Penntex Regulator Test

Penntex charging systems use an external voltage regulator that is usually mounted inside the vehicle. **VERY IMPORTANT**: Testing the charging system must be done at the voltage regulator with the regulator plugged in. The wires are color-coded and correspond as follows: Blue: Field/Rotor Voltage, Orange: Stator Voltage, Red: Battery Voltage, Brown: Ignition Voltage. **Voltage readings taken at the alternator connectors may be different and do not apply in this test.**

The test is to take place three times:
First: Ignition Off (key off)
Second: Ignition On (key on, engine not running)
Third: Engine On (key on, engine running 1000 RPM+)

The voltages listed in the chart below should be the readings you would expect to read at each point. Record your results in the table below and then call or fax us at the numbers below to have your readings reviewed.

<table>
<thead>
<tr>
<th>First Test: Key Off</th>
<th>Second Test: Key On / Engine Off</th>
<th>Third Test: Engine Running</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue: 0</td>
<td>Blue: 12.1 Volts</td>
<td>Blue: 5 Volts</td>
</tr>
<tr>
<td>Orange: 0</td>
<td>Orange: 0</td>
<td>Orange: 6 – 7 Volts</td>
</tr>
<tr>
<td>Red: 12.8 Volts</td>
<td>Red: 12.6 Volts</td>
<td>Red: 14.2 Volts</td>
</tr>
<tr>
<td>Brown: 0</td>
<td>Brown: 2 – 12 Volts</td>
<td>Brown: 13 – 14 Volts</td>
</tr>
</tbody>
</table>

The voltages shown above are normal readings with a fully charged battery.

Quality Power
31510 Yucaipa Blvd.
Yucaipa, CA 92399
(909) 794-1600
(909) 794-3838 (Fax)
Penntex Alternator Full Field Test
For PX-4000, PX-5000, and PX-6000 Regulators

A full-field test will determine if an alternator will charge with the regulator bypassed. The alternator must be installed and positive and negative cables connected.

Full-field test procedure:
1) Turn off all accessories
2) Locate the voltage regulator
3) Disconnect the 4-wire connector
4) Jump blue and red wires
5) Start vehicle; run at idle
6) After it runs for 15 seconds, check voltage at red wire
7) That voltage is: __________
8) Raise engine rpm to 1000 rpm
9) Check voltage at red wire
10) That voltage is now: __________
11) Shut engine off
12) Remove jumper wire

Note: Do not let engine run more than 30 seconds in full-field mode. Damage to the vehicle electrical system could result.

Your contact phone # __________________ Contact name __________________

After completing this test, fax the results to (909) 794-3838 or call us direct at the number below to discuss the results.

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