The NVARC “Ugly” Filter Project

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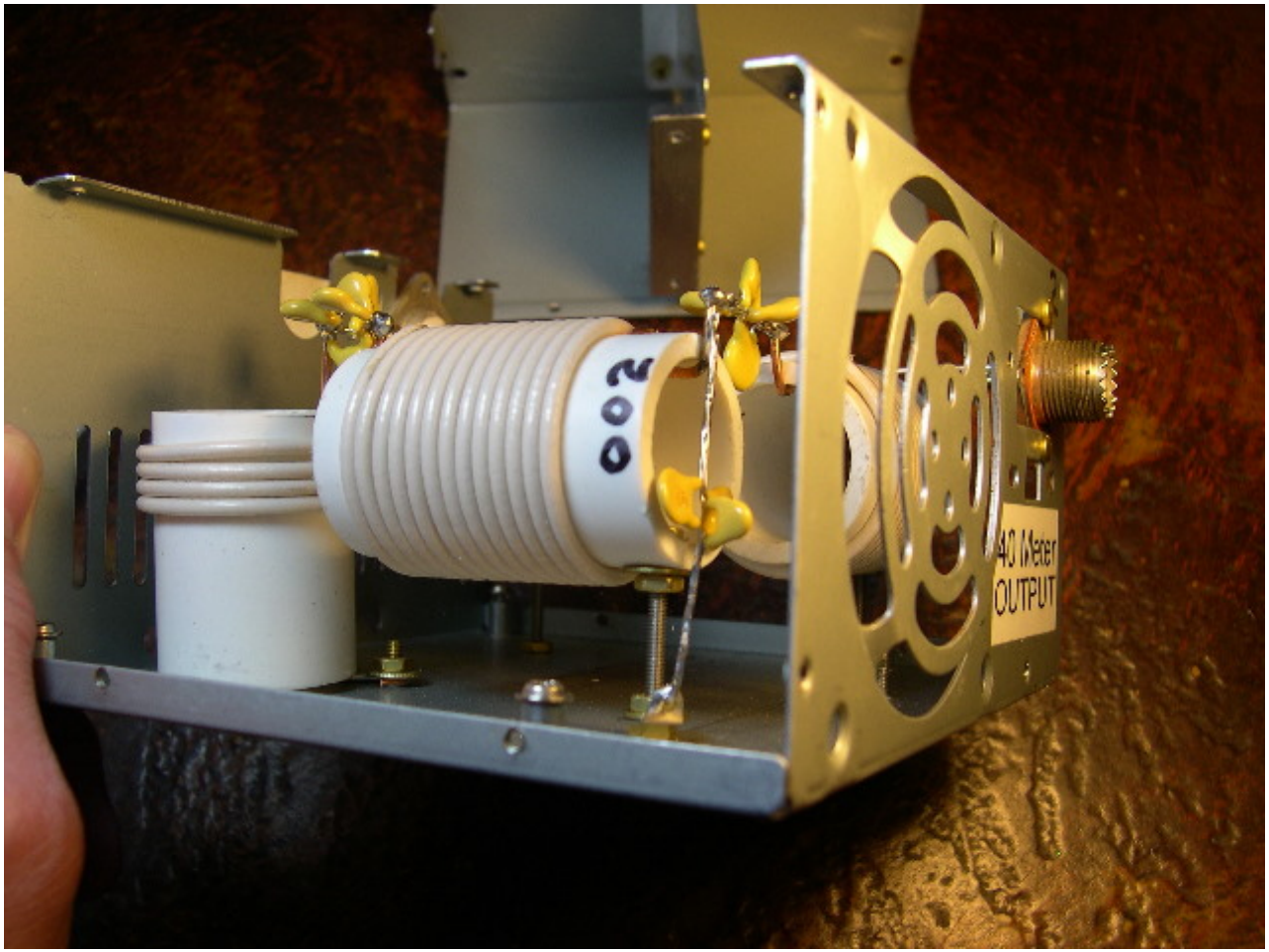
General Construction Notes

Very high voltages can exist in the filter especially if there is a high SWR. Keeping lead lengths short and as shown will minimize problems when this occurs.

Capacitors in parallel should be “fanned” as shown in the photo. This prevents interaction between components and maximizes the component cooling.



Photo; DSCN1080 full resolution version (use F11 to toggle full-screen viewing)

Prepare parallel capacitors by gently twisting the leads together over their entire length while keeping the capacitors “fanned”. Solder one end of the leads and then check that the capacitors are still in position. Sometimes they slide when the leads are twisted and the opposite leads get very close together. Solder the leads together over the entire length to form a single conductor. Trim the lead length as necessary to install.

Most wire with insulation we measured had a thickness of 0.10 inches and the coil lengths measured here are based on that thickness.

The starting wire through hole is generally 9/16ths of an inch from the end of the form. The drill to use is a #36 numbered drill which is 0.106 inch.

After the filter is assembled affix the input and output labels to the case at the appropriate connectors. Note the filters are bilateral and either connector can be the input or the output.

To keep track of the coils during assembly numbers were put on the coil forms and some are visible in the pictures. They are **not** schematic coil references.

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