

The Preventive Maintenance Series

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Winter Things

After polling at a recent HACOIA meeting it turned out that half of the members store their cars during the winter months and the other half will drive their Corvairs at least occasionally. The following may be useful no matter which half you belong to.

Gas Tanks: If you park a Corvair with an original gas tank in your house garage be sure to inspect the tank bottom and the sending unit seal. This can be an extremely important issue, particularly if your furnace or water heater are anywhere in the area.

Oil: Store with fresh oil, this will minimize the acids available to attack engine parts when not being driven. And if you drive your car in the winter clean oil makes cold starting much easier on the engine.

Fuel: After reviewing several good sources it appears that it is best to avoid ethanol if you store your car all winter and to leave the tank almost empty so you will have fresh seasonal gas soon after startup in the spring. Gas is blended for winter and summer so keep that in mind. Also all the old car sources I checked strongly suggest you add Sta-bil to the tank and drive for a few minutes to circulate it. That is also mentioned in my new snow blower owners' guide which also states that fuel with ethanol will start to deteriorate after only 30 days.

Fuel Antifreeze: Using HEET to absorb small amounts of water in your tank and carburetor bowls is a good idea as long as you use the correct type. The yellow bottle is worthless and only adds volume to your gas. It contains methyl alcohol and water will settle out of it in to little beads when it sets (try it!). The red bottles contain isopropyl alcohol which absorbs water and keeps it in solution. If you look at a bottle of rubbing alcohol it contains 30% water and never settles out of solution.

Battery: A battery will only have 30% of its cranking capacity at zero degrees. Try taking your battery inside overnight or leave a (incandescent) light on next to it. You will notice a big improvement. A very low or discharged battery will freeze so take what ever steps you want to avoid that. For an all winter storage, remove the battery, keep it in the house and charge it once or twice during that time.

Tires: Tires loose pressure as the temperature goes down so add additional air before storage to avoid having to do it in the cold weather. If you have a snow beater, use of an "all weather radial" or "radial snow tire" is best. Look at the outer tread line, the chunkier the tread the better is will be in snow, although slightly noisier. Perfect alignment and tire pressure is mandatory for driving on slick roads and all four tires must match. GM recommended 60 pounds of extra weight in the trunk for winter and remember to shift into neutral in Powerglide cars as you approach a stop on slick pavement. If your chokes are still on this is a must.

Things That Change During Storage: Fuel pump screws, worm drive fuel line clamps, and fan belts should be checked in the spring. Accelerator pump cups shrink and harden when dry but may survive after a few days of driving. I am not positive but I think Stabil helps with the pump cup issue.

Avoid Starting Fluid (Ether): Instead, use a spray can of carburetor cleaner (Gumout). The severe knocking you get from using ether can break top piston rings and make intake valve seats fall out. The carburetor cleaner is a good enrichment and is much less prone to pre-ignition knocking.

Tuning: Winter accentuates any short comings in your ignition or carburetion system. Spark plug gap and deposit condition, plug wire boot condition (and wire in general), distributor cap condition and points/condenser all affect spark output. Points can oxidize when stored for long periods so clean in the spring just to be safe. Be sure your resistor by-pass is hooked up properly for cold starting. Remove your distributor breaker plate and check the movement of springs and weights. Hardened grease in cold weather may cause the weights to be slow in responding. Check your accelerator pump output, choke valves and pull-off condition and their adjustment. Turbo engines will usually never start if the chokes are not completely closed in winter temperatures and the choke cover may need seasonal adjustment.

Miscellaneous: Never store cars on gravel or dirt. The Midwest humidity rises daily into the body and is not blown out by the airflow from driving. Car covers can cause terminal mildew for the same reasons, they should only be used for indoor storage (dust, blown solvents, etc.)

All Powerglide transmissions leak down from the converter during storage, overfilling the pan. Your car may leak a little, a lot or none at all depending the condition of your shifter cable, pan gasket or manual valve o-ring.

A grease job just before storage insures any water or dirt accumulated is forced out and does not spend the winter in the various joints.

Heater Maintenance: Follow this link to a previous tech article on Corvair heater issues:

http://www.hacoa.org/index.php/technical/cat_view/9-technical-documents/34-mike-dawsons-preventive-maintenance-series?limit=5&order=date&dir=ASC&start=55