Installation instruction do88 performance Intercooler kit and turbo inlet hose kit 911 TT (991.1 and 991.2) 2013-



This instruction shows how to replace the OEM intercoolers and the inlet ducts with do88 performance intercooler kit and high flow inlet hose kit.

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

Parts included in ICM-270 intercooler kit:

- 1. Left side intercooler
- 2. Right side intercooler
- 3. Silicone hose Turbo to Intercooler left side
- 4. Silicone hose Intercooler to Y-pipe left side
- 5. Silicone hose Turbo to Intercooler right side
- 6. Silicone hose Intercooler to Y-pipe right side
- 7. Turbo outlet adapters 2pcs
- 8. Carbon fiber air guide left side
- 9. Carbon fiber air guide right side
- 10. 8pcs Hose clamps
- 11. 8pcs M8x16 screws, 8pcs M8 washers and 2pcs Threadlocking fluid
- 12. Sealing strips 2,3m 3x10mm, Sealing strips 1,3m 5x10m
- 13. 2pcs O-ring 41mm, 8pcs O-ring 50mm



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Parts included in do88-kit179S turbo inlet hose kit:

- 1. Left side upper inlet hose
- 2. Right side upper inlet hose
- 3. Left side lower inlet hose
- 4. Right side lower inlet hose
- 5. Left side turbo inlet adaptor
- 6. Right side turbo inlet adaptor
- 7. Hose joiners
- 8. By pass valve hoses
- 9. Hose clamps, 6pcs 20-32mm, 2pcs 60-80mm, 2pcs 80-100mm, 2pcs T-bolt 70-78mm
- 10. 4pcs M6 screws
- 11. 2pcs O-ring 57x1,5mm (not in picture)



- Open both the engine lid and luggage compartment lid.
 Disconnect the negative battery terminal.
 Note! Do not close the luggage compartment lid after you have removed the battery terminal.
- 2. Lift and secure the car so both rear wheels can be safely removed.



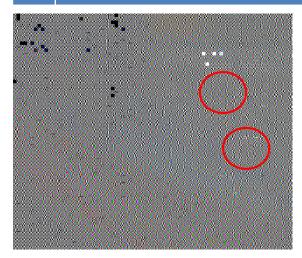
From the rear inner fenders, Remove 5pcs Torx T25 screws and 1x Hex 10mm plastic nut on each side.



4. Remove the 4pcs Torx T30 along the top of the rear bumper.



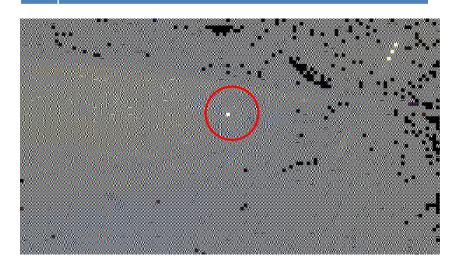
Loosen 2x Torx T25 and gently pull the rear light straight back. Disconnect the cable connector. Do this on both sides.



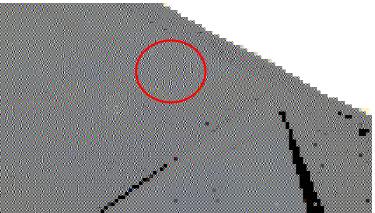
7. Remove 6x Torx T30 screws along the bottom of the bumper.



6. Remove 1x Torx T30 screw hidden behind rear light on both sides.

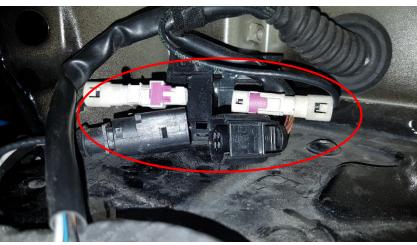


8. Remove 1pcs Torx T30 screw in the top end of the bumper inside each wheel housing (hidden behind the wheel arch plastic).



9. Disconnect the cables going to the bumper on both sides.





- 10. Now remove the rear bumper. With the help of a friend, gently pull each corner of the bumper out from the wheel arch edge a bit. Then remove the bumper by pulling it straight back.
- 11. Remove the fan cover. Firstly pull the rear end up, disconnect the two cables then remove fan cover.



12. Disconnect the 2 cables on the right side.



Remove the coolant cap and the 10mm hex screw.

Now tilt up the plastic cover and reinstall the coolant cap.



Remove 4x Torx T45 screws.



Turbo

15. Push the plastic tab downwards and pull out engine lid lock cable.

16.

Remove the plastic air duct by releasing the two rivets.





17. Now remove the wing motor plate.

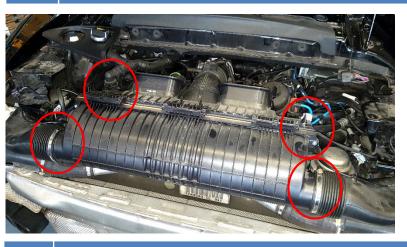


19. Remove the intercooler outlet hose from the intercoolers on both sides by prying out the quick coupling lock clips with a flat screwdriver about 10mm and then pull hose straight out from connection.

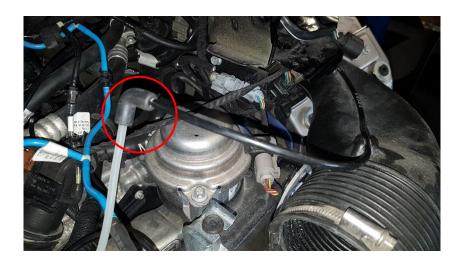
Also remove the hose clamp on the Y-pipe connections, then remove the intercooler outlet pipes together with the hoses.



Remove 2x hose clamps, left side breather valve, right side solenoid valve and vacuum line. Then remove the air filter box.



20. Disconnect the bypass valve vacuum line hoses on both sides.



On both sides. Remove the U-shaped turbo inlet pipes on both sides. Hose clamps, 2x Torx E10 screws, valve connection hose. Also disconnect the VTG connector and remove the plastic cover (these covers wont be re-installed).



On both sides, from underneath remove 2 pcs 14mm hex nuts and 1x Torx T25 screw holding the heat shield to the intercooler support frame.

Gently bend the heat shield down to separate it from intercooler console.



On both sides, remove the turbo outlet hose. Do this by prying out the quick coupling lock clips with a flat screwdriver about 10mm and then pull hose straight out from connection.



24. Before you perform this step, let a friend hold the the intercooler support console to prevent it from coming loose before you want it to.

On both sides. Remove 4x 10mm Hex Nuts and 2x 10mm Hex screws.

Now the intercooler assembly are loose and you can now remove it from the vehicle by moving it forward then pull the rear part out from the vehicle and remove the intercooler with support console down/rearwards from vehicle. Do this on both sides.







25. On both sides. Remove the turbo inlet pipes, 1x hose clamp on the intercooler outlet tank and 1x C-clip from the console.



On both sides. Remove 6x C-clips that holds the intercooler in the console.

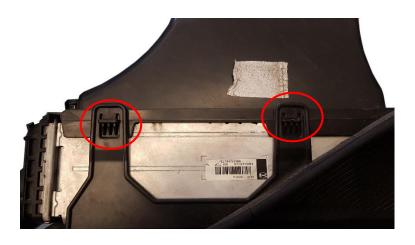


On both sides. Remove 3x Hex 10mm screws and gently split the intercooler console. Remove the intercooler and air guides from the console. Make sure the rubber grommets are left in place in the console.





- On both sides. Split the intercooler air guides by unclipping the 5 plastic fasteners that holds them together with a flat screw driver.
- On both sides. Cut the 4 corners on the lower air guides down to the same level as the edge that goes around the whole air guide.





30. On both upper carbon fiber air ducts install the included sealing like this:

Top flange (towards air inlet duct) = 5x10mm sealing Bottom edges (towards intercooler) = 3x10mm sealing





The intercooler consoles on both sides needs to get three small modifications to make space for the do88 intercooler and inlet hoses.

Red area: Grind down edge about 5mm.

Green area: Grind or bend edge with a plier to make 3mm larger space in the hole.

Blue area: Grind corner down about 5mm (only necessary if installed with do88 inlet hoses).





- Carefully install both upper and lower air ducts onto the intercooler. Take your time to check that the sealings don't get twisted or damaged. Install included 41mm & 50mm O-rings according to picture to fix upper and lower air guides.
- With the help of a friend carefully install the intercooler with air guides into the console.

It will help to put a little lubrication into the rubber bushings before you do this.

Secure with the included M8x16 screws and large M8 washers. Put some of the included Thread-locking fluid onto the threads each screw.





- The OEM O-rings and clips needs to be gently removed from the turbo end of the OEM Turbo->Intercooler hoses and installed into the do88 turbo outlet adapters. Make sure to install the O-rings in same direction as in thy were in the OEM hoses. If installed the other way you may get leakage. Pry away the plastic retainers to be able to remove the clips.
 - Install the adapters onto the turbocharger outlets on both sides and make sure they sit well.









This step only needs to be done if you install do88 intercoolers together with the OEM Turbo inlet ducts.

Note! This step is quite time consuming. The plastic needs to heated slowly at low/mid temperature (5-10min) in the red and green area with a heat gun or blow torch and then reshaped using a tool to push on the heated plastic. We recommend doing this in small steps multiple times. Wear gloves to protect yourself!

Red area: Heat and push in about 5mm. Green area: Heat and push in about 5mm. Blue area: Cut off the plastic bracket.

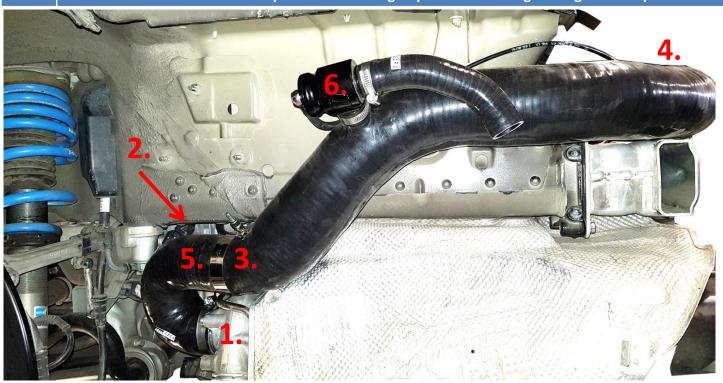








- 36. If you install the do88 intercooler kit together with the do88 turbo inlet pipes it is now time to install the inlet pipes on both sides before installing the intercooler assemblies. Do this in this order:
 - 1. Install the turbo inlet adapters with 57x1,5mm O-ring, 2pcs M6 screws using 4mm Allen key. (Some grease on the O-ring will keep it in place more easily)
 - 2. Install the U-shaped silicone hoses, carefully connect breather valve hoses.
 - 3. Push the stainless steel hose joiners into the U-shaped silicone hose.
 - 4. With help from friend align the large inlet silicone hose towards the air box connections.
 - 5. While holding the two silicone hoses into place tighten the 70-78mm T-bolt hose clamp firmly. The clamp must be aligned straight over the joint between the two hoses. One clamp should hold both hoses into place.
 - 6. Install the bypass valves and the 1" (25mm) silicone hoses with the supplied hose clamps. Align the bypass valve and hose into correct position according to picture before tightening the clamps.



With the help of a friend re-install the intercooler console with the intercooler and air guides in it into the car on both sides. While doing this be careful not to damage the top sealing on the carbon fiber duct. It is a tight fit with the inlets so the intercooler assembly needs to be pushed into position before installing the screws/nuts.



Install all hoses and tighten all clamps:
Turbo->Intercooler
Intercooler->Y-pipe
Bypass valve hose to intercooler



Install all other parts in reverse order. With this possible exception:

When installing rear bumper lower screws the holes may not align with intercooler consoles. Then you can adjust the lower part of the intercooler console by loosing the screws between upper and lower part of it and push the lower part in the desired direction then tighten the screws again.

