

SERVICE MANUAL

PURE POWER DC STEREO RECEIVER

SANSUI G-5700
G-6700
G-7700



Sansui

SANSUI ELECTRIC CO., LTD.

SPECIFICATIONS

- ◆ Audio section
- <G-5700>
- Power output
Min. RMS, both channels driven, from 20 to 20,000 Hz, with no more than 0.03 % total harmonic distortion.
75 watts per channel into 8 ohms
Load impedance 8 ohms
- <G-6700>
- Power output
Min. RMS, both channels driven, from 20 to 20,000 Hz, with no more than 0.025 % total harmonic distortion.
90 watts per channel into 8 ohms
Load impedance 8 ohms
- <G-7700>
- Power output
Min. RMS, both channels driven, from 20 to 20,000 Hz, with no more than 0.025 % total harmonic distortion.
120 watts per channel into 8 ohms
Load impedance 8 ohms
- <G-5700/G-6700>
- Intermodulation distortion (70 Hz : 7 kHz = 4:1 SMPTE method) less than 0.03 % at rated power output
- Frequency response (at 1 watt)
Overall (from TAPE/AUX) 5 to 75,000 Hz, +0.2 dB, -2.0 dB
Power amplifier section DC to 200,000 Hz, +0 dB, -3.0 dB
- <G-7700>
- Intermodulation distortion (70 Hz : 7 kHz = 4:1 SMPTE method) less than 0.025 % at rated power output
- Frequency response (at 1 watt)
Overall (from TAPE/AUX) 5 to 75,000 Hz, +0.2 dB, -2.0 dB
Power amplifier DC to 200 kHz, +0 dB, -3.0 dB
- <G-5700>
- Total harmonic distortion less than 0.03 % at or below rated min. RMS power output
- Rise time 1.4 μsec
Slew rate 56 V/μsec
- <G-6700/G-7700>
- Total harmonic distortion less than 0.025 % at or below rated min. RMS power output
- Rise time 1.4 μsec
Slew rate 60 V/μsec
- <G-5700/G-6700>
- RIAA curve deviation (PHONO, 30 Hz to 15 kHz) +0.2 dB, -0.2 dB
- Damping factor (20 Hz to 20 kHz, both channels driven) 50 into 8 ohms
- Input sensitivity and impedance (at 1 kHz)
PHONO 2.5 mV/47 kilohms
(Max. input capability: 210 mV at 1 kHz, less than 0.1 % total harmonic distortion)
MIC 6 mV/10 kilohms
TAPE-1, 2 PLAY, TAPE/AUX 150 mV/47 kilohms
- Output level (at 1 kHz)
TAPE-1, 2 REC 150 mV
- Hum and noise (short-circuit, A-network)
PHONO 78 dB
TAPE-1, 2 PLAY, TAPE/AUX 95 dB
- Channel separation (at 1 kHz)
PHONO 55 dB
TAPE-1, 2 PLAY, TAPE/AUX 65 dB
- <G-7700>
- RIAA curve deviation (PHONO, 20 Hz to 20 kHz) +0.2 dB, -0.2 dB
- Damping factor (20 Hz to 20 kHz, both channels driven) 50 into 8 ohms
- Input sensitivity and impedance (at 1 kHz)
PHONO-1, 2 2.5 mV/47 kilohms
(Max. input capability: 250 mV at 1 kHz, less than 0.1 % total harmonic distortion)
MIC 6 mV/10 kilohms
TAPE-1, 2 PLAY, TAPE/AUX 150 mV/47 kilohms
- Output level (at 1 kHz)
TAPE-1, 2 REC 150 mV
- Hum and noise (short-circuit, A-network)
PHONO-1, 2 78 dB
TAPE-1, 2 PLAY, TAPE/AUX 95 dB
- Channel separation (at 1 kHz)
PHONO-1, 2 60 dB
TAPE-1, 2 PLAY, TAPE/AUX 65 dB

Specifications

<G-5700>

- Controls**
- BASS ±10 dB at 50 Hz
- TREBLE ±10 dB at 10 kHz
- SUBSONIC FILTER -3 dB at 16 Hz (6 dB/oct)
- LOUDNESS (VOLUME control: -30 dB position) 8 dB at 50 Hz, 6 dB at 10 kHz
- AUDIO MUTING -20 dB

<G-6700/G-7700>

- Controls**
- BASS ±10 dB at 50 Hz
- TREBLE ±10 dB at 10 kHz
- SUBSONIC FILTER -3 dB at 16 Hz (6 dB/oct)
- HIGH FILTER -3 dB at 3 kHz (6 dB/oct)
- LOUDNESS (VOLUME control: -30 dB position) 8 dB at 50 Hz, 6 dB at 10 kHz
- AUDIO MUTING -20 dB

FM section

- <G-5700/G-6700>
- Tuning range 88 to 108 MHz
- Usable sensitivity Mono IHF 10.8 dBf (1.9 µV), DIN 1.2 µV, Stereo IHF 18 dBf
- 50 dB quieting sensitivity Mono 15 dBf, Stereo 37 dBf
- Signal to noise ratio (at 65 dBf) Mono 75 dB, Stereo 70 dB
- Distortion (at 65 dBf) Mono less than 0.13% at 100 Hz, less than 0.1% at 1,000 Hz, less than 0.25% at 6,000 Hz, less than 0.25% at 100 Hz, less than 0.15% at 1,000 Hz, less than 0.25% at 6,000 Hz

Alternate channel selectivity (at 400 kHz)

- 50 dB
- Capture ratio 1.0 dB
- Image response ratio 50 dB
- Spurious response ratio 70 dB

- IF response ratio 90 dB
- Stereo separation 35 dB at 100 Hz, 40 dB at 1,000 Hz, 28 dB at 10,000 Hz
- Frequency response 30 to 15,000 Hz, +0.5 dB, -1.0 dB
- Antenna input impedance 300 ohms balanced, 75 ohms unbalanced

<G-7700>

- Tuning range 88 to 108 MHz
- Usable sensitivity Mono IHF 9.8 dBf (1.7 µV), DIN 1.0 µV, Stereo IHF 17 dBf
- 50 dB quieting sensitivity Mono 14 dBf, Stereo 36 dBf
- Signal to noise ratio (at 65 dBf) Mono 76 dB, Stereo 71 dB
- Distortion (at 65 dBf) Mono less than 0.1% at 100 Hz, less than 0.1% at 1,000 Hz, less than 0.25% at 6,000 Hz, less than 0.15% at 1,000 Hz, less than 0.23% at 6,000 Hz

Alternate channel selectivity (at 400 kHz)

- 70 dB
- Capture ratio 1.0 dB
- Image response ratio 70 dB
- Spurious response ratio 90 dB
- IF response ratio 95 dB
- Stereo separation 35 dB at 100 Hz, 42 dB at 1,000 Hz, 30 dB at 10,000 Hz, 25 dB from 30 to 15,000 Hz
- Frequency response 30 to 15,000 Hz, +0.5 dB, -1.0 dB
- Antenna input impedance 300 ohms balanced, 75 ohms unbalanced

AM section

- <G-5700/G-6700/G-7700>
- Tuning range 530 to 1,600 kHz
- Usable sensitivity (bar antenna) 50 dB/m (300 µV/m)

- Selectivity 33 dB
- Signal to noise ratio 46 dB
- Distortion (at 30% Modulation, 80 dB/m) less than 0.5%

Others

- <G-5700>
- Power requirements Power voltage 100, 120, 220, 240 V (50/60 Hz), For U.S.A. and Canada 120 V (60 Hz)
- Power consumption Rated consumption 400 watts 450 VA
- Dimensions 465 mm (18-5/16") W, 177 mm (7") H, 405 mm (16") D
- Weight 13.8 kg (30.4 lbs) net, 16.0 kg (35.3 lbs) packed

<G-6700>

- Power requirements Power voltage 100, 120, 220, 240 V (50/60 Hz), For U.S.A. and Canada 120 V (60 Hz)
- Power consumption Rated consumption 330 watts 420 VA
- Dimensions 505 mm (19-15/16") W, 182 mm (7-3/16") H, 442 mm (16-5/8") D
- Weight 16.1 kg (39.7 lbs) net, 18.4 kg (45.2 lbs) packed

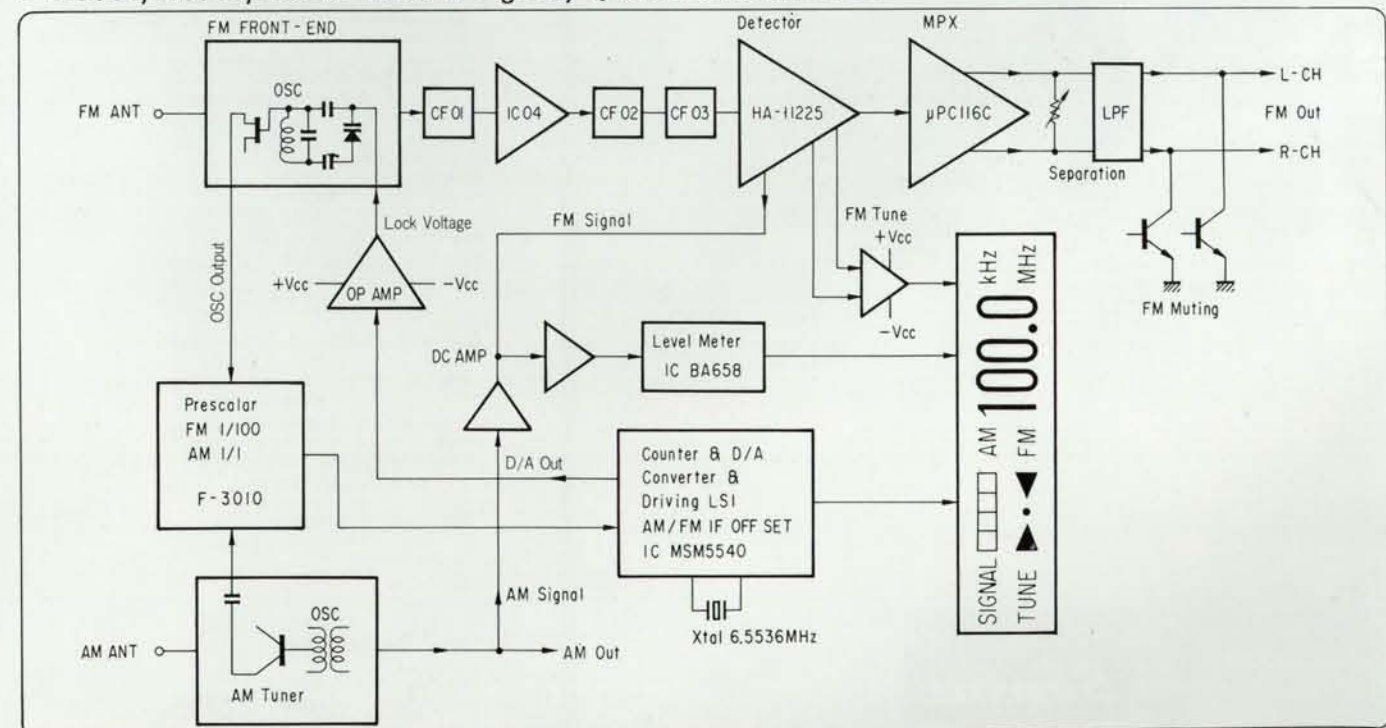
<G-7700>

- Power requirements Power voltage 100, 120, 220, 240 V (50/60 Hz), For U.S.A. and Canada 120 V (60 Hz)
- Power consumption Rated consumption 430 watts 540 VA
- Dimensions 505 mm (19-15/16") W, 182 mm (7-3/16") H, 422 mm (16-5/8") D
- Weight 18.0 kg (39.7 lbs) net, 20.5 kg (45.2 lbs) packed

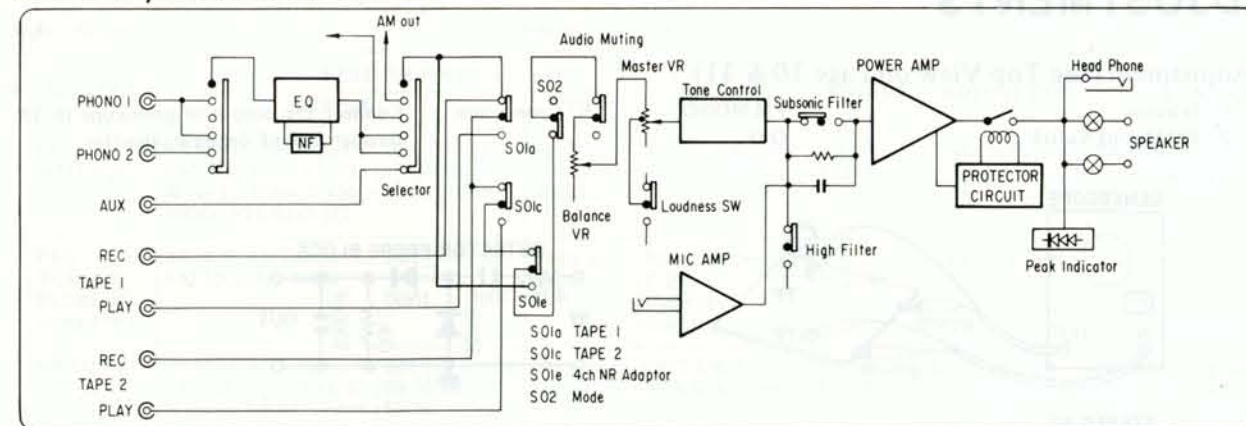
* Design and specifications subject to changes without notice for improvements.

1. BLOCK DIAGRAM

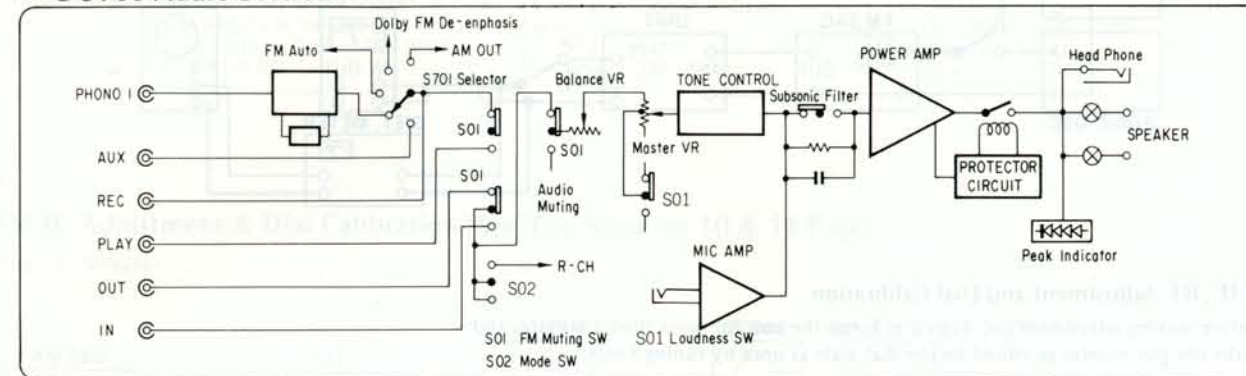
G-5700/G-6700/G-7700 Tuner & Digitally Quartz Locked Section



G-6700/G-7700 Audio Section

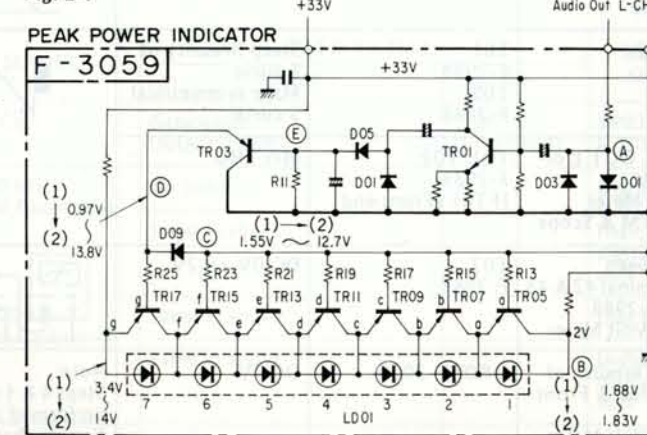


G-5700 Audio Section



2. OPERATION OF PEAK POWER INDICATOR

Fig. 2-1



Note: (1) In case no LED lighting (2) In case of all LEDs lighting

Fig. 2-2

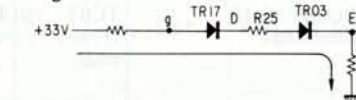
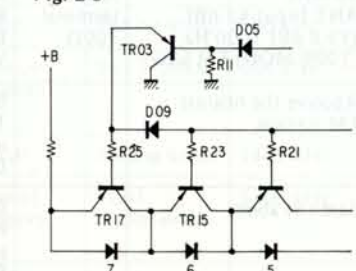


Fig. 2-3



2-1. In case no LED lighting

- 1) TR17, R25, TR03 & R11 on F-3059 regarded as a series circuit and a voltage applied to the circuit. TR17 and TR03 are equivalent to diodes connected in forward direction that a current flows into this circuit as Fig. 2-2.
- 2) TR17 being ON, a voltage is applied to the TR15 emitter and a current flows into a circuit composed of TR17, TR15, R23, D09, TR03, and R11 as Fig. 2-3.
- 3) As the bias voltage added to TR03 is the lowest, during no input signal, the maximum current flows and turn on the transistors from TR17 to TR05.
- 4) When every transistor is ON, a current flowing LEDs are belittled that LEDs would not shine.

2-2. In case only one LED lighting

- 1) If input signal of about 0.28V (0.01W) is applied from audio-out, this signal is fed to TR03 as a base bias voltage through TR01 and D05. This bias voltage rises to make the current flowing TR03 little when input voltage of point A is increased.
- 2) Input signal being 0.28V, transistors from TR17 to TR07 are ON and only TR05 turns OFF.
- 3) When TR05 becomes OFF, a current flows into LED of No. 1 and this LED starts lighting.

2-3. In case from two to seven LEDs lighting

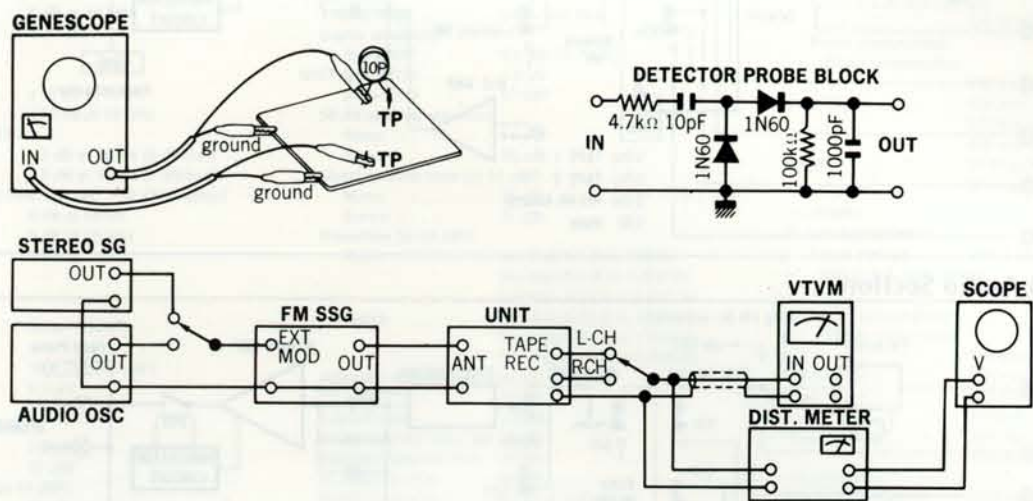
In the same function as 2-2, transistors TR05, 07, 09 turn OFF successively and all LEDs start lighting. The LED at center is always lighting to be supplied a voltage.

3. ADJUSTMENTS

1. FM Adjustment (See Top View on Page 10 & 11)

Note: 1. Selector FM MONO
2. FM Muting Switch OFF

3. Connection Connect the output of genescopes to TP through 100 pF ceramic capacitor.



(1) FM IF, RF Adjustment and Dial Calibration

* Before making adjustments of steps 2 ~ 5, run the unit for more than 2 minutes and make the dial pointer go round on the dial scale at once by tuning knob.

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	IF Coil	Output 90 dB Genescopes	TC03 (Front-end)	TP01 Use Detector Probe	T1 (Front-end)	Max. IF waveform	
2.	Discriminator Coil In case of using Genescopes	Output 80 dB Genescopes	TC03 (Front-end)	TP02	T01 F-2988 T02 F-2988	Steep linearity of S curve Make symmetrical S curve	
	Discriminator Coil In case of using Dist meter	98 MHz ANT Input 65 dBf (59.8 dB) 1000 Hz (100% MOD) FM SSG	ANT terminal 300Ω	REC OUT L or R-CH Dist Meter VTVM & Scope	T01, T02 F-2988 IFT01 (Front-end)	Min THD	
3.	Tune Indicator Adj.	Receive the nearest FM station		Between Terminal 42 & 43 of F-2988 DC Volt Meter	T02 F-2988	DC 0V ±0.2V	
4.	AFC Voltage Adj.	Same as above		07 Terminal of F-2988 & Front-end DC Volt Meter	VR03 F-3000	DC 7V	Note: Steps 4 & 5 should be performed after confirming that the look indicator does not become luminous when shorting ground and collector of TR15 & base of TR17 on F-3000
5.	98 MHz Dial Calibration	No Input		Dial Pointer	Tuning knob	98 MHz	
		Same as above		Indicator of Display unit	TC06 (Front-end)	98 MHz	
6.	98 MHz RF Adj.	98 MHz ANT Input Minimum value with sine wave 1000 Hz (100% MOD) FM SSG	Same as above	Same as above	<G-5700/6700> TC03, TC04 <G-7700> TC03, TC04, TC05 (Front-end)	Max. Output	
7.	Signal Indicator Volume	98 MHz ANT Input 65 dBf (59.8 dB) 1000 Hz (100% MOD) FM SSG	Same as above		VR01 F-3000	Make every 8 lamps lighting	
		No ANT Input			VR01 F-3000	Make only one lamp lighting	

Note: Confirm the Dial Calibration on the frequencies of 90 MHz & 106 MHz in step 5.

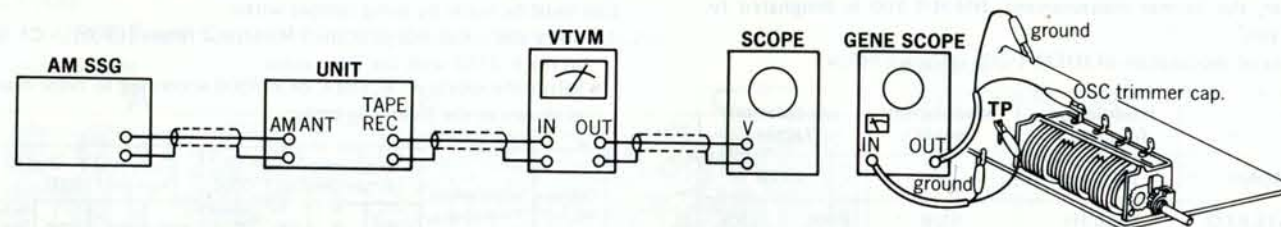
(2) FM STEREO Adjustment

Note: Selector FM AUTO

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	PLL VCO Adj.	98 MHz ANT Input 65 dBf (59.8 dB) FM SSG Pilot 19 kHz (9% MOD) R (or L) Mode 1 kHz + Pilot (100% MOD) STEREO SG	ANT terminal 300Ω	Stereo indicator	VR03 F-2988	Light indicator	Adjust the VR within center of lighting level.
	PLL VCO Adj. In case of using Freq. counter	98 MHz ANT Input 65 dBf (59.8 dB) FM SSG (No MOD)	Same as above	No. 18 terminal F-2988 Use Freq. counter	VR03 F-2988	19 kHz ± 50 Hz	
2.	Separation	98 MHz ANT Input 65 dBf (59.8 dB) FM SSG Pilot 19 kHz (9% MOD) R Mode 1 kHz + Pilot (100% MOD) STEREO SG	Same as above	OUT L-CH VTVM & Scope	VR02 F-2988	OUT -40 dB	Confirm separation L-CH → R-CH (-40 dB)
3.	Muting level	98 MHz ANT Input 15 dBf (9.8 dB) FM SSG Pilot 19 kHz (9% MOD) SUB 1 kHz + Pilot (100% MOD) STEREO SG	Same as above	Stereo indicator	VR01 F-2988	Muting level 15 dBf (9.8 dB) indicator turns ON	FM MUTING Switch ON

2. AM IF Adjustment & Dial Calibration (See Top View on 10 & 11 Page)

Note: 1. Selector AM



STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	IF Coil	Genescopes Output 70 dB	TC01 (Front-end)	TP03 F-2988	T04, T05 F-2988	Max. Output	
2.	600 kHz Dial Calibration	No Input		Dial Pointer	Tuning knob	600 kHz	
		Same as above		Indication of digital display unit	T03 F-2988	600 kHz	
3.	600 kHz RF Adj.	600 kHz ANT Input 50 dB 400 Hz (MOD 30%) AM SSG	Same as above	Same as above	Bar Antenna L701	Same as above	
		1400 kHz ANT Input 50 dB 400 Hz (MOD 30%) AM SSG	Same as above	Same as above	TC02 (Front-end)	1400 kHz	
4.	Signal Meter volume	1000 kHz ANT Input 80 dB 400 Hz (MOD 30%) AM SSG	Same as above	Signal indicator lamp	VR02 F-3000	Make every 8 lamps lighting	
		No Input	Same as above	Same as above	VR02 F-3000	Make only one lamp lighting	
5.	9 kHz Notch filter Adj.	9 kHz 5 mV OSC	TP03 F-2988	OUT L or R-CH VTVM & Scope	T06 F-2988	Min. Output	

3. Driver Circuit Board Adjustments <G-5700/G-6700/G-7700> (See Top View on Page 10 & 11)

Note: 1. Master Volume Minimum
 2. Room Temperature . . . 18°C ~ 28°C (65°F ~ 83°F)
 3. For adjustment, run the unit for more than 3 minutes after the power is switched on.

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	DC 0V Adj. L-CH	Speaker terminal (L-CH)	VR01 (L-CH) F-2980	DC 0V ± 5 mV	Before turning ON power switch, set VR01 & VR02 to center position.
2.	DC 0V Adj. R-CH	Speaker terminal (R-CH)	VR02 (R-CH) F-2980		
3.	Bias Current Adj. L-CH	<G-5700/G-6700> Between terminal 85 & Point A (See Top View on Page 10) <G-7700> Between terminal 89 & 87 of F-2980 (Between A & B) (See Top View on Page 11)	VR03 F-2980	DC 5V ± 1 mV	• Before turning ON power switch, turn VR03 & VR04 fully counter-clockwise. This bias current adjustment converts current value into voltage by Ohms law.
4.	Bias Current Adj. R-CH	<G-5700/G-6700> Between terminal 86 & Point B (See Top View on Page 10) <G-7700> Between terminal 90 & 88 of F-2980 (Between C & D) (See Top View on Page 11)	VR04 F-2980		

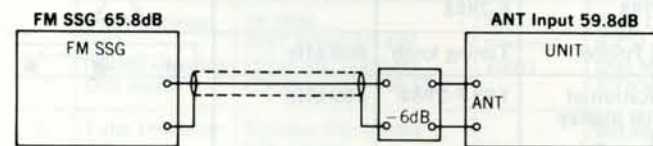
• NEW MEASUREMENT FOR FM.

Input signal level under the provision of IHFM-T-200, a new measurement method is indicated by available power ratio "dBf". To obtain approximate available power ratio "dBf", abstract 0.8 from attenuator indication of general FMSG (open load indication type); however, the former measurement, IHFM-T-100 is designated together too.

The way of modulation of IHFM-T-200 is shown below.

	modulation frequency	modulation mode	modulation factor
FM MONO	1000 Hz		100%
FM STEREO	1000 Hz	SUB	Pilot 9% Pilot + SUB 100%

• The relation between the standard input 65 dBf of IHFM-T-200 and the former indication "dB" is shown below.



• Intermediate frequency of AM Section (See Figs. 3-1 & 3-2).

Since the band pass filter of both 450 kHz type and 455 kHz type are adaptable to the IF stage of these models, pay attention for inserting position of jumper wire and a diode for setting the IF OFFSET ROM value when replacement.

Fig. 3-1.

Intermediate frequency	Stock No. of IF filter, T05 on F-2988	Inserting Position of jumper wire on F-3000	Inserting Position of Diode on F-3000
450 kHz	0910490	X	D23
455 kHz	4230680	Z	D21, D24

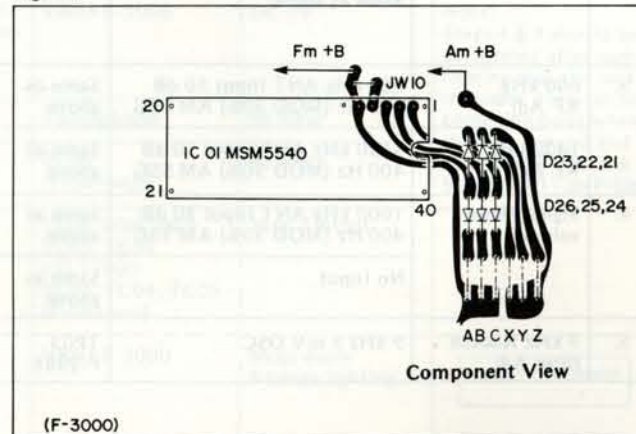
• Selection of Intermediate Frequencies (FM) (Refer to parts location F-3000 on page 9)

The digital locking point differs with the frequency rank of the ceramic filter used in the F-2988. When the central frequency (shown by a color) of the ceramic filter is changed, the following connection must be made by using jumper wires:

- Unify the color marks of the FM ceramic filters (CF 01 ~ CF 04) on the F-2988 with the same color.
- Select the joints A, B, and C of F-3000 according to color marks as shown in the following table:

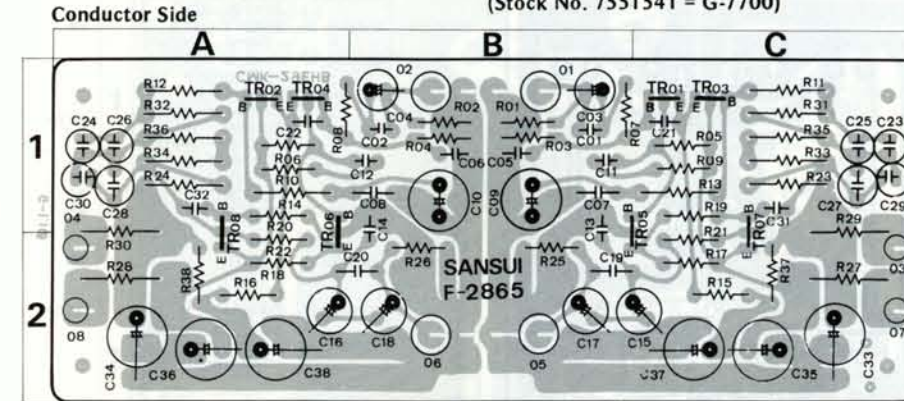
Colouring	Intermediate frequency	Connecting Position of Jumper wire on F-3000			Connecting Position of Diode on F-3000		
		A	B	C	D26	D25	D24
Black	10.64MHz			●			●
Brown	10.66MHz		●			●	
Blue	10.68MHz		●	●		●	●
Red	10.70MHz	●			●	●	
Orange	10.72MHz	●		●	●	●	●
Gray	10.74MHz	●	●		●	●	●
White	10.76MHz	●	●	●	●	●	●

Fig. 3-2



4. PARTS LOCATION & PARTS LIST

4-1. F-2865 Equalizer Circuit Board (Stock No. 7551551 = G-5700/G-6700) (Stock No. 7551541 = G-7700)



Parts List <G-5700/G-6700>

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
• Transistor							
TR01, 02	0300900, 1	2SA906 (G), (H)	1C, 1A	R 13, 14	0231471	470Ω 1/2W M.R.	1C, 1A
TR03, 04	0300900, 1	2SA906 (G), (H)	1C, 1A	R 23, 24	0210472	4.7kΩ 1/2W N.I.R.	1C, 1A
TR05, 06	0306550, 1	2SC1775 E, F	1, 2B, 1, 2A	R 27	0210101	100Ω 1/2W N.I.R.	2C
TR07, 08	0306550, 1	2SC1775 E, F	1, 2C, 1, 2A	R 29	0210101	100Ω 1/2W N.I.R.	1C
C 25, 26	0620121	120pF 50V P.C.	1C, 1A	R 31, 32	0231223	22kΩ 1/2W M.R.	1C, 1A
R 11, 12	0231101	100Ω 1/2W M.R.	1C, 1A	R 33, 34	0231473	47kΩ 1/2W M.R.	1C, 1A
				R 35, 36	0231274	270kΩ 1/2W M.R.	1C, 1A

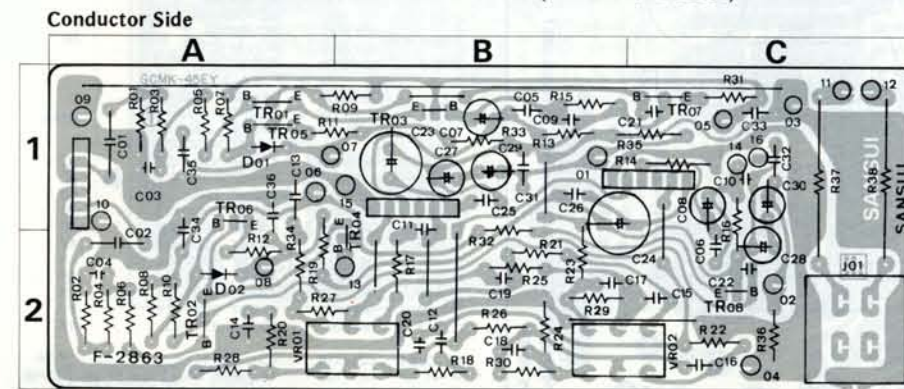
Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the Common Parts List for capacitors & resistors which was appended previously to each Sansui Manual.

Parts List <G-7700>

Parts No.	Stock No.	Description	Position
• Transistor			
TR01, 02	0300900, 1	2SA906 (G), (H)	1C, 1A
TR03, 04	0300900, 1	2SA906 (G), (H)	1C, 1A
TR05, 06	0306550, 1	2SC1775 E, F	1, 2B, 1, 2A
TR07, 08	0306550, 1	2SC1775 E, F	1, 2C, 1, 2A
C 05, 06	0260101	100pF 50V P.C.	1B
C 23, 24	0625122	120pF 50V P.C.	1C, 1A
C 25, 26	0620391	390pF 50V P.C.	1C, 1A
C 27, 28	0625562	560pF 50V P.C.	1C, 1A
C 29, 30	0620101	100pF 50V P.C.	1C, 1A
R 23, 24	0210562	5.6kΩ 1/2W N.I.R.	1C, 1A
R 28	0191270	27Ω 1/4W F.R.	2A
R 30	0191270	27Ω 1/4W F.R.	1, 2A
R 31, 32	0231473	47kΩ 1/2W M.R.	1C, 1A
R 33, 34	0231223	22kΩ 1/2W M.R.	1C, 1A
R 35, 36	0231564	560kΩ 1/2W M.R.	1C, 1A

• G-5700

4-2. F-2863 Tone Control Circuit Board (Stock No. 7562901)

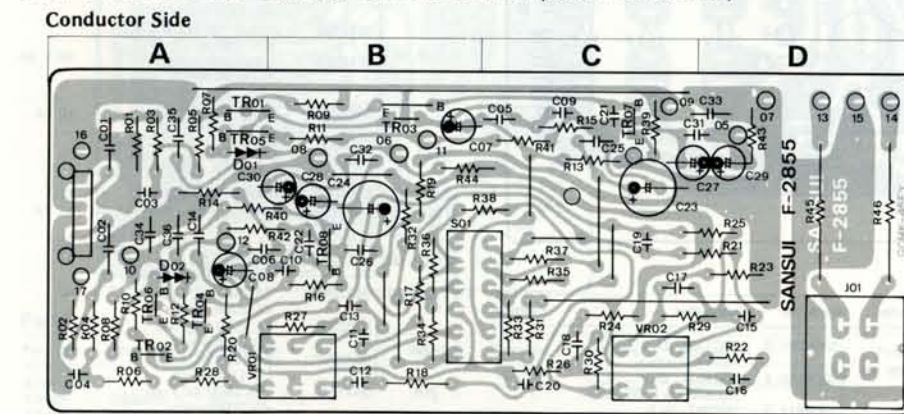


Parts List

Parts No.	Stock No.	Description	Position
• Transistor			
TR01, 02	0306740, 1	2SC1845 F, E	1A, 2A
TR03, 04	0306740, 1	2SC1845 F, E	1B, 2B
TR05, 06	0306740, 1	2SC1845 F, E	1A
TR07, 08	0301090, 1	2SA992 F, E	1C, 2C
• Diode			
D 01, 02	0340120 0340150	VD1212 MV-12	1A, 2A
R 37, 38	0135221	220Ω 5W Ce.R. Tone Control Volume	1C
VR01, 02	1015360, 1	100kΩ x 2	2B
J 01	2430400	Head Phone Jack	

• G-6700/G-7700

4-3. F-2855 Tone Control Circuit Board (Stock No. 7562861)



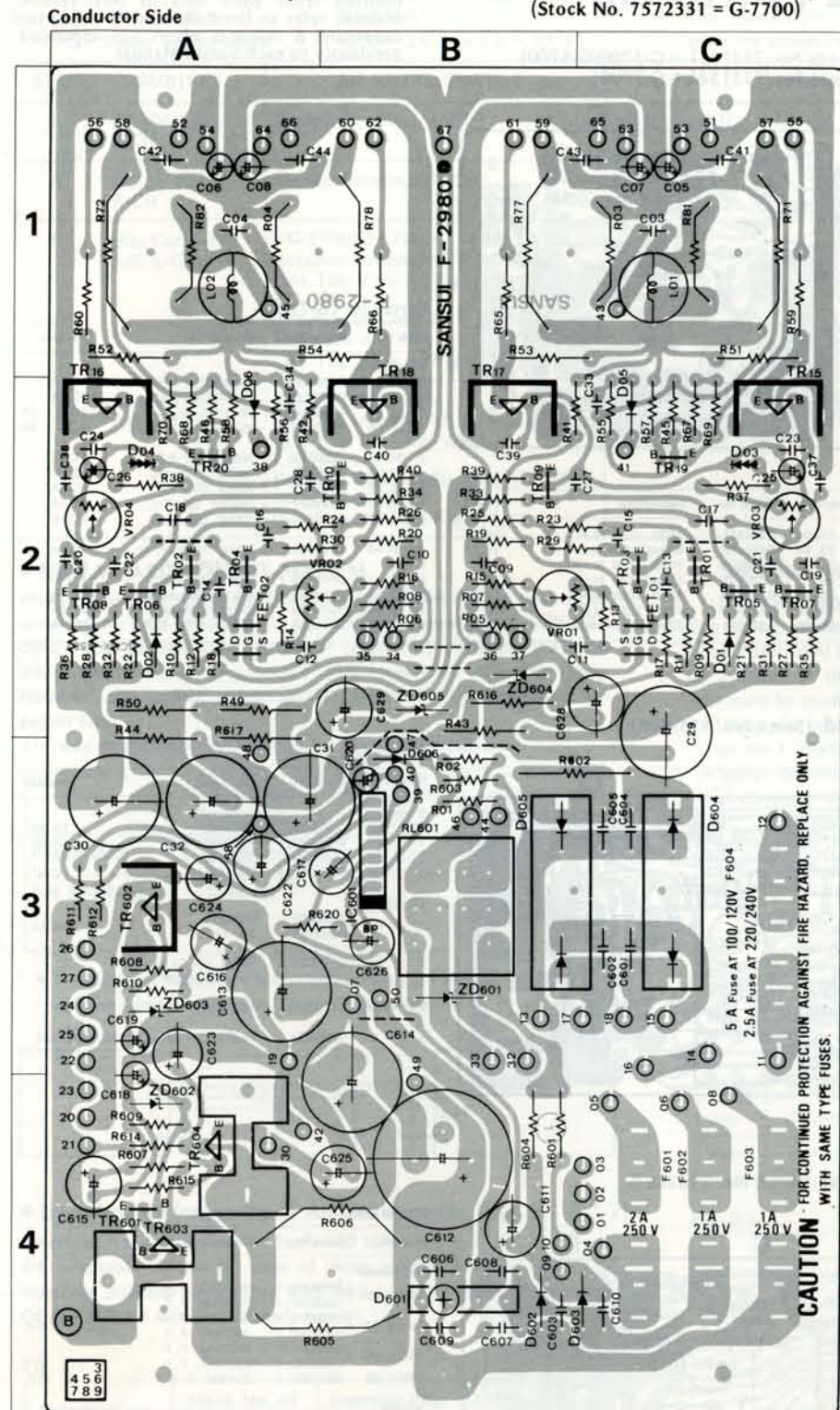
Parts List

Parts No.	Stock No.	Description	Position
• Transistor			
TR01, 02	0306070, 1	2SC1313 F, G	A
TR03, 04	0306740, 1	2SC1845 F, E	B, A
TR05, 06	0306740, 1	2SC1313 F, G	A
TR07, 08	0306740, 1	2SC1845 F, E	A
TR07, 08	0301090, 1	2SA992 F, E	C, B
• Diode			
D 01, 02	0340120 0340150	VD1212 MV-12	A
R 45, 46	0135221	220Ω 5W Ce.R.	D
VR01, 02	1015360, 1	100kΩ x 2, Tone Control Volume	B, C
S 01	1131630, 1	0.3A 45V, Tone Switch	B
J 01	2430400	Head Phone Jack	D

• Abbreviations

C.R.	Carbon Resistor	E.L.	Low Leak Electrolytic Capacitor
S.R.	Solid Resistor	E.B.	Bi-Polar Electrolytic Capacitor
Ce.R.	Cement Resistor	E.BL.	Low Leak Bi-Polar Electrolytic Capacitor
M.R.	Metal Film Resistor	Ta.C.	Tantalum Capacitor
F.R.	Fusing Resistor	F.C.	Film Capacitor
N.I.R.	Non-Inflammable Resistor	M.P.	Metalized Paper Capacitor
C.C.	Ceramic Capacitor	P.C.	Polystyrene Capacitor
C.T.	Ceramic Capacitor, Temperature Compensation	G.C.	Gimmick Capacitor
E.C.	Electrolytic Capacitor		

4-4. F-2980 Power Amplifier Circuit Board (Stock No. 7572341 = G-5700) (Stock No. 7572591 = G-6700) (Stock No. 7572331 = G-7700)

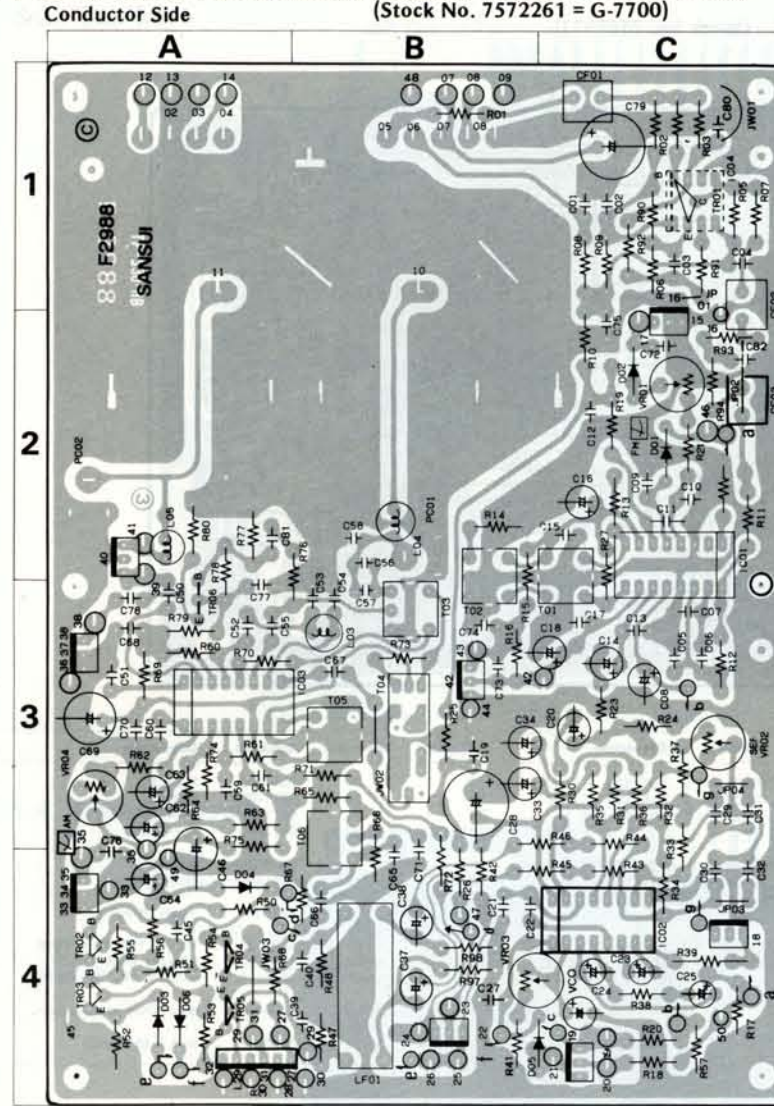


Parts List <G-5700/7700>

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
•Transistor							
TR01,02	0306740,1	2SC1845 F, E	2C, 2A	TR09,10	0306281,2	2SC1735 D, E	2B
TR03,04	0306740,1	2SC1845 F, E	2C, 2A		0306680,1	2SC2071 B, V	
	0300721,2	2SA850 D, E			0308611,2	2SD357 D, E	
		<G-5700 only>			0308531,2	2SD381 (2) M, L	2C, 2A
TR05,06	0301030,1	2SA939 B, V	2C, 2A		0306720	2SC2238B O, Y	
		<G-6700/G-7700 only>				<G-7700 only>	
	0300721,2	2SA850 D, E					
		<G-5700 only>					
TR07,08	0301030,1	2SA939 B, V	2C, 2A				
		<G-6700/G-7700 only>					

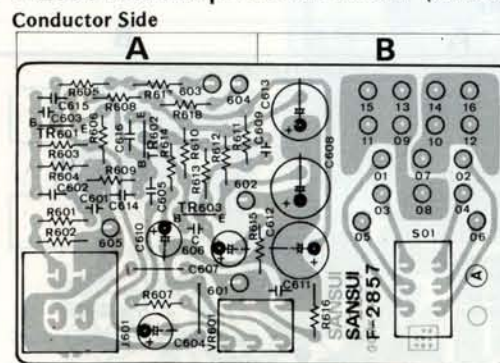
Parts No.	Stock No.	Description	Position
TR17,18	0303441,2	2SB527 D, E	
	<G-5700 only>		
	0303371,2	2SB536 (2) M, L	2B
	<G-6700 only>		
	0301070,1	2SA968B O, Y	
	<G-7700 only>		
	0301090,1	2SA992 F, E	
	<G-5700 only>		
TR19,20	0301030	2SA939B	2C, 2A
	<G-6700/G-7700 only>		
TR601	0306740,1	2SC1845 F, E	4A
TR602	0303232	2SB507V11-AL E	3A
TR603	0308392,3	2SD313AL E, F	4A
TR604	0308393	2SD313AL F	4A
•IC			
IC 601	0360900	HA12002	3B
•FET			
FET01,02	0370311,2	2SK129A L, M	2C, 2A
	<G-5700/G-7700 only>		
	0390361,2	μPA68H L1, L2	
	<G-6700 only>		
•Diode			
D 01,02	0311160	1S2473D	2C, 2A
	0311180	1S1588	
	0311160	1S2473D	2C, 2A
D 05,06	0311180	1S1588	
D 601	0311700	RB-152	4B
D 602	0310350	10D2	4B
D 603	0310350	10D2	4C
D 604	0311310	SS-5	3C
D 605	0311320	SS-5R	3B
D 606	0310350	10D2	3B
ZD601	0317170	RD-24F (B)	3B
	0317220	RD-30F (C)	
	<G-5700/G-6700 only>		
ZD602	0317230	RD-33F (B)	4A
	<G-7700 only>		
ZD603	0317220	RD-30F (C)	
	<G-5700/G-6700 only>		
	0317230	RD-33F (B)	3A
	<G-7700 only>		
ZD604,605	0317110	RD-18F (B)	2B
ZD605	0317120	RD-18F (C)	
ZD606	0316320	RD13E C	
C 41-44	0659804	0.001μF 150V C.C.	
	<G-5700 only>		
	0655103	10000pF 500V C.C.	1C, 1A
	<G-6700/G-7700 only>		
C 601	0655472	4700pF 500V C.C.	3C
C 602	0655472	4700pF 500V C.C.	3B
C 603	0655472	4700pF 500V C.C.	4B
C 604	0655472	4700pF 500V C.C.	3C
C 605	0655472	4700pF 500V C.C.	4B
C 606	0655472	4700pF 500V C.C.	3C
C 607	0655472	4700pF 500V C.C.	4B
C 608	0655472	4700pF 500V C.C.	4B
C 609	0655472	4700pF 500V C.C.	4C
C 610	0655472	4700pF 500V C.C.	4C
C 612	0549207	1000μF 63V E.C.	4B
R 03,04	0212479	4.7Ω 2W N.I.R.	1C, 1A
R 81,82	0212109	1Ω 2W N.I.R.	1C, 1A
R 601	0201122	1.2kΩ 1W N.I.R.	4B
R 604	0201102	1.0kΩ 1W N.I.R.	4B
	0185391	390Ω 5W Ce.R.	
	<G-5700 only>		
R 605,606	0135271	270Ω 5W Ce.R.	4B
	<G-6700 only>		
	0185331	330Ω 5W Ce.R.	
	<G-7700 only>		
	0212182	1.2kΩ 1W N.I.R.	
	<G-5700 only>		
R 616,617	0212182	1.8kΩ 2W N.I.R.	2B, 2, 3A
	<G-5700 only>		
L 01,02	4290370	1μH Filter Coil	1C, 1A
RL601	1150400		3B
	1150480		
VR01,02	1034150	100ΩB, DC 0V Adjust	2B
VR03,04	1034150	100ΩB, Bias Current Adjust	2C, 2A
F 601	0432240	2A 250V AC Fuse	4C
F 602,603	0432220	1A 250V AC Fuse	4B
	<G-6700 only>		
F 602,603	0432240	2A 250V AC Fuse	4C
	<G-6700 only>		
	0432260	3A 250V AC Fuse	
	<G-5700 only>		
F 604	0432300	6A 125V AC Fuse	3C
	<G-5700 only>		
F 604	0431320	10A 250V AC Fuse	3C
	<G-7700 only>		
	0431270	4A 250V AC Fuse	3C
	<G-6700 only>		
F 604	0432500	7A 125V AC Fuse	3C
	<G-6700 only>		

4-5. F-2988 Tuner Circuit Board (Stock No. 7522281 = G-5700/G-6700) (Stock No. 7522261 = G-7700)



• G-6700/G-7700

4-6. F-2857 Mic Amp. Circuit Board (Stock No. 7610461)



Parts List

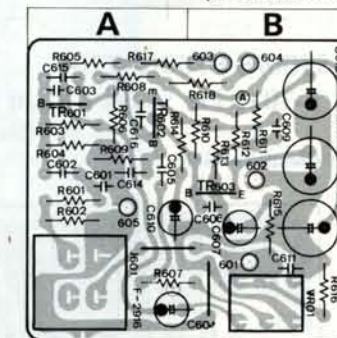
Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
•Transistor							
TR601	0306070,1	2SC1313 F, G	A	VR601	1090340,1	20kΩ x 2, mic level volume	A
TR602	0300470	2SA726 (F)	A	S 01	1131620,1	Dolby FM De-emphasis Switch	B
TR603	0306740,1	2SC1845 F, E	A	J 601	2430400	Mic Jack	A
R 617	0191470	47Ω 1/4W F.R.	A				
R 618	0191470	47Ω 1/4W F.R.	A				

Parts List <G-5700/G-6700/G-7700>

Parts No.	Stock No.	Description	Position
•Transistor			
TR01	0306341,2	2SC1674 L, K	1C
	<G-5700/G-6700 only>		
TR02	0306740,1	2SC1845 F, E	4A
TR03	0301090,1	2SA992 F, E	4A
TR04,05	0306581,2	2SC1634-6,7	4A
TR06	0306341,2	2SC1674 L, K	3A
•IC			
IC 01	0360930	HA11225	2C
IC 02	0360990	μPC1161C	4C
IC 03	0360800	LA1240	3A
IC 04	0360510	LA1222 <G-7700 only>	1C
•Diode			
D 01	0311160	1S2473D	2C
D 03-06	0311160	1S2473D	4A, C
C 21	0622471	4700pF 125V P.C.	4B
C 23	0573228	0.22μF 35V T.C.	4C
C 24	0573159	1.5μF 35V T.C.	4C
C 25	0573339	3.3μF 35V T.C.	4C
C 26	0629006	470pF 50V P.C.	4C
C 31,32	0622561	560pF 125V P.C.	3C, 4C
C 56	0622391	390pF 125V P.C.	2B
C 57	0669210	10pF 50V C.C.	3B
C 58	0669406	22pF 50V C.C.	2B
C 901	0669502	2pF 50V C.C.	
L 03	4900110	100μH Inductor	3B
L 04,05	4900140	1μH Inductor	2B, 2A
T 01	4236230	FM Detector Coil	2C
T 02	4236240	FM Detector Coil	2B
T 03	4220710	OSC Coil	3B
T 04	4220730	OSC Coil	3B
T 05	0910490	Filter 450 kHz	3B
T 06	4230620	IF Coil 455 kHz	3B
	0910450	Filter Coil	3B
CF 01,02	0990060	Ceramic Filter	1C
	<G-5700/G-6700 only>		
CF 01-03	0910480	Ceramic Filter <G-7700 only>	1C, 2C
LF 01	0910220	Low Pass Filter	4B
VR01	1035150	22kΩB, FM Muting Volume	2C
VR02	1035210	220ΩB, Separation Volume	3C
VR03	1034250	4.7kΩB, PLL VCO Volume	4B
TC 01,02	1230060	Trimmer <G-7700 only>	
	7510800	Front-end Pack	

•G-5700

4-7. F-2916 Mic Amp. Circuit Board (Stock No. 7610471)

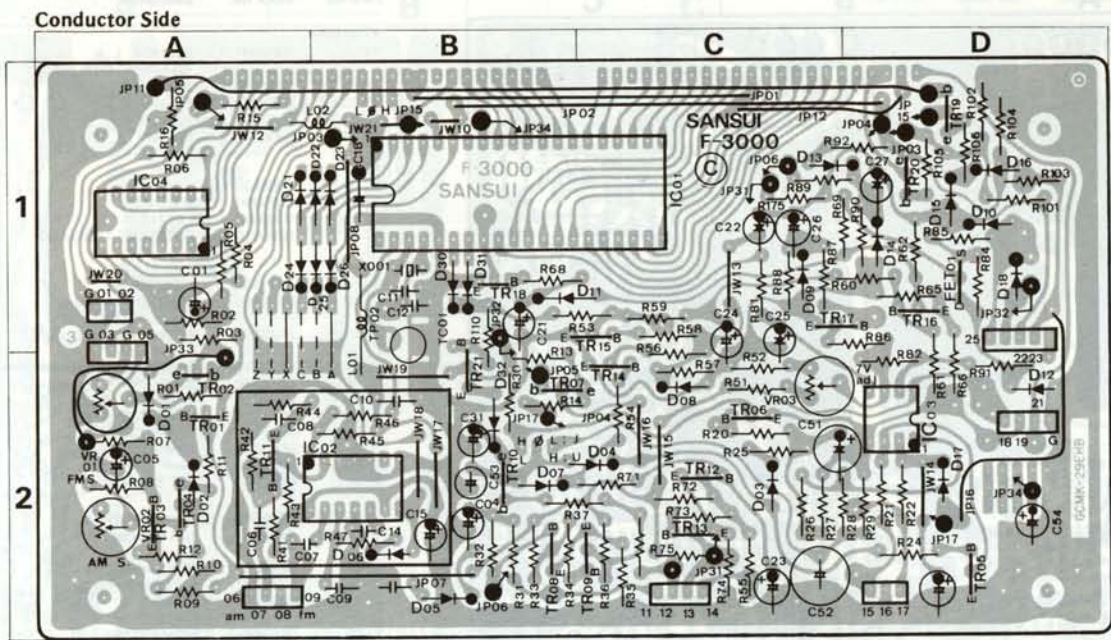


Parts List

Parts No.	Stock No.	Description	Position
•Transistor			
TR601	0306740,1	2SC1845 F, E	A
TR602	0301090,1	2SA992 F, E	A
TR603	0306740,1	2SC1845 F, E	B
R 617	0191470	47Ω 1/4W F.R.	A
R 618	0191470	47Ω 1/4W F.R.	B
VR601	1090340,1	20kΩ x 2 Mic Level Volume	
J 601	2430400	MIC Jack	A

● G-5700/G-6700/G-7700

4-8. F-3000 Digitally Display Circuit Board (Stock No. 7597971)



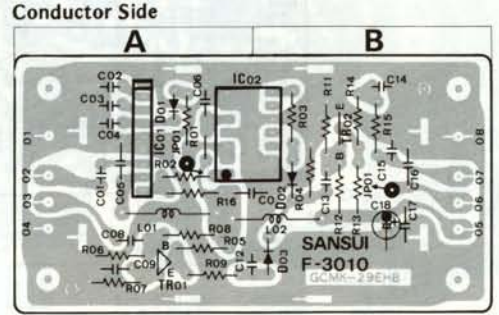
Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
●Transistor				TR19	0300510 ~ 2	2SA733A P, O, R	1D	D 23	0311160	1S2473D	1B
TR01	0305951 ~ 3	2SC945 Q, P, K	2A	TR20	0300510 ~ 2	2SA733A P, O, R	1D	D 26	0311160	1S2473D	1B
TR02	0300510 ~ 2	2SA733A P, O, R	2A	TR21	0305951 ~ 3	2SC945 Q, P, K	2B	D 30	0311160	1S2473D	1B
TR03	0305951 ~ 3	2SC945 Q, P, K	2A					D 32	0311160	1S2473D	2B
TR04	0300510 ~ 2	2SA733A P, O, R	2A	●IC				C 11	0669508	8pF 50V C.C.	1B
TR05	0305951 ~ 3	2SC945 Q, P, K	2D	IC 01	0360910	MSM5540RS	1B	C 12	0661220	22pF 50V C.C.	1B
TR06	0305951 ~ 3	2SC945 Q, P, K	2C	IC 03	0360770	NJM4558D	2D				
TR07	0300510 ~ 2	2SA733A P, O, R	2B	IC 04	0360830	BA658	1A	L 01	4290011	3.5μH Choke Coil	1B
TR08	0305951 ~ 3	2SC945 Q, P, K	2B	●FET				VR01	1035130	10kΩB, FM Meter Adjust	2A
TR09	0305951 ~ 3	2SC945 Q, P, K	2C	FET01	{ 0370300 ~ 3	2SK117 O, Y, GR, BL	1D	VR02	1035190	100kΩB, Meter Adjust	2A
TR10	0300510 ~ 2	2SA733A P, O, R	2B		{ 0370340 ~ 7	2SK163		VR03	1035110	4.7kΩB, AFC Bias Adjust	2C
TR12	0305951 ~ 3	2SC945 Q, P, K	2C			K1, K2, L1, L2, M1, M2, N1, N2		TC 01	1230150	30pF Trimmer Capacitor	1B
TR13	0305951 ~ 3	2SC945 Q, P, K	2C	●Diode				XO01	0930040	Xtal, 6.5536 MHz	1B
TR14	0305951 ~ 3	2SC945 Q, P, K	2C	D 02 ~ 10	0311160	1S2473D	1C,2A,B,C				
TR15	0305951 ~ 3	2SC945 Q, P, K	1C	D 11 ~ 18	0311160	1S2473D	1B,C,D,2D				
TR16	0305951 ~ 3	2SC945 Q, P, K	1D								
TR17	0305951 ~ 3	2SC945 Q, P, K	1C								
TR18	0305951 ~ 3	2SC945 Q, P, K	1B								

● G-5700/G-6700/G-7700

4-9. F-3010 Pre Scaler Circuit Board

(Stock No. 7597981)

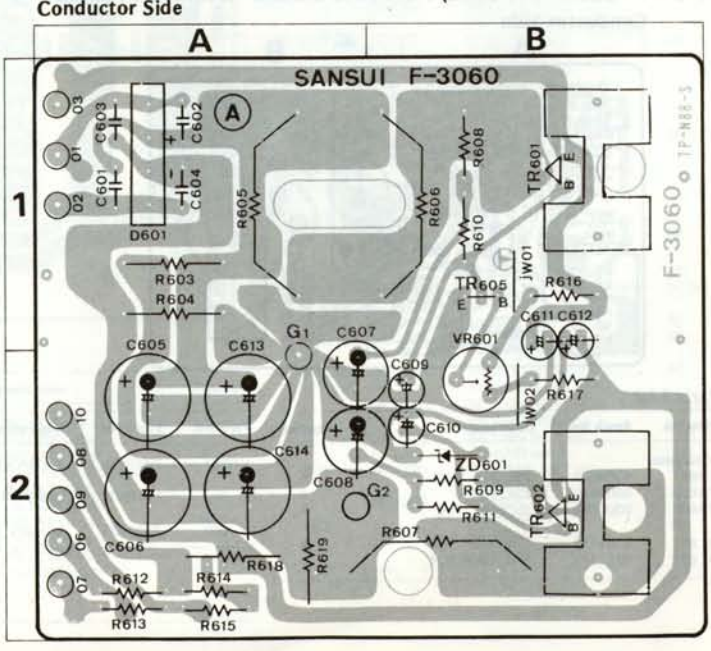


Parts List

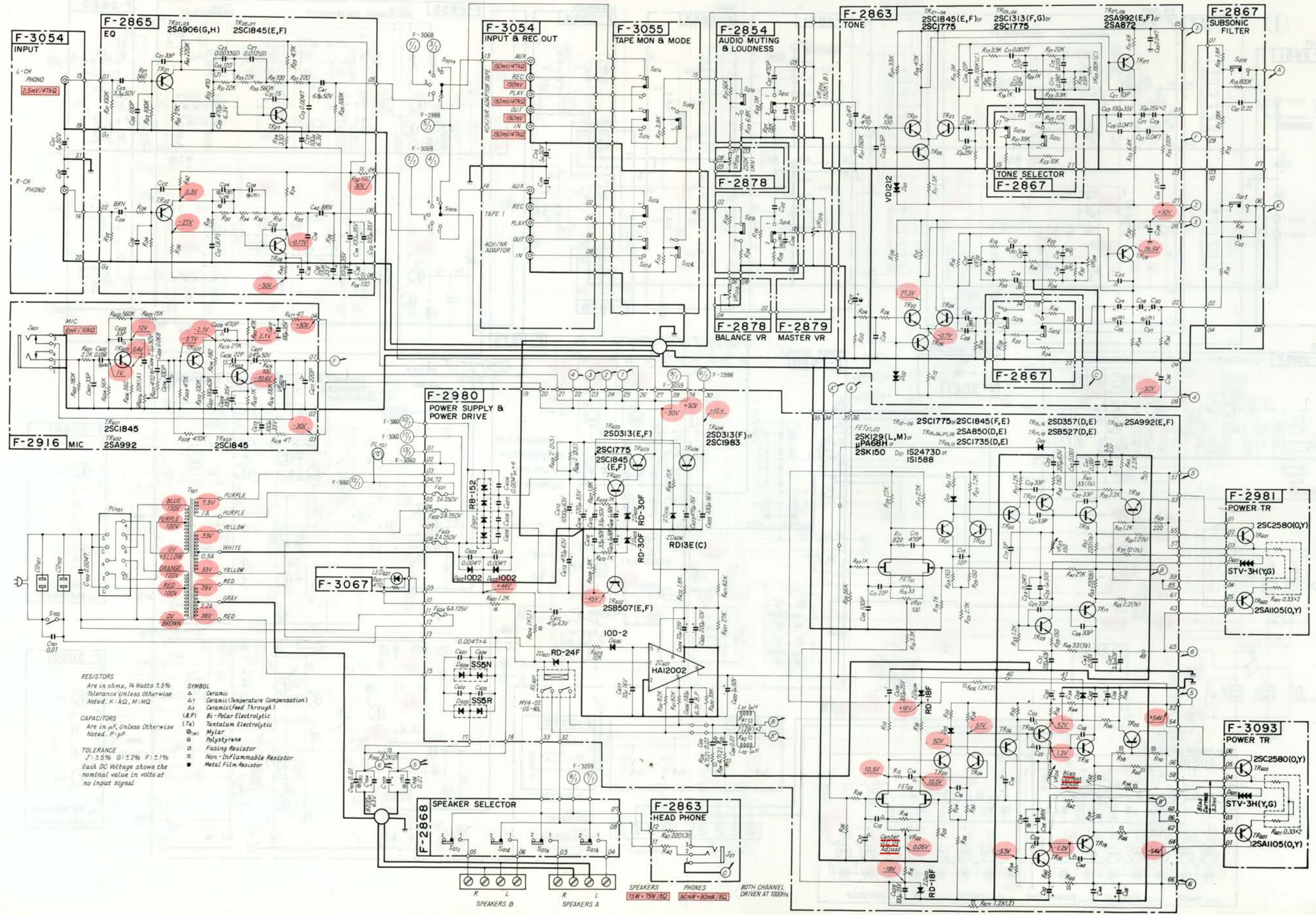
Parts No.	Stock No.	Description	Position
●Transistor			
TR01	0306341, 2	2SC1674 L, K	A
TR02	0306341, 2	2SC1674 L, K	B
●IC			
IC 01	0361130	AN6821	A
IC 02	0361120	SN74LS90N	A
●Diode			
D 01	0311160	1S2473D	A
D 02	0311160	1S2473D	B
D 03	0311160	1S2473D	B
L 01	4290011	3.5μH Choke Coil	A
L 02	4290011	3.5μH Choke Coil	B

4-10. F-3060 Power Supply Circuit Board for Digital Circuit

(Stock No. 7503461 = G-5700)
(Stock No. 7503901 = G-6700)
(Stock No. 7503411 = G-7700)



6. SCHEMATIC DIAGRAM 6-1. Audio Section <G-5700>



RESISTORS
Are in ohms, $\frac{1}{2}$ Watts $\pm 5\%$ Tolerance Unless Otherwise Noted. K: $\times 10^3$, M: $\times 10^6$

CAPACITORS
Are in μF , Unless Otherwise Noted. P: pF

TOLERANCE
J: $\pm 5\%$ G: $\pm 2\%$ F: $\pm 1\%$
Each DC Voltage shows the nominal value in volts at no input signal

SYMBOL
 Δ Ceramic
 Δ Ceramic (Temperature Compensation)
 Δ Ceramic (Feed Through)
(B.P) Bi-Polar Electrolytic
(Ta) Tantalum Electrolytic
 C Mylar
 P Polystyrene
 F Fusing Resistor
 NF Non-Inflammable Resistor
 MF Metal Film Resistor

1

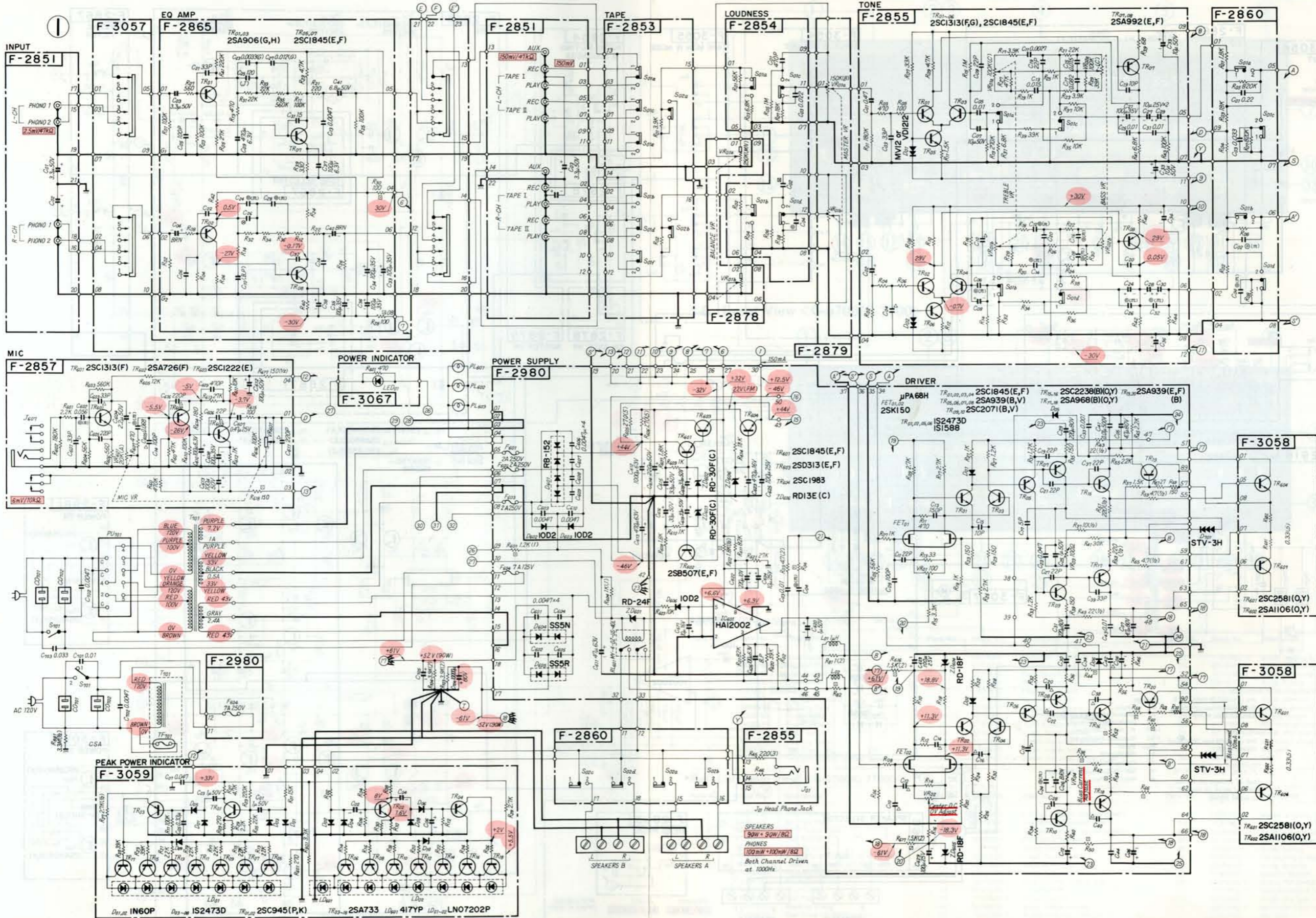
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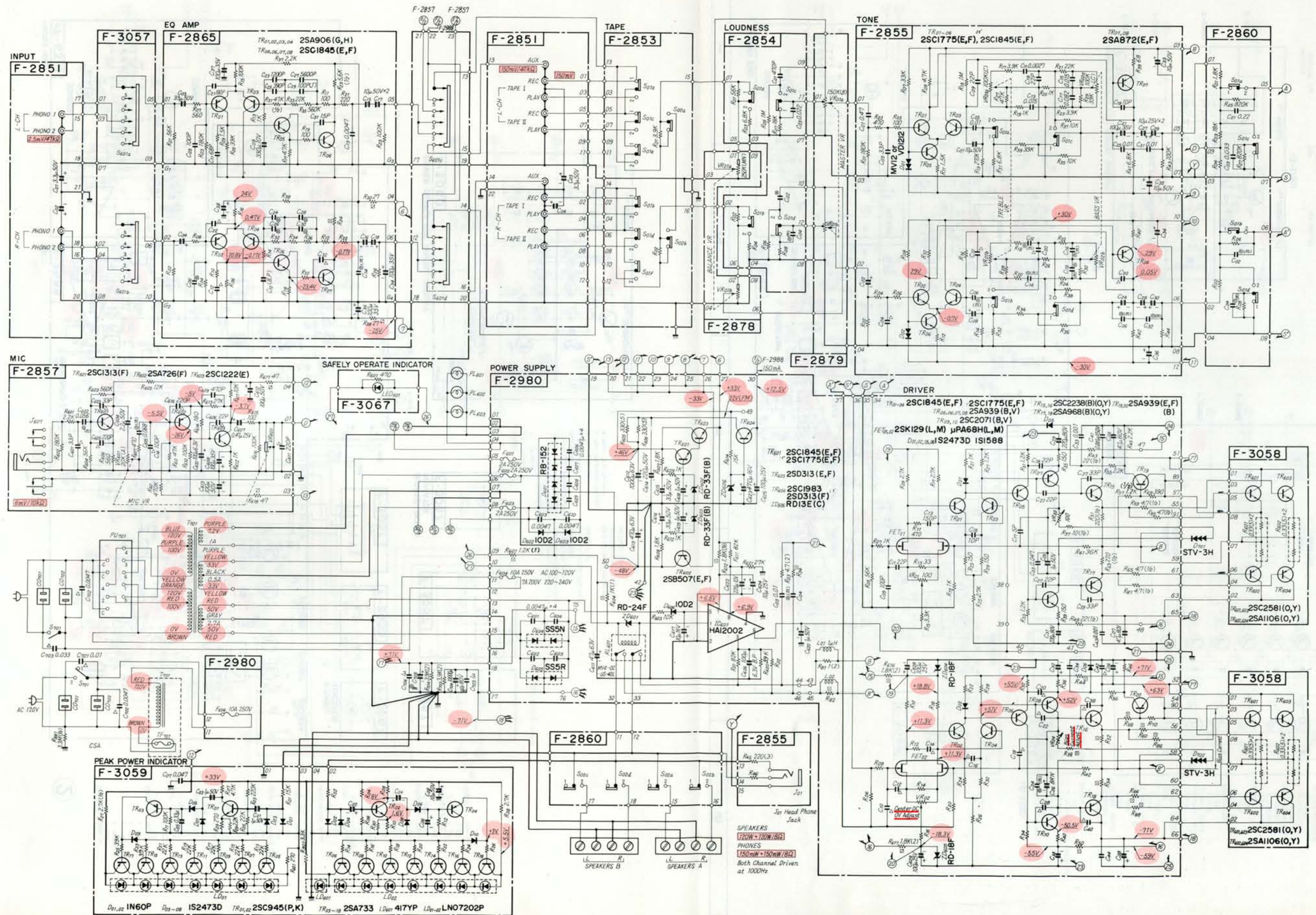
5

6-2. Audio Section <G-6700>



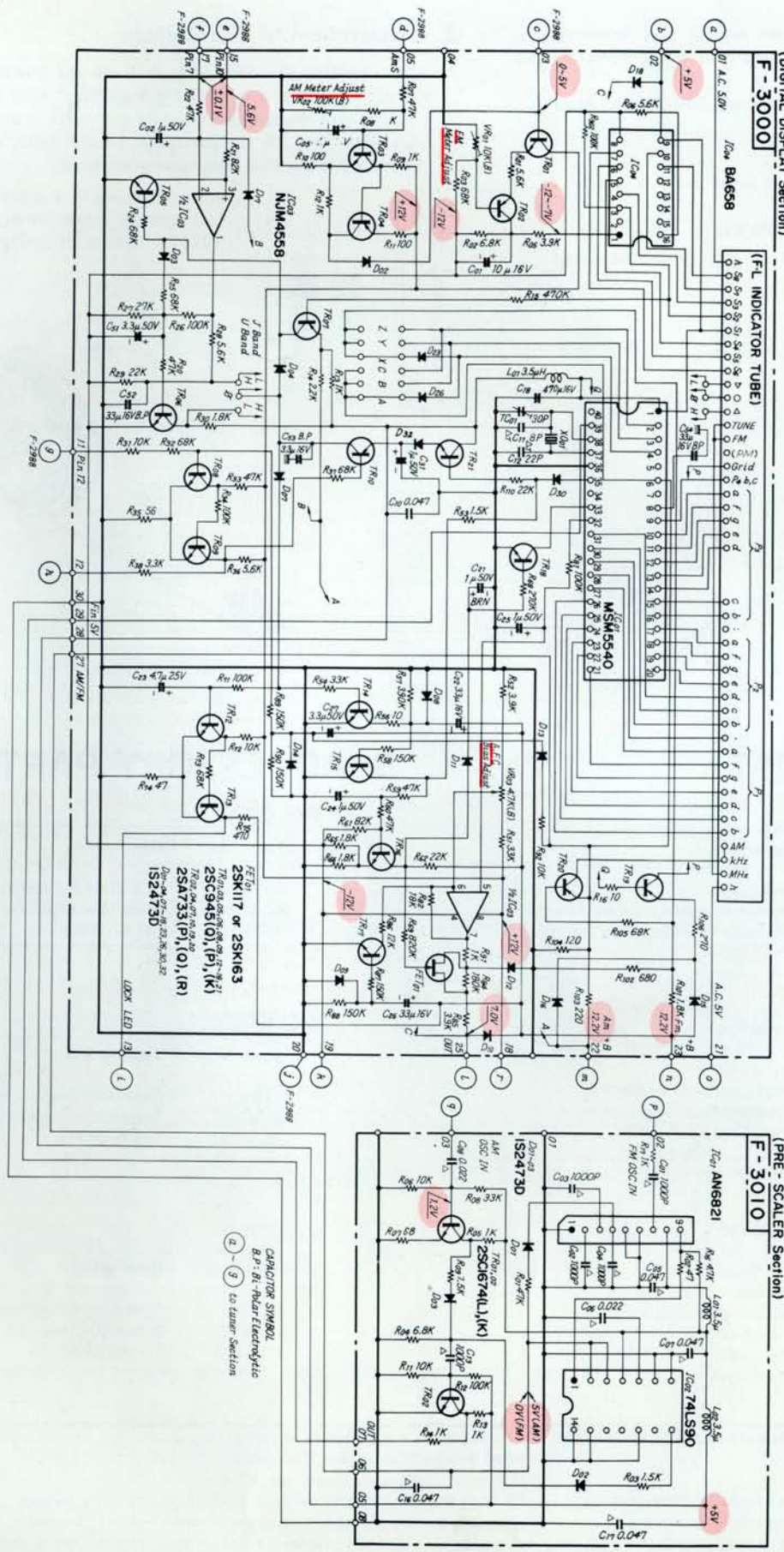
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6.3. Audio Section <G-7700>



A B C D

6-6. Digital Display Section <G-5700/G-6700/G-7700>



- | | | |
|----------|----------|---------|
| 2SA992 | 2SA906 | 2SB507 |
| 2SA733 | 2SA726 | 2SD313 |
| 2SC1775 | 2SA850 | |
| 2SC1845 | 2SC1735 | |
| 2SC1222 | | |
| 2SC945 | | |
| 2SC1675 | | |
| 2SC1634 | | |
| 2SC1674 | | |
| 2SA968 | 2SA939 | NJM4558 |
| 2SC2238 | 2SC2071 | LA1222 |
| 2SB527 | 2SK163 | 2SK117 |
| 2SD357 | | 2SK129 |
| | | |
| 2SA1106 | LA1240 | |
| 2SA1105 | HA11225 | |
| 2SC2580 | μPC1161C | |
| 2SC2581 | BA658 | |
| | AN6821 | |
| SN74LS90 | | |
| | HA12002 | |
| MSM5540 | | |
| | | |
| 1N60P | RD24F | STV-3H |
| | RD13E | |
| | RD24F | |
| | RD18F | |
| MV-12 | | |
| VD-1212 | RB-152 | |
| | | |
| 10D-2 | SS5N | |
| | SS3N | |
| IS2473D | | |
| IS1588 | SS5R | |
| | SS3R | |

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CAPACITOR SYMBOL
 B.P. - Bifalar Electrolyte
 C - Coilman Section

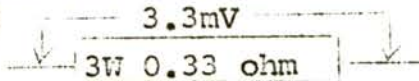
CORRECTION OF SERVICE MANUAL FOR MODELS G-5700/G-6700/G-7700

The following are corrections for the bias current adjustment in the Service Manual of the Models G-5700/G-6700/G-7700 appearing on Page 5. Please adjust the bias current by following the directions below and refer to the circuit diagram carefully.

1. G-5700

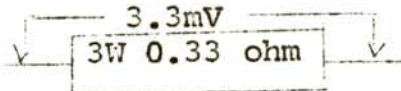
L-CH: Adjust VR-03 to get voltage as follows:

3.3mV: between both leads of the emitter resistor for the power transistor (TR-601)



R-CH: Adjust VR-04 to get voltage as follows:

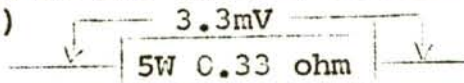
3.3mV: between leads of the emitter resistor for power transistor (TR-602)



2. G-6700

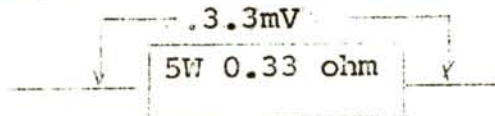
L-CH: Adjust VR-03 to get voltage as follows:

3.3mV: between both leads of the emitter resistor for power transistor (TR-604)



R-CH: Adjust VR-04 to get voltage as follows:

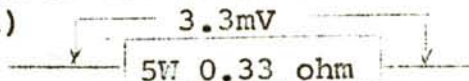
3.3mV: between both leads of the emitter resistor for power transistor (TR-601)



3. G-7700

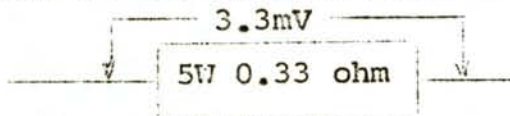
L-CH: Adjust VR-03 to get voltage as follows:

3.3mV: between both leads of the emitter resistor for power transistor (TR-601)



R-CH: Adjust VR-04 to get voltage as follows:

3.3mV: between both leads of the emitter resistor for power transistor



7. THREADING OF DIAL CORD

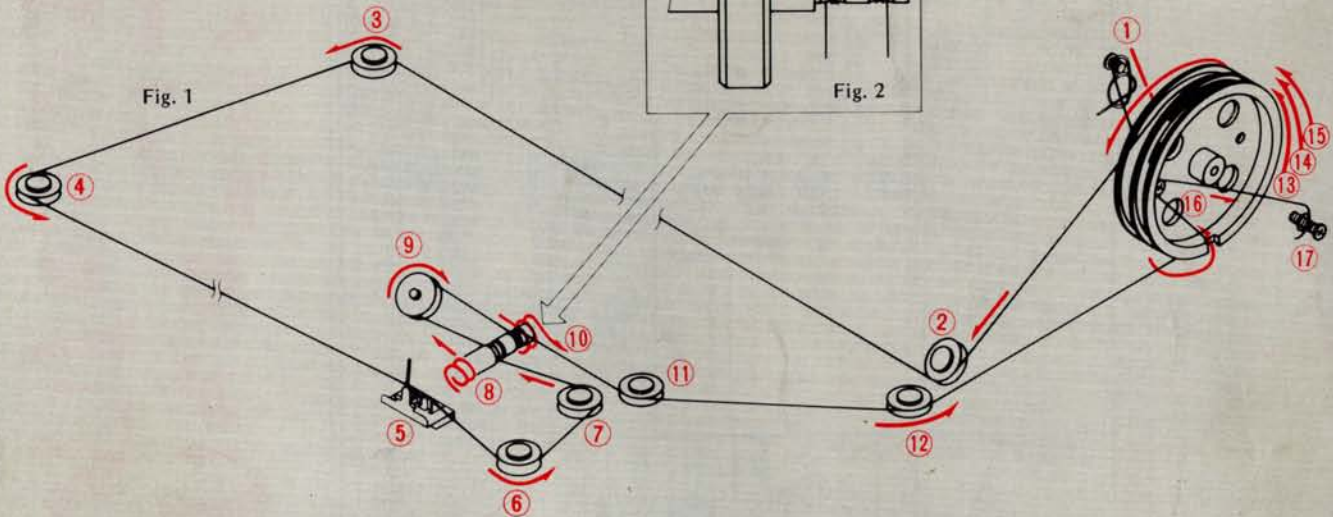
- If a dial cord is cut off or slips, replace it by following procedures. As this unit uses 0.5 mm ϕ cord, please replace it with the same type certainly.
- The length of dial cord is approximately 200 cm (78.7 inch).

1. Threading of Dial Cord

Thread the dial cord in numerical order from 1 to 17 as Fig. 1.

- Open the variable capacitor completely.

* Dial Cord (0.5 mm ϕ) (Stock No. 6036050)



2. Attachment of Dial Pointer

1. After installing the dial string, turn on the power switch. If the digital display is in the "FM Reception" state as shown in Fig. 8-2, turn the tuning knob until the digital display indicates 98.0 MHz. Then, fix the pointer to the dial string, after setting the pointer to the 98.0 MHz value of the scale.

2. After attaching Dial pointer, confirm Dial pointer moves from 88 MHz to 108 MHz to turn the tuning knob.

8. PACKING LIST

• G-5700

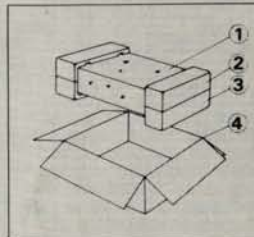
Parts No.	Stock No.	Description
1	9116790	Vinyl Cover
2	9028141	Styrofoam Packing, upper
3	9028151	Styrofoam Packing, lower
4	9001951	Carton Case

• G-6700

Parts No.	Stock No.	Description
1	9116810	Vinyl Cover
2	9028260	Styrofoam Packing, upper
3	9028270	Styrofoam Packing, lower
4	9056350	Carton Case <G-6700>
	9001931	Carton Case <G-7700>

• G-7700

Parts No.	Stock No.	Description
1	9116810	Vinyl Cover
2	9028260	Styrofoam Packing, upper
3	9028270	Styrofoam Packing, lower
4	9001931	Carton Case <G-7700>
	9056350	Carton Case <G-6700>



9. ACCESSORY PARTS LIST

• G-5700

Stock No.	Description
9205030	Operating Instructions
9238340	Schematic Diagram
3820100	FM Antenna

• G-6700

Stock No.	Description
9205620	Operating Instructions
9238470	Schematic Diagram
3820100	FM Antenna

• G-7700

Stock No.	Description
9205020	Operating Instructions
9238220	Schematic Diagram
3820100	FM Antenna

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