

Audi B9 S4 3.0T Kohlefaser Luft-Technik Intake System Installation Instructions













INTRODUCTION

The Project:

Our engineering team at ECS has been conceptualizing, engineering, testing, and building performance air intake systems for years. The Kohlefaser Luft-Technik intake systems are the artful culmination of all of that experience, a tier all their own. Our systems feature uncompromising quality, superior performance, and flawless aesthetics, making them the most superior and complete intake system on the market. The Audi 3.0T engine is a technological wonder on it's own, however with the addition of our new Kohlefaser Luft-Technik intake you will experience the true prower of your engine unleashed. The sleek carbon fiber accentuates the under hood styling with tasteful precision and the freed up airflow allows the engine to breathe like never before. Each kit includes everything you need for a seamless installation with absolutely no modification necessary to your vehicle. With such attention to detail and a price that is more than affordable, we have no doubt that you will be satisfied with your purchase.

ECS Difficulty Gauge



Take your time and enjoy the project, start to finish this project can be completed in an hour or two. Be sure to read these instructions completely, gather your parts and tools and you're good to go. We include all necessary hardware to help make installation a breeze. Thank you for choosing to make ECS Tuning your provider of performance and replacement parts, we appreciate your business!





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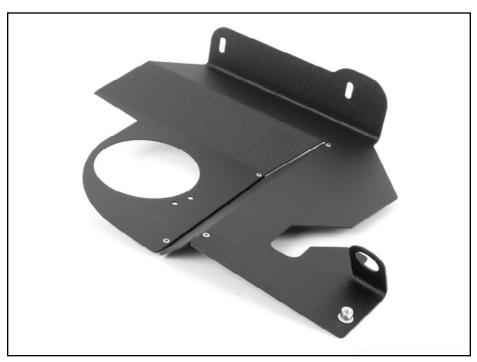
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KIT CONTENTS



Carbon Fiber Air Box Lid (QTY 1)



Heat Shield (QTY 1)



High Flow Air Filter (QTY 1)



Silicone Turbo Inlet Hose (QTY 1)



60-80mm Hose Clamp (QTY 1)



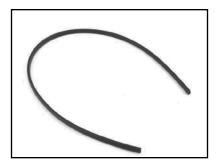
70-90mm Hose Clamp (QTY 1)



Billet Filter Adapter (QTY 1)



KIT CONTENTS



Edge Trim (QTY 1)



Mounting Stud (QTY 3)



M6x16mm Bolt (QTY 1)



M6 Steel Washer (QTY 5)



Heat Shield Grommet (QTY 1)



M8x16mm Bolt (QTY 1)



M6x60mm Bolt (QTY 1)



M6x50mm Bolt (QTY 1)



M6 Nylon Washer (QTY 4)



M6 Locknut (QTY 5)



M5x14mm Screw (QTY 2)



M5 Split-Lock Washer (QTY 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)	<u>ES#2221243</u>	• 1/4" Drive Rat
• 3/8" Drive Ratchet	<u>ES#2765902</u>	• ¼" Drive De
• ³ / ₈ " Drive Torque Wrench	<u>ES#2221245</u>	• 1/4" Drive Ext
• 3/8" Drive Deep and Shallow Sockets	<u>ES#2763772</u>	 Plier and Cut
• 3/8" Drive Extensions		 Flat and Phill
Hydraulic Floor Jack		 Jack Stands
Torx Drivers and Sockets		• Ball Pein Ham
• ½" Drive Deep and Shallow Sockets	ES#2839106	• Pry Bar Set
• ½" Drive Ratchet		 Electric/Cordl
• ½" Drive Extensions		 Wire Strippers
• ½" Drive Torque Wrench	ES#2221244	• Drill Bits
• ½" Drive Breaker Bar		 Punch and Ch
Bench Mounted Vise		• Hex Bit (Allei
Crows Foot Wrenches		• Thread Repair
Hook and Pick Tool Set	ES#2778980	Open/Boxed

• ¼" Drive Ratchet	<u>ES#2823235</u>
• 1/4" Drive Deep and Shallow Sockets	<u>ES#2823235</u>
• ¼" Drive Extensions	<u>ES#2823235</u>
Plier and Cutter Set	<u>ES#2804496</u>
Flat and Phillips Screwdrivers	<u>ES#2225921</u>
Jack Stands	
Ball Pein Hammers	
• Pry Bar Set	<u>ES#1899378</u>
• 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/Boxed End Wrench Set	



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.
- 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.



Step 1:

Push in the button on the back edge of the hood release lever, then pull the lever off.



Step 2:

Remove the radiator shroud by pulling up on the front edge to unclip it from the grille, then pull it forward to slide it out of the core support.

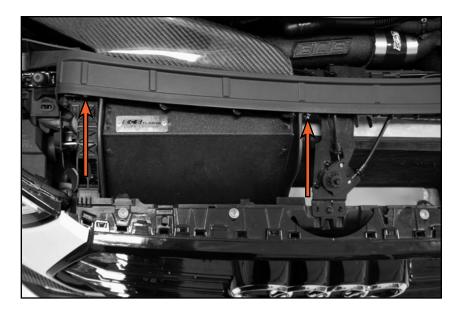




Step 3:

T25 Torx

Remove the two intake duct screws.



Step 4:

Pull the intake duct back from the core support, then pull it out of the air box.





Step 5:

Remove the engine cover by pulling up at the four corners to release it from the ball studs.



Flat Blade Screwdriver -or- 7mm Socket & Ratchet Step 6:

Loosen the clamps on either side of the inlet pipe, then remove the pipe from the vehicle.





Step 7:

Pull straight up on the air box to release it from its mounting grommets.



Step 8:

If any mounting grommets come out with the air box, pull them off of the air box and set them aside, we will be reusing them to install the new heat shield.



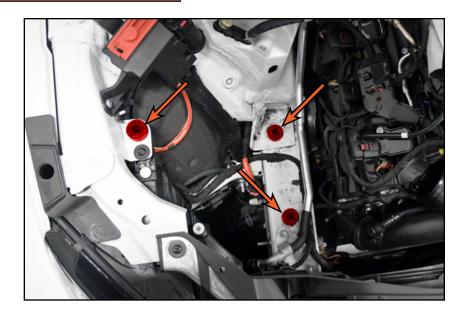
We have highlighted these mounting grommets in **RED** for visibility.





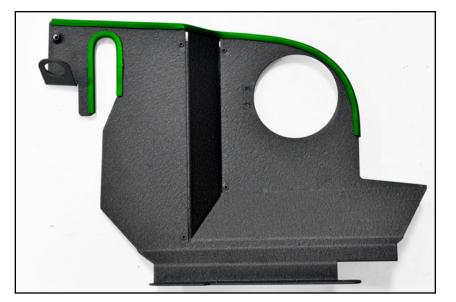
Step 1:

Ensure that all three mounting grommets (highlighted in RED) are properly installed into the vehicle mounting holes as shown.



Step 2:

Install the provided edge trim (highlighted in GREEN) onto the heat shield as shown in the photo, trimming as necessary.





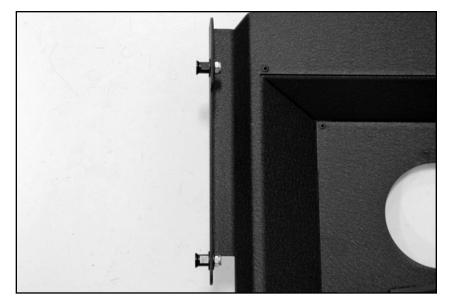
Step 3:

Push the included grommet into the large hole in the heat shield.



Step 4:

Using four M6 steel washers and two M6 lock nuts, loosely install the two mounting studs into the bottom of the heat shield. Be sure to place a washer on either side of the heat shield to protect the finish from the stud and nut.

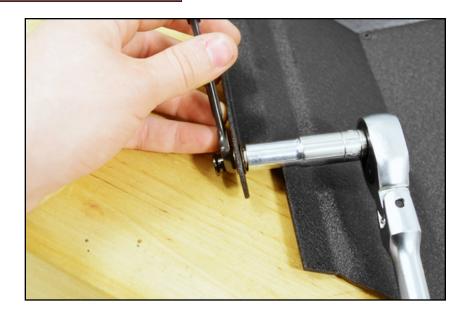




Step 5:

8mm Wrench, 10mm Wrench

Hold the mounting stud in place with an 8mm wrench and tighten the nut until it makes contact plus 1/8th of a turn.



Step 6:

8mm Wrench, 10mm Wrench

Using the same process, install the mounting stud into the hole on the tab on the lid and tighten to contact plus 1/8th of a turn. Be sure to use two of the black nylon washers instead of the steel ones. This will help to protect the carbon fiber finish.



CAUTION: Be careful not to over tighten the hardware, over tightening can cause the carbon fiber to crack.





Step 7:

Line up the two mounting studs with the two lower grommets in the vehicle and push down to pop the heat shield into place.



5mm Allen Wrench Step 8:

Install the M8 bolt through the grommet in the heat shield and into the threaded hole on top of the ground post.





Step 9:

Install the new inlet hose onto the shorter end of the billet adapter. Ensure that both clamps are loosely installed onto either end of the inlet hose as shown in the photo, but leave them loose for now.



Step 10:

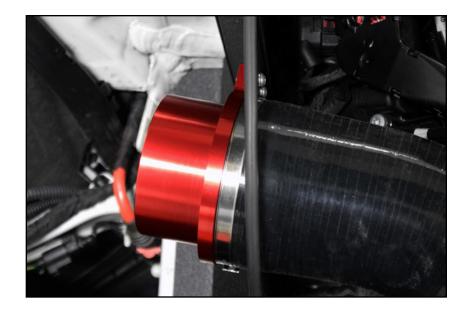
Slide the hose and adapter through the hole in the heat shield and onto the plastic turbo inlet pipe flange. Twist and adjust the hose until both ends sit flush. You can leave the clamps loose for now, we'll come back and tighten them a little later.





Step 11: 3mm Hex (Allen) Socket & Ratchet

Rotate the billet adapter until the threaded holes line up with the holes in the heat shield. Install the two m5x14mm screws and splitlock washers through the heat shield and into the adapter to secure it in place.



Flat Blade Screwdriver -or- 7mm Socket & Ratchet Step 12:

Push everything together to ensure both ends sit flush, then tighten both clamps until they are snug. When you release pressure the inlet hose will settle to its final resting position.





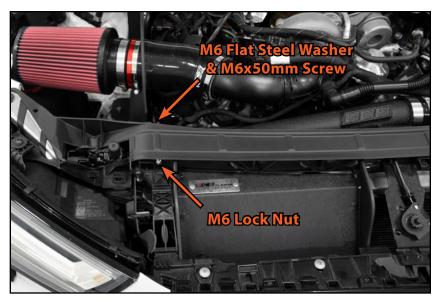
Flat Head Screwdriver Step 13:

Install the new filter onto the other end of the billet adapter and tighten the clamp to secure it in place.



4mm Allen Wrench, 10mm Socket & Ratchet Step 14:

Using the supplied M6x50mm screw, M6 flat steel washer, and M6 lock nut, secure the factory inlet shroud to the core support.





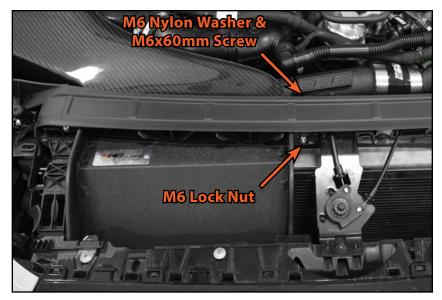
Step 15:

To install the carbon fiber air box lid, begin by inserting it into the air inlet shroud along the front of the engine compartment. Then pivot the lid downward until it rests on top of the heat shield. Press down on the RH side of the lid and ensure the mounting stud on the lid slides into the grommet on the body of the vehicle, securing it in place.



Step 16: 4mm Allen Wrench, 10mm Socket & Ratchet

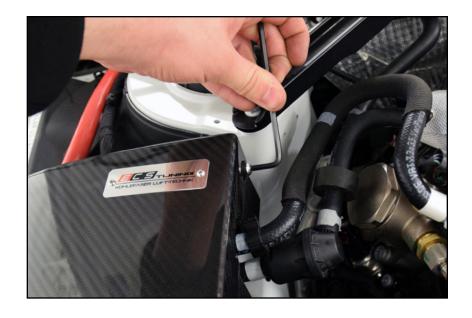
Slide the M6x60mm screw and M6 nylon washer through the ear on the lid, through the hole in the core support and into the inlet scoop.





Step 17: 4mm Hex (Allen) Wrench

Install the final M6x16mm screw and M6 nylon washer through the hole in the side of the lid and into the threaded hole on the heat shield. Tighten until snug.



Step 18:

Reinstall the engine cover by lining up the grommets on the engine cover with the ball studs on the engine and pushing down to pop them in place.





Step 19:

Reinstall the radiator shroud by sliding it into the core support and pushing downward to clip the front of the shroud to the top of the grille.



Step 20:

Push the hood release lever back into place.



Congratulations, your installation is complete!



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

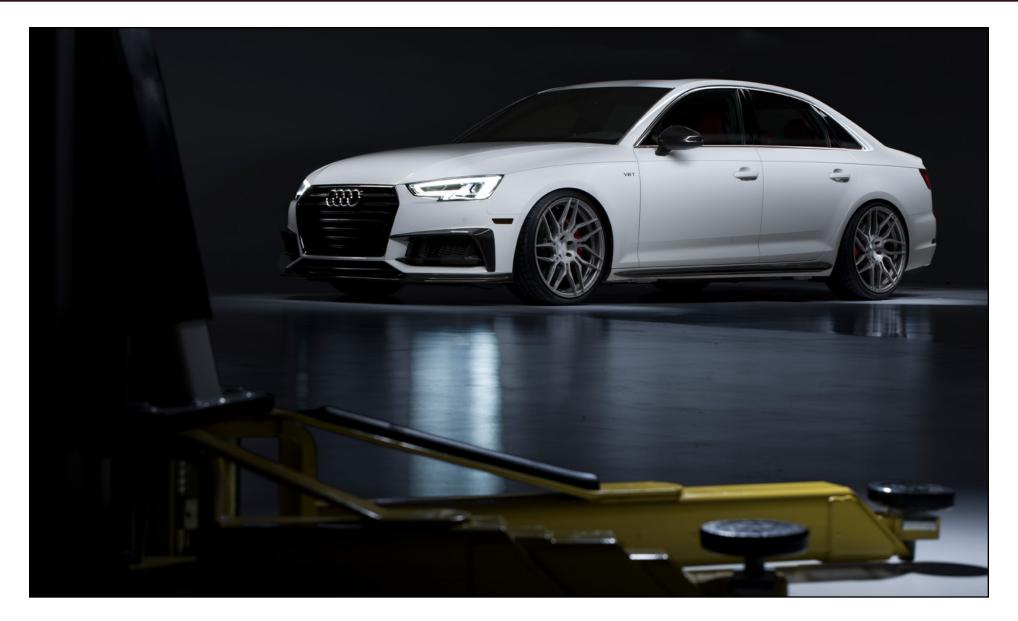




SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

At ECS Tuning, we carry a line of high quality Schwaben Tools and Equipment to help you build your ultimate tool collection. Never before has affordability and quality been so closely related. Our entire Schwaben line is subjected to strict in house testing for strength and durability. See what we have to offer and equip your garage without breaking the bank.

Your Kohlefaser 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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