

Audi B8 2.0T Luft Technik Intake System Installation Instructions















INTRODUCTION

The Project:

Today we're going to install our Luft-Technik Intake System on an Audi B8 with a 2.0T. Our car is an A4, but it'll also fit an A5 or an Allroad with the 2.0T. We'll remove the original airbox and install our new system, utilizing a few of the components from the original, and taking you through it step by step.

ECS Difficulty Gauge



1: Easy
Basic Skills Required

Take your time and enjoy the project, this is a very easy installation, and you'll be done in about an hour. Before you begin, read through these instructions and make sure you have all the required tools on hand. Once you've gathered the tools together and reviewed the install, you'll breeze right through it. You're going to love the looks, the sound, and the performance. Thank you for looking to ECS Tuning for all your repair and performance needs. We appreciate your business!





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Symbols:

The following symbols may be used throughout these instructions indicating special attention:



FORK IN THE ROAD: When there are different options within any given kit, we will direct you to the proper page and step to continue.



YIELD: Pause for a moment to double check component installation before you continue. Ignoring this can cost you time later during the installation.



CAUTION: Pay close attention to these warnings and instructions. Difficult installation, personal injury or component damage may occur if ignored.



STOP: The upcoming steps require specific preparation and/or assistance in the interest of safety. Please read ahead in the instructions and prepare before continuing.



TECH TIP: Tips and tricks to make the job go much easier.



NOTE: Additional information that may be useful to the installation depending on your application.



KIT CONTENTS



Main Heat Shield Assembly



Auxiliary Heat Shield



Heat Reflector



Silicone Turbo Inlet Hose



High Flow Air Filter w/Clamp



Side Bracket



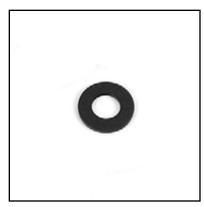
KIT CONTENTS



3/8" Bulb Seal



Expanding Rivet



Large Fiber Washer



Heat Shield "S" Clips (3)



Aluminum Spacers (4)



Hose Clamps 60-80mm (1) 79-90mm (1)



Assembly Hardware



Main Shield Mounting Feet (2)



REQUIRED TOOLS

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

Standard Automotive Tools

Required For This Install

Available On Our Website

Protecta-Sockets (for lug nuts)	ES#2221243
• 3/8" Drive Ratchet	ES#2765902
• 3/8" Drive Torque Wrench	<u>ES#2221245</u>
• 3/8" Drive Deep and Shallow Sockets	<u>ES#2763772</u>
• 3/8" Drive Extensions	<u>ES#2804822</u>
Hydraulic Floor Jack	<u>ES#240941</u>
Torx Drivers and Sockets	<u>ES#11417/8</u>
• 1/2" Drive Deep and Shallow Sockets	ES#2839106
• 1/2" Drive Ratchet	
• 1/2" Drive Extensions	
• 1/2" Drive Torque Wrench	ES#2221244
• 1/2" Drive Breaker Bar	ES#2776653
Hook and Pick Tool Set	<u>ES#2778980</u>
VAG Connector Removal Tool	ES#2628676
Locking Hose Clamp Pliers	<u>ES#2702616</u>

• 1/4" Drive Ratchet	. <u>ES#2823235</u>
• 1/4" Drive Deep and Shallow Sockets	ES#2823235
• 1/4" 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	. <u>ES#11420</u>
Thread Repair Tools	.ES#1306824
Open/Royad End Wrench Set	EC#2765007



SHOP SUPPLIES AND MATERIALS

Standard Shop Supply Recommendations: We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser Click Here
- Pig Mats for protecting your garage floor and work area from spills and stains Click Here
- Spray detailer for rapid cleaning of anything that comes into contact with your paint such as brake fluid Click Here
- Micro Fiber Towels for cleaning the paint on your car Click Here
- Latex Gloves for the extra oily and dirty jobs Click Here
- Medium and High Strength Loctite Thread lock compound to prevent bolts from backing out Click Here
- Anti-Seize Compound to prevent seizing, galling, and corrosion of fasteners Click Here
- Aerosol Brake/Parts Cleaner for cleaning and degreasing parts
- Shop Rags used for wiping hands, tools, and parts
- Penetrating oil for helping to free rusted or stuck bolts and nuts
- Mechanics wire for securing components out of the way
- Silicone spray lube for rubber components such as exhaust hangers
- Paint Marker for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties for routing and securing wiring harnesses or vacuum hoses
- Electrical tape for wrapping wiring harnesses or temporary securing of small components



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.
- If using an automotive lift, be sure and utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always 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.

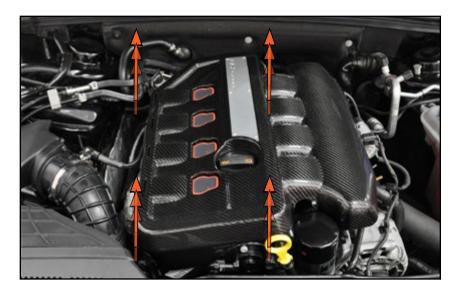


NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.



Step 1:

The first step is to remove the engine cover. Whether you have the factory cover or our carbon fiber engine cover as shown here, they are both removed by pulling them up at the four corners to release the rubber grommets from the grommet studs.



T30 Torx Socket, 3/8" Ratchet Step 2:

Remove the four upper radiator shroud screws.





Step 3:

Lift up on the rear edge of the radiator shroud, then pull it rearwards to unhook it from the grille, and remove it.



T25 Torx Socket, Ratchet Step 4:

Remove the two air scoop hold down screws.





Step 5:

Pull up on the air duct where it meets the air box and remove it along with the air scoop.



Flat Blade Screwdriver Step 6:

Remove the turbo inlet hose by loosening the two clamps and pulling it off at both ends.





Step 7:

Locate the Mass Air Flow (MAF) sensor connector.

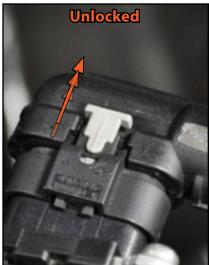
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Step 8:

Unlock the connector on the MAF sensor by pulling the gray locking tab out.







Step 9:

Press down on the end of the gray locking tab, then pull the connector off of the MAF sensor.





Step 10:

Pull upwards on both sides of the airbox and remove it from the engine compartment.





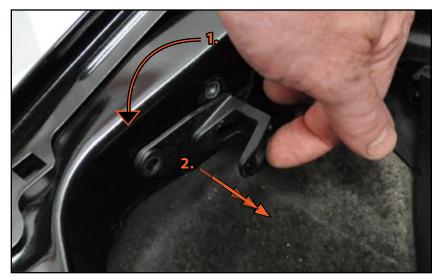
T30 Torx Socket, Ratchet Step 11:

Remove the airbox bracket screw.



Step 12:

Rotate the bracket 90 degrees counter clockwise, then pull it out of the inner fender.





Flat Blade Screwdriver Step 13:

Squeeze the center of the air duct (arrow) and pull it off of the air scoop.



Step 14:

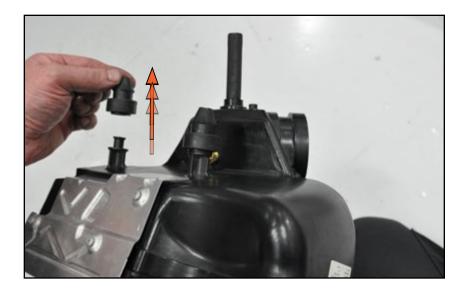
The air scoop (as shown in the photo on the right) will be used later during the installation of your new intake system, but you can set it aside for now.





Step 15:

Pull the two lower mounting grommets off the bottom of the original air box and set them aside for now.



T25 Torx Socket, Ratchet Step 16:

Remove the two mass air flow sensor screws, then pull the MAF sensor out of the original air box and set it aside for now.

> You are now ready to install your new Luft-Technik Intake System!





Step 1:

Push the three heat shield "S" clips onto the auxiliary heat shield in the locations shown. Make sure they are fully seated and that the top half of each clip is located above the heat shield.



Step 2:

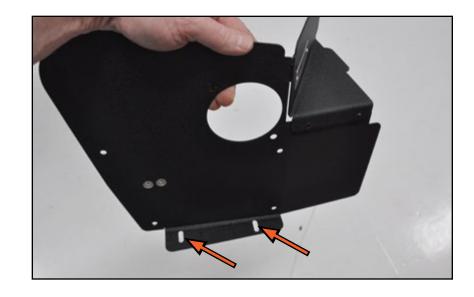
Push the auxiliary heat shield into place on the edge of the exhaust manifold shield as shown.





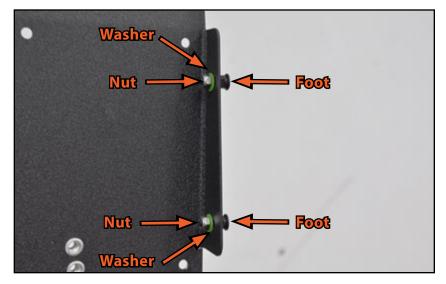
Step 3:

Locate the two elongated slots on the bottom of the main heat shield (arrows).



Step 4:

Install the two main heat shield mounting "feet" into the elongated slots, with the feet located on the bottom, and an M6 fiber washer and self locking nut located on the top. Loosely install the nuts but do not tighten them yet.





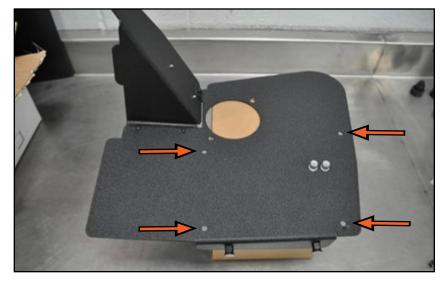
8mm Open End Wrench, 10mm Wrench or Socket Step 5:

Make sure the "feet" are located in the center of the elongated slots as shown in the photo, then tighten the nuts.



Step 6:

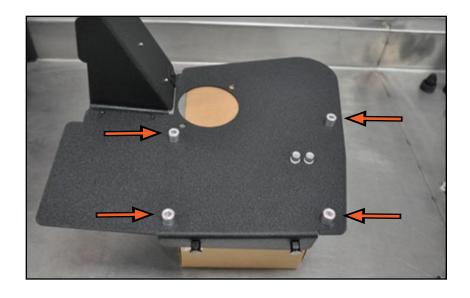
Place the main heat shield onto a box as shown (engine side facing up) so the four heat reflector mounting holes are open. We are using the box for the air filter, it works perfect for this part of the job.





Step 7:

Place the four aluminum spacers onto the main heat shield, one over each heat reflector mounting hole.



Step 8:

Insert the four M6 x 30 bolts (included with the kit) through the heat reflector as shown.



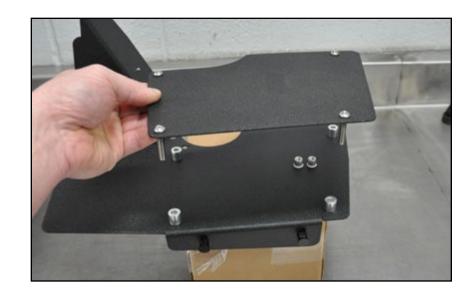


Step 9:

Lower the heat reflector into place on the main heat shield, while guiding the M6 x 30 bolts through the spacers and the holes in the main heat shield.



The top of the heat reflector is cut out to clear the mass air flow sensor. Be sure to locate this cutout around the hole for the MAF sensor.



Step 10:

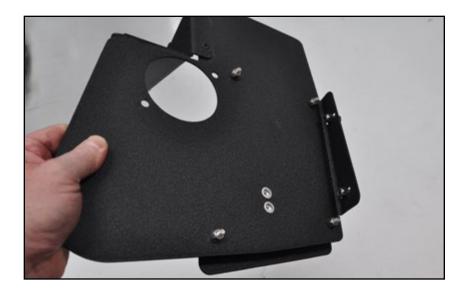
The heat reflector should now be located on the main heat shield as shown, with a spacer located at each corner. Install an M6 fiber washer and start an M6 nut onto the end of each M6 x 30 bolt.





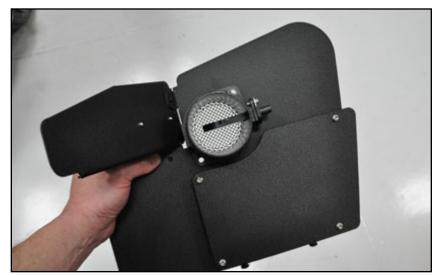
4mm Allen, 10mm Socket, Ratchet Step 11:

Now with the nuts started, you can lift the main heat shield up for easier access. Tighten all four nuts.



Step 12:

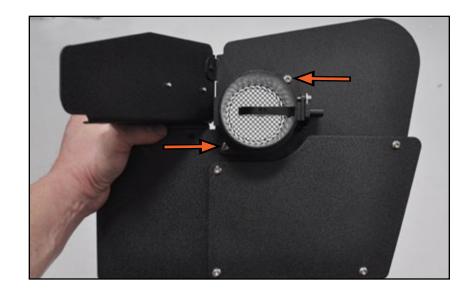
Place the MAF sensor onto the engine side of the main heat shield as shown in the picture.





4mm Allen, 10mm Socket, Ratchet Step 13:

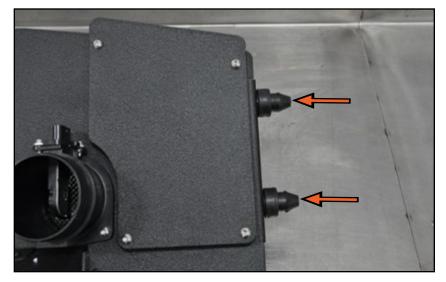
Install the two M6 x 20 bolts through the MAF sensor and main heat shield, then install an M6 fiber washer and nut onto the other side of each one. Tighten both nuts.



Step 14:

Push the two original lower mounting grommets onto the mounting "feet".

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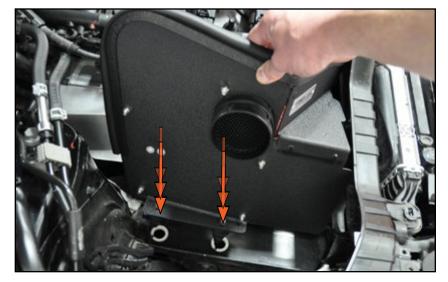
Step 15:

Starting flush with the front edge (arrow), push the bulb seal into place along the top of the main heat shield and down the back side as shown.



Step 16:

Install the main heat shield assembly into the car by pushing the two lower mounting grommets into the holes in the frame channel.



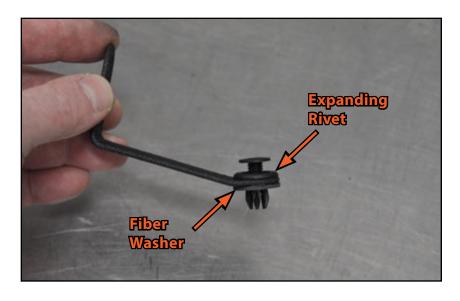


Step 17:

Insert the expanding rivet through the side bracket, then install the large fiber washer over the end of the expanding rivet as shown in the picture.



The center screw of the expanding rivet must be threaded out as shown in the picture.



Step 18:

Locate the hole in the shock tower on the filter side of the main heat shield.

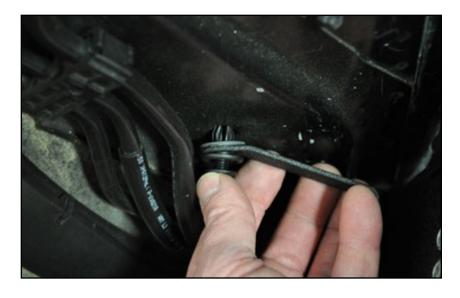
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Step 19:

Line up the end of the expanding rivet with the hole in the shock tower.



Step 20:

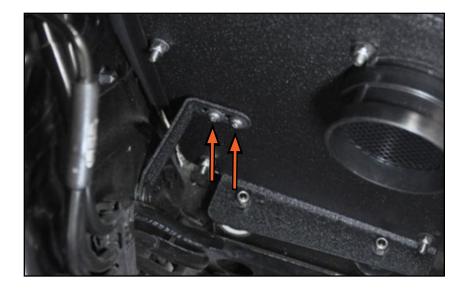
Push the end of the expanding rivet into the hole, the push the center screw of the rivet all the way in until it is fully seated.





4mm Allen Step 21:

Swing the side bracket into place, then install and tighten the two M6 x 15 bolts through the bracket into the riv-nuts in the main heat shield, making sure there is a fiber washer under the head of each bolt.



Step 22:

Place a hose clamp over each end of the silicone turbo inlet hose.

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Step 23: Flat Blade Screwdriver

Push the hose into place between the MAF sensor and the turbocharger inlet and tighten the clamps.



Step 24:

Connect the MAF sensor.





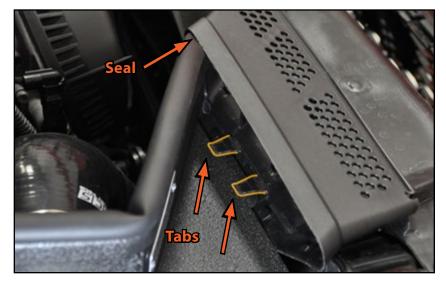
Step 25: Flat Blade Screwdriver

Push the air filter onto the inlet of the MAF sensor and tighten the clamp.



Step 26:

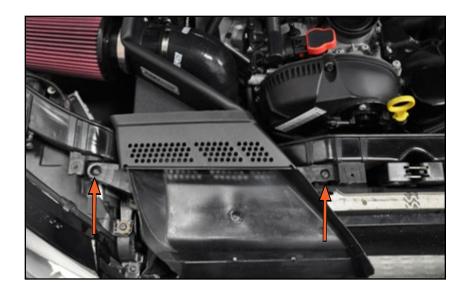
Install the air scoop back into place, making sure the two tabs on the inside fit over the front edge of the main heat shield and the seal sits just inside the corner, as shown in the photo.





T25 Torx Socket, Ratchet Step 27:

Install the two air scoop mounting screws.



T30 Torx Socket, 3/8" Ratchet Step 28:

Install the upper radiator shroud and install the engine cover.

Your Luft-Technik Intake System installation is complete!



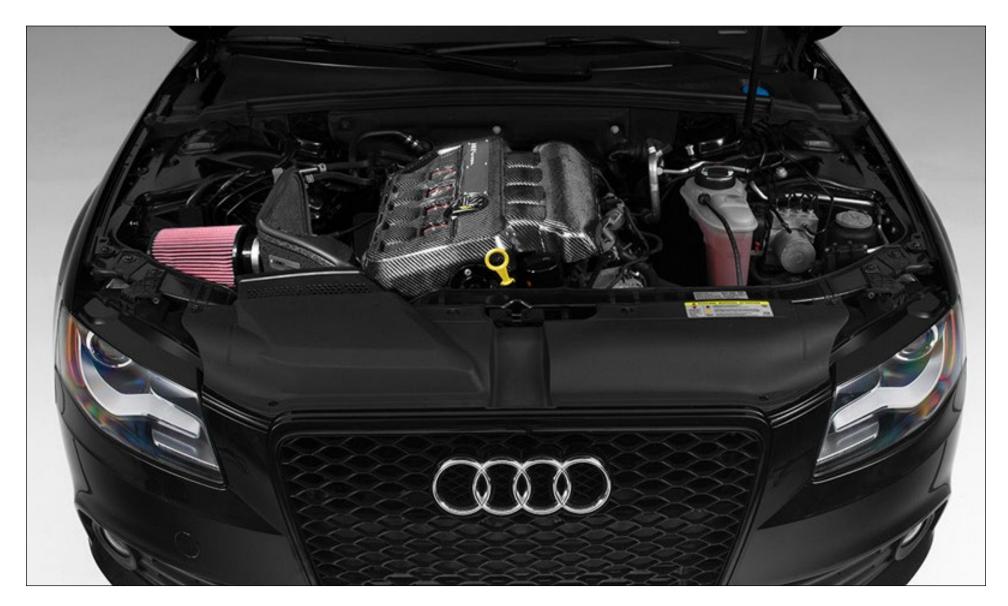


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Your Luft-Technik Intake System installation is complete!



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.

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