Volkswagen 2014 + Gen3 1.8T/2.0T Intake Side Port Boost Tap 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're going to install our side port boost tap onto an intake manifold. The car we're using is a MK6 Jetta GLI, but it'll fit onto the intake of any 2014 + 1.8T or 2.0T Gen3 TSI engine, and the procedure will be the same. This is a very easy installation that will only take you about 30-45 minutes. The Jetta we're installing it on has the original air box which we remove simply to gain access to the intake side port. If you have an aftermarket intake, you may not need to remove it and the job will go even quicker.

ECS Difficulty Gauge

1 - Easy Pro - 4

2 - Moderate Advanced - 3

You don't need much experience for this installation, and we'll walk you through it step by step. It only requires a handful of tools, but just to be sure you have them all, check the tool list and read through these instructions before you begin. The boost tap comes with everything you need for a successful installation and gives you the option for up to three boost/vacuum ports to cover any accessories you've installed. Thank you for looking to ECS Tuning for all your performance and repair needs. We appreciate your business!

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Symbols:

The following symbols may be used throughout these instructions indicating special attention:

FORK IN THE ROAD: When there are different options within any given kit, we will direct you to the proper page and step to continue.

YIELD: Pause for a moment to double check component installation before you continue. Ignoring this can cost you time later during the installation.

CAUTION: Pay close attention to these warnings and instructions. Difficult installation, personal injury or component damage may occur if ignored.

STOP: The upcoming steps require specific preparation and/or assistance in the interest of safety. Please read ahead in the instructions and prepare before continuing.

KIT CONTENTS

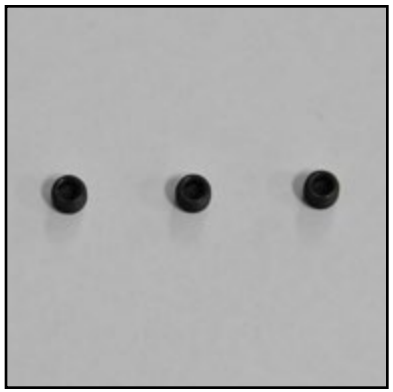
Side Port Boost Tap

Manifold Piercing Tools

Threadlocker Compound

Retaining Clip

Boost Tap Nipples (3)



Boost Tap Plugs (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 ..... ES#11417
- 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
- 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
- Bench Mounted Vise
- 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

Specialty Tools

Specialty Tool Requirements: The following specialty tools are not considered part of a standard tool set and are required specifically for the installation of the Gen3 Intake Side Port Boost Tap. Tools with a hyperlink are available on our website.

- Spring Clamp Pliers ..... ES#2702616

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.
- 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.

INSTALLING THE SIDE PORT BOOST TAP

Step 1:

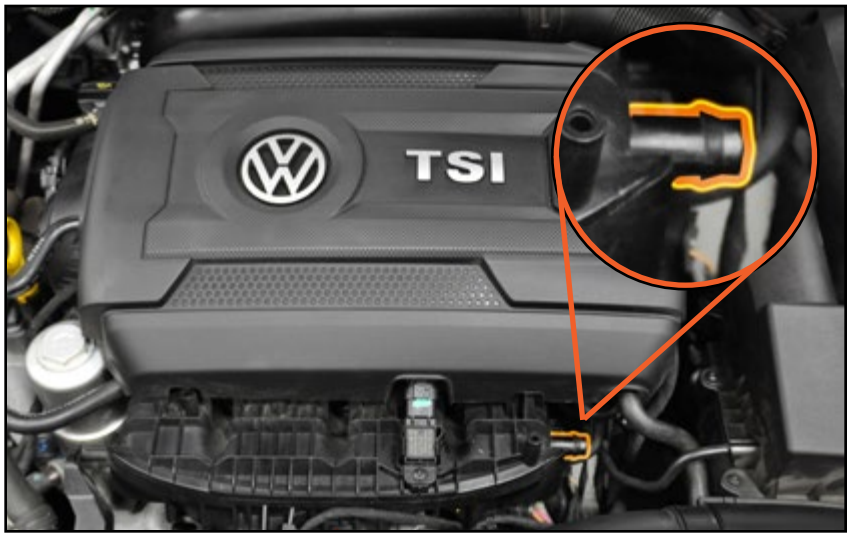
With the hood closed, start your engine and let it run until it reaches operating temperature.

CAUTION

Do not fail to warm up the engine as described. The intake manifold must be warm to the touch before you proceed. If you attempt to pierce the intake manifold while it is cold, it may crack or splinter.

Step 2:

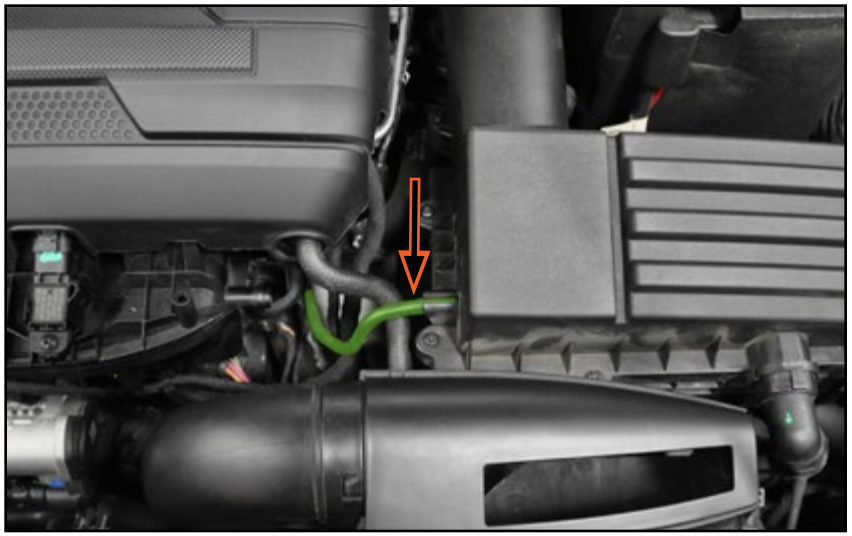
Locate the side vacuum port on the intake manifold. It is located on the LH (Driver's side) of the intake manifold, near the front This is where we are going to pierce the manifold and install the boost tap, and as you can see, with the factory air box installed, we need a little more room to work. We're going to remove it in the next few steps, but if you have an aftermarket intake, you may already have enough room and you can skip air box removal.



INSTALLING THE SIDE PORT BOOST TAP

Step 3:

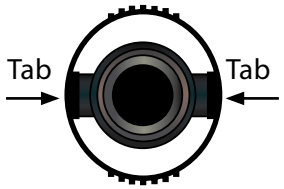
Pull the vacuum hose off the side of the air box lid. Be careful and pull gently, twisting it back and forth if necessary to release it from the port on the air box.



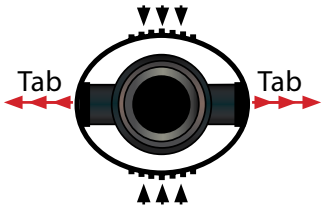
Step 4:

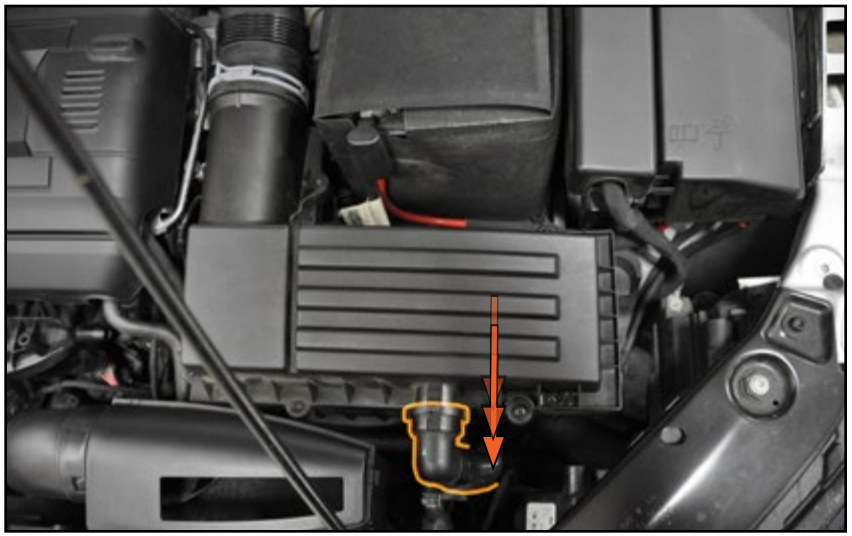
If equipped, remove the secondary air injection intake pipe from the front side of the air box lid by squeezing the locking ring then pulling it straight off. The diagram below illustrates how the locking ring works:

Normal state: The tabs keep the hose "locked" onto the air box.



Released: Squeeze the top and bottom of the locking ring together and the tabs will expand and release the hose from the air box.

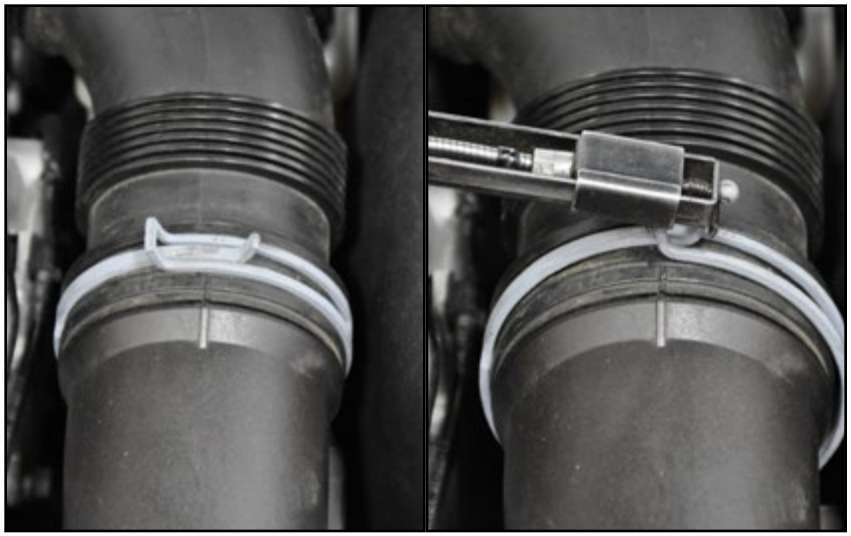




INSTALLING THE SIDE PORT BOOST TAP

Step 5: Spring Clamp Pliers

Release the tension on the spring clamp that connects the air box to the flexible intake tube.



NOTE

Spring clamp pliers are best suited for this, however if you do not have any, a large pair of slip-joint or groove-joint (channel lock) pliers will work - but be careful, the clamp can easily slip off.

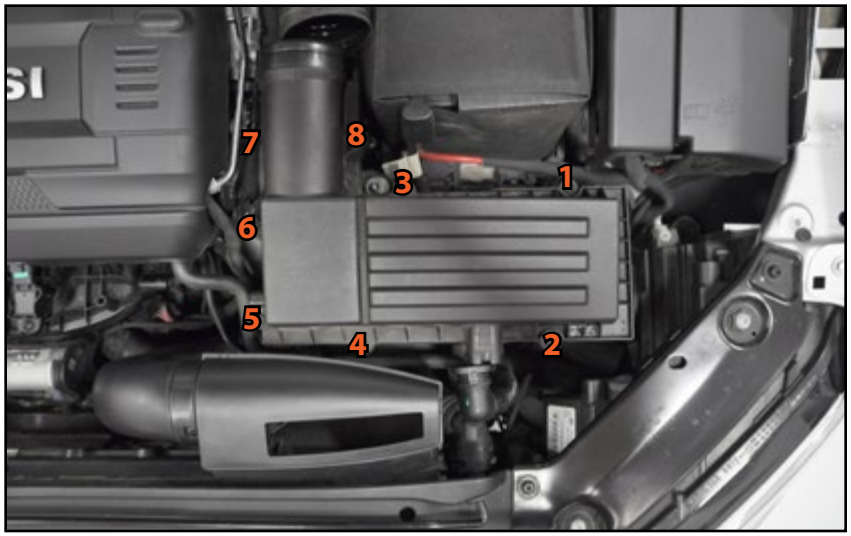
Step 6:

Slide the clamp back along the intake tube, then pull the tube off of the air box.

INSTALLING THE SIDE PORT BOOST TAP

Step 7: T25 Torx Bit

Remove the air box lid by loosening the eight screws holding it in place and lifting it off.



NOTE

These air box screws are "trapped" screws. When fully loosened, the screws will remain in the air box lid.

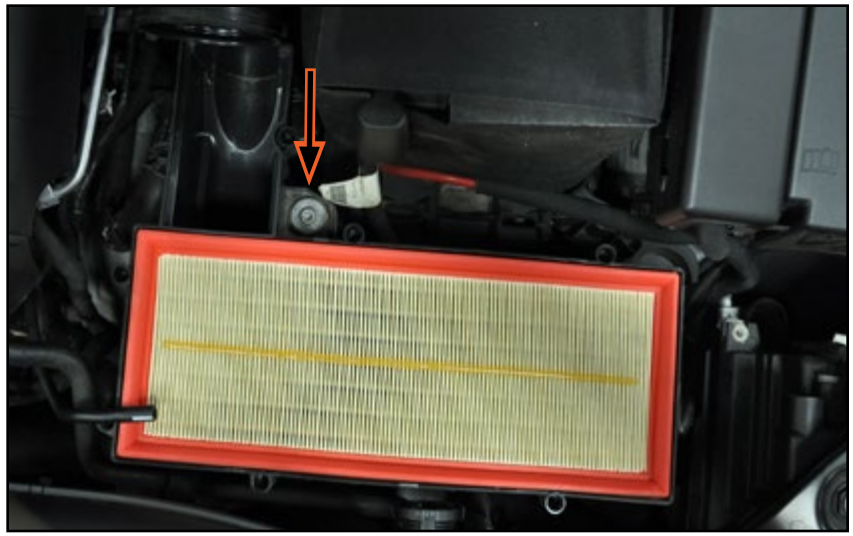
Step 8: Flat Blade Screwdriver

Squeeze the top and bottom of the intake duct and pull it off of the duct housing on the top and the air box on the bottom. You'll find that the bottom is pretty easy, but the top can be a little tough. You may need to use a flat blade screwdriver to help push in the hooks that hold the top of the duct to the housing (see inset photo).

INSTALLING THE SIDE PORT BOOST TAP

Step 9: T30 Torx Bit

Loosen the air box hold down screw (arrow). Fully loosen the screw, but keep in mind that it is a "trapped" screw, just like the ones in the lid, and it will remain in place in the air box once it is completely loosened.



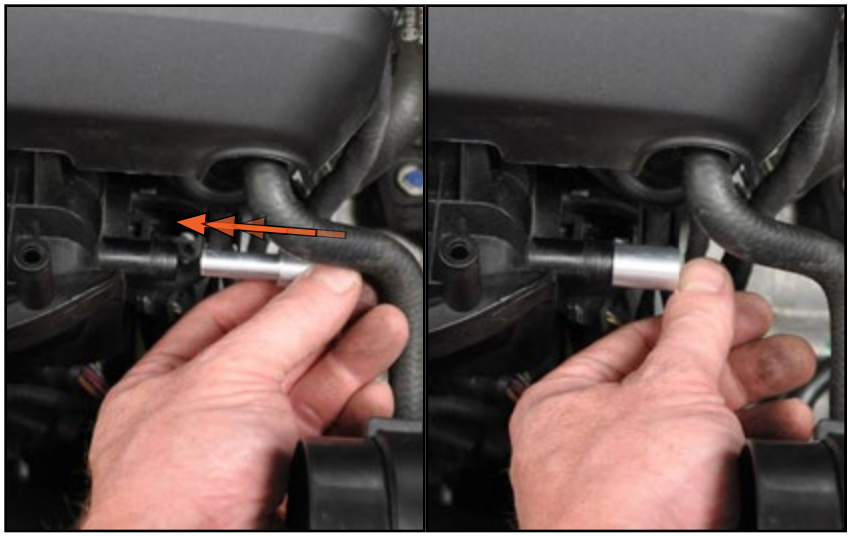
Step 10:

Lift the air box out of the car, keeping in mind that there is a drain tube connected to the lower outside corner. You can carefully guide the drain tube up through the LH front corner of the engine compartment and remove the air box with it attached.

INSTALLING THE SIDE PORT BOOST TAP

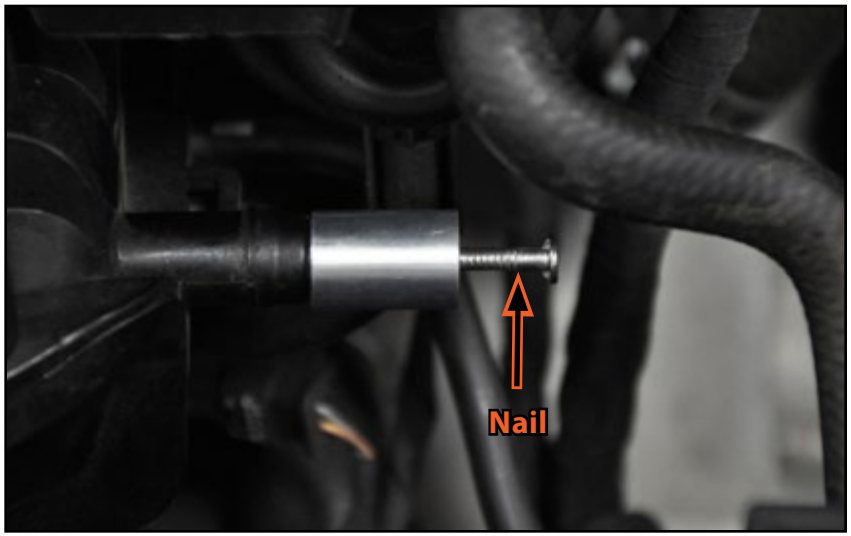
Step 11:

Slide the manifold piercing alignment tool into the side port on the intake manifold until it is fully seated.



Step 12:

Slide the nail into the end of the alignment tool until you feel it hit the closed end of the intake side port.



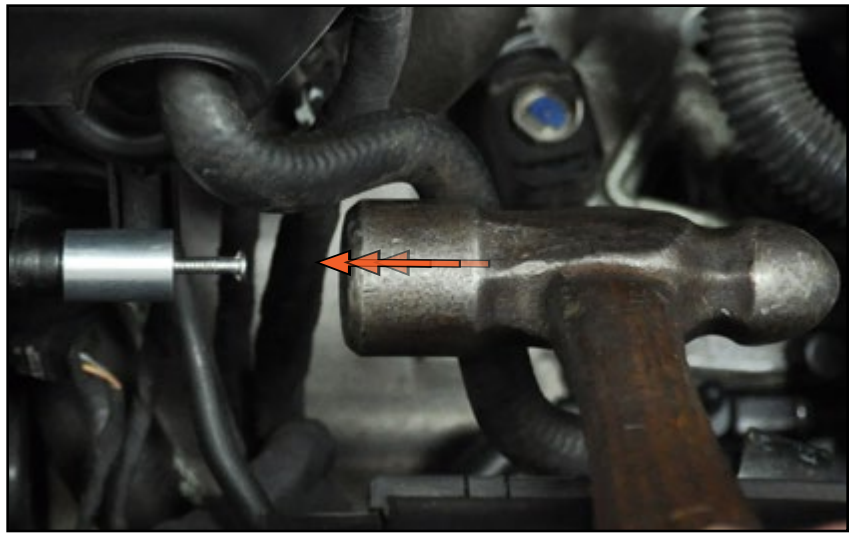
Intake Manifold Temperature Warning

Don't forget, the engine should be completely warmed up as described in step 1 before you proceed.

INSTALLING THE SIDE PORT BOOST TAP

Step 13: Ball Pein Hammer

Using a ball pein hammer, not a really big one - the 16 oz hammer we are using here is plenty big enough, tap lightly on the nail in the piercing alignment tool, just as if you are starting a nail in a piece of wood. After you tap on it just a few times, you will feel it begin to pierce the manifold.



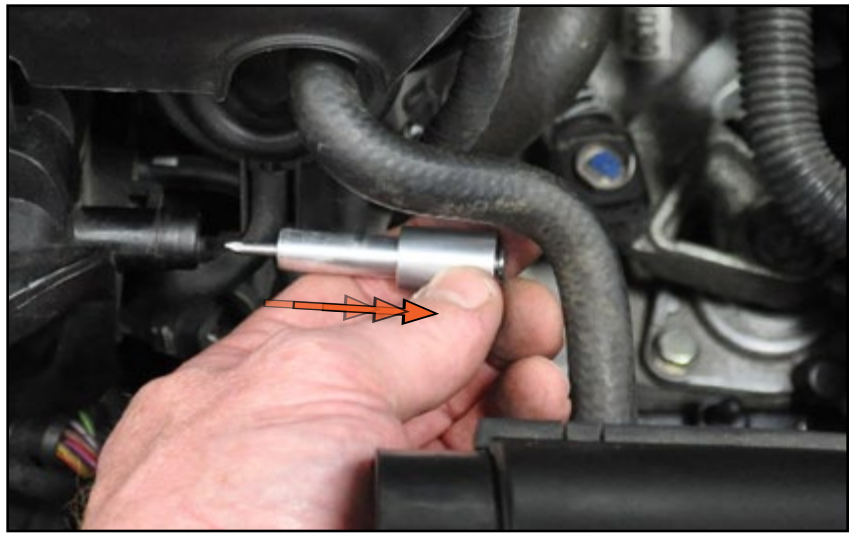
Step 14: Ball Pein Hammer

Just a couple more taps and the nail will easily pierce through the side port. When the head of the nail is seated against the surface of the manifold piercing alignment tool as it is in this photo, you have successfully pierced the manifold.

INSTALLING THE SIDE PORT BOOST TAP

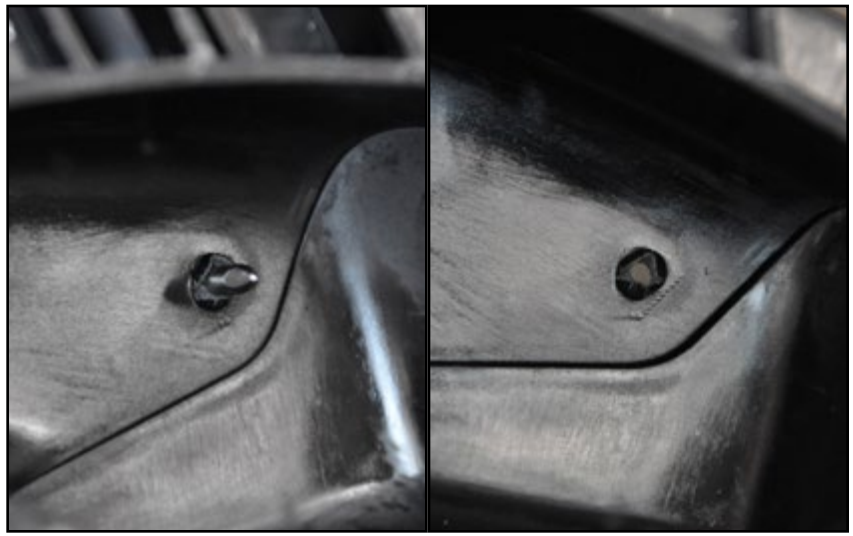
Step 15:

Pull the piercing alignment tool and the nail out of the intake manifold side port.



Step 16:

These unedited, cut-away views of the inside of the intake manifold demonstrate how the nail will smoothly and evenly pierce through the plastic, creating a perfect hole with absolutely no break off and no burrs.



INSTALLING THE SIDE PORT BOOST TAP

Step 17:

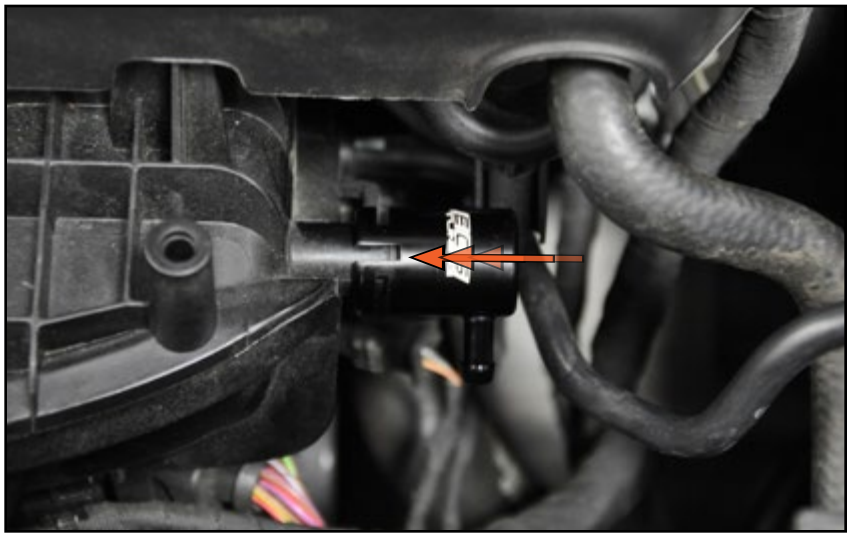
Install the nipples and plugs into your boost tap depending on how many ports you need. Use the following installation guidelines:

Nipples: Install them using a drop of threadlocker, tighten them with your fingers.

Plugs: Install them using a drop of threadlocker, thread them in just until they are flush with the chamfer on the side on the boost tap. The threadlocker will seal them and hold them in place.

Step 18:

Push the boost tap onto the intake manifold side port until it is fully seated, making sure to orient the nipple(s) where you want them.



Push the retaining clip into the groove on the boost tap until it is fully seated.

Attach your vacuum hose(s) to the boost tap.

- [ ] Reinstall the air box.

Your Boost Tap 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 Gen3 Intake Side Port Boost Tap Installation is complete!

These instructions are provided as a courtesy by ECS Tuning

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