

## Changing Oil on a VR6

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Changing oil is basic maintenance that must be done on a regular basis to keep an engine running in good condition. Here I will go through the steps to change the oil on a B4 (95-97) Passat with a VR6.

Tools/Materials needed:

- 36mm socket (Available at auto parts stores such as Advanced Auto Parts)
  - 6mm hex wrench
  - 3/4" socket
  - Oil drain pan
  - 6 quarts of the oil of your choice
  - Torque wrench
  - Socket wrench
  - Various adapters based on your tools
  - Jack with jackstands or ramps
  - New copper crush washer
1. Drive the car around for a couple of minutes to warm up the oil. If you drive around too long the oil will be too hot and you should let it cool before proceeding.
  2. Drive the car up on ramps or jack it up and put it up on jackstands. I usually use ramps because they are safer but if you have to use a jack, do not rely on the jack alone. Especially the cheap jack that came with the car. **ANYTIME YOU ARE UNDER THE CAR USE JACKSTANDS.** Also, buy a better jack than the one that came with the car.
  3. Open the oil fill on the top of the engine. This allows the oil to drain better.



4. Drain the oil from the filter. To do this, locate the oil filter housing:



5. Remove the silver oil filter drain plug using a 6mm hex wrench. Let all the oil drain into a drain pan for about 5 minutes.
6. Take the massive 36mm socket and put it on the plastic nut on the bottom of the oil filter housing. With some force, loosen the housing.
7. Slowly and carefully unscrew the housing from the engine. Pull it away quickly and allow the oil to drain from the upper filter housing. Let the filter and housing cool if it is too hot to handle. When it is cool, pull the filter out of the black housing and dispose of it in a responsible manner.
8. Place the drain pan under the back of the oil pan, under the oil pan drain plug. Using a 3/4" socket, remove the oil pan drain plug and allow a couple of minutes for the oil to drain.
9. Now would be the time to replace the oil pan or the oil pan gasket if you need to do that.
10. Put a new copper crush washer on the drain plug. It is important to replace this everytime or oil could leak from the drain plug. Also, when I did this, I ordered a magnetic drain plug to collect any metal particulate in the oil. I ordered a 10 pack of washers that included a new magnetic drain plug.
11. Torque the drain plug to 30 Nm (22 ft lb). Do not over torque this or it will strip the oil pan.
12. Take your new oil filter and clip the end with the grey plug (not the end that is open that goes into the filter) into the lower housing of the oil filter housing.



13. Hopefully your new oil filter came with a new gasket for the oil filter housing. This goes on the outside of the black plastic part of the housing. Pull the old one off using a small screwdriver and put the new one on it. It is also important to replace this one to prevent leaks. The oil filter I ordered from [germanautoparts.com](http://germanautoparts.com) came with a reddis brown colored paper band on the oil filter. I saw no reason for this so I removed it.
14. Now, screw the oil filter housing with the filter snapped in into the housing on the engine. Torque the entire housing to 30 Nm (22 ft lb). Take the small filter drain and screw that back into the housing and torque to 10 Nm (7 ft lb). According to the repair manual, the gasket on this plug should also be replaced at every change but I did not order a new one and I have not seen any leaking.
15. Pour 5 quarts of oil into the engine via the hole on the top of the engine. I decided to switch to synthetic. I used Vavoline Synpower 5w-30. This is a good all season weight oil recommened by the service manual. If you live in a climate where it doesn't get too cold, you could go with something like 10w-30 or even 20w-50.



16. After you have put in five quarts, look at the dipstick and see what the level is at. Add enough oil from the sixth quart to get the level up to the middle of the dipstick mark.
17. Take the car off the jacks or ramps and start the engine. The oil light will be on for a couple of seconds but should shortly go off. Let the engine run for a minute and turn it off.
18. Check the oil level again. It probably went down. Add enough oil to get the level to almost the max mark on the dipstick but don't go higher.
19. Dispose of your used oil responsibly.