

4. ADJUSTMENTS

1. Test & Adjustment point

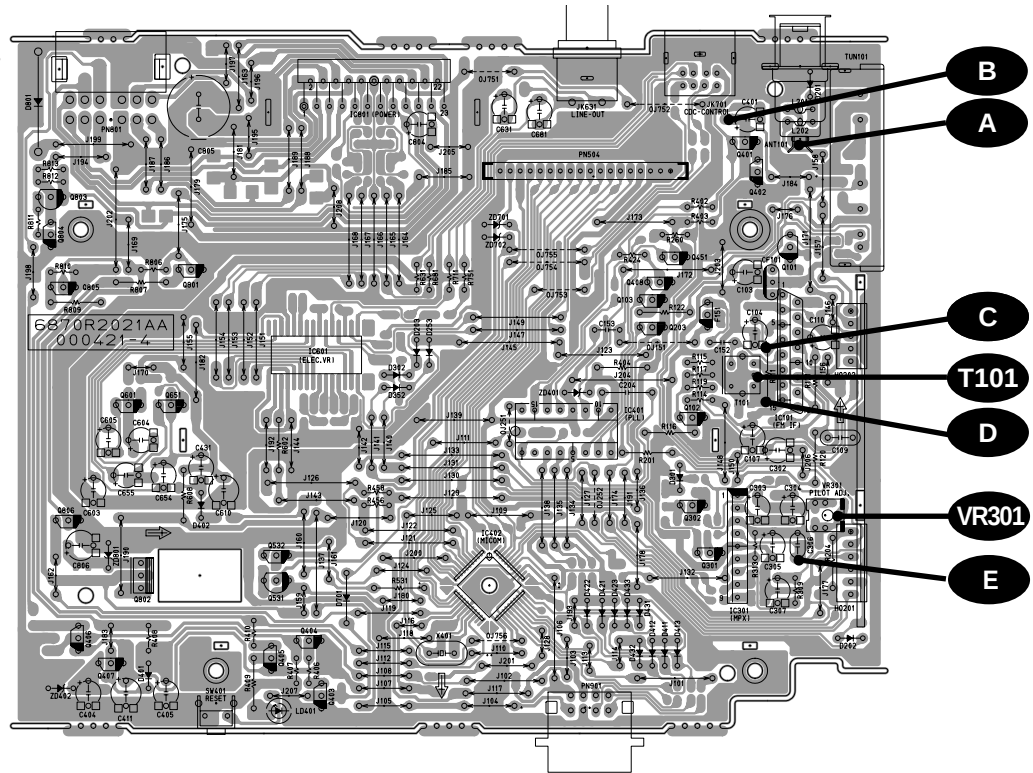


Figure 1. MAIN PCB Board

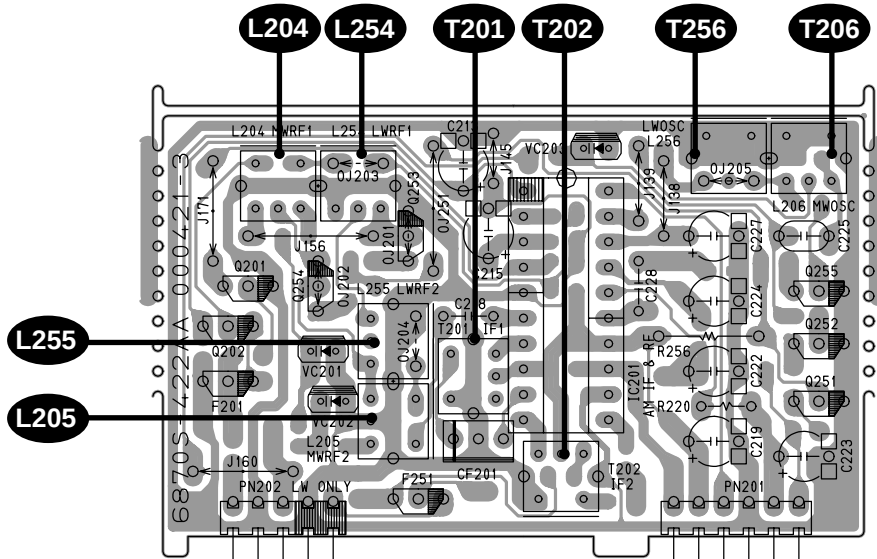


Figure 2. RF PCB Board

2. FM Adjustment

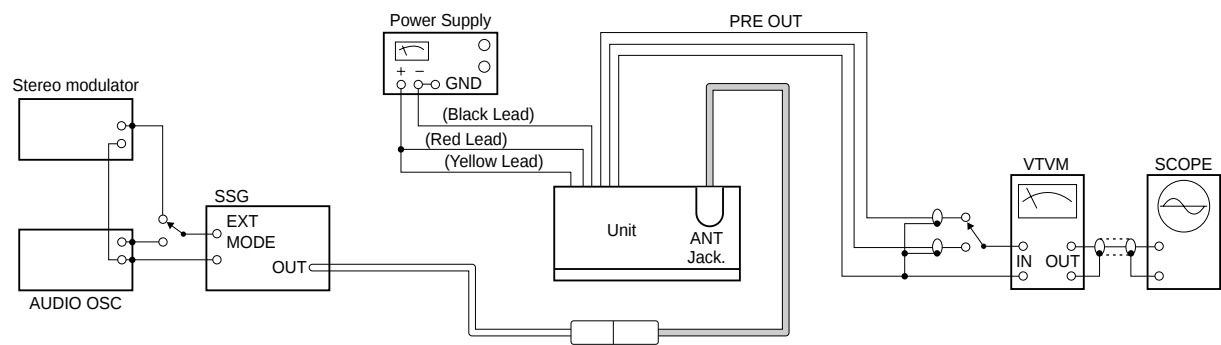


Figure 3.

- (1) The impedance of FM antenna terminal is 75Ω
Therefore, connect coaxial cable (3C-2V etc.) between FM SG and antenna terminal when wiring.

Item Type	FM SSG Attenuator Indication	Available Power Ratio	Antenna Terminal Voltage
Open indication type	0dB 60dB	5.2dBf 65.2dBf	6dB/μV 66dB/μV
Load or close indication type	0dB 54dB	11.2dBf 65.2dBf	12dB/μV 66dB/μV

- (2) There are two kind in indication of FM SG output attenuator.
1) Attenuator with Marking of 75Ω open...open indication type
2) Attenuator with marking of 75Ω load or close...load or close indication type.
- (3) FM SG output level in this FM adjustment are described as open indication type. The left table shows relations among FM SG attenuator indication(dB), available power ratio(dBf) and antenna terminal voltage(dB/μV) in each indication type.

Notes:

- 1. BAND Switch FM
- 2. BALANCE Center
- 3. TREBLE/BASS Center
- 4. Connect as shown in figure 3.
- 5. Refer to figure 1~2 for Adjustment Points.

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUSTMENT	ADJUST FOR
		FROM	TO			
1	Discriminator	98MHz 60dB 22.5kHz Dev. 1kHz FM SSG	ANT Jack or Point A	Between Point C & Point D, DC Volt Meter.	T101	DC 0V±10mV
2	MPX Adjustment	98MHz 60dB 75kHz Dev.1kHz FM SSG	Same as above	Between Point E & GND, Frequency Counter	VR301	76kHz±50Hz

3. AM(MW) Adjustment

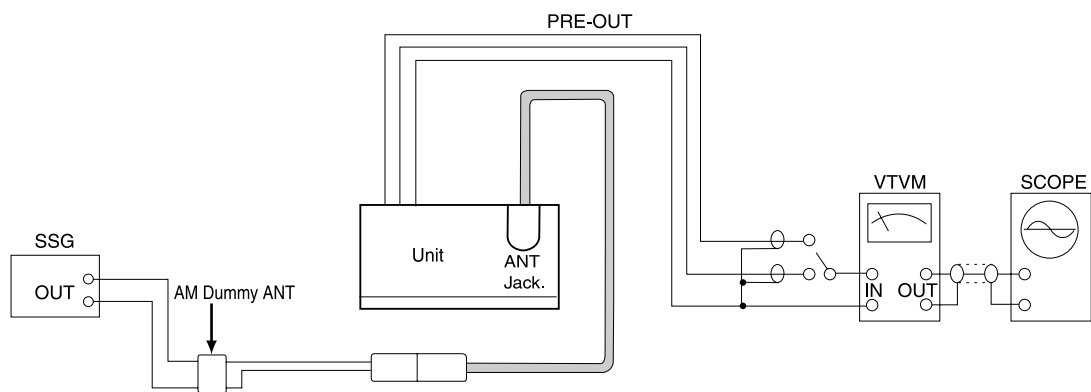


Figure 4.

Notes:

- 1. BAND Switch AM(MW)
- 2. Connect as shown in figure 4.
- 3. Refer to figure 1~2 for Adjustment Points.

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUSTMENT	ADJUST FOR
		FROM	TO			
1	520 or 522kHz	No Input		LCD Display (Reception Frequency)	TUNE +/- Button	520 or 522kHz
	Tuning Voltage Adjustment			Between Point B and GND, DC Volt Meter	L206	DC 1.2V±0.05V
2	IF Coil Adjustment	600kHz or 603kHz ANT input, 30dB, 400Hz (30% MOD) SSG.	ANT Jack or Point A	Output L or R ch, VTVM & Oscilloscope	T201 & T202	Max. Output
3	600kHz or 603kHz RF Adjustment	600kHz or 603kHz ANT input, 30dB, 400Hz (30% MOD) SG.	Same as above	LCD Display (Reception Frequency)	TUNE +/- Button	600 or 603kHz
				Output L or R ch, VTVM & Oscilloscope	L204 & L205	Max. Output

4. LW Adjustment(Optional)

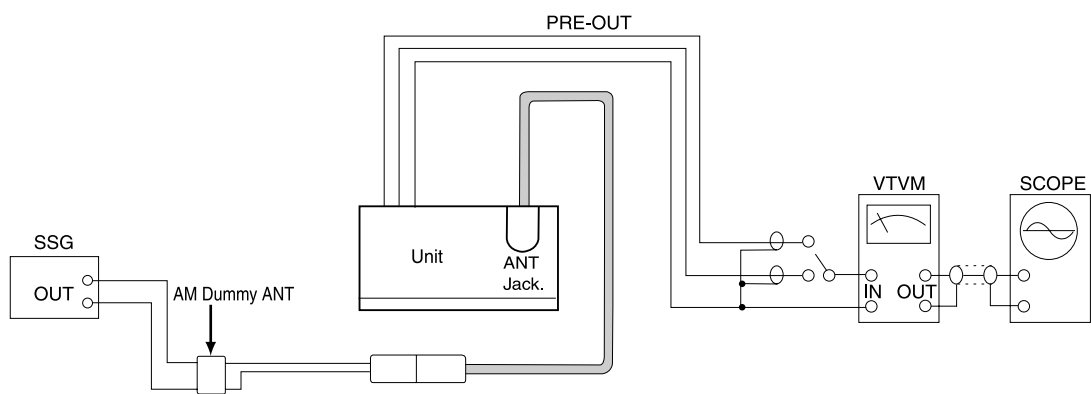


Figure 5.

Notes:

- 1. BAND Switch LW
- 2. Connect as shown in figure 5.
- 3. Refer to figure 1~2 for Adjustment Points.

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUSTMENT	ADJUST FOR
		FROM	TO			
1	144kHz	No Input		LCD Display (Reception Frequency)	TUNE +/- Button	144kHz
	Tuning Voltage Adjustment			Between Point B and GND, DC Volt Meter	L256	DC 1.2V±0.05V
2	150kHz RF Adjustment	150kHz ANT input, 30dB, 400Hz (30% MOD) SSG.	ANT Jack or Point A	LCD Display (Reception Frequency)	TUNE +/- Button	150kHz
				Output L or R ch, VTVM & Oscilloscope	L254 & L255	Max. Output

5. Cassette Deck Adjustment

- (1) Before this adjustment, clean PLAYBACK head surface.
- (2) For this adjustment, use test tape MTT-114.
- (3) VOLUME Center
- (4) BALANCE Center
- (5) TREBLE/BASS Center
- (6) Connect as shown in figure 6.

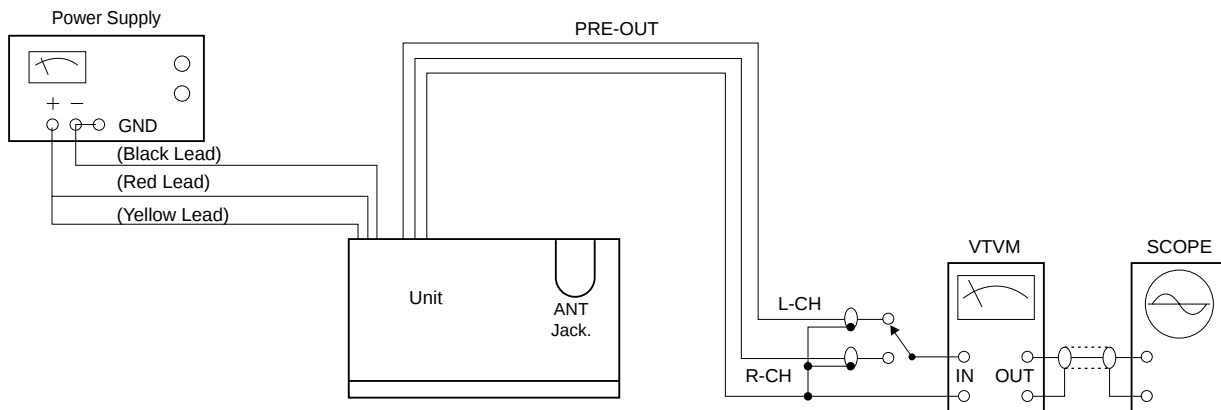


Figure 6.

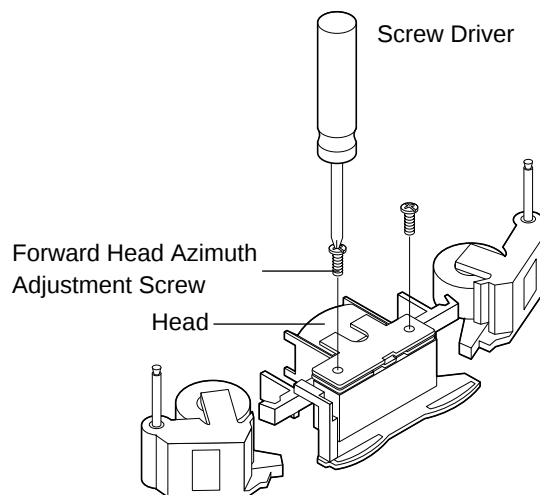


Figure 7.

SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
P.B Head Adjustment	L-CH, R-CH, VTVM and Scope See figure 6.	Playback(FWD & REV) the TEST TAPE MTT-114	Adjust the azimuth adjusting screw (in figure 7).	Max. Output both channels on FWD and REV PLAY	After this adjustment, lock the screw with paint.