



BMW E46 M3 Street Flow Rear Diffuser
Installation Instructions - [Click HERE to Shop](#)



Skill Level
1 - Easy
Basic Skills
Required



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

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.

INSTALLING THE REAR DIFFUSER

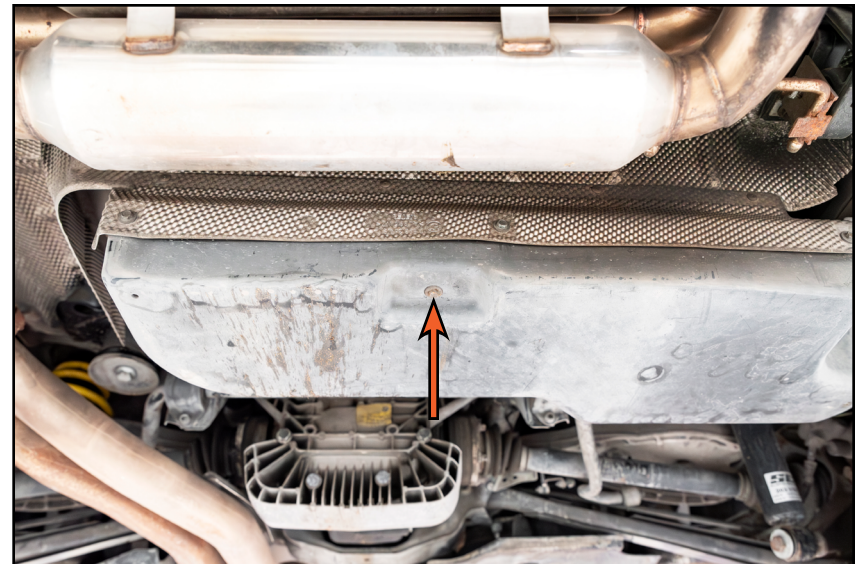
Step 1: Trim Removal Tool

Remove the plastic push rivets (arrows) from the underside of the rear valance.



Step 2: 8mm Socket & Ratchet

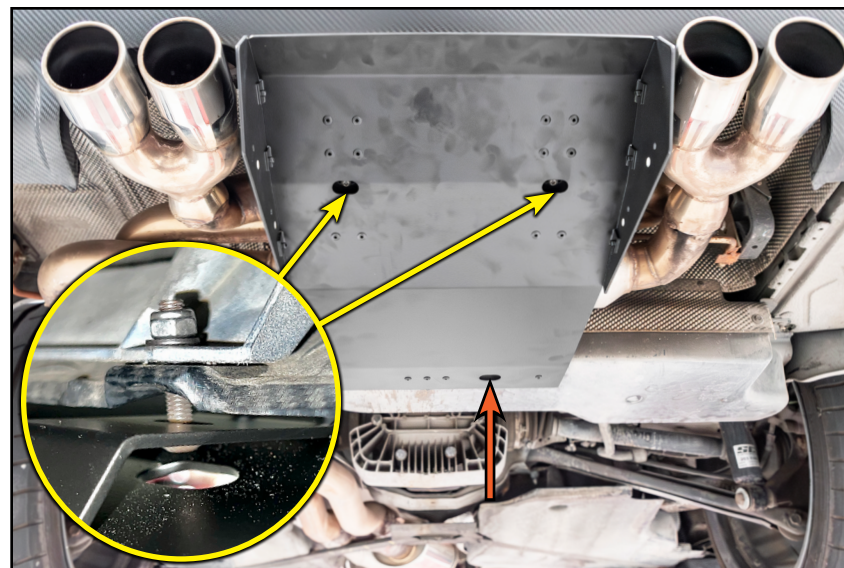
Remove the screw (arrow) from the underside of the plastic charcoal canister cover.



INSTALLING THE REAR DIFFUSER

Step 3: 10mm Wrench, 10mm, 4mm Hex (Allen) Socket & Ratchet

Lift the center diffuser panel into place and secure it with two of the provided M6 x 30mm screws, washers, and nuts (as shown in inset photo) but leave them loose enough to allow for adjustment. Loosely install the provided self-tapping screw (arrow) to secure the diffuser panel to the plastic cover.



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

Adjust the center diffuser panel until it is perfectly centered and level, then tighten the hardware until snug.



INSTALLING THE REAR DIFFUSER

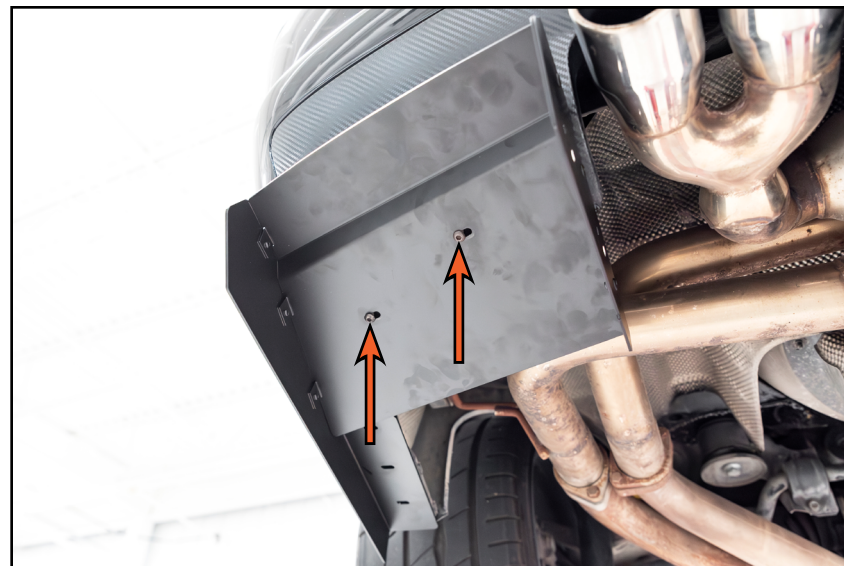
Step 5: 4mm Hex (Allen) Socket & Ratchet

Remove the screws and clamping brackets from each side diffuser panel as shown.



Step 6: 10mm Wrench, 4mm Hex (Allen) Socket & Ratchet

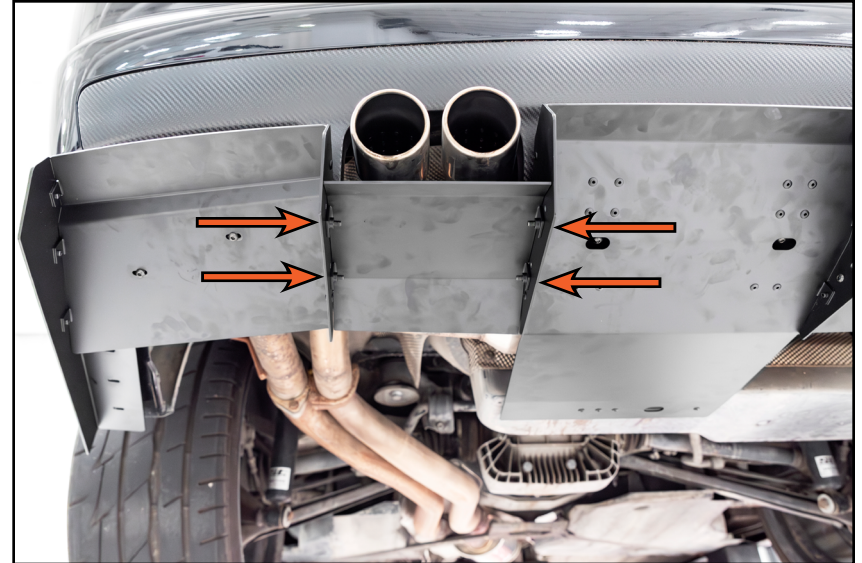
Lift each side diffuser panel into place and secure it with two of the provided M6 x 30mm screws, washers, and nuts (arrows) but leave them loose enough to allow for adjustment.



INSTALLING THE REAR DIFFUSER

Step 7: 4mm Hex (Allen) Socket & Ratchet

Lift each exhaust tip diffuser panel into place and secure it with four of the provided M6 x 16mm screws (arrows), tightening until snug.



Step 8: 10mm Wrench, 4mm Hex (Allen) Socket & Ratchet

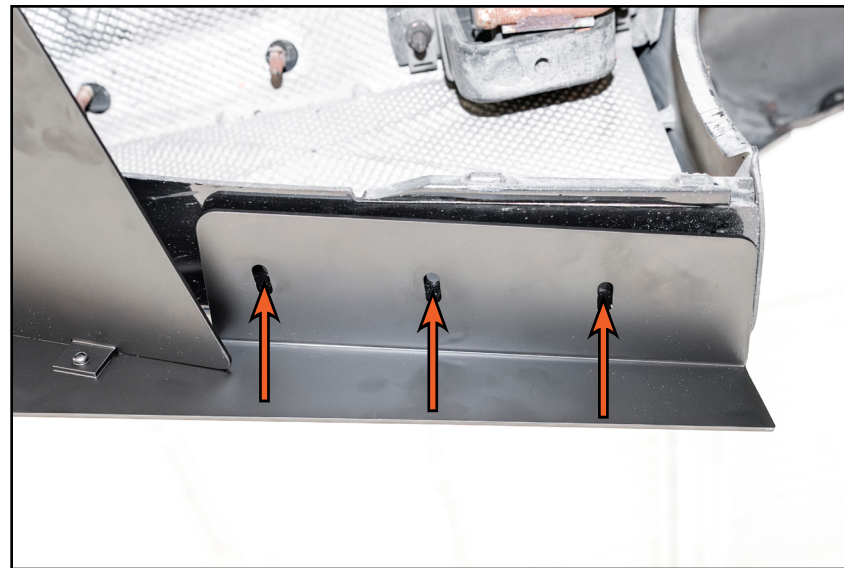
Adjust the diffuser until it is perfectly centered and level, then tighten the hardware until snug.



INSTALLING THE REAR DIFFUSER

Step 9: Paint Pen

Push up on each side diffuser panel and mark where the three holes (arrows) align with the bumper.



Step 10: 1/4" Drill Bit & Drill

Remove the diffuser assembly, then carefully drill 1/4" holes at each of the locations marked in the previous step (**RED** circles).



INSTALLING THE REAR DIFFUSER

Step 11: 10mm Wrench, 10mm, 4mm Hex (Allen) Socket & Ratchet

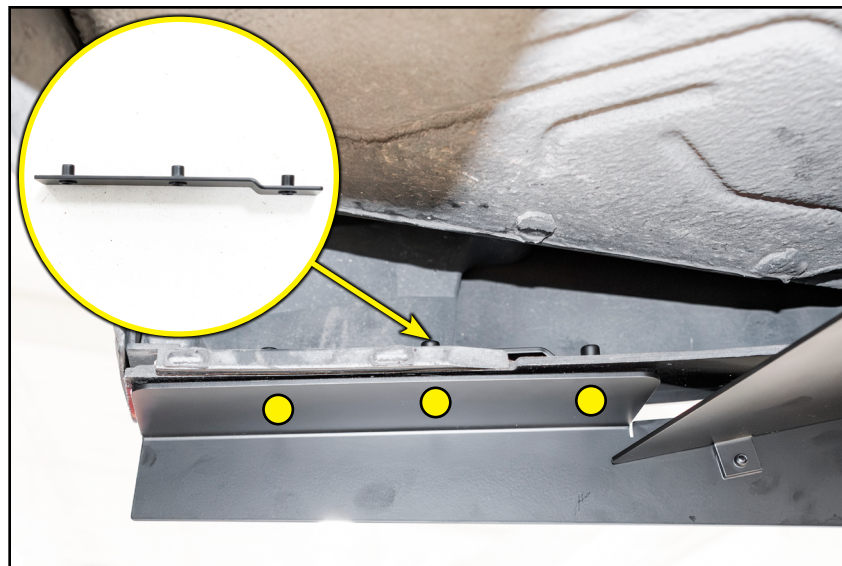
Reinstall the diffuser, ensuring it is perfectly centered and level, then tighten all the hardware until snug.



Step 12: 4mm Hex (Allen) Socket & Ratchet

Install the clamping bracket inside the bumper cover with the step-down facing towards the rear of the vehicle (as shown in the inset photo). Install the screws (YELLOW circles) through the diffuser and into the threaded inserts in the brackets, sandwiching the bumper between the two. Adjust the side panels until you are satisfied with their fitment then tighten the screws until snug.

Congratulations, your installation is complete!



Your Rear Diffuser installation is complete!



These instructions are provided as a courtesy by ECS Tuning

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