

Audi B8 S4, S5, Q5 3.0T Luft-Technik Intake System Installation Guide - 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

Take your time and enjoy the project, it should take you a couple of hours or less. This document will outline the installation on a B8 S4 3.0T, but the steps also apply to the B8 S5 and Q5 3.0T. Read all of these instructions first and you should be able to breeze right through the install. Be sure to reference the list of required tools on <u>Page 5</u> before you begin to make sure you have everything that you need to finish the job. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

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# **KIT CONTENTS**



B8 3.0T Luft-Technik heat shield (QTY 1)



Heat shield foot adapter (QTY 2)



Heat shield support bracket (QTY 1)



Air filter w/clamp (QTY 1)



<sup>5</sup>/<sub>8</sub>" bulb seal (20" length)



SAI filter & clamp (QTY 1ea)



SAI adapter (QTY 1)



SAI filter bracket (QTY 1)



Expanding rivet (QTY 1)



M10 fiber washer (QTY 1)



M6x16mm bolt (QTY 4)



/I6 fiber washe (**QTY 6)** 



90° plastic elbow (QTY 1)



# **KIT CONTENTS**



Silicone intake coupler(QTY 1)70-90mm hose clamp(QTY 1)90-110mm hose clamp(QTY 1)





### **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>
• ¾" Drive Ratchet	<u>ES#2765902</u>
• <sup>3</sup> / <sub>8</sub> " Drive Torque Wrench	<u>ES#2221245</u>
• <sup>3</sup> / <sub>8</sub> " Drive Deep and Shallow Sockets	<u>ES#2763772</u>
• <sup>3</sup> / <sub>8</sub> " Drive Extensions	<u>ES#2804822</u>
Hydraulic Floor Jack	<u>ES#2834951</u>
Torx Drivers and Sockets	<u>ES#11417/8</u>
• <sup>1</sup> / <sub>2</sub> " Drive Deep and Shallow Sockets	<u>ES#2839106</u>
• <sup>1</sup> / <sub>2</sub> " Drive Ratchet	
• <sup>1</sup> / <sub>2</sub> " Drive Extensions	
• <sup>1</sup> / <sub>2</sub> " Drive Torque Wrench	<u>ES#2221244</u>
• <sup>1</sup> / <sub>2</sub> " Drive Breaker Bar	<u>ES#2776653</u>
Bench Mounted Vise	
Crows Foot Wrenches	
Hook and Pick Tool Set	<u>ES#2778980</u>

• <sup>1</sup> ⁄4" Drive Ratchet	<u>ES#2823235</u>
• <sup>1</sup> / <sub>4</sub> " Drive Deep and Shallow Sockets	<u>ES#2823235</u>
• <sup>1</sup> / <sub>4</sub> " Drive Extensions	<u>ES#2823235</u>
Plier and Cutter Set	<u>ES#2804496</u>
• Flat and Phillips Screwdrivers	ES#2225921
• Jack Stands	
Ball Pein Hammers	
Pry Bar Set	ES#1899378
Electric/Cordless Drill	
Wire Strippers/Crimpers	
• Drill Bits	
<ul> <li>Punch and Chisel Set</li> </ul>	
Hex Bit (Allen) Wrenches and Sockets	ES#11420
Thread Repair Tools	ES#1306824
Open/Boxed End Wrench Set	



### **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:

Open the hood and locate the four radiator shroud retaining rivets (arrows in **Photo #1**).

While listening carefully, gently push in the center pin (arrow in **Photo #2**) of each radiator shroud rivet until you hear a faint "click" indicating that it is unlocked (**Photo #3**).

With the center pins unlocked (**Photo #4**), pull the rivets out of the radiator shroud (**Photo #5**). If you have trouble grabbing a hold of the rivets, try lifting up slightly on the edge of the radiator shroud.











#### Step 2:

Pull up on the two front corners of the radiator shroud to unhook them, then pull the entire shroud towards the rear and remove it from the vehicle.



#### Step 3: T25 Torx

Remove the two screws (arrows) which secure the air scoop to the core support.



### Step 4:

Loosen the hose clamps at both ends of the intake tube (arrows in **Photo #1**).



NOTE

The hose routing over the intake tube is slightly different on a Pre-Facelift B8.

Locate the vent hose on the back side of the intake tube and pull it off (arrow in **Photo #2**).

Remove the two fuel lines from their retaining clips (arrows in **Photo #3**), then remove the intake tube by first pulling it off the throttle body and then off the air box coupler.







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#### Step 5:

Firmly grasp the air filter housing and lift it upward 1-2" (**photo #1**). Reach down below the air filter housing and disconnect the secondary air tube from the fitting on the bottom side. Reference the illustrations below for more information on how to release this style of connector.

With the secondary air tube disconnected you can lift the air filter housing up and remove it from the engine bay (**photo #2**).





NORMAL INSTALLED STATE:

The tabs keep the hose "locked" onto the fitting.



**TO REMOVE:** Squeeze the knurled sides of the locking

### Step 6:

We're almost ready to install the new Luft-Technik intake system, we just have a few more things to do:

Remove the screw for the inner fender bracket, rotate the bracket clockwise to unhook it from the fender, then remove it from the vehicle (arrow in **Photo #1**).

Pull the two mounting grommets off the bottom of the stock air box and set them aside (**Photo #2**).

Unclip the intake pipe union from the stock air box, then pull it off and set it aside (arrows in **Photo #3**).

Gently squeeze both long sides of the air duct, then pull the air scoop (highlighted in **GREEN** in **Photo #4**) off of the air duct and set it aside.









### Step 1:

Install the SAI filter adapter and filter onto the new bracket (**photo #1**).

Make sure the flats on the SAI filter adapter are parallel with the back side of the bracket (arrows in **photo #2**).

Push the SAI filter adapter into the secondary air hose until it snaps securely into place (**Photo #3**).

Mount the breather bracket onto the inner fender as shown, using the original T30 fender bracket screw (arrow in **Photo #4**).









### Step 2:

Install the heat shield foot adapters into the in the heat shield slots (as shown in **Photo #1**). Be sure to install washers on either side of the heat shield to protect the powdercoat finish. Thread the nuts onto the adapters, but leave them loose enough so the feet will slide back and forth in the slots (**Photo #1**).

Slide both of the feet all the way to the inside edge of the slots (**Photo #2**), then counter-hold them with an 8mm wrench while you tighten the nuts until snug (**Photo #2**).

Push the two rubber mounting grommets onto the feet on the base of the new heat shield (**Photo #3**).







Step 3:

Push the bulb seal (highlighted in **GREEN**) into place along the top edge of the heat shield. Start one edge flush with the front side of the shield, then trim the other end of the seal so it is flush with the back side of the heat shield (**Photo #1**).

Install the intake pipe union onto the new heat shield, then tighten the screws until snug. There is a small arrow on the edge of the union (highlighted in YELLOW) in **Photo #2**) which needs to point toward the engine. The groove on the union will also be located the side which is nearest the engine.



#### Step 4:

Install the heat shield into place by pushing the mounting grommets into the holes in the frame channel (**Photo #1**).

Inspect the heat shield for clearance between the lower rear corner and the aluminum coolant pipe that runs nearby. If necessary, slightly bend the coolant pipe outward (it will bend very easily) so the two do not contact each other (**Photo #2**).





#### Step 5:

Remove the center screw from the expanding rivet by completely unthreading it (**Photo #1**).

Push the expanding rivet into the support bracket, then slide the M10 fiber washer onto the expanding rivet from the other side (**Photo #2**).

Push the expanding rivet into the pre-existing hole in the shock tower, then loosely install the two remaining

M6 cap screws and fiber washers through the support bracket and into the heat shield. Thread (or push) the center screw into the expanding rivet (**RED** inset photo). Push the heat shield towards the RH (passenger) side so the cap screws are positioned in the support bracket slots as shown, then tighten the cap screws until snug (**Photo #3**).





### Step 6:

Position the air scoop onto the core support, over the front edge of the heat shield as shown. (**Photo #1**).

Make sure the two tangs on the air scoop are engaged over the front lip of the heat shield as shown. Also note that the upper seal on the heat shield should be seated in the corner of the air scoop. (**Photo #2**).

Install and tighten the two air scoop retaining screws. (arrows in **Photo #3**).











If you purchased an intake system with a carbon fiber intake pipe:

• Please proceed to the next page.





If you purchased an intake system with a silicone intake coupler:

• Please skip ahead to Page 20.

### Step 7:

Slide the silicone couplers and hose clamps over the ends of the carbon fiber intake pipe, then install the pipe in place between the air box and the throttle body. Be sure to install the straight coupler on the air box side and the hump coupler on the throttle body side (**Photo #1**). Align all couplers and clamps, then tighten the clamps until snug.

Push the plastic 90° elbow into the end of the vent hose on the back of the intake (**Photo #2**).

Push the vent hose extension onto the other end of the plastic 90° elbow, then onto the nipple on the rear of the carbon fiber pipe (**Photo #3**).



Please skip ahead to Page 21.







#### Step 7:

Install the silicone intake coupler between the air box and the throttle body. Be sure to use the 90-110mm clamp on the air box side and the 70-90mm clamp on the throttle body side. Tighten both clamps until snug (**Photo #1**).

Push the plastic 90° elbow into the end of the vent hose on the back of the intake (**Photo #2**).

Push the other end of the 90° elbow into the back of the silicone intake pipe (**Photo #3**).







#### Step 8:

Wipe out the opening of the air filter to remove any oily residue (arrow in **Photo #1**).

Push the air filter onto the end of air box coupler and tighten the clamp (**Photo #2**).

Install the radiator shroud and rivets (**Photo #3**).

Your Luft-Technik Intake System 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



### 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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