

DIAGNOSIS AND TESTING (Continued)

Charging System Tests

Tools Required:

- Rotunda Starting and Charging System Tester (VAT-40) 078-00005

Generator Output Test

When performing charging system tests, turn off all lamps and electrical components. Place transmission in PARK and apply parking brake.

CAUTION: Do not make jumper wire connections except as directed. Making improper jumper connections may damage the regulator or fuse links.

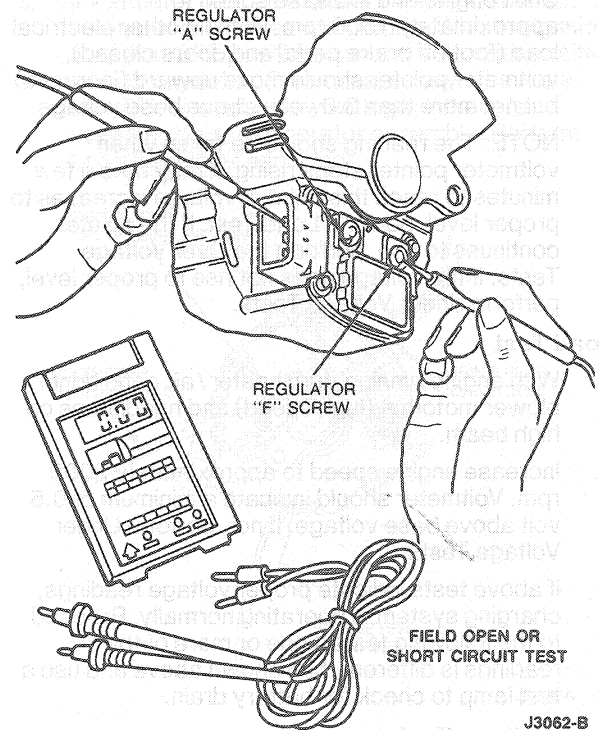
NOTE: Battery posts and cable clamps must be clean and tight to ensure accurate meter indications. Reference measurements to ground should be made to the battery negative post.

In order to check the charging system, the use of Rotunda Starting and Charging System Tester (VAT-40) 078-00005 or equivalent, is recommended.

1. Connect the positive and negative leads of the tester to battery.
2. Connect current probe to generator output lead (to measure generator output).
3. With the engine running at approximately 2000 rpm, set the load adjustment to determine generator output (with an ambient temperature of less than 27°C [80°F]).

NOTE: When measuring generator output, the tester can be connected to the battery positive or negative cable. In this case all electrical accessories must be turned off and 10-15 amps must be added to the reading on the tester to compensate for engine operation.

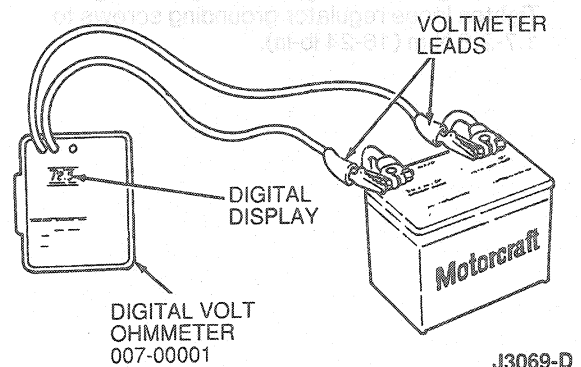
NOTE: Refer to the tester procedure manual for complete directions on checking the charging system.



Base Voltage Test

NOTE: Prior to running this test, turn the headlamps on for 10-15 seconds to remove any surface charge from the battery. Then, wait until the voltage stabilizes prior to performing the base voltage test.

1. With ignition switch in OFF position and no electrical loads operating, measure voltage across the battery positive and negative posts.
2. Record battery voltage reading shown on voltmeter scale. This reading is called base voltage.



No-Load Test

1. Connect a tachometer to engine.