

Alternator Diagnosis

Once the regulator and harness are tested and proven good, disconnect the negative probe of the test lamp from the regulator ground and connect the negative probe to the field terminal of the alternator. Connect the positive probe to the **blue** (field) wire coming from the regulator.

Does the test light illuminate?

No

If the lamp does not illuminate, the alternator may not be completing the connection to ground.
Check the ground connections at the alternator to system ground (if you know how, you can use your multimeter to check for resistance between the alternator and ground).

Is there a substantial amount of resistance between the alternator and the system ground?

No

Yes

A wiring or terminal connection issue is indicated.
Re-check system ground cabling and wiring.

Is it now working?

No

Yes

If an internal fault is indicated as a result of testing, remove the alternator and contact Balmar Customer Service or your local alternator shop for recommendations.

Yes

If the test lamp is illuminated when connected in series with the regulator field wire and the alternator field terminal, place a metallic object (a screwdriver blade works well) near the front of the alternator pulley shaft or the rear bearing cover of the alternator.

If the screwdriver blade is magnetically drawn to the alternator, the alternator's internal components appear to be functioning correctly.

Is the test light illuminated and magnetism detected?

No

Yes

If the test lamp is lit and magnetism is detected, you can remove the test lamp, re-connect the blue (field) wire and start the engine.

Once the engine is started and the regulator's initial start delay is complete, voltage should climb to levels set by the regulator.