

# Adjustable Windshield System

## BMW G650GS 2009

Please read this entire manual before proceeding with installation.

### What is in the box:

- (1) Set of preassembled MadStad adjustable windshield brackets
- (1) Black aluminum mounting plate

### For plate to bike:

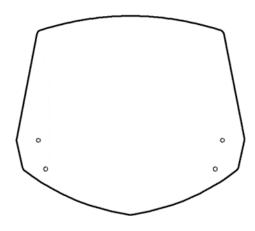
- (4) M6 x 20 button socket screws
- (4) M6 plastic flat washers
- (4) M6 metal flat washers
- (4) M6 nylock nuts

### For brackets to plate:

- (4) M6 x 16 screws
- (4) M6 rubber washers
- (4) M6 flat washers
- (4) M6 lock nuts

### For mounting the shield:

- (4) M5 T-Screws
- (4) Hard rubber washers
- (4) soft rubber washers







MadStad adjustable brackets are designed to bolt to a curved surface like the metal adapter plate included in this kit. The new windshield attaches to the top of the brackets with quick-removal T-screws. Loosening the two adjustment knobs allow you to change the windshield height and tilt without getting off of the bike, and without any tools.

You will need to remove your factory windshield; it is not adaptable for use with these brackets.

### **Step 1: Install the MadStad Mounting Plate**

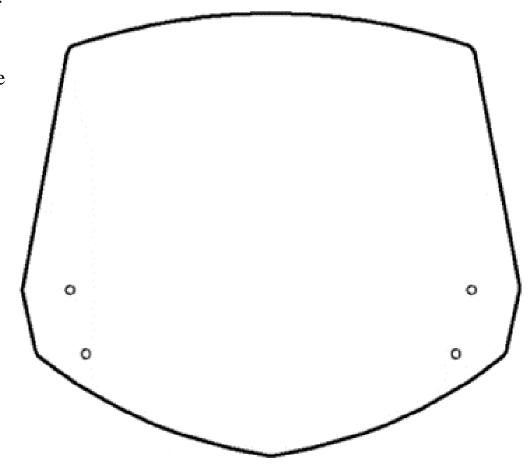
This is the black aluminum mounting plate that looks like a windshield. Mount it to your bike in place of the factory windshield using the M6 x 20 mm button socket screws. You will need an M4 Allen wrench and a 10 mm crescent (openend) wrench:

- A) Push out the four rubber well nuts that are sitting in the factory windshield mounting holes.
- B) Put a plastic flat washer on each of the M6 x 20 Phillips screws.

C) Put one of these through the plate-mounting holes on our aluminum base

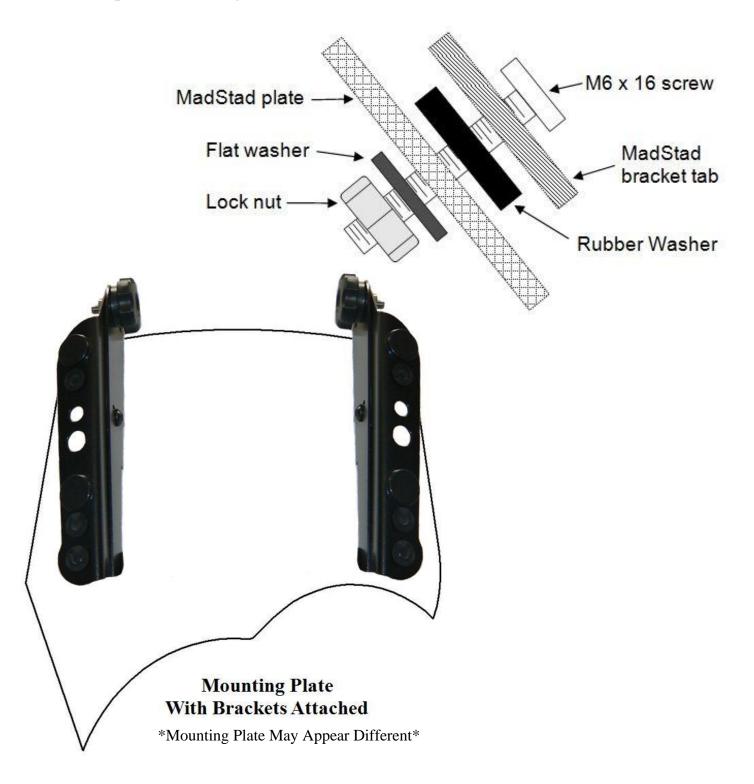
plate (the inner / darker holes shown below) and put a soft rubber washer on the back side to hold it onto the place. Repeat for the other three darker mounting holes as seen below.

D) Set the mounting plate onto your factory windshield mounting holes and secure to the factory bracket by putting a flat washer and nylock nut on the back side. Fasten securely.



### **Step 2: Bracket Installation**

Your MadStad brackets attach to the mounting plate as shown below. The bracket knobs should be up and facing each other. Use the four M6 x 16 screws with hardware as shown in the diagram below. Note that there is a **thick rubber washer** between our bracket mounting tabs and the mounting plate at each screw. This is necessary to raise the brackets off of the plate surface slightly to clear the plate mounting screws.



# Windshield Installation

- 1. Pre-install the Truss screws & washers into the windshield holes as shown in the image below.
- 2. Once all four of the screws are in place, gently guide the screws into the Well Nuts in the brackets until all four are set.
- 3. Hand tighten the Truss screws until they swell up behind the bracket and are firmly holding the windshield.



### **Adjusting the Knob Brackets**

The knob screws release the brackets allowing the windshield to slide and tilt. These knob screws must always be tightened securely before riding. DO NOT attempt to adjust the brackets while riding! You must come to a complete stop before making adjustments. Also make sure that you do not set the windshield in such a way that causes your handlebars or hand guards (if installed) to hit the windshield when turning, or before reaching full lock.

To make adjustments, loosen the knobs 1-2 turns and set the windshield so the top edge is at about your chin level as you look straight ahead while seated on the bike. Set the angle at approximately 60 degrees. (Use the angle guide on the back page of this manual as a guide.) Tighten the knobs and go for a ride to see if you now have smooth airflow over and around your helmet. Do this on a calm day if at all possible; windy days make it hard to judge the airflow. Don't ever try to adjust the mount while in motion!

WARNING: If you tilt the shield fully backward, it may make contact with the top edge of the brackets. This could scratch the back of your shield, so please check to make sure there is no contact.

To try a different windshield position, bring the motorcycle to a complete stop and out of traffic. Loosen the two knob screws and tilt the windshield forward or back 2-3 degrees or so, and/or adjust it up or down if necessary. Re-tighten the knobs and go for another ride.

Continue experimenting with different positions at different speeds until you find a combination of height and rake angle that eliminates buffeting and gives a smoother ride. You may have more than one favorite position, for example shield tilted forward on cooler days, and shield tilted back for hot days to let more air to your body.

#### **PIVOT SCREWS**

The MadStad mount has a pivot screw on each set of brackets, located near the center of the bottom bracket. A nylon lock nut keeps the screw snugly in place, yet allows the brackets to slide back and forth. It is adjusted at the factory to have a minimum of play yet still allow the brackets to move. Over time it may loosen up a bit so to adjust the tightness of this pivot screw, use the 4mm Allen wrench provided along with a 10mm socket or crescent wrench to make the adjustment. If you tighten the lock nut completely you will not be able to slide the brackets up and down.

### **Notes on Windshield Angle**

Most windshields work best when set at a 55-60 degree angle (from horizontal). We have provided an angle guide **on the back page of this manual** so that you can check and see if your shield is set somewhere in this range.

To check your shield angle, your bike should be in an upright position either on a center stand or held up by a helper. Set the spine (folded edge) of the manual against the front of the shield. If the large arrow marked 60° is pointing straight up, then your shield is at a 60 degree angle. (See diagram on Page 5.) A little farther back and your angle would somewhere between 55 and 60 degrees. Anywhere in this range is fine for your initial test ride. On some bikes a more vertical angle works better, so don't be afraid to experiment later if tilting the shield back doesn't seem to be ideal.

### **Disclaimer**

Neither MadStad Engineering nor its owners shall be liable for any damages, consequential or inconsequential, resulting from the use of our products. Installation of any of our products constitutes acceptance of these terms.

It is the responsibility of the user to make sure all fasteners are tightened securely, the windshield is mounted properly and the adjustment knobs are tightened snugly before putting the motorcycle in motion. MadStad systems ARE NOT intended to be adjusted while the vehicle is in motion; you must pull over out of the way of traffic and come to a complete stop before making any changes. The user must never place the windshield in such a position as to interfere with the safe and complete movement of the handlebars and controls.

## **Returns and Warranty**

MadStad adjustable brackets carry a lifetime warranty against manufacturing defects. This does not include cosmetic issues nor any parts that inherently wear out or degrade over time such as rubber and plastic parts. Windshields, deflectors, and other similar plastic parts are warrantied for 1 year against manufacturing defects, not against cosmetic issues or issues related to normal wear and tear. Please visit our website for further details.

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Thank you for your support, and ride safely!

