Installation instruction do88 performance Intercooler for Volvo S60 / V60 / XC60 / S90 / V90 / XC90 SPA platform

Part number: ICM-330

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

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

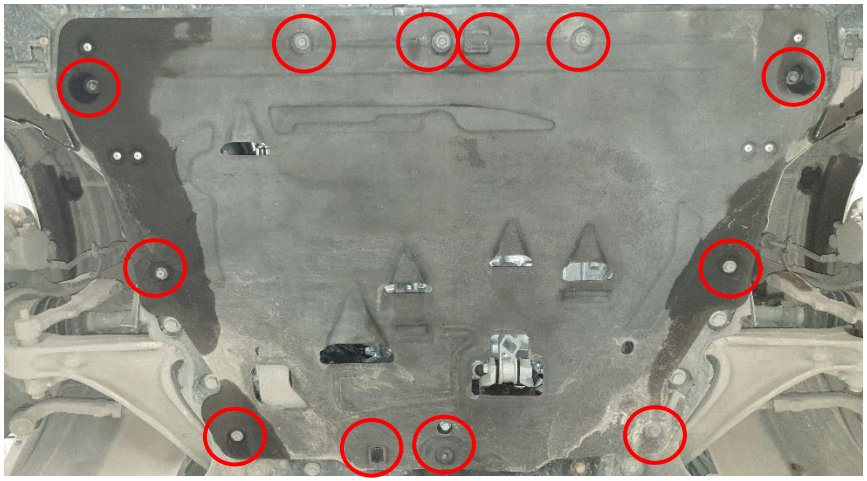
Parts included:

1. 1pc do88 Performance Intercooler
2. 1pc Intercooler inlet hose
3. 1pc Intercooler outlet hose
4. 2pcs air guides for S60/V60
5. 2pcs air guides for S90/V90
6. Grille shutter simulator
7. T-shaped rotation limiter
8. 6pcs M5x12mm Black Allen screws
9. 1pc M5x12mm hex flange screw
10. 3pcs 5.5x22mm Large washers
11. 4pcs 5.3X10X1mm Nylon washers
12. 2pcs 5.0X25mm Torx T-25 Thermo plastic screw
13. 4pcs hose clamps
14. 2pcs 370mm stripe

This installation instruction are based on our installation performed on a Volvo V60 T6 MY -19. Other vehicles this product fit to might have some differences in the installation procedure.

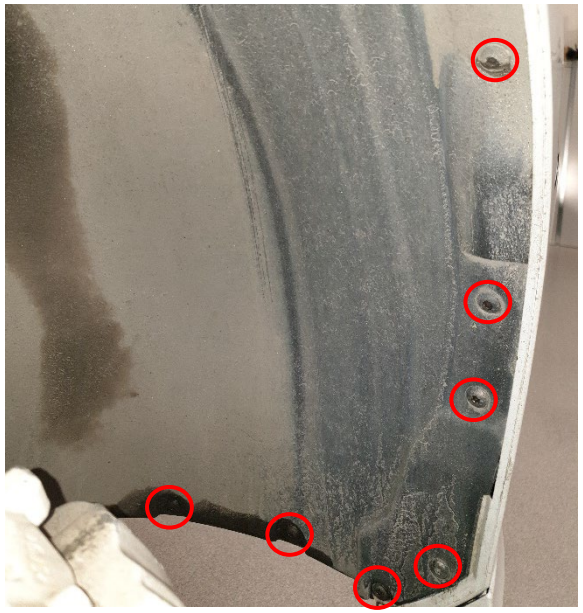
1. Raise the front of the car and remove the front wheels.

2. Remove 10pcs Torx T30 and two plastic clips then remove the plastic shield under the engine.

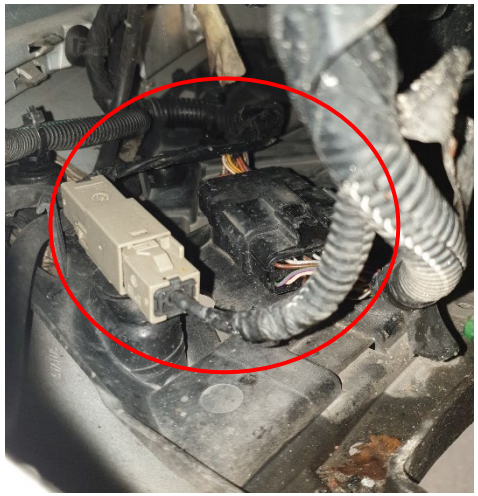


3. In the lower edge of the bumper remove 3pcs plastic rivets. Press both the plastic tabs towards the middle and then gently pull it out in its collar.

4. Remove 7pcs Torx T25 in each wheel arch.



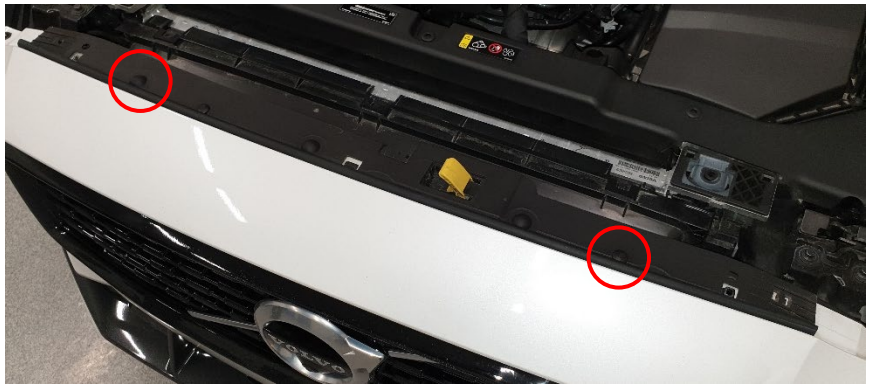
5. In the lower left corner of the bumper, disconnect the electrical connectors by pushing their release tabs and separate them.



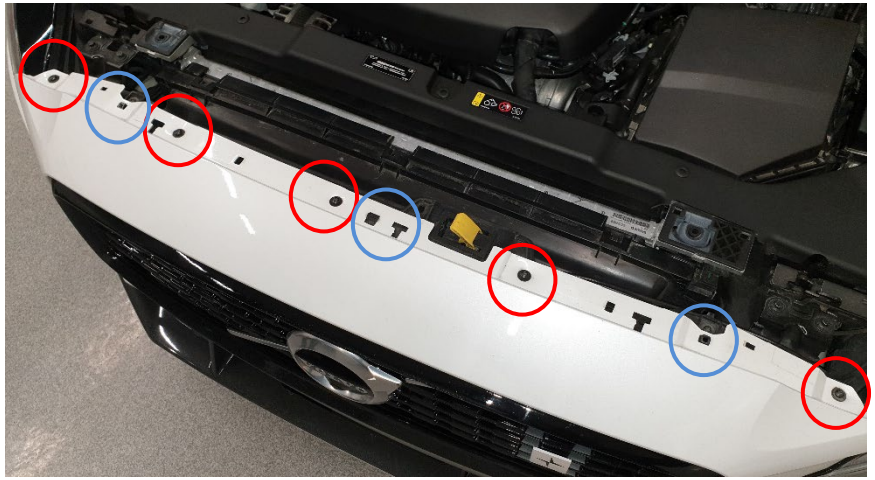
6. Behind the left headlight, disconnect the washer fluid line by removing lock clips and separate.

7. In front of each wheel arch, remove 2pcs 8mm hex screws that holds bumper to front fender.

8. Remove the 2 plastic rivets on top of the bumper cover by pushing the middle part down and then pull rivet up in its collar. Then carefully remove the cover fastened with plastic tabs.



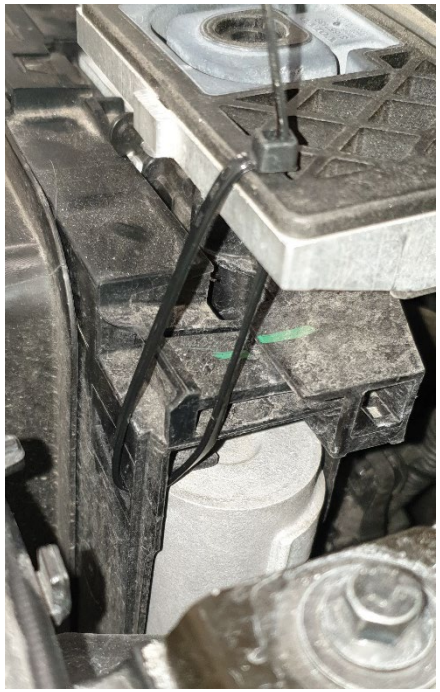
9. From the top of the bumper, remove 5pcs Torx T25 marked in red.



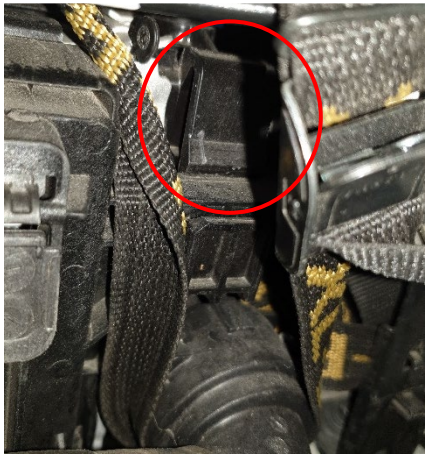
11 Loosen intercooler hoses from intercooler by pressing hoses to the intercooler and at the same time pry out the lock clip until in position as on picture. Then slide the hoses from the intercooler connections.

10. With help of an assistant now remove the bumper by first carefully pulling the edges of bumper that meets the front fenders down a bit then out from the car. When separated in the corners, lift the top of bumper from the 3 tabs marked in blue on picture under step 9 then remove the entire bumper cover in a forward direction.

12. Secure the radiator/condenser/fan cover with a strap on the right side and included stripe on left side according to pictures.



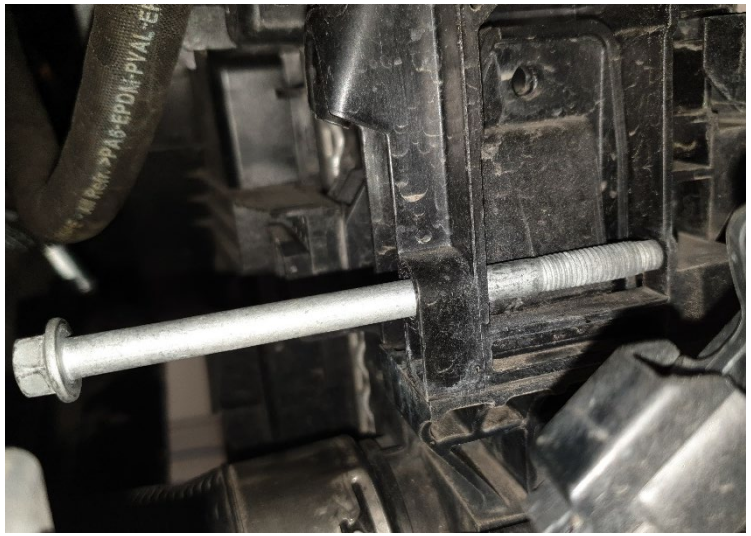
13. Loosen the fan cover by pressing in the locking tabs on both sides, then lift the fan cover about 2cm (3/4”) upwards. Leave it in this position.



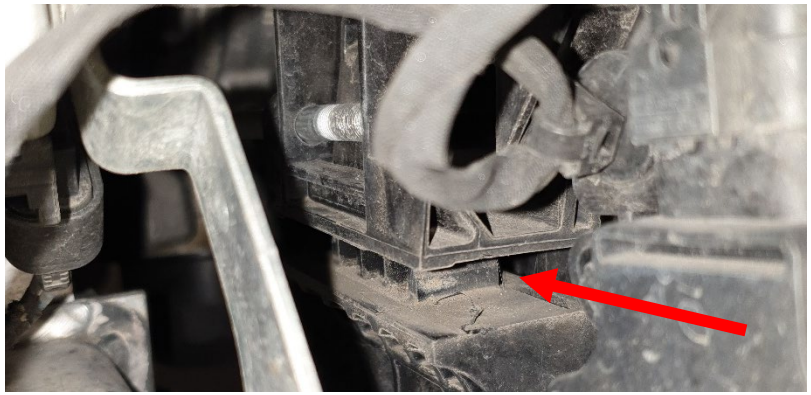
14. Loosen intercooler air guide from the intercooler by pressing in the locking tabs and then lift the air guide a bit upwards.

15. Remove 2pcs 10mm hex screws on each side that holds the intercooler mounts.

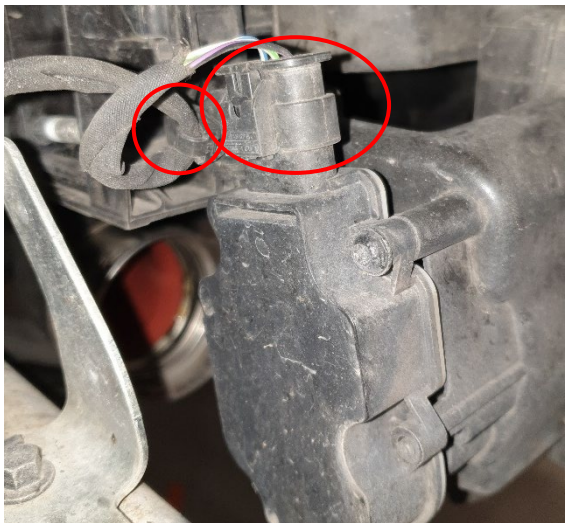
16. Push in the locking tab that holds the right side of the intercooler and use one of the screws just removed to hold the tab



17. Pry here with a screwdriver to separate the intercooler. Then remove intercooler from car by first lowering the right side until the left side slides out of its bracket. Be aware of the lower left fan cover bracket so you don't damage it.

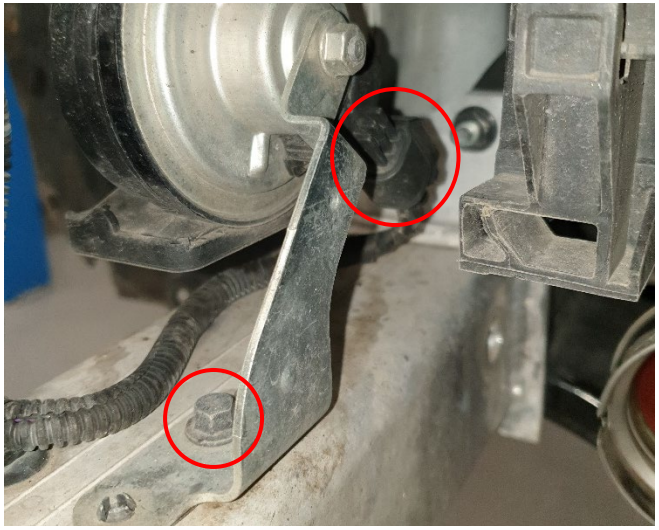


18. Disconnect shutter motor connector and the cable holder that sits in the air guide.

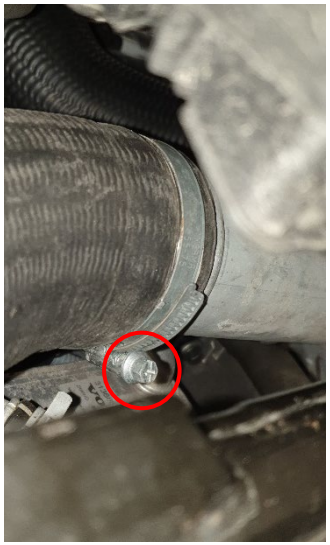


19. Use an angled pry tool from the backside of the intercooler air guide to separate it from the locking tabs then lift it off the hooks and remove.

20. Disconnect cable connector from right side horn and then loosen the 8mm hex screw and remove horn from car.



21. Loosen hose clamps (7mm hex) that holds intercooler hoses to pipes then remove hoses from car.



22. Remove both intercooler mounts from intercooler by prying locking tabs seen from bottom of intercooler using a screwdriver then remove locking plates and slide mounts off the intercooler.

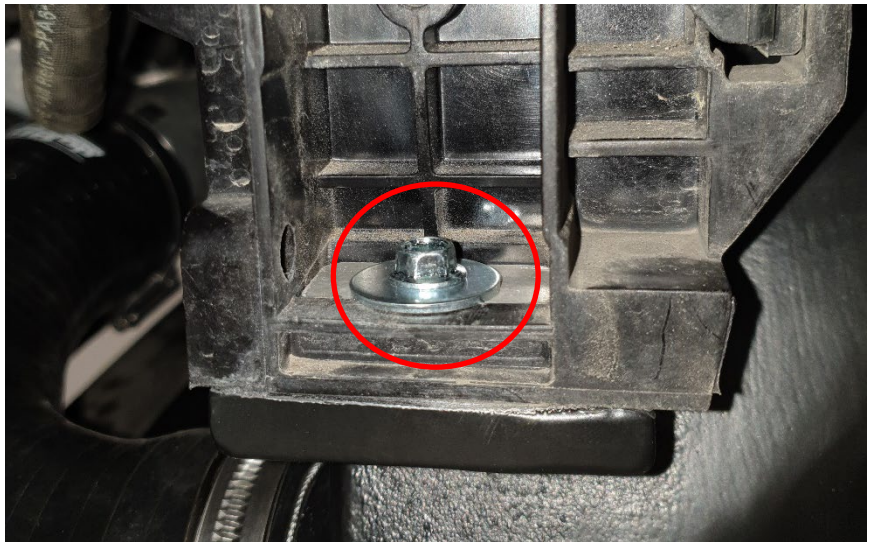
23. Install the intercooler mounts on the do88 intercooler, in same direction as it had on OEM intercooler. Secure in place using 1pc 5,5x22mm washer and 1pc M5x12mm Allen screw on each side.

24. Install both intercooler hoses with clamps to the intercooler pipes in an approximate angle, do not tight the clamps yet.

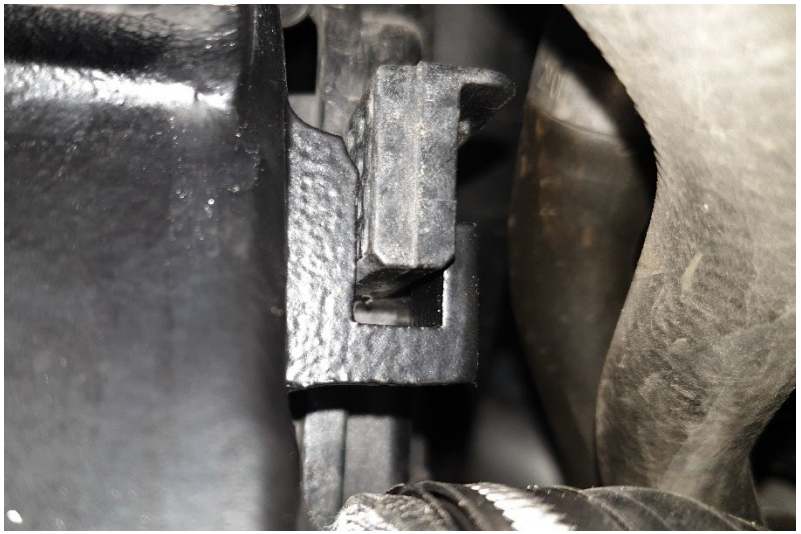
25. Install intercooler in car in the opposite way that the OEM intercooler was removed.

Fasten the intercooler mounts in the car with the 4pcs OEM screws previously removed, do not tighten yet.

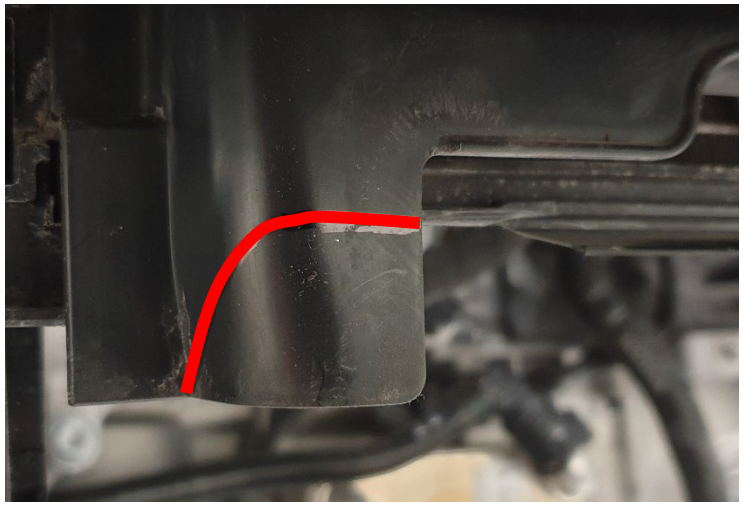
26. Fasten the right side of the intercooler using included 1x M5x12 hex flange screw and 1x 5,5x22mm. Tighten the 4 screws holding the intercooler mounts.



27. Slide the fan cover into the intercooler slots so the upper tabs locks in position.

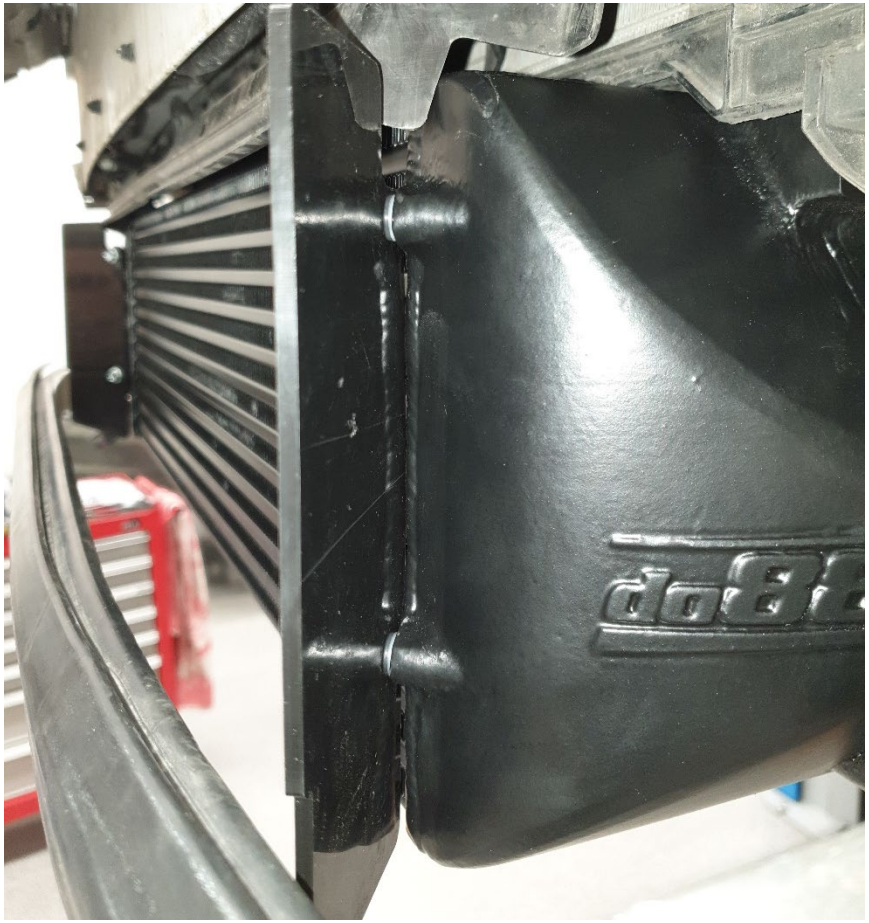


28. On S90/V90 and some other models it might be necessary to cut the corners of the upper air guide according to before and after pictures below.

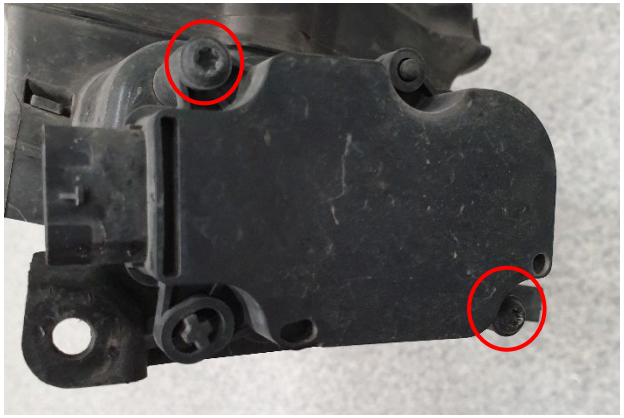


29. Install the suitable pair of supplied air guides to the intercooler with 4pcs supplied nylon washer between intercooler and air guide and secure with 4pcs M5x12 Black Allen screws.

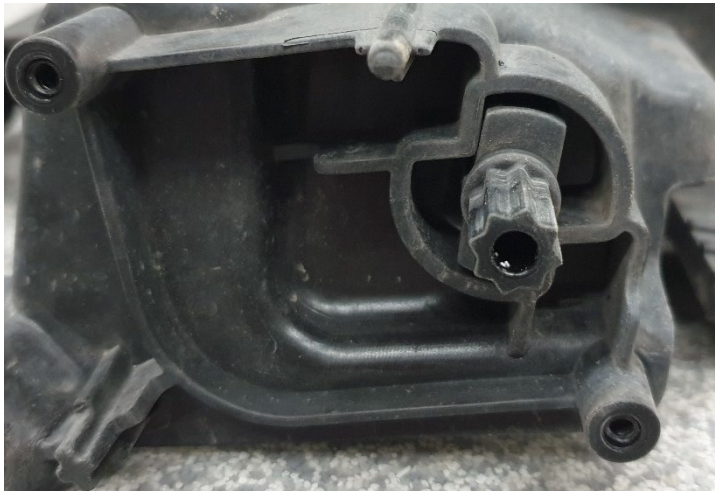
NOTE! On some car models it might be necessary to trim the best fitting pair of plastic air guides for best fit.



30. <u>If car have active grille shutter follow step 30-34:</u> Note the position of the active grille shutter and keep it in this position. Remove two Torx T20 and then remove actuator from shutter.



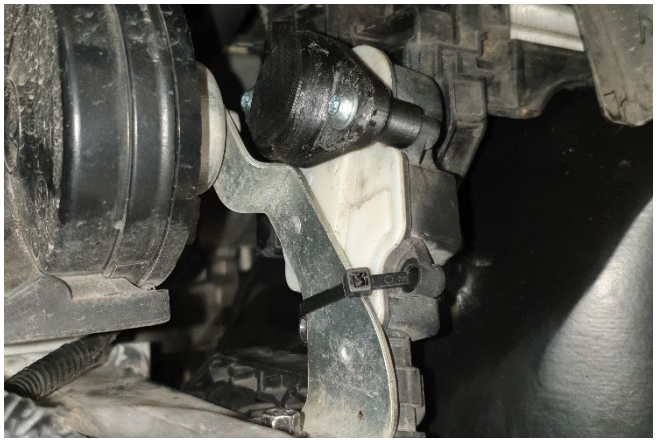
31. Notice the position of the rotation limiter in the grille shutter.



32.	**-Check in which direction the grille shutter simulator should sit on the actuator. -Place the T-shaped rotation limiter in grille shutter simulator so it is turned the same way as the rotation limiter in the grille shutter.**

33.	**Assemble the actuator to the grille shutter limiter with the T-shaped rotation limiter as close as possible to the rotation just determined. Secure with 2pcs 5x25 screws included, screw in slowly to avoid damages to the actuator housing.**

34.	**Reinstall removed horn and secure shutter actuator to the horn bracket with included stripe and reconnect its electrical connector.**



35.	**Install all other parts in reverse order.**