



Motor Caravan Autumn Maintenance Guide

Now that autumn is upon us, many motor-caravanners are preparing to store their vehicle for the coming winter. The luckier ones among us might already be driving off to greener fields in the south. This is the perfect time to check your motor caravan's power system to prepare it for storage or before leaving on a trip. While requiring little time or effort, proper maintenance of your motor caravan will ensure many years of enjoyment.

Here are a few tips which could prove helpful. Also, don't ever hesitate to contact your motor caravan dealer with any questions you might have. Their expert technicians will gladly share their knowledge to help you save time and money.

BATTERY MAINTENANCE

One thing that should not be overlooked when preparing your motor caravan for winter is proper battery storage. Here are some recommendations to keep your batteries in great shape while your motor caravan is parked for extended periods:

- 1) Avoid storing the battery in a location where freezing can occur.** Freezing will cause irreversible damage to the battery plates and container as the acid inside expands. The sulfuric acid (electrolyte) in a completely discharged flooded lead-acid battery will freeze and expand at around freezing point (32°F). Keep the battery fully charged to avoid freezing as the acid will only freeze at -94°F! However, the battery container will not be able to handle such cold temperatures so make sure to verify the manufacturer's recommendations if storing under cold conditions is unavoidable.
- 2) Avoid exposing the battery to heat sources above 80°F** as this will accelerate the self-discharge on the battery.
- 3) Charge the battery before storing for a long period.**
- 4) Store battery in a cool, dry location away from the elements.**
- 5) Monitor the battery voltage or specific gravity of the cells during storage** (see the manufacturer's specifications). Charge the battery if charge is low. As you all know, a battery will continuously self-discharge and eventually be completely dead if left unattended for long periods. In fact, a new 12V lead-acid battery might actually lose up to 1% of its charge daily (at 77°F). A small solar charger can be used to compensate for natural losses and ensure the battery is always fully charged while the RV is in storage. See www.selectsolar.co.uk for more information on solar battery maintainers.

SOLAR MAINTENANCE

If you already own a solar system, here are a few simple guidelines to ensure optimal performance:

1) Clean the glass on the solar modules

A solar module will produce power when sunlight hits the solar cells. To ensure that your module is transforming all of the available sunshine into usable power for the motor caravan batteries, a regular cleaning of the glass laminate of the solar module is recommended. A slightly damp cloth is all that is required to remove any dirt or dust that might build up on the module.

2) Check connections

A regular verification of your system's connections is an important part of the maintenance program. Inspect connections for any sign of corrosion or loose wires. All connections for a 12V system should be in parallel, meaning positive (+) to positive (+), negative (-) to negative (-).

3) Check your solar module mounting

Make sure the screws and brackets are securely affixed to the roof. As with all products affixed onto a moving vehicle, wind force and vibrations may loosen the brackets holding the module. A regular check of the mounting bracket installation is recommended to ensure the unit is secure.

The solar module must be installed in a location where the roof is strong enough to support the wind loads. It is recommended to mount the module lengthwise on the motor caravan roof to reduce drag.

