

MIDLAND 2001 / 3001 /4001

PLL Alignment

REQUIRED TEST EQUIPMENT

DC Power Supply (13.8VDC, 5A)

Frequency Counter (100 MHz)

50 Ω RF dummy load

Multimeter (Digital)

ALL TESTS TO BE CARRIED OUT WITH 50 Ω RF DUMMY LOAD CONNECTED TO THE ANTENNA SOCKET.

10.240 CRYSTAL ALIGNMENT

1. Connect the Frequency Counter to PIN 12 of IC 102 (LC7137).
2. Adjust C206 for 10.24046 MHz \pm 100 Hz.

VCO ALIGNMENT

1. Set the radio to channel 40 in the TX mode.
2. Connect the Multimeter to TP1 and Ground.
3. Adjust L116 to obtain 2.5 vdc.
4. Set the radio to channel 1 and in the RX mode.
5. Check the voltage at TP1 it should be about 2.0 vdc.

To check that the VCO is set ok with the Multimeter connected to TP1 and Ground in RX mode you should have 2.0 vdc at channel 1 and about 4.0 vdc at channel 40.