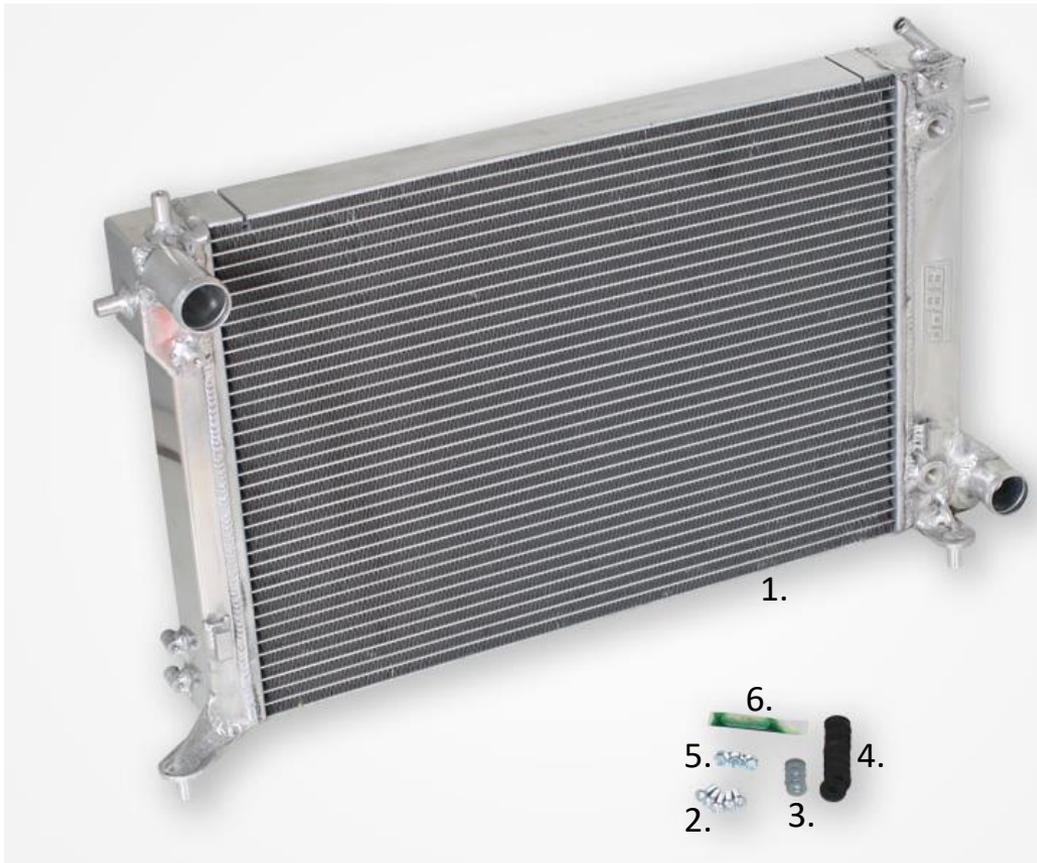


Installation instruction do88 aluminum radiator for SAAB ng900/og9-3

Part number: WC-300



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:

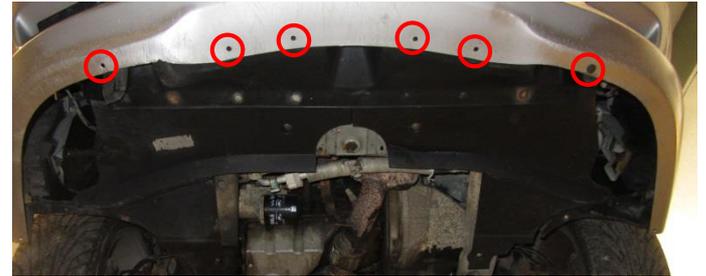
1. 1 x do88 Aluminium radiator
2. 5 x M5x16 Screws
3. 5 x M5 Washer
4. 10 x Rubber washers
5. 3 x M5x12 Screws
6. Thread locker

1. Disconnect battery poles (start with negative) then remove battery from vehicle.

2. Remove the 6pcs plastic rivets that attaches the bottom plastic radiator protection to the bumper cover by unscrewing the middle part of them and then pull them out in the collar.

3. Remove the 1pcs screw on each side of vehicle that holds the bumper to the inner fender.

4. Remove the 1pc screw on each side that attaches the plastic radiator protection to the inner fenders.
Remove the 1pc screw on each side that attaches the bottom of the bumper cover to the inner fender.



5. Disconnect the fog light electrical connectors from underneath by prying out the retainer clip and pulling it downwards from the lamp connector.



6. Remove front indicator lights by removing the 1 screw that attaches it to the headlight from the top. Then pull the indicator light forwards and remove the electrical connection.

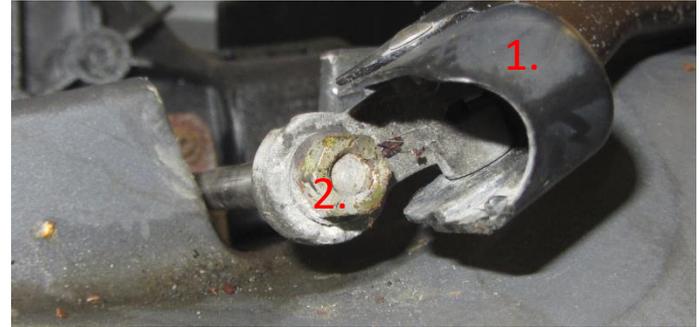


7. Remove the front grille by pressing the metal clips (1.) and then lift grille upwards. Remove headlights by disconnecting the electrical connector (info below), removing the 3 screws (2.) that attaches them. Lift free from tab in rear area and pull forwards out of the car.

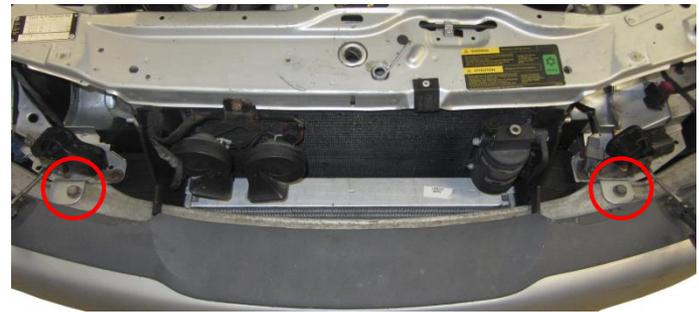
Info
This type of electrical connector are disconnected by pulling the red part out from it at the same time as the male and female connectors are pulled apart.



8. If vehicle are equipped with headlight vipers, first remove the washer hose from the viper blade arm and then remove them by folding up the plastic cover (1.), removing the 8mm hex nut (2.) located underneath and then wiggle it a bit at the same time as you pull it of the axle.



9. Remove the bumper from car by removing the 2pcs 16mm hex screws then hold out the rear part of bumper so it comes loose from the inner fenders and then move the bumper forward until it's a few centimeters ahead of car and in this position remove the ambient temperature sensor from the lower grille in the bumper cover.

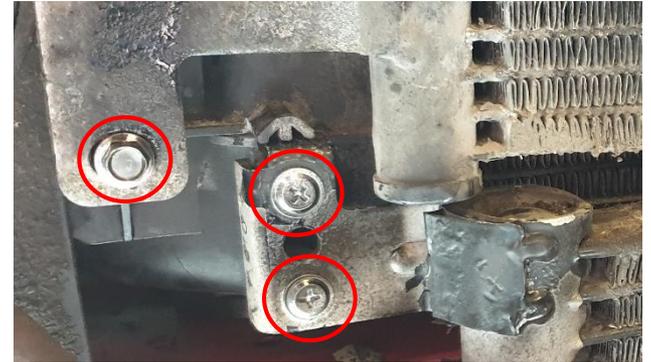


10. Remove the intercooler hoses by removing the hose clamps with 7mm hex wrench or hose clamp driver. Then pull the hoses off the connection.

11. Remove the intercooler by removing 1psc 10mm hex screws on each side of intercooler then remove from vehicle by pulling it forward.



12. Remove the 5 screws that attaches oil cooler and bottom of AC condenser to the radiator. Picture shows the three of them located on the right side of the radiator. Carefully hang the oil cooler in the oil lines.



13. Remove the left and right side air guides by pulling them in a forward direction. Right side shown on picture.



14. Remove the by pass valve with hoses and turbo inlet hose from by removing three clamps and then remove this as an assembly from the car.



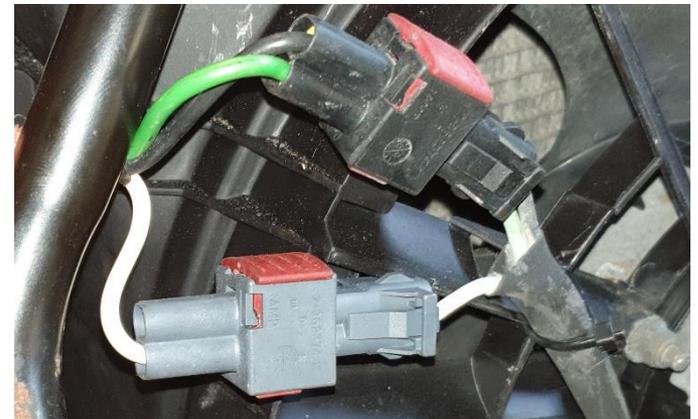
15. Drain the cooling system either using the drain plug on the left side of the radiator or by removing the lower radiator hose.

16. Loosen hose clamps on all three radiator hoses (marked on picture to right) on the radiator side and then pull them loose from the radiator.

17. Loosen power steering pipe by removing this screw.

18. Remove the power steering and positive battery cable bracket by loosening this screw.
Fold the power steering pipe over the engine and secure it there.

19. Disconnect the two electrical connectors to the cooling fan.



20. Remove the exhaust manifold heat shield by removing the nut then pull it upwards.



21. Remove the boost pressure valve by disconnecting the cable connector and removing its two screws. Leave the hoses installed just lay the valve away from the radiator.



22. Remove the fan cover by removing the two screws that holds it to the radiator (left side screw shown on picture) then lift it upwards and jiggle to remove from vehicle.



23. Only for cars with auto gearbox, remove the two fasteners for the auto gearbox pipes located on the top of the radiator and on the left side of the radiator
Then remove the oil connections by loosening the banjo screws. Now move the pipes so they lay over the engine away from the radiator area.

24. Remove the two metal clips that holds the bushings in the top radiator brackets using a plier. One clip located on each side of the radiator.



25. Secure the AC condenser using straps then lift it off the “hooks” on the radiator.
NOTE! It is a lot easier to safely replace the radiator if you completely remove the AC condenser from the car. But to do this you have to have proper equipment to drain the AC system and refill it afterwards.



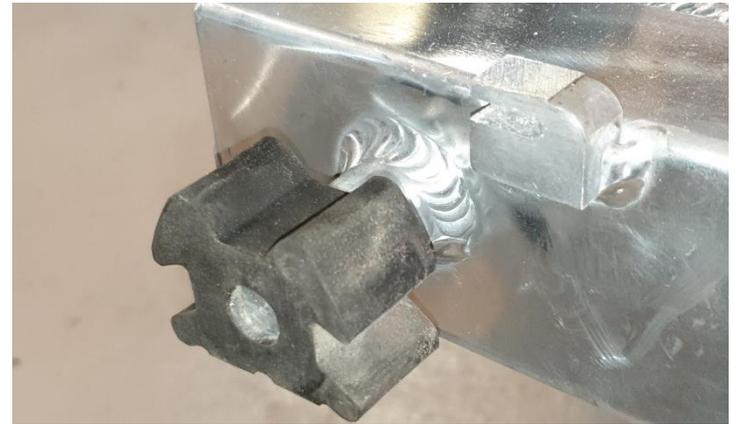
26. Now remove the radiator by tilting it backwards, you may need to pry the bushings the first part as the rubber bushings can sit firmly in the holders. Then remove radiator by lift it upwards and jiggle it to remove from vehicle.

27. Cut the bracket on the AC condenser at the line marked in the picture to the right make it fit with the aluminum radiator. Use a small hacksaw or a separate hacksaw blade.



28.

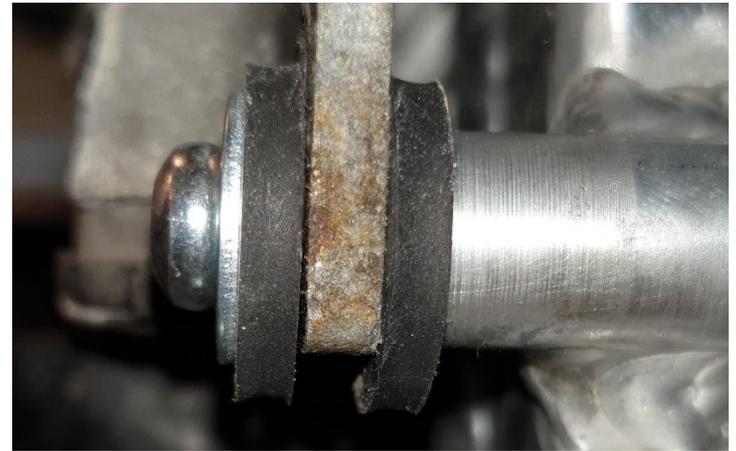
Remove the two rubber bushings from the original radiator and install on the aluminum radiator according to picture.



29.

Reinstall the performance radiator and all other removed parts in reverse order with these notes/exceptions:

1. To protect the new aluminum radiator during installation, put for example cardboard sheets over both sides of the core when putting it in place.
2. Secure the lower part of AC condenser and oil cooler to the aluminum radiator with the supplied 5 pcs M5x16 screws, 10pcs rubber washers, 5pcs M5 washers according to picture. Use thread locker on the screws and tighten just until the rubber washers have been a bit compressed.
3. Secure the fan cover with 2pcs of the supplied M5x12 flange screws.
4. Only for cars with auto gearbox. Secure the auto gearbox oil pipes on top of the radiator with 1pc of the supplied M5x12 flange screws.



Seen from left:

Screw head - Washer - Rubber washer - AC condenser or oil cooler - rubber washer - Aluminum radiator.