

# MADSTAD

E N G I N E E R I N G

## Adjustable Windshield System

Honda CB500X

*Please read this entire manual before proceeding with installation.*

### What is in the box:

- (1) MadStad CB500X Brackets Kit
- (4) M5 x 20 Phillips truss screws
- (4) M5 flat plastic washers
- (4) M5 soft rubber washers
- (4) M5 well nuts
- (4) Large silver flat washers
  
- (2) Side deflectors
- (2) black plastic spacers
- (2) M6 x 50 screws
- (2) M6 x 16 screws
- (4) M6 flat washers
- (2) Thin rubber 3/4" washers

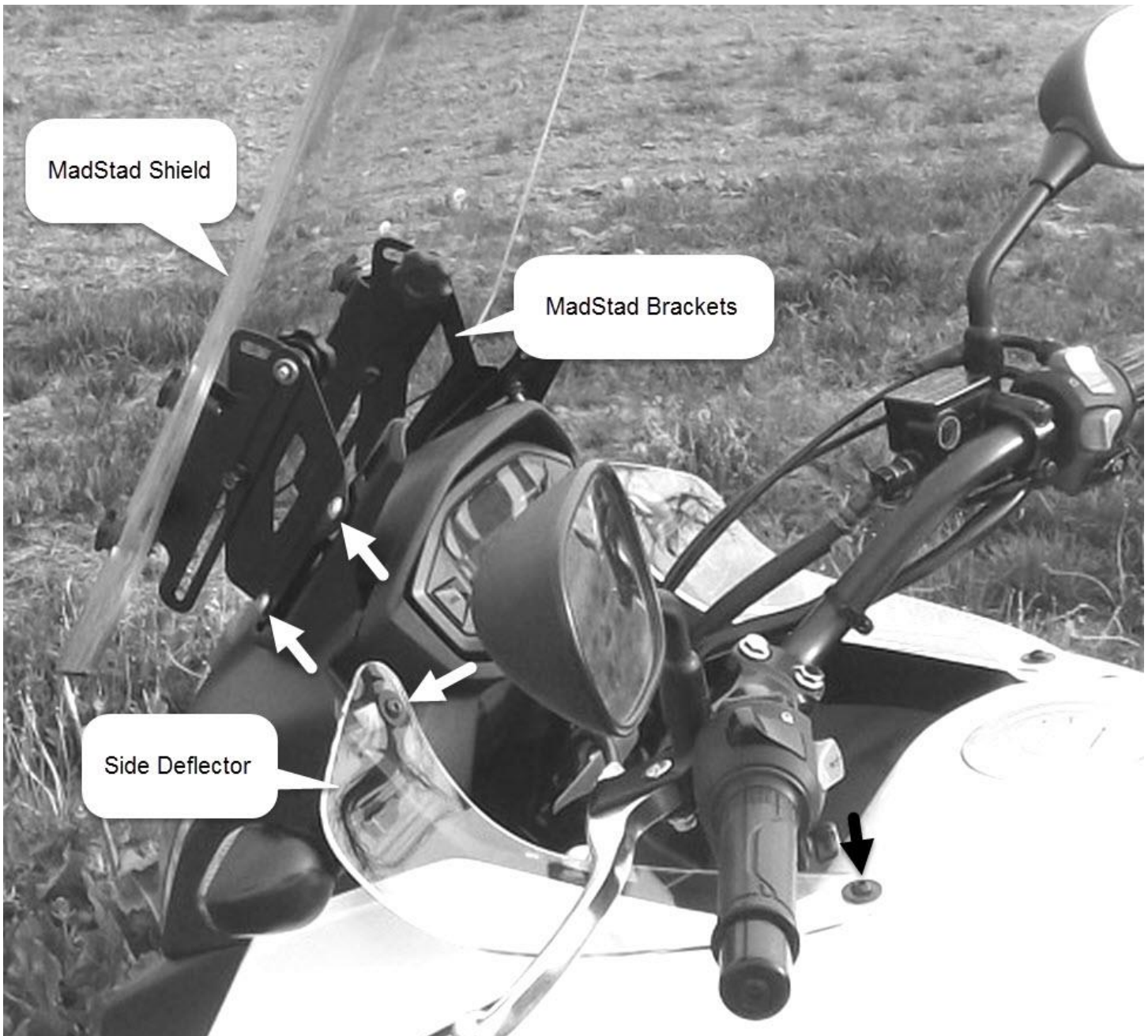


### **Tools Needed:**

- 5 mm Allen wrench (hex key)
- 4 mm Allen wrench
- #2 Phillips screwdriver

MadStad adjustable brackets are designed to bolt to your bike with a new windshield that is fully adjustable so you can change the windshield height and angle without getting off of the bike, and without any tools. Separating the shield from the bike is critical because it allows air to flow under the bottom edge which dramatically improves airflow smoothness.

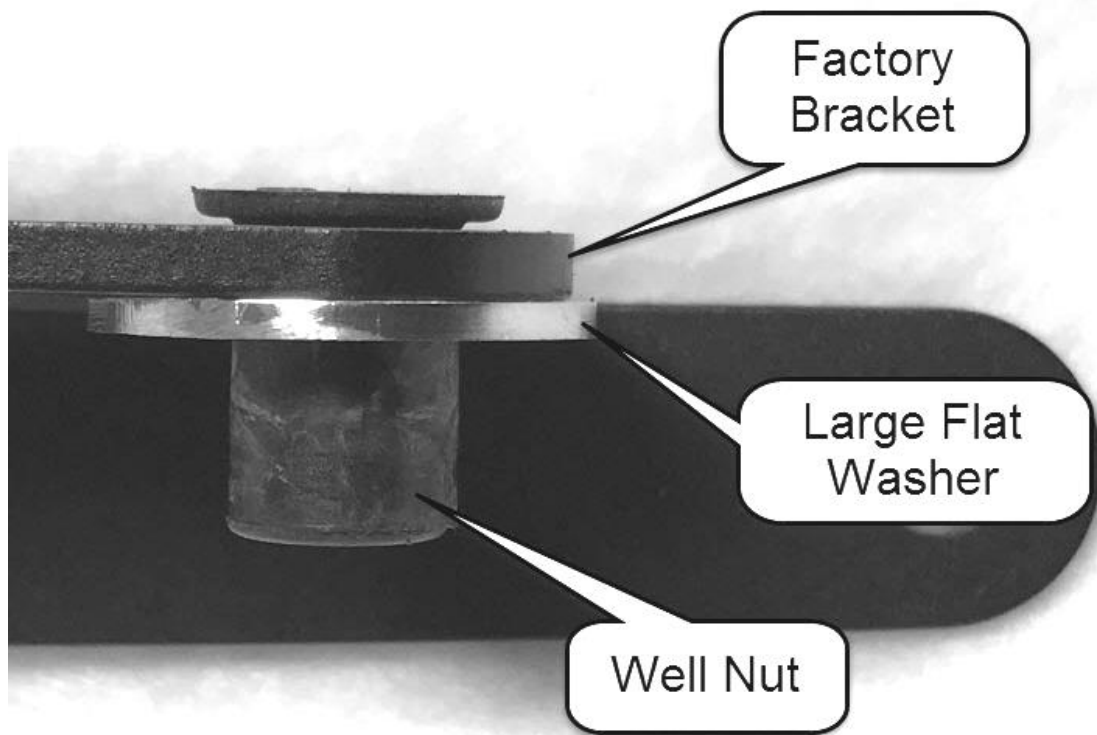
You will need to remove your factory windshield (5mm Allen wrench) in order to attach the MadStad brackets to where the stock windshield sits.



## Bracket Installation:

The MadStad brackets attach to the factory windshield mounting brackets as shown in the photo on page 2. **However**, replace the factory rubber well nuts with the new well nuts and large flat washers supplied in your kit. The washers go onto the well nuts **beneath** the factory bracket (see image below) before you tighten the screws into them and will hold the well nuts more securely. Use the factory screws and a 5mm Allen wrench to attach our brackets instead of the windshield, and we recommend that you install the brackets in the lowest factory position.

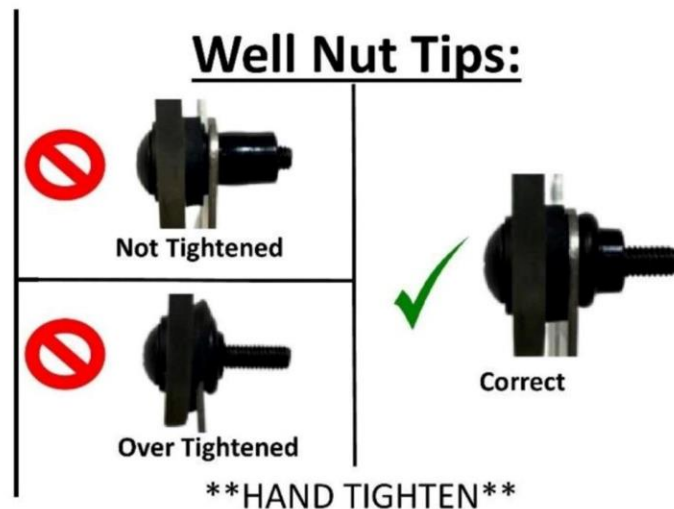
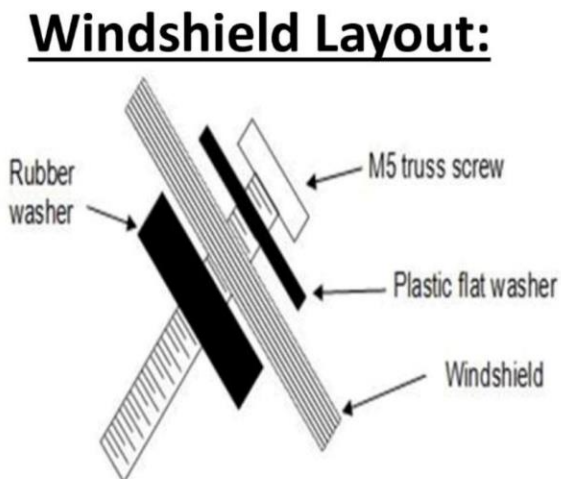
Make sure you are orienting the brackets with the black knobs facing inward toward each other and up toward the driver as seen in the photo on Page 2.



**NOTE:** Do not tighten the screws down hard. You are fastening to rubber well nuts which can be damaged if you over-tighten. Just make the screws good and snug, and that's it.

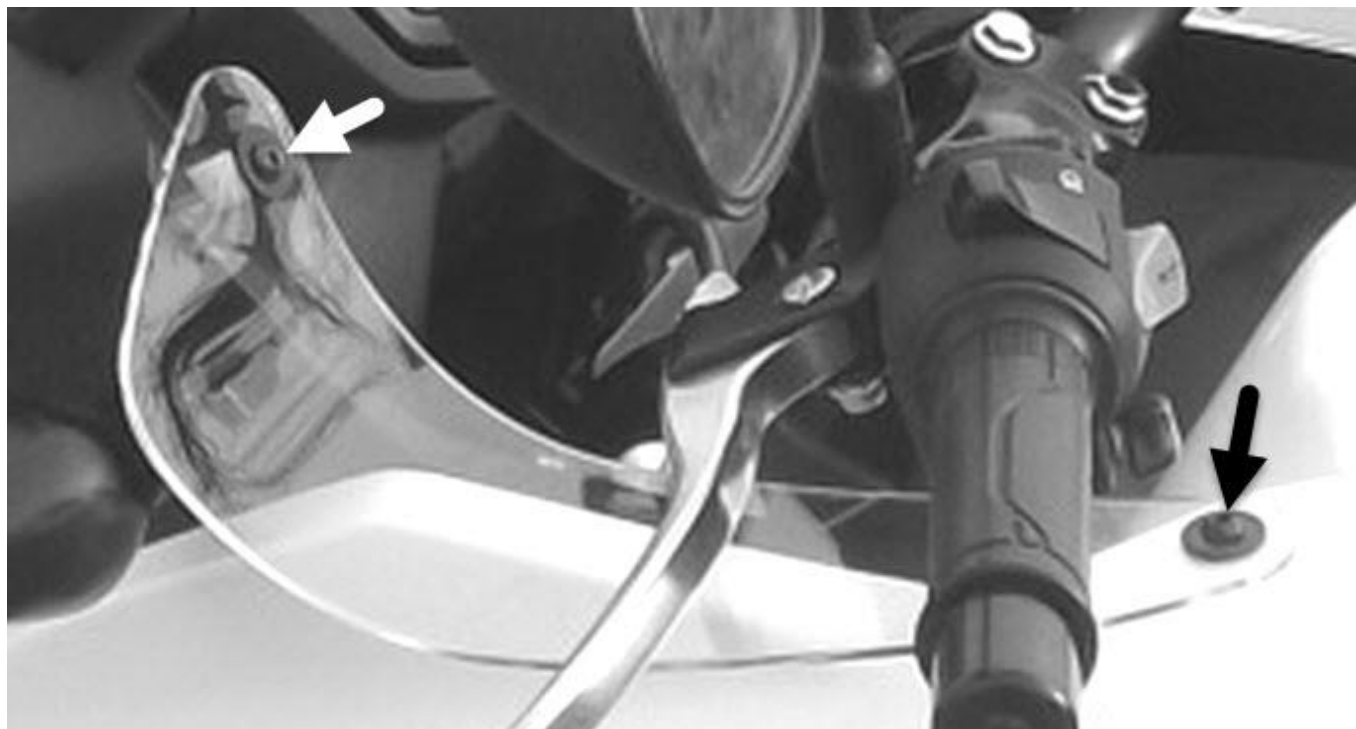
# Windshield Installation

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.



## Side Deflector Installation

The side deflectors provided in this kit are mounted horizontally along the body of the bike, to the left and right side of the forks (see photo below). There are four factory screws (two per side) that need to be removed at the points shown by the arrows in this photo. Two are on the outsides of the instrument panel, and the other two are just forward of the fuel tank. Save all of these screws, they will not be used for the MadStad deflectors.



All of the hardware you need for the side deflectors is provided in this kit. At the instrument panel you will use the tall black plastic spacer between the deflector and the panel, then run the long M6 x 50mm screw with a flat washer on it through the deflector, the spacer and into the dash. At the back of the deflector, put a thin rubber washer in between the deflector and the body of the bike, then use the shorter M6 x 16mm screw with a flat washer to fasten it to the bike.

## Adjusting the MadStad 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!

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.

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 crescent wrench to make the adjustment. **NOTE:** 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 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!*

