

ADJUSTMENTS

- * Tuning dial is set to the proper point corresponding to no radio stations.
- * The sweep and the r.f. generator are set to the lowest response possible on oscilloscope.
- * When connecting the r.f. generator to the antenna terminal, use the dummy antenna . . . refer to Fig. 1.
- * Use the insulated screwdriver adjusting the i.f.t.
- * FM MUTING is OFF position unless it is required.
- * Test point shown in the schematic diagram and PC board.
- * INPUT means antenna input level.

No.	ALIGN	TEST EQUIPMENTS		TUNER SETTING	OUTPUT INDICATOR	ADJUSTMENT POINTS	REMARKS
		CONNECTION	SETTING				
FM SECTION							
1	IFT	SWEEP to TP1 via. 5pF cap.	10.7 MHz	Non-station	SCOPE to TP2 via 100kΩ resist.	La7, Lb5	Maximum deflection (Fig. 2)
2	IFT	Same	Same	Same	SCOPE to T3	Lb11	Same
3	DISCRIMINATOR	Same	Same		VTVM & SCOPE to REC jack	Lb7	S-response and its symmetry on each side of 10.7 MHz center frequency (Fig. 3)
4	TRACKING	RF-SG to ANT via. dummy ant.	90 MHz 75 kHz (Dev.) 400 Hz (Mod.)	90 MHz	Same	La1, La3, La4 La6, La8	Maximu deflection
5	TRACKING	Same	105 MHz 75 kHz (Dev.) 400 Hz (Mod.)	105 MHz	Same	CTa1 ~ 5	Same
6	BEACON	Same	95 MHz 75 kHz (Dev.) 400 Hz (Mod.) 60 dB (Input)	95 MHz	DC Volt Meter to TP4	VRb4	Set VRb4 to its center. Check the output (DC) at TP4 and assume its value for 0 dB
7	IF GAIN	Same	95 MHz 75 kHz (Dev.) 400 Hz (Mod.) 22 ~ 23dB (Input)	Same	Same	VRb1	Adjust VRb1 so that the output is at -3 dB in respect to 0 dB
8	MUTING	Same	Same	95 MHz MUTING 1 position	Same	VRb4	Adjust VRb4 so that muting operation is on.
9	AF OUTPUT	Same	95 MHz 75 kHz (Dev.) 400 Hz (Mod.) 60 dB (Input)	95 MHz	VTVM & SCOPE to REC jack	VRb2	Output is 1.5V.
10	S METER	Same	Same	Same	S meter	Lb18	Maximum deflection
11	S METER	Same	Same	Same	S meter	VRb3	Confirm the meter deflection at 4.5
12a	VCO	—	—	Non-station	Frequency-counter to TP5	VRc2	Counter indicates 19 kHz.
12b	VCO	RF-SG to ANT via. dummy ant. MPX-SG to RE-SG ext. Mod.	95 MHz 60 dB (Input) PILOT SIG. ON-OFF	95 MHz	SCOPE to TP5	Same	Phase not drift.
13	DEVIATION METER	Same	95 MHz 67.5 kHz (Dev.) 400 Hz (Mod.) 60 dB (Input) L + R (SELECTOR)	95 MHz Deviation meter SW	Deviation meter	VRc3	Meter indicates 100%

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		CONNECTION	SETTING				
14	SEPARATION	Same	95 MHz 67.5 kHz (Dev.) 400 Hz (Mod.) 60 dB (Input) L or R (SELECTOR)	95 MHz	VTVM & SCOPE to REC jack	VRc1	Minimum deflection
15	MULTIPATH	AG to TP6	38 kHz (1mV)	Non-station	VTVM & SCOPE to TP7	Lb12, Lb13	Maximum deflection
16	MULTIPATH	—	—	Non-station	—	VRb5	Set VRb5 to its center
AM SECTION							
1	IFT	RF-SG to ANT	1,000 kHz (400 Hz, 30% Mod.)	1,000 kHz	VTVM & SCOPE to REC jack	Lb16	Maximum deflection
2	TRACKING	RF-SG to ANT	600 kHz (400 Hz, 30% Mod.)	600 kHz	Same	Lb15, Lb17 Ferrite ANT	Same
3	TRACKING	Same	1,400 kHz (400 Hz, 30% Mod.)	1,400 kHz	Same	CTa6 ~ 8	Same
4	S METER	Same	1,000 kHz (400 Hz, 30% Mod.)	1,000 kHz	S meter	VRb6	Confirm the meter deflection at 4.5

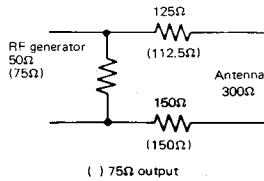


Fig. 1 Dummy antenna

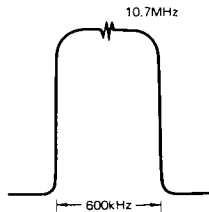


Fig. 2 IF waveform



Fig. 3 DISCRI waveform

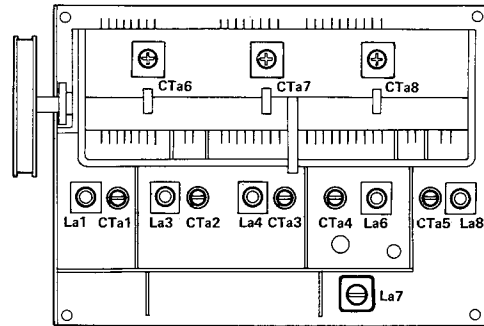


Fig. 4 RF unit

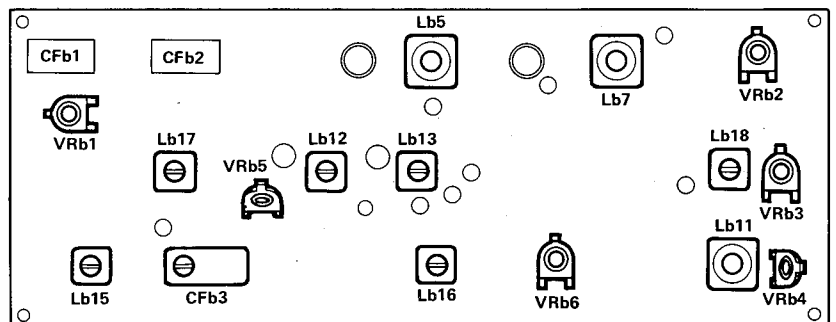


Fig. 5 IF unit