ECS TUNING

Audi B8 3.0T Luft-Technik Intake System Installation Instructions













INTRODUCTION

The Project:

Today we're going to install our Luft-Technik Intake System on a B8 Audi with a 3.0T engine. There are two different options for this intake, either a silicone or a carbon fiber intake pipe. We'll show you how to install both, so you'll be covered for the system that you purchased. This is an easy installation that only requires a few standard tools. Feel free to take your time and enjoy the project, it'll only take about an hour.

ECS Difficulty Gauge



1: Easy **Basic Skills Required**

Before you begin, read through these instructions first to get an overview of the job, then you'll breeze right through it. Just to make sure you have everything you need, reference the required tool list on Page 7. Thank you for looking to ECS Tuning for all your performance and repair 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, 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.



KIT CONTENTS

ES#2992531 w/Silicone Intake Pipe and ES#2992535 w/Carbon Intake Pipe



Heat Shield/Main Intake Support



M6 Lock Nut (4)



Heat Shield Feet (2)



M6 Fiber Washer (6)



M6 X 16 Cap Screw (4)

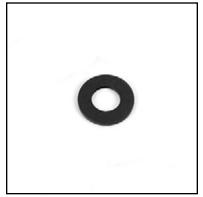


3/8" Bulb Seal



KIT CONTENTS

ES#2992531 w/Silicone Intake Pipe and ES#2992535 w/Carbon Intake Pipe



M10 Fiber Washer



Heat Shield Support Bracket



Air Filter w/clamp



90 Degree Elbow



Expanding Rivet



Breather Filter w/clamp



Breather Mounting Bracket



Breather Adapter



KIT CONTENTS

ES#2992531 w/Silicone Intake Pipe



ES#2992535 w/Carbon Intake Pipe



(1) Silicone Intake Pipe, (1) 4" Hose Clamp, (1) 3" Hose Clamp



(1) Carbon Fiber Intake Pipe, (1) 4" Straight Coupler, (1) 3" Hump Coupler, (1) Vent Hose Extension, (2) 3" Hose Clamps, (2) 4" Hose Clamps



REQUIRED TOOLS

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

Tool Recommendations: The following list of tools are part of a standard automotive tool set, and are used in various combinations for most automotive repairs. The tools required for this installation are highlighted in red, but we recommend you have this complete standard selection to overcome any issues that may arise such as rust, corrosion, or broken and stripped fasteners. The specific tools required for each step will be listed by the step number throughout these instructions, and any tools listed below with a hyperlink are available on our website.

Protecta-Sockets (for lug nuts)	ES#2221243
• 3/8" Drive Ratchet	ES#2765902
• 3/8" Drive Torque Wrench	ES#2221245
• 3/8" Drive Deep and Shallow Sockets	ES#2763772
• 3/8" Drive Extensions	ES#2804822
Hydraulic Floor Jack	ES#240941
Torx Drivers and Sockets	ES#11417/8
• 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
Bench Mounted Vise	
Crows Foot Wrenches	
Hook and Pick Tool Set	ES#2778980

• 1/4" Drive Ratchet	ES#2823235
• 1/4" Drive Deep and Shallow Sockets	ES#2823235
• 1/4" Drive Extensions	
Plier and Cutter Set	
Flat and Phillips Screwdrivers	
• Jack Stands	
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	FS#11/20
Thread Repair Tools	
Open/Boxed End Wrench Set	ES#2765907



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. Always make sure that the vehicle is securely supported on jack stands.



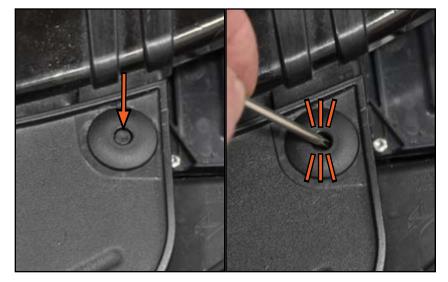
Step 1:

Open the hood and locate the four radiator shroud retaining rivets (arrows).



Small Screwdriver or Punch Step 2:

While listening carefully, gently push in the center pin of each radiator shroud rivet until you hear a faint "click" indicating that it is unlocked.





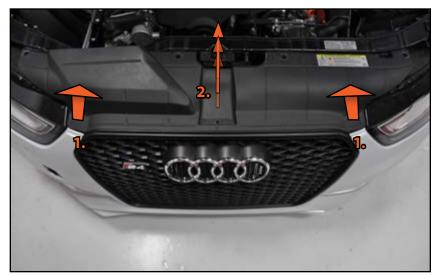
Step 3:

With the center pins unlocked, pull the rivets out of the radiator shroud. Slightly lifting the edge of the shroud will pull the rivets up so you can get a hold of them.



Step 4:

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.

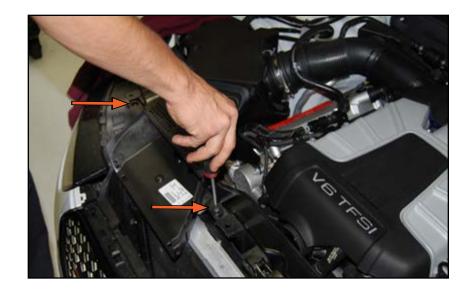




Step 5:

T25 Torx

Remove the two screws securing the air scoop to the core support.



Step 6:

Flat Blade Screwdriver -or- 7mm Socket and Ratchet

Loosen the hose clamps at both ends of the intake tube.

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NOTE

We are installing this intake on a post-facelift S4. The hose routing over the intake tube is slightly different on a pre-facelift car.





Step 7:

Locate the vent hose on the rear of the intake tube and pull it off.



Step 8:

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





Step 9:

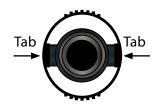
Gently pull up on both sides of the air box to release the fender mount and lower grommets, then locate the secondary air tube connected underneath. It's a tight fit, but there's just enough room to access it. Don't pull up too hard, because the secondary air tube will restrict the movement and you don't want to break it.



Step 10:

Remove the tube by squeezing the knurled sides of the tube connector together (arrows) and pulling downwards. With the tube removed, lift the original air box out of the car. The diagram below illustrates how the tube connector works.

Normal state: The tabs keep the tube connector "locked" onto the air box.



To release: Squeeze the knurled sides of the connector together, which will cause the tabs to spread and release the tube.

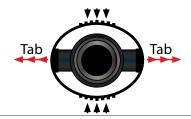




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REMOVING THE ORIGINAL AIR BOX

Step 11: T30 Torx

Remove the screw for the inner fender bracket, then rotate the bracket in a clockwise direction to unhook it from the fender, and remove it from the car.



Step 12:

We're almost ready to install the new Luft-Technik intake system, we just have a few more things to do. First, pull the two mounting grommets off the bottom of the original air box, then set them aside for now. We'll be using them later.





Step 13:

Unclip the coupler from the original air box, pull it off and set it to the side for now. We'll be using it later.



Step 14:

Gently squeeze both long sides of the air duct, then pull it off of the air scoop. Set the air scoop aside for now, we'll be using it later.

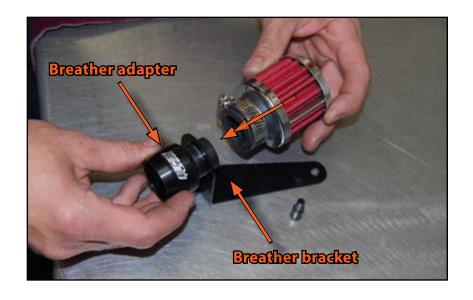
You are now ready to install your new Luft-Technik Intake System!





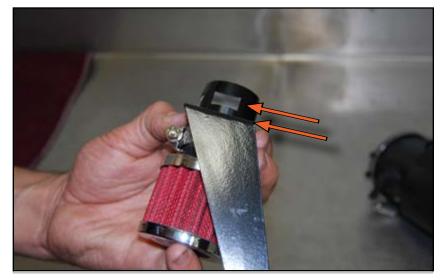
Step 1:

We're going to start by installing the secondary air tube breather. Insert the breather adapter through the breather bracket, then push the breather filter onto the adapter.



Step 2:

Make sure the flats on the breather adapter are parallel with the rear edge of the breather bracket as shown in the picture.





INSTALLING THE NEW LUFT-TECHNIK INTAKE SYSTEM

Flat Blade Screwdriver - or - Socket and Ratchet Step 3:

Tighten the hose clamp on the breather filter.

TECH TIP

A nut driver or socket and ratchet work well in place of a flat blade screwdriver when tightening hose clamps.



Step 4:

Push the breather adapter into the secondary air hose until it snaps securely into place.





Step 5:

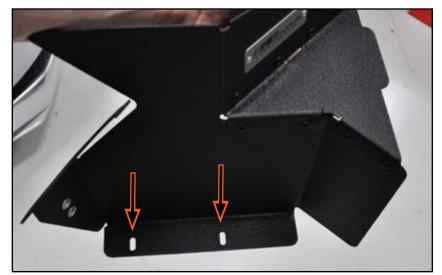
T30 Torx

Mount the breather bracket onto the inner fender as shown, using the original fender bracket screw.



Step 6:

Locate the two elongated slots on the base of the heat shield.





INSTALLING THE NEW LUFT-TECHNIK INTAKE SYSTEM

10mm Socket, Ratchet, 8mm Wrench Step 7:

Install the two feet into the slots as shown, with an M6 fiber washer located between the lock nut and the heat shield. Thread the nuts on, but leave them loose enough so the feet will slide back and forth in the slots.



Step 8: 10mm Socket, Ratchet, 8mm Wrench

Slide both of the feet all the way to the inside edge of the slots, then hold the feet with an 8mm wrench and tighten the nuts.



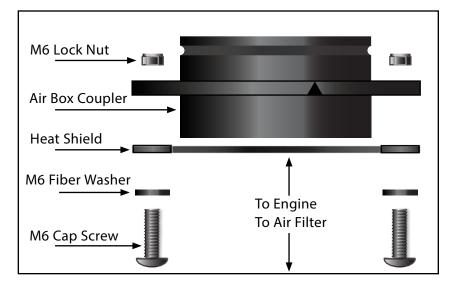
Step 9:

Push the two rubber mounting grommets onto the feet on the base of the new heat shield.



Step 10:

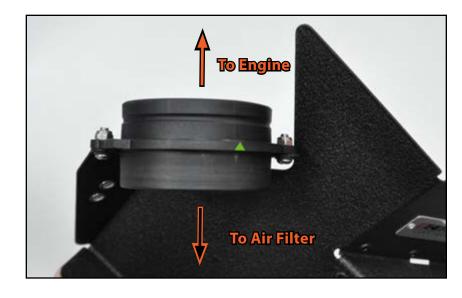
Now it's time to install the air box coupler onto the heat shield. Inspect the diagram on the right for component location, then proceed to step 11.





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

Install the coupler onto the heat shield and tighten the fasteners. There is a small arrow on the edge of the coupler (highlighted in the picture) that should point in the direction of the engine. The groove on the coupler will also be located towards the engine. Reference the diagram in step 10 to install the coupler, screws, washers, and nuts in their proper position.



Step 12:

Push the 3/8 bulb seal into place along the top edge of the heat shield. Start one edge flush with the front side of the shield as shown in the picture.





Cut-off Pliers or Side Cutters Step 13:

Trim the other end of the seal so it is flush with the back side of the heat shield as shown in the picture.



Step 14:

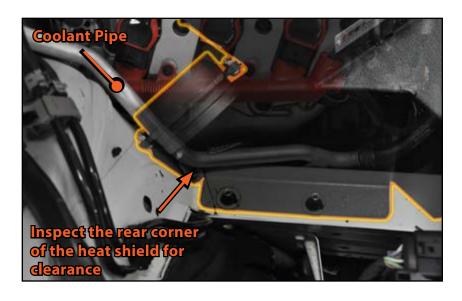
Install the heat shield into place by pushing the mounting grommets into the holes in the frame channel.





Step 15:

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.



Step 16:

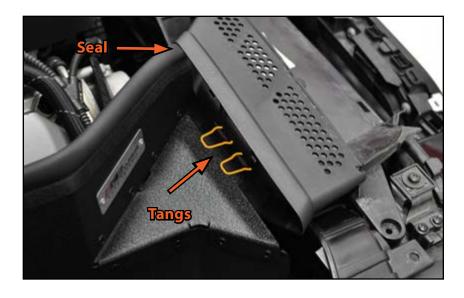
Position the air scoop onto the core support, over the front edge of the heat shield as shown.





Step 17:

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.



T25 Torx Step 18:

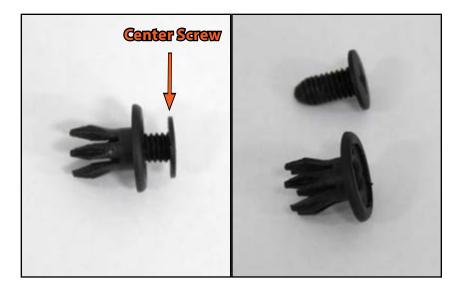
Install and tighten the two air scoop retaining screws.





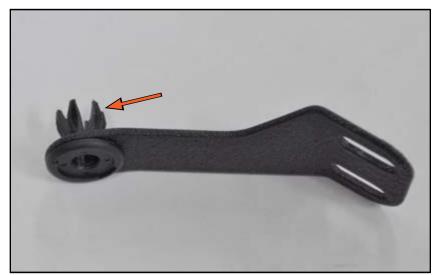
Step 19:

Remove the center screw from the expanding rivet by completely unthreading it.



Step 20:

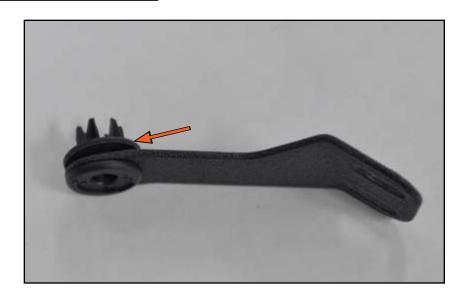
Push the expanding rivet through the end of the support bracket.





Step 21:

Install the M10 fiber washer onto the expanding rivet.



4mm Allen Step 22:

Push the expanding rivet into the pre-existing hole in the shock tower, then line up the elongated slots in the support bracket with the two riv-nuts in the heat shield. Place the remaining two M6 fiber washers onto the remaining two M6 cap screws, then thread the screws through the support bracket and into the heat shield, but do not tighten them yet.





INSTALLING THE NEW LUFT-TECHNIK INTAKE SYSTEM

4mm Allen, Phillips Screwdriver Step 23:

First thread (or push) the center screw into the expanding rivet, then 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.



If you are installing a Carbon Fiber Intake Pipe, proceed with the next step. If you are installing a Silicone Intake Pipe, skip to Step 27 on Page 30.

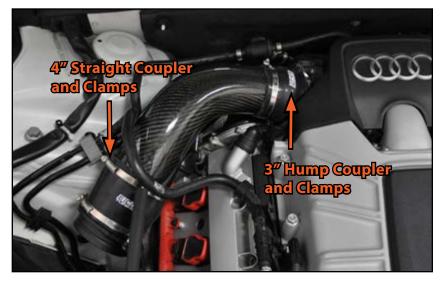


Flat Blade Screwdriver - or - Socket and Ratchet Step 24:

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 coupler and throttle body.

Be sure to install the 4" silicone straight coupler and clamps at the air box coupler and the 3" silicone hump coupler and clamps at the throttle body.

Align all couplers and clamps, then tighten all four clamps.





Step 25:

Push the 90 degree elbow into the end of the vent hose on the back of the intake.



Step 26:

Push the vent hose extension onto the other end of the 90 degree elbow, then onto the nipple on the rear of the carbon fiber pipe.



Continue with Step 30 on Page 31.

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Step 27: Flat Blade Screwdriver - or - Socket and Ratchet

Install the silicone intake pipe between the air box coupler and throttle body. Be sure to use the 4" clamp at the air box coupler and the 3" clamp at the throttle body. Securely tighten both clamps.



Step 28:

Push the 90 degree elbow into the end of the vent hose on the back of the intake.





Step 29:

Push the other end of the 90 degree elbow into the back of the silicone intake pipe.



Step 30:

Wipe out the opening of the air filter to remove any oily residue.





Step 31: Flat Blade Screwdriver - or - Socket and Ratchet

Push the air filter onto the end of air box coupler and tighten the clamp.



Step 32:

Install the radiator shroud and rivets.

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.

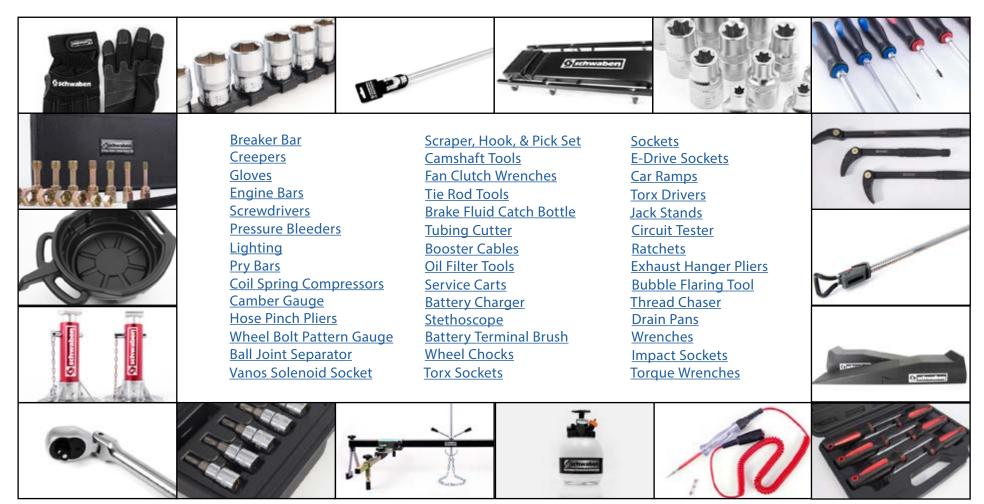
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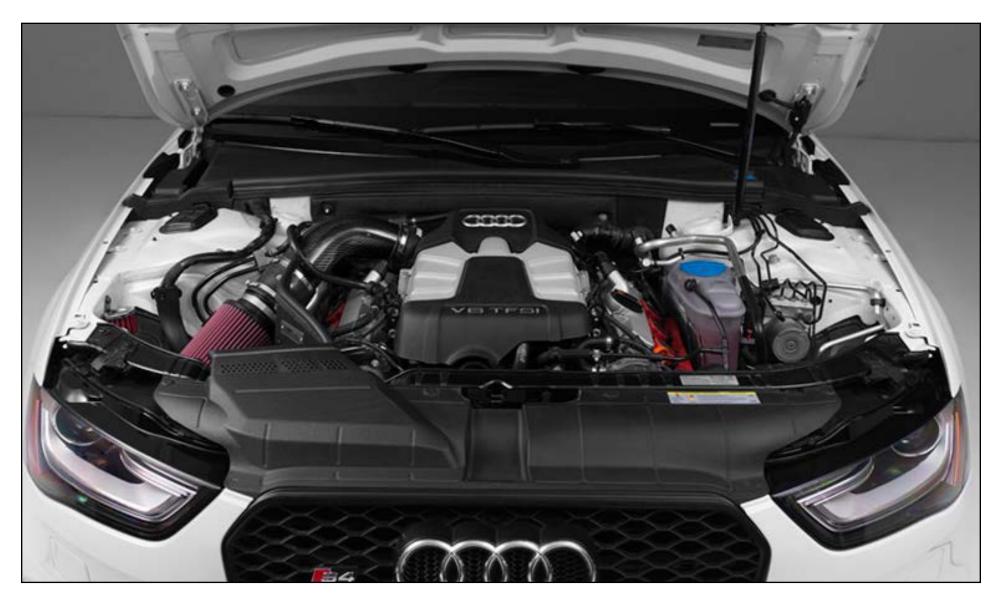


SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

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 Luft-Technik Intake 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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