# Key Off Battery Drain



**Meets ASE Task:** (A6-A-10) P-1 Measure and diagnose the cause(s) of excessive key-off battery drain (parasitic draw); determine needed action.

Name:_____ Date:_____ Time on Task:_____

Make/Model/Year:_____ VIN:_____

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

A battery electrical drain test should be performed if a battery is dead (discharged) to determine if a battery electrical drain was the cause of the dead battery.

☐ **1.** Perform a visual inspection and check if the following are turned on:

a. The glove box light (instrument panel compartment light)
b. The interior light switch
c. Vanity mirror(s) light(s)
d. Trunk light (look for discoloration indicating that the bulb may have been on for a long time)

☐ **2.** Turn the ignition and all accessories off. Close all doors and the trunk. Disconnect the under-the-hood lamp if equipped.

☐ **3.** Disconnect the negative (-) battery cable.

☐ **4.** Select DC amperes on a digital multimeter.

☐ **5.** Connect the black meter lead to the negative terminal of the battery.

☐ **6.** Connect the red meter lead to the disconnected cable end and read the ammeter.

_____ amps of battery electrical drain [should be less than 0.05A (50 mA)]

**OK** ☐ **NOT OK** ☐

☐ **7.** What is the needed action? _____

_____

☐ **8.** Reconnect the battery, reset the radio presets, and set the time on the vehicle clock.

**HINT:** If possible, use a clip-on type digital multimeter or an amp probe to measure the battery drain. Using this equipment prevents the need to disconnect the battery cable and then have to reset the radio and the clock.