■MEASUREMENTS AND ADJUSTMENTS

● ADJUSTMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ADJUSTMENT	
1. Set volume control to maximum. 2. Set band switch to AM or FM ST. 3. Set selector switch to radio. 4. Set power source voltage to 3 V DC.	5. Output of signal generator should be no higher than necessary to obtain an output reading. 6. Make sure head are clean. 7. Make sure capstan and pinch roller are clean.

● TUNER SECTION

AM ADJUSTMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
		AM-IF ALIGNMENT					
(1)	AM	Fashion a loop of several turns of wire and radiate the signal into the loop antenna of the receiver.	459kHz 30% Mod. at 400 Hz	Point of non-interference. (on about 600kHz)	Headphones Jack 20 Ω (Refer to Fig. 3)	T1 (AM IFT)	Adjust for maximum output.
		AM-RF ALIGNMENT					
(2)	AM	〃	511 kHz··· [E] 516kHz··· [EJ]	Tuning capacitor fully closed.	〃	L4 (AM OSC Coil)	Adjust for maximum output.
(3)	AM	〃	1650kHz··· [E] 1635kHz··· [EJ]	Tuning capacitor fully open.	〃	CT4 (AM OSC Trimmer)	〃
(4)	AM	〃	550kHz	Tune to signal.	〃	(*1) L1 (AM ANT Coil)	Adjust for maximum output. Adjust L1 by moving coil bobbin along ferrite core.
(5)	AM	〃	1,500kHz	〃	〃	CT1 (AM ANT Trimmer)	Adjust for maximum output. Repeat steps (2)~(5).

(*1) Cement antenna bobbin with wax after completing alignment.

FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
		FM-RF ALIGNMENT					
(1)	FM	Connect to test point ▼1 through FM dummy antenna. Negative side to test point ▼2.	86.2MHz···[E] 87.4MHz···[EJ]	Variable capacitor fully closed.	Headphones Jack 20 Ω (Refer to Fig. 3)	L3 (FM OSC Coil)	(*2) Adjust for maximum output.
(2)	FM		109.3MHz····[E] 108.35MHz···[EJ]	Variable capacitor fully open.		CT3 (FM OSC Trimmer)	〃
(3)	FM		90MHz	Tune to signal.		L2 (FM ANT Coil)	〃
(4)	FM		106MHz	〃		CT2 (FM ANT Trimmer)	(*2) Adjust for maximum output. Repeat steps (3)~(6).

(*2) Three output responses will be present; proper tuning is the center frequency.

● TAPE DECK SECTION

ITEM	INPUT	MEASUREMENT POINT	ADJUSTMENT POINT	PROCEDURE
Azimuth	QZZCFM (8kHz, −20dB)	Headphones Jack 20 Ω (Fabricate the plug as shown in Fig. 3 and then connect the lead wires of the plug to the measuring instrument.)	Azimuth adjustment screw (Refer to Fig. 2)	Adjust the azimuth adjustment screw during repeated forward and reverse playback to obtain the maximum head azimuth allgnment with both channels equal. Then screw-lock the adjustment in place.
Tape speed	QZZCWAT (3kHz, −10 dB)		VR2 (Refer to Fig. 1)	Playback the central part of the tape and adjust VR2 so that the tape speed is as follows. 3000±60Hz (Forward & Reverse)