

VW MKV FSI Boost Hose Kit Installation Instructions













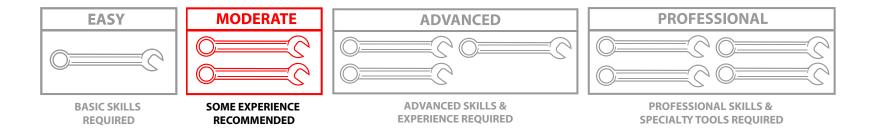


INTRODUCTION

VW MKV FSI Boost Hose Kit ES#2931639 & ES#2931644

The VW MKV FSI ECS Tuning Boost Hose Kit offers the following features:

- Made from thick 4-layer fiberglass reinforced silicone
- ECS Tuning engineered charge pipe adapters for an easy, direct fit installation
- Silicone hoses 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
- Serious visual appeal under any hood



Replacing the boost hoses on your MKV FSI Volkswagen 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 MKV FSI Boost Hose 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



Boost Hose Clamps



Charge Pipe Adapters - ES2931639: 2x - ES2931644: 4x

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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 MKV FSI Boost Hose 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	<u>ES#2093757</u>
• 3/8" Drive Ratchet		
• 3/8" Drive Torque Wrench	Available at ecstuning.com	ES#2221245
• 3/8" Drive Sockets: 10mm & 11mm	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	<u>ES#2221244</u>
Torx Bit Sockets: T25, T30	Available at ecstuning.com	<u>ES#11418</u>
Protecta-Socket Set (for lug nuts)		
• 11mm Wrench	Available at ecstuning.com	<u>ES#2765907</u>
Flat Blade Screwdriver	Available at ecstuning.com	<u>ES#2225921</u>
Wheel Hanger	Available at ecstuning.com	<u>ES#2678092</u>
• Floor Jack	Available at ecstuning.com	<u>ES#240941</u>
Jack Stands	Available at ecstuning.com	<u>ES#2763355</u>
Padded Creeper With Adjustable Headrest	Available at ecstuning.com	<u>ES#2763705</u>
VAG Connector Tool	Available at ecstuning.com	<u>ES#2628676</u>
Allen Bit Socket: 5mm	Available at ecstuning.comAvailable at ecstuning.com	<u>ES#2500878</u>
. O Pina Pick		

- O-Ring Pick
- Hacksaw or Pneumatic Cut Off Wheel

SHOP SUPPLIES AND MATERIALS

Hand Cleaner/Degreaser	Available at ecstuning.com <u>ES#2167336</u>
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.

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Step 1:

1/4" Drive Ratchet, T25 Torx Bit Socket

Squeeze the hose clamp on the air inlet hose to loosen it, then remove the two screws holding the hose to the core support. Remove the air inlet hose from the vehicle.



Step 2:

VAG Connector Tool

Disconnect the MAF electrical connector from the MAF sensor, then pop the two spring metal clips which hold the air duct to the engine cover, and pull the duct away from the housing.

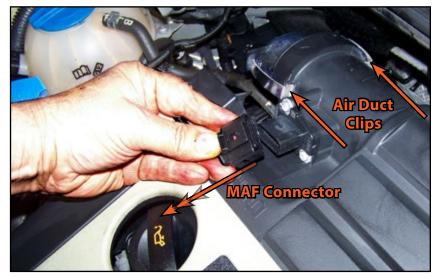


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Step 3:

Grab the engine cover and lift the cover straight up one corner at a time to release the rubber mounting grommets from their mating pins on the engine. The photo to the right is for reference, it shows the location of the rubber mounting grommets with the cover removed and flipped over.

CAUTION

Be sure to grab the engine cover as close to each grommet as possible during removal to keep from cracking the housing. We have found it is best to start by pulling up on the driver's side front grommet, then the driver's side rear, then the passenger's side rear, and finally the passenger's side front.

Flat Blade Screwdriver Step 4:

Loosen the hose clamp which secures the throttle body coupler to the throttle body.

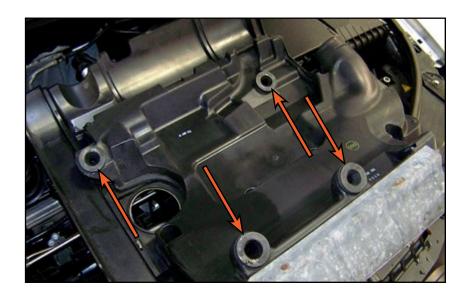




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Flat Blade Screwdriver Step 5:

Remove the clip securing the noise generator hose to the throttle body charge pipe by pulling upwards, then set the clip aside.



Flat Blade Screwdriver Step 6:

Loosen the hose clamp which secures the noise generator hose to the throttle body charge pipe, and remove the noise generator hose. Lift up on the MAF wiring harness to remove it from the noise generator pipe, then push the wiring harness to the side so it is out of the way.

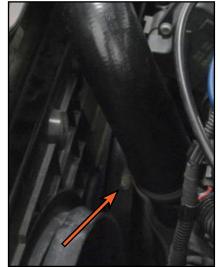




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Flat Blade Screwdriver, 3/8" Drive Ratchet, T30 Socket Step 7:

Remove the clip securing the noise generator hose to the noise generator by pulling upwards, then set the clip aside. Remove the two T30 screws which secure the noise generator pipe to the vehicle.





Step 8:

Remove the noise generator pipe from the vehicle.



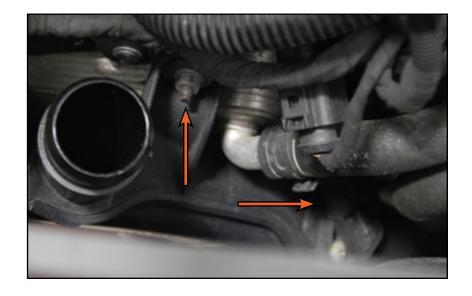
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Step 9:

3/8" Drive Ratchet, 10mm Socket

Remove the 10mm nut on the throttle body charge pipe, and disconnect the MAP sensor connector.



3/8" Ratchet, T25 Torx Bit Socket, Flat Blade Screwdriver Step 10:

Safely lift and support the vehicle, and remove the belly pan. Loosen the hose clamps and remove the lower left intercooler hose.



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Step 11:

3/8" Drive Ratchet, 10mm Socket

Remove the 10mm bolt on the throttle body charge pipe.



Step 12:

From above, pull the throttle body charge pipe outward just enough to clear the stud on top.



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Step 13:

Push down on the throttle body coupler to remove it from the throttle body charge pipe.



Step 14:

From below, remove the throttle body charge pipe and the throttle body coupler as one assembly from the vehicle. Be careful to avoid catching the charge pipe on the cooling fans, or damaging the MAP sensor on the way out.



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Flat Blade Screwdriver Step 15:

Place the throttle body charge pipe on a suitable work surface and loosen the remaining hose clamp on the throttle body coupler.



Step 16:

Note the orientation of the bend in the hose in relation to the throttle body charge pipe, remove the factory hose and install the new throttle body coupler.



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Step 17:

Install the new hose clamps onto the silicone throttle body coupler, but do not tighten them at this time. Be sure to orient the clamps as shown in the photo.



3/8" Drive Torque Wrench & Ratchet, 10mm & 11mm Sockets Step 18:

Reinstall the throttle body charge pipe and throttle body coupler in the vehicle from below, be careful to avoid catching the charge pipe on the cooling fans, or damaging the MAP sensor on the way in.

Install the 10mm nut and bolt in the throttle body charge pipe and tighten them to 8 Nm (5.9 Ft-lbs)

Reconnect the MAP sensor

Tighten the two 11mm hose clamp nuts

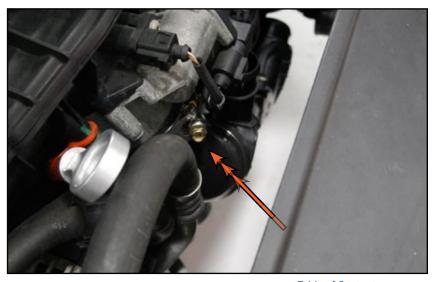


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3/8" Drive Ratchet, T30 Socket Step 19:

Reinstall the noise generator pipe in the vehicle.



Flat Blade Screwdriver Step 20:

Reinstall the noise generator hose in the vehicle.



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Step 21:

Carefully remove the seals from the factory lower left intercooler hose and transfer the seals to the ECS Tuning intercooler adapter.

NOTE

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





Step 22:

Insert the adapter into the intercooler, ensure the adapter is fully seated into the intercooler, then reinstall 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.

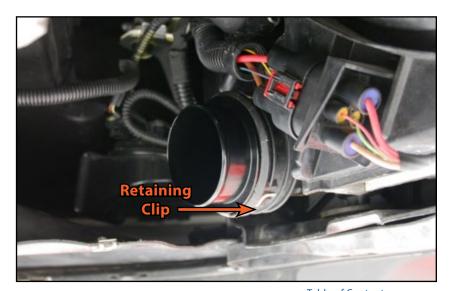
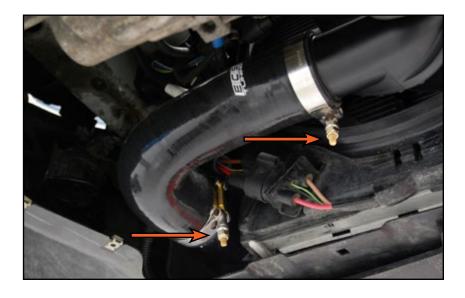


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3/8" Drive Ratchet, 11mm Socket Step 23:

Install the new lower left intercooler hose between the throttle body charge pipe and the intercooler using two new clamps, then tighten the two 11mm hose clamp nuts.



1/4" Drive Ratchet, T25 Socket Step 24:

Reinstall the engine cover and the air inlet hose. Reconnect the air duct hose to the engine cover and the MAF sensor wiring harness.



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3/8" Drive Ratchet, T25 Socket Step 25:

Remove the right front wheel, then remove the seven screws securing the front right lower fender liner to the vehicle, and remove the fender liner in order to gain access to the turbo discharge pipe.



Step 26: 1/4" Ratchet, 5mm Allen Socket

Remove the two bolts securing the turbo discharge pipe to the engine.

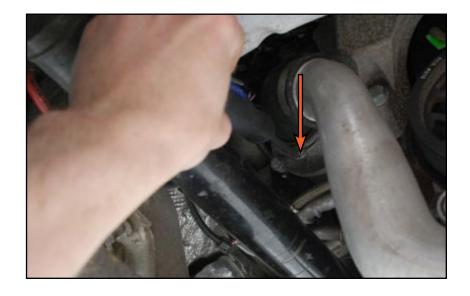


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Flat Blade Screwdriver Step 27:

Remove the clip securing the turbo discharge hose to the turbo by pulling downwards, then set the clip aside.



Flat Blade Screwdriver Step 28:

Loosen the hose clamp securing the lower right intercooler hose to the intercooler.



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Step 29:

Pull the turbo discharge hose out of the turbo, pull the lower right intercooler hose out of the intercooler, and remove the turbo discharge pipe and hoses as one assembly from the vehicle.





Flat Blade Screwdriver Step 30:

Place the turbo discharge pipe on a suitable work surface, and remove the clip securing the intercooler hose to the turbo discharge pipe, then remove the intercooler hose from the turbo discharge pipe.



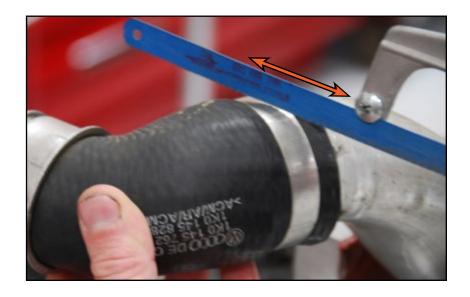


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Step 31: Hacksaw or Pneumatic Cut Off Wheel

Place the turbo discharge pipe in a soft-jaw bench vise (if possible), or have an assistant firmly hold the pipe in place. Cut a groove into the clamp which secures the turbo discharge hose to the turbo discharge pipe, use caution to not cut all the way through and damage the factory hose.



Step 32: Flat Blade Screwdriver

Pry upwards to break the clamp across the groove, then remove the hose from the turbo discharge pipe.

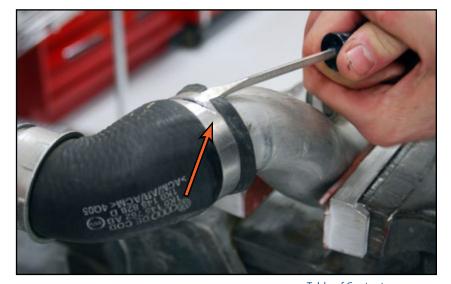


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Step 33:

Install the turbo outlet adapter into the silicone turbo discharge hose, making sure the shorter side of the hose is on the turbo outlet side, and the longer side of the hose is on the turbo discharge pipe side.



O-Ring Pick Step 34:

Carefully remove the seals from the factory turbo discharge hose and the lower right intercooler hose and transfer the seals to the ECS Tuning charge pipe adapters.





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Step 35:

Install the turbo outlet adapter and hose into the turbo, then slide the hose clamps over the end of the hose. Do not tighten the hose clamps at this time, but note their orientation with the pipe installed as shown in the photo.



Step 36:

Insert the turbo discharge pipe into the turbo discharge hose.

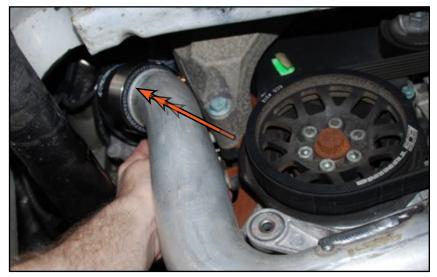


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3/8" Drive Torque Wrench, 5mm Allen Socket Step 37:

Install and tighten the turbo discharge pipe mounting bolts to 8 Nm (5.9 Ft-lbs).



Step 38: 3/8" Drive Ratchet, 11mm Socket

Tighten the two 11mm hose clamp nuts on the turbo discharge hose as shown in the photo to ensure maximum clearance for the axle.

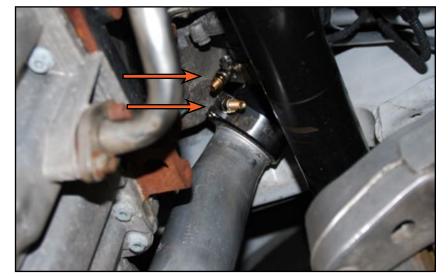


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Step 39:

Insert the lower right intercooler hose adapter into the turbo discharge pipe.

TECH TIP

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



Step 40:

Reinstall the retaining clip into place.

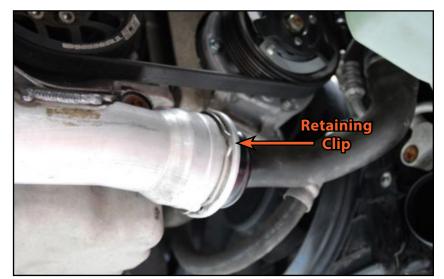


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Step 41:

Insert the lower right intercooler hose adapter into the intercooler.

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.

3/8" Drive Ratchet, 11mm Socket Step 42:

Install the silicone lower right intercooler hose and tighten the two 11mm hose clamp nuts.

Reinstall the right front lower fender liner

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

Reinstall the belly pan

Reinstall the engine cover and air inlet hose





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ES#2931644



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Your VW MKV FSI Boost Hose 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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