## Installation instruction do88 Intercooler for SAAB 9-3SS/SC 2,8 V6 Turbo



This instruction shows how to replace the OEM intercooler with this performance intercooler.

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

## Parts included:

- 1. Intercooler 1st
- 2. M5x12 6 hex screews 2pcs
- 3. M5 washer 2pcs
- 4. M5 flange nut 2pcs
- 5. Plastic screews 5x25 T25 2pcs

Part Number: ICM-110-V6

1. Remove battery cover by loosen the two plastic screws in the front end, remove coolant hose from the groove and lift the cover away.

Remove the air guide positioned between radiator support and battery box by lifting it up from battery box and then pull out to the rear.

Remove the negative terminal from the battery post and make sure it will not be in contact with the battery terminal.



2. Remove the 4pcs 8mm hex head screws in each front inner fender.



Remove 6pcs plastic rivets in the top of the bumper above the upper grille by pushing the center piece of them downwards a few millimeters (about 1/8") and then pull it up in the collar.

Cars with facelift 08-> have 4 pcs of plastic rivets and 2pcs of Torx T30 screws instead.



**4.** Remove the 4pcs of 8mm hex head screws marked on picture.

Bend down the outer left "corner" (2.) of the front protecting plate and disconnect the electric connector attached to it and make sure vehicle chassis harness are not attached to the protecting plate.

On vehicles with high pressure cleaning of headlight: Disconnect the hose to the headlight nozzles from the pump positioned in the washer fluid tank above the same "corner" (2.).

NOTE! Washer fluid might pour out.



5. Pull the rear end of bumper out from the car until it comes loose on both sides of vehicle.



Remove the headlights by removing 3pcs of 10mm (on facelift 2pcs 10mm & 1pc 7mm) hex screws on each headlight and then pull/lift forward so you can disconnect the electrical connector from the headlight and then remove headlight from vehicle.



- 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 pullet apart.
- 7. Disconnect the electrical connector from the horn and remove the cable clips from the front cross member.



8. Remove the two Torx T25 screews that secures the air inlet pipe to the radiator support.



9. Remove the radiator support by removing 8pcs of 10mm (on facelift 6pcs) hex head screws on top of it and 2pcs of 10mm hex head screws in the bottom of the cross member.

Protect the battery terminals so the will not be shorted and then lift up and position the radiator support with cross member above the engine compartment so its not on top of the radiators.

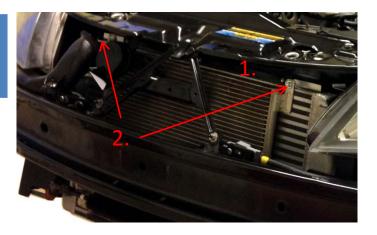


Remove the air inlet duct by screw up the washes, twist the pipe on its lower connection so it lifts from the attachment point then twist at the same time as you pull forward until it comes loose from the air box.



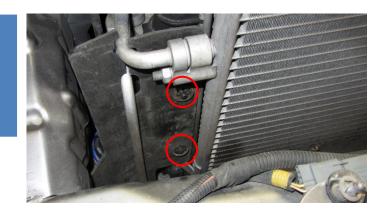
11. Remove the air guide (1.) from the top of the intercooler by pulling it upwards.

Remove the 2pcs Torx T25 screws (2.) that attaches the AC condenser to the intercooler.



Remove the air guides on both sides of the intercooler by gentle pry out the tabs in the washer and then remove from intercooler pin. Remove air guides from intercooler.

Then straighten out the tabs in the washers so you can reuse them when installing air guides on the new intercooler.



13. Lift the power steering cooling pipe up from its slots.
Support the power steering pipe by hand and temporarily attach it to the bumper beam with zip tie or similar.



14. Lift the AC condenser upwards from its slots in the intercooler and tie it toward bumper beam as much forward as possible.



15. Loosen both hoses from intercooler by loosen hose clamps (with a 7mm hose clamp screwdriver or 7mm hex socket) and pull them off the intercooler connections.

The hoses can be in place on car during intercooler replacement unless they should be replaced at the same time.



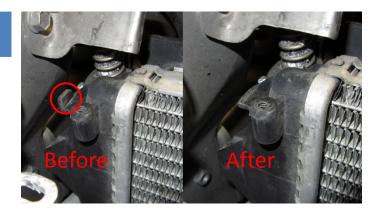
**16.** Remove the 2pcs Torx T25 screws that attaches intercooler to radiator (one on each side of intercooler).



17. Remove the intercooler by lifting it up from the radiator slots and then carefully remove the intercooler downwards starting with the left hand side and then the rest of it according to picture.



**18.** Cut/grind the small plastic tab down flat on the radiator according to picture.



19. Remove the lower AC condenser plastic brackets from the OEM intercooler and install them in the new intercooler according to picture.



Install the new intercooler the same way the old one was removed.

Lift up right side inlet connection over the lower radiator bracket then lift up the left side (Outlet).

Lift the intercooler and position the tabs in the radiator slots.



21. Attach the intercooler to the radiator with the two included 5x25 Torx T25 plastic screws . One on each top end of the intercooler.



Install the OEM air guides on each side of the intercooler using the tab washers removed in step 11.

This step are very important to achieve maximum cooling efficiency.



23. Install the AC condenser to the new intercooler by placing it in the plastic brackets installed on intercooler in step 19.



**24.** Fasten the AC condenser to the intercooler with the included M5x12 hex head screws together with the M5 flat washer and flanged nut according to picture. One on each side of condenser.



Install the upper air guide on the front side of the bracket on top of the intercooler using three included 4x16mm self drilling metal screws (not on included parts picture).

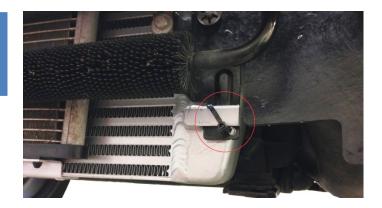
Position the plastic air guide centered on top of the intercooler.



26. Install both hoses on intercooler inlet and outlet. Secure with OEM hose clamp.



27. Lift the power steering cooling pipe in place in the intercooler slots. To secure the installation of this pipe we recommend to drill a hole in the power steering pipe bracket and then secure it with the included zip tie to the intercooler bracket according to picture.



**28.** Reinstall all other parts in reverse order.

## Installation instruction do88 intercooler pipes for SAAB 9-3 2.8T V6



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

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

## Parts included:

- 1. Intercooler pipe Turbo Intercooler
- 2. Intercooler pipe Intercooler Throttle body
- 3. Turbo outlet silicone hose
- 4. Intercooler Inlet silicone hose
- 5. Intercooler Outlet silicone hose
- 6. Throttle body silicone hose
- 7. Hose clamps 40-60mm 1pc, 60-80mm 7pcs
- 8. M5x12mm screw
- 9. M6x16mm screw



Part number: TR-110

1. Remove battery cover by loosen the two plastic screws in the front end, remove coolant hose from the groove and lift the cover away.

Remove the air guide positioned between radiator support and battery box by lifting it up from battery box and then pull out to the rear.

Remove the negative terminal from the battery post and make sure it will not be in contact with the battery terminal.



2. Remove the 4pcs 8mm hex head screws in each front inner fender.



Remove 6pcs plastic rivets in the top of the bumper above the upper grille by pushing the center piece of them downwards a few millimeters (about 1/8") and then pull it up in the collar.

Cars with facelift 08-> have 4 pcs of plastic rivets and 2pcs of Torx T30 screws instead.



**4.** Remove the 4pcs of 8mm hex head screws marked on picture.

Bend down the outer left "corner" (2.) of the front protecting plate and disconnect the electric connector attached to it and make sure vehicle chassis harness are not attached to the protecting plate.

On vehicles with high pressure cleaning of headlight: Disconnect the hose to the headlight nozzles from the pump positioned in the washer fluid tank above the same "corner" (2.).

NOTE! Washer fluid might pour out.

Pull the rear end of bumper out from the car until it comes loose on both sides of vehicle.



Remove the headlights by removing 3pcs of 10mm (on facelift 2pcs 10mm & 1pc 7mm) hex screws on each headlight and then pull/lift forward so you can disconnect the electrical connector from the headlight and then remove headlight from vehicle.



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 pullet apart.



7. Disconnect the electrical connector from the horn and remove the cable clips from the front cross member.



8. Remove the two Torx T25 screews that secures the air inlet pipe to the radiator support.



9. Remove the radiator support by removing 8pcs of 10mm (on facelift 6pcs) hex head screws on top of it and 2pcs of 10mm hex head screws in the bottom of the cross member.

Protect the battery terminals so the will not be shorted and then lift up and position the radiator support with cross member above the engine compartment so its not on top of the radiators.



Disconnect the plastic hose by pressing the plastic ring together and pulling it outwards.

Now remove the pipe from the car.

- Remove the oil filler cap. Then remove the engine cover by gently pulling it upwards in each corner.

  Now put back the oil filler cap.
- 12. Loosen the hose clamps at the throttle body and at the hose between the two pipes.

Now disconnect the sensor cable and then remove the pipe from the car.





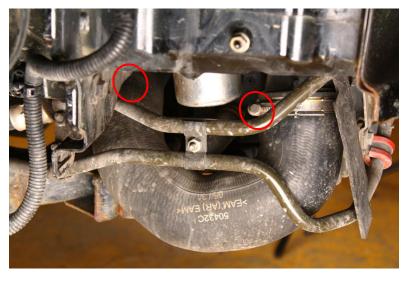


Remove the two plastic air guides next to the intercooler inlet and outlet connections. 2x 10mm Hex nuts.

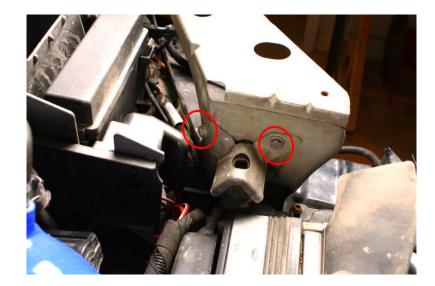


Loosen the hose clamps at the intercooler outlet and at the pressure pipe.

Now remove the hose from the car.



Remove the two radiator top brackets on both sides, 4x 10mm screws.



Gently tilt the radiator forward and then remove 3x E10 Torx from the pressure pipe.

Remove the pressure pipe from the car.



17. Install the throttle body silicone hose with a included 60-80mm hose clamp. Turn the hose so the pressure pipe will be slightly higher than the throttle body.

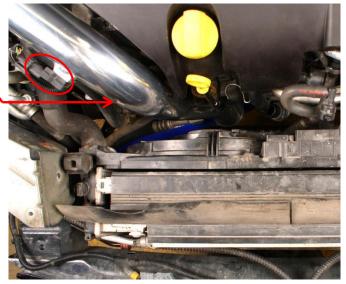
Now install the large pressure pipe. Gently "screw" the pipe clockwise into position according to the picture.



18. Insert the do88 performance pipe into the throttle body hose and fasten it with a included 60-80mm hose clamp.

Fasten the do88 performance pipe with the included M6x16mm screw.

- Remove the pressure sensor from the OEM pipe 1xT25 screw. Install the pressure sensor in the do88 performance pipe with the included M5x12 screw.
- 20. Install the silicone hose between the intercooler outlet and the do88 performance pipe with two included 60-80mm hose clamps.



**21.** Remove the E10 Torx from the intercooler inlet pressure pipe.

Then loosen the hose clamps at the intercooler inlet and turbo outlet.

Now remove the pressure pipe from the car.





22. Install the do88 performance pressure pipe and silicone hoses according to photo.

2x Silicone hoses

1x Pressure pipe

1x 40-60mm hose clamp

3x 60-80mm hose clamp

**23.** Reinstall all other parts in reverse order.





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