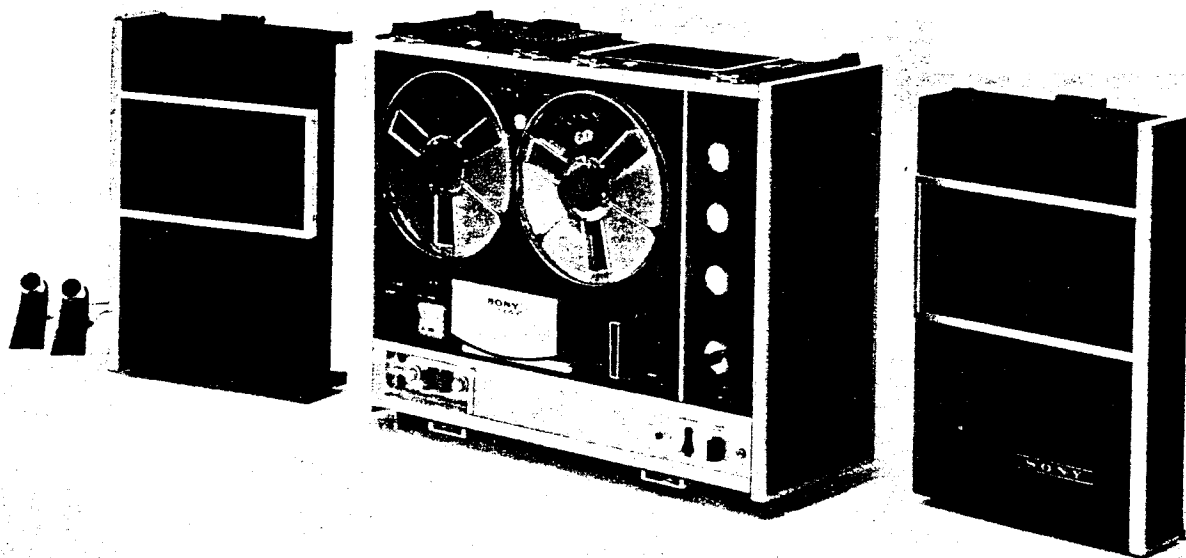


Serial No.122,351 and after
 Except Serial No. 124,851~125,850

TC-530



Specifications

Power Requirements: AC 100, 110, 117, 125, 220 or 240V, 65 watts, with voltage selector, 50/60 cps
 Only AC 60 c/s 117V for U.S.A
 Only AC 50/60 cps 117V for Canada

Tape Speed: 7½ ips., 3¾ ips. and 1⅞ ips. (19, 9.5 and 4.75 cm/s), instantaneous switching with automatic equalization change

Reels: 7" (18 cm) or smaller

Recording System: 4-track stereophonic or monophonic

Frequency Response: 30~20,000 cps at 7½ ips. (19 cm/s)
 ±3 db 50~15,000 cps at 7½ ips. (19 cm/s)
 30~13,000 cps at 3¾ ips. (9.5 cm/s)
 30~10,000 cps at 1⅞ ips. (4.75 cm/s)

Flutter and Wow: Less than 0.17% at 7½ ips. (19 cm/s)
 Less than 0.3% at 3¾ ips. (9.5 cm/s)
 Less than 0.4% at 1⅞ ips. (4.75 cm/s)

Power Output: 20 watts total (music power)
 10 watts total (undistorted)

Signal-to-noise Ratio: Better than 48 db (at peak record level)

Harmonic Distortion: Less than 3% at 0 db line output

Level Indication: VU meters calibrated to NAB standard

Tone Controls: Two separate controls for bass and treble

Inputs: Low impedance microphone inputs: transistorized (with accommodate any microphone from 250 to 1K ohm impedance) -72 dbs (0.19 mV)
 High impedance (100 K ohms) auxiliary inputs: -22 dbs (0.06 V)

Outputs: Line outputs: 0 db (0.775 V), load impedance 100K ohms
 Speaker outputs: load impedance 8 ohms
 Binaural monitor output: will accommodate stereo headset Model DR-3C (10 K ohm impedance)

Integrated Record/

Playback Connector: Input : -62 db (0.6 mV)
 Impedance 10K ohms
 Output: 0 db (0.775 V)
 Impedance 10K ohms

Recording Time: 4-track stereo 4-track monophonic
 (with 1,800' tape) 1 hr. 30 min. 3 hrs. at 7½ ips.
 3 hrs. 6 hrs. at 3¾ ips.
 6 hrs. 12 hrs. at 1⅞ ips.

Transistors: 2SC401 (8), 2SC402 (8), 2SC318 (2),
 2SD28 (4), 2SB383 (2)

Diodes: 5GD (4), 1T22 (4)

Record/Playback Head: PP30-4202N1

Erase Head: EF18-2902H

Dimensions: 19¼" (W) × 19¼" (H) × 15⅞" (D)
 (500 × 252 × 391 mm)

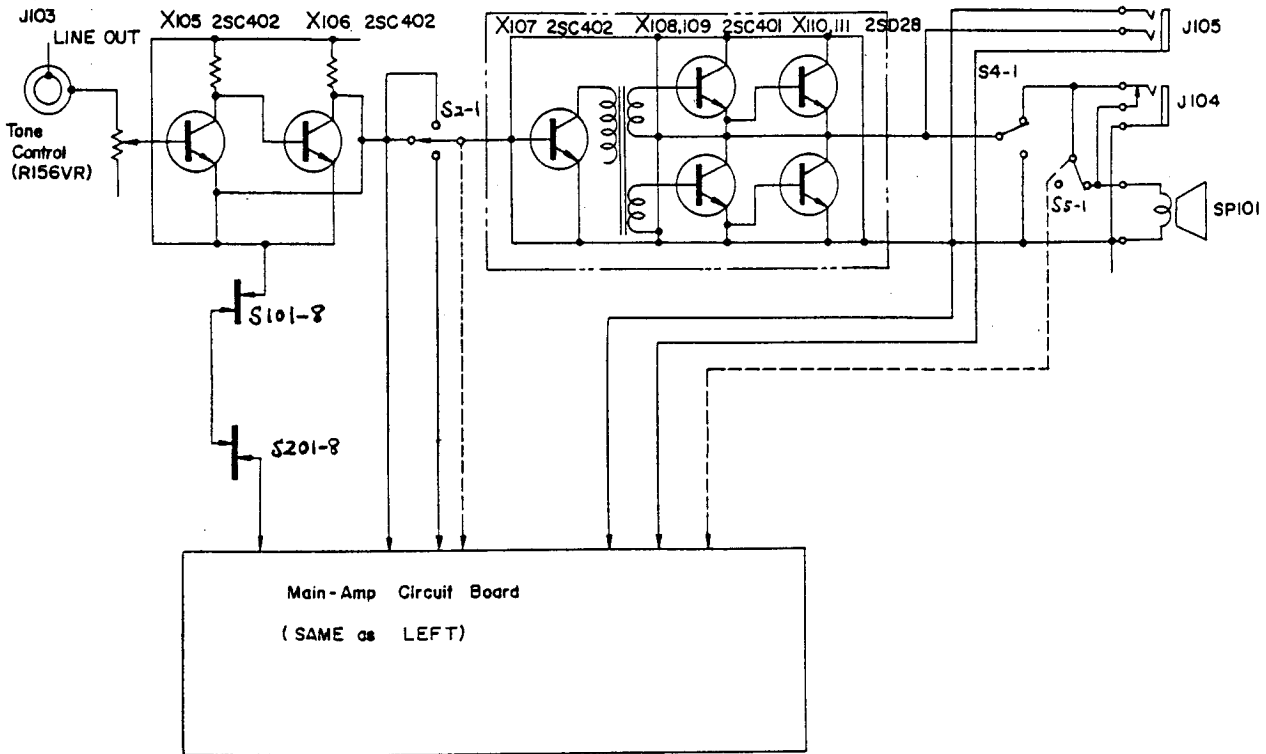
Weight: 41 lbs. 10 ozs. (19 kgs.)

SONY®

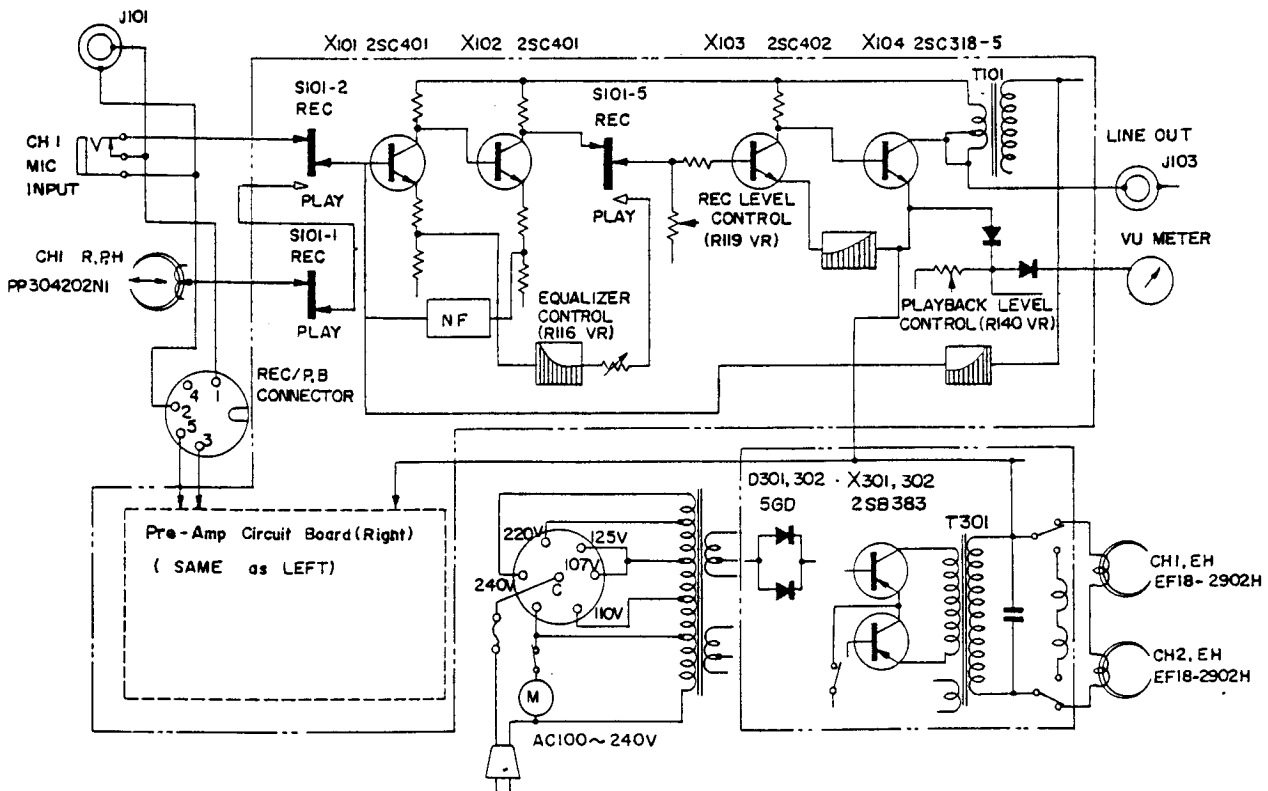
SERVICING GUIDE

Block Diagram

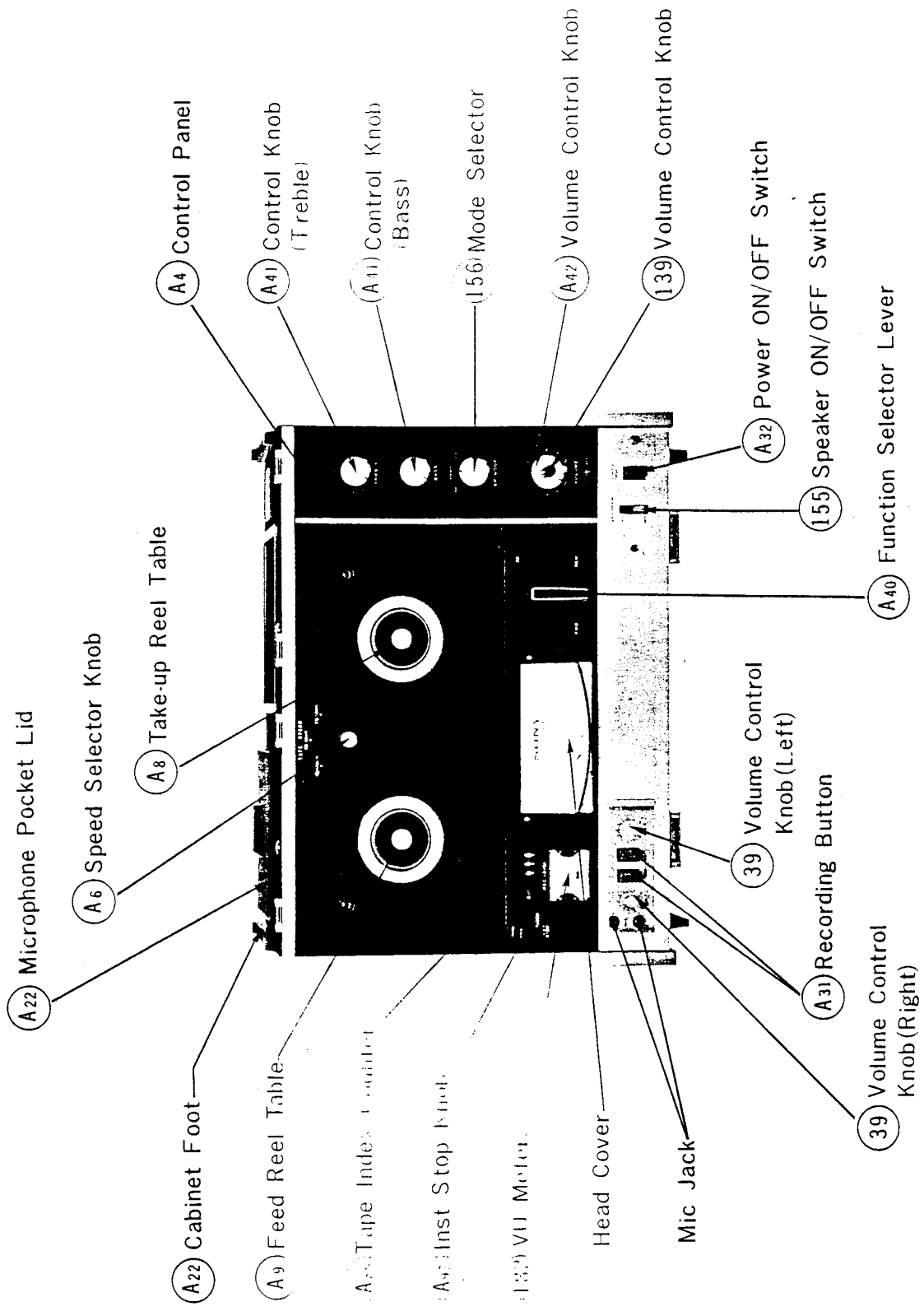
Main Amplifier



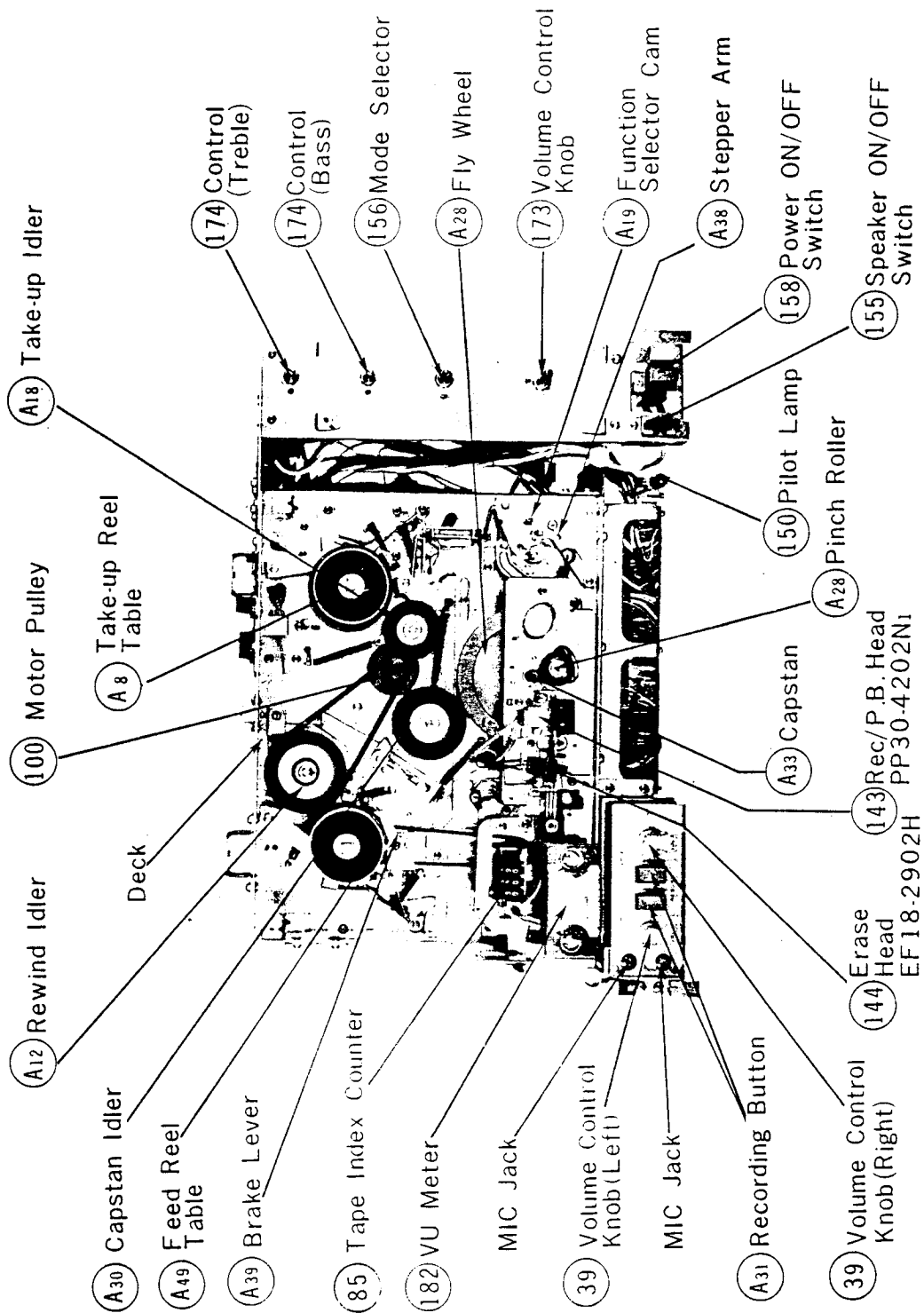
Pre-Amplifier



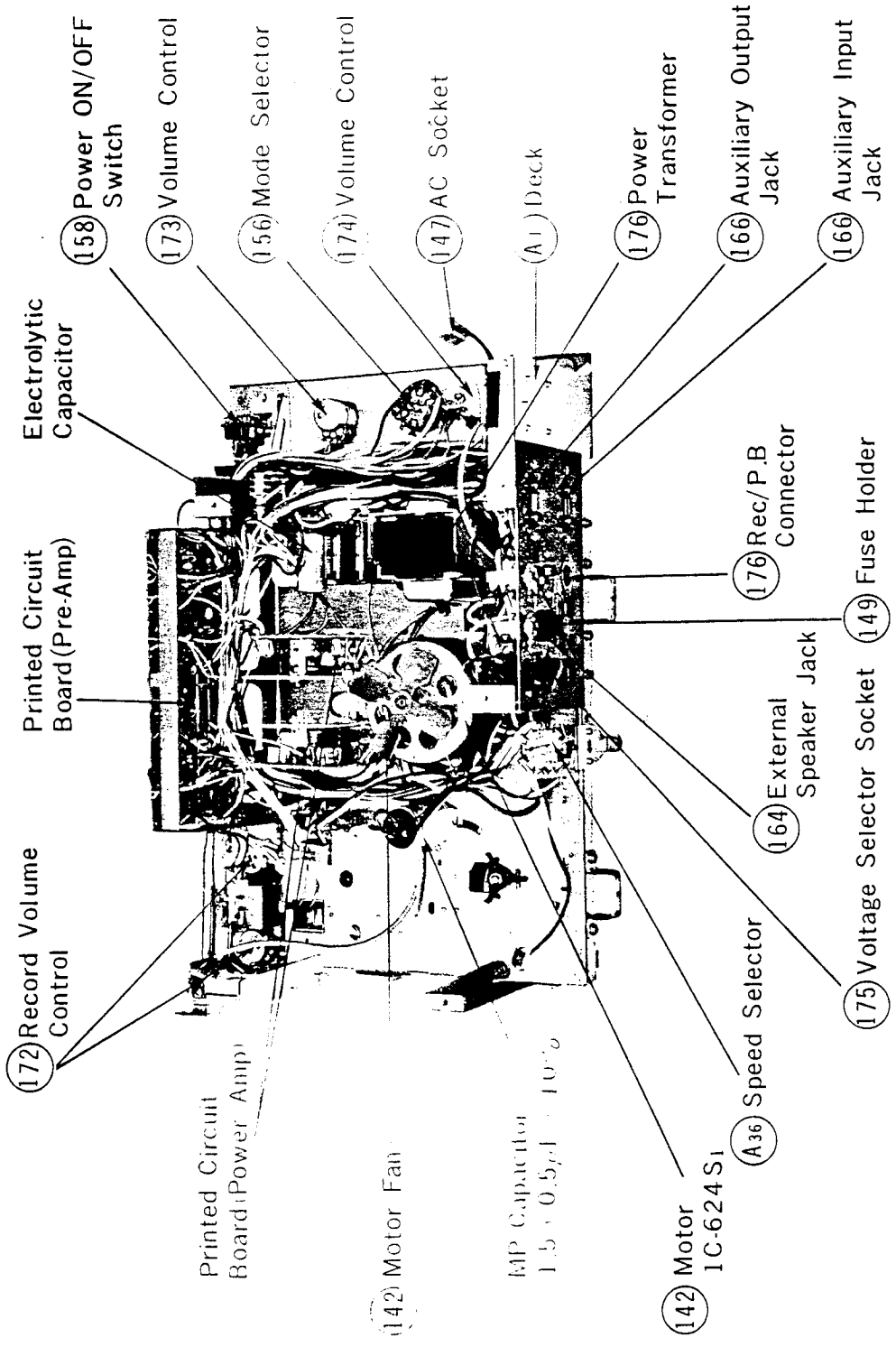
Cabinet Top View



Chassis Top View



Chassis Bottom View



Removal of Cabinet

- (1) Turn up-side down the recorder on a soft pad.
- (2) Remove five screws (\oplus RF $4\phi \times 15$ marked with \blacktriangle in Fig. 5), two screws (\oplus RK $4\phi \times 35$ marked with \triangle in Fig. 5), seven Cabinet Spacer and Fuse Holder as shown in Fig. 5.
- (3) Lift up the cabinet gently.

Removal of Reel Panel

- (1) Remove Head Cover in Fig. 2.
- (2) Remove Function Selector Knob, Speed Selector Knob, Pinch Roller and Instant Knob by loosening the respective Set Screws in Fig. 2.
- (3) Remove two Screws (\oplus B $3\phi \times 6$ marked with \blacktriangledown in Fig. 6), two 3ϕ Washers, one Screw (\oplus B $2.6\phi \times 10$ marked with \blacktriangledown in Fig. 6) and one Washer as shown in Fig. 6.
- (4) Remove two Tape Guide Pin as shown in Fig. 6.
- (5) Now Reel Panel can be removed and main mechanism can be checked.

NOTE: When re-assembling the Reel Panel, the shafts of knobs must be located just at the center of the respective holes.

Removal of Control Panel

- (1) Remove the Control Knobs, (Treble, Bass, SP. mode) and Volume Control Knob in Fig. 2.
- (2) Turn up-side down the recorder on a soft pad.
- (3) Remove four Nuts (3ϕ marked with \bullet in Fig. 7.)
- (4) Turn lower-side up gently.
- (5) Lift up the Control Panel gently as shown in Fig. 7).

NOTE: When re-assembling the Control Panel, the side (marked with \circ in circle in Fig. 7) must to touch uniformly.

Removal of Printed Circuit Boards

Printed Circuit Boards can be checked without disassembling. When it is necessary to remove the Circuit Boards, proceed as follows:

Circuit Board for Pre-Amplifier Section

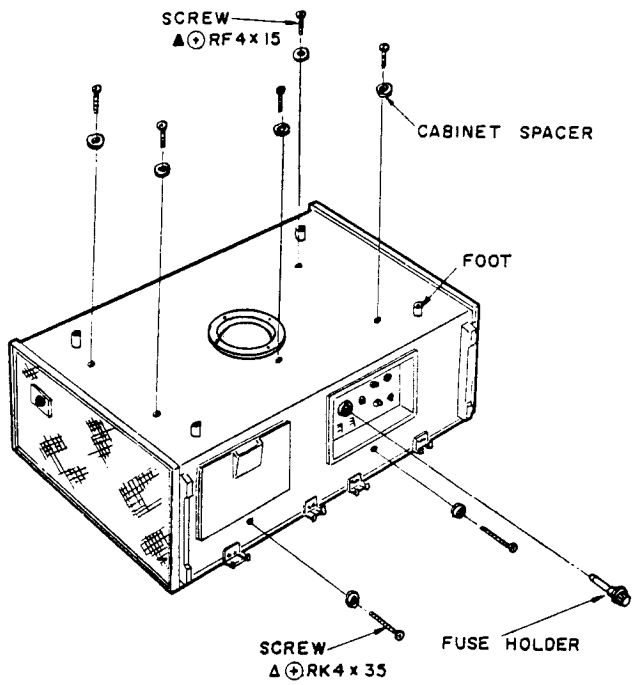
- (1) Remove three screws (\oplus RF $\phi 4 \times 6$ marked with \circ in Fig. 8) and three spring washers as shown in Fig. 8.
- (2) Take out two holding screws (\oplus RF $3\phi \times 6$ marked with \bullet in Fig. 8) and two spring washers and two washers as shown in Fig. 8.

Circuit Board for Power Amplifier Section

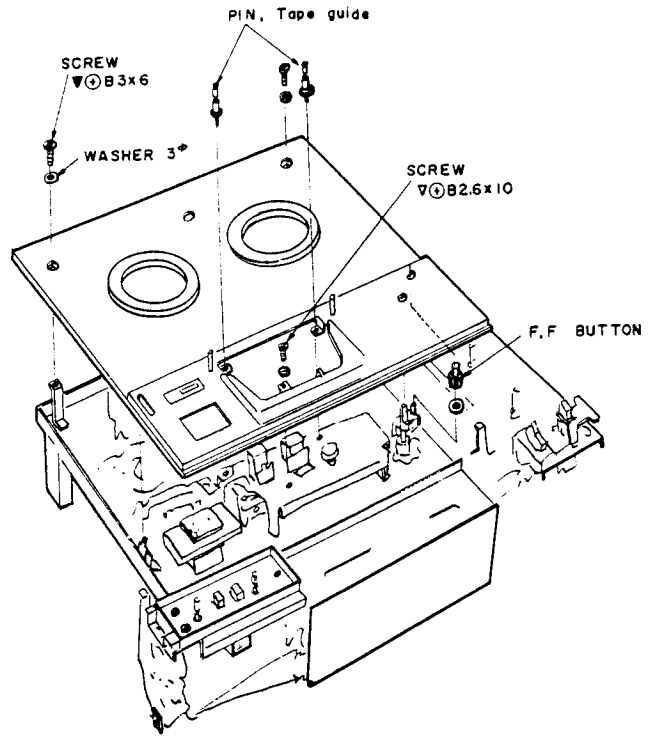
- (1) Remove the three screws (\oplus RF $3\phi \times 6$ marked with \triangle in Fig. 9), three spring washers and three washers of channel-1 as shown in Fig. 9.
- (2) Channel-2 is same as channel-1.

Circuit Board for Power Supply and OSC Section

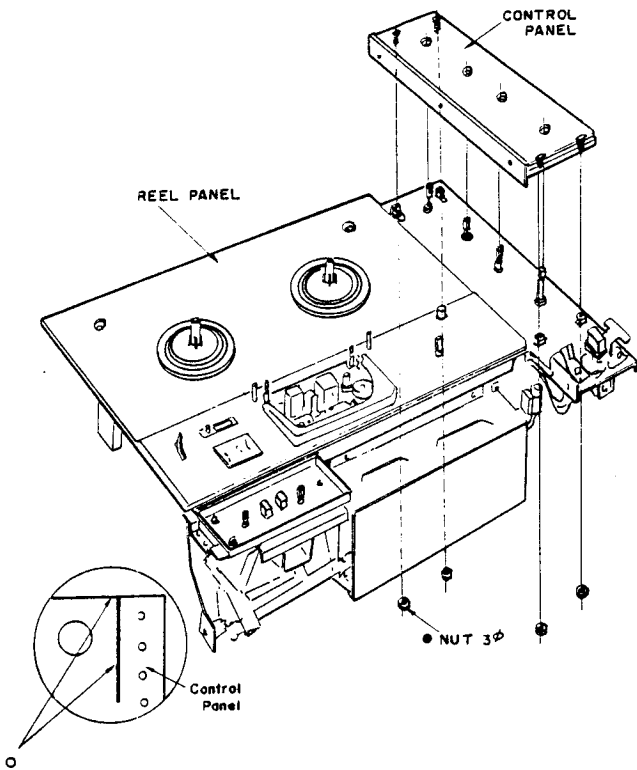
- (1) Remove the three screws (\oplus RF $3\phi \times 6$ marked with \blacktriangle in Fig. 10) and three spring washers as shown in Fig. 10.



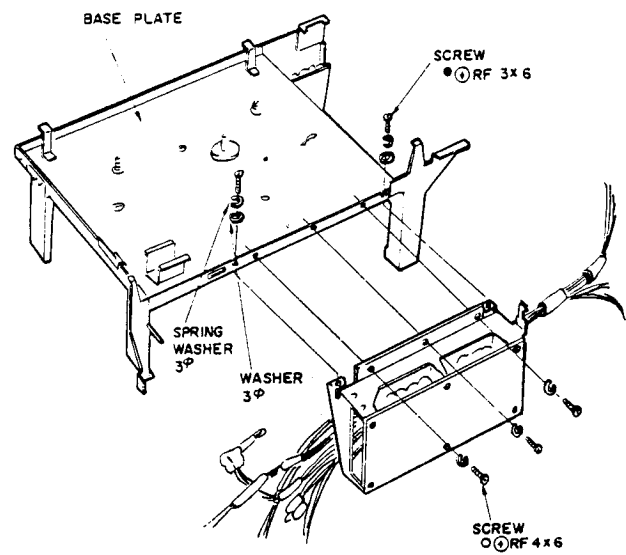
(Fig. 5)



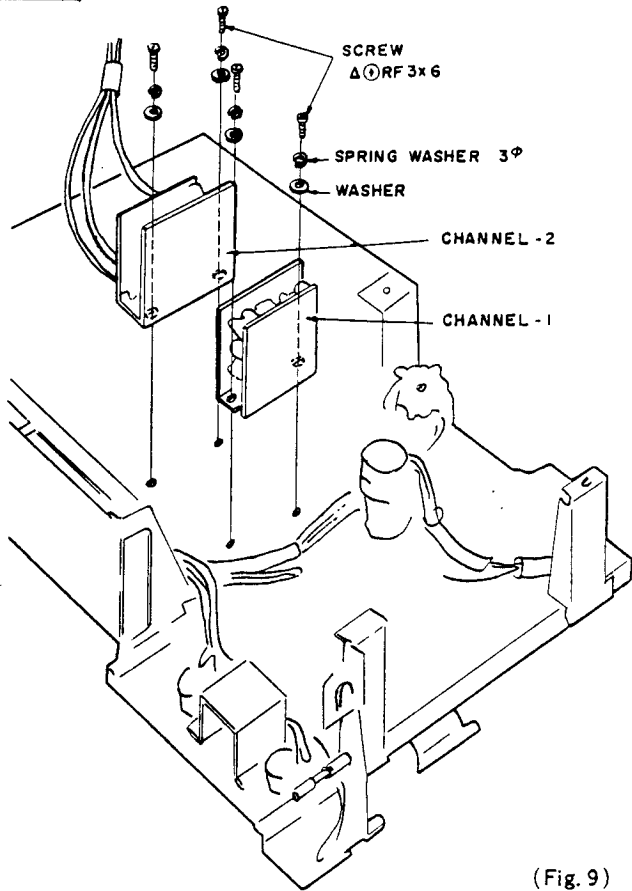
(Fig. 6)



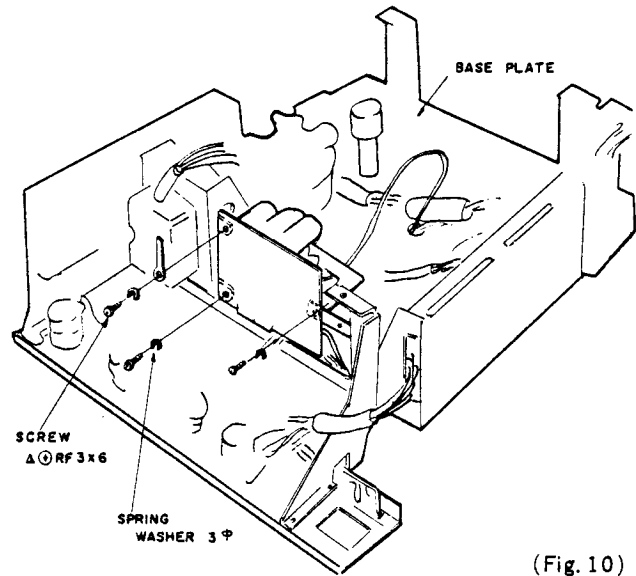
(Fig. 7)



(Fig. 8)



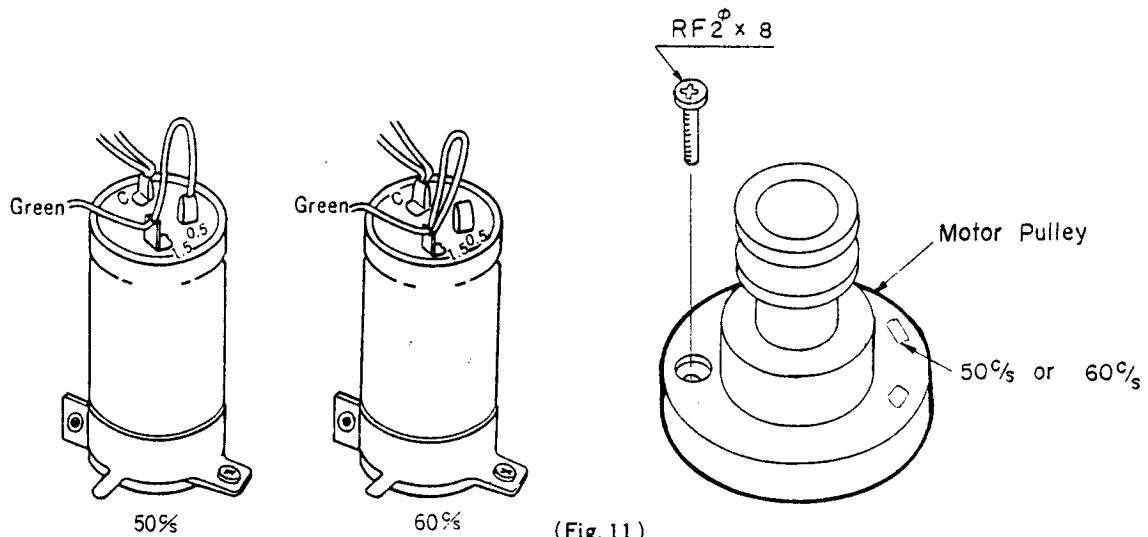
(Fig. 9)



(Fig. 10)

Modification to different Power line frequency

	For 50 c/s	For 60 c/s
1. Connection between terminals of the Metalized Paper Capacitor (MP.)	Connected (1.5 μ F - 0.5 μ F)	Disconnected (1.5 μ F)
2. Motor Pulley	3-418-210- 45.46 mm ϕ	3-418-211- 37.8 mm ϕ



(Fig. 11)

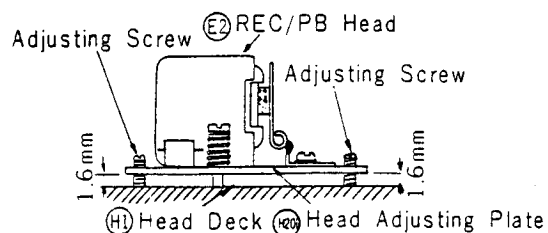
Mechanical Adjustment

Elevation Alignment

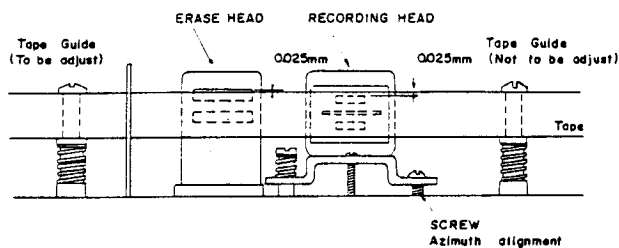
The exact vertical positionings of Head are adjusted at the factory and should never need readjustment.

However, when replacing Head or Tape Guide, height of the replaced part in relation to the tape should be checked as follows:

- (1) Thread a tape.
- (2) Align the upper edges of the Head Cores and upper edge of the tape by turning the Tape Guide located on the left side of the Erase Head.
- (3) Turn the Tape Guide clockwise by approximately 20° from the position obtained in the preceding process, so that the upper edge of the tape is approximately 0.025 mm lower than that of the Erase Head Core.



(Fig. 12)

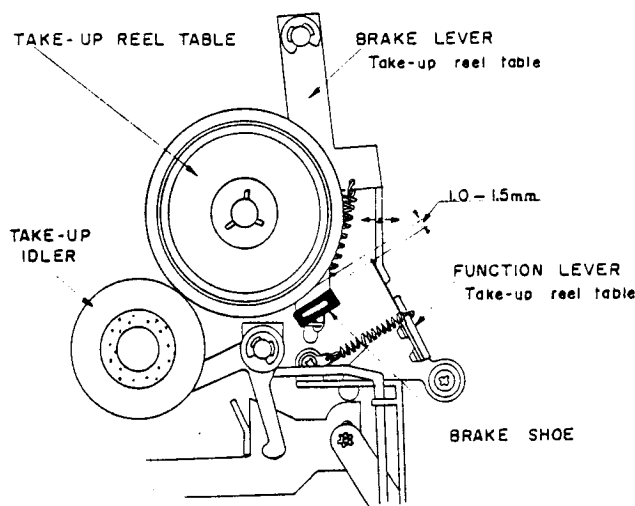


(Fig. 13)

Brake Alignment

When the tape slacks at stop mode, adjust the Brake as follows. Refer to Fig. 14.

- (1) Set the Function Selector Knob to forward position.
- (2) Bend the Brake Operating Levers to right or left, so that the clearance between the Brake Shoe and the take-up Reel Table must keep between 1.0~1.5 mm.



(Fig. 14)

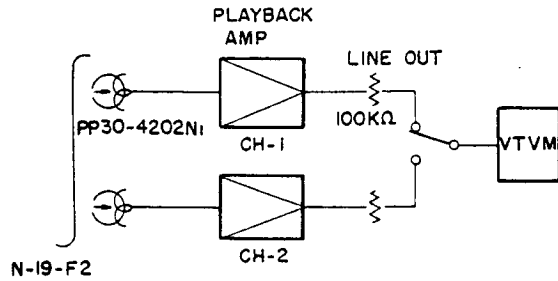
Electrical Adjustment

The alignment is to be performed at a tape speed of $7\frac{1}{2}$ ips unless otherwise specified. Connect an 8Ω load resistor in parallel with the VTVM terminals and connect the VTVM to the Speaker Output Jack.

Set the Speaker ON/OFF Switch on.

Playback Azimuth Alignment

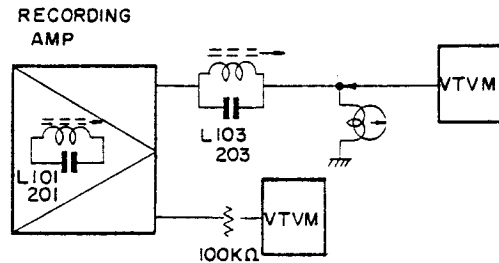
- (1) Playback a 10 Kc signal of -22 dBs recorded on the first section of the SONY alignment tape (N-19-F2).
- (2) Adjust the Azimuth Alignment Screw located on the right side of the Playback Head to obtain maximum reading on the VTVM.



(Fig. 15)

Bias Trap Adjustment

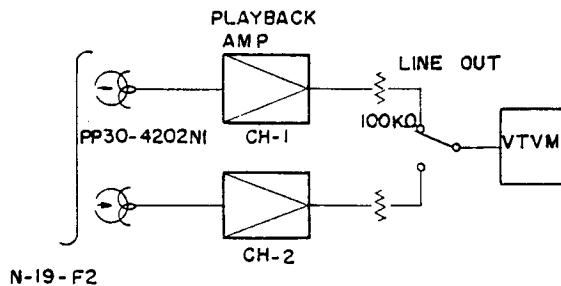
- (1) Before adjustment, turn the core counter-clockwise to the full.
- (2) Connect the VTVM across the Recording Head.
- (3) With the Trimmer Capacitor set to maximum, place the set in record mode.
- (4) Adjust the Trap Coil L_{103} (L_{203}) so that the VTVM indicates maximum.
- (5) Connect the VTVM to Line Output.
- (6) With the Recording Volume Control set to maximum, adjust the Trap Coil L_{101} (L_{201}) so that the VTVM indicates minimum.



(Fig. 16)

Playback Level Adjustment

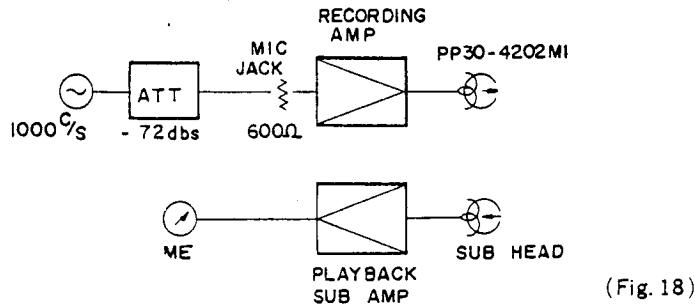
- (1) Set the Tone Control to the center position.
- (2) Playback a 700 c/s signal of -22 dBs recorded on the third section of the SONY alignment tape (N-19-F2) and measure the output with the VTVM.
- (3) Playback a 10 Kc signal of -12 dBs recorded on the fourth section of the SONY alignment tape.
- (4) Adjust the Potentiometer R_{116} (R_{216}) so that the VTVM indicates the same value as obtained at the third section.
- (5) When playing back a 10 Kc/s signal, check the Azimuth Alignment Screw again.
- (6) Apply locking point over the Azimuth Alignment Screw.



(Fig. 17)

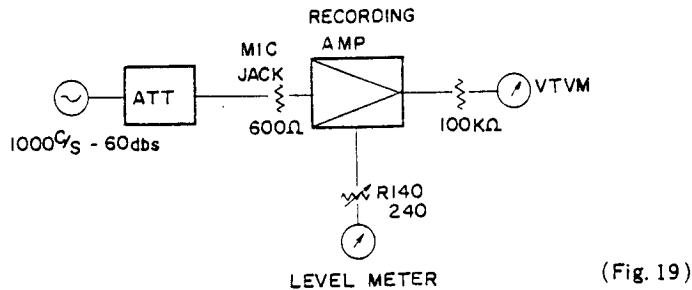
Recording Bias Alignment

- (1) Set the machine in record mode.
- (2) Connect a VTVM across winding of the Rec./P.B. Head of Channel 1 (Channel 2).
- (3) Adjust the Trimmer Capacitor C_{303} (C_{304}) shown in Fig. 18 so that the VTVM indicates approximately 40 V.



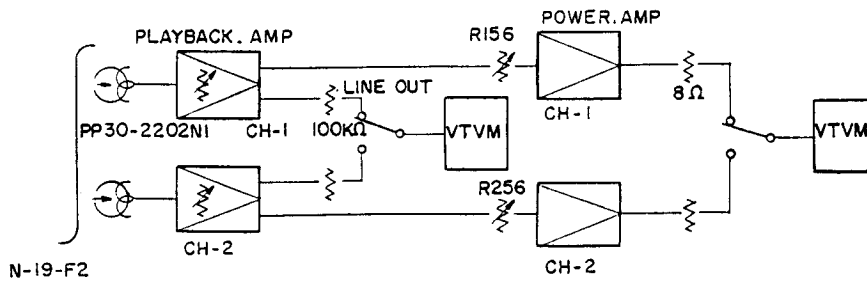
Recording Level Alignment

- (1) Set the Speaker ON/OFF Switch OFF.
- (2) Place the set in stereo recording mode.
- (3) Feed a 1000 c/s signal of -60 dBs (0.775 mV) into Mic Input Jack.
- (4) Turn the Recording Volume Control R_{137} (R_{237}) so that the VTVM indicates +1 dBs (0.80V).
- (5) Turn the Adjustable Resistor R_{140} (R_{240}) so that the pointer of the Level Meter is just at the boundary between the Red portion and the Black portion.



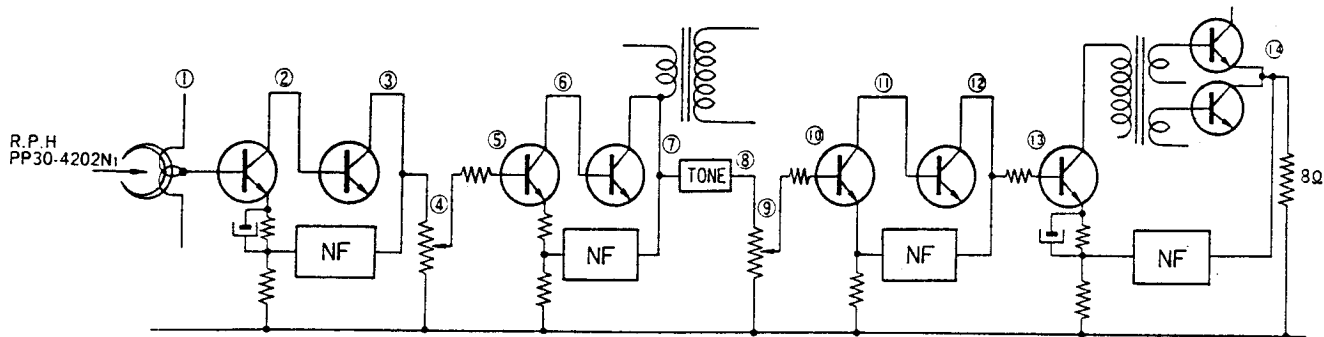
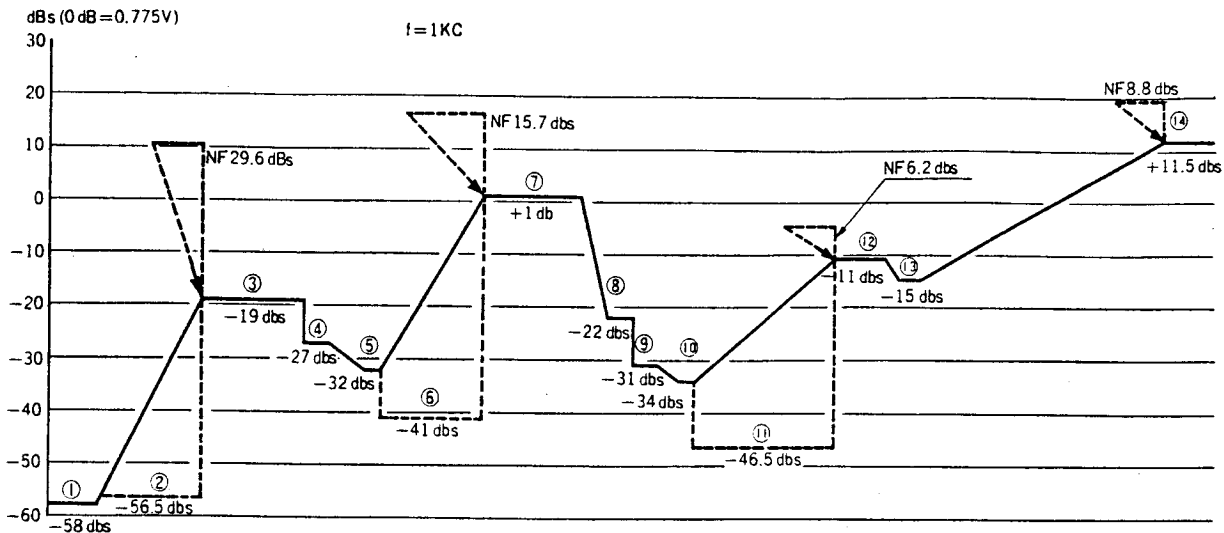
Playback Output Level Adjustment

- (1) Playback a 700 c/s signal of -12 dBs recorded on the second section of the SONY alignment tape (N-19-F2).
- (2) Adjust the Potentiometer R_{113} (R_{213}) so that the VTVM indicates 0 dBs (0.775V).

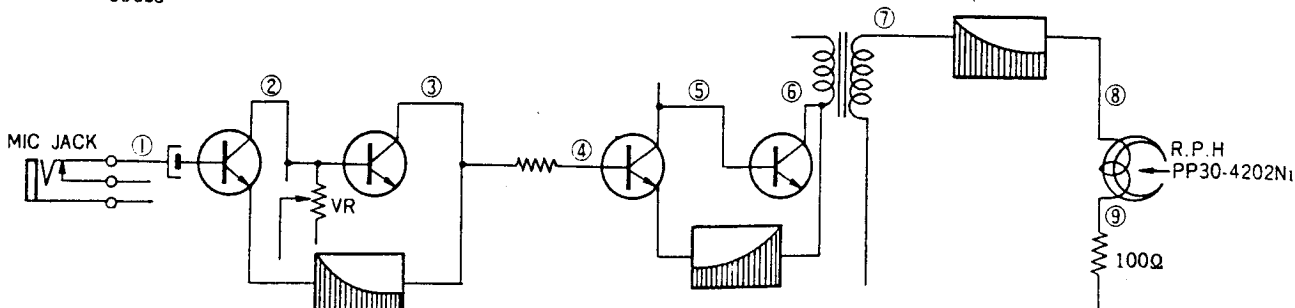
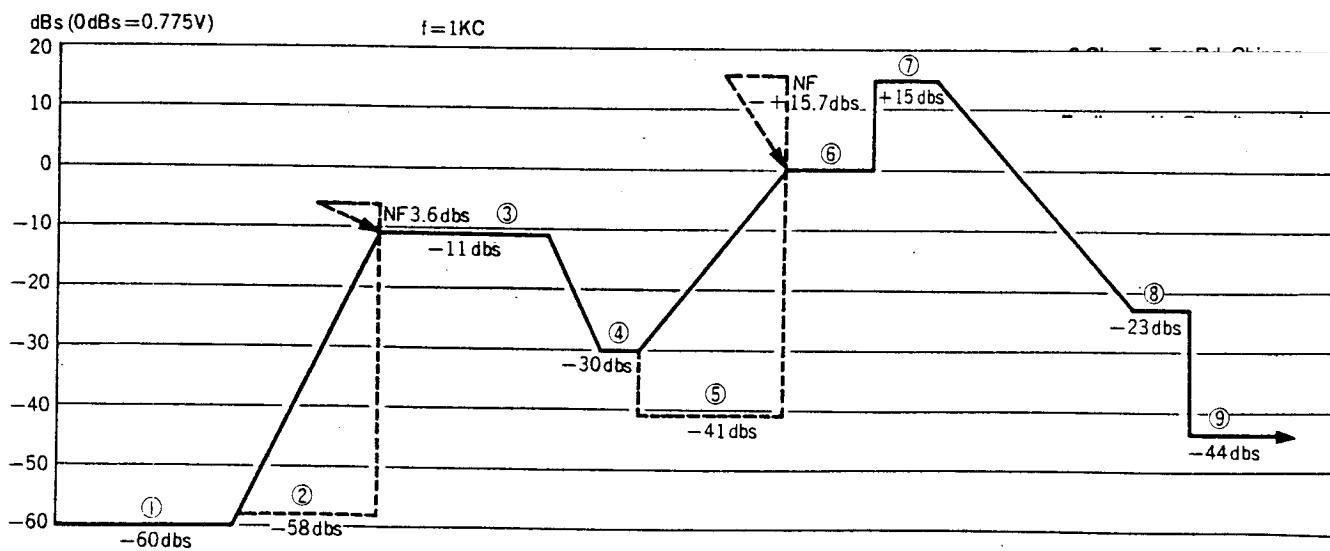


Level Diagram

Playback

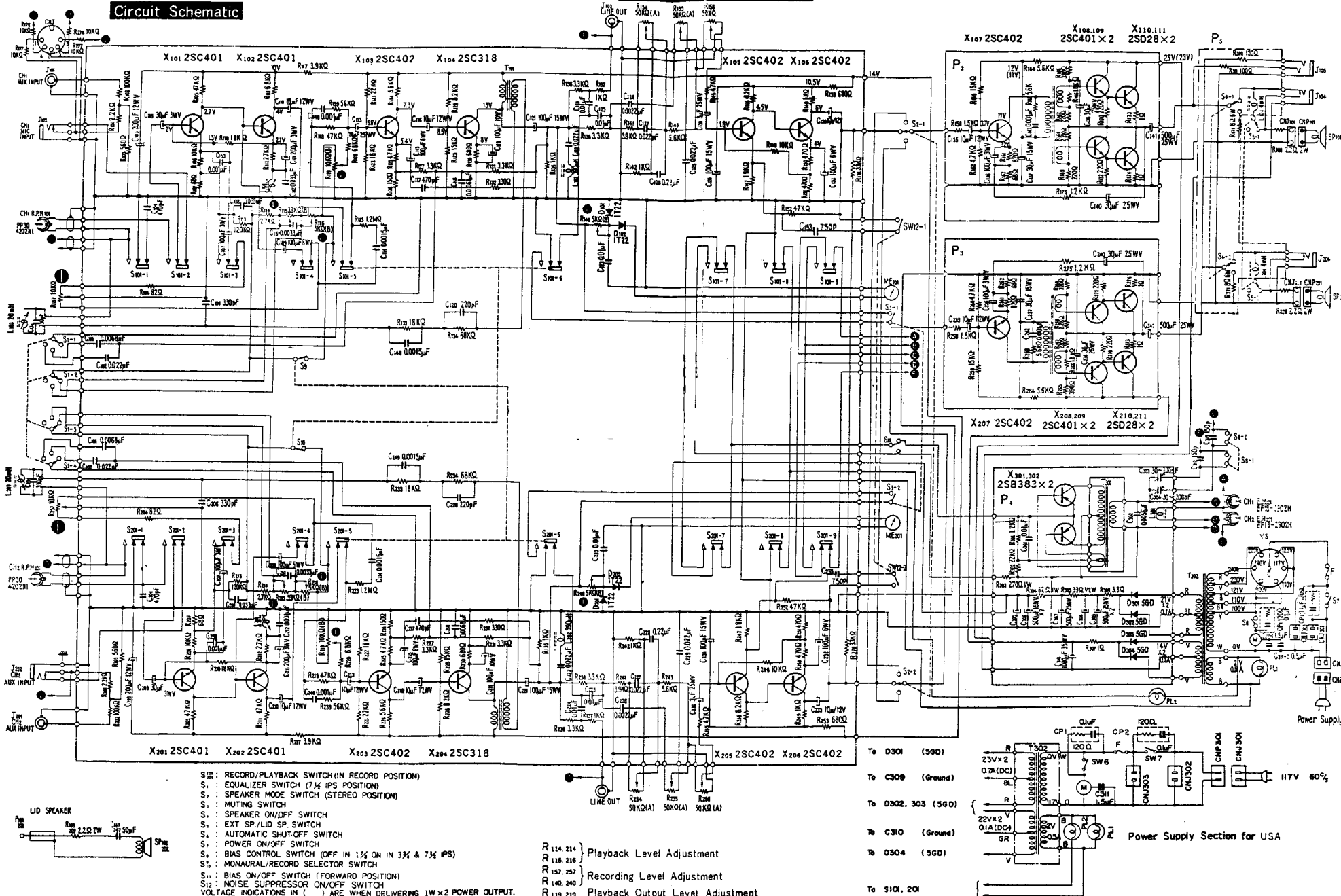


Recording



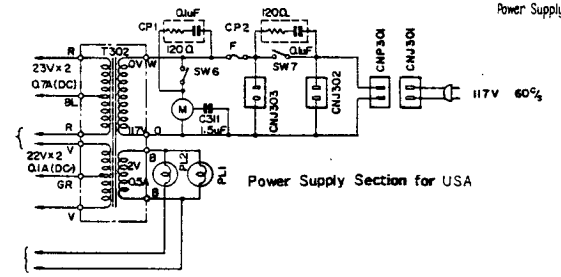
TC-530 TC-530

Circuit Schematic



- S1: RECORD/PLAYBACK SWITCH (IN RECORD POSITION)
 - S2: EQUALIZER SWITCH (7 1/2 IPS POSITION)
 - S3: SPEAKER MODE SWITCH (STEREO POSITION)
 - S4: MUTING SWITCH
 - S5: SPEAKER ON/OFF SWITCH
 - S6: EXT. SP./LID SP. SWITCH
 - S7: AUTOMATIC SHUT-OFF SWITCH
 - S8: POWER ON/OFF SWITCH
 - S9: BIAS CONTROL SWITCH (OFF IN 1 1/2 ON IN 3 1/2 & 7 1/2 IPS)
 - S10: MONAURAL/RECORD SELECTOR SWITCH
 - S11: BIAS ON/OFF SWITCH (FORWARD POSITION)
 - S12: NOISE SUPPRESSOR ON/OFF SWITCH
- VOLTAGE INDICATIONS IN () ARE WHEN DELIVERING 1W X2 POWER OUTPUT.

- R 114, 214 Playback Level Adjustment
- R 116, 216
- R 157, 257 Recording Level Adjustment
- R 140, 240
- R 119, 219 Playback Output Level Adjustment

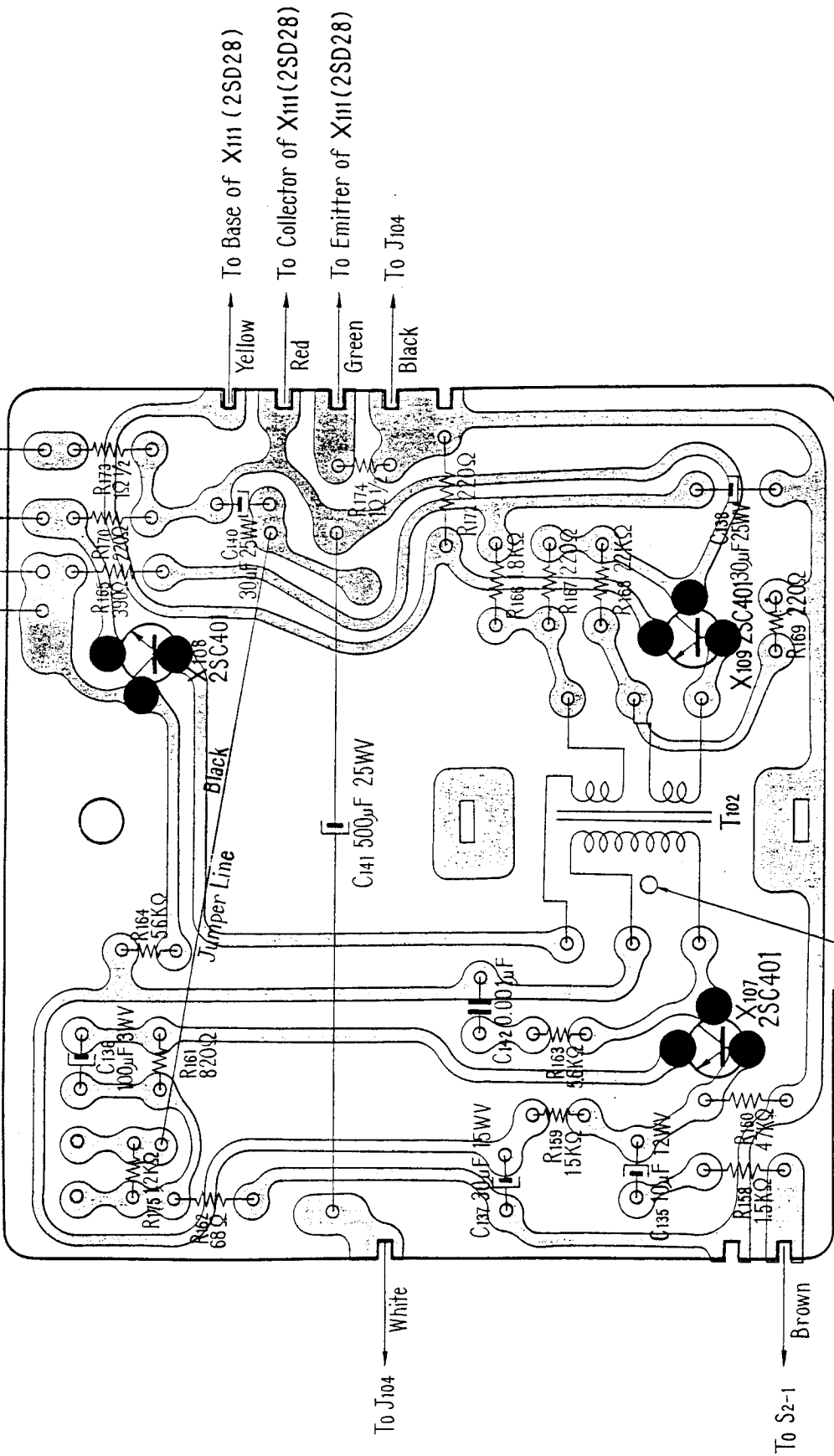


Mounting Diagram

Power Amplifier Section of Channel-1

— Conductor Side —
P₂

- Ⓜ To Circuit Board for Bias OSC and Power Supply
- To Collector of X110 (2SD28)
- To Base of X110 (2SD28)
- To Emitter of X110 (2SD28)

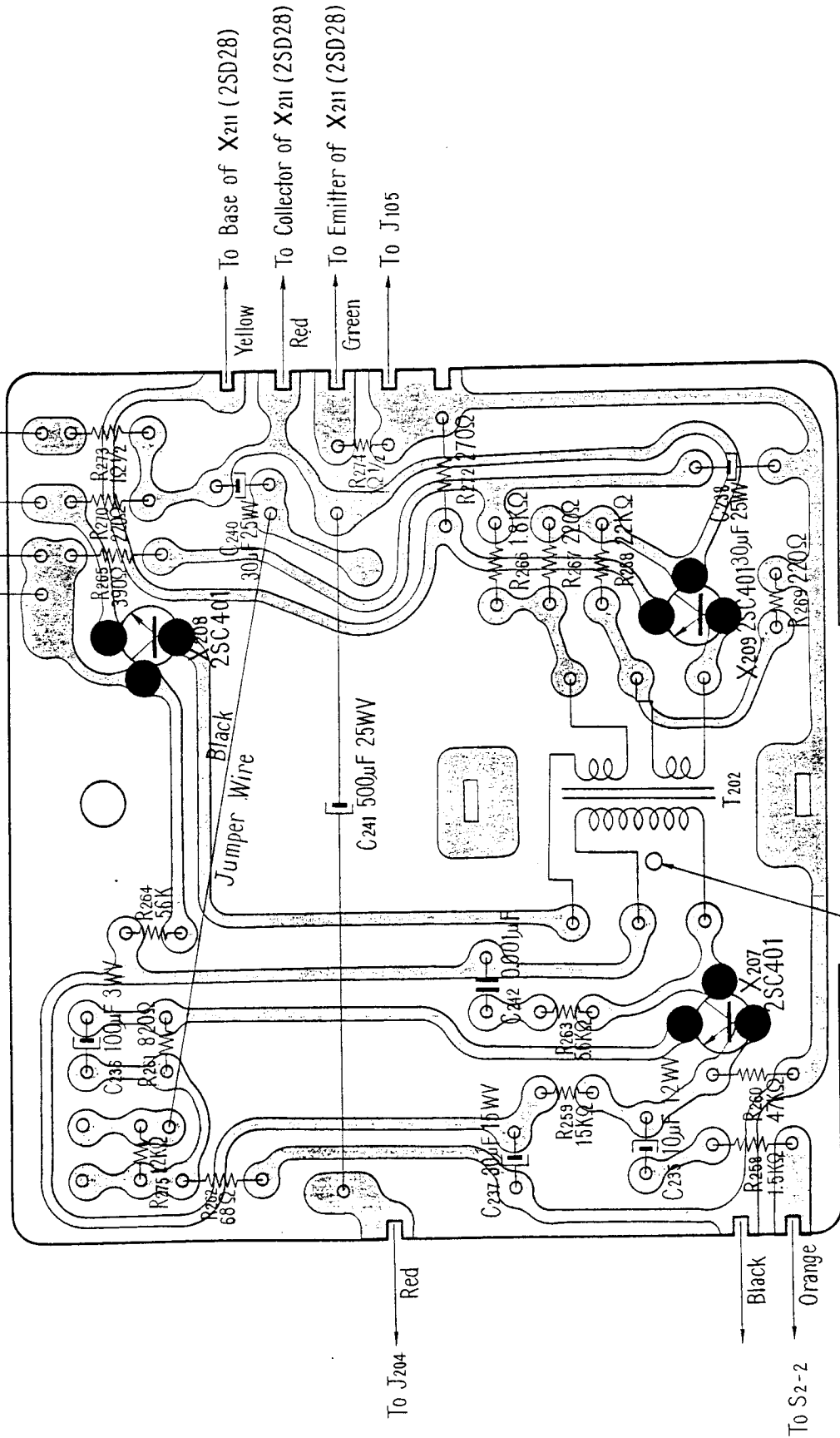


Mounting Diagram

Power Amplifier Section of Channel-2

--- Conductor Side —
P₃

- (M) To Circuit Board for Bias OSC and Power Supply
- To Collector of X₂₁₀ (2SD28)
- To Base of X₂₁₀ (2SD28)
- To Emitter of X₂₁₀ (2SD28)



- To Base of X₂₁₁ (2SD28) — Yellow
- To Collector of X₂₁₁ (2SD28) — Red
- To Emitter of X₂₁₁ (2SD28) — Green
- To J₁₀₅

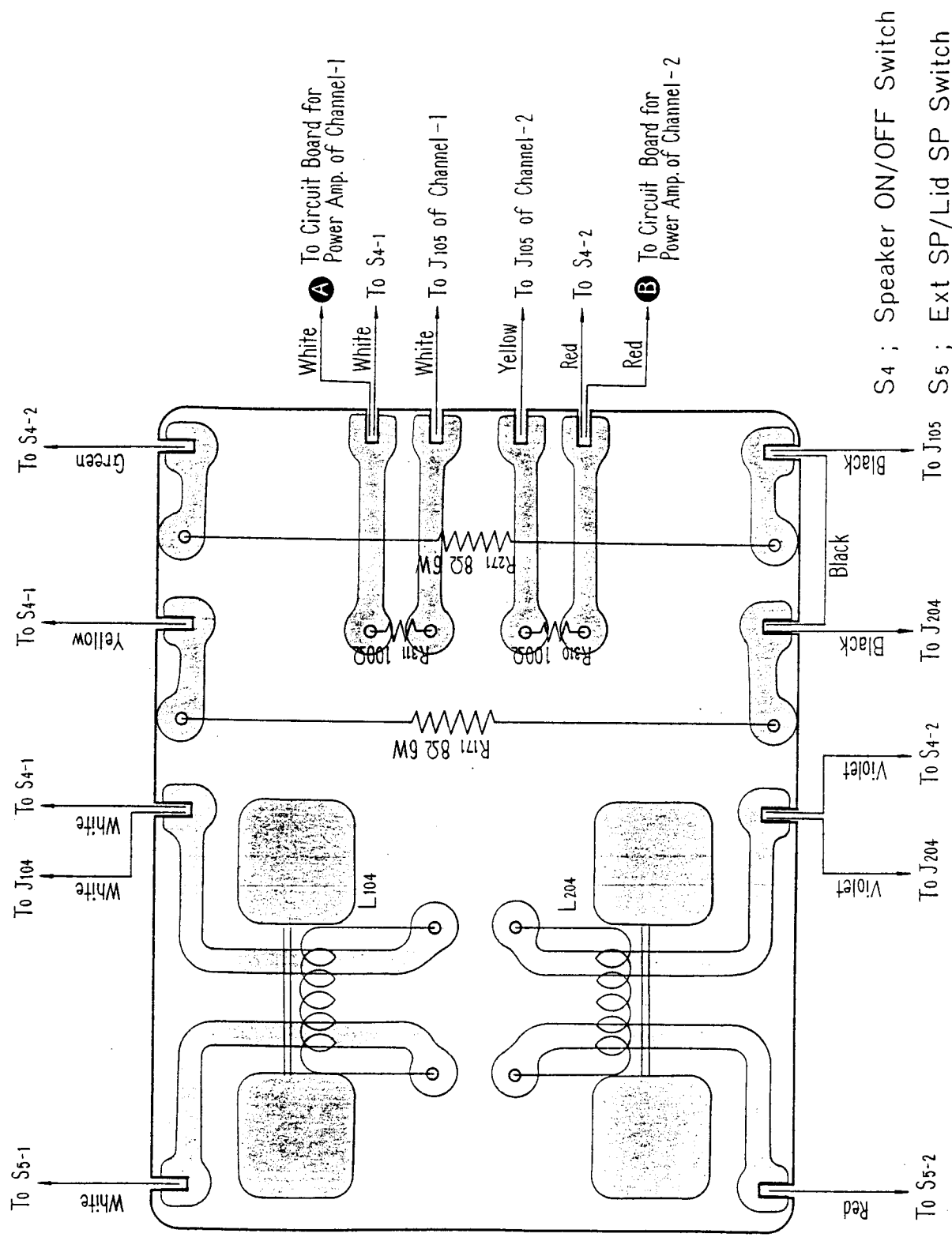
18

To J₂₀₄ — Red

To S₂₋₂ — Black, Orange

Marking

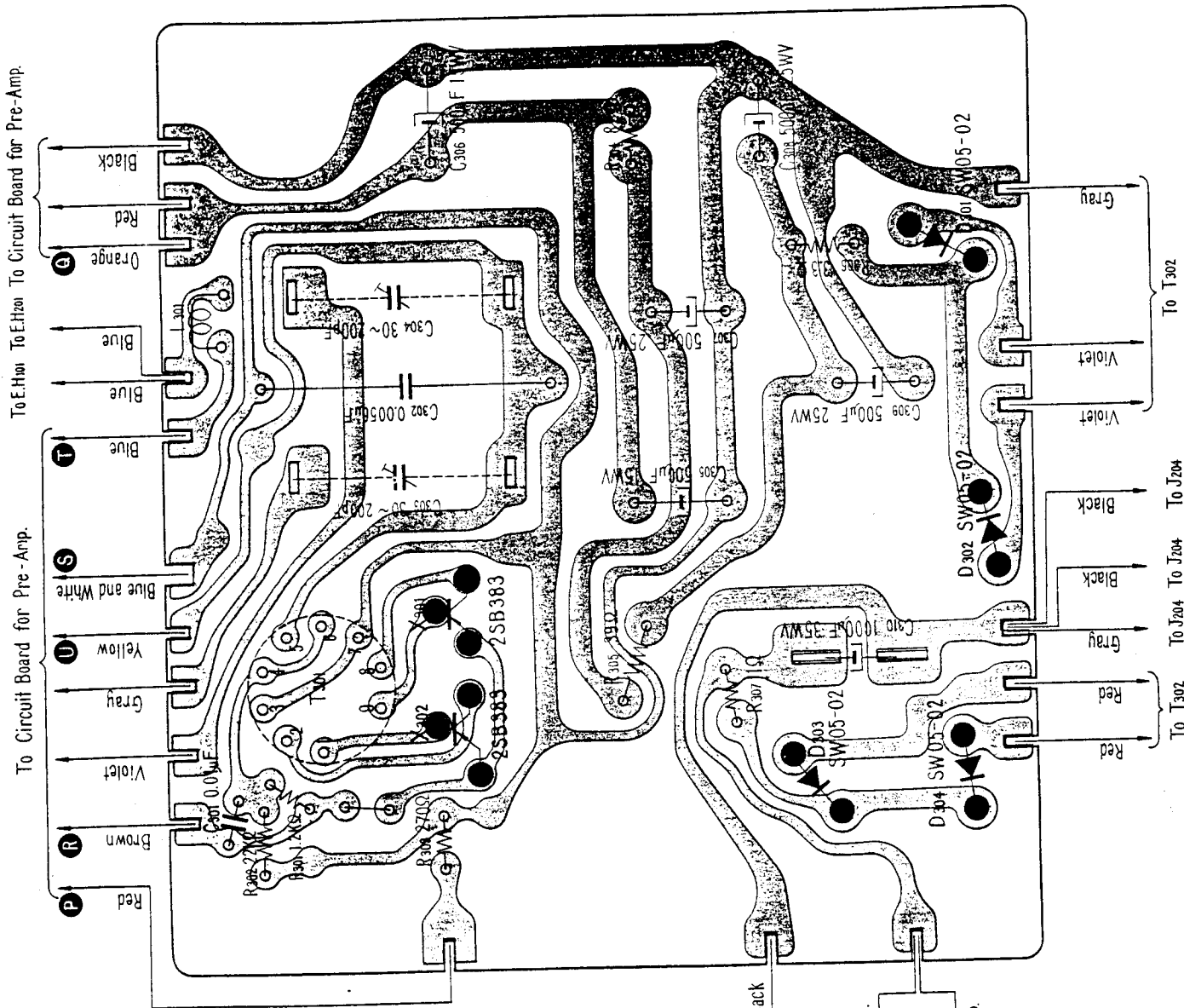
Mounting Diagram
Speaker Circuit Section
 —Conductor Side—
 P_s



Mounting Diagram

Power Supply and OSC Section

—Conductor Side—
P₁

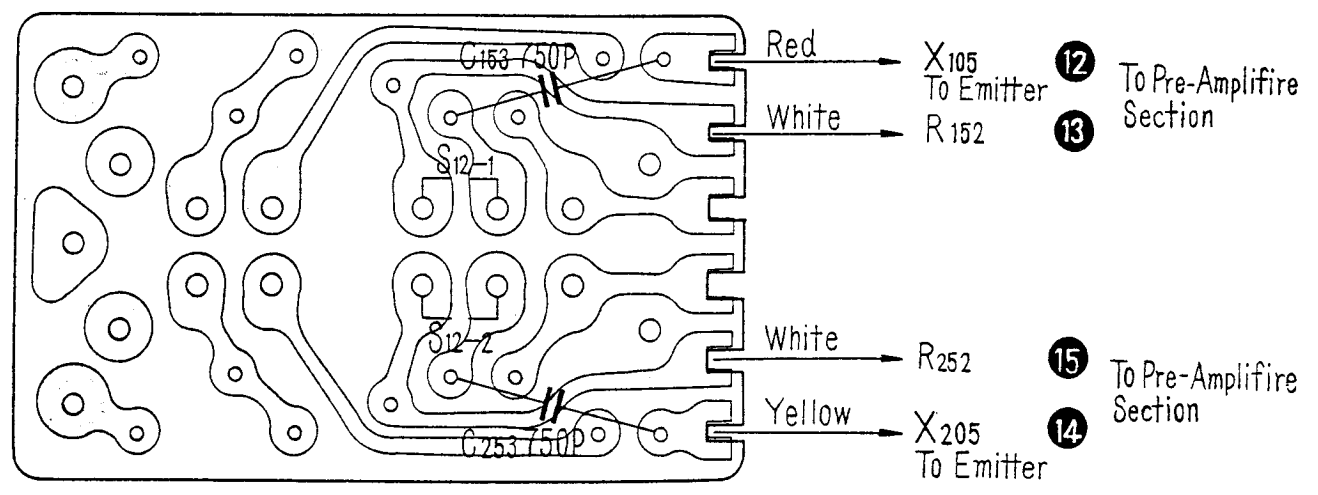


- To Circuit Board for Power Black Amp. of Channel - 2
- To Circuit Board for Power Amp.
Orange
Orange
- To Circuit Board for Power Amp.

Mounting Diagram

Noise Suppress Switch Section (additional)

—Conductor Side—



Parts List

2nd Revision

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
A1	X-34300-01-	*BASS PLATE, chassis	8	3-430-159-	WASHER, capstan shaft; black
A3	-03-	*SPRING, take-up and feed reel retainer	9	-160-	WASHER, take-up and feed reel spindle
A2	-02-	*LEVER, capstan idler, release	10	-161-	PULLEY, feed reel spindle
	-04-	*COVER, head	11	-162-	BRACKET, speed equalizer switch
A4	-05-	*PANEL, control		-163-	DECORATION PLATE, record control
	-07-	*BRACKET, power transformer	12		
A5	-08-	*BRACKET, binaural monitor jack		-165-	JOINT LEVER, recording clank
A6	-09-	*KNOB, speed selector	13	-166-	ROD, recording clank
A7	-10-	*FRONT PANEL	14	-167-	LEVER, record button
A8	-14-	*TABLE, take-up reel	15	-169-	BRACKET, recording
A9	-15-	*TABLE, feed reel	17	-170-	SPACER, clank
A10	-16-	*LEVER, record clank	18	-171-	LEVER, recording of channel 1
A11	-17-	*LEVER, rewind idler	19	-172-	LEVER, recording of channel 2
A12	-19-	*IDLER, rewind	20	-173-	ROD, rec/P.B. selector switch
A13	-20-	*BRACKET, jack, socket and fuse holder	21	-174-	BRACKET, rec/P.B. amplifier
			22	-175-	BRACKET, leg; power supply and oscillator block side
A14	-21-	*LEVER, automatic shut-off actuator	23		
			25	-177-	BRACKET, leg
A15	-22-	*BRACKET, front panel retainer	26	-178-	BRACKET, volume and tone control
A16	-23-	*HEAD DECK			
A17	-24-1	*BOARD, speaker box right; black	27	-190-	LEVER, instant stop
A18	-25-	*IDLER, take-up	28	-191-	BRACKET, muting switch
A19	-26-	*CAM, function selector	29	-192-	BRACKET, power supply and oscillator
A20	-27-	*LEVER, take-up idler		-193-	DECORATION PLATE, binaural monitor jack
	-28-3	CARTON ASS'Y	30		
A21	-29-	*PANEL, reel		-194-	BRACKET, cabinet and base plate
A22	-30-	*CABINET, body	31		
	-38-	*BRACKET, volume control	32	-195-	BRACKET, instant stop brake lever retainer
A43	-39-	*TAPE INDEX COUNTER			
A24	-31-	*CABINET LID, right	33	-196-	BRACKET, speed equalizer switch
A25	-32-	*CABINET LID, left	34	-197-	WASHER, volume control
A26	-33-	COMPLETE CABINET ASS'Y	35	-198-	CAP, take-up idler
A23	-34-	*LEVER, function selector; slide on base plate	36	-199-	WASHER, recording button; black
	-35-	BRAKE LEVER ASS'Y	37	-200-	WASHER, recording button; black
A28	-37-	*SHAFT, pinch roller	38	-201-	SHAFT, function selector
A33	X-34180-04-	*SHAFT, capstan	39	-202-	KNOB, record volume control
A34	-06-	ARM, capstan idler	40	-203-	SHAFT, head cover
A35	-08-	LEVER, tape speed selector	41	-206-	CAP, take-up and feed reel spindle
A36	-14-	JOINT LEVER, function selector cam and function selector lever	42	-209-	FELT, speaker box
			43	-210-	BOARD, speaker box, left; black
A37	-27-	CAM, pinch lever	44	-211-	CUSHION, VU meter
A38	-30-	ARM, stepper	45	-212-	ROD, recording
A40	-37-	*KNOB, function selector	46	-213-	SPRING, recording
	-33-	*PLATE, motor pulley; round shape	47	-214-	TAPE GUIDE, left
			48	-215-	SHAFT, tape guide, left
A29	X-34240-02-	*SHAFT, pinch lever	49	-216-	CUSHION, 2P connector
A39	X-34300-40-	*BRAKE, instant stop	50	-217-	JOINT SPRING, instant stop lever
A30	X-00270-03-	*IDLER, capstan	51	-219-	SPRING, recording clank
A31	X-34130-11-	*BUTTON, recording	52	-220-	BRACKET, monaural switch
A32	-12-	BUTTON ASS'Y, power	53	-221-	LEVER, feed reel brake arm
A41	X-34193-03-	KNOB ASS'Y, bass, treble mode	54	-222-	PLATE, feed and take-up brake arm joint
A42	-04-	KNOB ASS'Y, volume control; left	55	-223-	PLATE, spring holder
			56	-225-	SPRING, feed reel brake lever
	X-34308-01-	SHIELD PLATE ASS'Y, rec/P.B. head		-226-	BAG, polyethylene
			57	-227-	CAM, fast forward
	3-430-115-	COVER, pre-amplifier; fiber		-228-	DECORATION PLATE, jack
1	-152-	BRACKET, trap coil		-230-	LEVER, take-up reel
2	-153-	PLATE, microphone jack; bakelite	58	-231-	FELT, pinch roller; oil absorber
			59	-232-	CAP, pinch roller
3	-154-	BRACKET, speed selector shaft	60	-233-	PINCH ROLLER
4	-155-	PLATE, automatic shut-off actuator switch	61	-234-	WASHER, pinch roller; nylon
			62	-235-	SPACER, pinch roller; metal
5	-156-	SPRING, pinch lever cam	63	-236-	WASHER, front panel; meta
6	-157-	BRACKET, recording clank	64	-237-	SLEEVE, capstan shaft
7	-158-	SHAFT, fast forward	65		

* marked at top of part name means ASSEMBLY

Parts List

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
66	3-430-238-	SPRING, capstan shaft	115	3-005-001-	SPRING, rec/P.B. head
67	-239-	SPRING, feed reel brake	116	3-103-139-	HUM proof ring
	-240-	CUSHION, rubber	117	-140-	SUPPORT, hum-proof ring
	-048-	BOARD, speaker box right; black	118	-206-	WASHER, cabinet; back side
	-245-	SHIELD PLATE, mic jack		-527-	BINDER, rubber
	-246-	SPRING, switch holder	122	3-402-654-	TAPE PAD HINGE, rec/P.B. head
	-248-	BRACKET, micro switch holder	123	-655-	TAPE PAD HINGE, erase head
68	3-418-009-	SHAFT, pinch roller	124	-764-	SPACER, speed selector knob shaft
69	-011-	JOINT, pinch lever and slider			
70	-013-	SHIFTER, tape pad	126	2-409-102-	WASHER, fast forward button and pinch roller shifter shaft; nylon
71	-035-	ALIGNING PLATE, instant stop knob			
72	-053-	CLANK, fast forward	127	-108-	WASHER, front panel and reel panel; nylon
73	-054-	SPACER, stepper arm			
74	-055-	SHAFT, fast forward lock lever	128	-124-	WASHER, recording lever; nylon
75	-060-	SHAFT, capstan idler arm (Speed selector lever guide shift)	129	-133-	SPRING, rec/P.B. selector switch
			130	-158-	SPRING, recording clank
76	-069-	SPRING, capstan idler arm	131	-163-	WASHER, take-up and feed reel; nylon
77	-070-	SPRING, fast forward idler arm (Horizontal use)	132	-191-	WASHER, cabinet; bottom side
78	-073-	SPRING, capstan idler arm shaft (Vertical use)	134	3-412-059-	SCREW, front panel
			135	3-413-029-	BRACKET, wire retainer
	-074-	SPRING, speed selector lever (Horizontal use)	140	3-420-076-	FELT, vibration absorber
79	-075-	SPRING, capstan idler release lever	136	3-427-291-	CAUTION LABEL
				3-419-091-	WASHER, treble, bass mode control knob; black
80	-077-	SPRING, fast forward idler arm shaft (Vertical use)	137	-211-	CAM, capstan idler
			138	-345-	HEAT SINK, power amplifier
81	-079-	SPRING, instant stop lever	139	-353-	KNOB, volume control channel-1
82	-085-	SPACER, function selector cam shaft		3-401-156-	SPACER, microphone jack
				-179-	PLATE, lug
83	-086-	SPACER, instant stop brake lever		-100-	RUBBER, vibration absorber
84	-091-	SPRING, fast forward lock lever shaft		3-424-073-	BUSHING, pinch lever
				3-701-007-	BELT, tie-up
86	-107-	BRACKET, capstan holding		-029-01	TACK LABEL 60 c/s
87	-111-	RING CAP, capstan holding		(-028-01)	" (50 c/s)
88	-112-	OIL RING, capstan holding		3-430-803-	SHIELD PLATE
89	-113-	TAPE SUPPROT, right		3-431-161-01	SCREW, motor setting
90	-115-	NYLON WASHER, 8 ϕ (outer diameter)			TRANSISTOR, 2SC401; yellow mark X _{101, 201, 102, 202}
91	-137-	BUTTON, fast forward			2SC402 X _{107, 207, 103, 203}
99	-208-	BELT, rewind idler			2SC402 X _{105, 205, 106, 206}
100	-210-	PULLEY, 50 c/s, motor			2SC318 X _{104, 204}
92	-166-	WASHER, rewind idler; special			2SC383 X _{301, 302}
93	-167-	TAPE SUPPORT, left			2SD28 X _{110, 210, 111, 211}
	-168-	SPRING, rec/P.B. switch			2SC401 X _{108, 208, 109, 209}
94	-171-	SPRING, tape guide height adjusting			DIODE SW-05-02 D _{301, 302, 303, 304}
96	-191-	SCREW, rec/P.B. head height lock			1T22 D _{101, 102, 201, 202}
97	-193-	KNOB, instant stop	142	8-832-624-02	MOTOR, IC-624 S ₁
	-194-	PINCH ROLLER	143	8-821-242-26	REC/PB HEAD PP30.4202N ₁
	0-051-235-	HOLDER CLAMP, cable	144	8-826-629-21	ERASE HEAD EF18.2902H
98	3-418-200-	SPRING, take-up brake	176	1-441-262-13	TRANSFORMER, power T ₃₀₂
	3-442-064-	SPRING, brake block	177	1-427-174-	" output T _{1061, 201}
	3-424-030-	ACTUATOR GUIDE		1-423-114-	" input T _{102, 202}
101	0-007-259-	PAD, erase head	179	1-433-081-	" bias oscillator T ₃₀₁
102	-313-	HOLDER CLAMP, cable			COIL, trap 20 mH L _{103, 203}
106	0-027-216-	OIL RING, rewind and capstan idler	145	1-409-106-	" trap 200 μ H L _{101, 201}
103	-035-	WASHER, take-up idler	180	-083-	INDUCTOR, micro 390 μ H L _{102, 202}
104	-134-	SPACER, take-up brake arm, etc.	181	1-407-051-	COIL, dummy L ₃₀₁
105	-193-	SPRING, pinch lever	146	1-431-038-	" filter choke L _{104, 204}
107	-220-	WASHER, 5 ϕ rewind idler; paper		1-421-153-	SOCKET, AC
108	-473-	PAD, rec/P.B. head	147	1-509-062-	" AC outlet
109	0-037-249-	SPLIT NUT 2 ϕ	148	-015-	FUSE HOLDER
110	-406-	TAPE GUIDE	149	1-533-012-	PILOT LAMP
111	0-041-041-	WASHER, base plate; felt	150	1-518-052-	SOCKET, pilot lamp
112	-223-	SPACER, phone jack	151	1-517-003-	CONNECTOR
113	0-056-247-	BELT, tape index counter	152	1-509-117-	SPEAKER, cabinet side SP _{101, 201}
114	-322-	OIL RING, take-up idler	153	1-502-125-	

Parts List

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
154	1-502-154-	speaker box SP _{102, 202}		1-242-683-	2.7KΩ // // R _{112, 212,}
182	1-524-035-	VOLUME UNIT METER SWITCH,			114, 214
183	1-513-220-	rec/P.B. selector; slide SW _{101, 201}		-679-	1.8KΩ // // R _{147, 247}
159	-091-	speaker selector; slide SW ₅		-675-	1.2KΩ // // R ₃₀₁
156	1-514-227-	speaker mode; rotary SW ₂		-673-	1.0KΩ // // R _{135, 235,}
157	-226-	speed equalizer; rotary SW ₁			149, 249, 137, 237, 142, 242
158	-140-	power on/off push SW ₇		-677-	1.5KΩ // // R _{158, 258}
155	-091-	speaker monitor on/off; SW ₄		-671-	820Ω // // R _{161, 261}
160	-055-	bias control SW _{3, 8}		-709-	33KΩ // // R _{178, 278}
162	-039-	automatic shut-off SW ₄		-713-	47KΩ // // R _{152, 252}
	-247-	monaural record; muting SW _{9, 19}		-657-	2200Ω // // R _{170, 270,}
	-057-	micro switch			172, 272, 167, 267, 169, 269
164	1-507-108-	JACK, external speaker; mini J _{104, 204}		-669-	680Ω RD $\frac{1}{4}$ UL $\pm 10\%$ R _{130, 230,}
	-053-	microphone input; mini J _{102, 202}		-667-	560Ω // // R _{103, 203}
165	-106-	binaural monitor; phone J ₁₀₈		-665-	470Ω // // R _{150, 250,}
166	-142-	auxiliary input and line out; J _{101, 201, 103, 203}			151, 251
167	1-506-121-	CORD, external speaker		-661-	330Ω // // R _{132, 232}
	1-101-030-	CAPACITOR, 200pF 50WV C _{152, 252}		-653-	150Ω // // R _{126, 226}
	-534-	ENCAPSULATED COMPONENT, 0.1μF +120Ω CP _{1, 2}		-649-	100Ω // // R _{310, 311}
175	1-117-036-	CAPACITOR, 1.5μF 250WV C ₃₁₁		-645-	68Ω // // R _{107, 207}
	1-141-010-	" trimmer C _{303, 304}		-647-	82Ω // // R _{104, 204}
168	1-536-074-	TERMINAL STRIP		-633-	22Ω // // R _{162, 262}
169	-061-	" " 2-L-1		-613-	3.3Ω // // R ₃₆₀
	1-538-464-	CIRCUIT BOARD		-601-	1Ω // // R _{169, 269}
	-395-	CIRCUIT BOARD, pre-amplifier		-681-	2.2KΩ // // R _{168, 268,}
	-396-	" " power supply			101, 201
	-397-	and OSC " power-amplifier		1-204-679-	1.8KΩ RD $\frac{1}{4}$ UR $\pm 10\%$ R _{166, 266}
172	1-221-749-	VOLUME CONTROL, 10KΩ record R _{157, 257}		-527-	39Ω RD $\frac{1}{2}$ SP $\pm 5\%$ R _{305, 173,}
173	-750-	50KΩ playback R _{156, 256}		-528-	1Ω // // R _{173, 273,}
174	-751-	BASS AND TREBLE CONTROL, 50KΩ R _{154, 254, 153, 253}			174, 274, 307
170	-748-	ADJUSTABLE RESISTOR, 5KΩ R _{116, 216, 140, 240}		-663-	390Ω RD $\frac{1}{4}$ UR $\pm 10\%$ R _{165, 265,}
171	-401-	10KΩ R _{119, 219}			175, 275
	1-242-713-	RESISTOR 47KΩ RD $\frac{1}{4}$ UR $\pm 10\%$		-529-	270Ω RD1SP $\pm 5\%$ R ₃₀₃
	-703-	18KΩ // // R _{110, 210}		-530-	82Ω // // R ₃₀₄
	-697-	10KΩ // // R _{106, 206}		-537-	2.2Ω RD2SP $\pm 10\%$ R _{108, 208,}
	-687-	3.9KΩ // $\pm 5\%$ R _{115, 215}			109, 209
	1-214-721-	100KΩ RD $\frac{1}{4}$ UR $\pm 10\%$ R _{102, 202}		1-207-084-	wire wound 8Ω 6W $\pm 10\%$
	-723-	120KΩ // // R _{113, 213}			R _{171, 271}
	1-242-715-	56KΩ // // R _{139, 239}			CAPACITOR
	1-214-747-	1.2 MegΩ // // R _{123, 223}		1-105-667-	mylar, 0.0068μF 50WV C _{151, 251}
	-717-	68KΩ // // R _{134, 234}		1-107-008-	silvered mica 150pF C _{312, 313}
	1-242-705-	22KΩ // // R _{121, 221,}		1-105-689-	mylar 0.22μF 50WV C _{128, 228}
	-703-	18KΩ // // R _{122, 222,}		-679-	" 0.033μF // C _{108, 208,}
	-701-	15KΩ // // R _{159, 259,}			112, 212
	-697-	220KΩ // // R _{170, 270,}		-677-	" 0.022μF // C _{102, 202,}
	-695-	8.2KΩ // // R _{128, 228,}		-673-	" 0.01μF // C _{123, 223,}
	1-214-693-	6.8KΩ // // R _{111, 211,}		-671-	" 0.0068μF // C _{101, 201,}
	1-242-691-	5.6KΩ // // R _{124, 224,}		-665-	" 0.0022μF // C _{126, 226}
	-689-	4.7KΩ // // R _{125, 225,}		-661-	" 0.001μF // C _{148, 248,}
	-687-	3.9KΩ // // R _{117, 217,}			118, 218
	-685-	3.3KΩ // // R _{127, 227,}		-663-	" 0.0015μF // C _{114, 214,}
		131, 231, 136, 236, 138, 238			150, 250, 138, 238, 139, 239 *
				1-107-016-	silvered mica 470pF C _{104, 204,}
				-006-	" 330pF C _{134, 234,}
				-005-	" 220pF C _{120, 220}
				1-129-380-	polyethylene 0.0056μF 600WV C ₃₀₂
				1-121-081-	electrolytic 500μF 15WV C _{305,}
				-319-	" 200μF 12WV
				-317-	" 200μF 3WV
				-340-	" 100μF 15WV
					C _{121, 221, 131, 231}

Parts List

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	1-121-339-	electrolytic 100 μ F 10WV		3-793-010-20	TAPE TALK
	-315-	C _{119, 219} " 100 μ F 6WV		1-534-099-16	CORD, power supply
	-290-	C _{109, 209, 115, 215, 132, 232} " 100 μ F 3WV		0-041-127-12	BAG, polyethylene; red; 50 c/s
	-308-	C _{107, 207, 136, 236} " 30 μ F 3WV		(-01)	(white; 60 c/s)
	-307-	C _{105, 205} " 10 μ F 12WV		3-430-229-	CAP, reel
	-367-	C _{116, 216, 135, 235, 110, 210, 113, 213, 133, 233} " 3 μ F 25WV		3-401-193-02	RIBBON, head cleaning
	-234-	C _{130, 230} " 500 μ F 25WV		1-534-036-02	CONNECTION CORD; black
	-336-	C _{307, 308, 309} " 30 μ F 15WV		(-01)	(RK-46) (red)
	1-119-149-	C _{137, 237} " 500 μ F 25WV		3-403-810-	COVER, polyethylene
	-173-	C _{143, 243} " 500 μ F 50WV	175	3-701-020-	CHECK SHEET BAG
	1-121-094-	C _{147, 247} " 1000 μ F 35WV	176	3-418-221-	PULLEY 60 c/s motor
	-286-	C ₃₁₀ " 30 μ F 25WV		(-210-)	(50 c/s)
	3-790-227-12	C _{140, 240} INSTRUCTION MANUAL		3-701-025-	SPLICING TAPE PS-2
	3-793-009-11	INSPECTION CARD		7-491-001-	DESICCANT
				8-811-960-30	MICROPHONE F-96 (MTL)
				8-860-107-	REEL R-7A
				8-918-210-53	DEMONSTRATION TAPE, DSE-53
				Y-20161-01-	OIL, OL-1K
				1-509-064-	SOCKET, voltage selector
				-029-	CONNECTOR, record/playback
				1-536-030-	TERMINAL STRIP 2-L-2
				1-532-007-	FUSE, 1.5A
				1-244-697-	RESISTOR, carbon; fixed, 10K Ω
					RD $\frac{1}{4}$ SR \pm 5%
				3-430-813-	TOOL SET

Parts List for Noise Suppress Switch (additional)

Part No.	Description	Q'ty
X-34300-66	Mounted Circuit Board (Noise Suppress Switch)	1
1-538-679-	Printed Circuit Board (Noise Suppress Switch)	1
1-514-314-	Slide Switch	1
1-129-128-31	Capacitor, polyethylene 750pF \pm 10%, 50WV C _{153, 253}	2
3-430-252-	Bracket, suppress switch holder	1
-253-	Ornamental Plate, suppress switch	1
-178-05	Sub-chassis, control panel	1

Parts List

Parts List for U. S. A. (Additional)

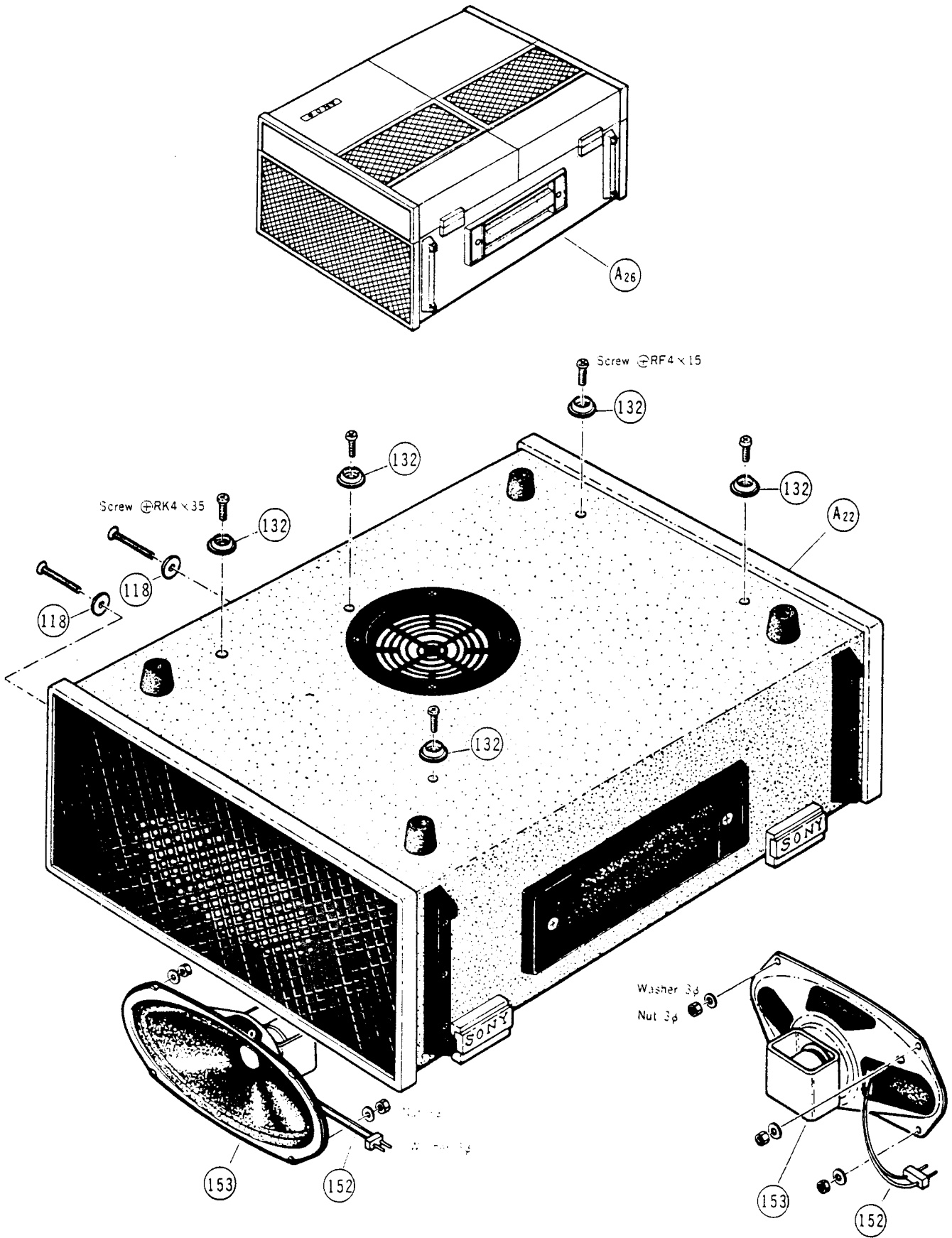
Ref. No.	Part No.	Description
24	X-34300-28-2	CARTON ASS'Y
	3-430-176-	DECORATION PLATE, jack
125	-205-	LABEL, serial NO.
	3-403-808-	BOX, AC SOCKET
100	3-410-044-	CAP, MP CAPACITOR
	3-418-211-	MOTOR PULLEY 60 c/s
	3-427-291-	CAUTION LABEL
	3-429-902-	INSULATOR, fiber
	3-790-227-22	INSTRUCTION MANUAL
	3-793-030-	TAPE BOOKLET
	1-506-105-01	PIN PLUG (red)
	-02-	(black)
	0-037-241-01	EARPHONE CASE
	X-37010-08-1	HEAD CLEANING RIBBON
176	1-441-252-	POWER TRANSFORMER
175	1-117-035-	MP CAPACITOR, 1.5 μ F AC 300V

Parts List for CSA (Additional)

Ref. No.	Part No.	Description
A22	X-34300-28-3	CARTON ASS'Y
	X-34309-01-	CABINET ASS'Y, body
A26	X-34309-02-	COMPLETE CABINET ASS'Y
24	3-430-176-	DECORATION PLATE, jack
	-901-	LABEL, serial NO.
125	3-407-956-	CAUTION LABEL
	3-410-044-	CAP, MP CAPACITOR
	3-403-808-	BOX, AC SOCKET
	3-429-902-	INSULATION, fiber
	3-490-227-42	INSTRUCTION MANUAL
	1-534-375-12	POWER CORD
	8-922-404-00	TOOL SET
176	8-918-211-23	DEMONSTRATION TAPE, DSJ-73
	1-441-252-	POWER TRANSFORMER
	1-231-057-	ENCAPSULATED COMPONENT
175		0.033 μ F +120 Ω 500WV
	1-117-035-	MP CAPACITOR, 1.5 μ F AC 300V

Exploded Diagram

Cabinet—Bottom View



Exploded Diagram

Reel Panel—Top View

