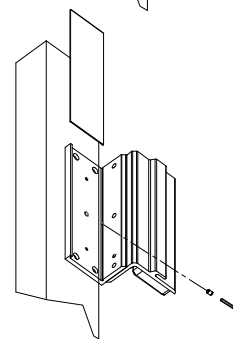
Loosen the socket cap screws which secure the standard mounting bracket to the magnetic lock assembly and remove the bracket. (The socket head cap screws are captured in the magnetic lock assembly.) Slide the TJ mounting plate into the magnetic lock assembly, leaving the upper two holes exposed. Place magnet/bracket assembly onto gate post and secure using two of either #10 flat head self tapping screws or the 10-24 flat head machine screws. Slide the magnetic lock upward to expose the to lower holes. Fasten the assembly with the remaining two #10 screws. Center the assembly on the TJ mounting plate and lock into place using two 6-32 set screws. A rubber mallet may be used to adjust position if tight. Fasten the standard mounting plate to the magnetic lock using the 3/16 hex wrench provided.


3.

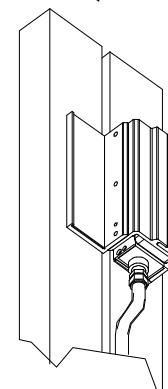
Mount armature/TJ bracket assembly to moving part of gate using four of either #10 flat head self tapping screws or the 10-24 flat head machine screws. Close the gate and secure it (if such mechanical means exists). With the gate in its closed position, push the armature/upper TJ bracket assembly toward the armature so that it comes to rest completely engaged, with no air gap. (If a temporary power supply is available to power up the lock do so in order to ensure that the lock will properly engage.) Mark the position of the armature/upper TJ bracket assembly (relative to the lower TJ assembly.) Open the gate. Tighten the 1/4-20 button head socket cap screws completely. Secure the position with the remaining 1/4-20 set screw.


4.

Slide the dress plate into the lower TJ bracket. Center it and secure with a 6-32 set screw.


5.

Run conduit to lock and make wiring connections for the voltage being used. See page 1 for wiring and monitor switch information. If the lock is used in a particularly corrosive environment such as near salt water or in a climate where salt is applied on the roads apply a thin film of grease (supplied) to the mating surfaces of the magnet and the armature.



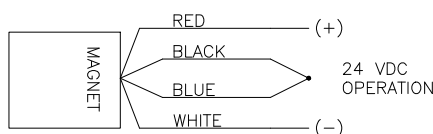
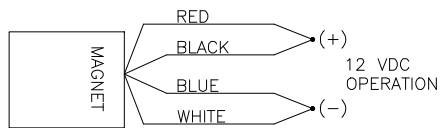
WIRING INFORMATION:

SPECIFICATIONS:

Amps(12V)
0.670

Amps(24V)
0.350

Holding Force: 1500lbs.



NOTE: POLARITY IN THIS CASE DOES NOT MATTER. IT IS SHOWN AS A SUGGESTION TO KEEP WIRING WITHIN A SYSTEM CONSISTENT.

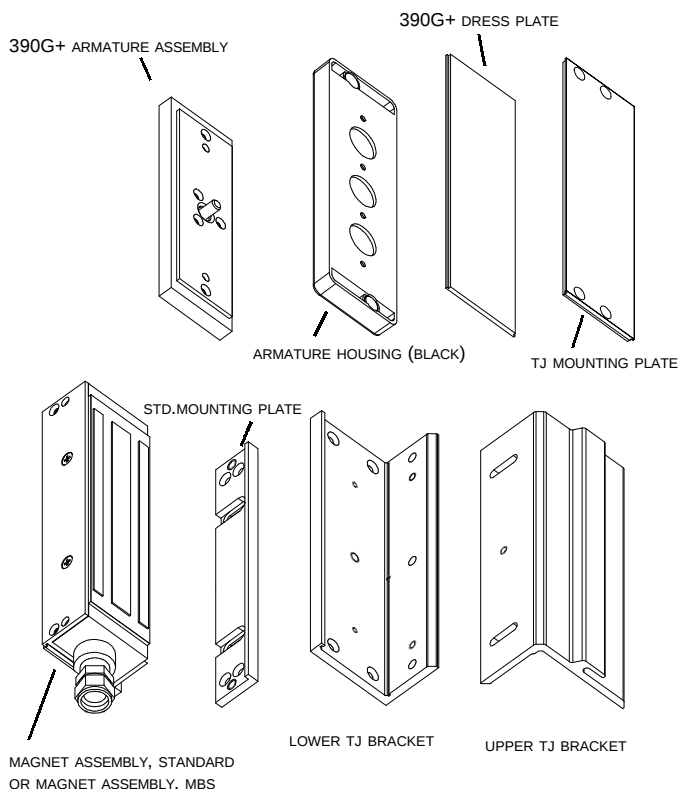
DSM:

(Door Status Monitor: changes state when gate is closed)
RED: N.C.
BLACK: C.
WHITE: N.O.
(RATING:0.250A@30VDC)

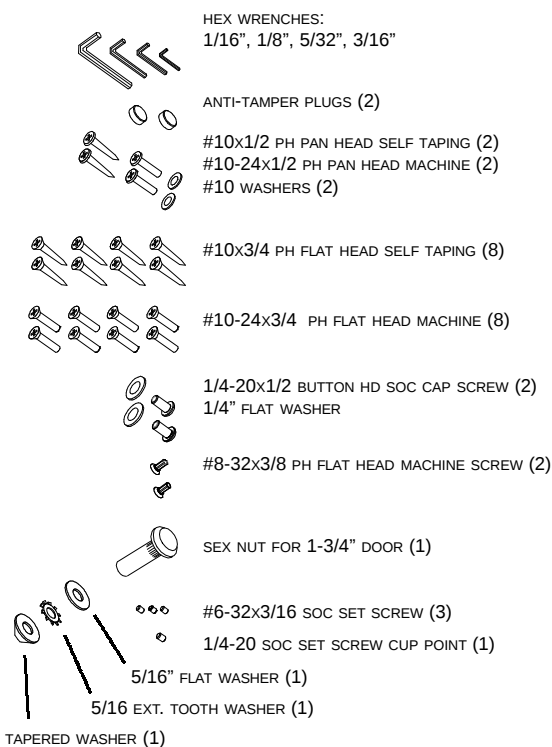
MBS:

(Magnetic Bond Sensor - indicates lock status, shown unlocked: changes state when a good magnetic bond is indicated)
WHITE: C.
WHITE: N.O.
(RATING:0.250A@30VDC)

PARTS LIST:



390G+ MOUNTING HARDWARE KIT



TROUBLE SHOOTING:

PROBLEM:

Lock does not lock.

POSSIBLE CAUSE:

No power applied.
AC voltage applied instead of DC.
Lock not making contact with armature.

RESOLUTION:

Check power at lock, then check wiring and power supply.
Use rectifier on low voltage side. Use DC power supply.
Adjust mechanical position. Check for proper installation of armature.

Lock does not have enough holding force.

Improper installation of armature hardware.
Improper alignment of armature to lock.

Correct sequence (tapered washer points toward armature-required.)
Adjust position to correct.

MBS not changing state.

Low voltage.
Debris between magnet and armature.
Poor alignment.

Check voltage at lock. It should be above 12 or above 24 VDC. If not correct condition. (Possibly the wire gauge is too small for the length and load.) Power supply inadequate.
Check and clean.
Correct condition.

DSM not changing state when gate closed.

Poor alignment between magnet and armature.

Correct condition.
Make sure there are small permanent magnets inside armature housing.