

Adjustable Windshield System

Triumph Tiger 800 (2011 – 2017)

Please read this entire manual before proceeding with installation.

What is in the box:

- (1) Madstad windshield
- (1) MadStad adjustable brackets set
- (1) Aluminum mounting plate
- (1) Front support bracket
- (2) Side support bars
- (6) M6 x 12 button socket screws
- (3) M6 x 16 button socket screws
- (7) M6 flat washers
- (7) M6 lock nuts
- (2) 1/4" split-ring lock washers
- (4) M5 x 20 Phillips truss screws
- (4) M5 flat plastic washers
- (4) M5 soft rubber washers
- (1) Off-road rear brace

Side Deflectors:

- (2) Side deflectors
- (4) M5 x 16 Phillips screws
- (4) M5 plastic flat washers
- (4) M5 lock washers



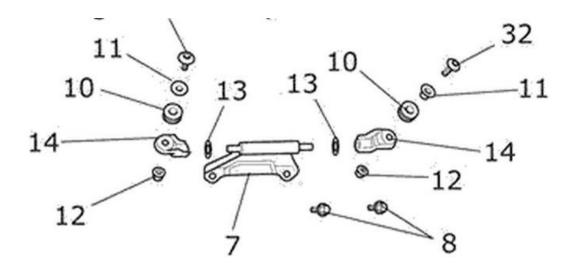


(Actual brackets may be slightly different than shown here.)

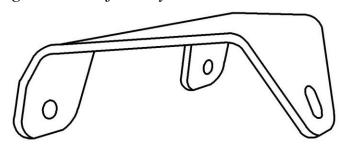
MadStad adjustable brackets (RoboBrackets) are designed to bolt to a curved surface like the metal adapter plate included in this kit. The new windshield attaches to the top of the brackets with Phillips truss screws. Loosening the two adjustment knobs allows you to change the windshield height and tilt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

You will need to remove your factory windshield, the windshield side supports and the front support bracket. This kit contains MadStad replacements for all of these items. You will not be able to use your factory windshield with these brackets.

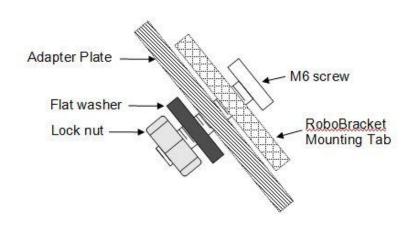
Step 1: Install the **Madstad front support bracket** (shown at bottom). *It replaces the front factory screen mount* located in front of the instrument cluster. It is a black metal part with a horizontal tube in the front. It holds up the front of the factory shield. (*Part #7 in the diagram below.*) It is held on by two silver bolts underneath the bracket. (*Part #8 in the diagram below.*)



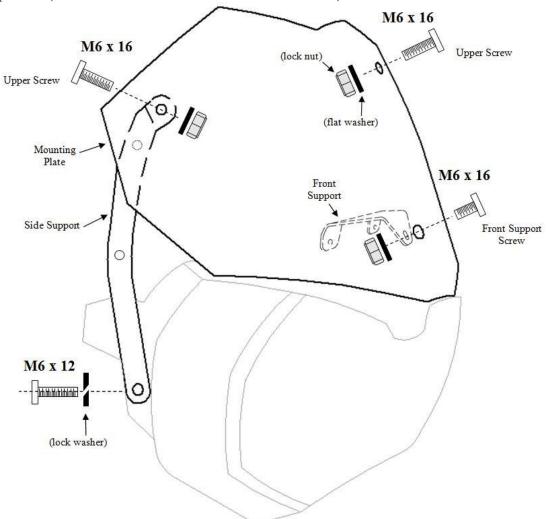
Using an **8mm socket**, remove those two bolts and attach this new **MadStad front support bracket** in its place - *using the same factory screws*.



Step 2: Install the MadStad Adjustable brackets onto the front of the Madstad mounting plate using the (4) M6 x 12 screws with flat washers and lock nuts as shown below. The knobs should be facing inward toward each other and up at the top side of the mounting plate.



Step 3: **Madstad mounting plate installation**: Review the below diagram and refer back to it during installation. This shows how the **Madstad mounting plate** (attached brackets not shown here) will mount to the front of the Tiger 800.



Step 3 cont'd: *Install the side supports* to the side of the headlight housing using the **M6 x 12 mm screws and split-ring lock washers.** *Don't tighten completely*, just enough to hold them place. **NOTE:** The upper part of each side support, *the bent mounting tab*, *should be facing inward* toward the center of the bike. (See diagram above).

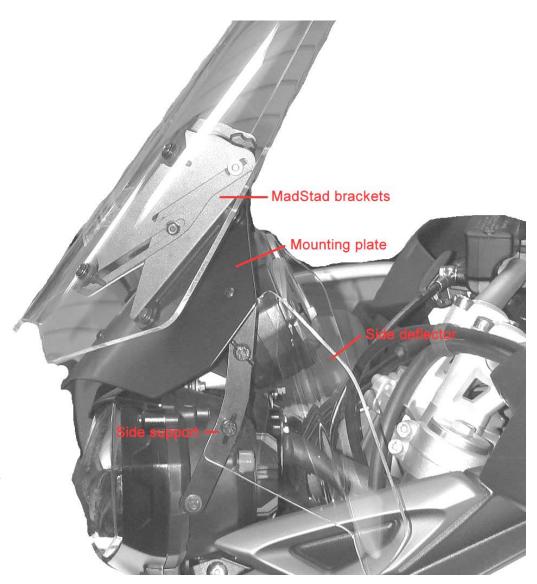
Place the mounting plate (with brackets attached) onto the front support using an M6 x 16mm screw with a flat washer and nut on the back. You don't have to tighten the nut fully just yet, but get it snug so that the bottom of the plate doesn't flop around or slip off. Then, while holding onto the mounting plate, maneuver each side support to match up bent tab hole with the upper holes in the mounting plate. Fasten the two together using the other M6 x 16 mm screws with flat washers and lock nuts. (See diagram on Page 4). <u>DO NOT TIGHTEN THE TWO UPPER SCREWS YET</u>. (helps with step 4)

Step 3 cont'd:

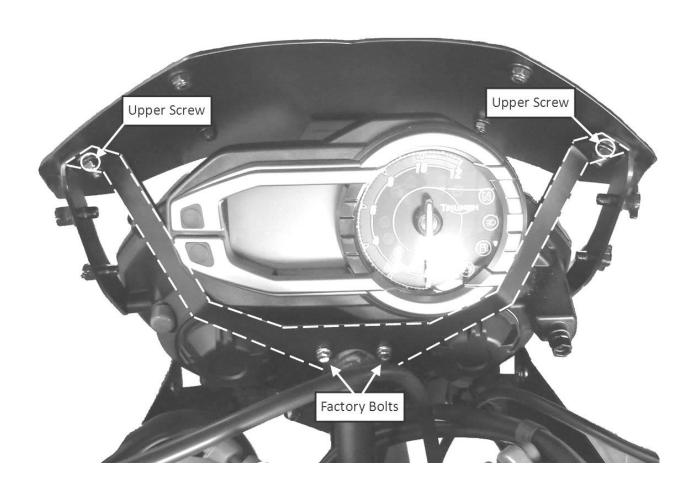
Fully tighten the front support connection. <u>Also ensure the side screws (on the sides of the headlight housing) are snug as well</u>. The result should look like the image below (without windshield / rear brace not shown here).

The side deflectors (seen in the photo) can be attached to the side supports if desired. They simply screw into the threaded inserts with the M5x16 Phillips screws, plastic washer (front) and rubber washer (back). Make sure they are not touching the bodywork along their bottom edge.

*t-screws shown for side deflectors – no longer used, (replaced with Phillips truss screws)

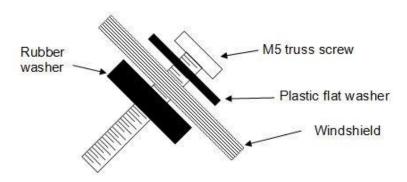


Step 4: Install the Madstad Offroad Rear Brace. Remove the two factory bolts that are directly below the instrument cluster as shown in the diagram below. Set the brace over these two holes and re-fasten with the same two factory bolts. Note that the upper arms of the rear brace attach to the back of the mounting plate - through the two upper M6 screws that hold the side supports on. Remove the M6 lock nut and washer, set the side supports onto the screws, then put the flat washers and lock nuts back on and tighten securely.



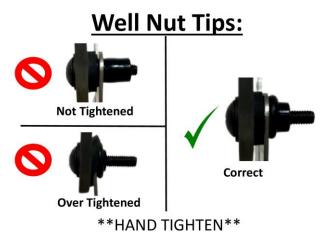
Step 5: Windshield Installation

The windshield attaches to the brackets with Phillips truss screws, M5 flat plastic and M5 soft rubber washers as shown above. Insert all four M5 Phillips truss screws, M5 plastic and rubber washers into the four windshield holes as shown at right before attaching the windshield to the



adjustable brackets. Use a hand screwdriver only, not a power driver. The rubber well nuts are flexible and shield holes are oversized so you can nudge the shield around to align the Phillips truss screws with the holes properly.

DO NOT OVERTIGHTEN THE SCREWS! Over tightening can damage the rubber well nuts. If the well nuts have swelled up behind the brackets and the screws are snug then your are done.



Adjusting the Brackets

The knob screws release the brackets allowing the windshield to slide and tilt. These knobs must always be tightened securely before riding. DO NOT attempt to adjust the brackets while riding! You must come to a complete stop before adjusting and make sure that you do not set the windshield in such a way that causes your handlebars or hand guards to interfere with the operation of your motorcycle.

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 which is usually at the middle of the bracket angle range. Tighten the knobs and go for a test ride. 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 brackets while in motion!

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 one or two notches, and/or adjust it up or down if necessary. Re-tighten the knobs and go for another ride. Continue experimenting with different positions you find a combination of height and angle that is the most comfortable.

Windshield Angle

Most windshields work best when set near a 60 degree angle. 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, the 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 (by deflecting the airflow a little higher) so don't be afraid to experiment later if tilting the shield back doesn't seem to be ideal.

With the proper angle, the airflow should smoothly clear the top of your helmet while you are still able to see over the top of the shield comfortably.

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.

MadStad Engineering, Inc.

1451 E. Jefferson Street Brooksville, FL 34601 USA Phone: 352-848-3646

Email: support@madstad.com

Thank you for your support, and ride safely!

