Electrical/Electronic Systems: Hybrid Electrical Safety

Student/intern information:

Name _____ Date _____ Class _____

Vehicle used for this activity:

Year _____ Make _____ Model _____

Odometer _____ VIN _____

Time off _____

Time on _____

Total time _____

Learning Objective/Task	CDX Tasksheet Number	2013 MLR NATEF Reference Number; Priority Level	2013 AST NATEF Reference Number; Priority Level	2013 MAST NATEF Reference Number; Priority Level
• Identify high-voltage circuits of electric or hybrid-electric vehicle and related safety precautions.	C561	6B7:P-3	6B7; P-3	6B7; P-3
• Identify hybrid vehicle auxiliary (12V) battery service, repair, and test procedures.	C874	6B9; P-3	6B9; P-3	6B9; P-3

Materials Required

- Hybrid or electric vehicle
- Certified and tested, high voltage electrical gloves.
- Depending on the type of concern, special diagnostic tools may be required. See your supervisor/instructor for instructions to identify what tools may be required.

Some Safety Issues to Consider

- Hybrid and electric vehicles are especially dangerous due to their extremely high DC voltage and current (high enough to kill you). In many dealerships, only fully trained master technicians are allowed to work on hybrid and electric vehicles. Follow all manufacturer procedures exactly, and wear all required personal protective equipment at all times when working around these vehicles.
- **Always wear high-voltage personal protective equipment when working around high-voltage sources, components, and wires.**
- Only students who have their supervisor's/instructor's direct permission should perform this task due to the safety concerns involved.
- Use extreme caution when working around batteries. Immediately remove any electrolyte that may come into contact with you. Electrolyte is a mixture of sulfuric acid and water. Please consult with the shop safety and emergency procedures when working with or around batteries.
- Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance ith local, state, and federal safety and environmental regulations.

Performance Standard

0—No exposure: No information or practice provided during the program; complete training required

1—Exposure only: General information provided with no practice time; close supervision needed; additional training required

2—Limited practice: Has practiced job during training program; additional training required to develop skill

3—Moderately skilled: Has performed job independently during training program; limited additional training may be required

4—Skilled: Can perform job independently with no additional training