

A6/U6/L2 STARTING SYSTEM

JOB SHEET A6C1 Starting Current Draw Test

Name: _____ Start Date: _____
Make: _____ Model: _____ Year: _____
VIN: _____ Mileage: _____

LEARNING OBJECTIVE/NATEF TASK



- Perform starter current draw tests; determine necessary action. **NATEF TASK A6/C1, P1. ICS160**

MATERIALS

Classroom Vehicle (s), OEM service information, Digital Multimeter (DMM), Volt-Amp Tester, Remote Starter Switch

PROCEDURE

- Wear Safety Glasses for this entire procedure.
- Review page 31 of Lesson 2 in UNIT 6 of the A6 Course. Locate in the OEM service information the procedure for the starter current draw test for vehicle you are using. Submit this procedure 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. What type of starter circuit does the vehicle have? _____
2. List the main stater circuit components on this vehicle:

3. Disable the ignition system to prevent the vehicle from starting. On this type of ignition system how did you prevent the engine from starting?

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4. Connect a DMM across the battery as shown on page 31 of Unit 6 Lesson 2 of the A6 Course.
5. Measure the battery voltage and record it here: _____
6. Crank the engine and note the voltage drop: _____
7. What is the minimum voltage allowed on most vehicles for this test? _____
8. When performing this voltage drop test, where should the positive lead of the DMM be placed? _____
9. When performing this voltage drop test, where should the negative lead of the DMM be placed? _____
10. Clamp the amp probe or inductive ammeter pickup around the starter motor power cable as described by the testing device manufacturer.
11. Crank the engine for several seconds and note the voltmeter and ammeter readings: _____
- 12. Be prepared to observe the amperage when the engine begins to crank and while it is cranking. Also note the voltage when you stop cranking the engine.**
- 13. The initial current draw was _____ amps. After _____ seconds, the current draw was _____ amps and the voltage dropped to _____ volts.**
14. What is indicated by your test results? Compare your measurements to the OEM specifications.

15. Return the vehicle to normal operation.

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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.

- 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** _____