



**Dear friend,**

To create this product, our team worked day and night, meticulously refining every step and polishing every detail. From the initial creative concept to countless research and development tests, and finally to the product presented to you, every step is imbued with our hard work and passion.

We deeply understand that your choice is not just a transaction, but also an expectation of us. We will always uphold our original aspirations, continuously improve product quality, optimize the user experience, and repay your support and love with even better service.

Thank you again for your trust and choice. May our product accompany you through every wonderful moment!





## BMW G87M2 GAT-V Carbon Fiber Rear Wing Installation Tutorial

### I. Preparations before installation

Installation difficulty: Medium; Construction time: 2 hours

Goods inspection: Upon receiving the product, first check the integrity of the components.

Tools needed: 1/4" drill gloves (to avoid cutting your hands), stepper bits or various drill bits \*5/8" are required

"10, 11, 12mm wrenches, 2.5, 4, 5mm wrenches, flathead screwdrivers, and a 50/50 mixture of isopropyl alcohol and water cleaning cloth (for wiping the installation area)."

#### Components:

1. Carbon fiber tail wing body x1
  2. Carbon fiber left plate x1
  3. Aluminum alloy CNC bracket x2
  4. Rear studs x4
- Screw kit x1



#### Installation effect display images:



## II. Removal of the original tail cover liner (without damage)

Strictly follow the GATcarbon installation instructions to avoid unnecessary damage to the vehicle and product during installation.

### Liner Removal:

Open the trunk using the car key or the button on the tailgate, and use a plastic/metal pry bar to remove the original factory liner by unscrewing the plastic screws inside the tailgate.

PS: Please collect the resealable bag clips to avoid loss. (Note: Please keep the original expansion nails safe for future reuse.)



### Inner lining harness clip removal:

Locate the wiring harness clips on the back of the tail cap as shown in the picture and remove them one by one.

Use a plastic pry bar to pop it out and carefully remove it (take photos of the internal wiring and connectors for documentation).



## **Harness connector removal:**

Next, we need to remove the outermost wire harness. Below is an image showing the location of these connectors.

The wiring harness connector and its exterior have been removed. Note: We used a set of needle-nose pliers to press both sides of the connector.

That will remove it. If your fingers are strong enough, you won't need to use needle-nose pliers.



You can now completely remove the cable harness from the suitcase by slowly pulling it out of the rubber plug on the front/bottom side of the suitcase.



Locate and remove the 11mm bolt near the trunk support, then completely remove the entire trunk from the vehicle.

**Note:** Having another team to help open the trunk would be very helpful.



Place your suitcase on a soft surface to ensure the surface is not scratched.



Pick up your electric drill and a **1/4-inch drill bit**. Using the threaded mounting hole as a reference, drill as shown below. This applies to both holes. Work on both sides.

**Note:** Please be sure to drill the hole in the center, and make sure you don't touch the threaded part while drilling. Yes, you can use a small punch to help start the drill bit more easily if you prefer.





Now we need to install the isolation posts as shown in the diagram below. (Shorter isolation posts)

This device is used in the rear area of the trunk bracket, while higher-spec partition brackets are used in the front area.

When installing the rear bracket, first install it by hand, then use a 12mm wrench to tighten it to 6 Nm.

Note: The tailstock mounting method shown in the diagram.

**Left side (driver's side with left-hand drive).**



Next, we need to prepare the vehicle body surface and the vehicle body mounting surface for the 3M adhesive.

Installation process. First, we recommend repairing the original surface caused by drilling.

After some touch-up painting, clean the vehicle body surface and the bottom sides of the body brackets with tools.

Use a microfiber towel and a 50/50 mixture of isopropyl alcohol and water.

**After both surfaces have been cleaned and dried, you can now begin installing the pre-cut 3M tape on the bottom side of the trunk bracket.**

Note: There are two pre-cut pieces of 3M VHB material here, located on the left and right sides respectively, like a rear bracket.



**Install the remaining M6×25mm parts, along with the bracket washer installed at the bottom, into place.**

Original factory mounting location. Use a 5mm wrench to adjust the torque value of all four trunk bolts to 6 ft-lb.

At the same time, ensure the rear of the vehicle is as centered as possible. A photo is attached below for reference.

Examine how all the components work together. At this point, you may need to reinstall the wiring harness and trunk assembly insulation.



You can now close the trunk. Take the **M6×20mm** long-head button head screws and **M6×12mm** outside diameter washers to mount the pillars to the trunk bracket. Begin tightening the bolts by hand, using a 4mm wrench to a torque of **6 ft-lbs**.



Now it's time to assemble the support frame and the tail wing together.

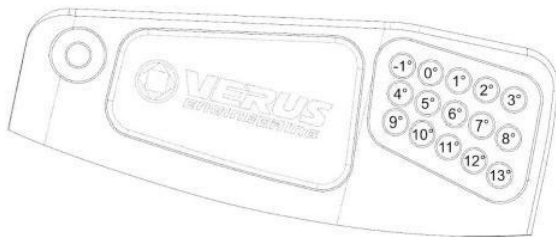
Use M6×22mm, Long SHCS, Two M6×12mm outer diameter washers

And an M6 nylon lock nut, start by tightening the bolts from the front on both sides.

Leave these bolts in the hand-tightening position for now.



Nevertheless, each installation device and vehicle may vary slightly in actual application. To ensure the AOA is in the correct position, you should place a straight line along the wing from front to back and check its relationship to the ground plane.



**Note:**The top and bottom edges of the end plate should be parallel to the ground. Check with a level before fully tightening the end plate.

Use a 2.5 mm wrench and tighten 1/8 turn, just beyond finger-tightening. High torque is not required here.

