## TECHNICAL TIP

## **TT-648**

GM Vehicles 1995 and Newer Have an "All Silicon Voltage Regulator" design. The **ASVR** regulator is designed to operate at a higher temperature and is a significant improvement over earlier model CS-series designs.

Special considerations are necessary when working with alternators with **ASVR** regulators.

- GM service manuals specify that the battery must be disconnected before alternator is removed.
- Failure to do so may cause voltage spikes when B+ terminal is removed which will damage or weaken computerized equipment.
- Most late model vehicles use the ECM or PCM to turn on the regulator.
- If a fault code was set when the original alternator failed, the code must be reset for proper alternator operation.
- If the error code is not cleared, the dashboard warning light may stay on and the alternator may not charge.
- A scan tool may be necessary to reset codes.