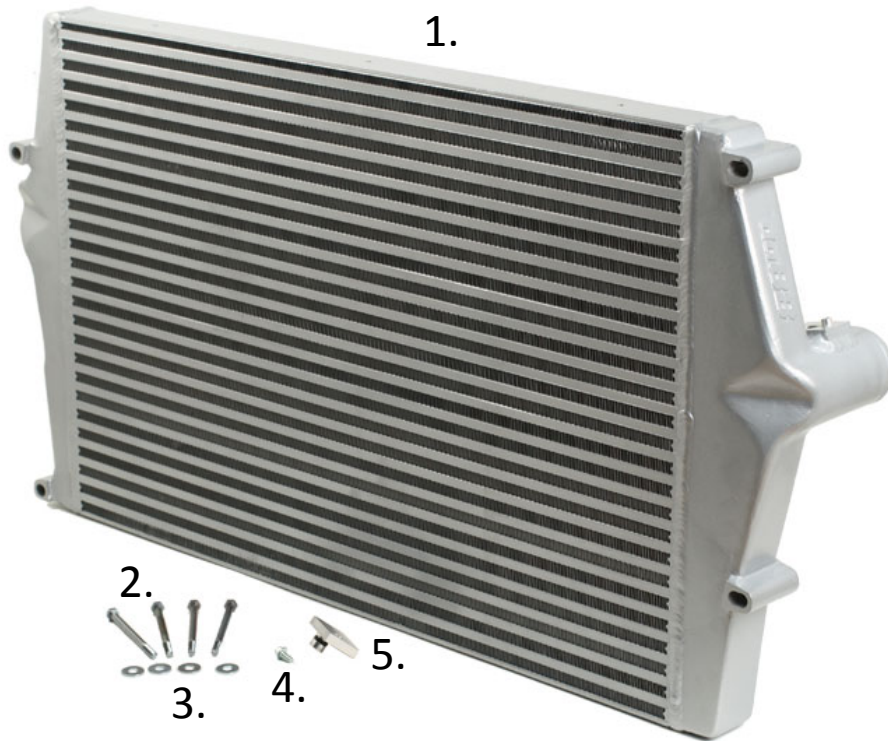


Installation instruction do88 Intercooler for Volvo S60 V70 XC70 S80 Turbo 00-09



This instruction shows how to replace the OEM intercooler with our 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 1pcs
2. M6 x 85mm 4pcs
3. M6 washer 8pcs
4. M5 x 12mm 1pcs
M5 x 10mm 1pcs
5. Sensor cover

This installation instruction are written according to our installation of this intercooler performed on a Volvo S60R MY-04. Other vehicles that this intercooler also fit to might have some differences in the way of installation.

Part number: ICM-160

1. Remove the over the engine intercooler pipe.

R-models:

1x V-band clamp Torx T30

1x Torx T25

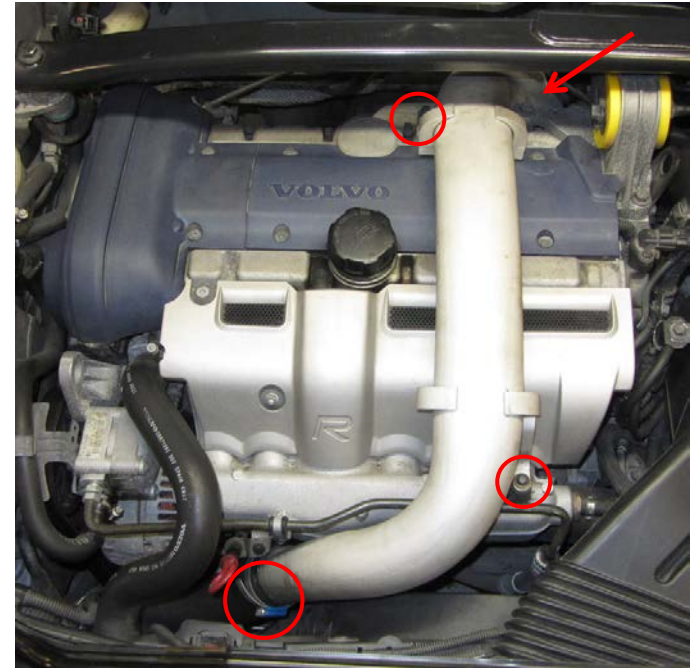
1x Hex 10mm

1x Hose clamp Hex 7mm

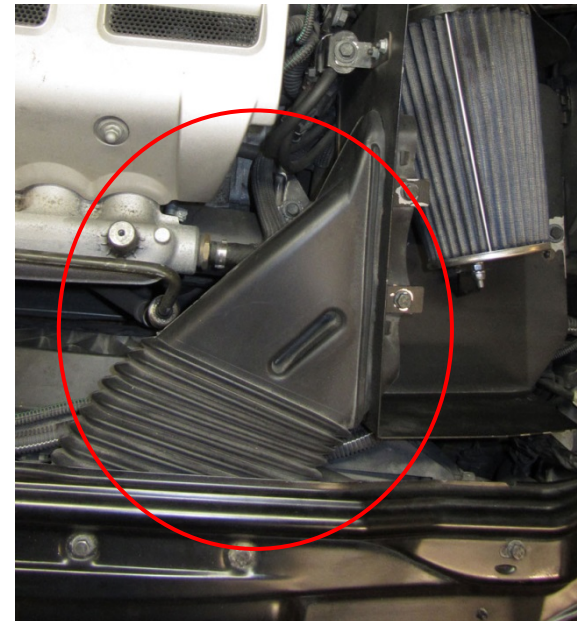
Non R-models

2x Hose clamps Hex 7mm

2x Torx T25



2. Remove the air filter box fresh air snorkel.

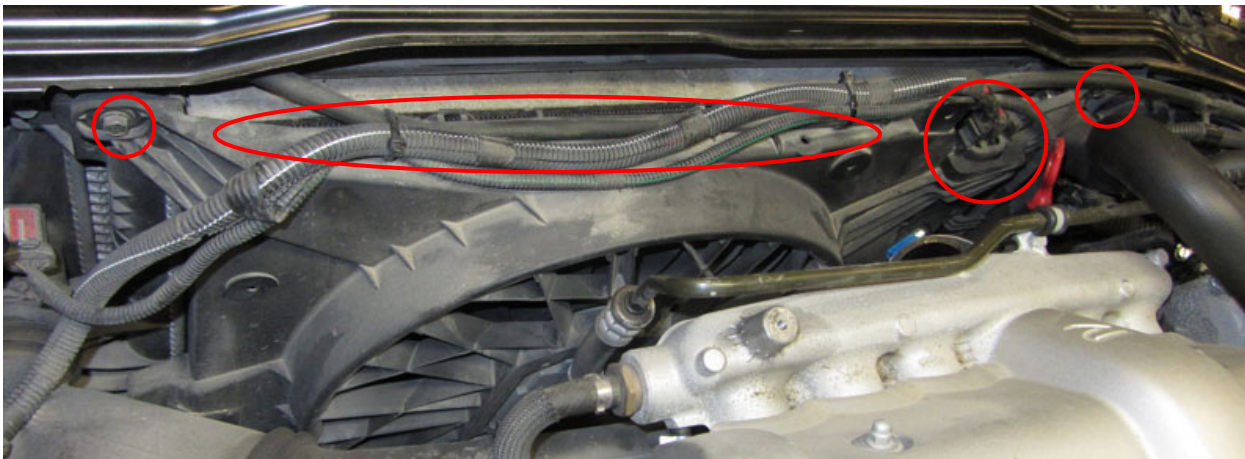


3. Loosen the hose clamp on the intercooler outlet and pull off the plastic pipe, Hex 7mm.
Disconnect the cable to the IAT sensor (only 2003-> models).



4. Loosen the hose clamp on the intercooler inlet and pull of the hose.
Hex 7mm

5. Loosen the hose together with all the cables that are “clicked” into the radiator fan cover. Disconnect the large connector on the fan cover. Remove the 2x Hex 10mm in top of the fan cover.
Now remove the fan cover, lift it upwards in the left corner first. Make sure no cables / hoses gets hooked in to the fan cover while lifting it.



6. 1. Remove the plastic radiator protection cover underneath the car. 2x Hex 10mm, one on each side of the cover.
2. Also make sure to loosen the 2 plastic clips in the front of this plastic.



7. Drain the engine coolant. 1x Hex 13mm.
Or loosen the lower radiator hose.



8. R-models only. Remove hoses to the auxiliary intercooler.

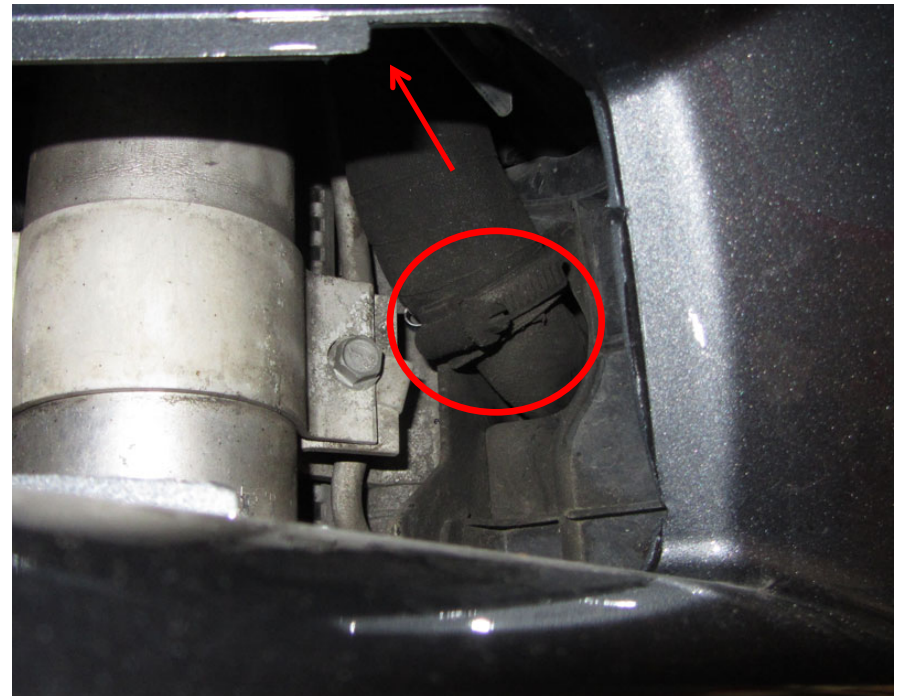
Right side: Remove the fog light plastic cover to reach the lower hose clamp. The upper hose clamp is a bit tricky to reach, but it is possible from under the car. Use a small ratchet with 6mm socket. 2x Hex 6mm

Left side: Remove the hose from under the car. 2x Hex 6mm

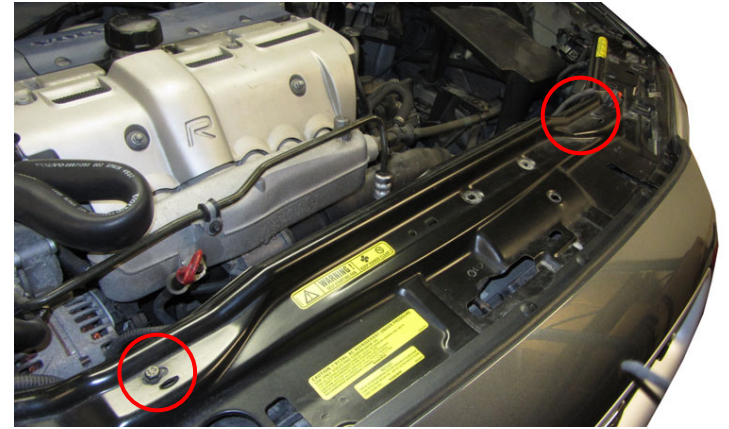
Left side



Right side



9. Remove 2x Hex 10mm on the radiator bulkhead.



10. Disconnect both radiator hoses.

11. Now you will need help from a friend.
1. Your friend holds up both the radiator and intercooler
2. Remove 4x Hex 10mm that are screwed into the condenser.
3. Remove 2x Hex 12mm that are screwed into the chassis.



12.

Now carefully lower the intercooler and radiator together.

Start with lowering the right side first otherwise it is not possible to slide them out from the AC pipe.

Make sure to remove the small coolant hose on top of the radiator.



13.

R-models only. Remove the auxiliary intercooler.

Remove 2x Hex 10mm. Make a gap between the condenser and the front bumper and slide out the intercooler. Be **CARFUL** not to damage the fins on the condenser while doing this!



14.

This step is optional on R-models only. For best performance we recommend to cut of the bracket and plastic air guide on the auxiliary intercooler and reinstall them.



15.

IAT sensor installation.

1. On 2003-> models. Remove the IAT sensor from them OEM intercooler 1x Torx T15. Install in new intercooler with 1pc M5 x 12mm. Make sure not to over tightening this screw!
2. On ->2003 without IAT Sensor install the included block off plate with 1pc M5 x 10mm. Make sure not to over tightening this screw!



16.

On top of the radiator there are two steel brackets. Because of the increased thickness of the intercooler these two brackets needs to be adjusted.

Remove the 2 brackets from the radiator 2x Hex 10mm

The top part of these brackets that screw into the radiator bulkhead needs to be bent about 12mm towards the front of the car.

This is easily done by putting the bottom of the bracket in a vise and bending the top part with a plier.



17.

Put the radiator and intercooler together and enter the 4pcs M6x85mm in the screw holes.

Lift them together into place from underneath the car with the left corner first.

Enter the 4pcs M6x85 screws into the condenser, if you see that the condenser is touching the intercooler at any point put some of the included M6 washers in between them to make clearance.

Now install the 2pcs OEM Hex 12mm screws that holds the radiator package and tighten.



18.

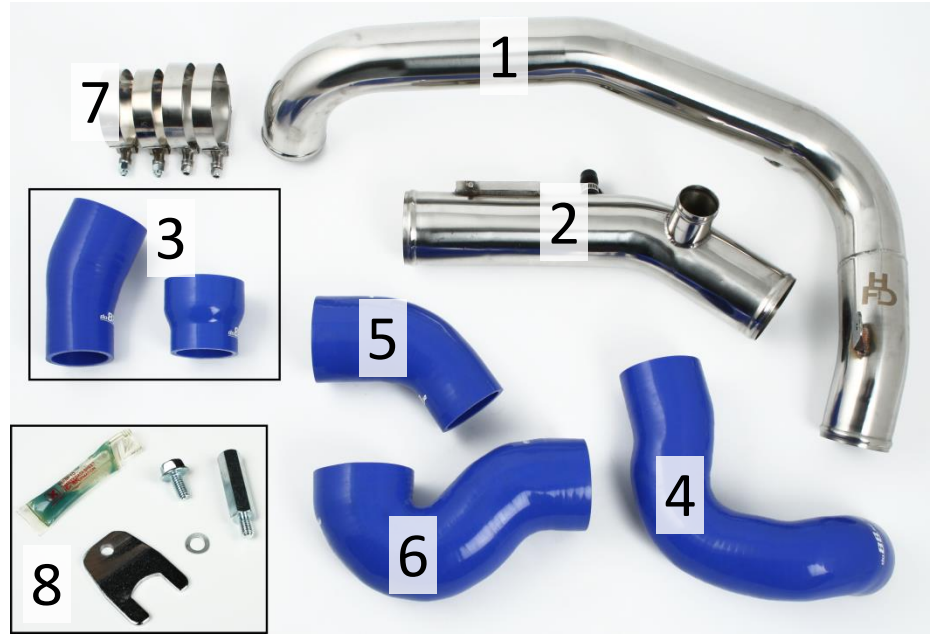
Reinstall all other parts in reverse order.

Installation instruction TR-X70, Intercooler pipe for Volvo V70/S60

01-07

Parts included in kit:

1. Upper intercooler pipe
2. Lower intercooler pipe
3. Hoses turbo - pipe
4. Hose pipe - intercooler
5. Hose intercooler - pipe
6. Hose pipe – throttle body
7. Hose clamps 4pcs 60-80
8. Installation parts for sensors, only for cars with sensors on lower pipe.



Installation:

NOTE! This is only a guide with tips on how to install this pipe kit. A person who installs it must have basic knowledge in mechanics.

Remove the negative battery terminal before installation!

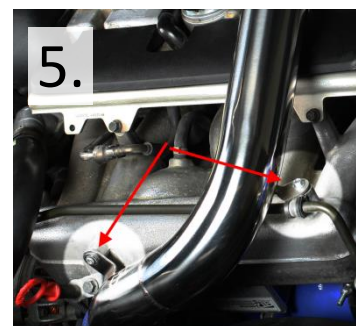
Lower intercooler pipe (Intercooler to throttle body)

1. Remove oem intercooler pipe from car, (see pic. 2.). Keep the hose clamps positioned towards intercooler and throttle body as they will be reused.
2. Install throttle body hose (nr 6) on throttle body with oem hose clamp, position clamp according to picture 3. Tighten loosely, you have to be able to adjust the hose.
3. Install hose (nr 5) on intercooler outlet with oem hose clamp. Tighten loosely, you have to be able to adjust the hose.
4. Install hose clamps (nr 7, 2pcs) on hose ends.
5. Install the lower intercooler pipe (nr 2) in the hoses, adjust hose angles so they fit their connections and the pipe. On cars with vacuum hose connection on lower pipe, remove protective cap and clamp from 10mm connection.
6. Tighten all hose clamps.
7. For cars with sensors on lower pressure pipe see sensor instruction on next page.



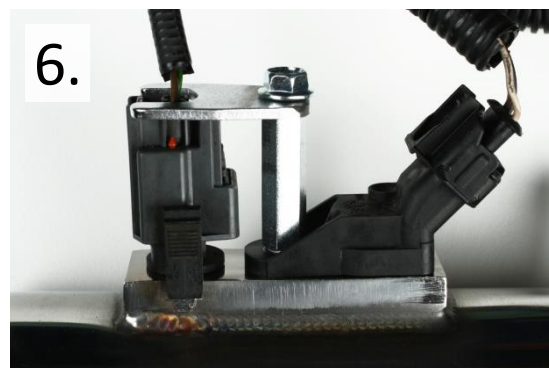
Upper intercooler pipe (Turbocharger to Intercooler)

1. Remove oem pipe from car, (see pic. 4.). Keep oem hose clamps installed at turbocharger and intercooler connections as they will be reused.
2. Install **one** of the hoses with number 3 on turbocharger with oem hose clamp. Tighten loosely, you have to be able to adjust the hose. Which hose you have to use depends on which turbocharger your car are equipped with. If turbocharger have a short straight connection use the longer elbow hose. If turbocharger have a app. 10cm long angled connection use the short hose.
3. Install hose (nr 4) on intercooler inlet with oem hose clamp. Tighten loosely, you have to be able to adjust the hose.
4. Install hose clamps (nr7, 2pcs) on hose ends.
5. Install upper intercooler pipe (nr 1) in the hoses, adjust hoses and pipe to fit the attachment points on intake manifold.
6. Install pipe to intake manifold with both screws (see pic. 5.) If the holes does not match screw holes it might be necessary to grind the holes on one or both pipe brackets.
7. Make sure hoses fit pipe and connections and torque all hose clamps.



Sensor installation instruction. (not for all models)

1. Remove sensors from oem pipe.
2. Install sensors in new pipe installed on car. Use appropriate grease on sensor o-rings. Connect sensor cables.
3. Install distance screw (nr 3) with lock washer (nr 5), use thread locker (nr 1) on screw threads.
4. Install sensor locking plate (nr 4) on top of sensor connector housing with the flange screw (nr 2) (see pic. 6.). Use thread locker on screw thread.



Connect negative battery terminal.

Finished!