

OmniControl™

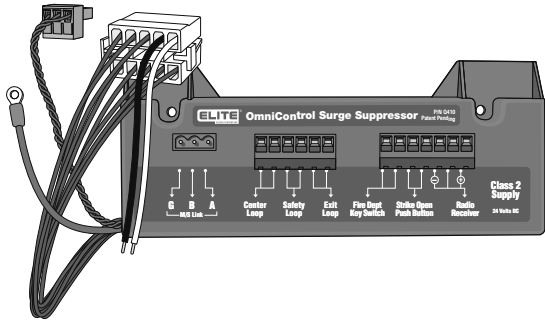
SURGE PROTECTION MODULE

For OmniControl™ Gate Operators

LiftMaster *strongly* recommends the installation of the Surge Protection Module to protect the gate operator from harmful surges caused by lightning strike phenomenon.

It is important to recognize that the surge protection module may not prevent damage to the gate operator in the event of a direct lightning strike.

The success of the surge protection will be based in the proper installation of the Surge Protection Module and the proper grounding of both the surge protector module and the gate operator itself.



⚠ WARNING: This product can expose you to chemicals including lead, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Inputs protected by the Surge Protection Module.
The Surge Protection Module will provide protection for the following input commands.

Name of Lines Protected	Number of Lines Protected
M/S Link, all three wires (G, B, A)	3
External Center Loop "Command" input	1
External Safety Loop "Command" input	1
External Exit Loop "Command" input	1
Fire Department or Key switch "Open" command	1
Strike Open or Push Button to open command	1
Radio receiver "Command" input	1
Ground reference and +24 VDC supply	2

⚠ Earth Ground Rod Installation

Proper grounding gives an electrical charge, such as from an electrical static discharge or a near lightning strike, a path from which to dissipate its energy safely into the earth.

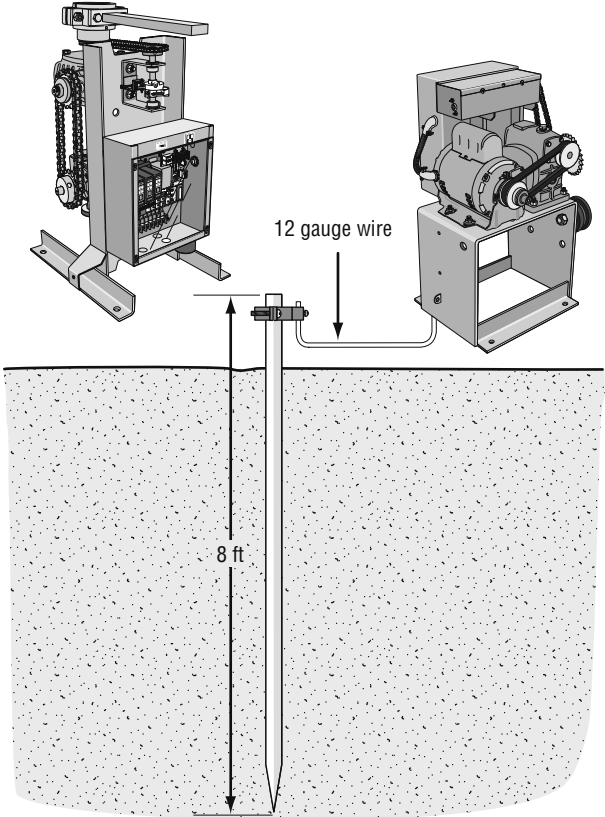
Without this path, the intense energy generated by lightning could be directed towards the gate operator. Although nothing can absorb the tremendous power of a direct lightning strike, proper grounding can protect the gate operator in most cases.

Avoid damaging gas, power, or other underground utility lines.

⚠ The earth ground rod must be located 2 to 3 feet from the gate operator.

⚠ The ground wire **must** be a single, whole piece of wire. **Never** splice two wires for the ground wire. If you should cut the ground wire too short, break it, or destroy its integrity, replace it with a single wire length.

⚠ Not responsible for improper installation or failure to comply with all necessary local building codes.



INSTALLATION

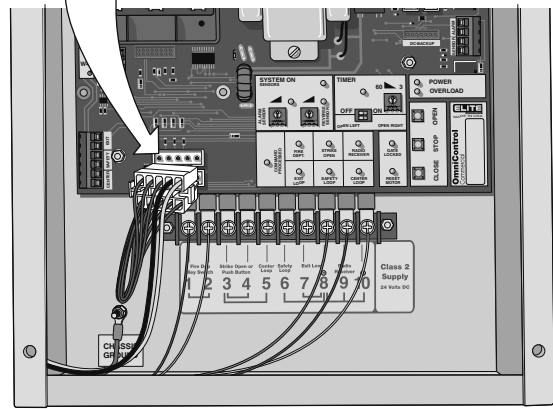
STEP 1

Turn the gate operator off by turning off the building/facility breaker for the 120 Vac supply to the gate operator.



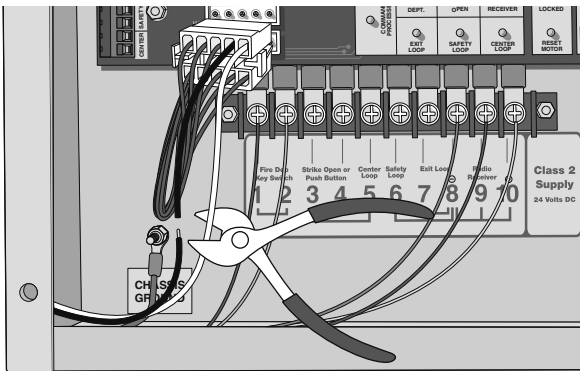
STEP 2

Remove J1 plug.



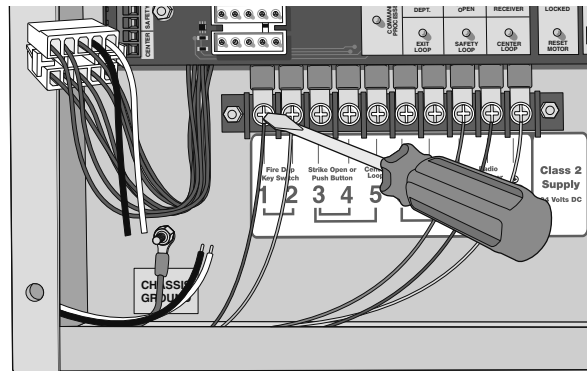
STEP 3

Cut the black and white wires (16 AGW) coming from the plug at least 3 inches away from the plug, and strip the wires at least .5 inches.



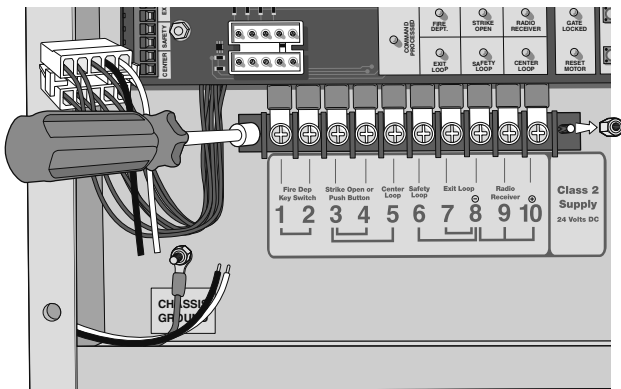
STEP 4

Remove all the accessory wires attached to the terminal block. Make sure to mark all the wires you are removing to reconnect them later.



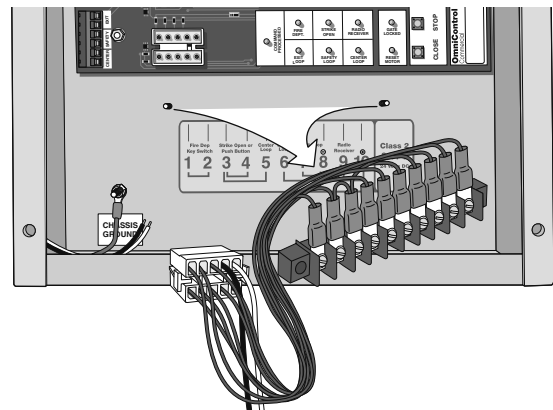
STEP 5

Use a nut driver and remove the 2 hex nuts holding the terminal block connector (10 terminals) on the electrical box.



STEP 6

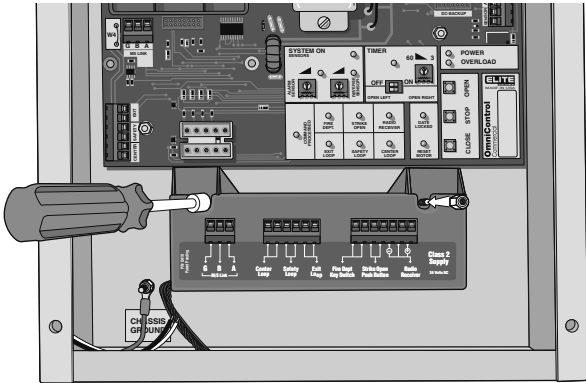
Remove the terminal block connector from the electrical box.



INSTALLATION (CONTINUED)

STEP 7

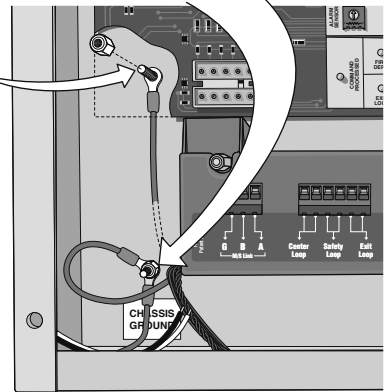
Place the Surge Protector module in place of the terminal block. Use a nut driver to secure the 2, 1 inch long hex nuts that came with the module.



STEP 8

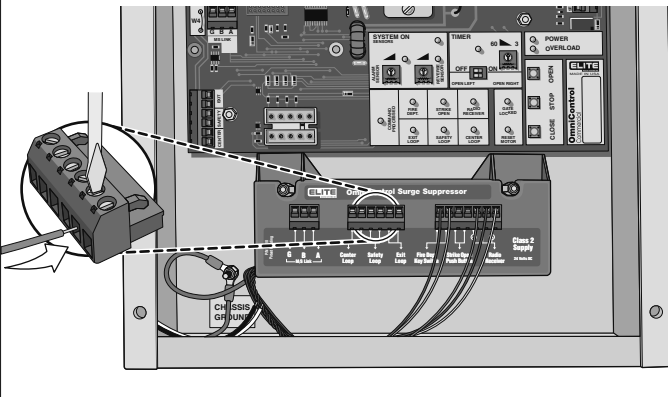
There is a green wire with a ring terminal coming out of the Surge Protection module, **This ring terminal MUST make good contact with the chassis of the gate operator.**

If the stud for grounding the surge protector is not accessible, remove the OmniControl™ board and unscrew the lower left hex nut under the board to secure the ring terminal to. Re-screw the hex nut and re-attach the OmniControl™ board.



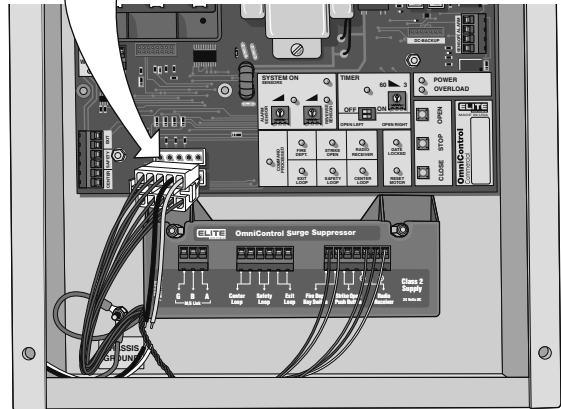
STEP 9

Reconnect the accessory wires to the Surge Protector. Match them up with the label on the module. All the connectors on the module are removable for easy wiring.



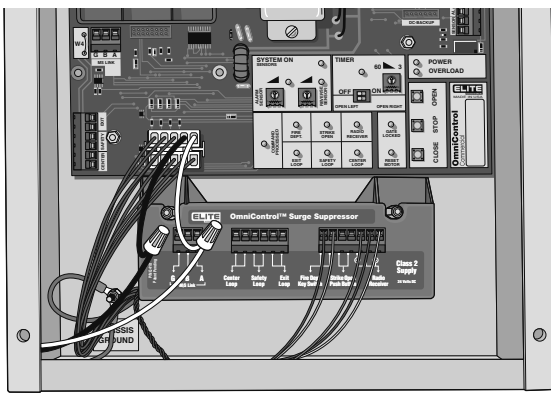
STEP 10

Connect the plug of the Surge Protector to the J1 connector on the OmniControl™ board.



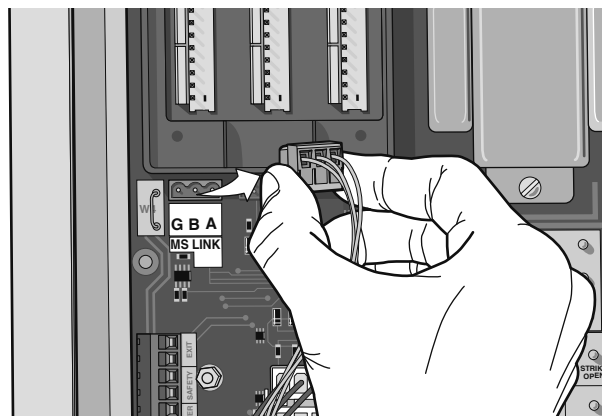
STEP 11

Use wire nuts to connect the AC wire coming from the outlet (through the channel) to the plug (black and white wires 16 AGW).



STEP 12

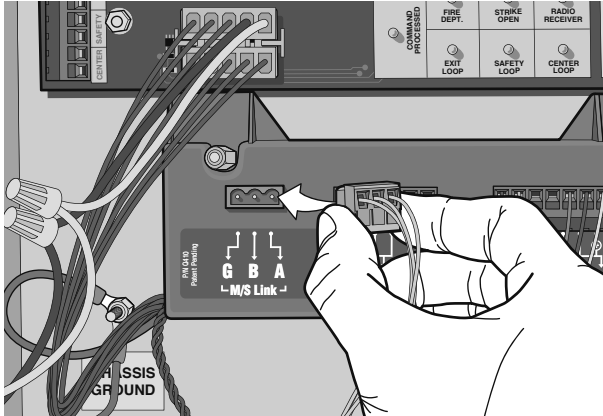
When using the master/slave operator setup, remove the M/S Link plug from the OmniControl™ board, then.....



INSTALLATION (CONTINUED)

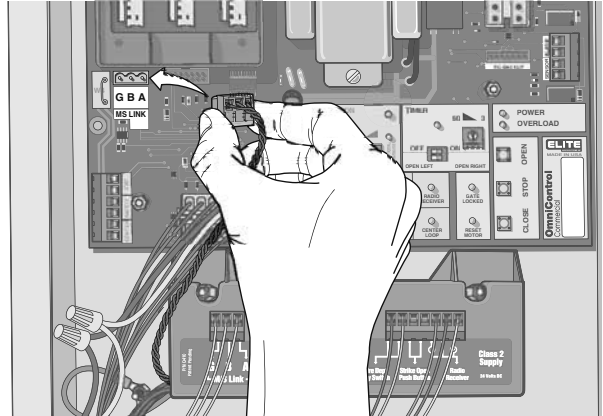
STEP 13

Connect the M/S Link plug from the OmniControl™ board to the Surge Protection module M/S Link.



STEP 14

Connect the 3 wire plug from the Surge Protection module to the OmniControl™ board M/S Link.



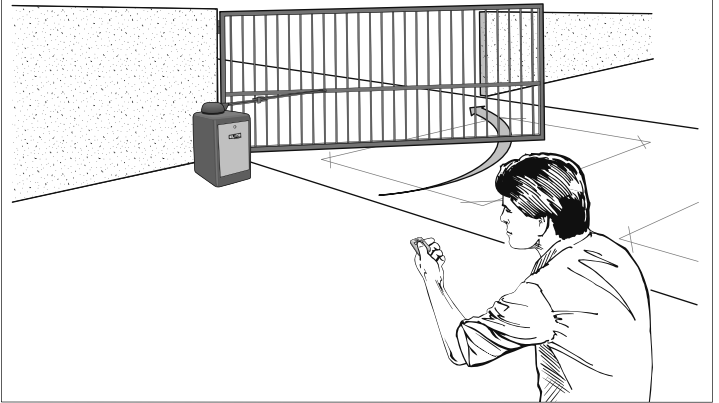
STEP 15

Turn the gate operator back on by turning on the building/facility breaker for the 120 Vac supply to the gate operator.



STEP 16

Test all the accessories in combination with the gate operator to corroborate proper installation and functionality.



For additional protection against surges, ensure that the cables or wires going to your accessories comply with the following rules:

All wires going to the accessories *must* be shielded wires.

The shield *must* be connected as follows:

- A) At the gate operator: To the chassis of the gate operator
- B) At the accessories: To their chassis (Earth grounding at the accessories will be even more beneficial)

Ensure that the connections to the chassis are made as tight as possible to create good contact.