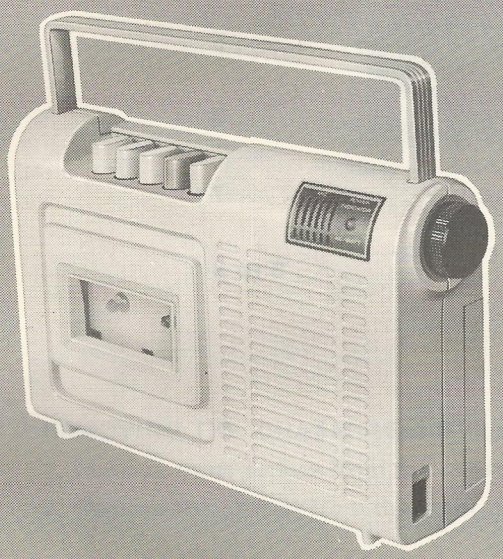
SERVICE DATA
FILE NO. 100-077

TOSHIBA
CASSETTE RECORDER
KT-225



SPECIFICATIONS

Usable Tape:	C-30, C-60, C-90, C-120
Tape Speed:	1-7/8ips
Track:	2 track 1 channel monophonic
Recording System:	AC bias at 50 KHz
Erasing System:	DC erasure
Frequency Response:	150 to 8000 Hz
Output Power:	1 watt (Max.)
Transistor and Diode:	8 transistors, 4 diodes
Speaker:	3-9/16", Dynamic Speaker
Input Jack:	MIC, 1.8 Kohm, 3.5mm
Output Jack:	MONI, 8 ohm, 3.5mm
Power Source:	AC 110/120/220/240V (TE) AC 240V (AY) Dry battery 6volt (4pcs "C" cell)
Power Consumption:	7 W
Rewind Time:	120 seconds maximum (Using C-60 tape)
Fast Forward Time:	120 seconds maximum (Using C-60 tape)
Dimensions:	Width 298mm(11-3/4in) Depth 76mm(3in) Height 181mm(7-1/8in)
Weight:	Approx. 2kg (4.5 lbs)

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DISASSEMBLY INSTRUCTIONS

REMOVING THE BACK CABINET(See figure 1)

1. Remove the battery cover.
2. Remove two screws from the bottom cover and remove the wiring from the battery plate.
3. Remove the back cabinet from the front cabinet.

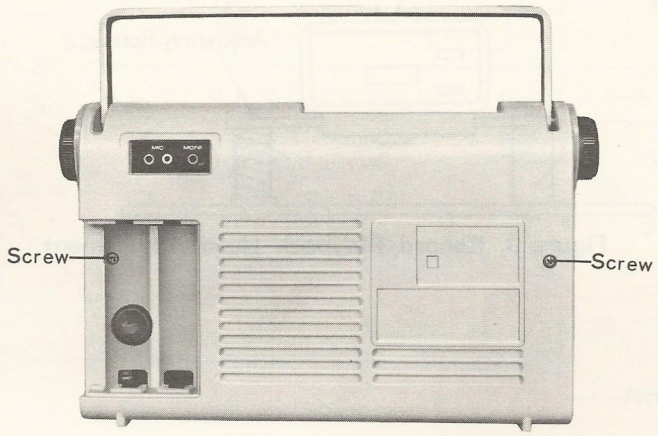


Figure 1. Location of Screws

REMOVING THE CHASSIS(See figure 2)

1. Remove three screws from the chassis.
2. Remove the chassis from the front cabinet.

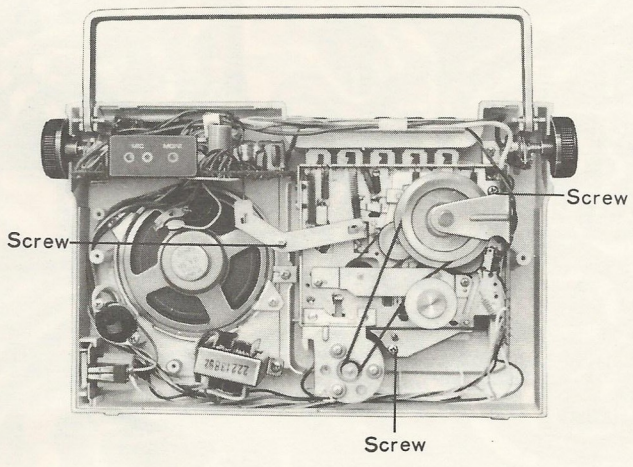


Figure 2. Location of Screws

ELECTRICAL ADJUSTMENT

RECORD/PLAYBACK HEAD ADJUSTMENT

1. Connect the VTVM across the speaker voice coil.
2. Use a 6.3KHz test tape for adjustment.
3. Adjust the adjusting screw so that the VTVM indicates the maximum position.

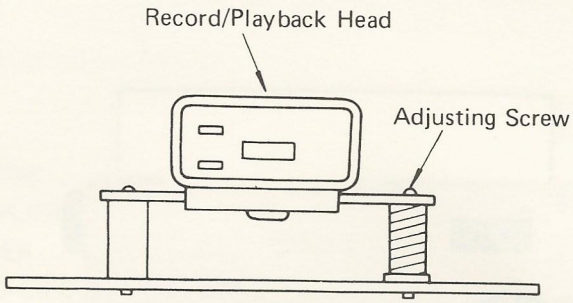


Figure 3. Record/Playback Head Adjustment.

BIAS CURRENT

Oscillation circuit non-adjustment.

Bias Current Center 0.45 mA

ELECTRICAL PARTS LOCATIONS

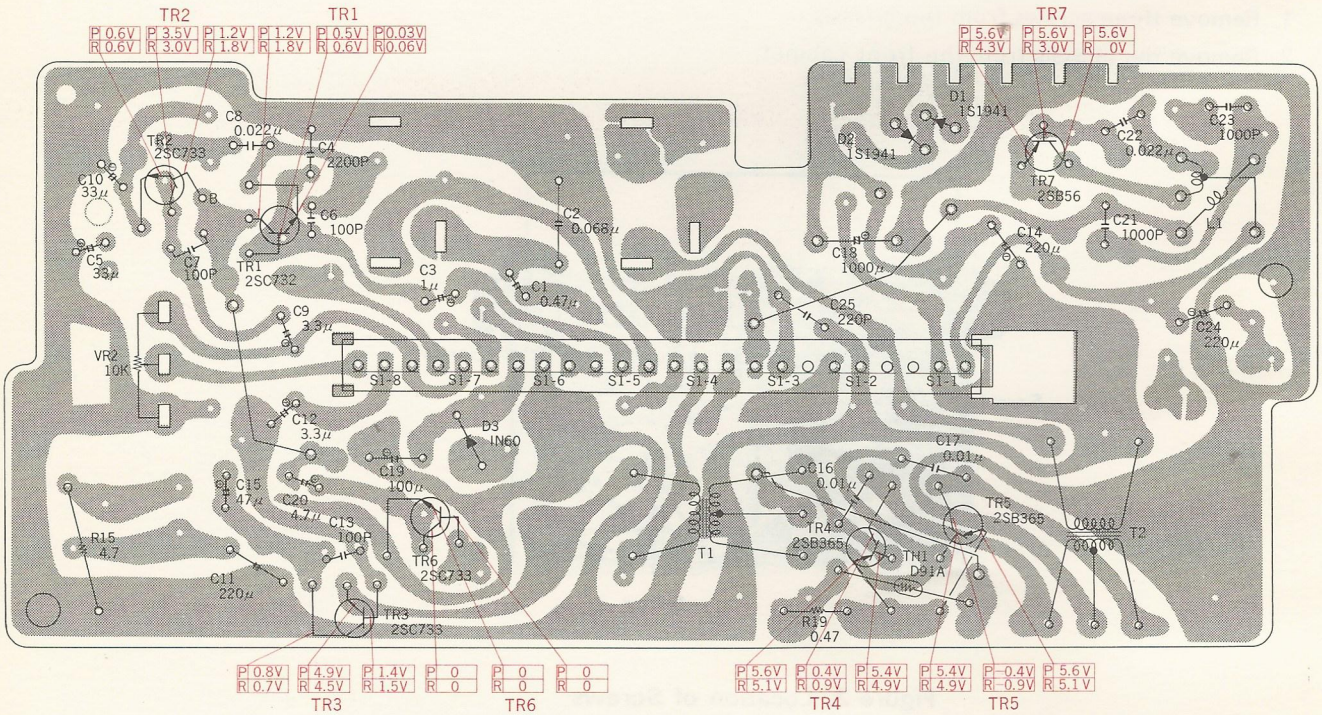


Figure 4. Bottom View of Amplifier P.C. Board

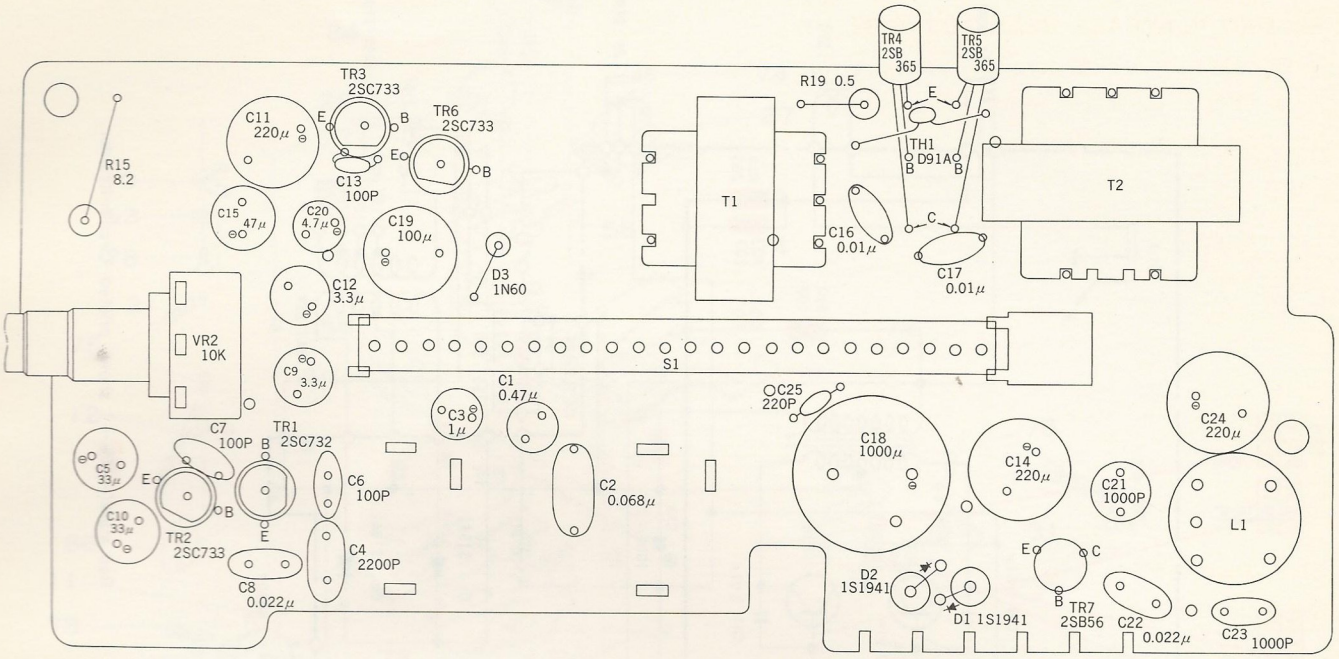


Figure 5. Top View of Amplifier P.C. Board

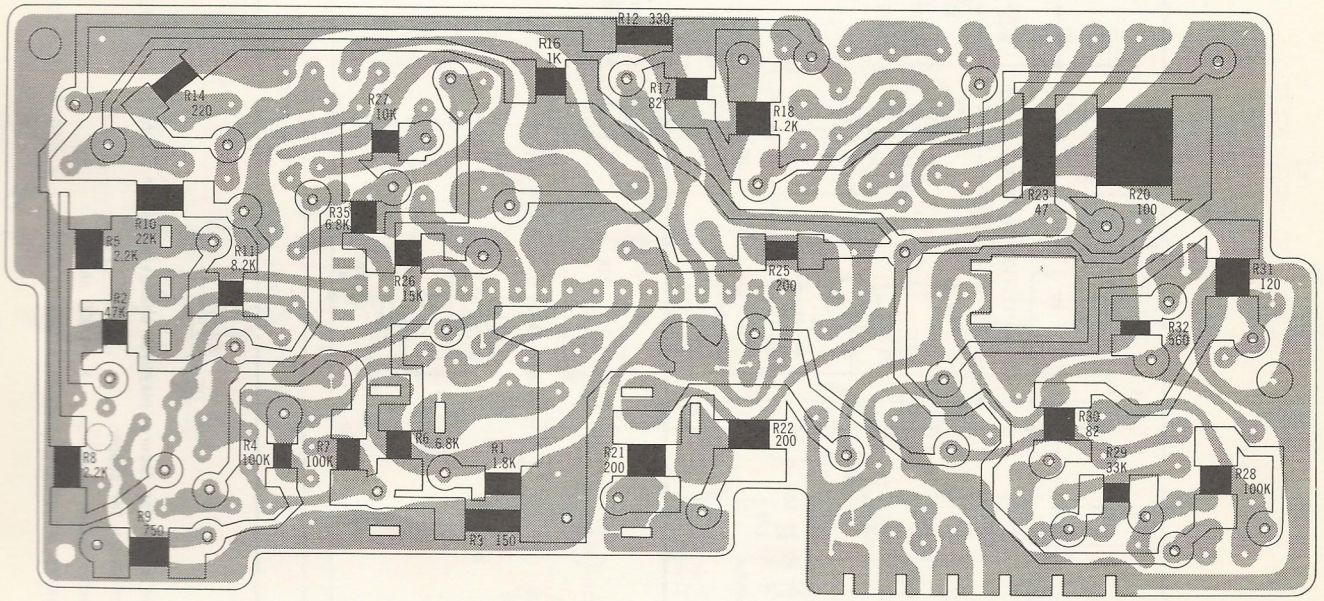
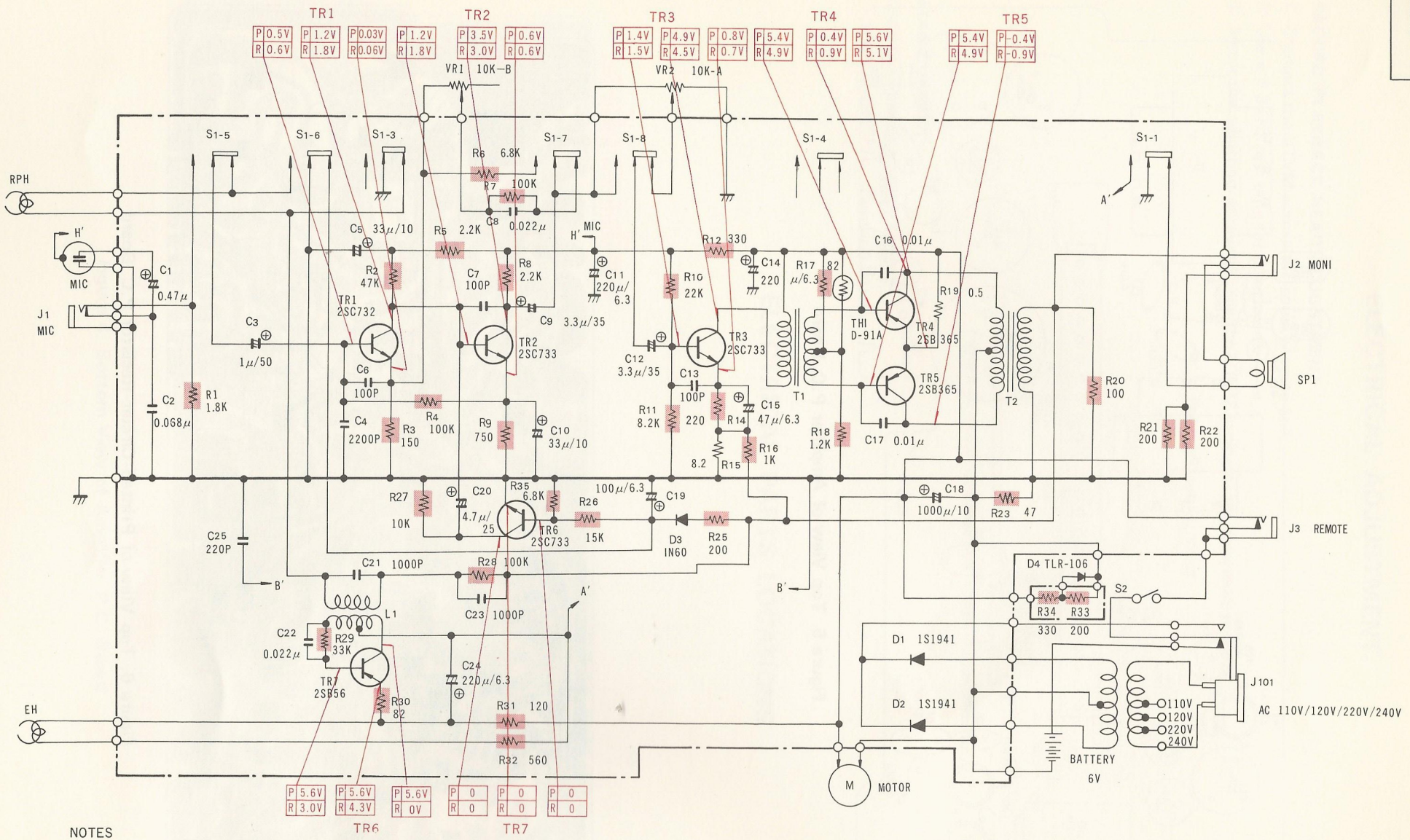


Figure 6. Top View of Printed-Circuit-Resistor P.C. Board



NOTES

1. S1 Slide switch for record/playback change(Shown in playback position).
2. S2 Leaf switch for supply.
3. All resistor values in ohm. K =1,000 ohm
4. All capacitor values in mfd unless otherwise noted. $\mu = 10^{-6}$, $P = 10^{-12}$

Red mark(—▭—) shown printed-Circuit-Resistor.

Figure 7. Schematic Diagram

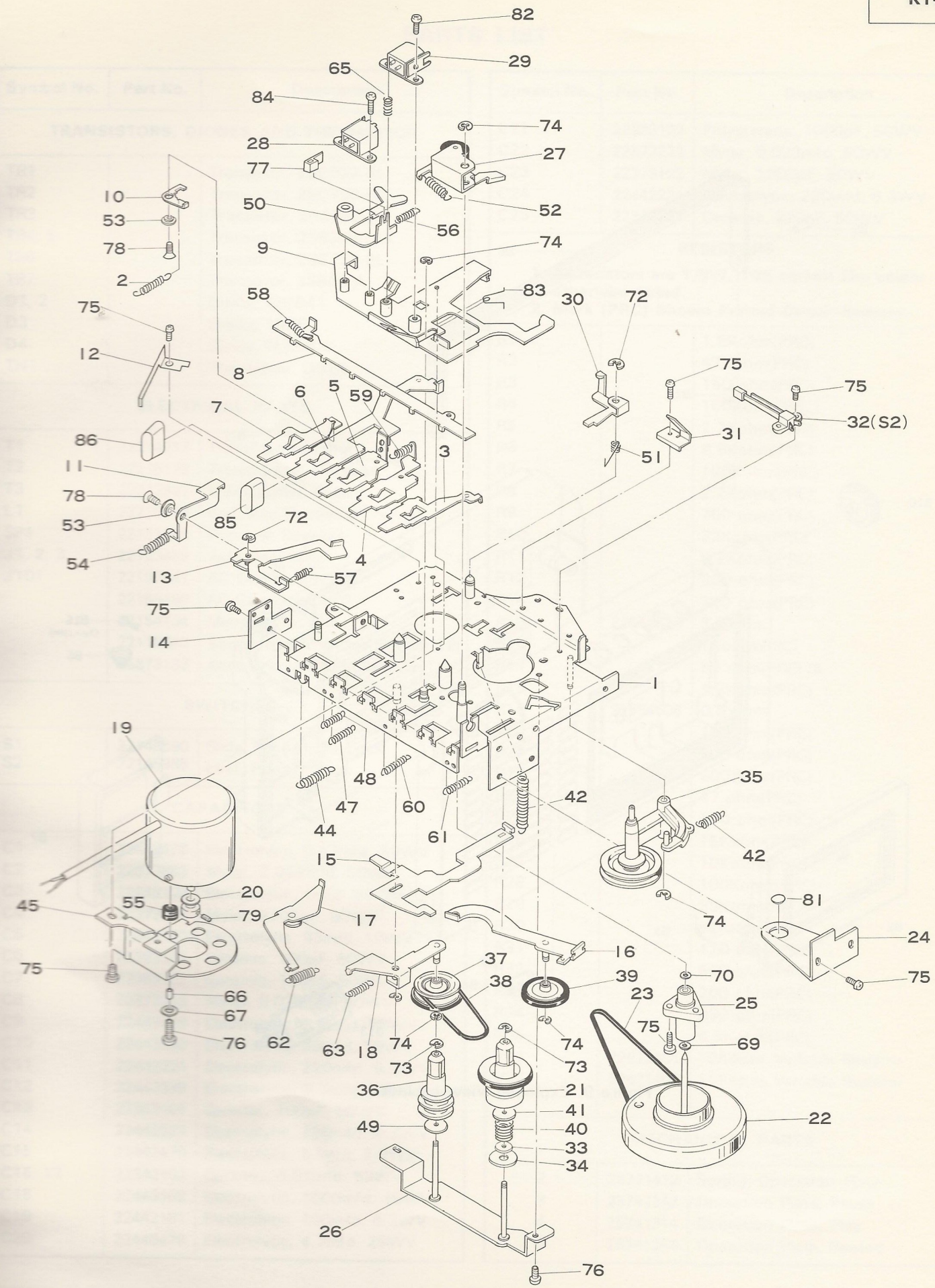


Figure 8. Exploded View-mechanism

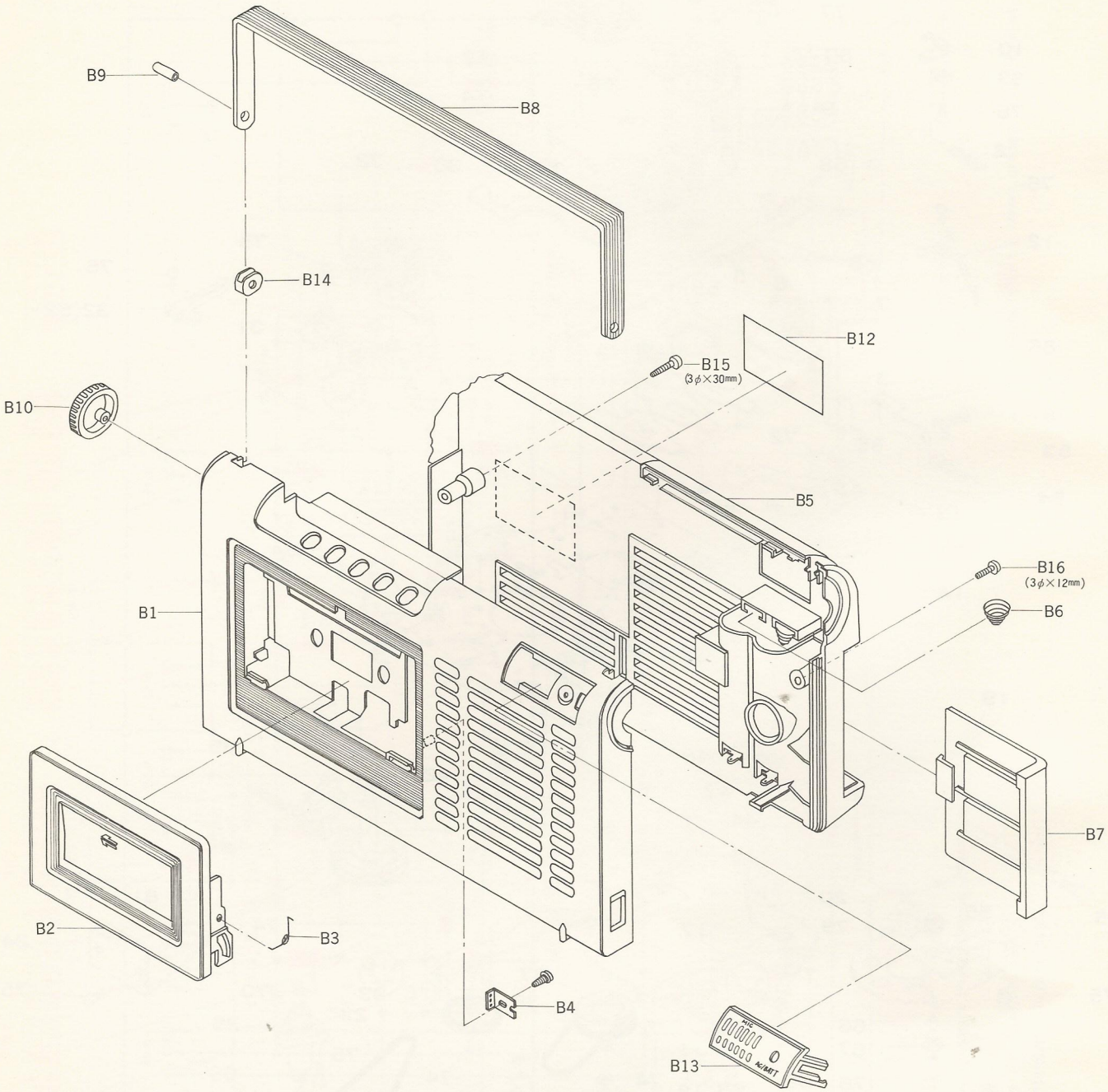


Figure 9. Exploded View-cabinet

PARTS LIST

Symbol No.	Part No.	Description
TRANSISTORS, DIODES AND THERMISTOR		
TR1		Transistor, 2SC732-BL
TR2		Transistor, 2SC733-BL
TR3		Transistor, 2SC733-BL
TR4, 5		Transistor, 2SB365-B/A
TR6		Transistor, 2SC733-BL
TR7		Transistor, 2SB56-A
D1, 2		Diode, 1S1941
D3		Diode, 1N60
D4		Diode, TLR-106
TH1		Thermistor, D91A
ELECTRICAL PARTS		
T1	22214217	Transformer, Input
T2	22216178	Transformer, Output
T3	22213892	Transformer, Power
L1	22235148	Coil, Bias Oscillator
SP1	22151615	Dynamic Speaker
J1, 2, 3	22163459	Jack Assembly
J101	22167341	AC Connector(TE)
	22163450	AC Connector(AY)
	22154134	Microphone Unit
	22116040	Socket, Supply Voltage Selector(TE)
	25873133	Knob, Supply Voltage Selector(TE)
SWITCHES		
S1	22146590	Slide, Record/Playback
S2	22145985	Leaf, Power
CAPACITORS		
C1	22448478	Electrolytic, 0.47mfd, 50WV
C2	22373683	Mylar, 0.068mfd, 50WV
C3	22448109	Electrolytic, 1mfd, 50WV
C4	22373222	Mylar, 2200pF, 50WV
C5	22443330	Electrolytic, 33mfd, 10WV
C6	22363101	Ceramic, 100pF, 50WV
C7	22363101	Ceramic, 100pF, 50WV
C8	22373223	Mylar, 0.022mfd, 50WV
C9	22447339	Electrolytic, 3.3mfd, 35WV
C10	22443330	Electrolytic, 33mfd, 10WV
C11	22442221	Electrolytic, 220mfd, 6.3WV
C12	22447339	Electrolytic, 3.3mfd, 35WV
C13	22363101	Ceramic, 100pF, 50WV
C14	22442221	Electrolytic, 220mfd, 6.3WV
C15	22442470	Electrolytic, 47mfd, 6.3WV
C16, 17	22342103	Ceramic, 0.01mfd, 50WV
C18	22443102	Electrolytic, 1000mfd, 10WV
C19	22442101	Electrolytic, 100mfd, 6.3WV
C20	22446479	Electrolytic, 4.7mfd, 25WV
C21	22382102	Polystyrene, 1000pF, 50WV
C22	22373223	Mylar, 0.022mfd, 50WV
C23	22373102	Mylar, 1000pF, 50WV
C24	22442221	Electrolytic, 220mfd, 6.3WV
C25	22343221	Ceramic, 220pF, 50WV
RESISTORS **1. All resistors are 1/8W, 10% carbon film unless otherwise noted.** **2. Mark (PRC) Shown Printed-Circuit-Resistor.**		
R1		1.8Kohm(PRC)
R2		47Kohm(PRC)
R3		150 ohm(PRC)
R4		100Kohm(PRC)
R5		2.2Kohm(PRC)
R6		6.8Kohm(PRC)
R7		100Kohm(PRC)
R8		2.2Kohm(PRC)
R9		750 ohm(PRC)
R10		22Kohm(PRC)
R11		8.2Kohm(PRC)
R12		330 ohm(PRC)
R14		220 ohm(PRC)
R15	22544829	8.2 ohm
R16		1Kohm(PRC)
R17		82 ohm(PRC)
R18		1.2Kohm(PRC)
R19	22554508	0.5 ohm
R20		100 ohm(PRC)
R21		200 ohm(PRC)
R22		200 ohm(PRC)
R23		47 ohm(PRC)
R25		200 ohm(PRC)
R26		15Kohm(PRC)
R27		10Kohm(PRC)
R28		100Kohm(PRC)
R29		33Kohm(PRC)
R30		82 ohm(PRC)
R31		120 ohm(PRC)
R32		560 ohm(PRC)
R33		200 ohm(PRC)
R34		330 ohm(PRC)
R35		6.8Kohm(PRC)
VR1	22622401	10Kohm, Variable Resistor
VR2	22621403	10Kohm, Variable Resistor
MECHANICAL PARTS		
2	25771412	Spring, Operation Plate
3	25741242	Operation Plate, Pause
4	25741314	Operation Plate, Play
5	25741244	Operation Plate, Rewind

PARTS LIST

Symbol No.	Part No.	Description
6	25718159	Operation Plate, Record
7	25741317	Operation Plate, Stop
8	25741315	Lock Plate
12	25774223	Spring, Lock, ASO
19, 20, 79	25711085	Motor Assembly
20	25751417	Pulley, Motor
21	25712214	Hub Plate, Take-up
22	25717218	Flywheel Assembly
23	25755247	Belt, Drive
25	25718135	Capstan, Holder
26	25712215	Hub Plate Chassis Assembly
27	25717219	Pressure Roller
28	22218140	Erase Head
29	22217153	Record/Playback Head
31	25774232	Brase, Cassette
33	25764394	Washer, Take-up Hed Plate
34	25764246	Washer, Take-up Heb Plate
35	25713368	Pulley, Take-up
36	25712272	Hub Plate, Supply
37	25713312	Pulley, Rewind
38	25755171	Belt, Rewind
39	25713281	Idler, FF
40	25772254	Spring, Back Tension
41	25764298	Washer, Take-up Hub Plate
42	25771450	Spring, Take-up Pulley
44	25771403	Spring, Operation Plate, Stop
47	25771405	Spring, Operation Plate, Rewind
48	25771658	Spring, Operation Plate, Record
49	25764196	Washer, Supply Hub Plate
51	25773152	Spring, Lock Lever
52	25771453	Spring, Pressure Roller
54	25771412	Spring, Cassette-up
55	25761238	Rubber Cushion, Motor
56	25771610	Spring, Lever, ASO
57	25771414	Spring, Arm, ASO
58	25771409	Spring, Lock Plate
59	25771410	Spring, Head Chassis
60	25771406	Spring, Operation Plate, Play
61	25771407	Spring, Operation, Plate, FF
62	25771578	Spring, FF Lever
63	25771451	Spring, Rewind Lever
65	25772240	Spring, Record/Playback Head
66	25726235	Spacer, Motor
69	25764398	Washer, Flywheel
70	25764396	Washer, Capstan Shaft
73	25735159	Stop Ring, Hub Plate
77	25764351	Cap, ASO
81	25764301	Nylon Washer, Capstan Shaft
83	25773164	Spring, Head Chassis
85	25826524	Push Button, Record
86	25826523	Push Button

Symbol No.	Part No.	Description
		CABINET PARTS
B1	25821411	Cabinet Front(BLACK) (TE)
	25821402	Cabinet Front(WHITE) (TE, AY)
B2	25812515	Cassette Cover Ass'y(BLACK) (TE)
	25812513	Cassette Cover Ass'y(WHITE) (TE, AY)
B3	25773196	Spring, Cassette Cover
B4	25845353	Bracket, Cassette Cover Spring
B5	25811466	Cabinet Back Ass'y(BLACK) (TE)
	25811458	Cabinet Back Ass'y(WHITE) (TE, AY)
B6	22764018	Spring, Battery
B7	25812516	Battery Cover Ass'y(BLACK) (TE)
	25812514	Battery Cover Ass'y(WHITE) (TE, AY)
B8	25825203	Handle
B9	25835266	Pin, Handle
B10	25826522	Knob, Volume/Tone
B12	25827201	Model No. Plate(TE)
B12	25827236	Model No. Plate(TE)
B12	25827320	Model No. Plate (AY)
B13	25818192	Microphone Cover Ass'y
B14	25835277	Spacer, Handle
B15	22701246	Screw, 3ϕ × 30mm
		ACCESSORIES
	22954097	Owner's Manual(TE)
	22954088	Owner's Manual(AY)
	22105323	Cassette Tape
	22152025	Earphone
	22176422	Power Supply Cord(TE)
	22176468	Power Supply Cord(AY)