5) Alignment Procedure

This radio is adjusted to meet all condition in production except special case.

Readjustment is not requirement.

5-1) The preparation before adjustment.

1) Set the Power Supply voltage to 13.8V and then connect to the radio.
2) Connect the connector to Radio Antenna terminal.
3) Connect the radio to test equipment.

5-2) PLL Synthesizer

1) Measure the voltage of TP1 with High impedance voltage meter.
2) Adjust TC302 at RX channel 2 to be 2.3V.
   Confirm if it is below 12V at RX high channel
   Adjust TC303 at TX channel 2 to be 2.5V.
   Confirm if it is below 15V at TX high channel.
3) Confirm if Channel 1 is in 3 +/-0.3 in WX.

5-3) Adjustment of Transmitter

1) Adjust to tune the set frequency.
2) Adjust RV1 to tune the set High power & Adjust RV2 to tune the set Low power
3) Set Audio Generator to be 1kHz 100mVrms and connect to Radio External Jack.
4) Adjust RV401 to tune desired modulation.

5) If a channel is set with CTCSS/DCS the modulation of CTCSS/DCS varies based on the size of the modulation.

5-4) Adjustment of Receiver

1) Set SSG RF level to –47dBm @1kHz 60% Dev.
2) Adjust T1 to maximize Audio.
3) Adjust SSG RF Level and confirm if 12dB Sinad is below –117dBm.
4) Check RV801 to open Audio.
5) Set tone frequency to SSG when there is channel set with CTCSS/ DCS and then set deviation to 10% Peak Dev. Then check if AUDIO is on.
6) Repeat the above in other channels.