AVO Silicone Inlet Pipe Installation Guide PN# S1B03G41BLUJ [blue] PN# S1B03G41BLKJ [black] PN# S1B03G41REDJ [red]

Applied Models: 2005-2006 Legacy GT, Outback XT



You are now the proud owner of a highly tested and proven AVOTurboworld upgrade kit. While you have made a wise choice in selecting this upgrade kit, below we have some suggestions and procedures for you to follow in ensuring its successful installation.

Tools Required

Metric socket and ratchet set Flathead screwdriver Philips head screwdriver



A) Orientation

Before grabbing a bunch of wrenches and attacking your car take a moment to

STOP AND THINK

Read these supplied installation instructions thoroughly from start to finish – do you understand all of the mechanical operations required? Are you sure that you can adequately complete all of the mechanical operations required?

Prior to installation, make sure that your car is in excellent mechanical condition and that there are no outstanding faults or problems. This part has been designed to work only with a car that is in good state of repair. Pre-existing problems or faults can result in improper operation and/or failure of your engine. This is your responsibility to ensure. No matter how carefully we design our Parts, this is one area we have no control over and cannot be held responsible.

Always use the highest grade of fuel available in your area. This is essential for correct operation of your car and your new Upgrade parts. Failure to use high-octane fuel can result in engine damage.

Installation

ALLOW THE ENGINE TO COOL DOWN COMPLETELY BEFORE STARTING WORK.



Remove 4 press-in retaining clips from the plastic upper engine cover. Removal of these clips requires a 1/2 turn counter-clockwise while applying very light pressure with a Phillips head screwdriver. Once the center pin pops up the clip can be removed. Remove Plastic engine cover.



Remove the small vacuum hose from the top of the factory Blow-Off-Valve (BOV).

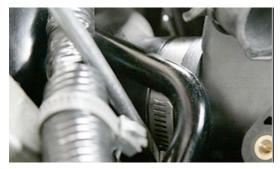


Remove **two** 10mm headed BOV retaining bolts that hold the BOV to the the factory intercooler.

Compress the spring clip and carefully **remove** the factory BOV from the larger vent return hose.



Remove the 12mm bolt from the intercooler mount bracket.



Remove the throttle body hose clamp on the intake manifold side of the intercooler



Remove the two 12mm nuts connecting the turbo to the intercooler (take care to not drop the nuts). On a stock intercooler this is a rubber o-ring used to seal the TMIC to the turbocharger, do not lose this.



Remove the stock intercooler from the engine. You should cover the turbo compressor outlet with a clean rag to prevent any debris getting into the turbocharger while you are working.



Remove the short rubber intake pipe that goes from the stock air box to the stock inlet pipe.

NOTE: This is a good time to remove the air box if you are going to fit an AVO Power Filter Kit. If you to plan to fit a Power Filter Kit (or similar) you will need to remove the metal adapter fitting from the inlet hose.



Unbolt this sensor bracket and keep it to the side during the install. Take note of where the vacuum line goes.



Loosen the hose clamp on the OEM inlet pipe.



You will also need to remove the crank case breather oil line.



Remove the Blow off valve return hose from the intake pipe - you will need to remove this 6mm bolt



This is what the blow off valve pipe looks like when removed.



Remove the intake pipe by pulling it out the front.

Before fitting the AVO Intake pipe you should spray some CRC/WD40 on it, as it will help the pipe slide in without damaging the pipe.



Fit the steel pipe to the blow off valve return pipe



The AVO inlet pipe is quite a bit bigger and longer than the standard inlet pipe. It is designed this way for a variety of

different turbocharger setups. Trim for best

fitment within your needs.

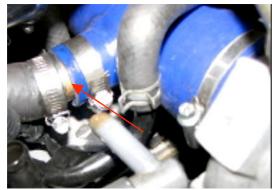




Fit the intake pipe to the turbo - tighten the hose clamp at the turbo end first.

There is a tool that resembles a dentists pick, this is very helpful for fitting the inlet hose to the turbocharger, as the fitment is very tight.





Fit the blow-off return hose to the blow-off valve intake pipe.



US Market Legacy models only: Remove this PCV sensor and hose from the inlet pipe. Unplug the wiring harness from it, and run a small wire across the two pins.

(You could also leave the sensor plugged in and tie it up out of the way.)



Fit the breather line from the front of the intake pipe to the crank case breather here:



Fit the bracket and the sensors back to the intake manifold – it is a tight fit. Make sure the breather and vacuum lines are correctly fitted. You will need to add the t-joint as per the photo.



Fit the crank case breather line to the front off the intake pipe. If you are running a FMIC you can run it under the intake manifold. If you are running a TMIC you will need to go around the intake manifold.



You will need to trim the engine cover to clear the breather line

Tech Tip: If you install a spacer here (photo on the right), you can get enough clearance between the hose and the engine cover so that you do not need to trim it.





An alternative method for routing the crankcase breather hose is pictured here.

Note: After completion and removing your tools, double check for leaks and any loose fittings. Correct if necessary. In order to maintain the reliability of your AVOTurboworld upgrade part, you should inspect all components during the recommended engine servicing schedules; and rectify or replace any damaged components as necessary.

Job Done-Enjoy your car!

NOTE! – If in any doubt over the operation or installation of your parts contact AVOTurboworld, or your selling dealer for advice and assistance in troubleshooting your questions.