ANSWER KEY TO CHALLENGE SHEET

CHARGING SYSTEM CHALLENGE 3

Customer's Concern: I've been using a lot of water in my battery. The battery is only a year old so I don't think it is because of a bad battery.

Customer Vehicle: Chevrolet Impala.

Possible Causes of This Challenge:

- 1. Voltage regulator malfunction.
- **2.** Defective alternator.
- 3. Short circuit causing the charging system to operate at full output.
- **4.** Internal battery problem.
- **5.** Incorrect battery for application.

Safety First Practices to Follow:

- 1. Wear safety glasses at all times.
- 2. Connect vehicle exhaust system to a vent hose in a closed shop.
- 3. Watch out for moving or hot parts when making under-hood inspection.
- 4. Follow all safety rules when using hand tools.

Tools and Equipment Required:

- 1. Vehicle service information.
- 2. Hand tools.
- **3.** Digital multimeter.
- **4.** Jumper wires.
- 5. Instrument tester variable resistor.