BMW Z3 M52 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.

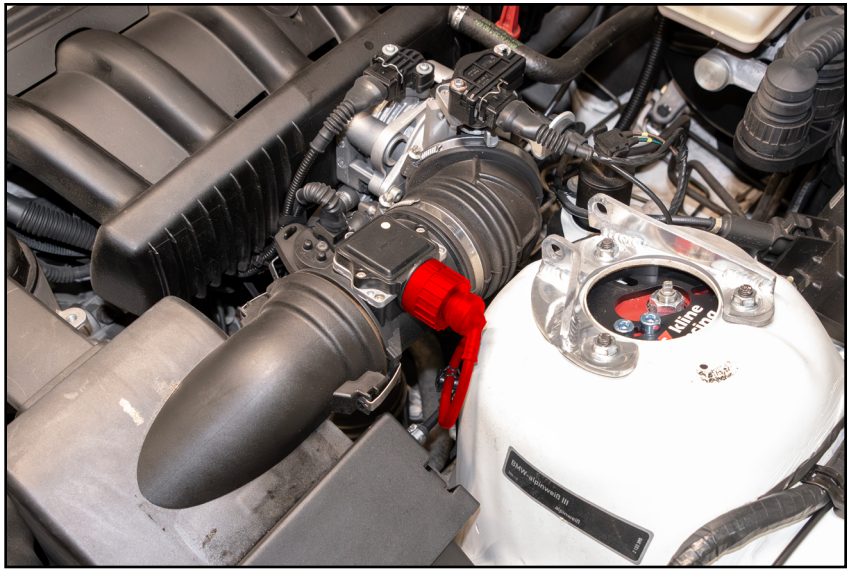


NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.

REMOVING THE STOCK INTAKE SYSTEM

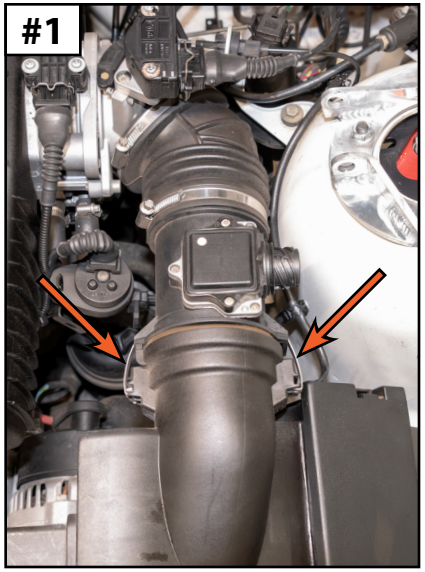
Step 1:

Disconnect the connector (highlighted in **RED**) from the MAF sensor.



Step 2: 6mm Socket & Ratchet

Open both the latches (arrows in **Photo #1**) that secure the MAF sensor to the airbox, then loosen the clamp (arrow in **Photo #2**) that secures the MAF sensor to the intake hose and remove the MAF sensor.

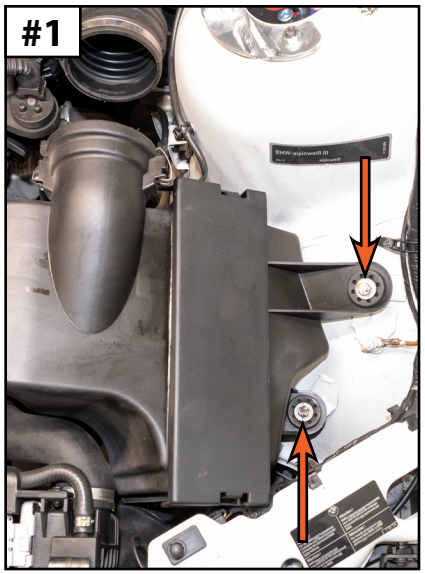




REMOVING THE STOCK INTAKE SYSTEM

Step 3: 10mm Socket & Ratchet

Remove the screws (arrows in **Photo #1**) that secure the airbox to the vehicle, then lift up to remove the airbox from the vehicle. Remove the rubber bumper (circled in **RED** in **Photo #2**) from the stud on the frame rail.

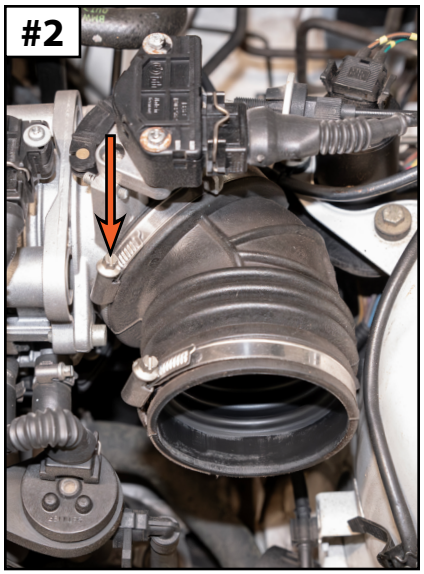




Step 4: 6mm Socket & Ratchet

Pull the idle control valve hose (highlighted in **RED** in **Photo #1**) free from the intake hose, then loosen the clamp (arrow in **Photo #2**) and remove the intake hose from the throttle body.





NOTE

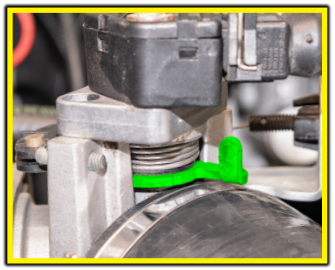
Non-ASC vehicles have an additional hose that must be removed from the intake hose.

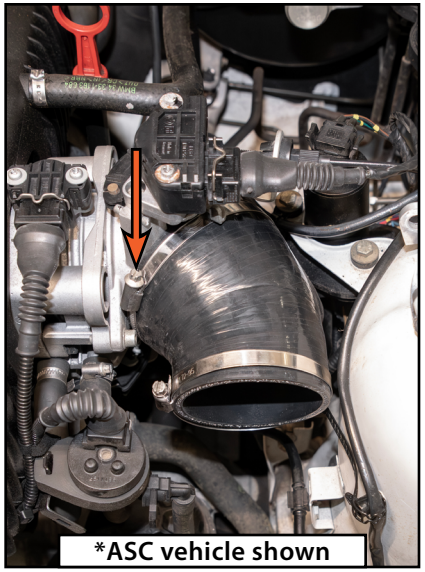
INSTALLING THE NEW INTAKE SYSTEM

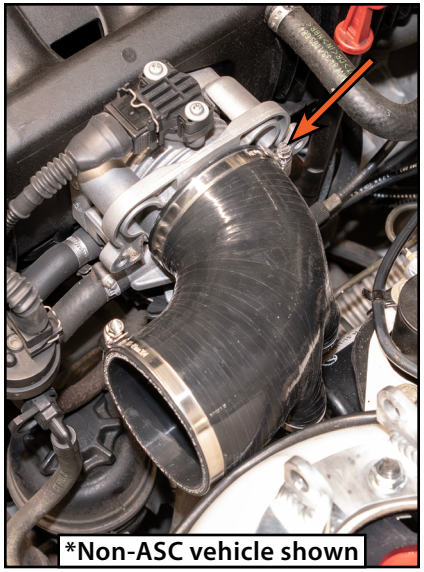
Step 1: 7mm Socket & Ratchet

Slide the new intake hose onto the throttle body and tighten the clamp (arrow) until snug.

ASC vehicles only: Ensure the clamp is oriented in such a way that it does not interfere with the ASC lever arm (highlighted in **GREEN** in the photo on the right). If needed, cut the tail off of the clamp.



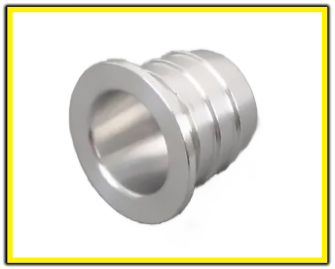

*ASC vehicle shown


*Non-ASC vehicle shown

Step 2: 7mm Socket & Ratchet

Slide the idle control valve hose (highlighted in **GREEN** in **Photo #1**) into the port on the underside of the new intake hose and tighten the clamp until snug. Slide the MAF sensor into the intake hose as shown, then tighten the clamp (arrow in **Photo #2**) until snug.

Vehicles with ASC deleted only: Install the provided ASC delete plug into the unused port on the intake hose and install the clamp.




#1

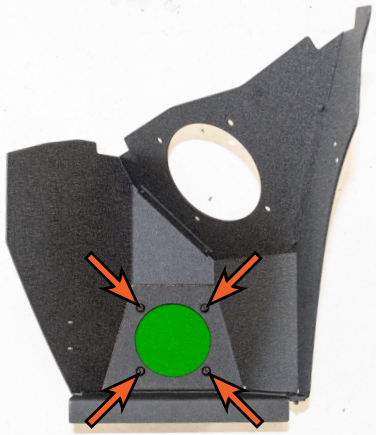

#2

INSTALLING THE NEW INTAKE SYSTEM

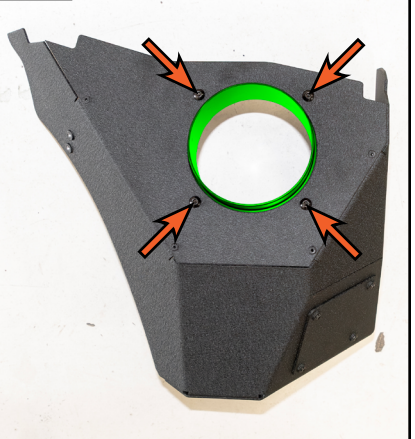
Step 3: 3mm Hex (Allen) Socket & Ratchet

Install the provided cover plate (highlighted in **GREEN** in **Photo #1**) into the opening in the bottom of the heat shield and secure it in place with the provided M5 x 8mm screws (arrows). Install the provided air filter adapter (highlighted in **GREEN** in **Photo #2**) into the opening in the top of the heat shield and secure it in place with the provided M5 x 8mm screws (arrows).

#1



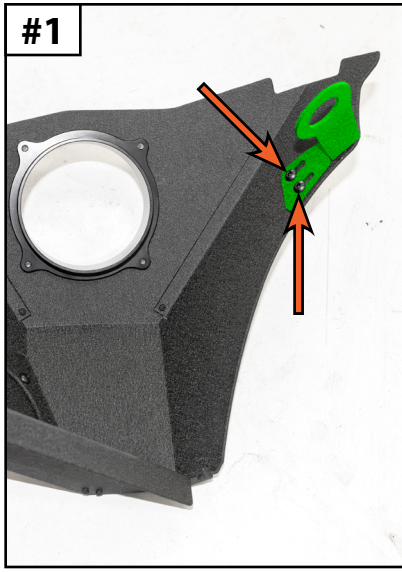
#2



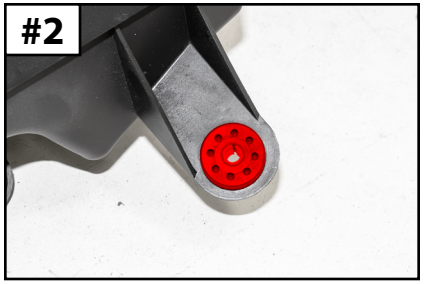
Step 4: 3mm Hex (Allen) Socket & Ratchet

Install the mounting bracket (highlighted in **GREEN** in **Photo #1**) onto the heat shield as shown and loosely secure it in place with the provided M5 x 12mm screws (arrows). Remove the spacer and grommet (highlighted in **RED** in **Photo #2**) from the airbox and transfer them (highlighted in **GREEN** in **Photo #3**) into the mounting bracket.

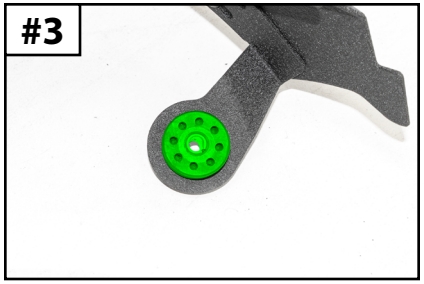
#1



#2



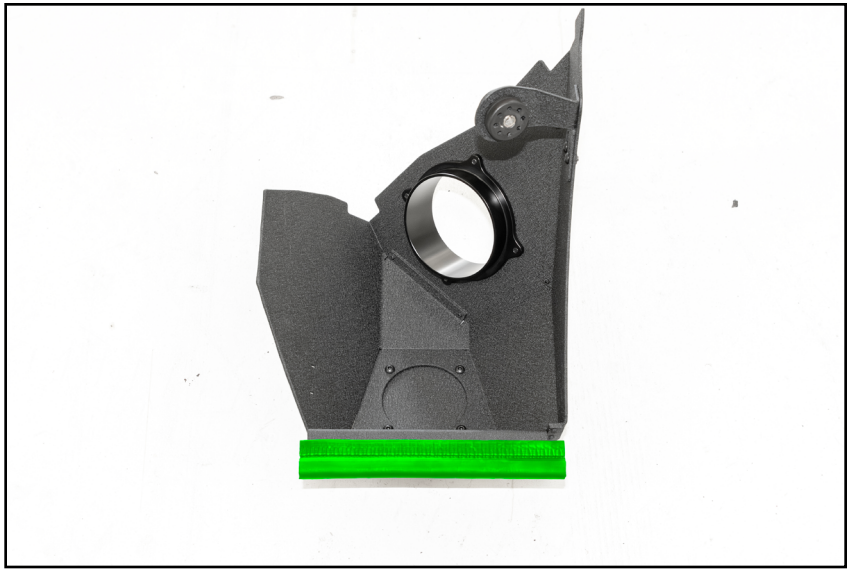
#3



INSTALLING THE NEW INTAKE SYSTEM

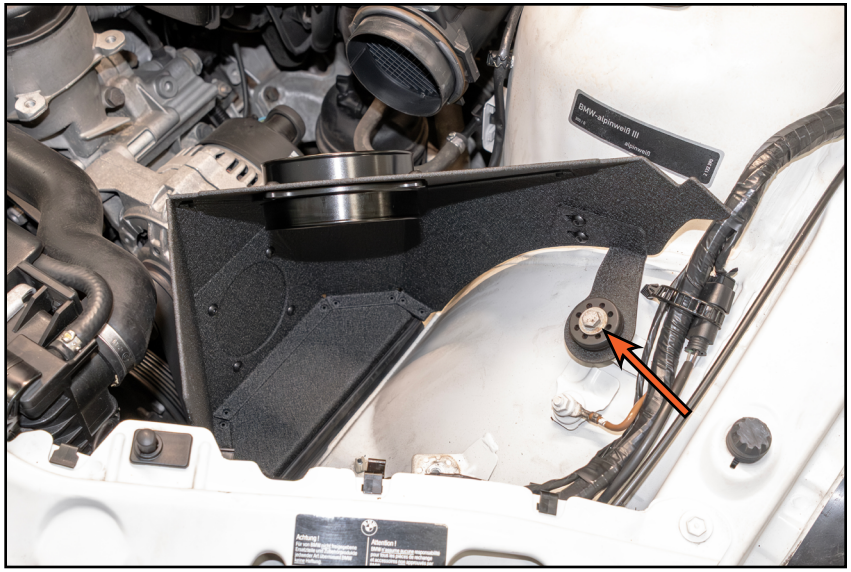
Step 5:

Install the provided short bulb seal section (highlighted in **GREEN**) along the underside of the heat shield as shown.



Step 6: 10mm Socket & Ratchet

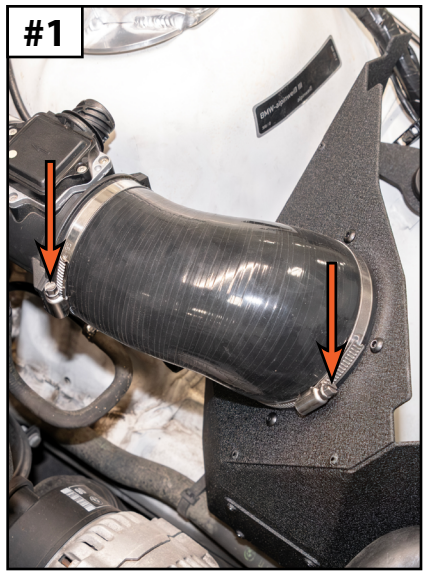
Carefully guide the heat shield into place, then reinstall the OE screw (arrow) to secure it to the vehicle

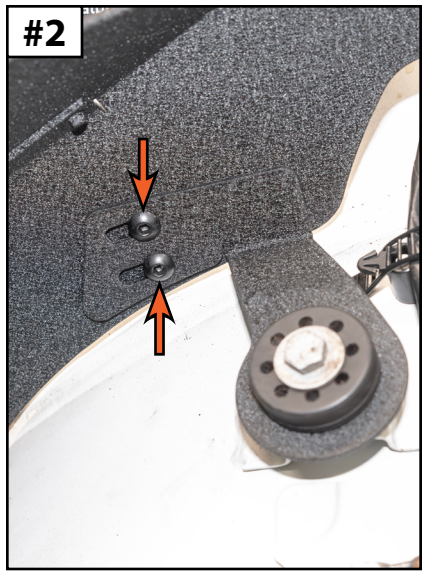


INSTALLING THE NEW INTAKE SYSTEM

Step 7: 3mm Hex (Allen), 7mm Socket & Ratchet

Install the provided intake coupler between the MAF sensor and air filter adapter and tighten the clamps (arrows in **Photo #1**) until snug. Tighten the bracket screws (arrows in **Photo #2**) until snug.





Step 8:

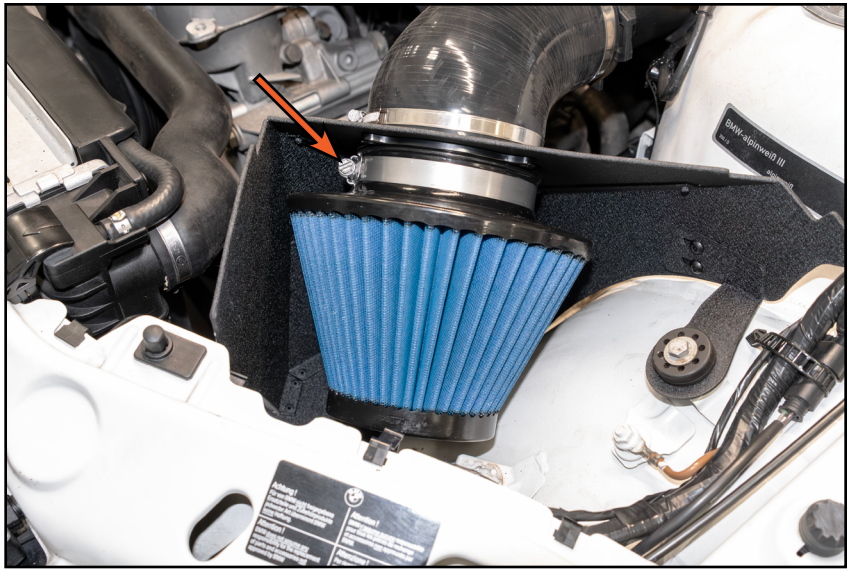
Reconnect the MAF sensor connector (highlighted in **GREEN**).



INSTALLING THE NEW INTAKE SYSTEM

Step 9: 8mm Socket & Ratchet

Slide the air filter onto the end of the filter adapter and tighten the clamp (arrow) until snug.



Step 10:

Install the provided bulb seal (highlighted in **GREEN**) along the top of the heat shield as shown, trimming to length as needed.



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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