

DX60B FUNCTION SWITCH REPAIR AND MODIFICATION

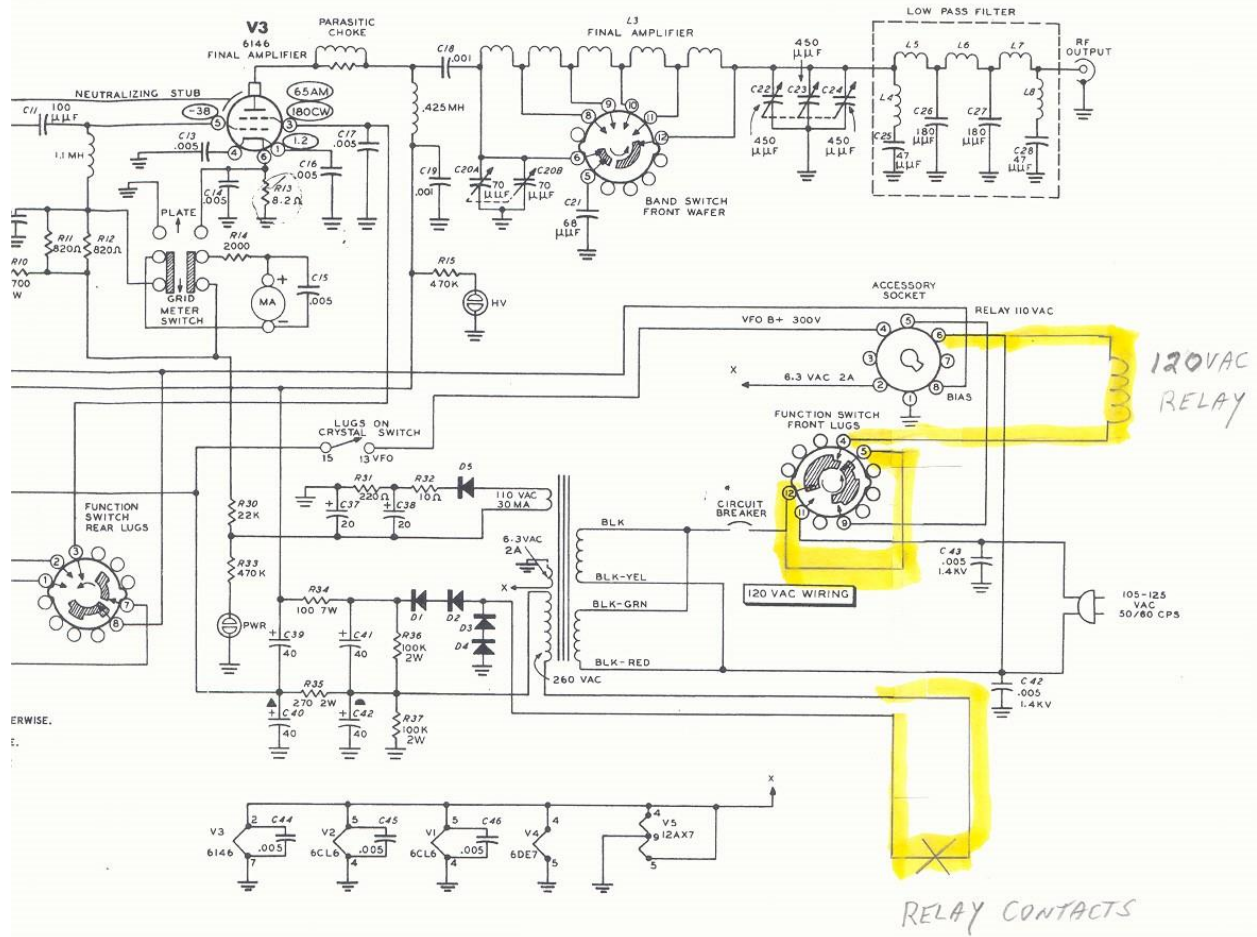
There are lots of mods for the Heathkit DX60 on the internet. These include audio and PTT mods. The PTT mods address an issue with the function switch and makes switching between RX and TX more flexible. The Function wafer switch on an unmodified DX60 switches the high voltage secondary of the power transformer when going from standby (receive) to transmit. The problem is that the contact is not substantial enough to handle the surge current and eventually results in a burnt contact. I had this problem with my DX60B and was asked on several occasion what I did about it so I am presenting my solution here.

I removed the burnt contact by carefully drilling out the rivet holding it in place. You need to be careful here so you don't break the ceramic part of the switch. I found a wafer switch in my box of junk that had contacts similar to the contacts used in the DX60. The plan was to replace the burnt contact in the DX60 with one of these. Replacing the contact wasn't a big job the only problem was finding a way to secure the replacement contact to the rest of the switch. I planned on using a machine screw lock washer and nut to do this. The problem was to find a small enough screw to do this. The hole in the wafer switch is about the size of 14 gauge wire. A number 1 machine screw will work but this size of screw is hard to find around here. I managed to get a couple of these screws with nut and lock washers from a local Ham and I got the job done.

In order to extend the life of contact I am now using a relay to switch the high voltage secondary of the transformer. I found a reasonable small relay with a 120 VAC coil in my box of relays. This relay had good size contacts that should do the job. I used the original contacts (replaced contact)on the function switch to operate the relay coil. The schematic on the following page shows the wiring changes. It should be correct but I do not guarantee the accuracy. You would probably want to compare this schematic with the original to understand the changes.

This mod has been in my DX60B for a number of years now and the replaced wafer switch contact has held up well. I am fairly active on AM and this DX60B gets a lot of use.

To save the AC ON contact on the Function switch, I normally power the DX60B up in the standby position using a power bar. I don't think problems with the AC ON contact are nearly as common as the high voltage contact.



December 2, 2013

Home Page www.ve6kq.com