

OBD2 Dongle Current draw

Are you having problems on late model vehicles with elusive parasitic draws?

What I am starting to find as one reason for this problem is the OBDII dongles that are used by some insurance companies. This problem was addressed by SAE, at the last OBD II symposium in Anaheim, Ca. and I have found some OE's are currently struggling to find reasons for batteries going dead for no reasons. While working at the OE hotline, we were getting a number of dead batteries on vehicle that we had no known issues with.

The issue appeared to be with the OBDII dongles, such as the ones used by insurance companies and the GPS tracker. They are classified on the data Bus as a scan tool. Their job is to request data and send it out over Bluetooth to a phone, or log vehicle data for later download.

With the vehicle, running this is not a problem, but when you turn off the vehicle, the dongle is staying powered up because of constant power on the OBDII connector. The 'scan tool's' job is to request data with the engine running or not. The CAN Bus, which normally goes to sleep, is now

constantly being kept awake with the request of data. The 'scan tool' is not capable of detecting if a vehicle is running which results in the PCM being asked for data and not going to sleep.

If the CAN communication is only to the PCM, there is usually not an issue, but on some vehicles the Bus is connected to many modules. The 'scan tool' will continue to interrogate the vehicle network and prevent network into going to sleep mode. This problem does not seem to be occurring on the other communication protocols where the PCM powers down when the ignition is turned off.

If the CAN Bus is networked so that communications is allowed after vehicle is powered down, this current draw issue is starting to occur on these vehicles if the dongle is connected.

The vehicle population that I have seen this problem effect is on vehicles with Permanent DTC's capability, 2010 and later, also on vehicles with high-end CAN busses.

Which manufacturer of the dongles is to blame? It does not appear to be manufacturer dependent at this time.

The problem is the dongle is a 'scan tool' that is requesting data after the vehicle is turned off and is waking the CAN Bus to get this information.

One last issue about leaving a scan tool or other dongles connected to the OBDII connector is, it has been known to stop data transmission to other features on the vehicle with infotamaint. This is another set of issues.

The solution: Unplug the device when you turn off the vehicle.

Hope this helps, Steve Caruso