

Hints and Tips

This month a couple of tips from Simon Dabbs G4GFN, and a timely reminder from John Teague G3GTJ

How I made one good 19 Set variometer knob from two broken ones.

Isn't it annoying how often one finds a variometer at a rally, only to discover that the Bakelite knob is badly broken? The usual cause, I'm sure, is ignorance on the part of a well-meaning individual intent on removing said knob to service the device. Unable to see any other means, an attempt is made to prise the knob from its spindle by using a screwdriver as a lever under one edge. This always results in disaster. (The correct approach is to loosen the eight screws arranged in a band near the knob-end of the cylinder, and the device comes apart nicely. Sadly, this is far from obvious to the uninitiated!). So it came to pass that I was in possession of two broken knobs. Each had about a one third tangent missing. It was kill or cure. I would attempt to make one good one from the two disasters.

First step was to take a ruler and pencil and mark a tangential cut-line on each knob so that the large piece from one would match the small piece from the other, with a bit of surplus Bakelite for safety, whilst also respecting and matching the indentations around the circumference of the knobs (easier said than done; but do-able).

Next a visit to my dear neighbour, Mr Tuck, who owns a band saw. Using this, and placing the flat rear of the knob on the flat table of the saw, a nice straight, upright cut was made through each. No turning back now!

Now the tedious part. Using a Carborundum block (wet) I ground down each cut face, until the two good pieces were a good fit. When reasonably happy, I dried them thoroughly, and glued them together using Araldite, whilst clamped in the vice.

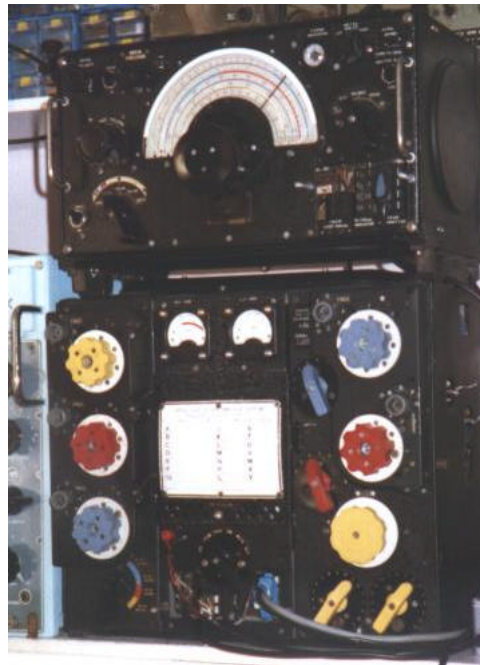
Next day, I got some (grey) automotive body-filler putty and filled in the inevitable gaps left in the joint. The following day, more rubbing down, this time with wet-and-dry to remove excess filler around the joint (even more tedious!). After a thorough wash and dry, the whole knob was sprayed with black semi-gloss ("silk" finish) paint.

I am pleased with the result. Predictably, I must quote Eric Morcambe and declare "you can't see the join". Well, you can sometimes, if the light catches it badly. But hey, I now have a 19 set variometer with an intact knob!

Restoring Crackle-finish Paint

I find that often, the crackle paint on an elderly piece of equipment tends to look very tired, and the first reaction is to want to re-spray. However, crackle paint can be rather expensive, difficult to find, and the results can be disappointing. I have found that old crackle finishes often look in a sorry state simply because their complex surface structure has become clogged with the grime that time brings. Hence, they often respond well to a little sprucing up, and here's how to go about it.

If possible, remove from the equipment the panel to be treated. Remove switches and other components. Using a scrubbing brush or an old nail brush, clean the panel vigorously with a strong solution of washing-up detergent in warm water. Rinse off under the warm water tap.



"Before and After". Although not quite so obvious when reproduced in black and white, these two pictures of Simon's T1154 show what can be achieved by the method described

Panels which can't be removed or stripped can be treated as follows. Arrange for the panel on which you are working to be in the horizontal plane, i.e. flat. Working with an old toothbrush, apply a little of the washing-up detergent solution. Have plenty of absorbent cloths or tissues to hand, and work about a square inch at a time with fairly vigorous circular strokes of the brush. The trick is to apply just enough detergent to do the cleaning, but not so much that it escapes and dribbles down into switches, meters etc. That's what the cloths are for, and to dry generally, before moving on the next bit. Obviously, we can't put the panel under the tap, so we remove the loosened grime by means of a clean toothbrush and clean warm water, little by little, again mopping up excess with fresh cloths as we go.

Allow the panels to dry naturally. By now, you will see some improvement, but you will probably be a little disappointed that your treasure still lacks lustre. If the paint appears to have actually worn thin, or there are scratches, now is the time to apply a little ordinary matt spray paint. Obviously, this needs to be the same colour as the piece, but in my experience, this is usually black, so not a problem. The important thing here is to just give the appropriate areas a light blowing over with spray, by holding the can at least 15 inches away. Do not apply too much, or you'll clog the surface and lose the crackle effect. Allow the paint to dry.

Still a bit lack-lustre? Well, now comes the magic! Take a clean, dry, soft cloth and moisten it with a light oil, such as "3 in One". Rub the oil into the crackle and bingo! It starts to come up like new. In theory, the oil may cause the item to attract more dust than before, but I haven't found it to be a problem.

Incidentally, I find a light application of "3 in One" useful if I've painted something with a very matt paint, and I want it to have just a hint of sheen. Makes your Olive Drab less drab!

Solder

I have read that lead/tin solder is to be banned by the EEC which is no doubt why so much is on sale at rallies - so buy some now while you can! Reels of 0.7mm cored solder were half price at Newbury!

John Teague G3GTJ