## Yuneec Typhoon H – Landing gear, driving shaft bent

One reason for malfunction of the landing gear is a bent driving shaft. The motor needs more power to overcome the bent area of the shaft and detect this as fence and switch off the motor before the landing gear is up. Reason for bent shaft is a crash or hard landing.

Let's see if we can unbend the driving shaft. But for this we have to disassemble the whole drive for the landing gear.



It makes sense to have a closer look into it before we strip down the whole stuff. Here are all the parts we get.



Bye the way, this is a good moment to spent an anti-interference capacitor to the driver motor. We need a small 100nF (imprint 104) between the motor connectors.

To unbend the shaft we need a spacer sleeve with internal thread M3 nearly as long as the shaft.



If the shaft is in order, the spacer can easily be screwed all the way to the end without jamming or getting hard.



Here we have a bent shaft, which can even be seen in the picture. The spacer can only be screwed up to a part of the shaft and then goes tight:



Let's try to unbend. Clamp the spacer in a vise and screw the shaft into the spacer till it goes tight.



**Important:** Go one or two turns back to avoid a double bent shaft. Check, in what direction the shaft is bent during screwing. Then try to unbend the shaft by hand, a small rubber-tipped hammer or

something like that. Check/unbend again and again until the shaft goes easy into the spacer without any resistance.



At the end we clean the thread with a M3 threading dies, do not forget cutting oil. Check again with the spacer, if everything is going smooth.

Then we have fun with the tiny parts to assemble all the stuff. A big help is to fix the parts with a little bit acid-free fat (lubrication and assembly paste).

To test the results of our work try to move the landing gear in both directions with a 1.5V battery. It should work smooth and sound "healthy".