

GL1800 Windbender Top Shield Rake Adjustment Kit **Electric Option Supplement**

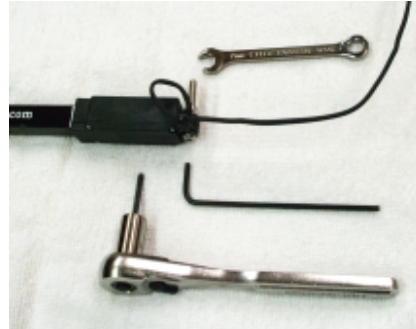
CAUTION: You will need to check for clearance between the actuator body and top shield as you complete this installation and adjust the height of your Top Shield. Use optional parts or make modifications to provide clearance as necessary. We make an Extended Rake Kit that provides 10mm more space if needed.

Tools:

- 7mm end wrench
- 2.5mm hex wrench
- 4mm drill bit (#21, 5/32")

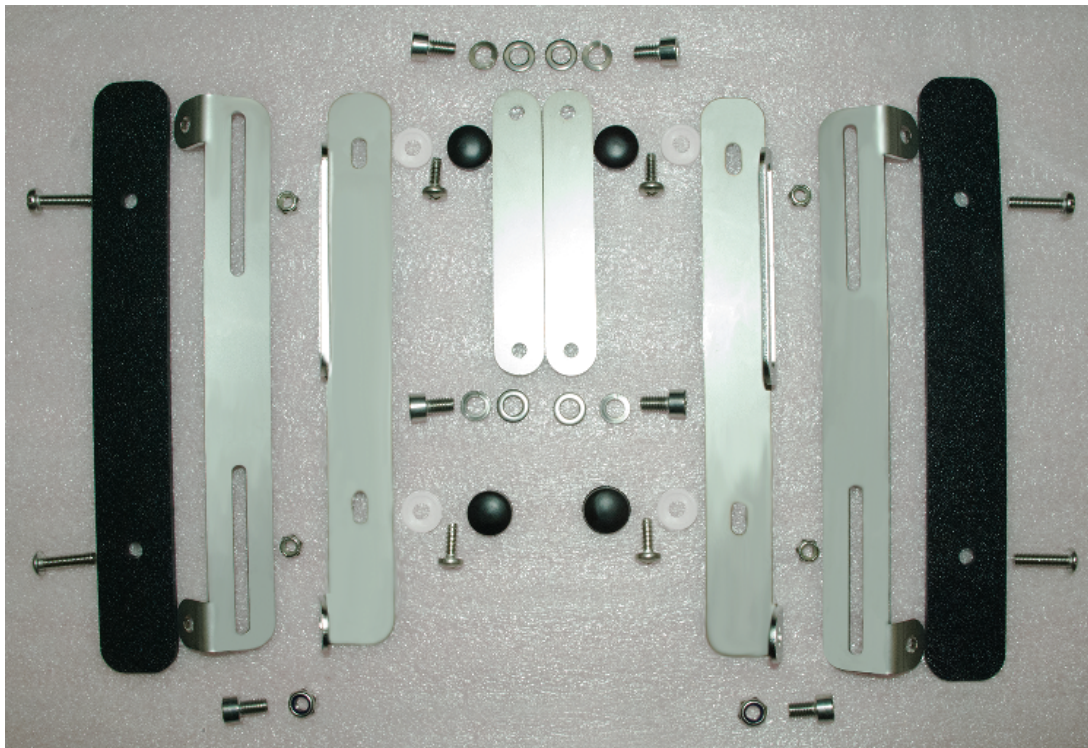
Parts:

- 1 M4 x 30mm Clevis Pin
- 2 R-Type Cotter Pins (one spare)
- 2 4mm Pivots
- 1 M4 x 20mm button head screw
- 3 M4 x 16mm button head screw
- 1 M4 acorn nut
- 4 M4 Nylock nut



Optional Parts:

- 2 Black ABS trim pieces
- 4 M5 x 20mm button head screws



1. Remove the lower actuator mounting screw and lead-wire stress-relief.

2. Actuator Modifications are different depending on which actuator you have.

Type 1 Actuator (square motor case – sold through early 2017)

Option 1:

A. Do nothing. Install pivots on both ends of the actuator.

Option 2:

A. Install with a pivot on the lower mount only.

B. Firmly holding the actuator motor case and piston shroud, turn the black clevis on top of the piston 90° counterclockwise (unscrew it). Use a clevis pin or 4mm screw for leverage if necessary. The whole piston may rotate, this is okay. You can remove the piston completely, rotate the clevis, then reinstall the piston.

C. Slightly ovalize the hole in the top clevis to accommodate the new shield angle. Use a needle file or appropriate size drill bit being careful not to remove much material from the top of the clevis.



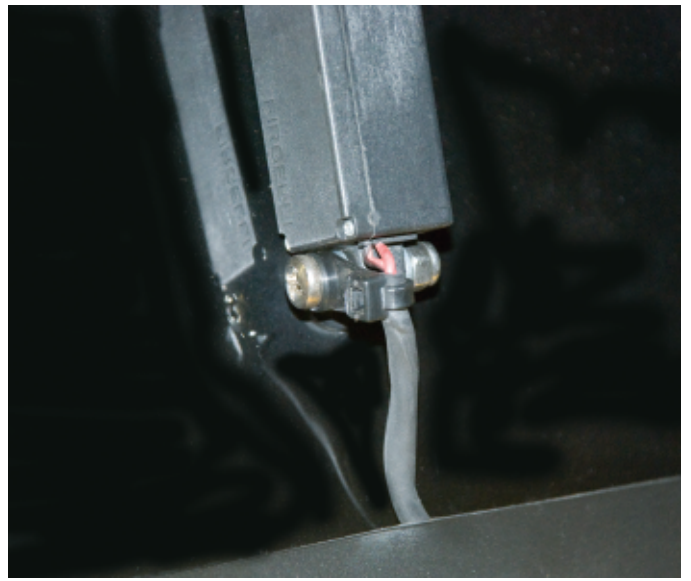
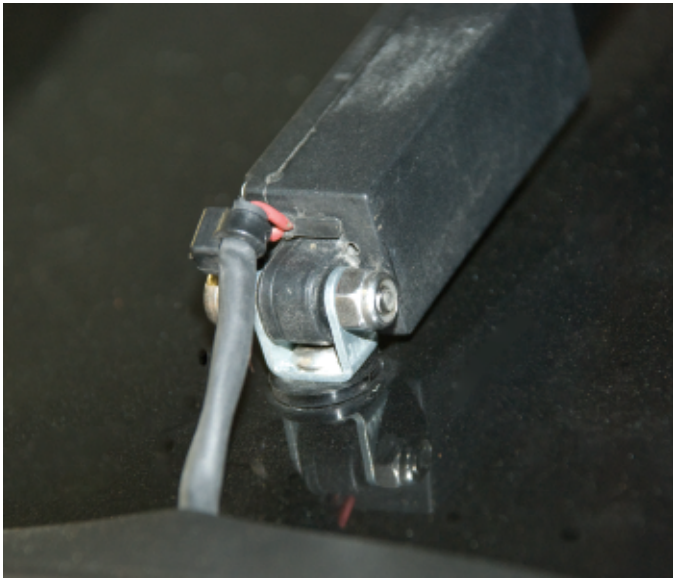
Type 2 Actuator (oval motor case – current version)

A. Drill a 4mm hole in the lower clevis of the actuator case perpendicular to the existing hole.

B. Sand or file the clevis sides so that a pivot will fit over the new hole.

C. Mount one pivot to the Windbender Base Unit with an M4 x 16mm screw using the nylon shoulder washer, flat washer and lock-nut that come with the Electric Option kit. The pivot should be only tight enough to not rattle.

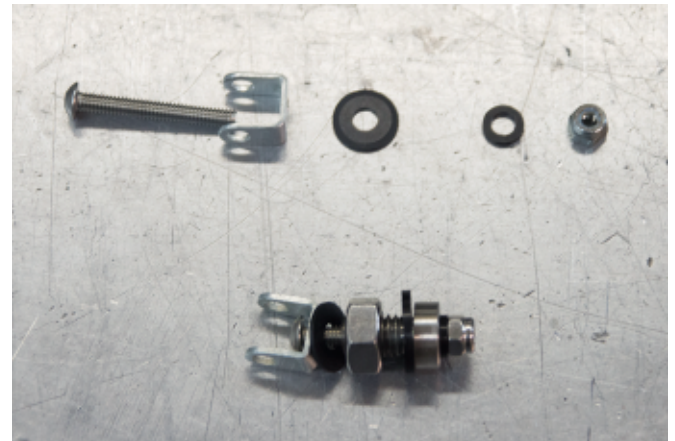




3. Mount the actuator and stress relief to the to the pivot on the base shield with an M4 x 20mm screw. You may use a 16mm screw if you don't use the stress relief. Tighten the assemble so that the actuator can still move in the pivot with minimal friction.

4. Check clearance between the Top Shield and actuator. If needed, install a black trim piece between the Top Shield and each Rake Kit bracket using M5 x 20mm screws and snap caps.

5. Tighten the stress relief around the actuator lead wires or zip-tie the lead wires to the piston housing.



6. Actuator top mount

Type 2 Actuator and Type 1 Actuator-Option 1

A. Install a pivot on the Hollow Bolt in the Top Shield with the 25mm screw, nylon washers and cap-nut. Use medium strength thread locker and tighten so the pivot doesn't rattle but can be rotated by hand.

B. Attach the actuator top clevis to the pivot with the original clevis pin or 16mm screw and lock-nut.

Type 1 Actuator Option 2:

A. Use new 4mm clevis pin with R-type cotter pin through the hollow bolt. Do not attempt to use the original detent ball clevis-pin on the top actuator mount with a Rake Kit. The actuator will fall off and your flying Top Shield could cause damage, injury or worse!!

NOTE: If your Top Shield touches the actuator with the rake kit installed, you can remove the black nylon flat washer from the lower pivot mount and reverse the black collared washer so that the pivot fits flush against the Base Shield.

