CAR LOVERS WINTER STORAGE CHECK LIST

DATE STORED:

OUT OF STORAGE DATE:

- **CLEAN CAR**: No matter where you store the car for the winter, before you put it away it should be *cleaned, waxed, and most definitely thoroughly dry*. Any form of moisture is an automobile's worst enemy. Even fiberglass cars hate moisture. Just as it will rust metal, moisture can come through fiberglass to bubble the paint, ruin the fabric, carpet and leather. So before putting it away, dry the car and allow ample time for sensitive areas to air dry naturally.
- **TREAT SEALS**: After cleaning, treat all rubber seals around windows, doors and tops with silicone or a similar agent to prevent cracking and aging.
- **LUBRICATE**: Lubricate all hinges on doors, hoods, etc.
- **FILL GAS TANK**: Before storing the car, fill up the tank completely with fuel. If you leave only a little in, *rust can form* on the exposed surfaces inside the tank.
- **FUEL ADDITIVE**: You can also prevent fuel from breaking down causing damage and varnishing by adding some fuel stabilizer to the full tank and letting it run a little while to circulate in the gas.
- **CHANGE OIL**: After running the car, drain the oil and refill it with fresh oil. Despite having gotten rid of moisture, your oil still has other contaminants in it. Better that those contaminants live at the recycling center than in your main bearings. **Need _____ quarts of oil and an oil filter** (filter change not required for storage).
- **CIRCULATE OIL**: With the new oil in, run the car briefly to let the new lubricant circulate.
- **WARM ENGINE**: Before storing the car, drive it 20 -25 miles-no less. This should take a sufficient amount of time for any condensation to be worked off the crankcase surfaces and the oil.
- **INJECT OIL**: This can be done for rare cars and for long term storage needs. If you really want to go to great lengths and are truly obsessed, take a lesson from motorcyclists: Remove the spark plugs and inject a little oil into the cylinders. Reinstall the spark plugs (or an old set of used plugs for storage) without torquing them completely, and crank the motor briefly with the plugs in and the positive lead to the distributor or the coil wire removed. (Don't let the engine fire.) This will coat the combustion chamber and cylinder walls with a protective layer of oil. Don't restart the car until spring. You will need to change the spark plugs back to your good ones or buy new ones in the spring because of the oil that fouled them with the protective layer.
- **COVER CARB**: On carbureted cars, remove the air cleaner; bag it to prevent corrosion and dust collecting. Bag off the carb as painters do with a few layers of plastic wrap, covering the carbs intakes, and tape the wrap to the carb's side. On late model injected cars, not much is needed in this area. If you really feel like doing something just block off the air intake ahead of the air filter.
- BRAKE FLUID: Change the brake fluid. Even if the car doesn't need it desperately, you'll be preventing future problems by changing the fluid. Moisture in the brake lines will cause damage no matter what, even when the car is *in use*. Many people ignore this bit of maintenance, anyway, so now is time for them to redeem themselves. At this point, also consider switching to silicone brake fluid if you drive you car hard. Racing teams use it. Why not you? Need ____ pts. of brake fluid.
 - **DRAIN RADIATOR**: Drain, flush and refill the radiator with new coolant. The same reasoning behind changing brake fluid applies here. **Need ______ gallons of coolant to fill radiator to capacity**. Now is a good time to remove your radiator to be hot-tanked over the winter if needed.
 - **BAT T E R Y**: Disconnect battery cables and remove the battery for storage inside, but *not on a cement floor*. You will find a dead battery in the spring if you store it on cement. Very low temperatures also destroy batteries. If you

BAT T E R Y (Cont.): have a battery charger, *trickle charge the battery* periodically over the winter and just before you take the car out of storage. Trickle charging will not boil the battery acid and wont damage it.

REMOVE BLADES: Remove wiper blades, especially if storing the car outside. Temperature changes will not do them any good, and they can fuse to plastic or glass over time.

PLUG EXHAUST TIPS: Plug the exhaust tips with material that mice and other rodents won't chew through. Also place a little poison inside so rodents won't even think of getting in there.

JACK STANDS: Storing the car on jack stands or blocks has it's pros and cons. *Pros*: You can remove the old bias-ply tires that may flat spot. You can also remove the wheels and tires and bag or cover them to prevent dry rotting and adverse environmental effects. *Cons*: If (heaven forbid) there is a fire in your garage/storage place, you can't just drive or wheel it out. The best compromise is to mount a spare set of wheels and tires (or just tires) and not use jack stands. If you can't get a spare set, over inflate tires by about 10psi to prevent flat spotting. It can't hurt.

BLOCK WHEELS: Don't set the emergency brake. Block the wheels in front and back to prevent rolling. Pads and shoes can stick to discs and drums.

- PLASTIC ON FLOOR: When storing inside or outside, lay a large sheet of heavy-duty plastic or a tarp (greater than the car's length and width) to prevent moisture rising from the ground or cement and collecting under the car. Outside, this will also prevent grass from growing up and touching the car's underside.
- **CAR COVER**: There are many sources of car covers. *Use one!* If you do store your car outside, use only an external cover that breathes. Moisture must escape from the cars surface. Ideally a synthetic fabric that sheds water, yet breathes, shielding from dirt and sun and will not mold or mildew.
- **STORAGE LOCATION**: If you leave your car outside, **pick a spot that will be shaded or as dark as possible**. Sun can damage paint through a thin cover.
- MOISTURE-ABSORBING PACK: If the car is being stored indoors, put a moisture-absorbing pack in the interior (and trunk, for solid-axle cars). DRYPAC is a vendor that makes these packs, which do not smell, swell or have any adverse effects on the vehicle. However the windows and vents must be closed for them to work.
- **TRAY OF MOTHBALLS**: Put a tray of moth balls inside the car to remove any odors. This will also help to drive away any carpet loving rodents.
- SPRING LUBRICATION: When you start up the motor in the spring, first disconnect the spark plug leads (or the positive distributor lead, or the coil) and crank the motor over a few times to get oil up into the bearings, rings and valve train. (You don't want the engine to fire.) Don't remove the plugs themselves, however, as this can damage the starter motor, letting it spin vary fast without the engine's compression limiting it's speed. The motor has sat for a long time, and the oil has dripped completely down into the pan/sump. Starting it and letting it run, even for one to three seconds without thorough lubrication, will cause more wear than 100 trips to the redline!
- CHECK SHEET: Keep this check sheet with the car in storage so you will know what you have done to the car. You'll need to know what you'll have to do to prepare it when you *pull* it *out of storage*. How you pull your car out of storage and prepare it for the road is *just as important* as preparing it for winter.

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