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# Volvo S60/V70R Performance Turbo Intake Pipe

## Directions for installation

## Equipment you will need:

- Long flathead screwdriver
- Short flathead srewdriver
- Metric socket set with extensions
- 7 and 8mm sockets or racheting wrench for stock clamps
- telescoping mirror is very helpful
- Several long extensions are also very helpful

## Included in kit:

- 1-3" polished aluminum pipe with barbs
- 1 Snabb MAF to Pipe reducing coupler
- 1 Snabb pipe to turbo coupler with T for PTC heating element
- 1 ABA 70mm-95mm clamp
- (2) ABA 64mm-89mm clamps
- 1 ABA 57mm-83mm clamp
- (2) 20-32mm clamps for PTC elbow and PTC coupler (all clamps are Swedish made, 316 stainless steel)

Please note that modification of your car is done at your own risk!

**Expected time to complete:** 2-4 Hours. Difficulty level- moderate.

**Tech tip:** Our silicone connectors are very thick and can be difficult to install. Use a small squirt of WD40 on the inside of the silicone to lubricate it just prior to installing each piece. This will make the installation significantly easier.

### **Applications:**

04-07 S60R, 04-07 V70R, 05-09 S60T5, any P2 vehicle with the R airbox and K24 turbo

#### **Instructions:**

### PART 1. REMOVAL AND MODIFICATION OF PTC

\*\*Before you start it is really important that you allow the car to cool off for at least a couple of hours before you start working on it. Alternately you can place a fan or two on the engine to help cool it off. Note: It is beneficial for it to be a little warm. It is actually much easier to remove the plastic pieces like airbox and factory pipe. Conversely it is not recommended to work in winter temperatures as the plastic becomes brittle and easy to damage\*\*

- 1. Remove cover that is directly behind the headlight and to the right of the airbox by depressing the three tabs and pulling up to remove it, this will allow access to the 8mm bolt on the driver's side of the airbox.
- 2. On the passenger side of the airbox remove the two 8mm head screws (on top) that secure the snorkel to the airbox. Pull the snorkel away from the airbox to release the tabs that are out of site and move the snorkel to the side.
- 3. Release the tab on the MAF connector and pull connector up and away from MAF. Use the screwdriver or 7mm driver to loosen the clamp that holds the factory Turbo intake pipe to the MAF.
- 4. Remove the (3) 8mm head bolts that secure the airbox at the base. Release TCV from drivers side of the airbox and move to the side. You are now ready to remove the airbox. Pull airbox up and out, while pulling away from stock Turbo intake pipe until it is completely free.
- 5. Remove the 2 vacuum lines from the base of the stock pipe. There is one vacuum line on each side of the PTC. They are not held on with clamps you only need to twist them slightly to break them free and then pull hard to get them off the plastic barbs on the pipe.
- 6. Remove Breather line (Rubber elbow) from the large PTC elbow using caution not to break the hard plastic pipe that leads to the factory oil separator. You will need to destroy the factory oetiker clamp that is on the PTC elbow to do this which is why you get a replacement in the kit. You can use a small flathead screwdriver to deform the clamp enough to get it off. Then you can separate the elbow from the PTC nipple by inserting a small flathead between the hose edge and the small lip or shelf on the PTC that the elbow sits against, pry upward gently and then pull the elbow off the PTC. Next remove the electrical connection to the PTC heater. There is a wire spring clip at the base of the connector that you will need to depress and hold down while you pull the connector off. You will also need to depress the spring clip when you reinstall the connector.
- 7. Remove clamp (that holds pipe to the turbo inlet) from base of pipe. You may not be able to see the clamp without a mirror or alternately you can jack up your car and remove the splash guard to get a good look at how it is positioned. (Typically the head of the clamp is tilting back slightly with the head facing up and toward the firewall) Use a flathead screwdriver, 7mm ratcheting wrench or a wobble head 7mm socket with an extension to loosen the nut. Once it's very loose (If it's not very loose you wil not be able to get the hose off) and you're sure nothing else is attached to the pipe, pull it off the turbo inlet with a lot of force and at an angle then remove it from the engine bay. We have found that it is easiest to access the clamp from over the top of the engine to the passenger side of the upper torque mount.
- 8. If you did not get a PTC preinstalled from Snabb:
  - **A**. Remove the PTC from the factory intake pipe, cut the odd shape grommet off the PTC and clean the PTC well with brake cleaner or soap and water making sure that the inner orifices are completely cleaned out.
  - **B**. Using a dremel with a cutter wheel/sander, a grinding wheel, or a belt sander, grind down the bottom lip of the PTC so that it will fit into the T on the Pipe to turbo silicone connector. Sand any rough edges off the lip. The lip can have roughly .5 millimeters left on it after you are done, this will help it seal even better.
  - **C.** Push the PTC into the connector and clamp it with the electrical connection facing the front of the car. Do a test-fit to verify that it is in the correct position. There are sometimes small variations in the lengths of silicone connectors. If the PTC sits too high because of such a variation you can simply trim it down slightly with a brand new razor blade, using caution not to cut the hose anywhere else.

### PART 2. INSTALLATION OF CUSTOM INTAKE PIPE

- 1. Attach the "Pipe to turbo" silicone reducer, and the 57mm-83mm clamp to the turbo. (As noted above: use a small amount of WD40 to lubricate the inside of the hose to aid installation on all the hoses) **Loosely** tighten the clamp over the turbo inlet (you don't want to tighten it all the way until both hoses are installed and the pipe is positioned correctly away from the brake lines and coolant lines.) Slide a 64-89mm clamp over the silicone then carefully (so as not to scratch it) slide the pipe into the connector and position so the opening of the barbs are pointing toward the engine. Attach the PTC electrical connection.
- 2. Attach the PTC Elbow to the PTC and clamp with the included 1" clamp to keep it in place Note. You may need to rotate the elbow slightly clockwise to make it match up to the new/slightly altered location of the PTC
- 3. Attach vacuum lines to the appropriately sized barb on the pipe.
- 4. Install the upper hose and clamps loosely then reinstall the airbox and connect the upper hose to the airbox. Once you are confident that the pipe is: centered, fully pushed into the turbo hose, not touching any brake lines, coolant hoses or anything else, tighten down the two remaining clamps. If the pipe is touching anything reposition it so that there is clearance and then tighten the remaining clamps.
- 5. Finally take a look through everything to make sure that all your vacuum lines are hooked up correctly, the PTC is seated correctly and all the hoses and pipes are connected tightly. Double check that the pipe is installed so that it is not touching any brake lines etc. and that the clamps are very tight. \*\*If the pipe is not fitted right then you will need to loosen the clamps and reposition it.\*\* If everything looks good take your car for a spin to and enjoy your increased throttle response, spool and turbo sound!

Thank you for your purchase and Enjoy!