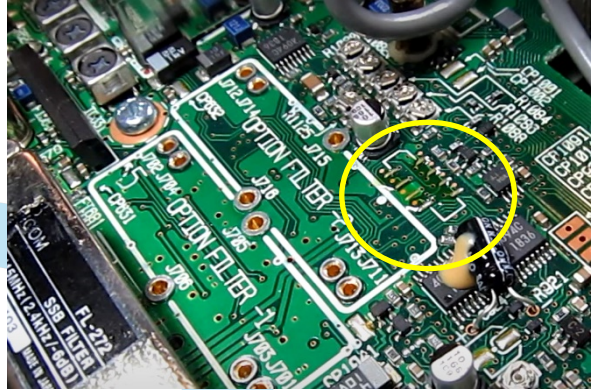


## At the Repair Bench – Icom® IC-706 - November 2022

Sometimes you wish that the customer would just be honest with you and tell you what *really* happened, and this month's *At the Repair Bench* is an example of one of those times. It all began with a phone call from a gentleman out in western Pennsylvania. I should have realized that something was wonky when he couldn't tell me who it was that referred him to me – or maybe he *wouldn't* say. Anyway, he asked if he could ship his faithful Icom® IC-706 to me for repair, saying only that the front panel was “dead”. Naturally, I agreed to look at it, so he shipped it in.

He did an over-the-top job of packing the radio and mic, going so far as to buy some Lowe's sheet foam and cut custom blocks to surround the radio, and then gluing the blocks together to make two half shells that fit the radio quite well, and also fit the carton perfectly. Kudos on that part! He lost some points, however, when I got into the repair... but I am getting ahead of myself.

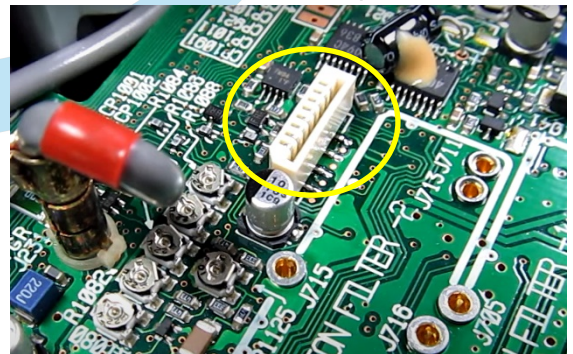


After unpacking the radio, I put it on the bench and connected it to my power supply and dummy load, and powered it on... or at least I tried to power it on. Nothing happened. The unit was stone cold dead and unresponsive. I took the cover screws out and lifted the top cover, and I saw immediately what the problem was.

The Icom® IC-706 has a removable front panel, which connects behind the panel to a set of eight spring contacts, which in turn connect to the main PCB via a “flex circuit” or Kapton cable. Connection to the main PCB is made through the use of a top-entry edge connector that is surface-mount soldered to the main PCB. This connector was off the PCB and floating free inside the radio, tethered to the end of the Kapton cable.

Here is the part where the owner lost points... someone had been inside the radio and most likely pulled that connector off the board. How do I know this? Simple... the speaker connection (the speaker is mounted to the top cover) was unplugged.

The repair was simple enough. Fortunately, no damage was done to the PCB – all of the pads were intact and in fact had plenty of solder on them. All I had to do was to reflow the solder on the connector pins once I put the connector in position. Of course, I had to remove the FL-100 CW Narrow Filter and the FL-223 SSB Narrow Filter to allow clear work access to the connector location on the PCB. The Kapton cable itself was unhurt, so after I resoldered the connector in place, I was able to simply re-insert the Kapton cable into the connector slot.



Was it embarrassment? Was it ignorance? Who knows? All that I know is that the radio performed properly once the repair was made, and I repeated the inbound packing job for the outbound trip back to the owner. A simple repair with a nebulous cause... but one thing is certain. That connector most likely did not fall off by itself.

I would much rather have the customer tell me the truth as to what is going on when a unit comes in for repair, as it takes a lot of the guesswork out of the equation. See you next month!