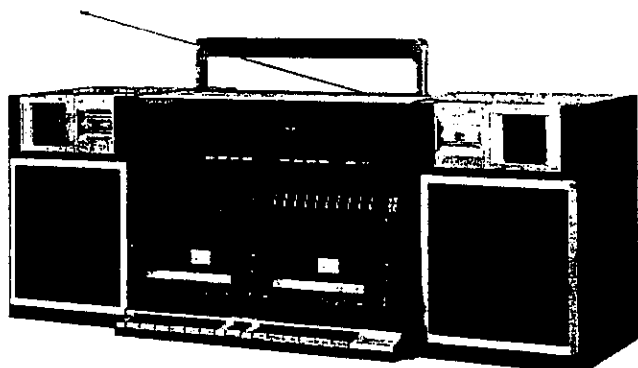


SHARP SERVICE MANUAL



SHARP-04627

S3648WF939ZBK

WF-939Z(BK) WF-939Z(S)

PHOTO: WF-939Z(BK)

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

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

SPECIFICATIONS

GENERAL

Power source:	AC 110 V — 127 V and 220 V — 240 V, 50/60 Hz DC 15 V (UM/SUM-1 or R20 type x 10, or external 15 V DC)
Output power:	PMPO; 200 W (100 W + 100 W) (AC operation) RMS; 26 W (13 W + 13 W) (DC operation, 10% distortion)
Input impedance:	External mic; 600 ohms Phono/line in/CD; 50 kohms
Loaded impedance:	Headphones; 8 — 32 ohms External speakers; 8 — 16 ohms Line out; 0.6 V/50 kohms
Dimensions:	Width; 680 mm Height; 250 mm Depth; 180 mm
Weight:	9.3 kg without batteries

TAPE RECORDER

Tape:	Compact cassette tape
Frequency response:	30 — 15,000 Hz (normal tape) 30 — 16,000 Hz (CrO ₂ tape) 30 — 17,000 Hz (metal tape)
Signal/noise ratio:	55 dB (Tape 1, playback) 50 dB (Tape 2, recording)

RADIO

Frequency range:	AM; 526.5 — 1606.5 kHz SW ₁ ; 2.3 — 7.3 MHz SW ₂ ; 7.3 — 22 MHz FM; 87.6 — 108 MHz
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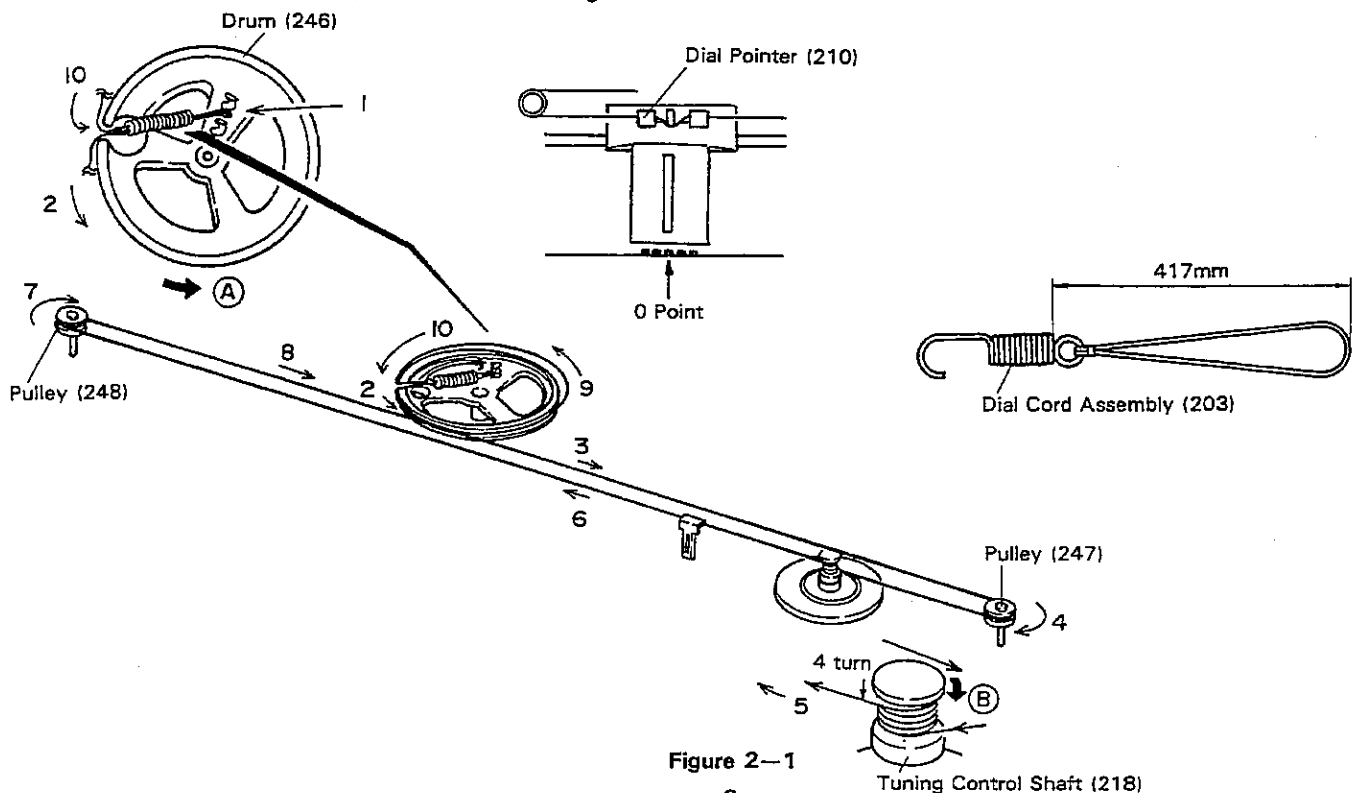
SPEAKER

Speakers:	210 cm ² square-type flat diaphragm woofer x 2 5 cm tweeter x 2 Super tweeter x 2
Impedance:	8 ohms
Input:	26 W (RMS) 100 W (PMPO)

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

STRINGING OF DIAL CORD

1. Turn the drum fully in the direction (A) shown in Fig. 2-1 and stretch its cord over the parts in the numerical order.
2. Then turn the tuning control shaft fully in the direction (B) shown in Fig. 2-1 and fix its pointer as shown in Fig. 2-1.



NAMES OF PARTS

1. Hour/Sleep Off Button
2. Clock Adjust Button
3. Minute Button
4. Clock/Timer Display
5. Timer Adjust Button
6. Sleep On Button
7. Tape 1) Tape Switch
8. Tape 2) Tape Switches
9. Dubbing Switch
10. Function Switches
11. Radio Band Selector
12. FM Mode Switch
13. Tuning Control
14. Fine Tuning Control
15. Timer On/Off Switch
16. Power Switch
17. Volume Controls
18. Tape Counter and Reset Button
19. Microphone Sockets
20. Headphones Socket

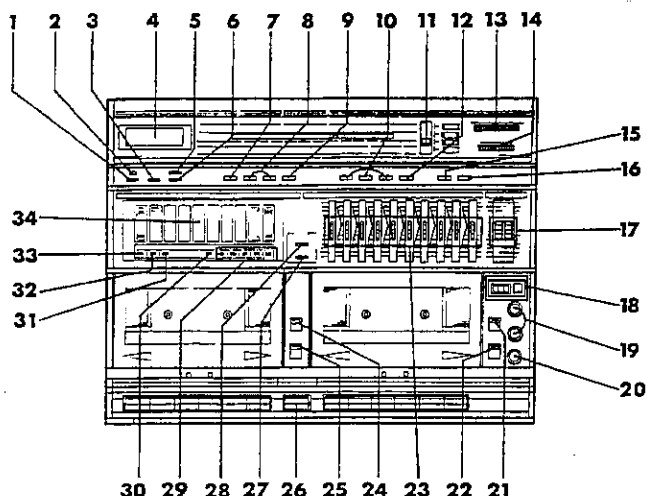


Figure 3-1

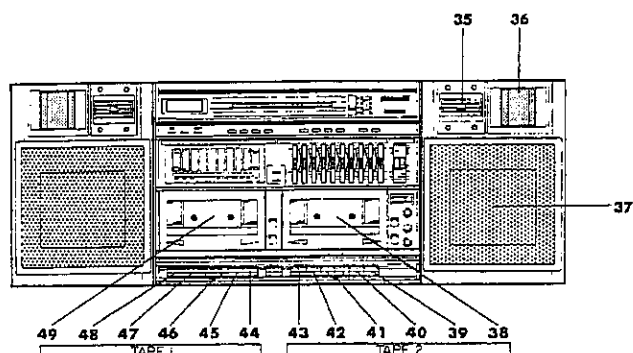


Figure 3-2

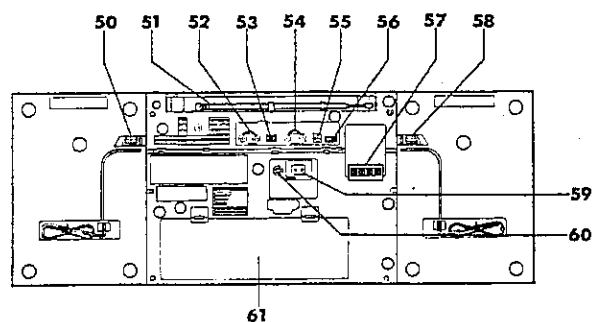


Figure 3-3

21. Tape 2) Direction Switch
22. Tape 2) Reverse Mode Switch
23. Graphic Equalizer
24. Tape 1) Direction Switch
25. Tape 1) Reverse Mode Switch
26. Dubbing Start Button
27. APLD/APPS Clear Button
28. APLD/APPS Set Button
29. APLD/APPS Set Indicators
30. APPS End Pause Indicator
31. FM Stereo Indicator
32. Sleep Indicator
33. Power Indicator
34. Spectrum Analyzer
35. Super Tweeter
36. Tweeter
37. Woofer
38. Cassette Compartment
39. Pause Button
40. Stop/Eject Button
41. Fast Wind Buttons
42. Play Button
43. Record Button
44. Pause Button
45. Stop/Eject Button
46. Fast Wind Buttons
47. Play Button
48. Play Button (Auto-Reverse continuing to TAPE 2)
49. Cassette Compartment
50. Speaker Release Lever
51. FM/SW₁/SW₂ Telescopic Rod Antenna
52. Line Output Sockets
53. Input Selector
54. Line Input Sockets
55. Earth Terminal
56. Beat Cancel Switch
57. External Speaker Terminals
58. Speaker Release Lever
59. AC Power Supply Socket
60. External DC Power Supply Socket
61. Timer and Main Battery Compartment

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep its safety and excellent performance:

1. Take cassette tape out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit and remove the batteries from the unit.
3. Take off nylon bands or wire holders where they need be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
Main Body Section			
1	Front panel	1. Battery compartement lid..... (A) 2. Screw (B)x8 3. Open the cassette holder.	4-1
2	Timer PWB	1. Screw (C)x1	4-2
3	Tuner frame	1. Screw (D)x1 2. Socket (E)x1	4-2
4	Mechanism block (TAPE 1, 2)	1. Tape counter drive belt... (F) 2. Screw (G)x4 3. Socket (H)x4	4-2, 3
5	Main PWB	1. Screw (I)x3	4-2
6	Power amp PWB	1. Screw (J)x1 2. Lever (K) 3. Screw (L)x2	4-3
Speaker Section			
1	Front panel	1. Screw (M)x5 2. Bushing (N)	4-4

• **Cares When Assembling**

Push the play buttons of Tape 1 and Tape 2 mechanisms before fitting the front panel of main body, and then fit the front panel in the state that the direction knobs is set to lower side (Side B position).

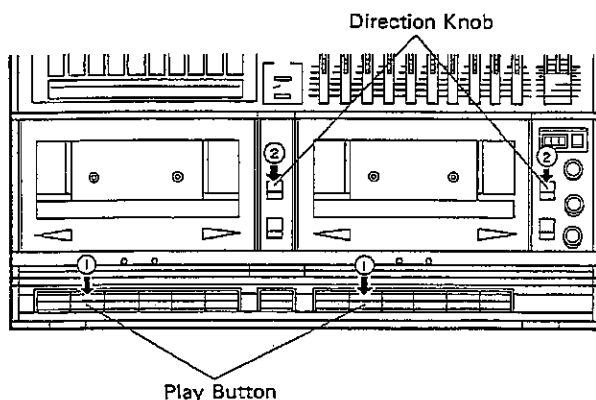


Figure 4-5

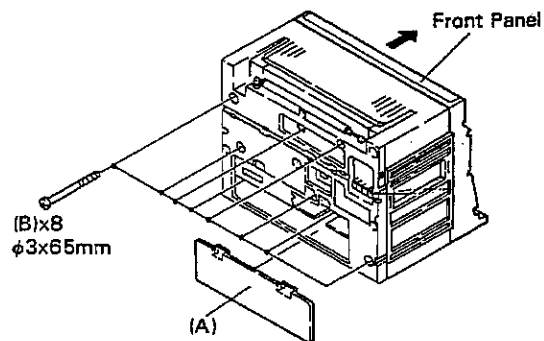


Figure 4-1

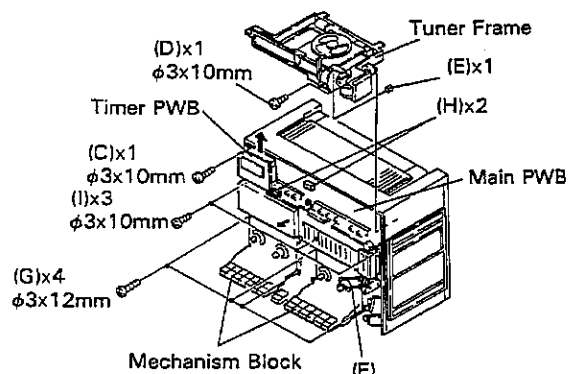


Figure 4-2

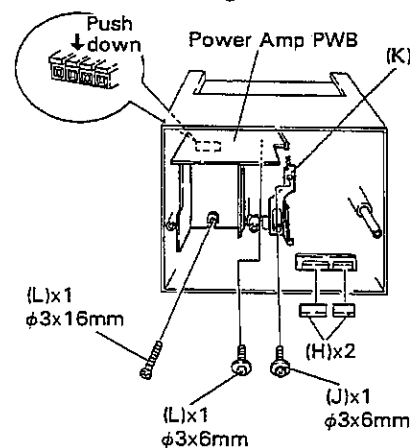


Figure 4-3

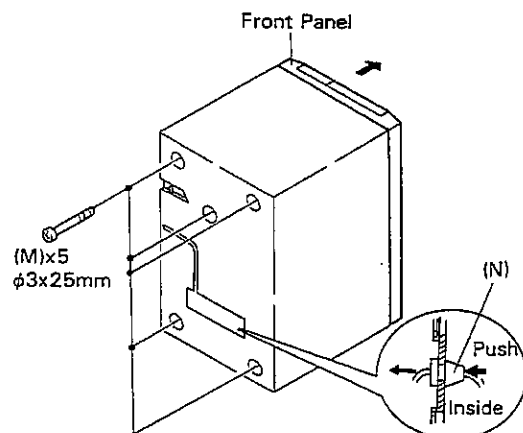


Figure 4-4

MECHANICAL ADJUSTMENT

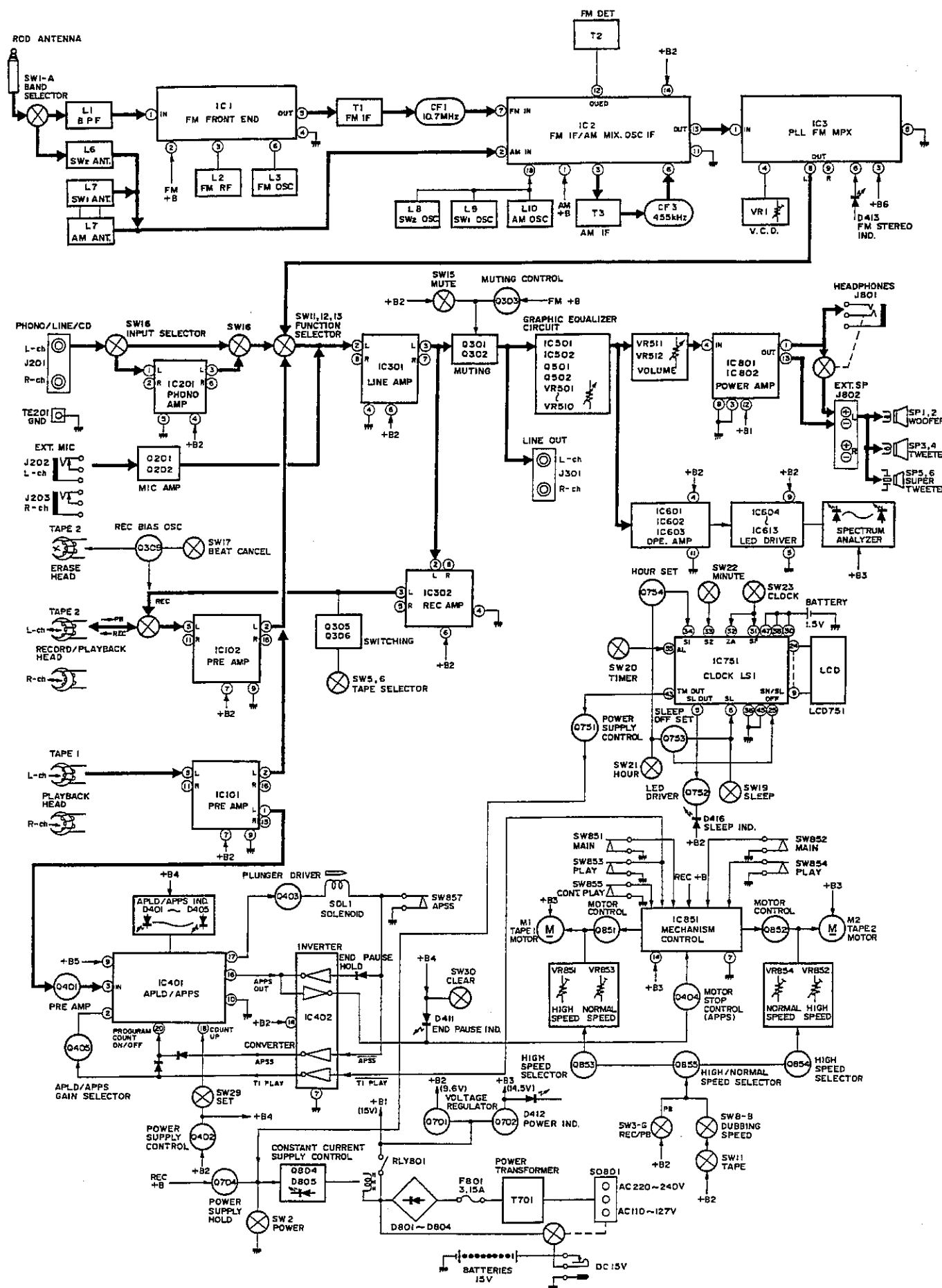


Figure 5 BLOCK DIAGRAM

ITEM	JIG	ADJUSTMENT POINTS	REMARK (CHECK)
Driving power	Tape tension measuring cassette Play, Forward TW-2412 Play, Reverse TW-2422	—	(More than 150 g)
Torque	Torque meter Play, Forward TW-2111 Play, Reverse TW-2121 Fast-forward TW-2231 Rewind TW-2231	—	(Play, Forward: 30—60 g-cm) (Play, Reverse: 30—60 g-cm) (Fast-forward: 90—135 g-cm) (Rewind: 90—135 g-cm)
Azimuth	Test tape MTT-114	Azimuth adjusting screw	Sine waveform attains the maximum.
Tape speed	Test tape High speed MTT-111 Normal speed MTT-111	High speed Tape 1: VR851 Tape 2: VR852 Normal speed Tape 1: VR853 Tape 2: VR854 * Short TP801 and ground when performing the high speed adjustment.	High speed 6,000 ± 80 Hz Normal speed 3,000 ± 30 Hz

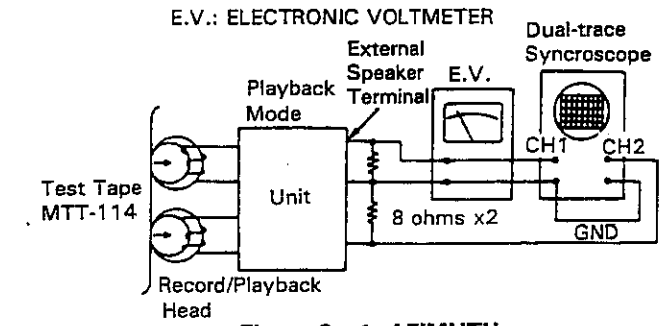


Figure 6-1 AZIMUTH

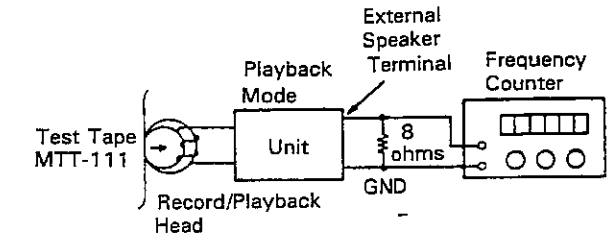


Figure 6-2 TAPE SPEED

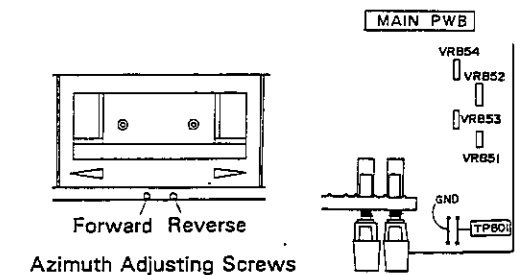


Figure 6-3 ADJUSTMENT POINTS

TEST TAPES FOR MEASUREMENT

COMPACT CASSETTE TYPE			
TITLE	MODEL	FREQUENCY/LEVEL	APPLICATION
FLUTTER	MTT-111	3 kHz, -10 dB	Tape speed, Wow and flutter check
AZIMUTH	MTT-113 MTT-113C MTT-114	6.3 kHz, -10 dB 8 kHz, -10 dB 10 kHz, -10 dB	Head azimuth adjustment
DISTORTION	MTT-118	1 kHz, -10 dB	Distortion check level adjustment
DOLBY LEVEL CALIBRATION	MTT-150	Dolby B-Type Tone 200 nwb/m	Dolby NR B-type level adjustment
BLANK	MTT-502	—	Record frequency check

TORQUE METER FOR COMPACT CASSETTE		
MODEL	MEASUREMENT RANGE	APPLICATION
TW-2111	10—100 g-cm	Normal : Playback torque
	1.5—10 g-cm	Normal : Back tension
TW-2121	10—100 g-cm	Reverse : Playback torque
	1.5—10 g-cm	Reverse : Back tension
TW-2231	30—200 g-cm	Fast-forward, Rewind torque
TW-2412	0—300 g	Normal : Driving power
TW-2422	0—300 g	Reverse : Driving power

CIRCUIT ADJUSTMENT (AUDIO SECTION)

SETTING POSITION OF SWITCH AND KNOB			
<ul style="list-style-type: none"> • Volume control: Maximum • Graphic equalizer: Center • Function selector switch: Tape • Tape selector switch: Normal • Beat cancel switch: A 			
ITEM	INPUT	ADJUSTMENT POINT	REMARKS (CHECK)
BIAS OSCILLATION FREQUENCY	—	—	(A: 104 ± 3.5 kHz) (B: 98 ± 3 kHz) (C: 99.5 ± 3.5 kHz)
ERASE CURRENT	—	—	(Normal: 45 ± 20 mV)
PLAYBACK AMPLIFIER SENSITIVITY	Test tape MTT-118	—	(3.0 V \pm 3 dB)
CLOCK REFERENCE FREQUENCY	—	TC751	32.768 kHz \pm 0.15 Hz

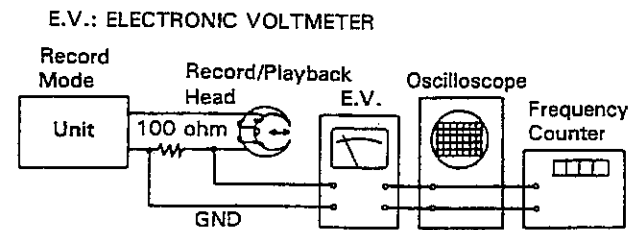


Figure 7-1 BIAS OSCILLATION FREQUENCY

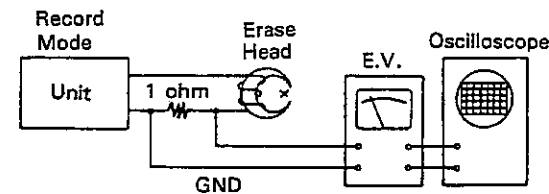


Figure 7-2 ERASE CURRENT

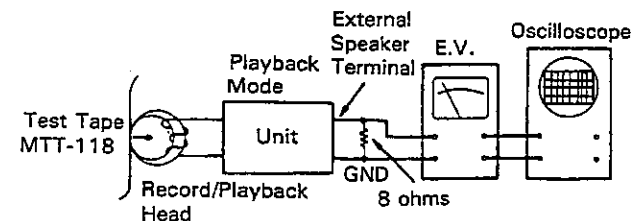


Figure 7-3 PLAYBACK AMPLIFIER SENSITIVITY

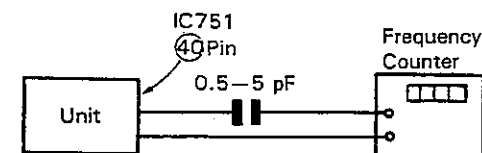


Figure 7-4 CLOCK REFERENCE FREQUENCY

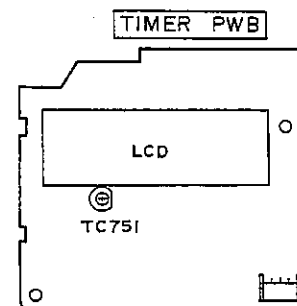


Figure 7-5 ADJUSTMENT POINT

CIRCUIT ADJUSTMENT (TUNER SECTION)

AM IF/RF ADJUSTMENT

SWITCH POSITION		Function Selector: Radio Volume Control: Maximum			
SIGNAL GENERATOR		400 Hz, 30%, AM modulated			
STEP	TEST STAGE	FRE-QUENCY	DIAL POINTER SETTING	AD-JUST-MENT	REMARKS
AM IF					
1	IF	455 kHz	High frequency	T3	Adjust for best "IF" curve.
AM RF					
2	Band coverage	510 kHz	Lowest frequency	L10	Adjust for maximal output.
3		1,650 kHz	Highest frequency	TC8	
4	Repeat steps 2 and 3 until no further improvement can be made.				
5	Tracking	600 kHz	600 kHz	L7	Adjust for maximal output.
6		1,400 kHz	1,400 kHz	TC5	
7	Repeat steps 5 and 6 until no further improvement can be made.				
SW ₁ RF					
8	Band coverage	2.25 MHz	Lowest frequency	L9	Adjust for maximal output.
9		7.4 MHz	Highest frequency	TC7	
10	Repeat steps 8 and 9 until no further improvement can be made.				
11	Tracking	2.6 MHz	2.6 MHz	L7	Adjust for maximal output.
12		6.0 MHz	6.0 MHz	TC4	
13	Repeat steps 11 and 12 until no further improvement can be made.				
SW ₂ RF					
14	Band coverage	7.2 MHz	Lowest frequency	L8	Adjust for maximal output.
15		22.5 MHz	Highest frequency	TC6	
16	Repeat steps 14 and 15 until no further improvement can be made.				
17	Tracking	8.5 MHz	8.5 MHz	L6	Adjust for maximal output.
18		19 MHz	19 MHz	TC3	
19	Repeat steps 17 and 18 until no further improvement can be made.				

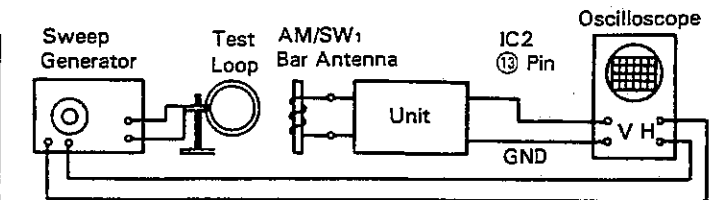


Figure 8-1 AM IF

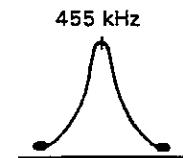


Figure 8-2 AM IF CURVE

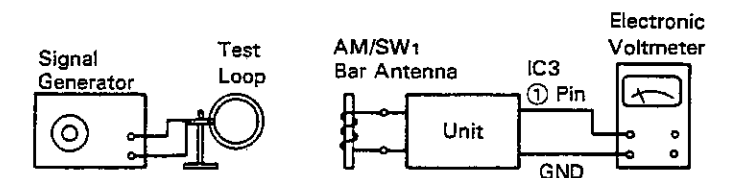


Figure 8-3 AM RF

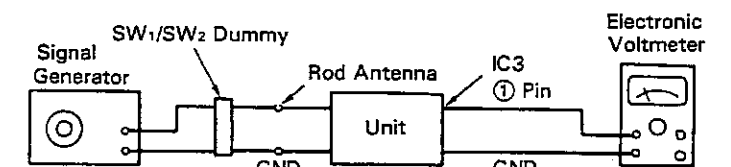
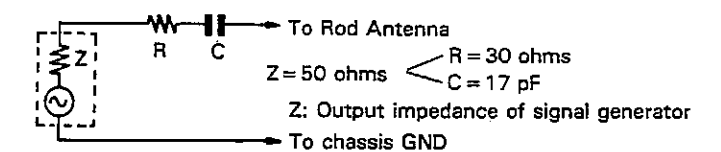
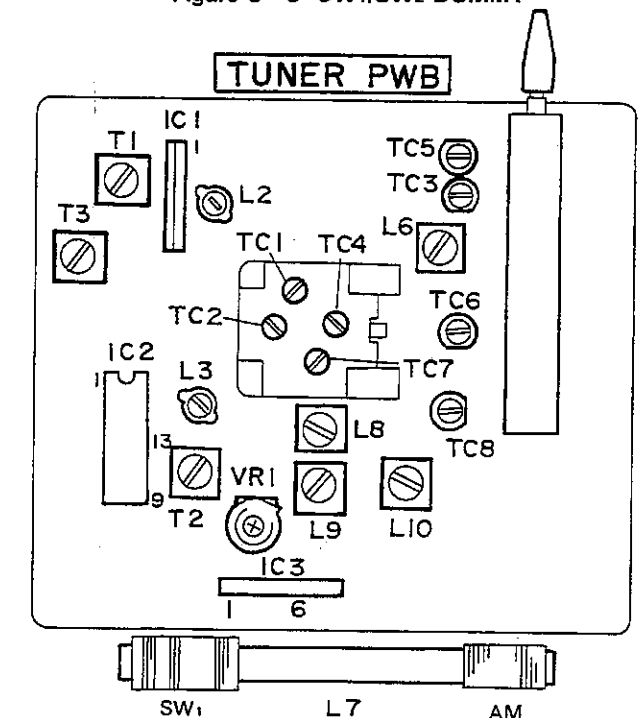
Figure 8-4 SW₁/SW₂ RFFigure 8-5 SW₁/SW₂ DUMMY

Figure 8-6 ADJUSTMENT POINTS

FM IF/RF ADJUSTMENT

SWITCH POSITION		Function Selector: Radio Band Selector: FM FM Mode: Stereo Volume Control: Maximum			
SIGNAL GENERATOR		400 Hz, 30%, FM modulated			
STEP	TEST STAGE	FREQUENCY	DIAL POINTER SETTING	ADJUSTMENT	REMARKS
1	IF	10.7 MHz	High frequency	T1	1. Using a minus driver, turn the core of T2 counter-clockwise before taking it out of the bobbin. 2. Adjust for best "IF" curve.
2	Detection			T2	Adjust for best "S" curve.
3	Repeat steps 1 and 2 until no further improvement can be made.				
4	Band coverage	87.1 MHz	Lowest frequency	L3	Adjust for maximal output.
5		109 MHz	Highest frequency	TC2	
6	Repeat steps 4 and 5 until no further improvement can be made.				
7	Tracking	88 MHz	88 MHz	L2	Adjust for maximal output.
8		108 MHz	108 MHz	TC1	
9	Repeat steps 7 and 8 until no further improvement can be made.				

VCO FREQUENCY ADJUSTMENT

SIGNAL GENERATOR		400 Hz, 30%, FM modulated (mono signal)		
FREQUENCY	DIAL POINTER SETTING	ADJUST- MENT	REMARKS	
FM mono position		FM stereo position (unmodulated)		
98 MHz at 54 dB	98 MHz	VR1	Adjust for 38.0 kHz \pm 100 Hz.	

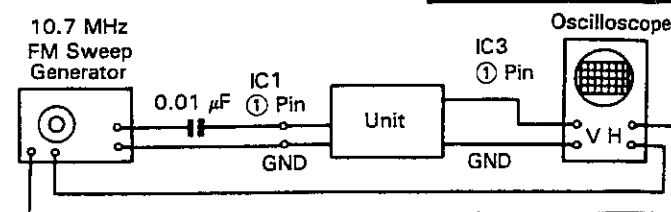


Figure 9-1 FM IF

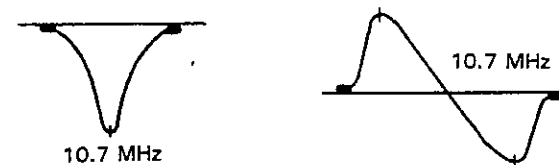


Figure 9-2 FM IF CURVE Figure 9-3 FM S CURVE

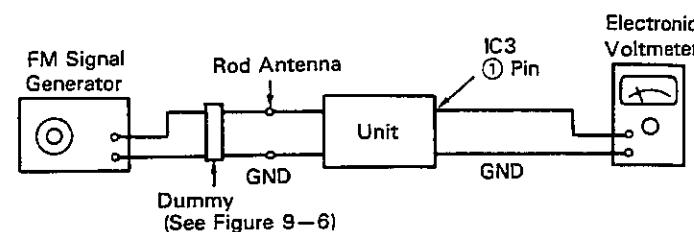


Figure 9-4 FM RF

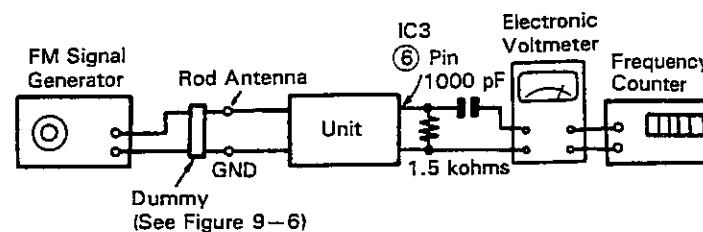


Figure 9-5 VCO FREQUENCY

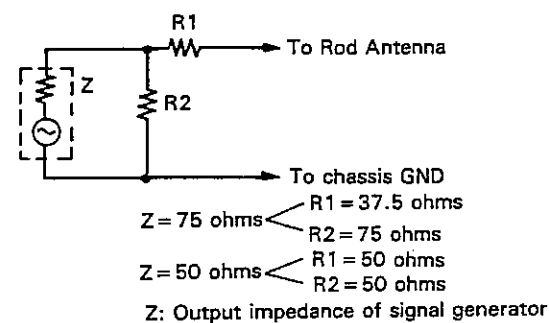


Figure 9-6 FM DUMMY

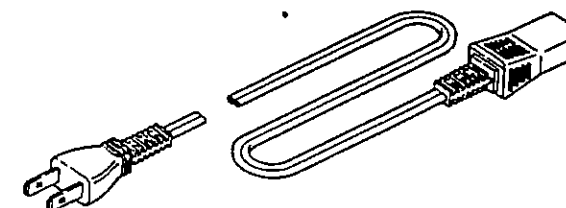
NOTES ON SCHEMATIC DIAGRAM

- Resistor:
To differentiate the units of resistors, such symbol as K is used: the symbol K means 1000 ohm and the resistor without any symbol is ohm-type resistor.
- Capacitor:
To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
(CH), (TH), (RH), (UJ): Temperature compensation
(ML): Mylar type
(P.P.): Polypropylene type
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.

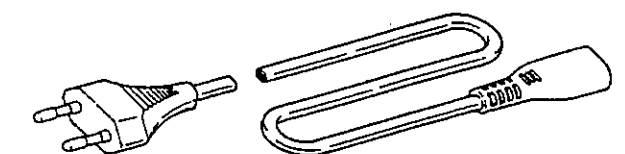
1. For the band selector switch of the tuner circuit:
(): AM mode
Marking except for (): FM mode
 2. For the audio circuit:
(): Record mode
Marking except for (): Stop mode
 3. For the mechanism control circuit:
(): High speed mode
Without mark: Stop mode
- Parts marked with "Δ" () are important for 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 and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.

AC POWER SUPPLY CORD

QACCZ0059AF00



QACCZ0060AF00



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 slightly loosening the screw to the visible indication of the side of your local voltage.

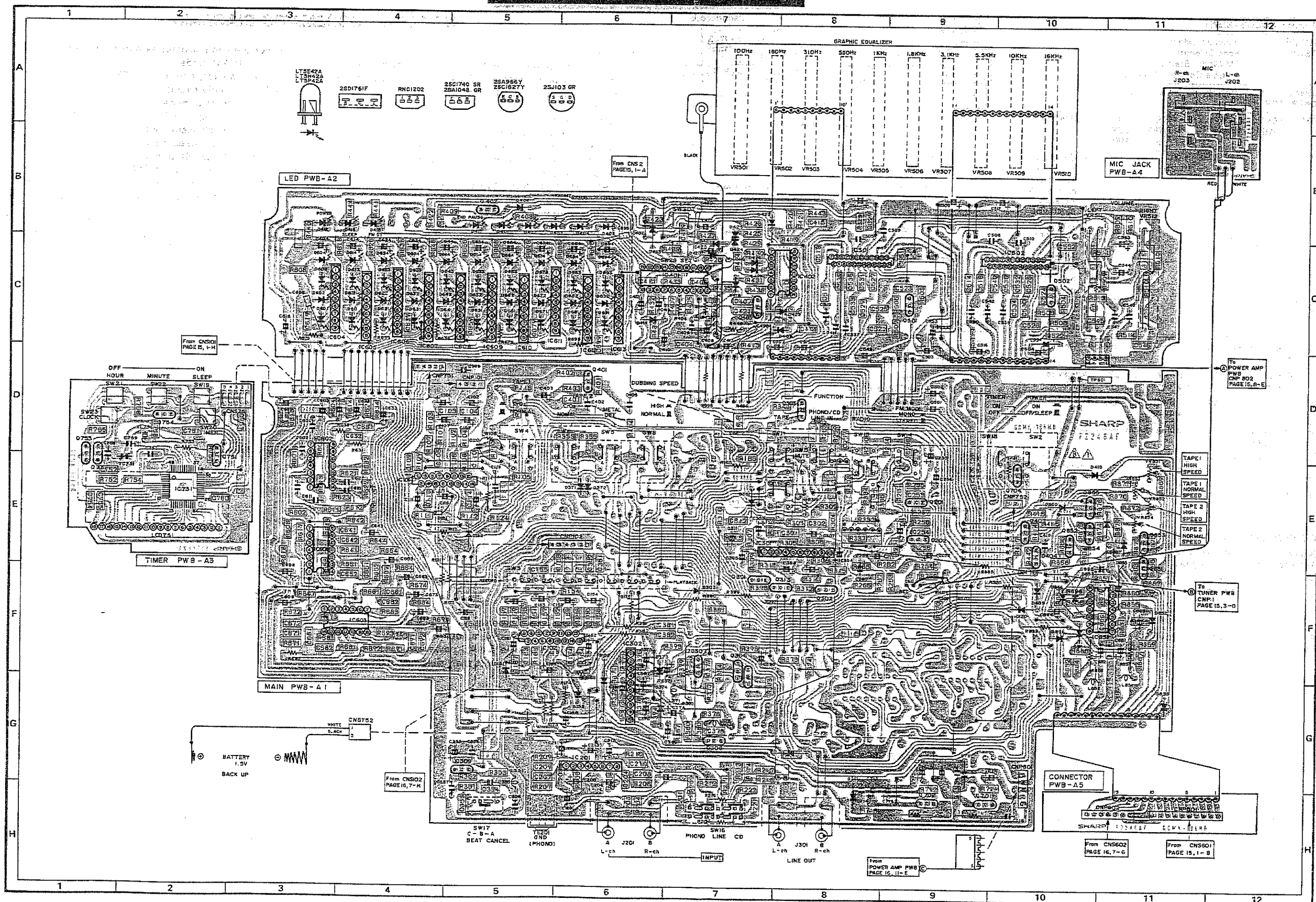


Figure 11 WIRING SIDE OF P.W.BOARD

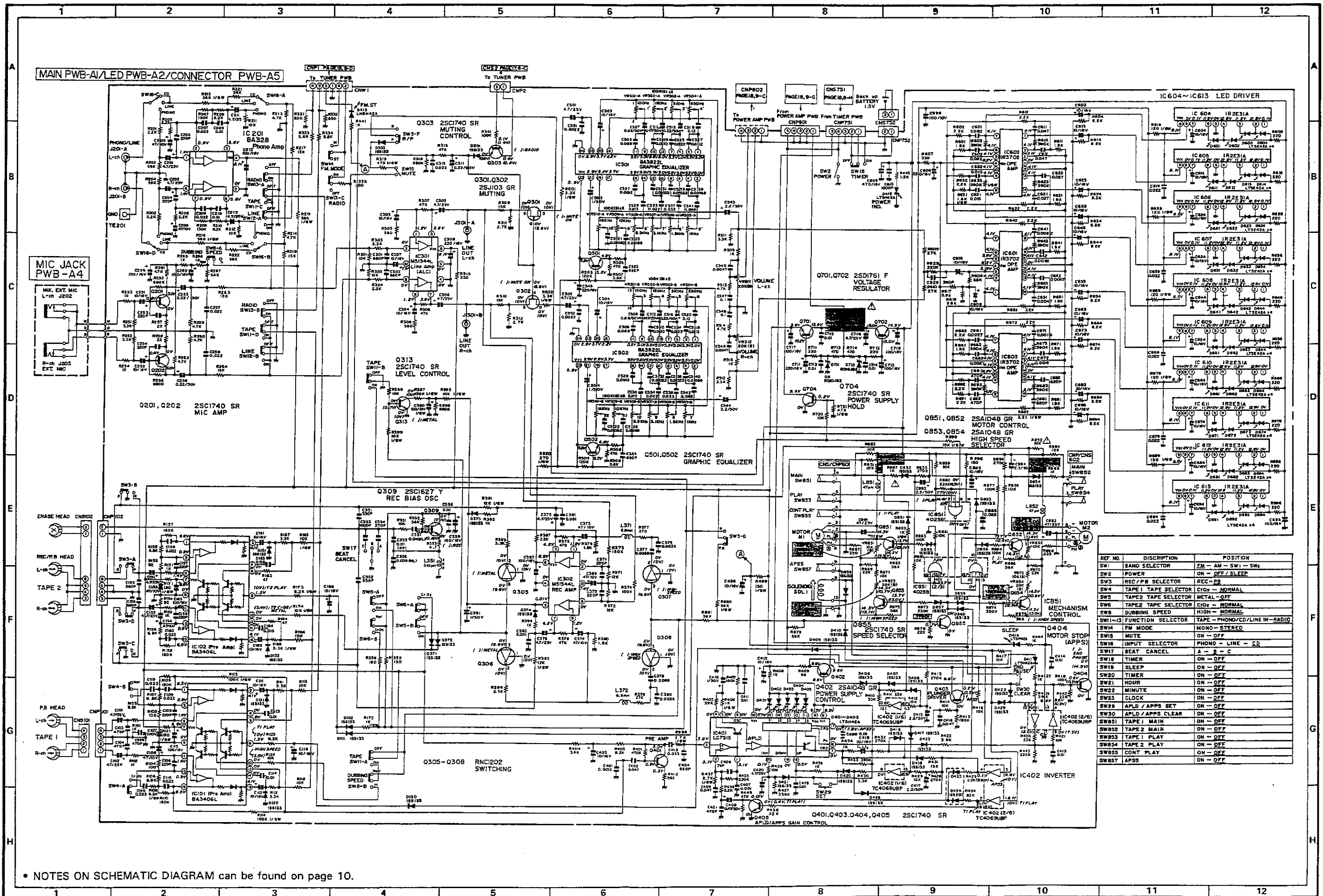


Figure 13 SCHEMATIC DIAGRAM

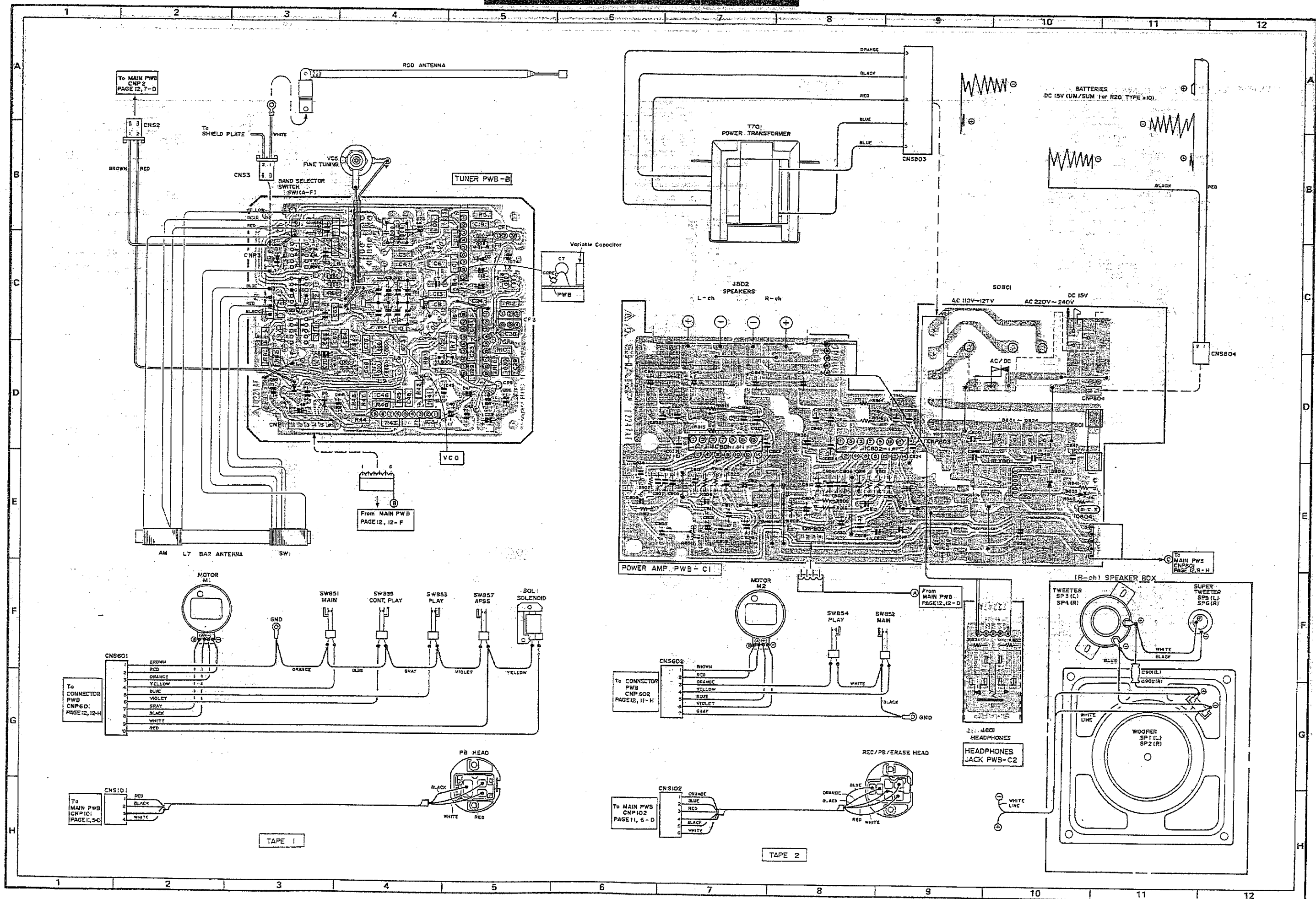
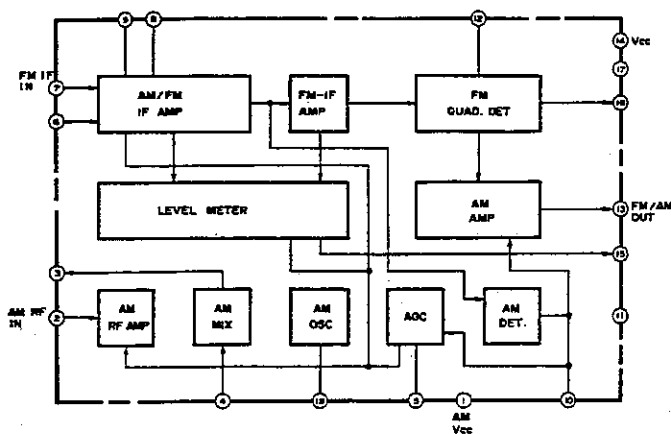


Figure 15 WIRING SIDE OF P.W. BOARD

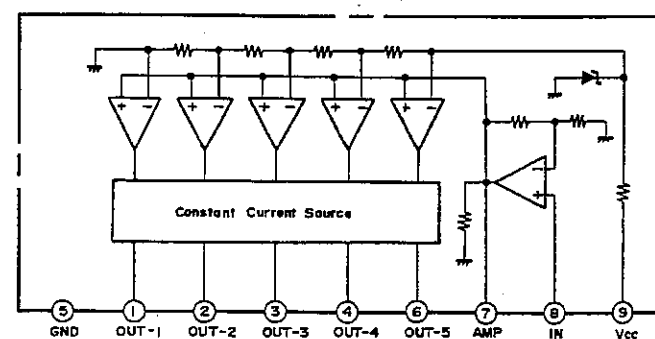


-17-

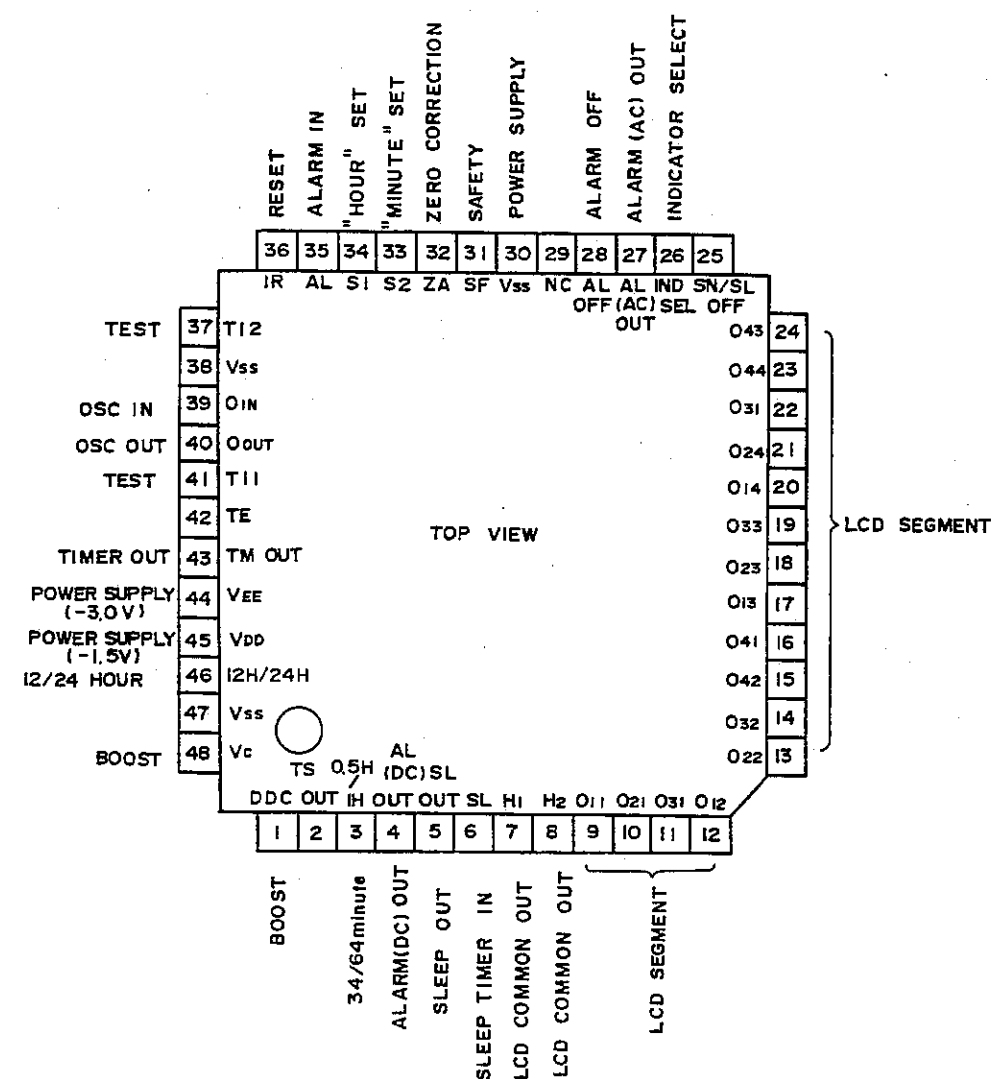
AN7224



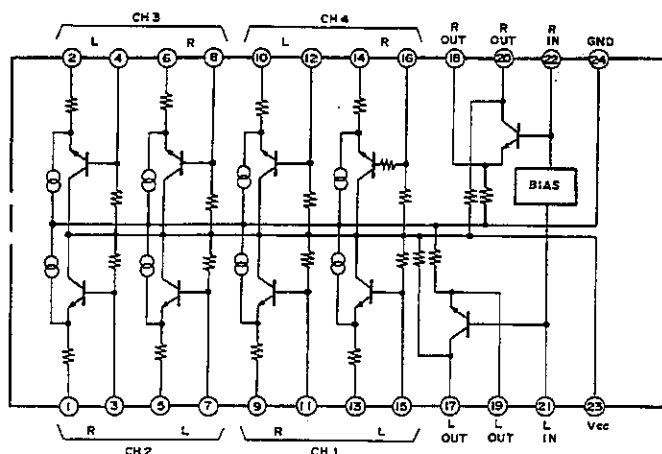
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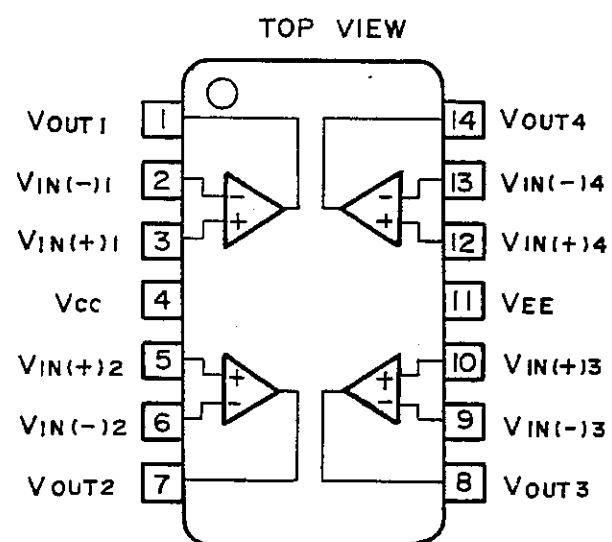
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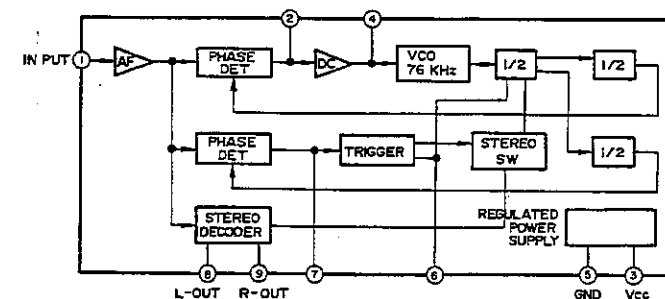
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IR3702



TA7343P



μPC1288V

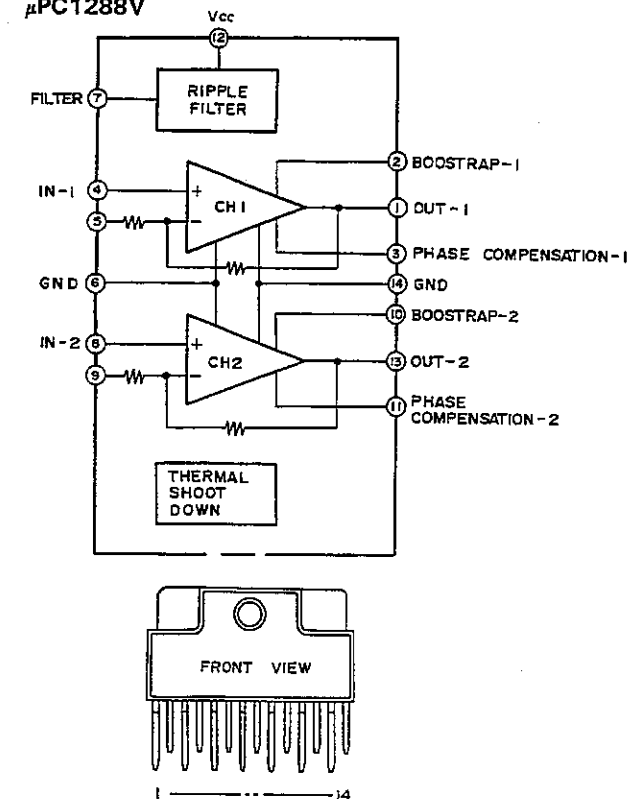


Figure 19 EQUIVALENT CIRCUIT (BLOCK DIAGRAM) OF IC

Figure 20 EQUIVALENT CIRCUIT (BLOCK DIAGRAM) OF IC

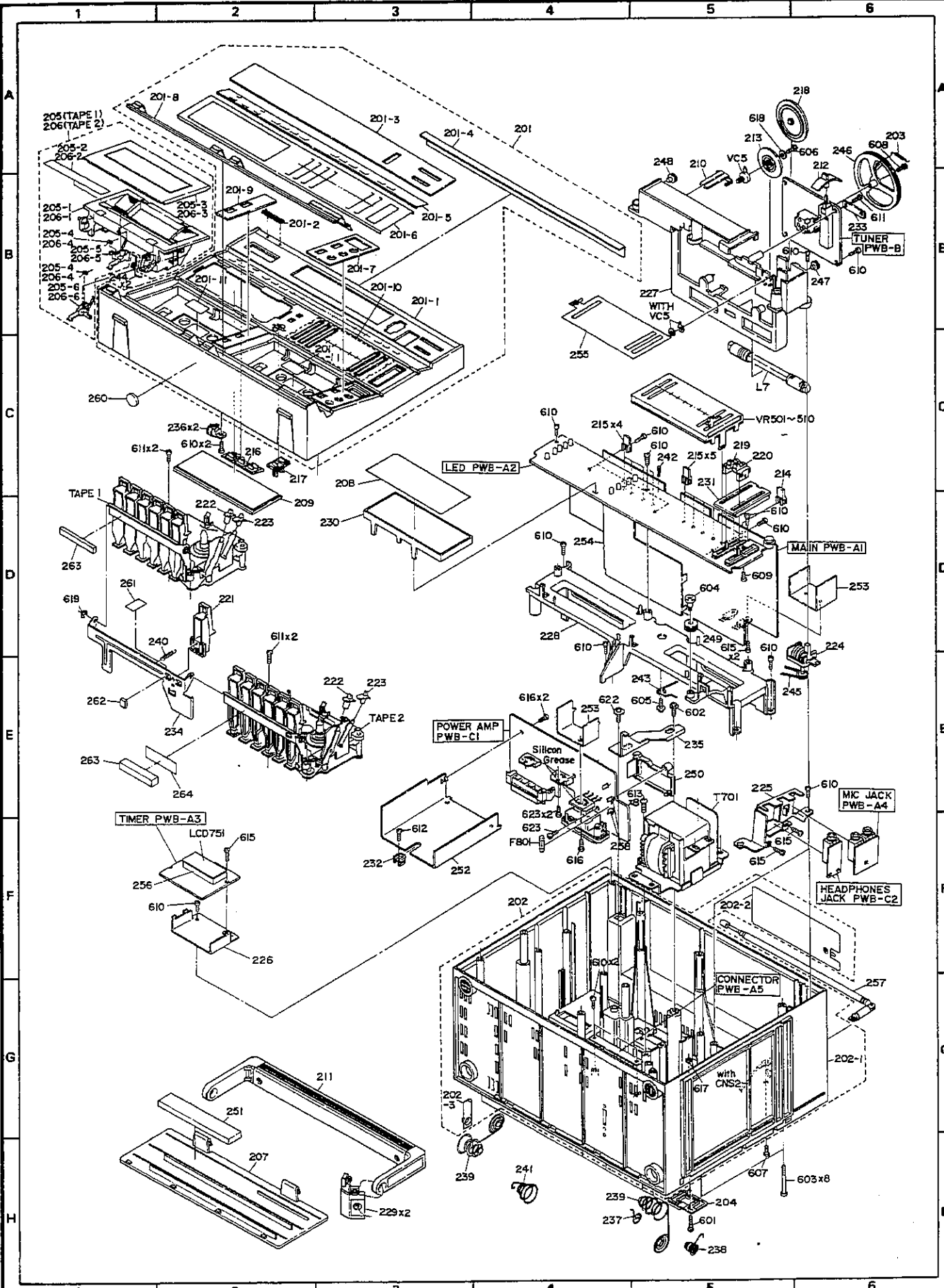


Figure 21 CABINET EXPLODED VIEW

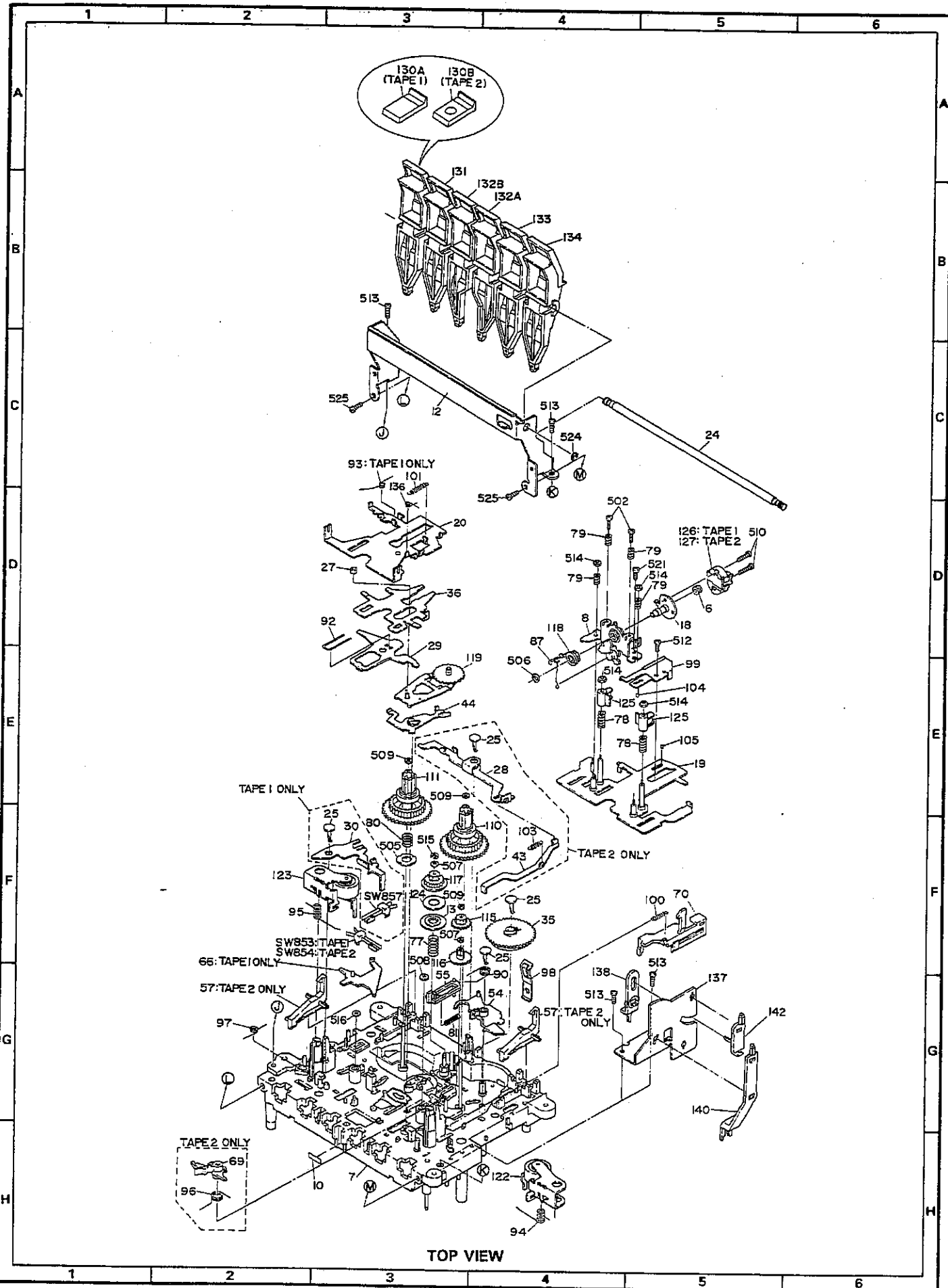


Figure 22 MECHANISM EXPLODED

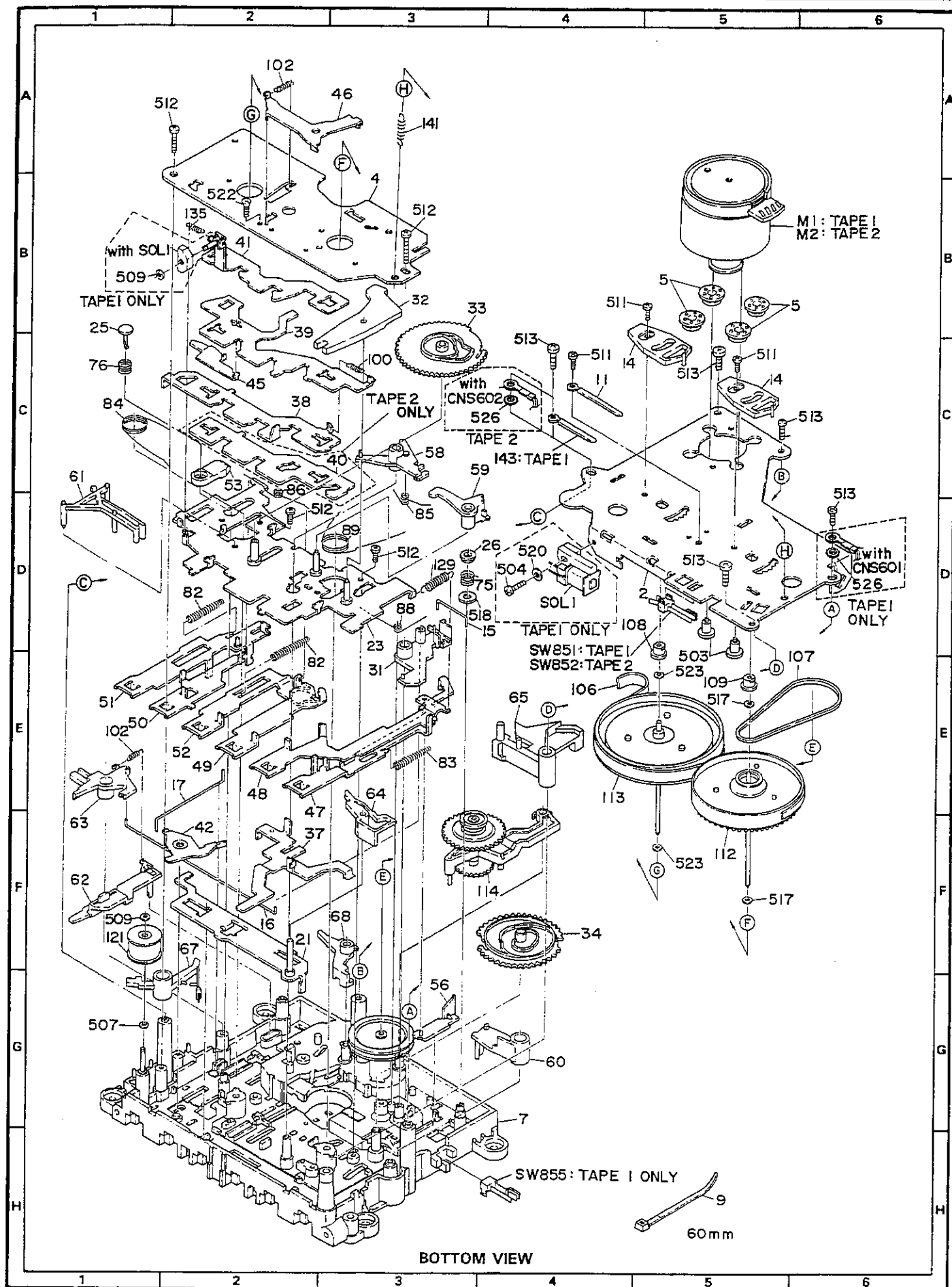


Figure 23 MECHANISM EXPLODED

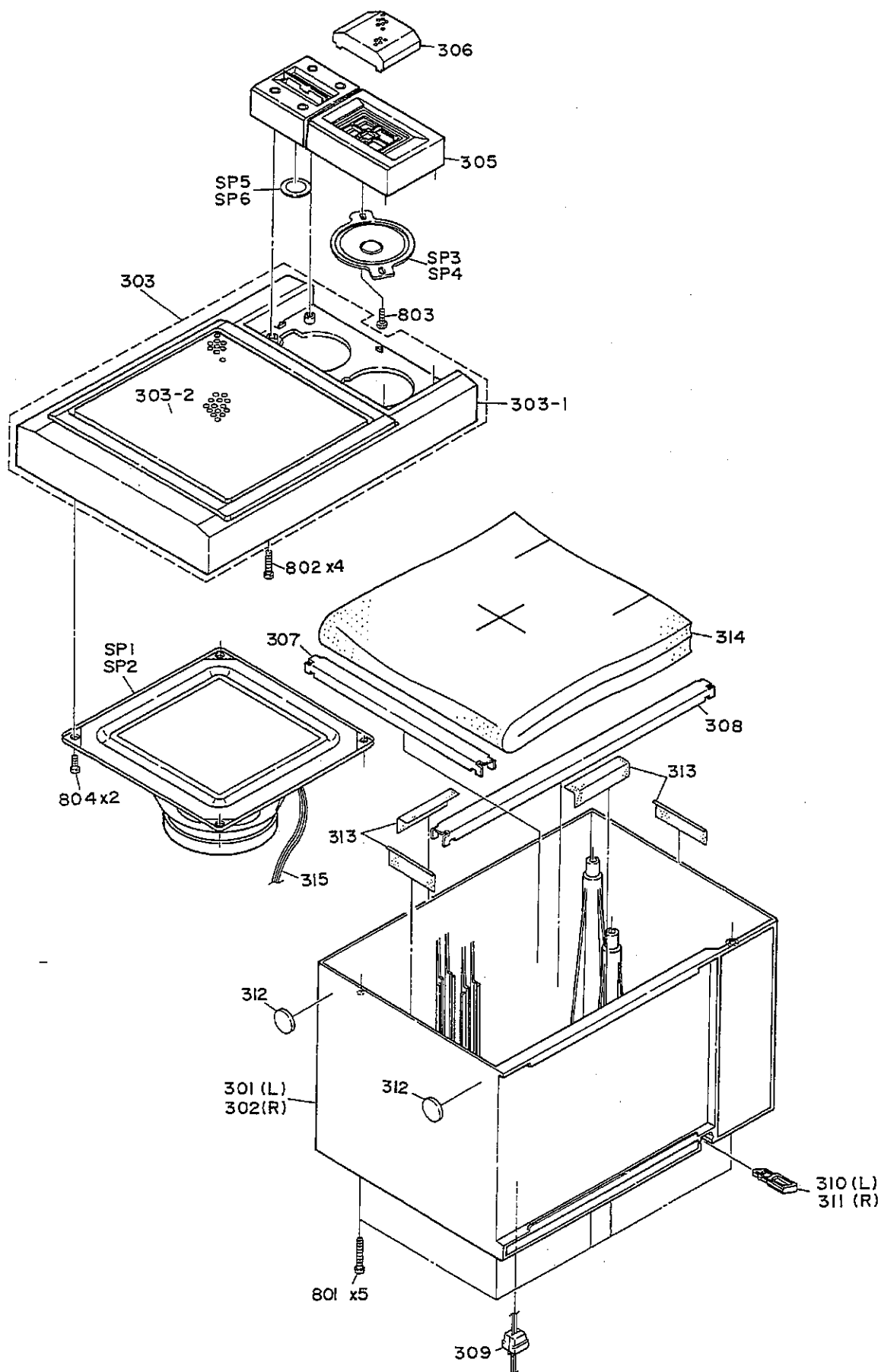


Figure 24 SPEAKER EXPLODED VIEW

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 |

NOTE:

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	REF.NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUITS				D426,429	VHD1SS133// -1	Silicon,1SS133	A A
IC1	VHiBA4402// -1	FM Front End,BA4402	A F	D601~604	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC2	VHiAN7224// -1	FM IF/AM Circuit,AN7224	A H	D611~614	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC3	VHiTA7343P/ -1	PLL FM MPX,TA7343P	A G	D621~624	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC101,102	VHiBA3406L/ -1	Pre Amp.,BA3406L	A F	D631~634	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC201	RH- iX1116AFZZ	Phono Amp,BA328	A G	D641~644	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC301	VHiM51544AL-1	Line Amp.,M51544AL	A G	D651~654	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC302	VHiM51544AL-1	Record Amp.,M51544AL	A G	D661~664	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC401	VHiLC7515// -1	APLD,LC7515	A H	D671~674	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC402	RH- iX1154AFZZ	Inverter, TC4069	A E	D681~684	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
		UBP		D691~694	VHPLT5E42A/ -1	LED,Green,LT5E42A	A B
IC501,502	VHiBA3822L/ -1	Graphic Equalizer,BA3822L	A G	D711	VHERD100JB2-1	Zener,10V,RD10JB2	A B
IC601~603	VHi iR3702// -1	Operational Amp.,iR3702	A H	D712	VHERD160JB2-1	Zener,16V,RD16JB2	A A
IC604~613	VHi iR2E31A/ -1	LED Driver,iR2E31A	A F	△D801~804	VHD4G4B44// -1	Bridge,4G4B44	A G
IC751	VHiLR3441// -1	LSI,LR3441	A N	D805	VHPLT5P42A/ -1	LED,Red,LT5P42A	A B
IC801,802	VHiUPC1288V-1	Power Amp.,μPC1288V	A L	D806	VHD11E4TA2// -1	Silicon,11E4	A B
IC851	RH- iX1150AFZZ	Mechanism Control,4025B	A E	D851~850	VHD1SS133// -1	Silicon,1SS133	A A
TRANSISTORS				FILTERS			
Q201,202	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	CF1	RF iLF0080AFZZ	Ceramic,FM IF,10.7MHz	A D
Q301,302	VS2SJ103GR/ -1	FET,2SJ103 GR	A C	CF3	RF iLA0085AFZZ	Ceramic,AM IF,455kHz	A E
Q303	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	TRANSFORMERS			
Q305~308	VSRNC1202// -1	Digital,NPN,RNC1202	A B	T1	RC iLi0324AFZZ	FM IF	A C
Q309	VS2SC1627Y/ -1	Silicon,NPN,2SC1627 Y	A D	T2	RC iLi0312AFZZ	FM Detector	A C
Q313	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	T3	RC iLi0310AFZZ	AM IF	A C
Q401	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	△T701	RTRNP1249AFZZ	Power	A Z
Q402	VS2SA1048GR-1	Silicon,PNP,2SA1048 GR	A B	COILS			
Q403~405	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	L1	RC iLA0620AFZZ	FM Band Pass Filter	A C
Q501,502	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	L2	RC iLB0672AFZZ	FM RF	A C
Q701,702	VS2SD1761F/ -1	Silicon,NPN,2SD1761 F	A D	L3	RC iLB0672AFZZ	FM Oscillator	A C
Q704	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	L6	RC iLA0556AFZZ	SW2 Antenna	A D
Q751,752	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	L7	RC iLA0818AFZZ	AM/SW Bar Antenna	A M
Q753,754	VS2SA1048GR-1	Silicon,PNP,2SA1048 GR	A B	L8	RC iLB0625AFZZ	SW2 Oscillator	A C
Q804	VS2SA966-Y/ -1	Silicon,PNP,2SA966 Y	A D	L9	RC iLB0624AFZZ	SW1 Oscillator	A C
Q851~854	VS2SA1048GR-1	Silicon,PNP,2SA1048 GR	A B	L10	RC iLB0623AFZZ	AM Oscillator	A C
Q855	VS2SC1740SR-1	Silicon,NPN,2SC1740 SR	A B	L351	RC iLF0072AFZZ	Bias Oscillator,510 μH	A C
DIODES				L371,372	RC iLZ0104AFZZ	6.8 mH	A C
D1,3	VHD1S2076RE-1	Silicon,1S2076RE	A A	L851,852	RC iLF0014AGZZ	47 μH,Choke	A B
D4,5	VHD1S2076RE-1	Silicon,1S2076RE	A A	CONTROLS			
D101,102	VHD1SS133// -1	Silicon,1SS133	A A	TC3	RTō-H1072AFZZ	Trimmer,SW2 Antenna	A C
D120~122	VHD1SS133// -1	Silicon,1SS133	A A	TC5	RTō-H1072AFZZ	Trimmer,AM Antenna	A C
D151,152	VHD1SS133// -1	Silicon,1SS133	A A	TC6	RTō-H1072AFZZ	Trimmer,SW2 Oscillator	A C
D301,303	VHD1SS133// -1	Silicon,1SS133	A A	TC8	RTō-H1072AFZZ	Trimmer,AM Oscillator	A C
D371~374	VHD1SS133// -1	Silicon,1SS133	A A	TC751	RTō-H1067AFZZ	Trimmer,11 pF	A D
D401~405	VHPLT5P42A/ -1	LED,Orange,LT5H42A	A B	VCI~4	RVC-R0096AFZZ	Variable Capacitor With Trimmers	A N
D406~410	VHD1SS133// -1	Silicon,1SS133	A A	VC5	RVC-Z0066AFZZ	Fine Tuning	A E
D411	VHPLT5H42A/ -1	LED,Orange,LT5H42A	A B	VR1	RVR-M0390AFZZ	5 kohms (B)	A B
D412,413	VHPLT5P42A/ -1	LED,Orange,LT5H42A	A B	VR501~510	RVR-Z0222AFZZ	100 kohm (B)×10	A Y
D416	VHPLT5P42A/ -1	LED,Red LT5P42A	A B				
D417~423	VHD1SS133// -1	Silicon,1SS133	A A				
D424,425	VHD1SS201// -1	Silicon,1SS201	A B				

REF.NO.	PART NO.	DESCRIPTION	CODE
VR511,512	RVR-Q0158AFZZ	20 kohms (B)	A F
VR851,852	RVR-M0464AFZZ	10 kohm (B)	A B
VR853,854	RVR-M0465AFZZ	20 kohms (B)	A B

CRYSTAL

XL751	RCRSP0051AFZZ	32.768 kHz	A K
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ELECTROLYTIC CAPACITORS

(All electrolytic capacitors are $\pm 20\%$ type.)

C12	RC-EZA336AF1C	33 μ F,16V	A A
C15	RC-EZA106AF1C	10 μ F,16V	A B
C20	RC-EZA476AF1A	47 μ F,10V	A A
C25	RC-EZA107AF1A	100 μ F,10V	A B
C26	RC-EZA475AF1E	4.7 μ F,25V	A B
C40	RC-EZA106AF1C	10 μ F,16V	A B
C41	RC-EZA335AF1H	3.3 μ F,50V	A A
C42	RC-EZA105AF1H	1 μ F,50V	A A
C44	RC-EZA475AF1E	4.7 μ F,25V	A B
C47	RC-EZA105AF1H	1 μ F,50V	A A
C48	RC-EZA105AF1H	1 μ F,50V	A A
C49	RC-EZA227AF1A	220 μ F,10V	A B
C74	RC-EZA106AF1C	10 μ F,16V	A B
C75	RC-EZA476AF1A	47 μ F,10V	A A
C101,102	RC-GZA475AF1E	4.7 μ F,25V	A A
C107,108	RC-GZA476AF1A	47 μ F,10V	A A
C111,112	RC-GZA106AF1C	10 μ F,16V	A A
C115	RC-GZA107AF1C	100 μ F,16V	A B
C118	RC-GZA106AF1C	10 μ F,16V	A A
C151,152	RC-GZA475AF1E	4.7 μ F,25V	A A
C153,154	RC-GZA476AF1A	47 μ F,10V	A A
C161,162	RC-GZA106AF1C	10 μ F,16V	A A
C165	RC-GZA107AF1C	100 μ F,16V	A B
C166	RC-GZA106AF1C	10 μ F,16V	A A
C201,202	RC-GZA475AF1E	4.7 μ F,25V	A A
C205,206	RC-GZA476AF1A	47 μ F,10V	A A
C211,212	RC-GZA475AF1E	4.7 μ F,25V	A A
C213	RC-GZA107AF1C	100 μ F,16V	A B
C251,252	RC-GZA106AF1C	10 μ F,16V	A A
C255,256	RC-GZA224AF1H	0.22 μ F,50V	A A
C259	RC-GZA227AF1C	220 μ F,16V	A B
C260	RC-GZA107AF1C	100 μ F,16V	A B
C303,304	RC-GZA106AF1C	10 μ F,16V	A A
C305,306	RC-GZA475AF1E	4.7 μ F,25V	A A
C307	RC-GZA106AF1C	10 μ F,16V	A A
C308	RC-GZA227AF1C	220 μ F,16V	A B
C311	RC-GZA224AF1H	0.22 μ F,50V	A A
C359	RC-GZA107AF1C	100 μ F,16V	A B
C373,374	RC-GZA475AF1A	47 μ F,10V	A A
C375,376	RC-GZA475AF1E	4.7 μ F,25V	A A
C387	RC-GZA107AF1C	100 μ F,16V	A B
C389	RC-GZA476AF1A	47 μ F,10V	A A
C390	RC-GZA107AF1A	100 μ F,10V	A C
C391	RC-EZY105AF1H	1 μ F,50V	A B
C403	RC-EZY106AF1C	10 μ F,16V	A B
C408	RC-GZA474AF1H	0.47 μ F,50V	A A
C410	RC-GZA105AF1H	1 μ F,50V	A A
C412	RC-EZY106AF1C	10 μ F,16V	A B
C413	RC-GZA225AF1H	2.2 μ F,50V	A A
C417	RC-GZA225AF1H	2.2 μ F,50V	A A
C418	VCEALA1CW106M	10 μ F,16V	A B
C420	RC-GZA475AF1E	4.7 μ F,25V	A A
C501,502	RC-GZA475AF1E	4.7 μ F,25V	A A
C503	RC-GZA106AF1C	10 μ F,16V	A A
C504	RC-EZY106AF1C	10 μ F,16V	A B
C507,508	RC-EZY684AF1H	0.68 μ F,50V	A B
C511,512	RC-EZY474AF1H	0.47 μ F,50V	A B
C515,516	RC-EZY224AF1H	0.22 μ F,50V	A B

REF.NO.	PART NO.	DESCRIPTION	CODE
C543,544	RC-EZY225AF1H	2.2 μ F,50V	A B
C549	RC-GZA227AF1C	220 μ F,16V	A B
C553	RC-EZY105AF1H	1 μ F,50V	A B
C554	RC-EZT105AF1H	1 μ F,50V	A B
C503	RC-GZA106AF1C	10 μ F,16V	A A
C604	RC-EZY106AF1C	10 μ F,16V	A B
C606	RC-GZA227AF1C	220 μ F,16V	A B
C608	RC-GZA105AF1C	10 μ F,16V	A A
C609	RC-GZA477AF1C	470 μ F,16V	A C
C613	RC-GZA106AF1C	10 μ F,16V	A A
C614	RC-EZY106AF1C	10 μ F,16V	A B
C618	RC-GZA106AF1C	10 μ F,16V	A A
C623	RC-GZA106AF1C	10 μ F,16V	A A
C624	RC-EZY106AF1C	10 μ F,16V	A B
C633	RC-GZA106AF1C	10 μ F,16V	A A
C634	RC-EZY106AF1C	10 μ F,16V	A B
C643	RC-GZA106AF1C	10 μ F,16V	A A
C644	RC-EZY106AF1C	10 μ F,16V	A B
C653	RC-GZA106AF1C	10 μ F,16V	A A
C654	RC-EZY106AF1C	10 μ F,16V	A B
C663	RC-GZA106AF1C	10 μ F,16V	A A
C664	RC-EZY106AF1C	10 μ F,16V	A B
C673	RC-GZA106AF1C	10 μ F,16V	A A
C674	RC-EZY106AF1C	10 μ F,16V	A B
C683	RC-GZA106AF1C	10 μ F,16V	A A
C684	RC-EZY106AF1C	10 μ F,16V	A B
C693	RC-GZA106AF1C	10 μ F,16V	A A
C694	RC-EZY106AF1C	10 μ F,16V	A B
C695	RC-EZT107AF1C	100 μ F,16V	A B
C696	RC-GZV107AF1A	100 μ F,10V	A B
C711	RC-GZA227AF1C	220 μ F,16V	A B
C712	RC-GZA107AF1C	100 μ F,16V	A B
C716	RC-GZA475AF1E	4.7 μ F,25V	A A
C717,718	RC-GZA107AF1C	100 μ F,16V	A B
C803,804	RC-GZA335AF1H	3.3 μ F,50V	A A
C809~812	RC-GZA107AF1E	100 μ F,25V	A B
C815,816	RC-GZA226AF1E	22 μ F,25V	A B
C821,822	RC-GZV477AF1E	470 μ F,25V	A C
C829,830	RC-GZA107AF1E	100 μ F,25V	A B
C835,836	RC-GZA107AF1E	100 μ F,25V	A B
C841~844	RC-GZV228AF1C	2200 μ F,16V	A G
C852	RC-GZW478AF1E	4700 μ F,25V	A G
C881	RC-EZY476AF1E	47 μ F,25V	A B
C882	RC-GZA476AF1E	47 μ F,25V	A B
C883	RC-EZY225AF1H	2.2 μ F,50V	A B
C884	RC-GZA225AF1H	2.2 μ F,50V	A A
C899	RC-EZV106AF1C	10 μ F,16V	A B
C901,902	VCE9AT1VC475M	4.7 μ F,35V,Non-polar	A D

CAPACITORS

There are two types of capacitors available and they can be identified from each other by reading their Part Numbers.

• Ceramic type capacitor;

A symbol "C" or "K" is given at the 3rd digit of its Part Number like "VCC (or K).....J."

• Semiconductor type capacitor;

A symbol "T" is given at the 3rd digit of its Part Number like "VCT.....J."

The capacitance error of each capacitor is indicated by the symbol given at the 13th digit of the Part Number as follows: "J" ($\pm 5\%$), "K" ($\pm 10\%$), "M" ($\pm 20\%$), "N" ($\pm 30\%$), "C" (± 0.25 pF), "D" (± 0.5 pF), "Z" ($\pm 80-20\%$).

(Tubular type ceramic capacitor is identified by the symbol MF of the part NO. VC00MF0000000; this MF does not mean the lead wire.)

C1	VCCSMF1HL100J	10 pF,50V	A A
C2,3	VCTYMF1HV472K	0.0047 μ F,50V	A A
C4	VCCCMF1HH240J	24 pF (CH),50V	A A
C6	VCCCMF1HH150J	15 pF (CH),50V	A A
C7	VCCCMF1HH100J	10 pF (CH),50V	A A
C7	VCCCPU1HH100J	10 pF (CH),50V	A A

REF.NO.	PART NO.	DESCRIPTION	CODE	REF.NO.	PART NO.	DESCRIPTION	CODE
C8	VCTYMF1HV152K	0.0015 μ F,50V	A A	C519,520	VCFYHAIHA124 J	0.12 μ F,50V	A B
C9	VCCRPUIHH8R0D	8 pF (RH),50V	A A	C521,522	VCTYMF1EX822K	0.0082 μ F,25V	A A
C10	VCCCMF1HH3R9C	3.9 pF (CH),50V	A A	C523,524	VCKYMF1HB681K	680 pF,50V	A A
C11	VCCCMF1HH2R2C	2.2 pF (CH),50V	A A	C525,526	VCTYMF1EX682K	0.0068 μ F,25V	A A
C13,14	VCTYMF1CY223N	0.022 μ F,16V	A A	C527,528	VCKYMF1HD122M	0.0012 μ F,50V	A A
C19	VCTYMF1EX103N	0.01 μ F,25V	A A	C529,530	VCTYMF1EX153M	0.015 μ F,25V	A A
C21,22	VCTYMF1CY223N	0.022 μ F,16V	A A	C531,532	VCTYMF1HV222K	0.0022 μ F,50V	A A
C23	VCKYMF1HB221K	220 pF,50V	A A	C533,534	VCTYMF1CY223N	0.022 μ F,16V	A A
C24	VCTYMF1CY223N	0.022 μ F,16V	A A	C535,536	VCTYMF1HV332K	0.0033 μ F,50V	A A
C28	VCCSMF1HL470J	47 pF,50V	A A	C537,538	VCTYPA1EX333K	0.033 μ F,25V	A A
C29,30	VCTYMF1CY223N	0.022 μ F,16V	A A	C539,540	VCTYMF1EX682K	0.0068 μ F,25V	A A
C43	VCCSMA1HL102J	1000 pF,50V,Styrol	A B	C541,542	VCTYPA1CX683M	0.068 μ F,16V	A A
C45,46	VCTYMF1CY223N	0.022 μ F,16V	A A	C545,546	VCTYMF1HV472K	0.0047 μ F,50V	A A
C52	VCCSMF1HL4R7C	4.7 pF,50V	A A	C547,548	VCTYPA1CX104M	0.1 μ F,16V	A B
C53	VCCCMF1HH5R6D	5.6 pF (CH),50V	A A	C551,552	VCTYMF1HV222K	0.0022 μ F,50V	A A
C54	VCTYMF1HV152K	0.0015 μ F,50V	A A	C601,602	VCTYPA1CX823M	0.082 μ F,16V	A B
C66	VCCCMF1HH130J	13 pF (CH),50V	A A	C610	VCKYMF1HB102K	0.001 μ F,50V	A A
C67	VCKYMF1HB331J	330 pF,50V	A A	C611,612	VCTYPA1EX473M	0.047 μ F,50V	A A
C68	VCCSMF1HL330J	33 pF,50V	A A	C619	VCTYMF1CY223N	0.022 μ F,16V	A A
C70	VCCCMF1HH100J	10 pF (CH),50V	A A	C621,622	VCTYPA1EX273K	0.027 μ F,25V	A A
C71	VCTYMF1HV472K	0.0047 μ F,50V	A A	C629	VCKYMF1HB391K	390 pF,50V	A A
C72,73	VCTYMF1CY223N	0.022 μ F,16V	A A	C631,632	VCTYMF1EX153M	0.015 μ F,25V	A A
C76	VCCCMF1HH6R8D	6.8 pF (CH),50V	A A	C639	VCTYMF1CY223N	0.022 μ F,16V	A A
C99	VCTYPU1EX223M	0.022 μ F,25V	A A	C641,642	VCTYMF1EX822K	0.0082 μ F,25V	A A
C103,104	VCKYMF1HB471K	470 pF,50V	A A	C651,652	VCTYMF1HV472K	0.0047 μ F,50V	A A
C105,106	VCKYMF1HB221K	220 pF,50V	A A	C659	VCTYMF1CY223N	0.022 μ F,16V	A A
C109,110	VCTYMF1CY223M	0.022 μ F,16V	A B	C661,662	VCTYMF1HV272K	0.0027 μ F,50V	A A
C113,114	VCTYMF1EX103M	0.01 μ F,25V	A A	C671,672	VCTYMF1HV152K	0.0015 μ F,50V	A A
C119,120	VCTYAT1CY223N	0.022 μ F,16V	A A	C679	VCTYMF1CY223N	0.022 μ F,16V	A A
C155,156	VCKYMF1HB561K	560 pF,50V	A A	C681,682	VCKYMF1HB821K	820 pF,50V	A A
C157,158	VCKYMF1HB221K	220 pF,50V	A A	C691,692	VCKYMF1HB471K	470 pF,50V	A A
C159,160	VCTYMF1CY223M	0.022 μ F,16V	A B	C699	VCTYMF1CY223N	0.022 μ F,16V	A A
C163,164	VCTYMF1EX153M	0.015 μ F,25V	A A	C713,714	VCKZPA1HF103Z	0.01 μ F,50V	A A
C203,204	VCKYMF1HB221K	220 pF,50V	A A	C715	VCKZPA1HF103Z	0.01 μ F,50V	A A
C207,208	VCTYMF1CY223M	0.022 μ F,16V	A B	C751,752	VCTYMF1CY223N	0.022 μ F,16V	A A
C209,210	VCTYMF1EX103K	0.01 μ F,25V	A A	C753	VCTYPA1CX104M	0.1 μ F,16V	A B
C253,254	VCKYMF1HB221K	220 pF,50V	A A	C754,755	VCTYMF1CY223N	0.022 μ F,16V	A A
C257,258	VCTYMF1CY223M	0.022 μ F,16V	A B	C756	VCTYPA1CX104M	0.1 μ F,16V	A B
C301	VCKYMF1HB681K	680 pF,50V	A A	C757	VCTYMF1EX103N	0.01 μ F,25V	A A
C302	VCKYMF1HB681K	680 pF,50V	A A	C758	VCCCMF1HH330J	33 pF (CH),50V	A A
C312	VCTYMF1CY223N	0.022 μ F,16V	A A	C759	VCTYPA1CX104M	0.1 μ F,16V	A B
C351	VCKYMF1HB331K	330 pF,50V	A A	C760	VCTYMF1CY223N	0.022 μ F,16V	A A
C352	VCKYMF1HB331K	330 pF,50V	A A	C805,806	VCKYBT1HB102K	0.001 μ F,50V	A A
C353	VCKYMF1HB102K	0.001 μ F,50V	A A	C807,808	VCKYBT1HB102K	0.001 μ F,50V	A A
C354	VCKYMF1HB271K	270 pF,50V	A A	C813,814	VCKYBT1HB102K	0.001 μ F,50V	A A
C355	VCCPKQ2AA103J	0.01 μ F,100V,Polypropylene	A B	C817,818	VCTYPA1EX103K	0.01 μ F,25V	A A
C356	RC-QZA393AFYK	0.039 μ F,50V, $\pm 10\%$,Mylar	A B	C819,820	VCTYPA1EX103K	0.01 μ F,25V	A A
C357	RC-QZA103AFYK	0.01 μ F,50V, $\pm 10\%$,Mylar	A B	C823,824	VCTYPA1EX103K	0.01 μ F,25V	A A
C358	VCKZPA1HF103Z	0.01 μ F,50V	A A	C825,826	VCCSBT1HL100J	10 pF,50V	A A
C371,372	VCKYMF1HB221K	220 pF,50V	A A	C827,828	VCTYPA1EX103K	0.01 μ F,25V	A A
C377,378	VCTYMF1EX682K	0.0068 μ F,25V	A A	C831,832	RC-QZA154AFYK	0.15 μ F,50V, $\pm 10\%$,Mylar	A C
C379,380	VCTYMF1HV392K	0.0039 μ F,50V	A A	C833,834	VCCSBT1HL100J	10 pF,50V	A A
C381,382	VCKYMF1HB102K	0.001 μ F,50V	A A	C837,838	VCTYPA1EX103K	0.01 μ F,25V	A A
C401	VCKYMF1HD122M	0.0012 μ F,50V	A A	C839,840	RC-QZA154AFYK	0.15 μ F,50V, $\pm 10\%$,Mylar	A C
C402	VCTYPA1EX473M	0.047 μ F,50V	A A	C845,846	VCKYBT1HB102K	0.001 μ F,50V	A A
C404	VCKYMF1HB821K	820 pF,50V	A A	C847,848	VCKZPA1HF103Z	0.01 μ F,50V	A A
C405	VCTYPA1EX333K	0.033 μ F,25V	A A	C849,850	VCKZPA1HF103Z	0.01 μ F,50V	A A
C406	VCCSMF1HL390J	39 pF,50V	A A	C885	VCTYMF1EX103N	0.01 μ F,25V	A A
C407	VCKYMF1HB102K	0.001 μ F,50V	A A	C886	VCTYMF1CY223M	0.022 μ F,25V	A B
C409	VCTYPA1EX473M	0.047 μ F,50V	A A	C999	VCCSPA1HL471J	470 pF,50V	A A
C411	VCTYMF1EX103N	0.01 μ F,25V	A A				
C414,415	VCTYMF1EX103N	0.01 μ F,25V	A A				
C416	VCTYPA1EX473M	0.047 μ F,50V	A A				
C419	VCTYMF1EX103N	0.01 μ F,25V	A A				
C421	VCKYMF1HB471K	470 pF,50V	A A				
C449	VCTYPU1EX103M	0.01 μ F,25V	A A				
C505,506	VCTYPA1CX683M	0.068 μ F,16V	A A				
C509,510	VCTYPA1EX333K	0.033 μ F,25V	A A				
C513,514	VCTYMF1CY223N	0.022 μ F,16V	A A				
C517,518	VCTYMF1EX123K	0.012 μ F,25V	A A				

RESISTORS

(Unless otherwise specified, resistors are $\pm 5\%$, carbon type.) (Tubular type carbon film resistor $\pm 5\%$ is identified the symbol MF of the part NO. VRD—MF0000000; this MF does not mean lead wire.)

	VRD-MF2EE000C	0 ohm, 1/4W, Jumper	A A
R1	VRD-MF2EE391J	390 ohms, 1/4W	A A
R4	VRD-MF2EE824J	820 kohms, 1/4W	A A

REF.NO.	PART NO.	DESCRIPTION	CODE	REF.NO.	PART NO.	DESCRIPTION	CODE
R5	VRD-MF2EE182J	1.8 kohms,1/4W	A A	R318	VRD-MF2EE684J	680 kohms,1/4W	A A
R6	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R319	VRD-ST2CD473J	47 kohms,1/6W	A A
R7	VRD-MF2EE272J	2.7 kohms,1/4W	A A	R331,332	VRD-MF2EE821J	820 ohms,1/4W	A A
R8	VRD-MF2EE680J	68 ohms,1/4W	A A	R333,334	VRD-MF2EE562J	5.6 kohms,1/4W	A A
R9	VRD-MF2EE471J	470 ohms,1/4W	A A	R335	VRD-MF2EE101J	100 ohm,1/4W	A A
R10	VRD-MF2EE152J	1.5 kohms,1/4W	A A	R341	VRD-MF2EE104J	100 kohm,1/4W	A A
R11	VRD-MF2EE471J	470 ohms,1/4W	A A	R351	VRD-MF2EE103J	10 kohm,1/4W	A A
R12	VRD-MF2EE331J	330 ohms,1/4W	A A	R352	VRD-MF2EE563J	56 kohms,1/4W	A A
R41	VRD-MF2EE102J	1 kohm,1/4W	A A	R353	VRD-MF2EE4R7J	4.7 ohms,1/4W	A A
R42	VRD-MF2EE103J	10 kohm,1/4W	A A	R355	VRD-MF2EE151J	150 ohms,1/4W	A A
R43	VRD-MF2EE224J	220 kohms,1/4W	A A	R356	VRD-MF2EE181J	180 ohms,1/4W	A A
R44	VRD-MF2EE471J	470 ohms,1/4W	A A	R371,372	VRD-MF2EE123J	12 kohms,1/4W	A A
R45,46	VRD-MF2EE332J	3.3 kohms,1/4W	A A	R373,374	VRD-MF2EE154J	150 kohms,1/4W	A A
R47,48	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R375,376	VRD-MF2EE473J	47 kohms,1/4W	A A
R61	VRD-MF2EE101J	100 ohm,1/4W	A A	R377,378	VRD-MF2EE271J	270 ohms,1/4W	A A
R62	VRD-MF2EE330J	33 ohms,1/4W	A A	R379,380	VRD-MF2EE182J	1.8 kohms,1/4W	A A
R65	VRD-MF2EE221J	220 ohms,1/4W	A A	R381,382	VRD-ST2CD123J	12 kohms,1/6W	A A
R99	VRD-ST2CD272J	2.7 kohms,1/6W	A A	R383,384	VRD-MF2EE332J	3.3 kohms,1/4W	A A
R101,102	VRD-MF2EE102J	1 kohm,1/4W	A A	R387	VRD-MF2EE221J	220 ohms,1/4W	A A
R103,104	VRD-MF2EE101J	100 ohm,1/4W	A A	R393,394	VRD-MF2EE102J	1 kohm,1/4W	A A
R105	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R395	VRD-ST2CD103J	10 kohm,1/6W	A A
R106	VRD-ST2CD822J	8.2 kohms,1/6W	A A	R396	VRD-MF2EE684J	680 kohms,1/4W	A A
R107,108	VRD-MF2EE682J	6.8 kohms,1/4W	A A	R397	VRD-ST2CD124J	120 kohms,1/6W	A A
R109,110	VRD-MF2EE184J	180 kohms,1/4W	A A	R398	VRD-MF2EE103J	10 kohm,1/4W	A A
R111,112	VRD-MF2EE332J	3.3 kohms,1/4W	A A	R399	VRD-ST2CD103J	10 kohm,1/6W	A A
R113,114	VRD-ST2CD104J	100 kohm,1/6W	A A	R401	VRD-MF2EE474J	470 kohms,1/4W	A A
R115,116	VRD-MF2EE103J	10 kohm,1/4W	A A	R402	VRD-MF2EE561J	560 ohms,1/4W	A A
R121	VRD-ST2CD151J	150 ohms,1/6W	A A	R403	VRD-MF2EE822J	8.2 kohms,1/4W	A A
R123	VRD-ST2CD822J	8.2 kohms,1/6W	A A	R404	VRD-MF2EE562J	5.6 kohms,1/4W	A A
R124	VRD-MF2EE103J	10 kohm,1/4W	A A	R405	VRD-MF2EE393J	39 kohms,1/4W	A A
R151,152	VRD-MF2EE102J	1 kohm,1/4W	A A	R406	VRD-ST2CD102J	1 kohm,1/6W	A A
R153,154	VRD-MF2EE820J	82 ohms,1/4W	A A	R407	VRD-MF2EE104J	100 kohm,1/4W	A A
R155,156	VRD-MF2EE682J	6.8 kohms,1/4W	A A	R408	VRD-MF2EE102J	1 kohm,1/4W	A A
R157,158	VRD-MF2EE184J	180 kohms,1/4W	A A	R409	VRD-MF2EE680J	68 ohms,1/4W	A A
R163,164	VRD-MF2EE470J	47 ohms,1/4W	A A	R410,411	VRD-MF2EE333J	33 kohms,1/4W	A A
R165	VRD-ST2CD103J	10 kohm,1/6W	A A	R412	VRD-MF2EE103J	10 kohm,1/4W	A A
R166	VRD-MF2EE103J	10 kohm,1/4W	A A	R413	VRD-MF2EE274J	270 kohms,1/4W	A A
R167	VRD-MF2EE332J	3.3 kohms,1/4W	A A	R414	VRD-MF2EE103J	10 kohm,1/4W	A A
R168	VRD-ST2CD332J	3.3 kohms,1/6W	A A	R415	VRD-MF2EE184J	180 kohms,1/4W	A A
R171	VRD-ST2CD151J	150 ohms,1/6W	A A	R416	VRD-MF2EE103J	10 kohm,1/4W	A A
R173	VRD-ST2CD822J	8.2 kohms,1/6W	A A	R417	VRD-MF2EE103J	10 kohm,1/4W	A A
R174	VRD-ST2CD103J	10 kohm,1/6W	A A	R418	VRD-MF2EE104J	100 kohm,1/4W	A A
R175	VRD-ST2CD102J	1 kohm,1/6W	A A	R419	VRD-MF2EE393J	39 kohms,1/4W	A A
R201,202	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R420	VRD-MF2EE223J	22 kohms,1/4W	A A
R203,204	VRD-MF2EE563J	56 kohms,1/4W	A A	R421	VRD-MF2EE103J	10 kohm,1/4W	A A
R205,206	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R422	VRD-MF2EE102J	1 kohm,1/4W	A A
R207,208	VRD-MF2EE154J	150 kohms,1/4W	A A	R423	VRD-MF2EE392J	3.9 kohms,1/4W	A A
R209,210	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R424	VRD-MF2EE823J	82 kohms,1/4W	A A
R211,212	VRD-MF2EE103J	10 kohm,1/4W	A A	R425	VRD-MF2EE223J	22 kohms,1/4W	A A
R213,214	VRD-MF2EE472J	4.7 kohms,1/4W	A A	R426	VRD-MF2EE103J	10 kohm,1/4W	A A
R215,216	VRD-ST2CD563J	56 kohms,1/6W	A A	R427	VRD-MF2EE334J	330 kohms,1/4W	A A
R217,218	VRD-MF2EE153J	15 kohms,1/4W	A A	R428	VRD-MF2EE274J	270 kohms,1/4W	A A
R219	VRD-ST2CD561J	560 ohms,1/6W	A A	R429	VRD-MF2EE103J	10 kohm,1/4W	A A
R221,222	VRD-MF2EE563J	56 kohms,1/4W	A A	R430	VRD-MF2EE332J	3.3 kohms,1/4W	A A
R251,252	VRD-MF2EE332J	3.3 kohms,1/4W	A A	R431	VRD-MF2EE153J	15 kohms,1/4W	A A
R253,254	VRD-MF2EE100J	10 ohm,1/4W	A A	R432	VRD-MF2EE274J	270 kohms,1/4W	A A
R255,256	VRD-MF2EE684J	680 kohms,1/4W	A A	R433	VRD-MF2EE394J	390 kohms,1/4W	A A
R257,258	VRD-MF2EE220J	22 ohms,1/4W	A A	R434	VRD-MF2EE102J	1 kohm,1/4W	A A
R259,260	VRD-MF2EE472J	4.7 kohms,1/4W	A A	R435	VRD-MF2EE224J	220 kohms,1/4W	A A
R261,262	VRD-MF2EE472J	4.7 kohms,1/4W	A A	R436	VRD-MF2EE222J	2.2 kohms,1/4W	A A
R263,264	VRD-MF2EE153J	15 kohms,1/4W	A A	R437	VRD-ST2CD272J	2.7 kohms,1/6W	A A
R265,266	VRD-MF2EE102J	1 kohm,1/4W	A A	R438	VRD-MF2EE223J	22 kohms,1/4W	A A
R267	VRD-MF2EE562J	5.6 kohms,1/4W	A A	R439	VRD-MF2EE102J	1 kohm,1/4W	A A
R301,302	VRD-MF2EE103J	10 kohm,1/4W	A A	R440	VRD-MF2EE152J	1.5 kohms,1/4W	A A
R303,304	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R441	VRD-MF2EE102J	1 kohm,1/4W	A A
R305,306	VRD-MF2EE561J	560 ohms,1/4W	A A	R442	VRD-MF2EE223J	22 kohms,1/4W	A A
R307,308	VRD-MF2EE473J	47 kohms,1/4W	A A	R443	VRD-MF2EE224J	220 kohms,1/4W	A A
R309,310	VRD-MF2EE153J	15 kohms,1/4W	A A	R444	VRD-MF2EE102J	1 kohm,1/4W	A A
R311,312	VRD-MF2EE272J	2.7 kohms,1/4W	A A	R449	VRD-ST2CD473J	47 kohms,1/6W	A A
R315,316	VRD-MF2EE331J	330 ohms,1/4W	A A	R499	VRD-ST2CD151J	150 ohms,1/6W	A A

REF.NO.	PART NO.	DESCRIPTION	CODE	REF.NO.	PART NO.	DESCRIPTION	CODE	REF.NO.	PART NO.	DESCRIPTION	CODE	REF.NO.	PART NO.	DESCRIPTION	CODE
R501,502	VRD-ST2CD332J	3.3 kohms,1/6W	A A	△R716	VRG-ST2EG1R0J	1 ohm,1/4W,Fusible	A B	J301	QJAKZ0197AFZZ	Socket,Line Out	A C	39	MLEVF1814AFFW	Lever,Switch	A B
R503,504	VRD-MF2EE124J	120 kohms,1/4W	A A	R720	VRD-MF2EE103J	10 kohm,1/4W	A A	J801	QJAKJ0106AFZZ	Jack,Headphones	A F	40	MLEVF1815AFFW	Lever,Prevention,Tape2	A A
R505,506	VRD-MF2EE471J	470 ohms,1/4W	A A	R721	VRD-ST2CD472J	4.7 kohms,1/6W	A A	J802	QJAKZ0468AFZZ	Terminal,External Speaker	A E			Only	
R507,508	VRD-MF2EE562J	5.6 kohms,1/4W	A A	R751,752	VRD-MF2EE104J	100 kohm,1/4W	A A	LCD751	RV-LX0021AFZZ	LCD	A M	41	MLEVF1816AFFW	Lever,APSS Lock,Tape2	A B
R509,510	VRD-MF2EE102J	1 kohm,1/4W	A A	R753	VRD-ST2CD103J	10 kohm,1/6W	A A	M1,2	RMOTV0236AF01	Motor,with Pulley	A U	41	MLEVF1816AFZZ	Lever,APSS Lock,Tape1	A C
R511,512	VRD-MF2EE332J	3.3 kohms,1/4W	A A	R754	VRD-MF2EE103J	10 kohm,1/4W	A A	RLY801	RRLYZ0113AFZZ	Relay	A H	42	MLEVF1818AFFW	Lever,APSS Lock Release	A A
R513,514	VRD-MF2EE472J	4.7 kohms,1/4W	A A	R755,756	VRD-MF2EE103J	10 kohm,1/4W	A A	△SO801	QSCE0561AFZZ	AC Power Supply Socket	A H	43	MLEVF1819AFFW	Lever,Erase Prevent	A A
R520	VRD-ST2CD271J	270 ohms,1/6W	A A	R801,802	VRD-ST2CD331J	330 ohms,1/6W	A A			with AC/DC Selector				Mortion,Tape2 Only	
R601	VRD-MF2EE182J	1.8 kohms,1/4W	A A	R807~810	VRD-ST2CD181J	180 ohms,1/6W	A A			Switch		44	MLEVF1820AFFW	Lever,Pause Mortion	A A
R602	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R811,812	VRD-ST2CD390J	39 ohms,1/6W	A A	SOL1	RPLU-0195AFZZ	Solenoid	A F	45	MLEVF1821AFFW	Lever,Eject	A A
R603	VRD-MF2EE394J	390 kohms,1/4W	A A	△R813~816	VRG-ST2ED1R0J	1 ohm,1/4W,Fusible	A B	SP1,2	VSPSQ21WB068A	Speaker,Woofers	A Y	46	MLEVF1822AFFW	Lever,Timing Cam	A A
R604	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R817,818	VRD-ST2CD332J	3.3 kohms,1/6W	A A	SP3,4	VSP0050TB926A	Speaker,Tweeter	A L	47	MLEVF1838AFFW	Lever,Record	A B
R606	VRD-MF2EE221J	220 ohms,1/4W	A A	R831,832	VRD-ST2CD221J	220 kohms,1/6W	A A	SP5,6	RALMB0057AFZZ	Speaker,Super Tweeter	A C	48	MLEVF1839AFFW	Lever,Playback	A B
R607	VRD-MF2EE331J	330 ohms,1/4W	A A	R840	VRD-ST2CD821J	820 ohms,1/6W	A A	SW1	QSW-B0181AFZZ	Switch,Lever Type	A M	49	MLEVF1840AFFW	Lever,Rewind	A B
R608	VRD-MF2EE683J	68 kohms,1/4W	A A	R841	VRD-ST2CD330J	33 ohms,1/6W	A A	SW2		Switch, Part of SW11~15	—	50	MLEVF1841AFFW	Lever,Stop	A A
R609,610	VRD-MF2EE273J	27 kohms,1/4W	A A	R851,852	VRD-MF2EE103J	10 kohm,1/4W	A A	SW3	QSW-S0442AFZZ	Switch,Slide Type	A E	51	MLEVF1842AFZZ	Lever,Pause	A C
R611	VRD-MF2EE182J	1.8 kohms,1/4W	A A	R853,854	VRD-MF2EE274J	270 kohms,1/4W	A A	SW4~6,8	QSW-P0694AFZZ	Switch,Push Type,	A L	52	MLEVF1843AFFW	Lever,Fast-forward	A B
R612	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R855,856	VRD-MF2EE103J	10 kohm,1/4W	A A			4-Segment		53	MLEVP0502AFZZ	Lever,Pause Lock	A B
R613	VRD-MF2EE394J	390 kohms,1/4W	A A	△R857,858	VRG-ST2ED4R7J	4.7 ohms,1/4W,Fusible	A B	SW11~15	QSW-P0693AFZZ	Switch,Push Type,	A Q	54	MLEVP0637AF00	Lever,Sensor	A A
R614	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R859	VRD-MF2EE103J	10 kohm,1/4W	A A			7-Segment		55	MLEVP0638AF00	Lever,Brake Release	A A
R616	VRD-MF2EE221J	220 ohms,1/4W	A A	R860	VRD-MF2EE223J	22 kohms,1/4W	A A	SW16	QSW-S0536AFZZ	Switch,Slide Type	A E	56	MLEVP0639AF00	Lever,Latch Release	A A
R617,618	VRD-MF2EE562J	5.6 kohms,1/4W	A A	R861	VRD-MF2EE103J	10 kohm,1/4W	A A	SW17	QSW-S0267AFZZ	Switch,Slide Type	A D	57	MLEVP0640AF00	Lever,Erase Prevention,	A A
R619	VRD-ST2CD121J	120 ohms,1/6W	A A	R863,864	VRD-MF2EE104J	100 kohm,1/4W	A A	SW18		Switch, Part of SW11~15	—			Tape2 Only	
R621	VRD-MF2EE182J	1.8 kohms,1/4W	A A	R865,866	VRD-MF2EE563J	56 kohms,1/4W	A A	SW19~23	QSW-K0060AFZZ	Switch,Push Type	A B	58	MLEVP0641AF00	Lever,Play Cam Lock	A B
R622	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R867,868	VRD-MF2EE221J	220 ohms,1/4W	A A	SW29,30	QSW-K0060AFZZ	Switch,Push Type	A B	59	MLEVP0642AF00	Lever,Timing	A A
R623	VRD-MF2EE394J	390 kohms,1/4W	A A	R869	VRD-MF2EE223J	22 kohms,1/4W	A A	SW851,852	QSW-F0216AFZZ	Switch,Leaf Type	A B	60	MLEVP0643AF00	Lever,Head Pack	A A
R624	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R870	VRD-MF2EE223J	22 kohms,1/4W	A A	SW853~855	QSW-F0197AFZZ	Switch,Leaf Type	A C	61	MLEVP0644AF00	Lever,Fast-forward/	A A
R626	VRD-MF2EE221J	220 ohms,1/4W	A A	R871,872	VRD-MF2EE103J	10 kohm,1/4W	A A	SW857	QSW-F0214AFZZ	Switch,Leaf Type	A C			Rewing Release	
R629	VRD-MF2EE224J	220 kohms,1/4W	A A	R873,874	VRD-MF2EE334J	330 kohms,1/4W	A A	TE201	QTANN0162AFZZ	Terminal,Earse	A B	62	MLEVP0645AF00	Lever,End Selector	A A
R631	VRD-ST2CD182J	1.8 kohms,1/6W	A A	R875,876	VRD-MF2EE563J	56 kohms,1/4W	A A					63	MLEVP0646AF00	Lever,Direction Change	A A
R632	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R877	VRD-MF2EE104J	100 kohm,1/4W	A A					64	MLEVP0647AF00	Lever,Record Releasege	A A
R633	VRD-ST2CD394J	390 kohms,1/6W	A A	R878	VRD-MF2EE223J	22 kohms,1/4W	A A					65	MLEVP0648AF00	Lever,Switch Operation	A B
R634	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R879	VRD-MF2EE563J	56 kohms,1/4W	A A					66	MLEVP0650AF00	Lever,APSS Switch,Tape1	A A
R636	VRD-MF2EE221J	220 ohms,1/4W	A A	R880	VRD-ST2CD563J	56 kohms,1/6W	A A							Only	
R639	VRD-ST2CD121J	120 ohms,1/6W	A A	R881	VRD-MF2EE563J	56 kohms,1/4W	A A					67	MLEVP0652AF00	Lever,Mode Mortion	A A
R641	VRD-MF2EE182J	1.8 kohms,1/4W	A A	R883,884	VRD-MF2EE103J	10 kohm,1/4W	A A					68	MLEVP0653AF00	Lever,Stop Killer	A A
R642	VRD-MF2EE222J	2.2 kohms,1/4W	A A	R885	VRD-ST2CD102J	1 kohm,1/6W	A A					69	MLEVP0670AFZZ	Lever,Pause Stop,Tape2	A A
R643	VRD-MF2EE394J	390 kohms,1/4W	A A	R887,888	VRD-MF2EE102J	1 kohm,1/4W	A A							Only	
R644	VRD-MF2EE822J	8.2 kohms,1/4W	A A	R899	VRD-ST2CD103J	1 kohm,1/6W	A A					70	MLEVP0649AF00	Lever,Holder Lock	A B
R646	VRD-MF2EE221J	220 ohms,1/4W	A A	R998	VRD-ST2CD272J	2.7 kohms,1/6W	A A					75	MSPRC0449AFFJ	Spring,Latch Lock	A A
R651	VRD-MF2EE182J	1.8 kohms,1/4W	A A									76	MSPRC0458AFFJ	Spring,Pause Lock Lever	A A
R652	VRD-MF2EE222J	2.2 kohms,1/4W	A A									77	MSPRC0575AFFJ	Spring,Clutch Gear	A A
R653	VRD-MF2EE394J	390 kohms,1/4W	A A									78	MSPRC0578AFFJ	Spring,Tape Guide	A A
R654	VRD-MF2EE822J	8.2 kohms,1/4W	A A									79	MSPRC0579AFFJ	Spring,Azimuth	A A
R656	VRD-MF2EE221J	220 ohms,1/4W	A A									80	MSPRC0580AFFJ	Spring,Back Tension	A A
R659	VRD-ST2CD121J	120 ohms,1/6W	A A									81	MSPRC0581AFFJ	Spring,Back Release Lever	A A
R661	VRD-MF2EE182J	1.8 kohms,1/4W	A A									82	MSPRC0582AFFJ	Spring,Pause Lever	A A
R662	VRD-MF2EE222J	2.2 kohms,1/4W	A A									83	MSPRC0583AFFJ	Spring,Fast-forward Lever	A A
R663	VRD-MF2EE394J	390 kohms,1/4W	A A									84	MSPRD0689AFFJ	Spring,Over Stroke Return	A A
R664	VRD-MF2EE822J	8.2 kohms,1/4W	A A									85	MSPRD0690AFFJ	Spring,Play Cam Lock	A A
R666	VRD-MF2EE221J	220 ohms,1/4W	A A											Lever	
R671	VRD-MF2EE182J	1.8 kohms,1/4W	A A									86	MSPRD0691AFFJ	Spring,Stop/Rewind	A A
R672	VRD-MF2EE222J	2.2 kohms,1/4W	A A											Return	
R673	VRD-MF2EE394J	390 kohms,1/4W	A A									87	MSPRD0692AFFJ	Spring,Head Selector	A A
R674	VRD-MF2EE822J	8.2 kohms,1/4W	A A									88	MSPRD0693AFFJ	Spring,Reverse Cam Lock	A A
R676	VRD-MF2EE221J	220 ohms,1/4W	A A											Arm	
R679	VRD-ST2CD121J	120 ohms,1/6W	A A									89	MSPRD0694AFFJ	Spring,Direction Change	A A
R681	VRD-MF2EE182J	1.8 kohms,1/4W	A A											Drive	
R682	VRD-ST2CD222J	2.2 kohms,1/6W	A A									90	MSPRD0696AFFJ	Spring,Pause Killer	A A
R683	VRD-MF2EE394J	390 kohms,1/4W	A A									92	MSPRD0698AFFJ	Spring,Play Selector Arm	A A
R684	VRD-MF2EE822J	8.2 kohms,1/4W	A A									93	MSPRD0699AFFJ	Spring,APSS Switch Lever,	A A
R686	VRD-MF2EE221J	220 ohms,1/4W	A A											Tape1 Only	
R691,692	VRD-MF2EE222J	2.2 kohms,1/4W	A A									94	MSPRD0700AFFJ	Spring,Forward Pinch	A A
R693	VRD-MF2EE394J	390 kohms,1/4W	A A											Roller	
R694	VRD-MF2EE822J	8.2 kohms,1/4W	A A									95	MSPRD0701AFFJ	Spring,Reverse Pinch	A A
R696	VRD-MF2EE221J	220 ohms,1/4W	A A											Roller	
R699	VRD-ST2CD121J	120 ohms,1/6W	A A									96	MSPRD0722AFFJ	Spring,Head Prevention,	A A
R711,712	VRD-MF2EE221J	220 ohms,1/4W	A A											Tape2 Only	
R713,714	VRD-MF2EE471J	470 ohms,1/4W	A A									97	MSPRD0723AFFJ	Spring,Reverse Stop	A A
△R715	VRG-ST2EF100J	10 ohm,1/4W,Fusible	A B												

REF.NO.	PART NO.	DESCRIPTION	CODE
98	MSPRP0370AFFW	Plate Spring,Cassette Retaining	A A
99	MSPRP0430AFFJ	Plate Spring,Head Plate	A A
100	MSPRT1196AFFJ	Spring,Main Lock Lever	A A
101	MSPRT1197AFFJ	Spring,Head Plate	A A
102	MSPRT1198AFFJ	Spring,End Selector	A A
103	MSPRT1205AFFJ	Spring,Erase Prevention, Tape2 Only	A A
104	NBALS0006AGFJ	Steel Ball,φ2mm	A A
105	NBALS0056AFZZ	Steel Ball,φ1.5mm	A A
106	NBLTH0108AF00	Belt,Flywheel	A C
107	NBLTK0352AF00	Belt,Turntable	A B
108	NBRGC0116AFZZ	Capstan Metal,Forward	A B
109	NBRGC0117AFZZ	Capstan Metal,Reverse	A B
110	NDAIR0194AFZZ	Turntable,Take-up	A E
111	NDAIR0195AFZZ	Turntable,Supply	A C
112	NFLYC0136AFZZ	Flywheel,Reverse	A H
113	NFLYC0135AFZZ	Flywheel,Forward	A F
114	NGERH0186AFZZ	Gear,Fast-forward/Rewind	A E
115	NGERH0187AF00	Gear,Play	A A
116	NGERH0188AF00	Gear,Reduction	A A
117	NGERH0189AF00	Gear,Clutch	A A
118	NGERH0190AF00	Gear,Headh	A A
119	NIDR-0091AFZZ	Idler,Play	A D
121	NPLYR0116AFZZ	Pully,Flywheel Belt	A C
122	NR0LY0075AFZZ	Pinch Roller,Forward	A D
123	NR0LY0076AFZZ	Pinch Roller,Reverse	A D
124	PCUSF0033AF00	Felt,Clutch Gear	A A
125	PGIDM0129AF00	Guide,Tape	A A
126	RHEDF0100AFZZ	Head,Playback	A N
127	RHEDK0052AFZZ	Head,Record/Playback/ Erase	A V
129	MSPRT1216AFFJ	Spring,Playback Lever	A A
130A	JKNBR0476AFSA	Button,Auto Reverse Play, Tape1	A E
130B	JKNBR0477AFSA	Button,Record,Tape2	A E
131	JKNBR0478AFSA	Button,Play	A E
132A	JKNBR0480AFSA	Button,Fast-forward	A E
132B	JKNBR0479AFSA	Button,Rewind	A E
133	JKNBR0481AFSA	Button,Stop	A E
134	JKNBR0482AFSA	Button,Pause	A E
135	MSPRT1224AFFJ	Spring,APSS Lock	A A
136	MSPRD0697AFFJ	Spring,Pause Back	A A
137	LANGT1462AFFW	Bracket,Direction Lever	A B
138	MLEVP0700AFZZ	Lever,Direction Interlocking	A B
140	MLEVP0698AFZZ	Lever,Reverse Mode	A B
141	MSPRT1233AFFJ	Spring,Earth	A A
142	MLEVP0699AFZZ	Lever,Direction	A B
143	LHLDW3056AFZZ	Wire Holder,Tape1 Only	A A
502	LX-BZ0450AFZZ	Screw,φ2×6mm	A A
503	LX-BZ0451AFFD	Screw,φ2×6mm	A A
504	LX-HZ0143AFFD	Screw,φ2×8mm,Tape1 Only	A A
505	LX-WZ1106AFZZ	Washer,Sensor	A A
506	LX-WZ1107AFZZ	Washer,φ3.5×φ5×0.25mm	A A
507	LX-WZ5018AGZZ	Washer,φ21×φ4×0.25mm	A A
508	LX-WZ9053AFZZ	Washer,φ2.4×φ5×0.5mm	A A
509	LX-WZ9064AFZZ	Washer,φ1.5×φ3.8×0.5mm	A A
510	XBPSD14P07000	Screw,φ1.4×7mm	A A
511	XHBSD20P04000	Screw,φ2×4mm	A A
512	XHBSD20P06000	Screw,φ2×6mm	A A
513	XHBSD26P08000	Screw,φ2.6×8mm	A A
514	XNESD20-16000	Nut,φ2×1.6mm	A A
515	XREUJ15-04000	Stop Ring,E-Type,φ1.5×0.4mm	A A
516	XWHJZ21-05040	Washer,φ21×φ4×0.5mm	A A
517	XWHJZ23-05044	Washer,φ23×φ4.4×0.5mm	A A
518	XWHJZ47-02075	Washer,φ4.7×φ7.5×0.2mm	A A
520	XWHS21-05065	Washer,φ21×φ6×0.5mm	A A
521	LX-BZ0571AFFD	Screw,φ2×4mm	A A

CABINET PARTS

REF.NO.	PART NO.	DESCRIPTION	CODE
221	CCAB-1540AF01	Front Panel Assembly (BK)	B E
201	CCAB-1540AF03	Front Panel Assembly (S)	B E
201-1		Front Panel (BK)	—
201-1		Front Panel (S)	—
201-2	HBDGB1001GESA	Badge,SHARP	A C
201-3	HDALM0470AFSA	Dial Scale	A P
201-4	HDECA0635AFSA	Decoration Plate,Top	A K
201-5	HiNDM1660AFSA	Indication Plate, Switch(BK)	A G
201-5	HiNDM1660AFSB	Indication Plate,Switch(S)	A G
201-6	HiNDM1661AFSA	Indication Plate,Graphic Equalizer(BK)	A N
201-6	HiNDM1661AFSB	Indication Plate,Graphic Equalizer(S)	A N
201-7	HiNDM1662AFSA	Indication Plate,Jack(BK)	A E
201-7	HiNDM1662AFSB	Indication Plate,Jack(S)	A E
201-8	HiNDM1663AFSA	Indication Plate, Mechanism(BK)	A N
201-8	HiNDM1663AFSB	Indication Plate, Mechanism(S)	A N
201-9	HiNDM1664AFSA	Indication Plate,Mode(BK)	A D
201-9	HiNDM1664AFSB	Indication Plate,Mode(S)	A D
201-10	PC0VM9077AF00	Felt,Knob Cover	A B
201-11	TLABZ0645AFZZ	Mirror Label	A A
202	CCAB-2158AF01	Rear Cabinet Assembly (BK)	A X
202	CCAB-2158AF03	Rear Cabinet Assembly (S)	A X
202-1		Rear Cabinet (BK)	—
202-1		Rear Cabinet (S)	—
202-2	PSLDM7161AFZZ	Shield Plate	A C
202-3	QTANB9127AFFN	Terminal,Battery +	A C
203	CSPRT1029AF13	Dial Cord Assembly	A C
204	GC0VH1179AFSE	Cover,AC Power Supply Socket(S)	A B
204	GC0VH1179AFSJ	Cover,AC Power Supply Socket(BK)	A B
205	GFTA-0066AFSA	Cassette Holder Assembly, Tape1 (BK)	A R
205	GFTA-0066AFSB	Cassette Holder Assembly, Tape1 (S)	A R
205-1		Cassette Holder(BK)	—
205-1		Cassette Holder(S)	—
205-2	HiNDP1641AFSA	Indication Plate,Tape1	A C
205-3	HPNLH1153AFSA	Plate,Transparent(BK)	A K
205-3	HPNLH1153AFSB	Plate,Transparent(S)	A K
205-4	MSPRD0788AFFJ	Spring,Cassette Press	A A
205-5	PGIDM0130AFSA	Gaide,Cassette,Left	A B
205-6	PGIDM0131AFSA	Gaide,Cassette,Right	A B
206	GFTA-0067AFSA	Cassette Holder Assembly, Tape2 (BK)	A R
206	GFTA-0067AFSB	Cassette Holder Assembly, Tape2 (S)	A R
206-1		Cassette Holder(BK)	—
206-1		Cassette Holder(S)	—
206-2	HiNDP1642AFSA	Indication Plate,Tape2	A C
206-3	HPNLH1154AFSA	Plate,Transparent(BK)	A K
206-3	HPNLH1154AFSB	Plate,Transparent(S)	A K
206-4	MSPRD0788AFFJ	Spring,Cassette Press	A A
206-5	PGIDM0130AFSA	Gaide,Cassette,Left	A B
206-6	PGIDM0131AFSA	Gaide,Cassette,Right	A B

REF.NO.	PART NO.	DESCRIPTION	CODE
207	GFTAB1132AFSF	Lid,Battery Compartment(BK)	A F
207	GFTAB1132AFSG	Lid,Battery Compartment(S)	A F
208	HiNDP1627AFSA	Indication Plate,Spectrum Analyzer	A G
209	HPNLH1155AFSA	Window,Spectrum Analyzer	A F
210	HSSND0394AFSA	Pointer,Dial	A C
211	JHNDG1097AFSC	Handle(S)	A R
211	JHNDG1097AFSE	Handle(BK)	A R
212	JKNBK0282AFSB	Knob,Band Selector	A B
213	JKNBK0306AFSD	Knob,Fine Tuning	A C
214	JKNBM0547AFSJ	Button,Push,Red	A B
215	JKNBM0547AFSK	Button,Push,Gray	A B
216	JKNBM0696AFSA	Button,Clock	A D
217	JKNBM0697AFSA	Button,APLD/APPS	A C
218	JKNBN0576AFSA	Knob,with Shaft,Tuning	A C
219	JKNBP0275AFSA	Knob,Volume,Left	A D
220	JKNBP0276AFSA	Knob,Volume,Right	A D
221	JKNBR0475AFSA	Button,Dubbing Start	A E
222	JKNBZ0475AFSC	Knob,Reverse Mode	A B
223	JKNBZ0476AFSC	Knob,Direction	A B
224	KC0UB0198AFZZ	Tape Counter	A G
225	LANGQ1003AFZZ	Bracket,Jack	A E
226	LANGQ1004AFZZ	Bracket,Timer PWB	A C
227	LHLDL1364AFZZ	Frame,Tuner	A H
228	LHLDL1365AFZZ	Frame,Main	A H
229	LHLDL1060AF00	Holder,Handle	A B
230	LHLDL1096AFZZ	Holder,LED	A D
231	LHLDZ1320AFSA	Holder,Knob	A E
232	LSLVP0007AFZZ	Sleeve,Heat Sink	A B
233	LSTPZ0056AFZZ	Stopper,Tuner Frame	A B
234	MLEVF1886AFZZ	Lever,Dubbing Start	A E
235	MLEVF1887AFZZ	Lever,Record/Playback	A C
236	MLIFP0034AFZZ	Damper	A C
237	MSPRC0509AFFW	Spring,Battery,+	A B
238	MSPRC0510AFFW	Spring,Battery,-	A B
239	MSPRC0513AFFJ	Spring,Battery,+,-	A C
240	MSPRC0620AFFJ	Spring,Dubbing Start	A A
241	MSPRC0624AFFJ	Spring,Battery,-	A B
242	MSPRC0630AFFJ	Spring,Earse	A A
243	MSPRD0671AFFJ	Spring,Record/Playback Lever	A B
244	MSPRD0760AFFJ	Spring,Cassette Holder	A A
245	NBLTK0369AFZZ	Belt,Tape Counter	A B
246	NDRM-0200AFZZ	Drum	A C
247	NPLYB0051AFZZ	Pulley,φ7mm	A A
248	NPLYB0060AFZZ	Pulley,φ10mm	A B
249	NPLYB0083AFZZ	Pulley,φ13mm	A B
250	PC0VP9173AFZZ	Cover,Power Supply	A D
251	PCUSU0309AFZZ	Cushion,Battery	A A
252	PRDAR0454AFFW	Heat Sink	A K
253	PRDAR0455AFFW	Heat Sink	A C
254	PSLDM3411AFZZ	Shield Plate,Main PWB	A D
255	PSLDM9106AFZZ	Shield Plate,Graphic Equalizer	A D
256	PSPAG0143AF00	Spacer,LCD	A B
257	QANTR0136AFZZ	Rod Antenna	A M
258	QFSDH2051AFZZ	Fuse Holder	A A
260	GLEGG0085AF00	Leg	A B
261	PFLT-0739AF00	Felt,15×10×0.5mm	A A
262	PSPA10337AFZZ	Fiber,10×5×1mm	A A
263	PGUMSO411AF00	Rubber,50×7×4mm	A B
264	PSPA20234AFZZ	Felt,60×7×0.5mm	A A
601	LX-BZ0286AFFF	Screw,φ2×12mm	A A
602	LX-JZ0078AFFD	Screw,φ3×7.5mm	A A
603	LX-CZ0011AFFD	Screw,φ3×65mm	A A
604	LX-CZ0062AFFD	Screw,φ3×11mm	A A
605	LX-JZ0004AFFD	Screw,φ3×14mm	A A
606	XBBS20P05000	Screw,φ2×5mm	A A

REF.NO.	PART NO.	DESCRIPTION	CODE
607	XBPS30P14J00	Screw,φ3×14mm	A A
608	XBPSD26P08J00	Screw,φ2.6×8mm	A A
609	XCBSD26P08000	Screw,φ2.6×8mm	A A
610	XCBSD30P10000	Screw,φ3×10mm	A A
611	XCBSD30P12000	Screw,φ3×12mm	A A
612	XCBSD30P16000	Screw,φ3×16mm	A A
613	XCTSD40P12000	Screw,φ4×12mm	A B
615	XHBSD30P06000	Screw,φ3×6mm	A A
616	XHBSD30P10000	Screw,φ3×10mm	A A
617	XNEBN20-16000	Nut,φ2×1.6mm	A A
618	XWSSJ20-05000	Washer,φ2×0.5mm	A A
619	XREUJ30-06070	Stop Ring,E-Type,φ3×0.6mm	A A

SPEAKER BOX PARTS

REF.NO.	PART NO.	DESCRIPTION	CODE
301	CCABB2159AF01	Rear Cabinet,Left (BK)	A Y
301	CCABB2159AF02	Rear Cabinet,Left (S)	A Y
302	CCABB2160AF01	Rear Cabinet,Right (BK)	A Y
302	CCABB2160AF02	Rear Cabinet,Right (S)	A Y
303	GCAB-1541AFSA	Front Panel Assembly (BK)	A W
303	GCAB-1541AFSB	Front Panel Assembly (S)	A W
303-1		Front Panel (BK)	—
303-1		Front Panel (S)	—
303-2	HPNC-0232AFSA	Punching Metal,Woofer	A H
305	HDECQ0287AFSA	Grille,Tweeter	A L
306	HPNC-0233AFSA	Punching Metal,Tweeter	A E
307	LANGZ0156AFFW	Bracket,Resonance Prevention	A C
308	LANGZ0160AFFW	Bracket,Resonance Prevention	A D
309	LBSHC0065AFZZ	Bushing,Speaker Cord	A B
310	MLEVP0696AFSA	Lever,Speaker Release, Left(BK)	A B
310	MLEVP0696AFSB	Lever,Speaker Release, Left(S)	A B
311	MLEVP0702AFSA	Lever Speaker Release, Right(BK)	A B
311	MLEVP0702AFSB	Lever Speaker Release, Right(S)	A B
312	PFLT-0405AFZZ	Leg	A A
313	PFLT-0597AF00	Felt	A A
314	PKYU-0085AFZZ	Acoustic Material	A E
315	QCNWG0021AFZZ	Speaker Cord	A G
801	LX-CZ0017AFFD	Screw,φ3×25mm	A A
802	LX-CZ0032AFFD	Screw,φ6.3×16mm	A A
803	LX-CZ0039AFZZ	Screw,φ3×8mm	A A
804	LX-CZ0047AFFD	Screw,φ4×8mm	A A

ACCESSORIES/PACKING PARTS

REF.NO.	PART NO.	DESCRIPTION	CODE
△	QACCZ0059AF00	AC Power Supply Cord	A G
△	QACCZ0060AF00	AC Power Supply Cord	A K
△	QPLGA0253AFZZ	AC Plug Adaptor	A E
	RTPEK0101AFZZ	Cassette Tape	A K
	SPAKA1633AFZZ	Packing Add.,Main Body, Left	A G
	SPAKA1634AFZZ	Packing Add.,Main Body, Right	A G
	SPAKA1635AFZZ	Packing Add.,Speaker, Top	A E
	SPAKA1636AFZZ	Packing Add.,Speaker, Bottom	A E
	SPAKC3990AFZZ	Packing Case(BK)	A P
	SPAKC4057AFZZ	Packing Case(S)	A P
	SPAKP0711AFZZ	Polyethylene Bag,Main Body	A C
	SPAKP0712AFZZ	Polyethylene Bag,Speaker	A B

REF.NO.	PART NO.	DESCRIPTION	CODE	REF.NO.	PART NO.	DESCRIPTION	CODE
	SSAKA0035AFZZ	Polyethylene Bag, Operation Manual	A A				
	TCAUA0309AFZZ	Caution Label,AC	A A				
	TGANE1121AFZZ	Warranty Card	A C				
	TINSZ0918AFZZ	Operation Manual	A N				
	TLABZ0893AFZZ	Label,Spectrum Analyzer	A D				
	TLABZ0951AFZZ	Label,Special Feature	A C				
	TLABZ0952AFZZ	Label,Output Power	A C				
	UBATU0008AGZZ	Battery,SUM-3E	A C				
	UBATU0009AGZZ	Battery,UM-1	A C				

WF-939Z

SHARP

Writer and Editor: Quality & Reliability Control of Audio System Group, Sharp Corp.

A8604-539NK-K1-J

Printed in Japan