

Question 1: T01/T02/T03 windings help

I'm stuck at the toroids portion of the Ensemble RX II instructions. Having never wound any coils or toroids, I really need some help!

T01 #30(8 (2x4)in) had easy instructions, take two 5" strands of #30 wire and twist them together...thread it through the binocular core for two turns.

I did that and wound up with a lot of extra wire which I cut off, I'm guessing the extra wire was to be able to sand off the enamel? I mean I was left with a LOT of wire doing just two turns on that tiny toroid. Perhaps I didn't wind them together enough?

How did we figure on 5" when it states #30(8 (2x4)in); doesn't this mean a total of 8 inches of wire which is why it starts with (8..? Should those 5" strands have ended up being 4" after they were wound together, still I think that would leave a lot of extra wire...

Question 2:

Now I'm at the Auto Band Pass Filters Build Notes, and I'm really stuck here. The instructions read:

T02: 4T(bi)T #30(12 (2x6)in) - I think that is clear, two (2) six (6) inch pieces of #30 wire and twist them together ("bifilar"); although I should use perhaps two seven inch pieces and wind them together so they are six inches long and to be able to remove the enamel?

T03: 4T/2T(bi)T #30(12 (6/2x3)in) - Does this mean a total of six (6) pieces; of two (2) wires which are twisted together so they are three (3) inches long?

I did read the notes about "nnT/wXmmT" or "wXmmT/nnT" but it's just not clear to me.

Answer:

You seem to be making heavy weather of the transformers!

Not quite sure, but you appear to be confusing the HF and LF version wire lengths. I assume you are constructing the kit for the normal HF band coverage?

For T1, all you need to do is take an 8 inch length of wire, fold it in half (2 x 4"), then twist it. Aim for 3 - 5 turns per inch, no critical at all. One turn = threading the wire through both holes so you end up with both sets of wires at the same end. Cut off the loop and separate the wires and use an ohm meter to identify the two windings.

T2 is made in the same way except 12" is folded in half to make 2 6".

T3 is slightly different as it has both a primary winding and a centre tapped secondary.

Take a 6" piece of wire and wind 4 turns on the core. Now take another 6" piece and fold in half (2x3") and twist together as before. Wind 2 turns of this over the top of the 4 turns already on the core. If it gets a bit tight, use a sewing needle and carefully make a path for the wire to go through.

It does help to identify the primary and secondary windings if you happen to have two or better 3 different coloured wires. What can help is to strip the enamel and tin the primary wires before winding the secondary so at least you have that identified.

73, Bob G8VOI

