



## BMW E30 M5x Swap 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.

## 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:

Remove the intake system.

- Disconnect MAF sensor connector.
- Disconnect intake boot from the throttle body.
- If equipped, disconnect hoses from the intake boot.
- Remove previous airbox/air filter.

*If equipped with a coolant reservoir that has been relocated to the LH (driver's) side:* loosen the clamp (arrow) then disconnect the coolant reservoir hose (highlighted in **RED**).



### Step 2: 9mm Drill Bit & Drill

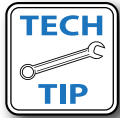
Using a 9mm drill bit, drill the preexisting holes in the top of the LH frame rail (arrows).



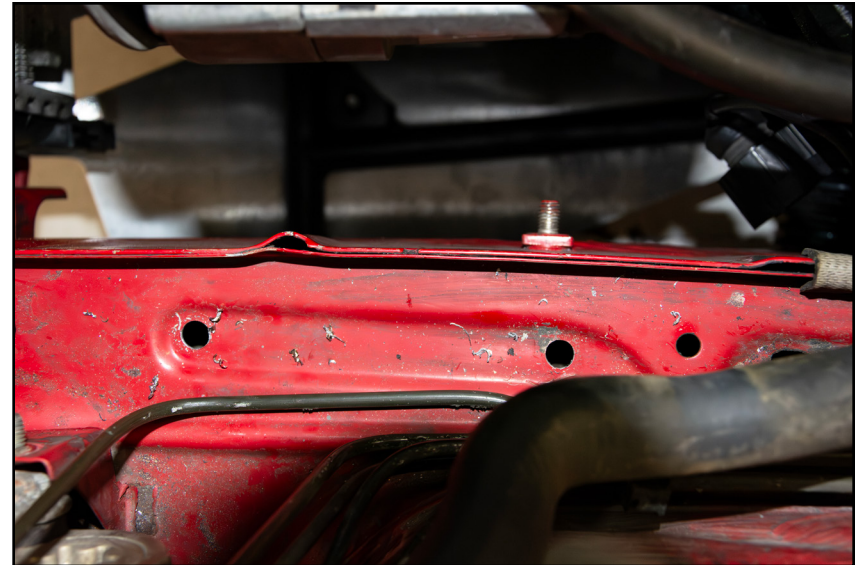
## REMOVING THE STOCK INTAKE

### Step 3: Deburr Tool - OR - Metal File & Paint Pen

Clean and deburr the edges of the holes that were drilled.

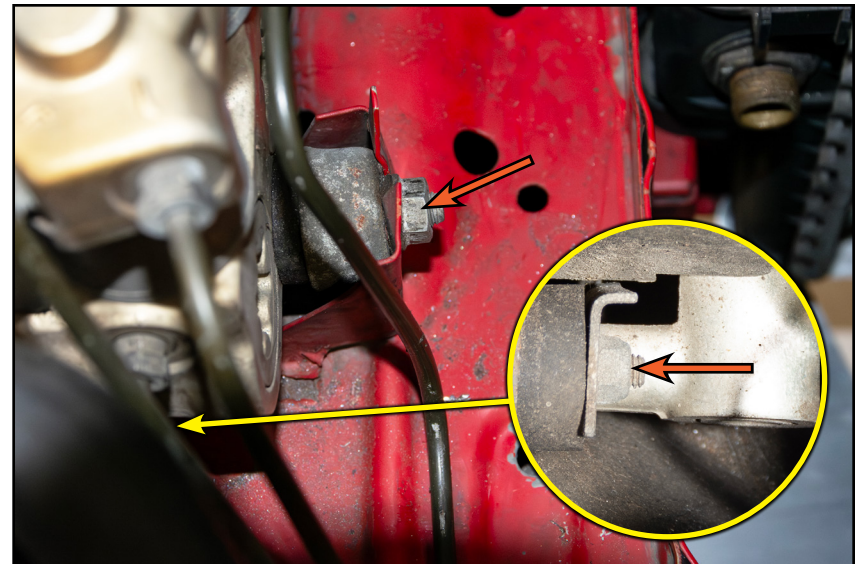


Apply self etching primer or use a paint pen to protect the exposed metal.



### Step 4: 10mm Socket, 13mm Socket & Ratchet

Remove the nut (arrow) that secures the ABS module to its mount, then remove the nut (arrow in inset photo) for the ABS bracket and set them aside, we will be reusing them later.



## INSTALLING THE NEW INTAKE SYSTEM

### Step 1: Riv Nut Installation Tool

Install the provided M6 riv-nuts (circled in **YELLOW**) into the drilled holes.



### Step 2:

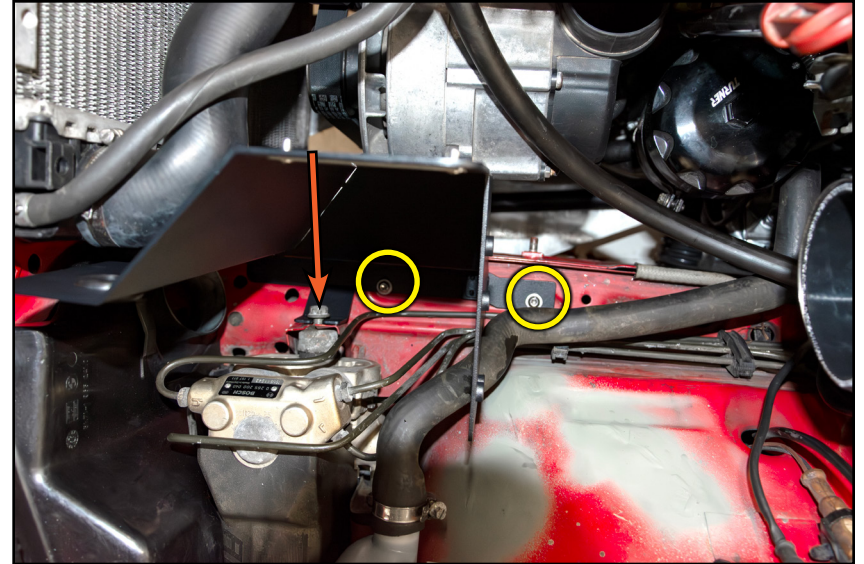
Install the grommet (highlighted in **GREEN**) into the heat shield.



## INSTALLING THE NEW INTAKE SYSTEM

### Step 3: 4mm Hex (Allen), 13mm Socket & Ratchet

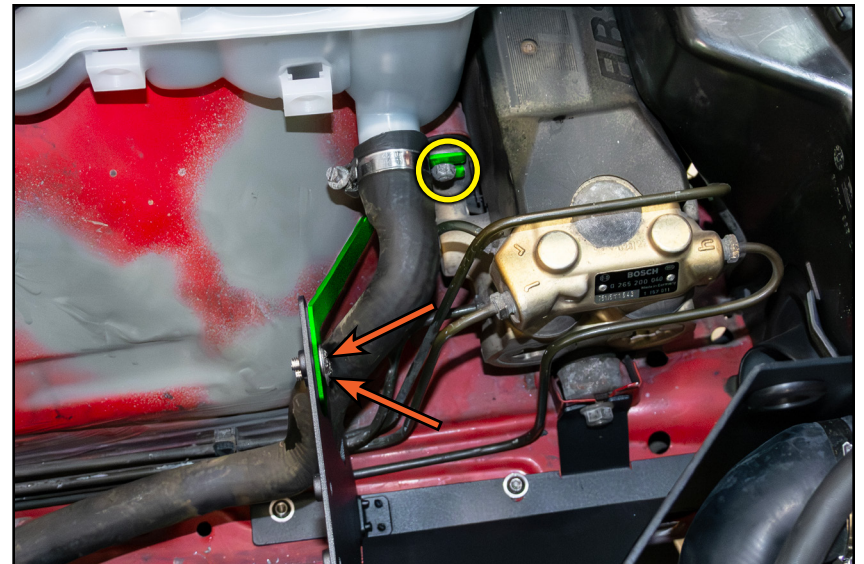
Install the heat shield onto the LH frame rail and install the two M6 x 20mm screws (circled in **YELLOW**) to secure it to the riv-nuts. Reinstall the nut (arrow) to secure the heat shield to the ABS module.



### Step 4: 4mm Hex (Allen), 10mm Socket & Ratchet

Install the heat shield support bracket (highlighted in **GREEN**) onto the ABS bracket stud, then secure it to the heat shield using the provided M6 x 12mm screws (arrows) and tighten them until snug.

Reinstall the nut (circled in **YELLOW**) and tighten it until snug.



## INSTALLING THE NEW INTAKE SYSTEM

### Step 5: 7mm Socket & Ratchet

Install the throttle body and MAF sensor housing couplers onto the MAF sensor housing as shown.

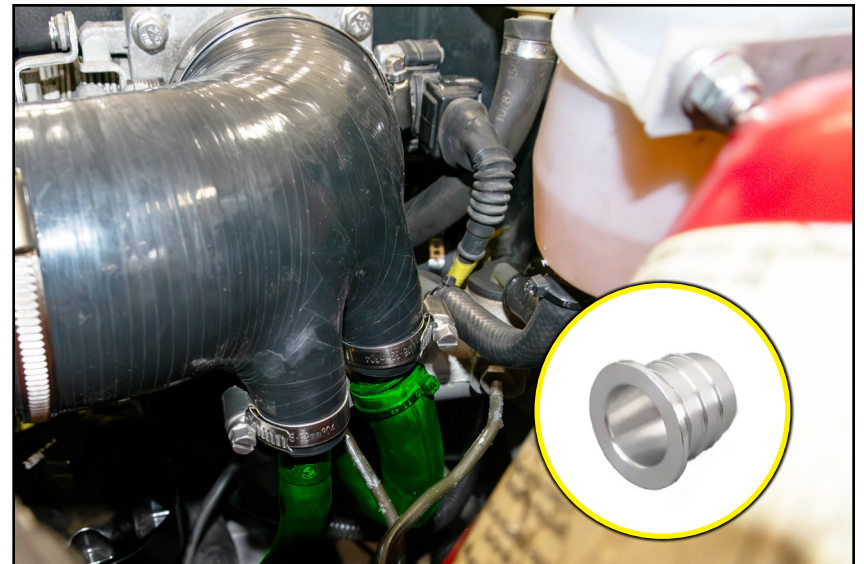


### Step 6: 7mm Socket & Ratchet

If equipped, reinstall the hoses (highlighted in **GREEN**) into the ports in the bottom of the throttle body coupler and tighten the clamps (arrows) until snug.



**OBD2 vehicles with ASC deleted only:** Install the provided ASC delete plug (inset photo) into the unused port on the throttle body coupler and install the clamp.



## INSTALLING THE NEW INTAKE SYSTEM

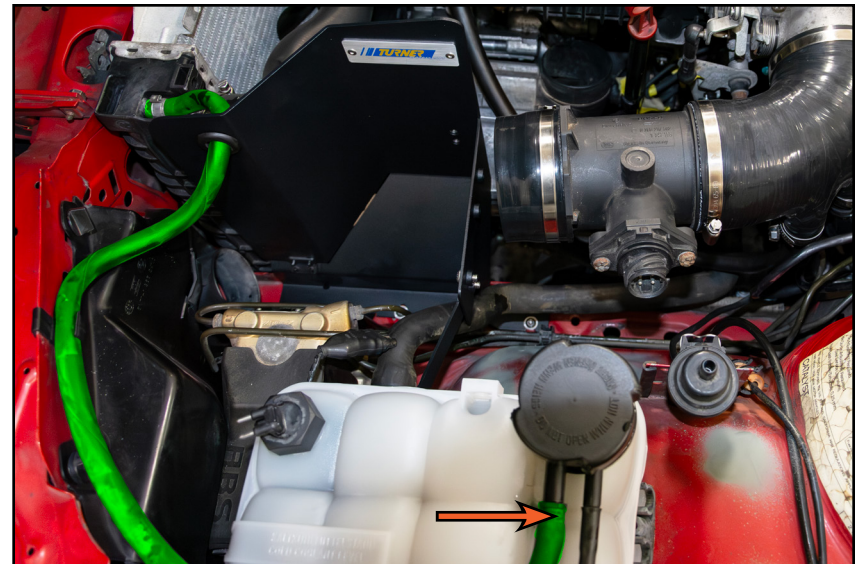
### Step 7: 7mm Socket & Ratchet

Install the MAF sensor housing assembly onto the throttle body, then tighten the clamps (arrows) until snug.



### Step 8:

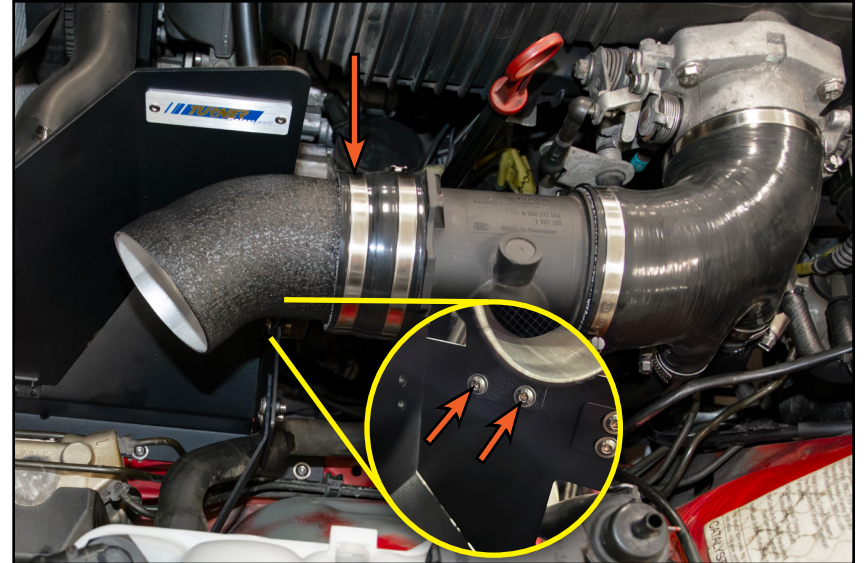
*If equipped with a coolant reservoir that has been relocated to the LH (driver's) side:* route the coolant reservoir hose (highlighted in **GREEN**) through the grommet in the heat shield, then reconnect it to the reservoir and tighten the clamp (arrow) until snug.



## INSTALLING THE NEW INTAKE SYSTEM

### Step 9: 4mm Hex (Allen), 6mm Socket & Ratchet

Slide the intake tube into the silicone MAF coupler, then secure the intake tube to the heat shield with the provided M6 x 12mm screws (arrows in inset photo) and tighten the clamp (arrow) until snug.



### Step 10: 8mm Socket & Ratchet

Slide the air filter onto the intake tube, make adjustments until proper fitment is achieved, and tighten the clamp (arrow) until snug.

Reconnect the MAF sensor connector (highlighted in **GREEN**).

***Congratulations, your installation is complete!***



## Your Intake System installation is complete!



### **These instructions are provided as a courtesy by Turner Motorsport**

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