

# Quick troubleshooting Guide

TUN-QTSG-0519-EN\_A2

For power inverter models M1500 – M2000 – M2500 – M3000

## ANNEX 2



DC/AC POWER INVERTERS

## TESTING FOR PARASITIC LOADS

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Today's trucks are equipped with many electronic systems that run continuously (e.g. powertrain ECM's). When the engine is not running, the alternator has no output and the batteries supply all the energy to power these parasitic loads. When combined with loads left ON and unattended, such as 12 V refrigerators for example, it may increase demand beyond the capacity of the batteries and cause engine-start issues.

### CONSUMPTION FUNDAMENTALS

The total consumption of a load is determined by two factors:

- Length of time the parasitic load is ON.
- The amount of current the parasitic load is drawing.

For example, a 12 V refrigerator left ON for an entire weekend (72 hours) would completely drain a bank of 4 batteries.

### WHAT TO LOOK FOR?

1. Anything that would have been left ON by a driver (heated blanket, 12 V cooler, 12 V refrigerator, interior lighting, CB radio, etc.)
2. Faulty door switches (front doors, storage compartment doors)
3. Defective ECM's

### TEST PROCEDURE

1. Using a suitable clamp meter, set the mode to DC AMP 0- 10 A.
2. Place the clamp meter on the power cable that powers the cab.
3. With the doors ALL closed, radio OFF and CB OFF, you should get a total consumption of < than 1 A. Anything higher than 1 A is caused by a load that should not be ON when the engine is off.
4. To isolate loads, you can interrupt their power supply by removing their fuse from the fuse panel or the fuse located on their input power cable.



### RECOMMENDATIONS

All loads that may be left on by drivers should be protected by an LVD set above 11.5 VDC. Aftermarket low-capacity programmable models are available.