

Fixing "Rudder Flutter" in the Logitech Wingman Extreme Joystick

Originally posted at "Wings of Valour" and here reprinted with updates because you bastages are too cheap to buy a new stick.

"OK I need DETAILS!!!!!!!!!!!!!! Tell me exactly how to do it, and remember anything with an exoskeleton doesn't have a lot of brain capacity!" – BA°Grasshopper
"My god! That is exactly how I did it, right down to the 5-10 attempts to get the handle halves to fit together properly." – J9_Hammer
"If I send the 10\$ along with my joystick to you would you fix it? Thanks for the instructions!" – BA°Grasshopper
"Someone needs a bigger "honey do list". – RAC_lil'Sparrow
"Incontheivable!!!" – RAC_Cloudnine
"Whatever you have been prescibed Pepe..... put some in the drinking water eh? Too funny....." – BA°Tinkerbelle CO
"Thank God we have some one like Pepe!" – *AA* Lt Col Trouble4u~ACO~
"Pepe is a genius. Or a complete moron... Funny either way!" – ^EAC^Cpl.Neobaron434
"...a Debauched stinky alcoholic skunk" – NZ_Reckless

1) Remove the three screws in the handgrip and separate the two halves of the handgrip. Struggle in vain to separate the two halves of the handgrip. Find and remove FOURTH screw in handgrip. Finally separate the two halves of the handgrip. At this point a lot of buttons and parts will fall out on the desk. I don't worry too much about this as it's not my joystick.

2) Hunt around under desk for all the parts that fell out:

- two halves of handgrip
- trigger with spring
- hat switch circuit board
- 2 silver function buttons
- 3 (er, 4) screws
- black plastic curved thingy that locks/unlocks twisty action
- assorted paperclips and M&Ms

3) Eat M&Ms if not too dusty. Throw paperclips back on floor. Locate twisty control potentiometer which is inserted into white vertical post of stick. Slide potentiometer out of the white post and spray it with contact cleaner or swish it in alcohol. Rotate it back and forth several times to ensure it is clean and the alcohol gets inside it to wash out any residue.

4) Pop the plastic throttle cover ring (with the hex bolts) off the base of the stick. Surprise! The hex bolts are just dummy bolt heads and can't actually be unscrewed. Now discover the ring won't fit over the hat switch circuit board. Unplug hat switch circuit board carefully to avoid breaking the wires. Now remove the black rubber dust boot. Wipe grease off hands onto pants. It's OK, they're not my pants either.

- 5) Invert base and remove screws. Separate two halves of base and remove throttle ring. Wipe hands on pants again.
- 6) Locate two potentiometers that are at the base of the white universal joint assembly. Spray these with contact cleaner and wiggle them around or remove them and swish them in alcohol. If you use ethyl alcohol you can swish yourself in some at the same time. The potentiometers are anchored in place with metal friction clips -- you will need to haul these suckers out with pliers. Now apply alcohol to pinched finger where pliers slipped and also apply to gouge on forehead that occurred when potentiometer finally released and you whacked yourself. To get at the potentiometers you may need to remove the white universal joint by undoing the 4 chromate screws. You may need to unplug the potentiometers from the circuit board. You may need to buy a new stick and possibly more band-aids.
- 7) Replace potentiometers in base, ensuring that the black "ball" ends fit the slots in the universal joint assembly. Cut yourself on the metal clips. Put alcohol on cuts. Curse and wipe alcohol off cuts again. Apply band aid and note they will not stick as you're covered in grease. Wipe blood and grease from hands onto pants. Reconnect wires if required.
- 8) Put the two halves of base together and replace throttle ring so it hooks over throttle control. Wipe hands on pants. Replace screws in base. Replace rubber boot and snap on ring (be careful to align snap clips on the ring with the holes in the base of the boot.)
- 9) Reconnect the hat switch circuit board wires. Invert left side of stick and insert two loose buttons then slide hat switch circuit board in place to secure them.
- 10) Mount left side of stick on white pillar and insert rudder potentiometer into hole on top of pillar. Align ball on potentiometer with slot on stick.
- 11) Reattach trigger. Replace black curved "lock" at base of grip. Wedge side (not curve side) goes toward the white pillar, and slotted end goes toward the throttle if you want the twist to work properly.
- 12) Make sure twist control wires are clear and snap right half of stick onto left half of stick.
- 13) You dropped it on the floor. Repeat steps 9-12 several more times before getting halves of stick to snap together. TEST THE TWIST MOTION. Rats, it doesn't twist. Pop it apart and try again. Eat any additional M&Ms you found while looking for all the parts that fell out when you had to unsnap it. Repeat steps 9-13 several times until you can get it assembled AND twisting. If you use ethyl alcohol, swish some around in your mouth to sterilize the M&Ms. You never buy M&Ms so the previous owners of your home must have left them 10 years ago. Make note to vacuum more often.
- 14) Replace 4 screws in grip and recalibrate stick. Wipe blood and grease off stick. Buy new pants or put old pants with grease stain into laundry with wife's old lipstick in order to deflect blame away from Red Baron related activities. Send \$10 to Pepe. If you have leftover parts or screws, throw them on the floor so you will find them next time you disassemble stick. Tell wife you love her just as she is and she doesn't need new lipstick.
- 15) It figures that anyone who would eat dusty M&Ms off their floor would be too cheap to buy a new stick. I'm not holding my breath for the \$10 either. And if your wife asks, I'm telling her about the pants.