



ALTERNATOR TROUBLE SHOOTING CHECKLIST

CHASSIS TYPE (E series, etc)	APS ALTERNATOR PART	Serial Number
CHASSIS YEAR OF MFR	NUMBER	
OE MFR		
ENGINE TYPE		

BEFORE PROCEEDING, PLEASE REVIEW AND COMPLETE THE FOLLOWING CHECKLIST:

- STEP 1:** Locate the primary (in the engine compartment) battery + and - posts.
Be sure the clamps are all marine grade clamps. They should be soldered and sufficiently tightened.
- STEP 2:** Locate the alternator positive (+) post. Be sure the output post nut is tight and there is NO red protectant spray on the terminal. If there is red spray on the alternator, remove the alternator and return to your distributor for replacement.
- STEP 3:** Ensure that there is a heavy ground wire from alternator mount to where the battery is grounded on the vehicle.
If there is no such wire, install one using a 1/0 cable and the output from the alternator to the battery is also a 1/0 cable.
- STEP 4:** Loosen the alternator belt and turn the pulley. Confirm that pulley is not in contact with or rubbing the alternator frame.
If the pulley is rubbing the frame remove the alternator and return to American Power Systems for replacement.
- STEP 5:** Ensure that control wire plug is FULLY inserted into back of the alternator. These plugs are hard to insert.
- STEP 6:** Using a good DIGITAL VOM perform tests 1 - 4 below:

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TESTS #1 - #4

Test Terminal	Test #1 Ignition Off Engine Off	Test #2 Ignition On Engine Off	Test #3 Ignition On Engine On - std idle No electrical loads	Test #4 Ignition On Engine On - high idle No electrical loads
Battery Positive to Negative	_____ volts	_____ volts	_____ volts	_____ volts
	volts s/b 12.6 If less replace or charge battery.	volts s/b 12.6 If less replace or charge battery.	volts s/b 13.8 - 14.9 If less go to test #4 If voltage is in range unit is ok.	volts s/b 13.8 - 14.9 If voltage is in range unit is OK. Possible OE plug problem Run test #5. If voltage is less alternator has no output. Repeat checklist steps 1-6

**TEST #5 Test OE chassis alternator plug field terminal integrity, pin to ground.
Consult your OE schematic for proper identification of field/ignition wire ID.**

Test Terminal OE Alternator Plug with plug unplugged	Test #5 Ignition Off Engine Off	Test #6 Ignition On Engine Off	Test #7 Ignition On Engine On - std idle No electrical loads
Field or Ignition Pin	_____ volts	_____ volts	_____ volts

Field terminal voltage should be 12.6 or higher. Lack of voltage at this terminal pin will cause the alternator not to turn on.

If there is little or no voltage at this pin to ground you must identify where the break is. If the break cannot be identified contact your American Power Systems dealer for a solution.