

Telephone Set J

I bought this off e-Bay were it was described as being "In truly shocking condition" which was indeed the case.

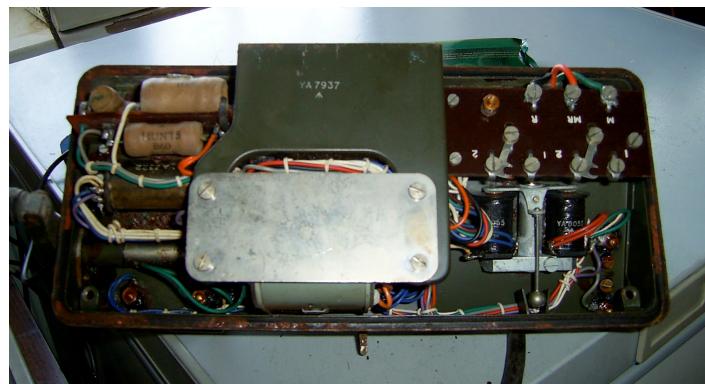


The battery box was very badly rusted and contained an old bicycle lamp battery. All that remained of the lid was the rubber gasket with some lumps of rust stuck to it.

Rather than putting me off the condition had attracted me to it as I thought it would be fun to sort out and would involve some interesting metalwork.

Despite its apparent state the blinking thing actually worked; at the very least I'd expected the transmitter to have needed changing.

The insides looked much better.



For all that it worked I noticed that even with the Key down, which is effectively on-hook, the dial-tone was still there. In that state it should show an infinite DC resistance to the exchange but it actually measured about $50\text{k}\Omega$. Changing the capacitors fixed that. At first I thought the old ones were cased in some sort of ceramic but later concluded they were rubber which had gone rock-hard.

Apart from the battery box only one further hole appeared when I got the worst of the rust off and this was easy to patch.



A lot of the rest was down to paper thickness so would be better filled than attempting to sand it smooth.



I decided to mend the battery box with brass as it's easier to work with than steel, and I'd got more of it.

I cut away the front part of the original and soldered a piece of brass to the inside of the sides — in the case of the right hand side what remained of it.

The back was alright apart from at the top so I cut that off and replaced it with a bit of brass doubled over to stiffen it.

The bit I'd expected to be most difficult was making a new lid for the battery box. In the event this went very smoothly, probably because I didn't measure anything — "Measurement is the enemy of Accuracy" after all. I again used brass.



That was the end of the structural repairs and after that it was a case of filling the rusty plating and then painting it. I couldn't get the correct colour paint, or not at a vaguely sane price at least, but got some that I like; it looks far nicer in the flesh than on these photographs. This 'phone hasn't much historical value as all the internal wiring is PVC so it must have been re-newed at some time. These 'phones remained in use by Civil Defence until its abolition in 1968.



It's still far from perfect but looking like it's been kicked 'round a battle-field isn't altogether inappropriate.

Despite the battery box being in the worst condition of the whole thing its sealing gasket was the only one which was fit for re-use. I didn't worry about replacing the rest as I've no plans to use it where it would need to be water resistant.

One interesting thing I found is that despite having two 500Ω bell coils, as do most 'Vintage' telephones, it was an absolute hog for ringing current; it would ring OK but not leave any for any other telephones. Instead of fitting the usual $3.3k\Omega$ limiting resistor I found that $5.6k\Omega$ worked better. This not only left current for the others but improved the sound of the J. It doesn't have actual bells; the hammer hits the case and reducing the force of this certainly made the sound more pleasing.

