#### ANSWER KEY TO CHALLENGE SHEET

#### **IGNITION SYSTEM CHALLENGE 1**

Customer's Concern: The engine feels like it hesitates when I try to accelerate quickly.

Customer Vehicle: Chevrolet Monte Carlo.

## **Possible Causes of This Challenge:**

- 1. Broken distributor pick up coil leads.
- **2.** Carbon tracked or damaged distributor cap.
- **3.** Damaged distributor rotor.
- **4.** Defective or damaged spark plug cables.
- **5.** Excessive wide gap at spark plugs.
- **6.** Excessive retarded ignition timing.

### **Safety First Practices to Follow:**

- 1. Wear safety glasses at all times.
- 2. Connect vehicle exhaust system and vent hose in closed shop.
- 3. To prevent electrical shock, do not handle ignition components with engine running.
- **4.** Make sure vehicle is in Park or Neutral and parking brake is set before running engine.

# **Tools and Equipment Required:**

- 1. Vehicle service information.
- **2.** Hand tools.
- **3.** Engine diagnostic machine or oscilloscope.
- **4.** Timing light.
- **5.** Digital multimeter.