

# Vanagon Westfalia DIY Guide

## Removing the Rear Heater

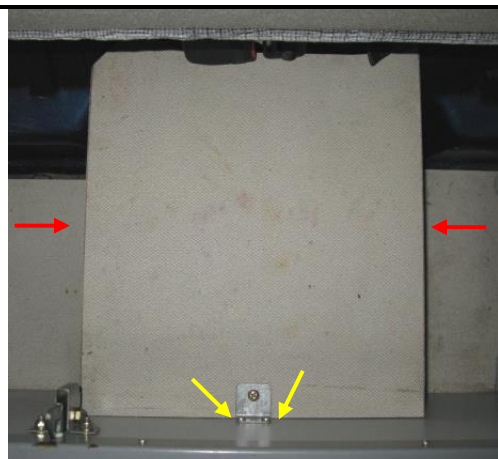
### Tools:

- Philips screwdriver
- Small flat screwdriver
- Hose clamp pliers (or other hose clamp removal tool)
- Hose pinching tool(s)
- Rags and/or paper towels
- Container for coolant

### Parts:

- 2 clean spark plugs (or similar size bolt) ~ temporary repair
- Permanent removal:
- Two 5/8" metal straight fittings ~ permanent removal
  - Bottle of new coolant (if permanently removing heater)
  - 2 hole plugs (approx. 1" in diameter), or washers/bolts of appropriate size
  - New hoses and senders, if desired

### Temporary Removal (1990 Westfalia shown; others may be same or similar)



Remove the cover using Philips screwdriver: 2 from the floor (red arrows), 2 from the kickboard (yellow arrows).



Remove the white electrical connector (yellow arrow). Remove the two blower assembly screws from the floor (red arrows). Note: There is a block of wood under each bracket that may be soaked in coolant.



Pry off the two metal clips (red arrows) holding the blower assembly to the duct using a small flat screwdriver. Remove the duct.



Close the valve, if not already shut (move lever towards rear of van). Put your rags into position and pinch the top hose shut, remove the top hose clamp, remove the top hose. When the coolant has drained, insert spark plug into hose, replace hose clamp, and remove pinch tool. Repeat hose removal process with bottom hose.



Keep your rags handy and remove the rear heater assembly, keeping the heater core's hose flanges up. Drain the remaining fluid into an appropriate container and dispose of properly. What you should now have under the rear seat is shown above (with more or less of a mess).



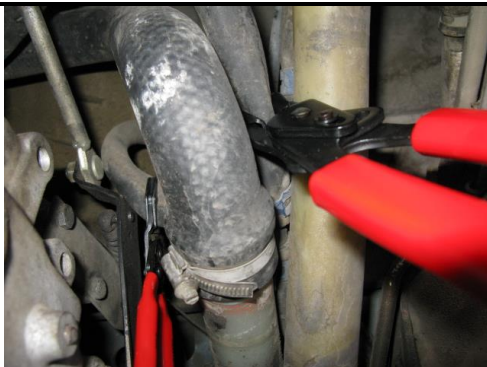
Clean up the mess left by the leaking heater. If the leak was really bad, and depending on your van, you may need to remove the wood/carpet floor for complete cleanup.

## Permanent Removal (1990 Westfalia shown; others may be same or similar)



After following the temporary procedure: Get your straight fittings\* and tools ready and jack the rear of the van up (place on jack stands for safety).

\*It is recommended to use metal fittings, not plastic.



Pick one of the two heater hoses (location: above plastic pipes, right side of transmission) and remove (by sliding them back several inches) the two hose clamps on each side of its T-fitting. Pinch off each hose on both sides of said T-fitting.

### Side Note:



Now would be a grand time to replace cooling components: old hoses, temp senders, etc. I took the opportunity to replace the temp II sender (leaking & original!) and the crossover hose, which was completely collapsed at the bend (installed a spring support on new hose).



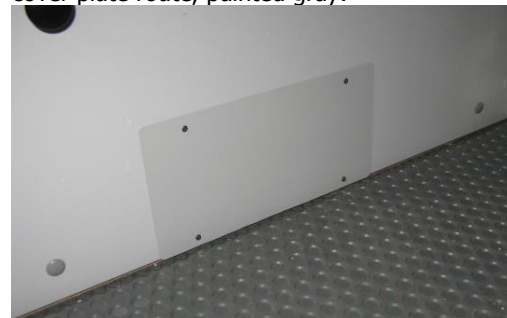
Carefully remove the main (front) heater hoses from the T-fitting (warning: coolant will spill out!) and insert your new straight fitting. Remove the hose pinchers and replace the hose clamps. Pull the rear heater hose out (remove hose clamp and plug first, if still in place). Drain remaining coolant. Repeat process with second hose.



Reinstall the floor screws (or seal the holes with your preferred method). Insert hole plugs into holes left in firewall. Above photo courtesy of *Timwhy* who used bolts, washers, & compression nuts. I used metal hole plugs found at Home Depot (requires removing the rubber grommets):



What to do with the gaping hole that's left? Lots of options out there (reinstall the vent, or cut the duct off and reinstall vent, or put in a newer auxiliary heater like a Propex, make a cover plate, etc.), but I went the sheet metal cover plate route, painted gray:



If you replaced hoses, or lost a lot of coolant during removal, fill the system with new coolant and bleed the system per your preferred method (Bentley Manual, "Libby Bong", etc.).

Enjoy all the new-found under-seat storage space!

