The Dirty Pot Jitter Blues

by Steve Thompson

So you say you have the jitters, you say your servo keeps talking back to you, you say it doesn't want to return to center.... is that what's bugging you bunkee? Well you have the dirty pot jitter blues.... and thanks to ***Tony Ohm*** *of* ***Hitec RCD*** *the fix is in...*

How to clean your **pot**entiometers in seven easy steps. The pot can get moisture or dust in it (my theory is it generates carbon dust over time). All this leads to bad contact or shorting along the track in the pot and bingo, jitter. Time to clean it. You could send it to Hitec for cleaning or **O'*yea baby!*** get your tools out.

Figure 1

You need two small screwdrivers (phillips and standard), a pair of pliers and some zero residue contact cleaner, spray or pen (fig 1).

1. Remove four screws and separate the bottom and top from the servo case.

2. Remove the gear train. Some will fall off, the others just pull off with your fingers. Take a good look at how they are placed, the plan is to put them back the way they were.

3. Remove the circuit board and drive motor from the case by pressing down on the drive motor head with the small standard screwdriver, (fig-2). Do not pull on the circuit board or bad things could happen.

Figure 2

Figure 3

Remove the nut holding the pot and pop it out (fig-3). Take a good look at the pot and note now the small piece of tape insulates the three contacts from touching the pot casing. You'll need to recheck this in step 7.

Ok here is where we have two ways to go. ***The faint of heart***...spray contact cleaner into the pot and work the pot around to clean the contacts and then jump to step 7. ***The reckless*** ... go on to step 5. .

****** CAUTION THIS IS NOT RECOMMENDED BY TONY ******
(but...it's the way I do it)

5. Open up the pot by bending back the three prongs and removing the top (fig-4)

6. Blow out any dust and apply contact cleaner. Clean the tracks and contacts with the cleaner pen (fig-5). **Be careful not to bend anything!** Let it dry for a few minutes and put it back together re-bending the tangs down tight. It will go to together three ways, two are wrong. Look before you push.

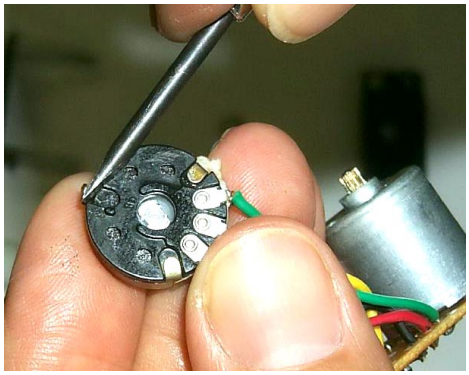

Figure 4

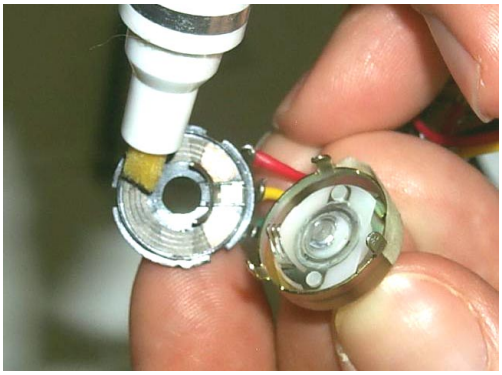

Figure 5

7. Check the pot wiring, re-install the pot into the case, reseat the motor and circuit board, reinstall the gears and close it all up.

Test the servo for jitter. It should have gone away if not... well clean it again. In two years of sailing I've had two servos get the jitters. The first I cleaned about a year ago and it is still going strong. The second, I cleaned last night in about 10 minutes (not counting stopping for photos)..... Hey if I can do this anyone can...

....fair winds ...../Steve