

# Electrical/Electronic Systems: Lighting System Diagnosis and Repair

## Student/intern information:

Name \_\_\_\_\_ Date \_\_\_\_\_ Class \_\_\_\_\_

## Vehicle used for this activity:

Year \_\_\_\_\_ Make \_\_\_\_\_ Model \_\_\_\_\_

Odometer \_\_\_\_\_ VIN \_\_\_\_\_

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 system voltage and safety precautions associated with high-intensity discharge headlights.	C564	6E3; P-2	6E4; P-2	6E4; P-2
• Inspect interior and exterior lamps and sockets including headlights and auxiliary lights (fog lights/driving lights); replace as needed.	C956	6E1; P-1	6E2; P-1	6E2; P-1
• Aim headlights.	C321	6E2; P-2	6E3; P-2	6E3; P-2
• Diagnose (troubleshoot) the cause of brighter-than-normal, intermittent, dim, or no-light operation; determine necessary action.	C320		6E1; P-1	6E1; P-1

Time off \_\_\_\_\_

Time on \_\_\_\_\_

Total time \_\_\_\_\_

## Materials Required

- Vehicle or simulator equipped with HID headlights
- DMM/DVOM
- Test light
- Headlight aligner or approved method

## Some Safety Issues to Consider

- Be cautious around electricity. High voltage (enough to injure or kill you) is present on many vehicles. Ignition systems, hybrid vehicles, high-intensity discharge headlights, and 42-volt electrical systems are just a few to be careful of.
- Wear lightweight leather-type gloves when removing small light bulbs as they can shatter, severely cutting fingers and tendons.
- 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 with 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