

Pre-Trip 12V System Checklist

Tick these off before you head out with the 4WD, van, caravan or camper trailer.

Safety first. Overheating, a burning smell, smoke, or melted or damaged wiring? Stop using the system. If it's safe, switch off at the battery isolator or main fuse, and have it checked before the trip.

Know your gear

- ☐ Battery type, nominal voltage and capacity (Ah) noted from the label or manual.
- ☐ Solar panel rating (W) and how the panels are connected.
- ☐ Regulator / MPPT battery setting matches your battery type.
- ☐ DC-DC charger battery setting matches your battery type, and it charges the right battery.
- ☐ Mains charger battery setting matches your battery type.
- ☐ Inverter rating (W) covers what you plan to run on it.

Charging and power

- ☐ Battery charges fully from mains before you leave.
- ☐ DC-DC charger is charging while driving (check the charger lights or battery monitor).
- ☐ Solar output looks normal on a sunny day. Panels clean and not shaded.
- ☐ Battery monitor reading makes sense, and the shunt is fitted if your monitor uses one.
- ☐ Daily power use worked out and the battery can cover it (try the Camping Trip Power Budget calculator).

Wiring and protection

- ☐ Fuses or breakers fitted close to the battery on every main run.
- ☐ Fuse ratings noted, with spares of each size packed.
- ☐ No loose, hot, corroded or damaged terminals and crimps.
- ☐ Cables secured, protected where they pass through metal, and away from sharp edges and heat.
- ☐ Battery firmly held down and the isolator works.

Pack for the trip

- ☐ Spare fuses, a multimeter, crimper, heat shrink and cable ties.
- ☐ Equipment manuals (or photos of the model plates) on your phone.

This is a plain-English checklist, not an electrical design or safety inspection. Ask a qualified auto electrician when you're unsure. Any work on 240V AC wiring, including inverter outputs, mains inlets and shore power, must be done by a licensed electrician.