

Pre-Installation

Disconnect all power before INSTALLING, CHECKING OR REPLACING lightning arrestor. SEVERE ELECTRICAL SHOCK can come from voltages present in control boxes, pressure switches, magnetic starters or other electrical equipment, Prior to installation, be sure nominal line voltage does not exceed 240 volts. Regardless of application the lightning arrestor must be installed within an enclosure for safety.

Installation - 120 volt or 240 volt Single Phase System

In either pressure switches or control boxes, attach black lead of the arrestor to each incoming power connection. Control box connections are marked "L1 and L2." For control box installation, put the black lead wires of the lightning arrestor under the control box terminals "L1 and L2." The pressure switch connections could be both marked "LINE." The white arrestor lead is connected to the ground terminal or screw in either control box or pressure switch. Complete the installation by grounding the control box and pressure switch with No. 12 wire or larger, to the best possible earth ground. In order of preference they are as follows:

1. Well casing - metal only
2. Copper ground rod
3. Galvanized rod or pipe driven into MOIST ground at least 6 feet
4. Copper plumbing if connected to good earth ground.
5. Electrical aluminum conduit if connected to good earth ground.

Check a Lightning Arrestor with an ohmmeter

Lightning arrestors have a unique feature unlike other secondary lightning arrestors in that they can be checked with a conventional ohmmeter.

With arrestor removed from circuit:

1. Set selector knob on ohmmeter to RX100K.
2. Connect both black "lightning arrestor" leads to one ohmmeter lead.
3. Connect white "lightning arrestor" lead to the other ohmmeter lead.
4. Resistance should read infinity (00). If a resistance reading other than infinity (00) is attained, the "lightning arrestor" should be replaced.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
"Arrestor" melted, separated or cracked.	Near direct lightning strike or extremely high current surge.	Replace "arrestor."
"Arrestor" has burn spots.	Near direct lightning strike or extremely high current surge.	Replace "arrestor."
Motor overload protector, fuses, or circuit breakers will not hold.	"Arrestor" damaged by lightning or extreme current surge.	Replace "arrestor."
Motor fails with "arrestor" installed.	1. Motor failure unrelated to lightning or high voltage surge.	Replace motor.
	2. "Arrestor" connected improperly.	Refer to installation instructions. Check all connections.
	3. "Arrestor" improperly grounded.	Refer to grounding instructions.