



Parasitic Battery Draw

The term parasitic battery draw refers to the electrical devices that continue to draw current from the battery when the ignition key is in the OFF position. As a rule of thumb normal parasitic draws are below 50 milliamps, however it is always best to refer to the original vehicle manufacturers specifications for recommended limits. Before a parasitic draw test can be performed the batteries [state of charge](#) must be greater than 75%.

Safety

Before testing a battery it is very important to follow some simple safety rules. Always wear eye protection and keep open flames away from the battery. If using a battery charger, always confirm that the charger is off before connecting or disconnecting the charger. Batteries produce hydrogen gas which is extremely flammable; do not smoke while servicing a battery. Batteries should only be charged in well ventilated areas. The electrolyte in the battery contains sulfuric acid, latex gloves are highly recommended.

Testing For Parasitic Draw

To perform the parasitic draw test you will need a digital amp meter capable of reading milliamps and a minimum of 10 amps. Be certain that your meter has a fuse intended to protect the meter for the rare occurrence of an abnormally high amp draw.

1. Insure that all accessories are off and the ignition switch is in the OFF position.
2. Remove the negative battery cable from the battery.
3. Set amp meter switch to the highest rating (10 amps or higher).
4. Connect amp meter as illustrated in figure 1.

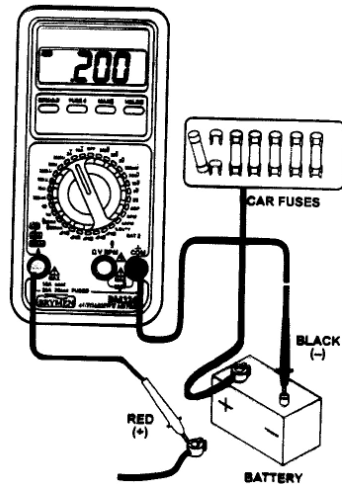


FIGURE 1

5. The reading may start as high as 6 amps, this is normal. When the battery cable was disconnected the vehicles electronics lost power, these devices will draw a higher current when they are reconnected. The current will drop as the numerous electronic devices "awaken". On some late model vehicles this may take 20 minutes or longer.

6. As the reading decreases and stabilizes adjust the amp meter down to read in the milliamp range. This reading will be the vehicles parasitic draw.

High Parasitic Reading

Should you determine that the parasitic draw exceeds the vehicles limit it will be necessary to determine the circuit that is creating the draw. This is best accomplished by using the process of elimination. Check lamp circuits (glove box, courtesy, trunk etc.) for bulbs that are illuminated when they should be off. To check the trunk lamp it may be necessary to get in the trunk. Make certain that you have a helper. And more importantly make certain that your helper is your friend!

If a visual inspection fails, isolate circuits by removing fuses one at a time while noting amp reading. Once you have identified the circuit, refer to the service manual or wiring diagram to determine which devices are on the circuit. Disconnect the devices to determine which is faulty. It may also be necessary to disconnect relays or non fused circuits. It is simply a process of elimination at this point.