Voltage and Ground Checks for Negative Ground Systems

Checking Grounds:
1. Turn the engine off and make sure that the key is in the off position.
2. Using a digital volt ohm meter (DVOM), set the meter to the 200 Ohm scale.
3. Attach the red lead of the meter to the aluminum baseplate of the Ignitor module.
4. Attach the black lead of the meter to the battery negative terminal.
5. Readings greater than 0.2 ohm indicate a ground problem. The problem can be located by moving the black meter lead, from the battery terminal to the location where the battery attaches to the frame or engine. Watch the meter for a drop in resistance. Keep moving the meter black lead closer to the distributor until the meter reaches 0.2 ohms or less. The ground problem will be located between the last location that measured high and location that measured within the 0.2 ohm specification.
6. Common areas of poor or bad grounds are:
   - Corroded negative battery connections
   - Paint between engine and frame connections
   - Distributor to engine block connections
   - Points breakerplate to distributor body

Checking Voltage:
1. Turn the engine off and make sure that the key is in the off position.
2. Using a digital volt ohm meter (DVOM), set the meter to the 20V DC scale.
3. Attach the red lead of the meter to the positive terminal of the coil.
4. Attach the black lead of the meter to a good clean engine ground.
5. Briefly turn the key to the start position without cranking the engine and observe the meter reading. Do not leave the key in the on position more than a few seconds or damage can be done to the module and coil.
6. Readings between 12.4 and 10 volts indicate sufficient voltage for proper ignition function. Reading less than 10 volts could indicate the presence of a resistance wire, ballast resistor, poor engine ground or corroded wires and connections.