

Finding a parasitic draw

How to catch what is killing a battery overnight, why modules need time to sleep, and the fuse-pull sequence that finds the circuit.

PROCEDURE

- 1 Prep the vehicle**
Key out, doors shut, everything off. Use the door latch trick or a jumper so the cab thinks it is closed while you work.
- 2 Connect in series**
Meter in the A range, in line with the disconnected battery negative, with a jumper in parallel so the circuit never opens.
- 3 Remove the jumper and wait**
Now the current runs through the meter. Wait for sleep — 20 to 60 minutes, longer on some chassis.
- 4 Compare to spec**
Read the settled draw against the limits below.
- 5 Pull fuses one at a time**
Watch for the drop. Reinstall each before moving on, and allow the reading to resettle.

NUMBERS

Typical passenger vehicle	under 50 mA	after full sleep
Heavy truck / apparatus	under 100–200 mA	more modules, telematics, radios; check OEM spec
Time to sleep	20–60+ min	the number one reason this test gets misread
Battery killer threshold	roughly 30 mA per 100 Ah	rough guide for a weekend without starting trouble

COMMON MISTAKES

- Reading before the modules sleep, then chasing a draw that does not exist.
- Opening the circuit to connect the meter and restarting the sleep timer without noticing.
- Using a clamp meter for a 40 mA draw — it is below the clamp's usable floor.
- Forgetting aftermarket additions. Radios, light bars, cameras and trackers are the usual culprits on apparatus.

Overhaul Prep · overhaulprep.app/learn/parasitic-draw · practice and prep material, not a substitute for the manufacturer's service information.