



# TECH TIPS



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## GM Erratic Warm Idle

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Erratic Warm Idle Late Model General Motors

An erratic, high, or searching idle condition on late model General Motors fuel injected vehicles can sometimes be caused by the presence of AC voltage from a leaking alternator diode on the ECM's DC power lead.

The momentary voltage drop that occurs as the AC voltage crosses the positive/negative voltage threshold appears to fool the computer into thinking that a drop in system voltage has occurred. The ECM reacts by increasing engine RPM and boosting the fuel mixture to compensate for the incorrectly perceived low voltage condition. Technicians can test for this condition by attaching a voltmeter, set to display AC voltage, to the main alternator output terminal. The presence of AC voltage greater than 2 volts would indicate that alternator service may be required.