



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 be installing our new ECS Street Shield and Reinforcement Kit on a VW MK7.5 GTI. The stock plastic belly pan may provide a some protection against light debris, but it will do little to protect you in the event of an impact or nasty scrape. So whether you are looking some extra assurance for your lowered vehicle, seeking some added armor for the track, or some serious protection for your daily driver, our Street Shield has you covered! Our Street Shield Kit features a durable, aluminum skid plate and sturdy chassis mounted vertical braces to secure it in place. Installation is quick and requires only a few basic hand tools, so no matter your skill level installation is a breeze!



Here's all the tools you may need:

- 1. 10, 13, 15, & 18mm Sockets
- 2. 1/4" & 3/8" Drive Ratchets
- 3. T25 Torx Socket
- 4. 5mm Hex (Allen) Socket
- 5. M10 Triple Square Socket
- 6. 17mm Wrench
- 7. Marker
- 8. 7/16" Drill Bit & Drill



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KIT CONTENTS



Installation Hardware Kit

Street Shield Reinforcement Kit

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.

Step 1: T25 Torx

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In order to remove the stock plastic paneling we must locate and remove the fourteen torx fasteners holding it in place.



Step 2: T25 Torx Socket & Ratchet

Support the belly pan from below while removing all of the torx fasteners.



Step 3:

Once the fasteners have been removed, lower and remove the stock belly pan from the vehicle.





Step 4: T25 Torx

Next we must remove the plastic fender liners inside the wheel wells, each liner is held up by four torx fasteners.

Step 5:

Pull the fender liner downward to remove it from the wheel well.



Step 6: 13mm Socket & Ratchet

In order to gain enough clearance to install the LH vertical brace we had to relocate the secondary air pump. If your vehicle is equipped with this pump, remove the nut securing the secondary air pump bracket to the chassis.



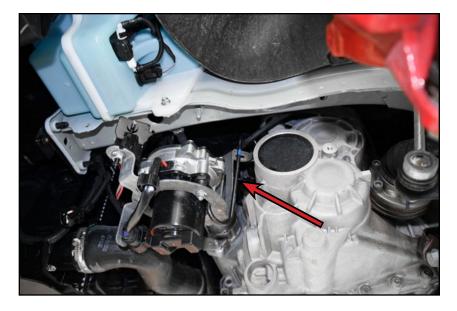
Step 7: 10mm Socket & Ratchet

The secondary air pump bracket is secured by one additional nut which can be found behind the windshield washer fluid reservoir.



Step 10:

Hang the secondary air pump up out of the way, making sure that it's not hanging by the hoses as they are often brittle and are prone to cracking easily.



Step 11:

Under the front bumper cowl, locate and disconnect the LH horn connector.



Step 12: M10 Triple Square Socket & Ratchet

Remove the bolt holding the horn bracket to the lock carrier.



Step 1: 15mm Socket & Ratchet

Install the LH vertical brace onto the bolts jutting through the LH side of the crash beam, then install two of the M10 nuts to secure the brace in place.



We include two different sets of M10 nuts in the kit, the non-flanged nuts can be substituted on certain applications where the flanged nuts do not fit onto the threads of the bolts.

Step 2: M10 Triple Square Socket & Ratchet

Once the LH brace has been installed, we can reinstall the horn bracket bolt.







Step 3:

Reconnect the LH horn connector.



Step 4: 13mm Socket & Ratchet

Lift the secondary air pump into place and reinstall the first nut to hold it in place.





Step 5: 10mm Socket & Ratchet

Finally, reinstall the other nut to mount the secondary air pump to the vehicle.



Step 6:

On the RH side you can easily access the crash beam bolts without removing any additional components.



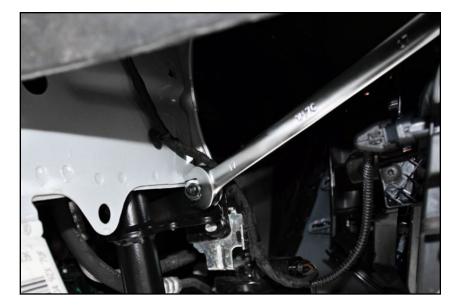
Step 7: 15mm Socket & Ratchet

Install the RH vertical brace onto the exposed threads of the crash beam bolts and install the final two M10 nuts to hold it in place.



Step 8: 17mm Wrench

On certain specific applications such as this MK7.5 GTI, the RH vertical brace nuts may not have enough clearance to be threaded onto the bolts or allow for a socket to be used. In this case, we included four non-flanged nuts which can be used instead. We found that an open end wrench may be used to adequately tighten the nuts.



Step 9: 18mm Socket & Ratchet

Lift the reinforcement bar into place between the two vertical braces, then loosely thread the two M12 bolts through the braces and into the threaded holes on either end of the bar.



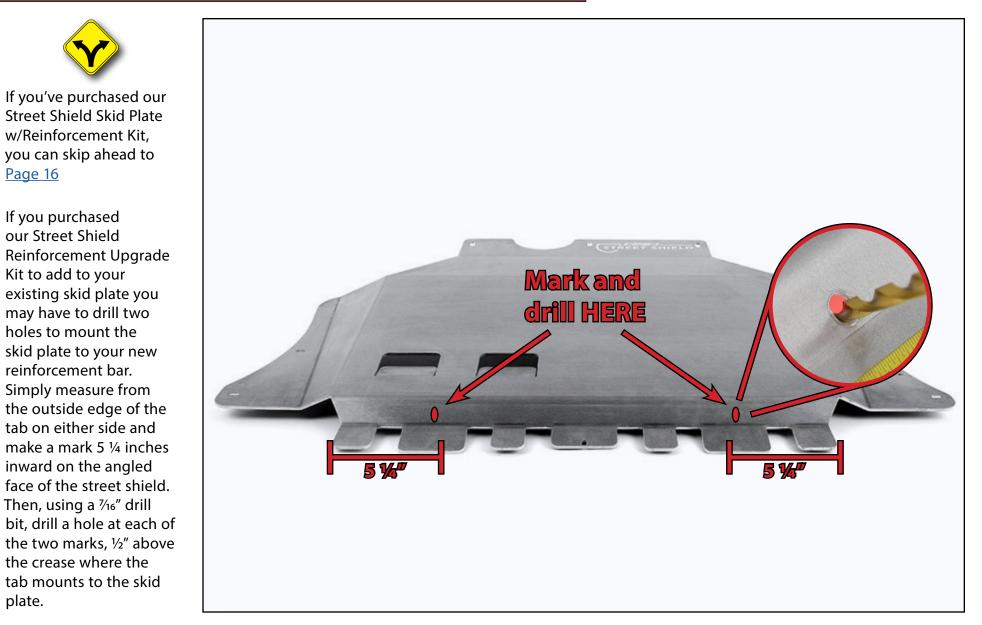
We will come back and torque these bolts later.

Step 10:

Slide the two M6 clip nuts over the holes on the vertical braces as shown in the photo.







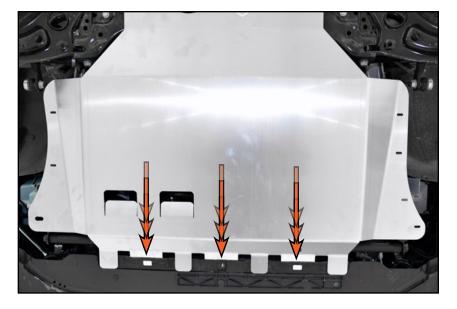
Step 11:

Install the black speed nut onto the center tab on the front of the new ECS Street Shield.



Step 12:

Lift the street shield into place and slide it forward so that the front tabs slide into the plastic panel.

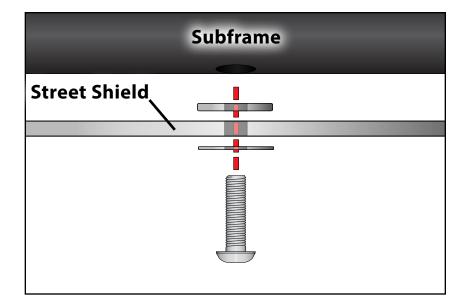


Step 13: 5mm Hex Socket & Ratchet

In order to hold the street shield up, we will loosely install the three longer M8 bolts and washers.

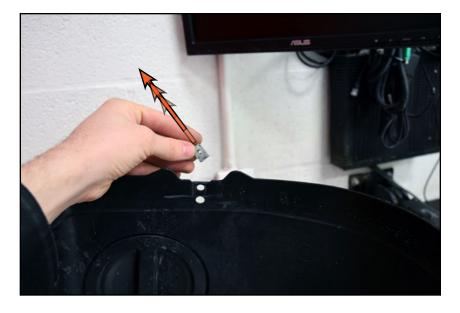


The three rear mounting bolts feature a flat washer and a spacer, reference the illustration on the right for the order of installation.



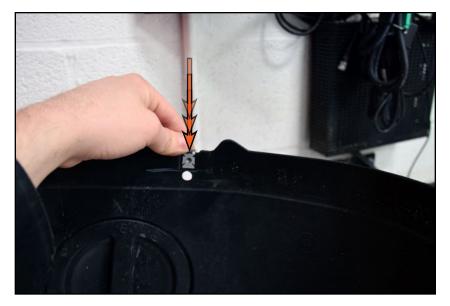
Step 14:

Remove any old or worn speed nuts from the fender liners.



Step 15:

Included in your hardware kit are new speed nuts to replace old or missing ones, they can be simply slid into place to be installed.



Step 16:

We will not be installing a speed nut in the front-most hole on either fender liner, our street shield will be mounted to the vertical braces using a bolt that will utilize these holes.



Step 17:

Reinstall the front fender liners into the wheel wells.



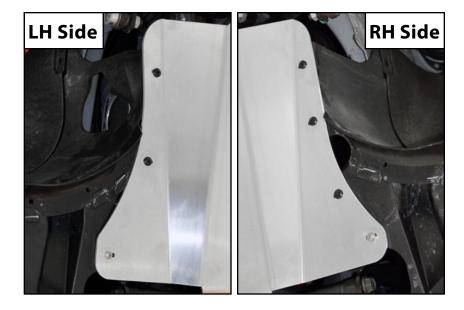
Step 18: 4mm Hex Socket & Ratchet

Next we will be installing the two M6 bolts, these screws secure the street shield by threading through the hole in the fender liner and into the clip nut on each vertical brace.



Step 19:

Install a fastener into each of the five remaining holes.



Step 20:

Rotate the reinforcement bar so that the threaded holes line up with the slotted holes in the street shield.



Step 21: 5mm Hex Socket & Ratchet

Install the two short M8 bolts into the holes in the reinforcement bar and tighten them down.



Step 22: 18mm Socket & Ratchet

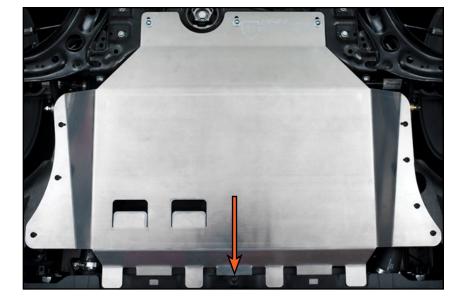
Now, we can return to the bolts on the reinforcement bar and tighten them to secure the bar in the correct orientation.



Step 23:

Once everything has been aligned, tighten all the bolts to secure the street shield to the subframe and braces, then tighten all the remaining fasteners. Install the final fastener in the hole located near the front of the vehicle.

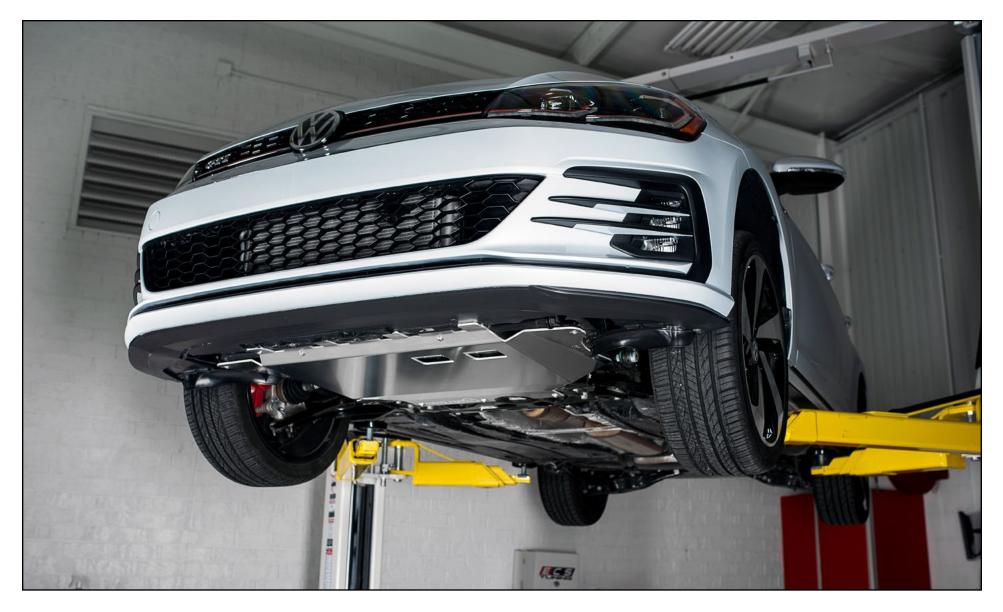
Your installation is complete!



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 ECS Street Shield Brace Kit installation is complete!



These instructions are provided as a courtesy by ECS Tuning

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