



**WORKSHEET 3-2**  
***Battery Visual Inspection and Using the Battery Analyzer***

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

In this worksheet, you will practice performing a visual inspection of the battery on an actual vehicle. When you have completed these exercises, you will be able to demonstrate the proper use of the approved battery tester.

**Tools and Equipment**

For this exercise you will need the following:

- Technician’s Handbook
- Vehicle
- MicroPro Battery Analyzer
- Battery
- Eye protection
- Access to TIS (PG017-02).

**Exercise 1: Visual Inspection**

Inspect each component on the list; describe the condition of each item in the table below:

Inspection Item	Condition
Positive battery cable	
Negative battery cable	
Positive battery terminal	
Negative battery terminal	
Battery case	
Hold-down bracket	
Electrolyte	

## Exercise 2: Setting up the Battery Analyzer

Your instructor will provide you with a battery to test (this should be a Toyota battery).

Set up the battery analyzer as follows:

1. Connect the analyzer's red lead to the positive battery terminal.
2. Connect the black lead to the negative battery terminal.
3. Check the analyzer's display. It should illuminate and show four zeros to indicate a good connection. The analyzer's display will not illuminate if there is a poor connection.

**Connections** - The teeth on both sides of each clamp must contact the battery terminal. Rock both clamps back and forth to ensure a good electrical connection.

4. Proceed to Testing the Battery (on the next page) if you have not charged the battery before test.
5. Press the Test Mode key once if you charged the battery before the test. The "After Charge" LED will light.

Press the Test Mode key twice if battery temperature is 32°F (0°C) or lower.

The "Cold Battery" LED will light.

## Exercise 3: Test the Battery

Use the following steps to test the Toyota OEM battery.

1. Select the correct STK# from the chart included with the tester (in the flap of the soft case).
  - Can also be found on T.I.S.
    - Go to T.I.S. home page
    - Click on "Diagnostics"
    - Click on "Midronics Battery Tester Software"
    - Click on "Toyota Stock Number Chart"

**Note: A valid STK# is a requirement for warranty testing.**

2. Use the analyzer's keypad to enter the 4-digit STK#.
3. Press the STK#/CODE key to start the test.
4. Note the result on the analyzer display and record it here:

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5. What would you do if the analyzer display showed "REPLACE?"

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# Battery Visual Inspection and Using the Battery Analyzer

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

Review this sheet as you are doing the Battery Visual Inspection and Using the Battery Analyzer 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
Battery Visual Inspection			
Use of Battery Tester			



**Notes**