

Coolant Flushing

<http://www.corrado-club.com/corrado/garage/VR6coolant.cfm>

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This procedure applies if you are staying with the G11(blue)coolant

I drained the coolant on my VR6 maybe a month or two ago and am extremely happy that I did it. Since doing it I've noticed consistently lower temperatures that really put my mind at ease. I would say at least 10 -15 degrees lower than before. Here's what I did:

- 1) remove the drain plug using a long flathead screwdriver from beneath the car. It's up next to the dipstick tube. it's the only thing near the dipstick tube that looks like it can be removed. Be careful, it's plastic!
- 2) let the coolant drain (into a bucket of course).
- 3) once the old dirty brown coolant is gone, screw the drain plug back in and follow the instructions on your new bottle of radiator flushing fluid. on most of these you put in the flushing fluid with some water and run the engine to normal operating temps for 10 - 15 minutes (**DON'T FORGET TO TURN YOUR HEATER ON FULL BLAST**)
- 4) shut off your engine, let it cool and drain your cooling system again by following steps 1 and 2.
- 5) since your doing all this work you might as well flush it totally clean.
- 6) with the drain plug out, enlist the help of a friend and have him hold your garden hose in your expansion tank with a constant stream of water. Once you see the water come out the drain plug, start your engine and turn the heater on full blast just let the water run through the engine while it's running and out your drain plug. Of course, keep a bucket under the drain plug so you can see how dirty the water is.
- 7) I filled up at least 7 or 8 buckets, probably more like 10, until the water ran practically clear. I'm sure by keeping the plug out, I missed some sections of the cooling system, but hey, it's still much cleaner than before.
- 8) Now that you're feeling all good about the clean water coming out of your car, turn off your garden hose and engine and let all the water drain.
- 9) now that all the water is drained, put the plug back in and it's time to mix the coolant.
- 10) Refer to your car's manual for amounts of coolant, but I mixed one whole bottle of Prestone PHOSPHATE FREE (for our aluminum heads) coolant with water (tap is okay) at about a 40% coolant 60% water ratio and had some left over for topping off down the

line. This coolant is reddish like factory VW. Now that it's mixed you want to add the appropriate amount of Redline WaterWetter (should be available at Pep Boys). WaterWetter mixing instructions are on the bottle (I HIGHLY RECOMMEND THE WATERWETTER).

11) Fill your cooling system with your mixed coolant and store the rest for topping off later. You may want to keep some handy just in case an air bubble moves out of the system, but I didn't run into that problem.

12) Seal up your system and go for a drive, you WILL notice a difference immediately. Definately takes longer to heat up, and if you drive your car easy, your temps may not go above 230. I'm very happy with the results and recommend this procedure to all SLC owners. Mark this day on your calendar and do it again on this same day next year.

This procedure is for SLC's (VR6). But I would assume it is similar for G60's.

Enjoy your new lower temps

Ariff

The following steps apply if you are switching to the new G12 coolant:

VW issued a Technical Service Bulletin (TSB 199601) which states that = the blue G11 coolant causes corrosion to the aluminum head. The TSB says to change to the new red G12 coolant. If you would like to see this TSB, just go to your dealership and ask to see it. Yes, you are authorized to see it no matter what they tell you! Also if your coolant is brown, its seen better days and needs to get changed. Changing coolant on Passat GLX VR6.=20 The Bentley manual says to mix 3.5l of coolant with 6.5l distilled water to achieve a 35% mixture which is good for -13=B0F. To achieve -31=B0F, go with a 50% mixture. (I'm sure you can figure out the math.) North = American cars have 35 % mix with Canada getting the 50% according to the 95 Passat owners manual.

1) Remove reservoir cap to bleed off pressure.

2) Remove drain plug. You can find the drain plug by looking under the = car, in the gap between the oil filter housing and air conditioning = compressor. The plug is about the size of a nickel and has a screw = driver slot in it.

3) Apply compressed air to the coolant system. The easiest way to do so, unless you have the proper VW tool, is to install the cap and remove the small coolant hose from the reservoir. With a blow gun nozzle and air compressor, or a bicycle pump if you can find a nozzle for it, apply air to the system to force out any trapped coolant.

4) Reinstall drain plug. Unless you have very skinny hands you will need a 6-7" piece of garden hose to get the plug back up there. Cut a slit in the hose in case the plug is bigger than your hose and if the plug slips out of the hose, cut a slot to fit the plug into. (Mechanical fingers would work also.)

5) Fill system with distilled water and run the car until at least the coolant fan comes on, preferably a bit longer.=20

6) Repeat steps 1 through 5 until the water comes out clean. (The clean water will splash against the engine block and may pick up some rust/dirt so you may try to put a piece of plastic between the block and the splashing water.)

7) Fill your coolant system with your mix of G12.

8) Run car and check for leaks.

9) Top off if needed.

10) Mark your reservoir to read "G12 Coolant Only!". Mixing coolants is a bad thing and you'll have to do this all over again The G12 coolant is supposedly "Lifetime", but it is probably best if changed every 4 years or sooner if it gets cloudy.

Ralf Lindow