BMW F8x M3/M4 S55
Open & Closed Intake System
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 Product:

Our engineers here at Turner Motorsport set out to design an intake system which performs as well as it looks, and these systems are the result. Introducing the Turner Motorsport S55 intake system; the artful culmination of hours of skillful engineering. This intake is available in either an open filter configuration featuring a sturdy powder-coated heat shield or as an enclosed filter carbon fiber air box system. The heat shield is constructed of sturdy aluminum with an attractive black powder coat finish for durability. Each intake includes custom fit pieces of gold heat tape which help to reflect engine heat away from the heat shields and reduce intake air temps. The carbon fiber intake pipes are truly a work of art, they are constructed of hand-laid carbon fiber with our logo beautifully preserved beneath the durable finish. Each system is available in either a classy and captivating matte finish or in a sleek and attractive high-gloss finish. Optionally, you can opt for wrinkle black powder coated aluminum pipes in lieu of the carbon fiber for a more subdued style. Today we are going to be installing our intake system into an F82 M4, but keep in mind the installation process is the same regardless of your vehicle series.

The Installation:

Installation is quick, simple, and completely reversible. We highly recommend reading through these instructions completely first before getting started with your installation. No specialty tools are required for this installation and we include all necessary hardware necessary to install your new intake. In total, this installation should take no longer than one hour.

Thank you for choosing to make Turner Motorsport your primary supplier for your BMW performance and repair needs, we appreciate you!

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KIT CONTENTS


M4 x 14mm Screw
(QTY 4)


Heat Shields
(QTY 1)


Hose Clip
(QTY 2)


Heat Shield Tape
(QTY 2)

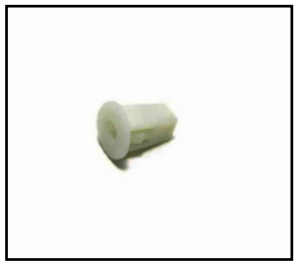

Standoff
(QTY 3)


Countersunk Washer
(QTY 2)


M6 x 16mm Screw
(QTY 1)


22mm Grommet
(QTY 2)

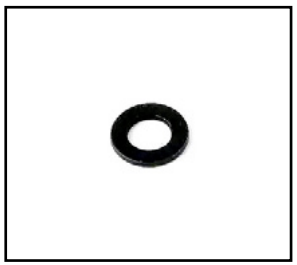

17mm Grommet
(QTY 1)


Expanding Nut
(QTY 1)


M6 Clip Nut
(QTY 1)


M6 x 20mm Bolt
(QTY 2)

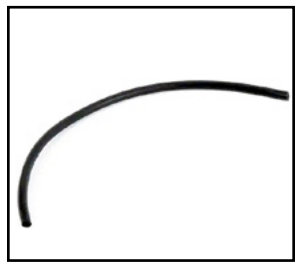

Screw
(QTY 1)


M5 Washer
(QTY 8)


M5x12mm Screw
(QTY 8)

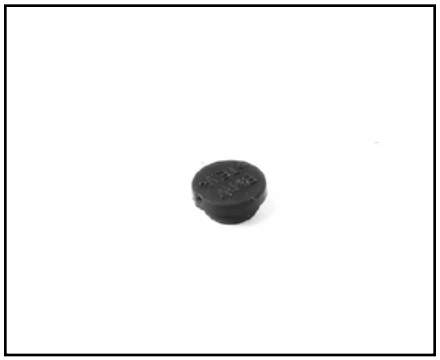

Air Filter
(QTY 2)


Thick Edge Trim
(QTY 2)


Thin Edge Trim
(QTY 2)

KIT CONTENTS

Plastic Plug
(QTY 2)



Rubber plug
(QTY 4)

OPEN intake only

Front Lid Mounting Bracket
(QTY 1)

Lid Mounting Bracket
(QTY 2)

Mounting Grommet
(QTY 6)

CLOSED intake only

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

Turner Motorsport 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.

REMOVING THE STOCK INTAKE

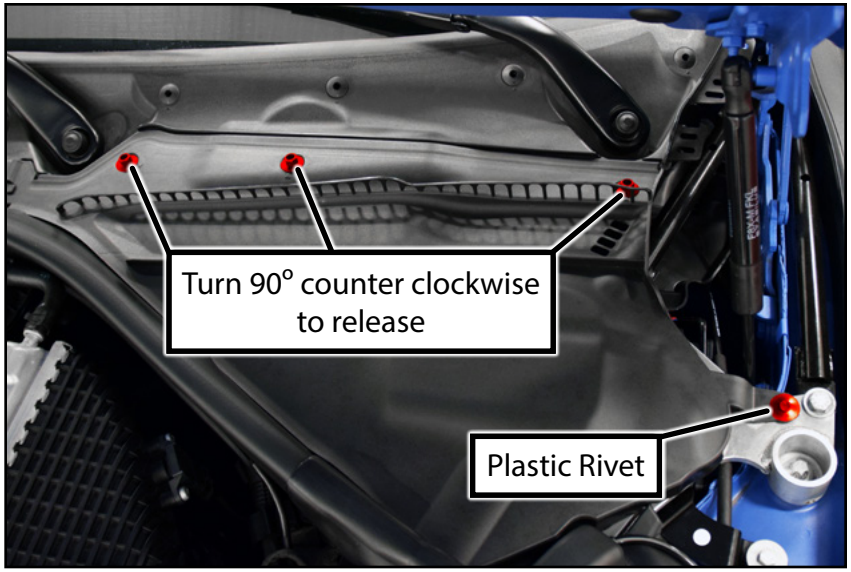
Step 1:

Grasp the engine cover and pull it upwards to release it from its mounting grommets.

Step 2: 10mm Socket & Ratchet

In order to remove the plastic rain tray covers from the vehicle we must do the following:

- Turn the three 10mm plastic nuts 90° counter clockwise to release them.
- Pull the core upwards out of the plastic expanding rivet to release it.
- Lift the rain tray cover out of the vehicle and set it aside.
- Repeat this process to remove the rain tray cover on the other side.

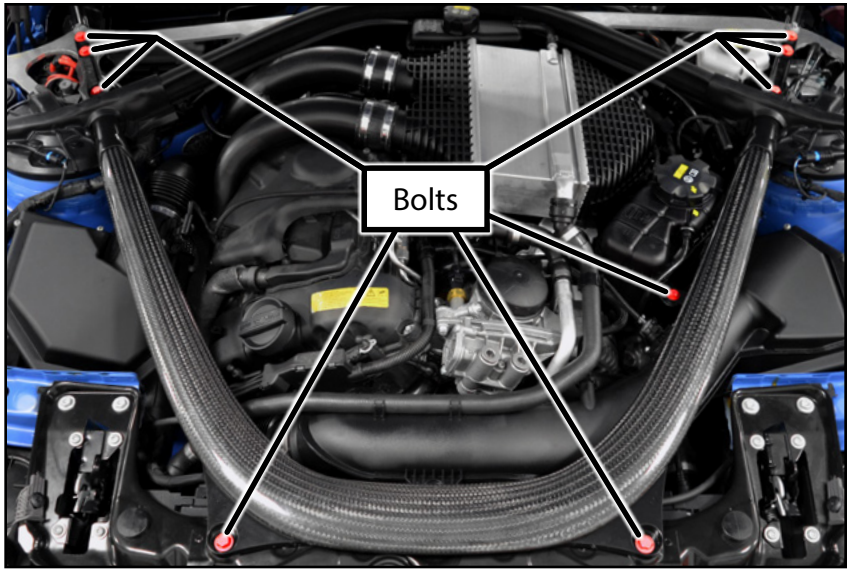


REMOVING THE STOCK INTAKE

Step 3: 10mm Socket, 13mm Socket & Ratchet

Next we must remove the carbon strut from the engine compartment by doing the following:

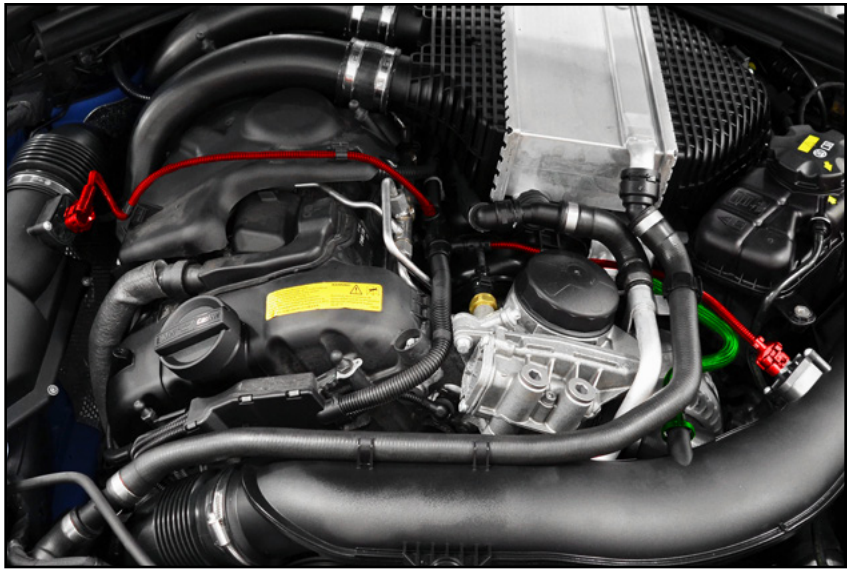
- Remove all of the bolts securing the carbon strut to the vehicle (highlighted in **RED**).
- Carefully slide the carbon strut out from the rubber weather strip and out from the vehicle.
- Set the strut aside where it cannot be damaged.



Step 4:

Depress the locking tab on each MAF sensor connector (highlighted in **RED**) and pull the connectors off of the MAFs.

Remove the vacuum line (highlighted in **GREEN**) by pinching the two sides inward and then pulling it off of the flange on the intake pipe.



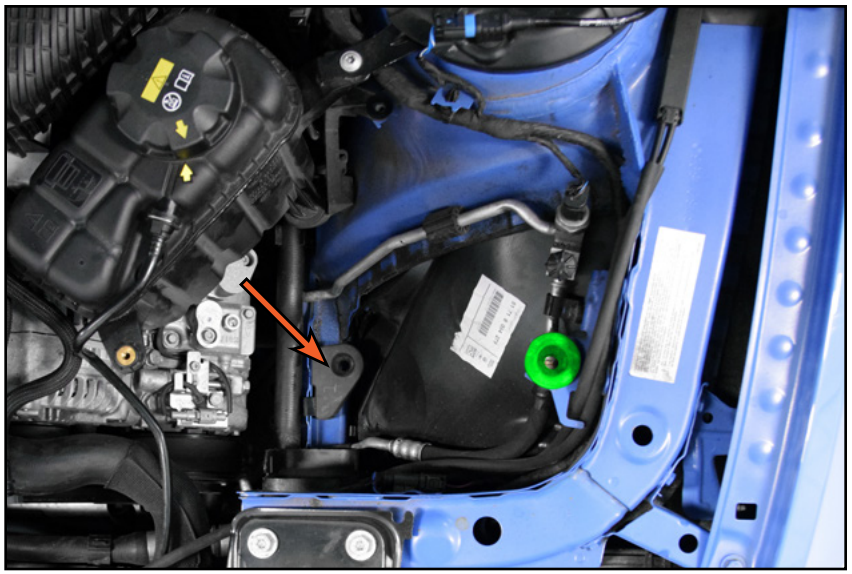
REMOVING THE STOCK INTAKE

Step 5: Flat Head Screwdriver

First, loosen the two hose clamps (arrows) which secure the stock air boxes (highlighted in **RED**) to the corrugated lower intake pipes, then lift up on each air box to pop them free from their mounting grommets and remove them.

Step 6:

Place the rubber support bottom (arrow) from the LH air box into the vehicle as shown.

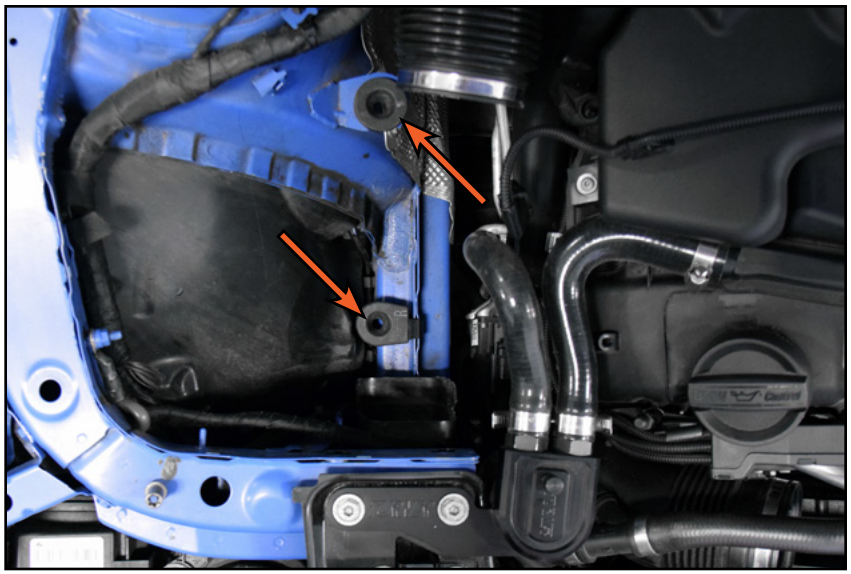


If you purchased a **CLOSED** intake system, leave the air box mounting grommet (highlighted in **GREEN**) in place, it will be used to mount the carbon lid later.

INSTALLING THE NEW INTAKE SYSTEM

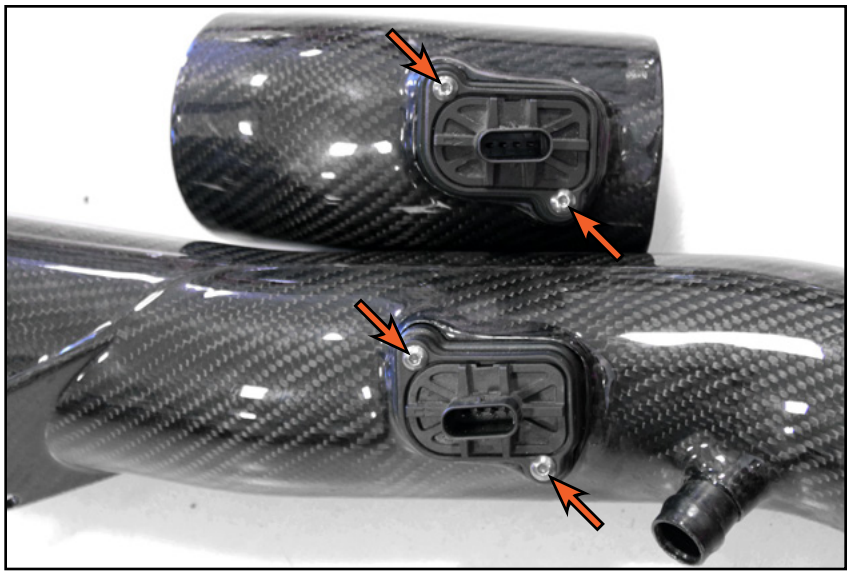
Step 1:

Place the rubber support bottom and mounting grommet (arrows) from the RH air box into place as shown.



Step 2: 2.5mm Hex (Allen)

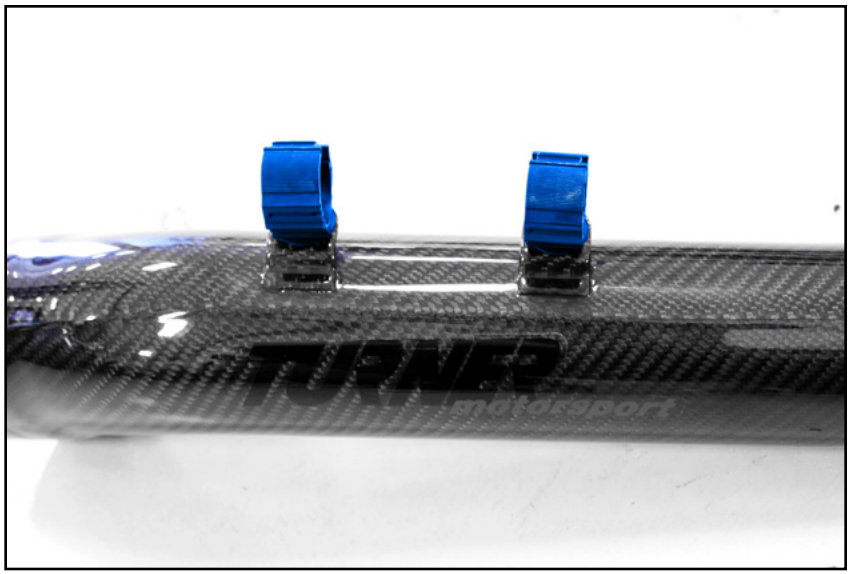
Transfer the MAFs to the new intake pipes and secure them with the provided M4 screws (arrows).



INSTALLING THE NEW INTAKE SYSTEM

Step 3:

Install the two provided hose clips (highlighted in **BLUE**) into the RH intake pipe as shown.



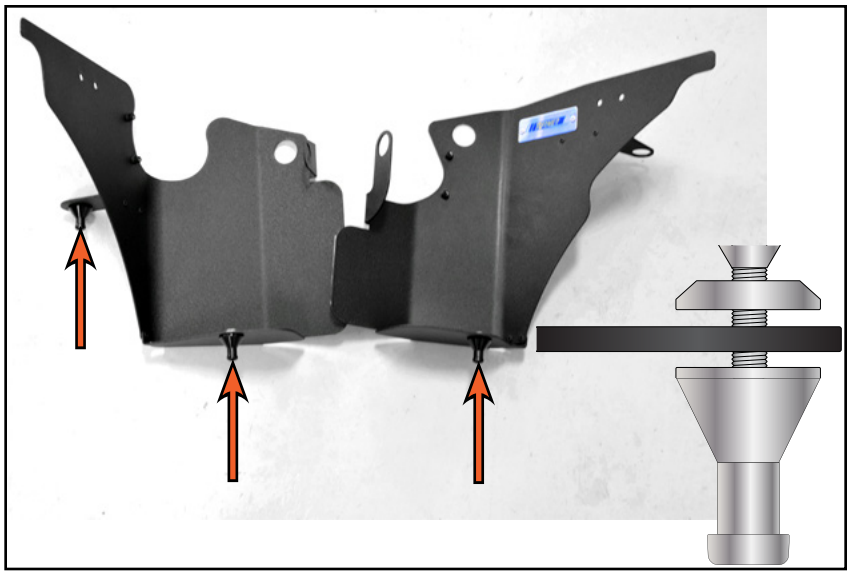
Step 4:

Line up the reflect-a-gold sticker with each heat shield, then remove the backing and adhere the sticker to each heat shield as shown.

INSTALLING THE NEW INTAKE SYSTEM

Step 5: 4mm & 6mm Hex (Allen)

Using the illustration on the right, install the three standoff studs (arrows) into the heat shield with the provided countersunk washers and M6 screws.



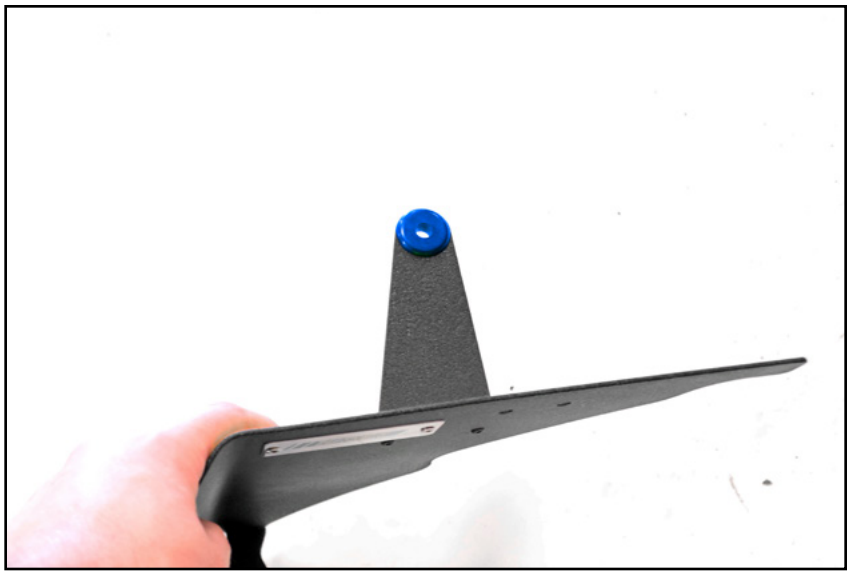
Step 6:

Install the two 22mm grommets (highlighted in **BLUE**) into the heat shields as shown.

INSTALLING THE NEW INTAKE SYSTEM

Step 7:

Install the provided 19mm grommet (highlighted in **BLUE**) into the mounting arm on the LH heat shield as shown.



Step 8:

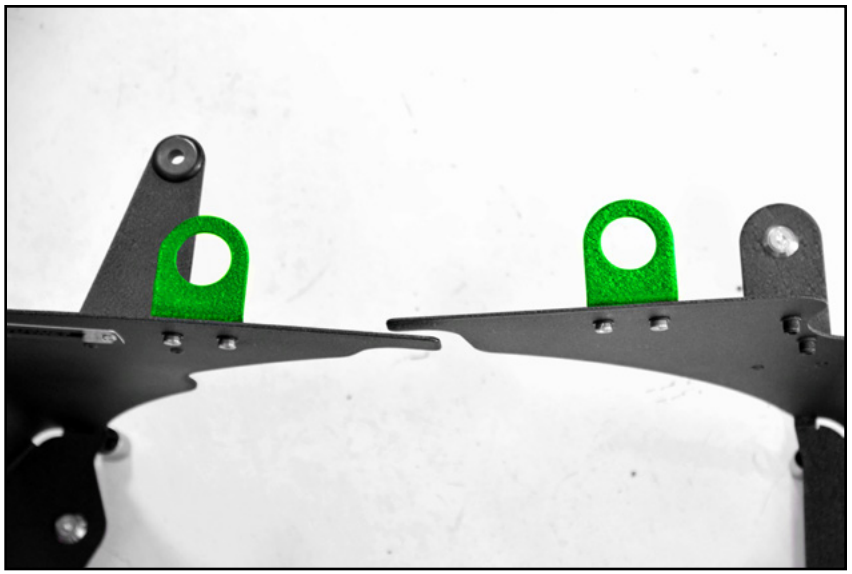
Install two mounting grommets (highlighted in **GREEN**) into the holes in the heat shields as shown.

If you purchased an **OPEN** intake system, install the two large rubber plugs provided in the kit in place of these grommets.

INSTALLING THE NEW INTAKE SYSTEM

Step 9: 3mm Hex (Allen)

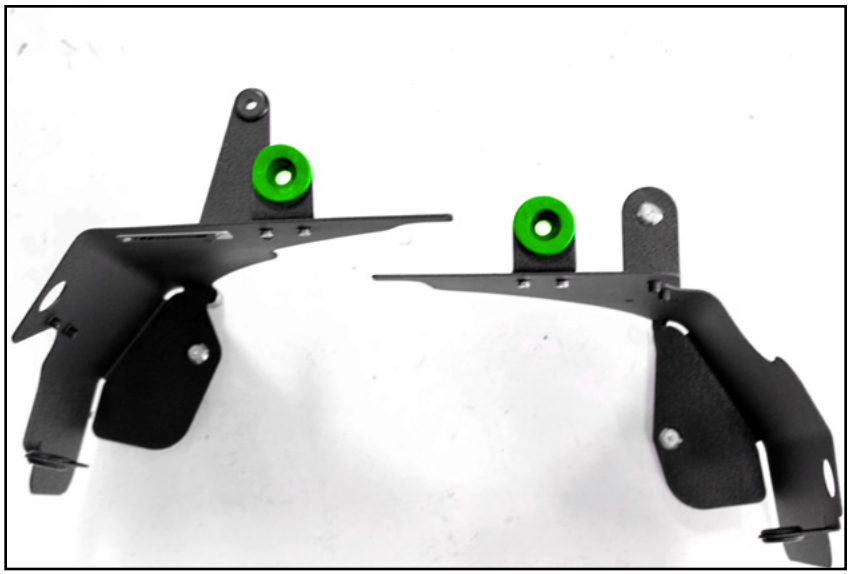
Install the lid mounting brackets (highlighted in **GREEN**) onto the heat shield as shown, using the two M5 screws and washers (arrows) to secure it in place.



If you purchased an **OPEN** intake system, install the four provided small rubber plugs in place of the screws, then skip to the next page.

Step 10:

Install two mounting grommets (highlighted in **GREEN**) into each lid mounting bracket as shown.



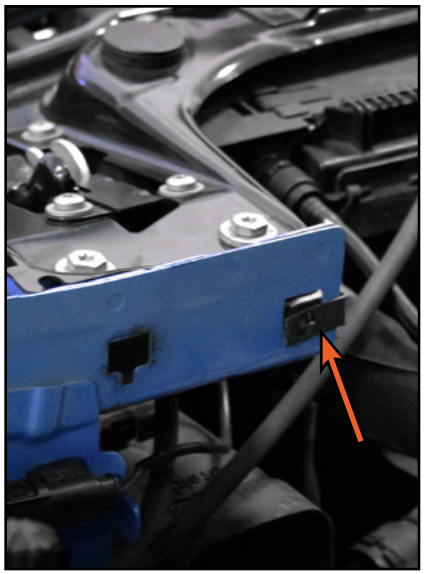
INSTALLING THE NEW INTAKE SYSTEM

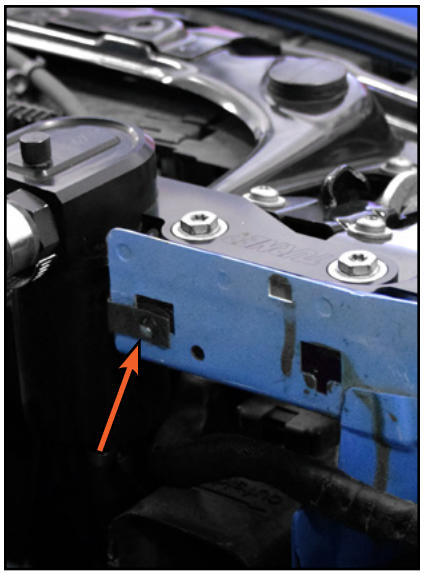
Step 11: 8mm Socket & Ratchet

Loosen and discard the screw and replace the plastic expanding nut (inset photo) with the replacement provided in the kit.

Step 12:

Install the provided clip nuts (arrows) over the notches on either side of the body of the vehicle as shown.



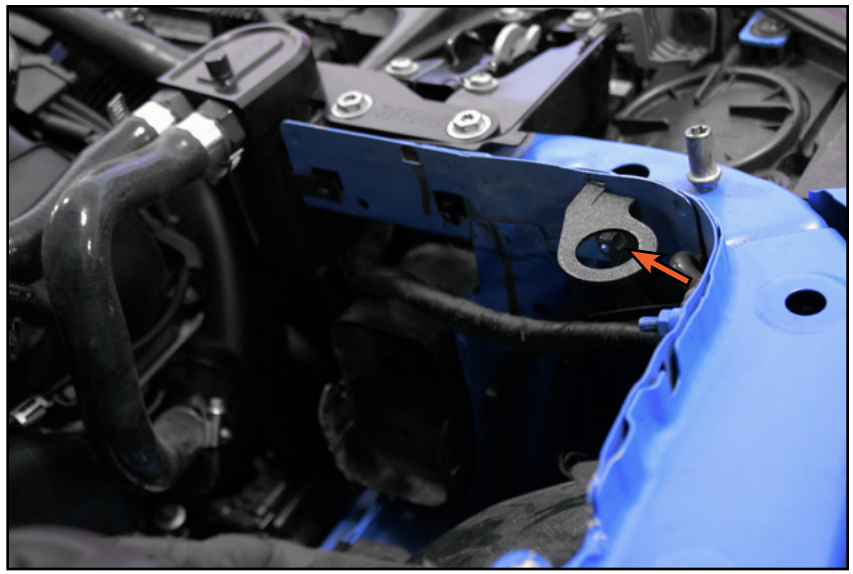


If you purchased an **OPEN** intake system, skip ahead to page 17.

INSTALLING THE NEW INTAKE SYSTEM

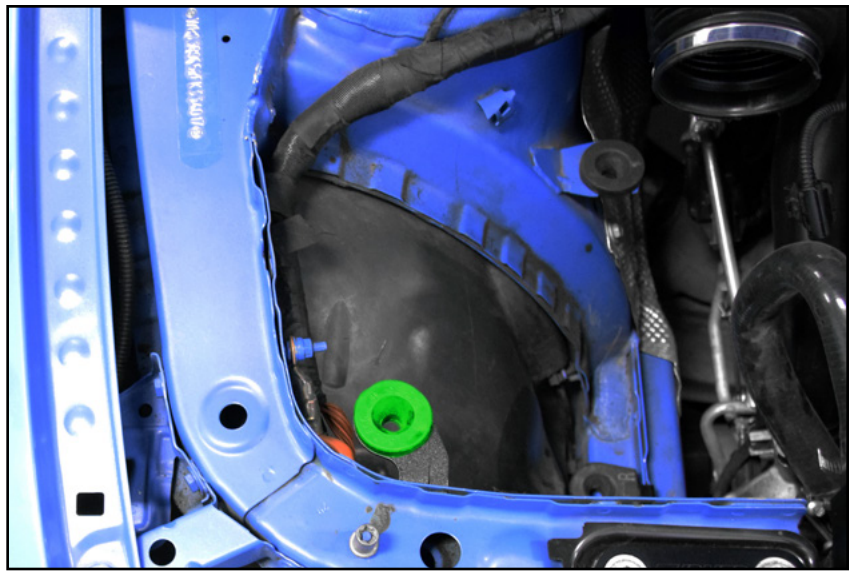
Step 13: 10mm Socket & Ratchet

Install the provided front lid mounting bracket using the 10mm nut (arrow) found on the body as shown.



Step 14:

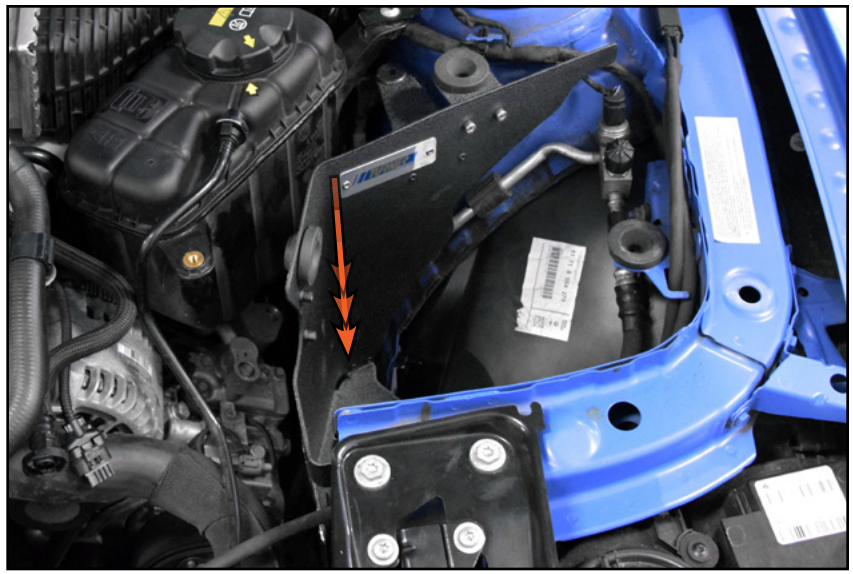
Install a mounting grommet (highlighted in **GREEN**) into the front mounting bracket as shown.



INSTALLING THE NEW INTAKE SYSTEM

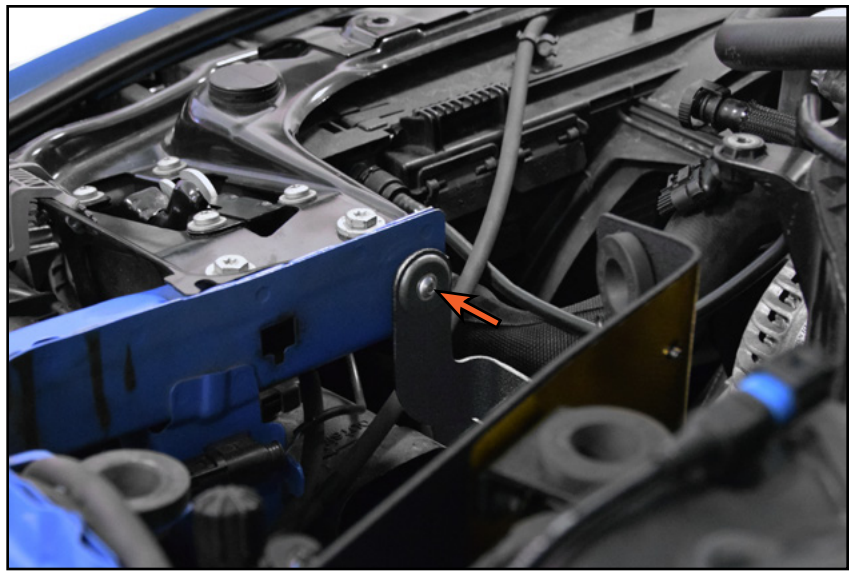
Step 15:

Install the LH heat shield by lining it up and pushing it downward to pop it into the support bottom.



Step 16: 4mm Hex (Allen)

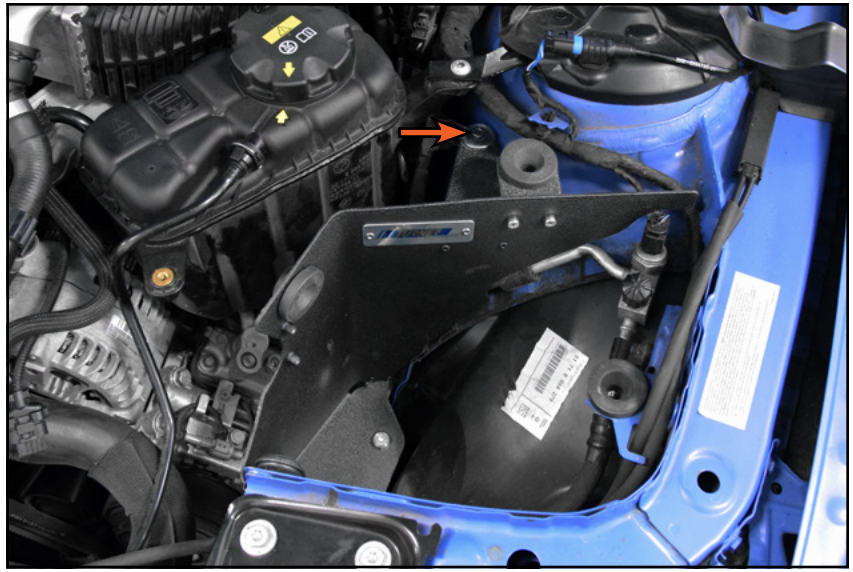
Install the provided M6 bolt (arrow) through the heat shield grommet and tighten it until snug.



INSTALLING THE NEW INTAKE SYSTEM

Step 17: 8mm Socket & Ratchet

Install the provided replacement screw (arrow) through the rear heat shield grommet and tighten it until snug.



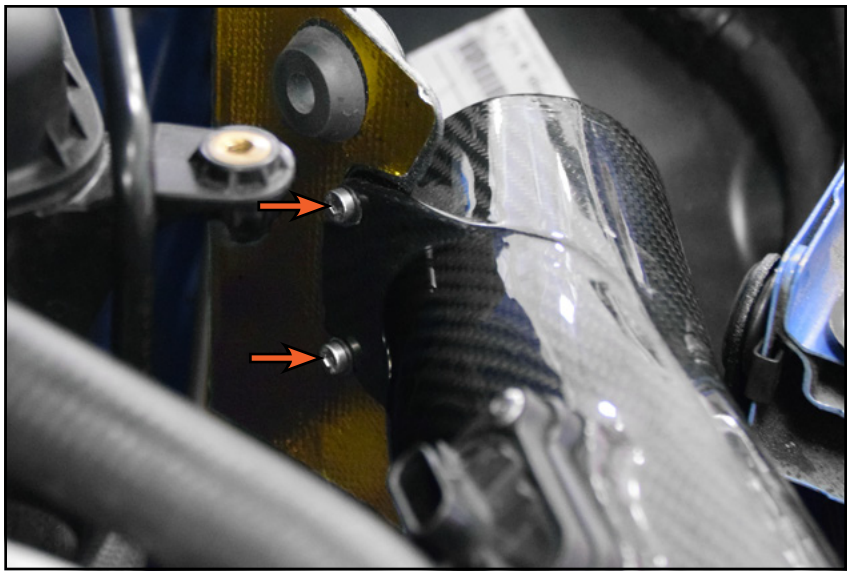
Step 18:

Slide the LH intake pipe into the corrugated lower intake tube as shown but leave the clamp loose for now.

INSTALLING THE NEW INTAKE SYSTEM

Step 19: 3mm Hex (Allen)

Install the two M5 screws and washers (arrows) to secure the LH intake pipe to the heat shield.



Be careful not to over-tighten any screws or clamps when installing the carbon pipes, over tightening can crack the carbon fiber.

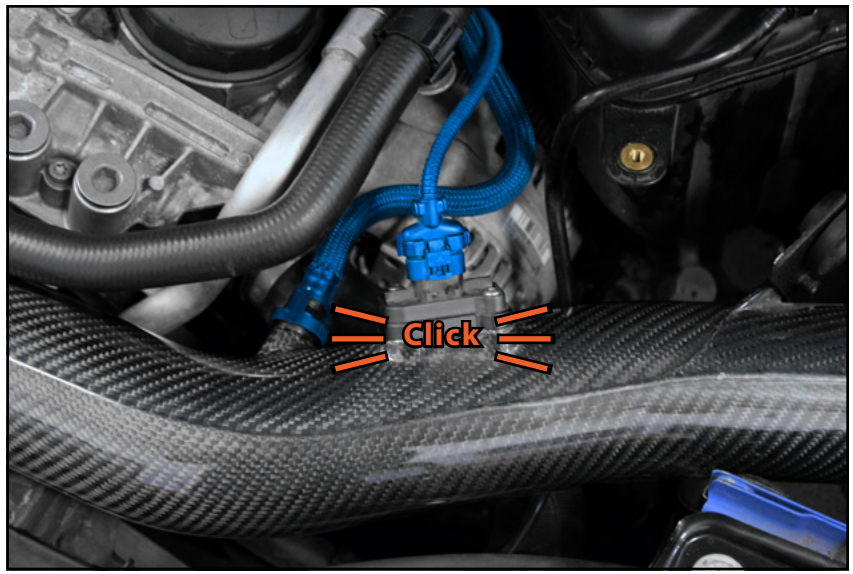
Step 20:

Install the coolant line (highlighted in **BLUE**) into the hose clips on the LH intake pipe as shown.

INSTALLING THE NEW INTAKE SYSTEM

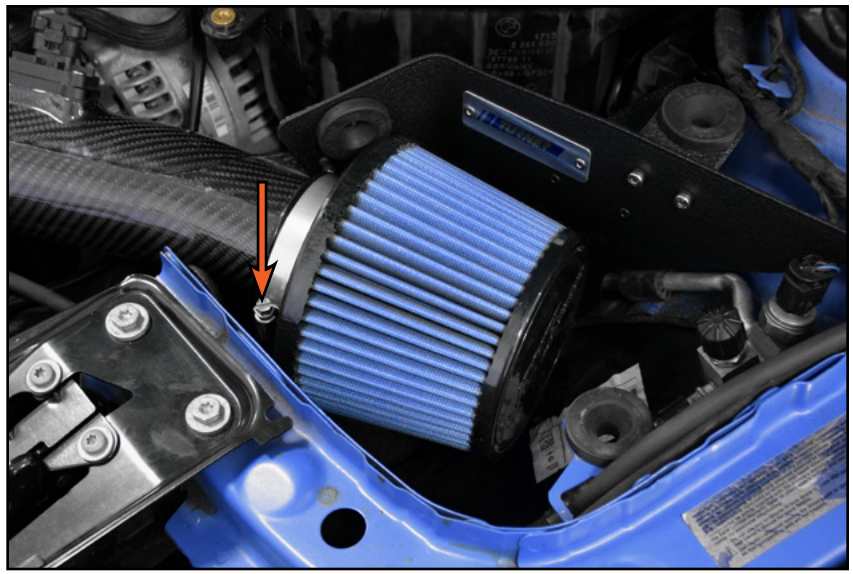
Step 21:

Reconnect the MAF sensor connector (highlighted in **BLUE**) and reinstall the vacuum line (highlighted in **BLUE**) onto the flange on the intake pipe.



Step 22: Flat Head Screwdriver

Install the air filter onto the intake pipe and tighten the clamp (arrow) to secure it.



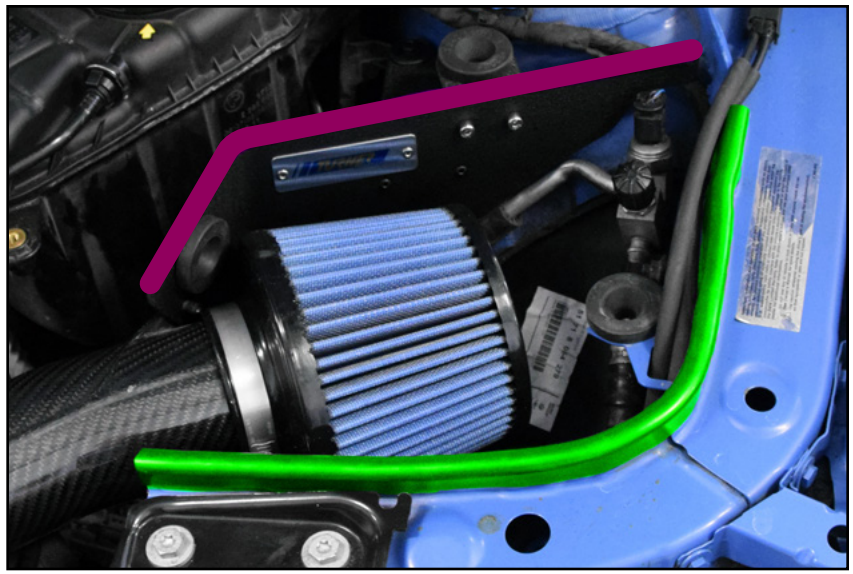
INSTALLING THE NEW INTAKE SYSTEM

Step 23: Flat Head Screwdriver

Before we move on, don't forget to go back and tighten the clamp (arrow) on the lower intake tube.

Step 24: Razor Blade

Apply the rubber edge trim to the area highlighted in **GREEN**.



If you purchased the **OPEN** intake, apply the bulb seal to the heat shield in the area highlighted in **MAGENTA**. This will help seal the intake to the hood, making it more air-tight.

NOTE

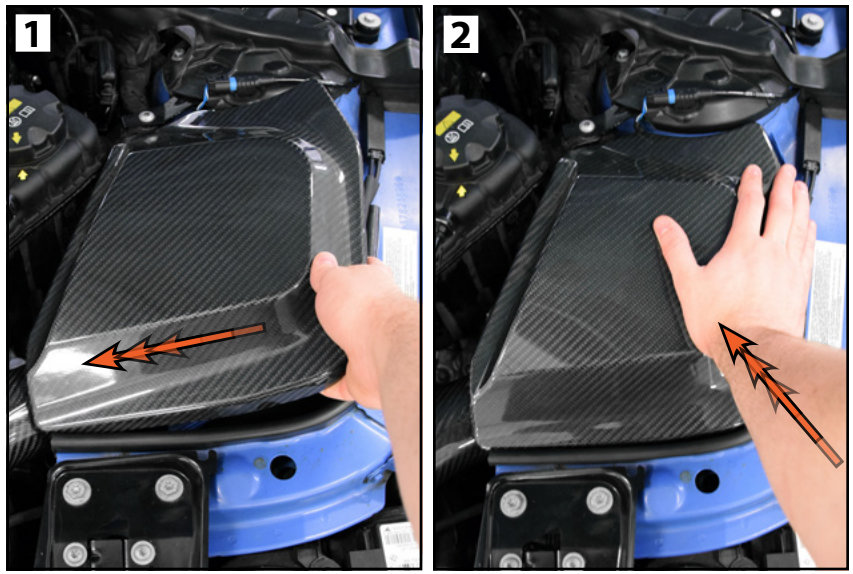
Be sure to trim off any excess length of edge trim or bulb seal for a clean appearance.

INSTALLING THE NEW INTAKE SYSTEM

Step 25:

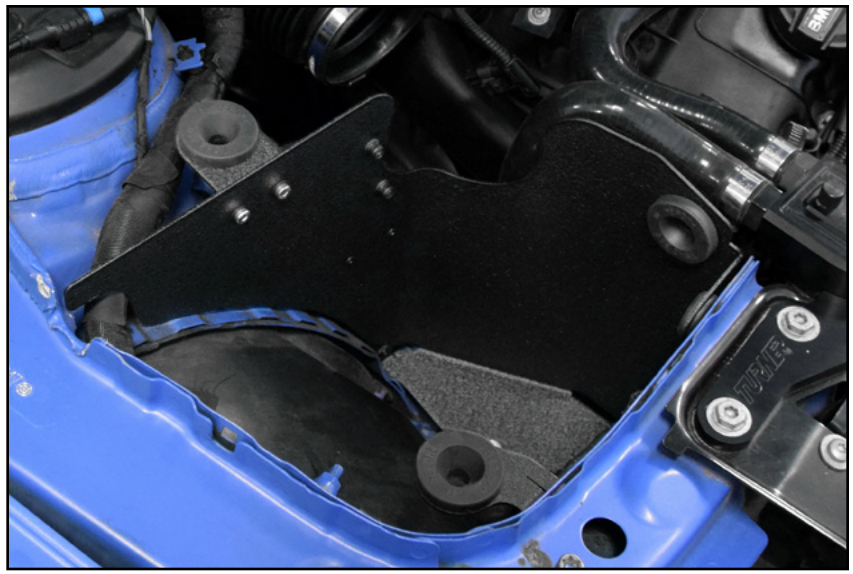
If you have purchased the **OPEN** intake system, you can skip this step.

Lay the LH carbon fiber lid into place so that the stud on the side of the lid slides into the grommet on the side of the heat shield (1), then push downward to pop the other two mounting studs into the grommets, securing the lid in place (2).



Step 26:

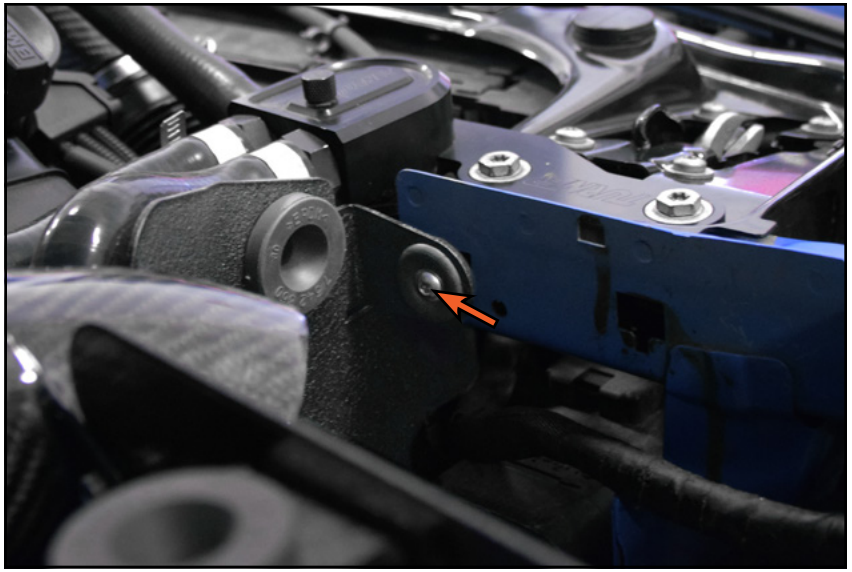
Install the RH heat shield by lining it up and pushing it downward to pop it into the support bottom and mounting grommet.



INSTALLING THE NEW INTAKE SYSTEM

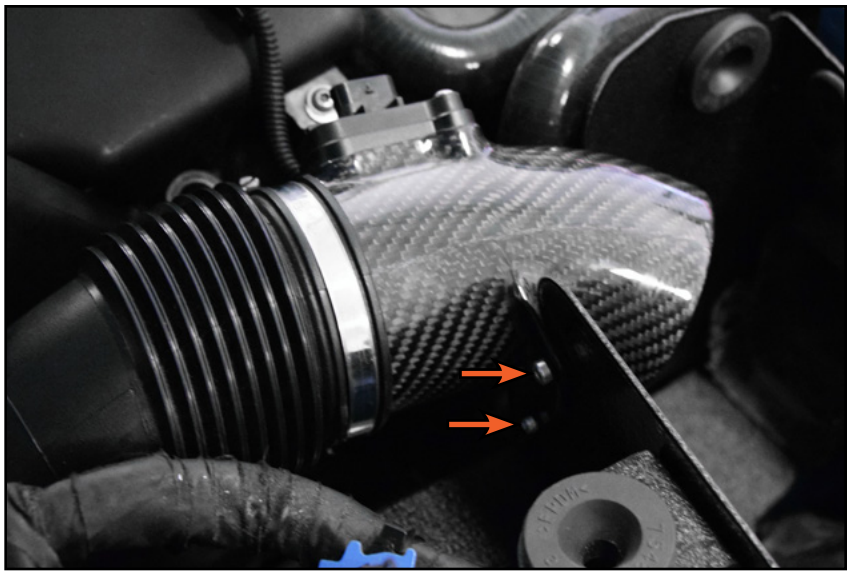
Step 27: 4mm Hex (Allen)

Install the provided M6 bolt (arrow) through the heat shield grommet and tighten it until snug.



Step 28: 3mm Hex (Allen)

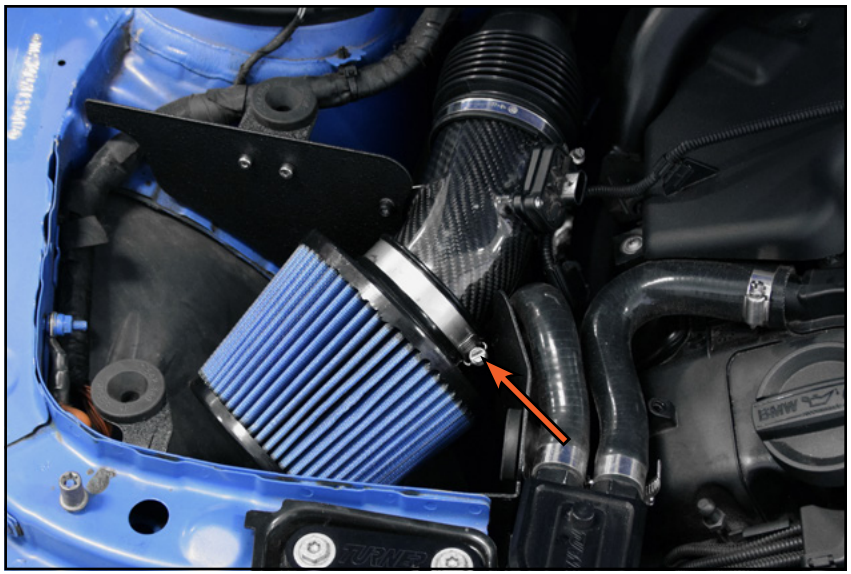
Slide the RH intake pipe into the corrugated lower intake tube as shown then Install the two M5 screws and washers (arrows) to secure it to the heat shield.



INSTALLING THE NEW INTAKE SYSTEM

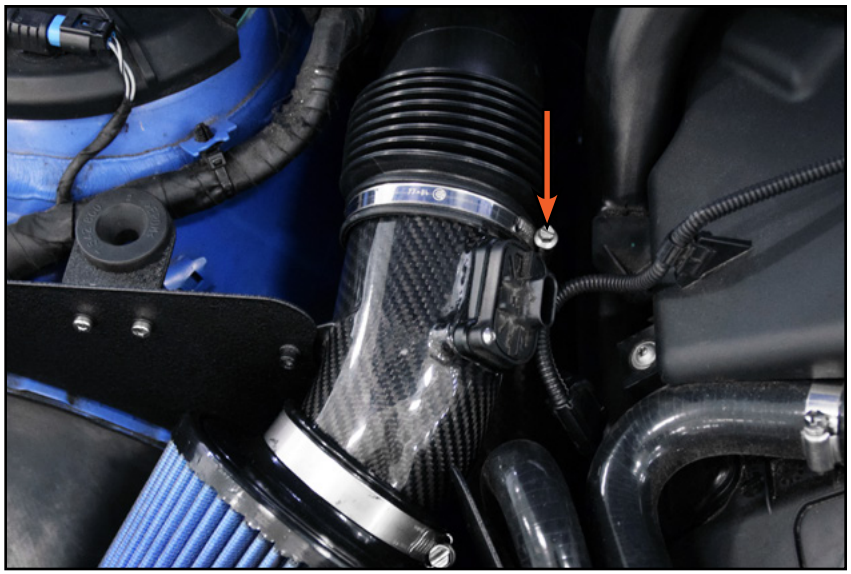
Step 29: Flat Head Screwdriver

Install the air filter onto the intake pipe and tighten the clamp (arrow) to secure it.



Step 30: Flat Head Screwdriver

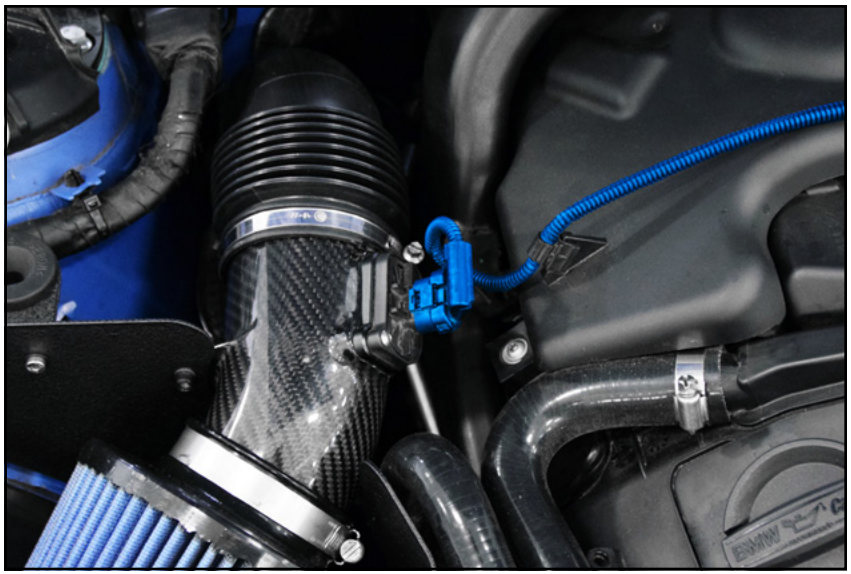
Tighten the clamp (arrow) on the lower intake tube.



INSTALLING THE NEW INTAKE SYSTEM

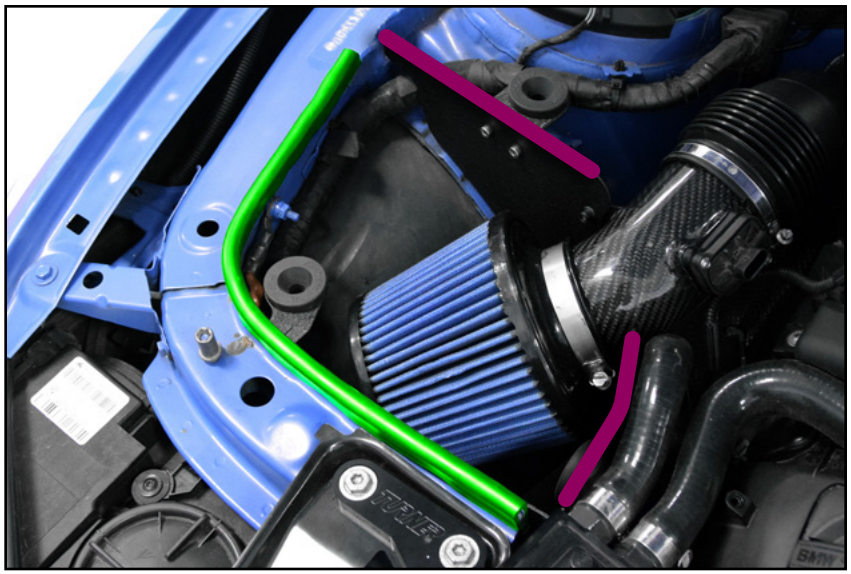
Step 31:

Reinstall the MAF sensor connector (highlighted in **BLUE**).



Step 32: Razor Blade

Apply the rubber edge trim to the area highlighted in **GREEN**.



If you purchased the **OPEN** intake, apply the bulb seal to the heat shield in the area highlighted in **MAGENTA**. This will help seal the intake to the hood, making it more air-tight.

NOTE

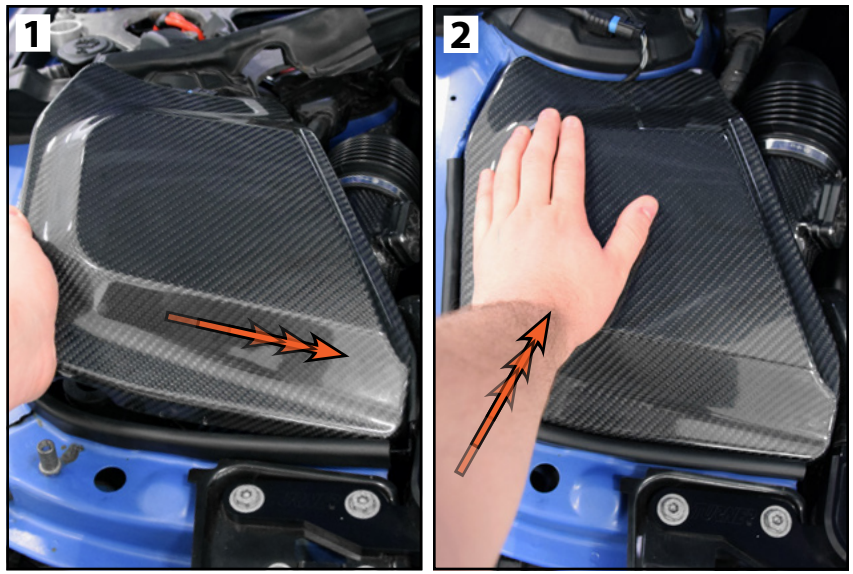
Be sure to trim off any excess length of edge trim or bulb seal for a clean appearance.

INSTALLING THE NEW INTAKE SYSTEM

Step 33:

If you have purchased the **OPEN** intake system, you can skip this step.

Lay the LH carbon fiber lid into place so that the stud on the side of the lid slides into the grommet on the side of the heat shield (1), then push downward to pop the other two mounting studs into the grommets, securing the lid in place (2).



Step 34: 10mm, 13mm Sockets & Ratchet

Reinstall the carbon brace and torque the eight bolts to 28 Nm (21 Ft-lbs), reinstall the smaller expansion tank bolt and torque it to 10 Nm (7 Ft-lbs). rain trays, and engine cover.

Congratulations, your installation is complete!

CARBON FIBER CLEANING AND CARE

Turner Motorsport Carbon Fiber Intakes are clear coated for excellent finish durability and UV resistance right out of the box.

Carbon fiber can be washed with any gentle cleanser or soap. If it is safe for the paint on your car, it will be safe for the carbon fiber.

Be extra careful not to nick or deeply scratch the clear coat on the carbon fiber. This can lead to water intrusion into the carbon fiber which will damage the finish and the integrity of the intake.

If the clear coat does get nicked or deeply scratched to expose the carbon fiber, seal the damaged area thoroughly with a clear coat touch up or clear nail polish.

To retain UV resistance and protect the finish, we recommend regular waxing with a high quality caranuba wax.

Small surface scratches and light oxidation can be buffed out using the same methods and cautions you would use on the vehicle paint.

Carbon Fiber Cleaning and Care Kit, available at turnermotorsport.com

T#383078

Your Intake System installation is complete!

These instructions are provided as a courtesy by Turner Motorsport

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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