

TS-50 Button Repair and SMD Elko Exchange

Front Panel Buttons Repair

Behind the plastic front panel Kenwood used some foam to hold the little buttons from falling out. This foam was decomposed and fall out during cleaning. After thinking how I can fix those little buttons, I had the idea to fix them with pieces of non-woven material with about 1mm thickness. First I tried it with 2mm material (on the photo) , but that was too thick. I cut the relevant pieces and punched 2.5 mm holes with some special hole pliers (for waistbelts) .



Battery exchange

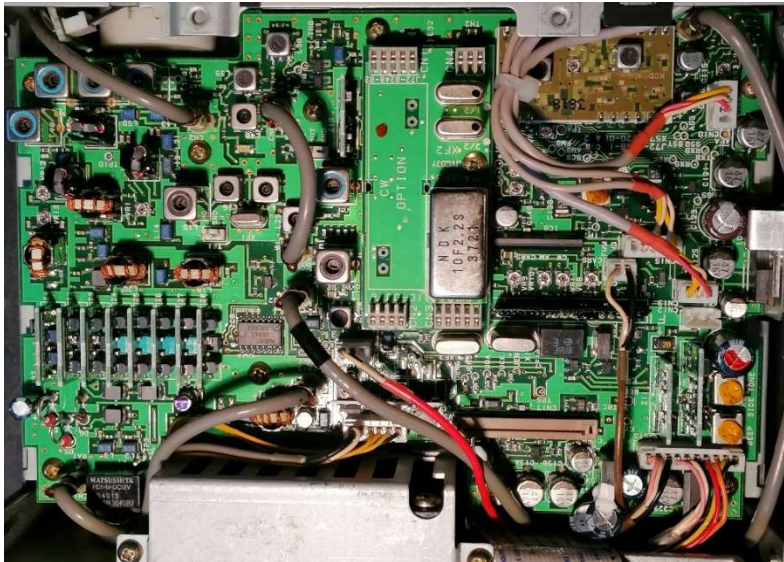
When the transceiver was open, it was easy to find the 3V backup battery under the bottom cover. I inserted a new special CR2032 with solder lugs. Just be careful not to produce any shorts and insert it in right polarity.



Surface Mount Capacitor Exchange

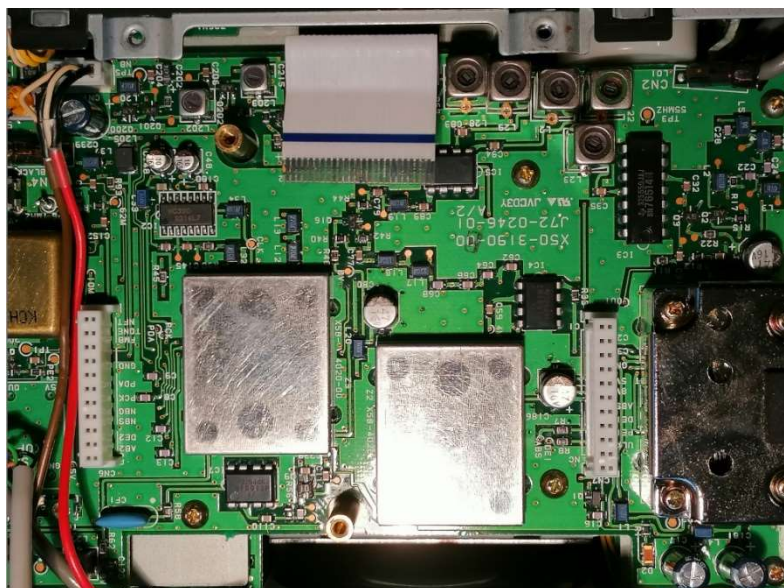
The TS-50 has quite some of those surface mount Capacitors, which leak acid liquid after years. This liquid may destroy the pads on the pcb and the capacitors do not work reliable any more. So after 20 years its time to exchange them, before they destroy your board. In my case the radio did still work without failures. Those capacitors are on 3 different boards:

Capacitor	Reichelt Order No	ø	TRX-Unit	Front-Unit	PLL-unit	Sum
10uF/16V	FK-V 10U 16	4 mm	3	0	2	5
22uF/16V	FK-V 22U 16	5 mm	3	0	0	3
47uf/16V	FK-V 47U 16	6,2 mm	7	1	3	11
47uF/6,3V	S-V 47U 6,3	5 mm	1	0	0	1



As you see its quite tight on that board. For your work you should mark and remove all connectors from the TRX Board and deassable it. To remove the surface mount capacitors I hardly advice to use 2 solder irons with a round tip or solder scissors otherwise you will destroy the board. Clean the board underneath the capacitors be soldering the new ones.

TRX Board



The PLL board and the Display board do not need to be deassabled.

PLL Board



Just be careful with the 3 wires close to the capacitor with your solder iron.

Display Board