Munin L4 Construction With A BN-61-002 Core

The Third alternative using a BN-61-002.

General information:

The Primary of this transformer is made from the braid of a coax cable instead of a solid metal tube. During the construction you will have to manipulate the braid in several ways to construct the transformer and you must be careful to not deform or break the braid to a point that the integrity of the shielding can not be restored. When you are finished all of the 4 turns of the Secondary winding will be inside the shield [the only exception is at the start and finish end of the core] which is a one turn Primary winding. It is also important when removing the braid from the coax cable that you do not cut the braid wires so that there is not a complete circuit. In short – be patient and careful.

You will need a FID type tool for construction. This can be any cylindrical device with a pointed tip. The tip does not need to be sharp, but its diameter must be less than 0.250” to fit through the core. It can be made of wood, plastic or metal.

Construction:

This Ferrite has no metal hardware so we use braid taken from RG58 or better from RG400, RG142 or similar coax with doubled shielded silvered braid.

Cut 17 cm [6.75”] of coax and remove the insulation. Then carefully remove the braid and compress it as much as possible and thread it into the Ferrite. See picture No.11.

Then flatten the 2 ends and make one opening in the braid, with the FID, just outside the Ferrite on both sides of the core. If you fold the ends under the core and secure with a rubber band, it will keep the free end open and keep it from working up the core tube.

You will need 45 cm [18”] of the Stranded 18 ga Teflon covered wire.

Start winding by threading the wire through the right side. At the top of the core, try to get the wire to start through the bend before it comes through the braid. See picture No. 12. Thread most of the wire through, leaving only enough wire at the starting end to easily reach the PCB connection point. See picture No 16.

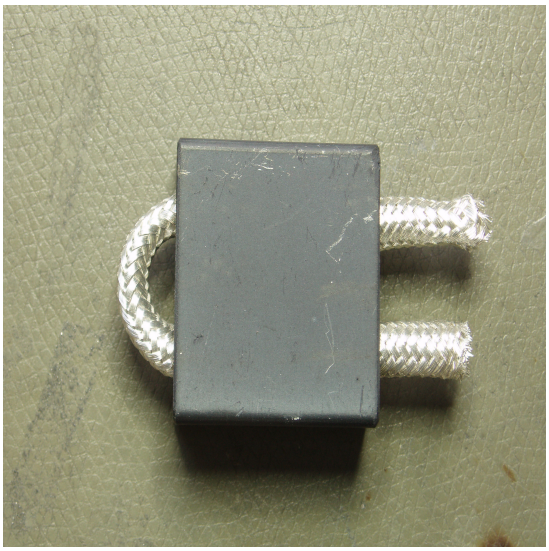
With the FID, carefully open the braid and feed the wire back through the same hole and down the left side of the core and out the hole in the braid at the finish end. See pictures No. 14 & 15.

Start the second turn and repeat the above two steps. See pictures No. 13, 14 & 15

Repeat the procedure until all 4 turns have been wound on the core.

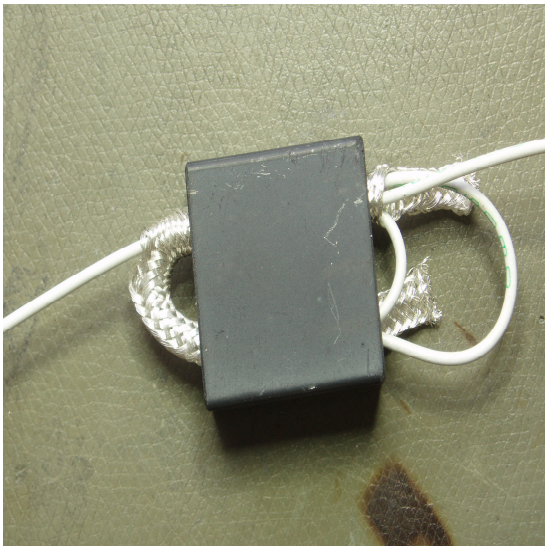
After all 4 turns are done, close up the braid, tighten the windings and trim the braid to fit on the PCB. See picture Nos.15 &16.

After soldering the transformer to the PCB, use some Clear Seal silicone to glue the left end to the PCB.

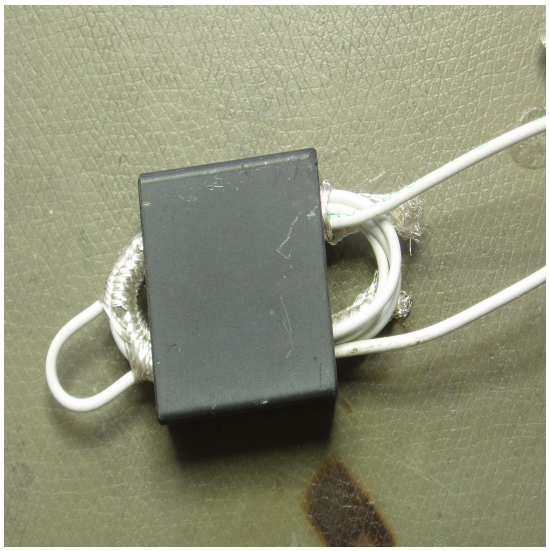


No 11

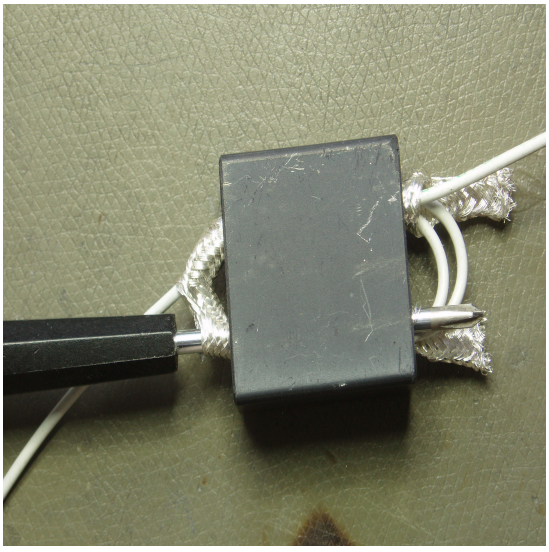
No 12



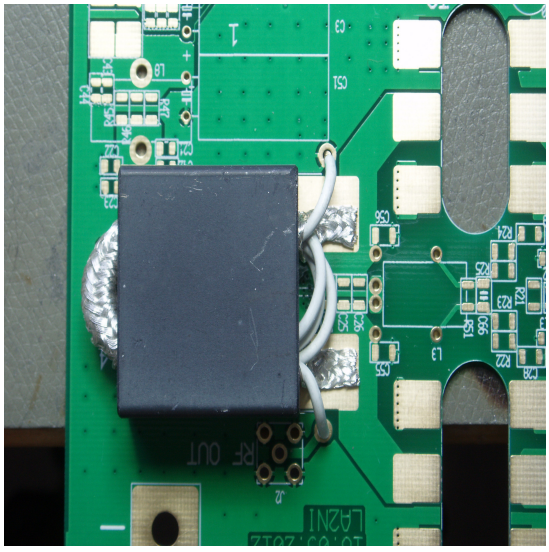
No 13



No 14



No 15



No 16