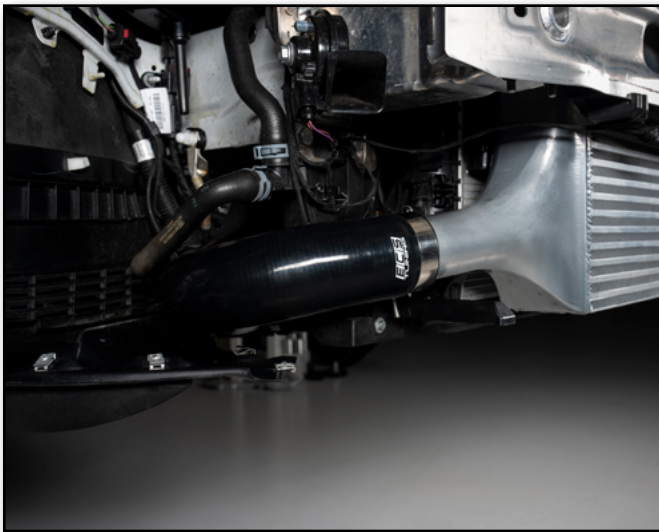




## Audi B9 S4 Intercooler Charge Pipe Kit Installation Instructions



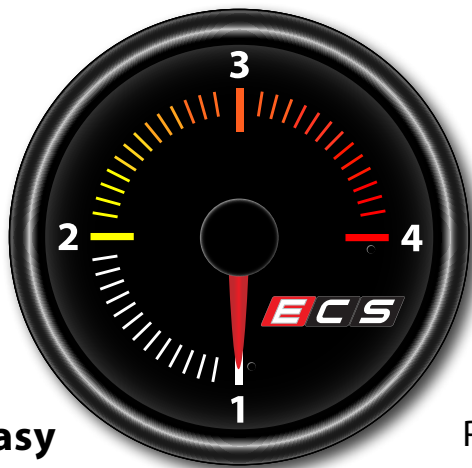
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times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

## INTRODUCTION

### The Project:

Today we are going to install our ECS Tuning Intercooler Charge Pipe Kit for the Audi B9 S4. These pipes have been completely designed by our engineers at ECS Tuning to provide superior fitment and performance. Our pipes are constructed of durable and smooth aluminum and feature a sleek wrinkle black finish. You can expect to see a reduced in restriction through the intercooler system, less air turbulence, improved efficiency. Our charge pipe kit includes all necessary components for installation and with absolutely no permanent modification to the vehicle installation is completely reversible.

### ECS Difficulty Gauge

**1 - Easy**

2 - Moderate

Advanced - 3

Pro - 4

Installation of this kit is an absolute breeze! Installation will take a few hours at most and requires no specialty tools or modification. Make sure to read through these instructions completely before you get started and refer back to them as needed throughout your install. Thank you for purchasing your new charge pipe kit from ECS Tuning, we appreciate your business!

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## KIT CONTENTS



Charge Pipe  
(QTY 1)



Turbo Outlet Pipe  
(QTY 1)



Throttle Body Flange  
(QTY 1)



Straight Coupler  
(QTY 1)



Reducing Coupler  
(QTY 1)



70-78mm Clamp  
(QTY 3)



77-85mm Clamp  
(QTY 3)

## 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](#)
- **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](#)

### Required For This Install

### Available On Our Website

- **1/4" Drive Ratchet** ..... [ES#2823235](#)
- **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](#)
- **Trim Removal Tool Kit** ..... [ES#517779](#)
- 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](#)

## 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.

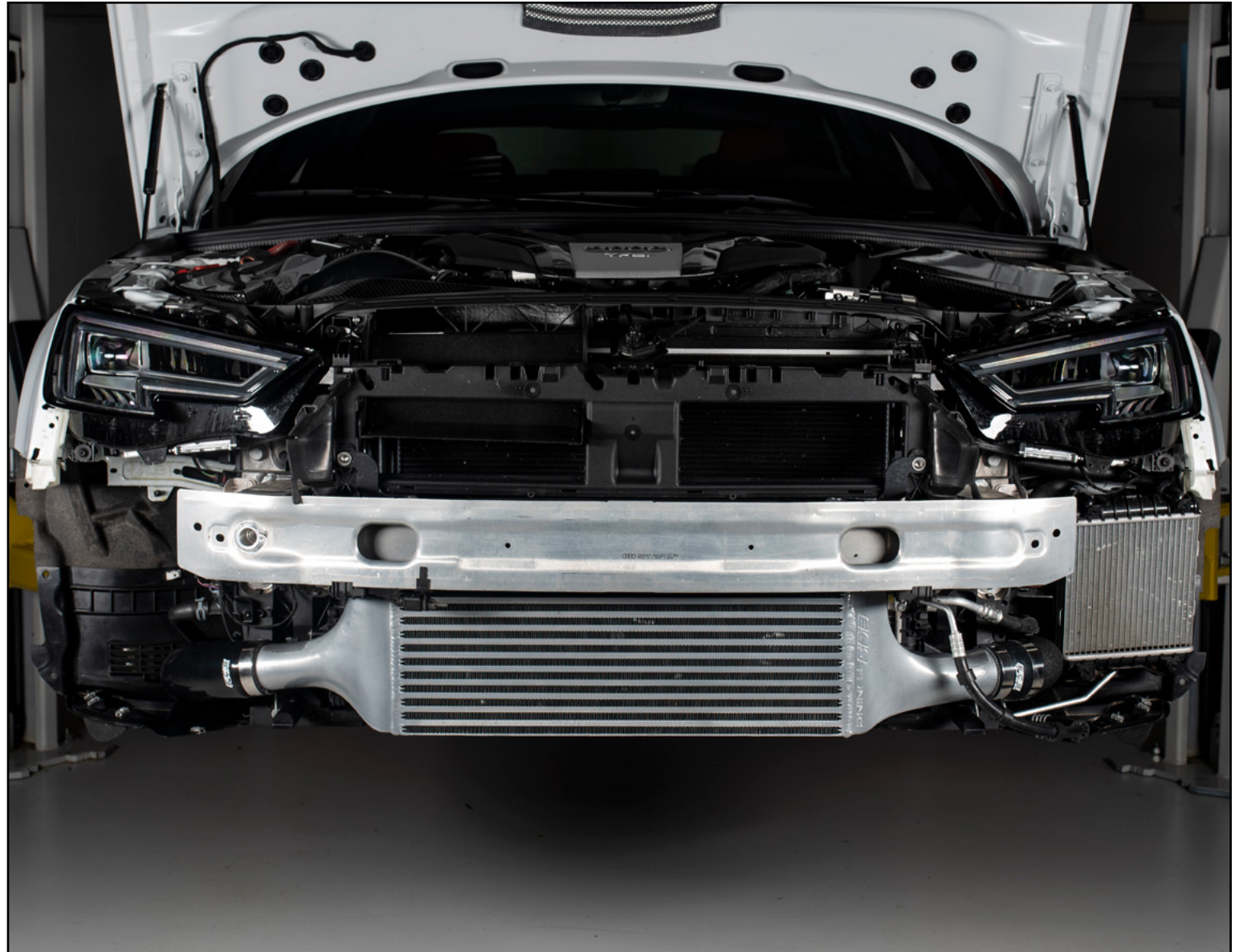


**NEVER** get underneath a vehicle that is supported only by a jack, and **ALWAYS** make sure that the vehicle is securely supported on jack stands.

## PROJECT OVERVIEW

Before we get started, let's take a look at how the installation process is laid out. Installation can be easily split up into several simple sections: removal of the front bumper, removal of the stock pipes, installation of the new charge pipe Kit and finally reinstallation of the front bumper. Our upgraded pipes are a direct-fit replacement for the stock pipes, and we include all required couplers and clamps so installation is simple. The only modification required is to remove the stock throttle body flange and replace it with the included upgraded aluminum flange. That's really all there is to it!

***Now let's get to it!***





## REMOVING THE ORIGINAL PIPES

### Step 1:

Locate the release button along the back edge of the hood release lever. Push in on the button with your finger, then pull the hood release lever off.



### Step 2:

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



## REMOVING THE ORIGINAL PIPES

### Step 3: Protecta-Sockets

Safely lift and support the vehicle, then remove the front wheels.



### Step 4: T25 Torx

Remove the three outermost fasteners in each wheel well.



## REMOVING THE ORIGINAL PIPES

### Step 5: Trim Removal Tool

Pry up to remove the vertical push-clip located behind each fender liner.



### Step 6: T30 Torx, Extension

Remove the screw located deeper behind the fender liner.





## REMOVING THE ORIGINAL PIPES

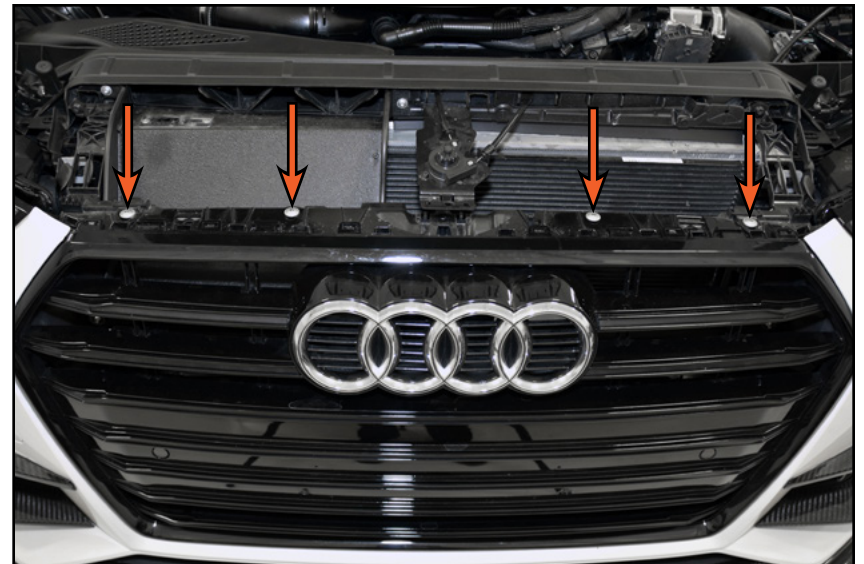
### Step 7: T25 & T30 Torx

Remove the seven fasteners securing the bumper to the belly pan.



### Step 8: T30 Torx

Above the front grille, locate and remove the last four screws securing the bumper to the vehicle.



## REMOVING THE ORIGINAL PIPES

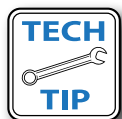
### Step 9:

From inside each wheel well, gently pull the bumper outward, away from the fender, to pop it free from its mounting clips.



### Step 10:

In order to remove the bumper from the vehicle we must remove the parking sensor harness. In order to access this connector pull the bumper forward until it is completely free from the vehicle .



The bumper is not very heavy, but it's slightly awkward to hold by yourself. Removal can be made much easier if you have a friend lend you a helping hand.





## REMOVING THE ORIGINAL PIPES

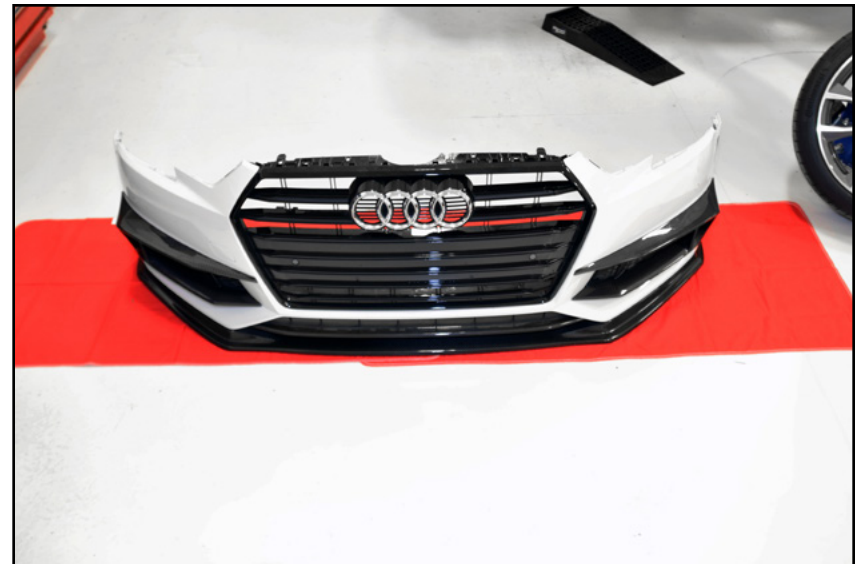
### Step 11:

If your vehicle is equipped with parking sensors, you will need to disconnect the harness located on the LH side of the bumper before you can fully remove the bumper from the vehicle.



### Step 12:

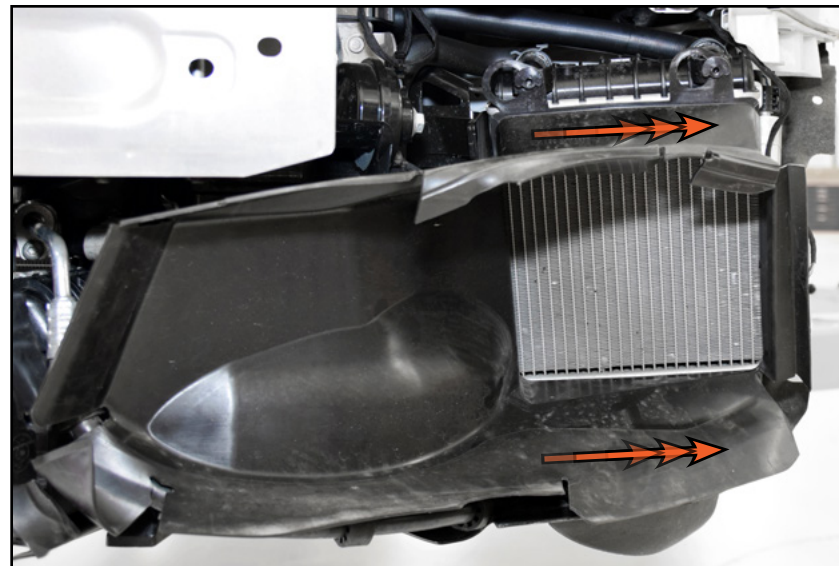
Set the bumper aside on fender covers or another suitable surface to prevent scratches or damage.



## REMOVING THE ORIGINAL PIPES

### Step 13:

Remove the plastic auxiliary radiator cowl by pulling it toward the outside of the vehicle to free it from the tabs.



### Step 14: Flat Head Screwdriver

Loosen the hose clamp on the stock turbo outlet pipe (located on the RH side of the intercooler), then slide it off of the intercooler.



## REMOVING THE ORIGINAL PIPES

### Step 15: Flat Head Screwdriver

Loosen the hose clamp and pull the stock turbo outlet pipe free from the flange and remove it from the vehicle.



### Step 16:

Loosen the hose clamp on the stock charge pipe (located on the LH side of the intercooler), then slide it off of the intercooler.





## REMOVING THE ORIGINAL PIPES

### Step 17:

To remove the MAP sensor from the stock charge pipe, push down on the retaining tab while you rotate the sensor 90 degrees, then pull it straight out of the pipe.



### Step 18: Flat Head Screwdriver

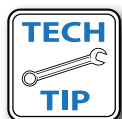
Loosen the clamp holding the charge pipe to the throttle body flange.



## REMOVING THE ORIGINAL PIPES

### Step 19:

Pull the charge pipe free from the throttle body flange then, pull the coolant line free from the clip on the throttle body flange.



This pipe can be rather difficult to pull off of the flange, if you struggle here you can remove the four screws from the flange and remove it along with the charge pipe. Refer to step 21 on the next page for the locations of the screws.



### Step 20:

Gently guide the stock charge pipe down and out from the vehicle.



Removal will require you to rotate the pipe several times in order to clear the chassis.

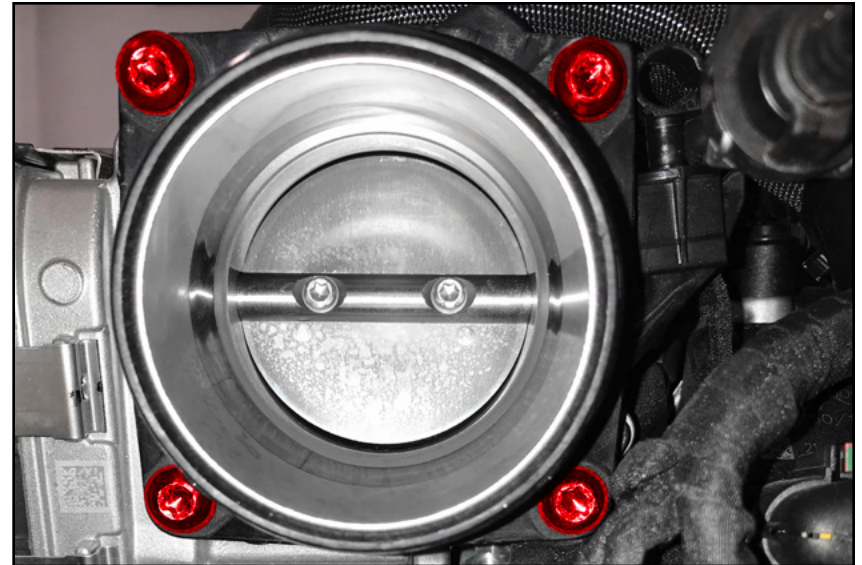




## REMOVING THE ORIGINAL PIPES

### Step 21: T30 Torx

Remove the four screws (highlighted in **RED**) securing the stock throttle body flange to the throttle body.



### Step 22:

Remove the clip from the stock flange by carefully pulling it straight up.



## INSTALLING THE NEW CHARGE PIPE KIT

### Step 1:

Transfer the clip from the stock flange to the mounting tab on the new flange.



### Step 2: T30 Torx

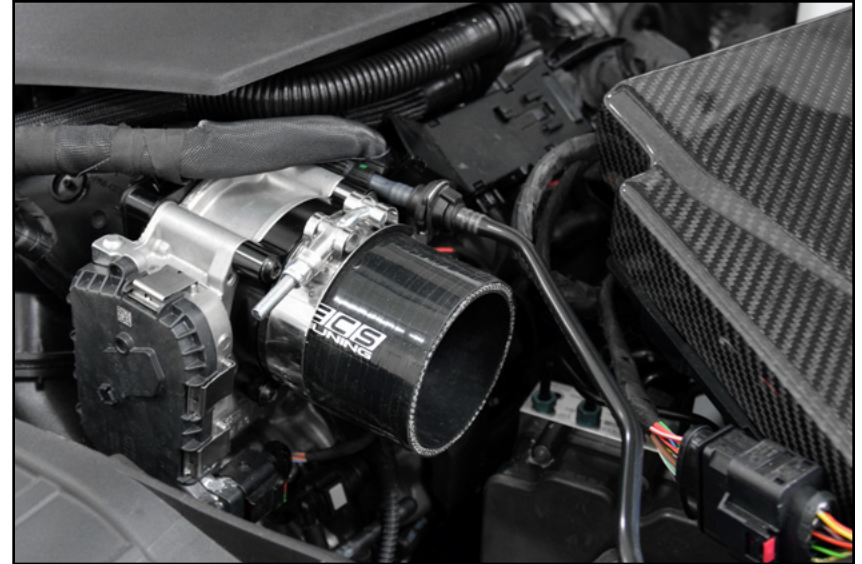
Install the new flange onto the throttle body and secure it with the four screws. Tighten the screws until they make contact + 1/8 turn.



## INSTALLING THE NEW CHARGE PIPE KIT

### Step 3: 10mm Socket & Ratchet

Slide the straight coupler over the flange and install a 77-85mm clamp but leave it loose enough to allow for adjustment.



### Step 4:

Install the reducing coupler onto the lower end of the new charge pipe.



## INSTALLING THE NEW CHARGE PIPE KIT

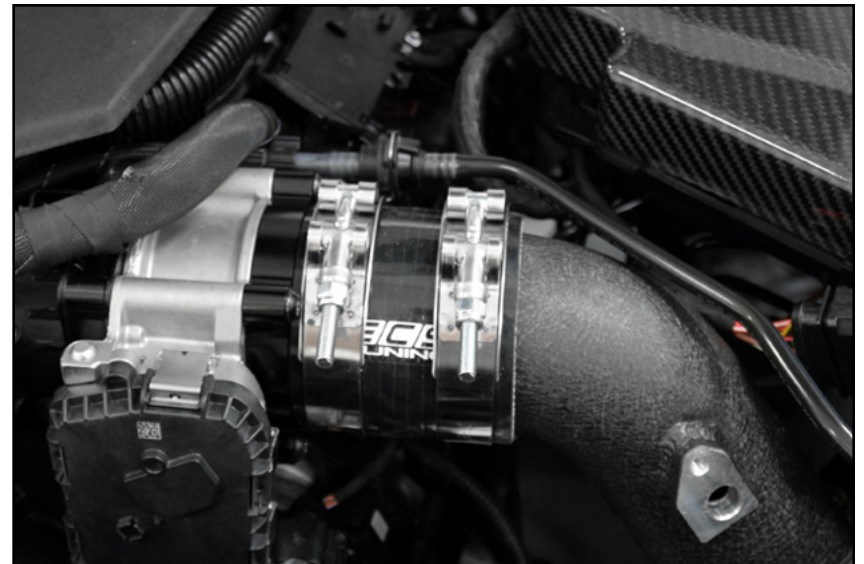
### Step 5:

Guide the new charge pipe with the reducing coupler up into the vehicle towards the throttle body.



### Step 6: 10mm Socket & Ratchet

Install the charge pipe into the straight coupler and loosely install a second 77-85mm clamp but leave it loose enough to allow for adjustment.





## INSTALLING THE NEW CHARGE PIPE KIT

### Step 7: 5mm Hex (Allen) Socket and Ratchet

Install the MAP sensor into the port on the new charge pipe and secure it with the screw.



### Step 8:

Slide the reducing coupler over the LH side of the intercooler.

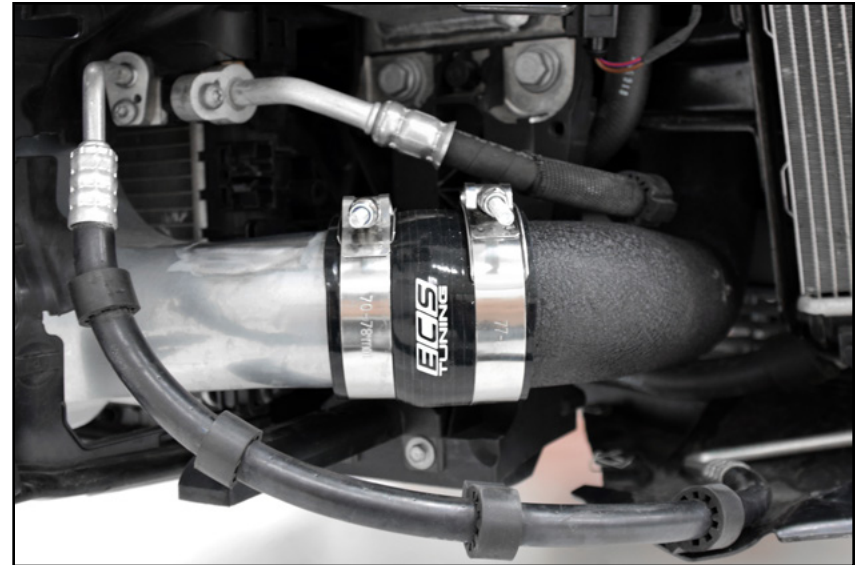




## INSTALLING THE NEW CHARGE PIPE KIT

### Step 9: 10mm Socket & Ratchet

Install a clamp onto each end of the reducing coupler but leave them loose enough to allow for adjustment.



### Step 10:

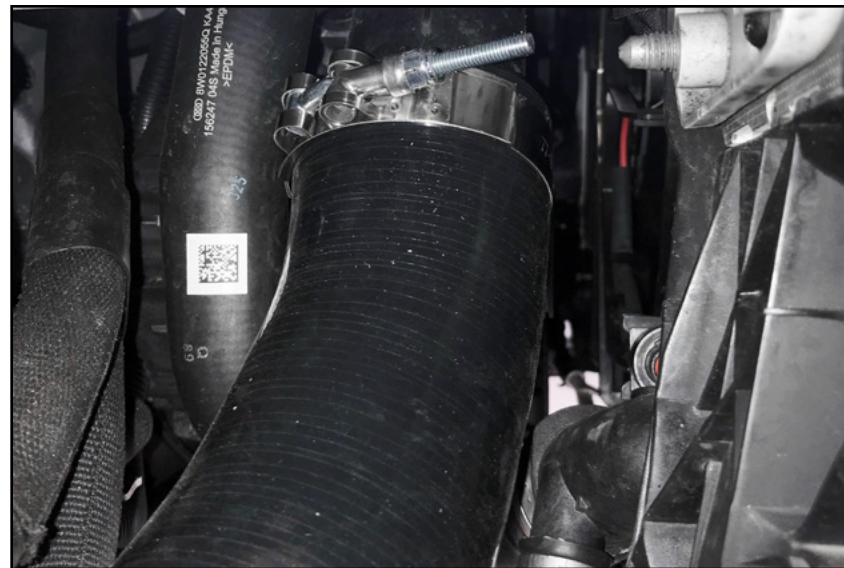
Guide the silicone turbo outlet pipe up towards the turbo outlet flange



## INSTALLING THE NEW CHARGE PIPE KIT

### Step 11: 10mm Socket & Ratchet

Slide the new turbo outlet pipe onto the flange and install a 70-78mm clamp but leave it loose enough to allow for adjustment.



### Step 12:

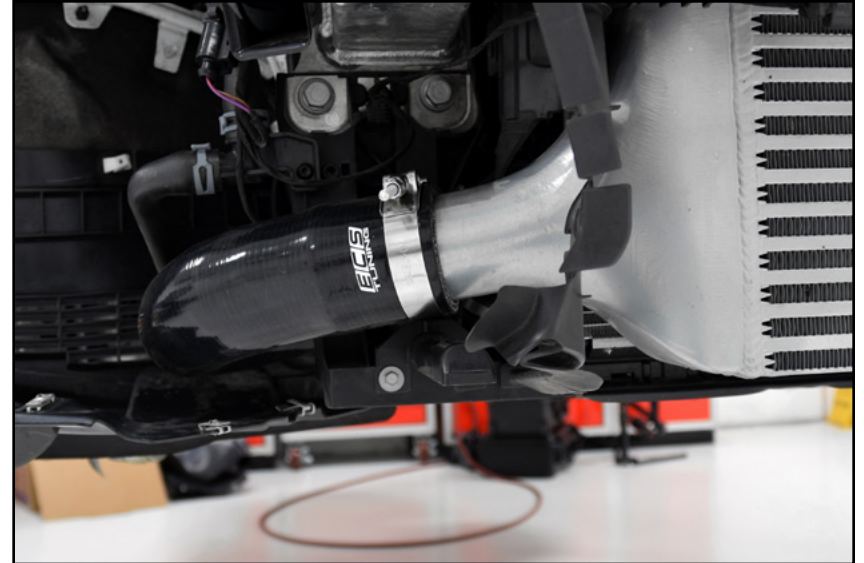
Slide the new turbo outlet pipe over the RH side of the intercooler.



## INSTALLING THE NEW CHARGE PIPE KIT

### Step 13: 10mm Socket & Ratchet

Loosely install the 70-78mm clamp to secure the turbo outlet pipe onto the intercooler.



### Step 14: 10mm Socket & Ratchet

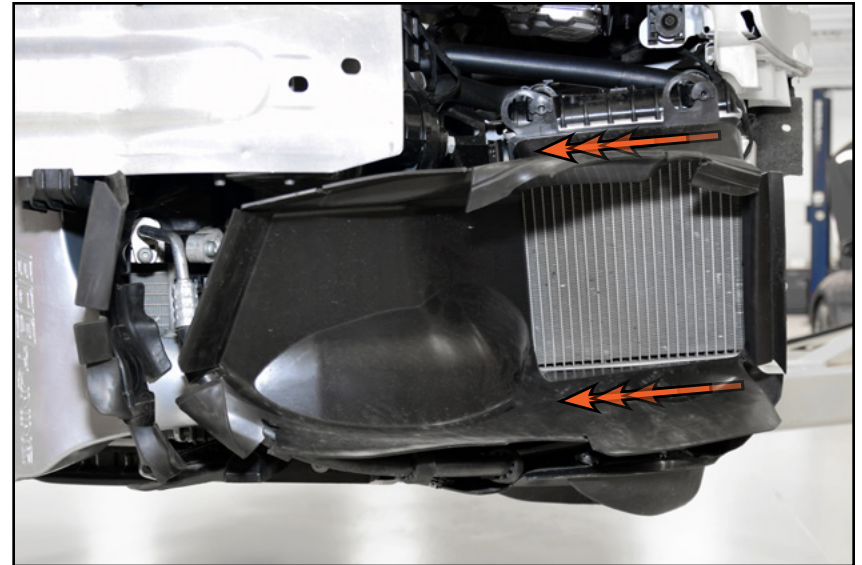
Adjust both pipes for proper fitment, then fully tighten all clamps to secure them into place.



## INSTALLING THE NEW CHARGE PIPE KIT

### Step 15:

Slide the plastic auxiliary radiator cowl back into place.



### Step 16:

If equipped, reinstall the parking sensor harness on the LH side of the bumper.





## INSTALLING THE NEW CHARGE PIPE KIT

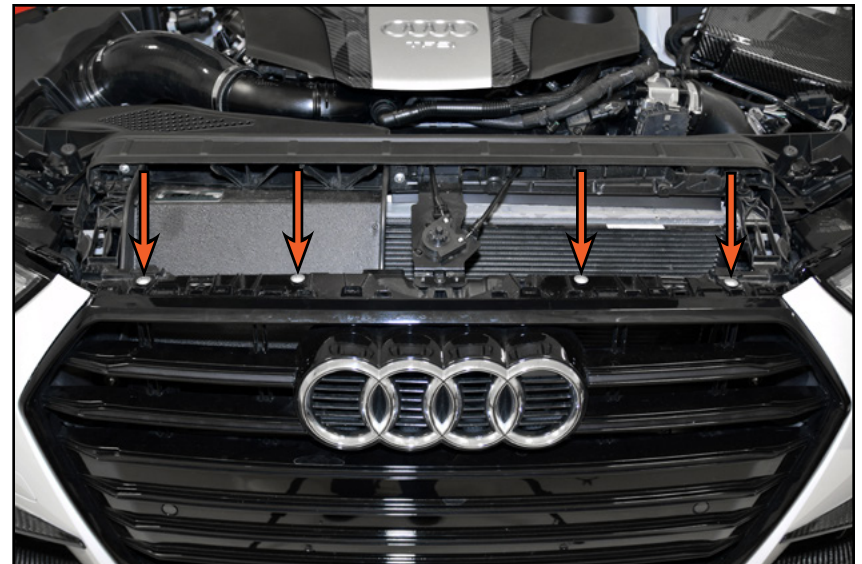
### Step 17:

Lift the bumper back into place.



### Step 18: T30 Torx

Reinstall the four upper screws securing the bumper to the plastic support bracket.

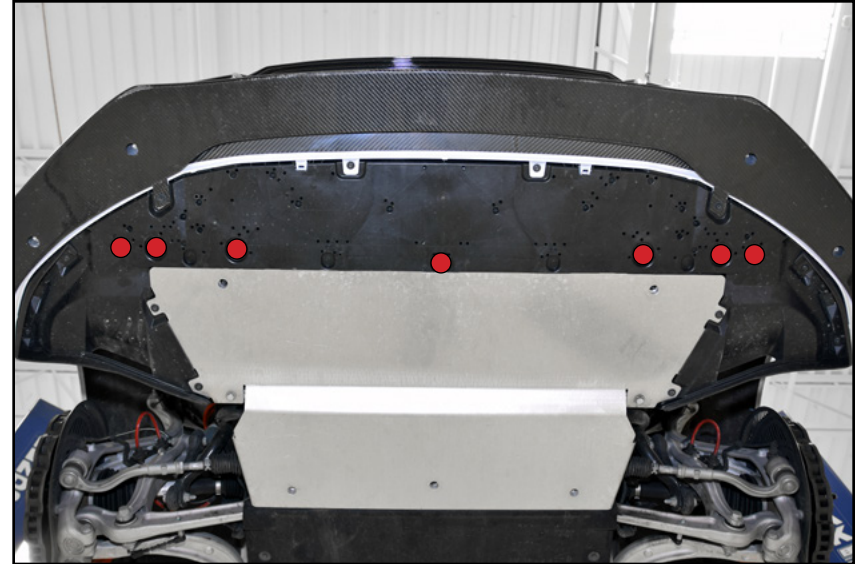




## INSTALLING THE NEW CHARGE PIPE KIT

### Step 19: T25 Torx, T30 Torx

Reinstall the seven fasteners securing the bumper to the belly pan.



### Step 20: T30 Torx

Reinstall the screw located deep behind each fender liner.



## INSTALLING THE NEW CHARGE PIPE KIT

### Step 21:

Reinstall the vertical push-clip on either side.



### Step 22: T25 Torx

Reinstall the three fasteners in either fender liner.



## INSTALLING THE NEW CHARGE PIPE KIT

### Step 23:

Slide the front shroud back into place and push it down to snap it back into the top of the grille.



### Step 24:

Reinstall the hood release lever.



***Congratulations, your installation is complete!***

## 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 Intercooler Charge Pipe Kit 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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