

# A6/U10/L1 MISCELLANEOUS SYSTEMS DIAGNOSIS AND REPAIR

## JOB SHEET A6H3 Electric Door Lock Diagnosis

Name: \_\_\_\_\_ Start Date: \_\_\_\_\_  
Make: \_\_\_\_\_ Model: \_\_\_\_\_ End Date: \_\_\_\_\_  
VIN: \_\_\_\_\_ Year: \_\_\_\_\_  
Mileage: \_\_\_\_\_

### LEARNING OBJECTIVE/NATEF TASK



- Diagnose incorrect electric lock operation; determine necessary action **NATEF TASK A6/H3, P2. ICS167**

### MATERIALS

Classroom Vehicle (s), OEM service information, DMM, Jumper wires

### PROCEDURE

- Wear Safety Glasses for this entire procedure.
- Review Lesson 1 of UNIT 10 in the A6 course. Locate in the OEM service information the wiring diagram for the Power Door Locks and the procedure to diagnosis their incorrect operation for the vehicle you are using. Submit this information to your instructor or mentor for approval.

Your Instructor **MUST** stamp or initial the box to the right before you can proceed with this job sheet.



1. Does this vehicle use a Keyless Entry System? \_\_\_\_\_
2. If it does, how is it diagnosed differently than standard power door locks?

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3. Using the wiring diagram that you located, list in the table below the areas in the circuit, such as, connectors, wires, fuses, splices, grounds, and components, symptoms, causes, and tests used to solve a concern that could cause the power door locks not to function properly:

| AREA | SYMPTOM | CAUSE | TEST USED |
|------|---------|-------|-----------|
|      |         |       |           |
|      |         |       |           |
|      |         |       |           |
|      |         |       |           |
|      |         |       |           |

4. Perform the diagnostic steps from the test that you listed in the above table. Did this process of elimination help to identify the circuit problem?

\_\_\_\_\_

5. What is the voltage supplied to the door lock solenoid/motor? \_\_\_\_\_
6. Can you assume by the operation of the system that the fuse is good and the circuit is getting power? \_\_\_\_\_.
7. Using Job Sheet A6H8, remove the door panel from one of the front doors. Using a DMM, connect the negative lead to a good ground and probe the power feed terminal of the switch connector. Do you have battery voltage at the terminal? \_\_\_\_\_
8. Disconnect the connector from the door lock motor and connect the DMM meter leads to the terminals. Use paper clips and jumper wires as needed. Polarity does not matter.
9. Press the door lock switch to open the locks. Does the meter display show negative ( - ) polarity? \_\_\_\_\_
10. Press the door lock switch to close the locks. Does the meter display show negative ( - ) polarity? \_\_\_\_\_
11. Does the meter show a change in polarity when the switch is moved from the lock position to the unlock position? \_\_\_\_\_
12. Connect the connector to the lock motor and install the door panel.

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## 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.

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- 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 = Demonstrated 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 = MASTERED the competency

**Instructor** \_\_\_\_\_ **Mentor** \_\_\_\_\_