



USING YOUR VAN IN WINTER



It's very important to look after your van, especially in winter when the weather turns colder. The term 'winterisation' can mean different things. How much you prepare your van for winter, will mainly depend on how much you are using your van in winter.

If you are using your van in winter, then a full 'Van Shut Down' may not be needed: you can take some precautionary steps to prevent any damage (see 'Using Your Van in Winter Guide'). If you do not plan on using your van in winter, then we do advise a full 'Van Shut Down' (see 'Full Van Shut Down Guide').

USING YOUR VAN IN WINTER GUIDE

If you are using your van throughout the winter months, then a 'Full Van Shut Down' is not always necessarily needed. You can take a few steps to ensure the cold weather doesn't cause any damage.

If you use your van during a cold spell, the fact the van is in use – it will generally generate enough heat for most problems not to occur. The most important precaution you should always take when not using the van for any amount of time (especially in winter), is to de-pressurize the water system and open the taps. This means that if there was any water in the system, it has somewhere to expand if it was to freeze; thus reducing the risk of damage.

We always advise storing the van inside during winter, but realise this is not possible for everyone. Checking on the van wherever it is stored is vital. Making sure you turn the heaters on periodically is always good practice.

Deciding whether to do a full shut down, will depend on how much you are using the van and what the temperature is. It's about monitoring the weather and learning what the van can cope with.

As a guide, **always** de-pressurize the water system and open all taps to drain as much water out of the system as possible. This should be done whenever the van is left for any period of time unchecked (even if it's for a day). This will reduce the risk of damage if water was to freeze. It will generally take consecutive days/nights of freezing weather to have an impact on the water system; however, it depends on many factors.

How to De-pressurize the System?

1. Open all the taps, valves and set the mixer tap in the middle position.
2. Run the pump until they run dry.



3. Leave the taps in the open position.

Using your Van in Winter Guide Summary:

- Store inside if possible
- De-pressurize the water system and open the taps when leaving the van for any length of time even when in use
- Turn the heaters on to warm it throughout winter periodically
- Use the van regularly
- Monitor the weather
- Check on the van

WINTER VAN FULL SHUT DOWN GUIDE

If you are **not** using the van in winter, then we advise doing a full van shut down to prevent any damage. We have outlined what to do below.

Water System

Any water left in the campervan's water supply system is at risk of freezing and causing damage during very cold weather. Ensure you drain down the whole system, including the Truma boiler, fresh water tank, waste tank, water heater, pipes and taps.

1. Start by opening all of the van's taps, not forgetting the shower. For mixer taps, ensure the lever is in the central position to allow for both hot and cold water to drain. It is usually best to remove the shower head to empty it of water.



2. Drain the fresh water tank by opening the tap. Then open the boiler water system drain valve - which is usually situated next to the Truma combi boiler. This will empty most of the fresh water.



3. Run your pump for a few moments to clear it of water. The pump can be run dry for short periods without causing any harm. When no more water is coming out of anywhere, turn off the pump.

4. Your van uses a metal-screen grit filter located next to the on-board pump in the cupboard in the garage of the van. This will not hold water but it is worth cleaning the screen while the system is drained down.



4a. Remember, it's not only the freshwater system that needs to be drained down. Ensure the waste tank is empty. It could look like the first or second picture.



5. Do not forget your ancillary water equipment such as external pumps for filling the tank and portable water containers. Ensure they are drained and allowed to dry out to prevent mould growth.

6. You can invest in a Floe drainage system or similar to fully drain the system, but if you don't have one - the next best way to evacuate the last drops of water in your system is to shake it out. Drain down the water tanks on your last outing of the season so that only a small amount of water is left onboard. With all the valves open, exit the campsite and drive back with all the drain valves and taps open. It is important to drain the tanks onsite first, to avoid creating a danger or nuisance to other road users

7. Leave the taps & valves fully open over winter just in case any water is trapped in the tap body. This will provide room for expansion if residual water freezes.



9. Even if small pockets of water remain in the system and do not cause damage, this stagnant water does not bode well for the safety or taste of water next season, so getting rid of as much as possible is advised.

10. It is good to vent your waste and freshwater tanks by leaving the drain valves open, it is advised to cover the outlets with mesh to stop insects and other creatures setting up home in your tanks.

Keeping Damp and Mould at Bay

Moisture is a real enemy during winter for both the base vehicle and living area.

A damp atmosphere can create the conditions for moulds and fungus to grow, which can be particularly damaging for soft furnishings. Moisture can also be harmful to electronics in the control systems for the habitation equipment and under the dashboard of the base vehicle.

Regular inspection for damp is also sound advice to nip any water ingress as early as possible, this will reduce the severity.

Ideally the best way to limit damp conditions is to provide warmth and a flow of air through the van. It is expensive to provide heating and in many storage locations it is impractical, but ventilation is possible. Your Van has a certain amount of permanent ventilation built into the roof openings even when closed. More ventilation is preferable but weighted against this is the problem of security from windows left in the 'ajar' setting and insurance company requirements. Roof lights left open can be an invitation to vermin and damage from winter storms, so again you are left with accepting the campervans own built-in ventilation option.

Electric dehumidifiers are an option if the unit has just come back from a camping trip or the furnishings are particularly damp on lay-up, as is a box of drying salts. But in the long term, the van's ventilation will mean you are simply trying to dehumidify the air surrounding the van.

These are a good option:

Dehumidifier Interior Damp Trap Mould Moisture Mildew Remover Caravan Home



Ensure you open up the interior cupboards in the living quarters, particularly where the gas drop out openings are located (in the kitchen cupboard), as this will encourage a flow of air throughout the van. Any doors or lockers left open should be secured in position if you have an alarm with internal security movement sensor, as this will help prevent triggering false alarms.



Interior cleaning

Even with ventilation, given the likely winter atmosphere, there is still a risk of mould and fungus growth within the living quarters so consider the following to minimise this risk:

- Remove all traces of food from the van and thoroughly clean the kitchen and appliances with products suitable for the materials and surfaces within the van. Traces of food can encourage mould growth and attract vermin.
- Ensure the fridge door is kept ajar, either with a special catch or wedge it open. Removing containers can help with air circulation.
- Vacuum the floor and upholstery and wipe down hard surfaces to remove any crumbs that could congeal into a crust with damp.

Consider taking soft furnishings such as seat cushions, and other fabrics into the house. If you keep soft furnishings in place inside the campervan, cover them with a breathable cover such as an old cotton sheet. Place seat cushions upright for improved ventilation.

Blinds can be closed to shield the inside fabrics from sunlight. Metal parts such as hinges can be cleaned and lightly oiled to protect against rust, but keep oil clear of adjacent surfaces. Alternatively use Thetford's silicon spray which is safe on most campervan surfaces and spray the toilet door runners while you have the silicon spray out.

Top Tips

A light dusting on rubber window and door seals with talcum powder can prevent them sticking.

The Base Vehicle

It is important to remember prolonged inactivity is not recommended for base vehicle engines, electrical systems or running gear. Your campervan is based on a commercial vehicle designed to work every day, so ideally take it out for a drive regularly during its winter lay-up. This drive should last long enough to ensure a period of driving at normal operating temperature to keep all the working parts at their best, typically at least an hour.

Assuming your base vehicle is serviced according to the manufacturer's recommendations, the engine coolant should contain sufficient anti-freeze to ensure the safety of the engine. But consider the following actions:

- Charge the engine battery on a regular basis to keep it in good condition. Or better still leave it on a trickle charge.
- Increase the strength of the windscreen washer solution as recommended by the manufacturer to ensure protection for sub-zero temperatures.
- Moisture-laden air can be a problem in your fuel tank, so top up your tank to full just before storing. This way there is less chance of corrosion occurring in the tank and water getting into the fuel.
- Inflate your tyres to the maximum recommended figure so they are better able to withstand the development of flat spots over a long period of remaining static.



- Ideally you should move the van from time to time to ensure no one section of tyre is continually loaded.
- Use wheel chocks and put the vehicle in gear to secure the vehicle rather than keeping the handbrake on, which is likely to seize up on the brake drums or discs over winter.
- Old engine oil contains moisture, metal particles, sludge and corrosive elements so it can be argued the onset of winter before laying up is the best time to replace the oil and filter. You should service the vehicle according to the manufacturer's recommendations but have it inspected annually, for the sake of safety.

Remember that your campervan needs two services, one for the vehicle and running gear and another for the inhabitation area.

Top Tip

Put a note on the dashboard to remind you to reverse any temporary changes such as tyre pressures and chocks

Take the van out for a good run on a fine dry day during its winter layup to ventilate the vehicle and help prevent the running gear from seizing up.

To cover or not?

Left in the open exposed to the elements your van will suffer from a build-up of grime and algae growth, particularly on the roof and around trimmings. In spring, removing these winter accumulations is likely to require several stages of careful washing to avoid grinding grit into the paintwork, using a fine brush to remove algae build up around window frames and other trimmings.

Fitting your van with a cover will mean that once it's removed you can begin touring with a clean vehicle straight away. That is not to say washing can be avoided entirely because it is essential the van's bodywork is cleaned thoroughly before the cover is put in place. Failure to do so can result in grit deposited on the body being ground into the paintwork by the cover. While cleaning it is a good opportunity to inspect seals and joints and repair them before winter sets in to help avoid water ingress and damp issues.

An alternative to using a cover is to apply a protective coating such as Fenwick's Overwintering Exterior Protector. This is sprayed or brushed on to the unit after cleaning and leaves a coating that repels water dirt and algae. The coating can be washed off with a strong solution of cleaner, but as it is bio-degradable, it is likely a normal wash at the end of the winter lay up will remove all traces of the coating.

Choosing a cover

- Opt for a good purpose-made cover that is breathable with a soft underside. A breathable fabric is essential to prevent a build-up of condensation inside and outside the van.
- A tailor-made cover from Protec Covers or Specialised Covers for your campervan body with allowances for extras fittings such as roof racks and bike racks should eliminate any excess of loose fabric. With an adequate number of fastenings, this should prevent chafing of bodywork in windy weather.
- A soft underside material further reduces the risk of the bodywork being marked by movement of the cover in windy weather.



- Never use cling film to protect windows from abrasions as it can damage acrylic materials, good quality covers will provide some additional packaging suitable for this purpose.
- Check how easy a cover is to fit. It is worth considering features to simplify fitting.
- Remember to order a cover with openings if you will need access to the van entry door or external lockers during the winter.
- Check the guarantee period but remember that the cover is a sacrificial layer. The life of the cover will depend on the amount it's used and the conditions it's used in. Its life will be reduced if used extensively in summer months when ultra-violet light degradation will take its toll on the cover fabric.
- Check if protective cushioning is provided for awkward protrusions on your van that if left unprotected can pierce the cover.
- With a cover fitted, your roof-mounted solar panel will no longer function. Made-to-measure cover suppliers can provide a translucent section over the solar panel if it is essential for maintaining your batteries, but generally they consider it introduces a weakness into the cover and will reduce the energy the panel can absorb.

Top Tip

Wash down a breathable cover from time to time. This will make sure that any accumulated grime does not reduce its breathability.

Cassette Toilet and Waste Tank

When preparing your cassette and tank for winter, it is also a good time to prepare it for the new season ahead. The first essential is to ensure the toilet cassette is empty after its last use.

Clean the bowl and cassette body with products such as Thetford's bathroom cleaner. If there is a build-up of limescale or other matter in the bowl, use Thetford's specialist toilet cleaner. Cleaning with a stiff brush may be needed too. Do not use domestic cleaning products anywhere on a toilet cassette as they are likely to cause damage to the cassette components

Use special tank cleaning fluid (Thetford and Fenwick both make this product) in a warm water solution to soak and clean the inside of the cassette. Ensure all surfaces get a soaking, gently agitate from time to time and then leave overnight.

Clean the cassette valve blade and seals using Thetford's bathroom cleaner and then lightly coat them with olive oil or use Thetford's seal lubricant spray, which can be easier to apply. Applying lubricant to the seals will ensure they remain supple and prevent them sticking during the storage period of disuse. Never use Vaseline or other vegetable oil except olive oil as they may cause deterioration of the seal material.

After draining, rinse well so there is no cleaning fluid residue left to interfere with toilet fluid action, especially if you use environmentally-friendly biological fluids. The same tank cleaner can be used for your grey waste tank.

Replace the cassette in the campervan and partially open the blade valve to vent the tank and prevent sticking.

Top Tips



If the cassette and toilet seat are looking tired and worn, consider a refresh kit from Thetford.

Remember, if left until the start of the next season accumulated deposits will dry out and be all the harder to remove.

Maintaining Battery Power

Lack of use for long periods can see both the vehicle and leisure batteries becoming totally discharged and in such a state the original capacity cannot be fully restored. Permanent damage can be caused to the batteries. Anytime the vehicle is stood longer than a couple of weeks it will be at risk that it could deplete the starter battery - to the point it will not be able to start the vehicle, so you need a strategy to avoid this (this is amplified in cold weather).

It is important to minimise the rate of battery discharge by ensuring only essential equipment is taking power. Turn off the inverter and all appliances, not forgetting to turn off the fridge. If your van has remote access to the Victron system, then you might want to leave the main red 12v isolation switch on and Wi-Fi so you can monitor the leisure battery. If it doesn't, then you can switch off the red isolator in the garage.

Best practice where possible is to leave your van plugged into mains power. This will maintain the leisure battery on a trickle charge, even if the red isolation switch is switched off. If this isn't possible, then leaving the solar panels in the best position for sunlight can be enough to keep the leisure battery charged - but you will need to monitor this within your own storage space as many factors will affect the amount of solar harvested. I would advise taking the van out for a drive as regularly as possible over winter; especially after prolonged cold weather. This will allow some charge back into the batteries and is a good time to take the van to mains power for a full recharge.

Don't forget the van battery should also be left on trickle charge (you will need a separate trickle charger).

Before you store your campervan, check all gas valves are closed.

Winter storage check list:

- Water system drained and taps left open
- Waste and fresh water tanks emptied and valves left open
- Toilet cassette emptied and cleaned
- All food and drinks removed and interior cleaned
- Fridge cleaned and door latched open
- Seat cushions removed or stored upright for good ventilation
- Batteries charged and arrangements made for monitoring
- Engine and windscreen wash water anti-freeze adequate
- Base vehicle and habitation service schedules are up to date
- Storage and security set up adequate
- Fuel tank full
- Vehicle wheels chocked, handbrake off and in gear
- Tyre pressures increased



- Accessories prepared for storage including awning
- Gas valves off
- Security alarm, tracker and other security systems activated
- Drive your campervan periodically if possible

**Best wishes,
JVC Team**