

### Getting started

To begin, please review and complete the following steps. Do not charge the battery with a charger beforehand.

- ★ **Step 1:** In the engine compartment, locate the primary battery positive (+) and negative (-) posts. Be sure all the clamps are marine-grade. They should be soldered and sufficiently tightened.
- ★ **Step 2:** Locate the alternator positive (+) post. Be sure the output post nut is tight.
- ★ **Step 3:** Ensure that there is a heavy ground wire from the 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 be sure the output from the alternator to the battery is also a 1/0 cable. Other tips for ensuring a proper ground:
  - Do not ground the alternator to the engine. This is not sufficient.
  - Ensure there is no paint on the alternator mounting bracket (only applies to aftermarket bracket kits). Thick paint on the mounting bracket can cause an insufficient connection to ground the alternator.
- ★ **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, please contact us directly for assistance.
- ★ **Step 5:** Ensure that control wire plug is fully inserted into back of the alternator. These plugs are hard to insert.

### Testing with your multimeter (VOM)

After following the steps above, perform the tests below with your VOM in sequential order and record results.

Test terminal	Test 1 Ignition off Engine off	Test 2 Ignition on Engine off	Test 3 Ignition on Engine on – standard idle No electrical loads	Test 4 Ignition on Engine on – high idle No electrical loads
	_____ volts	_____ volts	_____ volts	_____ volts
Battery positive to negative	volts s/b 12.6  If fewer volts, replace or charge battery.  If more volts, go to Test 2.	volts s/b 12.6  If fewer volts, replace or charge battery.  If more volts, go to Test 3.	volts s/b 13.8 - 14.9  If voltage is in range, unit is OK.  If fewer volts, go to Test 4.	volts s/b 13.8 - 14.9  If voltage is in range, unit is OK. Possible OE plug problem. Run Test 5 below.  If voltage is below range, alternator has no output. Repeat checklist steps 1-5 above.

### Contact us

Still experiencing problems? [Contact us](#) for one-on-one assistance. International callers dial +1 (563) 323-7994, ext. 103. US callers dial (866) 466-8878, ext. 103. Normal business hours are 9 a.m.-4:30 p.m. CT Monday-Friday. Please be ready with your APS part and serial numbers, as well as vehicle and engine type, so that we may serve you better.

