

MADSTAD

Harley Davidson Pan America (2020-Up)

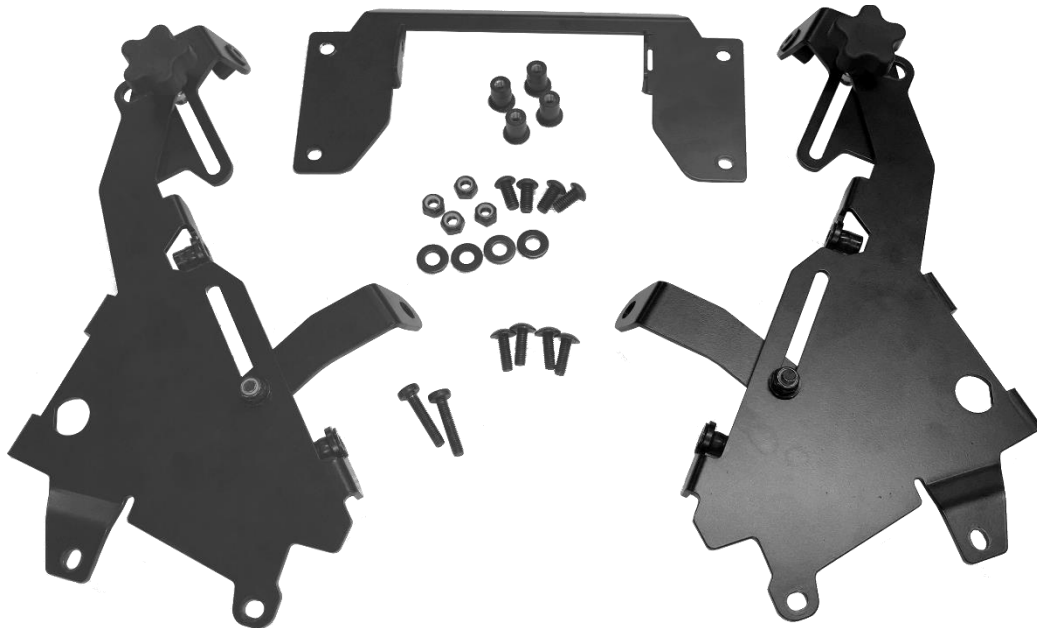
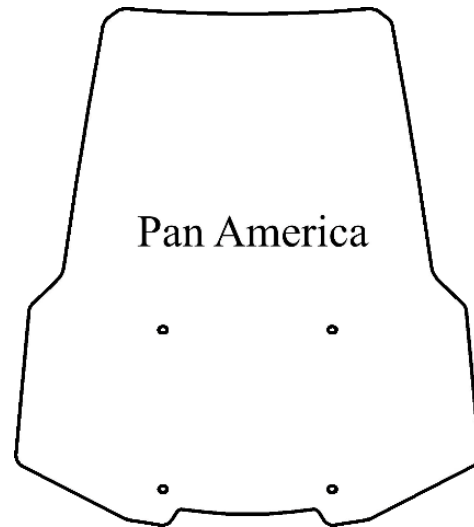
** Please read this entire manual before proceeding with the installation **

Hardware:

- (4) M6 X16 Button Screws
- (4) M6 Metal Flat Washers
- (4) M6 Lock Nuts
- (4) M5 Well Nuts
- (2) M5 X 30 Phillips Head Screws
- (8) M5 X 20 Truss Screws
- (4) M5 Soft Rubber Washers
- (4) M5 Black Plastic Flat Washers

Tools Needed:

- 10mm Wrench
- Phillips Head Screwdriver
- Torx Wrenches



*****If installing our other Pan America products, follow these steps: Begin with the main windshield system manual but during step #4 this is when you'll install the display riser, integrating those instructions as well. You'll skip step #1 of the display riser manual.**

Mount the GPS/Phone display next according to those instructions before mounting the cage onto the bike. Then finish with the main windshield system.

1. Factory Shield/Cowl/Deflector Removal

There are three things we want to remove right away:

- A. Remove the windshield by loosening all four screws that hold it on. These will **not** be reused. See picture on right.
- B. Remove the two factory screws that hold on each Side Deflector. **They will be reinstalled.**
- C. Grab the sides of the Cowl and pull toward you to release the internal plugs.



2. Removing the Stock Windshield Cage

A. Support the cage and remove the four factory Torx screws (T-27) that attach the windshield cage – two on each Side. **These screws will be reused.**

- B. Remove front deflector from the stock windshield cage. **The screws will be reused.**

Note: The stock windshield arms slide because of the two metal bars (one on each arm) that glide behind the front deflector and they will fall out when removing the deflector. You should keep these and any parts you remove.





B

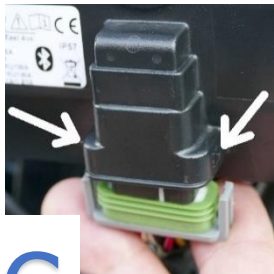
Front Deflector



Retaining Tab



Metal Gliding Bars



C

C Remove the power connector from the digital display but be gentle so that the two clips on the side of the connector don't break.

D. There is a USB plug on the throttle side of the cage. There is a retaining ring that has to be unscrewed, then push the plug in and the cage will be free from the bike. Picture on right.

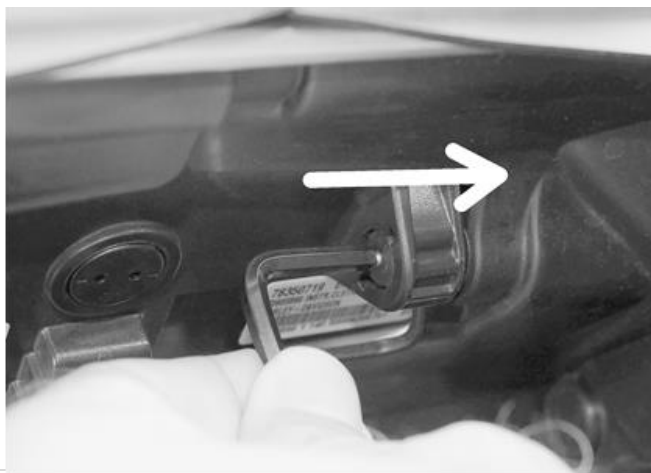


D

3. Removing Digital Display

Take the Stock Cage and set it on a flat surface. Turn the cage so you can see where the Instrument display is attached.

There are two "plugs" that hold the panel on to the cage and they can be removed by pushing the backside of the plug outward using a small Allen wrench. Push both through and the display will be free from the cage. Picture below.



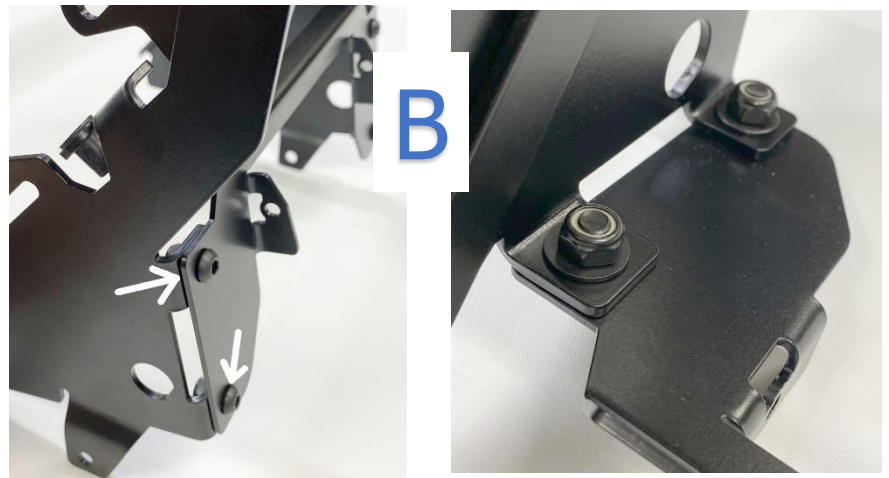
4. Installing the MadStad Brackets

We want to set the bracket into the Front Deflector:

- A. Holding the Front Deflector, set the MadStad Bracket Arm through the slot as shown in the picture below. Be sure the adjustment knobs are facing outward while the arm tab is facing inwards.



- B. The Back Brace is attached to the back of the brackets. Using the M6 X 16 screws with washers and lock nuts, be sure the mounting holes of the Back Brace are on top. Also, the washers should be in the back with the lock nut. please reference the pictures below.



- C. The two MadStad Arm Tabs that we put through the Front Deflector need Well Nuts inserted. Please follow the pictures below and remember the Well Nut is inserted from the backside of the hole.



5. Attaching Digital Display/Front Deflector

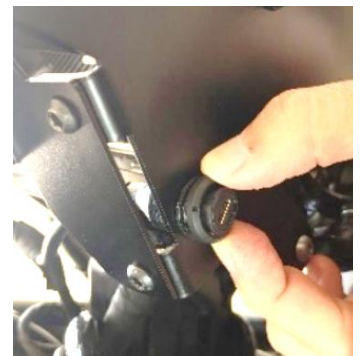


- A. We're going to use M5 Well Nuts to attach the display. Simply slide a Well Nut into the Display clamps from the outside, as the picture above illustrates.
Set the display between the clamps and use an M5 X 30 screw (2), tightening it from the outside. The Well Nuts swell up once the screw starts going in and will hold the display firmly.



6. Assembling the Windshield Cage to the bike

- A. Insert the two front factory screws (closest to the headlight) and tighten halfway. This will prevent the cage from falling while you reconnect the USB and display and it can be tilted forward.
- B. The USB plug has a flat spot as does the USB hole in the bracket. Be sure to line them up before pushing it through.
- C. Reconnect the display plug and remember not to force it. It is designed to go in one way and the display will turn on when reconnected.
- D. Then insert the last two factory cage screws and tighten all 4 screws.
- F. Using M5 X 20 screws (4), attach the Front Deflector. They mount into 4 Well Nuts in the brackets.



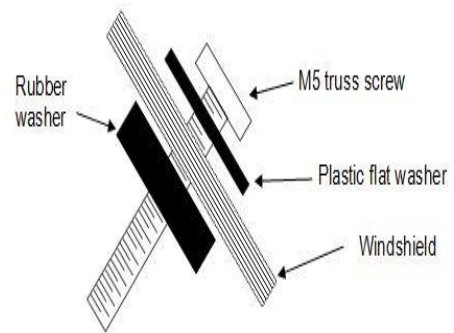
7. Attaching Side Deflectors, Cowl, and MadStad Windshield

- A. Using the factory screws, reattach the side deflectors to their position on the bike.
- B. Line up the Cowl's prongs to the rubber sockets on the bike and gently push it into place.

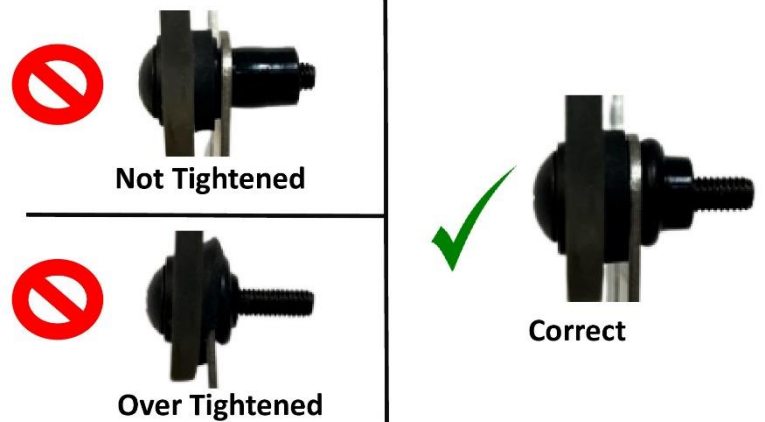


C. Installing the windshield:

- C1. Pre-install the M5 X 20 truss screws (4) & washers into the windshield holes as shown in the image at right.
- C2. Once all four of the truss screws are in place, gently guide the screws into the Well Nuts in the brackets until all four are set.
- C3. Hand tighten the truss screws until they swell up behind the bracket and are firmly holding the windshield. Be sure not to overtighten.



Well Nut Tips:



****HAND TIGHTEN****

Pivot Screws

The MadStad mount has a pivot screw on each set of brackets, located near the middle of brackets. A nylon lock nut keeps the screw 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 more forward. 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 open-end wrench to make the adjustment. If you tighten the lock nut completely you will not be able to slide the brackets.

Adjustment Knobs

To adjust the windshield for height and/or angle you must loosen the knobs about 1-2 turns to loosen the brackets allowing them to slide back and forth. Gently push or pull on the shield to position it where you want it. Once you have the brackets adjusted, you do not need to tighten the knobs down hard, just snug enough to prevent them from moving out of adjustment.

Adjustments

You will have at least 2" of vertical travel and 20 degrees of angle to work with. We suggest setting the angle first, usually about the same angle as the forks on the bike. Loosening the knobs allows for adjustments.

Take the bike out and test. You may want to change the angle a little or change the height – this is very much a trial and error type of experiment. **Be sure to stop and pull over when making adjustments.**

Different weather conditions and different speeds will help in determining what works best for you.

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.

MadStad Engineering, Inc.

1451 E. Jefferson St.

Brooksville, FL 34601

352-848-3646

Web Site: <http://www.madstad.com>

Email: support@madstad.com

Thank you for your support, and ride safely!