Charging System: Testing and Inspection

System Overcharges (Battery Boils Over)

1. Turn ignition to ON position, then measure voltage between voltage regulator test point "A" and positive battery post. If voltage drop is less than **0.25 volt,** proceed to step 2. If voltage drop is more than **0.25 volt,** service excess voltage drop in circuit between test point "A" and positive battery post. Ensure fuse and connectors are in good condition.
2. Measure voltage at wiring harness "I" terminal. If voltage is greater than **one volt,** proceed to step 3. If voltage is less than **one volt,** service high resistance in circuit between alternator "I" and battery warning lamp.
3. Check grounds between voltage regulator and alternator, alternator and engine, then the engine and battery. Repair any loose or corroded ground connections. If all connections are clean and tight, proceed to step 4.
4. Turn ignition switch to the OFF position and measure voltage at voltage regulator test point "F." If voltage is less than **battery voltage,** proceed to step 5. If voltage is equal to **battery voltage,** replace voltage regulator.
5. Remove alternator and voltage regulator, then measure resistance between slip rings and housing. If resistance is more than **200 ohms,** replace voltage regulator. If resistance is less than **200 ohms,** clean and recheck resistance. If resistance is still less than **200 ohms,** replace alternator.