

19 Laying up for Winter

Many owners prefer to lay their TVRs up for the winter. There are several reasons for this: it prevents salt from getting onto the chassis and it means that the car avoids the worst weather, including black ice. Driving a 340 bhp car (or even a 240 bhp one) on slippery roads requires a lot of concentration and restraint to prevent the rear wheels from spinning and keeping it pointing in the direction you want it to go! Laying the car up also creates time to give it a little extra loving care and I find that a small break away from the car stops me getting complacent about it, which can happen with any vehicle that is driven regularly. However, the downside is waiting for the spring to arrive.

If you want to lay the car up and avoid problems when the car comes out of hibernation in the spring, what do you do? This chapter provides some advice based on information from John Hayter (TVRCC) and Mervyn Larner (TVRCC), with some of my additions.

Planning

The main problems with storing a car over winter are the cold, the damp and maintaining the battery to keep the car alarmed. The cold can cause problems with the cooling system and, in extreme cases, can cause the coolant to freeze and potentially damage the engine. The damp can cause mildew in the carpets, cracking or warping of the walnut fascia and that damp, musty smell inside the cabin.

It is advisable to get the car serviced before the lay up. If this reveals the need for further maintenance work, this can be done over the winter. The car will also be put away in a good condition with fresh oil, antifreeze, and so on. The problem is that with a 12 month service interval, this can be difficult to organise and it may be worth bringing forward a service. There is also the alternative scheme which says that servicing the car after a lay up is a better strategy because any problems caused by the

lay up can be addressed. Ideally, a service or thorough check over before *and* after is the best method. The service for my Griffith 500 was due in February, so I checked the car over before laying up and had it serviced immediately it came out.

Some dealers will actually prepare a car for a lay up so that most of the lubrication and checking work is already done. All that is left to do is to clean the car, make sure it is dry and put it in the garage. Well almost, there are some other things to do, as we will see.

Road tax and insurance savings

If the car is laid up off the public road, the road fund licence can be returned for a refund. The disc must be sent back before the first of the month from which you are claiming a refund. You will also have to declare the fact that the car is laid up off the public highway by filling out a SORN form and sending it to the DVLA. Full details can be obtained at main Post Offices. It is also worth contacting your insurance company about 'off road insurance' as it may mean you are entitled to a refund or policy extension when the car goes back on the road.

Laying up

Laying up itself is not difficult but it should not be treated as a 'do it and leave the car over winter' procedure. The car should be periodically checked to try and detect problems before they become serious. Simply moving the wheels and operating the clutch can often identify a problem. Looking at the car can detect a leak and thus prevent the car upholstery deteriorating.

Exterior

First, wash the car and chassis thoroughly. Apply full lock to the steering before starting to fa-

cilitate access to the front suspension. Wash the car with a proper car shampoo. Household detergents may be kind to your hands but they often contain salts which can be harmful to paintwork. Leather the car dry and wax the paintwork. Any metalwork will also benefit from a good polish.

Interior

Vacuum out the interior and give the leather upholstery two or three coats of hide food, such as the one sold by Connolly. Next, take out the footwell carpets, vacuum them and store them somewhere dry — keeping them flat.

Engine and suspension

If the car has not been serviced recently, change the engine oil and filter. Oil gradually becomes contaminated with the acids formed by the combustion process and these can attack bearing surfaces. With the car in its storage position, jack it up and support it on axle stands. It will now be possible to top up the gearbox and differential oils. Remove the wheels and lay them flat underneath the car. Alternatively, leave them on the car so that they are not affected by frost. (I leave them on as this makes the occasional turning of the hubs by hand far easier.) If the car is not placed on axle stands, the tyres will develop flat spots if you leave the car on its wheels for a prolonged period. Moving the car regularly so that the tyres rest on a different part of the tread can help prevent this, but the best solution is undoubtedly to use axle stands.

Lubricate the suspension and handbrake cables. Some UJs are fitted with grease nipples: check and lubricate if necessary. Release the handbrake and remember to give each wheel a couple of turns every two or three weeks. Cut a length of wood to jam between the front of the seat and the fully depressed clutch pedal to prevent the clutch sticking. A piece of foam can be used to protect the seat. Give the coil a squirt with WD40, or something similar, to help keep it dry.

With pre-cat cars

Note: *This should only be done with cars that do not have catalytic converters.* Adding oil in this way can damage the catalytic converter when the engine is started.

Remove the spark plugs and put a generous squirt of engine oil into each cylinder. Remove the low tension wire from the distributor and turn the engine over a few times to spread the oil around the cylinder head. Disconnect the battery and replace the plugs. This may seem rather a fuss but it will

stop the cylinder bores from corroding. It may be necessary to put more oil into the cylinders during the winter because it will gradually drain past the piston rings.

With cat and pre-cat cars

As an alternative, for pre-cat cars or with cat cars, starting and running the engine for 20 minutes on a regular basis e.g. once a week is a good idea. If the car is up on axle stands, it can even be put into gear and allowed to drive the rear wheels to ensure that the transmission is free. This should be done very carefully with the engine idling. There is no need to rev the engine as it can drive the rear wheels enough at idle to overcome any potential sticking. This also gives an opportunity to blow warm air through the cabin.

Cooling system

Check the radiator hoses for any sign of deterioration and replace them if necessary. Check the effectiveness of the antifreeze with a hydrometer or see if it turns to ice when you put some into the freezer. If in doubt, drain the system and refill with an appropriate mixture of water and antifreeze. Do not be tempted drain the cooling system and leave it empty, as there will be residual dampness which will lead to internal corrosion of the radiator core, heater matrix and water jacket.

Brake fluid

If the brake fluid is more than 18 months old it will have absorbed water from the atmosphere and be less effective. This is an ideal time to change the brake fluid and prevent the moisture it contains from corroding the braking system from the inside.

During the lay up

While it is laid up, the car will still need to be alarmed and this will drain the battery. Alternative charging arrangements will thus be needed to prevent a flat battery. These are covered in the chapter on the battery. The best solution is to use a small battery conditioner which monitors and trickle charges the battery as required. These devices will maintain the battery in first class condition. If a battery fails, it will usually happen in the winter when it is under most stress — and it is often most inconvenient!

To remove damp from the interior, put a tub of desiccant in the cabin on the transmission tunnel to absorb condensation. This is available from hardware stores and I have been very pleased with the

results. It keeps the interior fresh smelling without a trace of mustiness. However, it is still important to store the car with a dry interior, as using desiccant is not a substitute for a dry car. Any dampness will quickly cause problems in a laid up car and damp carpets etc. should be thoroughly dried out before the car is stored.

A more expensive and thorough method of drying air is to use a Carcoon — a car size plastic bubble which the car is stored in. Fresh dried air is pumped into the bubble to maintain a dry atmosphere. These cost several hundred pounds but are worth considering for long lay ups or where the storage environment is not ideal.

A dust cloth over the car is a good idea to protect it from dust and scratches. If you have a double garage or need to move objects past the car, consider placing some carpets around the car to offer it further protection, especially from car doors.

Starting up in the spring

If your car has been stored in less than ideal conditions (and most are), it will have deteriorated significantly by now. It is probably no exaggeration to say that it is safer and better to run a car through the winter than to store it without proper care and then try to start it without thorough preparation. In other words, just putting the car in the garage and leaving it for three months is asking for trouble!

Do not start the engine until the car has been thoroughly checked over. It has been known for engines to be started without oil and/or coolant with catastrophic results.

The battery

Recharge the battery while completing the rest of the tasks in the list. It should be trickle charged to ensure long reliable service as it charges up slowly. Bear in mind that although the car is laid up, the alarm may still need to be activated to comply with insurance conditions. This will flatten the battery over time and, if left neglected, can sometimes cause the battery to fail. In this case, regular charging will be needed over the lay up period. (See the chapter on the battery for more details on suitable strategies.) If the battery is completely flat, it may be damaged and require replacing. It is worth putting the battery on charge a day before you want to bring the car out of storage to give time for a thorough charge. In extreme cases, jump starting may be needed — but this should not be done with a completely flat battery. Jump starting a discharged battery will do it no good at all. With a battery monitor, this procedure is simpler: just disconnect the monitor.

Visual inspection

Make a visual inspection of tyres, engine compartment, interior and undersides. Look for anything that has changed over the winter: rust, perished rubber seals and hoses, deflated tyres, seepages and leaks from the engine, gearbox, brakes, axle etc. Look under the car for any signs of fluid leaks.

Do not forget to check that the clutch cylinder still has hydraulic fluid in it. This can easily be forgotten as it is hidden in the inner wing behind an inspection hatch. If the clutch hydraulic system has a small seepage leak, the fluid may have dripped out during storage and may cause clutch problems later.

The cooling system

If the system has been drained (it *should not* have been, as antifreeze contains corrosion inhibitors which are essential to protect the aluminium alloy engine from internal corrosion) flush the system using a hose and refill with the correct proportion of **good quality** antifreeze solution. Then check for leaks. A leak spotted now could prevent an expensive overhaul and breakdown.

If the system was not drained, take this opportunity to test the antifreeze. Use a tester (from any decent accessory shop) to check the strength of the antifreeze. This is crucial as any aluminium components are more susceptible to corrosion and cracking. If it is not up to specification, drain and refill.

Checking/changing gearbox and axle oil

Check and top up the oil levels. If there is any doubt about how many summers the oil has been used, change it. A few pounds spent now can save expensive gear or bearing wear.

Petrol

Remember that petrol deteriorates by evaporation, so add some fresh to the tank. If the petrol has stood unused for over a year, it is probably better to carefully drain the tank and refill.

The engine

Note: This should only be done with cars that do not have catalytic converters.

All oil will have drained from the cylinder bores into the sump, so remove the sparking plugs (giving them a clean and resetting the gaps as you go) and squirt some upper cylinder lubricant (e.g. Redex) or engine oil into each cylinder. Now spin the engine over on the starter for 10 to 15 seconds and replace the plugs. Check and top up or change the oil.

With catalytic cars, set the spark plug gaps and top up or change the oil. Adding oil and spinning the engine without firing can overload the catalytic converter with hydrocarbons and potentially damage it. The only cure is to replace it, which is very expensive.

Electrical items

Before installing the battery, check that all the main electrical connections are clean and tight. Connect up the battery and smear the terminals with a petroleum-based grease or Wurth's special electrical grease. Copperease can also be used for this purpose.

Moving the car

After taking the car off axle the stands, it is tempting to get in and drive out of the garage. This is not a good idea until you have checked that the brakes and clutch work.

Brakes

Now you're ready to roll the car out of the garage. You *should not* try to drive it out as the brakes may have seized. This is especially likely if the hand-brake was left on during the lay up period. If a disc is seized, jack up the car, secure it on axle stands and try to lever the wheel forward. If it does not shift, the brake(s) will need to be stripped and the rust cleaned off with coarse emery cloth. Wear a mask when working on brakes because of the dust.

Warm-up checks

If all is well, the engine can be started using the normal cold-start procedure. While the engine is warming up, check the engine bay for leaks and

listen for unusual sounds. It is not unknown for old exhausts to rust out during storage. Check all the lights and other electrical items and inflate the tyres (including the spare) to the correct pressure. Check brake and clutch fluid levels and that there are no leaks from these systems.

Clutch check

Just as you are ready for a gentle trial run, one of the more common start up problems may be encountered — a seized clutch. There are two ways to solve this problem. The first is to safely support the rear wheels clear of the ground using axle stands, securely chocking the fronts. With the engine thoroughly warmed, start it while in gear (2nd or 3rd is best) and snatch the brakes on and off with the clutch pedal depressed. If this does not work, try roll-starting in second gear (on a safe, quiet road!) and then apply the brake and clutch together at about 10 mph. **Beware** this can break something in the transmission. If neither method works after several attempts when the engine is really hot, the only solution is an engine/gearbox out job.

Wash and polish

Now give the car a good wash and polish, replace the footwell mats and give the leather a good feed with hide food.

Sealing the roof

It may be advisable to waterproof the roof with Fabsil or Thompsons WaterSeal to ensure that it stays watertight if the car is driven in the rain. The waterproofing can degrade over time and the roof may need re-sealing now. It doesn't take long and preserves the life and condition of the roof. This is something else that dealers can do.