



It's hard to believe that November is in full swing and, in a few short weeks, most of us will be in the thick of another winter. Driving an Air Cooled Volkswagen on a bitter cold morning means navigating the car on a snow-covered road; trying to exhale out the half open driver's window while simultaneously shifting gears and scraping frost off of the inside of the windshield so you can see where you are going. With the help of Midwest AutoSavers, Mid America Motorworks has put together some tips to prepare your VW for the snowy roads ahead.

### Winter Driving Preperation

For those of you who just can't bear to put your VW away for hibernation (no pun intended), there are some things you should do now, before the first snow fall, in order to survive comfortably and at the same time preserve your car.

- Take a few minutes and check the overall condition of your VW. If you have broken heater cables, rusted out heat exchangers, holes in the lower body, etc. you aren't going to get the warm air into the car and directed where it needs to go.
- If you do have holes in the floors, wheel well or lower body, take some time to patch things up now to keep the inside air in and the slush and salt out. If you're not up to a full-blown restoration or saving all you money for presents, a few well placed metal patches, screwed on or glued on can go a long way and be easily removed come restoration time.
- Be sure to clean the underside of your VW including under the fenders with a high pressure spray, touch up any bare or flaking metal on the undercoating to prevent corrosion from taking hold as slush and salt from the roads make their home on your VW.

# Restyling

### **Heat Things Up**

When functioning properly in a solid car, the VW's heater does a good job at keeping the windows clear and keeping you from freezing. In order to inspect and maintain the heating system, you'll need to know the basics.

The heater is operated on most models by the right hand side lever between the seats and in older models via a rotating knob near the shifter. Other models vary; consult your owners or workshop manual.



6

From about 1963 on, VW utilized a fresh air heating system where fresh air was drawn in through the fan housing and forced out through two flexible hoses or tubes that enter the heat exchangers. Earlier model use the "stale" air that also cools the engine. The air then blows through a large metal can with the car's exhaust pipe running through the middle. Pulling a lever operates cables that open a diverter valve and allow warm air into the cabin that is normally dumped out under the car. On a VW Bus, the large accordion tubes that run between the heat exchangers and the body are then connected to a 4" flexible pipe that runs the length of the Bus and enters ahead of the hand brake lever.

After the heated air enters the cabin on all but the Bus, it travels through a "Y" shaped pipe that has two outlets on each side. One lets heat out under the rear seat and the other is piped through a tube to outlets at the front seat outer floor area, as well as the defroster tubes that run up the inside of the hinge pillar to the windshield. Any disconnect or leakage of heated air anywhere between the engine and the outlets reduces the amount of heated air to your heat or defrosters.

The stock defroster hoses that run from the heater channels up to the defroster ducts were ingeniously insulated. They are a corrugated aluminum hose, much like those in the engine bay, but wrapped inside and out with paper. The problem is the paper deteriorates and clogs internally. You can try blowing compressed air up from the floor vent to clear it out, but replacing the hose will be your best option.

Since most Air Cooled VWs rely on the engine-driven cooling fan to blow the warm air into the car, sitting in traffic or traveling in too high of a gear results in less air flow. There are

still severaltypes of electric blower fans that can be plumbed in-line under the back seat to give plenty of air flow, even at idle.



# Charge It Up

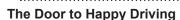
Make sure your battery is fully charged, not more than perhaps four years old and the cables and battery terminals are clean. If the cables show any signs of age or are more than 10 years old, it would be wise to replace them before winter driving. Don't forget the transmission ground strap also. The diehard 6V folks should take the extra step to clean each and every one of the electrical connectors in the car!

### **Belts & Plugs**

Your V-Belt is critical, as it not only spins the pulley that drives the generator or alternator, but it also spins the fan that cools the engine and gives you heat. An old, brittle or cracked belt will often fail during very cold weather. At the same time, a belt that is too loose can slip and not spin the drive pulley properly.

All tune up-related items should be brought up to date. Spark plugs and points should be cleaned and gapped or replaced; spark plug wires

should be pliable with no tears or cracks in the insulation. Check caps and rotors for corrosion or cracks and adjust valves.



Spend a few minutes to lubricate your door locks with a graphite lock fluid. Use high quality penetrating oil on your hinges, latches and wiper shafts. Make sure the wiper arms are torqued to spec and the wiper blades are in good shape.

# Keep the Outside on the Outside

It should be noted that you need to keep your car clean as much as possible during sloppy, salty winter weather. A high pressure spray used to clean under the fenders, floors, and nooks and crannies is best. Remember to direct it away from door locks, even though you've lubricated them. This should be done at least once a week. A thin film of silicone grease or talcum powder rubbed into the door seals will keep them from freezing shut.

### **Fuel the Passion**

Keep the fuel tank full and use a fuel line anti-freeze additive in the tank about every 4th fill-up. There will always be a little water condensation in your tank and you don't want it to freeze in a fuel line. Inspect your fuel hoses and fuel filter. The filter should be replaced yearly and NEVER installed in the engine compartment, for it greatly increases the risk of an engine fire.





### **Change Your Oils**

Change your engine oil to a more suitable winter weight. Your VW's manual, which was printed some 30-40 years ago, may suggest a specific straight weight engine oil. Oils have come a long way since then and a quality multi-grade oil is much easier on your engine. While you may run 20W50 during the summer, a 10W40 or 10W30 is better for the winter in cold climates. Note that in the last several years, the zinc content in motor oil has been reduced to nearly nothing. Adding a few ounces of zinc goes a long way in protecting your camshaft and lifters.

If you haven't thought about it in while, this is a great time to change your manual transmission oil. Drain it and refill with a quality 80W90 or 85W90 weight gear oil. The lighter weight makes it easier to shift in extremely cold weather.

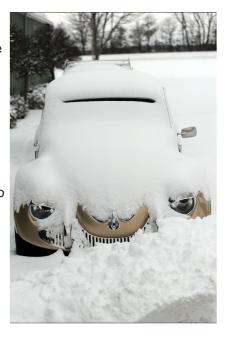
## **Hints for a Happy Road Trip**

Now a couple of hints that may help you get down the road some bitter morning.

- Unless you have a fuel injected vehicle, a carburetor needs to be made to prime the engine and set the automatic choke if equipped. Before operating the starter, fully depress and release the throttle two times. This will set the choke and give a couple of squirts of gasoline down the intake. Depress the clutch pedal to disengage the transmission from the engine. This will allow the engine to crank faster, as it isn't trying to spin the transaxle shafts in molasses thick gear oil. Then operate the starter.
- If you immediately blip the throttle after starting, you will also actuate the automatic choke pull-off and promote stalling. A properly adjusted carburetor and choke will allow for a fast idle of 1200 1300 RPM for about 30 seconds.
- It is better for you and your Volkswagen to not sit there and warm up for 10 minutes each day. After the engine starts it will begin to idle on its own, usually about 30-60 seconds. Drive off slowly and avoid high RPMs until the engine is warmed up.
- Crack open the side window and exhale out the window, this will keep you from steaming up the inside. Set the heater and defroster lever to full on and stay in a lower gear to move more air and to warm the heat exchangers faster.
- Keeping a vent window cracked open will help move more heated air into the car as it isn't trying to pressurize the passenger compartment.
- Keep a blanket, ice and snow brush, and a spare set of gloves in the car. A Beetle will benefit with a 50 pound bag of cat litter in the trunk to aid steering in the snow. Plus, if you do get stuck it, you can spread the litter in front of a spinning tire for better traction.
- •Until you are sure of your VW's locks won't freeze during below zero weather, keep a small lock deicer in your pocket. You can also unlatch your vent window just enough that rocking it in and out will unlatch it and allow you to reach in and unlock the door or roll the window down to reach the lock.

This winter when you're stopped refueling in your Air Cooled VW and someone gives you that look that says, "Why on Earth would you drive a car like that in this weather," simply smile at them and say, "Because I can!"





Dr. Darby Milnor 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. He is a past recipient of both the Passing on the Passion and Platinum Bug Awards at Mid America Motorworks' annual Funfest for Air-Cooled VW.His Passion for Vintage VWs is far-reaching with customers sending him vehicles from almost every state, Mexico, Puerto Rico and Europe.

# MIDWEST AUTOSAVERS