**Meets ASE Task:** (A6-B-5) P-1 Perform battery charging according to manufacturer’s recommendations.

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

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

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

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

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

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

**Battery Charging**

Page 149

**[ ]  1.** Measure the open-circuit voltage of the battery = \_\_\_\_\_\_ volts (red lead of the

 voltmeter to positive [+] and black lead to negative [-]). (If more than 12.6 V, remove

 the surface charge by turning on the headlights for 1 minute).



**[ ]  2.** Percentage of charge = \_\_\_\_\_\_%.

 12.6 V or higher = 100% charged

 12.4 V = 75% charged

 12.2 V = 50% charged

 12.0 V = 25% charged

 below 11.9 V = discharged

**[ ]  3.** Determine the cold cranking amperes

(CCA) of the battery = \_\_\_\_\_\_\_\_\_\_.

 (*The charge rate should be 1% of the CCA.* For example, a battery with a 500 CCA rating should be charged at 5 ampere rate.) Charge Rate = CCA

 100

**[ ]  4.** Determine the reserve capacity in minutes = \_\_\_\_\_\_\_\_\_.

 (*The charge rate can be determined by dividing the reserve capacity of the battery in minutes by 30.* For example, a 180-minute battery should be charged at 6 ampere rate: 180/30 = 6).

 Charge Rate = Reserve Capacity

 30

**[ ]  5.** The battery should be charged at \_\_\_\_\_ amperes

 (CCA method) or at \_\_\_\_\_ amperes (reserve capacity method).