

PMVR-120-c VOLTAGE REGULATOR

The **PMVR 120-c AC REGULATOR** is a solid-state control device that controls the DC voltage applied to the Direct Current fields of the Power-Max. The regulator senses the AC output voltage drop when a load is applied or a voltage increase when the load is removed. This is accomplished instantaneously by the factory preset AC output voltage, which is electronically compared to the input DC voltage applied to the field through the voltage regulator. The AC output voltage is factory calibrated at 120 VAC (+ -) 5 VAC with a 12 to 14 DC volt input to the voltage regulator. During variable load applications from no load to full load the voltage regulator will hold the AC output voltage steady at between 110 and 120 VAC.

The **PMVR 120-c Solid State Voltage Regulator** is ruggedly designed for severe commercial use because of high quality parts and expert factory assembly and testing. There are no moving parts or no relays or moving electrical contacts or transformers. This device compensates for all over-voltage conditions for use with most electronic equipment. The PMVR 120-c, patent applied for, comes from the factory ready for use with any Negative ground, 12 volt DC system, however, it can easily be adapted to a Positive Ground system in the field in a matter of minutes. Also the voltage regulators are available with 24 VDC field inputs with 120 or 220 VAC outputs, the 12 VDC field input units can also produce 220 VAC outputs, when used with the corresponding Power-Mite generator models, ask your local dealer.

INSTALLATION INSTRUCTIONS FOR THE PMVR-120C AC VOLTAGE REGULATOR

1. Connect the Red wire from the voltage regulator to the vacant Brass Screw on the Switch in the control box. (NOTE: This is the hot + 12 volt DC source. (Install a 30 Amp inline fuse in the circuit).
2. Connect the double Brown wires from the voltage regulator as follows: One Brown wire to the vacant Silver Screw of the receptacle on the control box, and the other Brown wire to the vacant Brass Screw on the same receptacle.
3. Connect the Black wire from the voltage regulator, **DIRECTLY to the (-) negative side of the battery, (not to the frame).**
4. Connect the Green wire from the voltage regulator to the Green wire of the Power Generator, use a Butt Connector or a Wire Nut.
5. Connect the White wire from the Power Generator to the vacant Silver Screw on the other receptacle in the control box.
6. Connect the Black wire from the Power Generator to the vacant screw on the overload in the control box.
7. Plug the five-pin connector on the wire harness into the voltage regulator. **The connector only fits in one way do not try to force it.** If connector is too tight, reverse it. Check all wiring for proper color-coding and tightness before turning on the power. **DO NOT START THE GENERATOR UNDER LOAD! THE VOLTAGE MUST BE AT 120 VOLTS BEFORE APPLYING A LOAD.**

