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## **Service Bulletin**

Re: 2006 GMT560 LLY 6.6L Duramax dual/single alternators ie TopKicks

Bulletin Date: June 27, 2006

### **Service Issue:**

The 2006 GMT560 LLY 6.6L Duramax dual alternators will not work properly (OE or aftermarket) and will exhibit extreme engine surging under high amperage draw. This is caused by the alternator 12V sense feeds, which are attached to the main starter power feed, shared by the intake air heater and glow plug system. The single alternator configuration does not seem to have the extreme surge problem but may not turn on correctly without this fix. **Note: This is the production configuration for this vehicle that can affect both the OE and American Armature alternators.**

### **Recommendation:**

In conjunction with GM we have come up with the following to help resolve this issue.

- In order to eliminate the majority of the surging relocate the alternator sense wires (see schematic) from the starter lug, shared with the glow plugs and the intake air heater, up to the under hood to the 12V body electrical center. Note: Write up and pictures to follow.
- In addition, GM has made significant improvements with V89 software/cals released April 06, 2006. The diagnostic calibrations have been improved and are much more robust. All 06 trucks must be reflashed with this service cal.
- Because of the increased output from the American Armature alternators if any circuit breakers, solenoids, isolators etc. are used they must be capable of handling the output currents. At this time we are measuring above 250a per unit at full output.

Some minor surging will still be present in the current after the above changes but will not be evident in either engine speed or in vehicle function.

**Technical Support:** Please call our Technical Services if you have any questions regarding this problem.

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