

Winding of T5 (rev 0.5 and up)

From supplied 30cm of 0.315mm wire, cut off about 10cm piece:



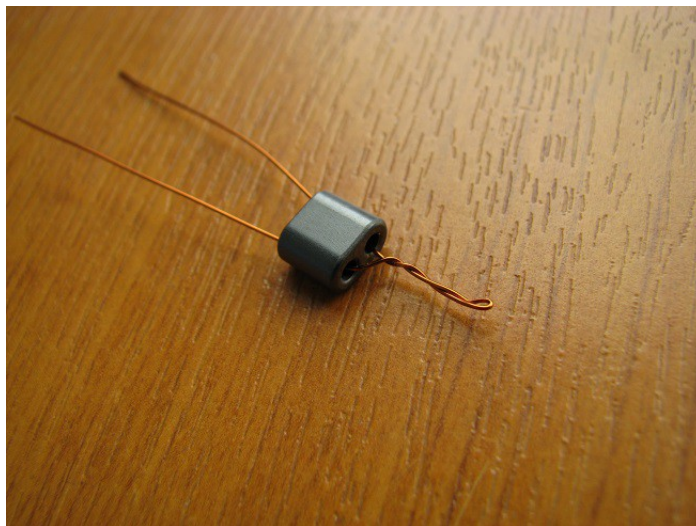
Then bend it in the middle, to form two equal parts:



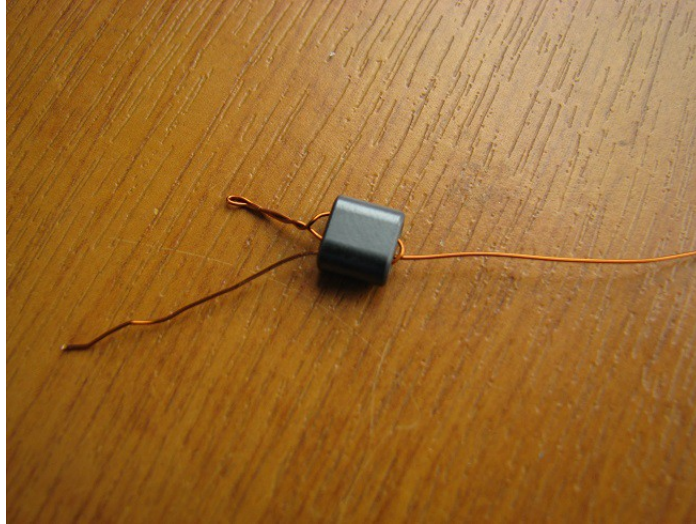
Twist some 8-10mm from the end together, to prevent slipping into the core:



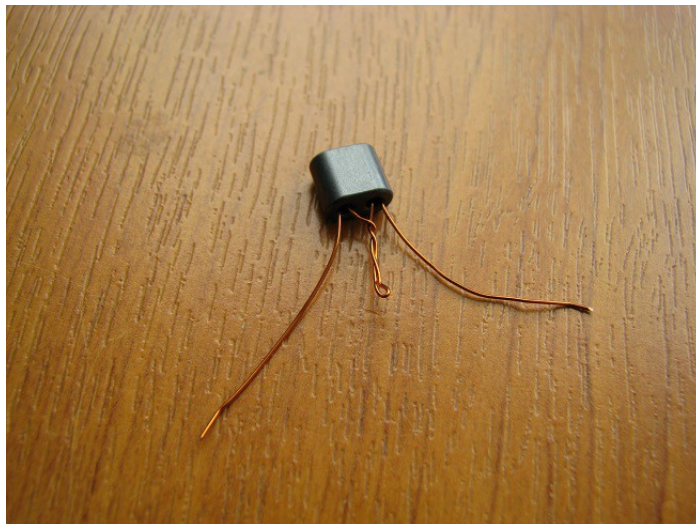
Push the two ends into the supplied binocular core (BN43-2402):



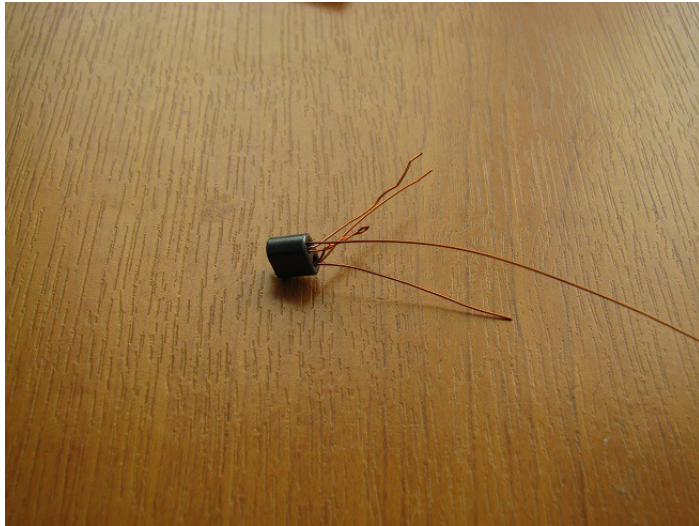
Then route the first end into the opposite hole to form the first turn of the secondary:



Do the same to the other end – push again into the opposite hole of the core:



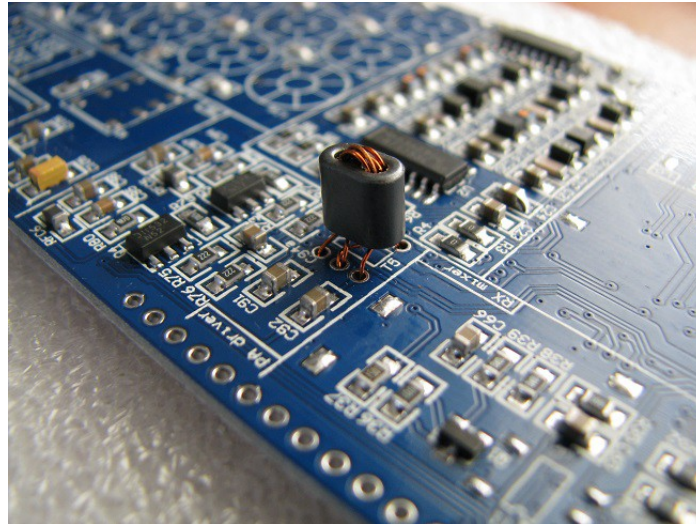
Now using the rest of the wire, we do the primary, so we form the first turn, where one turn in a binocular core is when a wire goes through both holes and exits on the same side it enters:



Continue with the rest of the turns, until we have full 4 turns. Be careful while pushing the wires, as it is tight fit, do not scrape the coating, as this could short the transformer:



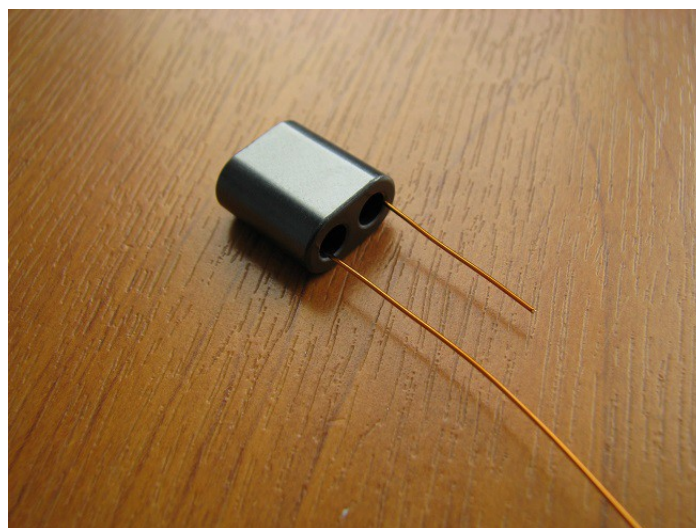
Finally the transformer is complete, please carefully scrape the ends with a sharp SMD tool, then using plenty of flux (resin) and solder, prepare them and insert.



T5 guide courtesy of Clint(KA7OEI)

Winding of T7 (original mcHF transformer)

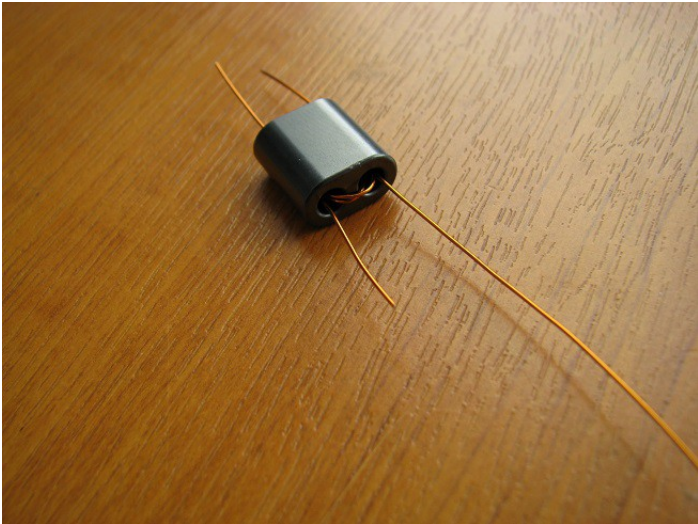
It only makes sense to make T7 in its original form, so you can fully test the functionality of the built mcHF, then make the suggested modified transformer that improves the radio performance. So using the supplied wire and BN43-202 core, start with pushing one turn into it:



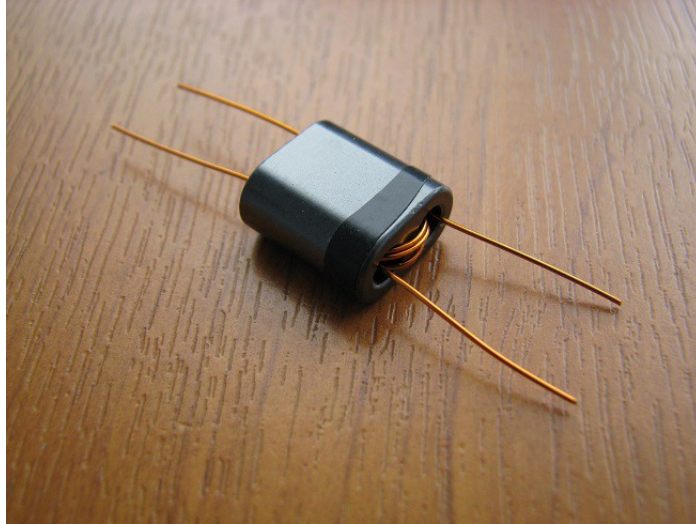
Continue, till you have full two turns of the primary:



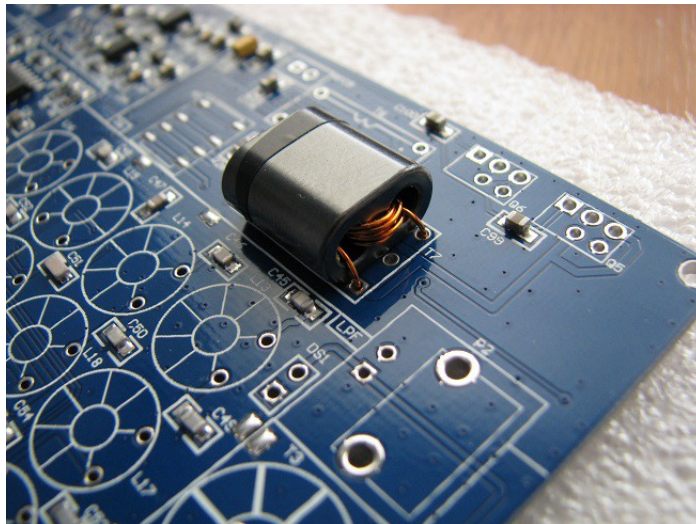
Start on the secondary, but this time from the other end, push the first turn:



Complete the full 3 turns and mark this side with some tape, for easier identification later:



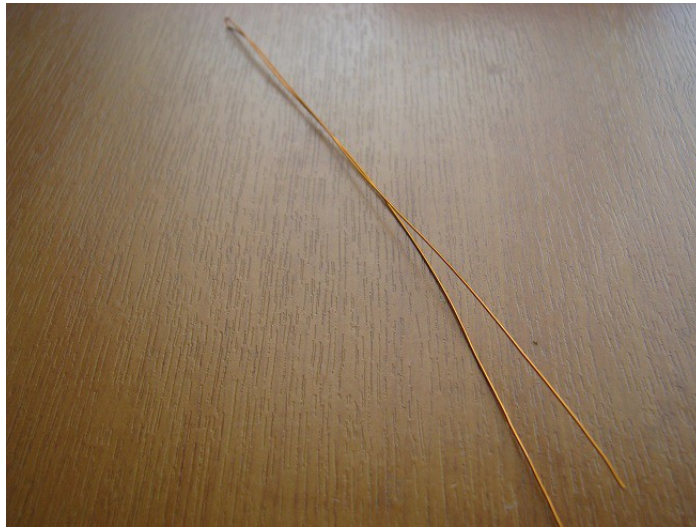
Finally, scrape the ends, cover with flux and solder and push through:



Please make sure you insert the correct way – primary 2 turns goes to the transistors (pointing the P2 connector footprint).

Winding of T6 (original mcHF transformer)

Using the supplied BN43-202 core and 30cm of 0.450mm wire, start by bending in the middle and forming two equal size pieces (without cutting them):



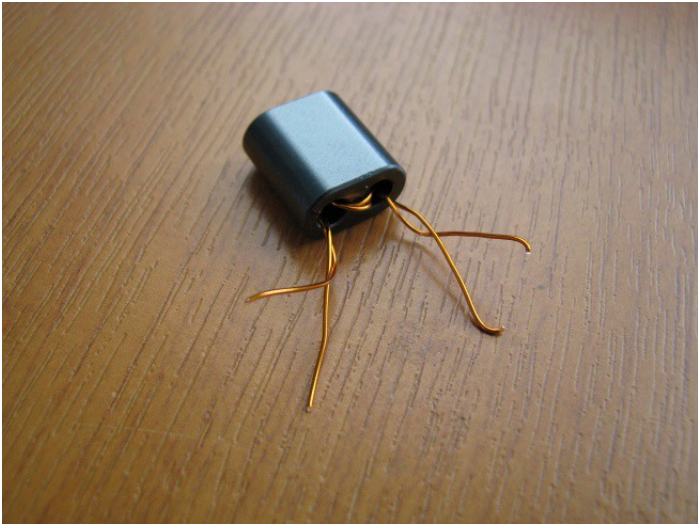
Twist them together, where the twisting occurs on regular 10 mm intervals:



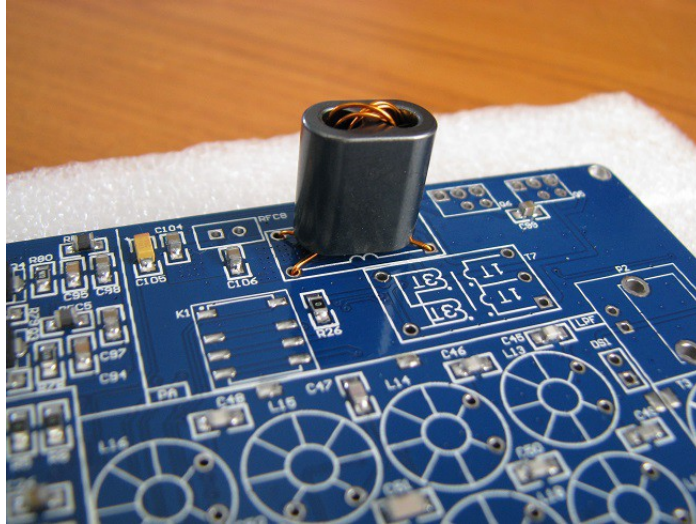
Push the newly formed wire through the core to make the first turn:



Complete the transformer by pushing a second turn, then cut-off the excess wire:



Finally scrape the ends, and prepare them with flux and solder, then insert:



Please be careful that the turns conductivity matches the footprint underneath!

For more details on modifications related to T7 and T6 and how to exactly wire T2 and T3, please check the [mcHF_board_modifications_20150928.pdf](#) which is available for download in the Files section of the mcHF Yahoo support group (Files, KA7OEI sub folder).

73, Chris
M0NKA