



VW MKVI TSI ECS Tuning Charge Pipe Kit Installation



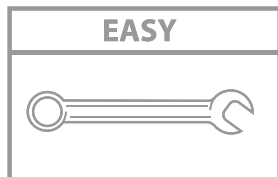
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times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

INTRODUCTION

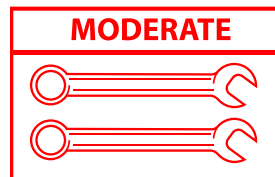
VW MKVI TSI ECS Tuning Charge Pipe Kit ES#2893840 & ES#2893841

The VW MKVI TSI ECS Tuning Charge Pipe Kit offers the following features:

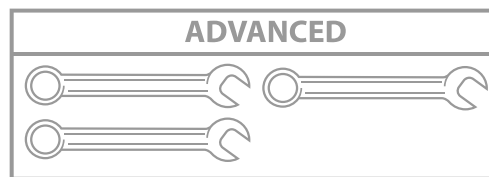
- 4-ply fiberglass reinforced silicone couplers
- ECS Tuning engineered charge pipe adapters for an easy, direct fit installation (ES#2893840 only)
- Couplers will withstand higher boost pressure, and higher temperature
- Longer service life than the OE rubber hoses
- Stainless steel T-Bolt hose clamps for maximum hose connection stability
- High flow charge pipes with wrinkle black finish
- Serious visual appeal under any hood



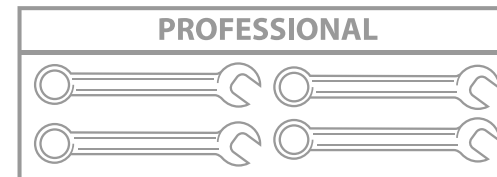
**BASIC SKILLS
REQUIRED**



**SOME EXPERIENCE
RECOMMENDED**



**ADVANCED SKILLS &
EXPERIENCE REQUIRED**



**PROFESSIONAL SKILLS &
SPECIALTY TOOLS REQUIRED**

Replacing the charge pipes on your Volkswagen MKVI TSI is a rewarding project that an experienced technician will be able to complete in a few hours. Plan accordingly based on your experience level. Before you begin, read and familiarize yourself with these instructions and make sure you have all the required tools on hand. Thank you for purchasing our ECS Tuning VW MKVI TSI Charge Pipe Kit, we appreciate your business!

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KIT CONTENTS



Throttle Body Coupler



Turbo Discharge Hose



Lower Left Intercooler Hose



Lower Right Intercooler Hose



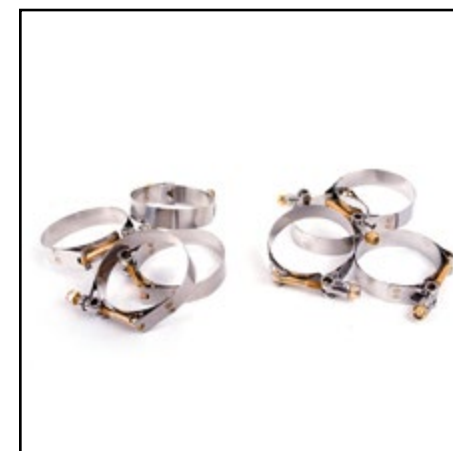
Throttle Body Charge Pipe



Turbo Discharge Pipe



Charge Pipe Adapters & Seals
(if applicable)



Boost Hose Clamps

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REQUIRED TOOLS

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

We recommend that you have a complete selection of tools and equipment necessary for automotive repair. Below is a list of the tools we used to install the ECS Tuning VW MKVI TSI Charge Pipe Kit. Additional tools may be required for any issues that arise during installation such as rust, corrosion, or broken and stripped fasteners.

• 1/4" Drive Ratchet	Available at ecstuning.com	ES#2093757
• 3/8" Drive Ratchet	Available at ecstuning.com	ES#2765902
• 3/8" Drive Torque Wrench	Available at ecstuning.com	ES#2221245
• 3/8" Drive Sockets:	Available at ecstuning.com	ES#2763772
• 1/2" Drive Breaker Bar	Available at ecstuning.com	ES#2776653
• 1/2" Drive Torque Wrench	Available at ecstuning.com	ES#2221244
• Torx Bit Sockets: T25, T30	Available at ecstuning.com	ES#11418
• Protecta-Socket Set (for lug nuts)	Available at ecstuning.com	ES#2221243
• Wrenches: 10mm, 11mm	Available at ecstuning.com	ES#2765907
• Flat Blade Screwdriver	Available at ecstuning.com	ES#2225921
• Wheel Hanger	Available at ecstuning.com	ES#2678092
• Floor Jack	Available at ecstuning.com	ES#240941
• Jack Stands	Available at ecstuning.com	ES#2763355
• Padded Creeper With Adjustable Headrest	Available at ecstuning.com	ES#2763705
• VAG Connector Tool	Available at ecstuning.com	ES#2628676

SHOP SUPPLIES AND MATERIALS

• Hand Cleaner/Degreaser	Available at ecstuning.com	ES#2167336
• Aerosol Brake Cleaner	Available at your local auto parts store	
• Shop Rags	Available at your local auto parts store	
• Aerosol Spray Lubricant/Penetrating Oil	Available at your local auto parts store	

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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.

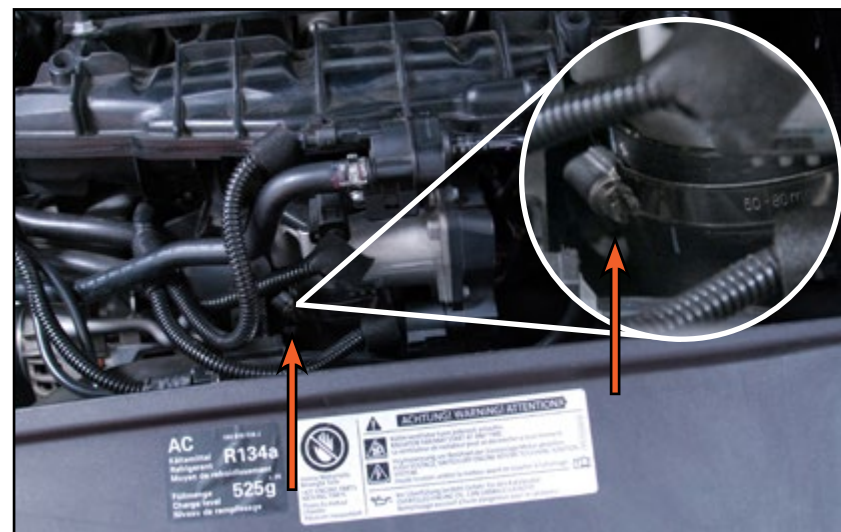


Never get underneath a vehicle that is supported only by a jack. Always make sure that the vehicle is securely supported on jack stands.

THROTTLE BODY CHARGE PIPE INSTALLATION

Step 1: Flat Blade Screwdriver

Loosen both the upper and lower hose clamps on the throttle body coupler and leave them loose enough to remove the coupler later on.



Step 2:

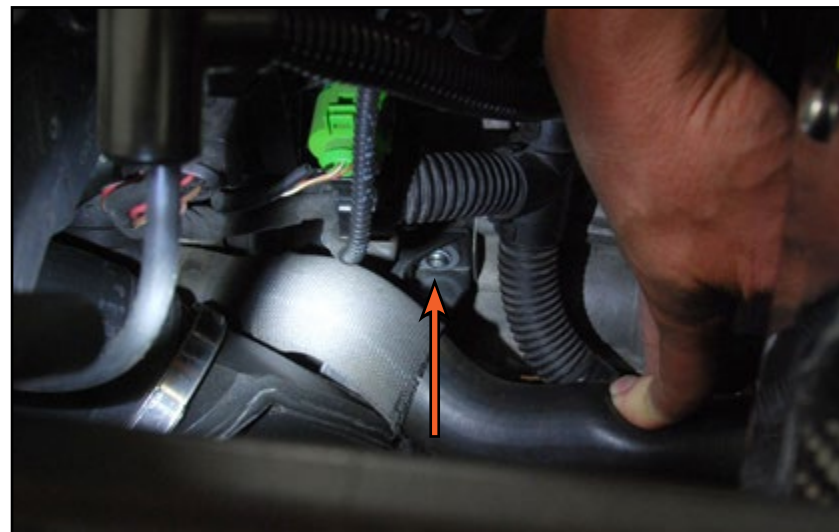
Disconnect the MAP sensor connector on the charge pipe, located in the front of the engine compartment between the radiator and the engine.


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THROTTLE BODY CHARGE PIPE INSTALLATION

Step 3: 3/8" Drive Ratchet, T30 Torx Socket

Working from the top, remove the top mounting bolt on the charge pipe, located near the MAP sensor on the front of the engine. Remember that this bolt is a trapped bolt, which means it will remain in the charge pipe after it is unthreaded from the engine.



Step 4:

Safely lift and support the vehicle and remove the belly pan.



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THROTTLE BODY CHARGE PIPE INSTALLATION

Step 5: 3/8" Drive Ratchet, T30 Torx Socket

Remove bottom mounting screw, remember that this bolt is also a trapped bolt and it will remain in the charge pipe after it is unthreaded from the engine.

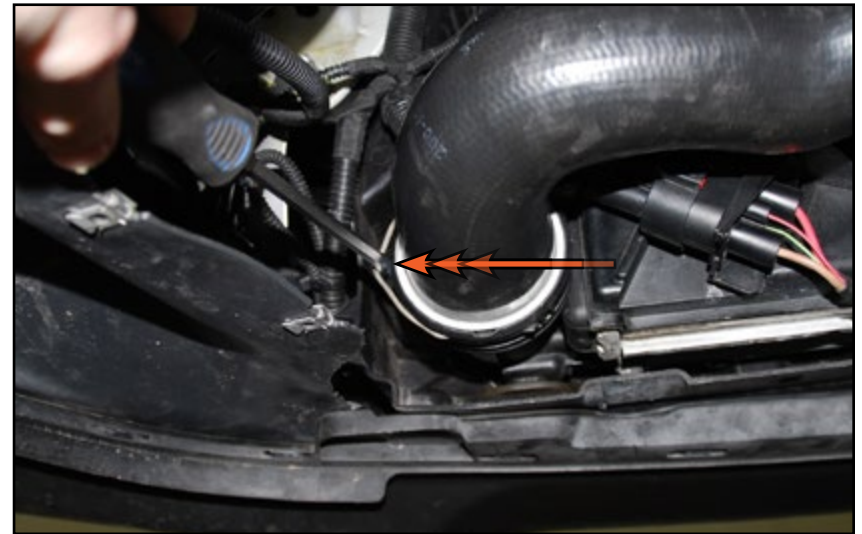


Step 6: Flat Blade Screwdriver

Remove the clip from the lower left intercooler hose and set it aside, then pull the hose out of the intercooler.

NOTE

This step only applies to ES#2777054. If your intercooler does not have clip style attachments simply loosen the hose clamp and pull the hose off of the intercooler.

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THROTTLE BODY CHARGE PIPE INSTALLATION

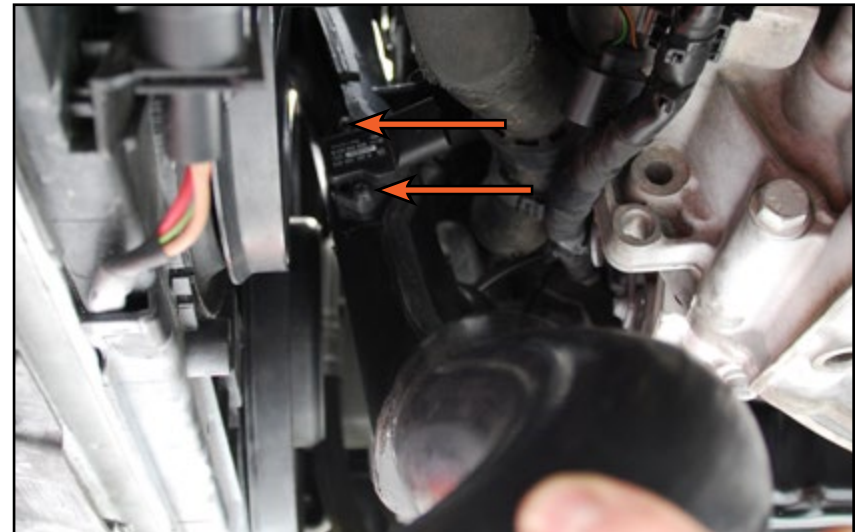
Step 7:

Working from the top, push the throttle body coupler downward to remove it from the throttle body. Once it has been removed from the throttle body, pull upwards to remove it from the throttle body charge pipe, then remove the coupler from the vehicle.



Step 8: Phillips Head Screwdriver

Working from the bottom, twist the throttle body charge pipe in order to gain access to the MAP sensor, then loosen the two mounting screws and remove the MAP sensor from the charge pipe. This step eliminates the risk of damaging the MAP sensor when removing the charge pipe from the vehicle due to tight clearances between the engine and the cooling fans.

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THROTTLE BODY CHARGE PIPE INSTALLATION

Step 9:

Working from the bottom, remove the throttle body charge pipe by twisting and rotating as shown in the photo. Be careful during this step as there is limited clearance between the engine and the cooling fans to remove the pipe.

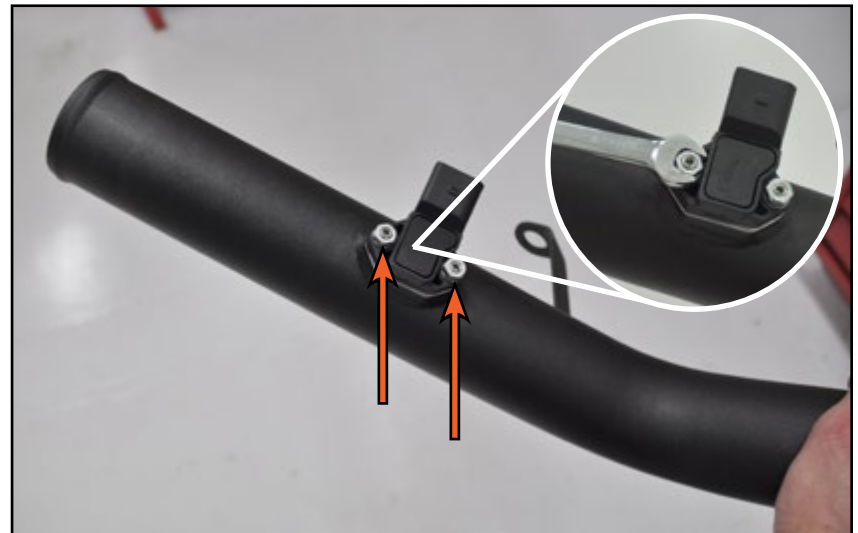


Step 10: 10mm Wrench

Install the MAP sensor into the new charge pipe with the supplied hardware. Note the orientation of the sensor in the photo, this ensures the sensor faces towards the engine as it should.

TECH TIP

A wrench must be used for this step because there is not enough clearance for a socket. Install the lock washer first, then tighten the nut ONLY until it is snug.

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THROTTLE BODY CHARGE PIPE INSTALLATION

Step 11: Flat Blade Screwdriver

Remove the bolts from the factory throttle body charge pipe by pushing on them from behind, then remove the rubber grommets from the charge pipe and set the bolts and grommets aside as you will be reusing one of each in the next step.



Step 12:

Install one screw and grommet into the new throttle body charge pipe as shown in the photo, note that this new charge pipe only has one mounting point.

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THROTTLE BODY CHARGE PIPE INSTALLATION

Step 13:

Install the new intercooler hose adapter seal onto the adapter, then install the adapter into the intercooler. Ensure the adapter is fully seated into the intercooler, then reinstall the securing clip.

TECH TIP

Silicone lubricant can be sprayed on the outside of the adapter seal for ease of installation in the intercooler.

NOTE

Skip this step if your intercooler does not have clip style attachments.

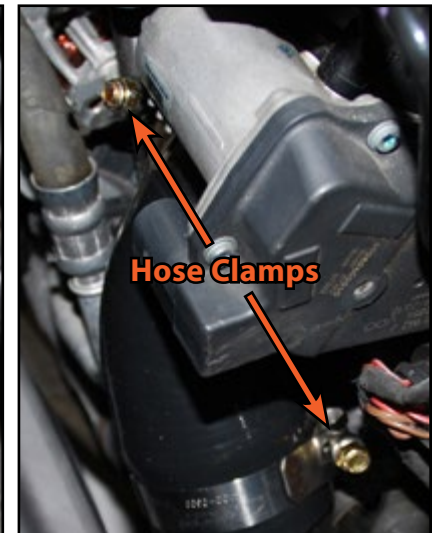


Step 14:

Working from the top, install the new throttle body coupler onto the throttle body, and slide the clamps on as shown in the photo, but do not tighten them during this step.

CAUTION

Ensure there is adequate clearance between the throttle body coupler and the engine cooling fans while installing the throttle body charge pipe.


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THROTTLE BODY CHARGE PIPE INSTALLATION

Step 15:

Working from the bottom, install the new throttle body charge pipe, inserting the pipe into the throttle body coupler. Twist the pipe as necessary to clear the engine and cooling fans.



Step 16: 3/8" Torque Wrench, T30 Torx Socket

Install and tighten the throttle body charge pipe mounting screw to 8 Nm (5.9 Ft-lbs).

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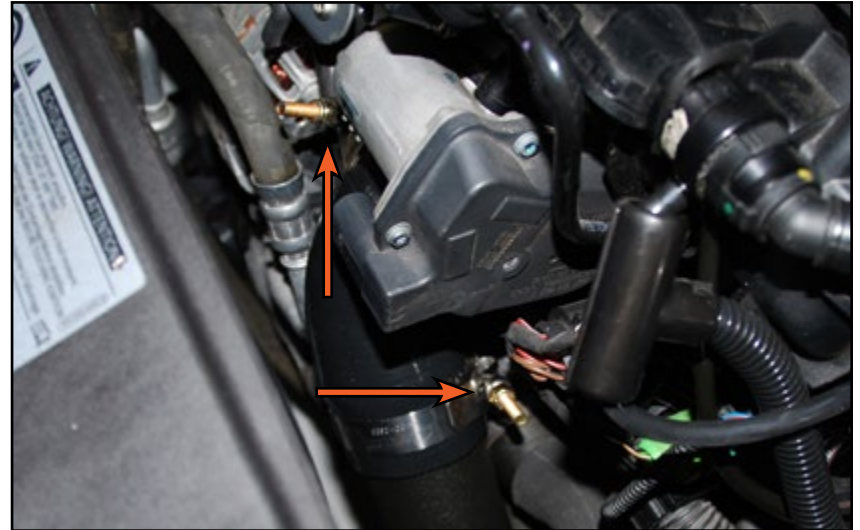
THROTTLE BODY CHARGE PIPE INSTALLATION

Step 17: 3/8" Drive Ratchet, 11mm Socket

Tighten the hose clamps on the throttle body coupler, note their orientation in the photo.

NOTE

We removed the purge valve and wiring harness to the throttle body for better visibility of the throttle body coupler during this step. Please ensure that there is enough clearance between the top hose clamp and the purge valve, hoses, and wiring harness during installation.



Step 18: 3/8" Drive Ratchet, 11mm Socket

Install the new lower left intercooler hose between the throttle body charge pipe and the intercooler, then tighten the hose clamps, note the orientation of the hose clamps in the photo.

Reconnect MAP sensor



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TURBO DISCHARGE PIPE INSTALLATION

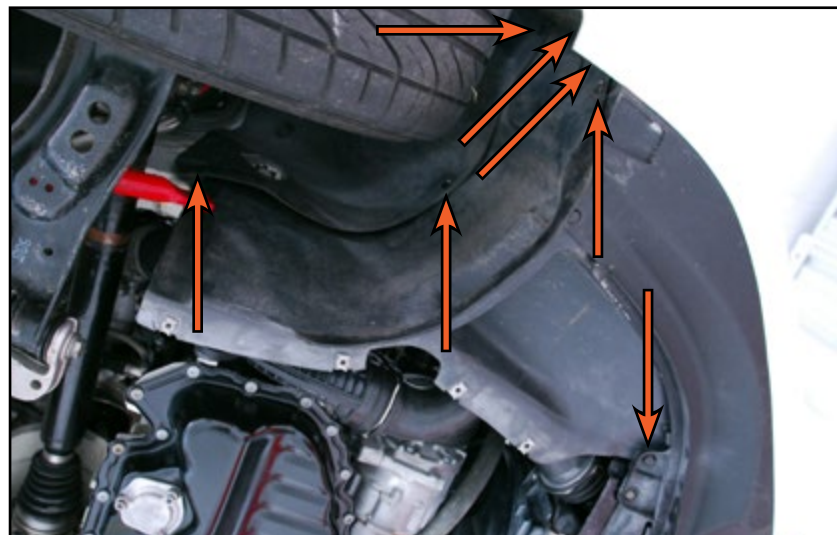
Step 1:

During our installation, we removed the RF wheel. This is an optional step, however it does give much greater access to the turbo discharge pipe with the wheel removed.



Step 2: 1/4" Drive Ratchet, T25 Torx Socket

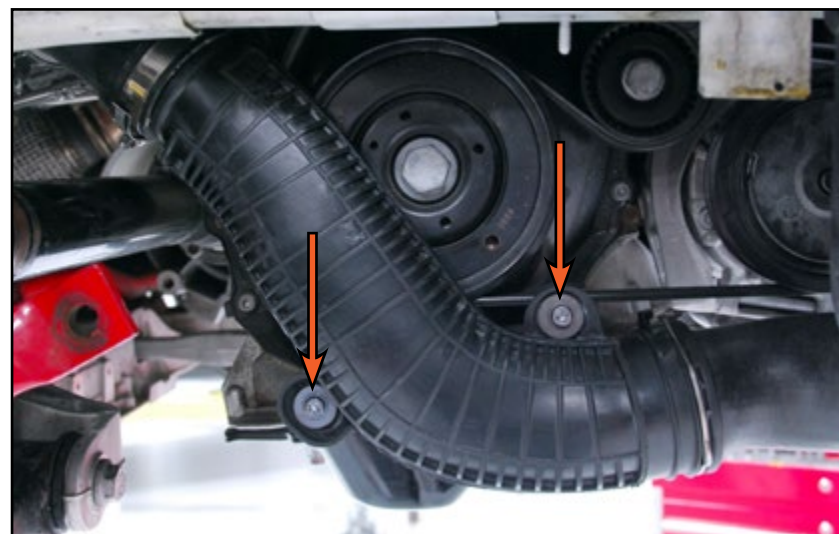
Remove the seven screws which secure the fender liner to the vehicle, remove the fender liner and set it aside.

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TURBO DISCHARGE PIPE INSTALLATION

Step 3: 3/8" Drive Ratchet, T30 Torx Socket

Locate the turbo discharge pipe on the right side of the engine and loosen the two mounting bolts. Remember these bolts do not have to be removed completely, they are fastened by rubber grommets to the charge pipe.



Step 4: Flat Blade Screwdriver

Remove the retaining clip from the lower right intercooler hose and pull the hose out of the intercooler.

NOTE

This step only applies to ES#2777054. If your intercooler does not have clip style attachments simply loosen the hose clamp and pull the hose off of the intercooler.

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TURBO DISCHARGE PIPE INSTALLATION

Step 5: Flat Blade Screwdriver

Remove the retaining clip from the turbo discharge hose and pull the hose out of the turbo. The turbo discharge pipe can now be removed from the vehicle and set on a work surface.



Step 6: Flat Blade Screwdriver

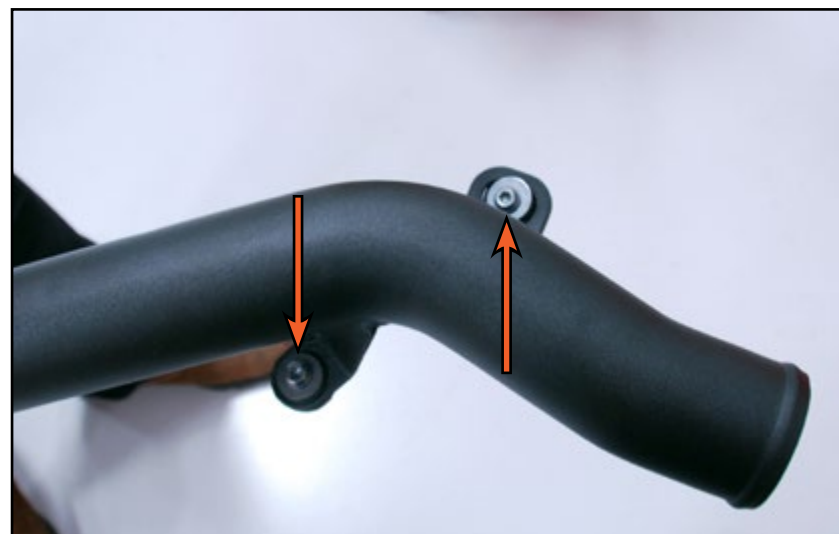
Remove the bolts from the turbo discharge pipe by pushing on them from behind, then remove the rubber grommets from the charge pipe and set the bolts and grommets aside as you will be reusing these parts in the next step.

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TURBO DISCHARGE PIPE INSTALLATION

Step 7:

Install the grommets and bolts into the new turbo discharge pipe as shown in the photo.



Step 8:

Install the seals onto the turbo discharge adapter and the intercooler outlet adapter as shown in the photos.

NOTE

Skip this step if your intercooler does not have clip style attachments.


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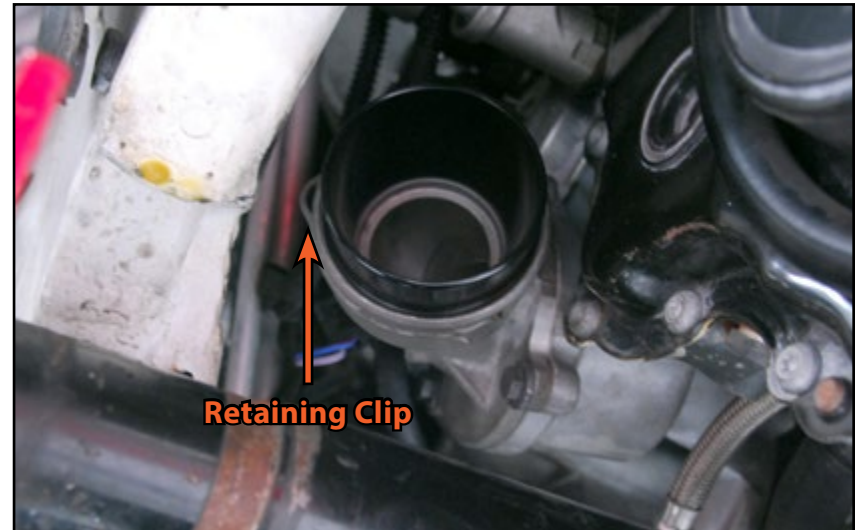
TURBO DISCHARGE PIPE INSTALLATION

Step 9:

Install the turbo discharge adapter into the compressor outlet. Make sure the adapter is fully seated into the compressor outlet, then install the retaining clip.

TECH TIP

Silicone lubricant can be sprayed on the outside of the adapter seal for ease of installation in the compressor outlet.



Step 10:

Install the intercooler outlet adapter into the intercooler. Make sure the adapter is fully seated into the intercooler, then install the retaining clip.

TECH TIP

Silicone lubricant can be sprayed on the outside of the adapter seal for ease of installation in the intercooler.

NOTE

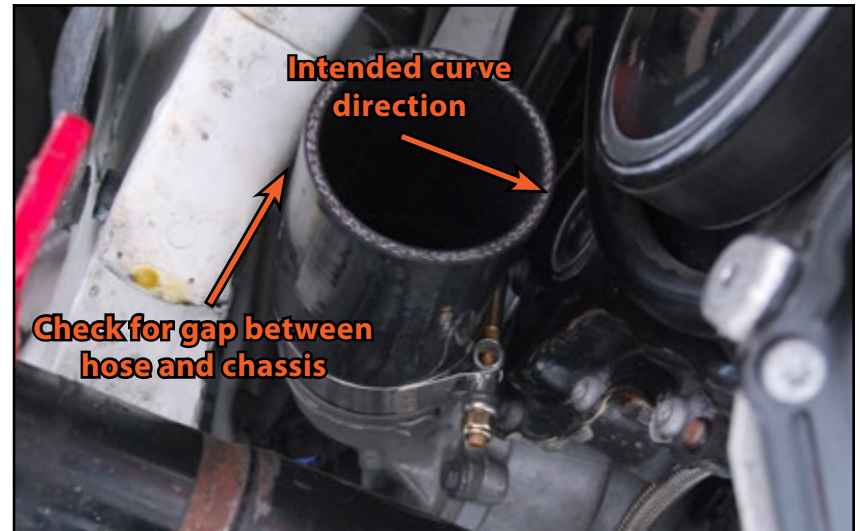
Skip this step if your intercooler does not have clip style attachments.

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TURBO DISCHARGE PIPE INSTALLATION

Step 11: 11mm Wrench

Install the turbo discharge hose onto the adapter as shown. It is extremely important that the slight curve in the hose is oriented as shown in the photo, this curve is designed to direct the hose away from the chassis to prevent any rubbing. Install the upper hose clamp as shown but do not tighten it at this time.



Step 12:

Place the two hose clamps on the turbo discharge pipe as shown in the photo, then slide the lower right intercooler hose onto the turbo discharge pipe.

TECH TIP

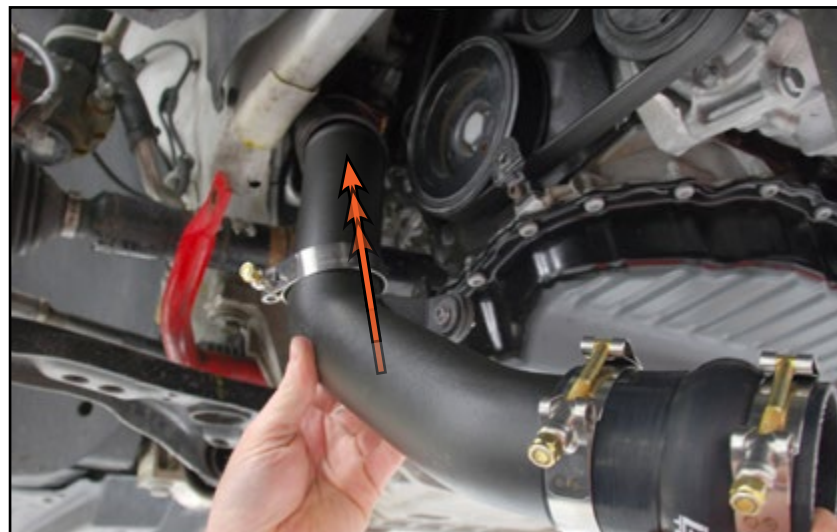
Make sure the clamps are oriented as shown in the photo, this will ensure ease of access once the pipe is installed, and will provide adequate clearance from the chassis.


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TURBO DISCHARGE PIPE INSTALLATION

Step 13:

Install the turbo discharge pipe into the turbo discharge hose by sliding the pipe into the hose as shown.



Step 14:

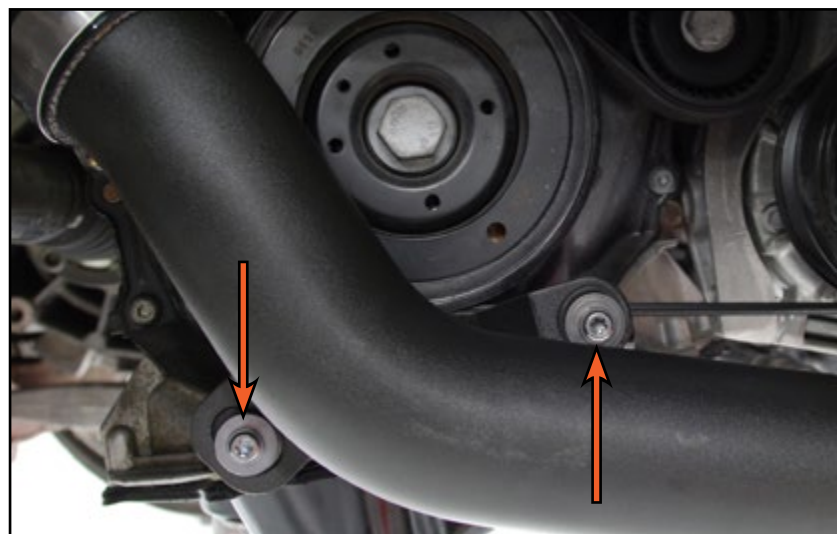
Install the front of the turbo discharge pipe by sliding the lower right intercooler hose on to the intercooler.

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TURBO DISCHARGE PIPE INSTALLATION

Step 15: 3/8" Torque Wrench, T30 Torx Socket

Tighten both turbo discharge mounting screws to 8 Nm (5.9 Ft-lbs).



Step 16: 3/8" Drive Ratchet, 11mm Socket

Tighten the four hose clamps on the turbo discharge pipe, note the orientation of the clamps in the photo, this ensures maximum clearance for the belly pan, fender liner, engine, axle, etc.

Reinstall the right front lower fender liner

Reinstall and torque the right front wheel (if removed) to 120 Nm (89 Ft-lbs)

Reinstall the belly pan

Reinstall the engine cover



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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.

					
	Breaker Bar Creepers Gloves Engine Bars Screwdrivers Pressure Bleeders Lighting Pry Bars Coil Spring Compressors Camber Gauge Hose Pinch Pliers Wheel Bolt Pattern Gauge Ball Joint Separator Vanos Solenoid Socket	Scraper, Hook, & Pick Set Camshaft Tools Fan Clutch Wrenches Tie Rod Tools Brake Fluid Catch Bottle Tubing Cutter Booster Cables Oil Filter Tools Service Carts Battery Charger Stethoscope Battery Terminal Brush Wheel Chocks Torx Sockets	Sockets E-Drive Sockets Car Ramps Torx Drivers Jack Stands Circuit Tester Ratchets Exhaust Hanger Pliers Bubble Flaring Tool Thread Chaser Drain Pans Wrenches Impact Sockets Torque Wrenches		
					
					
					

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Your VW MKVI TSI 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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