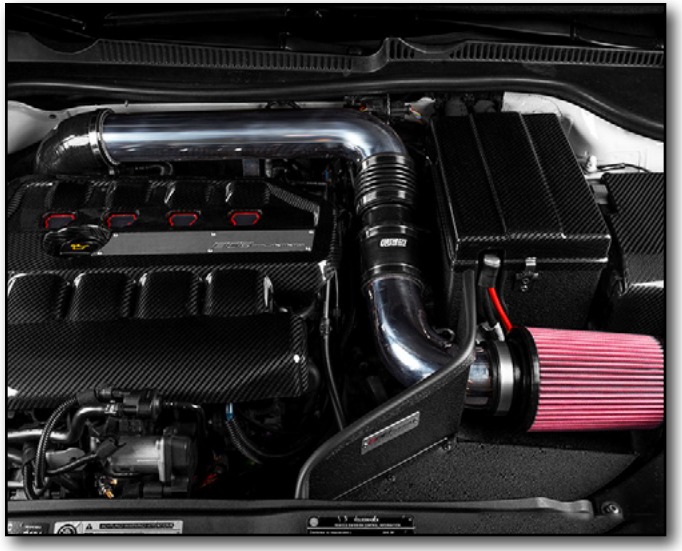
VW MK6 Luft-Technik Intake System Installation Instructions - Click HERE to Shop

Skill Level
1 - Easy

Basic Skills Required











Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

INTRODUCTION

Our Luft-Technik intake systems offer the following features:

- CNC bent aluminum pipes available in a wrinkle black powder coat finish
- Open-element design
- Dyno proven results
- In-house designed by ECS Tuning Engineers
- 4-Ply silicone couplers
- High flow cotton gauze air filter
- All mounting hardware included
- Easy installation

Our ECS Tuning Luft-Technik Intake Systems have been meticulously designed in-house to provide superior fitment and performance. Each kit comes with all of the components you'll need for a quick and easy installation.

Take your time and enjoy the project, it'll only take you a couple of hours or less. Read these instructions completely first, and with the project overview under your belt, you'll breeze right through it. Just to make sure you have everything you need, reference the required tool list on Page 5 before you begin. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

TABLE OF CONTENTS

Kit Contents pg.3
Required Tools and Equipment pg.5
Installation and Safety Information pg.6
Removing the Stock Intake System pg.7
Installing the New Intake System pg.14
Secondary Air Filter Kit Contents pg.21
Installing the Secondary Air Filter Kit pg.22
Carbon Fiber Cleaning and Care pg.24

KIT CONTENTS



Luft-Technik Heat Shield Assembly (Wrinkle Black Powdercoat)
(QTY 1)



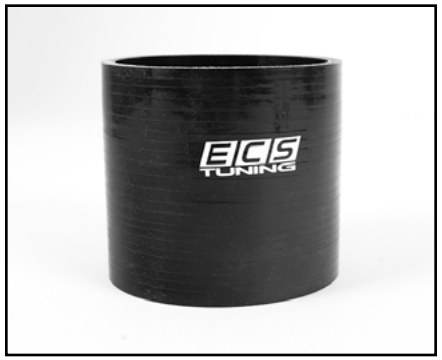
Turbo Inlet Pipe & Air Filter Pipe (available in polished aluminum, wrinkle black aluminum, or carbon fiber - **QTY 1 each**)



Turbo Inlet Silicone Coupler
(QTY 1)



High Flow Air Filter
(QTY 1)



Silicone Straight Coupler
(QTY 1)



Rubber Accordion Coupler
(QTY 1)

KIT CONTENTS (CONTINUED)



60-80mm Hose Clamp
(QTY 1)



70-90mm Hose Clamp
(QTY 5)



Bushing
(QTY 1)



Nut
(QTY 1)



Grommet
(QTY 1)



Heat Shield Screw
(QTY 2)



Turbo Inlet Pipe Bolt
(QTY 1)

REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

Standard Automotive Tools

- Protecta-Sockets (for lug nuts) ES#2221243
- **⅜" Drive Ratchet** ES#2765902
- ⅜" Drive Torque Wrench ES#2221245
- **⅜" Drive Deep and Shallow Sockets** ES#2763772
- **⅜" Drive Extensions** ES#2804822
- Hydraulic Floor Jack ES#240941
- **Torx Drivers and Sockets** ES#11417/8
- ½" Drive Deep and Shallow Sockets ES#2839106
- ½" Drive Ratchet
- ½" Drive Extensions
- ½" Drive Torque Wrench ES#2221244
- ½" Drive Breaker Bar ES#2776653
- Bench Mounted Vise
- Crows Foot Wrenches
- Hook and Pick Tool Set ES#2778980

Required For This Install

- **¼" Drive Ratchet** ES#2823235
- **¼" Drive Deep and Shallow Sockets** ES#2823235
- **¼" Drive Extensions** ES#2823235
- Plier and Cutter Set ES#2804496
- **Flat and Phillips Screwdrivers** ES#2225921
- Jack Stands ES#2763355
- Ball Pein Hammers
- Pry Bar Set ES#1899378
- Electric/Cordless Drill
- Wire Strippers/Crimpers
- Drill Bits
- Punch and Chisel Set
- **Hex Bit (Allen) Wrenches and Sockets** ES#11420
- Thread Repair Tools ES#1306824
- Open/Boxed End Wrench Set ES#2765907

Available On Our Website

Specialty Tools

- **Spring Clamp Pliers** ES#2702616
- **VAG Connector Release Tool** ES#2628676

INSTALLATION NOTES

- **RH** refers to the ***passenger side*** of the vehicle.
- **LH** refers to the ***driver side*** of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety, please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- Whether lifting a vehicle using an automotive lift or a hydraulic jack, be sure and utilize the factory specified lift points.
- Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- **ALWAYS** support the vehicle with jack stands.
- **ALWAYS** read and follow all safety information and warnings for the equipment you are using.



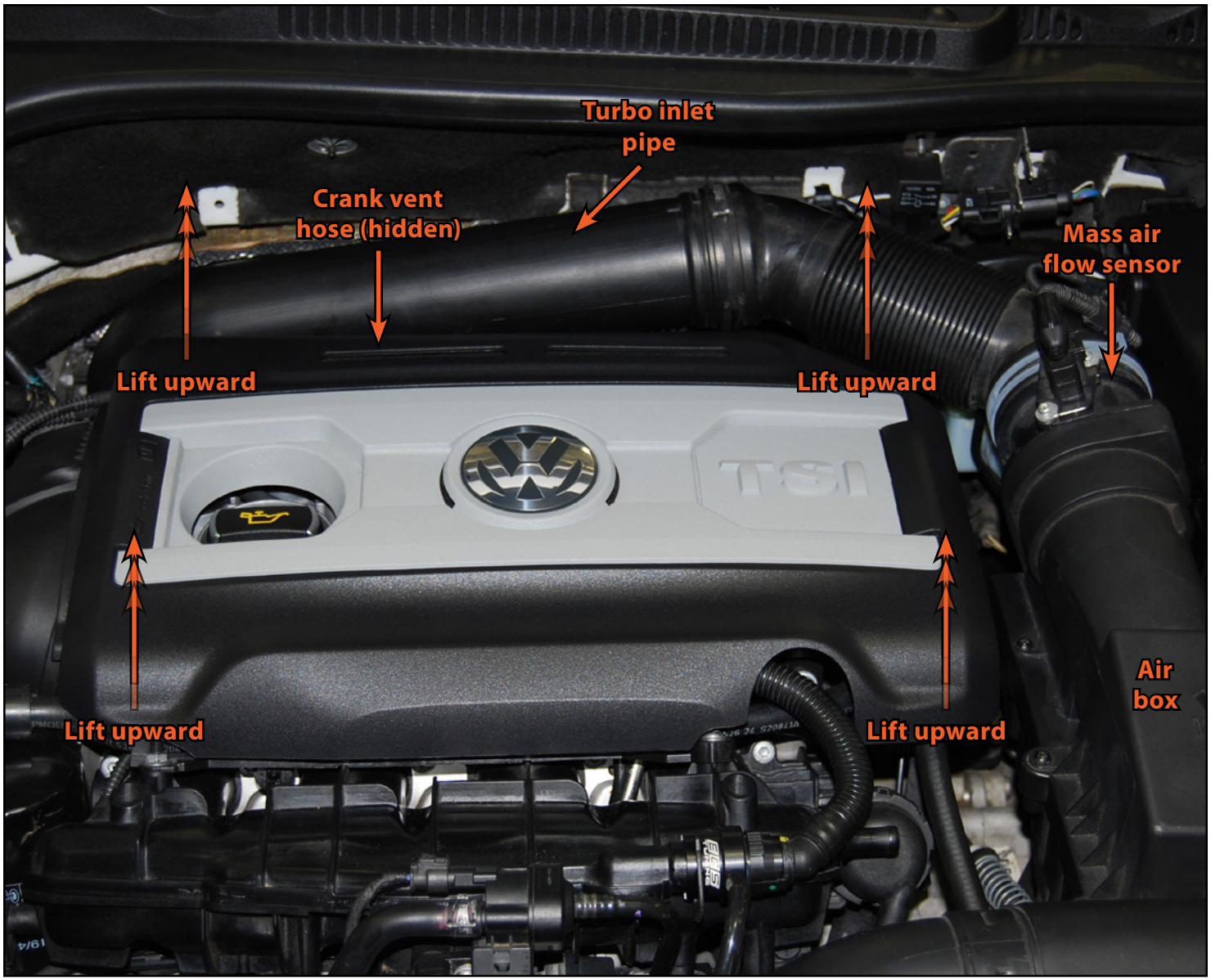
NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.

REMOVING THE STOCK INTAKE SYSTEM

Step 1:

Pull upward on all four corners of the engine cover to release the grommets, then remove it from the vehicle.

In the next few pages we will be removing the stock air box, mass air flow sensor, and turbo inlet pipe. Before we begin, take a moment to familiarize yourself with these components and their locations.

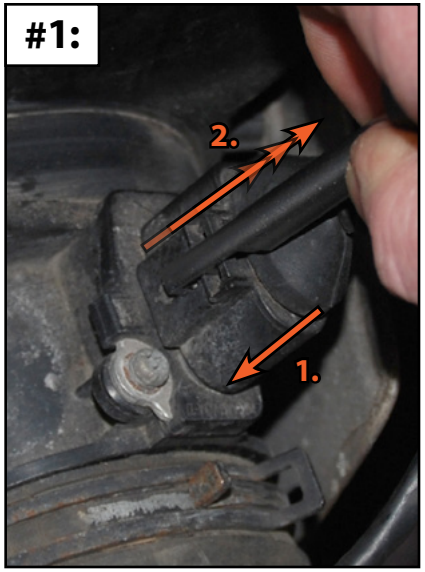


REMOVING THE STOCK INTAKE SYSTEM

Step 2: VAG Connector Release Tool

Disconnect the Mass Air Flow sensor electrical connector using our Schwaben Connector Release or other suitable tool. The trick to removing these "push and pull" style of connectors is to first push and hold the connector down, which will release the tension between the locking tab and the catch on the sensor, then insert the tool and pull up. This will raise the locking tab in the connector just far enough to clear the catch on the sensor and it will slide off with ease (see **photo #1** and **photo #2** on the right).

#1:



#2:



Step 3: Spring Clamp Pliers

Release the tension on the spring clamp that secures the flexible intake tube to the Mass Air Flow sensor (**photo #1**).

Pull the flexible intake tube off of the Mass Air Flow sensor, then remove the spring clamp (**photo #2**).

#1:



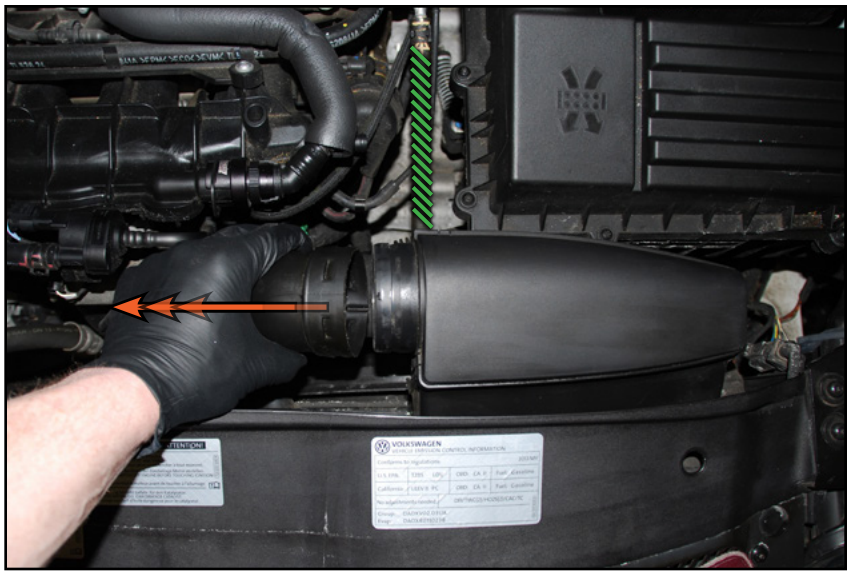
#2:



REMOVING THE STOCK INTAKE SYSTEM

Step 4:

Pull the air box inlet tube off of the front air scoop.



NOTE

Note the location of the coolant air bleed hose (//////////), this will be relevant later on.

Step 5: 5mm Hex (Allen)

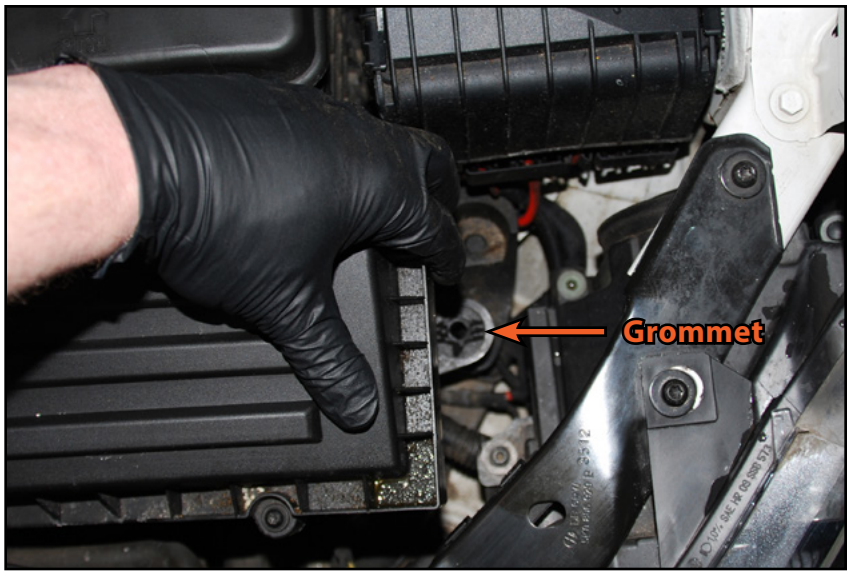
Loosen the hold down screw for the original air box. This is a "trapped" screw and will remain in place in the air box after it is loosened.



REMOVING THE STOCK INTAKE SYSTEM

Step 6:

There are two rubber hold down grommets on the air box. First, pull up on the LH (driver's) side of the air box to release the grommet on the end, then using one hand on the front and one on the back, pull up on the center of the air box to release the grommet on the bottom side.

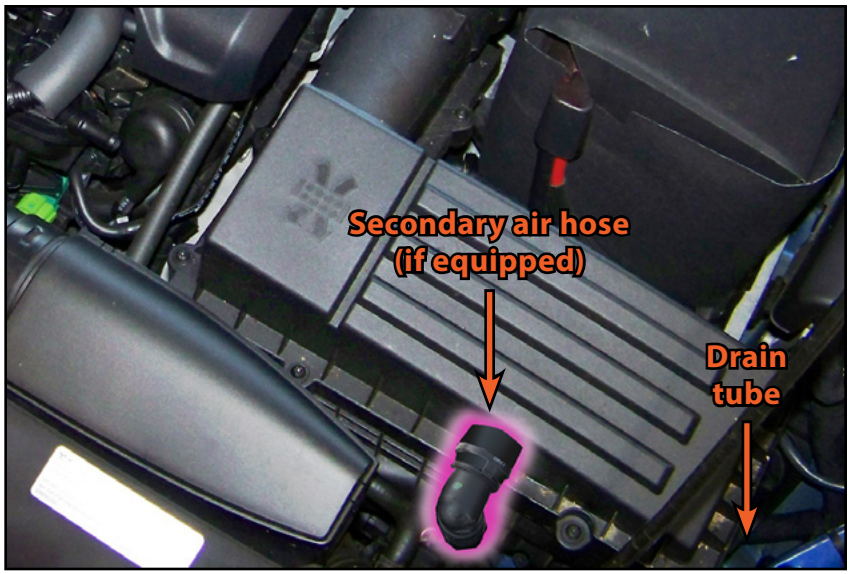


NOTE

Pull up on the air box *just enough* to release the grommets but do not attempt to completely remove it at this time.

Step 7:

Look down between the air box and the fender and you will see where there is a drain tube attached to the bottom. It is very difficult to release the retaining clip, but by patiently following the next two steps, the air box can be removed without disconnecting this drain tube.



NOTE

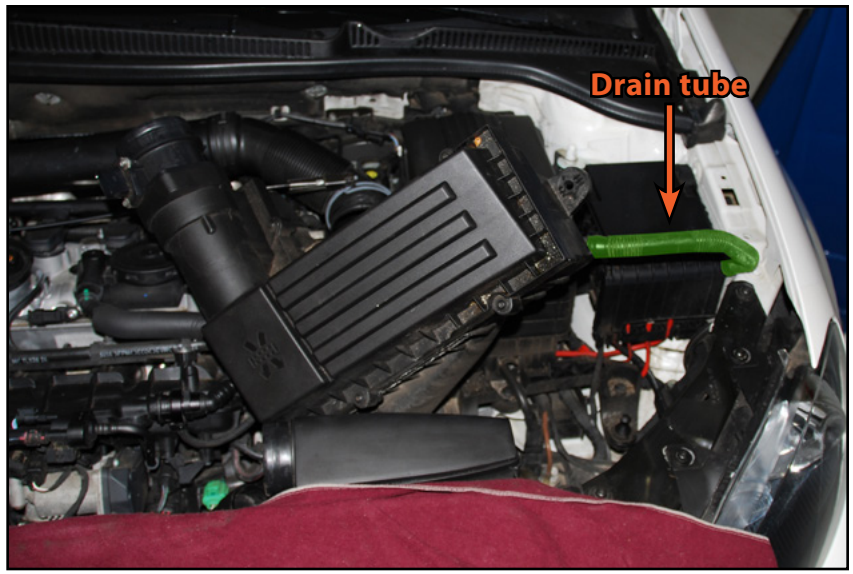
Some vehicles may also have a secondary air tube connected to the front of the air box lid. If you are not sure, carefully inspect your air box and remove this tube if equipped.

REMOVING THE STOCK INTAKE SYSTEM

Step 8:

Lift the air box up slowly on the LH side and carefully guide the drain tube out.

Rotate the air box upside down so the curved inlet tube can be pivoted around the small coolant air bleed tube we identified earlier. You will now be able to lift the entire air box assembly out of the vehicle.



Step 9: T25 Torx

Remove the front air scoop by removing the two securing screws (arrows) and pulling it rearwards off of the core support.



REMOVING THE STOCK INTAKE SYSTEM

Step 10: T30 Torx

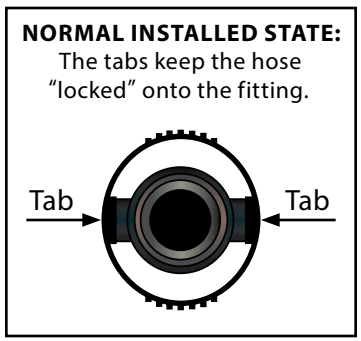
Remove the bolt securing the turbo inlet pipe to the heat shield, behind the rear of the cylinder head (shown here with the flexible intake tube removed for clarity).

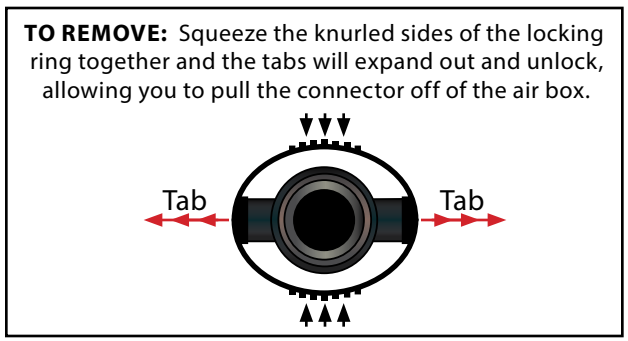


Step 11:

Remove the crank vent hose from the turbo inlet pipe by pinching the retaining tabs together, then pulling it back off the pipe (outlined in the illustrations below).



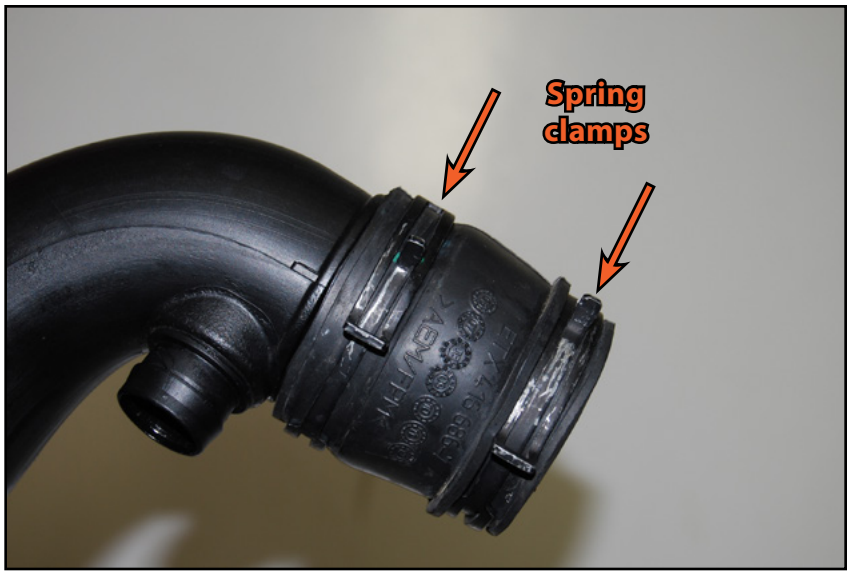




REMOVING THE STOCK INTAKE SYSTEM

Step 12:

Inspect the picture on the right of the turbo inlet pipe removed and the pipe to turbo coupler on the end. There are two spring clamps on the coupler which are difficult to see. You will need to release the tension on the lower clamp in order to remove the turbo inlet pipe.



Step 13: Spring Clamp Pliers

Release the tension on the lower clamp for the turbo inlet pipe coupler and then pull the turbo inlet pipe and coupler off and set them aside.



INSTALLING THE NEW INTAKE SYSTEM

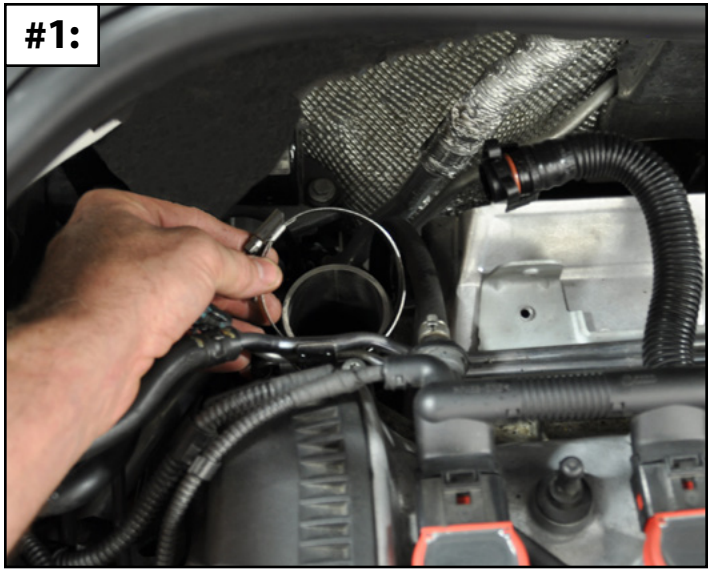
Step 1:

Place the 60-80mm hose clamp (must be loosened for this step) over the turbo inlet (**photo #1**). Orient the head of the clamp screw exactly as shown in the photo so that it won't interfere with the coolant pipes on the back of the cylinder head. It will also be easy to access when we need to tighten it later on.

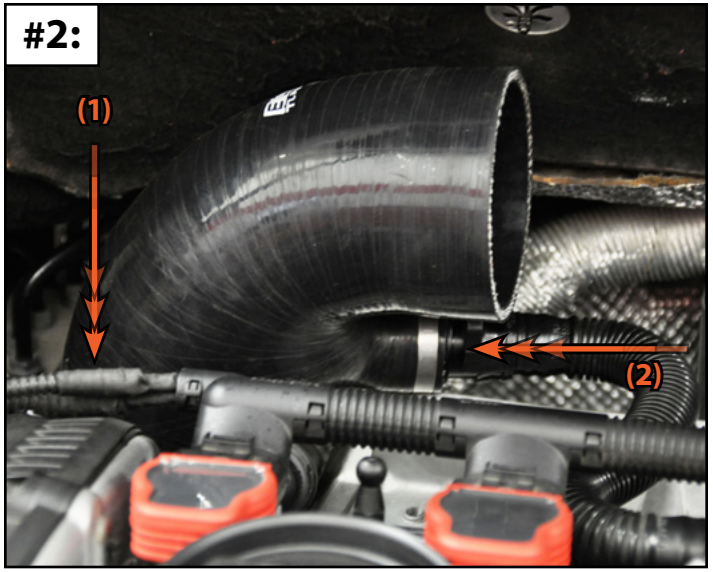
Push the turbo inlet coupler onto the turbo inlet, then attach the crankcase breather hose by pushing the connector onto the integrated receiver and snapping it into place (**photo #2**).

Place one of the 70-90mm hose clamps over the turbo inlet coupler, then insert the straight end of the turbo inlet pipe into the end of the coupler (**photo #3**).

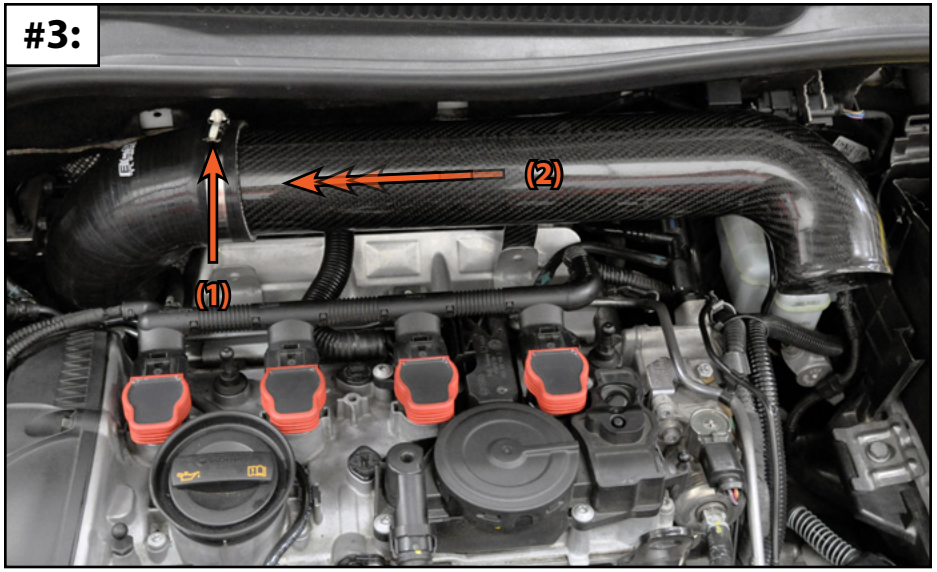
#1:



#2:



#3:



INSTALLING THE NEW INTAKE SYSTEM

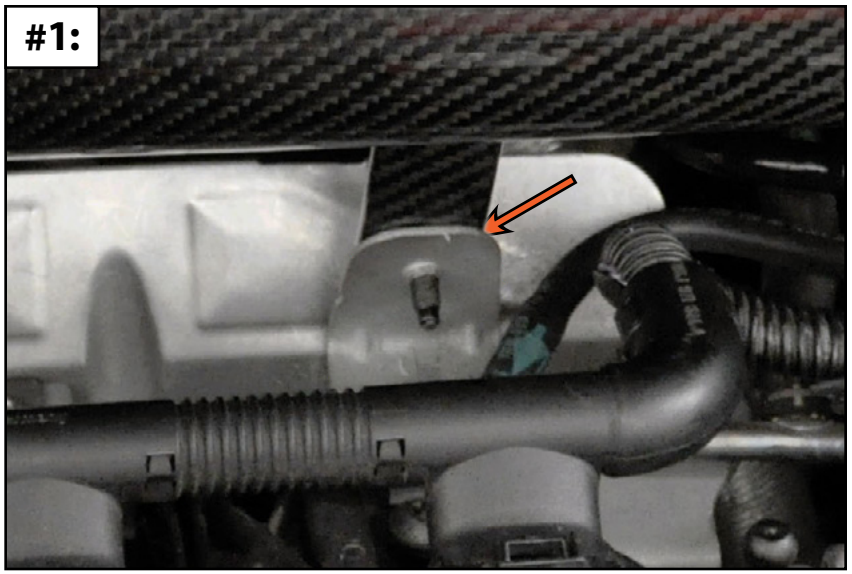
Step 2: T30 Torx, Flat Blade Screwdriver or 7mm Socket & Ratchet

Position the bracket tab on the turbo inlet pipe *behind* the bracket tab on the exhaust heat shield, then insert the mounting bolt through the brackets as shown and tighten the bolt.

NOTE

GLI customers may need to bend the steel tab which is attached to the engine (arrow) by approximately 20 degrees in order to achieve superior fitment. We do not recommend bending the tab on the aluminum pipe due to the risk of damaging the pipe.

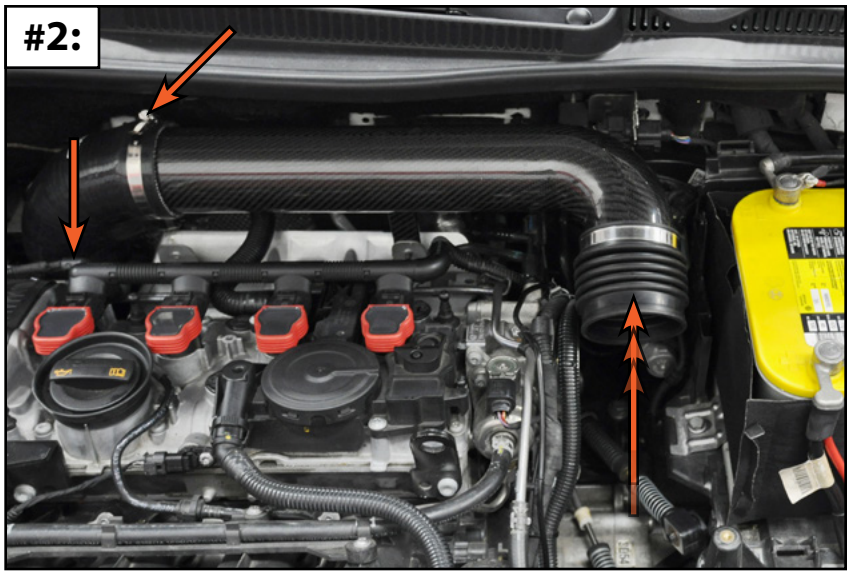
#1:



Tighten the clamps until they are snug (arrows in **photo #2**). Remove the battery cover in order to gain better access to the surrounding area. Place a clamp onto the accordion coupler, then place the coupler over the end of the turbo inlet pipe, but do not tighten the clamp at this time.

Be careful not to over tighten any of the clamps as this could crack the carbon fiber.

#2:



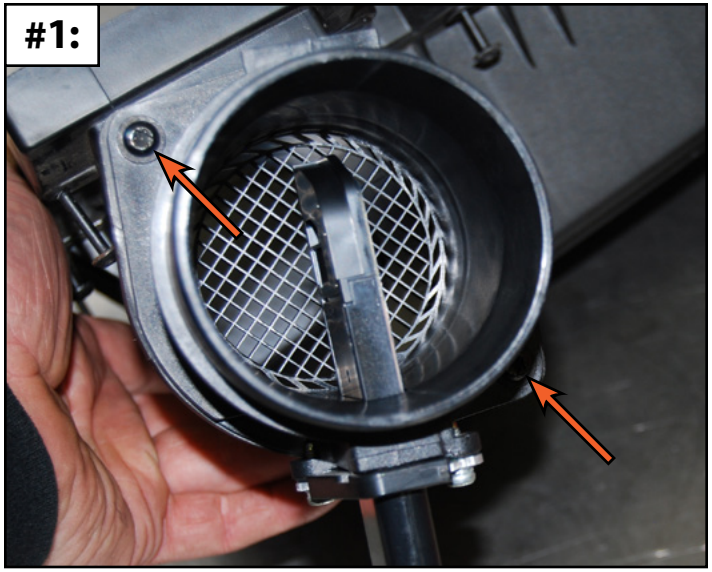
INSTALLING THE NEW INTAKE SYSTEM

Step 3:

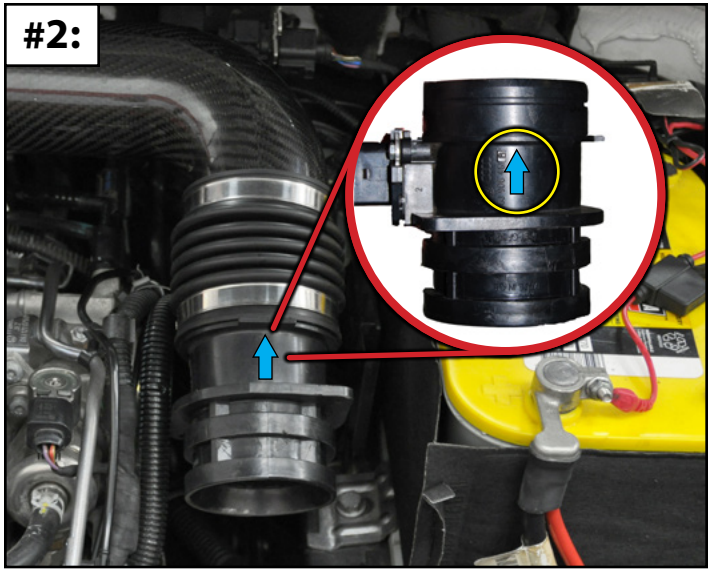
Remove the two T25 screws which secure the MAF sensor to the stock air box (arrows in **photo #1**).

Place a clamp onto the accordion coupler, then insert the MAF sensor into the coupler, but do not tighten the clamp at this time (**photo #2**). Plug the electrical connector into the MAF sensor.

#1:



#2:



NOTE

The MAF sensor has an arrow on the side (highlighted and circled in **photo #2**) to indicate direction of air flow. The MAF Sensor has also been installed with the connector facing down for a cleaner look.

Slide the straight coupler onto the other end of the mass air flow sensor as shown (**photo #3**).

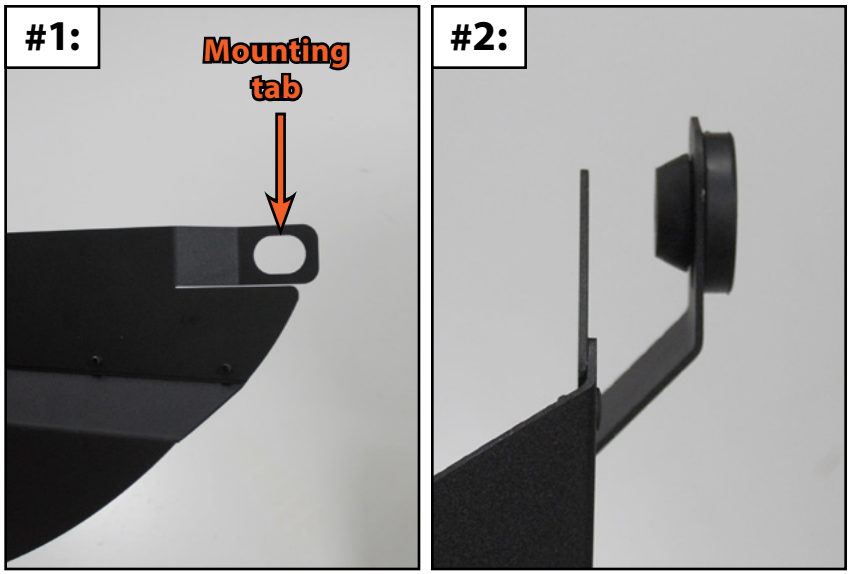
#3:



INSTALLING THE NEW INTAKE SYSTEM

Step 4:

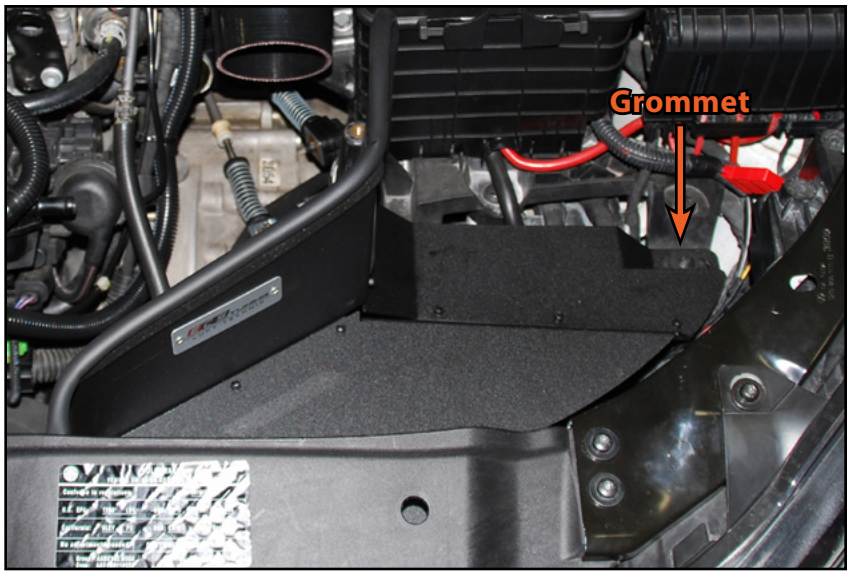
Locate the mounting tab on the heat shield and install the heat shield mounting grommet into place with the larger end on the bottom as shown.



If your car is equipped with secondary air injection, you **MUST** follow the instructions beginning on Page 21 to install the SAI filter before you proceed.

Step 5:

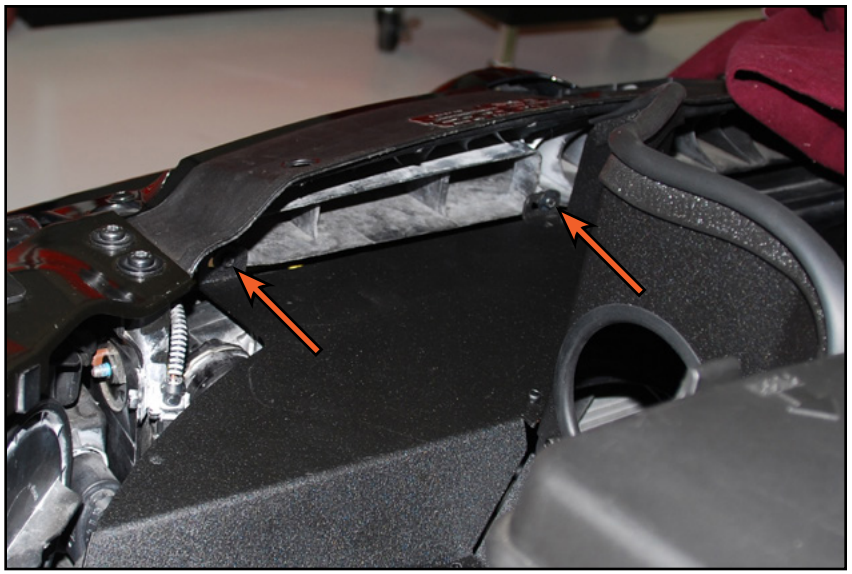
Install the heat shield into place, locating the front underneath the edge of the radiator core support and pushing the grommet onto the mounting stud.



INSTALLING THE NEW INTAKE SYSTEM

Step 6: T25 Torx

Install and tighten the two heat shield mounting screws into the radiator core support until they are snug.



Step 7:

Loosely install the two remaining 70-90mm hose clamps over the straight coupler.



INSTALLING THE NEW INTAKE SYSTEM

Step 8:

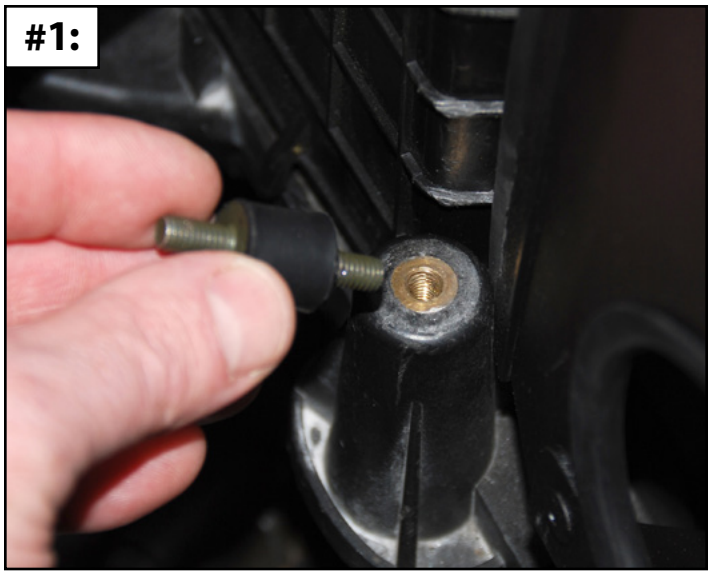
Thread the air filter pipe mount bushing into the original air box mounting post (**photo #1**).

Push the air filter pipe through the opening in the heat shield, making sure the seal stays in place (**photo #2**).

Rotate the air filter pipe down and insert it into the straight coupler, making sure the mounting tab is located on top of the stud of the mount bushing. Then install and tighten the air filter pipe mounting nut until it is snug (**photo #3**).

Adjust the straight coupler, mass air flow sensor, and accordion coupler as necessary for proper alignment, allowing the accordion coupler to flex as needed during engine operation. Tighten all four hose clamps until they are snug (**photo #4**).

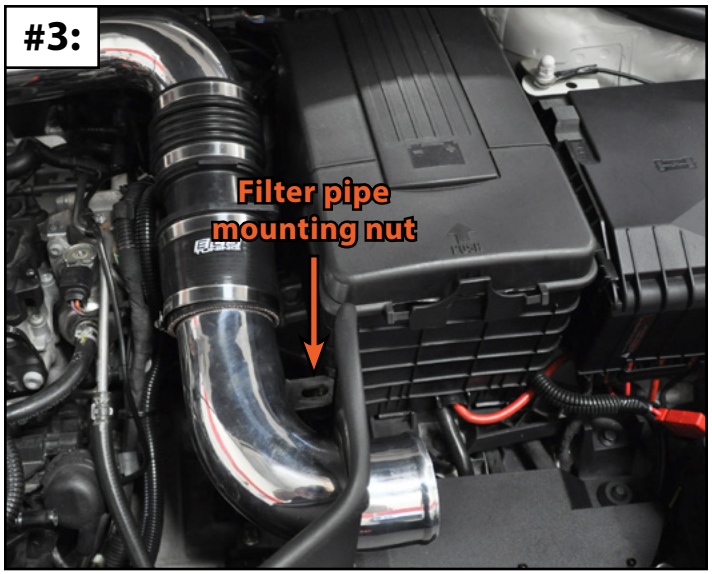
#1:



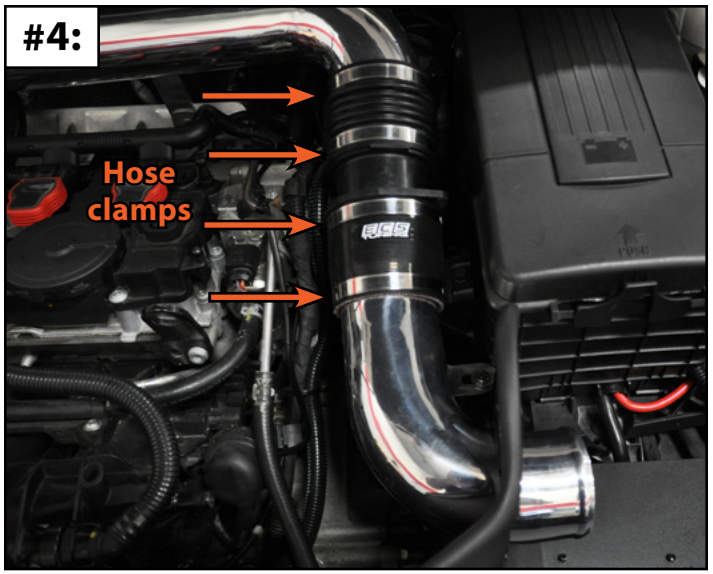
#2:



#3:



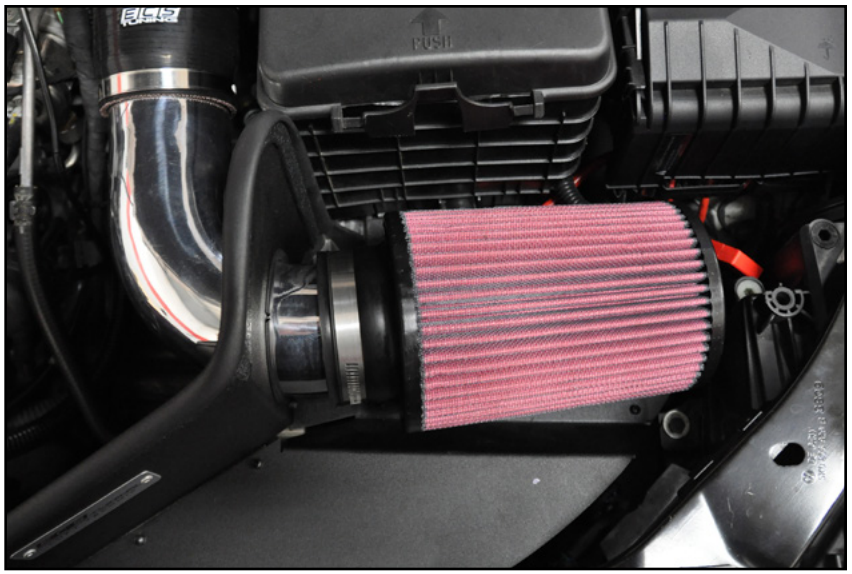
#4:



INSTALLING THE NEW INTAKE SYSTEM

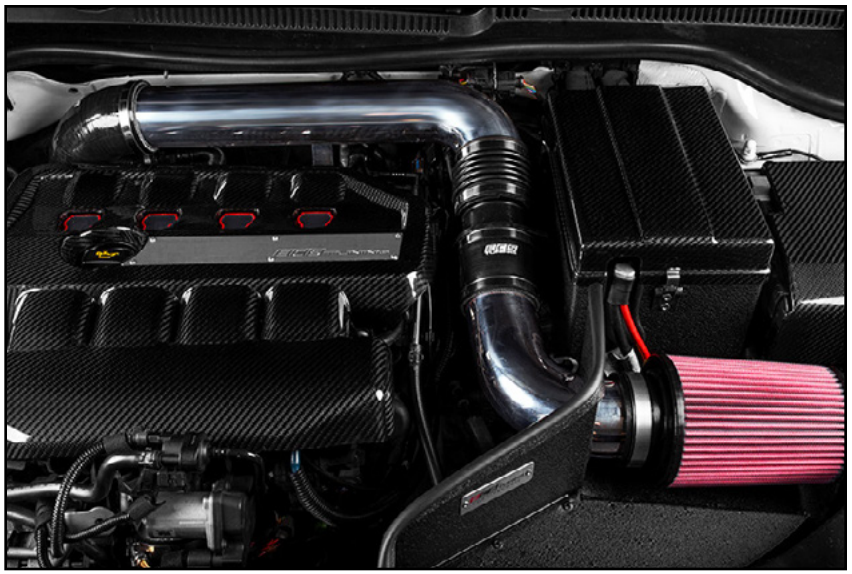
Step 9: Flat Blade Screwdriver or 7mm Socket & Ratchet

Push the air filter over the end of the air filter pipe and tighten the clamp until it is snug.



Step 10:

Reinstall your battery cover and engine cover.



Congratulations, your intake system installation is complete!

SECONDARY AIR FILTER KIT CONTENTS

These components are available for purchase separately if your vehicle is equipped with Secondary Air Injection.
The kit can be found on our website as ES#2864860.



SAI Filter and Clamp



SAI Filter Mounting Bracket



SAI Filter Adapter



Mounting Grommet

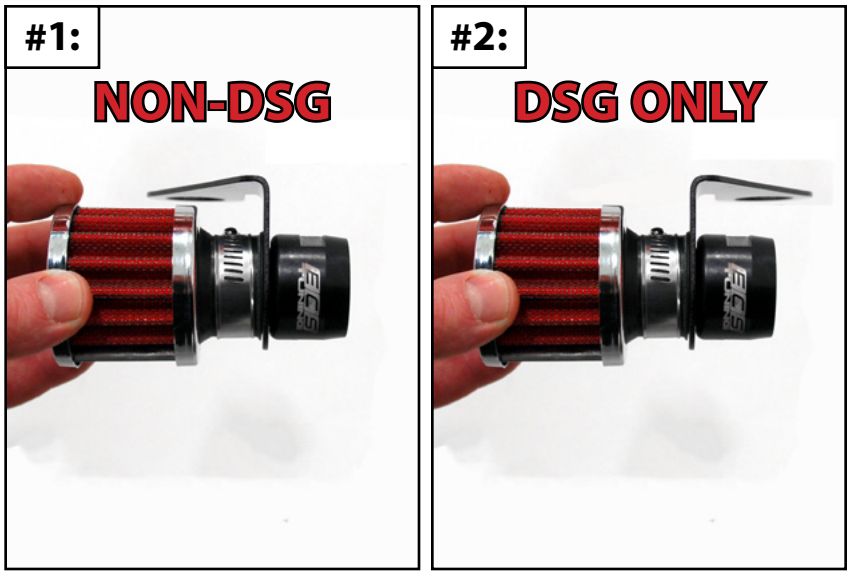
INSTALLING THE SECONDARY AIR FILTER KIT

Step 1: Flat Blade Screwdriver - or - 7mm Socket, ¼" Ratchet

Remove the secondary air injection kit from its packaging, and tighten the hose clamp which secures the filter until it is snug.

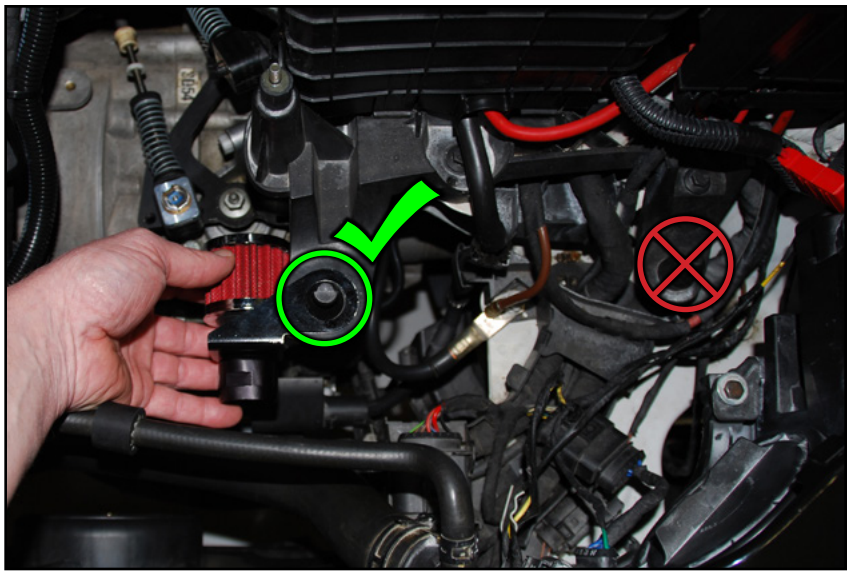
NOTE

Vehicles equipped with a DSG transmission must install the mounting bracket so that it faces the opposite direction as shown in the photo on the right.



Step 2:

Place the secondary air intake assembly onto the innermost air box mounting stud (the stud which is nearest to the engine) so the filter and adapter hang down below the mounting stud.



INSTALLING THE SECONDARY AIR FILTER KIT

Step 3:

Route the original secondary air intake tube over to the adapter and connect the two together. Rotate the filter assembly as necessary so the secondary air intake tube does not kink or bind.

NOTE

Vehicles equipped with a DSG transmission must install the filter assembly so that it faces upward as shown in the **photo #2** on the right.





Step 4:

Allow the assembly to hang in place for now, when you install the carbon fiber air box the innermost air box mounting grommet will hold the secondary air intake securely in place. As you can see in the photo, the secondary air intake is almost completely hidden underneath the carbon fiber air box.



Return to Page 17 to continue with the installation of your Luft-Technik Intake System.

CARBON FIBER CLEANING AND CARE

ECS Tuning Carbon Fiber Intakes are clear coated for excellent finish durability and UV resistance right out of the box.

Carbon fiber can be washed with any gentle cleanser or soap. If it is safe for the paint on your car, it will be safe for the carbon fiber.

Be extra careful not to nick or deeply scratch the clear coat on the carbon fiber. This can lead to water intrusion into the carbon fiber which will damage the finish and the integrity of the intake.

If the clear coat does get nicked or deeply scratched to expose the carbon fiber, seal the damaged area thoroughly with a clear coat touch up or clear nail polish.

To retain UV resistance and protect the finish, we recommend regular waxing with a high quality caranuba wax.

Small surface scratches and light oxidation can be buffed out using the same methods and cautions you would use on the vehicle paint.

Carbon Fiber Cleaning and Care Kit, available at ecstuning.com.

ES#2914954



Your Luft-Technik Intake System installation is complete!



These instructions are provided as a courtesy by ECS Tuning

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.