

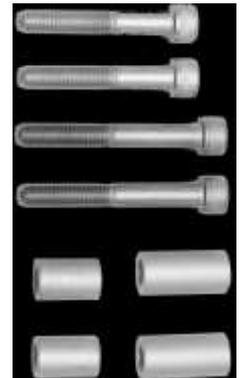
Adjustable Windshield System

KTM 690 Duke

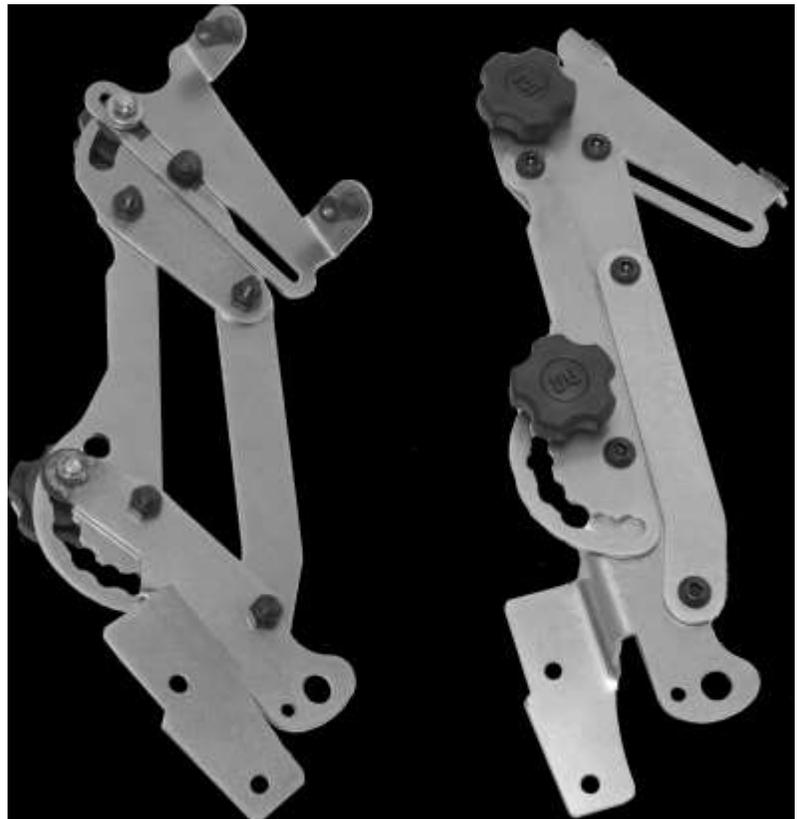
Please read this entire manual before proceeding with installation.

What is in the box:

- (2) Fork brackets (long and slim)
- (2) M8 x 60 screws (long)
- (2) Aluminum spacers (long)
- (2) M8 x 50 screws (shorter)
- (2) Aluminum spacers (shorter)



- (1) Adjustable brackets set
- (4) M6 x 16 button socket screws
- (2) Small rubber grommets for
- (4) M5 x 25 T-screws
- (4) 3/8L washers
- (4) soft rubber washers



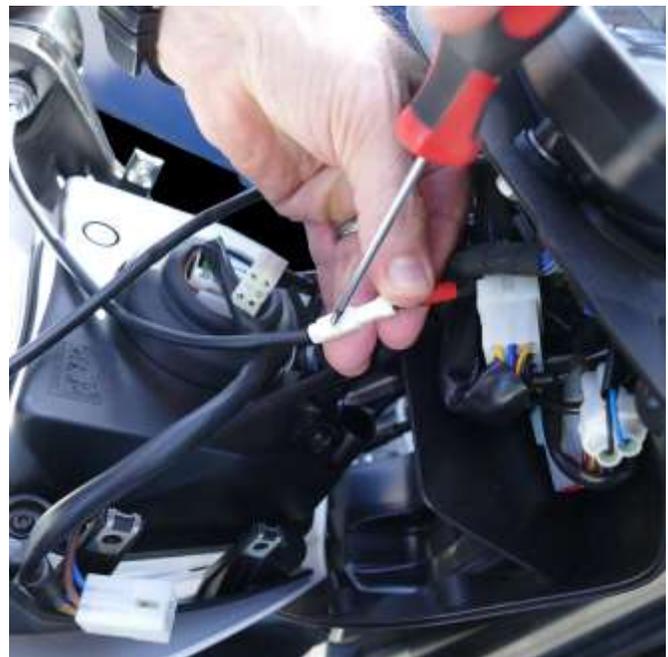
Installation

Tools needed: Torx driver bits T15 and T20, Torx socket in a T45 (and you may want to have a breaker bar handy in addition to the ratchet handle). Adjustable crescent wrench.

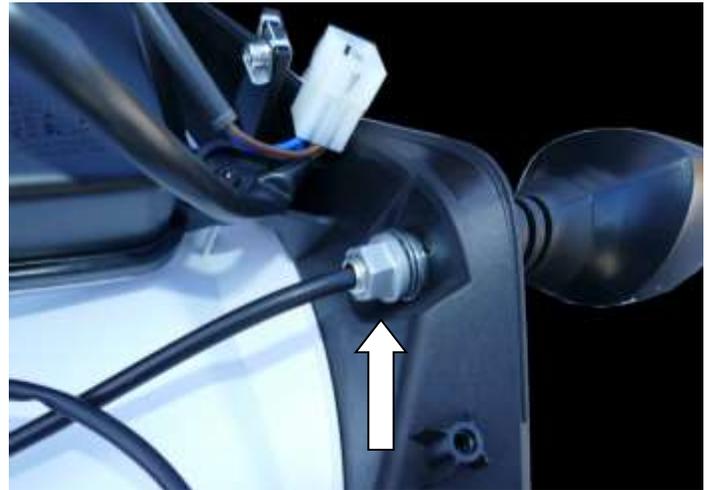
STEP 1 – Remove the four side screws on your headlight housing, then remove the two top screws and allow your headlight housing to tip forward. Have a small-tip screwdriver or a small pointy tool handy for the next step.



STEP 2 – Disconnect the wires to the turn signals and headlight. You will need a small pointy tool or small flat-blade screwdriver to push on the connectors and unlatch them. Make note of which turn signal goes to which wire so that you can match them back up when putting it back together.



STEP 3 – Remove the turn signals from the headlight housing by unscrewing the nuts and pulling them off of the wires. These turn signals will be relocated to the MadStad bracket.



STEP 4 – On your front fork clamps, remove the pinch bolt on the top clamp, and the upper pinch bolt on the bottom clamp (see photo at right, white arrows). Do not remove the very bottom bolt (red arrow), it needs to stay tight to prevent the fork from shifting. Remove only these two bolts on one side of the bike, you will do the other side after installing our fork brackets.

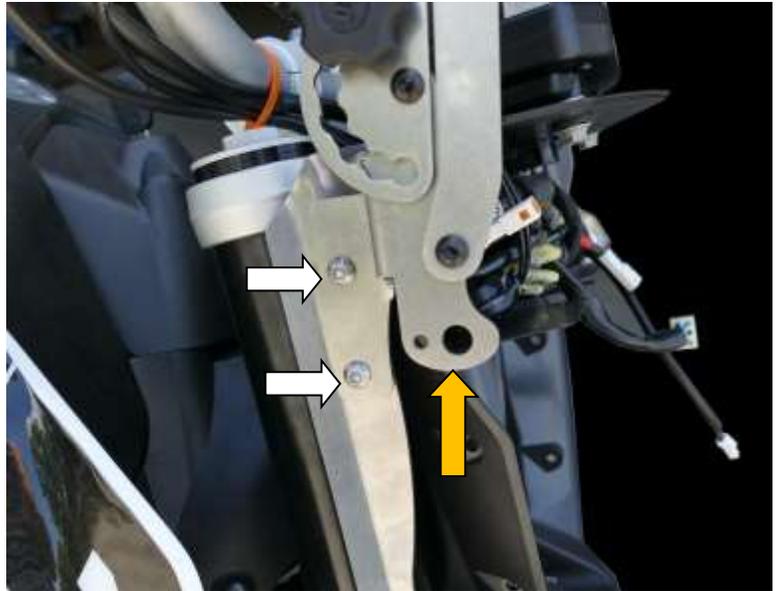


STEP 5 – Install our fork bracket as shown in the photo at left. The long bolt goes through the top hole of our bracket with the long spacer between the bracket and the bike. The shorter bolt goes through the bottom hole of our bracket with the shorter spacer between the bracket and the bike.

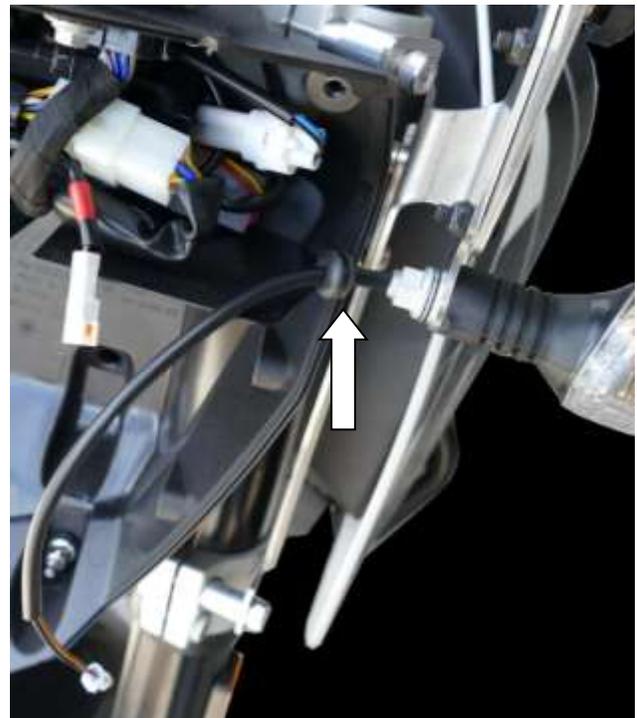
Install these and tighten to the manufacturer's recommended torque level which is 17 Nm (12.5 lbf ft) for the top clamp, and 12 Nm (8.9 lbf ft) for the bottom clamp.

Once installed, repeat on the other side.

STEP 6 – Attach the adjustable bracket to the fork bracket using the M6 screws provided (as shown in the photo at right, white arrows). Tighten securely and repeat on the other side of the bike. The hole shown by the vertical arrow is where your turn signals will be relocated in the next step.



STEP 7 – Attach the turn signals to the brackets as shown by feeding the wire through the bracket hole in toward the center of the bike, and secure using the nut and lock washer. Pull a rubber grommet over the turn signal connector and slide it up the wire until it is near the turn signal stem. This grommet will be used to seal the larger open hole in the plastic headlight housing where the turn signal used to be mounted.



***NOTE:** The grommet will need to be stretched a bit to fit over the connector.*

You can use a small screwdriver or similar tool to help stretch and pry the grommet over the connector. A little bit of soapy water applied to the outside of the connector as well as the wire will help the grommet slide up and over, however this is not required.



STEP 8 – Bring back the headlight housing, feed the turn signal wires through the side holes as shown at left, re-connect all of the wire harnesses you disconnected and re-install the housing using the factory screws. It would help to have an assistant hold the housing while you feed and reconnect the wires.



STEP 9 – Set the grommets into the sides of the head light housing. You may want to use a small flat-blade screwdriver or similar tool to help you push the grommet into the hole.

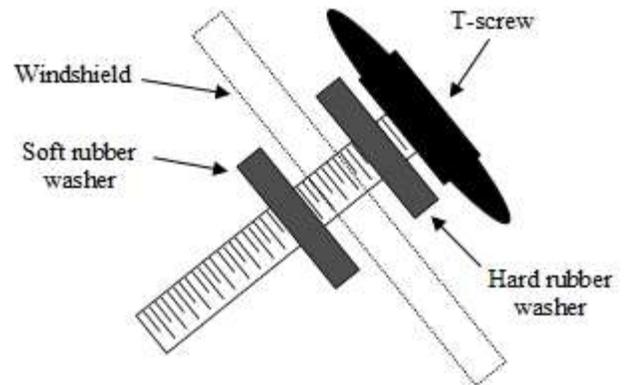
Before installing the windshield you must put both brackets in the same position. There are two set of knobs, the Pivot Adjust Knob (closest to the forks) which lets you change the overall position of the system. You can set the shield up for highway wind protection, or down low out of your way for off-road riding.

You will need to loosen each of the pivot knobs several turns to unlock the brackets and when you tighten them back up make sure that the tapered inner shoulder of the knob seats itself



into one of the seven holes on the pivot bracket. We recommend you start out with both brackets pivoted fully up and back for windshield installation. Also make sure the windshield adjustment mechanism (upper knobs) is the same on both sides, otherwise the windshield won't line up to the brackets. Loosening the knobs just one turn will free up the height adjustment. To change the windshield angle, loosen about 3-4 turns.

The windshield attaches to the brackets with the T-screws 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. Also, move the MadStad brackets to the same height and angle if they aren't already. Then set the shield with all four screws into their corresponding rubber well nuts and



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. One turn loosens the shield for height adjustment only, and 3-4 turns allows you to change the angle. These knob screws must always be tightened securely before riding and DO NOT attempt to adjust the brackets while riding! You must come to a complete stop before adjusting.

Start with the angle at about the middle of the bracket range, and the top of the shield at about your chin level as you look straight ahead. Then tighten the brackets and go for a ride. Experiment with different positions at different speeds until you find a combination of height and rake angle that eliminates buffeting and gives a smoother ride.

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.

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 warranted for 1 year against manufacturing defects, not against cosmetic issues or issues related to normal wear and tear.

MadStad Engineering, Inc.

1451 E. Jefferson Street
Brooksville, FL 34601 U.S.A.

Phone: 352-848-3646

Email: support@madstad.com

Thank you for your support, and ride safely!

