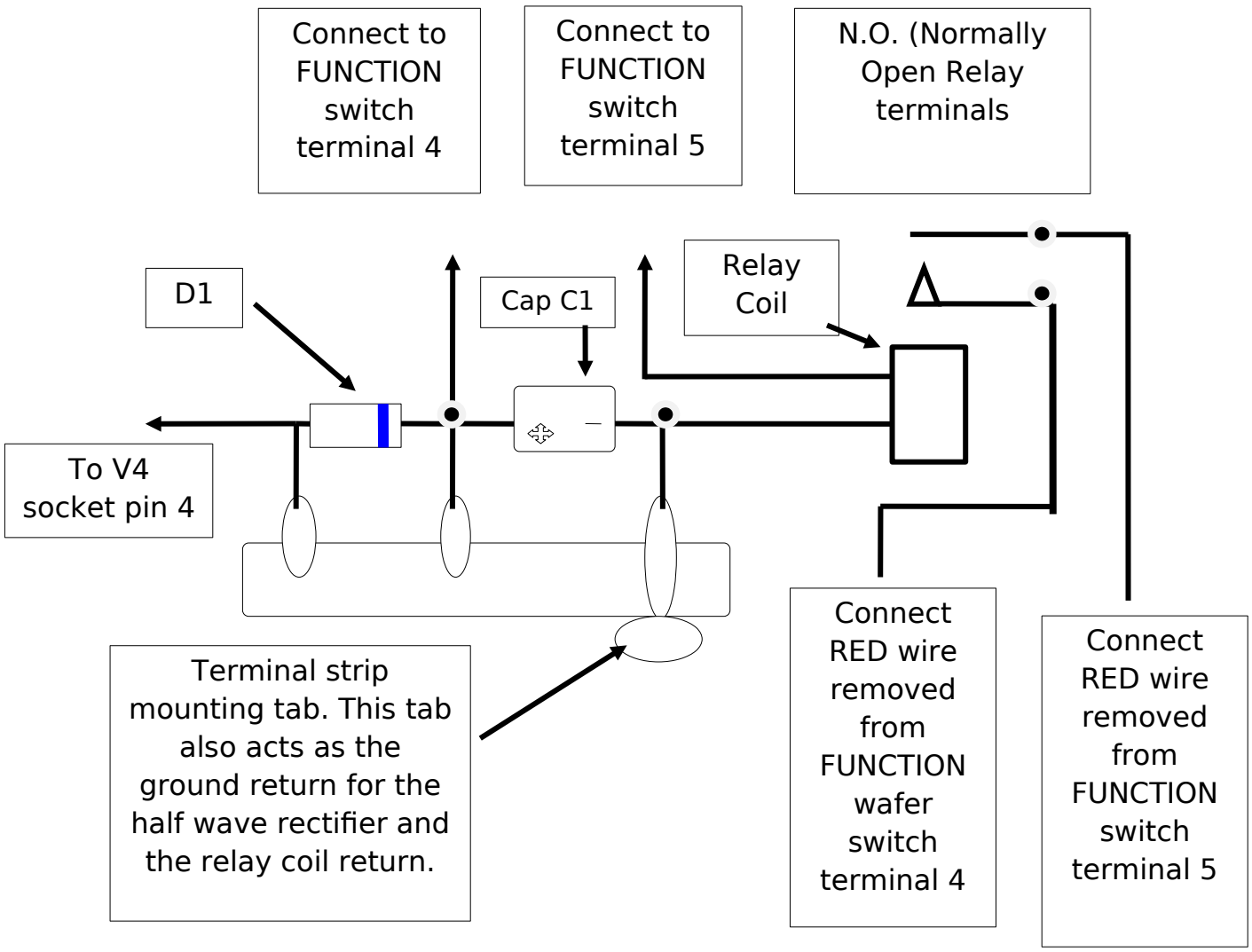
DX-60/A/B Function Switch Modification



The relay shown above is NOT energized (FUNCTION switch set to OFF or STANDBY). The relay energizes in "TUNE, PHONE, and CW" positions only.

Note the filter capacitor C1, a 330ufd 50VDC capacitors, how it has its "Positive" lead terminal connected to the terminal strip. That capacitor lead connects to the banded lead of the diode. Do not use a smaller

capacitance value otherwise the relay will not energize but will "buzz".

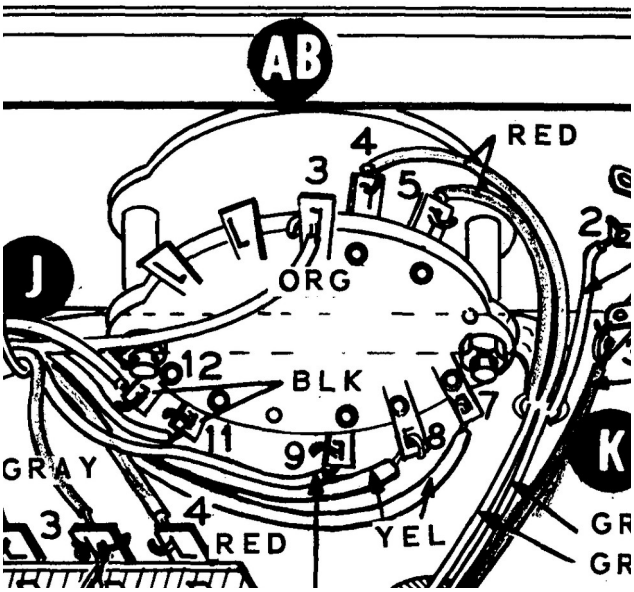
Power source for the half wave rectifier is a tap on V4 filament pin "4". Do not use V4 pin 5 as pin 5 is "grounded".

D1 is the silicon diode. Any silicon diode with a voltage rating of 50VDC or higher may be used. Pay attention so the diode's banded lead is connected as shown.

Perform the modification with the main AC power cord REMOVED from the wall outlet and the filter capacitors are allowed to drain to zero volts before attempting to perform the modification.

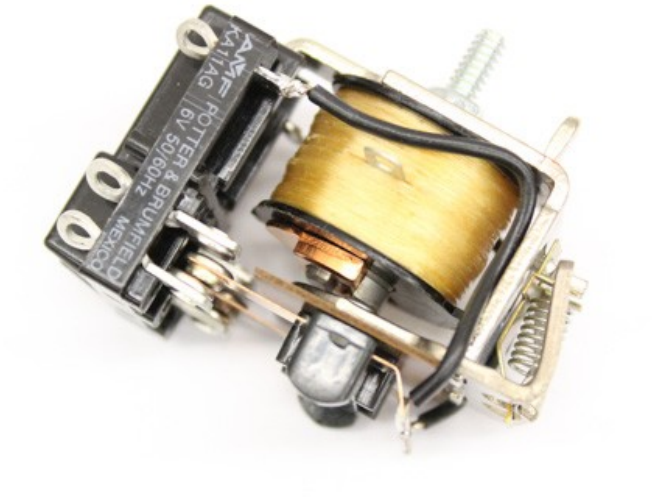
Step 1

Disconnect both RED wire's from the FUNCTION wafer switch terminals 4 and 5 (see picture below). The Function switch is viewed below the chassis with the front panel facing away from you.



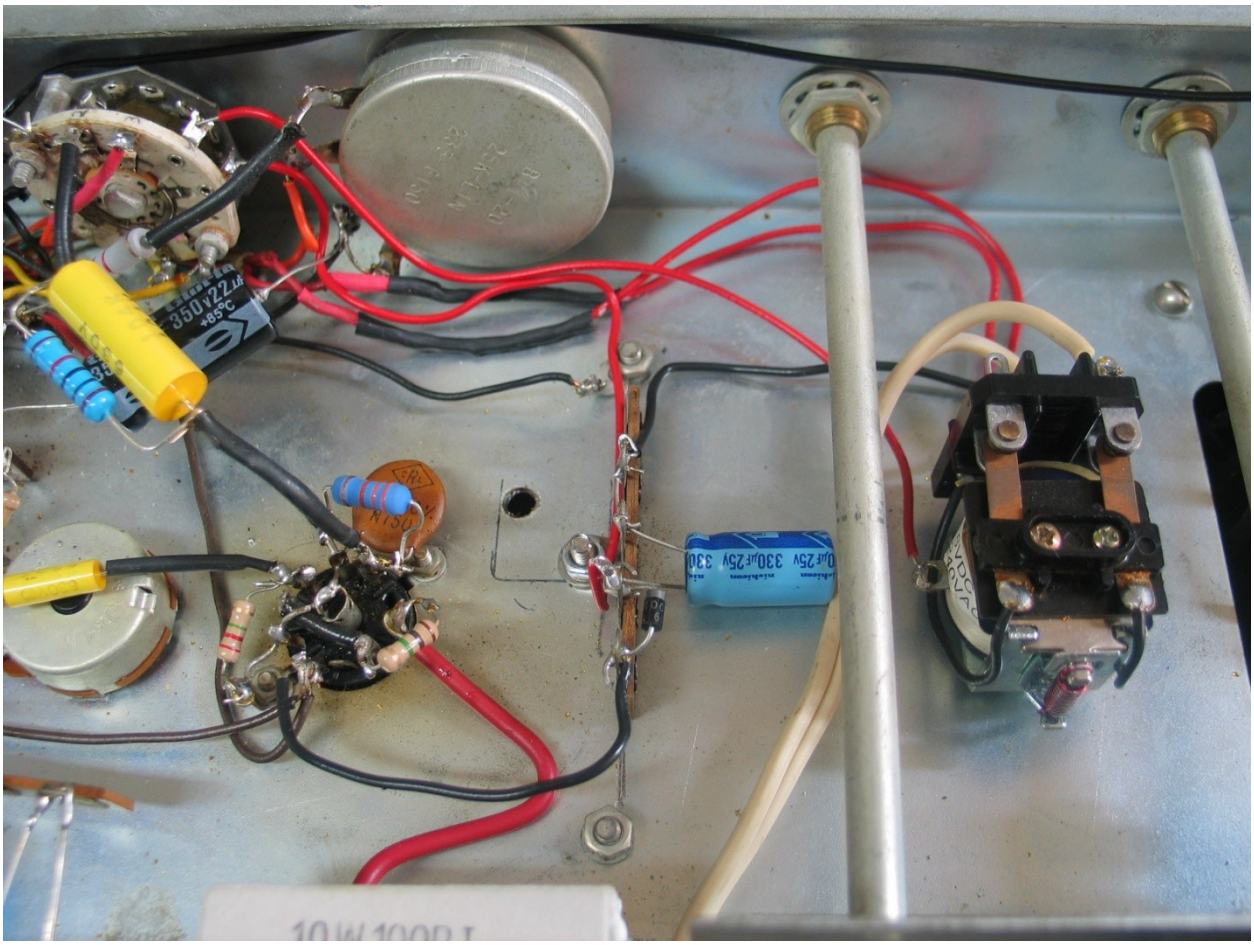
Step 2

The relay I used is a 6VDC DPDT NTE R06-11D10-6 relay that has a 1/2" 6x32 threaded mounting stud on the bottom of the relay. If you use a different relay, make sure you check the relay terminal switching voltage ratings. The relay will be switching the DX-60's power transformer's HV secondary winding's "260VAC".



I use a rubber grommet slid over the threaded stud between the relay and the chassis to reduce the noise created when the relay energizes (click sound). A hole is drilled into the chassis to mount the relay below the chassis.

Note the placement of the relay near V4 in the picture below. Ignore the White zip cord wire, that's not part of the modification.



Step 3

Mount the multi tab terminal strip to final amplifier enclosure nuts next to V4 below the chassis (see above picture).

Step 4

Build the half wave rectifier as shown above and make connections to the FUNCTION switch and RELAY coil terminals as follows.

1. Connect the 2 RED wires removed from the Function switch terminals 4 and 5 to the 2 N.O. Relay terminals on the relay as shown in the top drawing above. These 2 wires will need to be extended. I used same wire gauge and some heat shrink tubing once the wires were extended. Do NOT mess with the wiring harness, use short lengths of Red wire to extend the lengths of the 2 Red wires disconnected from the Function switch tabs 4 and 5.

2. Connect 2 Red wires from the Function switch terminals 4 and 5, one wire connects to the multi tab terminal switch as shown in the top drawing. The other wire connects to one terminal of the relay coil.

3. Connect a length of Black wire from the other relay coil terminal to the multi tab terminal "ground" tab as shown in the top drawing.

Check your wiring so it is the same as shown in the top drawing. Solder all connections using just enough heat to melt the solder and allow it to flow on the connection. Do NOT use excessive solder that produces a "solder blob".

Check for shorts. Power up the DX-60. Placing the Function switch in TUNE, PHONE, or CW mode should

energize the relay. Placing the Function switch in STANDBY should de-energize the relay.

This complete the Basic FUNCTION switch HV switching modification. The Function switch no longer switches the 260VAC but rather switches 6VDC and the relay N.O. contacts perform the 260VAC switching.

73s Mike W5RKL