

## **Honda Goldwing GL1800, F6B, GL1500 Windbender Top Shield Rake Adjustment Kit - INSTALLATION INSTRUCTIONS -**

***Read completely, check your parts and tools before you begin to save time and avoid mistakes.  
Don't hesitate to call if you have any questions or difficulties during assembly.***

We are always happy to help!

***You'll need the following tools to complete the installation:***

- Small flat-blade screwdriver
- #2 Phillips screwdriver or;  
#2 JIS (Japanese Industrial Standard\*) screwdriver  
(JIS style will grip better)
- 10mm end-wrench or ratchet and socket
- 8mm end-wrench or ratchet and socket
- 3mm hex wrench (a T-handle wrench is easiest to use)
- 5mm hex wrench (a T-handle works well for initial assembly,  
but you will need an L-key or ball-end hex wrench for final  
tightening due to access limited by the curvature of the Top Shield)



\*see [www.vesseltools.com](http://www.vesseltools.com) for a complete description and ordering details.

***You should have these parts in the Manual Adjust kit:***

- 1 - Right Fixed Bracket (attach to male rail)\*
- 1 - Left Fixed Bracket (attach to male rail)\*
- 2 - Swing Brackets (attach to top shield)\*  
Right and Left are identical.
- 2 - Adjustment Arms (identical.)\*
- 6 - M6 x 10mm SS cap screws
- 2 - M6 SS Nylock nuts
- 4 - M6 SS flat washers
- 4 - M6 SS lock washers
- 4 - M5 x 16mm SS button head screws
- 4 - M5 SS Nylock nuts
- 4 - #12 x 1/2" SS pan head screws
- 4-Snap-Cap sets



\*Stainless steel parts are shipped bare so you can make them meet your personal preference. They may be painted (use a good primer first), or powder-coated prior to installation. You may also use sandpaper or a wire brush for a modern brushed finish appearance.

1. Remove the top shield from your Windbender and place it on a soft surface.

2. Remove the Male Rails from the Top Shield by first removing the four snap-caps with a small standard screwdriver (carefully, so as not to scratch the Trim Piece or Top Shield – a thin piece of chipboard, from the back of a note-pad, laid on the Trim Piece next to the snap-cap will work well to pry against – once your screwdriver is under only the snap-cap, not the white cap base, lifting rather than twisting will usually get them off), then remove the four mounting screws with a Phillips or JIS screwdriver. Set the caps, cap bases, screws and Trim Pieces aside. You will use the Trim Pieces again shortly.

**3. (fig 1-3A)**

Using the rail mounting hardware you just remove from the top shield, mount the Fixed Brackets to the male rails with the slide and pivot tabs to the outside and the slide tab towards the top (rounded end) of the rail.

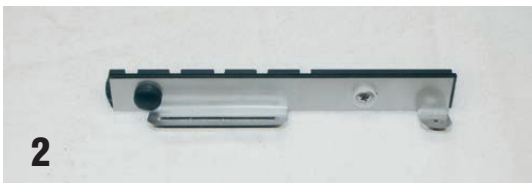
You must use the snap cap base under the screws to keep the screws from protruding through the rail. If you do not wish to use the black snap caps you may substitute a suitable stainless steel washer or grind the screws shorter. Even with the snap cap bases installed, the original screws you took out of the top shield will protrude through the rail creating interference between the rails. Do not attempt to use the original #10-5/8" screws; use the new #10 x 1/2" SS Pan Head screws supplied in the kit. (fig 1A-3A) Center the Fixed Bracket on each male rail and try to keep the brackets at equal vertical locations on the rails. Do not over tighten the #10 screws or you may strip the threaded hole in the male rails. You may install the black snap caps at this time or wait until completion of the final adjustment.

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**4. (fig 4-6)**

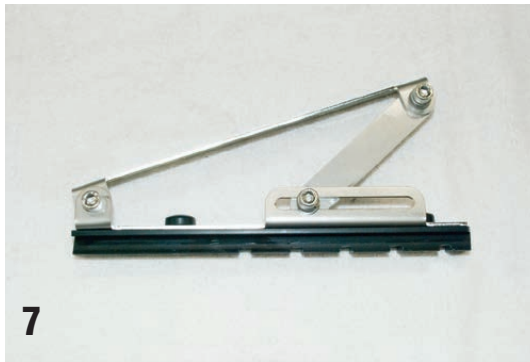
Now, attach each Swing Bracket to the Fixed Brackets at the pivot tabs with one M6x10mm cap screw and one Nylock nut. The Swing Brackets are identical. Locate the Swing Bracket tab inside the Fixed Bracket tab. The mounting surfaces of each bracket set should be parallel or you may have the swing bracket mounted to outside of the Fixed Bracket. This attachment should only be snug: allow the Swing Bracket to pivot on the Fixed Bracket with minimal resistance. You may need to slightly bend the pivot tabs so that the top tab on the Swing Bracket and the slide tab on the Fixed Bracket are flush as shown.

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**5. (fig 7-8)**

Attach the Adjustment Arm inside the top tab on the Swing Bracket and the slide tab on the Fixed Bracket by threading one M6x10mm cap screw, lock washer and flat washer into each tapped hole in the Arm. Do not tighten these at this time.



**6. (fig 9-11)**

Mount the Swing Brackets to the Top Shield with four M5x16mm button head screws, new snap cap bases, and M5 Nylock nuts. Insert the screws through the snap cap bases, then through the trim pieces you removed earlier, through the Top Shield, then through the Swing Bracket. Attach the nuts and leave them loose enough that the brackets can slide easily on the Top Shield. Additional vertical adjustment is available in the Swing Bracket for raising or lowering the top shield if desired. If you wish to lower the Top shield in the Swing Bracket far enough you may have to cut or sand off the bottom of the Top Shield for it to clear the windshield garnish on your bike.

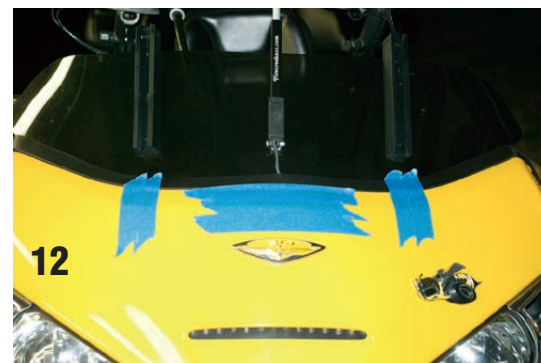


**11**



**7. (fig 12)**

Before you put your Top Shield back on the bike, you may want to protect the windshield garnish with tape as the shield will be loose and could slide into the paint.



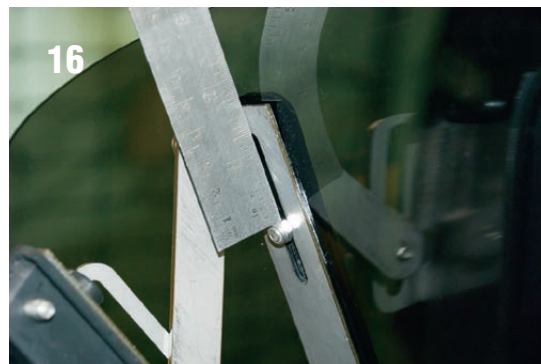
**8. (fig 13-15)**

Reinstall your Top Shield in the base rails on your bike. Put the manual adjust clevis pins in the top slots (shield in lowest position). Set the top shield height in the Swing Brackets to the desired height. If you have the electric option, align the top actuator mount in the shield (actuator in lowest position) by sliding the Top Shield on the Swing Brackets and insert either the new or old clevis pin (this will be the height of your top shield unless you wish to drill a new hole for the hollow bolt). If you do need to drill a new hole to set the Top Shield height to your desired point, you can simply fill the old hole with a black or chrome furniture plug available at ACE and other hardware stores – we've done exactly that and they look fine.



**9. (fig 16)**

At this point, raise the arms in the slide tabs in the rake bracket so the top shield is in it's most vertical position and tighten one M6 cap screw in each bracket. Square up everything up to make the rails equal height on the top shield. Give the Top Shield a little giggle to make sure all the pieces are lined up and can move freely. You may want to measure from the top of the Swing Bracket to the mounting nut to check for even height on each side. Tighten the four M5 mounting screws and nuts.



**10. (fig 17)**

The Top Shield should now adjust smoothly and you can start playing with your Top Shield rake angle by loosening the six M6 x 10mm cap screws in the adjustment arms. and bottom of the swing bracket attached to the male rail. We like it at about 18° from vertical (the top of the recurve on our HP/HPS is nearly vertical).



**Enjoy your new smooth ride!!!**