

## Adjustable Windshield System

### KTM 390 Duke

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

#### What is in the box:

- (1) MadStad Brackets Kit
- (4) Aluminum spacers 0.5"
- (4) M8 x 50 screws
- (8) M8 flat washers
- (1) Crossbar (208mm long)
- (2) M6 x 16 screws
- (2) M6 split lock washers
- (2) M6 flat washers
- (4) M5 x 25 T-screws
- (4) thicker rubber washers
- (4) soft rubber washers



This MadStad system attaches above your handlebar clamps using aluminum spacers and longer bolts. Your handlebars do not need to come loose as you can install these brackets one side at a time.

## Bracket Installation:

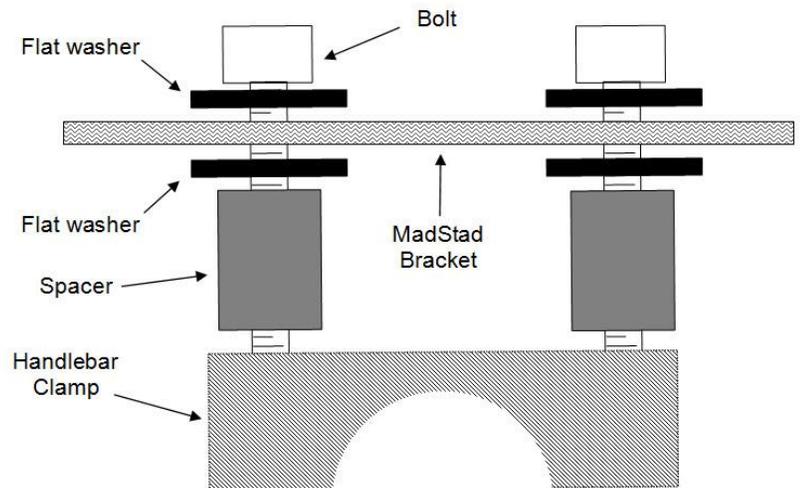
**STEP 1** – Remove two of your handlebar clamp bolts ON ONE SIDE ONLY. (If you remove all four handlebar clamp bolts your bars will come loose, and we don't want to do that.)

Remove the bolts but leave the top clamp in place. The MadStad brackets will bolt on top.



**STEP 2** – Set two of the aluminum spacers provided in your kit into the two holes in the now-open top clamp, as seen in the photo above. Put one M8 flat washer on top of each spacer. To keep it from slipping off, put a dab of Vaseline or similar thick grease on top of the spacer so that the flat washer will stick to it and not slide off.

Or, pre-assemble the new long bolts with washers right onto the MadStad bracket as shown at right. Just hold the bolts and washers in place so they don't fall out when you go to set them into the spacers and lower bar clamp.



**STEP 3** – Insert the bracket with the new M8 bolts and washers provided right through the aluminum spacers and into the mounting holes of the bottom bar bracket. Run the bolts in with your fingers to get them started then bolt them down so the final result looks like the photo below. ***NOTE:** Tighten the front bolt completely first, then tighten the back bolt to factory specifications.*

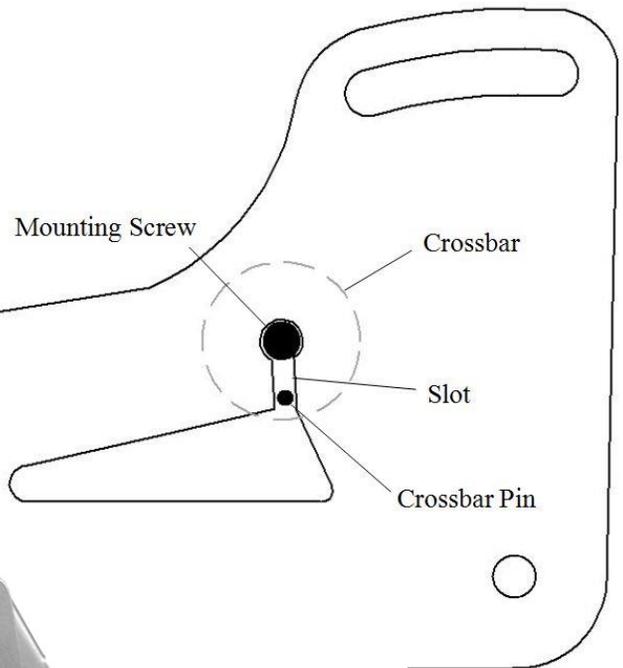
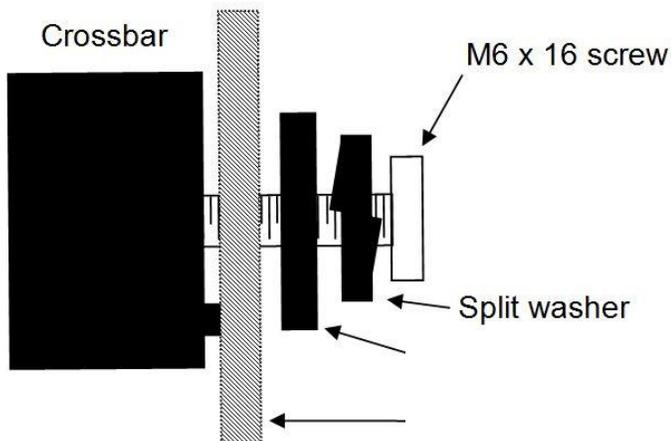


**STEP 4** – Repeat steps 1, 2 and 3 for the other set of brackets on the other bar clamp. The final result will look like the photo above.



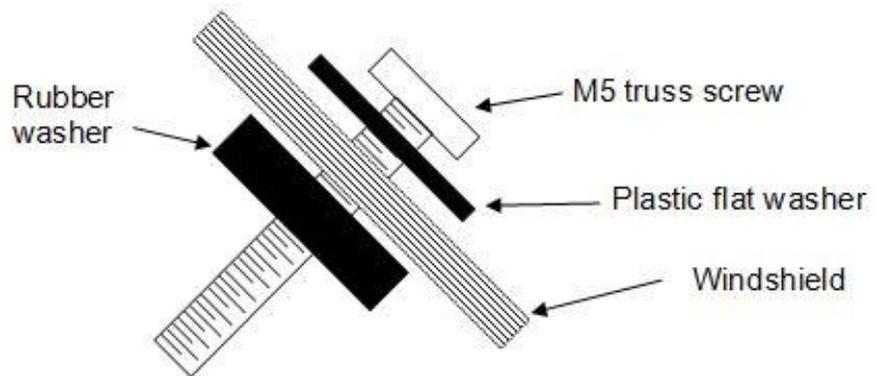
**STEP 5: Crossbar** – The solid aluminum crossbar mounts between the two adjustable brackets as shown at left. One side of the crossbar has a protruding pin which must sit in the slot on either bracket, to prevent the crossbar from rotating. Slide the crossbar between the brackets, align the center hole with the keyhole slot in the bracket as shown below, then fasten as shown below. The finished assembly should look like the photo at

bottom.



## STEP 6 - Windshield Installation

The windshield attaches to the brackets with Phillips truss screws, plastic flat washers and rubber washers. Pre-insert all four screws and washers into the four windshield holes (as shown the diagram at right) before attaching the windshield



onto the MadStad brackets. Set all four screws into their corresponding rubber well nuts and screw them down until they are snug, which means the screw tip has gone past the back of the well nut, the well nuts have swelled up a **DO NOT OVERTIGHTEN!** Over-tightening can damage the rubber well nuts and is unnecessary. Once they swell up in back they will hold the windshield securely against the brackets.

## 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.

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. It may take a couple of extra turns to free up the angle adjustment. Set the angle at approximately 60 degrees (roughly the same angle as your forks). You can also use the angle diagram 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 brackets while in motion!

Experiment with different positions at different speeds until you find a combination of height and angle that give you the smoothest ride. Just a 3-degree change in angle or slight change in height can make a difference.

## **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. 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](http://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 warranted for 1 year against manufacturing 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!*

