

VE6NHB Motorola MSR2000 VHF Repeater Documentation & Power Supply Setup Notes

RECEIVER

TRD6182A Receiver 146 – 174 MHz

MODIFIED – to lower receive frequency range.
Changed C102 to 6.8 pfd, C103 to 3.0 pfd.
Changed C109 to 10 pfd, C111 to 10 pfd AND C117 to 3.3 pfd.
C110 was not changed.

HLD4052A RF Pre-Amp 146 – 174 MHz

MODIFIED to HLD4051A 132 – 150.8 MHz.
Changed C154 to 1.5 pfd.
Added C156 – 2.0 pfd.

TRANSMITTER **TLD2532A 110W Intermittent Duty Power Amplifier**

TLD9252A Power Amplifier Board 150.8 – 162 MHz

TLD9232B Simplex Exciter Board 146 – 174 MHz

POWER SUPPLY **TPN1191A**

TRN6138B Distribution Board

TRN5119A Auxiliary Regulator Board 84D82110N02

MODIFIED

Connector J1
Pins 2 and 5 are removed.
Pins 2 and 7 are connected.
Pins 5 and 6 are connected.

ADJUSTMENTS

Set R35 for 9.4 Volts at TP101
Set R7 for 13.9 Volts at TP111

TRN0000X Custom Battery Control Board

ADJUSTMENT – Alarm Tone

Adjust “tone level” control R128 for 500 Hz deviation.
The alarm tone can be activated by jumpering alarm input connector J2.

ADJUSTMENT – Low Voltage Detect

Connect a variable DC power supply set at 13.1 volts to TB601.
Preset low-voltage control R129 fully clockwise.
Set power supply to 10.5 volts.
Adjust R129 counterclockwise until relay K100 drops out.
Check relay operation by increasing the power supply voltage
until the relay pulls in and then reduce it until the relay drops out.