



1997-2003 Volkswagen Golf Partial Power Steering Fluid Change

This will show you how to change some of the power steering fluid in a Mk 4 Golf.

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INTRODUCTION

Pictured is a right hand drive automatic 1.6L SR 8v (74kW), engine code AEH. Other models may be different.

Avoid contact with power steering fluid when possible. Avoid inhalation of vapours.

This is not a complete flush as some fluid will still be inside the power steering rack and system.

TOOLS:

- [Large Needle Nose Pliers](#) (1)
- [Clean bucket](#) (1)

To catch the used power steering fluid.

PARTS:

- [Nitrile Gloves 100 Box](#) (1)

For handling the power steering fluid

- [Pentosin CHF11S Power Steering Fluid](#) (1)

Step 1 — Release hood



- Locate the hood release handle inside the drivers side footwell
- Pull it towards the rear of the car

Step 2 — Opening hood



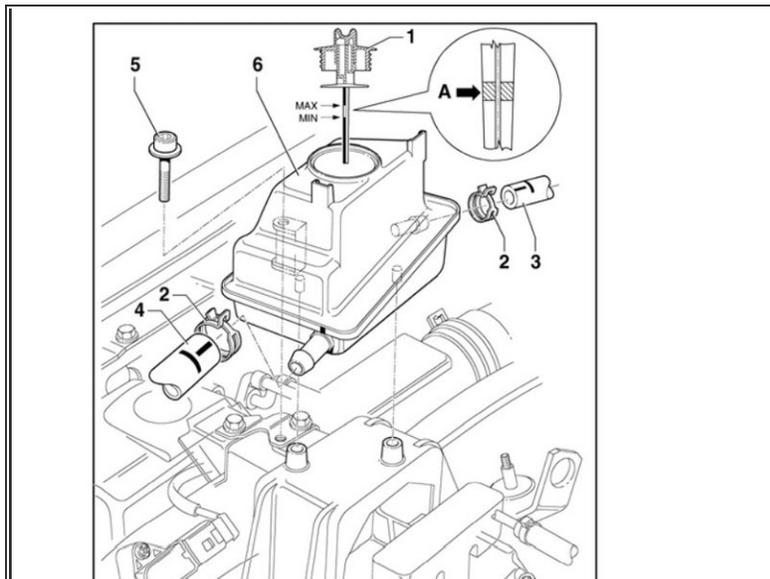
- The hood should be slightly lifted
- Lift the hood more to reveal the pull handle
- Pull the handle while lifting up the hood

Step 3 — Locate reservoir and remove lid



- Ensure the steering wheel is straight before you begin. Locate the power steering reservoir.
- Open the reservoir using your hands, a coin, a flathead screwdriver, your car key, or another similar object.
- The fluid should be green in colour.

Step 4 — Check Fluid Level



- Take the dipstick out, wipe it with a paper towel or a cloth, and place it back in the reservoir. Remove it again to see the level.
- The dipstick should show the fluid between the Min mark and 2mm above it, when cold. Refer to the cross-hatched section on the back (A).
- When warm (50+ degrees Celcius), the fluid should be between the minimum and maximum mark.
- The fluid should be green in colour.
- With engine cold, oil level must not rise above Min. marking

Step 5 — Locate power steering pump and line



- Gloves are recommended from this point, as you will be handling fluids.
- Under the bumper, on the engine accessory belt, you will find the power steering pump.
- It has a hose running from the reservoir to the pump.
- Place a bucket under the hose.

Step 6 — Remove power steering hose and drain fluid



- Use a pair of pliers to squeeze and move the hose clamp back.
- Pull the hose off of the power steering fluid pump.
- Twist the power steering hose to ensure all liquid comes out of it.
- You should end up with about 450mL of fluid drained.
- This fluid pictured is in reasonable condition (green coloured) as I had previously done another change.

Step 7 — Reconnect hose and fluid disposal



- Reverse the previous step to connect the hose to the power steering pump, and move the clamp back to position.
- Ensure no power steering fluid was spilt - If so, clean it up with kitty litter and a rag.
- **Dispose of the fluid responsibly.** Talk to your local mechanic, auto parts store, council or waste disposal organisation. Do not pour the fluid down the sink or dispose of it into your garden or the environment.

Step 8 — Filling the reservoir



- Fill the power steering fluid to the correct level by measuring it with the dipstick, as in step *"Check Fluid Level"*.
- In my car, a rough guideline for filling up was when the middle section of the reservoir was no longer visible.
- Always wipe the dipstick clean between measurements to ensure the reading is accurate.
- Also ensure the dipstick goes all the way into the reservoir. You may have to screw it partially on before removing and measuring.

Step 9 — Removing air bubbles / bleeding the system



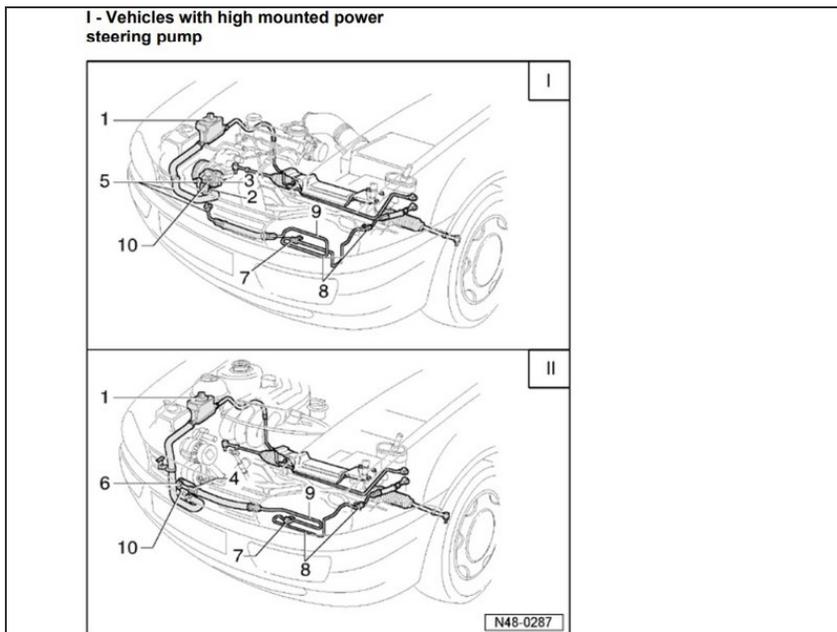
- Leave the lid off of the fluid reservoir. Do not start the engine.
- Slowly turn the steering wheel to full lock in each direction, twice.
- i.e. full lock left, full lock right, full lock left, full lock right, centre.
- Check the fluid level in the reservoir, and add more fluid as necessary.
- Repeat this step until the fluid level is stable.
- Get an assistant to start the engine, while you check the power steering fluid level.
- Continue turning the wheel slowly from lock to lock until no bubbles appear in the fluid reservoir.

Step 10 — Check the fluid level



- Follow step "*Filling the reservoir*" to ensure your fluid level is still correct.
- If it is too low, add more fluid.
- Repeat step "*Removing air bubbles*" if you added any more fluid.
- Close the lid and ensure the arrow on the lid lines up with the marking on the reservoir.

Step 11 — Finished.



- You're done!

And you're done! Your power steering system should be quieter, and your steering wheel should be easier to turn.

You may want to complete this process again after driving for a while, as not all of the fluid was changed.