# **Voltmeters**

## **Operation**

A voltmeter indicates the battery voltage and the general condition of the battery charging system. The meter requires no warm-up and indicates voltage changes instantly. See Appendix I for gauge dimensions. Instrument part numbers are located on a label attached to the outside of the case (i.e. VP0000A).

## **Troubleshooting**

#### Symptom:

A. <u>Gauge appears to "stick" during operation</u> - Slightly loosen nuts holding backclamp and check operation. If gauge now operates properly and is not loose in panel, gauge now should provide suitable service. If gauge continues to stick during operation, replace gauge.

### B. No voltage reading is noted on the voltmeter:

- 1. If the indications are normal (engine starts, lamps lights, etc.) proceed with this test, otherwise, check battery voltage with a test voltmeter, or a 12 volt test light.
- 2. Check for voltage at voltmeter by connecting test voltmeter or 12 volt test light to "+" and "-" terminals of voltmeter; turn ignition switch on.
  - a) If light does not light, or if test voltmeter reads the same as installed voltmeter, the problem is in the battery charging system or wiring. See manufacturer's shop manual for trouble-shooting procedure.
  - b) If test voltmeter indicates correct voltage; typically 14 volts with engine running and at least 12 volts with no accessories on and engine off (see engine shop manual for details), then replace voltmeter.