

MADSTAD

E N G I N E E R I N G

Adjustable Windshield System

Suzuki V-Strom (2002-2003)

Please read this entire manual before proceeding with installation.

What is in the box:

- (1) Set of preassembled Robo Knob adjustable windshield mounts
- (1) Black aluminum adapter plate
- (4) M6 x 12 mounting screws
- (4) M6 flat washers
- (4) M6 lock nuts
- (4) M5 T-Screws
- (8) 1/8" thick rubber washers (for T-screws)

Tools Required:

4mm Allen Wrench
10mm Socket Wrench
Phillips Screw Driver



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

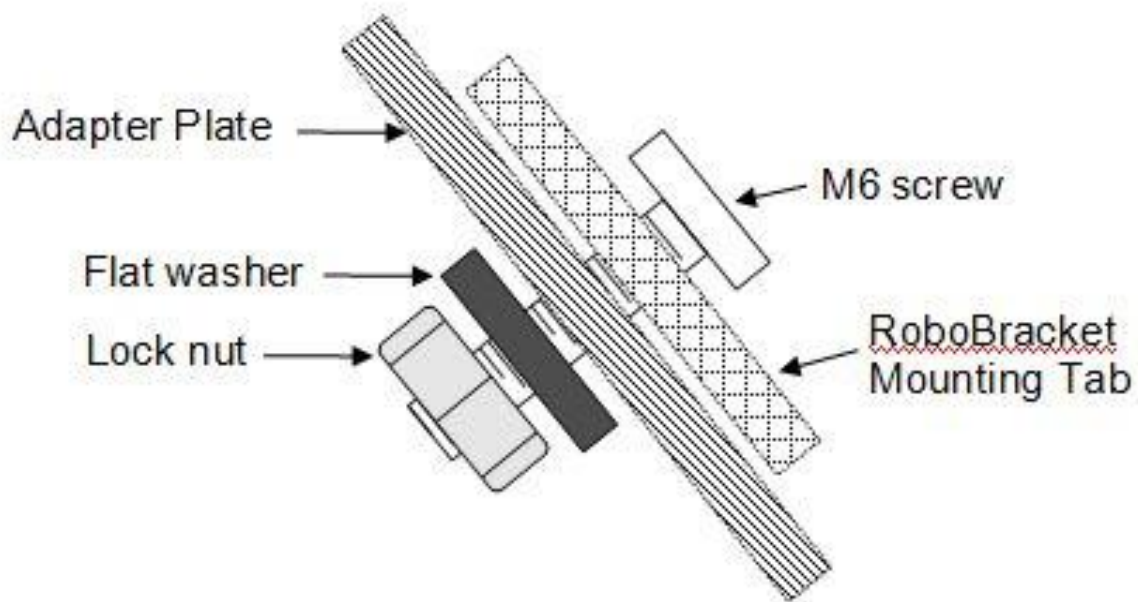
MadStad RoboKnob brackets are designed to bolt to a curved surface like the metal adapter plate included in this kit. The new windshield attaches to the top of the brackets with quick-removal T-screws. Loosening the two adjustment knobs allow you to change the windshield height and tilt without getting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

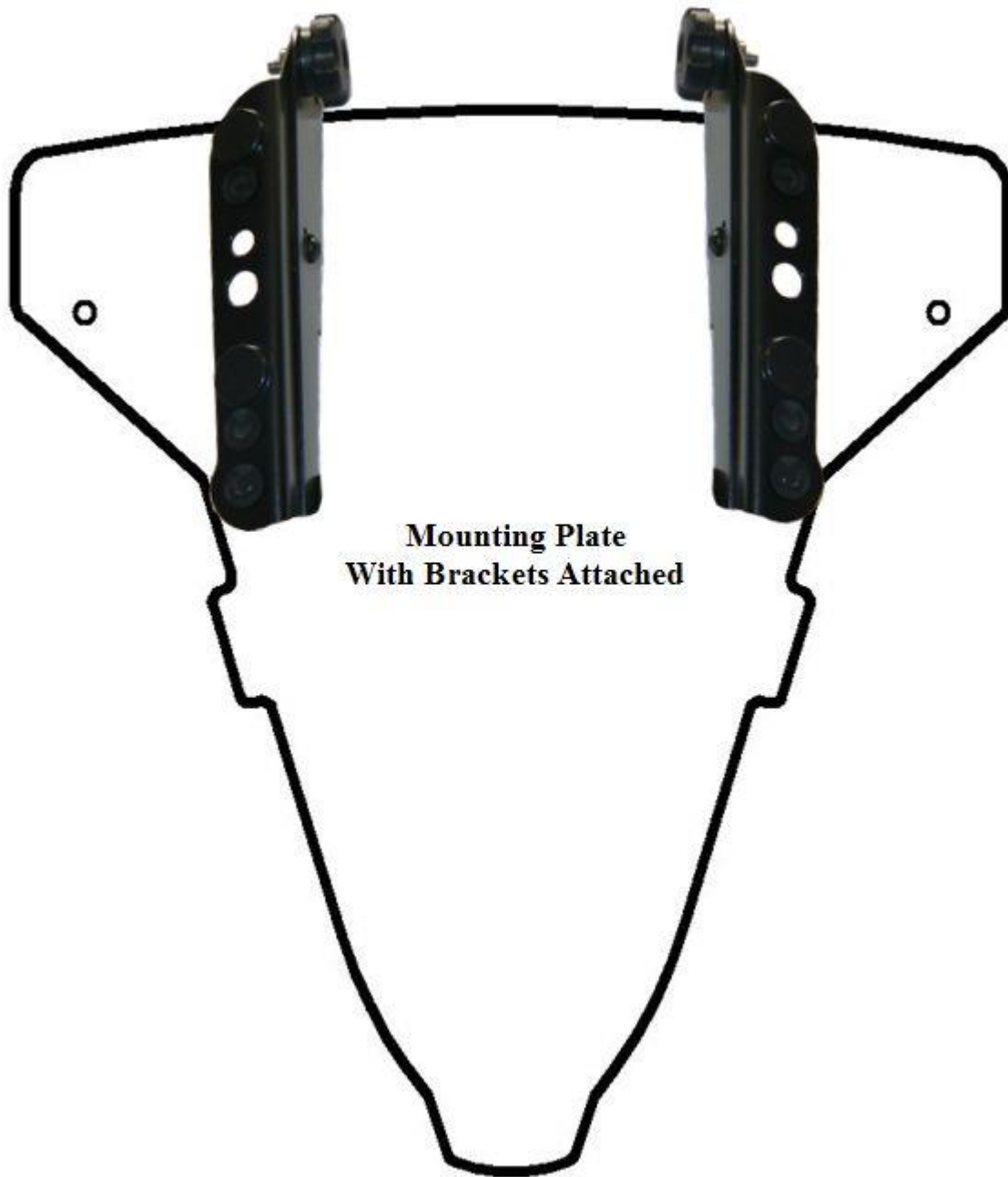
Bracket Installation:

Your Robo Knob brackets attach to the MadStad adapter plate threaded inserts. Use the four M6 x 16 screws with lock washers as shown in the diagram below.

DO NOT OVERTIGHTEN!



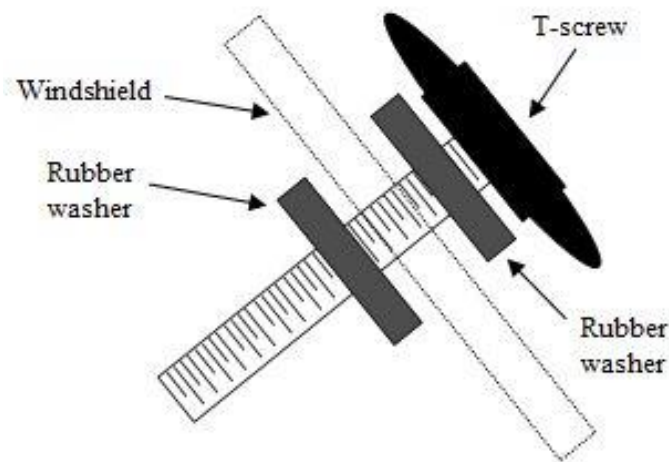
The knobs on the brackets go to the insides (facing each other) with the knob sides up. When both brackets are installed it should look like the diagram below:



The adapter plate then slides into the fairing in place of the stock shield. You may have to wiggle it around a bit to get all the holes lined up, then screw it in with the original factory windshield screws and washers.

Windshield Installation

Once bracket adjustment is complete, the windshield attaches to the brackets with T-screws and rubber washers as shown at right. Insert all four T-screws and washers into the four windshield holes as shown at right before attempting to attach the windshield onto the RoboBrackets. We recommend that you first install the upper and lower screws on one side, then install the upper and lower screws on the other side. The rubber well nuts are flexible and shield holes are oversized so you can nudge the shield around to align the T-screws with the holes properly.



DO NOT OVERTIGHTEN THE T-SCREWS! The rubber well nuts cannot be pulled up out of the brackets, even if they are not tight, so tighten only until the well nuts begin to swell up and the shield is snug against the brackets. Over tightening can damage the rubber well nuts.

Adjusting the RoboKnob 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.

The upper pivot hole gives maximum rearward tilt, and the lower pivot hole moves the tilt range 5 degrees forward. The lower pivot hole also brings the shield a bit closer to the bike. If for some reason you wish to adjust the tightness of this pivot screw or move it to an alternate pivot position, use a 4mm Allen wrench, along with a 10mm socket or wrench to make the adjustment. If you tighten the lock nut completely you will not be able to slide the brackets.

Notes on Windshield Angle

Most windshields work best when set at a 55-60 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, 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 be 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

If you are not satisfied with your new windshield system you have 30 days to return it. Full details are available on our web site at www.madstad.com. If purchased from a dealer then please contact the dealer for their return policy.

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 or materials defects, not against cosmetic issues or issues related to normal wear and tear.

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Thank you for your support, and ride safely!

