Testing for Battery Drain

Link: https://help.wextelematics.com/troubleshooting/testing-for-battery-drain/ Last Updated: October 4th, 2016

Although it may be *possible* for a device's power draw to exacerbate existing battery conditions (i.e., an old battery or other after-market products causing draw), the device alone *should not* cause battery draw issues.

Note. After a maximum of 30 minutes Ignition Off, fully updated devices typically see a range of 30-50mA draw.

– PNP = ~32mA
– GPSI-5000 = ~40-50mA

If you're unsure if the device is drawing abnormally high amounts of power, the following steps will help you test draw:

All testing should be completed when the vehicle is in the open and the device has a clear line of sight to the sky. Ensure vehicle has been reporting properly prior to draw test.

1. Remove the negative battery cable from its post, set your multi-meter to DC Amperage, and connect the multi-meter to complete the circuit (in series).

   Connecting the multi-meter in series will complete the circuit giving the vehicle and GPS unit power again.

2. Disconnect the GPS device from power by either removing the inline fuse on the red wire, unplugging the 20-pin Molex connector at the device, or by disconnecting the device from the OBD-II port (varies by device).

3. Close all doors, and wait 30 minutes for the vehicle's electrical system to stabilize.

   Note. Failure to wait the full 30 minutes may result in a false reading, as various modules within the vehicle (DMC, ECM, ECU, ABS, etc.) will be "awake" and offset the test results.

4. Reconnect the GPS device without waking up any of the onboard modules. If the dome light comes on, or a door is opened, you may have to wait another 30 minutes for the vehicle modules to fall back asleep.

5. Confirm the device is connected to both GPS and Cellular networks; the green and amber LEDs should be on solid.

6. Record the amperage on your multi-meter (reading #1).

7. Without waking up any of the onboard modules, disconnect the GPS device from power by either removing the inline fuse on the red wire, by unplugging the 20-pin Molex connector at the device, or by disconnecting the device from the OBD-II port (varies by device).

8. Record the amperage on your multi-meter (reading #2).

9. Subtract **Reading #2** from **Reading #1** to obtain the number of milliamps the unit is drawing.

If you have any questions, please contact Support.