



## WORKSHEET 4-5 *Starter Current Draw Test*

Vehicle	Year/Prod. Date	Engine	Transmission
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### Worksheet Objectives

When you have completed this worksheet, you will be able to demonstrate a starter current draw test.

### Tools and Equipment

For this exercise you will need the following:

- Technician's Handbook
- Repair Manual / EWD
- Vehicle
- VAT-40 or VAT-60 Tester

### Exercise 1: Current Draw Test

1. Turn off all electrical accessories and lights in the vehicle; set ignition switch to OFF.
2. Disable the fuel or ignition system so engine will not start while cranking. (e.g. remove EF 1 main relay)
3. Connect the tester in this sequence:
  - Red lead to positive battery terminal
  - Black lead to negative battery terminal
  - Current probe
4. For VAT-40, set the voltage selector to INT 18 (volts).
  - Set "Test Selection" to position #1 "Starting."
  - Adjust Ammeter to zero.
5. Without cranking the engine, note the voltage reading.
  - Should be at least 12.6 volts
  - Recharge the battery before proceeding if the voltage is below 12.6 volts

**Note - Do not crank the engine longer than 10 seconds at a time.**

6. Crank the engine and observe the voltage and current readings.

7. Record the test values in the blank spaces below:

Cranking current draw \_\_\_\_\_ Amps

Cranking voltage \_\_\_\_\_ Volts

Starter passed test? \_\_\_\_\_ Yes

\_\_\_\_\_ No

8. When finished with the test, disconnect the tester leads and restore the vehicle to its original condition (replace fuse or relay).

# Starter Current Draw Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Review this sheet as you are doing the Starter Current Draw Test worksheet. Check each category after viewing the instructor's presentation and completing the worksheet. Ask the instructor if you have questions regarding the topics provided below. Additional space is provided under topic for you to list any other concerns that you would like your instructor to address. The comments section is provided for your personal comments, information, questions, etc.

I have questions

I know I can

Topic	Comment		
Current Draw Test			



**Notes**