As street crews check their pre-treatments to prevent ice on roads, all we can think about at Mid America Motorworks is the end of another driving season. We asked our friend Dr. Darby Milnor for his insight into preparing your show car, summer car, Sunday driver – or whatever you call your special Air Cooled VW – for hibernation.

### Combat the Chemicals

Sodium chloride (salt), magnesium chloride, calcium chloride, calcium magnesium acetate and potassium acetate chemicals are all used to prevent and remove snow and ice from roads. Unfortunately, they are also highly corrosive and therefore most of our "special" cars get tucked into the garage or other shelter to await next Spring's driving season.

The idea of simply parking your vehicle for the winter and expecting it to start right up and be ready for the next season is nice, but in reality it takes some planning and forethought.

### Plan Your VW's Winter Hibernation

Here are some basic steps to take before you close the garage doors for the season. Proper storage and prep will ensure that your VW gets back on the road quickly when the sun starts to shine again.

## **Fuel Stabilizer**

Before you drive your Vintage Volkswagen to its Winter resting place, get some fuel stabilizer and, if you desire, a bottle of fuel drier AKA gas line anti-freeze. Today's fuels are nothing like those we had a few years ago, which means that gas doesn't stay "fresh" for months on end. Fuel also leaves behind an unfriendly varnish. Combat this with one last drive to warm up your VW. Stop at your favorite filling station and add the fuel stabilizer per the directions on the bottle. If you wish to add the fuel drier, this is also the time to do so.

Fill the tank full to better protect the inside of the tank itself from corrosion caused by condensation during temperature swings. Drive your VW or run it for approximately 15 minutes to make sure the fuel is sufficiently mixed with the additives. This will also move the mixture through the fuel lines and up to the engine.





Change the Oil With the engine fully warmed up, this is a great time to change the oil. Change it before storage while the engine is warm to remove the contaminants that are suspended in the oil before they have a chance to settle. You will also be removing acids and moisture that are corrosive to the internal engine components. Change the filter too (if equipped) and clean out the strainer. Refill with the proper amount and quality of oil that you prefer. Remember that most of today's oils are formulated with very low levels (possibly zero) of the zinc that an engine with flat lifters needs to combat cam and lifter wear. Click here (http://image.mamotorworksmedia.com/production/Website/emailArchive /vw/newsletters/2015/engine0il/engine0ilStatic.htm) to learn about the importance of oil grades and additives. Consider adding 4 to 6 ounces of zinc to the oil. You can find zinc additives at any automotive store.

Your engine will be happy all Winter, and you will be happy knowing you that will not have to change the oil when you're ready to be out driving your vintage VW. Spend the extra time to lubricate all the hinges and locks, and grease the front end if equipped with fittings. Early VWs may also have grease fittings at the brake cables and pedal cluster too.

Time For A Bath Wash and dry your VW for storage. Spend a few extra minutes while washing to clean off any bug or tar spots

and any other surface contaminants now. If left unchecked they could lead to spotting or other damage to

the car's finish. Dry the car well, including door jambs and other areas where water may become trapped.

Because silicone and bodywork don't mix very well, if you don't plan on doing any projects, use some silicone grease sparingly on all of your seals and gaskets around the doors, lids, windows, fuel cap, etc. This will protect them from drying out and add a little life to them. Just a little on your finger goes a long way. Be sure to wipe off any excess.

## There are varying opinions about tires and suspension

Tires & Suspension

components during storage. Dr. Darby gave us a few facts to consider for long-term storage: When left on a VW sitting on the ground, bias ply tires

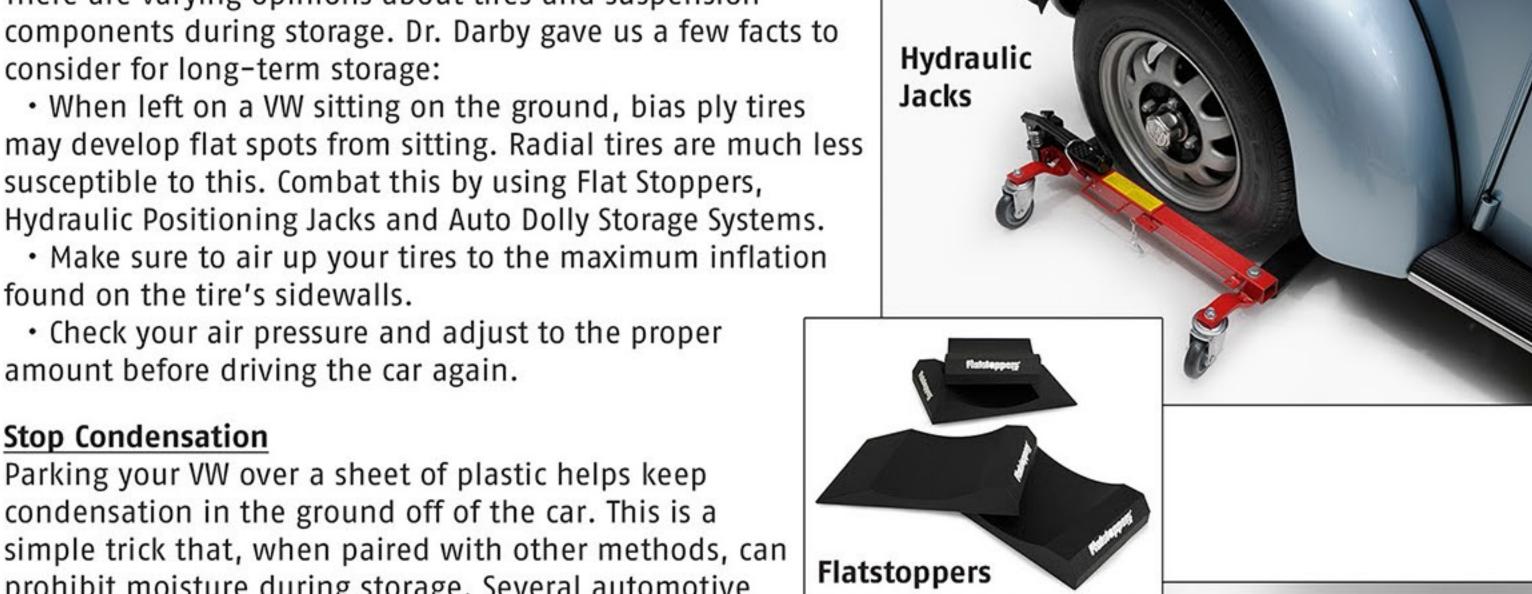
susceptible to this. Combat this by using Flat Stoppers, Hydraulic Positioning Jacks and Auto Dolly Storage Systems. Make sure to air up your tires to the maximum inflation found on the tire's sidewalls.

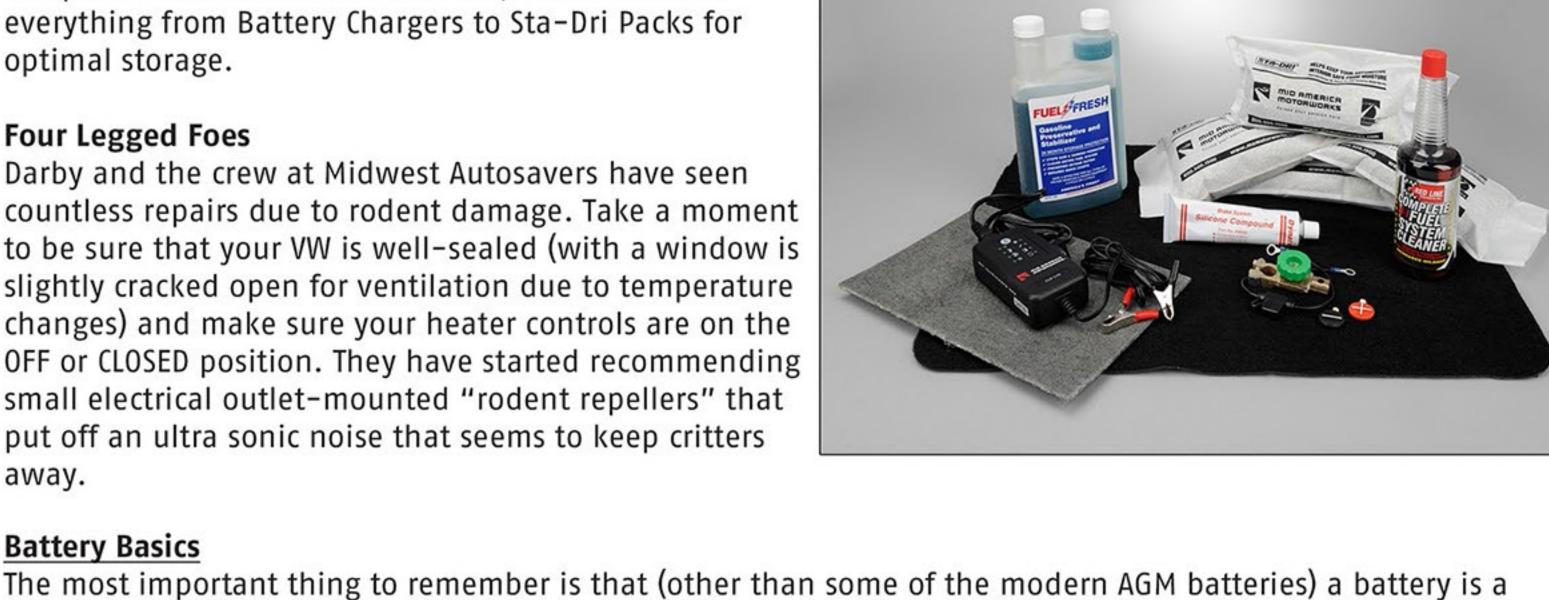
 Check your air pressure and adjust to the proper amount before driving the car again.

Stop Condensation Parking your VW over a sheet of plastic helps keep condensation in the ground off of the car. This is a

prohibit moisture during storage. Several automotive companies offer a Winterization Kit, which includes everything from Battery Chargers to Sta-Dri Packs for optimal storage. **Four Legged Foes** Darby and the crew at Midwest Autosavers have seen countless repairs due to rodent damage. Take a moment

changes) and make sure your heater controls are on the OFF or CLOSED position. They have started recommending small electrical outlet-mounted "rodent repellers" that put off an ultra sonic noise that seems to keep critters away. **Battery Basics** 





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# remove it from the car and bring it indoors. Make sure you have a safe place for it.

You can also enlist the help of a trickle charger or battery maintainer to keep the battery charged during periods of non-use. Make sure to review the charger before you make a decision. It's best to select one of low amp rating that is fully automatic.

big box full of acid and you need to use caution when handling it. For Winter storage, many folks opt to

If you choose to leave your battery in the VW for the Winter, be sure that a window is cracked open to allow any out gassing that may occur to escape the confines of the car if the battery is located within the vehicle. If you do leave the battery in the vehicle, fully disconnect it from the car's electrical system.

protect against bumps and dings that come from moving sleds, shovels and other vehicles.

Cover Up

**Start Your Engine** If you can get your Volkswagen out on the road and drive it monthly or weekly, you'll help ensure that all systems

are still functioning when cruising season returns. If you

Use a clean, soft, breathable car cover to protect the finish while in

storage. Even if your VW will be stored in a garage, a car cover can

can't take it on a proper drive, don't be tempted to run a car that is properly stored. Unless the engine is allowed to fully warm up to burn off the condensation that is caused from running it, you are doing more harm than good.

For extended periods of storage (9 months or more), there is more work to be done than the basics of Winter storage. You'll want to remove spark plugs and squirt oil into the cylinders, etc. Here we're talking about

Winter vs. Extended Storage

short term storage. If your Volkswagen is only taking a few months off, periodically check it and make sure the tires are properly aired up, nothing is leaking and, using a wrench, turn the engine over 5 to 10 complete revolutions leaving it at rest in a different position to lessen the strain on the valve springs and keep the cylinder walls from getting a rust ridge.

Welcome Spring When the snow and slush of Winter has come and gone, check all the fluid levels and carefully check your fuel hoses, points and other wear items. Adjust the air pressure in the tires and disconnect the center wire to the distributor cap, then crank the engine until the oil light goes out or the gauge shows pressure. This will ensure that your VW has oil pressure, as well as get fuel moving on its way toward the engine.

With these tips, your VW will be ready to make an appearance at Funfest for Air-Cooled VW!

## **About Midwest Autosavers**

Dr. Darby has been restoring vintage VWs, cars and trucks, as well as saving them from the hands of unscrupulous repair shops, untrained mechanics and the scrap yard, for almost 40 years. His Passion for Vintage VWs is far-reaching and led to Midwest Autosavers, where he receives vehicles from customers in almost every state, Mexico, Puerto Rico and Europe.

