

INSTRUCTIONS TO CHANGE THE SHAFT ON A STEPPER MOTOR

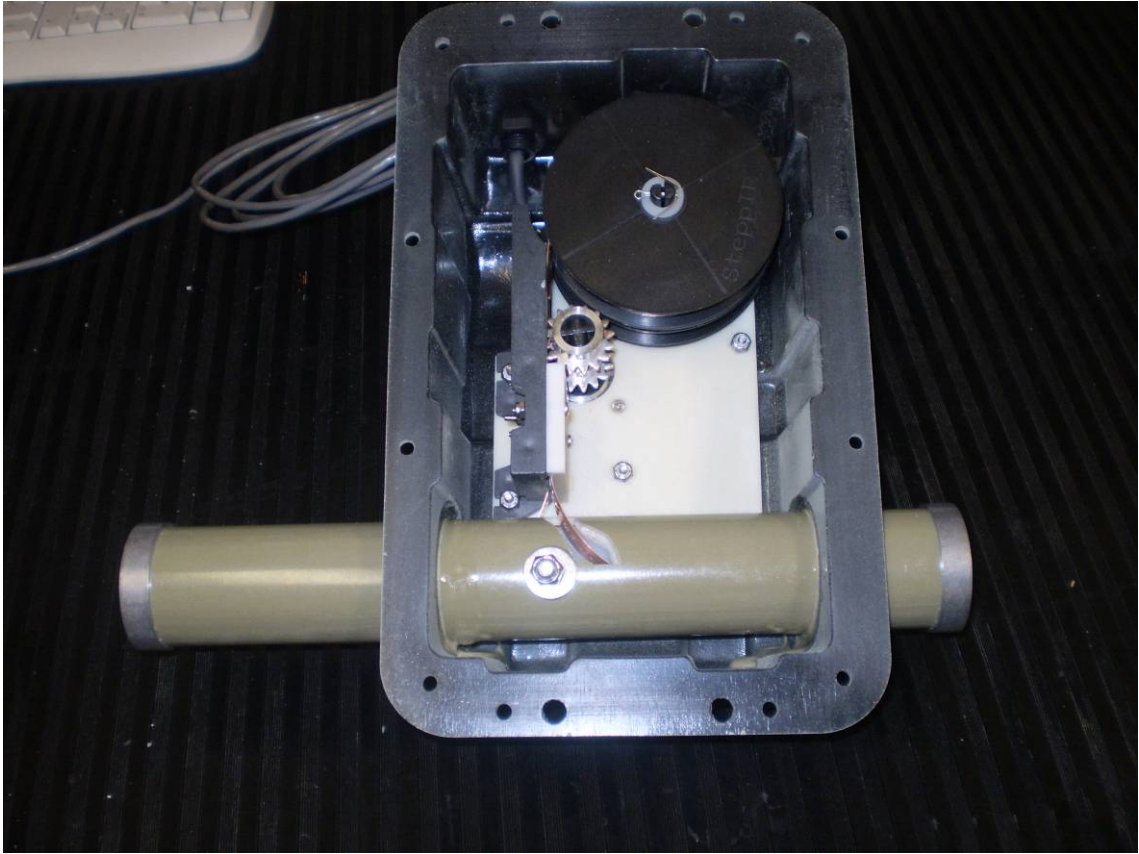


EA1AHY, EA1YO Y EA1CCW

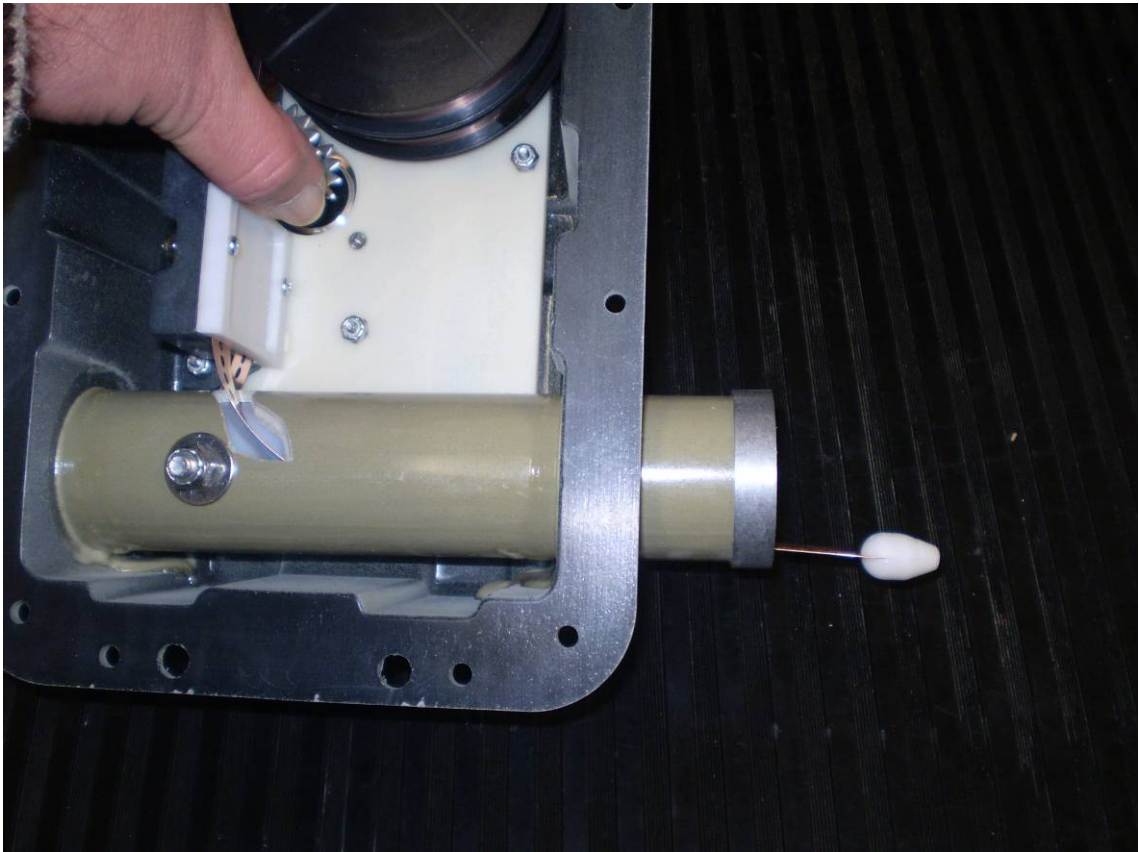
By Hams for Hams. The manual is completely free for any use but you should mention
the source.
Good Luck!!

Torrelavega, December 2008

73, Pedro
EA1YO

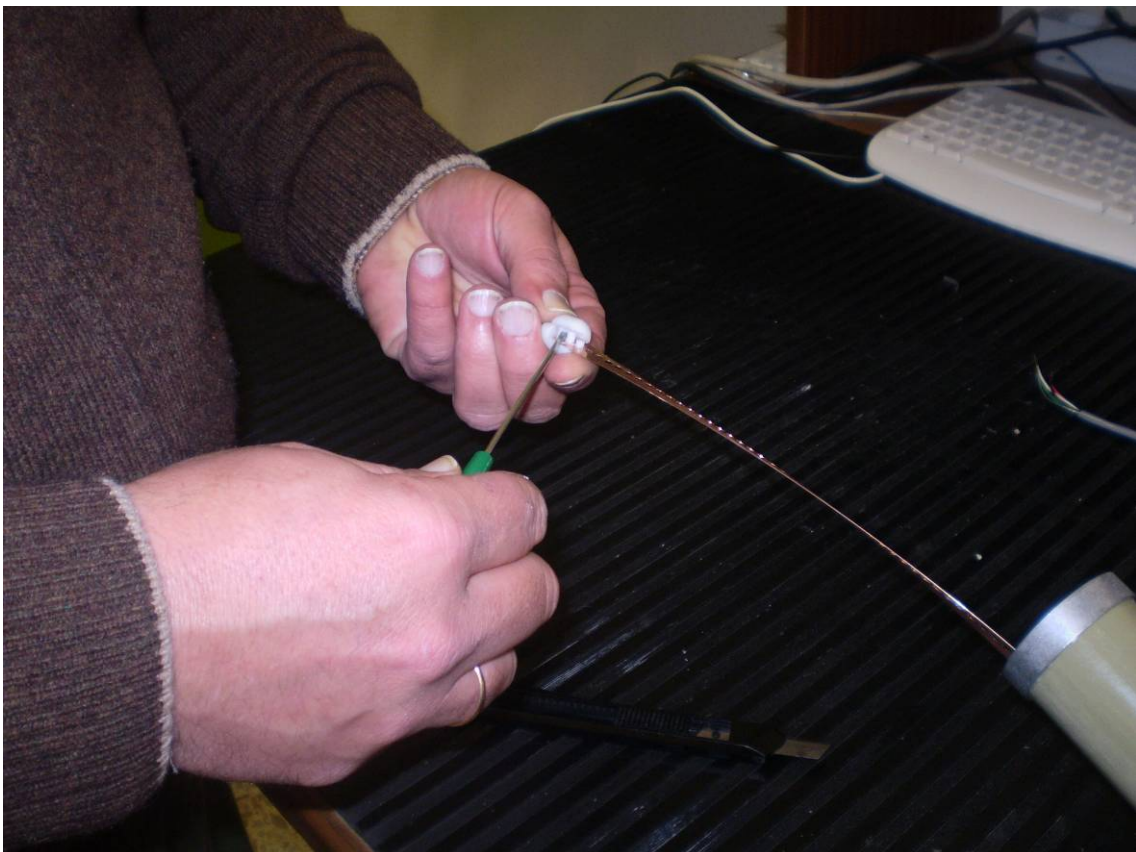


1. Take out the copper tape turning the shaft by hand



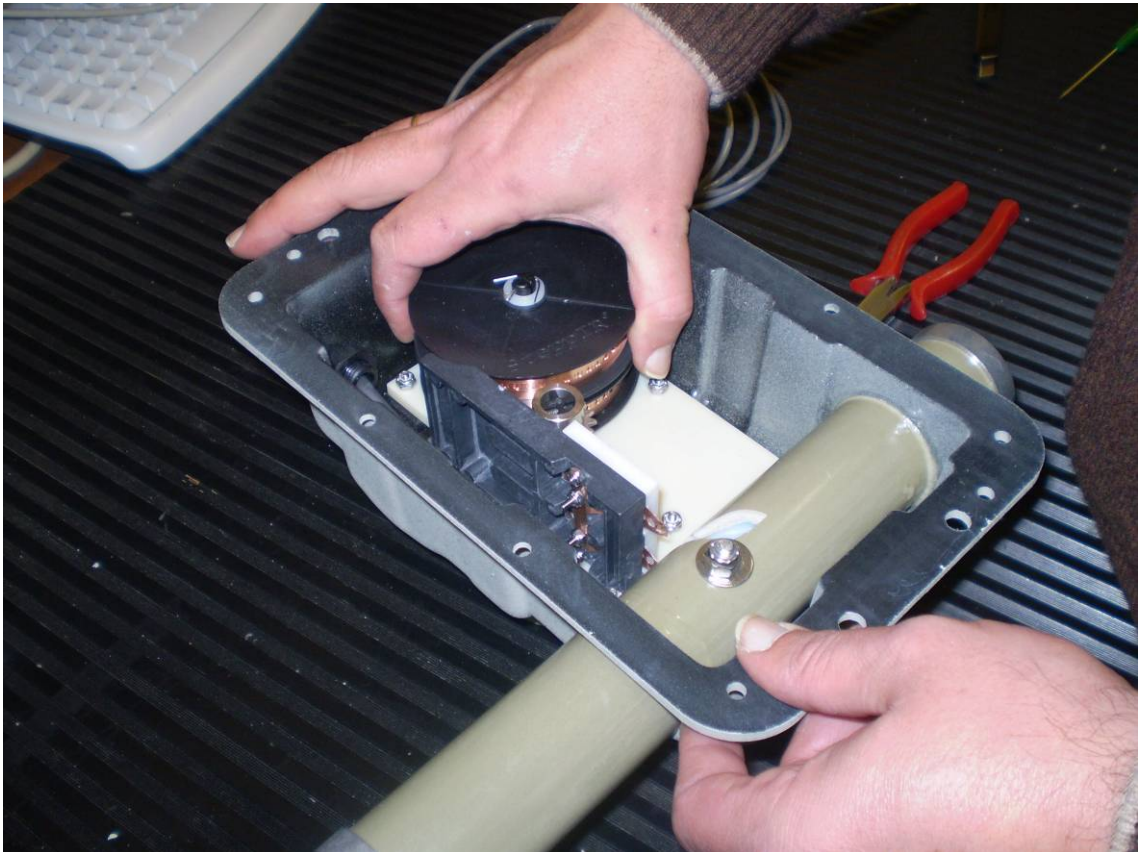


2.- With the help of a cutter (or a razor) and a small screwdriver dismount the end on the tips of the copper tape

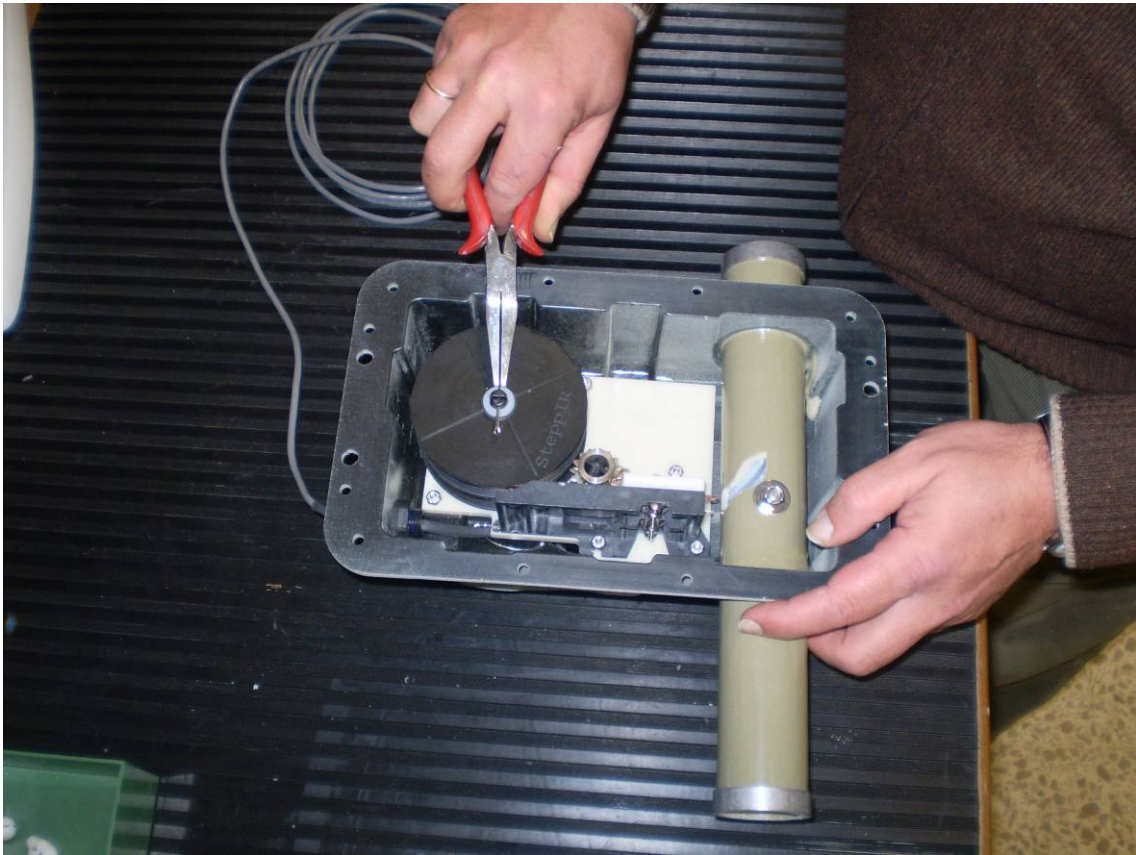




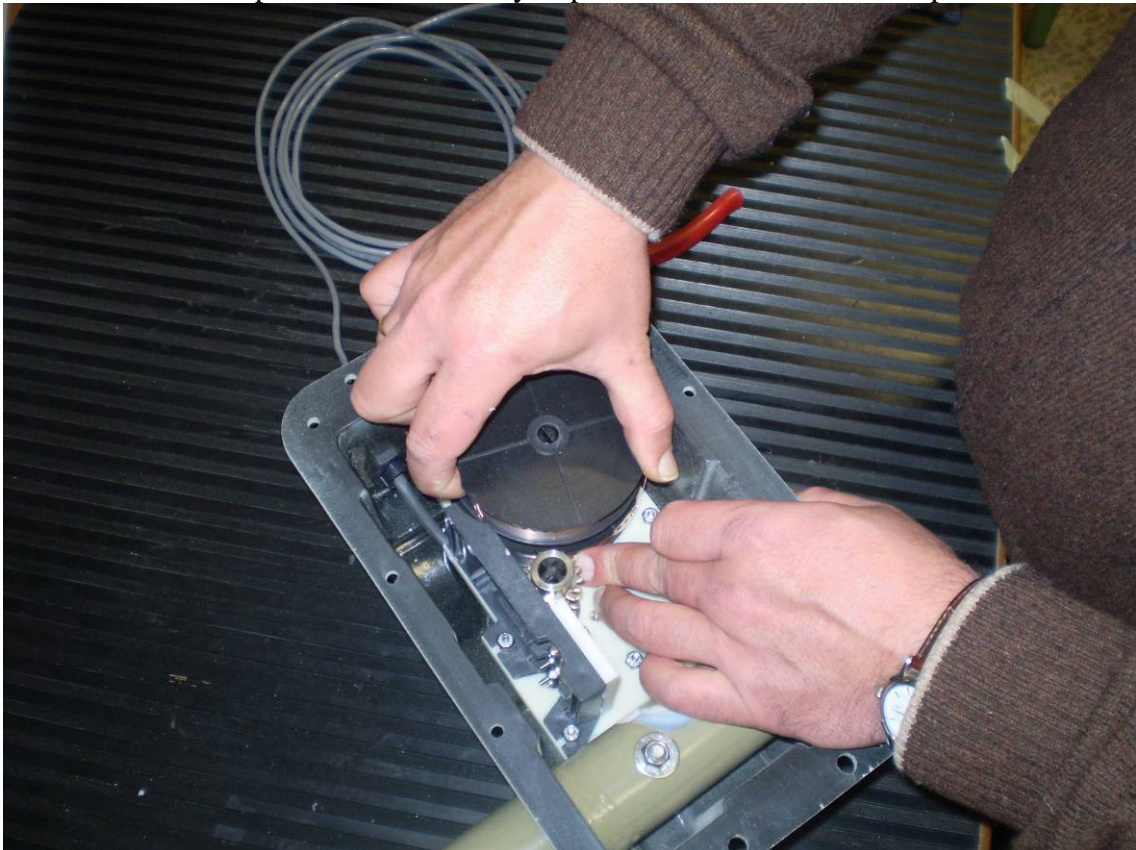
3.- Retract the copper tape till the end avoiding to get it out of the sprocket



4.- Take out the pin at the reel



5.- Holding the copper tape with the hand on both reels, retract the tape completely and take apart the reel carefully to prevent the unwind of the tape



6.- To prevent unwind, stick the tape to the reel with adhesive tape



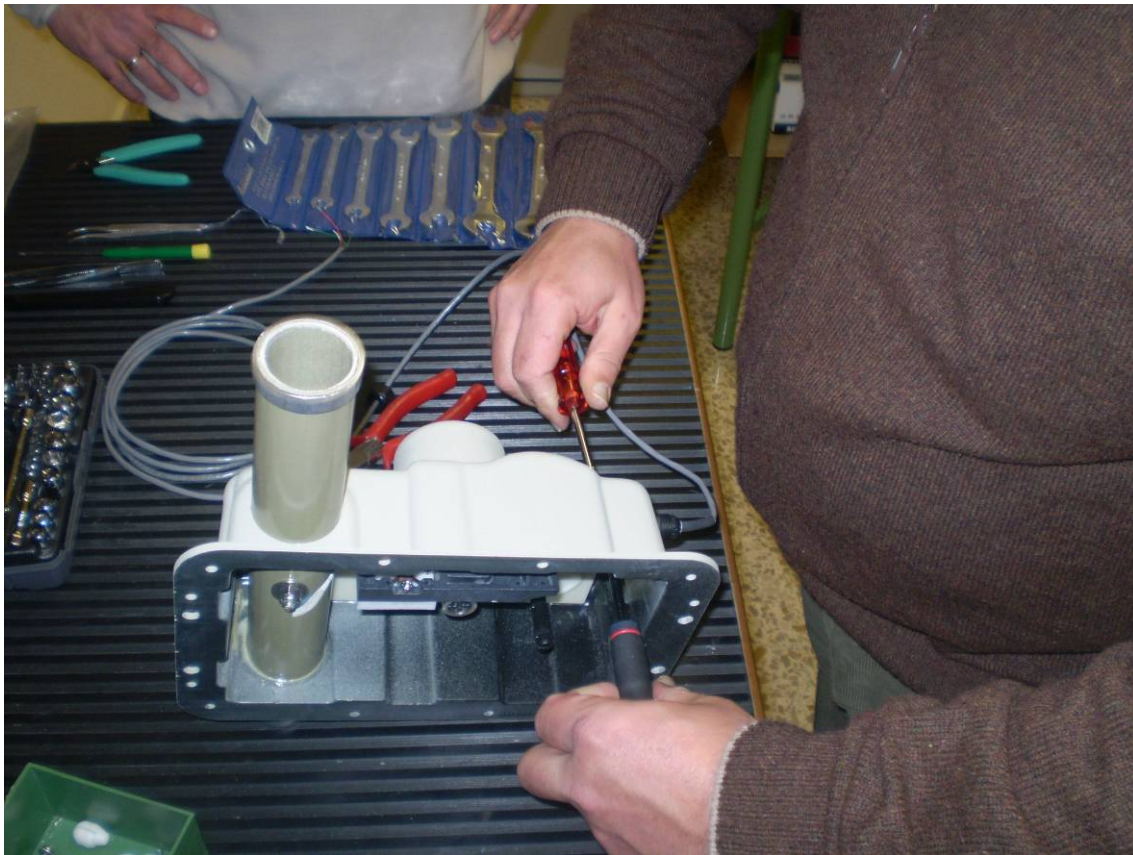
7.- Unscrew the nut on the cable holder



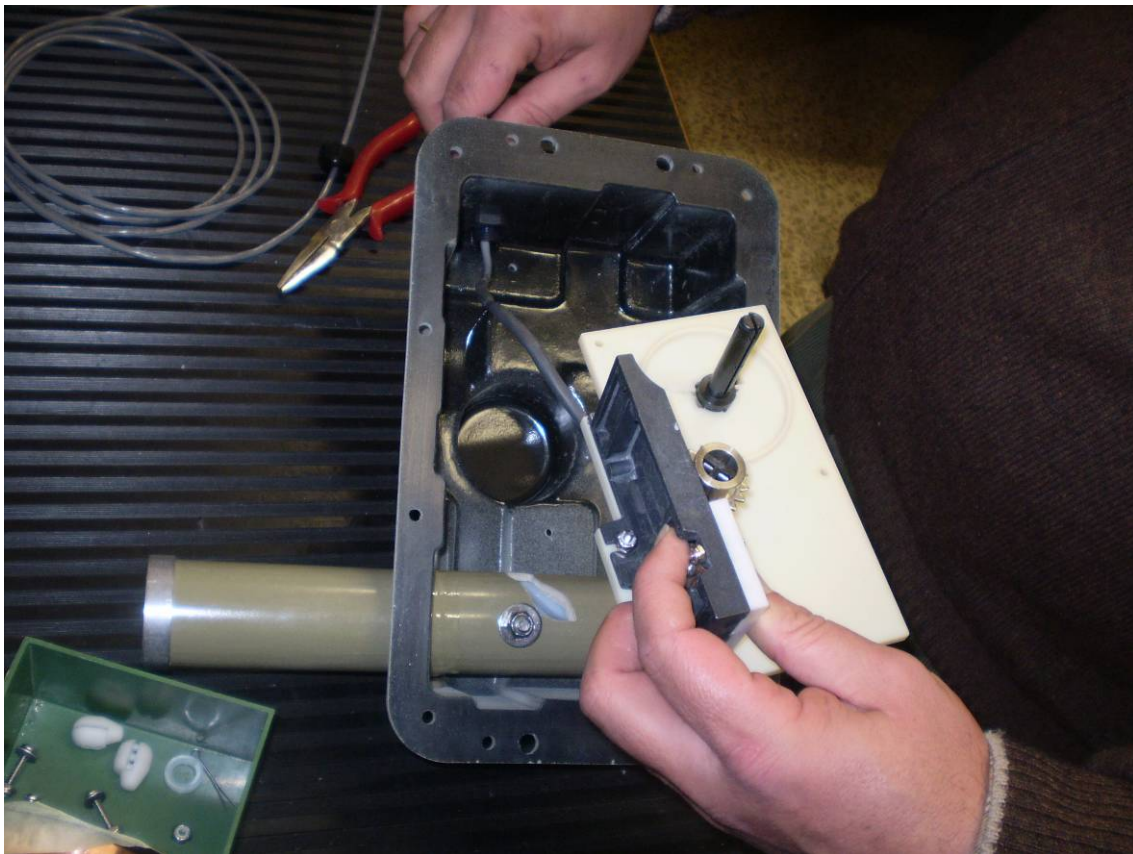


8.- Unscrew the 3 screws that hold the motor plate





9.- Take out the plate inserting the control cable through its hole



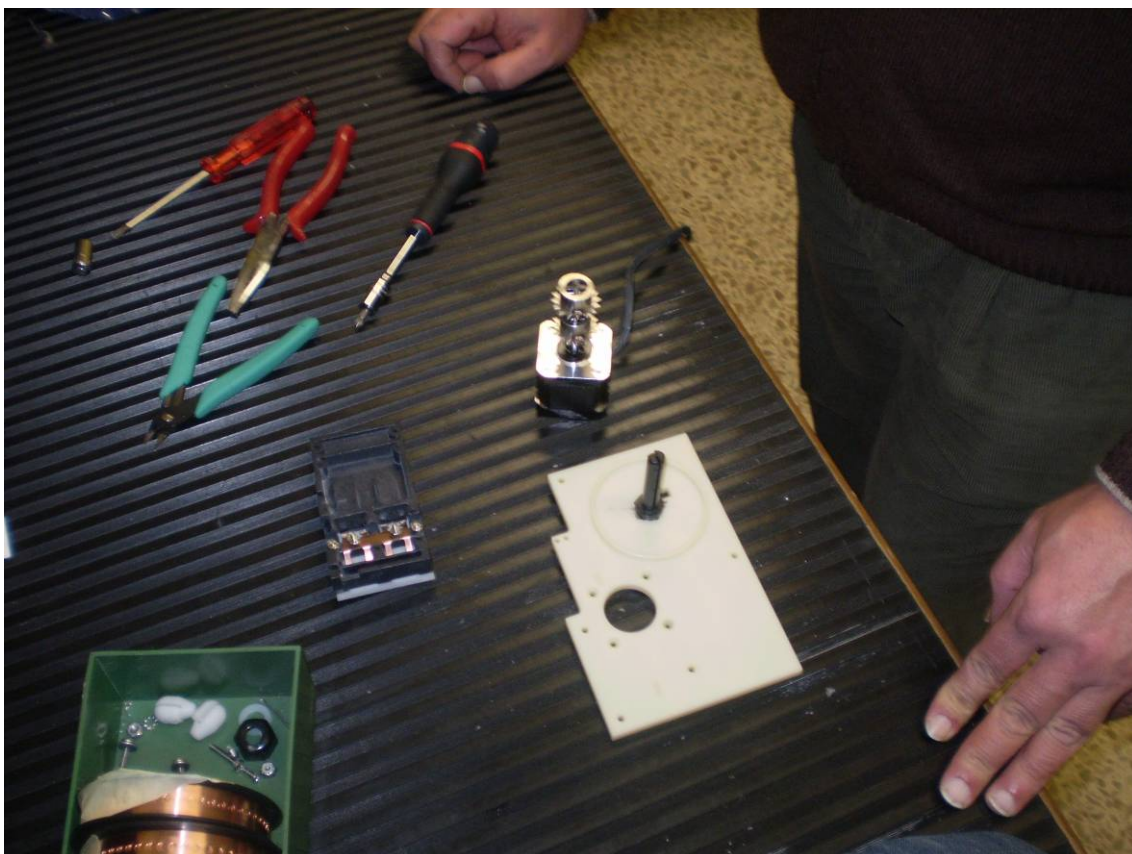
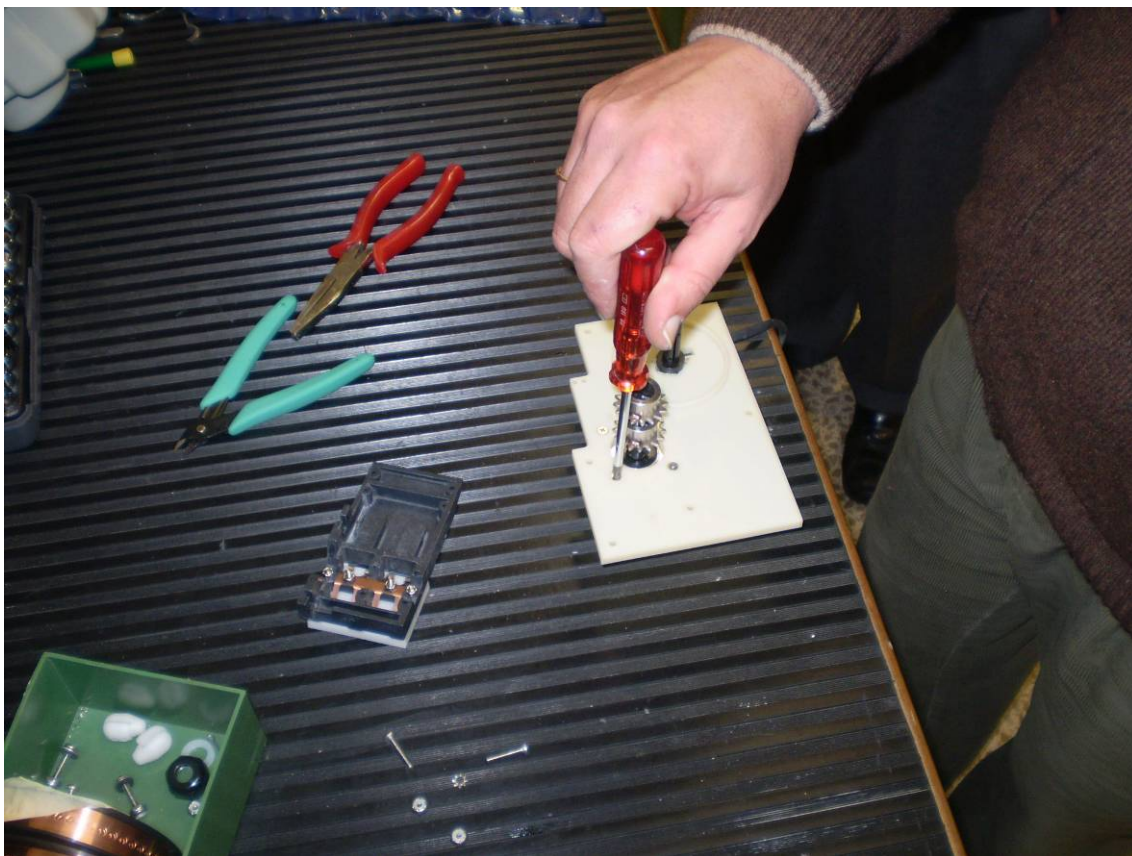
10.- Cut the plastic bridle that holds the cable in place



11.- Unscrew the 2 screws that holds the contact plate



12.- Unscrew the 4 screws that hold the motor against the plate

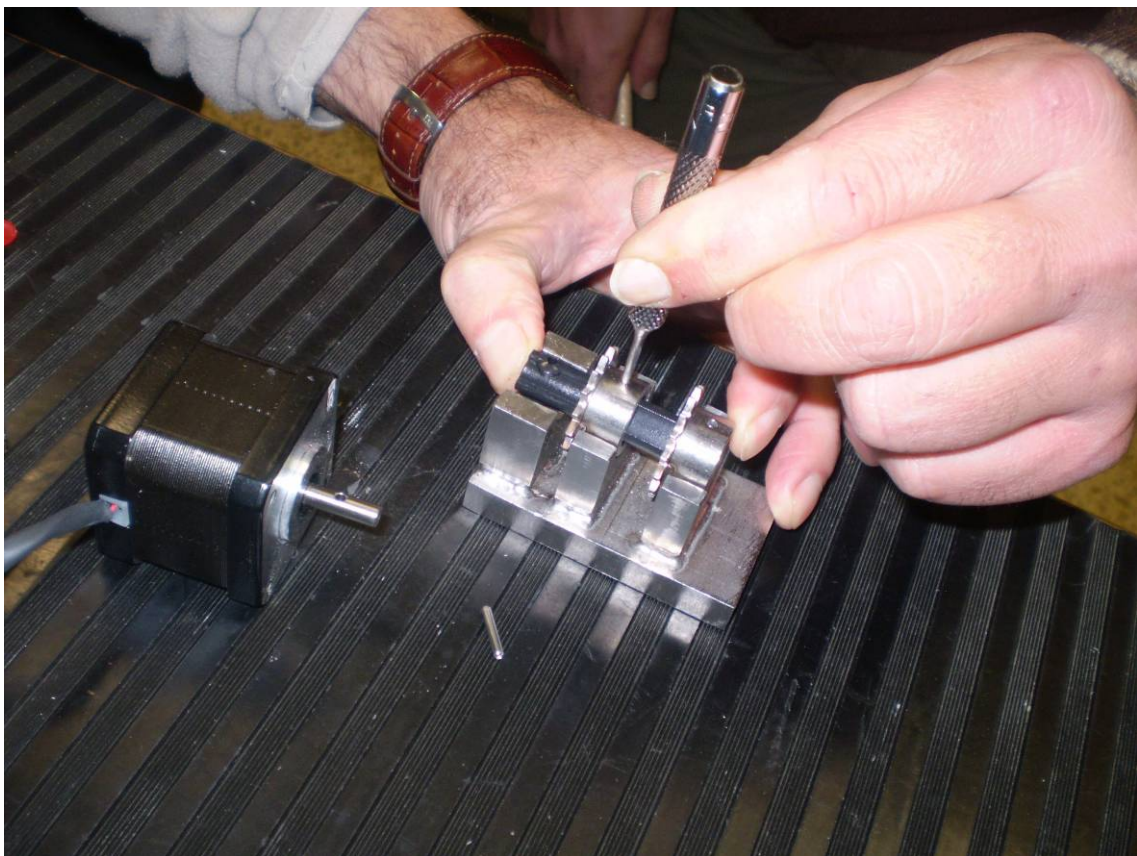


13.- Over a metallic support and with the help of a pin insertion tool take out the pin located at the bottom





14.- Take out the pins that hold the sprockets in place





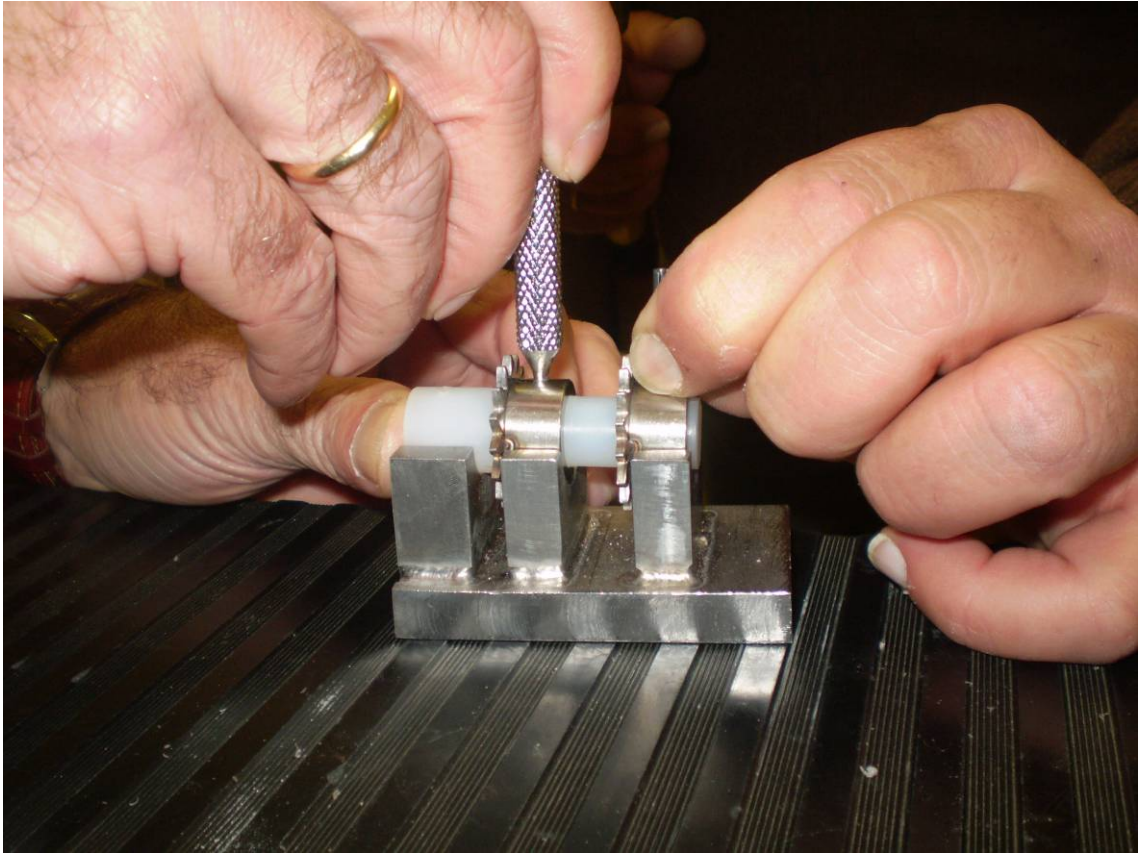
15.- Insert the sprockets on the new shafts and align with the holes



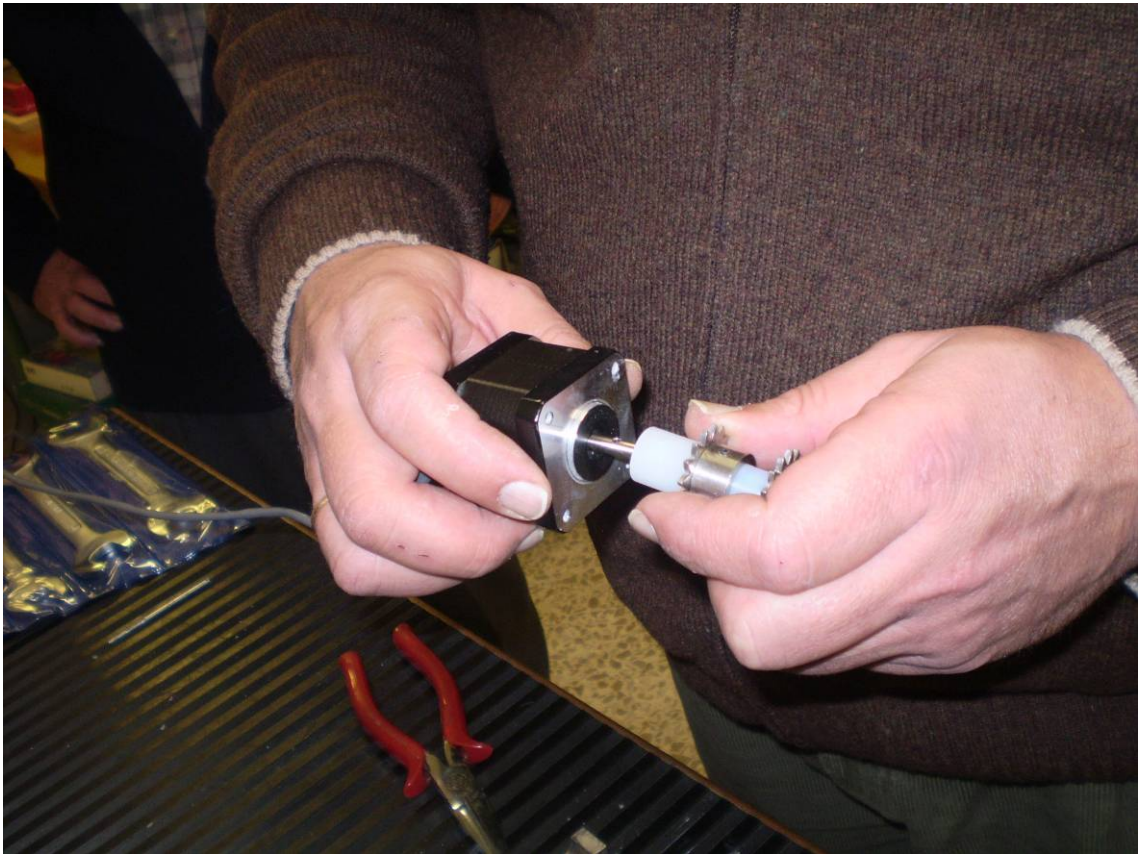


16.- Reinsert the pins on the sprockets using the originals pins



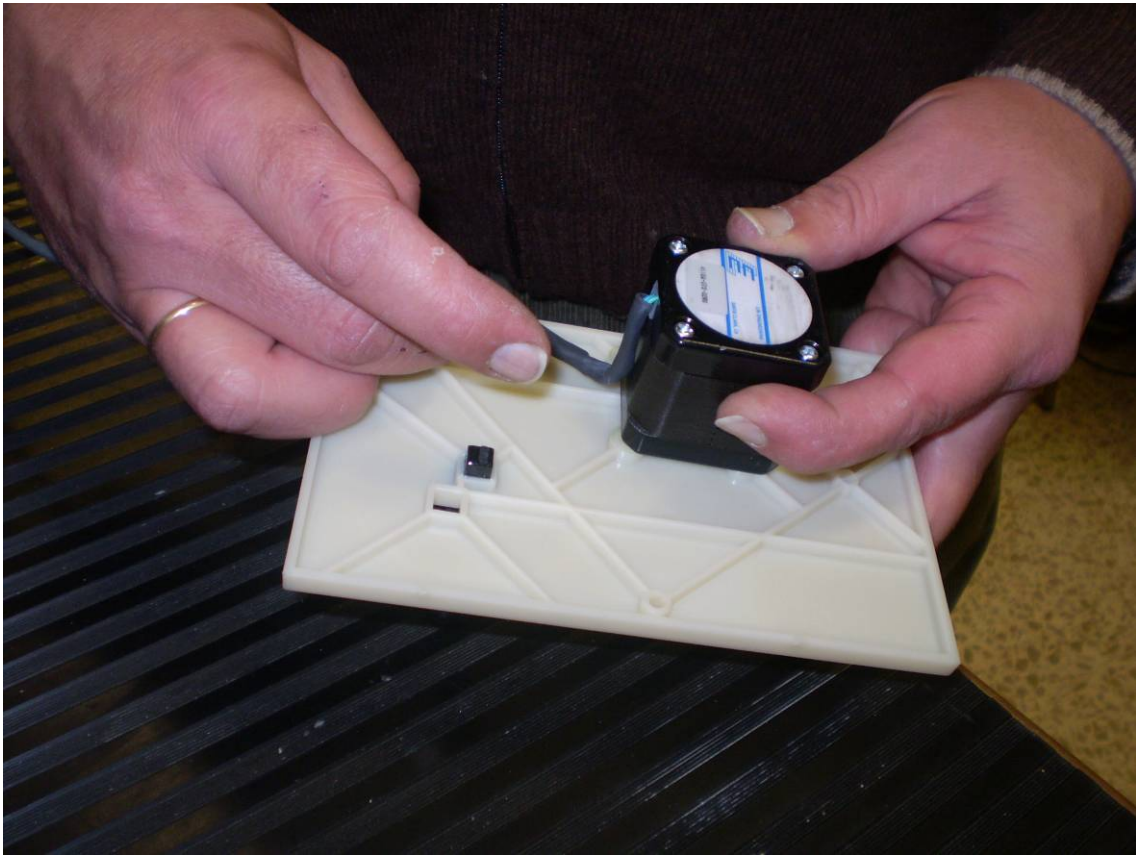


17.- Install the new shaft in the motor, align with the hole and insert new pin



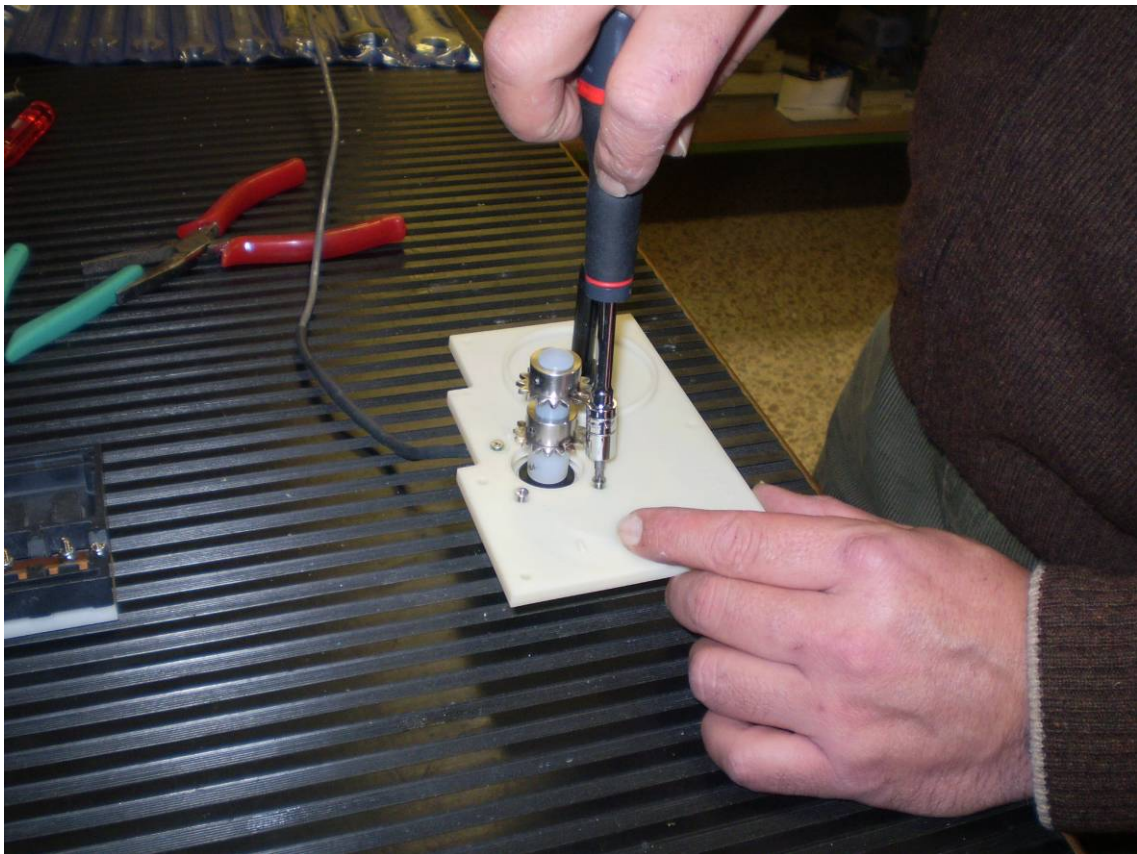


18.- Mount the motor back over the plate

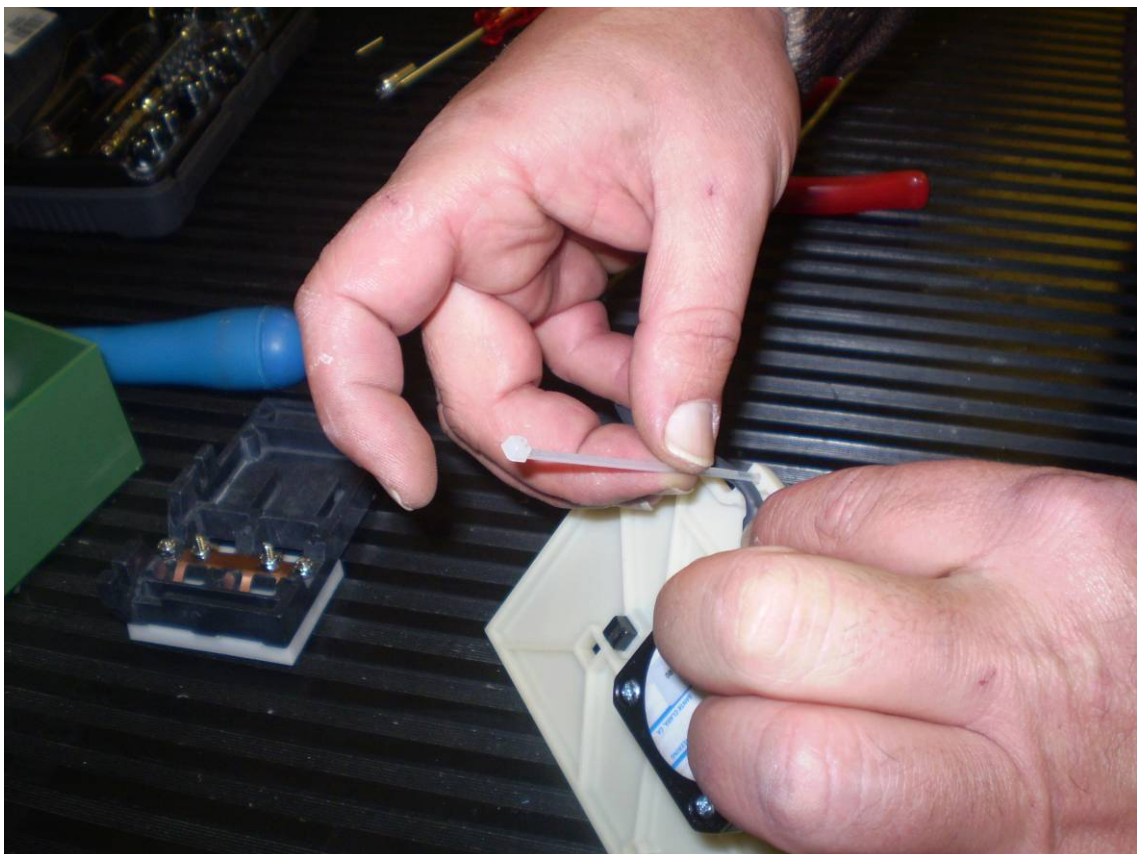


19.- Apply a little amount of Loctite anaerobic sealant in the holes and tighten the screws. **When tightening screws that hold the motor to the plate do NOT over-tighten screws.**





20.- Put the cable in place and hold with a plastic bridge

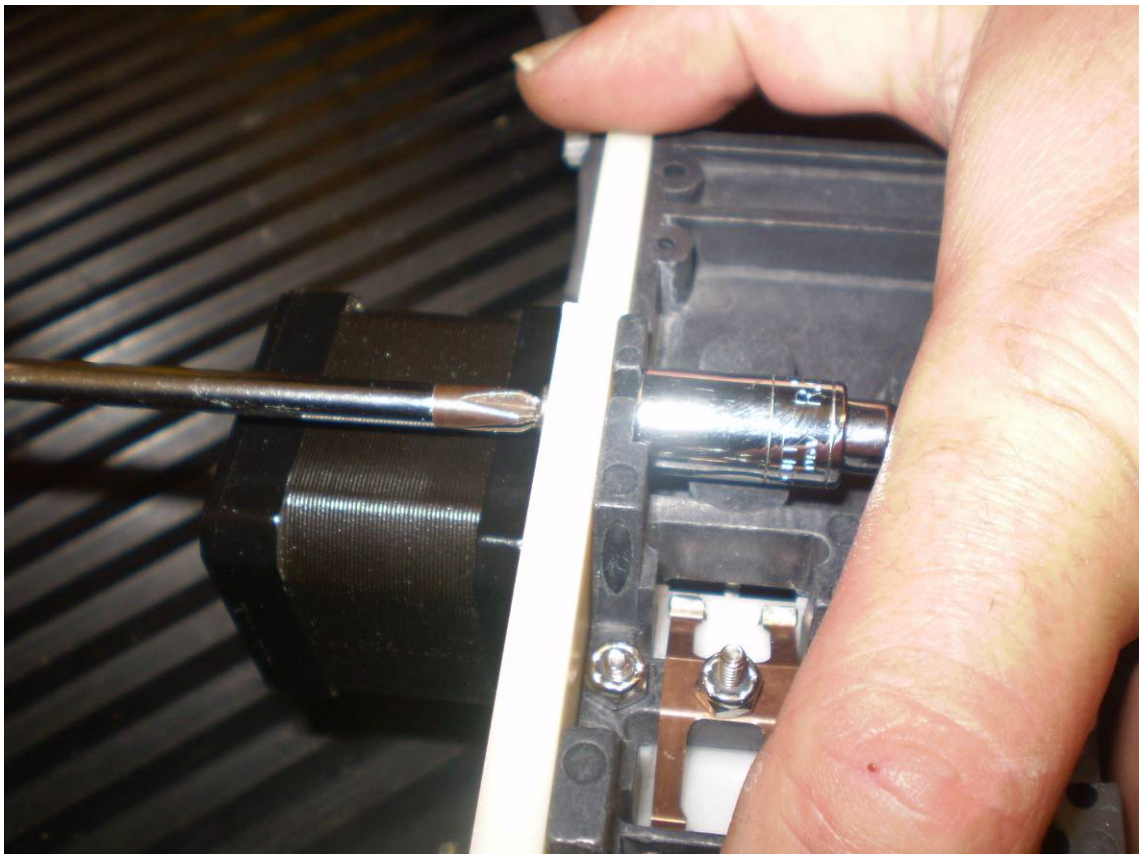
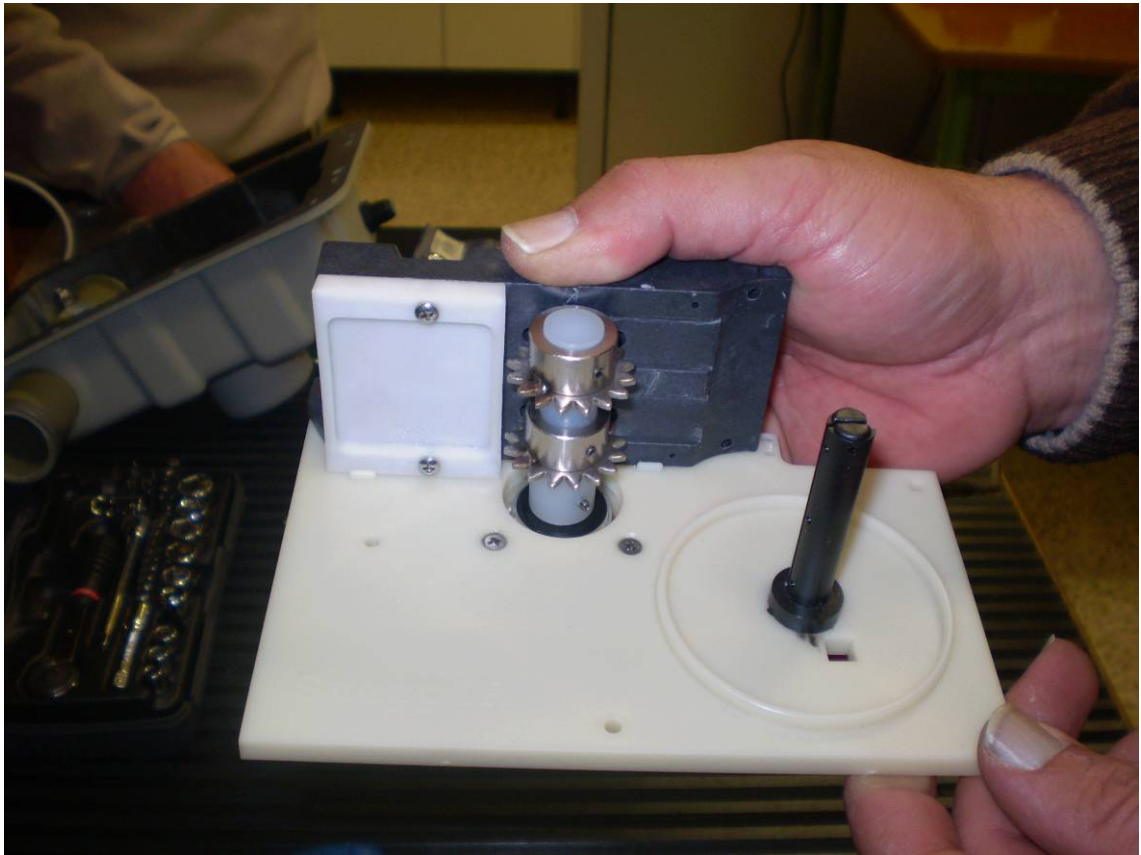


21.- Cut the remaining bridle

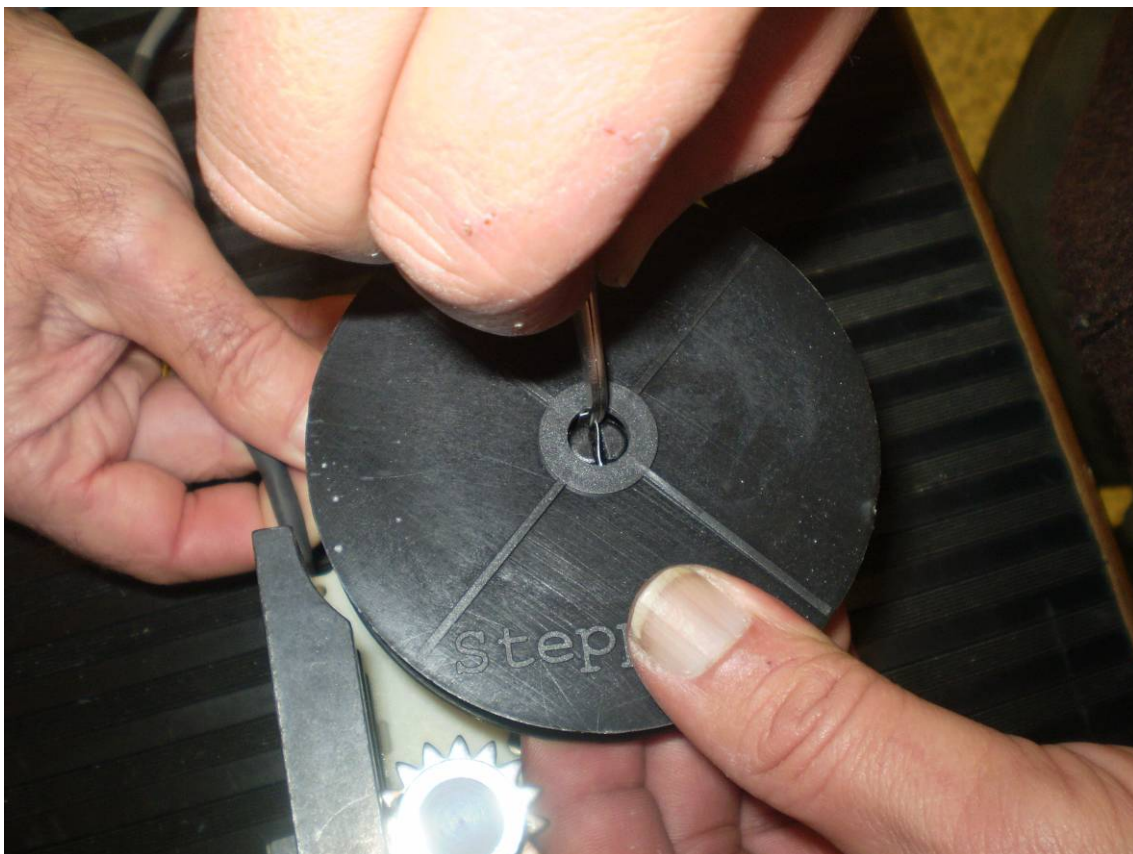
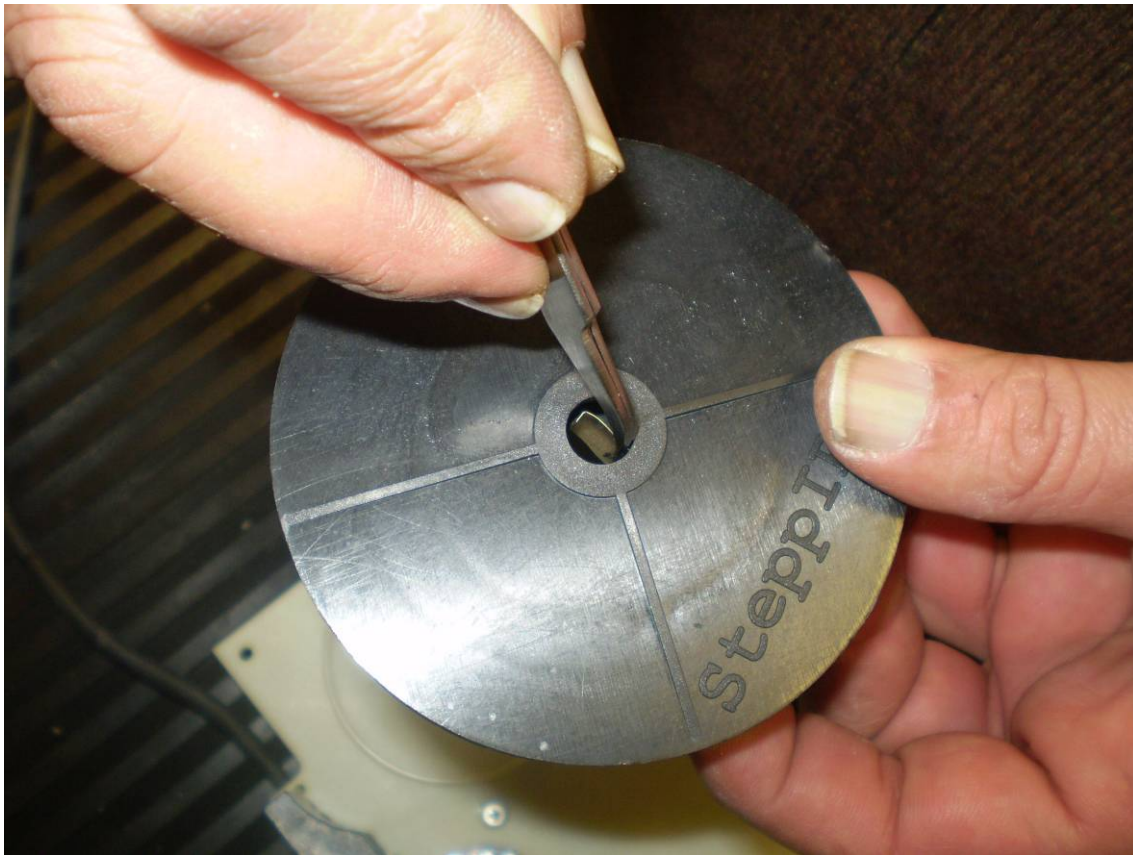


22.- Reinstall the connection plate and its screws. Make sure it is firmly and well inserted on its position over the motor plate





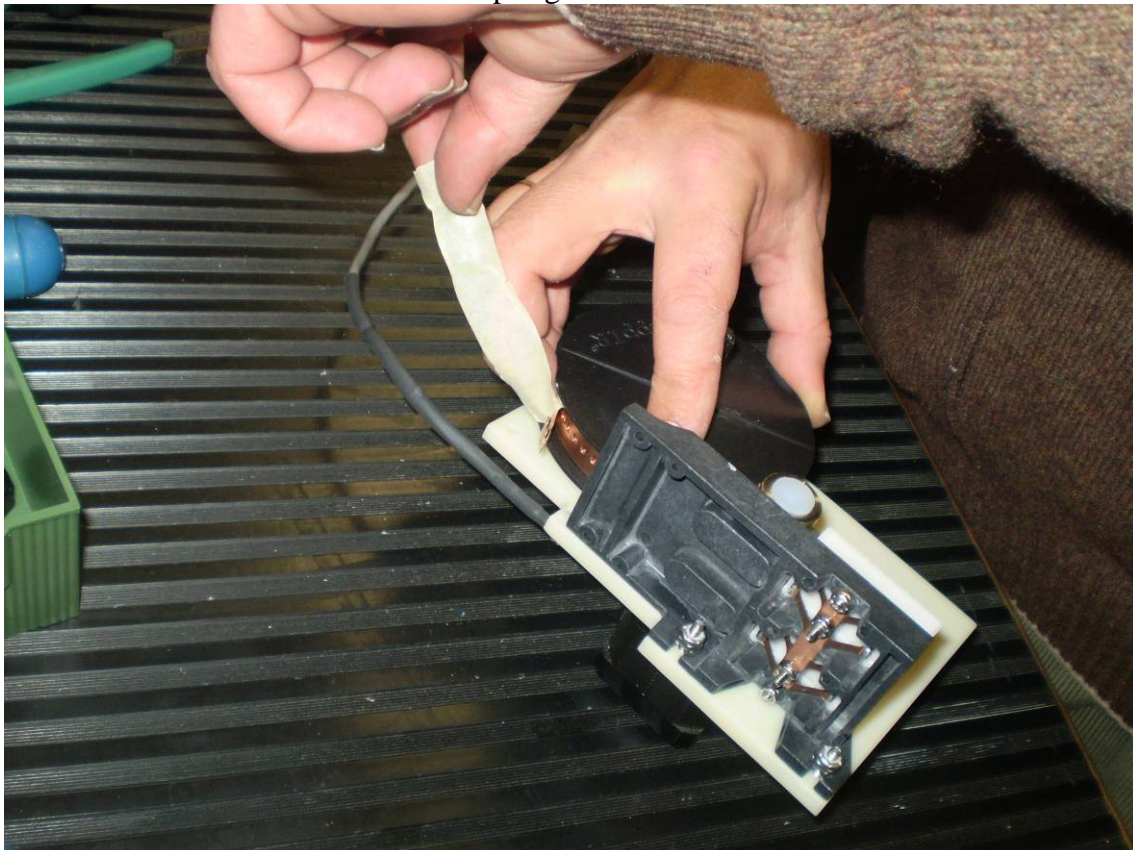
23.- With the help of a forcep hold the metallic bar and insert the reel on its support



24.- GIVE THE REEL 8 COMPLETE TURNS COUNTER CLOCK WISE to get the right tension on the spring.



25.- Take the adhesive tape off holding the reel with your hand to avoid to lose the spring tension



26.- Insert the copper tape on the sprocket to hold the reel in place

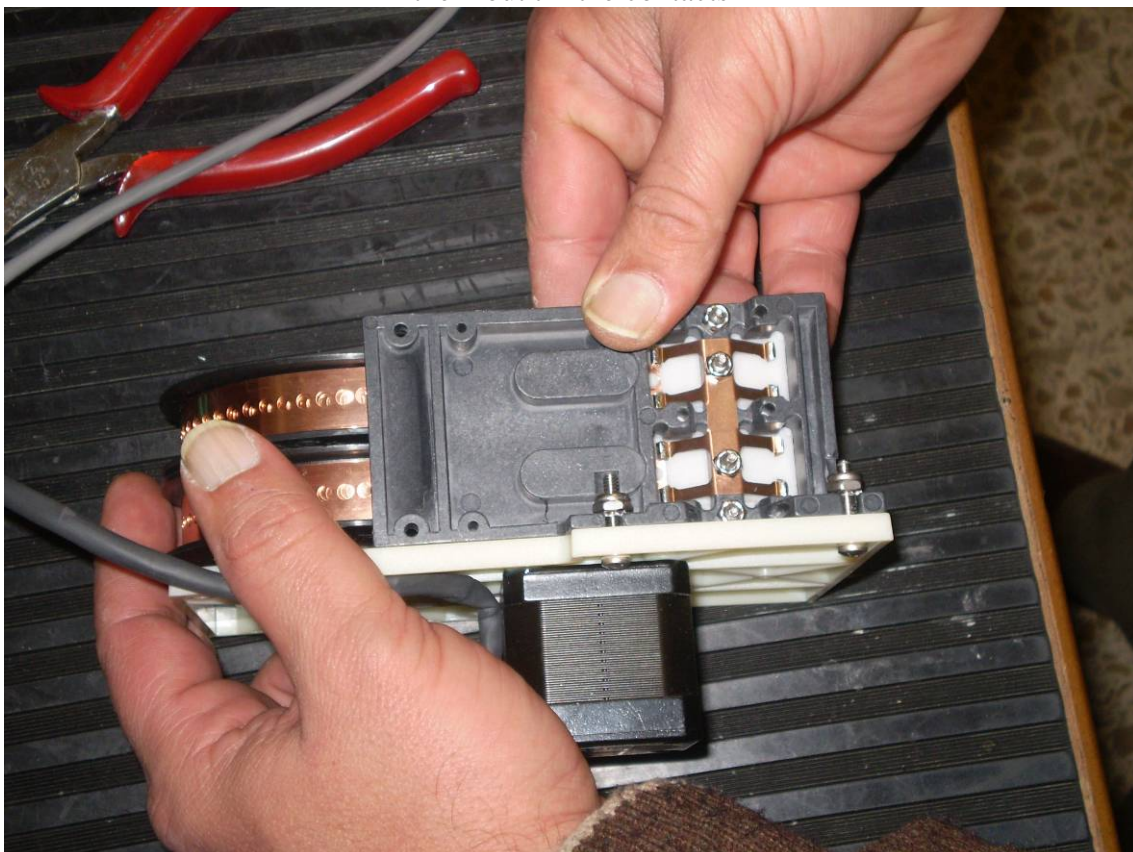


27.- Repeat the operation with the second reel

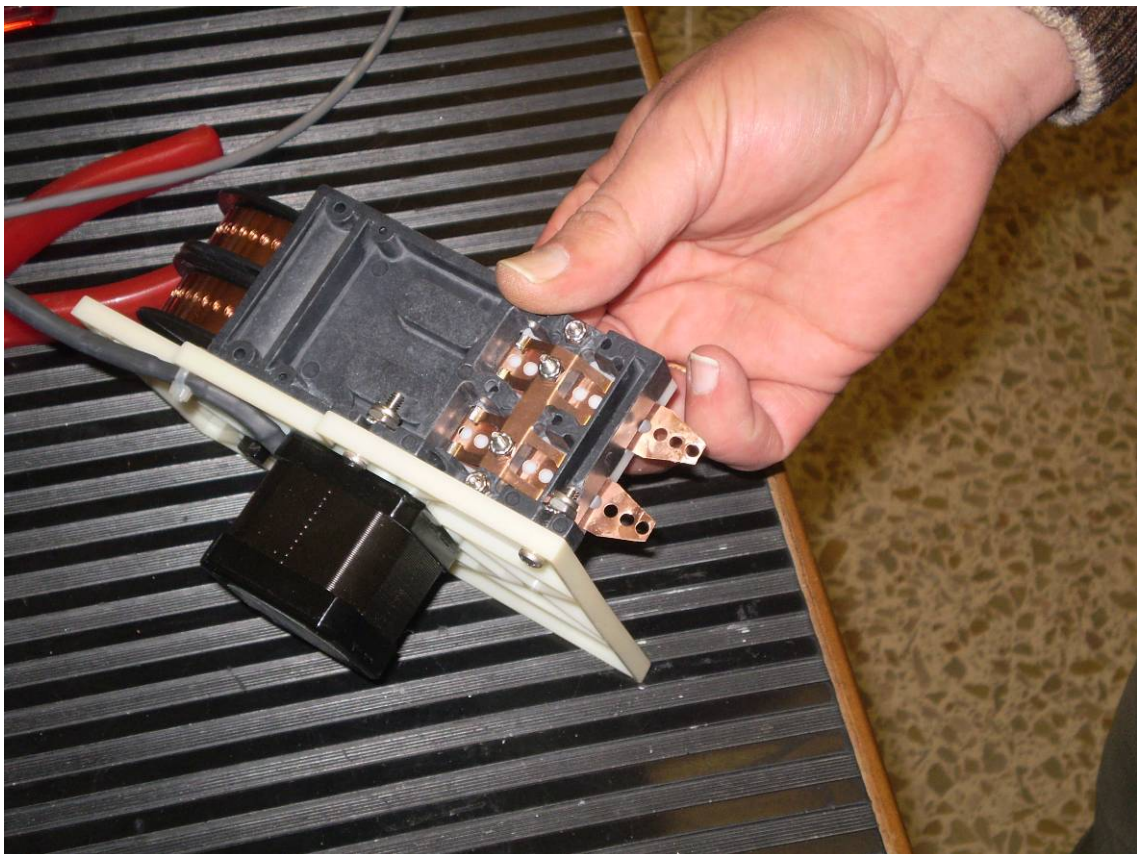
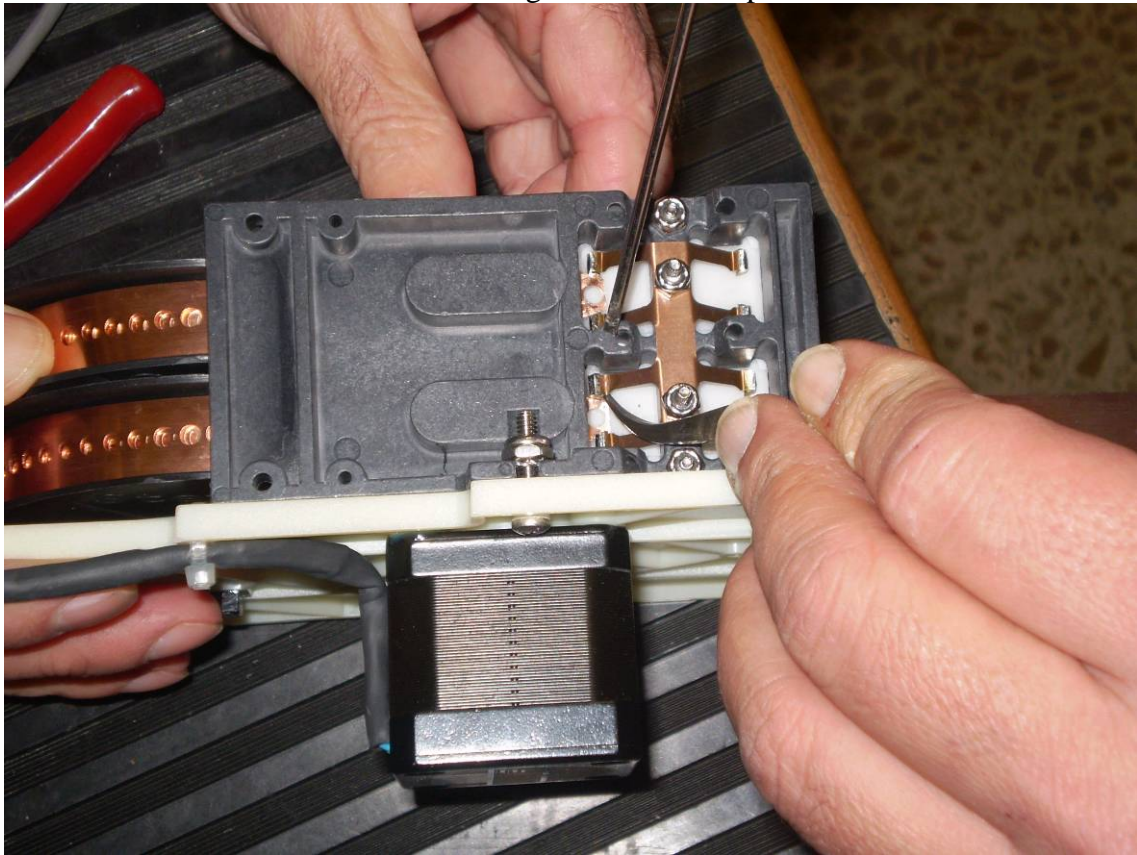




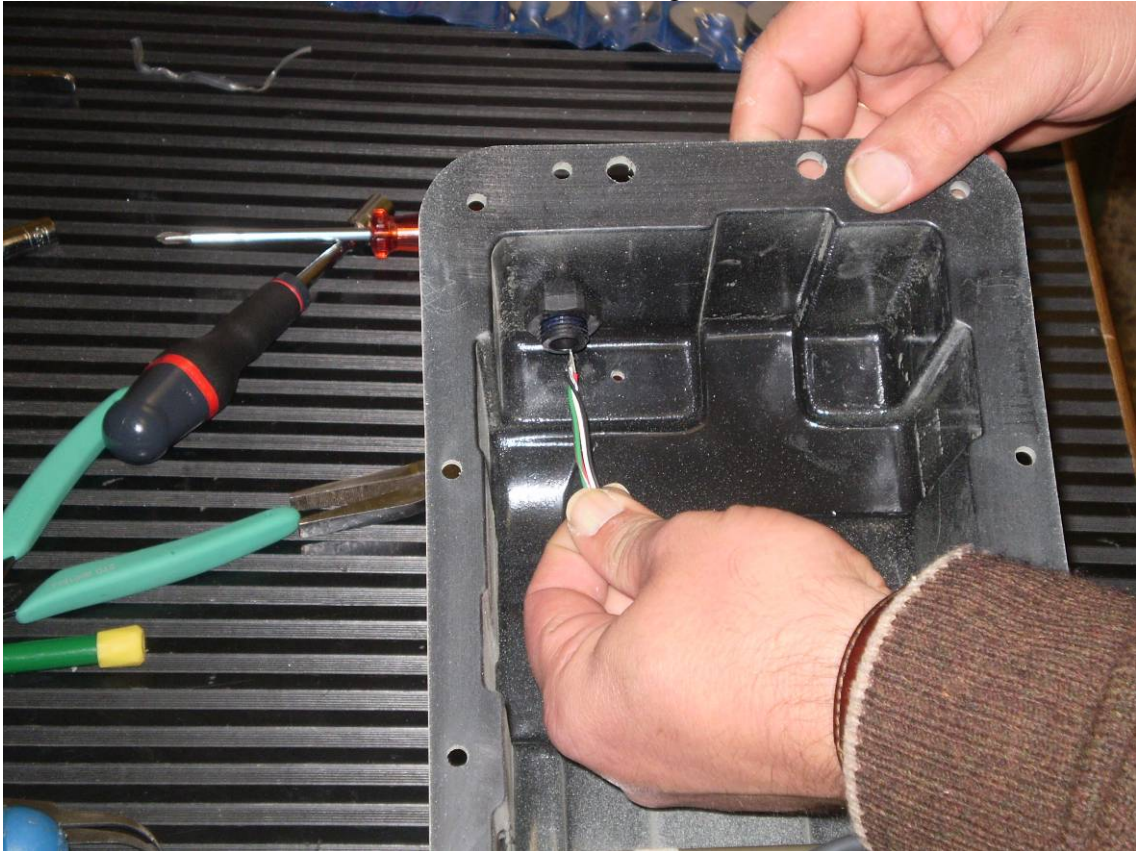
28.- Holding both reels at the same time put both copper tapes on the sprocket and take them out till the contacts



29.- With the help of a tweezers, raise the contacts and insert the copper tape behind them till the edge of the contact plate



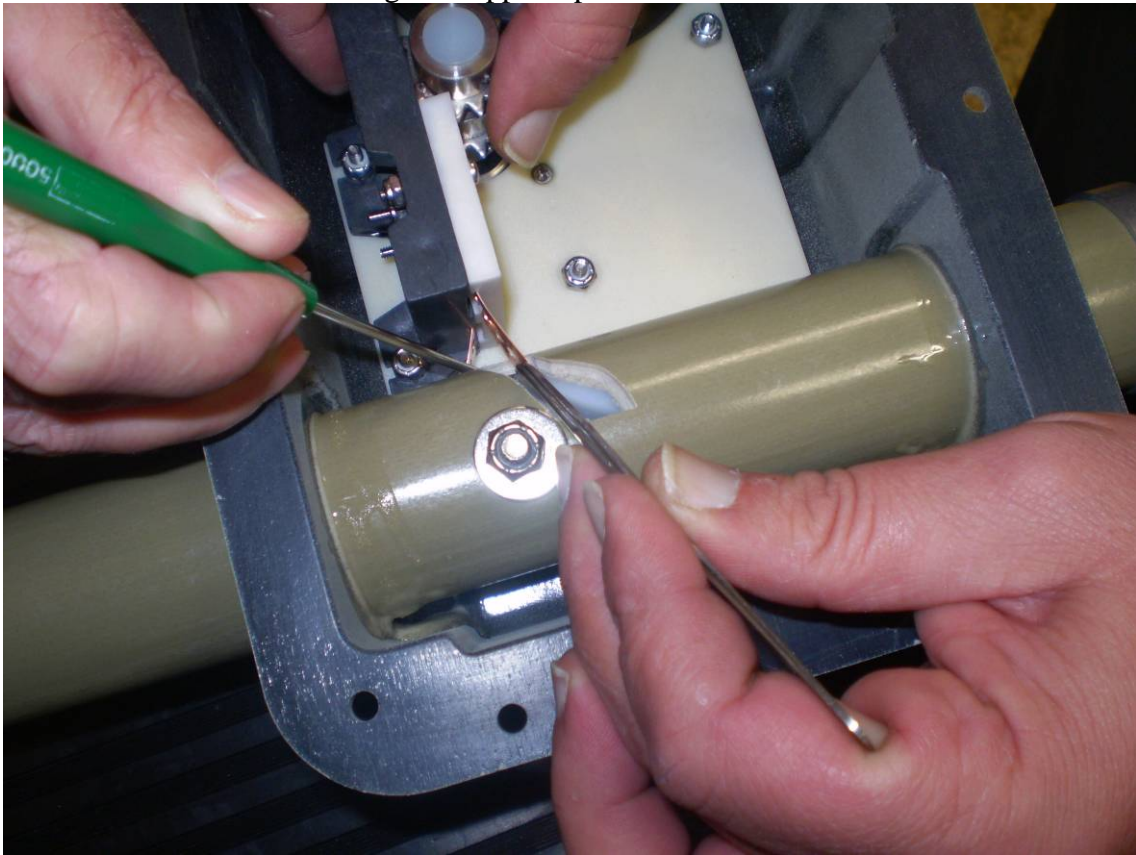
30.- Insert the cable through its hole



31.- Put the plate back in place and hold with its screws



32.- With the help of a tweezers, insert the copper tape through the element housing taking the copper tape out off the EHU



33.- Apply loctite on the plastic tips and put them back on the tape





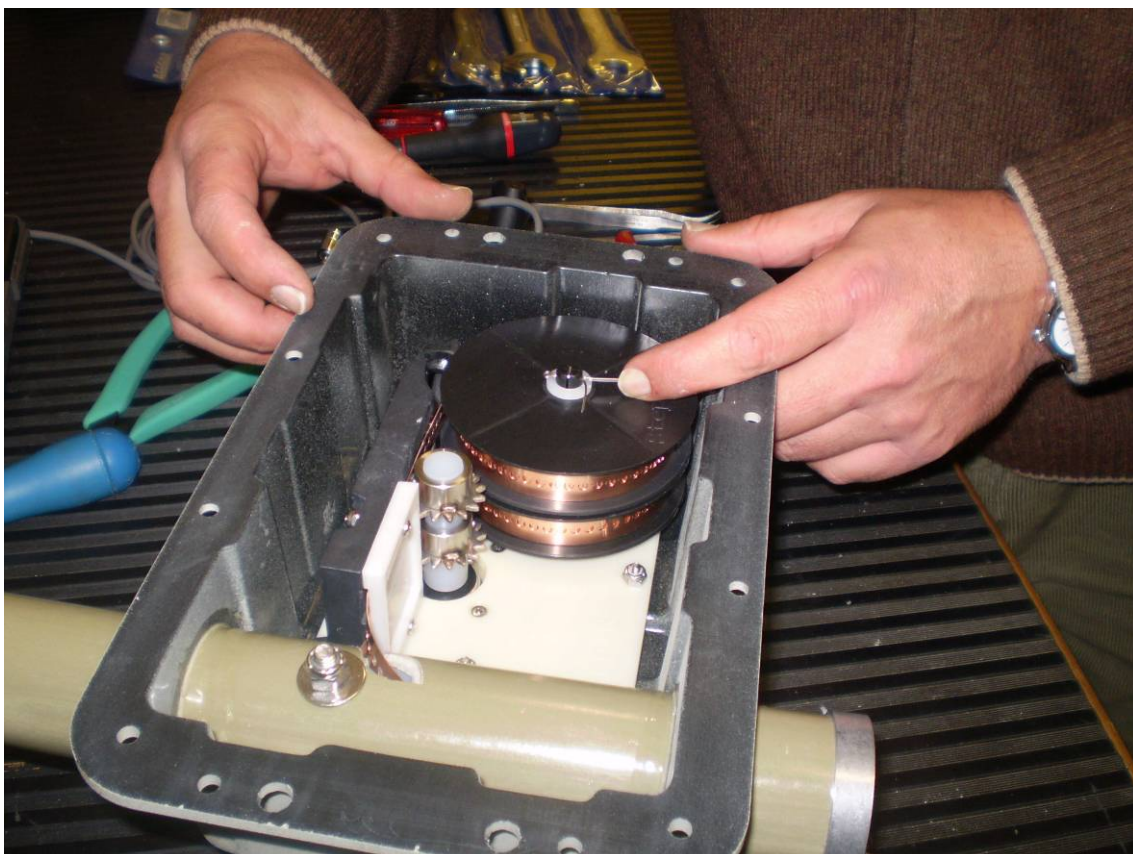
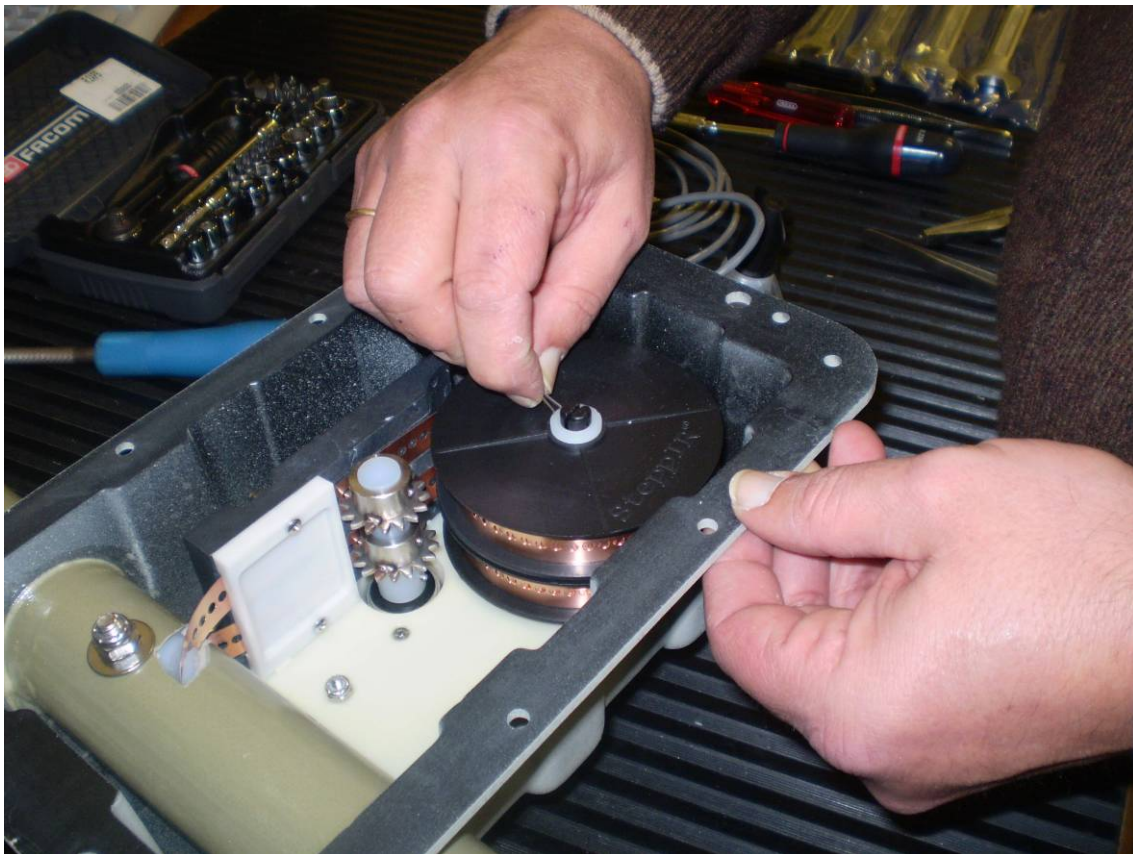
34.- Press the plastic for a seconds and repeat the operation on the other copper tip



35.- Retract the copper tape till it stops



36.- Put the washer and the pin of the reel back in place



37.- Work done ;!!

