**Meets ASE Task:** (A6-A-6) P-1 Demonstrate knowledge of the causes and effects from shorts, grounds, opens, and resistance problems in electrical/electronic circuits.

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

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

Time on Task:\_\_\_\_\_\_\_\_\_\_\_\_\_

Make/Model/Year:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

VIN:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluation (Enter number from 4, 3, 2, 1) :\_\_\_\_\_\_\_\_\_

**Locate Shorts, Grounds, and Opens**

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**1.** Check service information for the recommended method for locating shorts, grounds,

and opens.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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2. Follow the recommended troubleshooting procedure to

 locate the short-to-ground. Check all that apply.

Short finder

Ohmmeter attached to the fuse panel with the

fuse removed

Voltmeter attached to the fuse panel with the fuse

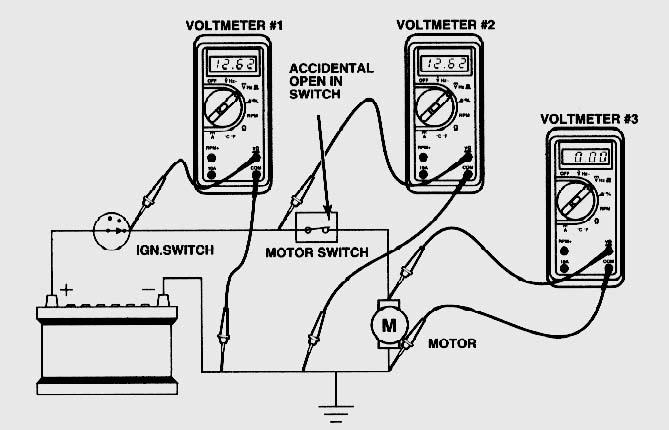
removed

Ammeter attached to the fuse panel with the fuse removed

Sonic short finder

Other (describe) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.** Most diagnostic test procedures include checking for proper power and ground at the

 component that is not functioning.

a. Is there voltage at the

component when the circuit is

activated?

**Yes  No**

b. Is there continuity between the

ground connection at the

component and a good chassis

ground?

**Yes  No**

**4.** Based on the test results, what is the needed action? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_