

to Mr. Meyers

Service Manual

Radio Cassette
RX-1955/©

Compact FM Stereo Radio Cassette Recorder
 with Featherweight Stereo Headphones



■ SPECIFICATIONS

General:

Power Requirement: Battery; 3V (two "AA" size Penlight batteries)
 (Panasonic UM-3 or equivalent)

Power Output: 30mW (15mW×2) Headphone

Input: MIC; sensitivity 0.25mV/applicable microphone impedance (600Ω)

Output: DC IN; 3V
 Headphones; 32Ω

Dimensions: 13.8cm(W)×8.4cm(H)×3.3cm(D)
 [5¹/₂"×3⁵/₁₆"×1⁵/₁₆"]

Weight: (Main Unit)
 340g (12 oz) without batteries
 (Headphones)
 47g (1.66 oz) with cord

Radio Section:

Radio Frequency Range: FM 88~108MHz
 Intermediate Frequency: FM 10.7MHz
 Sensitivity: FM 3.2μV (-3dB Limit sense)

Tape Deck Section:

Frequency Response: Normal.....50~10,000 Hz
 CrO₂.....50~12,000 Hz

Recording System: AC bias, Magnet erase

Tape Speed: 4.8cm/s (1⁷/₈ ips)

Program Time: 1 hour with C-60 cassette tape

Track System: 4-track, 2-channel, stereo recording and playback

Headphones:

Input: 40mW (max)

Impedance: 32Ω

Connection Cord: 1.35m (53⁵/₃₂")

Weights and dimensions shown are approximate.
 (Les poids et dimensions mentionnes sont approximatifs.)
 Specifications are subject to change without notice.

Panasonic®

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LOCATION OF CONTROLS AND COMPONENTS



Fig. 1

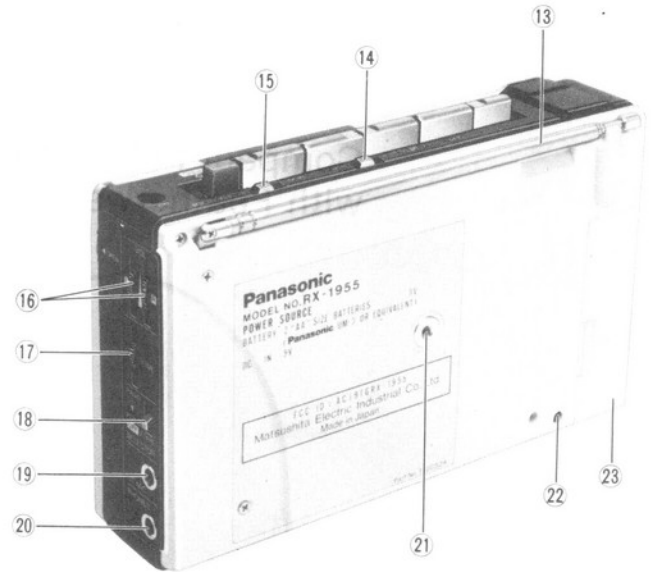


Fig. 2



Fig. 3

- ① Built-in Microphone (MIC)
- ② Record Button (REC)
- ③ Playback Button (PLAY)
- ④ Rewind/Review Button (REW/REV)
- ⑤ Fast Forward/Cue Button (FF/CUE)
- ⑥ Stop/Eject Button (STOP/EJECT)
- ⑦ Pause Button (PAUSE)
- ⑧ Cassette Compartment
- ⑨ Recording Indicator (REC)
- ⑩ Battery Check Indicator (BATT)
- ⑪ Tape Counter/Reset Button
- ⑫ FM Stereo Indicator (FM STEREO)

- ⑬ Telescopic Antenna
- ⑭ Tape Switch (CrO₂/METAL P.B, NOR)
- ⑮ FM Mode Switch (MONO, ST)
- ⑯ Volume Control (VOL)
- ⑰ Tuning Control (TUNE)
- ⑱ Function Switch (RADIO, POWER OFF/TAPE)
- ⑲ Stereo Microphone Jack (ST MIC), 0.25mV, 600Ω, ϕ3.5
- ⑳ Headphone Jack (PHONES), 32Ω, ϕ3.5
- ㉑ Carrying Holder Fixation Hole
- ㉒ DC Input Jack (DC IN 3V ⊖ ⊕)
- ㉓ Battery Compartment
- ㉔ Exclusive Stereo Headphones

DISASSEMBLY INSTRUCTIONS

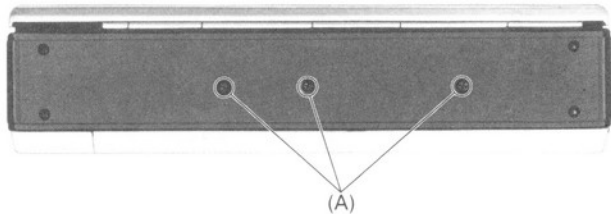
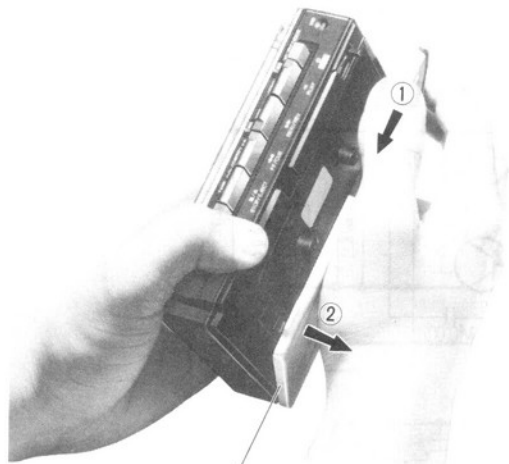


Fig. 4



Cassette Panel

Fig. 5

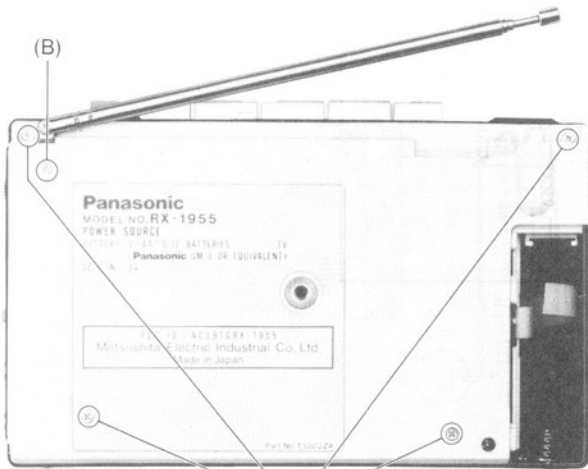


Fig. 6

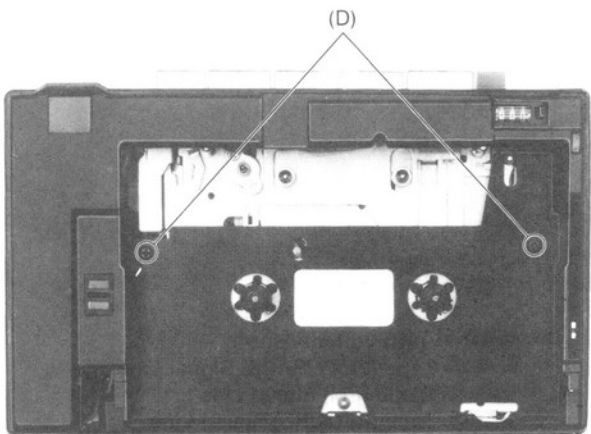


Fig. 7

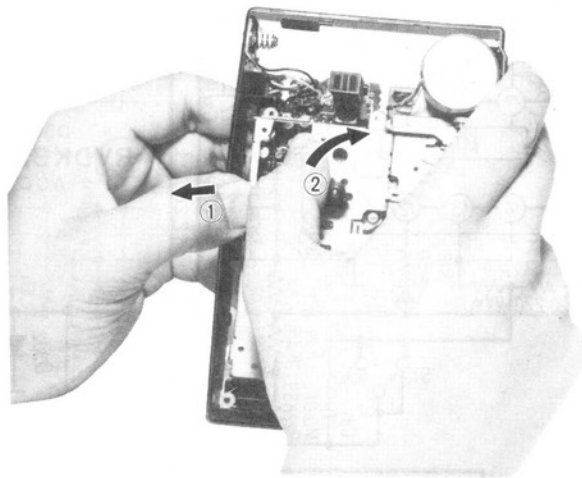


Fig. 8

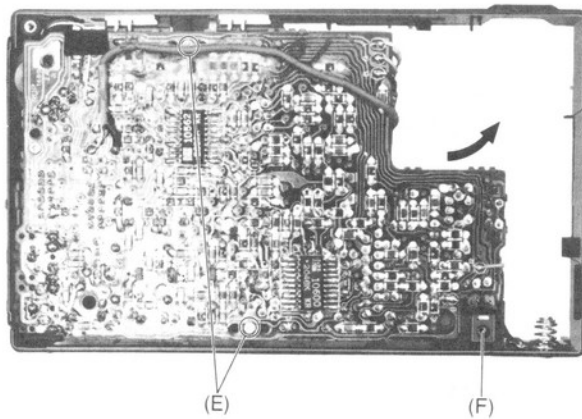


Fig. 9

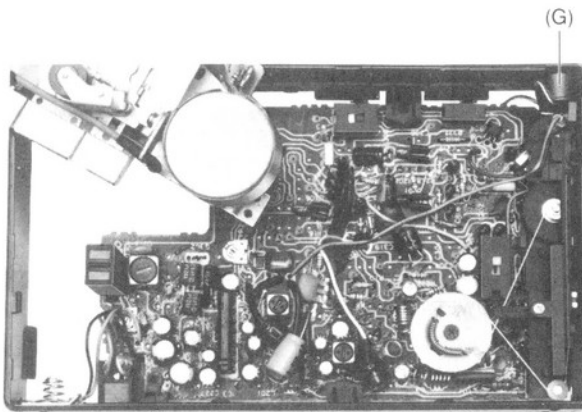


Fig. 10

Procedure	To remove —.	Remove —.	Shown in Fig. —.
1	Cassette Panel	Screw (2×5)(A)×3	4
2		Remove the cassette panel in the direction ① and ②.	5
3	Telescopic Antenna	Screw (2×2.5)(B)×1	6
4	Rear Cabinet	Screw (2×5)(C)×4	6
5	Front Cabinet	Screw (2×5)(D)×2	7
6	Mechanism	Remove the mechanism in the direction ① and ②.	8
7	Circuit Board	Screw (2×4)(E)×2	9
8		Pull out the DC input jack(F)×1	9
9		Pull out the built-in mic(G)×1	10
10		Remove the circuit board in the direction of arrow.	9

MEASUREMENTS AND ADJUSTMENTS

■ ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

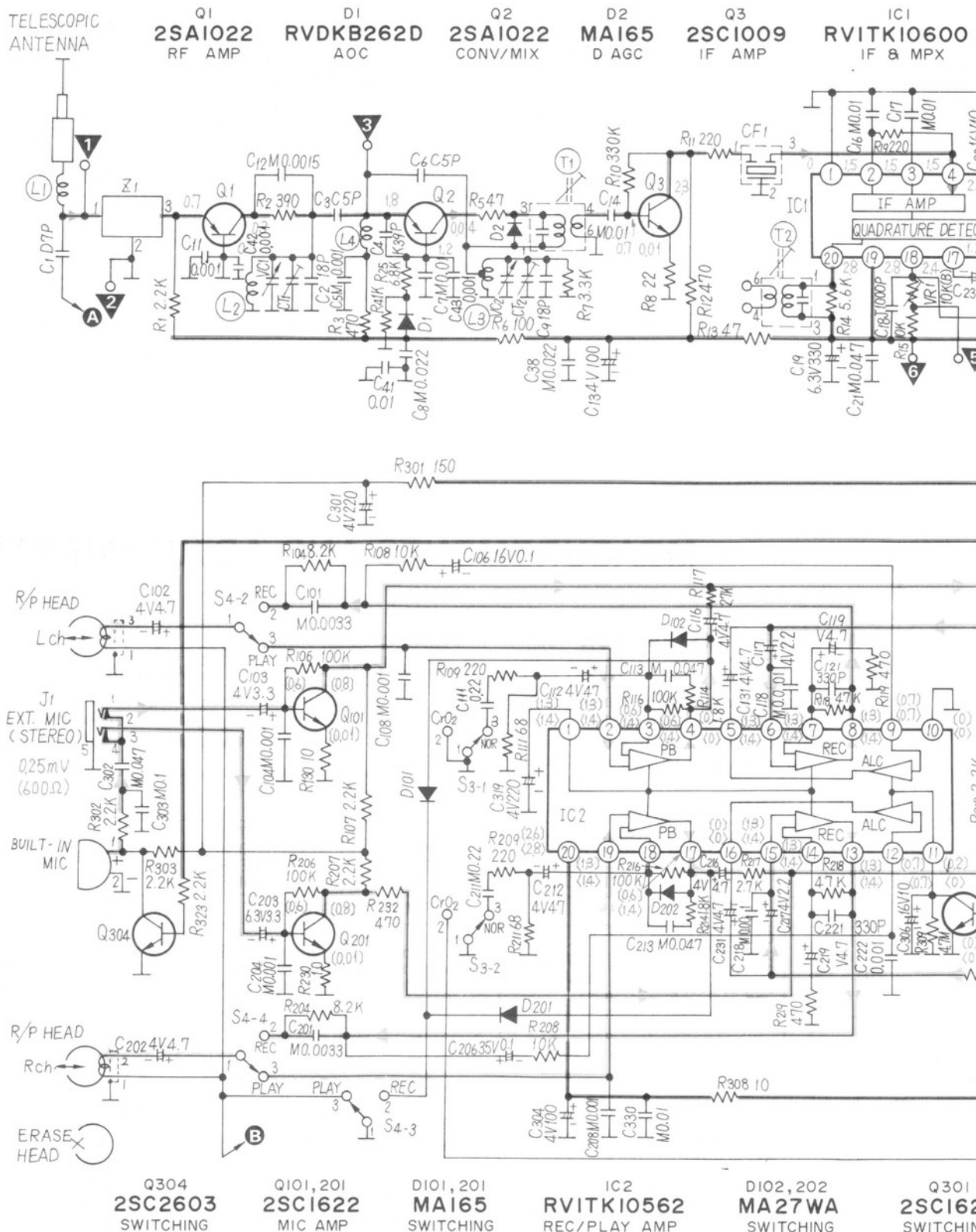
1. Set volume control to maximum.
2. Set FM mode switch to ST.
3. Set function switch to radio.
4. Set tape switch to NOR.
5. Set power source voltage to 3V DC.
6. Output of signal generator should be no higher than necessary to obtain an output reading.

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
FM-IF ALIGNMENT							
(1)	FM	Connect to test point ③ through 0.001μF. Negative side to test point ②.	10.7MHz (SWP.)	Point of non-interference. (on/about 90MHz)	Connect vert. amp. of scope to test point ④. Negative side to test point ②.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to fig. 11.)
(2)	FM	"	"	"	"	T2 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to fig. 12.)
FM-RF ALIGNMENT							
(3)	FM	Connect to test point ⑤ through FM dummy antenna. Negative side to test point ②.	90MHz	90MHz (Refer to fig. 13)	Output meter across phone jack.	L3 (FM OSC Coil) L2 (FM ANT Coil)	(*) Adjust for maximum output.
(4)	FM		106MHz	106MHz (Refer to fig. 13)		CT2 (FM OSC Trimmer) CT1 (FM ANT Trimmer)	(*) Adjust for maximum output. Repeat steps (3) and (4).

(*) Three output responses will be present; proper tuning is the center frequency.

SCHEMATIC DIAGRAM

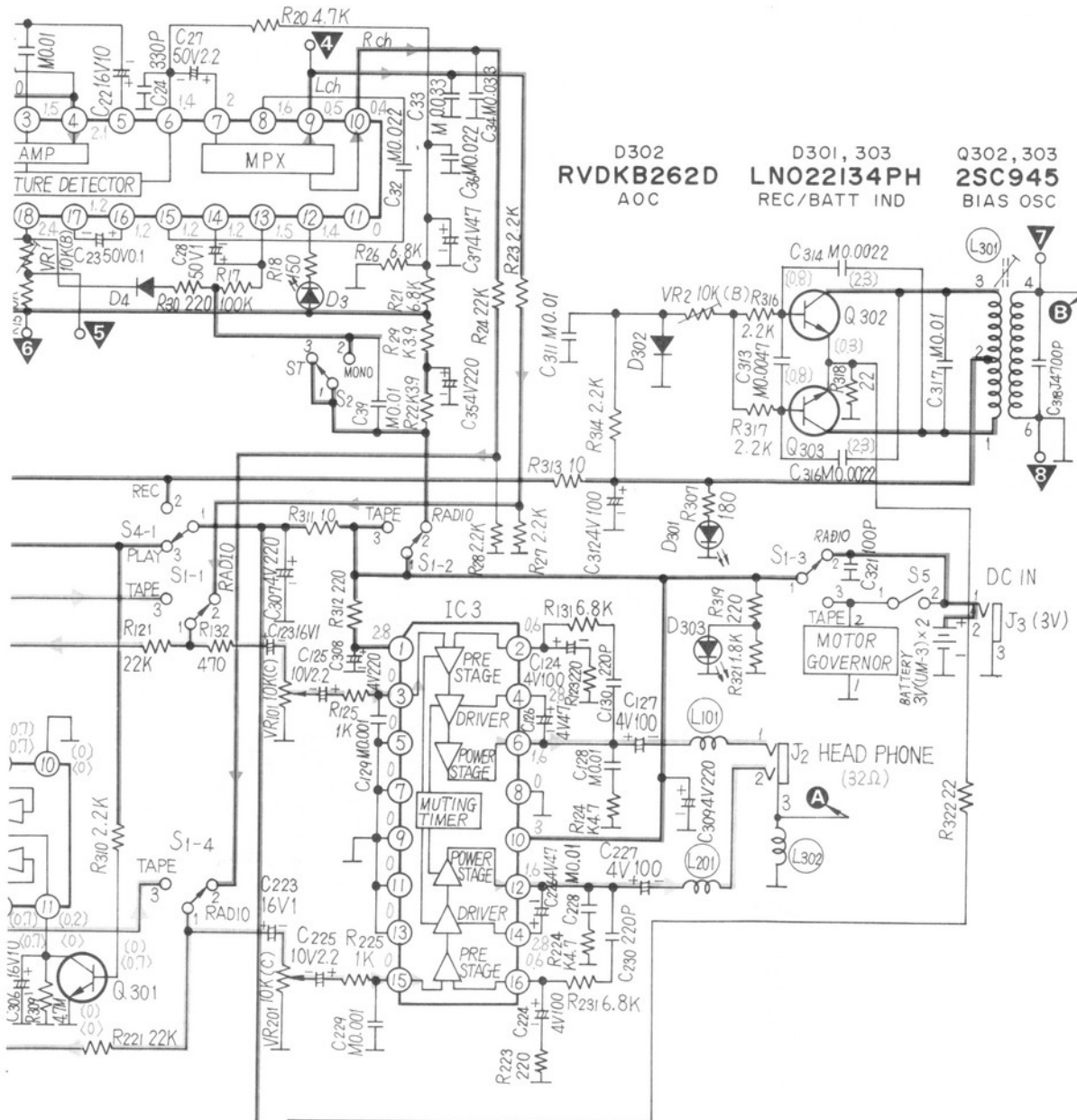


Notes:

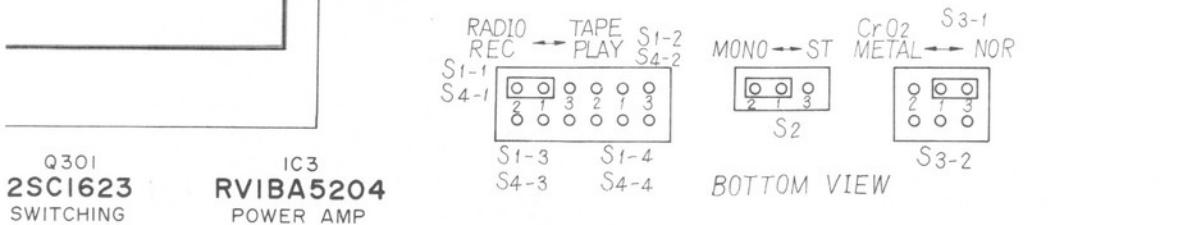
- S1-1~S1-4: Function switch in "RADIO" position. (2...RADIO, 3...POWER OFF/TAPE).
- S2: FM mode switch in "ST" position. (2...MONO, 3...ST).
- S3-1, S3-2: Tape switch in "NOR" position. (2...CrO₂/METAL, 3...NOR).
- S4-1~S4-4: Recording/playback switch in "Playback" position. (2...Recording, 3...Playback).
- S5: Motor switch.
- VR1: MPX adjustment VR.
VR2: Bias current adjustment VR.
VR101: Volume control VR (Lch).
VR201: Volume control VR (Rch).
L301: Bias oscillator adjustment.
- DC voltage measurements are taken with electronics voltmeter from negative terminal of battery. []...Record, < >...Play.

AM MODEL RX-1955/©

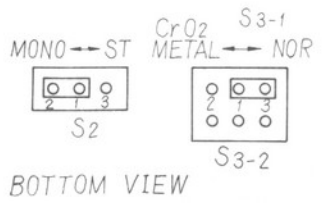
I
IO600 D4 D3
 MPX MA165 LN242RP
 SWITCHING STEREO IND



D302 D301, 303 Q302, 303
RVDKB262D **LN022134PH** **2SC945**
 AOC REC/BATT IND BIAS OSC



Q301 IC3
2SC1623 **RV1A5204**
 SWITCHING POWER AMP



BOTTOM VIEW

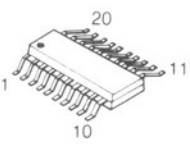
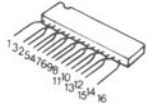
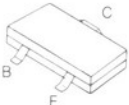
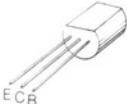



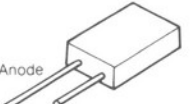
- 8. Battery current: No signal 50 mA
- Maximum output (Radio) 73 mA
- Maximum output (Record) 160 mA
- Maximum output (Playback) 120 mA

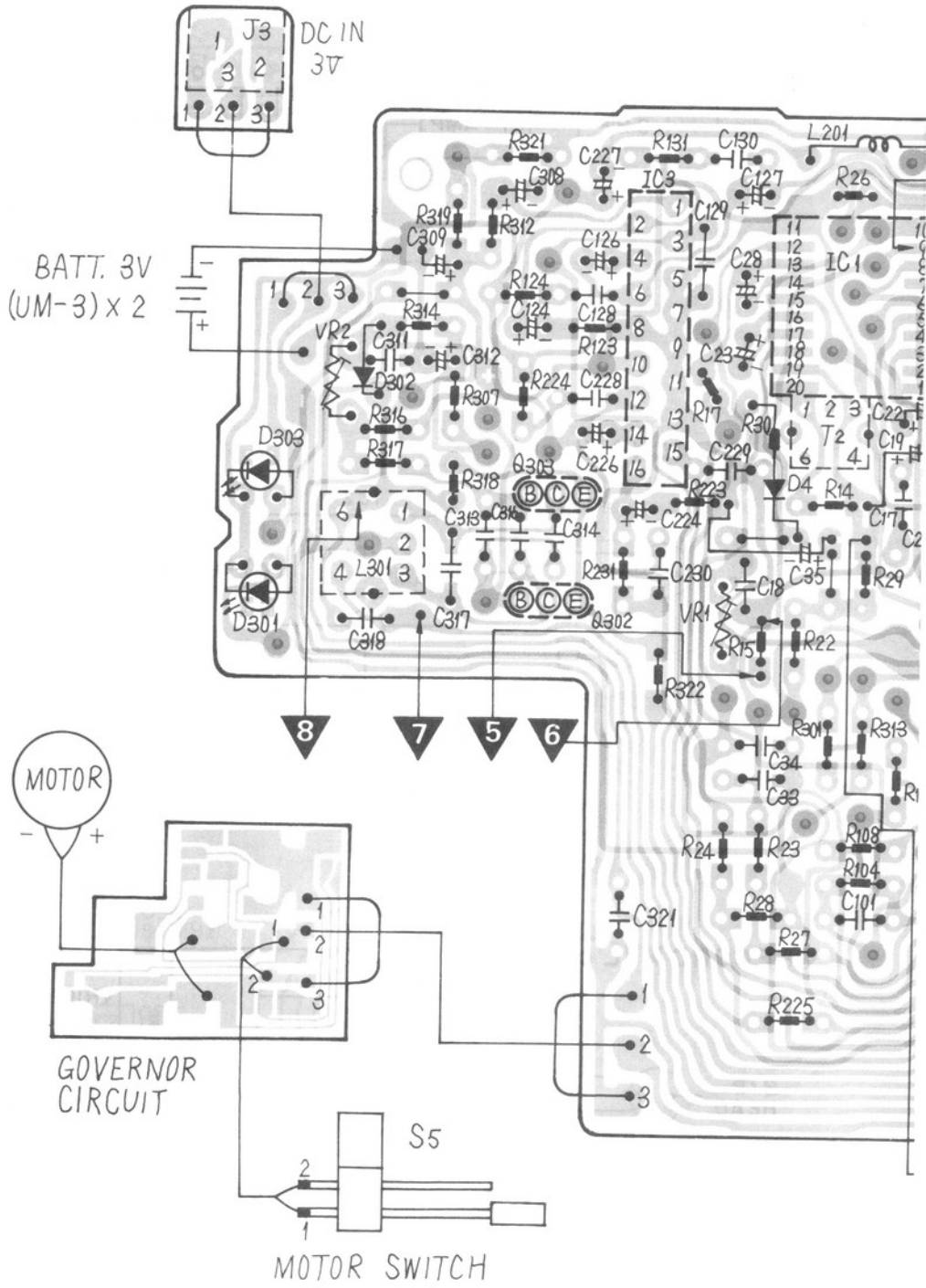
BIAS VOLTAGE
 8.5±0.5V (Normal)
 13±2V (CrO₂)

OVERALL FREQUENCY RESPONSE
 125Hz -4±3dB
 Normal 1kHz 0dB
 6.3kHz -4±6dB

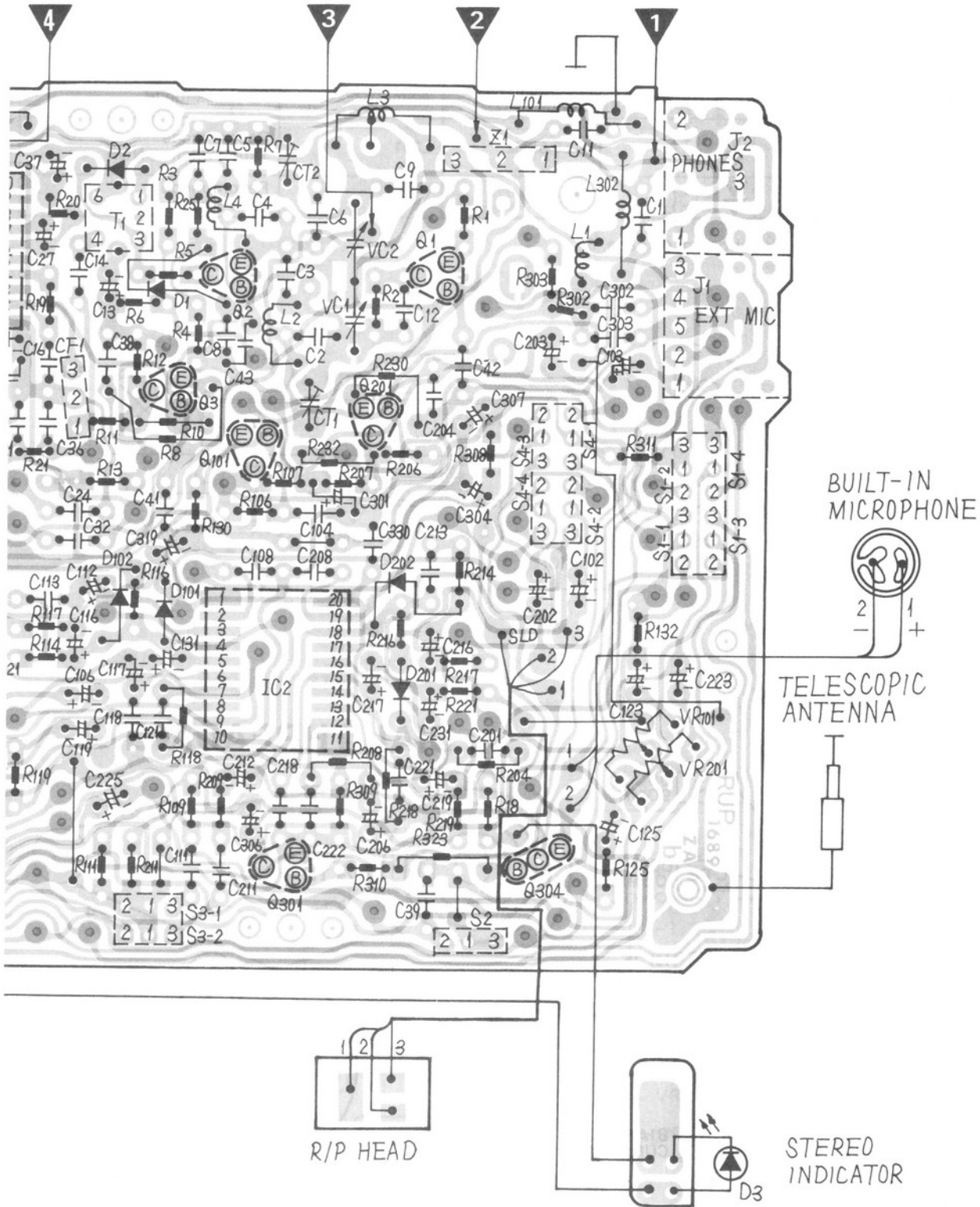


CIRCUIT BOARD AND WIRING

 <p>IC1, 2</p>
 <p>IC3</p>
 <p>Q1~3, 101, 201, 301</p>
 <p>Q304</p>
 <p>Q302, 303</p>
 <p>D1, 302</p>
 <p>D2, 4, 101, 102, 201, 202</p>
 <p>D3</p>



CONNECTION DIAGRAM MODEL RX-1955/©



■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	90 MHz, 60 dB	5 ... (+) 6 ... (-)	VR1	76 kHz	Adjust VR1, for 76 kHz (±100 Hz) reading on electronics counter.

■ AUDIO ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8 kHz, -20 dB)	PHONE JACK	Maximum output.	Azimuth screw	Playback mode
Bias oscillation frequency	—	7 ... (+) 8 ... (-)	54 ± 0.5 kHz	L301	Record mode Tape switch → NOR
Bias current	Use normal tape	7 ... (+) 8 ... (-)	8.5 ± 0.5 V	VR2	Record mode Tape switch → NOR

• As for test points, refer to the circuit board, on page 6.

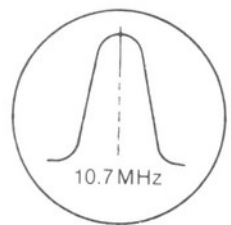


Fig. 11

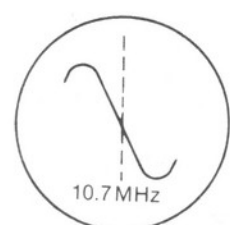


Fig. 12

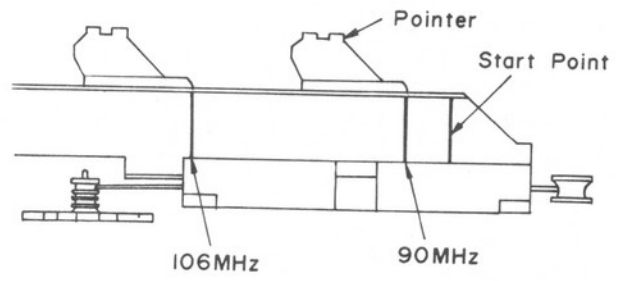


Fig. 13

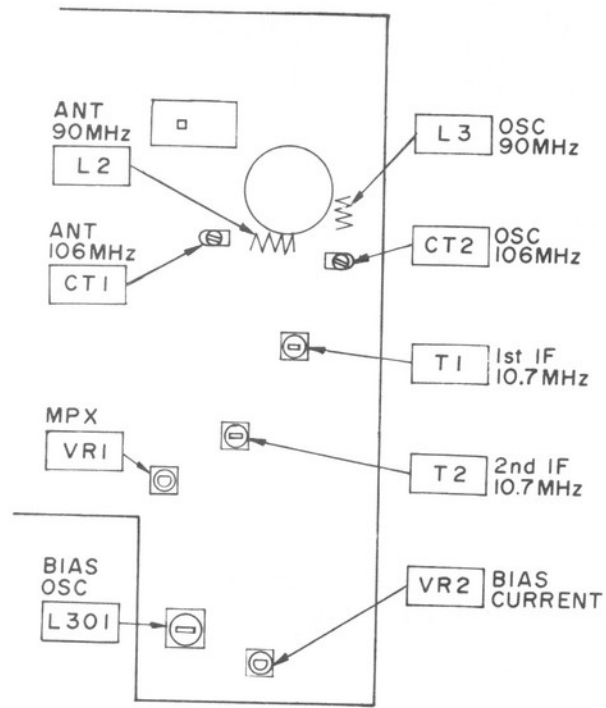


Fig. 14

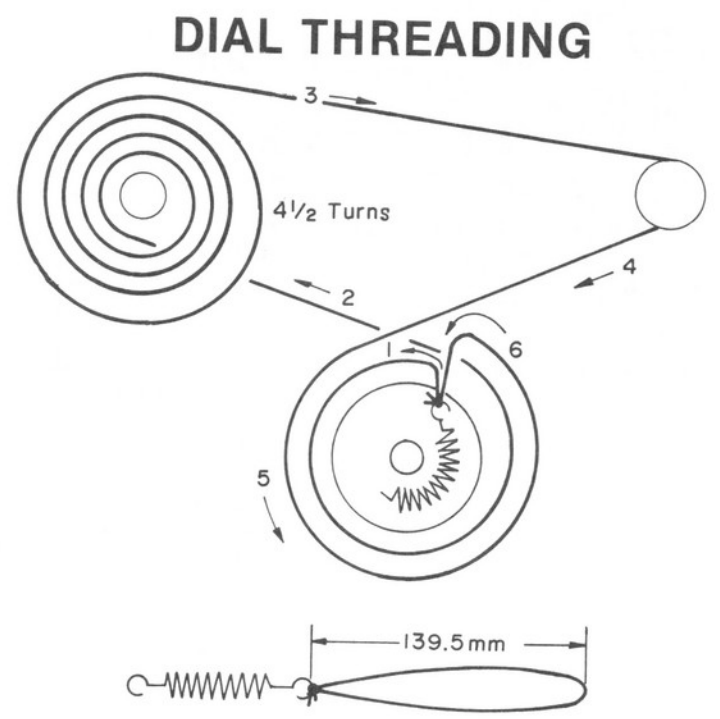
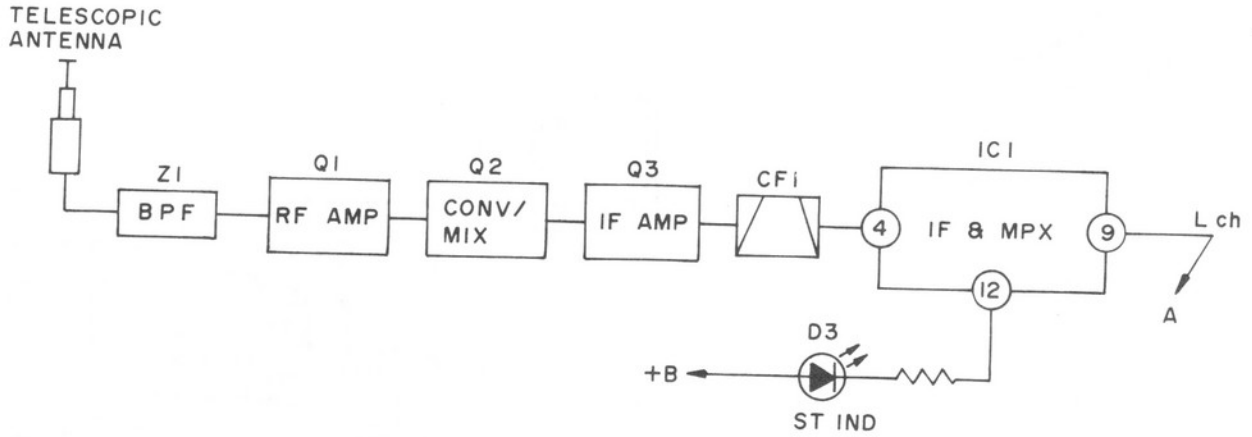


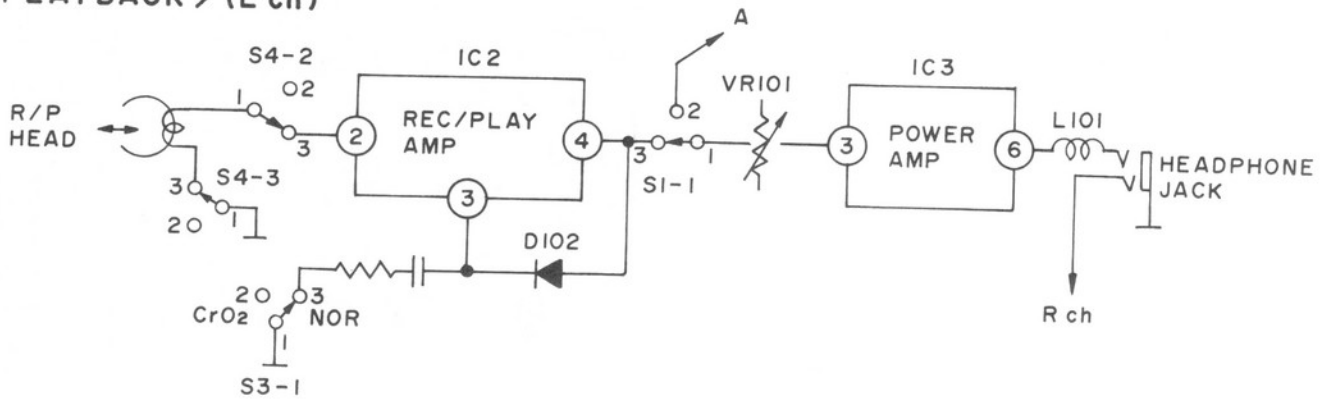
Fig. 15

BLOCK DIAGRAM

< RADIO >



< PLAYBACK > (L ch)



< RECORD > (L ch)

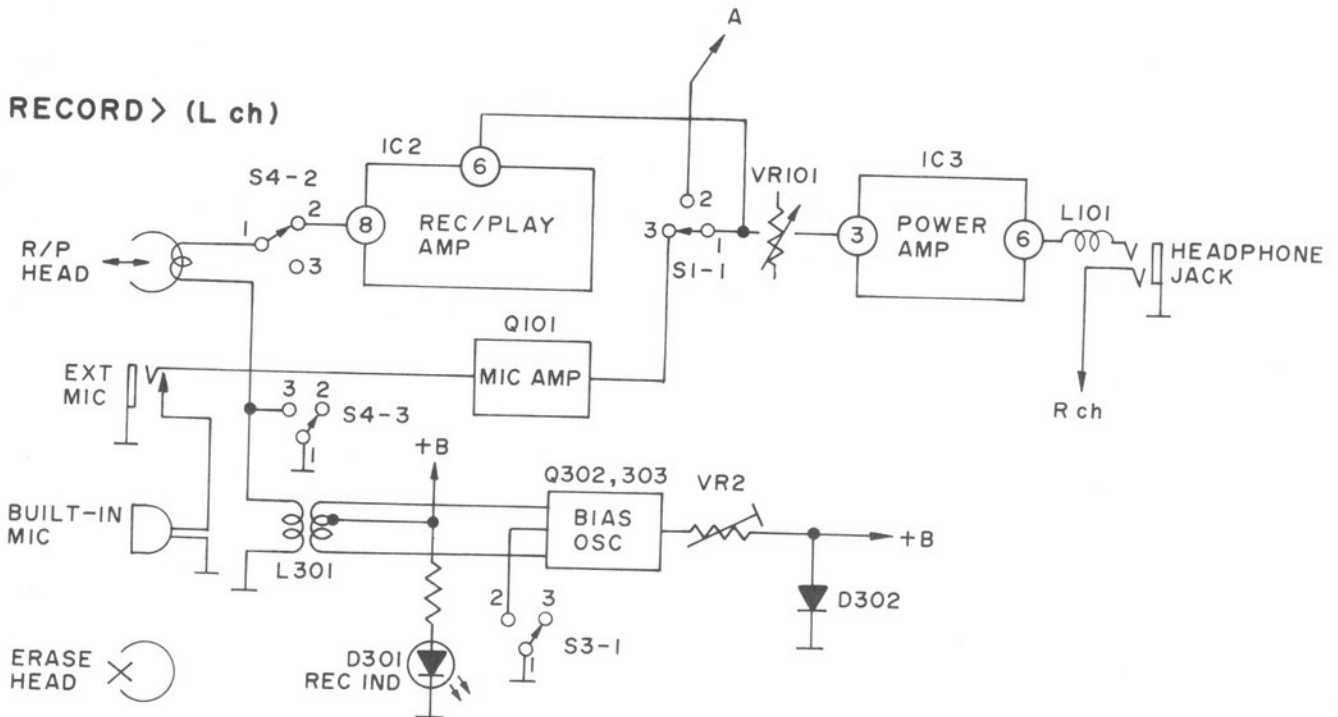


Fig. 16

MECHANISM PARTS LOCATION

BOTTOM VIEW

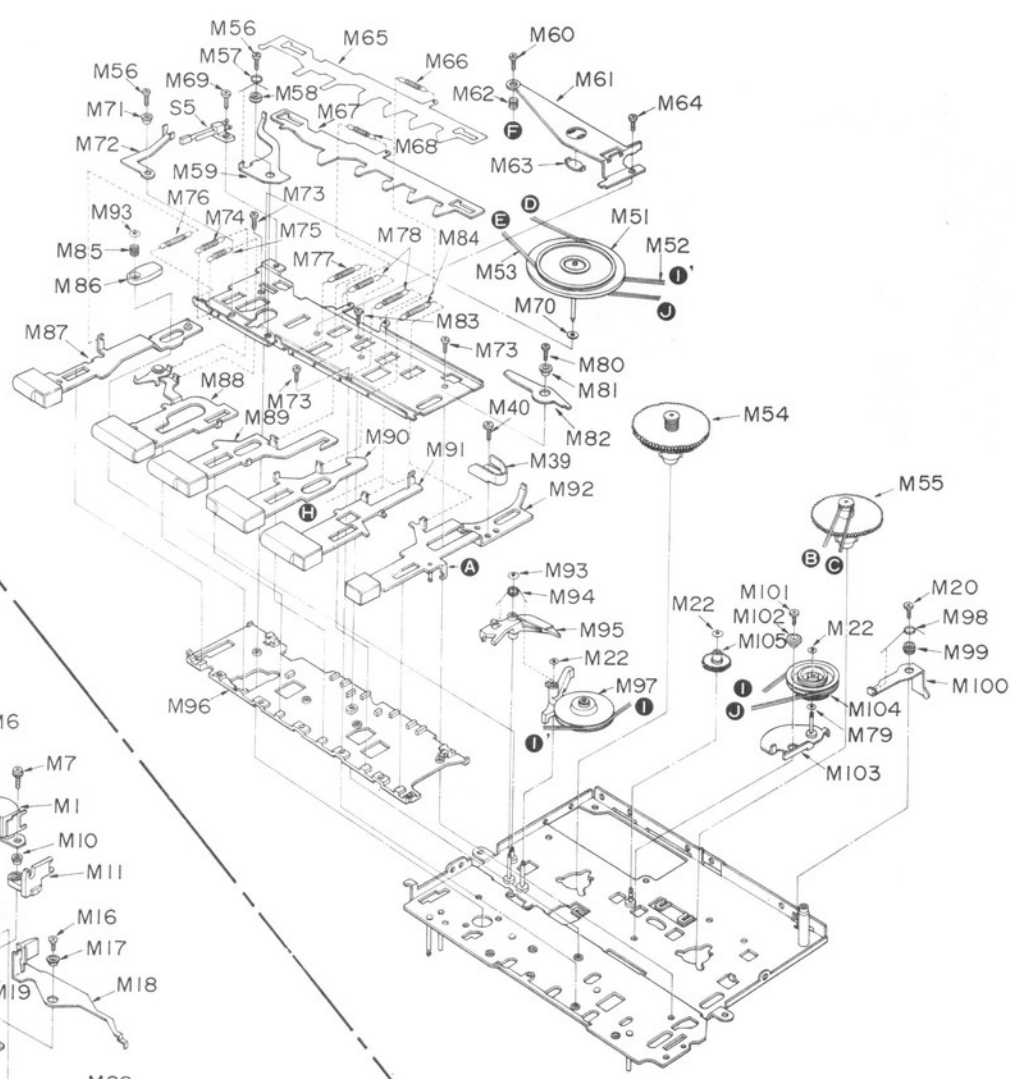


Fig. 17

TOP VIEW

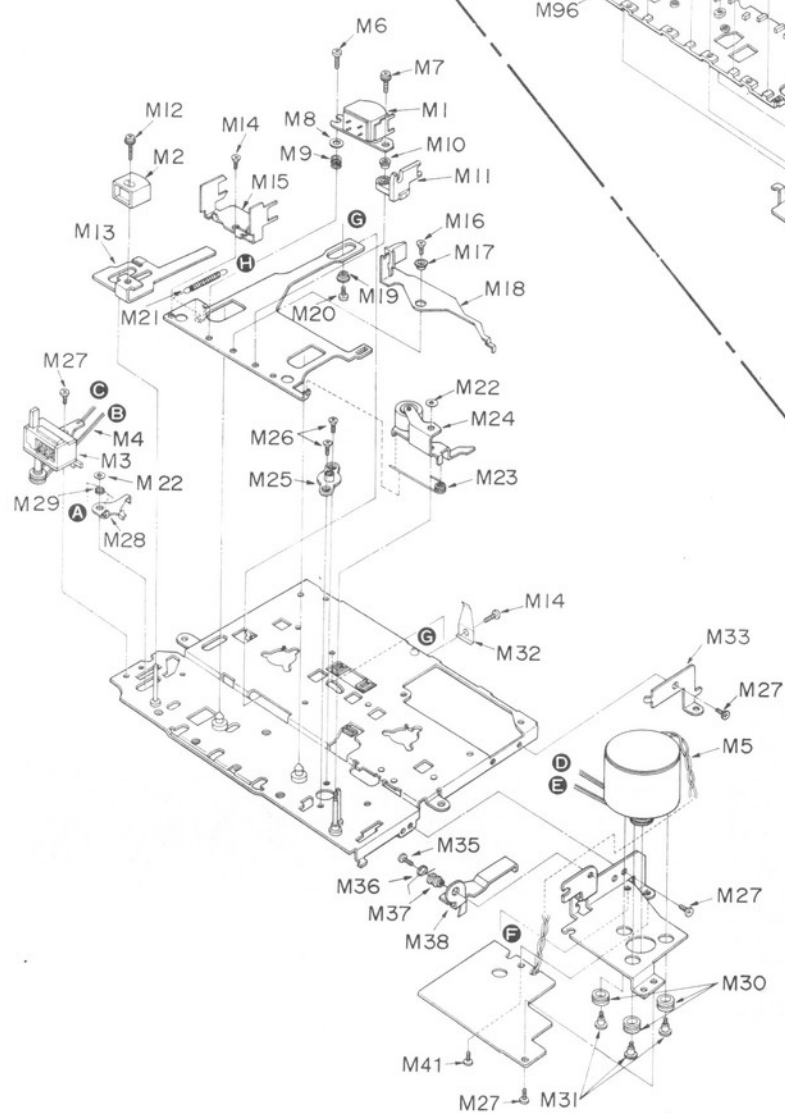


Fig. 18

Specification

Pressure of pressure roller	190~240gr
Takeup tension	20~60gr
Wow & flutter	Less than 0.3% (WRMS)
Tape speed fluctuation	±3%

CABINET PARTS LOCATION



Fig. 19

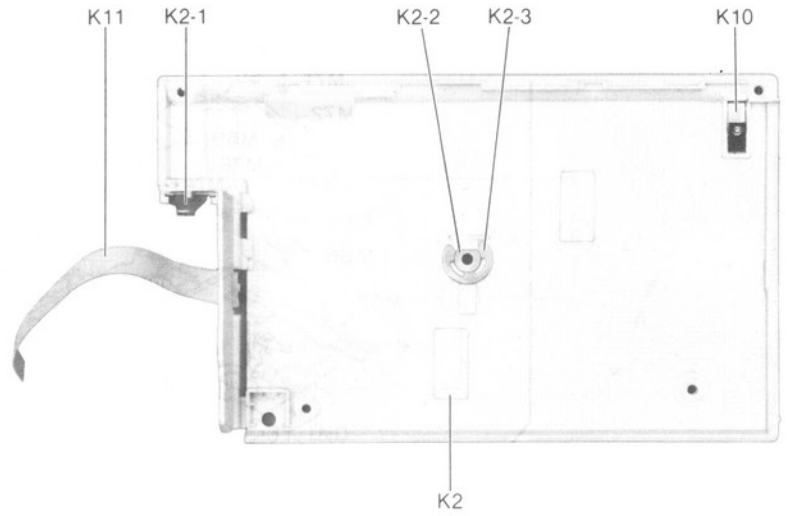


Fig. 22

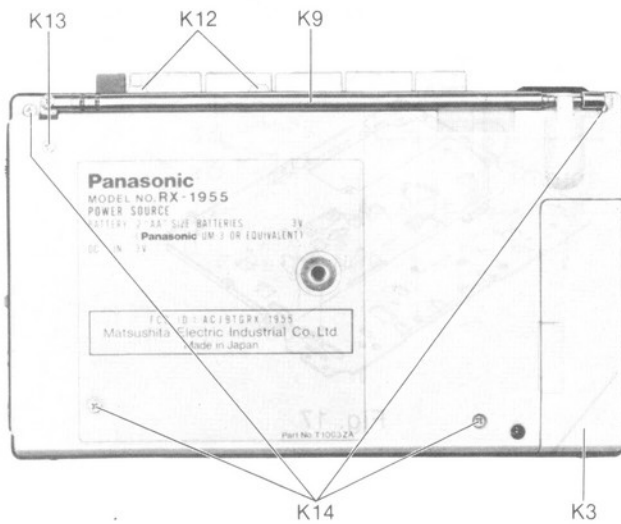


Fig. 20

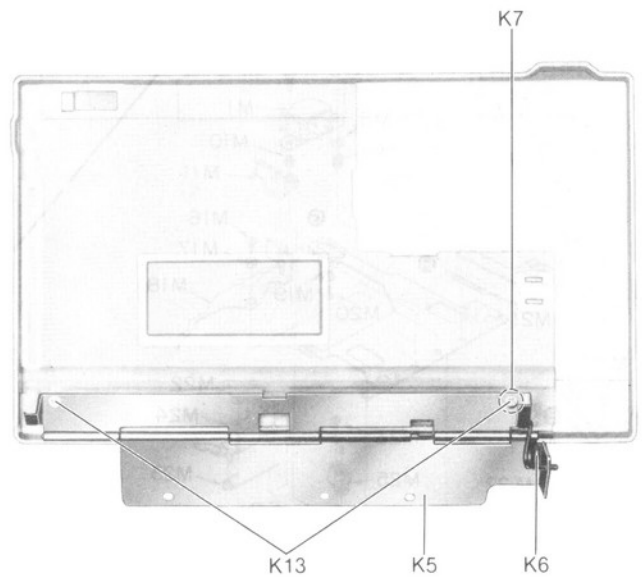


Fig. 23

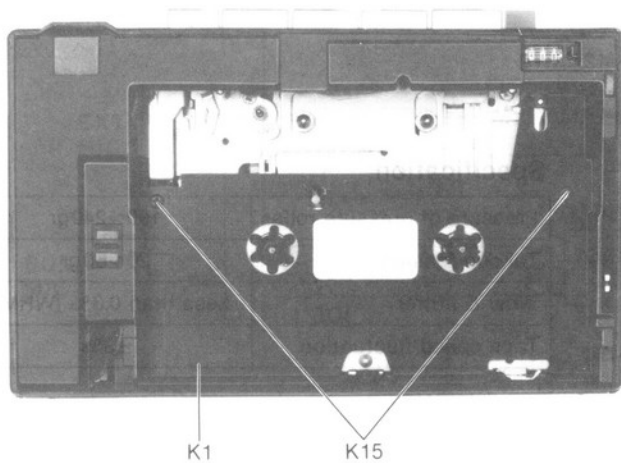


Fig. 21

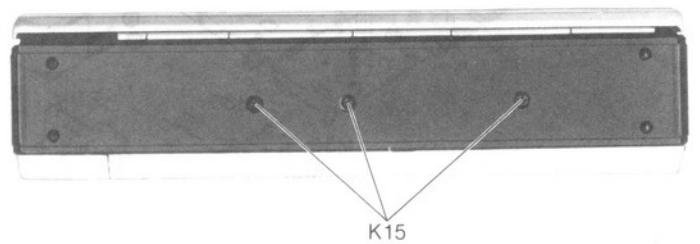


Fig. 24

ELECTRICAL PARTS LOCATION

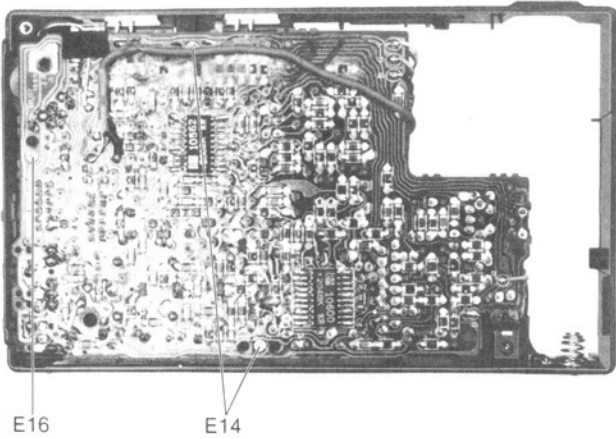


Fig. 25

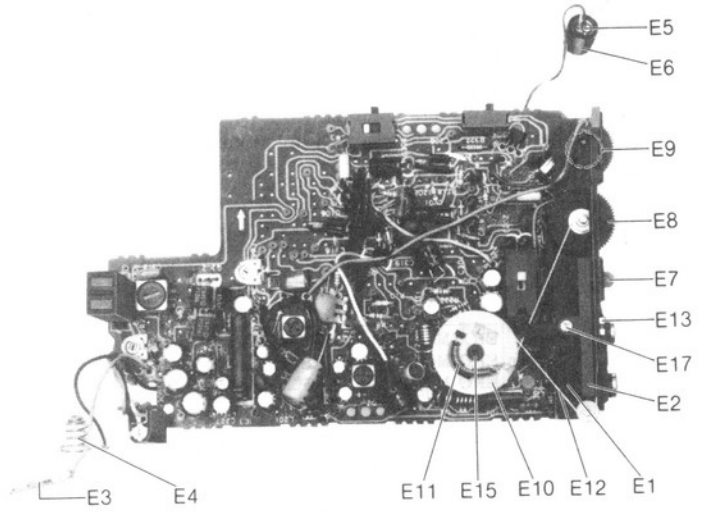


Fig. 26

ACCESSORIES AND PACKING MATERIALS

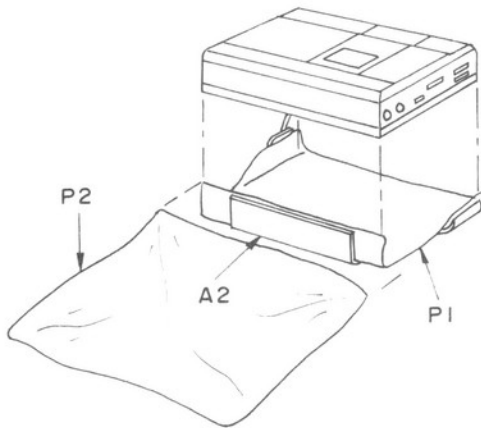


Fig. 27

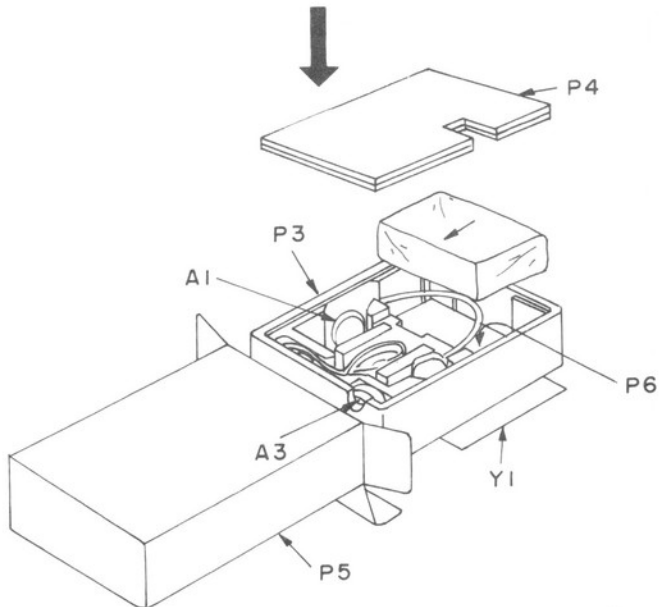


Fig. 28

HEADPHONES PARTS LOCATION

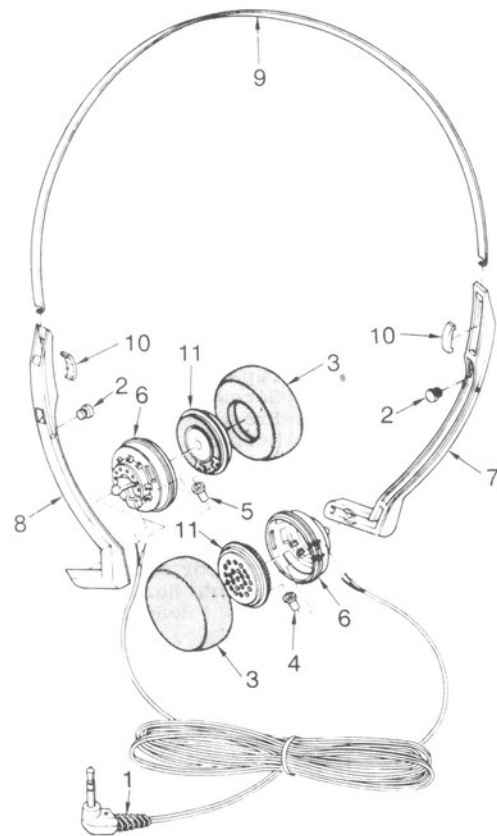


Fig. 29

REPLACEMENT PARTS LIST..... RX-1955

Notes:

- Important safety notice.
Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
- The S mark indicates service standard parts and may differ from production parts.
- RESISTORS & CAPACITORS
Unless otherwise specified.
All resistors are in OHMS (Ω) K=1000 Ω , M=1000k Ω
All capacitors are in MICRO FARADS (μ F) P= μ F

* Type & Wattage of Resistor
Type

ERC:Solid	ERX: Metal Film	ERW: Wirewound Resistor
ERD: Carbon	ERG: Metal Oxide	ERS: Fusible Resistor
RRD: Chip	ERO: Metal Film	ERF: Cement Resistor

Wattage

10,16:1/8W	14,25:1/4W	12:1/2W	1:1W	2:2W	3:3W
------------	------------	---------	------	------	------

* Type & Voltage of Capacitor
Type

ECFW: Semi-conductor	ECOD, ECKD, ECBT: Ceramic
ECQS: Styrol	ECQM, ECQV, ECQG: Polyester
ECUX: Chip	ECEA, ECSZ : Electrolytic
ECMS: Mica	ECQP : Polypropylene

Voltage

ECQ Type	ECQG, ECQV, Type	ECSZ Type	Others		
1H: 50V	0,5: 50V	OF: 3.15V	OJ : 6.3V	1H, 1V, 50: 50V	
2A: 100V	1: 100V	1A: 10V	1A : 10V	1J : 63V	
2E: 500V	2: 200V	1V: 35V	1C : 16V	2A : 100V	
2H: 500V		OJ: 6.3V	1E, 25: 25V		

Ref. No.	Part No.	Part Name & Description	Per Set
		MECHANICAL PARTS	
M1	RJH2S3Z	R/P Head	1
M2	RJH5S1Z	Erase Head	1
M3	RFC2Z	Counter Bracket Ass'y	1
M4	RFB27Z	Belt, Counter	1
M5	RFM18Z	Motor Ass'y	1
M6	RFE106Z	Screw, Azimuth	1
M7	XYN2+5F	Screw, R/P Head M'tg	1
M8	RFN80Z	Washer, R/P Head	1
M9	RFS40Z	Spring, Azimuth	1
M10	RFX65Z	Spacer, R/P Head	1
M11	RFE86Z	Tape Guide	1
M12	RFE89Z	Screw, Erase Head M'tg	1
M13	RFD146Z	Erase Head Plate	1
M14	RFE90Z	Screw, Cassette Pressure etc. M'tg	2
M15	RFE87Z	Tape Guide A	1
M16	RFE91Z	Screw, Detector Arm M'tg	1
M17	RFX66Z	Spacer, Detector Arm	1
M18	RFY218Z	Detector Arm Ass'y	1
M19	RFX67Z	Spacer, Head Panel	1
M20	RFE92Z	Screw, Head Panel M'tg	2
M21	RFS275Z	Spring, Head Panel	1
M22	RFN81Z	Washer, Pinch Roller etc	5
M23	RFS276Z	Spring, Pinch Roller Ass'y	1
M24	RFR11Z	Pinch Roller Ass'y	1
M25	RFD147Z	Flywheel Metal	1
M26	RFE93Z	Screw, Flywheel Metal M'tg	2
M27	RFE94Z	Screw, Counter etc. M'tg	4
M28	RFY219Z	Lever, Erase Head Plate	1
M29	RFS277Z	Spring, Erase Head Lever M'tg	1
M30	RFI20Z	Cushion, Motor	3
M31	RFE95Z	Screw, Motor M'tg	3

Ref.No.	Part No.	Part Name & Description	Per Set
M32	RFS278Z	Cassette Pressure	1
M33	RFD148Z	Side Bracket	1
M35	RFE96Z	Screw, Eject Kick Arm M'tg	1
M36	RFS279Z	Spring, Eject Kick Arm	1
M37	RFX68Z	Spacer, Eject Kick Arm	1
M38	RFY220Z	Eject Kick Arm	1
M39	RUS493Z	Spring, R/P Switch	1
M40	XSN17+2FZ	Screw, Spring M'tg	1
M41	RFE105Z	Screw, Governor Circuit M'tg	1
M51	RFF17Z	Flywheel Ass'y	1
M52	RFB28Z	RF Belt	1
M53	RFB29Z	Main Belt	1
M54	RFJ24Z	Take Up Reel Table	1
M55	RFJ25Z	Supply Reel Table Ass'y	1
M56	RFE97Z	Screw, Auto Stop Lever etc. M'tg	2
M57	RFS280Z	Spring, Auto Stop Lever	1
M58	RFX69Z	Spacer, Auto Stop Lever	1
M59	RFY221Z	Auto Stop Lever	1
M60	RFE98Z	Screw, Flywheel Metal M'tg	1
M61	RFD149Z	Flywheel Bracket	1
M62	RFS281Z	Spring, Thrust	1
M63	RFE88Z	Flywheel Bracket	1
M64	RFE99Z	Screw, Flywheel Bracket M'tg	1
M65	RFY222Z	Switch Operation Plate	1
M66	RFS282Z	Spring, Switch Operation Plate	1
M67	RFY223Z	Lock Operation Plate	1
M68	RFS283Z	Spring, Lock Operation Plate	1
M69	RFE100Z	Screw, Switch M'tg	1
M70	RFN82Z	Nylon washer, Flywheel	1
M71	RFX70Z	Spacer, Switch Arm	1
M72	RFY224Z	Switch Arm	1
M73	RFE101Z	Screw, Pressure Plate M'tg	3
M74	RFS284Z	Spring, Eject Arm	1
M75	RFS285Z	Spring, Stop Lever	1
M76	RFS286Z	Spring, Pause Lever	1
M77	RFS287Z	Spring, FF Lever	1
M78	RFS288Z	Spring, REC, REW Lever	2
M79	RFN84Z	Washer, RF Pulley	1
M80	RFE102Z	Screw, RC Arm M'tg	1
M81	RFX71Z	Spacer, RC Arm	1
M82	RFY225Z	RC Arm	1
M83	RFE103Z	Screw, Pressure Plate M'tg	1
M84	RFS292Z	Spring, Playback Lever	1
M85	RFS289Z	Spring, Pause Lever	1
M86	RFY226Z	Lever, Pause	1
M87	RYT1X1955M	Pause Rod Ass'y	1
M88	RYT2X1955M	Stop Rod Ass'y	1
M89	RYT3X1955M	FF Rod Ass'y	1
M90	RYT4X1955M	REW Rod Ass'y	1
M91	RYT5X1955M	Play Rod Ass'y	1
M92	RYT6X1955M	Rec Rod Ass'y	1
M93	RFN83Z	Washer	2
M94	RFS290Z	Spring, Auto Stop Kick Arm	1
M95	RFY233Z	Auto Stop Kick Arm	1
M96	RFU17Z	Button Base	1
M97	RFY234Z	TU Pulley Arm Ass'y	1
M98	RFS291Z	Spring, Rec Safety Lever	1
M99	RFX72Z	Spacer, Rec Safety Lever	1
M100	RFY235Z	Rec Safety Lever	1
M101	RFE104Z	Screw, RF Pulley Arm M'tg	1
M102	RFX73Z	Spacer, RF Arm	1
M103	RFY236Z	RF Pulley Arm Ass'y	1
M104	RFQ21Z	RF Pulley Ass'y	1
M105	RFQ39Z	FF Gear	1
		INTEGRATED CIRCUITS, TRANSISTORS AND DIODES	
IC1	RVITK10600	IC	1
IC2	RVITK10562	IC	1
IC3	RVIBA5204	IC	1

Ref. No.	Part No.	Part Name & Description	Per Set	Ref. No.	Part No.	Part Name & Description	Per Set
Q1	2SA1022C	Transistor (Ge)	1	E6	RHG557Z	Cover, Microphone	1
Q2	2SA1022B	Transistor (Ge)	1	E7	RBD196Z	Knob, Power	1
Q3	2SC1009F4	Transistor (Si)	1	E8	RBT168Z	Knob, Tuning	1
Q101, 201	2SC1622AD17	Transistor (Si)	2	E9	RMR111Z	Spacer, Volume	1
Q301	2SC1623L6A	Transistor (Si)	1	E10	RDD182Z	Drum, Dial	1
Q302, 303	2SC945-Q	Transistor (Si)	2	S			
Q304	2SC2603F	Transistor (Si)	1	E11	RDS2052Z	Spring, Dial	1
D1, 302	RVDKB262D	Diode (Si)	2	S			
D2, 4, 101, 201	MA165	Diode (Si)	4	E12	RDZ03Y	Cord, Dial	1
D3	LN242RP	LED	1				ROLL
D102, 202	MA27WA	Diode (Si)	2	E13	RDP866Z	Pointer, Dial	1
D301, 303	LN022134PH	LED	2	E14	XTNR2+4CFN	Screw, Circuit Board etc. M'tg	2
				E15	XSHR17+2FZ	Screw, Drum M'tg	1
				E16	XSHR2+5FN	Screw, Tuning Knob M'tg	1
				E17	XTNR2+6CFZ	Screw, Dial Chassis M'tg	1
		COILS AND TRANSFORMERS				ACCESSORIES	
L2	RLO4Y15	Coil, Antenna	1	A1	RD9277M	Headphone	1
L3	RLO4Y60	Coil, Oscillator	1	A2	RQK94Z	Carrying Holder	1
L101, 201, 302	RLQZA100K	Coil, Choke	3	A3	RQC9020Z	Shoulder Strap	1
L301	RLO9A2	Coil, Bias Oscillator	1				
T1, 2	RLI4A4	IFT	2				
		VARIABLE RESISTORS				PACKING MATERIALS	
VR1, 2	EVNA6AA00B14	Variable Resistor, Preset, 10k Ω (B)	2	S			
VR101	EVLAGAA02A14	Variable Resistor, 10k Ω (A)	1	P1	RPH412Z	Soft Sheet	1
VR201	EVLC2AA02A14	Variable Resistor, 10k Ω (A)	1	P2	XZB20X20A01	Polyethylene Cover	1
				P3	RPN4111Z	Pad	1
				P4	RPN4112Z	Pad	1
				P5	RPK1577Z	Gift Box	1
				P6	RPE507Z	Display	1
						PRINTED MATERIALS	
VC1, 2	RCV2C3R1P	Tuning Capacitor	1	Y1	RQX4120Z	Instruction Book, For USA	1
CT1, 2	RCVCTZ3110	Trimmer Capacitor	2	Y1	RQX4121Z	Instruction Book, For Canada	1
		CERAMIC FILTER				HEADPHONES	
CF1	RVFSFE107MAZ	Ceramic Filter	1	1	RWR4923A10	Input Cord	1
				2	RWR6522A10	Stopper	2
		COMPONENT COMBINATION		3	RWR8465A10	Ear Pad	2
Z1	RXABPWB8	Component Combination	1	4	RWR6533A10	Bushing (L)	1
				5	RWR6534A10	Bushing (R)	1
		SWITCHES		6	RWR8024A10	Holder	2
S1	RSS2D11Z	Switch, Function	1	7	RWR8225A10	Hanger (L)	1
S2	RSS2A32Z	Switch, FM Mode	1	8	RWR8226A10	Hanger (R)	1
S3	RSS2B32Z	Switch, Tape	1	9	RWR6322A10	Head Band	1
S4	RSS2D12Y	Switch, Recording/ Playback	1	10	RWR7272A10	Spring (Head Band)	2
S5	RFA35Z	Switch, Motor	1	11	RWR2602A10	Speaker	2
		JACKS					
J1	RJJ1D19Z	Jack, Microphone	1				
J2	RJJ1D15Z	Jack, Phones	1				
J3	RJJ1B3Z	Jack, DC Input	1				
		CABINET PARTS					
K1	RYF1X1955M	Front Cabinet Ass'y	1				
K2	RYF2X1955M8	Rear Cabinet Ass'y	1				
K2-1	RJC935Z	Terminal, Battery	1				
K2-2	RHE5043Z	Nut, Case	1				
K2-3	XUCR5FT	Circlip	1				
K3	RKK242Z8	Battery Cover Ass'y	1				
K4	RYPX1955M	Cassette Panel Ass'y	1				
K5	RBH19Z	Hinge, Cassette Panel	1				
K6	RUS509Z	Spring, Hinge	1				
K7	RDS3040Z	Spring, Hinge Earth	1				
K8	RKM765Z	Cabinet Body	1				
K9	XEARK104EAY	Telescopic Antenna	1				
K10	RJT806Z	Terminal, Telescopic Antenna	1				
K11	RHS31Z	Ribbon, Battery	1				
K12	RBD197Z	Knob, Tape, FM Mode	2				
K13	XSHR2+25FN	Screw, Hinge etc. M'tg	3				
K14	XSHR2+5FN	Screw, Cabinet M'tg	4				
K15	XSHR2+5FZ	Screw, Cabinet M'tg	5				
		ELECTRICAL PARTS					
E1	RZAX1955M	Dial Chassis Ass'y	1				
E2	RUG74Z	Guide, Pointer	1				
E3	RJC368Z	Terminal, Battery + Side	1				
E4	RJC719Z	Spring, Battery - Side	1				
E5	WM063X	Microphone	1				

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
RESISTORS											
R1	RRD18XJ222	2.2k	R28	RRD18XJ222	2.2k	R209	RRD18XJ221	220	C43	ECKD1H102KB	0.001
R2	RRD18XJ391	390	R29	ERD10TJ3R9	3.9 S	R211	RRD18XJ680	68	C101	ECUX1H332MD	0.0033
R3	RRD18XJ471	470	R30	ERD10TJ221	220 S	R214	RRD18XJ182	1.8k	C102	ECSF0GD475	4.7
R4	RRD18XJ102	1k	R104	RRD18XJ822	8.2k	R216	RRD18XJ104	100k	C103	ECSF0JD335	3.3
R5	RRD18XJ470	47	R106	RRD18XJ104	100k	R217	RRD18XJ272	2.7k	C104	ECUX1H102MD	0.001
R6	RRD18XJ101	100				R218	ERD10TJ473	47k S	C106	ECSF1CD104	0.1
R7	RRD18XJ332	3.3k	R107	RRD18XJ222	2.2k	R219	RRD18XJ471	470	C108	ECUX1H102MD	0.001
R8	ERD10TJ220	22 S	R108	RRD18XJ103	10k	R221	RRD18XJ223	22k			
R10	ERD10TJ334	330k S	R109	RRD18XJ221	220	R223	RRD18XJ221	220	C111	ECUX1E224ZF	0.22
R11	RRD18XJ221	220	R111	RRD18XJ680	68	R224	RRD18XK4R7	4.7	C112	ECEA0GK470	47
			R114	RRD18XJ182	1.8k				C113	ECUX1E473MD	0.047
			R116	RRD18XJ104	100k	R225	RRD18XJ102	1k	C116	ECSF0JE475	4.7
R12	RRD18XJ471	470	R117	RRD18XJ272	2.7k	R230	ERD10TJ100	10 S	C117	ECSF1AD225	2.2
R13	RRD18XJ470	47	R118	ERD10TJ473	47k S	R231	RRD18XJ682	6.8k	C118	ECUX1H102MD	0.001
R14	RRD18XJ562	5.6k	R119	RRD18XJ471	470	R232	ERD10TJ471	470 S	C119	ECSF0GD475	4.7
R15	RRD18XJ103	10k	R121	RRD18XJ223	22k	R301	RRD18XJ151	150	C121	ECUX1H331K	330P
R17	ERD10TJ104	100k S				R302	ERD10TJ222	2.2k S	C123	ECSF1CD105	1
R18	RRD18XJ151	150	R123	RRD18XJ221	220	R303	RRD18XJ222	2.2k	C124	ECEA0GK101	100
R19	RRD18XJ221	220	R124	RRD18XK4R7	4.7	R307	RRD18XJ181	180			
R20	ERD10TJ472	4.7k S	R125	RRD18XJ102	1k	R308	RRD18XJ100	10	C125	ECSF1AD225	2.2
R21	ERD10TJ682	6.8k S	R130	RRD18XJ100	10	R309	RRD18XK475	4.7M	C126	ECEA0GK470	47
R22	RRD18XK3R9	3.9	R131	RRD18XJ682	6.8k				C127	ECEA0GK101	100
			R132	RRD18XJ471	470	R310	RRD18XJ222	2.2k	C128	ECUX1H103MD	0.01
R23	RRD18XJ222	2.2k	R204	ERD10TJ822	8.2k S	R311	RRD18XJ100	10	C129	ECKD1H102ZF	0.001
R24	RRD18XJ222	2.2k	R206	RRD18XJ104	100k	R312	RRD18XJ221	220	C130	ECUX1H221K	220P
R25	RRD18XJ682	6.8k	R207	RRD18XJ222	2.2k	R313	RRD18XJ100	10	C131	ECSF0GD475	4.7
R26	ERD10TJ682	6.8k S	R208	ERD10TJ103	10k S	R314	RRD18XJ222	2.2k	C201	ECUX1H332MD	0.0033
R27	RRD18XJ222	2.2k				R316	RRD18XJ222	2.2k	C202	ECSF0GD475	4.7
						R317	RRD18XJ222	2.2k	C203	ECSF0JD335	3.3
						R318	ERD10TJ220	22 S			
						R319	RRD18XJ221	220	C204	ECUX1H102MD	0.001
						R321	RRD18XJ182	1.8k	C206	ECSF1VE104	0.1
									C208	ECUX1H102MD	0.001
						R322	RRD18XJ220	22	C211	ECUX1E224ZF	0.22
						R323	ERD10TJ222	2.2k S	C212	ECEA0GK470	47
						CAPACITORS					
						C1	ECUX1H070DC	7P	C213	ECUX1E473MD	0.047
						C2	ECUX1H180KC	18P	C216	ECSF0JE475	4.7
						C3	ECUX1H050CC	5P	C217	ECSF1AD225	2.2
						C4	ECUX1H390KC	39P	C218	ECUX1H102MD	0.001
						C5	ECUX1H102MD	0.001	C219	ECSF0JE475	4.7
						C6	ECUX1H050CC	5P	C221	ECUX1H331K	330P
						C7	ECUX1H103MD	0.01	C222	ECUX1H102MD	0.001
						C8	ECUX1H223MD	0.022	C223	ECSF1CD105	1
						C9	ECUX1H180KC	18P	C224	ECEA0GKS101	100
						C11	ECUX1H102ZF	0.001	C225	ECSF1AD225	2.2
									C226	ECEA0GKS470	47
									C227	ECEA0GK101	100
									C228	ECUX1H103MD	0.01
						C12	ECUX1H152MD	0.0015	C229	ECUX1H102ZF	0.001
						C13	ECEA0GKS101	100	C230	ECUX1H221K	220P
						C14	ECUX1H103MD	0.01			
						C16	ECUX1H103MD	0.01			
						C17	ECUX1H103MD	0.01	C231	ECSF0JE475	4.7
						C18	ECQP2A102JZ	1000P	C301	ECEA0GKS221	220
						C19	ECEA0JV331	330	C302	ECUX1E473MD	0.047
						C21	ECUX1E473MD	0.047	C303	ECUX1E104MD	0.1
						C22	ECEA1CK100	10	C304	ECEA0GKS101	100
						C23	ECEA1HKS0R1	0.1	C306	ECEA1CK100	10
									C307	ECEA0GKS221	220
						C24	ECUX1H331K	330P	C308	ECEA0GK221	220
						C27	ECEA1HK2R2	2.2	C309	ECEA0GKS221	220
						C28	ECEA1HK010	1	C311	ECUX1H103MD	0.01
						C32	ECUX1H223MD	0.022			
						C33	ECUX1E333MD	0.033	C312	ECEA0GKS101	100
						C34	ECUX1E333MD	0.033	C313	ECUX1H472MD	0.0047
						C35	ECEA0GKS221	220	C314	ECUX1H222MD	0.0022
						C36	ECUX1H223MD	0.022	C316	ECUX1H222MD	0.0022
						C37	ECEA0GK470	47	C317	ECUX1H103MD	0.01
						C38	ECUX1H223MD	0.022	C318	ECQP2A472JZ	4700P
									C319	ECEA0GKS221	220
						C39	ECUX1H103MD	0.01	C321	ECUX1H101K	100P
						C41	ECUX1H103ZF	0.01	C330	ECUX1H103MD	0.01
						C42	ECUX1H102ZF	0.001	C401	ECSF0GE106	10