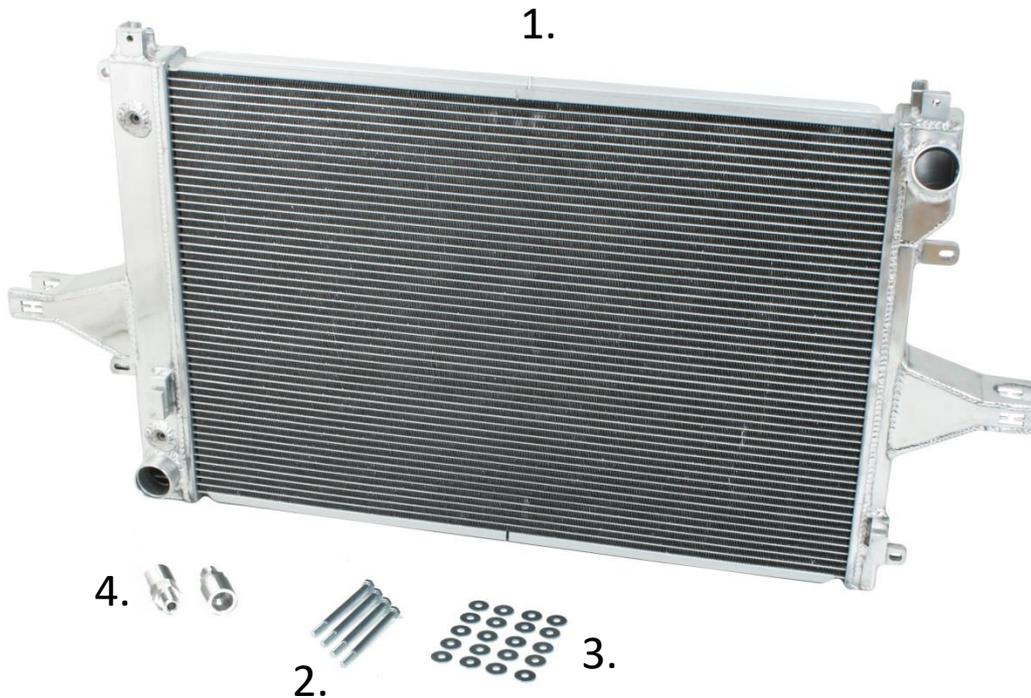


Installation instruction do88 Performance Radiator for Volvo S60 V70 XC70 S80 00-09

Part number: WC-210



This instruction shows how to replace the OEM radiator with do88 performance radiator.

At this type of installation we always recommend that you have mechanical experience and knowledge about safety during work on vehicles.

Parts included:

1. Radiator 1pcs
2. M6 x 90mm 4pcs
3. M6 washer 20pcs
4. Oil connection-adaptors 2pcs
(Auto transmission only)
5. Tube bushing 4pcs (not on photo)

This installation instruction are written according to our installation of this radiator performed on a Volvo V70 MY-06. Other vehicles that this intercooler also fit to might have some differences in the way of installation. Vehicles up to MY-04 without facelift have different bumper mounting.



1. Loosen the 6 plastic rivets on top of bumper by pressing the middle part down then pull rivet up by its collar.



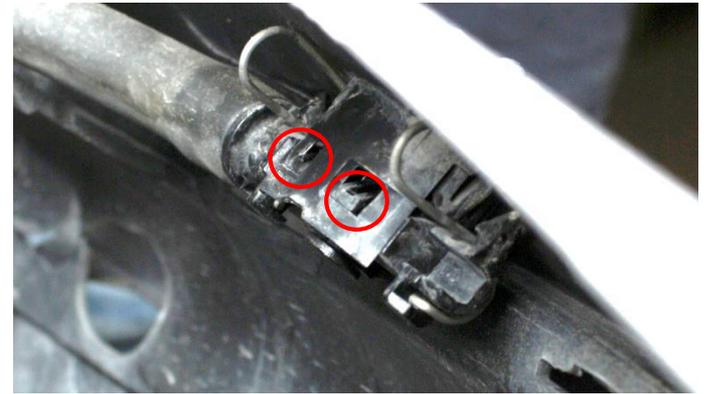
2. On both sides, remove 1 pc Torx T20 (1.) from each wheel arch. In the lower edge of the bumper, remove 4pcs plastic rivet (2.) by pressing in the center part of it and then pulling it out in its collar.



3. On both sides, pull the bumper cover out from the fender to loosen the plastic clips that holds it in place.



4. Remove bumper cover from vehicle by strictly pulling it straight forward from car until it comes loose from clips.
For cars equipped with headlight washers, remove the nozzles from bumper cover by prying all 4 tabs according to picture with a small screwdriver from inside of bumper and then loosen the nozzle.



5. Disconnect cables to the fog lights and remove the bumper from vehicle.

6. Remove 2x Hex 10mm and then remove the plastic cover and bumper Styrofoam.



7. On both sides underneath the head lights remove 2x Torx T25 and 1x Hex 8mm.



8.

Remove the head lights.

Remove 3x Hex 8mm, pull the head light forward and disconnect the cable.



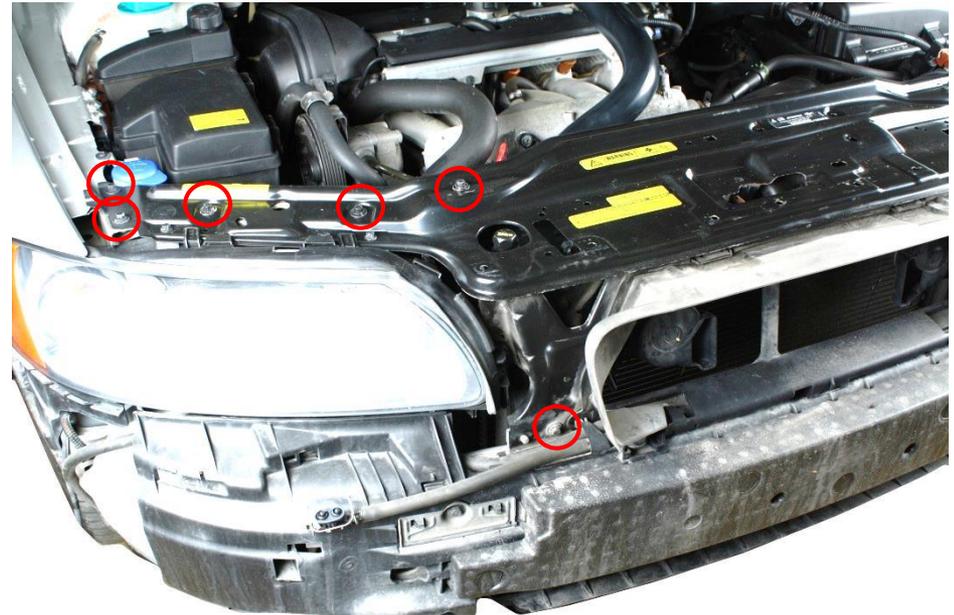
9.

Remove radiator support frame.

Remove 12x Hex 8mm (only 6pcs show on photo).

After removing these screws lift the entire radiator support frame forward / up and loosen the cable connection and the hood wire locking wire.

Remove radiator support frame from the vehicle.

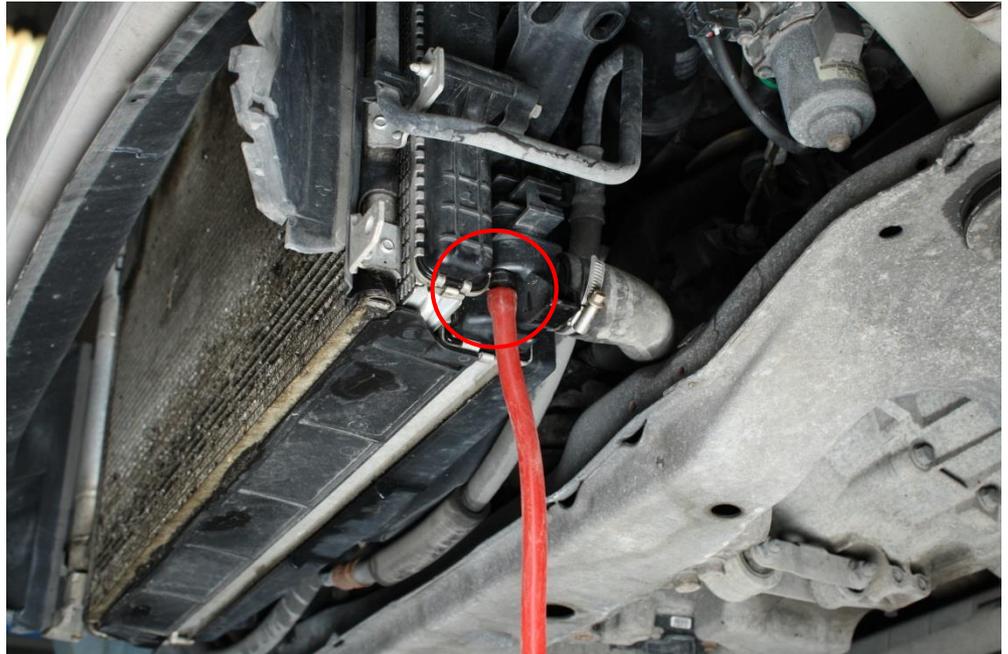


10. Remove the plastic cover underneath the radiator.
Remove 2x Hex 10mm on both sides, then pull the plastic backwards.



11. Warning! Before doing this step make sure engine is not warm!

Unscrew the expansion tank lid. Then drain all coolant fluid from the radiator, do this by unscrewing the hex 13mm plastic drain plug a few turns.



12. Remove lower, upper and bleed hose from radiator.

13. Remove the plastic air guide that is located on the back side of the crash beam. Loosen the 2 plastic rivets by pressing the middle part down then pull rivet up by its collar.

14. Remove the fresh air duct to the air filter box.

15. Remove the fan cover.
Remove 2x Hex 8mm and disconnect the large cable connector.

Lift the entire fan cover straight up.

16. Remove the intercooler inlet hose from both the intercooler and pipe connection.

17. Automatic transmission only.
Disconnect the 2 oil lines on the left side of the radiator. Tape some protection over the connection to prevent oil leakage and dirt getting into the system.



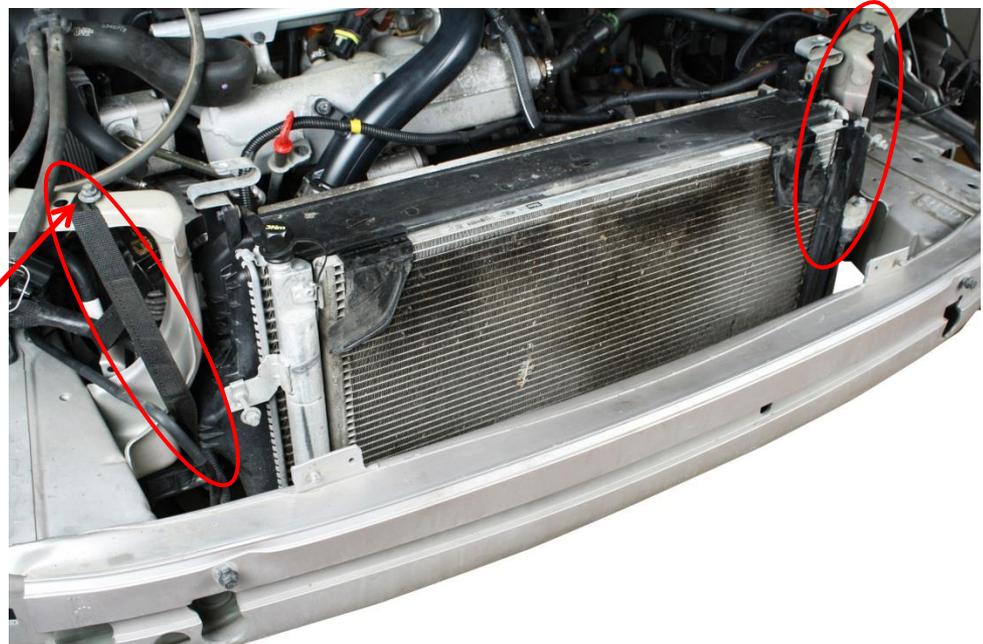
18. Remove the plastic air guide underneath the intercooler. 3x Plastic rivets.



19. The intercooler and AC-condenser needs to be supported while the radiator is removed.

Use 2x straps and pull these around the intercooler inlet and outlet and then around the head light frames as shown on the photo.

Secure the straps with a screw so the don't slide off.

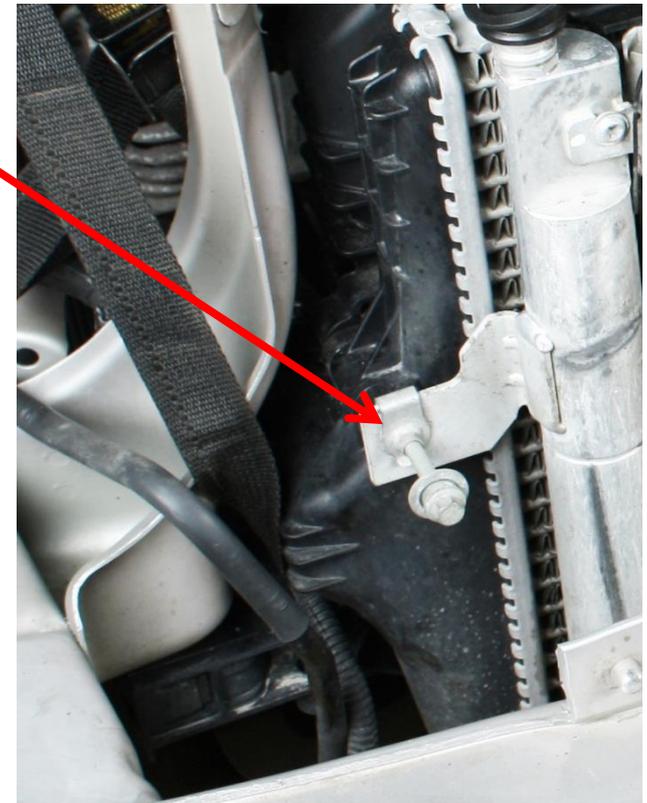


20.

Remove the 2 top screws Hex 10mm that holds the radiator to the intercooler / AC-condenser assembly.

Once these screws are removed, screw them into the AC-condenser about 20mm from the opposite direction. This way the AC-condenser will be supported by the intercooler when the radiator is removed.

Now remove the 2 bottom screws Hex 10mm that holds the radiator to the intercooler / AC-condenser assembly.



21.

On both sides remove 1x Hex 12mm that holds the radiator to the chassis.

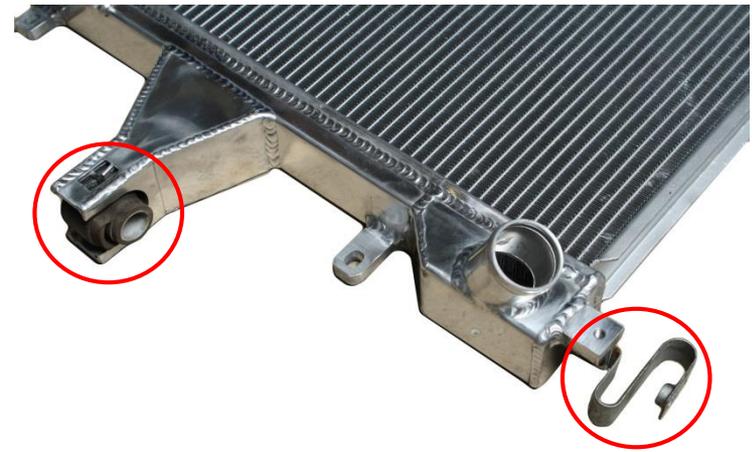
Now lower the radiator gently and remove from vehicle.



22.

Move the 2 large rubber bushings and the 2 top metal brackets from the OEM radiator to the do88 performance radiator.

Lock the bushing into place by bending the small metal flaps downwards as much as possible.



Please note it might be necessary to grind a bit on the plastic edges on the rubber bushing to make fit. These radiators are hand built and some variations in production may make this necessary.

23.

Automatic transmission only.

Install the 2 included oil connection adaptors. Make sure connections are free from any dirt before installing them.

Screw them slowly into the radiator and don't over tighten them! The aluminum threads can easily be damaged if you tighten them too much. Recommended Torque is 30Nm.



24.

If you install this radiator together with a aluminum intercooler it Must be able to move sideways relative to the intercooler.

If you install together with do88 performance intercooler (ICM-160) you must install it with the included tube bushings!

Install the parts according to the photo.

It is **IMPORTANT!** that you install like this otherwise it may void warranty!



25.

Install all other parts in reverse order except the screws that holds the radiator to the intercooler / AC-condenser assembly.

When screwing the radiator to the OEM intercooler / AC-condenser assembly use the included 4x M6x90mm and washers.

Put 1 washer behind screw head and enough washers between radiator and intercooler so they don't touch each other.

26.

Finished. Refill coolant (Volvo OEM) and bleed system. If you have automatic transmission, also check gearbox oil level!

