SERVICE MANUAL

PORTABLE COMPONENT SYSTEMS

SANSUI CP-7/CP-5

NOTE:

1. CP-7 and CP-5 systems are made up of following units.
   CP-7 System: CP-R7 TUNER/AMPLIFIER;
   CP-F7 CASSETTE DECK and
   CP-S7 SPEAKER SYSTEMS
   CP-5 System: CP-R5 TUNER/AMPLIFIER;
   CP-F7 CASSETTE DECK and
   CP-S5 SPEAKER SYSTEMS
2. There are CP-R7 and CP-R5 respectively having the different reception bands as follows:
   1) FM, MW, SW_1 and SW_2 ..... XX Model
   2) FM, LW, MW and SW. ..... EU Model
3. In this service manual, the differences between XX and EU Model are shown on the Parts List and Schematic Diagram as indicated below.
   1) (XX) ..... XX Model only
   2) (EU) ..... EU Model only

Sansui

SANSUI ELECTRIC CO., LTD.

Original

• SPECIFICATIONS

• System CP-7

<XX Model Only>
Power voltage
AC ..... 120/220/240 V (50/60 Hz)
For U.S.A. and Canada
..... 120 V (60 Hz)
Dry batteries .... DC 12 V (1.5 V x 8)
Car battery .... DC 12 V
Power consumption ... 70 watts 80 VA Rated
Dimensions ..... 532 mm (21") W
282 mm (11-1/8") H
193 mm (7-5/8") D
Weight ..... 9.8 kg (21.6 lbs.) net
12.7 kg (28.0 lbs.) packed

<EU Model Only>
Power Voltage
AC ..... 220/240 V (50 Hz)
Dry batteries .... DC 12 V (1.5 V x 8)
Car battery .... DC 12 V
Power consumption ... 95 watts Maximum
Dimensions ..... 532 mm (21") W
282 mm (11-1/8") H
193 mm (7-5/8") D
Weight ..... 9.8 kg (21.6 lbs.) net

Tuner/amplifier: CP-R7

Audio section <XX, EU Model>
Power output
Min. RMS, both channels driven, from 70 to 15,000 Hz with no more than 5 % total harmonic distortion
13 watts per channel into 4 ohms
Total harmonic distortion
..... less than 5 % at or below rated min. RMS power output
Frequency response (at 1 watt)
..... 30 to 30,000 Hz, +3 dB, −3 dB
Input sensitivity and impedance (at 1 kHz)
PHONO ..... 2.5 mV/47 kilohms
AUX, TAPE PLAY .. 75 mV/47 kilohms
Signal to noise ratio (short-circuit, A-network)
PHONO ..... 72 dB
AUX, TAPE PLAY .. 75 dB

FM section <XX EU Model>
Tuning range ..... 87.5 to 108 MHz
Usable sensitivity
Mono ..... 14 dBf
50 dB quieting sensitivity
Stero ..... 40 dBf
Signal to noise ratio (at 65 dBf)
Stereo ..... 68 dB
Distortion (at 65 dBf)
Stereo ..... less than 0.5 % at 1,000 Hz
Stereo separation .... 35 dB at 1,000 Hz

AM section
<XX Model Only>
Tuning range
MW ..... 530 to 1,620 kHz (10 kHz)
522 to 1,611 kHz (9 kHz)
SW1 ..... 3.8 to 12 MHz
SW2 ..... 5.8 to 15.5 MHz
Usable sensitivity
MW ..... 50 dB/m
SW1, SW2 ..... 14 dB/μV
Signal to noise ratio ... 45 dB

<EU Model Only>
Tuning range
MW ..... 522 to 1,611 kHz
LW ..... 155 to 281 kHz
SW ..... 5.8 to 15.5 MHz
Usable sensitivity
MW ..... 50 dB/m
LW ..... 60 dB/m
SW ..... 14 dB/μV
Signal to noise ratio ... 45 dB

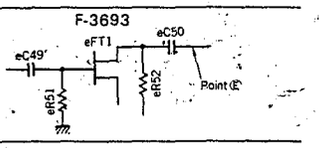
<XX, EU Model>
Dimensions ..... 270 mm (10-11/16") W
106 mm (4-3/16") H
193 mm (7-5/8") D
Weight ..... 3.1 kg (6.8 lbs.) net

to be continued▶

3. ADJUSTMENTS

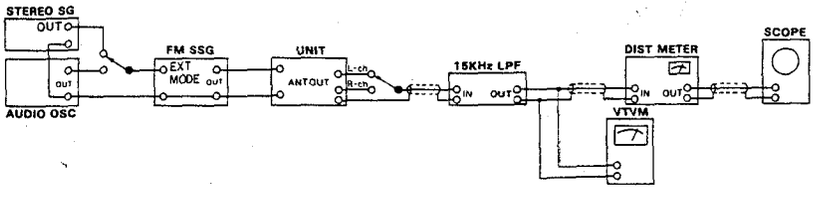
3-1. Reference Frequency Adjustment of Synthesizer Control Circuit <CP-R7>

Note: 1. Selector Switch . . . . . TUNER
2. Band Selector Switch . . . . . MW
3. See Fig. 3-7 on page 6 for MEASURE OUTPUT point.

STEP	SETTING	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Memorize 1450 kHz using Memory key 1	Point Ⓔ (Pin 91 of F-3693) Frequency Counter	fTC1 (F-3688)	1450.0 kHz	

3-2. FM Adjustment <CP-R7>

Fig. 3-1



(1) FM IF Adjustment

Note: 1. Selector Switch . . . . . TUNER
2. Band Selector Switch . . . . . FM
3. FM MODE Switch . . . . . MONO
4. See Fig. 3-5 on page 6 for MEASURE OUTPUT and ADJUST point.

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	Discriminator coil adj.	98MHz ANT Input 65.2dBf (60dB) (No.MOD.)	ANT terminal 75Ω	Between TP1 and TP2 of F-3644 DC Volt Meter	dT1 (F-3644)	+5mV ~ −5mV	

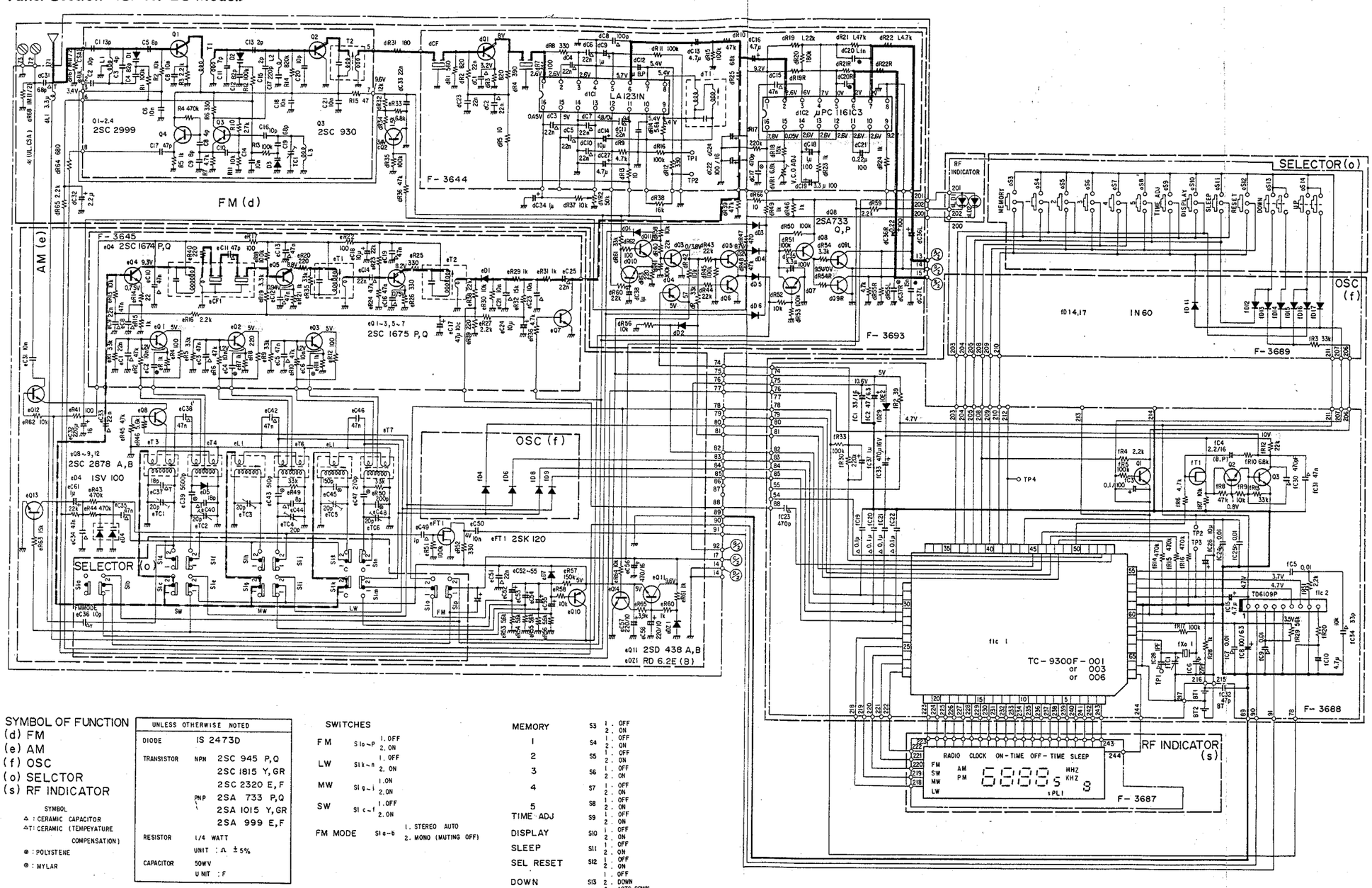
♦ FM RF adjustment & Dial Calibration are not necessary. When these circuits are defective, replace FM Front-end Pack with new one.

(2) FM Stereo Adjustment

Note: 1. Selector Switch . . . . . TUNER
2. Band Selector Switch . . . . . FM
3. FM MODE Switch . . . . . STEREO
4. See Figs. 3-5, 3-7 on page 6 for MEASURE OUTPUT and ADJUST point.

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	PLL VCO Adj.	98MHz ANT Input 65dBf (59.8dB), FM SSG, Pilot 19kHz (9% MOD.), R or L MODE 1kHz + Pilot (100% MOD.), STEREO SG	ANT terminal 75Ω	Stereo Indicator	dVR1 (F-3644)	Light indicator	Adjust the dVR1 within center of lighting level
	PLL VCO Adj. In case of using Freq. Counter	No Input	——	Pin 9 of dIC2 Freq. Counter (F-3644)	dVR1 (F-3644)	19kHz ± 200Hz	
2.	Muting Level Adj.	98MHz ANT Input 18dBf (12.8dB), 1kHz (100% MOD.), FM SSG	ANT terminal 75Ω	Tuner Out or Indicator VTVM, Scope	dVR2 (F-3693)	Output signal comes out.	

8-3. Tuner Section <CP-R7 EU Model>



SYMBOL OF FUNCTION
(d) FM
(e) AM
(f) OSC
(o) SELCTOR
(s) RF INDICATOR

SYMBOL
△ : CERAMIC CAPACITOR
△T: CERAMIC (TEMPEYATURE COMPENSATION)
Ⓟ : POLYSTENE
Ⓜ : MYLAR

UNLESS OTHERWISE NOTED		
DIODE		IS 2473D
TRANSISTOR	NPN	2SC 945 P,Q
		2SC 1815 Y,GR
		2SC 2320 E,F
	PNP	2SA 733 P,Q
		2SA 1015 Y,GR
		2SA 999 E,F
RESISTOR		1/4 WATT
		UNIT : Ω ±5%
CAPACITOR		50WV
		UNIT : F

SWITCHES

FM	S1a~P	1. OFF 2. ON
LW	S1k~n	1. OFF 2. ON
MW	S1g~i	1. ON 2. ON
SW	S1c~f	1. OFF 2. ON
FM MODE	S1a~b	1. STEREO AUTO 2. MONO (MUTING OFF)

MEMORY	S3	1. OFF 2. ON
1	S4	1. OFF 2. ON
2	S5	1. OFF 2. ON
3	S6	1. OFF 2. ON
4	S7	1. OFF 2. ON
5	S8	1. OFF 2. ON
TIME ADJ	S9	1. OFF 2. ON
DISPLAY	S10	1. OFF 2. ON
SLEEP	S11	1. OFF 2. ON
SEL RESET	S12	1. OFF 2. ON
DOWN	S13	1. OFF 2. DOWN 3. AUTO DOWN
UP	S14	1. OFF 2. UP 3. AUTO UP

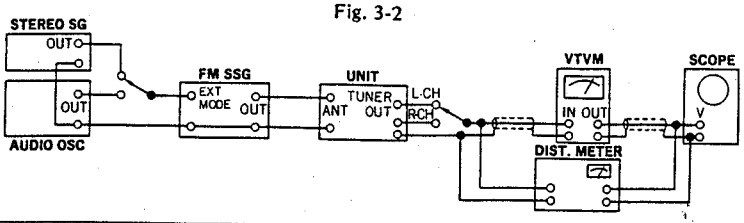
FM Signal Line
AM Signal Line

2SA733 2SK120
2SA999
2SA1015
2SB865
2SC945
2SC1674
2SC1675
2SC1815
2SC1845 2SK163
2SC2320
2SC2878
2SD438
2SB507
TD6109P
μPC1230H
LA1231
TC4001BP
UPC1161C
8A328
DAN601
DAN201 DAPZ01
10E2 RD6.2E
30D2 RD10E
1N60 RD12F
1S1588
1S2473D
TC-9300F-001

3-3. FM Adjustment <CP-R5>

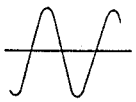
Note: 1. Selector Switch . . . . . TUNER
2. Band Selector Switch . . . . . FM
3. See Figs. 3-5, 3-8 on page 6 for MEASURE OUTPUT and ADJUST point.

Fig. 3-2



(1) FM IF, RF Adjustment and Dial Calibration

Note: 1. FM MODE Switch . . . . . MONO

STEP	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	Discriminator coil adj.	98MHz ANT Input 65dBf (59.8dB), 1kHz (100% MOD.), FM SSG	ANT terminal 75Ω	Between both lead wires of dR12 (TP1 and TP2), F-3644 DC Volt Meter	dT1 (F-3644)	−5mV ~ +5mV	
2.	90MHz Dial Calibration	90MHz ANT Input 65dBf (59.8dB), 1kHz (100% MOD.), FM SSG	Same as above	Dial Pointer LED	TUNING Knob	90MHz	
				TUNER OUTPUT L-ch (Connector Pin No. 13, F-3646) or R-ch (Connector Pin No. 15, F-3646) VTVM & Scope	dL4 (F-3646)	MAX. Output	Turning point of the dial pointer LED from red to green.
3.	106MHz Dial Calibration	106MHz ANT Input 65dBf (59.8dB), 1kHz (100% MOD.), FM SSG	Same as above	Dial Pointer LED	TUNING Knob	106MHz	
				TUNER OUTPUT L-ch (Connector Pin No. 13, F-3646) or R-ch (Connector Pin No. 15, F-3646) VTVM & Scope	dTC3 (F-3646)	MAX. Output	Turning point of the dial pointer LED from red to green.
4.	90MHz RF Adj.	90MHz ANT Input Minimum Value with sine wave 1kHz (100% MOD.), FM SSG	Same as above	TUNER OUTPUT L-ch (Connector Pin No. 13, F-3646) or R-ch (Connector Pin No. 15, F-3646) VTVM & Scope	dL2, dL3, (F-3646)	Same as above	
5.	106MHz RF Adj.	106MHz ANT Input Minimum Value with sine wave 1kHz (100% MOD.), FM SSG	Same as above	Same as above	dTC1, dTC2, (F-3646)	Same as above	

(2) FM STEREO Adjustment

Note: 1. FM MODE Switch . . . . . STEREO

STEP	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	PLL VCO Adj.	98MHz ANT Input 65dBf (59.8dB) FM SSG Pilot 19kHz (9% MOD.) SUB 1kHz + Pilot (100% MOD.) STEREO SG	ANT terminal 75Ω	Stereo indicator	dVR1 (F-3644)	Light indicator	Adjust the dVR1 within center of lighting level.
	PLL VCO Adj. In case of using Freq. counter	No Input	———	Pin No. 9 of dIC2 (F-3644) Freq. counter	dVR1 (F-3644)	19kHz ± 200Hz	
2.	IF Coil (dT3) Adj.	98MHz ANT Input 65dBf (59.8dB) FM SSG Pilot 19kHz (9% MOD.) L MODE 1kHz + Pilot (100% MOD.) STEREO SG	ANT terminal 75Ω	TUNER OUTPUT L-ch (Connector Pin No. 13, F-3646), Dist. Meter	dT3 (F-3646)	Min. THD	

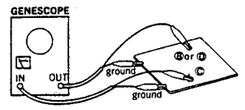
♦ Selection of Intermediate Frequency (FM) <CP-R5>

When the frequency (separated by color) of the ceramic filter is changed, unity the color marks of the FM ceramic filters (dCF1 and dCF2) on the F-3646.

3-4. AM IF Adjustment <CP-R7/CP-R5>

Note: 1. Selector Switch . . . . . TUNER
2. Band Selector Switch . . . . . MW
3. When F-3645 AM IF circuit board is out of adjustment, replace it with new board.
4. See Fig. 3-6 on page 6 for FEED SIGNAL, MEASURE OUTPUT and ADJUST point.

Fig. 3-3



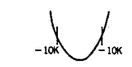
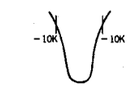
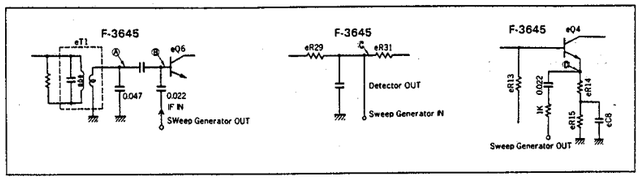
STEP	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	IF Coil Adj.	Genescope Output 90dB	Point Ⓑ through 0.022μF connect 0.047μF between Ⓐ point and ground (F-3645)	Point Ⓒ (F-3645)	eT2 (F-3645)	MAX. Output	
2.		Genescope Output 50dB	Point Ⓓ through 0.022μF and 1kΩ (F-3645)	Point Ⓒ (F-3645)	eCF1 (F-3645)	MAX. Output	

Fig. 3-4



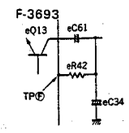
3-5. AM RF and Dial Calibration <CP-R7>

Note: 1. Selector Switch . . . . . TUNER
2. Band Selector Switch . . . . . MW, SW1, SW2, LW
3. See Fig. 3-7 on page 6 for MEASURE OUTPUT and ADJUST point.
4. Preset the following frequencies to the memories.

MEMORY KEY	MW	SW1	SW2(SW)	LW
SW2 1 (6)	522kHz	3.8MHz	5.8MHz	155kHz
2 (7)	603kHz	4.4MHz	6.6MHz	164kHz
4 (9)	1404kHz	10.0MHz	14.0MHz	272kHz
5 (10)	1611kHz	12.0MHz	15.5MHz	281kHz

(1) XX Model (FM, MW, SW1 and SW2)

a) Dial Calibration

STEP	SUBJECT	SETTING	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	MW Dial Calibration	Depress MEMORY key 1 to readout 522kHz	Point Ⓕ (between eR42 and Ground of F-3693 DC Volt Meter	eT7 (F-3693)	0.9V ±0.1V	
		Depress MEMORY key 5 to readout 1611kHz	Same as above	eTC6 (F-3693)	8.4V ±0.1V	
2.	SW1 Dial Calibration	Depress MEMORY key 1 to readout 3.8MHz	Same as above	eT6 (F-3693)	0.9V ±0.1V	
		Depress MEMORY key 5 to readout 12MHz	Same as above	eTC4 (F-3693)	8.4V ±0.1V	
3.	SW2 Dial Calibration	Depress MEMORY key 6 to readout 5.8MHz	Same as above	eT4 (F-3693)	0.9V ±0.1V	
		Depress MEMORY key 10 to readout 15.5kHz	Same as above	eTC2 (F-3693)	8.4V ±0.1V	

♦ ADJUSTMENT FOR FM

- The impedance of FM antenna terminal is 75Ω. Therefore, connect coaxial cable (3C-2V etc.) between FM SG and antenna terminal when wiring.
- 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.
- FM SG output level in this FM adjustment are described as open indication type. The right table shows relations among FM SG attenuator indication (dB), available power ratio (dBf) and antenna terminal voltage (dB/μV) in each indication type.
close indication type.

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

Fig. 3-5 <CP-R7/CP-R5>

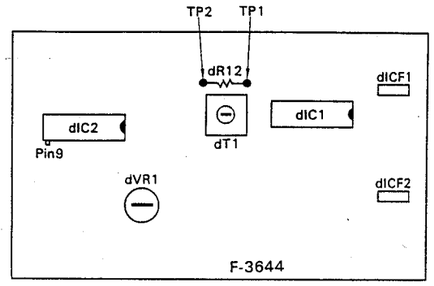


Fig. 3-6 <CP-R7/CP-R5>

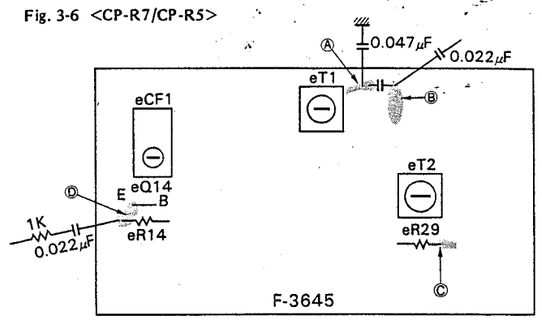
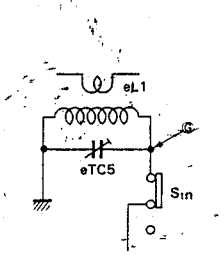


Fig. 3-7 <CP-R7>

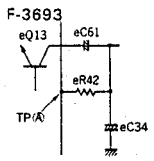
Fig. 3-8 <CP-R5>

b) RF Adjustment

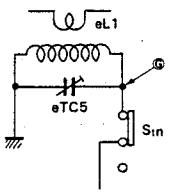
STEP	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	MW 603kHz RF Adj.	603kHz 34dB 400Hz (30% MOD.) AM SSG	Point Ⓖ (F-3693)	TUNER OUTPUT Connector Pin L-CH No. 13, R-CH No. 15 VTVM, SCOPE (F-3693)	Bar Antenna (L1) (F-3693)	MAX. Output	
	MW 1404kHz RF Adj.	1404kHz 34dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	eTC5 (F-3693)	Same as above	
2.	SW1 4.4MHz RF Adj.	4.4MHz 20dB 400 Hz (30% MOD.) AM SSG	ANT terminal 75Ω	Same as above	eT5 (F-3693)	Same as above	
	SW1 10MHz RF Adj.	10MHz 20dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	eTC1 (F-3693)	Same as above	
3.	SW2 6.6MHz RF Adj.	6.6MHz 20dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	eT3 (F-3693)	Same as above	
	SW2 14MHz RF Adj.	14MHz 20dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	eTC1 (F-3693)	Same as above	

(2) EU Model (FM, MW, SW and LW)

a) Dial Calibration

STEP	SUBJECT	SETTING	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	LW Dial Calibration	Depress MEMORY key 1 to readout 155kHz	Point Ⓐ (between eR42 and ground of F-3693) DC Volt Meter	eT7 (F-3693)	0.9V ±0.1V	
		Depress MEMORY key 2 to readout 164kHz	Same as above	eTC6 (F-3693)	8.4V ±0.1V	
2.	MW Dial Calibration	Depress MEMORY key 1 to readout 1522kHz	Same as above	eT6 (F-3693)	0.9V ±0.1V	
		Depress MEMORY key 5 to readout 1611kHz	Same as above	eTC4 (F-3693)	8.4V ±0.1V	
3.	SW Dial Calibration	Depress MEMORY key 1 to readout 5.8MHz	Same as above	eT4 (F-3693)	0.9V ±0.1V	
		Depress MEMORY key 5 to readout 15.5kHz	Same as above	eTC2 (F-3693)	8.4V ±0.1V	

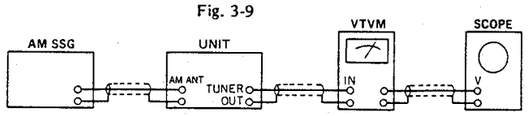
b) RF Adjustment

STEP	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	LW 164kHz RF Adj.	164kHz 45dB 400Hz (30% MOD.) AM SSG	Point Ⓖ (F-3693)	TUNER OUTPUT Connector Pin L-CH No. 13, R-CH No. 15 VTVM, SCOPE (F-3693)	Bar Antenna (L1) (F-3693)	MAX. Output	
	LW 272kHz RF Adj.	272kHz 45dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	eTC5 (F-3693)	Same as above	
2.	MW 603kHz RF Adj.	603kHz 35dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	Bar Antenna (L1) (F-3693)	Same as above	
	MW 1404kHz RF Adj.	1404kHz 35dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	eTC3 (F-3693)	Same as above	
3.	SW 6.6MHz RF Adj.	6.6MHz 20dB 400Hz (30% MOD.) AM SSG	ANT terminal 75Ω	Same as above	eT3 (F-3693)	Same as above	
	SW 14MHz RF Adj.	14MHz 20dB 400Hz (30% MOD.) AM SSG	Same as above	Same as above	eTC1 (F-3693)	Same as above	

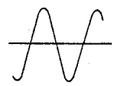
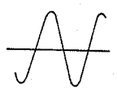
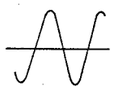
3-6. AM RF Adjustment and Dial Calibration <CP-R5>

Note: 1. Selector Switch . . . . . TUNER
2. Fine Tune Volume (eVR1) . . . . . Center Position
3. See Fig. 3-8 on page 6 for MEASURE OUTPUT and ADJUST point.

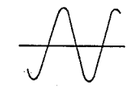
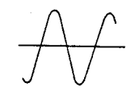
Fig. 3-9



(1) XX Model (FM, MW, SW1 and SW2)

STEP	BAND SELECTOR SWITCH	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	MW	600kHz Dial Calibration	600kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Point Ⓗ (JP6, F-3646)	TUNER OUTPUT L-ch (Connector Pin No. 13, F-3646) or R-ch (Connector Pin No. 15, F-3646) VTVM & Scope	eT7 (F-3646)	MAX. Output	Turning point of the dial pointer LED from red to green.
		1400kHz Dial Calibration	1400kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC4 (F-3646)	Same as above	
2.	SW1	2.5MHz Dial Calibration	2.5MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	ANT terminal 75Ω	Same as above	eT8 (F-3646)	Same as above	Same as above
		6MHz Dial Calibration	6MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC6 (F-3646)	Same as above	
3.	SW2	8MHz Dial Calibration	8MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eT9 (F-3646)	Same as above	Same as above
		18MHz Dial Calibration	18MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC6 (F-3646)	Same as above	
4.	MW	600kHz RF Adj.	600kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Point Ⓗ (JP6, F-3646)	Same as above	eL1 (F-3646)	Same as above	
		1400kHz RF Adj.	1400kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC1 (F-3646)	Same as above	
5.	SW1	2.5MHz RF Adj.	2.5MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	ANT terminal 75Ω	Same as above	eT5 (F-3646)	Same as above	
		6MHz RF Adj.	6MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC2 (F-3646)	Same as above	
6.	SW2	8MHz RF Adj.	8MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eT6 (F-3646)	Same as above	
		18MHz RF Adj.	18MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC3 (F-3646)	Same as above	

(2) EU Model (FM, LW, MW and SW)

STEP	BAND SELECTOR SWITCH	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	LW	170kHz Dial Calibration	170kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Point Ⓗ (JP6, F-3646)	TUNER OUTPUT L-ch (Connector Pin No. 13, F-3646) or R-ch (Connector Pin No. 15, F-3646) VTVM & Scope	eT7 (F-3646)	MAX. Output	Turning point of the dial pointer LED from red to green.
		300kHz Dial Calibration	300kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC4 (F-3646)	Same as above	
2.	MW	600kHz Dial Calibration	600kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eT8 (F-3646)	Same as above	Same as above
		1400kHz Dial Calibration	1400kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC5 (F-3646)	Same as above	
3.	SW	8MHz Dial Calibration	8MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	ANT terminal 75Ω	Same as above	eT9 (F-3646)	Same as above	Same as above
		18MHz Dial Calibration	18MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC6 (F-3646)	Same as above	
4.	LW	170kHz RF Adj.	170kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Point Ⓗ (JP6, F-3646)	Same as above	eL1 (LW) (F-3646)	Same as above	
		300kHz RF Adj.	300kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC1 (F-3646)	Same as above	
5.	MW	600kHz RF Adj.	600kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eL1 (MW) (F-3646)	Same as above	
		1400kHz RF Adj.	1400kHz Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC2 (F-3646)	Same as above	
6.	SW	8MHz RF Adj.	8MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	ANT terminal 75Ω	Same as above	eT6 (F-3646)	Same as above	
		18MHz RF Adj.	18MHz ANT Input 60dB 400kHz (MOD. 30%), AM SSG	Same as above	Same as above	eTC3 (F-3646)	Same as above	

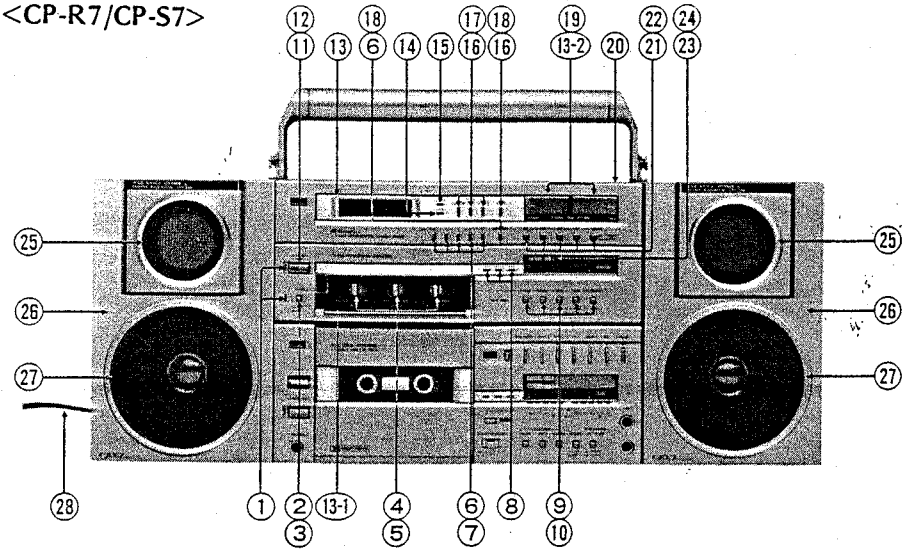
•Abbreviations

Equipment
- AM FM Generator Oscilloscope . . . . . Genescope
- AM Standard Signal Generator . . . . . AM SSG
- FM Standard Signal Generator . . . . . FM SSG
- FM Stereo Generator . . . . . Stereo SG
- Oscilloscope . . . . . Scope
- Audio Oscillator . . . . . Audio Osc.
- Distortion Meter . . . . . Dist. Meter

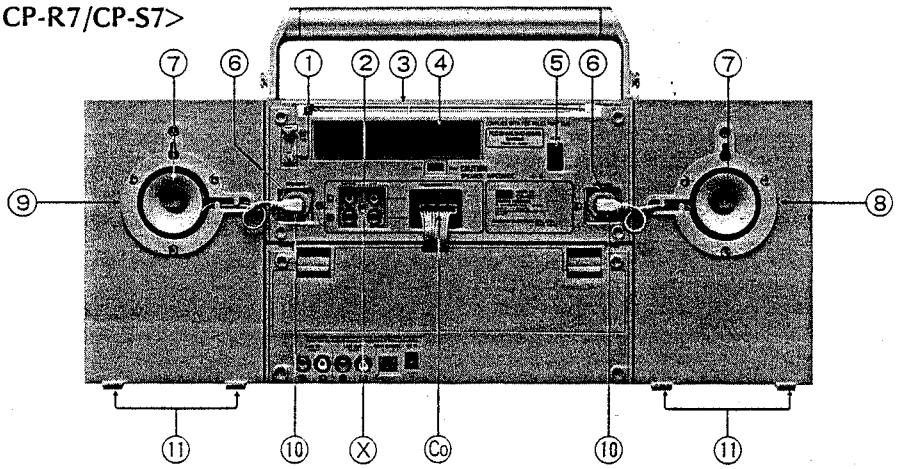
Others
- Antenna . . . . . ANT.
- Modulation . . . . . MOD.
- Total Harmonic Distortion . . . . . T.H.D.

5. OTHER PARTS

5-1. Front View <CP-R7/CP-S7>



5-2. Rear View <CP-R7/CP-S7>



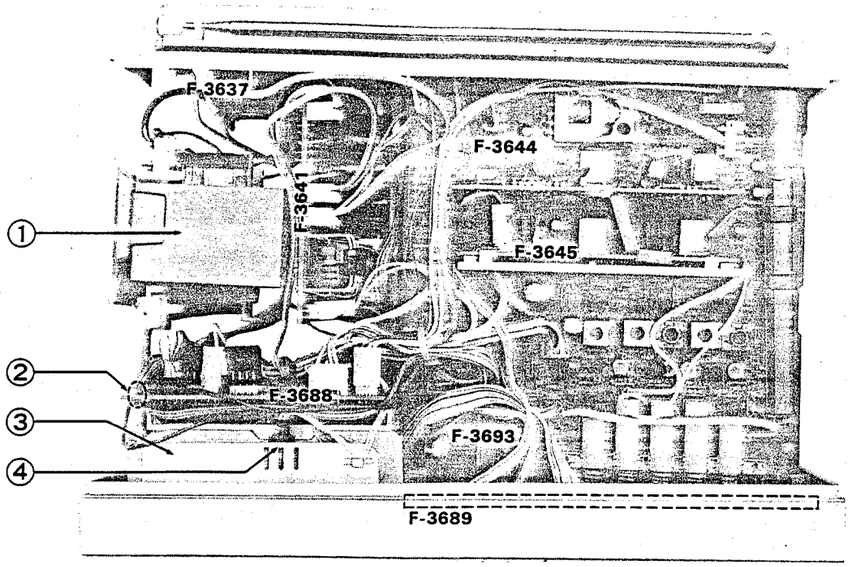
Parts List <Front View>

Parts No.	Stock No.	Description
1	46095200	LED, TIMER/POWER Indicator
2	46182600	Push SW., TIMER
3	07851000	Knob, TIMER SW.
4	46189100	BALANCE/TONE VR, 100kΩ x 2, 250kΩ
5	07852200	Knob, BALANCE/TONE VR
6	46184600	Push SW., 1 ~ 5 (MEMORY)/MEMORY
7	07850600	Knob, 1 ~ 5 (MEMORY)
8	46095200	LED, PHONO/TAPE/TUNER
9	46182800	Push SW., SELECTOR/TAPE/LOUDNESS
10	07851000	Knob, SELECTOR/TAPE/LOUDNESS SW.
11	07261300	Push SW., POWER
12	07850900	Knob, POWER SW.
13	07856900	Front Panel Ass'y (XX)
	07868700	Front Panel Ass'y (EU)
13-1	07848700	Tone Volume Cover
13-2	07850800	UP, DOWN SW. Knob
14	46095200	LED, STEREO Indicator
15	07250900	LED, LOCKED Indicator
16	46184600	Push SW., DISPLAY/TIME ADJ./SEC RESET/SLEEP
17	07850600	Knob, DISPLAY/TIME ADJ./SEC RESET SW.
18	07850700	Knob, SLEEP SW.
19	07224100	Push SW., UP/DOWN
20	07845800	Bonnet
21	46182700	Push SW., FM/MW/SW1/SW2 (LW)/FM MODE SW
22	07851100	Knob, FM/MW/SW1/SW2 (LW)/FM MODE SW.
23	46188800	Slide VR 150kΩ B x 2, master VR
24	07852000	Knob, master VR
25	46203800	Passive Radiator, P-111
26	07872900	Front Buffle Cover (A) Ass'y
27	46203700	FS-114, Fullrange Speaker
28	46186300	Power Supply Cord (XX)
	46186400	Power Supply Cord (EU)

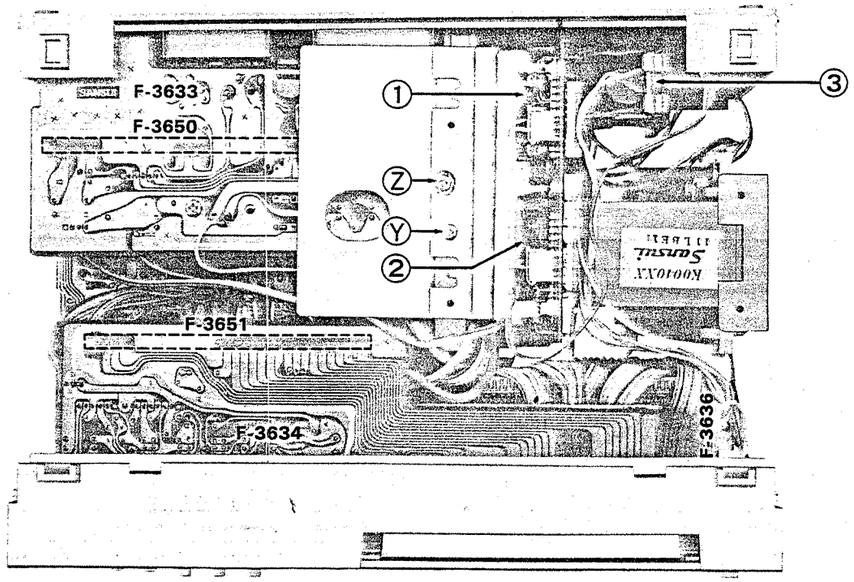
Parts List <Rear View>

Parts No.	Stock No.	Description
1	46200000	Terminal, FM 75Ω/GND
2	46200100	4P Input Terminal
3	46199400	Rod Antenna
4	07861900	Battery Case Cover
5	46182300	AC Inlet (XX)
	46182400	AC Inlet (EU)
6	46200200	DIN Jack, SPEAKER Connector
7	07849600	Sub Speaker Cord Reel
8	07849700	Speaker Cord Reel (L-ch)
9	07849900	Speaker Cord Reel (R-ch)
10	46203100	2P DIN Speaker Cord
11	07853700	Leg

5-3. Top View <CP-R7>



5-4. Bottom View <CP-R7>



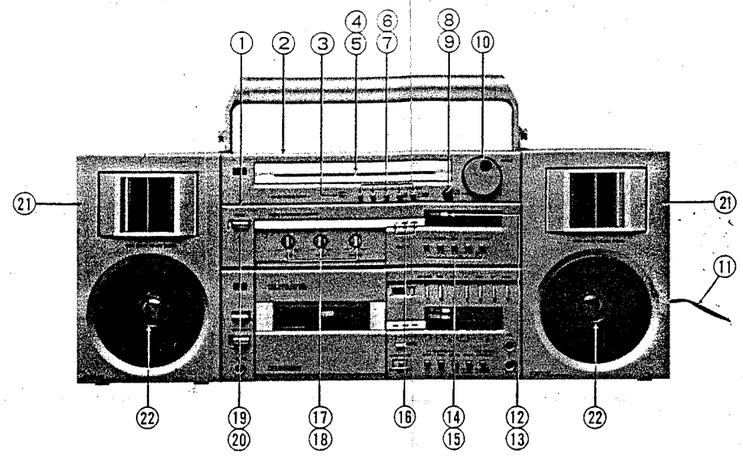
Parts List <Top View>

Parts No.	Stock No.	Description
1	15006601	Power Transformer (XX)
	15006605	Power Transformer (EU)
3	07858900	Illumination Case
4	46208200	Pilot Lamp, 12 V 150 mA

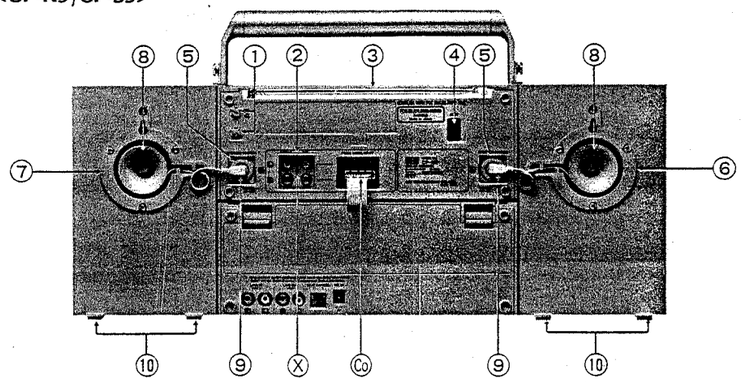
Parts List <Bottom View>

Parts No.	Stock No.	Description
1	46183600	Power Amp IC (L-ch), kIC1 μPC1230H
2	46183600	Power Amp IC (R-ch), kIC1 μPC1230H
3	46201500	AC Fuse 1A 250 V (AC 120 V) (XX)
	46201200	AC Fuse 0.5A 250 V (AC 220 V) (XX)
	07184200	AC Fuse 0.315A 250 V (EU)

5-5. Front View <CP-R5/CP-S5>



5-6. Rear View <CP-R5/CP-S5>



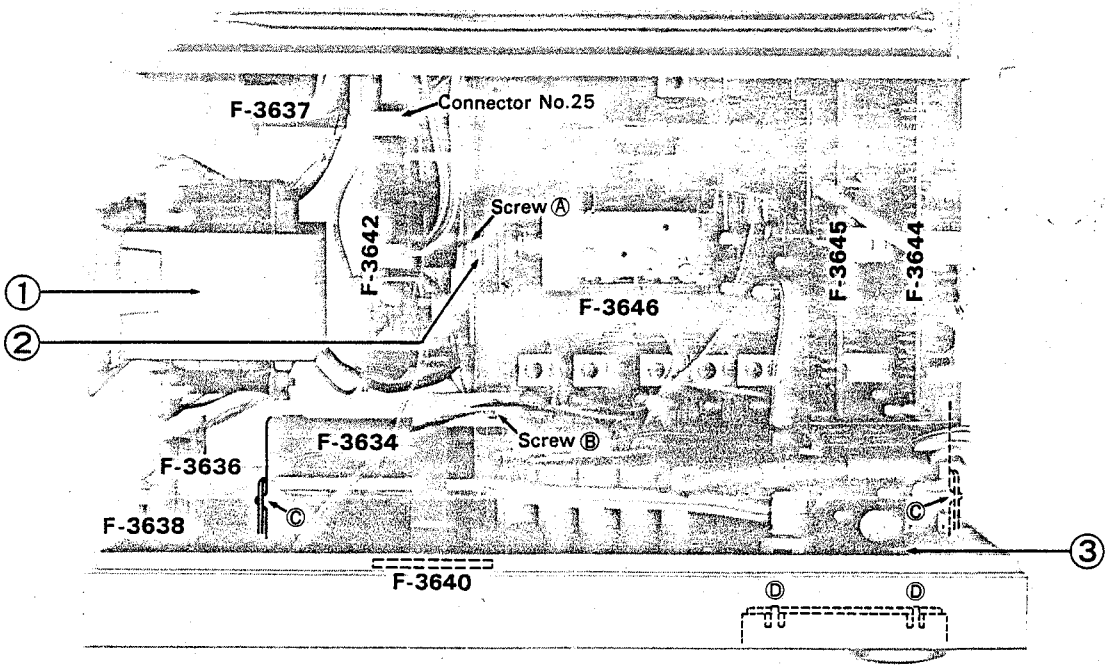
Parts List <Front View>

Parts No.	Stock No.	Description
1	07858500	Front Panel Ass'y (XX)
	07858600	Front Panel Ass'y (EU)
2	07845800	Bonnet
3	46095200	LED, STEREO Ind.
4	07856500	Dial Pointer
5	46198900	LED, dial pointer
6	07851100	Push Knob (B) } FM/MW (LW)/SW1 (MW)
7	46182700	Push SW. } SW2 (SW)/FM MODE
8	07850200	Knob } SW FINE TUNE
9	46188900	100kΩ (B) x 2 VR } SW FINE TUNE
10	07850100	Knob, TUNING
11	46186300	Power Supply Cord (XX)
	46186400	Power Supply Cord (EU)
12	07852000	Slide Knob } VOLUME
13	46188800	150kΩ (B) x 2 } VOLUME
14	07851000	Push Knob (A) } SELECTOR/TAPE,
15	46182800	Push SW. } LOUDNESS
16	46095200	LED, TUNER/PHONO/TAPE Ind.
17	07852100	Knob, BASS/TREBLE/BALANCE
18	46189000	<100kΩ (C) x 2> x 2, 250kΩ (C) VR
19	07850900	Push Knob } POWER
20	07261300	Push SW. (XX) } POWER
	46085600	Push SW. (EU) } POWER
21	07873010	Front Buffle Cover (B) Ass'y
22	07865800	FS-113 Fullrange Speaker Unit

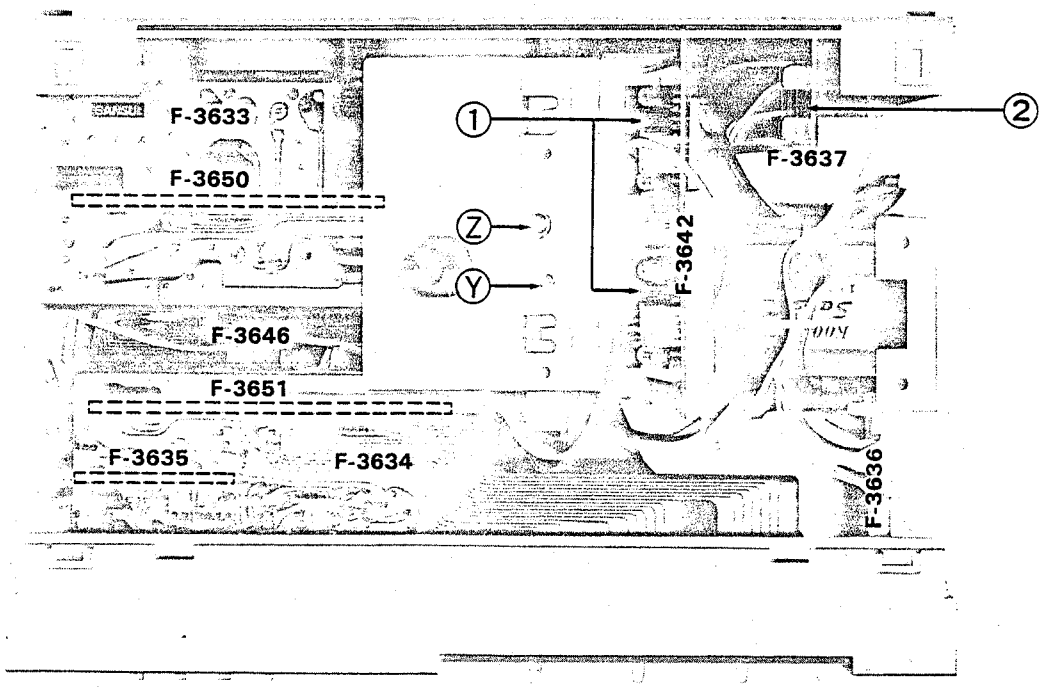
Parts List <Rear View>

Parts No.	Stock No.	Description
1	46200000	Terminal, FM/SW 75Ω, GND
2	46200100	4P Input Terminal, PHONO, AUX
3	46199400	Rod Antenna
4	46182300	AC Inlet (XX)
	46182400	AC Inlet (EU)
5	46200200	DIN Jack, speaker connector
6	07849700	Speaker Cord Reel (L)
7	07849900	Speaker Cord Reel (R)
8	07849600	Sub Speaker Cord Reel
9	46203100	2P DIN Speaker Cord
10	07853700	Leg

5-7. Top View <CP-R5>



5-8. Bottom View <CP-R5>



Parts List <Top View>

Parts No.	Stock No.	Description
1	15006601	Power Transformer (XX)
	15006605	Power Transformer (EU)
2	07779700	Pulley Ass'y
3	07860900	Tuning Unit

Parts List <Bottom View>

Parts No.	Stock No.	Description
1	46183600	μPC1230H Power IC
2	46201500	1A 250 V Fuse (120 V)(XX)
	46201200	500mA 250 V Fuse (220 V ~ 240 V)(XX)
	07184200	315mA 250 V Fuse (EU)

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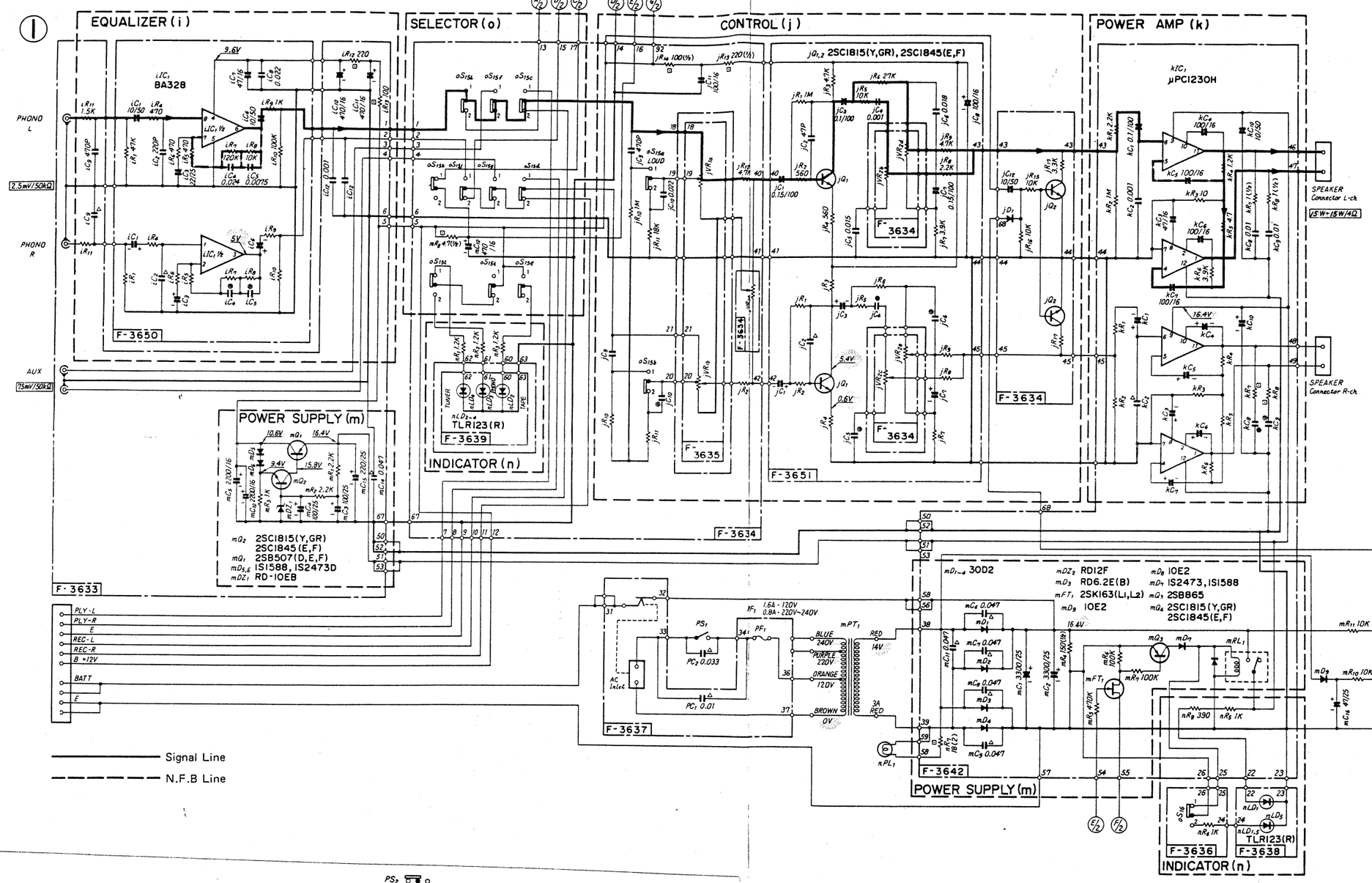
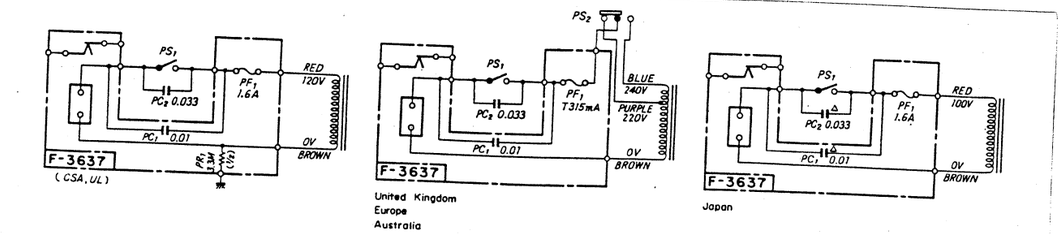
* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

8. SCHEMATIC DIAGRAM 8-1. Audio Section <CP-R7>





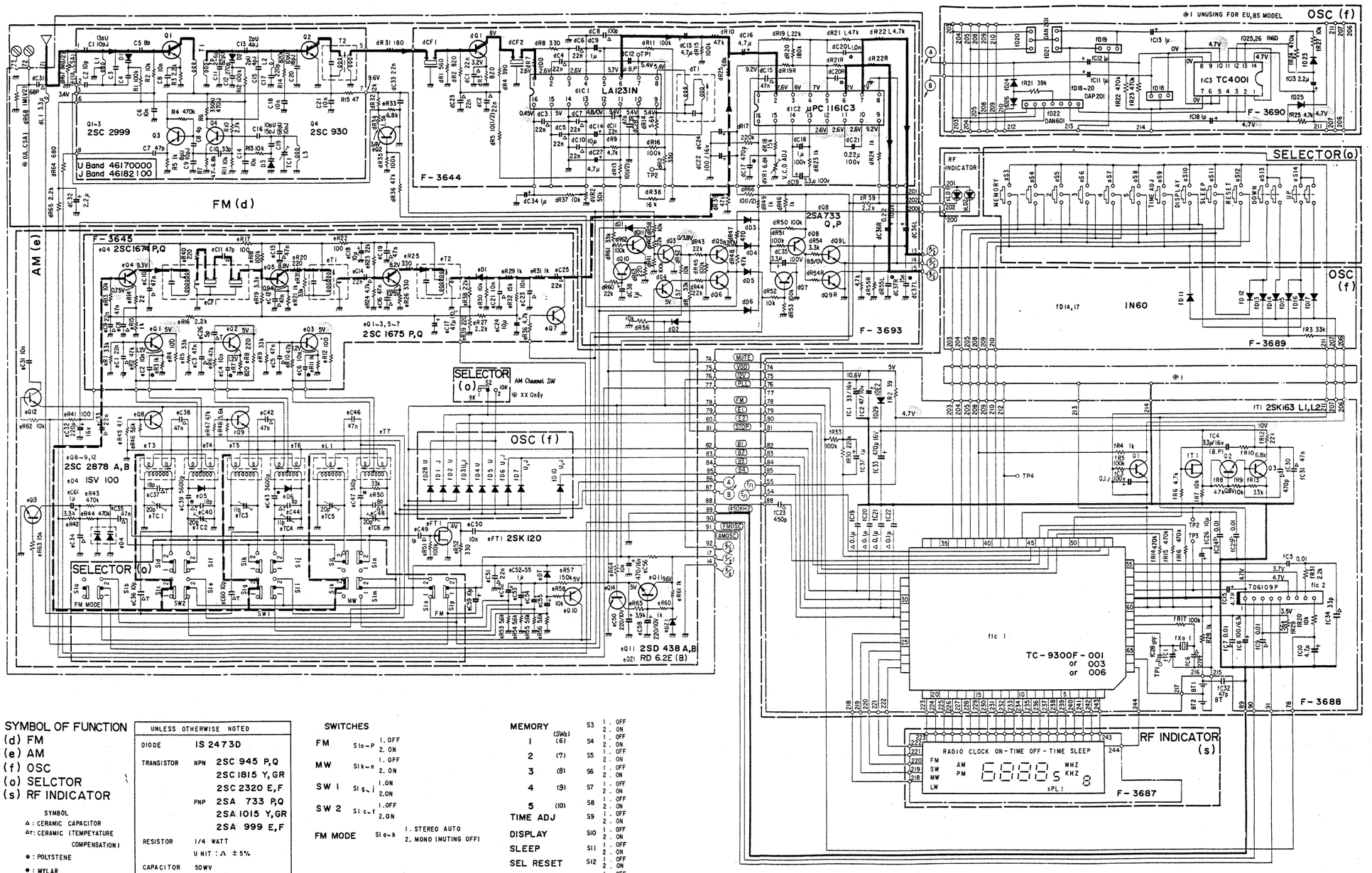
SYMBOL OF FUNCTION
(d) FM
(e) AM
(i) EQUALIZER
(j) CONTROL
(k) POWER AMP
(m) POWER SUPPLY
(n) INDICATOR
(o) SELECTOR
(s) RF INDICATOR

SYMBOL
△ Ceramic
● Mylar
⊡ Non-Inflammable Resistors
● Polystyrene
RESISTORS
Are in ohms, ¼Watts, ±5% Tolerance
Unless Otherwise Noted. K:kΩ, M:MΩ
CAPACITORS
Are in μF, Unless Otherwise Noted. P:pF
TORERANCE
J:±5%, G:±2%, F:±1%
Each D.C. Voltage shows the nominal value in volts at no input signal
Electrolytic Capacitor : Capacitance (μF)/Volt(V)

*F-3634
TUNER oS15x,z 1. ON 2. OFF
PHONO oS14,j 1 ON 2 OFF
AUX oS1,g,k 1 ON 2. OFF
TAPE PLAY oS11a,c,e 1 ON 2. OFF
LOUDNESS oS11a,b 1 ON 2. OFF
TIMER oS16 1 ON 2. OFF
*F-3635
VOLUME jVR1a,b
*F-3634
BALANCE jVR2a
TREBLE jVR2b,c
BASS jVR2d,e

2SA733 2SA999 2SA1015 2SB865 2SC945 2SC1674 2SC1675 2SC1815 2SC1845 2SC2320 2SC2878 2SD438
2SK120
2SK163
2SB507
TD6109P
μPC1230H
LA1231 TC4001BP UPC1161C
BA328
DAN601
DAN201 DAPZ01
10E2 30D2 1N60 1S1588 1S2473D
RD6.2E RD10E RD12F
TC-9300F-001

8-2. Tuner Section <CP-R7 XX Model>



SYMBOL OF FUNCTION
(d) FM
(e) AM
(f) OSC
(o) SELCTOR
(s) RF INDICATOR

SYMBOL
Δ : CERAMIC CAPACITOR
Δr: CERAMIC (TEMPEYATURE COMPENSATION)
● : POLYSTENE
● : MYLAR

UNLESS OTHERWISE NOTED		
DIODE		IS 2473D
TRANSISTOR	NPN	2SC 945 P,Q
		2SC 1815 Y,GR
		2SC 2320 E,F
	PNP	2SA 733 P,Q
		2SA 1015 Y,GR
		2SA 999 E,F
RESISTOR		1/4 WATT
		UNIT : Ω ±5%
CAPACITOR		50WV
		UNIT : F

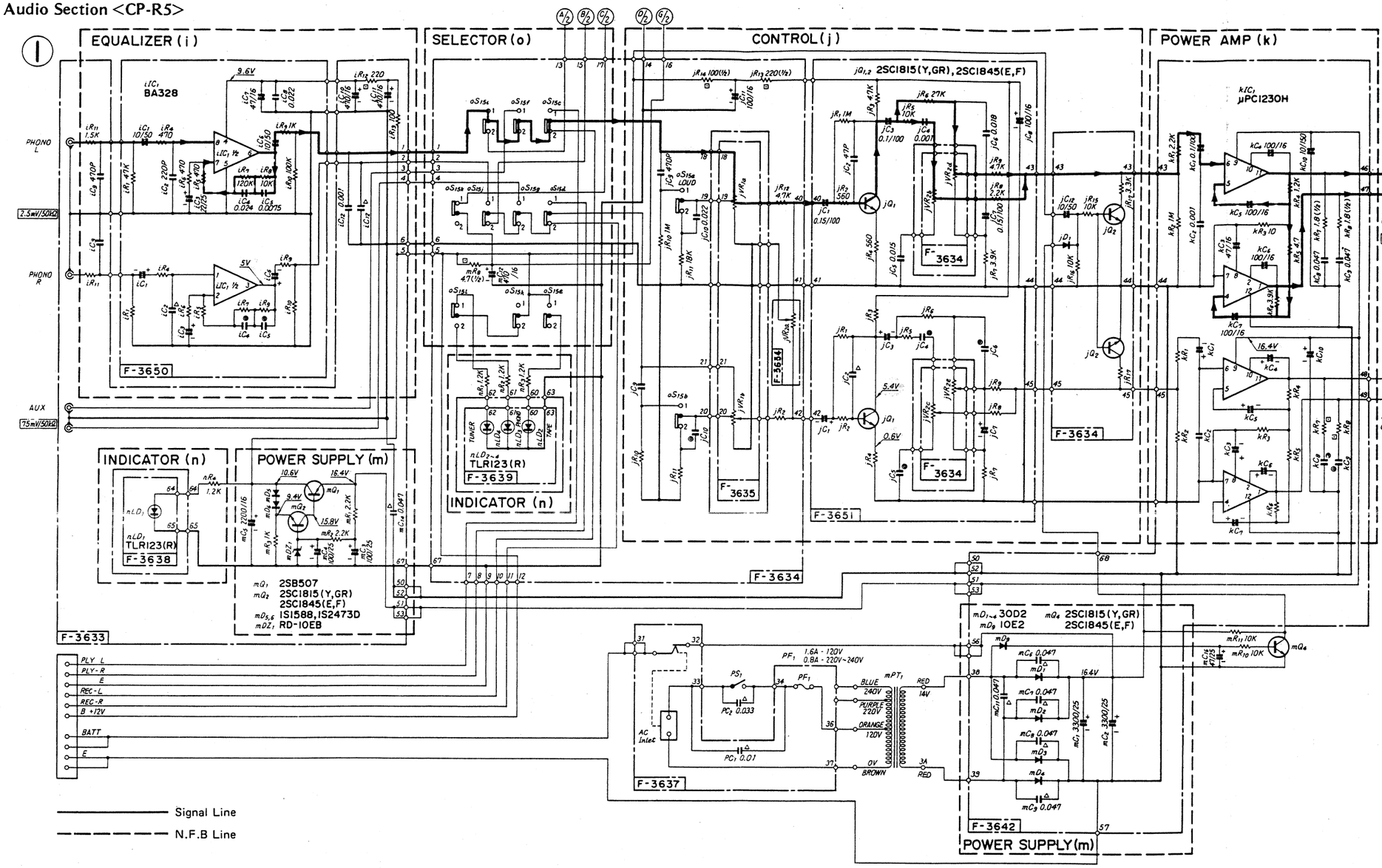
SWITCHES

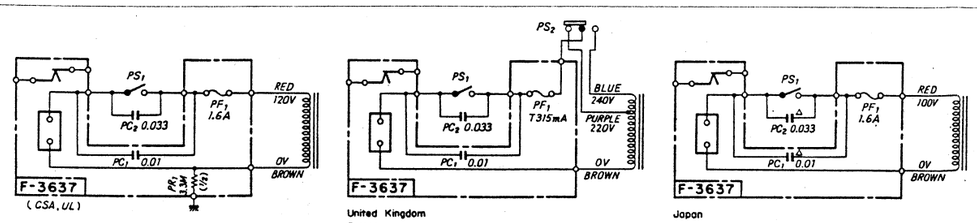
FM	S1a~P	1. OFF 2. ON
MW	S1k~n	1. OFF 2. ON
SW 1	S1g~j	1. ON 2. ON
SW 2	S1c~f	1. OFF 2. ON
FM MODE	S1a~b	1. STEREO AUTO 2. MONO (MUTING OFF)

MEMORY	S3	1. OFF 2. ON
1 (SW2) (6)	S4	1. OFF 2. ON
2 (7)	S5	1. OFF 2. ON
3 (8)	S6	1. OFF 2. ON
4 (9)	S7	1. OFF 2. ON
5 (10)	S8	1. OFF 2. ON
TIME ADJ	S9	1. OFF 2. ON
DISPLAY	S10	1. OFF 2. ON
SLEEP	S11	1. OFF 2. ON
SEL RESET	S12	1. OFF 2. ON
DOWN	S13	1. OFF 2. DOWN 3. AOTO DOWN
UP	S14	1. OFF 2. UP 3. AUTO UP

2SA733 2SA999 2SA1015 2SB865 2SC945 2SC1674 2SC1675 2SC1815 2SC2320 2SC2878 2SD438 — 2SK120 2SK163 — 2SB507 — TD6109P — μPC1230H — LA1231 TC4001BP μPC1161C — BA328 — DAN601 — DAN201 DAPZ01 — 10E2 30D2 1N60 1S1588 1S2473D — RD6.2E RD10E RD12F — TC-9300F-001

8-4. Audio Section <CP-R5>





SYMBOL OF FUNCTION
(d) FM
(e) AM
(i) EQUALIZER
(j) CONTROL
(k) POWER AMP
(m) POWER SUPPLY
(n) INDICATOR
(o) SELECTOR
(s) RF INDICATOR

SYMBOL
△ Ceramic
● Mylar
▣ Non-Inflammable Resistor
⊕ Polystyrene
RESISTORS
Are in ohms, ¼ Watts, ±5% Tolerance
Unless Otherwise Noted. K:kΩ, M:MΩ
CAPACITORS
Are in μF, Unless Otherwise Noted. P:pF
TOLERANCE
J:±5%, G:±2%, F:±1%
Each D.C. Voltge shows the nominal value in volts at no input signal
Electrolytic Capacitor: Capacitance(μF)/Volt(V)

●F-3634		
TUNER	oS152,1	1. ON 2. OFF
PHONO	oS141,j	1. ON 2. OFF
AUX	oS151,g,k	1. ON 2. OFF
TAPE PLAY	oS14c,d,e	1. ON 2. OFF
LOUDNESS	oS15a,b	1. ON 2. OFF
●F-3635		
VOLUME	jVR1a,b	
●F-3634		
BALANCE	jVR2a	
TREBLE	jVR2b,c	
BASS	jVR2d,e	

2SA999 2SA1015 2SC930 2SC945 2SC1674 2SC1675 2SC1815 2SC1845 2SC2320 2SC2878 — 2SC668
2SB507 — μPC1161C LA1231N
TA7335P
μPC1230H
BA328
10E-2 30D-2 1S1588 1S2473D — 1S553T
RD5.6E-B RD10E-B

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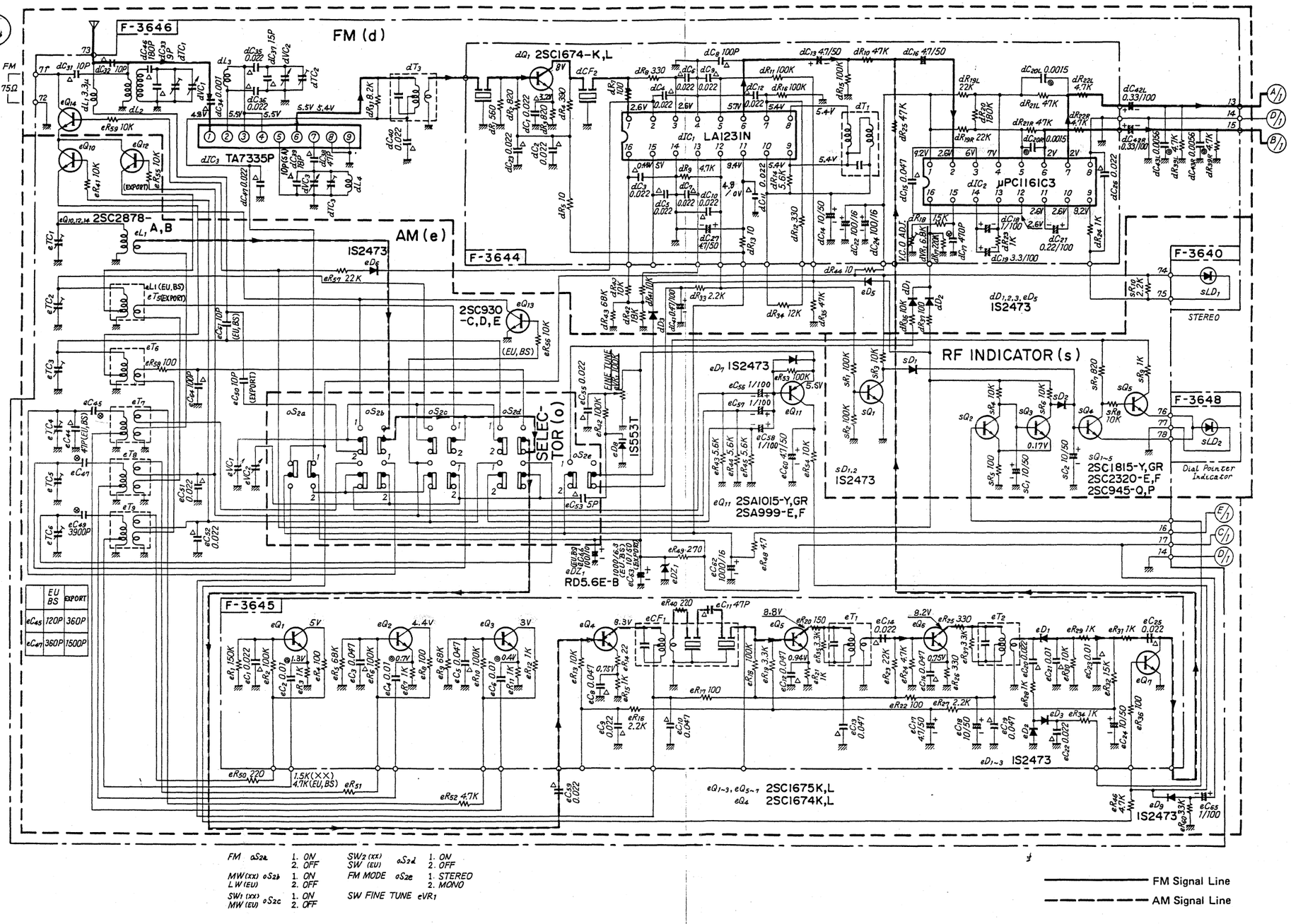
8-5. Tuner Section <CP-R5>



	EU BS	EXPORT
eC45	120P	360P
eC47	360P	1500P

FM oS2a 1. ON 2. OFF
MW(xx) LW(EU) oS2b 1. ON 2. OFF
SW1 (xx) MW (EU) oS2c 1. ON 2. OFF
SW2 (xx) SW (EU) oS2d 1. ON 2. OFF
FM MODE oS2e 1. STEREO 2. MONO
SW FINE TUNE eVR1

2SB507 2SA999 2SA1015 2SC930 2SC945 2SC1674 2SC1675 2SC1815 2SC1845 2SC2320 2SC2878

1S2473 1S553T 1S588 1S2473D RD5.6E-B RD10E-B

3-2. Playback Adjustment

Note: 1. Before this adjustment, clean REC/P.B. head surface.
2. For this adjustment, use Sansui Test Tape, SCT-F10K, SCT-L400 and SCT-F1K.
3. Set the Dolby NR switch to be OFF.
4. REC Level Volume . . . . . Max.
5. Connections are shown in Fig. 3-3.

Fig. 3-3

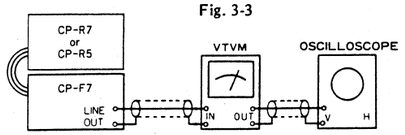
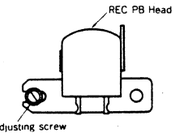


Fig. 3-4



STEP	SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
1.	REC/P.B. Head Adj.	LINE OUT VTVM, Scope	Playback the TEST TAPE SCT-F10K	Adjust the azimuth adjusting screw in Fig. 3-4.	MAX. Output on both channels.	Refer to removement of Lid Ass'y on Page 35. After this adjustment, lock the screw with paint.
2.	Playback Level Adj.	Same as above	Set TAPE SELECTOR to NORMAL (LH) position. Playback the TEST TAPE SCT-L400	Adjust each vVR2 on L-CH and R-CH.	225mV ±1dB	See Top View on Page 35.
3.	High Frequency Equalization Check	Same as above	Set TAPE SELECTOR to NORMAL (LH) position. Playback the TEST TAPE SCT-F1K.	———	———	Read output levels on both channels.
			Playback the TEST TAPE SCT-F10K.	———	———	Confirm that the output levels are within ±3dB comparing with the above readings.

Note: On STEP 3, set the TAPE SELECTOR to HIGH (CrO_2) position during playback of SCT-F10K, and confirm the indication on VTVM drops approximately 3dB ~ 4dB.

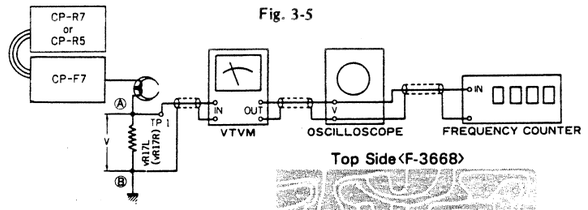
3-3. Recording Adjustment

1) Bias Adjustment

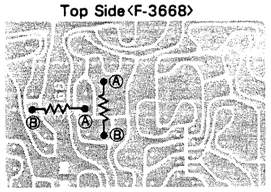
* Perform this adjustment when bias pot or REC/PB head is replaced.

Note: 1. For this adjustment, use Sansui Test Tape, SCT-SA.
2. Set the Dolby NR Switch to be OFF.
3. Connections are shown in Fig. 3-5.

Fig. 3-5



Top Side〈F-3668〉

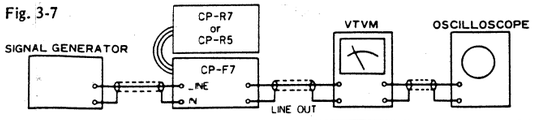


STEP	SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
1.	Recording Bias Adj.	Between Ⓐ & Ⓑ points of each vR17L, vR17R. VTVM, Scope, Frequency Counter	Load the TEST TAPE SCT-SA Depress PAUSE, REC and PLAY buttons. Set TAPE SELECTOR to HIGH (CrO_2) position.	Adjust vVR3L for L-CH and vVR3R for R-CH	5.0mV	vR17L and vR17R are shown in Fig. 3-6.
			Set TAPE SELECTOR to NORMAL (LH) position.	———	———	Confirm the indication on VTVM shows 3.5mV.
			Set TAPE SELECTOR to METAL position.	———	———	Confirm the indication on VTVM shows 9mV.
2.	Bias Frequency Check	Same as above	Load the TEST TAPE SCT-SA. Depress REC and PLAY button. Set TAPE SELECTOR to NORMAL (LH) position.	———	———	Confirm that the Frequency Counter shows 85kHz ±10kHz.

2) REC Level & Frequency Response Adjustment

Note: 1. Connections are shown in Fig. 3-7.
2. Set the Dolby NR switch to be OFF.

Fig. 3-7

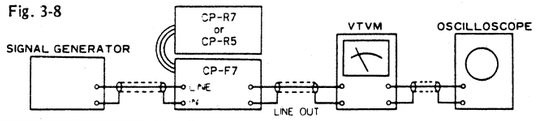


STEP	SUBJECT	INPUT SIGNAL	MEASURE OUTPUT	SETTING	ADJUSTMENT	REMARKS
1.	REC Level Adj.	Feed 1 kHz 100mV from S.G into LINE IN.	LINE OUT VTVM Scope	Load the TEST TAPE SCT-SA. Set TAPE SELECTOR to HIGH (CrO_2) position. 1. Depress PAUSE and REC button. 2. Adjust the Rec Level Volume for obtaining 180mV on VTVM. 3. Push on the PLAY button, then record the 1kHz signal. 4. Playback the 1kHz signal. 5. Confirm that the output levels on both channels are 180mV ±2dB on VTVM.	1. If not, turn vVR1 (REC, L-CH) and vVR1 (REC, R-CH) until output level 180mV ±2dB on both channels are obtained. 2. Repeat this REC Level adj. until the indication on VTVM will be 180mV ±2dB.	vVR1 (REC, L-CH) and vVR1 (REC, R-CH) are shown in Top View on page 35.
2.	Frequency Response Adj.	Feed 1kHz 7mV (−20dB) and 10kHz 7mV (−20dB) from S.G. into LINE IN.	Same as above	Load the TEST TAPE SCT-SA. Set TAPE SELECTOR to HIGH (CrO_2) position. 1. REC LEVEL Volume . . . Max. 2. Record the 1kHz and 10kHz signals from S.G. 3. Play back the 1kHz and 10kHz signals, then confirm 10kHz signal level in less than 1kHz signal level ±3dB on VTVM.	1. If not, adjust vVR3L for L-CH and vVR3R for R-CH slightly.	After this adjustment, perform the SETTING 2 ~ 3 again.

3-4. Peak Level Indicator Adjustment

Note: 1. Set the TAPE SELECTOR to be NORMAL (LH) position.
2. Set the Dolby NR Switch to be OFF.
3. Connections are shown in Fig. 3-8.

Fig. 3-8



STEP	SUBJECT	INPUT SIGNAL	MEASURE OUTPUT	SETTING	ADJUSTMENT	REMARKS
1.	Peak Level Indicator Adjustment	Feed 1kHz, 100mV from S.G. into LINE IN	LINE OUT VTVM Scope	Load the TEST TAPE SCT-SA 1. Depress PAUSE & REC button. 2. Adjust the REC Level Volume for obtaining 0dB point on Level Indicator. 3. Then confirm the output levels on both channels are 180mV ±2dB on VTVM.	Adjust nVR1L for L-CH and nVR1R for R-CH.	After this adjustment, perform the SETTING 1 ~ 3 again.

♦ List of Sansui Test Tape

Name of TEST TAPE	Recorded Frequency	Description
SCT-F40	40 Hz	Playback Frequency Response Check
SCT-F1K	1 kHz	High Frequency Equalization Check
SCT-F10K	10 kHz	REC/PB Head Adjustment
SCT-L400N	400 Hz	Playback Level and Indicator Level Adjustment
SCT-S3K	3 kHz	Speed Check and Wow & Flutter Check
SCT-LH NORMAL (LH)		Recording Bias Adjustment
SCT-SA HIGH (CrO_2)		REC/PB Level Adjustment
SCT-MA (METAL)		Frequency Response Check

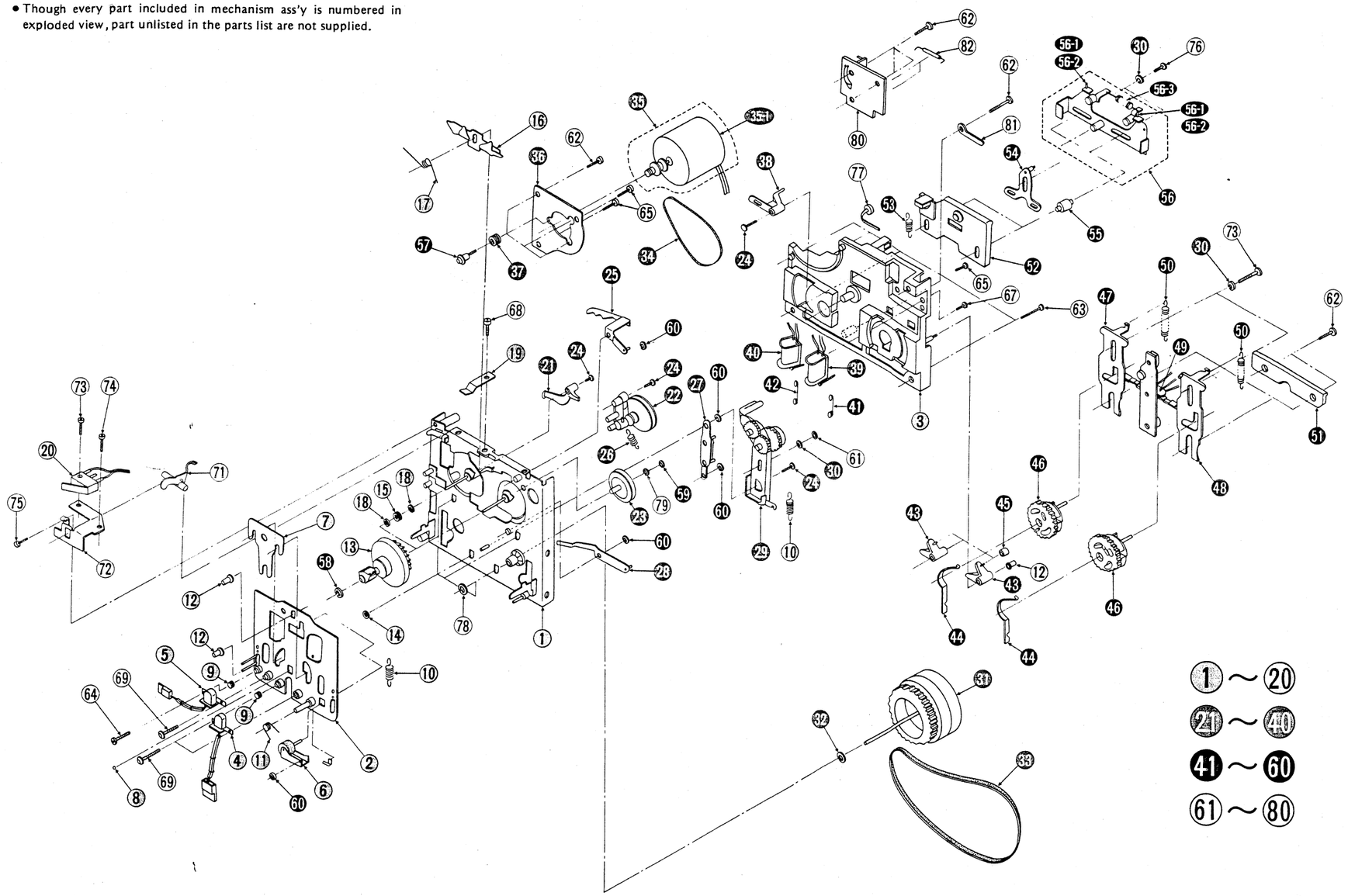
♦ Tape Selector Position

NORMAL (LH)	
FUJI	FL, FXI
MAXELL	UL, UD, XLI, XLI-S
TDK	D, AD, OD
SCOTCH	TARTAN CRYSTAL MASTER 120
SONY	AHF, BHF, CHF Low-Noise
AGFA	SUPER SUPER COLOR SUPER FERRO DYNAMIC
BASF	LN Super LH I

HIGH (CrO_2)	
FUJI	FX II
MAXELL	XL II, XL II-S
TDK	SA, SA-X
SCOTCH	MASTER 70
SONY	JHF
AGFA	STEREO CHROM
BASF	SCR
METAL	
MAXELL	MX
TDK	MA-R, MA
SCOTCH	Metafine
SONY	METALLIC

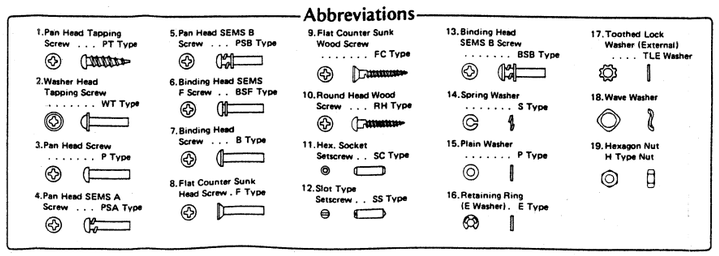
5. EXPLODED VIEW & PARTS LIST

- Though every part included in mechanism ass'y is numbered in exploded view, part unlisted in the parts list are not supplied.



1 ~ 20
21 ~ 40
41 ~ 60
61 ~ 80

Abbreviations



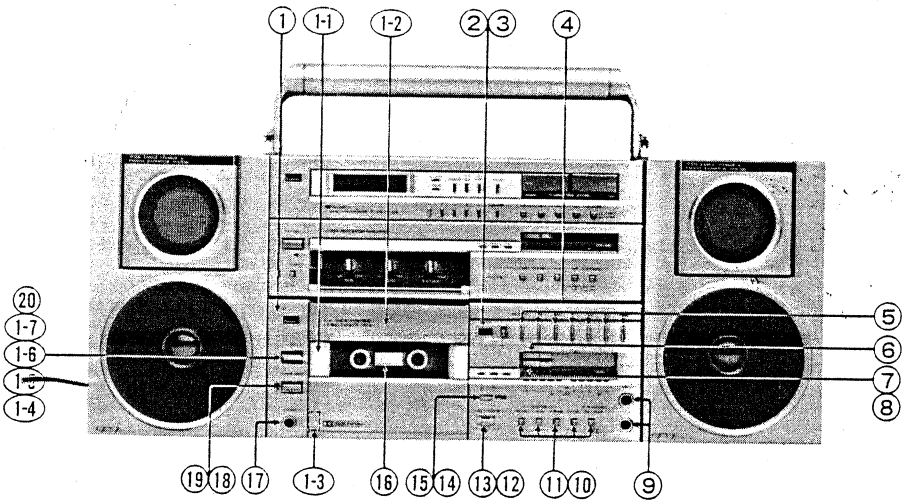
Parts List

Parts No.	Stock No.	Description
3	46212600	Sub Chassis
4	46212700	REC/PB Head
5	09438200	Erase Head
6	46212800	Pinch Roller Ass'y
8	46212900	Steel Ball
13	46213300	Reel Ass'y, take-up, supply
14	07706900	Steel Ball
20	46213800	Micro SW, rec prevention
22	46214000	PLAY Idler Ass'y
23	46214100	Pulley
29	46214400	FF/REW Gear Ass'y
31	46214600	Flywheel Ass'y
33	46214700	Capstan Belt
34	46214800	Reel Belt
35	46214900	Motor Ass'y
37	07709200	Cushion Gum
39	46215100	Plunger Solenoid, REW
40	46215200	Plunger Solenoid, FF
43	46215500	Stopper, FF lever, REW lever
46	46215800	Cam Gear
49	46260500	Leaf SW
71	46217300	REC Prevention Nail
82	03117700	10E-2
•Spring		
9	07707200	Spring Azimuth
10	46213000	Spring, head base, ff/rew gear ass'y
11	46213100	Spring, pinch roller
15	46213400	Spring, back tension
19	46213700	Spring, cassette holder
26	46214200	Spring, play idler ass'y
41	46215300	Spring, rew plunger solenoid
42	46215400	Spring, ff plunger solenoid
44	46215600	Spring, cam gear start
45	46215700	Spring, stopper
50	46216200	Spring, ff lever, rew lever
53	46216400	Spring, play lever
56-2	46217800	Spring (A), ff/rew lever
56-3	46217900	Spring (B), ff/rew lever
•Screw, Washer		
12	46213200	Stopper (B), head base, rew stopper, head wire
18	07513000	Poly-washer D-2.0
24	07707000	Plastic-Tack, ff/rew lever, play idler ass'y ff/rew link lever, brake release lever
30	00466200	Plane-Washer
32	09442300	Poly-Washer D-2.5
56-1	46217700	Screw M2 x 8.5
57	46216700	Screw, motor
58	07708500	Poly-Washer, reel stopper
59	46216800	Poly-Washer, pulley stopper
60	00489000	E Type-Washer D-2.0
61	00488900	E Type-Washer D-1.5
62	00440400	Tapping Screw M2.6 x 6
63	46216900	Tapping Screw M2.6 x 16
64	46217000	Tapping Screw M2 x 8
65	00440500	Tapping Screw M2.6 x 10
67	00434200	Screw M2.6 x 4
69	46217200	Screw M2 x 10
73	46217400	Screw M2.3 x 10
74	08321200	Screw M3 x 5
75	00440400	Screw M2.6 x 5
76	00440500	Screw M2.6 x 8
78	09442100	Poly-Washer, oil stopper

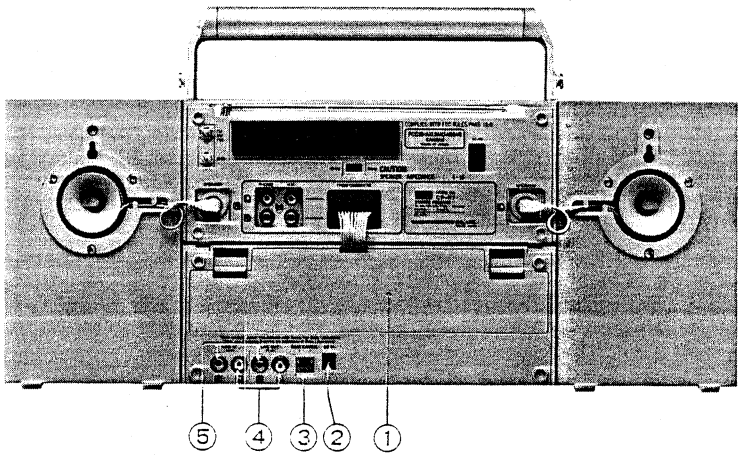
5. E) OTHER PARTS

• Thougl
explod

Front View



6-2. Rear View



75

Parts List <Front View>

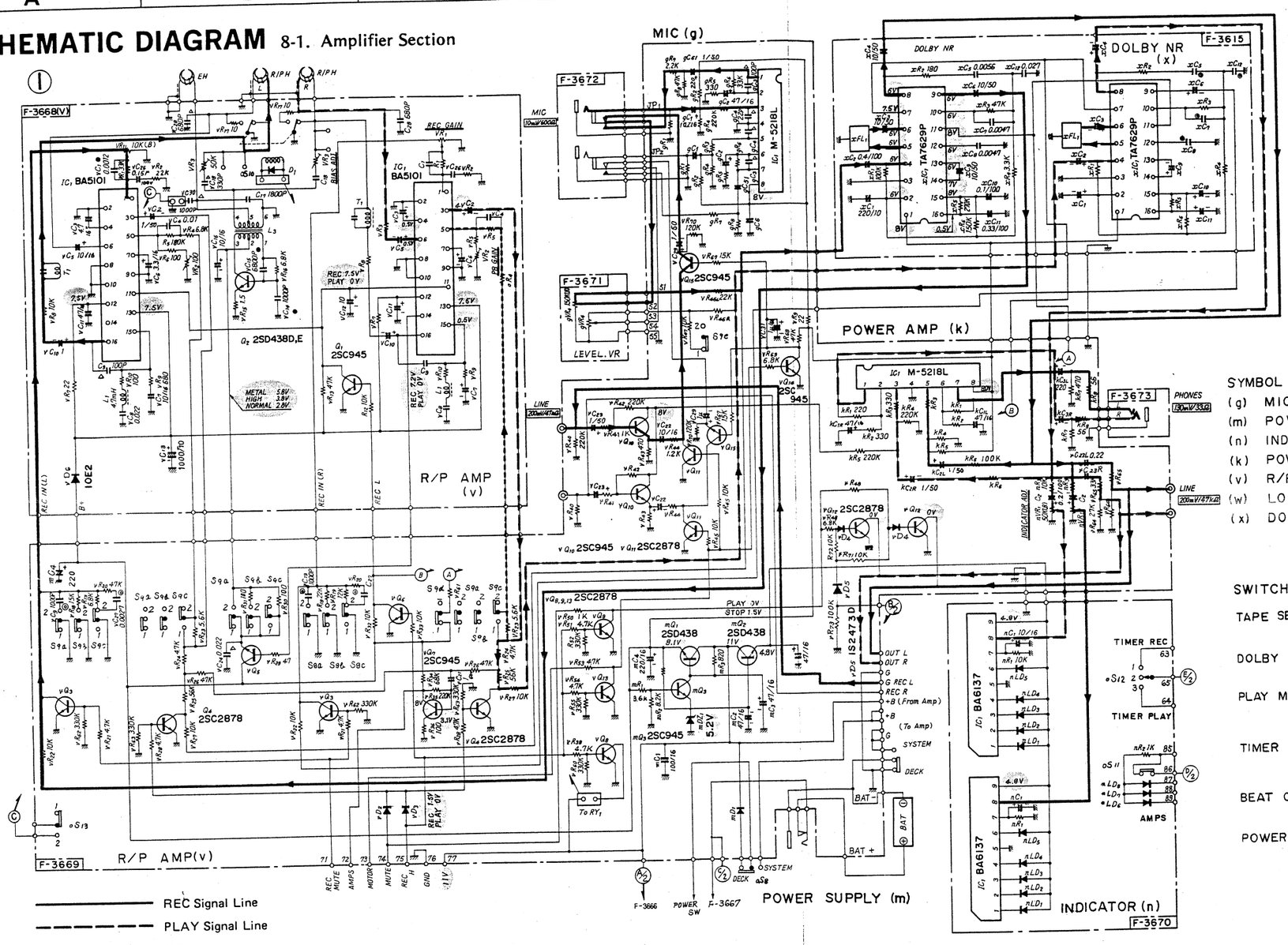
Parts No.	Stock No.	Description
1	07864000	Front Panel Ass'y
1-1	07858200	Cassette Well
1-2	07858300	Lid Ass'y
1-3	07864500	Spring, Lid
1-4	07862600	Knob, EJECT
1-5	07868100	Spring (A), EJECT knob
1-6	07864600	Shaft, EJECT
1-7	07868200	Spring (B), EJECT Shaft
2	46202600	TAPE COUNTER
3	07793400	Counter Belt
4	07846100	Bonnet
5	07854100	Knob, Control
6	07854300	Knob, LEVEL (L-ch)
7	07854200	Knob, LEVEL (R-ch)
8	46199500	Volume, REC LEVEL
9	46170600	Jack, MIC
10	07851000	Knob, SELECTOR, DOLBY, MIC MODE
11	46199900	Push SW, SELECTOR, DOLBY, MIC MODE
12	07853900	Knob, TIMER STAND-BY
13	46178400	Slide SW, TIMER
14	07854000	Knob, AMPS
15	07198200	Push Sw, AMPS
16	07859200	Mechanism Panel
17	46200400	Jack, phones
18	07850900	Knob, POWER/BATT.
19	07265300	Push SW, POWER/BATT.
20	46220200	Micro SW, EJECT

Parts List <Rear View>

Parts No.	Stock No.	Description
1	07846000	Battery Cover
2	46200310	Jack, DC
3	46177200	Slide SW, BEAT CANCEL
4	46199700	INPUT/OUTPUT Terminal (L-ch, white)
5	46199600	INPUT/OUTPUT Terminal (R-ch, red)

* Design and specifications subject to change without notice for improvement.
* La présention et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
* Anderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

8. SCHEMATIC DIAGRAM 8-1. Amplifier Section



SYMBOL OF FUNCTION

(g) MIC
(m) POWER SUPPLY
(n) INDICATOR
(k) POWER AMP
(v) R/P AMP
(w) LOGIC CONTROL
(x) DOLBY NR

SWITCHES & CONTROL

TAPE SELECTOR	S9a	METAL 1 OFF & HIGH 2 ON C NORMAL	
DOLBY NR	S9d	1 OUT 2 IN	
PLAY MIXING MODE	S9e	1 STEREO 2 CENTOR	
TIMER STAND BY	S12	1 REC 2 OFF 3 PLAY	
BEAT CANCEL	S13	1 1 2 2	
POWER SW	S15	1 OFF 2 ON	

2SA733A JNM78L05
2SA999
2SA1015
2SC945
2SC1815
2SC2320
2SC2878
2SD438
2SD1111

BA6137

BA5101

M5218L

LC4071B
LC4081B

LC7510

BA843
M54410P
M54515P
TA7629P

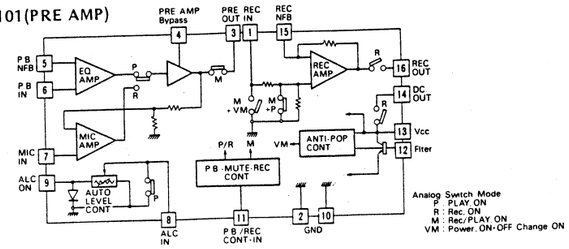
DAN601

DAN401 TLR123

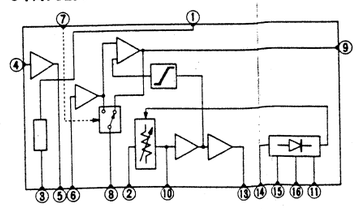
10D-1
1S1588
1S2473D

RD5.1E

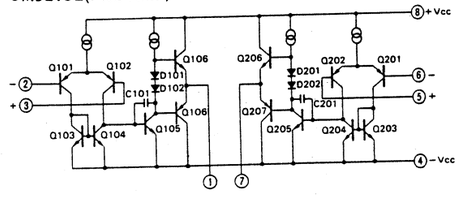
●BA5101(PRE AMP)



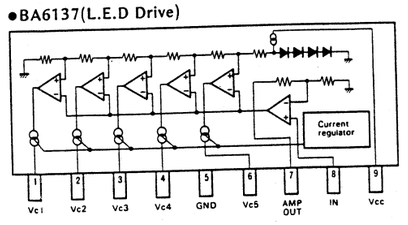
●TA7629P



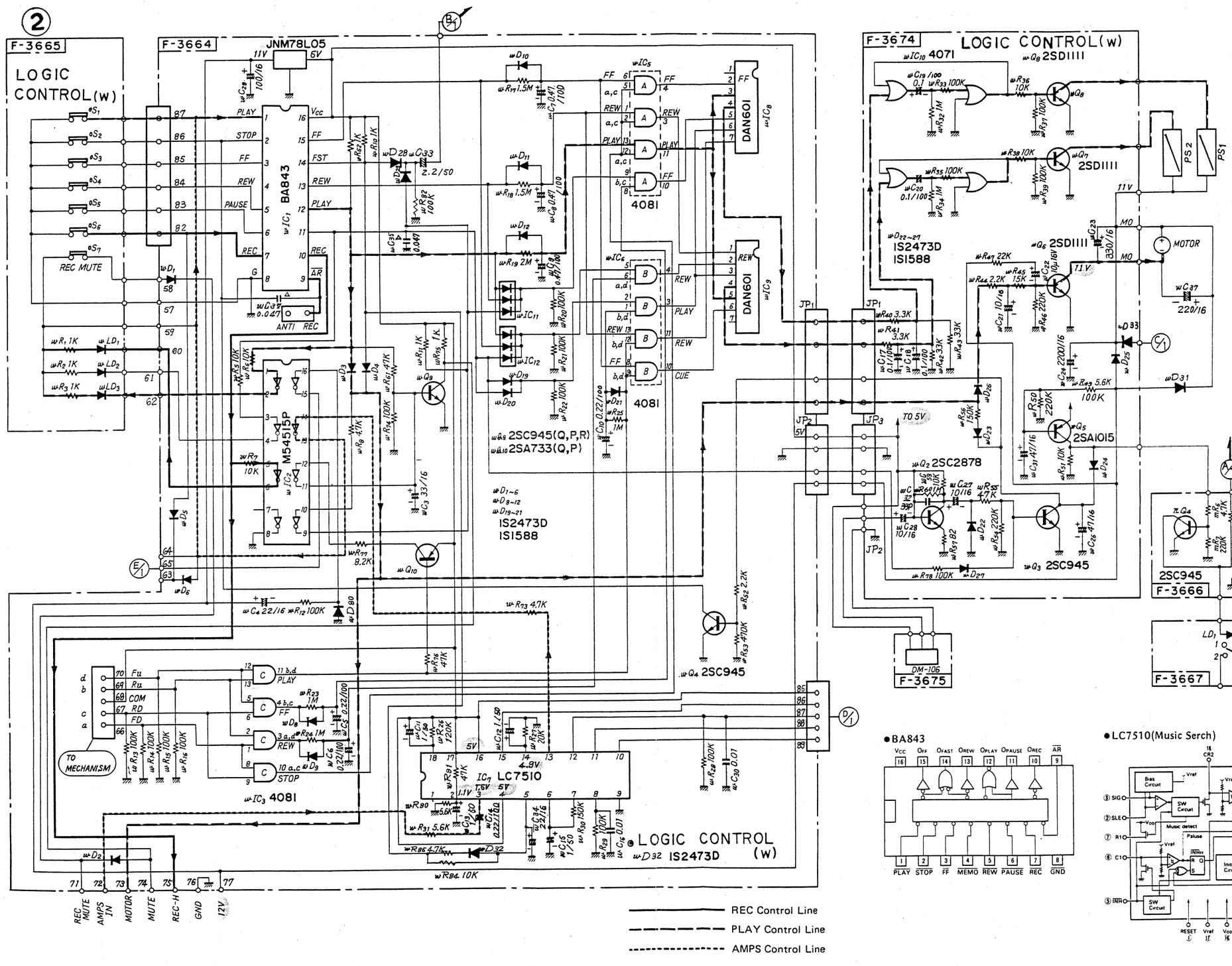
●M5218L(PRE AMP)

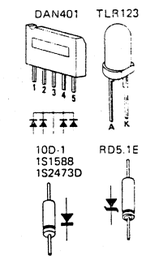


●BA6137(L.E.D Drive)



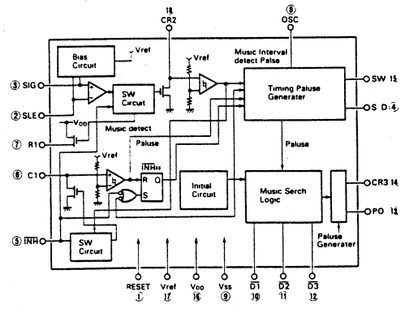
8-2. Control Section





● BA843

● LC7510(Music Serch)



189

369

SERVICE MANUAL

PORTABLE COMPONENT SYSTEMS

SANSUI CP-7/CP-5

(Black Model)

Note: CP-7/CP-5 (black model) are additional models which exterior color are totally different from those CP-7/CP-5 (silver model).

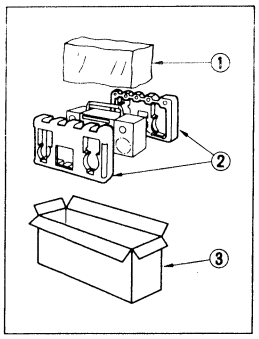
This manual contains parts' items with bold-faced prints on black model and also common parts between black & silver CP-7/CP-5 in PACKING LIST, JOINT PARTS and OTHER PARTS.
On others, refer to CP-7/CP-5 Service Manual previously issued.

1. PACKING LIST

1-1. CP-7/CP-5 XX Model

Parts List

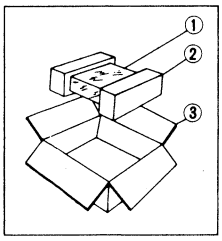
Parts No.	Stock No.	Description
1	07870300	Vinyl Cover
2	07871700	Styrofoam Packing
3	**47099300**	**Carton Case <CP-7>**
	47099200	Carton Case <CP-5>



1-2. CP-R7/CP-R5/CP-F7 EU Model

Parts List

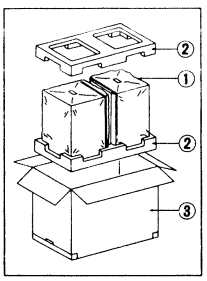
Parts No.	Stock No.	Description
1	07870600	Vinyl Cover
2	07871800	Styrofoam Packing
3	**47098600**	**Carton Case <CP-R7>**
	47098200	**Carton Case <CP-R5>**
	47099000	**Carton Case <CP-F7>**



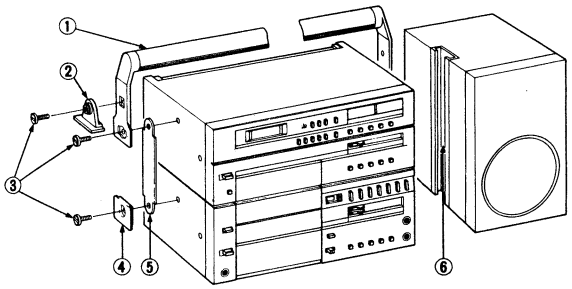
1-3. CP-S7/CP-S5 EU Model

Parts List

Parts No.	Stock No.	Description
1	07870900	Vinyl Cover
2	07871900	Styrofoam Packing
3	**47098800**	**Carton Case <CP-S7>**
	47098400	Carton Case <CP-S5>



2. JOINT PARTS

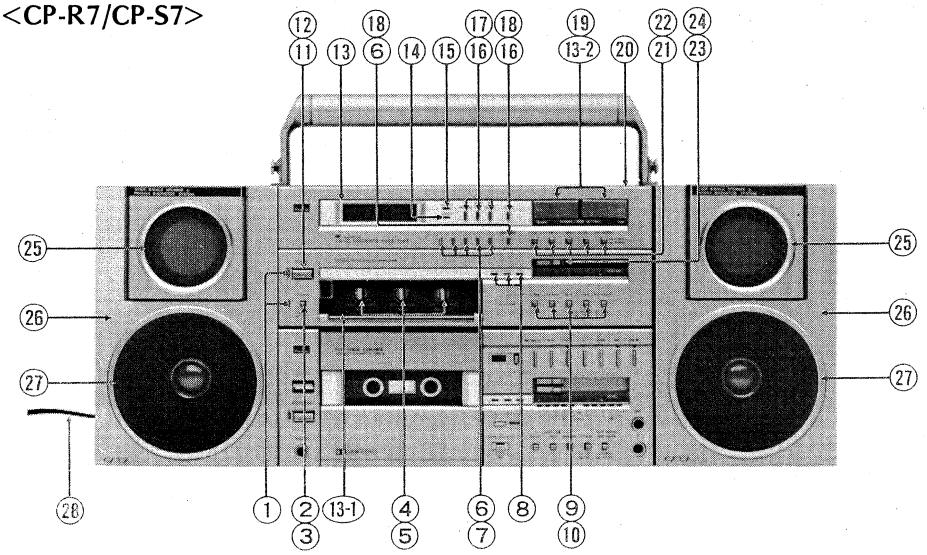


Parts List

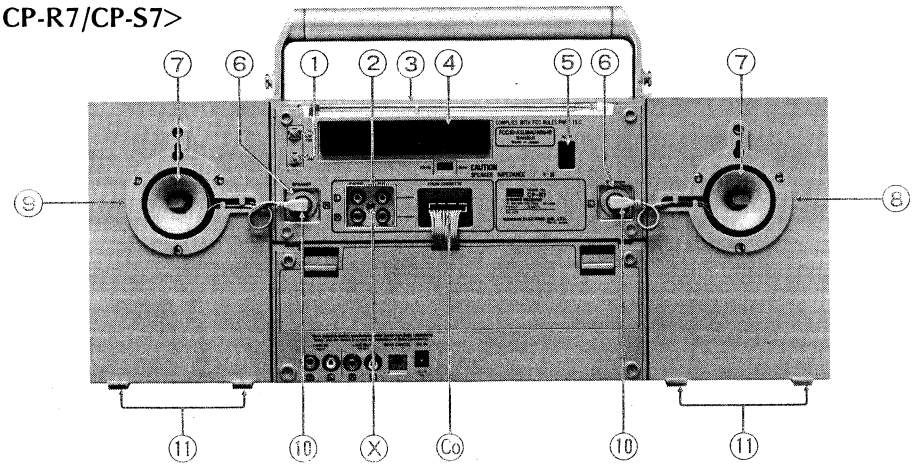
Parts No.	Stock No.	Description
1	**47099900**	**Carrying Handle Ass'y**
2	**47095600**	**Speaker Stopper**
3	**47095100**	**Dress Screw**
4	07855600	Cassette Washer
5	**47095800**	**Handle Metal Plate Ass'y**
6	**47097800**	**Speaker Rail**

3. OTHER PARTS

3-1. Front View <CP-R7/CP-S7>



3-2. Rear View <CP-R7/CP-S7>



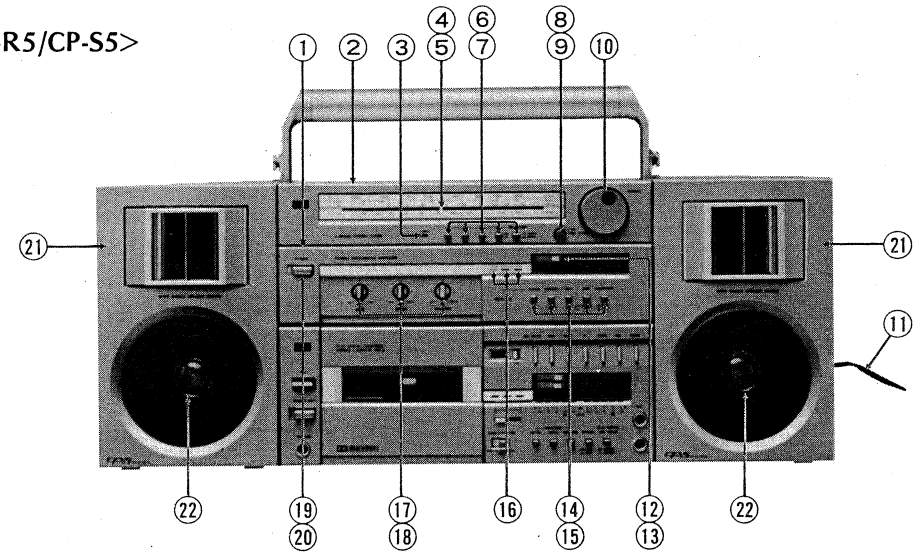
Parts List <Front View>

Parts No.	Stock No.	Description
1	46095200	LED, TIMER/POWER Indicator
2	46182600	Push SW., TIMER
3	07851000	Knob, TIMER SW.
4	46189100	BALANCE/TONE VR, 100kΩ x 2, 250kΩ
5	**47103200**	**Knob, BALANCE/TONE VR**
6	46184600	Push SW., 1 ~ 5 (MEMORY)/MEMORY
7	**47095300**	**Knob, 1 ~ 5 (MEMORY)**
8	46095200	LED, PHONE/TAPE/TUNER
9	46182800	Push SW., SELECTOR/TAPE/ LOUDNESS
10	07851000	Knob, SELECTOR/TAPE LOUDNESS SW.
11	07261300	Push SW., POWER
12	**47096100**	**Knob, POWER SW.**
13	**47102200**	**Front Panel Ass'y (XX)**
	47102300	**Front Panel Ass'y (EU)**
13-1	07848700	Tone Volume Cover
13-2	07850800	UP, DOWN SW. Knob
14	46095200	LED, STEREO Indicator
15	07250900	LED, LOCKED Indicator
16	46184600	Push SW., DISPLAY/TIME ADJ./ SEC RESET/SLEEP
17	**47119700**	**Knob, DISPLAY/TIME ADJ./SEC RESET SW.**
18	07850700	Knob, SLEEP SW.
19	07224100	Push SW., UP/DOWN
20	**47105810**	**Bonnet**
21	46182700	Push SW., FM/MW/SW1/SW2 (LW)/ FM MODE SW
22	07851100	Knob, FM/MW/SW1/SW2 (LW)/FM MODE SW.
23	46188800	Slide VR 150kΩ x 2, master VR
24	**47100000**	**Knob, master VR**
25	46203800	Passive Radiator, P-111
26	**47117200**	**Front Buffle Cover (E) Ass'y**
27	46203700	FS-114, Fullrange Speaker
28	46186300	Power Supply Cord (XX)
	46186400	Power Supply Cord (EU)

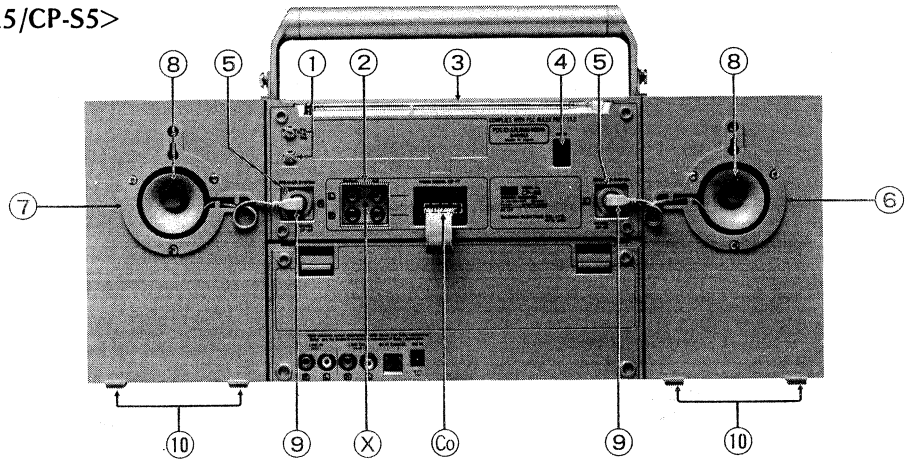
Parts List <Rear View>

Parts No.	Stock No.	Description
1	46200000	Terminal, FM 75Ω/GND
2	46200100	4P Input Terminal
3	46199400	Rod Antenna
4	**47095200**	**Battery Case Cover**
5	46182300	AC Inlet (XX)
	46182400	AC Inlet (EU)
6	**46528100**	**DIN Jack, SPEAKER Connector**
7	**47097400**	**Sub Speaker Cord Reel**
8	**47101100**	**Speaker Cord Reel (L-ch)**
9	**47101000**	**Speaker Cord Reel (R-ch)**
10	46203100	2P DIN Speaker Cord
11	**47097500**	**Leg**

3-3. Front View <CP-R5/CP-S5>



3-4. Rear View <CP-R5/CP-S5>



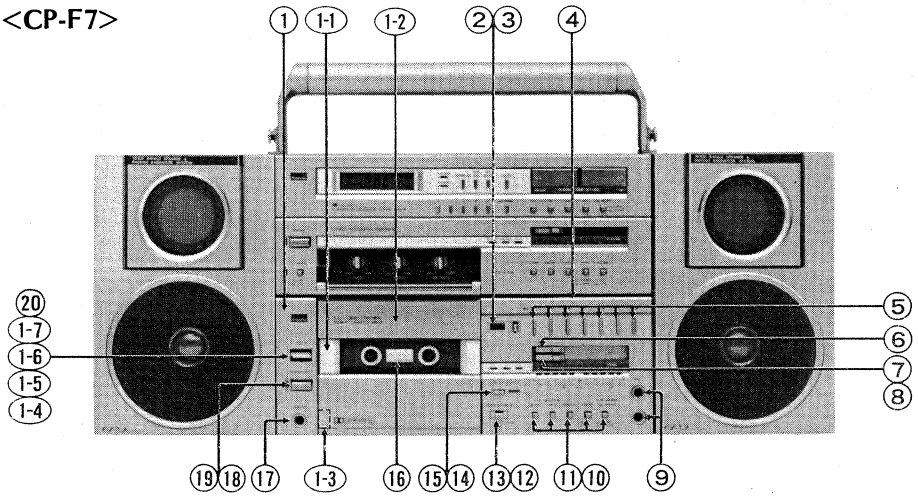
Parts List <Front View>

Parts No.	Stock No.	Description
1	**47100300**	**Front Panel Ass'y (XX)**
	47100400	**Front Panel Ass'y (EU)**
2	**47105810**	**Bonnet**
3	46095200	LED, STEREO Ind.
4	07856500	Dial Pointer
5	46198900	LED, dial pointer
6	07851100	Push Knob (B) } FM/MW (LW)/SW1 (MW)
7	46182700	Push SW. } SW2 (SW)/FM MODE
8	**47103400**	**Knob**
9	46188900	100kΩ (B) x 2 VR } SW FINE TUNE
10	**47103300**	**Knob, TUNING**
11	46186300	Power Supply Cord (XX)
	46186400	Power Supply Cord (EU)
12	**47100000**	**Slider Knob**
13	46188800	150kΩ (B) x2 Slide VR } VOLUME
14	07851000	Push Knob (A) } SELECTOR/TAPE,
15	46182800	Push SW. } LOUDNESS
16	46095200	LED, TUNER/PHONO/TAPE Ind.
17	**47103200**	**Knob, BASS/TREBLE/BALANCE**
18	46189000	<100kΩ (C) x 2> x 2, 250kΩ (C) VR
19	**47096100**	**Push Knob**
20	07261300	Push SW. (XX) } POWER
	46085600	Push SW. (EU) }
21	**47097300**	**Front Buffle Cover (D) Ass'y**
22	07865800	FS-113 Fullrange Speaker Unit

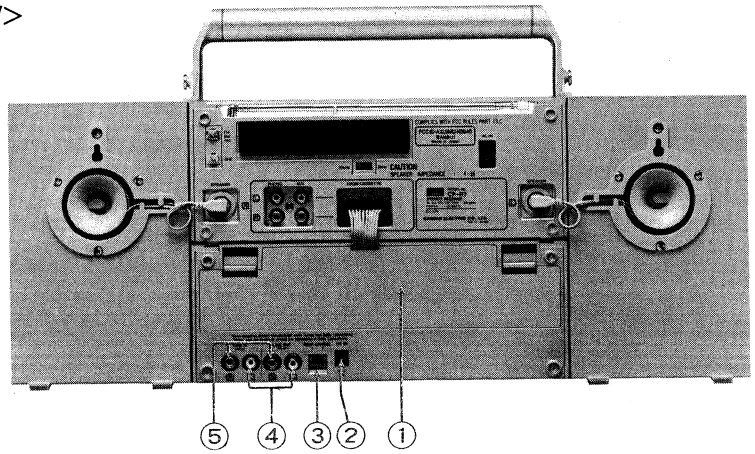
Parts List <Rear View>

Parts No.	Stock No.	Description
1	46200000	Terminal, FM/SW 75Ω, GND
2	46200100	4P Input Terminal, PHONO, AUX
3	46199400	Rod Antenna
4	46182300	AC Inlet (XX)
	46182400	AC Inlet (EU)
5	**46528100**	**DIN Jack, speaker connector**
6	**47101100**	**Speaker Cord Reel (L)**
7	**47101000**	**Speaker Cord Reel (R)**
8	**47097400**	**Sub Speaker Cord Reel**
9	46203100	2P DIN Speaker Cord
10	**47097500**	**Leg**

3-5. Front View <CP-F7>



3-6. Rear View <CP-F7>



Parts List <Front View>

Parts No.	Stock No.	Description
1	**47104200**	**Front Panel Ass'y**
1-1	**47100700**	**Cassette Holder**
1-2	**47100800**	**Lid Ass'y**
1-3	07864500	Spring, Lid
1-4	**47118400**	**Knob, EJECT**
1-5	07868100	Spring (A), EJECT knob
1-6	07864600	Shaft, EJECT
1-7	07868200	Spring, EJECT Shaft
2	**46367900**	**TAPE COUNTER**
3	**46368010**	**Counter Belt**
4	**47105900**	**Bonnet**
5	**47097100**	**Knob, Control**
	47097200	**Knob, REC**
6	**47101400**	**Knob, LEVEL (L-ch)**
7	**47101300**	**Knob, LEVEL (R-ch)**
8	46199500	Volume, REC LEVEL
9	46170600	Jack, MIC
10	07851000	Knob, SELECTOR, DOLBY, MIC MODE
11	46199900	Push SW. SELECTOR, DOLBY, MIC MODE
12	**47096900**	**Knob, TIMER STAND-BY**
13	46178400	Slide, SW., TIMER
14	**47097000**	**Knob, AMPS**
15	07198200	Push SW., AMPS
16	**07942500**	**Mechanism Panel**
17	**46313300**	**Jack, phones**
18	**47096100**	**Knob, POWER/BATT.**
19	07265300	Push SW., POWER/BATT.
20	46220200	Micro SW., EJECT

Parts List <Rear View>

Parts No.	Stock No.	Description
1	07846000	Battery Cover
2	46200310	Jack, DC
3	46177200	Slide SW., BEAT CANCEL
4	46199700	INPUT/OUTPUT Terminal (L-ch, white)
5	46199600	INPUT/OUTPUT Terminal (R-ch, red)

Sansui

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