MODEL PVA-1 PEAK VOLTAGE / DVA CONVERTER

General

The PVA-1 enables most Digital Multimeters (DMM's) to read Peak Voltage outputs, also called DVA readings, on marine ignition systems.

The PVA-1 has been tested extensively with our 732 as well as a broad range of Fluke and similar DMM's. Erratic readings may result from use with an inexpensive, insufficiently shielded DMM.

The PVA-1 is used primarily to detect "total failure" components resulting from shorts or open circuits, but it is also an effective indicator of high or low outputs.

Readings with the PVA-1 mimic, as nearly as possible, those of the Stevens Model CD-77 analog Peak Voltmeter but may vary somewhat in isolated cases. Such variations will normally be lower than true readings, thus avoiding indications of "good" on a bad system.

Setup

Select DC Volts on the DMM and choose either Autorange or a selected range sufficient to read the anticipated voltage.

Plug the PVA-1 into the DMM input jacks, **red** to **Volts, black or unmarked** to **Common.**

Plug the tester leads into the PVA-1 input jacks, **black** to **black** (COM) and **red** to the **first red jack** (PEAK DVA).

Testing

Test leads can now be used to check ignition components according to the engine service literature. If instructions call for a negative meter setting, connect the test leads backward (red to ground and black to test point). *Failure to reverse the leads can produce a reading that appears normal when the required output has not been tested at all*

Using the optional red jack

This jack is needed *only for pack terminal systems* (magneto CD with screw terminals on packs) which can read incorrectly with the standard red jack.

The second red jack, (LOW VOLT OPTION) is *never* used to read Charge Coil or Pack outputs.

For Sensor or Trigger outputs, use the first red jack. Then take another reading using the optional red jack (LOW VOLT OPTION). Use the lower of the two readings to determine whether Sensor or Trigger output is within spec.