Application: 2005 - 2006 Ford Expedition (with a computer-controlled alternator)

Symptom:

No Charge/Charge Warning Light Illuminated

Cause:

Bad Regulator Connector at the alternator





2005-06 Alternator Harness Connector



Replace or repair the alternator Regulator Connector



2005 Ford Expedition PCM

When dealing with electrical issues, make sure you perform a proper diagnosis to locate the underlying cause.

When you run into a no charge issue on an 05-06 Ford Expedition, the problem may be with the alternator's regulator connector. The alternator sends a signal through the wiring harness to the PCM so the PCM can determine the vehicle's electrical load to maintain the proper voltage set point. The PCM also uses this signal to determine the load placed on the engine by the charging system. If there is an issue with the wiring harness, the alternator's signal cannot reach the PCM and could cause a no charge issue.

The PCM controls the alternator regulator through the Regulator Connector terminal/wire. The PCM sends a command signal to the regulator, indicating the desired voltage setpoint needed.

To test this system, first, disconnect the three-terminal connector. Use a wiring schematic to identify the AS =SENSE, RC =GENCOM, and LI = GEN-MON circuits. With the ignition key on, engine off, and the alternator connector disconnected, your SENSE wire should have battery voltage at the connector. Next, the GEN-COM wire should have zerovolts, and the GEN-MON wire should have approximately 9 - 12 volts at the connector.

TECHNICAL SUPPORT 800-228-9672

ASE Certified Technicians are Standing by 7 days a week.











