



VW MK7 Front Mount Intercooler Kit Installation Instructions - [Click HERE to shop](#)



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AVAILABLE KITS



For Existing ECS Charge Pipes



For OEM Charge Pipes



With Red or Black ECS Charge Pipes

KIT CONTENTS



Intercooler
(QTY 1)



RH Intercooler Bracket
(QTY 1)



LH Intercooler Bracket
(QTY 1)



RH Horn Bracket
(QTY 1)



LH Horn Bracket
(QTY 1)



Inlet Coupler
(QTY 1)



Outlet Coupler
(QTY 1)



68-74mm Clamp
(QTY 4)



For OE Charge Pipes



For ECS Charge Pipes



Inlet Coupler
(QTY 1)



Outlet Coupler
(QTY 1)



68-74mm Clamp
(QTY 3)



76-84mm 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

- **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

- **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](#)
- 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** [ES#11420](#)
- Thread Repair Tools [ES#1306824](#)
- Open/Boxed End Wrench Set [ES#2765907](#)

Available On Our Website

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

Installation of this intercooler kit will require removal of the belly pan, lower fender liners, and the front bumper cover. Once the bumper cover is removed, installation is just a matter of installing the provided brackets, bolting the intercooler into place, and installing the provided silicone hoses and clamps. Our front mount intercooler kit is available with optional powder-coated aluminum charge pipes (pictured below) for maximum performance gains.

Now let's get to it!



INSTALLING THE INTERCOOLER KIT

Step 1: T25 Torx

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



Step 2:

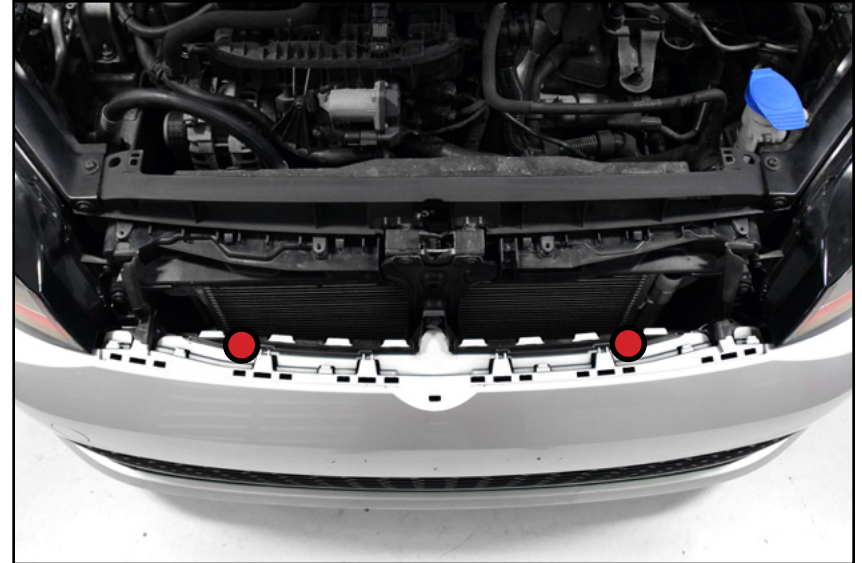
Remove the grille by pulling it towards the front of the vehicle and then lifting up to pop it free from the bumper.



INSTALLING THE INTERCOOLER KIT

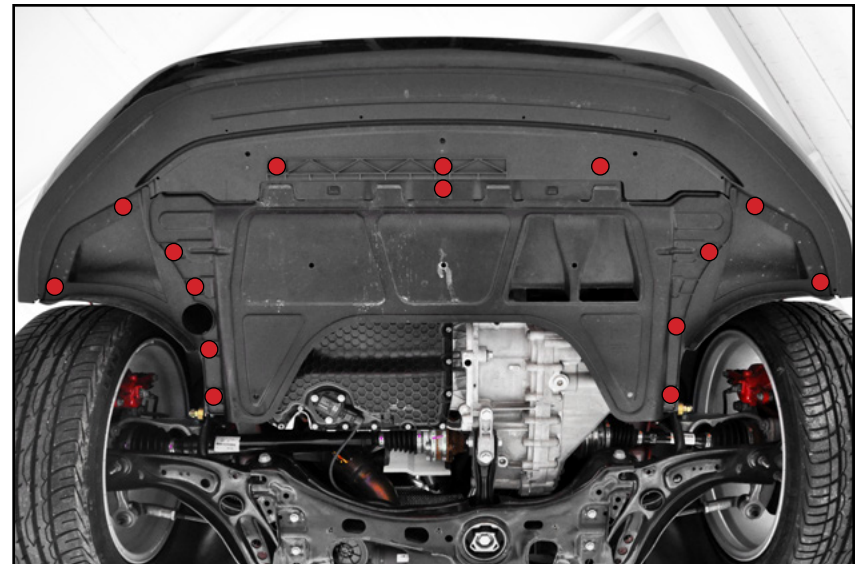
Step 3: Phillips Screwdriver

Certain vehicles have two additional screws which secure the bumper to the core support. If equipped, remove these screws (highlighted in **RED**) before moving forward.



Step 4: T25 Torx

Remove the screws (highlighted in **RED**) which secure the bumper, belly pan and lower fender liners to the underside of the vehicle.



INSTALLING THE INTERCOOLER KIT

Step 5: 17mm Protecta Socket & Breaker Bar

Remove the front wheels to gain access to the fender liners.



Step 6: T25 Torx

Remove the five screws (highlighted in **RED**) and remove the lower fender liners from the vehicle.

Remove the vertical screw (arrow) which secures the corner of the bumper to the vehicle.



INSTALLING THE INTERCOOLER KIT

Step 7:

Disconnect the fog light connectors (arrows) if equipped.



Step 8:

Carefully (but firmly) pull the bumper free from the fenders as shown.



INSTALLING THE INTERCOOLER KIT

Step 9:

Carefully remove the bumper cover and set it aside.



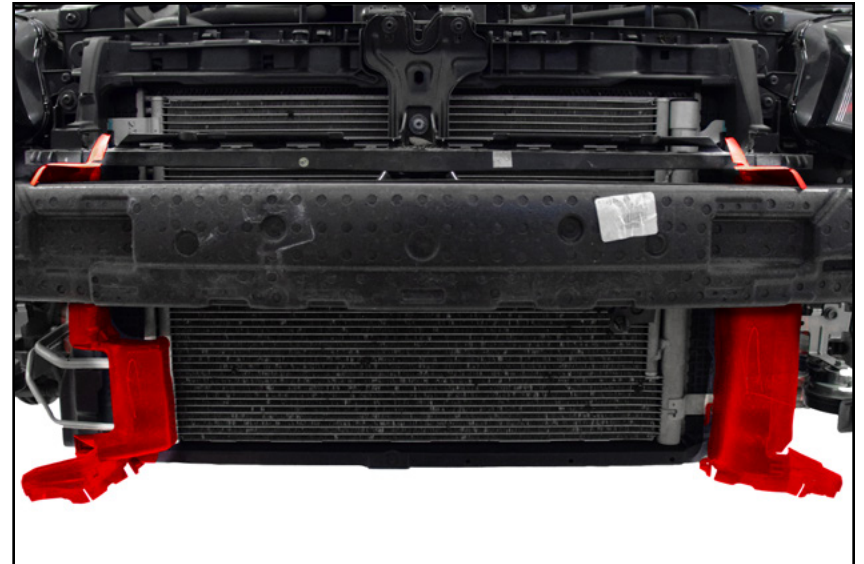
If you purchased our intercooler charge pipe kit, reference the PDF under the "installation" tab [HERE](#) to install them before moving forward.

Otherwise, continue to the next step to proceed with your installation.



Step 10:

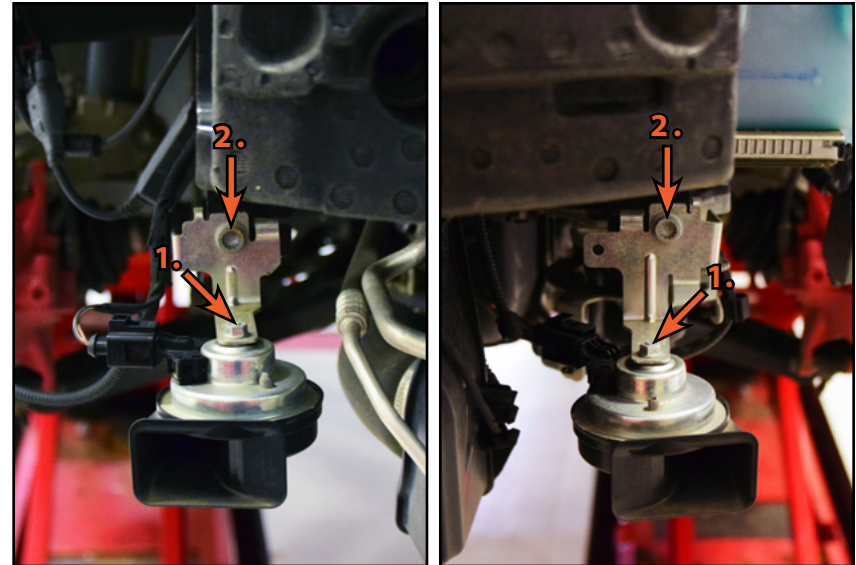
Locate and remove the two plastic air shrouds (highlighted in **RED**) which are clipped into the front of the core support.



INSTALLING THE INTERCOOLER KIT

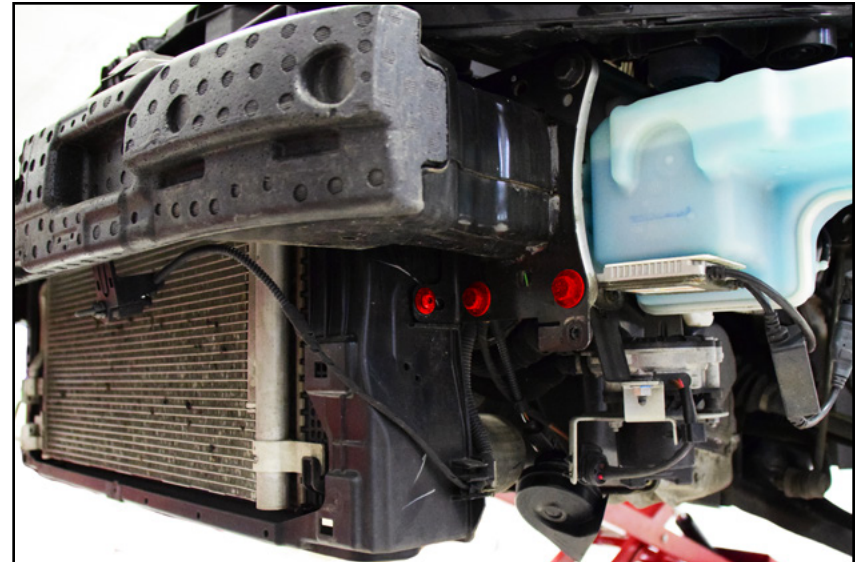
Step 11: M10 Triple Square, 10mm Socket & Ratchet

First, remove the nut which secures each horn to the factory bracket, then remove the bolt which secures the bracket to the vehicle.



Step 12: T30 Torx, 19mm Socket & Ratchet

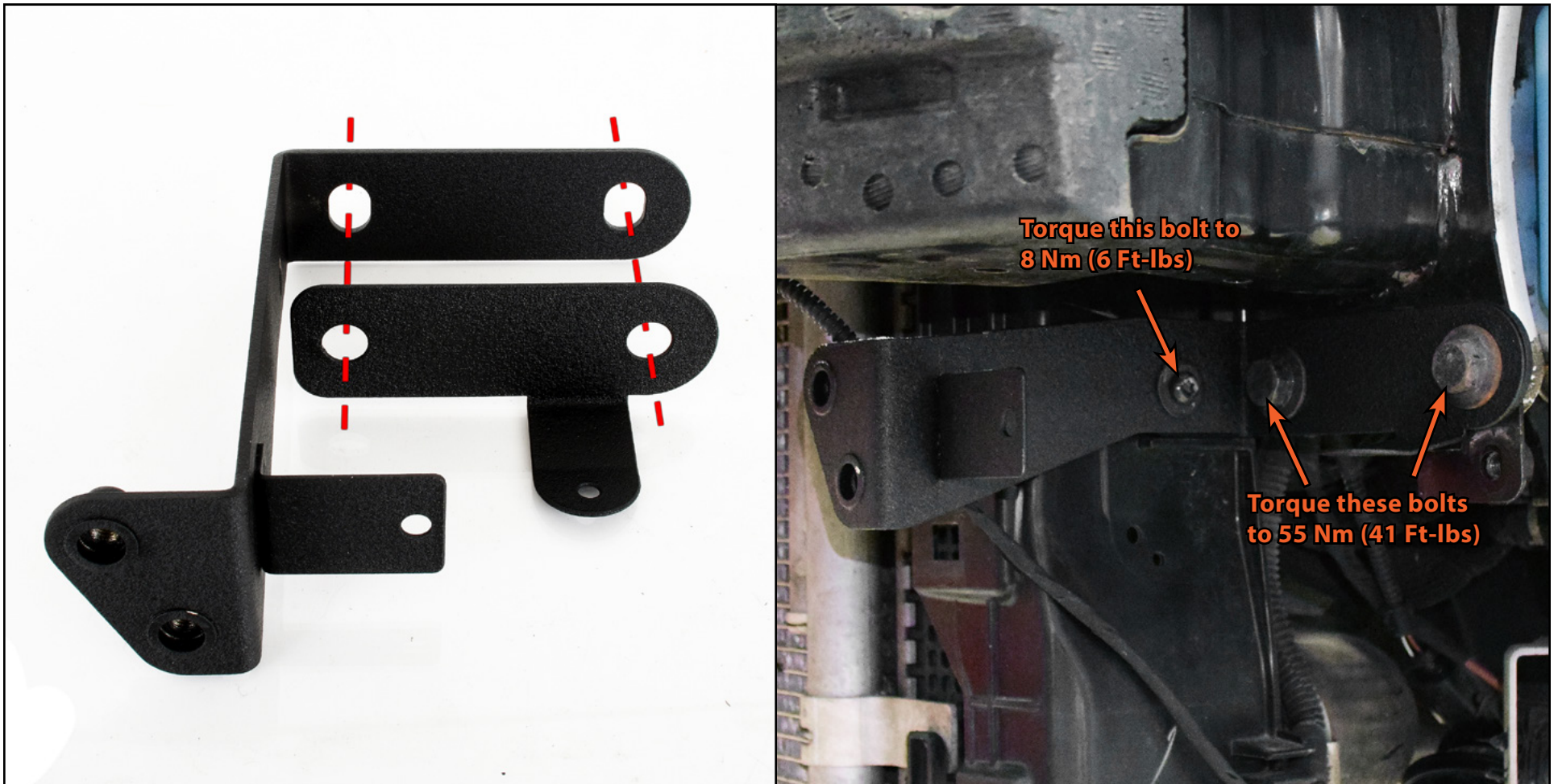
Remove the three bolts (highlighted in **RED**) on both sides of the core support and set them aside.



INSTALLING THE INTERCOOLER KIT

Step 13: T30 Torx, 19mm Socket & Ratchet

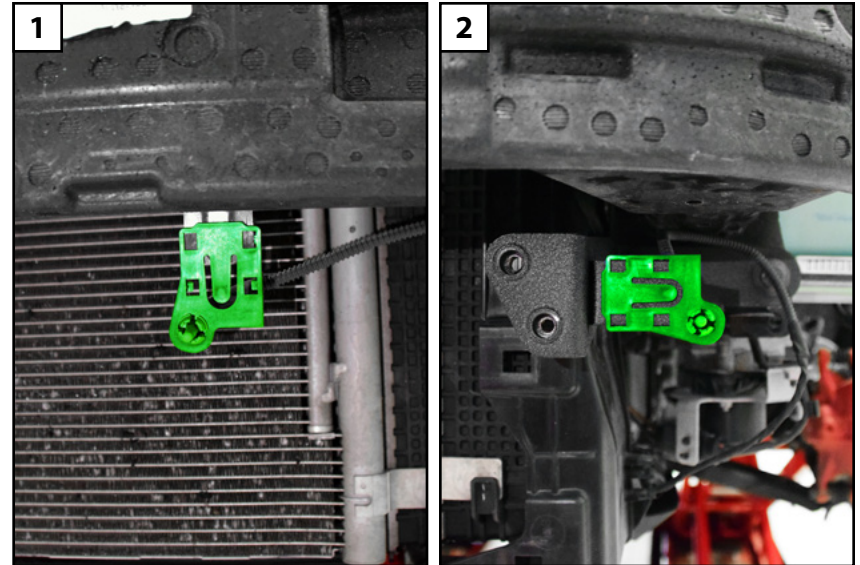
Install the LH intercooler bracket and horn bracket as shown in the photo on the left using the two 19mm bolts, torquing them to 55 Nm (41 Ft-lbs). Install the T30 bolt and torque it to 8 Nm (6 Ft-lbs). Repeat for the RH brackets.



INSTALLING THE INTERCOOLER KIT

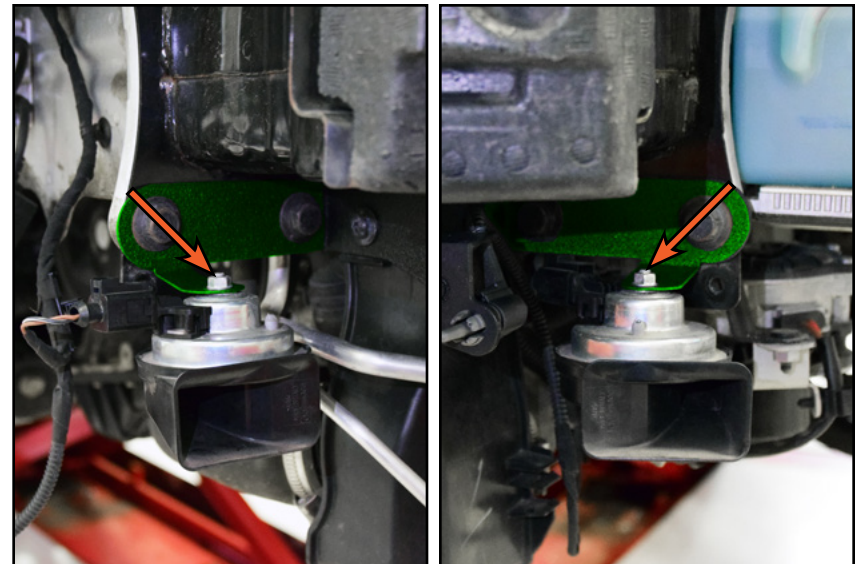
Step 14: Angled Pick

Remove the ambient air temperature sensor and bracket (highlighted in **GREEN**) from the mounting tab on the crash beam and transfer it to the mounting tab on the LH intercooler bracket as shown.



Step 15: 10mm Socket & Ratchet

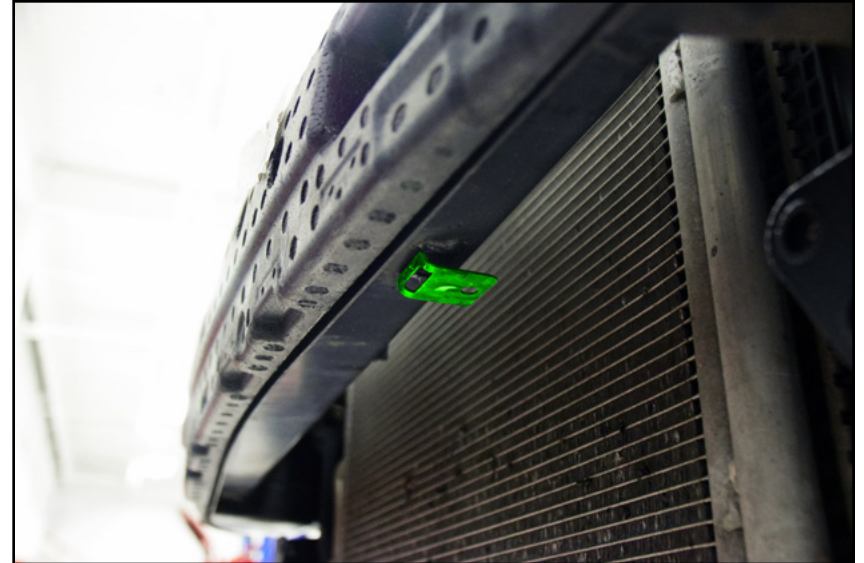
Install the horns into the horn bracket (highlighted in **GREEN**) and tighten the nuts (arrows) until snug.



INSTALLING THE INTERCOOLER KIT

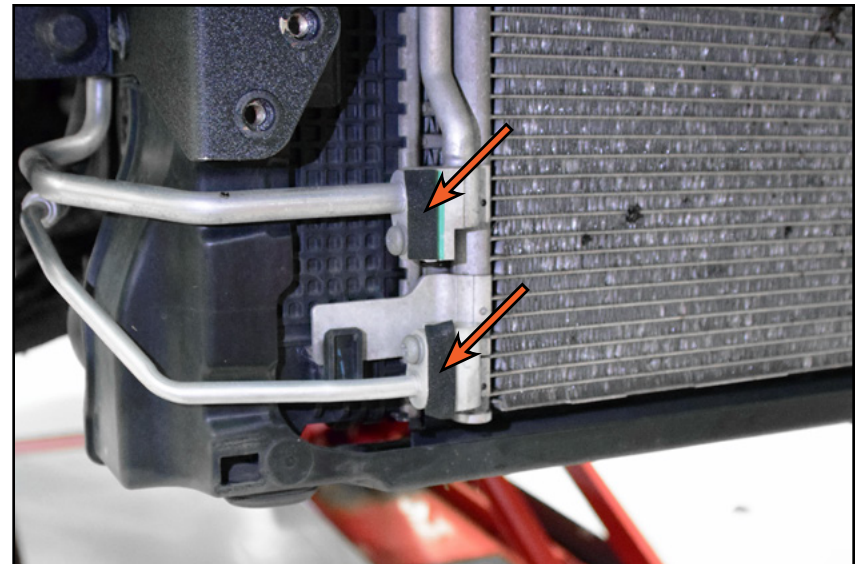
Step 16:

Bend the factory ambient air temperature sensor bracket (highlighted in **GREEN**) up against the crash beam as shown.



Step 17:

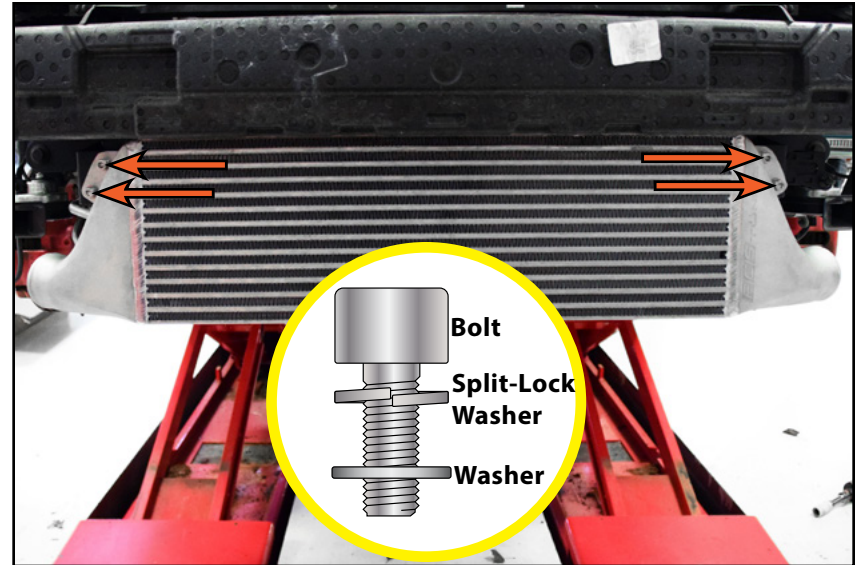
Cut the provided foam strip into two pieces and adhere it to the A/C lines as shown (arrows).



INSTALLING THE INTERCOOLER KIT

Step 18: 6mm Allen

Lift the intercooler into place and secure it to the mounting brackets using the four bolts, washers and split-lock washers (arrows) as shown in the inset illustration.



Step 19: Vise-Grips

If your vehicle is equipped with a secondary air injection pump on the LH side, it may be necessary to bend the harness bracket out of the way slightly (about 45 degrees) using a pair of vise-grips.



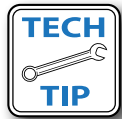
Provided in the kit are two intercooler caps (shown in the picture on the right), which can be used to cover the inlet and outlet flanges of the OE intercooler to prevent water or other contaminants from entering the intercooler.



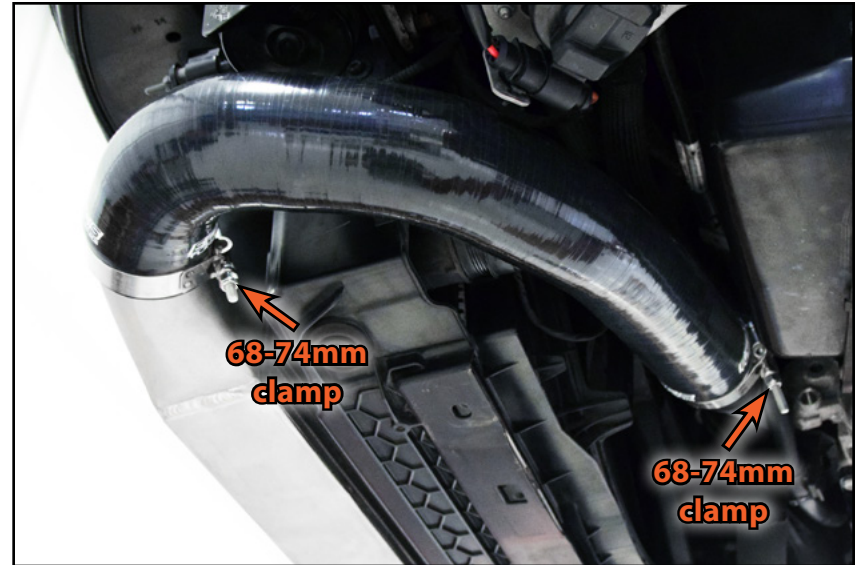
INSTALLING THE INTERCOOLER KIT

Step 20: 11mm Socket & Ratchet

Slide the intercooler inlet hose over the intercooler and charge pipe then slip the clamps around the hose and tighten them down.



It may be necessary to remove the nut from each clamp and slide it over the hose in order get them installed properly.

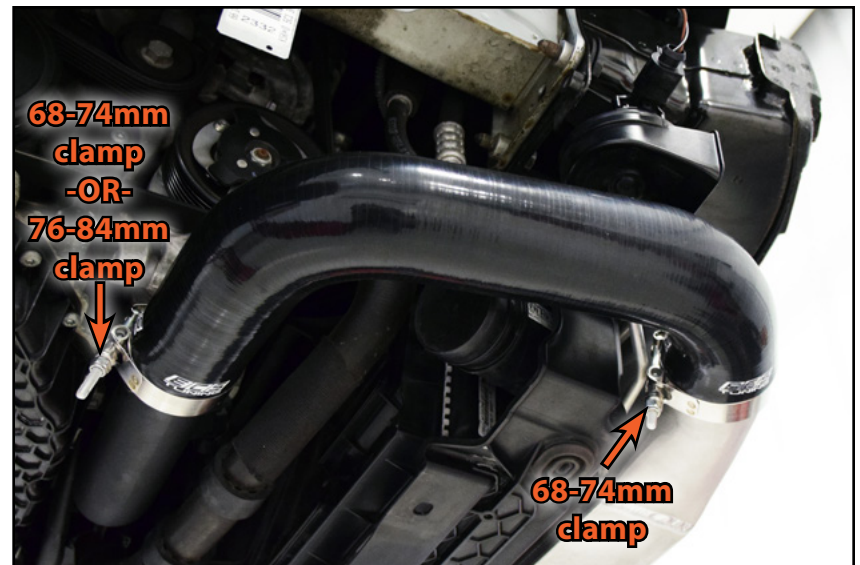


Step 21: 11mm Socket & Ratchet

Slide the intercooler outlet hose over the intercooler and charge pipe then slip the clamps around the hose and tighten them down.



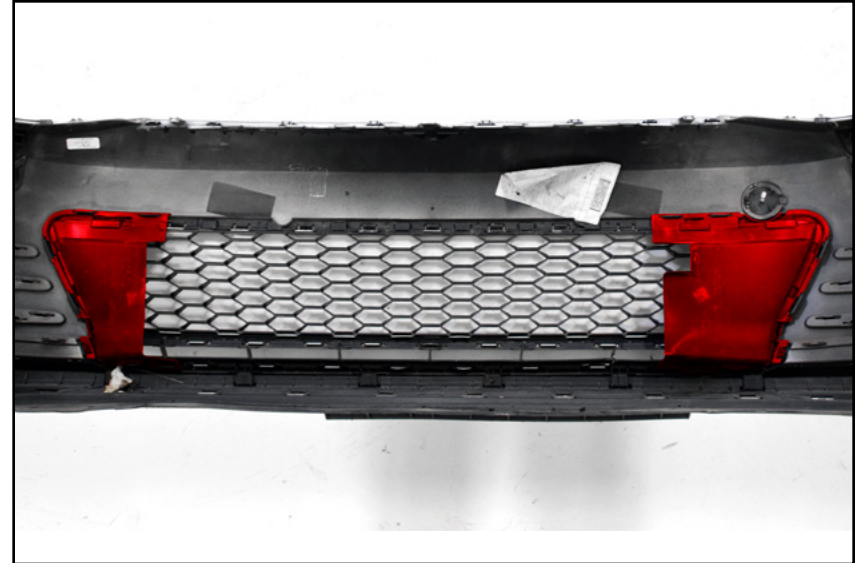
If you have ECS charge pipes: The charge pipe clamp will be a 76-84mm clamp.



INSTALLING THE INTERCOOLER KIT

Step 22: Flat Head Screwdriver

Remove the air guides from the front bumper by releasing the five clips which secure each guide to the bumper.



Step 23: T25 Torx, 17mm Protecta-Socket, Torque Wrench

Reinstall the bumper, fender liners, belly pan, wheels, and grille. Torque the wheel bolts to 120 Nm (89 Ft-lbs).

Congratulations, your installation is complete!



SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

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Your Front Mount Intercooler 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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