

Service Manual

NATIONAL**TAPE RECORDER****PANASONIC**

CASSETTE TAPE RECORDER WITH 3-BAND MW/SW1/SW2 RADIO

**RQ-224 MECHANISM SERIES**

MODEL RQ-434DS

SPECIFICATIONS

Power Source: AC: 90~109, 110~125, 200~219,
220~250 volts: 50/60 Hz
DC: 9 volts (six "C" type batteries);
Car/boat battery (using optional
car/boat adaptor RP-916)

Power Consumption: 6 W

Motor: Mechanical governor motor

Transistors: 2SB173(1) 2SB175(3) 2SB324(2)
2SB172(1) 2SC920(4)

Diodes: OA70 or 90 (1) FR2 or SD1 (2)
OA90 or SD46(2) RD6A(1)
EYV320D1R2JA(1)

Maximum Output: 1.5 W (RMS)

Track System: 2-track monaural

Recording System: AC bias 35 kHz

Erasing System: DC erase

Tape Speed: 1-7/8 ips.

Fast Forward Time: Approx. 110 seconds with C-60
cassette

Rewind Time: Approx. 110 seconds with C-60
cassette.

Frequency Response: 50~10,000 Hz

Inputs: "MIC" -68 dB 2.7 k Ω
"AUX IN" -23 dB 100 k Ω
"EXT SP" 8 Ω

Outputs: Recording time: One hour (two-way using C-60 tape)

Speaker: 3-5/8" PM dynamic speaker

Dimensions: 11-7/8" (W) x 10-1/4" (H) x 3-3/8" (D)

Weight: 6 lbs.

RADIO SECTION

Frequency Range: MW: 525~1,605 kHz
SW1: 2.3~7 MHz
SW2: 7~22 MHz

Sensitivity: MW: 100 μ V/m/50 mW
SW1: 70 μ V/50 mW
SW2: 70 μ V/5 mW

These specifications are subject to change in order to accommodate improvements in design.

MATSUSHITA ELECTRIC
MATSUSHITA ELECTRIC TRADING CO., LTD.

P. O. Box 288 Central, Osaka, Japan



LOCATION OF PARTS

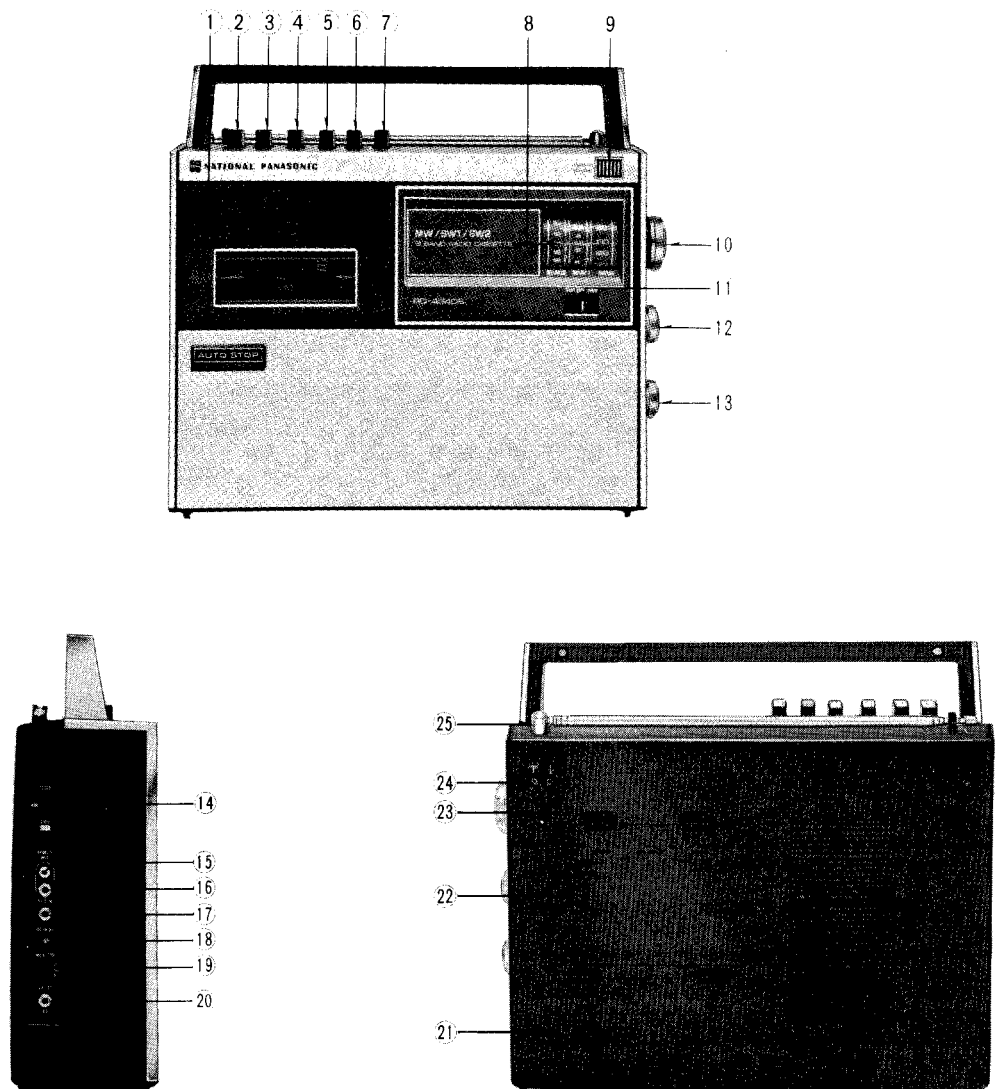


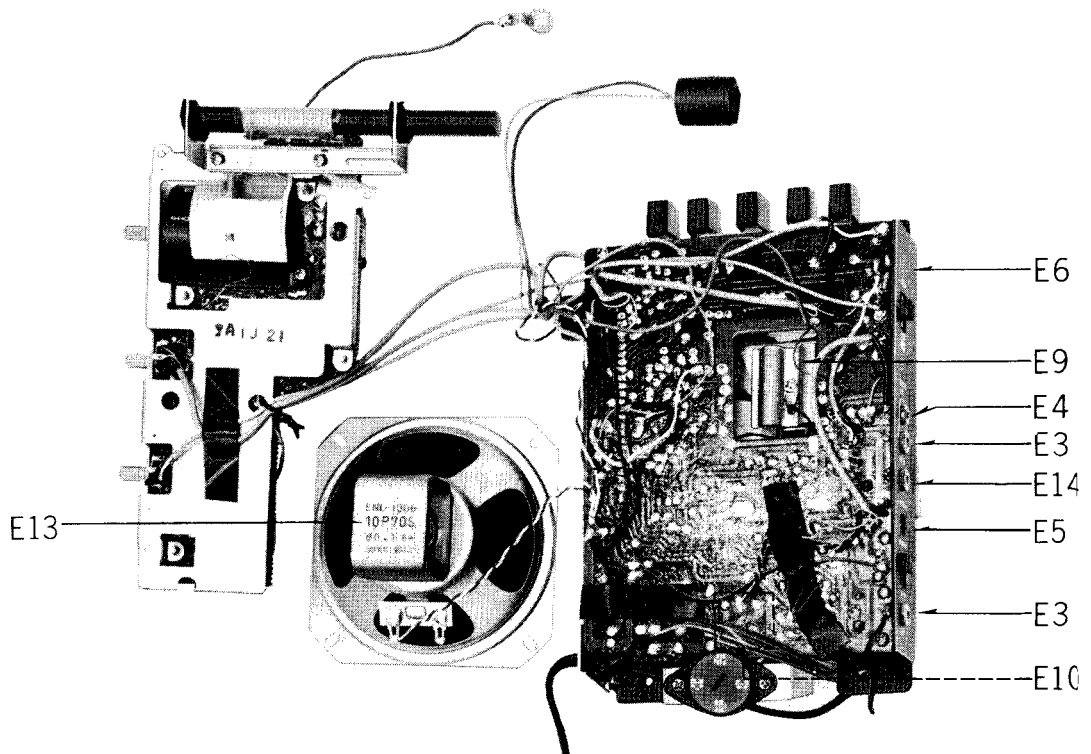
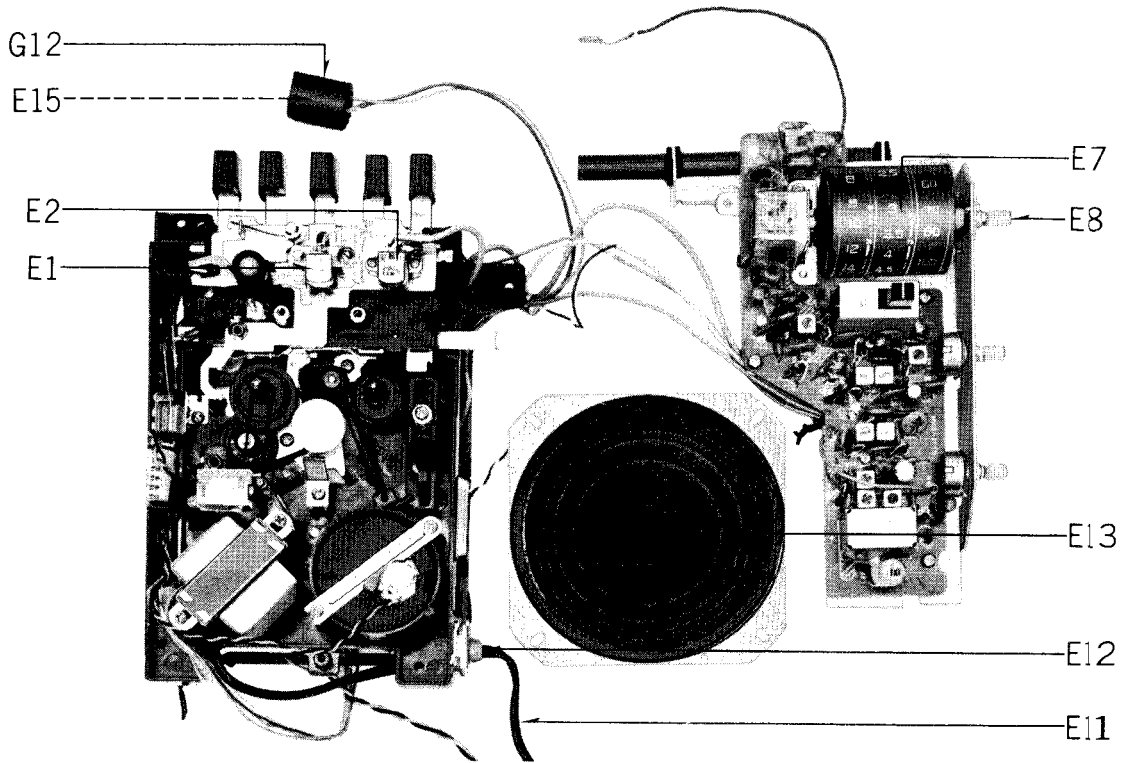
Fig. 1

- | | |
|------------------------------|----------------------------|
| ① Cassette compartment cover | ⑭ Radio/tape selector |
| ② Fast forward button | ⑮ Remote jack |
| ③ Stop button | ⑯ External microphone jack |
| ④ Playback button | ⑰ Auxiliary input jack |
| ⑤ Rewind button | ⑱ DC IN jack |
| ⑥ Record button | ⑲ Monitor switch |
| ⑦ Eject button | ⑳ External speaker jack |
| ⑧ Radio dial scale | ㉑ Cord compartment cover |
| ⑨ Built-in microphone | ㉒ Battery cover |
| ⑩ Tuning knob | ㉓ Earth jack |
| ⑪ Band selector | ㉔ External antenna jack |
| ⑫ Volume control knob | ㉕ Rod antenna |
| ⑬ Tone control knob | |

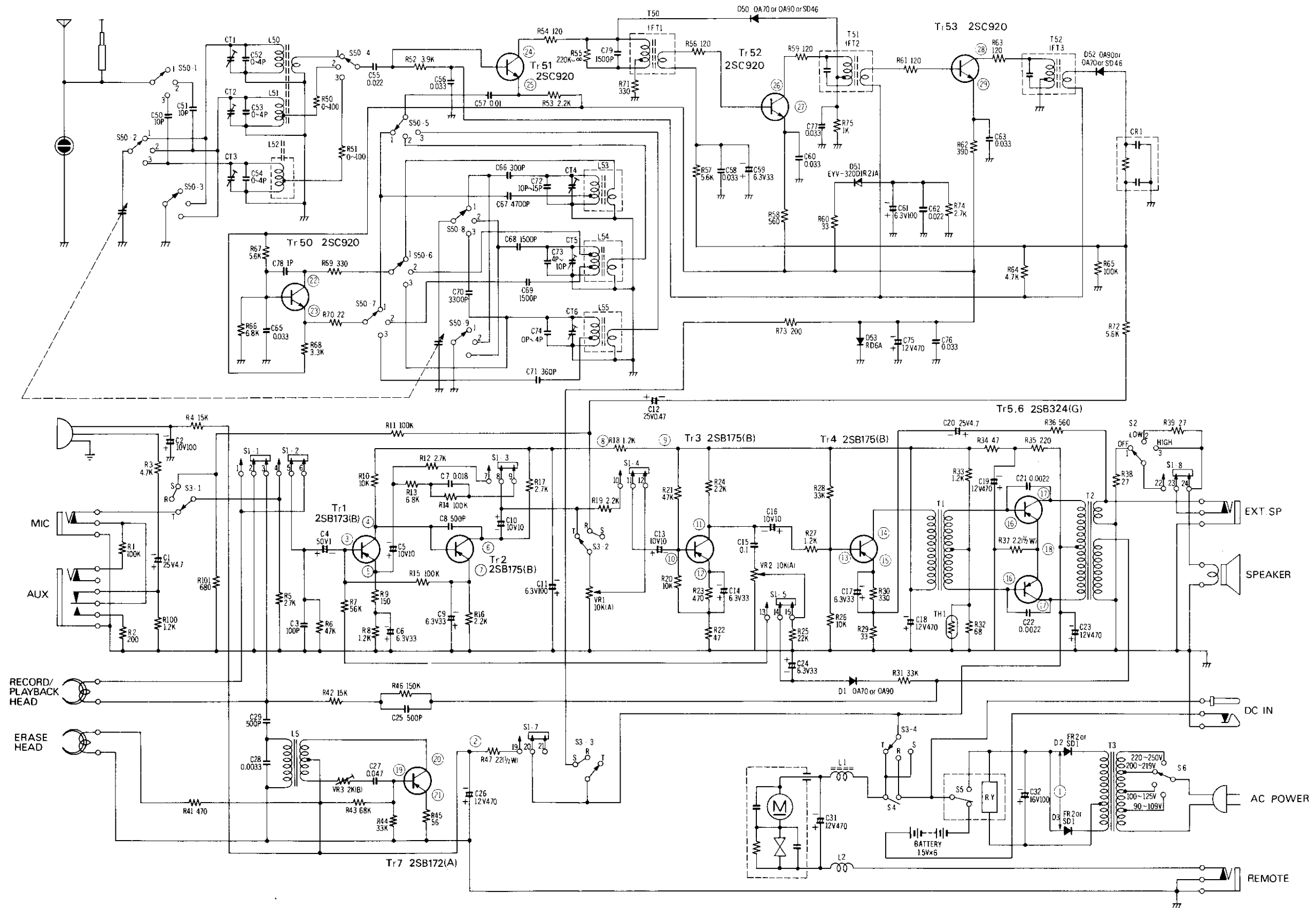
STANDARD VALUE TO TEST

ITEM	VALUE	PARTS TO BE ADJUSTED	REMARKS
Recording bias current.	0.45 ± 0.1 mA	VR3	Set the volume control to minimum.
Input level.	MIC -62 ± 5 dB AUX IN -10 ± 5 dB	—	To obtain $50 \pm 10 \mu\text{A}$ of recording current through the recording head. Set the volume control to maximum.
Bias Oscillation frequency.	35 ± 5 kHz	—	—
Erase current.	11 ± 3 mA	—	—
Takeup tension.	65 ± 15 gr-cm	—	—
Pressure of pressure roller.	500 ± 50 gr	Pressure roller lever spring.	—

ELECTRICAL PARTS LOCATION



SCHEMATIC DIAGRAM MODEL RQ-434DS



STANDARD VOTLAGE CHART

Check Point	Recording	Playback	Radio	Check Point	Recording	Playback	Radio
①	-9 V	-9 V	-9 V	⑩	-0.15 V	-0.15 V	
②	-8.4 V	---	---	⑪	-8.9 V	-8.9 V	
③	-0.42 V	-0.6 V		⑫	-0.013 V	-0.013 V	
④	-2.2 V	-1.5 V		⑬	-0.95 V		
⑤	-0.3 V	-0.45 V		⑭	-8.4 V		
⑥	-2.3 V	-3.2 V		⑮	-0.7 V		
⑦	-2.03 V	-1.4 V		⑯			-3.3 V
⑧	-4.8 V	-4.9 V		⑰			-0.2 V
⑨	-6.1 V	-6.1 V		⑱			-0.2 V
⑩	-1.03 V	-1.05 V		⑲			-4.9 V
⑪	-2.5 V	-2.5 V		⑳			-1.4 V
⑫	-0.85 V	-0.87 V		㉑			-5.1 V
⑬	-1.28 V	-1.25 V		㉒			-0.2 V
⑭	-5.6 V	-5.6 V		㉓			-5.2 V
⑮	-1.0 V	-1.05 V					

NOTE:

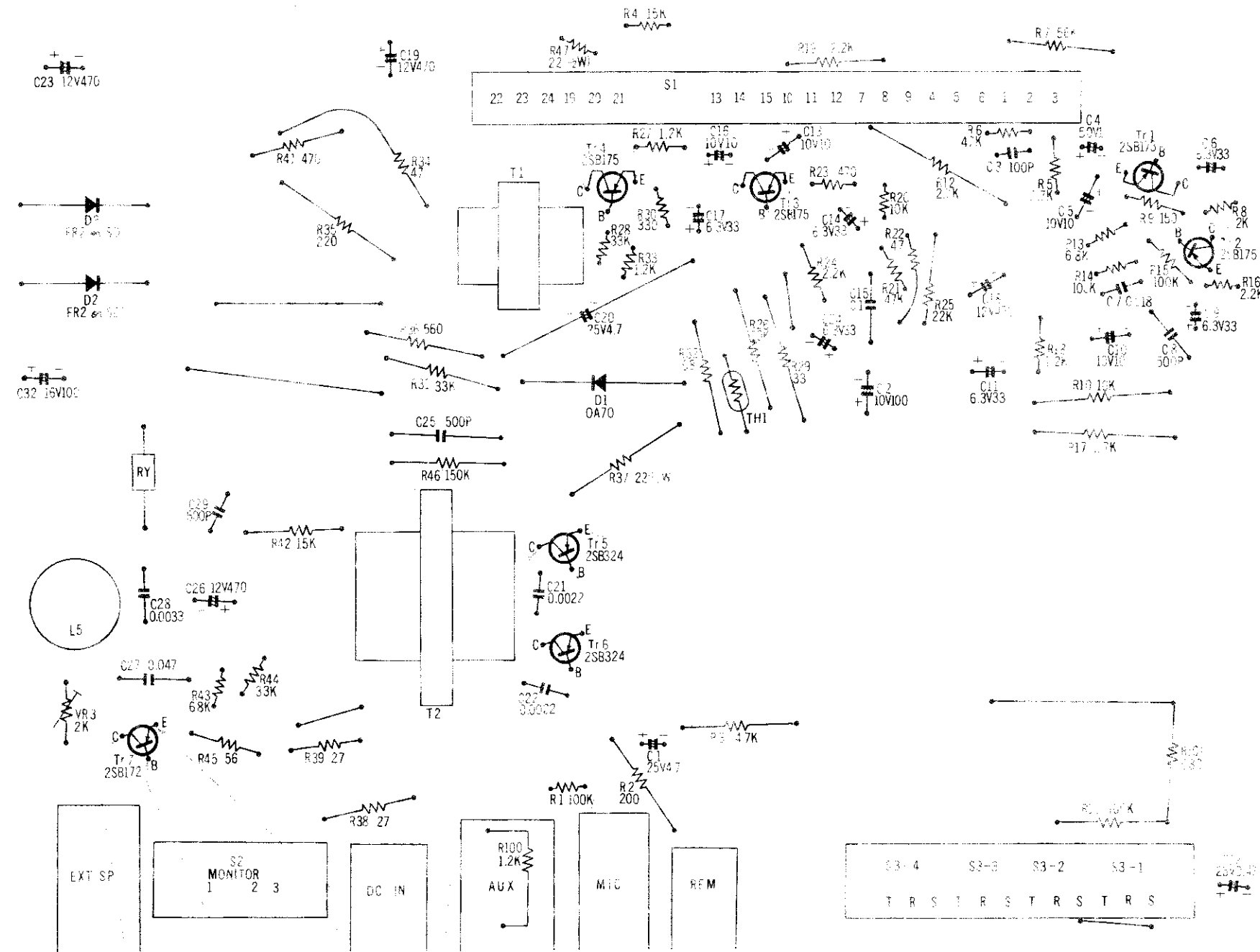
All measurements are under no signal condision with volume at minimum position.
Use VTVM for voltage measurement.

NOTE:

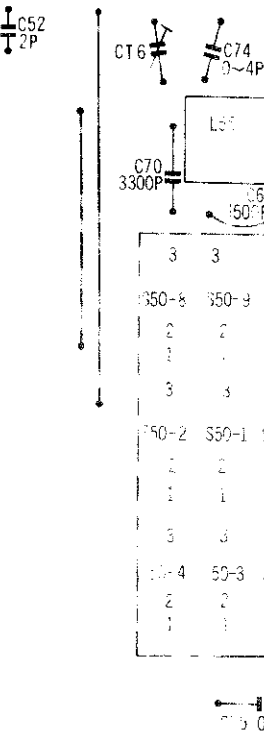
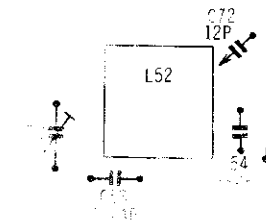
1. S1-1~S1-7..... Record/playback select switch (shown in playback position).
2. S2 Monitor ON/OFF switch (shown in OFF position).
3. S3-1~S3-4..... Tape/Radio select switch (shown in tape position).
4. S4 Power switch.
5. S5 AC/DC select switch.
6. S6 AC voltage select switch.
7. S50-1~S50-4 ... Band select switch (shown in MW positon).
8. VR1 Volume control.
9. VR2 Tone control.
10. VR3 Bias Oscillation adjustment VR.
11. Resistor are ohms (Ω), 1/4 watt unless specified otherwise.
K=1,000 Ω
12. Capacitors are microfarad (μ F) unless specified otherwise.
P=Micro-microfarad.
13. Encircled numbers (○) show the checkpoints for voltage.
The values are marked in the standard voltage chart.

CIRCUIT BOARD

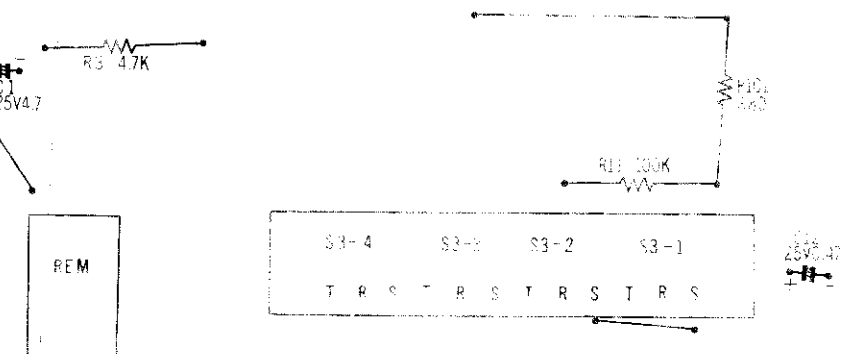
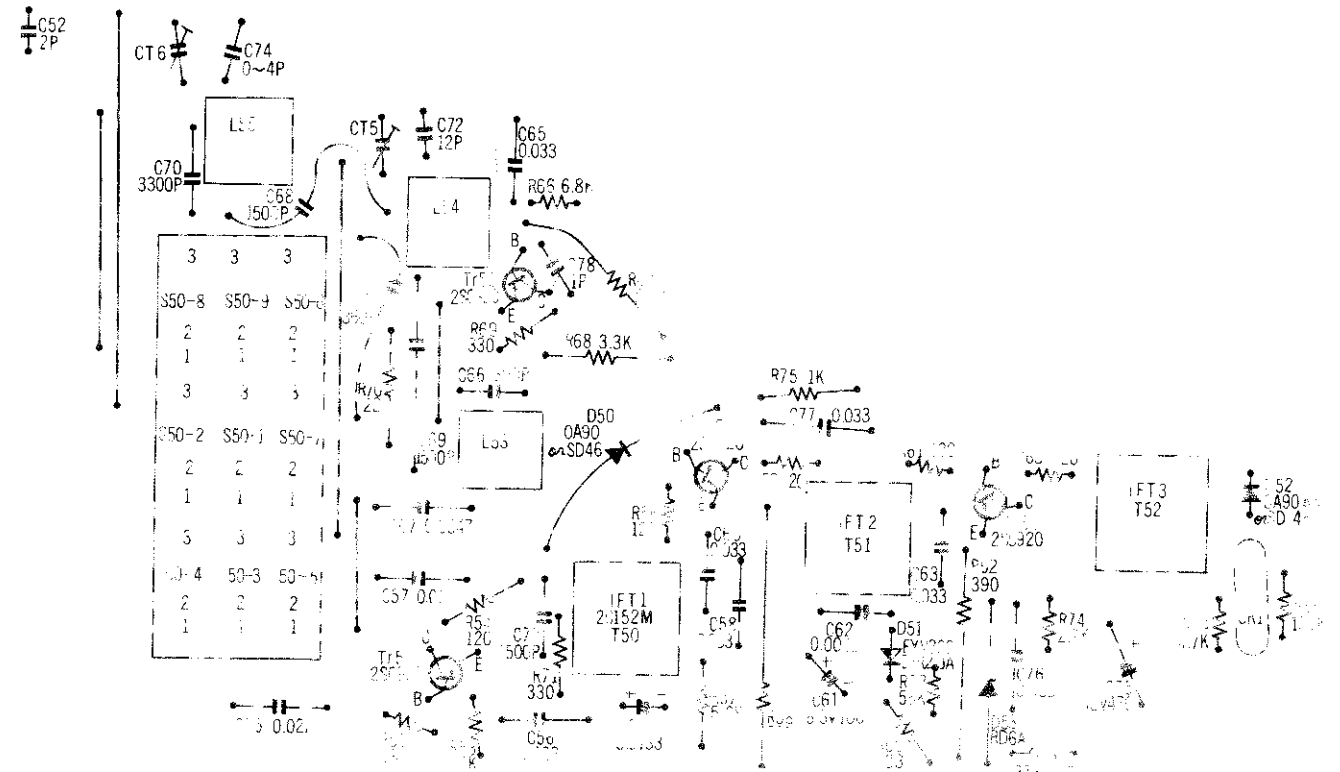
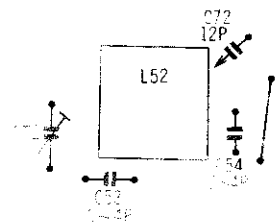
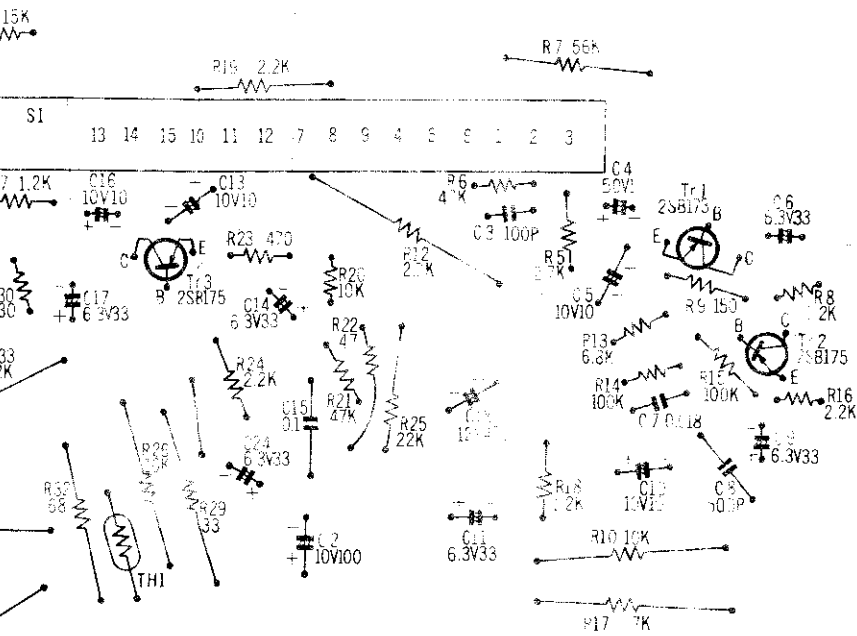
MAIN CIRCUIT BOARD



RADIO CIRCUIT BOARD

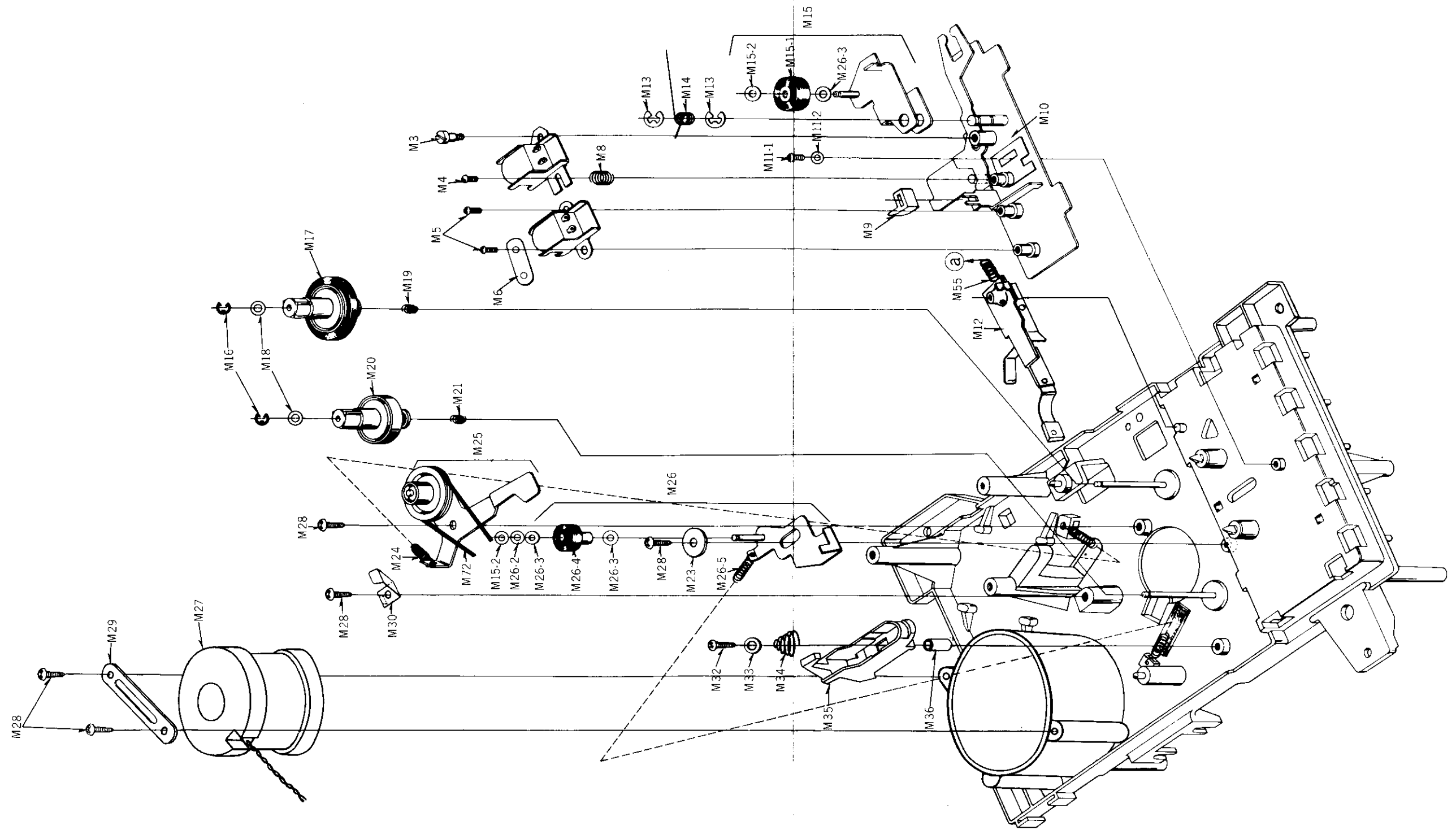


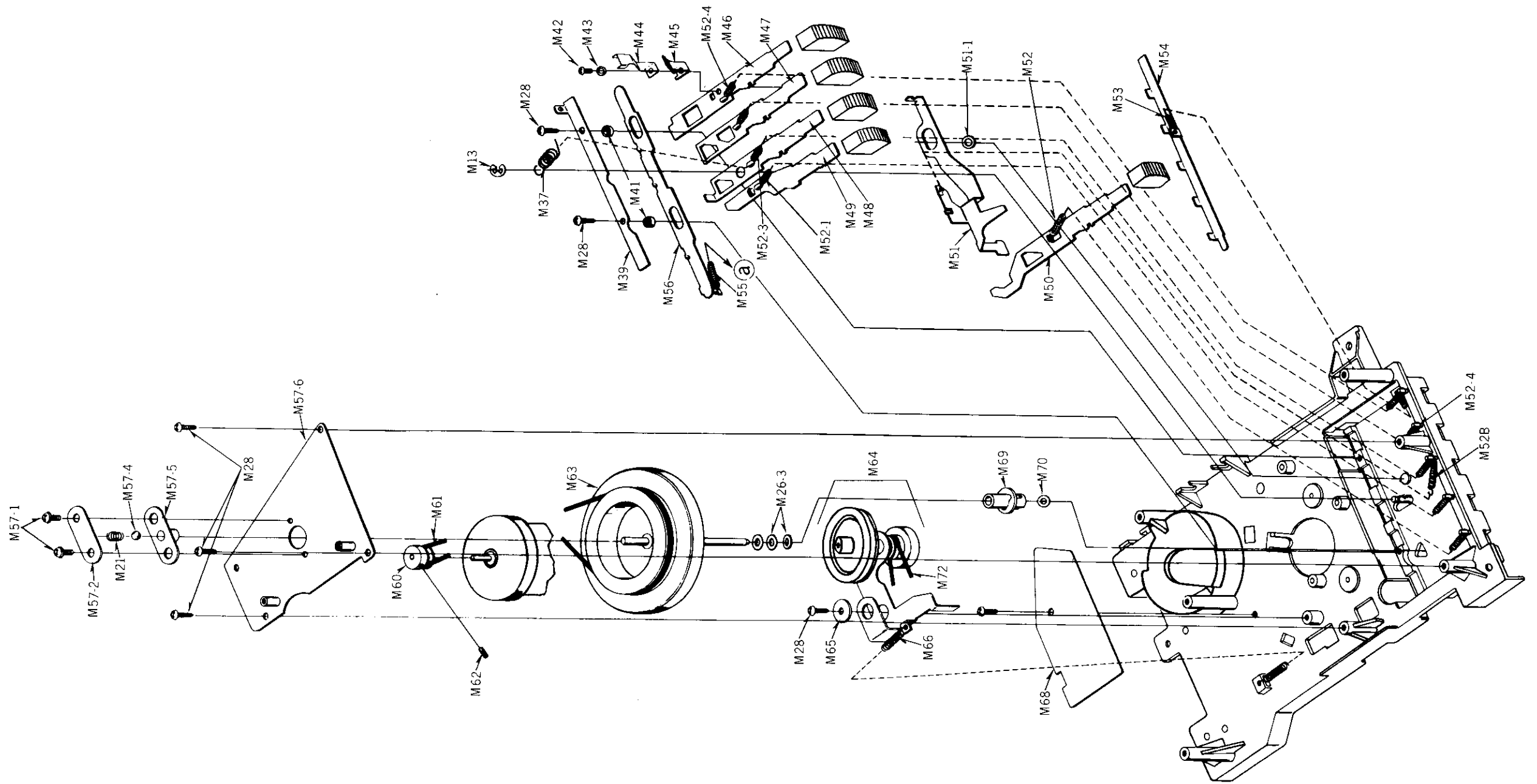
RADIO CIRCUIT BOARD



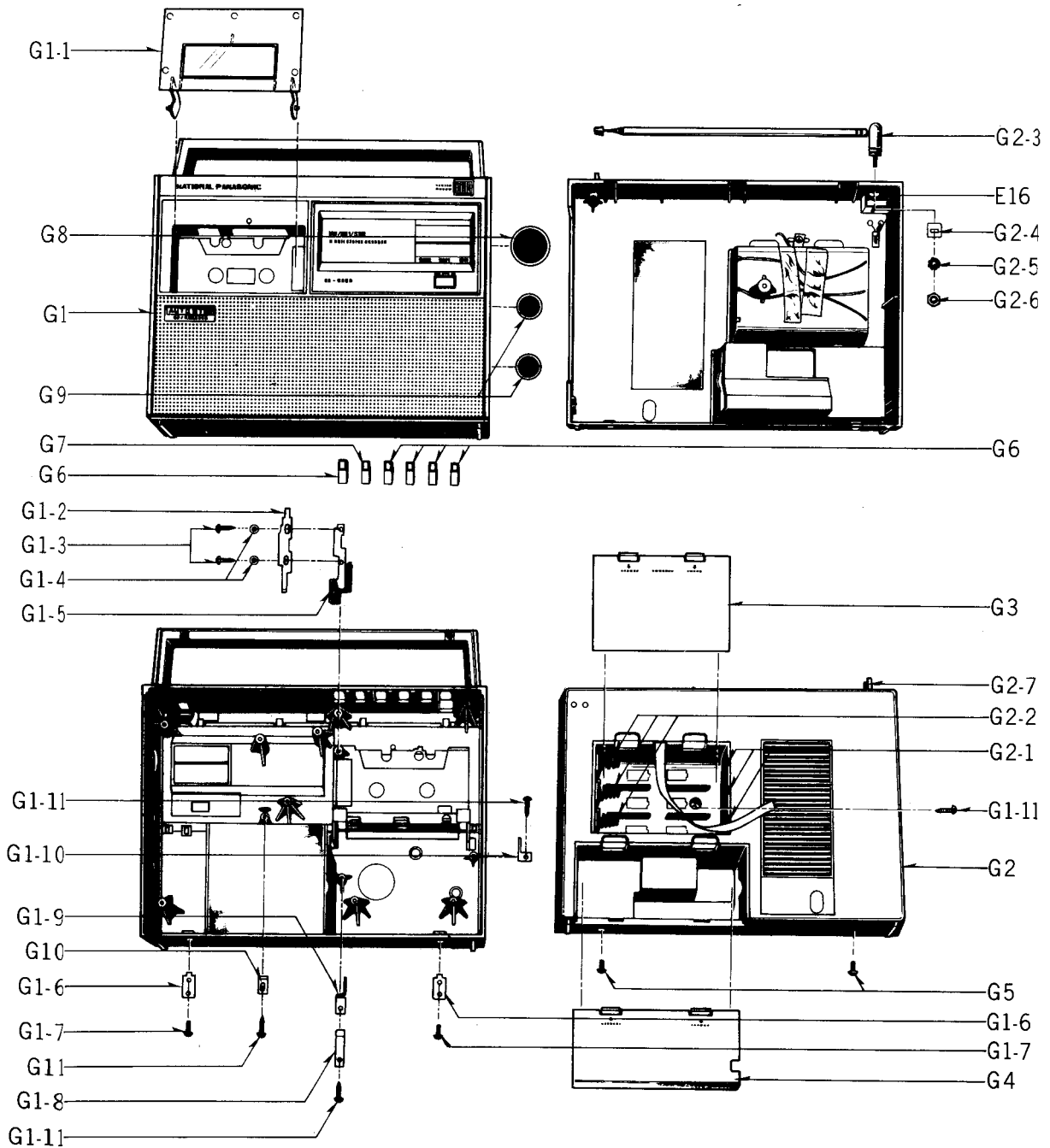
NOTES:
 The values of the components are given in the schematic diagram.
 The values of the components are given in the schematic diagram.
 The values of the components are given in the schematic diagram.
 The values of the components are given in the schematic diagram.

EXPLODED VIEWS





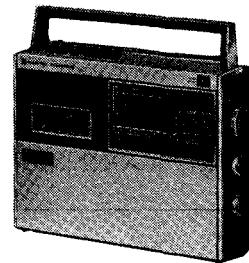
CABINET PARTS



REPLACEMENT PARTS LIST

MODEL RQ-434DS

NATIONAL PANASONIC



RQ-434DS

NOTE:

1. Be sure to make your orders of Replacement Parts according to this List.
2. "X" in "Rank" Column indicates that the part are not supplyable.
3. "A, B and C" in "Rank" Column indicates the recommended stock of replacement parts. Refer to the recommended stock table on last page.
4. "★" in "Remarks" Column indicates New Parts.
5. "ISO" in "Remarks" Column indicates ISO Screw or Nut.

NOTA:

1. Habrá que asegurarse que los pedidos de piezas de repuesto se hagan según esta lista.
2. "X" marcado en la columna "Rank", quiere decir que dichas piezas no pueden ser provistas.
3. "A, B y C" marcadas en la columna "Rank" indican el surtido que se recomienda tener de dichas piezas de repuesto.
4. "★" marcado en la columna "Remarks", quiere decir que las piezas son nuevas.
5. "ISO" marcado en la columna "Remarks", quiere decir que es un tornillo o tuerca "ISO".

NOTE:

1. Bien s'assurer de se conformer à la liste suivante pour les commandes de pièces de rechange.
2. "X", dans la colonne "Rank", indique qu'il n'est pas possible de fournir ces pièces.
3. "A, B et C", dans la colonne "Rank", indiquent le stock recommandé de pièces de rechange. Se reporter en dernière page au tableau des stocks/recommandés.
4. "★", dans la colonne "Remarks", indique les pièces nouvelles.
5. "ISO", dans la colonne "Remarks", indique une vis ou un écrou ISO.

HINWEIS:

1. Bestellen Sie Ihre Ersatzteile genau nach dieser Liste.
2. Mit "X" in der "Rank" Spalte aufgeführte Teile können nicht geliefert werden.
3. "A, B und C" in der "Rank" Spalte zeigt Ihnen den Vorrat der Ersatzteile an.
4. "★" in der "Remarks" Spalte bedeutet "neue Teile".
5. "ISO" in der "Remarks" Spalte bedeutet ISO-Schraube oder Mutter.


按:

1. 關於代用零件之訂購，務請依照此表而行之為荷。
2. 「等級」(Rank) 一欄中之 "X" 標記表示該零件無從供應。
3. 「等級」(Rank) 一欄中之 "A, B, C" 標記表示該零件有存貨，值得介紹。
請參照最後一頁的「值得介紹存貨表」。
4. 「備考」(Remarks) 一欄中之 "★" 形符號標記表示該零件為新出品。
5. 「備考」(Remarks) 一欄中之 "ISO" 符號標記表示國際標準化機構 (ISO) 式螺絲或螺母。

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
		<u>MECHANICAL PARTS</u>					
B	M3	Head Holding Screw	QHQT0007	1			RQ-236S,435S, 435DS
B	M4	Head Adjust Screw $\ominus 2 \times 7$	XSM2-7	1			COMMON
B	M5	Screw $\oplus 2 \times 4$	XSM2+4	2			"
C	M6	Square Lug	QTDT0010	1			RQ-224S,232S, 236S,435DS
B	M8	Head Adjust Spring	QBCT0017	1			RQ-203S
A	M9	Plastic Detector	QBJT0057	1			RQ-224S,236S, 435DS
X	M10	Head Slide Plate Assembly	QXHT0002	1			"
C	M11-1	Screw $\oplus 2 \times 6$	XTM2+6	1			COMMON
C	M11-2	Steel Washer $2.2 \times 8 \times 0.5$	QWQT0008	1			RQ-224S,236S, 435DS
B	M12	Brake Assembly	QXLT0019	1			"
C	M13	Stop Ring $E3\phi$	XUC3FT	3			COMMON
B	M14	Pressure Roller Lever Spring	QBNT0003	1			RQ-224S,236S, 435DS
B	M15	Pressure Roller Lever Assembly	QXLT0017	1			"
B	M15-1	Pressure Roller Assembly	QXPT0001	1			"
C	M15-2	Snap Washer $2.6 \times 6 \times 0.5$	QWQT0002	2			"
C	M16	Stop Ring $E1.5\phi$	XUC15FT	2			COMMON
A	M17	Take-up Reel Table Assembly	QXPT0021	1			RQ-224S,236S, 435DS
C	M18	Tetoron Washer $2.2 \times 4 \times 0.15$	QBKT7010	2			"
C	M19	Back Tension Spring-R	QBCT0005	1			"
A	M20	Supply Reel Table Assembly	QXPT0004	1			RQ-224S,232S, 236S,435DS
C	M21	Back Tension Spring-L	QBCT0010	2			RQ-224S,236S, 435DS
C	M23	Steel Washer	QWPT0011	1			RQ-224,435DS
C	M24	Take-up Lever Spring	QBTT0023	1			RQ-224S,236S, 435DS
B	M25	Take-up Pulley Lever Assembly	QXLT0021	1			RQ-224S
B	M26	Rewind Pulley Lever Assembly	QXLT0018	1			RQ-224S,236S, 435DS
B	M26-2	Fiber Washer $3.2 \times 6 \times 0.5$	QBKT7006	1			RQ-224S,236S, 435DS
C	M26-3	Tetoron Washer $3.2 \times 6 \times 0.15$	QWQT0004	5			"
B	M26-4	Rewind Pulley Assembly	QXPT0019	1			"

RQ-434DS

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	M26-5	Rewind Lever Spring	QBNT0004	1			RQ-224S,236S, 435DS
A	M27	Motor Assembly	QDMT0943	1			RQ-435S,435DS
C	M28	Screw $\oplus 2.6 \times 8$	XTM26+8	11			COMMON
X	M29	Motor Holding Plate	QMFT0015	1			RQ-224S,435S, 435DS
C	M30	Cassette Pressure Spring	QBPT0037	1			"
C	M32	Tapping Screw $\oplus 2.6 \times 18$	XTN26+18	1			COMMON
C	M33	Record Prevent Lever Washer	QWPT0008	1			"
C	M34	Record Prevent Lever Pressure Spring	QBCT0016	1			RQ-435S,435DS
C	M35	Record Prevent Lever	QMLT0075	1			"
C	M36	Record Prevent Lever Spacer	QMPT0024	1			"
C	M37	Slide Plate Lock Spring	QBCT0013	1			RQ-224S,236S, 435DS
C	M39	Push Angle	QMAT0013	1			★
C	M41	Lever Spacer	QMST0022	2			RQ-224S,236S, 435DS
C	M42	Screw $\oplus 2.6 \times 4$	XSM26+4	1			COMMON
C	M43	Lock Washer 2.6 ϕ	XWC26BFQ	1			"
C	M44	Slide Switch Moving Plate	QMFT0013	1			RQ-224S,236S, 435DS
C	M45	Slide Switch Angle	QMAT0009	1			"
B	M46	Push Lever (Record)	QMLT0051	1			RQ-224S,236S, 435DS
B	M47	Push Lever (Rewind)	QMLT0052	1			"
B	M48	Push Lever (Relay)	QMLT0053	1			"
B	M49	Push Lever (Stop)	QMLT0054	1			"
B	M50	Push Lever (FF)	QMLT0055	1			"
B	M51	Auto Stop Lever	QMLT0065	1			RQ-224S,236S, 435DS
C	M51-1	Thrust Washer 5.1 \times 12 \times 0.2	QBKT7011	1			"
C	M52	Push Button Spring-A	QBCT0014	1			"
C	M52-1	Push Button Spring	QBCT0032	1			★
C	M52-2	Auto Stop Lever Spring	QBT1072	1			RQ-224S,435S, 435DS
C	M52-3	Push Button Spring	QBCT0031	1			★
C	M52-4	Push Button Spring-B	QBCT0009	2			RQ-224S,236S, 435DS

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks	
C	M53	Lever Lock Spring	QBTT0025	1			RQ-224S,230S, 435DS	
C	M54	Lock Lever	QMLT0064	1			"	
C	M55	Clutch Lever Spring	QBT1064	1			RQ-224S,435DS	
C	M56	Main Switch Lever	QMLT0067	1			RQ-224S,435DS	
C	M57-1	Screw \oplus M3×6	XSM3+6S	2			COMMON 	
C	M57-2	Flywheel Retainer	QMQT0005	1			RQ-224S,236S, 435DS	
B	M57-4	Steel Ball 3/32"	QDK1002	1			"	
C	M57-5	Flywheel Supporter	QMMT0010	1			"	
X	M57-6	Flywheel Retainer Plate Assembly	QXKT0010	1			RQ-224S,236S, 435DS	
B	M60	Motor Pulley	QDPT0031	1			RQ-435S,435DS	
A	M61	Motor Belt	QDBT0009	1			RQ-224S,236S, 435DS	
B	M62	Motor Pulley Screw	XXA26C4FX	1			"	
A	M63	Flywheel Assembly	QXFT0003	1			"	
B	M64	FF Lever Assembly	QXLT0016	1			RQ-224S,236S, 435DS	
C	M65	FF Lever Washer	QWPT0004	1			"	
C	M66	FF Lever Spring	QBTT0026	1			"	
X	M68	Noise Prevent Plate	QTTT0111	1			"	
C	M69	Capstan Metal	QMMT0009	1			"	
C	M70	Snap Washer 2.4×6×0.5	QWQT0003	1			RQ-224S,236S, 435DS	
A	M72	Take-up Belt	QDBT0008	1			"	
		<u>RESISTORS</u>						
B	R1, 14, 15, 65	Carbon Resistor	100 K Ω 1/4 W	ERD14VK104	4			
B	R2	"	200 Ω 1/4 W	ERD14TK201	1			
B	R3	"	4.7 K Ω 1/4 W	ERD14TK472	1			
B	R4, 42	"	15 K Ω 1/4 W	ERD14VK153	2			
B	R5	"	2.7 K Ω 1/4 W	ERD14VK272	1			
B	R6 21	Carbon Resistor	47 K Ω 1/4 W	ERD14VK473	2			
B	R7	"	56 K Ω 1/4 W	ERD14VK563	1			
B	R8, 18, 27, 33, 100	"	1.2 K Ω 1/4 W	ERD14VK122	5			


Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
B	R9	Carbon Resistor 150Ω 1/4 W	ERD14VK150	1			
B	R10, 26	" 10KΩ 1/4 W	ERD14TK103	2			
B	R11	Carbon Resistor 100KΩ 1/4 W	ERD14TK104	1			
B	R12, 17	" 2.7KΩ 1/4 W	ERD14TK272	2			
B	R13, 66	" 6.8KΩ 1/4 W	ERD14VK682	2			
B	R16, 19, 24, 53	" 2.2KΩ 1/4 W	ERD14VK222	4			
B	R20	" 10KΩ 1/4 W	ERD14VK103	1			
B	R22	Carbon Resistor 47Ω 1/4 W	ERD14VK470	1			
B	R23, 41	" 470Ω 1/4 W	ERD14VK471	2			
B	R25	" 22KΩ 1/4 W	ERD14VK223	1			
B	R28, 44	" 33KΩ 1/4 W	ERD14VK333	2			
B	R30, 69, 71	" 330Ω 1/4 W	ERD14VK331	3			
B	R31	Carbon Resistor 33KΩ 1/4 W	ERD14TK333	1			
B	R32	" 68Ω 1/4 W	ERD14TK680	1			
B	R35	" 220Ω 1/4 W	ERD14TK221	1			
B	R36, 58	" 560Ω 1/4 W	ERD14TK561	2			
B	R37	Wire-wound Resistor 2.2Ω 1/2 W	ERW12L2R2	1			
B	R38	Carbon Resistor 27Ω 1/4 W	ERD14TK270	1			
B	R39	" 27Ω 1/4 W	ERD14VK270	1			
B	R43	" 68KΩ 1/4 W	ERD14VK683	1			
B	R45	" 56Ω 1/4 W	ERD14VK560	1			
B	R46	" 150KΩ 1/4 W	ERD14TK154	1			
B	R47	Carbon Resistor 22Ω 1/2 W	ERD12TK220	1			
B	R50, 51	" 100Ω 1/4 W	ERD14VK101	2			
B	R52	" 3.9KΩ 1/4 W	ERD14VK392	1			
B	R54, 56, 59, 61, 63	" 120Ω 1/4 W	ERD14VK121	5			
B	R55	" 220Ω 1/4 W	ERD14VK224	1			
B	R57, 67, 72	Carbon Resistor 5.6KΩ 1/4 W	ERD14VK562	3			
B	R60	" 33Ω 1/4 W	ERD14VK330	1			

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
B	R62	Carbon Resistor 390 Ω 1/4 W	ERD14TK391	1			
B	R64	” 4.7 K Ω 1/4 W	ERD14VK472	1			
B	R68	” 3.3 K Ω 1/4 W	ERD14VK332	1			
B	R70	Carbon Resistor 22 Ω 1/4 W	ERD14VK220	1			
B	R73	” 200 Ω 1/4 W	ERD14VK201	1			
B	R74	” 2.7 K Ω 1/4 W	ERD14VK272	1			
B	R75	” 1 K Ω 1/4 W	ERD14VK102	1			
B	R101	” 680 Ω 1/4 W	ERD14VK681	1			
		<u>VARIABLE RESISTORS</u>					
A	VR1, 2	Variable Resistor 10 K Ω (A)	EVHB0AL15A14	2			RQ-226S
A	VR3	Semi-fixed Variable Resistor 2 K Ω (B)	EVLTOAA00B23	1			COMMON
		<u>CAPACITORS</u>					
B	C1	Electrolytic Capacitor 25 V 4.7 μ F	ECEA25V4R7	1			
B	C2	” 10 V 100 μ F	ECEA10V100	1			
C	C3	Styrol Capacitor 100 pF	ECQS1101M	1			
B	C4	Electrolytic Capacitor 50 V 1 μ F	ECEA50V1	1			
B	C5, 10, 13, 16	” 10 V 10 μ F	ECEA10V1	4			
B	C6, 9, 14, 17, 24, 59	Electrolytic Capacitor 6.3 V 33 μ F	ECEA6.3V33	6			
C	C7	Mylar Capacitor 0.018 μ F	ECQM05183M	1			
C	C8, 25, 29	Styrol Capacitor 500 pF	ECQS1501M	3			
B	C11, 61	Electrolytic Capacitor 6.3 V 100 μ F	ECEA6.3V100	2			
B	C12	” 25 V 0.47 μ F	ECEA25VR47	1			
C	C15	Mylar Capacitor 0.1 μ F	ECQM05103M	1			
B	C18, 19, 23, 26, 31, 75	Electrolytic Capacitor 12 V 470 μ F	ECEA12V470	6			
B	C20	” 25 V 47 μ F	ECEB25V4R7	1			
C	C21, 22	Mylar Capacitor 0.0022 μ F	ECQM05222M	1			
C	C27	” 0.0047 μ F	ECQM05473M	1			
C	C28	Mylar Capacitor 0.0033 μ F	ECQM05332M	1			
C	C32	” 16 V 100 μ F	ECEA16V100	1			

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	C50, 51	Ceramic Capacitor	10 pF	ECCD1H100	1		
C	C52	"	2 pF	ECCD1H020	1		
C	C53, 54, 74	"	4 pF	ECCD1H040	1		
C	C55, 62	Ceramic Capacitor	0.022 μ F	ECKD1H223P	2		
C	C56, 58, 60, 63, 65, 76, 77	"	0.033 μ F	ECKD1H333P	6		
C	C57	"	0.01 μ F	ECKD1H103MY	1		
C	C66	Styrol Capacitor	300 pF	ECQS1301J	1		
C	C67	Ceramic Capacitor	0.0047 μ F	ECCD2H472P	1		
C	C68, 69, 79	Styrol Capacitor	1500 pF	ECQS1152J	2		
C	C70	"	3300 pF	ECQS1332J	1		
C	C71	"	360 pF	ECQS1361J	1		
C	C72	Ceramic Capacitor	12 pF	ECCD1H120C	1		
C	C73	"	7 pF	ECCD1H070C	1		
C	C78	Ceramic Capacitor	1 pF	ECCD1H010C	1		
C	CT2, 5, 6	Trimmer Capacitor		ECV1ZW10P50	3		RQ-435DS
B		Variable Capacitor		PVC2J20T	1		"
<u>COMBINATION PARTS</u>							
C	CR1	CR Combination		EXAF203Z471	1		RS-253S, 280S, 820S
<u>TRANSISTORS</u>							
A	Tr1	Transistor		2SB173	1		COMMON
A	Tr2, 3, 4	"		2SB175	3		"
A	Tr5, 6	"		2SB324	2		"
A	Tr7	"		2SB172	1		"
A	Tr50, 51, 52, 53	"		2SC920	4		RQ-237S, 435DS
<u>DIODES</u>							
A	D1	Diode		OA70 or OA90	1		COMMON
A	D2, 3	"		FR2 or SD1	2		RQ-226S, 224S
A	D50, 52	"		OA90 or SD46	2		COMMON RQ-435S, 504S
B	D51	Varistor		EYV320DIR2JA	1		RQ-435S, 435DS

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
A	D53	Diode	RD6A	1			RQ-234S
		<u>THERMISTOR</u>					
A	TH1	Thermistor	QVM500A	1			COMMON
		<u>TRANSFORMERS</u>					
A	T1	Input Transformer	QLAT0101	1			RQ-204S,206S, 224S,236S
A	T2	Output Transformer	QLAT0303	1			RQ-226S,236S
A	T3	Power Transformer	QLPT0310	1			RQ-226S,435DS
A	T50	IFT1	RLI2C152M				RQ-435DS
A	T51	IFT2	QLIT0101	1			"
A	T52	IFT3	QLIT0102	1			RQ-435DS
		<u>COILS</u>					
B	L1	Noise Prevention Coil (C)	QLPT0002	1			RQ-230S,232S, 435DS
B	L2, 3, 4	Noise Prevention Coil (A)	QLP0114	3			RQ-224S,232S, 236S,435DS
A	L5	Oscillator Coil	QLBT0107	1			RQ-435S,435DS
B	L50, 51	Bar Antenna Coil	ELR12B5009	1			RQ-435DS
B	L52	Antenna Coil	QLRT0004	1			"
B	L53	Local Oscillator Coil (MW)	QLBT0306	1			RQ-435DS
B	L54	Local Oscillator Coil (SW1)	QLBT0307	1			"
B	L55	Local Oscillator Coil (SW2)	QLBT0308	1			"
		<u>SWITHES</u>					
A	S1	Slide Switch (Record/Playback Selector)	QSST0018	1			RQ-236S
A	S2	Slide Switch (Monitor)	QSST0034	1			★
A	S3	Slide Switch (Tape/Radio Selector)	QSST0033	1			★
A	S4	Leaf Switch (Motor ON/OFF)	QSBT0006	1			RQ-236S,435S, 435DS
	S5	Relay		(1)			
A	S6	Rotary Switch (AC Voltage Selector)	QSR0004B	1			RQ-435DS RS-253S,254S
A	S50	Slide Switch (MW/SW1/SW2 Selector)	QSST0031	1			RQ-435DS

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
<u>ELECTRICAL PARTS</u>							
A	E1	Record/Playback Head	QWYT0103	1			★
A	E2	Erase Head	QWYT2102	1			RQ-204S,223S, 224S,435DS
B	E3	M3 Jack	QJAT0103	2			"
B	E4	M2 Jack	QJAT0102	1			"
B	E5	DC IN Jack	QJAT0105	1			RQ-204S,224S, 435DS
C	E6	Jack Conceal Panel (Plate)	QJQT0028	1			★
B	E7	Dial Dram Assembly	QXPT0034	1			★
B	E8	Dial Knob Shaft Assembly	QXMT0002	1			RQ-435S,435DS
C	E9	Heat Sink	QTHT0007	1			RQ-236S,435S, 435DS
A	E10	Relay With S5	QSK0114	1			RQ-226S,235S, 236S,435DS
B	E11	AC Cord	QFC1041	1			RQ-203S,232S, 236S,435DS
C	E12	Cord Bushing	QTD1126	1			"
A	E13	Speaker	EAS10P70S	1			★
B	E14	M3 Jack With SW	QJAT0110	1			★
A	E15	Condenser Microphone	EM24ATD	1			★
A	E16	Neon Lamp	QVL0301	1			COMMON
<u>CABINET PARTS</u>							
B	G1	Body Case Assembly	QYBT0090	1			★
B	G1-1	Cassette Lid Assembly	QYAT0041	1			★
X	G1-2	Eject Metal	QKTT0066	1			★
C	G1-3	Tapping Screw $\oplus 3 \times 10$	XTM3+10	2			COMMON
C	G1-4	Metal Spacer	QMPT0021	2			★
X	G1-5	Eject Angle Uuit	QYQT0012	1			★
X	G1-6	Case Installation Metal	QKTT0068	2			★
C	G1-7	Screw $\oplus 3 \times 6$	XST3+6S	2			COMMON 
B	G1-8	Cassette-up Spring	QBPT0040	1			RQ-224S,435S, 435DS
C	G1-9	Cassette Lid Holding Metal-L	QKTT0093	1			★

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	G1-10	Cassette Lid Holding Metal-R	QKTT0092	1			★
C	G1-11	Tapping Screw $\oplus 3 \times 12$	XTM3+12	3			COMMON
B	G2	Bottom Case Assembly	QYCT0068	1			★
C	G2-1	Battery Terminal	QJBT0031	3			RQ-430S
C	G2-2	Battery Terminal Spring	QJB0025	3			RQ-224S, 226S, 435DS
C	G2-3	Rod Antenna	QSAT0001	1			★
X	G2-4	Antenna Instruction Metal	QKTT0084	1			★
C	G2-5	Lock Washer	XWG5F	1			★
C	G2-6	Nut	XNG5FXB	1			COMMON
C	G2-7	Antenna Retainer	QKQT0020	1			★
B	G3	Battery Cover Assembly	QYFT0058	1			★
B	G4	Cord Cover Assembly	QYFT0059	1			★
C	G5	Screw $\oplus 3 \times 4$	XSM3+4	2			COMMON
B	G6	Push Button-A Assembly	QXBT0003A	5			★
B	G7	Push Button-C Assembly	QXBT0003B	1			★
A	G8	Tuning Knob Assembly	QYTT0029	1			★
A	G9	Volume Knob Assembly	QYTT0028	2			★
C	G10	Speaker Holding Metal	QKT1154	1			★
C	G11	Screw $\oplus 3 \times 8$	XTM3+8	1			COMMON
C	G12	MIC Support	QBGT0033	1			★
		<u>ACCESSORIES</u>					
A	A1	Cassette Tape (Demonstration)	QFTITCCNRJZ	1			RQ-435S RQ-282S
A	A2	Earphone	EAE2SB1	1			COMMON
B	A3	Plug Adaptor	QJP0603S	1			" 
B	A4	Erase Plug	QJP0959	1			"
B	A5	Instruction Book	QQT1621	1			★
		<u>PACKINGS</u>					
C	P1	Inside Carton	QPNT0143	1			★
C	P2	Inner Cushion-L	QPNT0136	1			★
C	P3	Inner Cushion-R	QPNT0135	1			★

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
C	P4	Dust Cover	QFD0071	1			RQ-226S,435S
C	P5	Accessory Box	QPWT0016	1			RQ-435S

RECOMMENDED STOCK OF REPLACEMENT PARTS

Rank of Part	Estimated Selling Q'ty of Tape Recorder Set					
	Less than	50	100	300	500	1,000
A rank Parts	2	5	15	20	40	80
B rank Parts	1	2	5	10	20	40
C rank Parts	0	1	3	5	10	20