GF-4949ZG

SHARP SERVICE MANUAL

S03C4GF4949ZG

PHOTO: GF-4949ZG

GF-4949ZG
GF-4949ZS

In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

For the mechanical adjustment, refer to the RD-620X Service Manual (ATSM281022TRC) already issued.

SPECIFICATIONS

GENERAL

Power source :	AC 110V–127V and 220V–240V, 50/60Hz DC 9V (UM/SUM-1 or R20 type x 6)
Speakers:	12cm (4-3/4") woofer x 2 Ceramic type tweeter x 2
Output power:	PMPO; 16W (8W + 8W) (AC operation) MPO; 12W (6W + 6W) (AC operation) RMS; 6W (3W + 3W) (DC operation, 10% distortion)
Semiconductors:	5 ICs 4 Transistors 11 Diodes 2 LEDs
Dimensions: Width;	445mm (17-1/2")
Height;	233.5mm (9-3/16")
Depth;	98mm (3-7/8")
Weight:	3.1 kg (6.8 lbs.) without batteries

TAPE RECORDER

Tape :	Compact cassette tape
Frequency response:	50Hz – 10,000Hz
Signal/noise ratio:	45dB
Input sensitivity and impedance:	
External mic.;	600 ohms
Loaded impedance:	
Headphones;	8 ohms – 25 ohms

RADIO

Frequency range:	FM; 87.6 MHz – 108 MHz AM; 526.5 – 1605.5 kHz SW_1; 2.3 MHz – 7.3 MHz SW2 ; 7.3 MHz – 22.0 MHz

Specifications for this model are subject to change without prior notice.

SHARP CORPORATION OSAKA, JAPAN

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

NAMES OF PARTS

1. Built-in Microphone (L-ch)
2. Power Indicator
3. FM Stereo indicator
4. Band Selector
5. Function Selector
6. Volume Control
7. Tone Control
8. Fine Tuning
9. Tuning Control
10. FM/SW Telescopic Rod Antenna
11. Built-in Microphone (R-ch)
12. Headphones Jack
13. AC Power Supply Socket
14. Cassette Holder
15. Record Button
16. Rewind Button
17. Playback Button
18. Fast-forward Button
19. Stop Button
20. Eject Button
21. Beat Cancel Switch
22. External Microphone Jacks
23. Battery Compartment Lid

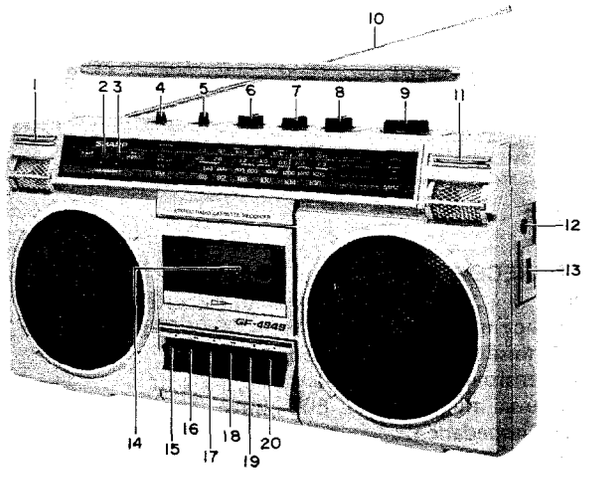


Figure 2-I

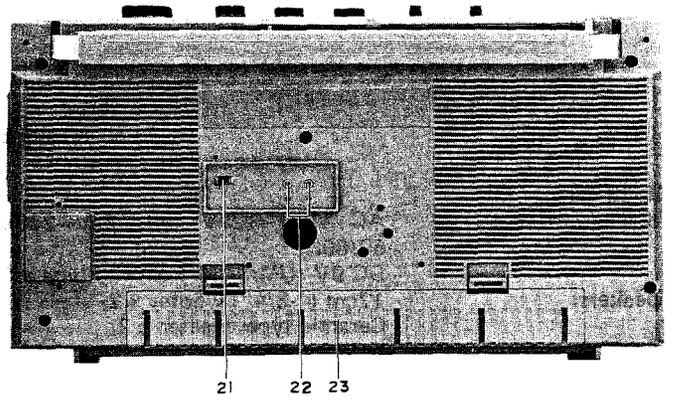


Figure 2-2

VOLTAGE SELECTION

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows: Slide the AC power supply socket cover by a little loosing one screw to the visible indication of the side of your local voltage. See Figure 2-3.

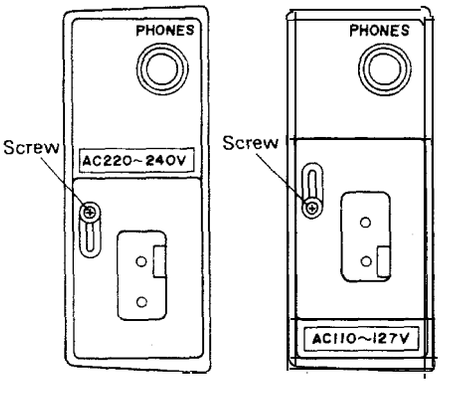


Figure 2-3

DISASSEMBLY

Caution:
Prior to the disassembly, be sure to remove the AC power supply cord, cassette tape and batteries from the unit.

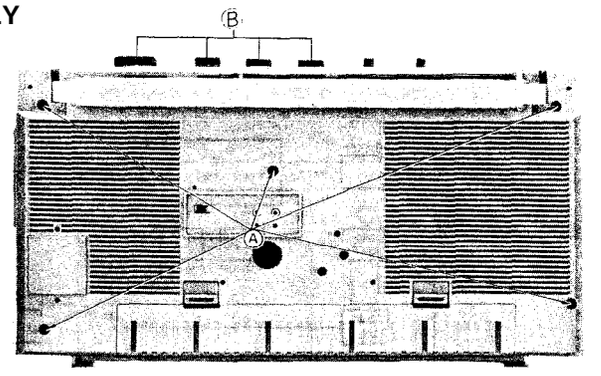


Figure 3-I

■ **FRONT CABINET REMOVAL**
(Refer to Figures 3–1 and 3-2.)
1. Remove five screws Ⓐ and four knobs Ⓑ.
2. Pull the front cabinet frontward by holding its upper part and disconnect three tips Ⓒ.

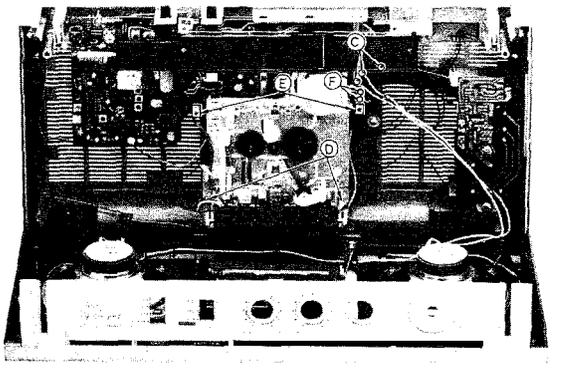


Figure 3–2

■ **MECHANISM BLOCK REMOVAL**
(Refer to Figure 3-2.)
1. Remove two screws Ⓓ.
2. Disconnect two sockets Ⓔ.
3. Unsolder two tips Ⓕ and then the mechanism block can be removed.

❑ **MAIN P.W.B. REMOVAL**
(Refer to Figure 3-3.)
1. Remove eight screws Ⓖ.
2. Remove the LED P.W.B. from two stoppers Ⓗ.
Then the main P.W.B. can be removed from the back cabinet.

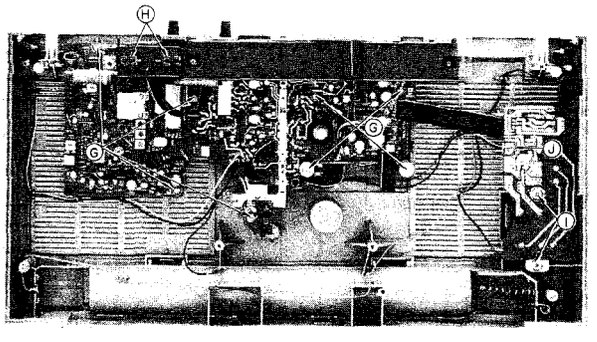


Figure 3-3

■ **POWER P.W.B. REMOVAL**
(Refer to Figure 3-3.)
1. Remove two screws Ⓘ.
2. Disconnect one socket@.

DIAL CORD STRINGING

1) Turn the drum fully clockwise and stretch its cord over the parts in the numerical order as shown in Figure 3-4.
2) Turn the tuning control shaft fully counterclockwise, and fix it with the pointer aligned with the zero (0) point on the frame. See Figure 3-5.

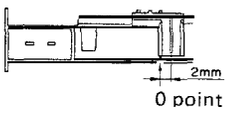


Figure 3-5

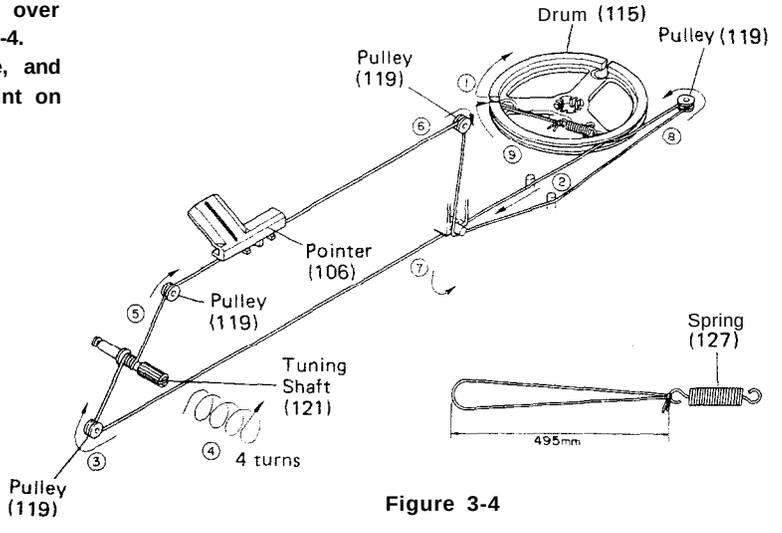


Figure 3-4

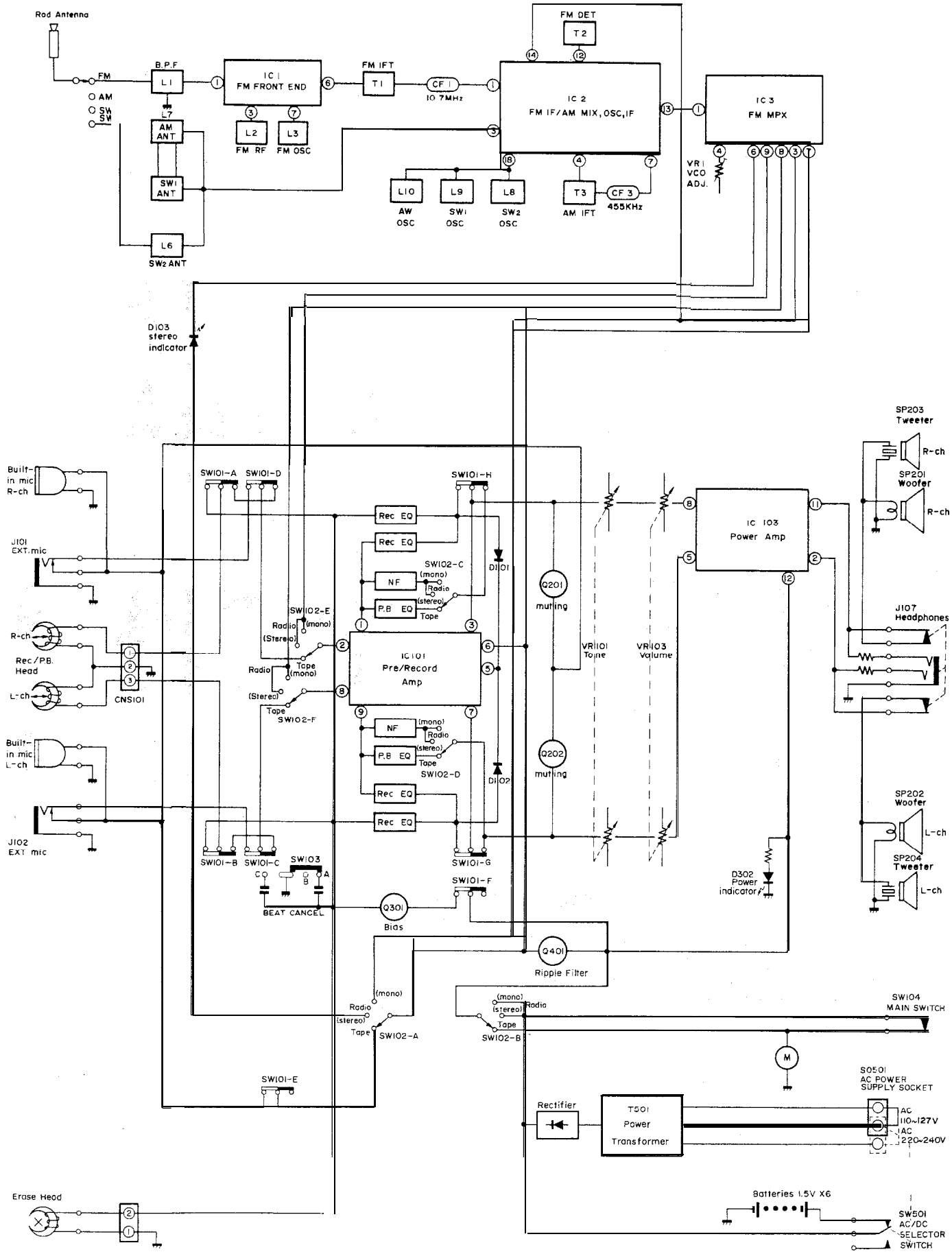


Figure 4 BLOCK DIAGRAM

MECHANICAL ADJUSTMENT

Except for the following item, refer to the RD-620X Service Manual already issued.

- **RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT**
  As shown in Figure 5-1, connect instruments, and adjust the head azimuth adjusting screw so that the output signals from both channels will have maximum waveform with the same phase in right and left.

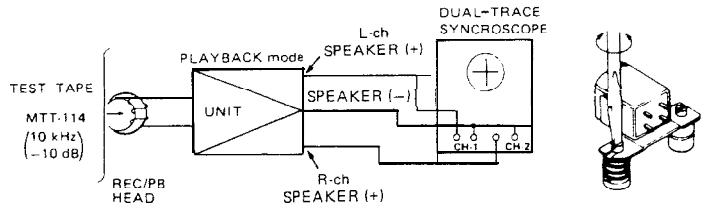


Figure 5-1

GENERAL ALIGNMENT INSTRUCTION

Should it become necessary at any time to check the alignment of this receiver, proceed as follows;

1. **Set the volume control (VR103) to maximum.**
2. **Attenuate the signals from the generator enough to swing the most sensitive range of the output meter.**
3. **Use a non-metallic alignment tool.**
4. **Repeat adjustments to insure good results.**
5. **Set the Function Selector Switch (SW102) to "radio" position.**

AM IF/RF ALIGNMENT

- **Set the signal generator to produce a signal of 400Hz, 30%, AM modulated.**
- **For adjustments in steps 4 and 9, see Note A .**

STEP	BAND	TEST TAGS	FREQUENCY	DIAL SETTING	ADJUSTMENT	REMARKS
IF (Connect instruments as shown in Figure 5-2.)						
1	AM	IF	455 kHz	High end of dial	T3	Adjust for best "IF" curve.
RF (Connect instruments as shown in Figure 5-3.)						
2	AM	Band coverage	510 kHz	Low end of dial	L10	Adjust for maximum output.
3	AM		1650 kHz	High end of dial	TC8	
4	AM	Tracking	600 kHz	600 kHz	L7	
5	AM		1400 kHz	1400 kHz	TC5	
6	Repeat steps 2,3,4 and 5 until no further Improvement can be made.					
RF (Connect instruments as shown in Figure 5-4.)						
7	SW_1	Band coverage	2.25 MHz	LOW end of dial	L9	Adjust for maximum output.
8	SW_1		7.4 MHz	High end of dial	TC7	
9	SW_1	Tracking	2.6 MHz	2.6 MHz	L7	
10	SW_1		6.0 MHz	6.0 MHZ	TC4	
11	Repeat steps 7,8,9 and 10 until no further improvement can be made.					
12	SW,	Band coverage	7.2 MHz	Low end of dial	La	Adjust for maximum output.
13	SW_2		22.5 MHz	High end of dial	TC6	
14	SW,	Tracking	a.5 MHz	a.5 MHz	L6	
15	SW,		19 MHz	19 MHz	TC3	
16	Repeat steps 12, 13, 14 and 15 until no further improvement can be made.					

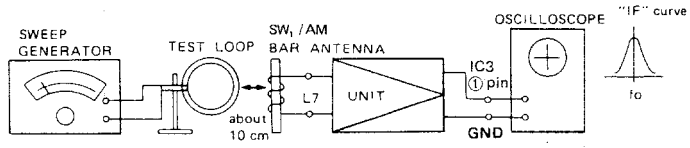


Figure 5-2

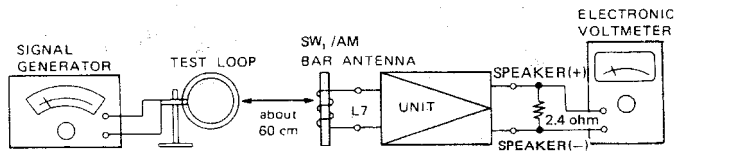


Figure 5-3

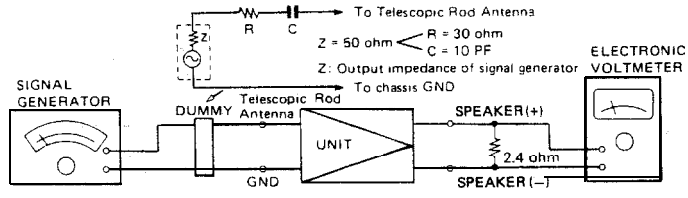


Figure 5-4

Note A **Check the alignment of the receiver antenna coil by bringing a piece of ferrite (such as a coil slug) near the antenna loop stick, then a piece of brass. If ferrite increases output, loop requires more inductance. If brass increases output, loop requires less inductance. Change loop inductance by sliding the bobbin toward the center of the ferrite core to increase inductance, or away to decrease inductance.**

FM IF/RF ALIGNEMNT

- **Set the signal generator to produce a signal of 400Hz, 30%, FM modulated.**

STEP	BAND	TEST STAGE	FREQUENCY	DIAL SETTING	ADJUSTMENT	REMARKS
IF (Connect instruments as shown in Figure 6-1.)						
1	FM	IF	10.7 MHz	High end of dial	T1 T2	Adjust for best "S" curve.
RF (Connect instruments as shown in Figure 6–2.)						
2	FM	Band coverage	87.1 MHz	Low end of dial	L3	Adjust for maximum output.
3	FM		109.0 MHz	High end of dial	TC2	
4	FM	Tracking	88 MHz	88 MHz	L2	
5	FM		108 MHz	108 MHz	TC1	
6	Repeat steps 2,3,4 and 5 until no further improvement can be made.					

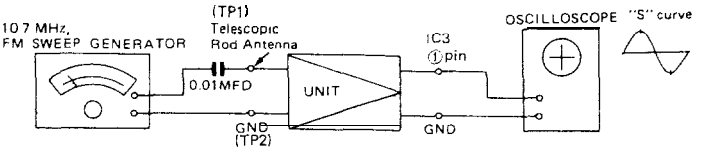


Figure 6–1

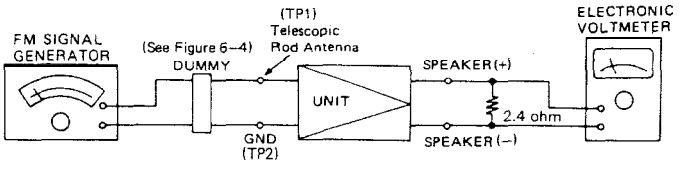


Figure 6-2

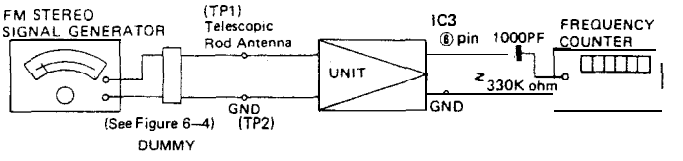


Figure 6-3

VCO FREQUENCY ALIGNEMNT

- **Set the Band Selector Switch (SW1) to "FM" position and Function Switch (SW102) to "stereo" position.**
- **Before this adjustment, connect the anode side of Stereo Indicator (D103) to GND.**
- **As shown in Figures 6-3 and 6–4, connect instruments.**

FREQUENCY	DIAL POINTER	AD JUST MENT	REMARKS
98MHz (54dB) unmodulated	98MHz	VR1	Adjust for 38 ±0.15kHz.

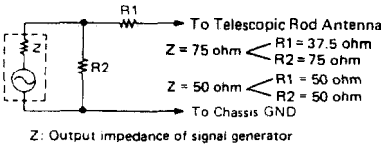


Figure 6–4. FM DUMMY

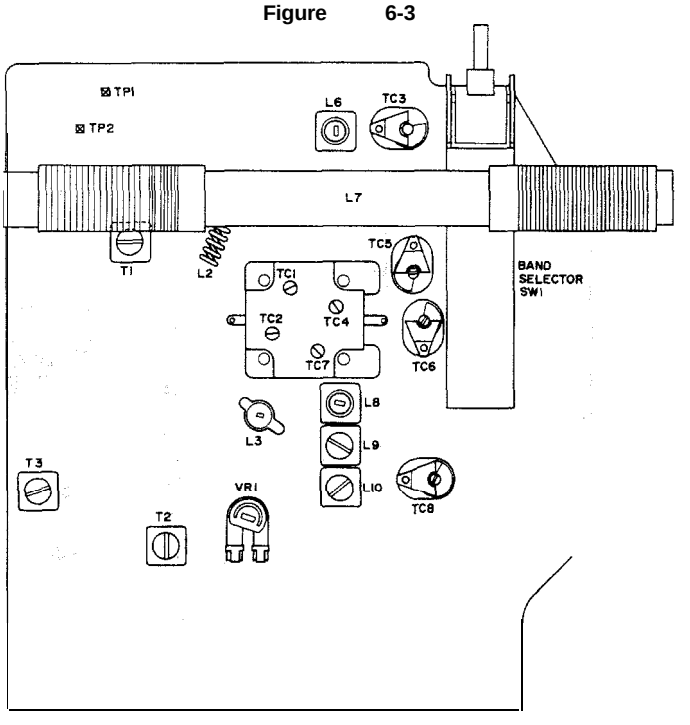


Figure 6-5 ALIGNMENT POINTS

NOTES ON SCHEMATIC DIAGRAM

1. **Voltage readings are measured with Digital Multimeter under no signal condition at tape position.**
   ( ): **AM mode**
   : **FM mode**
2. **Unless otherwise specified, all resistance is shown in ohms.** K = **1000 ohms**
3. **Unless otherwise specified, all capacitance is shown in microfarads.**
   P = **Picofarads**
   (CH), (RH) : Temperature compensation
4. ⊣W⊢ : **Printed resistor**
5. B **and** F **in Band Selector Switch (SW1), at each mode, are shown in Table 6. And the Terminals except for the mode in use are connected to the ground.**

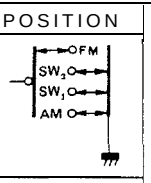
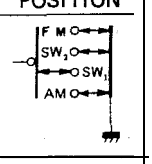
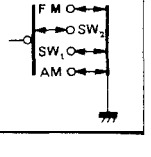
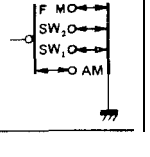
MODE	POSITION	MODE	POSITION
FM		SW_1	
SW_2		AM	

Table 6

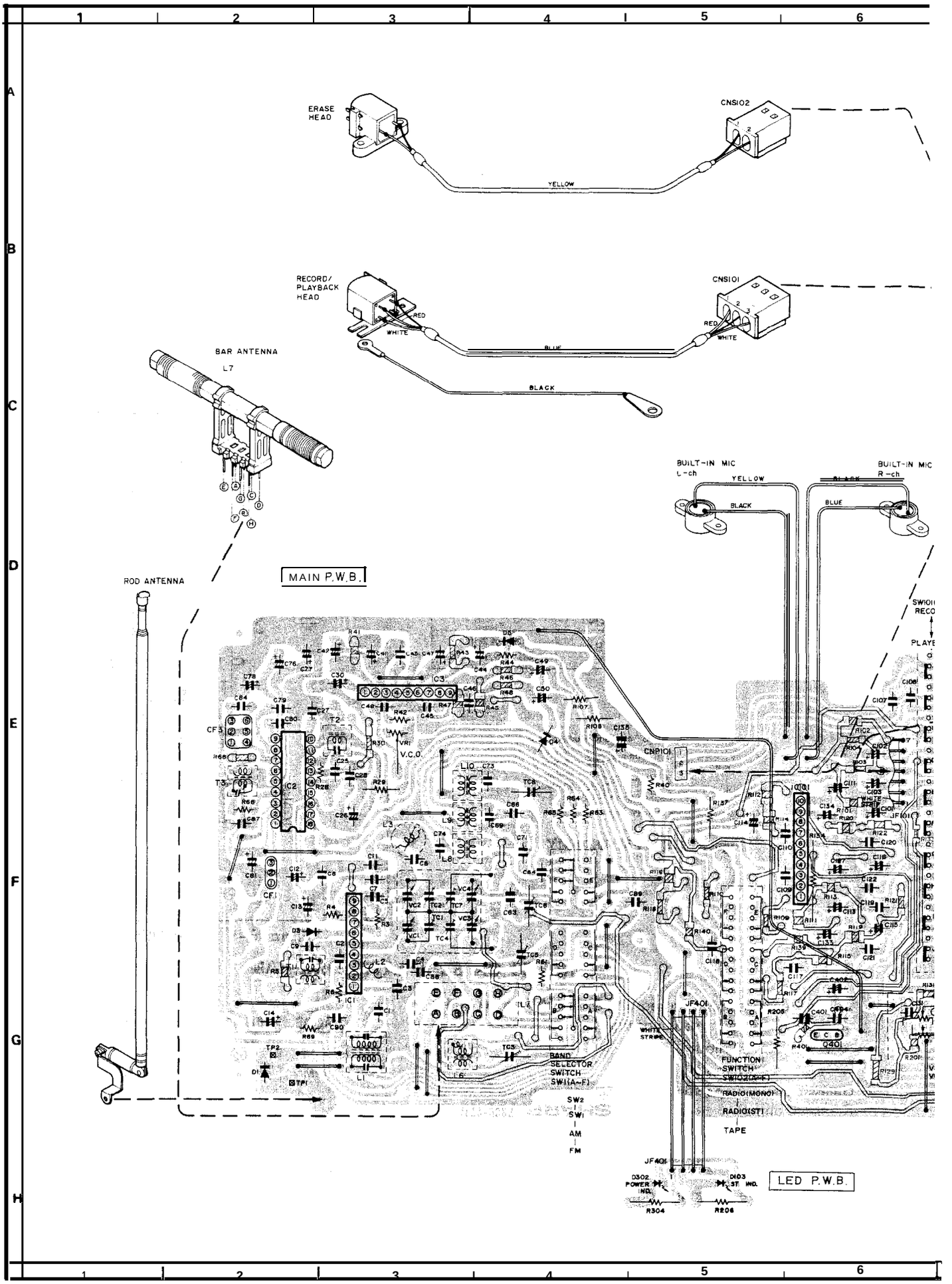
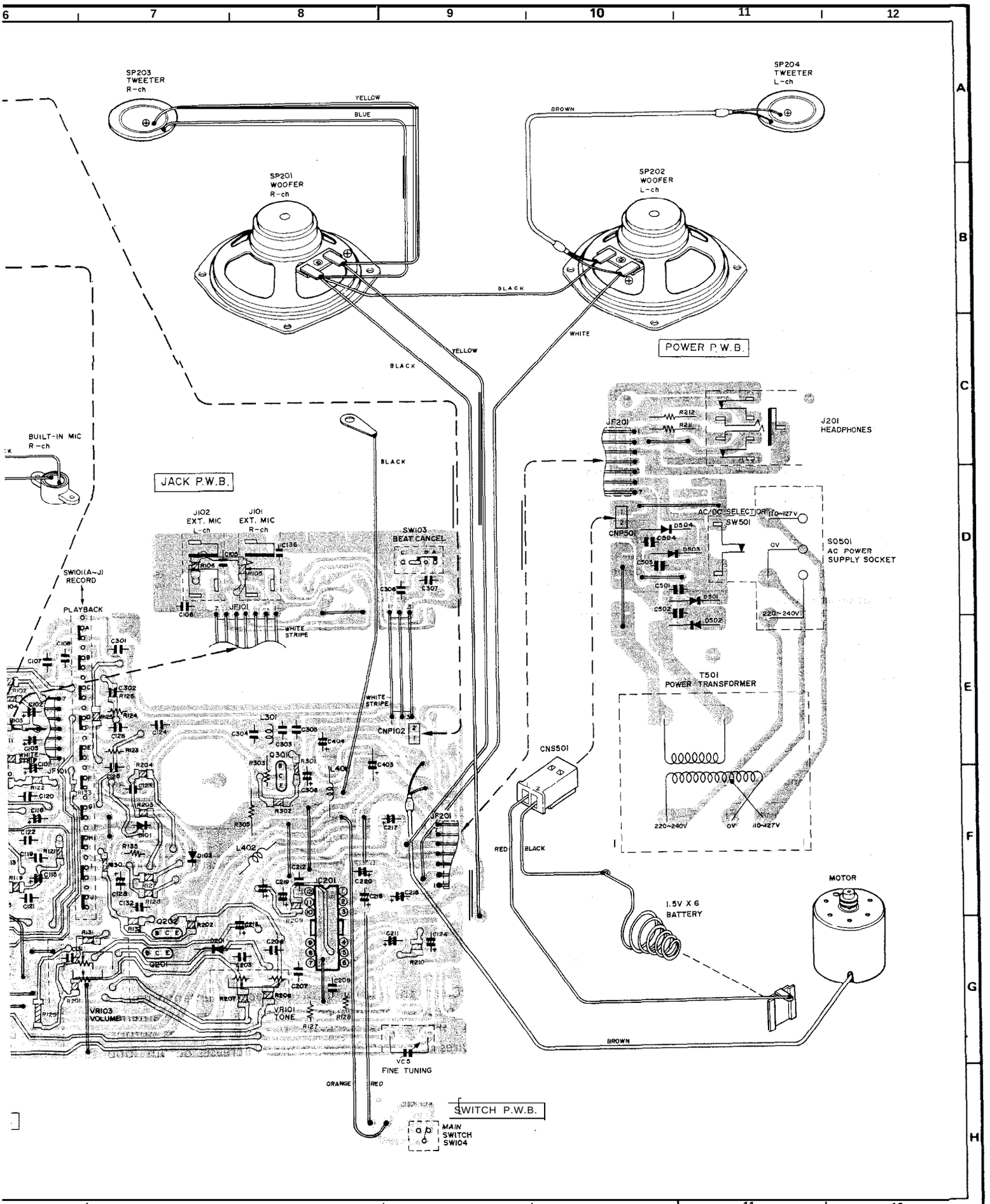
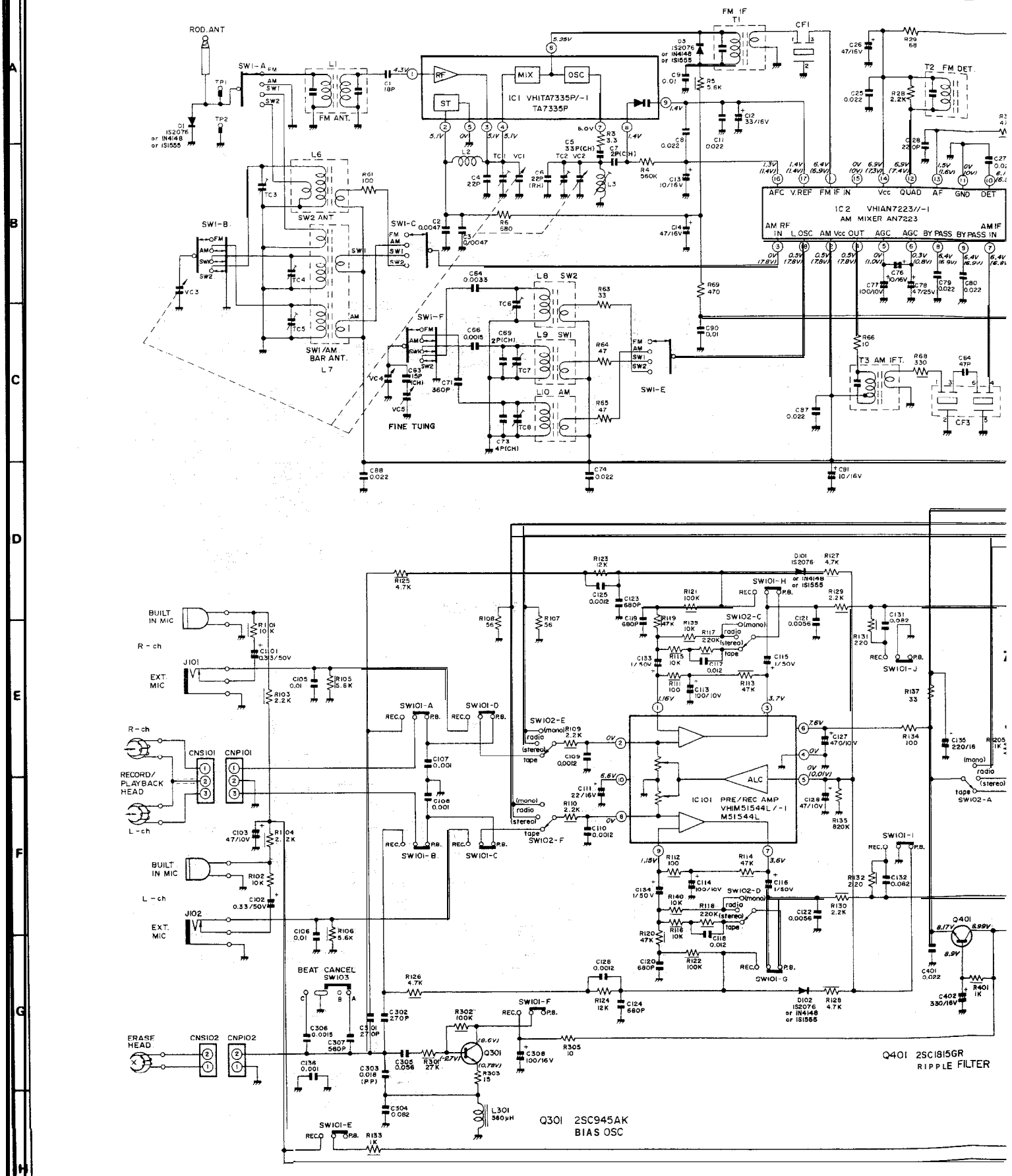


Figure 7 WIRING SIDE OF



NG SIDE OF P. W. BOARD

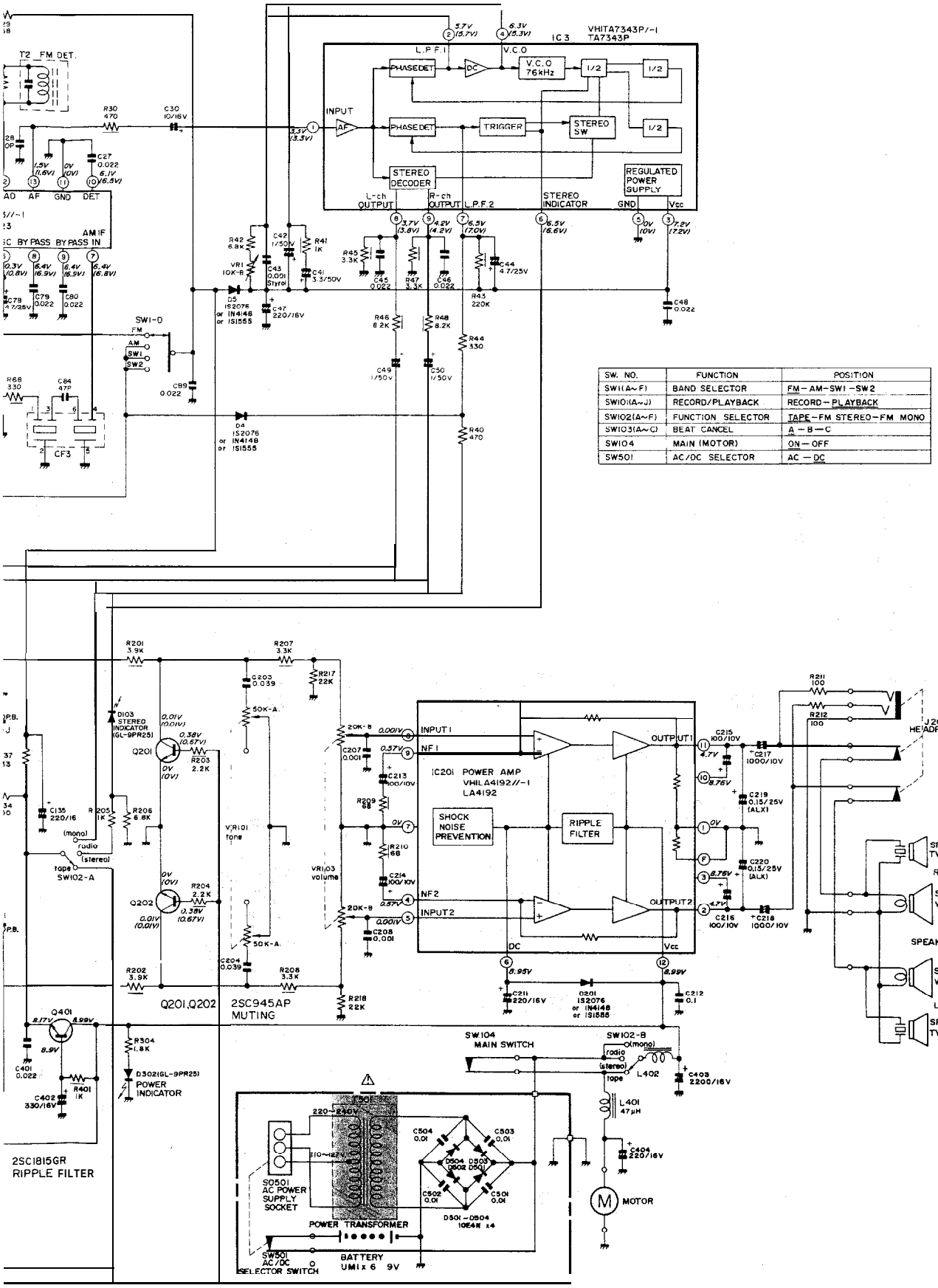


(Specifications or wiring diagrams of this model are subject to change for improvement without prior notice.)

- NOTES ON SCHEMATIC DIAGRAM can be found on page 6.

Notes: Parts maint

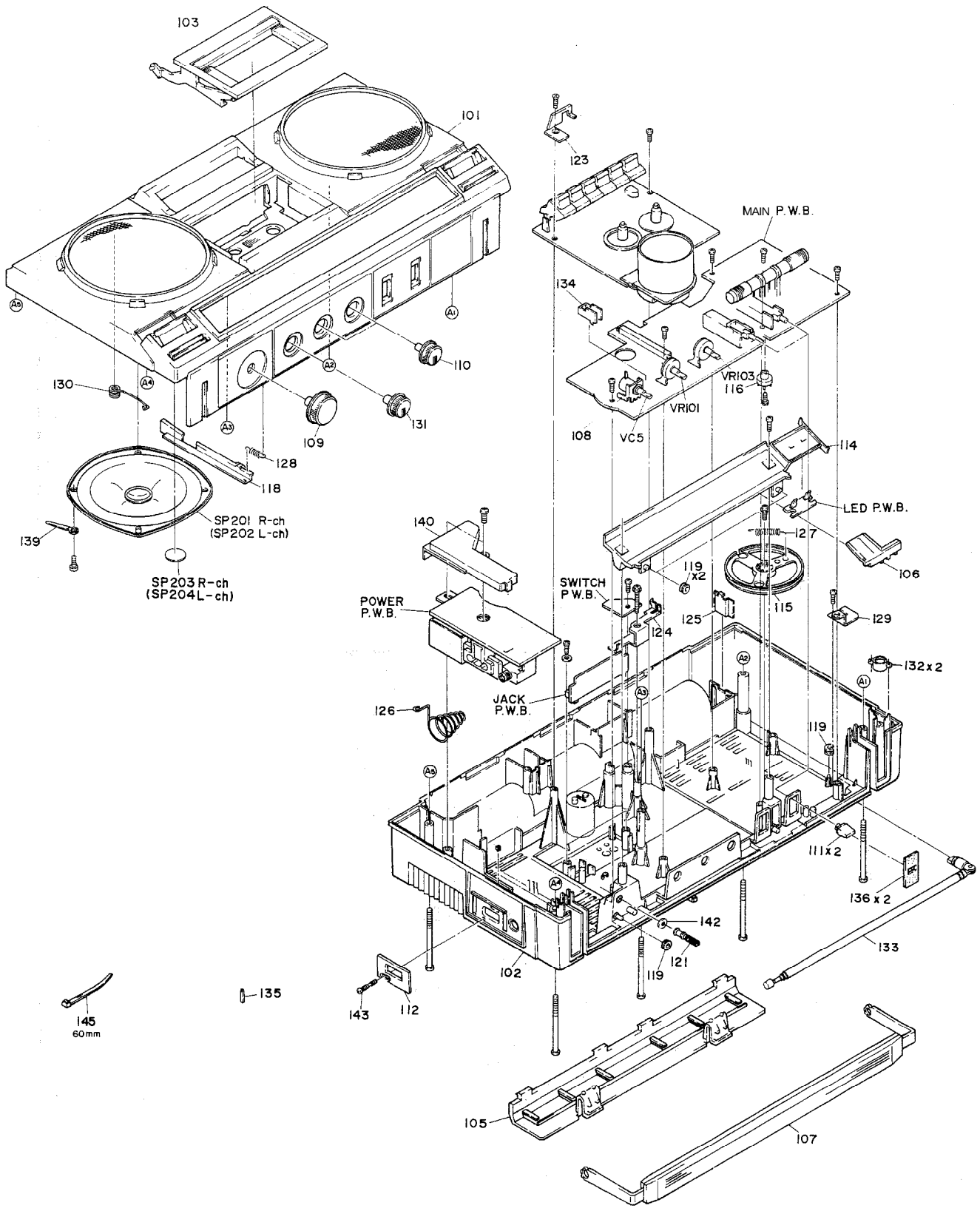
Figure 9 SCHEMATI



SW. NO.	FUNCTION	POSITION
SW1(A~F)	BAND SELECTOR	FM – AM – SW1 – SW2
SW101(A~J)	RECORD/PLAYBACK	RECORD – PLAYBACK
SW102(A~F)	FUNCTION SELECTOR	TAPE – FM STEREO – FM MONO
SW103(A~C)	BEAT CANCEL	A – B – C
SW104	MAIN (MOTOR)	ON – OFF
SW501	AC/DC SELECTOR	AC – DC

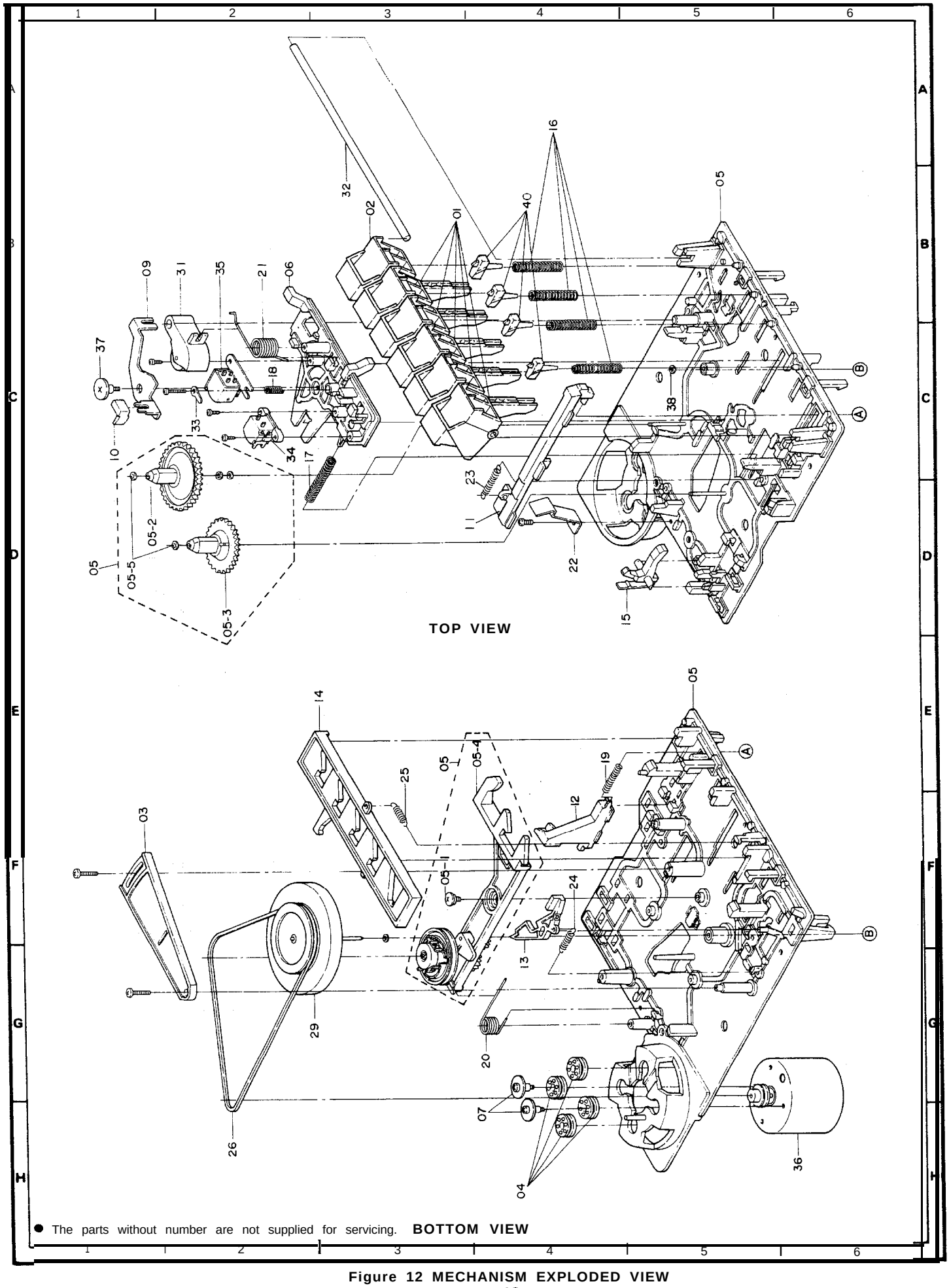
Notes: Parts marked with " ⚠ " (▒▒▒) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SCHEMATIC DIAGRAM



- The parts without number are not supplied for servicing.

Figure 11 CABINET EXPLODED VIEW



● The parts without number are not supplied for servicing.

Figure 12 MECHANISM EXPLODED VIEW

REPLACEMENT PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER **2. REF. NO.**

3. PART NO. **4. DESCRIPTION**

NOTES: Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO.	PART NO.	DESCRIPTION	CODE
	INTEGRATED CIRCUITS		
IC1	VHITA7335P/-1	FM Front End (TA7335P)	AG
IC2	VHIAN7223//-1	FM IF/AM (Mixer, Oscillator, IF)(AN7223)	AK
IC3	VHITA7343P/-1	FM Multiplex (TA7343P)	AG
IC101	VHIM51544L/-1	Pre/Record Amp. (M51544L)	AG
IC201	VHILA4192//-1	Power Amp. (LA4192)	AK
	TRANSISTORS		
a201	VS2SC945AP/-1	Muting (2SC945 AP)	AB
Q202	VS2SC945AP/-1	Muting (2SC945 AP)	
Q301	VS2SC945AK/-1	Bias Oscillator (2SC945 AK)	
0401	VS2SC1815GR-1	Ripple Filter (2SC1815GR)	
	DIODES		
D1	92L1N4148FV	Static Protector (1N4148)	AB
D3	92LI N4148FV	FM Overload (1N4148)	
D4, 5	92L1N4148FV	Switching (1 N4148)	
D101, 102	92LI N4148FV	ALC (1N4148)	
D103	RH-PX1029AFZZ	LED, Stereo Indicator (GL-9PR25)	AC
D201	92LI N4148	Stabilizer for AC Mode (1N4148)	AB
D302	RH-PX1029AFZZ	LED, Power Indicator (GL-9PR25)	AC
D501, 502, D503, 504	VHD10E4N///-1	Rectifier (10E4N)	AC
	COILS		
L1	RCILA0455AFZZ	FM Antenna	AC
L2	RCILR0364AFZZ	FM RF	AA
L3	RCILB0628AFZZ	FM Oscillator	AC
L6	RCILA0556AFZZ	SW2 Antenna	AD
L7	92LCOILA-199A	SW_1 /AM Bar Antenna	AP
L8	PCILB0625AFZZ	SW2 Oscillator	AC
L9	RCILB0624AFZZ	SW_1 Oscillator	
L10	RCILB0623AFZZ	AM Oscillator	
L301	VP-CH561 KOOOO	Bias Oscillator, 560μH	
L401	VP-CH470K0000	Noise Suppressor, 47μH	AB
L402	92LCOILC-197B	Noise Suppressor	AD
	TRANSFORMERS		
T1	RCILI01 57AFZZ	FM IF	AC
T2	RCILI0312AFZZ	FM Detector	
T3	RCILI0310AFZZ	AM IF	
⚠T501	92LPT-277A	Power	AW

REF. NO.	PART NO.	DESCRIPTION	CODE
	FILTERS		
CF1	RFILF0080AFZZ	Ceramic, FM IF, 10.7MHz	AD
CF3	RFILA0074AFZZ	Ceramic, AM IF, 455kHz	AG
	CONTROLS		
VC1, 2, VC3, 4, TC1, 2, TC 4, 7	RVC-R0083AFZZ	Variable Capacitors Tuning with Trimmers TC1; FM RF Trimmer TC2; FM Oscillation Trimmer TC4; SW_1 Antenna Trimmer TC7; SW_1 Oscillation Trimmer	AN
vc5	RVC-Z0056AFZZ	Fine Tuning	AE
TC3	RTO-HI 007AFZZ	SW2 Antenna Trimmer	AC
TC5	RTO-H1007AFZZ	AM Antenna Trimmer	AC
TC6	RTO-HI 007AFZZ	SW_2 Oscillation Trimmer	AC
TC8	RTO-H1007AFZZ	AM Oscillation Trimmer	AC
VR1	RVR-M0216AFZZ	1 OK ohm (B), V.C.O. Adjust	AB
VR101	92LVR-197A	50K ohm (A), Tone Control	AG
VR103	92LVR-197C	20K ohm (B), Volume Control	AK
	ELECTROLYTIC CAPACITORS		
	(Unless otherwise specified capacitors are ±20% type.)		
C12	RC-EZV336AF1C	33MFD, 16V	AB
C13	RC-EZV106AF1C	10MFD, 16V	
C14	RC-EZV476AF1C	47MFD, 16V	
C26	RC-EZV476AF1C	47MFD, 16V	AB
C30	RC-EZV106AF1C	10MFD, 16V	
c41	RC-EZV335AF1H	3.3MFD, 50V	
C42	RC-EZV105AF1H	1 MFD, 50V	
C44	RC-EZV475AF1E	4.7MFD, 25V	
c47	RC-EZV227AF1C	220MFD, 16V	
C49, 50	RC-EZV105AF1H	1 MFD, 50V	
C76	RC-EZV106AF1C	10MFD, 16V	
c77	RC-EZV107AF1A	100MFD, 10V	
C78	RC-EZV475AF1E	4.7MFD, 25V	
C81	RC-EZV106AF1C	10MFD, 16V	
C101, 102	RC-EZV334AF1H	0.33MFD, 50V	
C103	RC-EZV476AF1C	47MFD, 10V	
C111	RC-EZV226AF1C	22MFD, 16V	
C113, 114	RC-EZV107AF1A	100MFD, 10V	
C115, 116	RC-EZV105AF1H	1 MFD, 50V	
CI21	RC-EZV477AF1A	470MFD, 10V	AC
CI28	RC-EZV476AF1A	47MFD, 10V	AB
C133, 134	RC-EZV105AF1H	1 MFD, 50V	
C135	RC-EZV227AF1C	220MFD, 16V	
C211	RC-EZV227AF1C	220MFD, 16V	

REF. NO.	PART NO.	DESCRIPTION	CODE
C213, 214, C215, 216	RC-EZV107AF1A	100MFD, 10V	A0
C217, 218	92LCEU10Z1000Y	1000MFD, 10V	AC
C219, 220	RC-AZ1 001 AFZZ	0.15MFD, 25V	AB
C308	RC-EZV107AF1C	100MFD, 16V	AB
C402	RC-EZV337AF1C	330MFD, 16V	AC
C403	RC-EZV228AF1C	2200MFD, 16V, +50 -10%	AE
C404	RC-EZV227AF1C	220MFD, 16V	A0

CAPACITORS

CI	VCCSPU1HL180J	18PF, 50V, ±5%, Ceramic	AA
c2, 3	VCKZPUI HB472K	0.0047MFD, 50V, ±10%, Ceramic	AA
C4	VCCSPU1HL220K	22PF, 50V, ±10%, Ceramic	AA
C5	VCCCPU1HH330J	33PF (CH), 50V, ±5%, Ceramic	AB
C6	VCCRPU1HH220J	22P.F (RH), 50V, ±5%, Ceramic	AA
C7	VCCCPU1HH2R0C	2PF (CH), 50V, ±0.25PF, Ceramic	AA
C8	VCKZPU1HF223Z	0.022MFD, 50V, +80–20%, Ceramic	AA
C9	VCTYPUI EX103M	0.01 MFD, 25V, ±20%, Semiconductor	AA
C11	VCTYPUI EX223M	0.022MFD, 25V, ±20%, Semiconductor	AB
C25	VCTYPU1EX223M	0.022MFD, 25V, ±20%, Semiconductor	A0
C27	VCKZPU1HF223Z	0.022MFD, 50V, +80–20%, Ceramic	A A
C28	VCCSPU1HL221J	220PF, 50V, ±5%, Ceramic	AA
c43	VCQSMV1HL102J	0.001 MFD, 50V, ±5%, Styrol	AB
C45, 46, C48	VCTYPU1EX223M	0.022MFD, 25V, ±20%, Semiconductor	AB
C63	VCCCPU1HL150J	15PF (CH), 50V, ±5%, Ceramic	AA
C64	VCTYPU1EX333K	0.033MFD, 25V, ±10%, Semiconductor	AA
C66	VCTYPUI EX152K	0.001 5MFD, 25V, ±10%, Ceramic	AA
C69	VCCCPU1HH2ROC	2PF (CH), 50V, ±5%, Ceramic	AA
C71	92LCCD50V360PJ	360PF, 50V, ±5%, Ceramic	AA
c73	VCCCPU1HH4ROC	4PF (CH), 50V, ±5%, Ceramic	AB
c74	VCTYPUI EX223M	0.022MFD, 25V, ±20%, Semiconductor	AB
C79, 80	VCTYPUI EX223M	0.022MFD, 25V, ±20%, Semiconductor	AB
C84	VCCSPU1HL470J	47PF, 50V, ±5%, Ceramic	AA
C87.88	VCKZPU1HF223Z	0.022MFD, 50V, +80–20%, Ceramic	A A
C89	VCKZPUI HB223M	0.022MFD, 50V, ±20%, Ceramic	AB
C90	VCKZPU1HF103Z	0.01 MFD, 50V, +80–20%, Ceramic	AA
C105, 106	VCTYPU1EX103K	0.01 MFD, 25V, ±10% Semiconductor	AA
C107, 108	VCTYPUI EX102K	0.001MFD, 25V, ±10%, Semiconductor	AA
C109, 110	VCTYPU1EX122K	0.0012MFD, 25V, ±10%, Semiconductor	AA
C117, 118	VCTYPUI EX123K	0.012MFD, 25V, ±10%, Semiconductor	AA
C119, 120	VCKYPU1 HB681 K	680PF, 50V, ± 10%. Ceramic	AA
C121, 122	VCTYPUI EX562K	0.0056MFD, 25V, ±10%, Semiconductor	AA
C123, 124	VCKZPU1HB681K	680PF, 50V, ±10%, Ceramic	AA
C125, 126	VCTYPU1EX122K	0.0012MFD, 25V, ±10%, Semiconductor	AA
C131, 132	VCTYPU1EX823K	0.082MFD, 25V, ±10%, Semiconductor	AB
CI36	VCKZPUI HF102Z	0.001MFD, 50V, +80–20%, Ceramic	A A
C203, 204	VCTYPUI EX393K	0.039MFD, 25V, ±10%, Semiconductor	AA
C207, 208	VCTYPUI EX102K	0.001 MFD, 25V, ±10%, Semiconductor	AA
c212	VCTYPU1EX104M	0.1MFD, 25V, ±20%, Semiconductor	AB
C301, 302	VCKZPU1HB271K	270PF, 50V, ±10%, Ceramic	AA
C303	VCQPKV2AA183J	0.018MFD, 100V, ±5%, Polypropylene	AB
C304	VCTYPUI EX823K	0.082M FD, 25V, ±10%, Semiconductor	AB
C305	VCTYPU1EX563K	0.056MFD, 25V, ±10%, Semiconductor	AB
C306	VCTYPUI EX562K	0.0056MFD, 25V, ±10%, Semiconductor	A A
C307	VCKZPUI HB561K	560PF, 50V, ±10%, Ceramic	AA
C401	VCTYPU1EX223M	0.022MFD, 25V, ±20%, Semiconductor	AB
C501, 502, C503, 504	VCKZPUI HF103Z	0.01 MFD, 50V, +80–20%, Ceramic	AB

RESISTORS

(Unless otherwise specified resistors are ¼W, ±5%, Carbon type.)

R3	VRD-ST2EE3R3J	3.3 ohm	AA
R4	VRD-SU2EE564J	560K ohm	AA
R6	VRD-SU2EE681J	680 ohm	AA
R28	VRD-SU2EE222J	2.2K ohm	AA
R29	VRD-SU2EE680J	68 ohm	AA
R40	VRD-SU2EE471J	470 ohm	AA
R42	VRD-SU2EE682J	6.8K ohm	AA
R44	VRD-SU2EE331J	330 ohm	AA
R61	VRD-SU2EE101J	100 ohm	AA
R63	VRD-SU2EE330J	33 ohm	AA
R64.65	VRD-SU2EE470J	47 ohm	AA
R66	VRD-SU2EE100J	10 ohm	AA
R69	VRD-SU2EE471J	470 ohm	AA
R107, 108	VRD-SU2EE560J	56 ohm	AA
R123, 124	VRD-SU2EE123J	12K ohm	AA
R134	VRD-ST2EE101J	100 ohm	AA
R135	VRD-SU2EE824J	820K ohm	AA
R137	VRD-ST2EE330J	33 ohm	AA
R205	VRD-ST2EE102J	1K ohm	AA
R206	VRD-ST2EE682J	6.8K ohm	AA
R211, 212	VRD-SU2EE101J	100 ohm	AA
R217,218	VRD-SU2EE223J	22K ohm	AA
R303	VRD-SU2EE150J	15 ohm	AA
R304	VRD-ST2EE182J	1.8K ohm	AA
R305	VRD-ST2EE100J	10 ohm	AA

MECHANISM PARTS

01	92LM-BUTON277A	Button, Function (GF-4949ZG)	AC
	92LM-BUTON244A	Button, Function (GF-4949ZS)	AC
02	92LM-BUTON277B	Button, Eject (GF-4949ZG)	AD
	92LM-BUTON244B	Button, Eject (GF-4949ZS)	A D
03	92LM-SUPT152A	Bracket, Flywheel	AC
04	92LCUSN133A	Cushion Rubber, Motor	AB
05	92LMCASY152BS1	Mechanism Chassis Assembly	AW
05-1	LX-BZ0321AFFD	Screw, Slip Roller Assembly Retaining	AA
05-2	92LMC-R-REL025	Turntable, Take-up	AC
05-3	92LM-REL197B	Turntable, Supply	AC
05-4	92LM-S-ROL1 52A	Slip Roller Assembly	AK
05-5	LX-WZ9064AFZZ	Washer, 1.2mm Dia. x 3.3mm Dia. x 0.5mm	AA

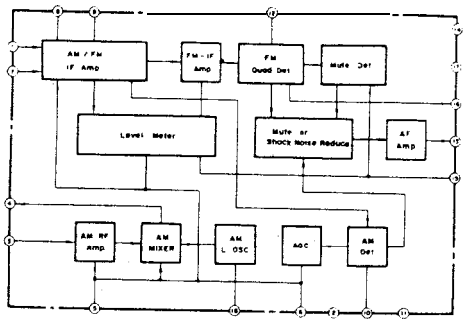
REF. NO.	PART NO.	DESCRIPTION	CODE
06	92LM-S-CHS152A	Sub-chassis	AG
07	92LS2R6S025A	Screw, Motor Retaining	AA
09	92LM-LEV152F	Lever, Tape Contact	AB
10	92LMC-SPAC025B	Contact, Tape	
11	92LM-LEV152A	Lever, Record Action	AC
12	92LM-LEV185A	Lever, Switch Action	AA
13	92LM-LEV152C	Lever, Auto Stop	AB
14	92LM-LEV152D	Lock Plate, Function Key	AD
15	92LM-LEV152E	Lever, Erase Prevention	AB
16	92LM-CSPR152D	Spring, Function Key	AA
17	92LM-CSPR152E	Spring, Sub-chassis Returning	
18	92LM-CSPR152F	Spring, Head Azimuth	AB
19	92LM-CSPR185A	Spring, Switch Action Lever	AA
20	92LM-CSPR1521	Spring, Slip Roller	AA
21	92LM-CSPR152H	Spring, Pressure Roller	AB
22	92LM-FSPR185A	Plate Spring, Cassette Retaining	AC
23	92LM-CSPR152A	Spring, Record Key	AB
24	92LM-CSPR152B	Spring, Auto Stop Lever	AA
25	92LM-CSPR152C	Spring, Function Key Release Lever	
26	92LBELT152A	Drive Belt	AD
29	92LM-FWHEL152A	Flywheel	AM
31	92LM-P-ROL152A	Pressure Roller Assembly	AQ
32	92LM-SHAFT152B	Shaft, Function Key	AC
33	QHWS-2222AGFN	Lug	AA
34	92LM-ER-HD197A	Head, Erase	AK
35	92LM-RP-HD197A	Head, Record/Playback	AS
36	92LM-MOTOR197A	Motor, DC	AW
37	92LS2R6S152A	Screw, Tape Contact Lever	AB
38	92LIR9W5-R5N	Washer, Capstan Oil Cut	AA
40	92LM-CHIP185A	Guide, Spring	AA

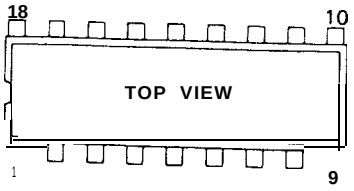
MISCELLANEOUS

101	92LCAB279FRTS1	Front Cabinet with Dial Scale Plate (GF-4949ZG)	BC
	92LCAB294FRTS1	Front Cabinet with Dial Scale Plate (GF-4949ZS)	BC
102	92LCAB279B	Back Cabinet (GF-4949ZG)	AX
	92LCAB294B	Back Cabinet (GF-4949ZS)	AX
103	92LCT-HOLD277A	Cassette Holder (GF-4949ZG)	AM
	92LCT-HOLD294A	Cassette Holder (GF-4949ZS)	AM
105	92LLID277A	Lid, Battery Compartment	AG
106	92LPINT277A	Dial Pointer	AD
107	92LMEC277HNL01	Handle	AP
108	92LSUPT199A	Fine Tuning Supporter	
109	92LKNOB220A	Knob, Tuning (GF-4949ZG)	AC
	92LKNOB244A	Knob, Tuning (GF-4949ZS)	AC
110	92LKNOB220B	Knob, Tone Control/Volume Control (GF-4949ZG)	AB
	92LKNOB244B	Knob, Tone Control/Volume Control (GF-4949ZS)	AB
111	92LKNOB220C	Knob, Function Selector/ Band Selector (GF-4949ZG)	AA
	92LKNOB244C	Knob, Function Selector/ Band Selector (GF-4949ZS)	AA
112	92LCOV277A	Cover, Voltage Selector	AB
114	92LDIAL-P223A	Frame	AE
115	92LWHEL197A	Drum	AD
116	92LBOS197A	Boss, Drum Joint	AD
118	92LLEV185A	Lever, Eject	AC
119	92LROLL009	Pulley, Dial Cord	AB
121	92LSHAFT262A	Shaft, Tuning	AD
123	92LSUPT197B	Supporter, Eject Button	AA
124	92LLEV197A	Lever, Record Joint	AC
125	92LBTML113A	Terminal, Battery	AB

REF. NO.	PART NO.	DESCRIPTION	CODE
126	92LBSPR277A	Spring, Battery	AB
127	92LCSPR197C	Spring, Dial Cord	AC
128	92LCSPR277A	Spring, Eject Lever	AA
129	92LSUPT277A	Supporter, Rod Antenna Joint	AB
130	92LCSPR197A	Spring, Cassette Holder Opening	AB
131	92LKNOB232A	Knob, Fine Tuning Control (GF-4949ZG)	AE
	92LKNOB294A	Knob, Fine Tuning Control (GF-4949ZS)	AE
132	92LIN-MIC-197A	Built-in Microphone	AH
133	QANTR0112AFZZ	Telescopic Rod Antenna	AM
134	92LRDAT279A	Heat Sink	AC
135	QLUGP0111CEFW	Lug, Terminal	AA
136	92LFELT277A	Felt, Switch Knob	AA
139	LHLDW9003CEZZ	Wire Holder	AA
140	92LCOV279A	Cover, Power P.W.B.	AF
142	92L4R7W8-R13P	Washer, Tuning Shaft	AA
143	LX-BZ0286AFFF	Screw, Voltage Selector Cover	AA
145	LHLDW1075AFZZ	Nylon Band	AA
CNP101	QCNCM136CAFZZ	Plug, 3 pin	AB
CNP102	QCNCM095BAFZZ	Plug, 2 pin	AB
CNP501	QCNCM095BAFZZ	Plug, 2 pin	AB
CNS101	QCNW-1493AFZZ	Socket, 3 pin with Wire Leads	AE
CNS102	QCNW-1494AFZZ	Socket, 2 pin with Wire Leads	AE
CNS501	QCNW-2187AFZZ	Socket, 2 pin with Wire Leads	AC
JF101	92LCONE-197A	Jumper, 7 Leads, 150 mm	AD
JF201	92LCONE-277A	Jumper, 7 Leads, 120 mm	AC
JF301	92LCONE-199A	Jumper, 3 Leads, 60 mm	AB
JF401	92LCONE-197C	Jumper, 4 Leads, 105 mm	AC
J101	92LJACK-197A	Jack, External Microphone (R-ch)	AE
J102	92LJACK-197A	Jack, External Microphone (L-ch)	AE
J201	92LJACK-197B	Jack, Headphones	AK
SO501 SW501	92LSOK-186A	Socket, AC Power Supply with AC/DC Selector Switch (SW501)	AL
SP201,202	92LSP-207A	Woofer, 2.4 ohm	AR
SP203, 204	RALMB0057AFZZ	Tweeter	AC
SW1 (A ~ F)	QSW-B0152AFZZ	Switch, Band Selector	AM
SW101 (A ~ J)	92LSWICH-197B	Switch, Record/Playback	AK
SW102 (A - F)	92LSWICH-197C	Switch, Function Selector	AM
SW103 (A, B, C)	QSW-S0267AFZZ	Switch, Beat Cancel	AD
SW104	QSW-F0158AFZZ	Switch, Mechanism	AE
	92LP-CASE279A	Packing Case (GF-4949ZG)	AM
	92LP-CASE294A	Packing Case (GF-4949ZS)	AM
	92LP-AD277A	Packing Add.	AK
	92LBAG277A	Polyethylene Bag, Unit	AB
	92LBAG117A	Polyethylene Bag, Operation Manual	AA
	92LINST279A	Operation Manual	AG
A	QACCZ0050AF00	AC Power Supply Cord, for EX	AK
A	QACCL0050AF00	AC Power Supply Cord, for SCA	AM
A	QPLGA0250AFZZ	Adaptor, AC Power Supply Cord, for EX	AF
	TLSTS0001ZZR0	SS List, for SCA	AC
	TGANE1124AFZZ	Warranty Cord, for SCA	AC

IC2: VHIAN7223//-1
(AN7223)





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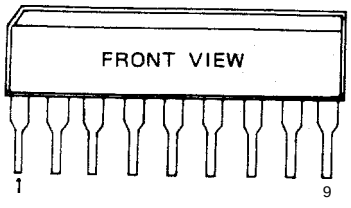

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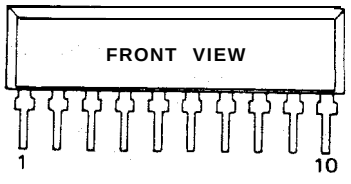

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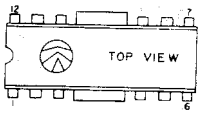

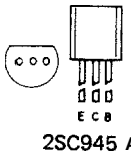

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