UNIT 8  Lighting System Diagnosis and Repair

JOB SHEET A6E2: Headlight Service

Start Date: ___________  End Date: ___________

Name: ____________________________  Make: ___________

End Date: ___________  Model: _______________

Make: _______________  Year: ___________

VIN: __________________________  Mileage: ___________

Learning Objective/NATEF Task
• Inspect, replace, and aim headlights and bulbs.
  o NATEF task A6/E2, P2. ICS 161

Tools and Materials
• Classroom vehicle(s)
• OEM service manual
• Digital Multimeter (DMM)
• Fender covers
• Jumper wires
• Safety glasses

Procedure

1. You must understand and observe all State/Federal Regulations and personal safety procedures when carrying out the following task(s). Wear safety glasses for this entire procedure.

2. Review “Lighting Diagnosis and Repair” in Lesson 2 of Unit 8 of the A6 course.

3. In the OEM service manual for your classroom vehicle, locate the procedure for the inspection, replacement, and aiming of headlights. Submit this procedure to your instructor or mentor for approval and then answer the following questions.

Your instructor must stamp or initial the box to the right before you can proceed with this job sheet.

1. Remove the socket or connector from a single filament taillight bulb of a classroom vehicle. Do the terminal or connections show signs of corrosion?

2. Using a test light connected to body ground, find the power terminal of the connector/socket. Turn the circuit off using the headlight switch.
3. Connect the test light ground lead to the ground terminal of the connector/socket. Probe the power terminal while a classmate turns the headlight switch on. If the test light glows, the ground side of the circuit is nominal. Does the test light glow? _____________________________

4. Turn the headlight switch off.

5. Using the DMM, check the ground side of the terminal for continuity to body ground. With the system under power you can check the voltage drop from the bulb ground terminal to the body ground. What is the voltage drop across the ground? ________ You can also use the “ohmmeter” function of the DMM to check resistance from the bulb ground terminal to the body ground.

6. Give your findings and interpret your results:

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

Task Summary
Now that you have completed this NATEF task, can you think of anything (tools, information, knowledge etc.) that would have made this task easier?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
List a customer complaint together with the cause determined by this diagnostic/inspection task that might appear on a work order, and then list the NATEF task correction you would use to resolve the complaint.

**COMPLAINT:**

1. Perform Checks/Inspect: ________________________________
2. Referencing Bulletin: ________________________________

**CAUSE:**

1. Diagnosis: **USED THIS NATEF DIAGNOSIS TASK**
2. Operating as designed: ________________________________
3. Cause identified as: ________________________________

**CORRECTION:**

1. Other Correction: ________________________________
2. Correction Verified By: ________________________________

Use this rubric to rate the completion of job sheet

1 = Demonstrates exposure/observation of the competency
2 = Applies the competency but only mastered a few essential attributes of the competency
3 = Capable of the competency but needs further practice
4 = Performs the competency satisfactorily
5 = Masters the competency

Instructor ________________________________ Mentor ________________________________