ALIGNMENT PROCEDURE

1. P L L U N I T

CONDITIONS: SUPPLY VOLTAGE :13.8V ADJUSTMENT CHANNEL :19

STEP	CONDITION	CONDITION	ADJUSTMENT	PROCECEDURE
1	RX MODE	CONNECT TP9 LEAD TO SYNCHROSCOPE	L16	ADJUST L16 COIL TO ITS MAXIMUM READING ON THE SYNCHROSCOPE.
2	RX MODE	DITTO	L16	ADJUST L16 THAT DIFERENCE OF OUTPUT AT CH 40 AND CH 1 BECOMES MINIMUM.
3	TX MODE	CONNECT TP2 TO DC VOLTMETRE	15	ADJUST L15 TO OBTAIN DC VOLTMETER READING TO BE 3.2V ± 0.1V AT CH 40.
4	RX MODE	DITTO	15	CHECK DC VOLTMETER READING TO BE APPROX. 1.7V AT CH 1.
5	AFTER THE ABOVE ADJUSTMENT , APPLY PARAFFIN LOCK TO L19.			

2. TRRANSMITTER

CONDITIONS: SUPPLY VOLTAGE :13.8V NODULATION : 1 kHz
ADJUSTMENT CHANNEL :19

STEP	CONDITION	CONDITION	ADJUSTMENT	PROCECEDURE
1	NO MOD.	CONNECT TP4 TO THE SYNCHROSCOPE	L10	ADJUST L18 & 17 TO REAL WITH CORES OF L14 POSITIONED AT THE BOTTOM. THEN ADJUST L14 TO PEAK.
2	80% MOD.	CONNECT POWER METER TO ANT. TERMINAL.	L10	ADJUST L10 TO OBTAIN MAXIMUM READING ON THE POWER METER.
3	NO MOD.	DITTO	L10	ROTATE L10 CW TO OBTAIN 3.9W.
4	100% MOD.	CONNECT SYNCHROSCOPE TO POWER METER	5	ADJUST VR4 TO OBTAIN 100% MODULATION (NEGATIVE) AT MOD. INPUT OF 30mV.
5	NO MOD.	CONNECT POWER METER TO ANTENNA TERMINAL	3	ADJUST VR5 SO THAT THE METER READING OF THE UNIT IS AS SHOWN:
6	APPLY PARAFFIN LOCK TO L10 AFTER THE ABOVE ADJUSTMENT			

3. R E C E I V E R (C B)

CONDITION	SUPPLY VOLTAGE	:13.8V	ANT. IMPEDANCE	:50Ω
	ADJUSTMENT CANNEL	:19	SSG MOD. SIGNAL	:1KHz 30%
	PUTPUT IMPEDANCE	:8Ω	AUDIO OUTPUT	:500mV
	RF SIGNAL OUTPUT	:0dB = 0.5μV		

UNLESS OTHERWISE EXPRESSLY STATED, THE SWITCHES ARE SHOW BELOW:

NB/ANL-------OFF
PA-WX-CB-----CB
SQUELCH------C.C.W
VOLUME-------C.W
RF GAIN-------C.W

ALL OF THE FOLLOWING dB VALUESARE TAKEN FROM DIRECT READING VALUES OF SSG ATTENUATOR.

STEP	ITEM	ADJUSTMENT	PROCEDURE
1	RX SENSITIVITY	L1.2.3.4.5.6.7	ADJUST EACH COIL TO PEAK AF OUTPUT LAVEL, HOWEBVER, DECREASE OUTPUT OF SSG ATTENUATOR PROPERLY SO THAT IT ALWAYS DOES NOT EXCEED THE STANDARD OUTPUT. SENSITIVITY DIFFERENCE METWEEN EACH CHANNEL SHOULD BE WITHIN 6 dB
2	NOISE BLANKER	L19	SET NB SWITCH TO NB/ANL POSITION. SET SSG AT 6dB AND SET THE AUDIO OUTPUT OF THE UNIT AT STANDARD OUTPUT. THEN ADJUST L1 TO OBTAIN MINIMUM AUDIO FREQUENCY OUTPUT.
3	SQUELCH	VR4	SET SSG AT 66dB. THEN ADJUST SQUELCH CONTROL SLOWLY UNTIL AF WAVE APPEARS.
4	S-METER	VR1	SET SSG AT 46dB AND ADJUST METER INDICATOR OF THE UNIT AS SHOWN:

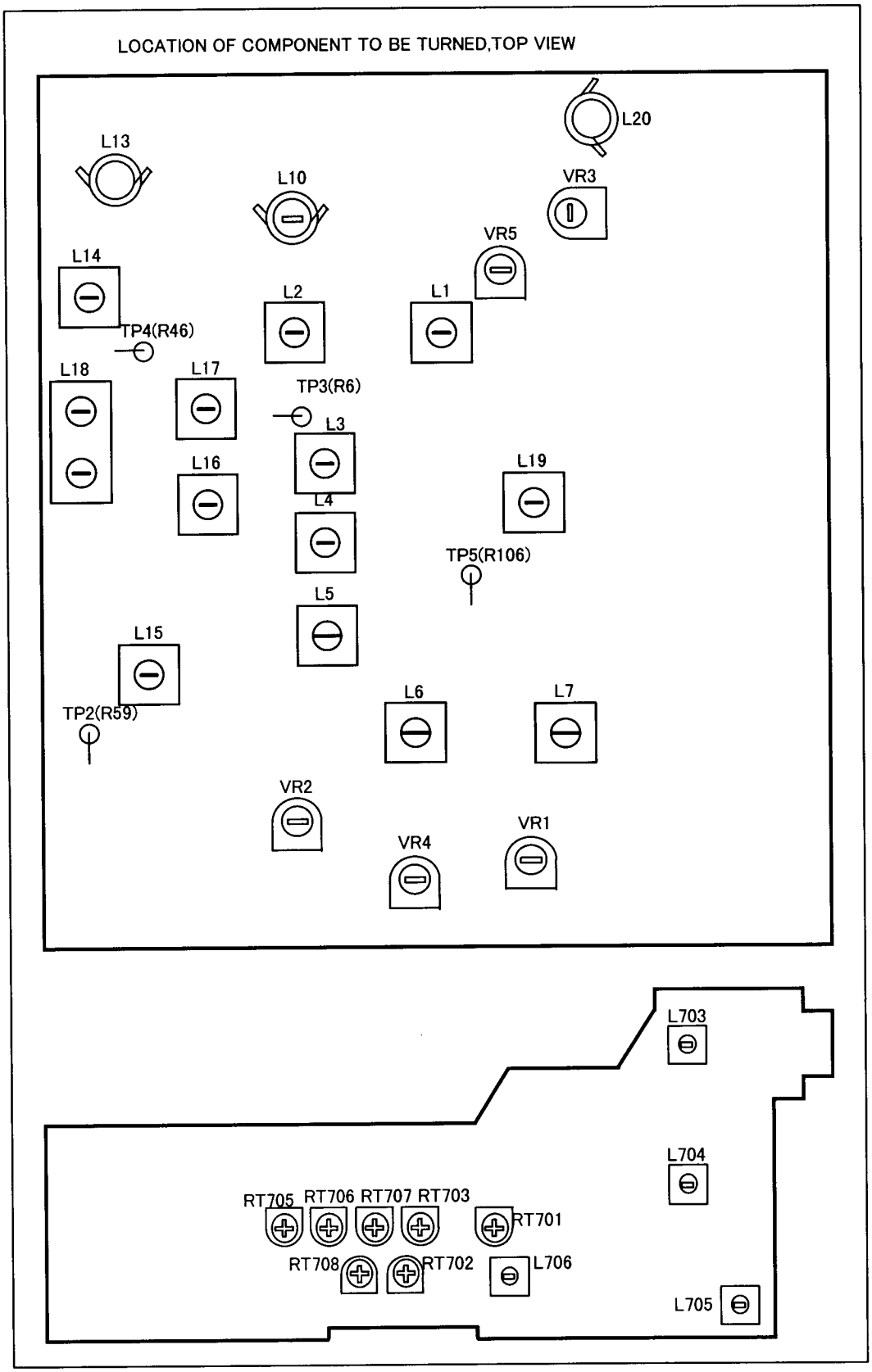
4. R E C E I V E R (W X)

CONDITION:
SUPPLY VOLTAGE : 13.8V DC
ANT, IMPEDANCE : 50Ω
STANDAED AUDIO OUTPUT : 500mW OUTPUT IMPEDANCE : 8Ω
SSG MOD, SIGNAL : 0.9KHz, ±3KHz DEV.
RF SIGNAL OUTPUT : 0dB =0.5μV

ALL CONTROLS AND SWICHES ARE SET AS FOLLOWS UNLESS OTHERWISE SPECIFIED.

CB/ALERT/WX : WX PA/CB : CB
VOLUME :CENTER VR711 : MIN.
TP6 Connect to GND.

STEP	ITEM	ADJUSTMENT	PROCEDURE
1	W1 (162.40MHz)	L705	SET SSG AT 66dB. ADJUST TO PEAK AF OUTPUT LEVEL.
2	W2 (162.425MHz)	RT703	ADJUST TO THE BEST SINAD. HOWEVER, DECREASE OUTPUT OF SSG ATTENUATOR PROPERLY SO THAT IT ALWAYS DOES 12dB SINAD.
3	W3 (162.450MHz)	RT702	DITTO
4	W4 (162.475MHz)	RT708	DITTO
5	W5 (162.500MHz)	RT707	DITTO
6	W6 (162.525MHz)	RT706	DITTO
7	W7 (162.55MHz)	RT705	DITTO
8	W1 CONNECT SYNCHROSCOPE TO TP 5 Volume : Min	RT701	SET SSG AT 66dB. SET SSG MOD. TO 1050Hz ±3KHz DEV. ADJUST RT701 TO ITS MAXIMUM READING.


LOCATION OF COMPONENT TO BE TURNED,TOP VIEW
L20
L13
L10
VR3
VR5
L14
L2
L1
TP4(R46)
L18
L17
TP3(R6)
L3
L16
L19
L4
TP5(R106)
L5
L15
TP2(R59)
L6
L7
VR2
VR1
VR4
L703
L704
RT705
RT706
RT707
RT703
RT701
RT708
RT702
L706
L705