

Reggio E. 18 apr 2006

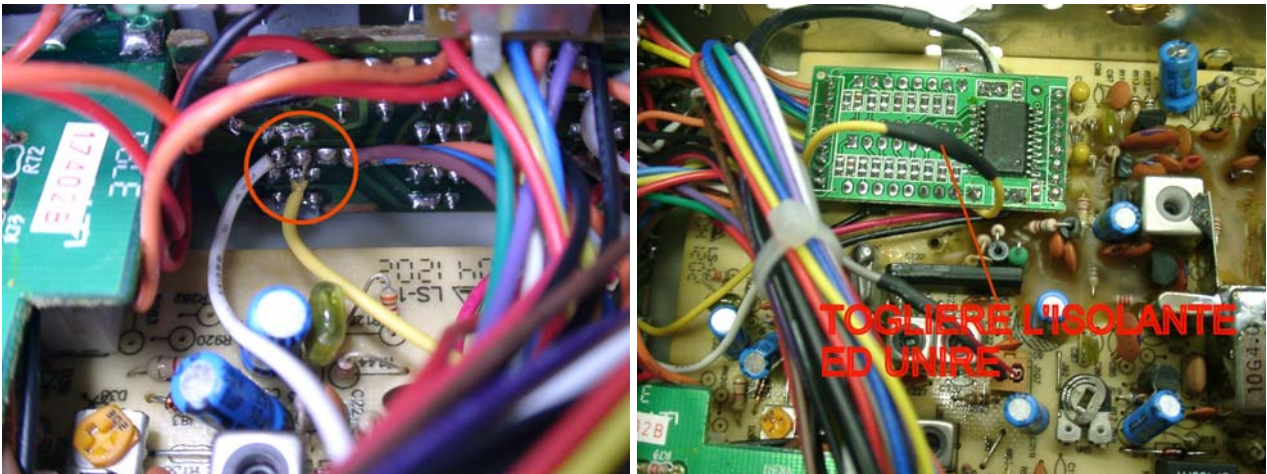
CH POWER modification and 10KHz alan8001 S.doc

RE: ALAN8001 S MODIFICATIONS

RESET +10 KHz

To reset the + 10Khz function, you have to reset the connection of a wire between the + 10 KHz command and the radio.

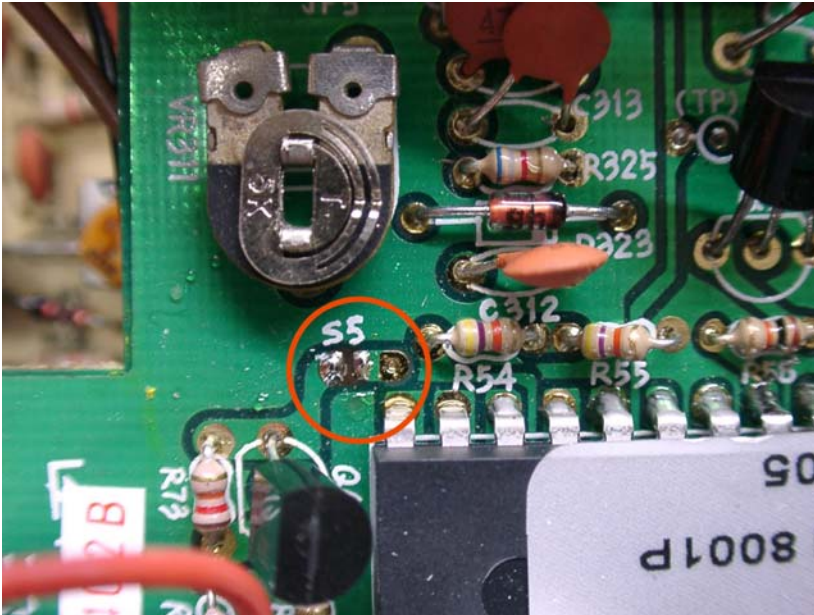
- Locate the place of the radio where the modification will be done (see picture)
- Locate the yellow wire (in some units, wires can be of different colour) soldered on the back of the + 10KHz command (this wire joins one of the soldering of the + 10KHz command to the main circuit of the radio);
- Locate, in the central part of the yellow wire, the shrink wrap protection isolating the two cut ends of the wire;
- Remove the insulating protection and join the two wires;
- Insulate the connection with the insulating tape.



REMOVE THE INSULATING TAPE AND JOIN

CHANNEL EXPANSION AND POWER INCREASE

- Locate the area of the radio where the modification will be done (see picture);
- Close the S5 jumper as the below picture with a soldering.



In order to activate the 400 channel expansion, it is necessary to keep pressed the CH/FREQ button and at the same time switch the radio on. To reset the 40CH function again, follow the same procedure.

While expanding the radio to 400CH, the supplied power from the unit can be decreased at the ends of the band, therefore it is necessary to carry out the power modification as described below.

To increase the power during the transmission, pls. follow the below instructions:

- Remove the 100 ohm resistance indicated in the following picture



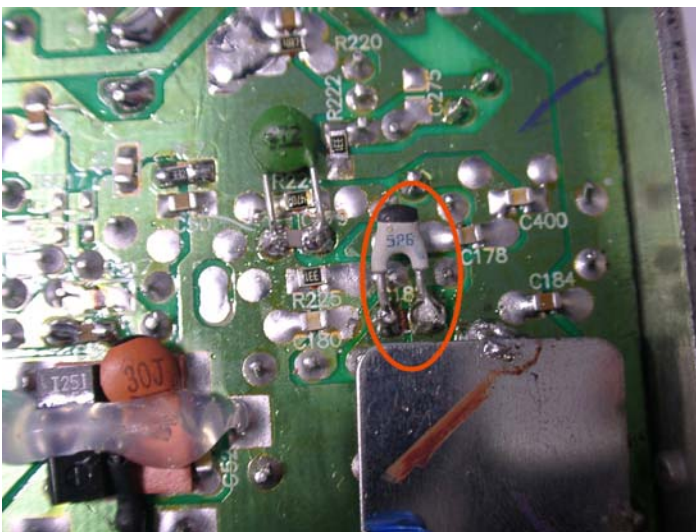
REMOVE THIS RESISTANCE

- Connect the central wire of the coaxial cable in the point indicated in the picture (where the 100 ohm resistance was connected):

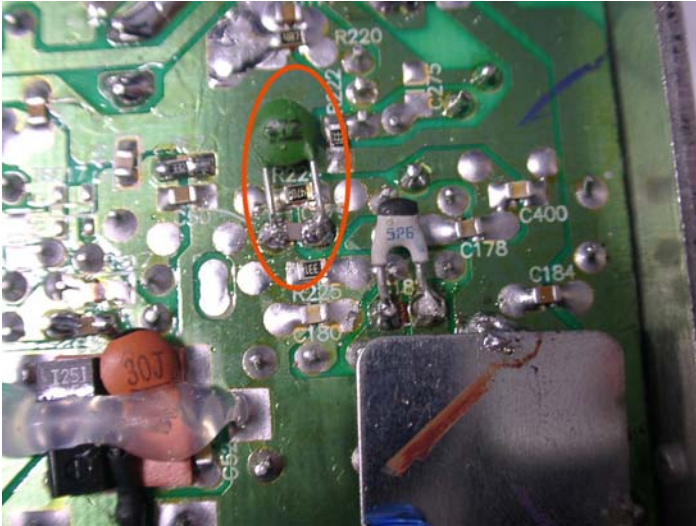
SOLDER THE CENTRAL WIRE OF THE COAXIAL CABLE IN THIS POINT (see below picture)



- Add a 5.6 Pf condenser paralleling to C182 (see picture)



- Add a 4.7 condenser paralleling to C179 (see picture)



- Add a 68 Pf condenser paralleling to C163 (see picture)



- Operate on the VR13 trimmer to increase the power in AM (turn clockwise to increase). In order to reach the optimum modulation, we suggest adjusting this trimmer to a 8/9 Watt power;
- Operate on VR14 trimmer to increase the level of modulation in AM (turn clockwise to increase);
- Operate on VR12 trimmer to increase power in SSB (turn clockwise to increase);
- Select the unit in FM on 20 Channel (27.205 MHz) and adjust the following coils: L40, L42, L43, L44, L18 to obtain max. output power;
- Make sure that the power supplied from the unit in SSB is regular in all the bands; if not, operate on the above mentioned coils to verify the level of the supplied power on the different working bands.