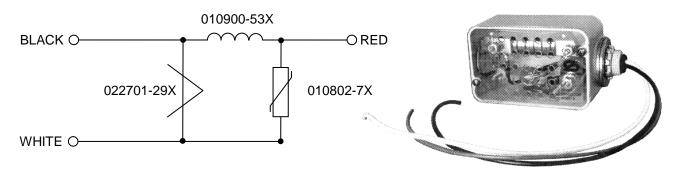


# Installation & Maintenance Power Line Surge Protector Model SP-37

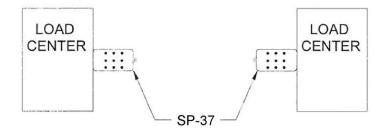
# **INTRODUCTION**

The SP-37 is a secondary surge protector designed to be mounted on a load center at the power service entrance. It offers a gap-type arrestor and is easily wired into existing systems. It has no exposed terminals.

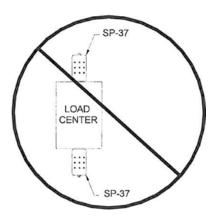


# **INSTALLATION**

The SP-37 must be mounted horizontally as shown.



- Never mount the SP-37 vertically. The arrestor may not "clear" properly if mounted in the vertical position.
- The SP-37 should never be mounted with the vent holes obstructed.
- This unit is only for use in areas protected from the weather, such as inside a bungalow or equipment case.
- Never install on the "line" side of a branch breaker on a load center.



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# PROCEDURES

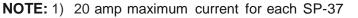
#### WARNING

### HIGH VOLTAGES ARE PRESENT. TURN OFF POWER BEFORE INSTALLATION OR SERVICING.

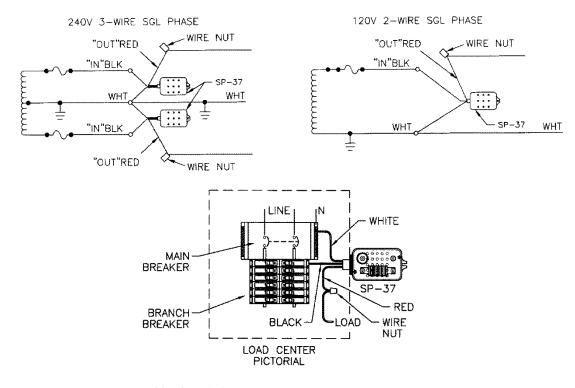
The use of temporary ground during installation and maintenance is recommended.

- 1) Install one washer over the threads at the end of the SP-37 housing. Push the washer up against the housing.
- 2) Choose a knockout in the load center that is a distance from the backboard that will <u>allow</u> the back of the SP-37 to lay flat against the backboard.
- 3) Install the second washer on the threads at the end of the SP-37 housing from inside the load center. Install the lock nut so that it loosely holds the SP-37 in place.
- 4) Use the wood screw provided to secure the SP-37 mounting tab to the backboard.
- 5) Tighten the lock nut installed in step 3 for a snug fit.
- 6) Cut the wires on the SP-37 to the minimum usable length. Do not coil the wires as this greatly reduces SP-37 performance. Also, avoid kinks and sharp bends in the wiring.
- 7) Connect the wires to the load center, observing the proper hook-up scheme.
- 8) The wires must be connected so that there is a fuse or circuit breaker between the SP-37 and the power service line.

#### HOOK UP SCHEMES



2) Do not use SP-37 in a circuit with voltage of more than 120 Vrms.



# MAINTENANCE

The SP-37 requires no regular maintenance. Over time, with repeated surges, the power-line protector inside will become damaged. It can be inspected visually through the clear plastic housing and, if blackened or burned, should be replaced as described below.

#### **CAUTION**

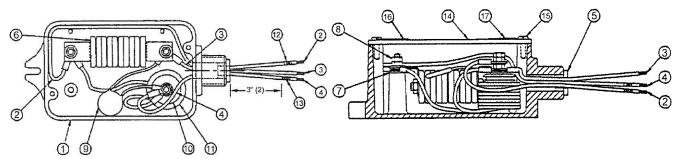
# DO NOT INSERT ANY OBJECTS INTO THE VENT HOLES OF THE SP-37.

#### SERVICING

The power-line protector can be replaced as follows:

- 1) Turn off all power to the load center at the main breaker. Make sure power is off.
- 2) Disconnect the SP-37 wires from the load center.
- 3) Remove the two screws holding the cover on the SP-37.
- 4) Remove the nuts holding the protector in place and remove the protector.
- 5) Install the new protector.
- 6) Reinstall nuts removed in step 4 and tighten nuts to hold the new protector in place.
- 7) Reinstall the cover and secure with the screws removed in step 3.
- 8) Reconnect the SP-37 wires to the load center observe correct hookup.
- 9) Restore power to the load center.

### **REPLACEMENT PARTS**



#### To Order: Specify Description and Part Number

Item	Part	Description	0.00
No.	No.	Description	Qty.
1	010836-1	Protector Housing	1
2	022312-11-7X	Wire 12 Ga. Black x 24" w/Terminal	1
3	022312-18-2X	Wire 12 Ga. White x 28" wiTerminal	1
4	022312-9-1X	Wire 12 Ga. Red x 23" w/Terminal	1
5	010836-5	Rubber Grommet Bushing	1
6	022701-29X	Power Line Protector	1
7	023690-14A	Beveled Washer	6
8	023690-14	Camp Nut	7
9	010900-53X	150 Volt Varistor Assembly	1
10	01000 <b>1</b> -9	1/2 ID Rubber Grommet	1
11	010802- <b>7</b> X	Choke Coil Assembly	1
12	18-00-090	Wire Marker "In"	1
13	18-00-091	Wire Marker "Out"	1
14	010836-2	Box Cover	1
15	5283	Tap Screw Phil #8 x 1/2	2
16	010836-3	Warning Label	1
17	010837-4	Part ID Label	1
18	7152	Loc Nut 3/4"	1
19	1742-SC	Flat Washer 1 x 2-1/2	2
20	5733-RSC	Wood Screw RD #10 x 1-1/4	1
21	2355	Wire Nut Type Y	1

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