## PMVR-220-c VOLTAGE REGULATOR

**The PMVR 220-c AC REGULATOR,** is a solid state control device which controls the DC voltage applied to the Direct Current fields of the Power-Mite, 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 230 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 230 and 220 VAC

The PMVR 220-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 220-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 VAC outputs, the 24 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-220C 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). IN 24 VOLT APPLICATIONS USE A 20 AMP FUSE.
- 2. Connect the double Brown wires from the voltage regulator as follows: One Brown wire to the vacant Brass Screw of the receptacle on the control box, and the other Brown wire to the other 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-Mite Generator to the round receptacle as shown to the screw together with the white factory installed jumper wire that is connected to the rectangle receptacle.
- 6. Connect the Black wire from the Power-Mite Generator to the vacant screw on the round 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 push it in firmly (until it snaps in tightly).** Check all wiring for proper color-coding and tightness before turning on the power.

