

MODEL **AD-6350H,C,U**

AIWA[®]
(SERVICE MANUAL)



Set using ISO screws



Shown above is AD-6350U

DATE OF ISSUE 15/5/1978

SPECIFICATIONS

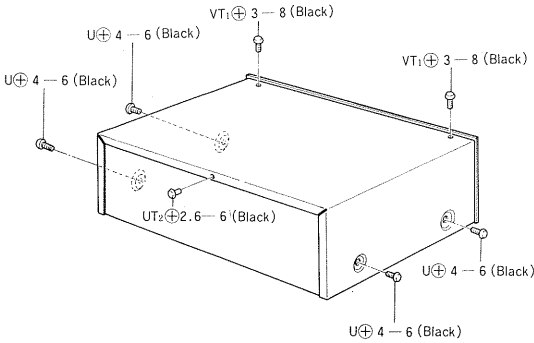
Semiconductors:	2 IC's, 28 transistors, 13 diodes & 3 LED's	Channel separation:	More than 35 dB (at 1 kHz 0VU)
Power source:	AD-6350H: AC110~120V/220V/240V (switchable) 50/60 Hz	Cross talk:	More than 65 dB (at 1 kHz 0VU)
	AD-6350C: AC120V 60 Hz	Erasing ratio:	More than 60 dB (at 400 Hz 0VU + 10 dB)
	AD-6350U: AC120V 60 Hz	Bias frequency:	85 kHz
Power consumption:	10 W	Frequency response:	LH tape: 25~14 kHz (-10 dB)
Dimensions:	420(W) x 150(H) x 330(D) mm (16-9/16" x 5-15/16" x 13")		Fe-Cr tape: 25~17 kHz (-10 dB)
Weight:	6.7 kg (14.8 lbs)		CrO ₂ tape: 25~16 kHz (-10 dB) (at Dolby off, Rec./Pb.)
Track system:	4-track 2-channel stereo	Motor:	DC servo motor
Tape speed:	4.76 cm/sec. (1-7/8 ips) ± 1%	Head:	Ultra-hard quality permalloy head
Wow & flutter:	Less than 0.08% (WRMS, Pb)	Input:	MIC: Max. input sensitivity 0.3 mV (200 Ω~10 kΩ suitable)
Automatic stop system:	Mechanical full auto-stop		LINE IN: Max. input sensitivity 50 mV (More than 50 kΩ)
Automatic shut-off action time:	Less than 15 sec.	Output:	LINE OUT: Standard output level 0.775V (0VU) Optimum load impedance more than 50 kΩ
Pinch roller pressure:	360 ± 30 g		PHONES: 1 mW Load impedance 8 Ω
Take-up torque:	50 ± 10 g-cm		
FF & rewind torque:	110 ⁺¹⁵ ₋₂₀ g-cm		
FF & rewind time:	75 ⁺⁵ ₋₃ sec. (w/c-60 cassette)		
Playback output: (TTA-161)	1.05 ± 0.05V (LINE)		
Playback noise: (Un-Weighted)	Less than 4.0 mV (LH, Dolby On) Less than 3.0 mV (Fe-Cr, CrO ₂ , Dolby On)		
Rec./Pb. output: (400 Hz 0VU)	0VU ± 1.0 dB (LINE)		
Rec./Pb. distortion:	Less than 2.0% (LH) Less than 1.5% (Fe-Cr) Less than 2.0% (CrO ₂)		
Rec./Pb. S/N: (400 Hz 0VU) (Un-Weighted)	More than 43/47 dB (LH, Dolby Off/On) More than 45/48 dB (Fe-Cr, Dolby Off/On) More than 45/48 dB (CrO ₂ , Dolby Off/On)		

- Specifications and external appearance are subject to change without notice due to product improvement.
- Dolby Noise Reduction System is licensed from Dolby Laboratories Incorporated.
- The name "Dolby" and the "Double D" symbol are trademarks of Dolby Laboratories Incorporated.

DISASSEMBLY INSTRUCTIONS

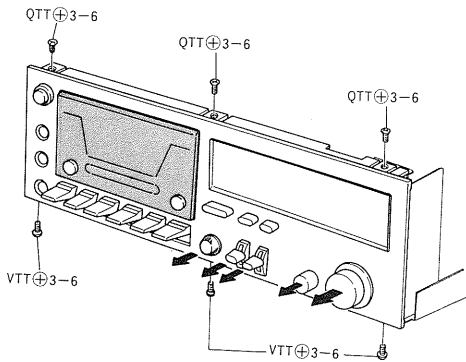
To Remove Cabinet

Remove 7 screws.



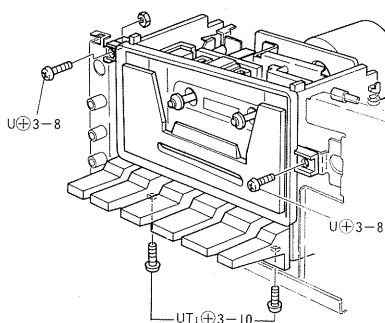
To Remove Front Panel

Pull out the 5 knobs and remove 6 screws.



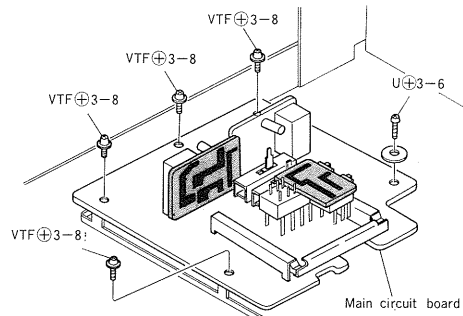
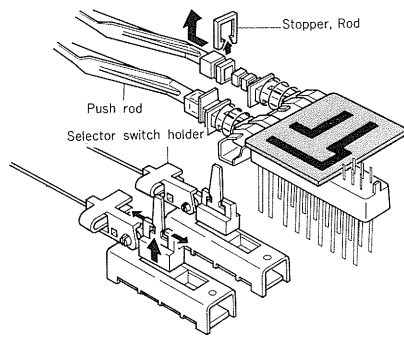
To Remove Mechanism

Remove 4 screws.

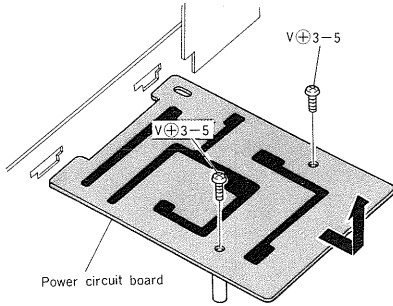


To Remove Main Circuit Board

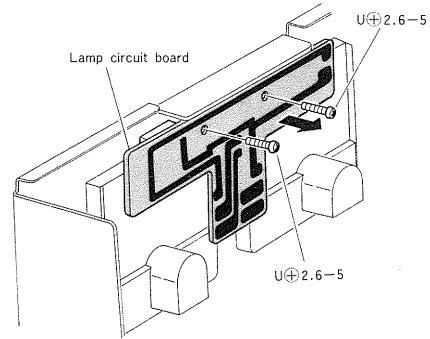
- 1) Remove rod stoppers and take out push rods in direction shown by arrow.
- 2) Remove selector switch holder in upward direction.
- 3) Remove 5 screws.



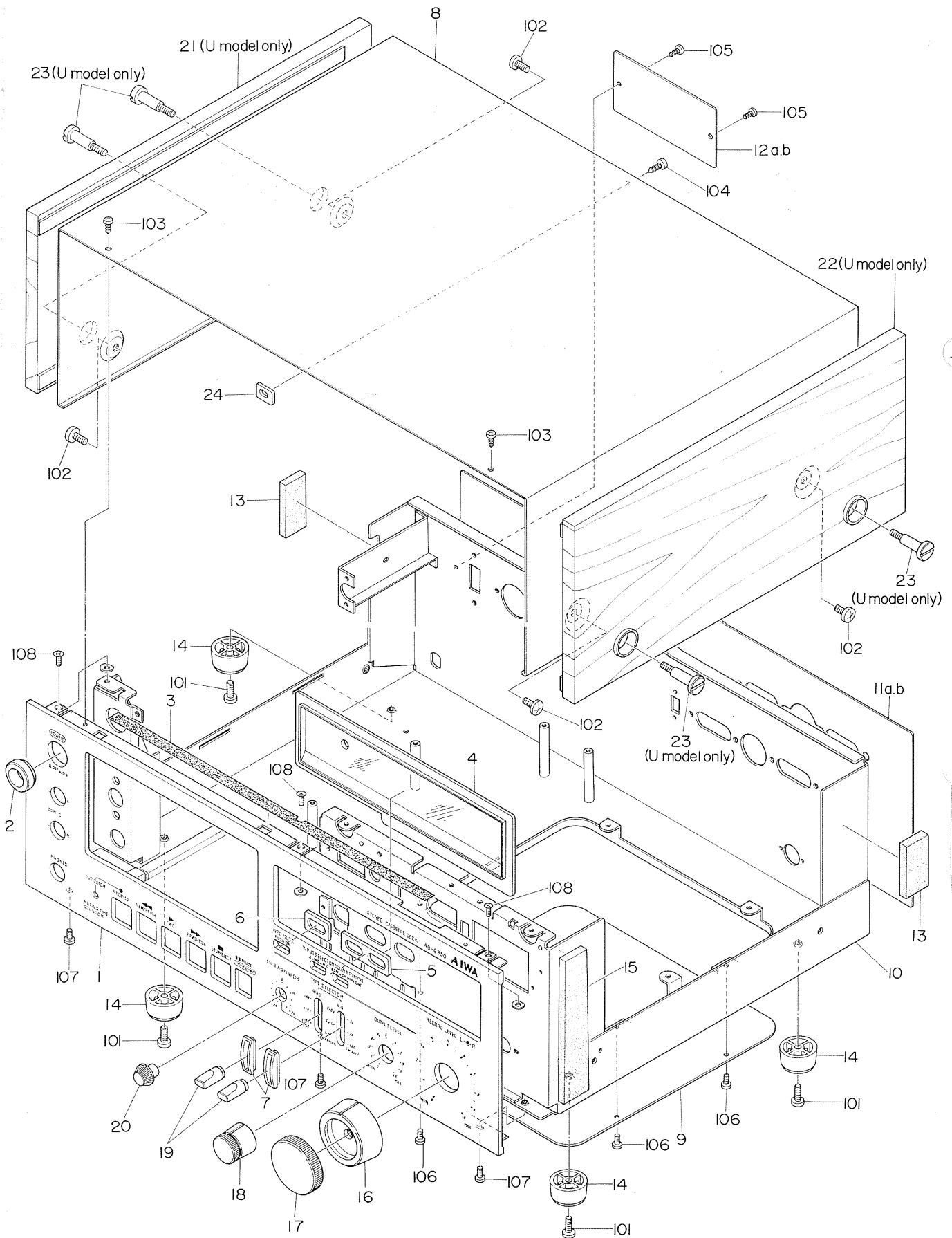
To Remove Power Circuit Board
Remove 2 screws.



To Remove Lamp Circuit Board
Remove 2 screws.



EXPLODED VIEW-1



MECHANICAL PARTS

PARTS LIST

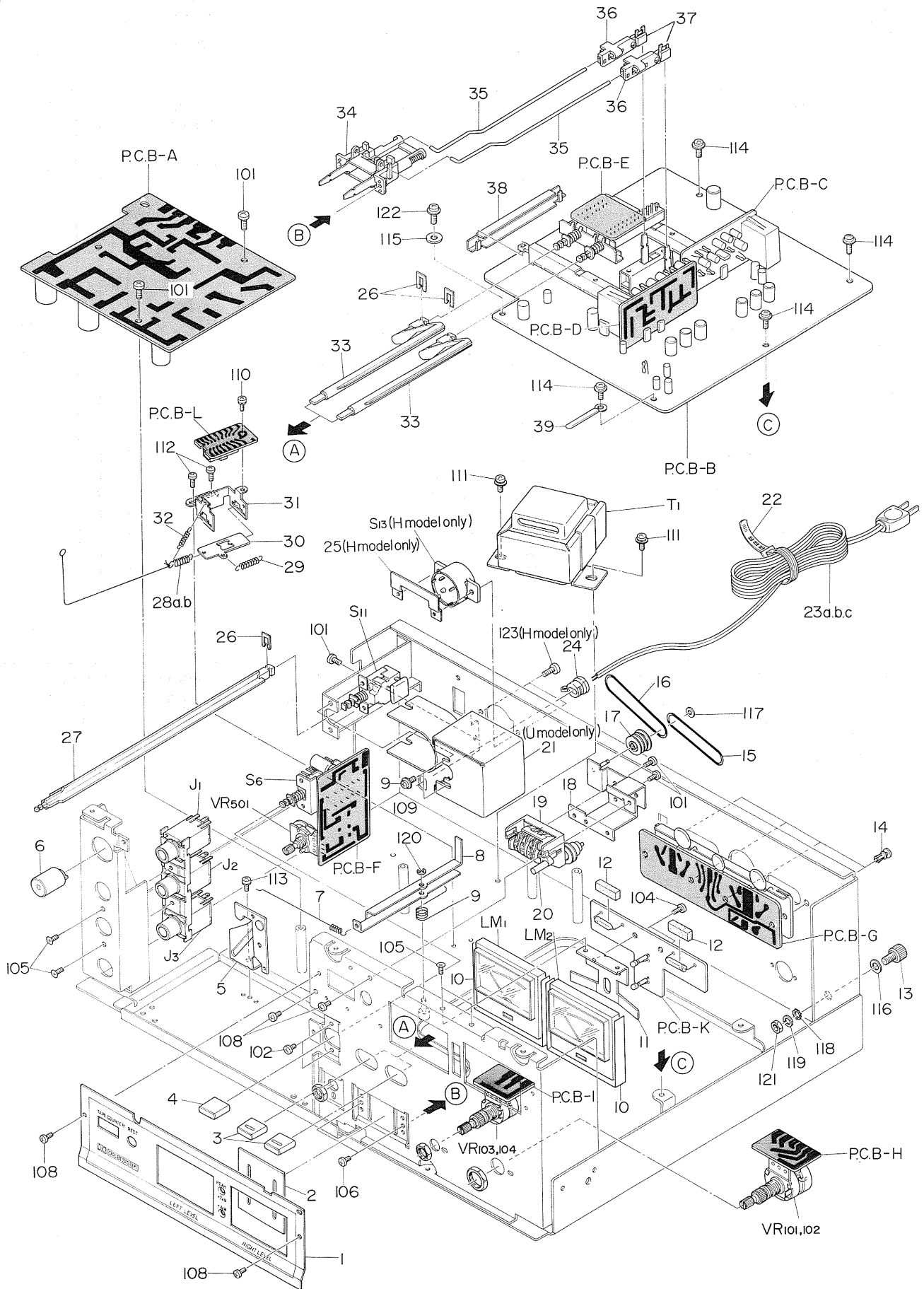
■ * mark in this part list shows exclusive part (which is used) for only Model AD-6350.

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1~7	09-047-114-01		Panel ass'y		
1-1	82-302-003-01		Panel, Front	*	1
1-2	82-397-027-01		Ring, AC switch button	AD-6550	1
1-3	82-397-245-01		Himeron cloth, Cabinet	AD-6550	1
1-4	82-302-004-01		Window, Meter	*	1
1-5	82-397-250-01		Cover, Selector button	AD-6550	1
1-6	82-302-219-01		Cover B, Button	*	1
1-7	82-301-002-01		Guide B, Lever switch		2
1-8	82-302-044-01		Steel cabinet	*	1
1-9	82-302-208-01		Cover, Bottom	*	1
1-10	82-302-232-01		Amp. chassis ass'y B	*	1
1-11a	82-302-030-01		Name plate, Jack (H model only)	*	1
1-11b	82-302-052-01		Name plate, Jack (C model only)	*	1
1-11c	82-302-033-01		Name plate, Jack (U model only)	*	1
1-12a	82-302-014-01		Name plate, Spec. (C model only)	*	1
1-12b	82-302-017-01		Name plate, Spec. (U model only)	*	1
1-13	82-385-291-01		Spacer A, Top panel	AD-6300	2
1-14	87-085-144-01		Leg		4
1-15	82-473-248-01		Spacer, Side panel		1
1-16	82-302-021-01		REC knob B ass'y	*	1
1-17	82-302-019-01		REC knob A ass'y	*	1
1-18	82-302-050-01		PB knob B ass'y	*	1
1-19	82-302-048-01		Selector knob B	*	2
1-20	82-397-062-01		Adjust knob	AD-6550	1
1-21	86-775-004-01		Side panel L ass'y (U model only)		1
1-22	86-775-002-01		Side panel R ass'y (U model only)		1
1-23	87-257-178-01		Mounting screw, Side panel (U model only)		4
1-24	82-380-439-01		Spacer, Back panel		1

Ref. No.	Part No.	Description	Q'ty
1-101	87-251-171-11	U + 4-10	4
1-102	87-257-169-11	U + 4-5(Black)	4
1-103	87-326-095-11	UT ₁ + 3-8(Black)	2
1-104	87-481-402-01	UT ₂ + 3-8(Black)	1

Ref. No.	Part No.	Description	Q'ty
1-105	87-356-033-01	UT ₂ + 3-4	2
1-106	87-081-481-01	VTT + 3-5	4
1-107	87-081-513-01	VTT + 3-6	3
1-108	87-081-531-01	QTT + 3-6	3

EXPLODED VIEW-2

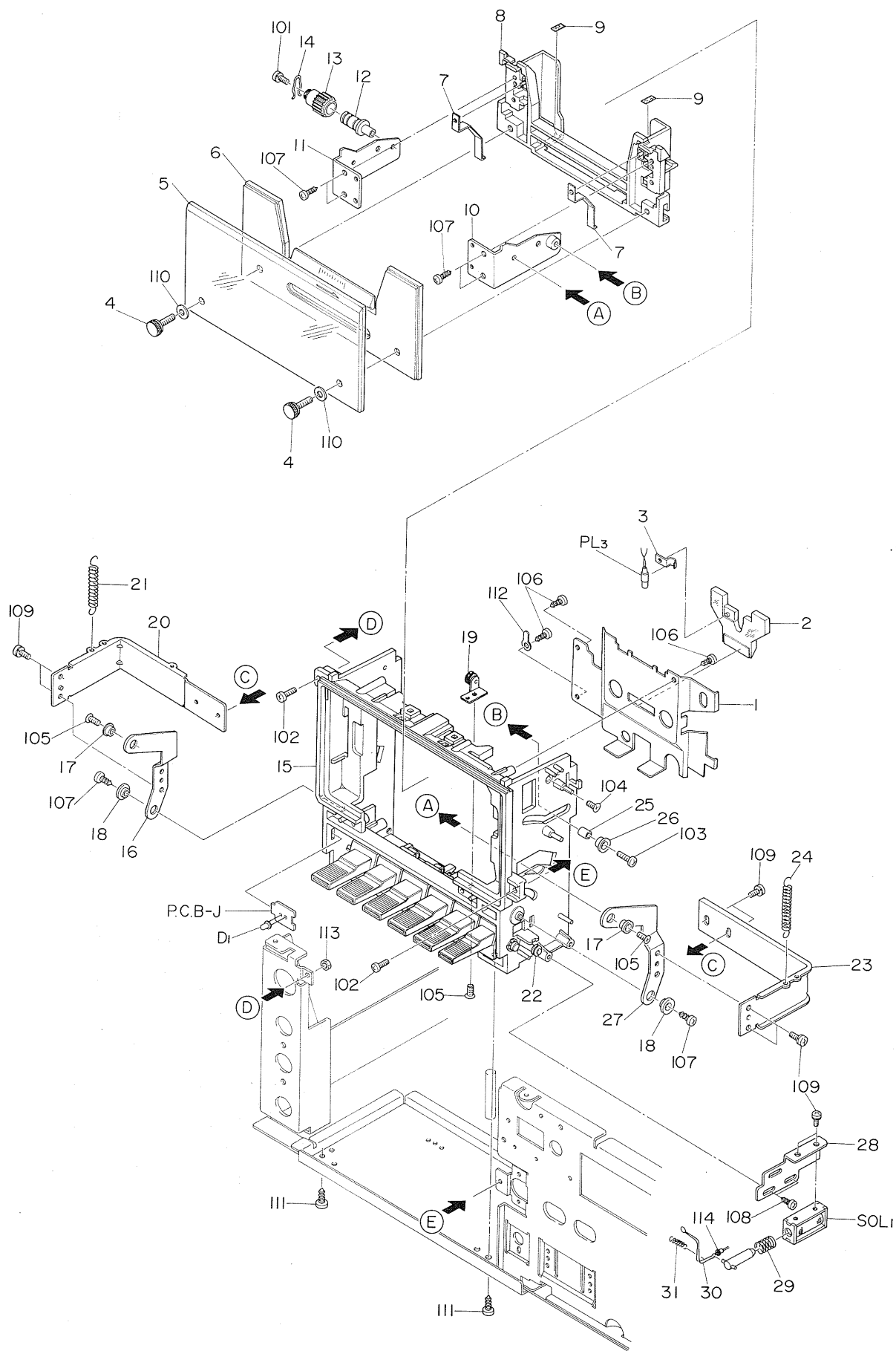


Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
2-1	82-302-005-01		Name plate, Meter	*	1
2-2	82-385-324-01		Lever guide	AD-6300	1
2-3	82-302-046-01		Selector button C	*	1
2-4	82-302-028-01		Selector button B	*	1
2-5	82-385-236-01		Rec. bracket ass'y	AD-6300	1
2-6	82-399-025-01		AC switch button ass'y	AD-6400	1
2-7	82-385-330-01		Spring B, REC	AD-6300	1
2-8	82-385-259-01		Lever F, REC	AD-6300	1
2-9	82-385-329-01		Spring, REC lever F	AD-6300	1
2-10	82-385-373-01		Himeron cloth, Meter	AD-6300	2
2-11	82-302-209-01		Holder, Meter	*	1
2-12	82-302-230-01		Cushion, Lamp	*	2
2-13	87-033-088-01		Earth terminal		1
2-14	87-085-102-01		Nylon rivet		4
2-15	82-533-219-01		Belt, Counter	TPR-920	1
2-16	82-302-218-01		Belt B, Counter	*	1
2-17	82-302-212-01		Relay pulley	*	1
2-18	82-302-211-01		Counter holder ass'y	*	1
2-19	82-385-271-01		Counter	AD-6300	1
2-20	82-302-009-01		Button, Counter	*	1
2-21	82-385-386-01		Cover, Power switch (U model only)	AD-6300	1
2-22	87-058-023-01		Cord binder		1
2-23a	87-034-826-01		AC power cord (H model only)		1
2-23b	87-034-816-01		AC power cord (C model only)		1
2-23c	87-034-867-01		AC power cord (U model only)		1
2-24	87-085-101-01		Bushing, AC power cord		1
2-25	82-488-232-01		Holder, Voltage selector (H model only)		1
2-26	82-385-383-01		Stopper, Rod	AD-6300	3
2-27	82-385-382-01		Rod P	AD-6300	1
2-28a	82-385-326-01		Spring A	AD-6300	1
2-28b	82-302-241-01		Brake spring (U model only)	*	1
2-29	82-372-417-01		Switch return spring		1
2-30	82-381-220-01		Switch position B	AD-1600	1
2-31	82-385-387-01		Switch holder D	AD-6300	1
2-32	82-416-281-01		Brake spring (H, C model only)	TPR-601	1
2-33	82-302-216-01		Push rod B	*	2
2-34	82-302-238-01		Selector lever D ass'y	*	1
2-35	82-302-239-01		Push rod	*	2
2-36	82-385-301-01		Holder B	AD-6300	2
2-37	82-385-300-01		Holder A	AD-6300	2
2-38	82-385-260-01		Pressure plate, REC switch	AD-6300	1
2-39	87-038-039-01		Wire binder		1

Ref. No.	Part No.	Description	Q'ty
2-101	87-263-093-11	V + 3-5	6
2-102	87-267-093-11	V + 3-5(Black)	4
2-103	87-253-095-11	U + 3-8	2
2-104	87-253-072-01	U + 2.6-5	2
2-105	87-233-094-11	Q + 3-6	4
2-106	87-351-073-01	VT ₁ + 2.6-6	2
2-107	87-341-096-01	UT ₁ + 3-10	2
2-108	87-347-033-01	UT ₂ + 2.4(Black)	2
2-109	87-480-094-01	VS + 3-6	2
2-110	87-480-072-01	VWS + 2.6-5	1
2-111	87-490-170-11	VWS + 4-8	2
2-112	87-081-502-01	VTT + 2.6-6	2

Ref. No.	Part No.	Description	Q'ty
2-113	87-081-481-01	VTT + 3-5	1
2-114	87-510-095-01	VTF + 3-8	4
2-115	87-410-319-01	W 3-15-0.8	1
2-116	87-410-326-01	W 4-10-10	1
2-117	87-081-489-01	PW 1.7-3.5-0.25	1
2-118	87-433-906-01	WTE-4	1
2-119	87-421-328-01	SW-4	1
2-120	87-441-005-01	STE-2	1
2-121	87-391-028-01	N-4	1
2-122	87-253-094-11	U + 3-6	1
2-123	87-257-095-11	U + 3-8(Black)	2

EXPLODED VIEW-3



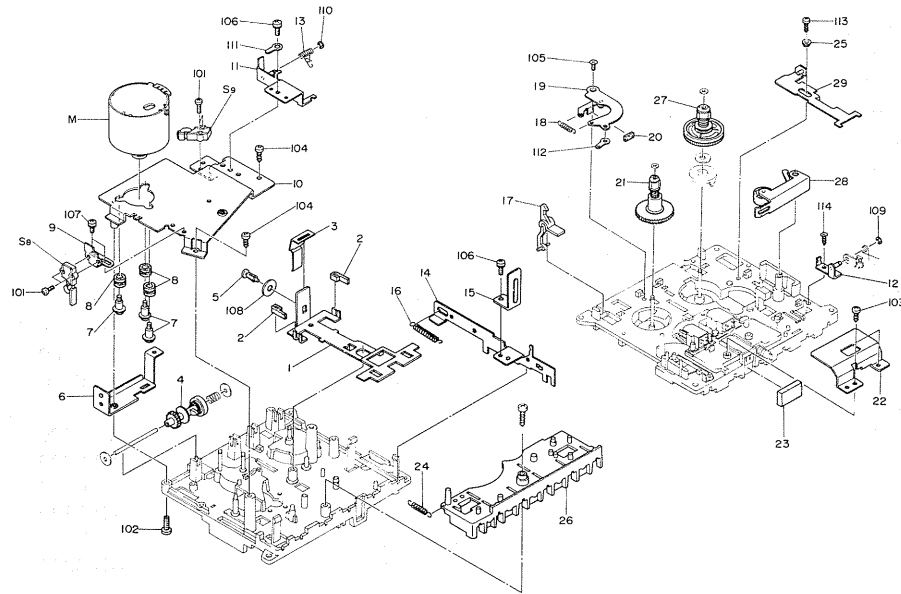
Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
3-1	82-302-034-01		Panel B, Blind	*	1
3-2	82-302-045-01		Guide, Light	*	1
3-3	82-385-283-01		Holder, Lamp	AD-6300	1
3-4	82-302-049-01		Decorative screw	*	2
3-5	82-302-008-01		Window, Cassette	*	1
3-6	82-302-007-01		Cassette lid	*	1
3-7	82-385-338-01		Pressure plate spring C, Cassette	AD-6300	2
3-8	82-302-047-01		Cassette case ass'y	*	1
3-9	82-385-337-01		Cushion, Cassette	AD-6300	2
3-10	82-385-339-01		Arm; Right A, Cassette lid	AD-6300	1
3-11	82-385-244-01		Arm; Left A, Cassette lid	AD-6300	1
3-12	82-385-304-01		Collar, Flange	AD-6300	1
3-13	82-385-305-01		Gear, Lid arm	AD-6300	1
3-14	82-385-378-01		Spring, Flange collar	AD-6300	1
3-15	82-302-220-01		Mechanism holder B ass'y	*	1
3-16	82-385-246-01		Arm; Left B, Cassette lid	AD-6300	1
3-17	82-385-248-01		Collar A; Arm, Cassette lid	AD-6300	2
3-18	82-385-315-01		Flange collar, Arm	AD-6300	2
3-19	82-385-240-01		Roller holder A ass'y	AD-6300	1
3-20	82-302-221-01		Arm L, Cassette lid (C)	*	1
3-21	82-385-285-01		Spring; Arm, Cassette lid	AD-6300	1
3-22	81-385-014-01		Roller		1
3-23	82-302-222-01		Arm R, Cassette lid (C)	*	1
3-24	82-302-231-01		Spring; Arm B, Cassette lid	*	1
3-25	82-385-333-01		Collar E; Arm, Cassette lid	AD-6300	1
3-26	82-385-250-01		Collar C; Arm, Cassette lid	AD-6300	1
3-27	82-385-245-01		Arm; Right B, Cassette lid	AD-6300	1
3-28	82-385-262-01		Holder, Plunger	AD-6300	1
3-29	82-385-334-01		Spring, Plunger	AD-6300	1
3-30	87-096-084-01		Play muting string		1
3-31	82-385-331-01		Spring B, Plunger	AD-6300	1

Ref. No.	Part No.	Description	Q'ty
3-101	87-480-076-01	VS + 2.6-12	1
3-102	87-253-095-11	U + 3-8	2
3-103	87-253-075-01	U + 2.6-10	1
3-104	87-233-094-11	Q + 3-6	1
3-105	87-233-071-01	Q + 2.6-4	3
3-106	87-351-035-01	VT ₁ + 2-6	3
3-107	87-341-095-11	UT ₁ + 3-8	6

Ref. No.	Part No.	Description	Q'ty
3-108	87-351-073-01	VT ₁ + 2.6-6	2
3-109	87-480-071-01	VS + 2.6-4	8
3-110	87-081-449-01	PW 4-8-0.25	2
3-111	87-34-096-01	UT ₁ + 3-10	2
3-112	87-450-411-01	LB-1	1
3-113	87-391-017-01	N-3	1
3-114	87-400-916-01	H 2.0-3-3.8	1

EXPLODED VIEW-4

As this is a PM-1 mechanism, the exploded view is omitted (see the supplement PM-1 mechanism adjustment manual). The exploded view below shows the additional mechanism of the PM-1. Also shown are the attachments of the motor and a list of such.



Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
4-1	82-439-269-01		Brake plate		1
4-2	82-439-426-01		Brake shoe A		2
4-3	82-385-252-01		Pressure plate spring B, Cassette	AD-6300	1
4-4	82-439-408-31		Worm wheel L ass'y		1
4-5	87-085-102-01		Nylon rivet		1
4-6	82-385-242-01		Chassis bracket	AD-6300	1
4-7	87-081-483-01		Motor screw, M2.6		1
4-8	82-416-299-01		Rubber cushion	TPR-601	3
4-9	82-302-226-01		Holder, Pause switch	*	1
4-10	82-302-224-01		Holder, Motor	*	1
4-11	82-385-294-01		Bracket S ass'y	AD-6300	1
4-12	82-439-455-01		Holder, Lock plate ass'y		1
4-13	82-385-400-01		Spring, REC blocking	AD-6300	1
4-14	82-385-230-01		REC lever A	AD-6300	1
4-15	82-385-231-01		REC lever B	AD-6300	1
4-16	82-470-277-01		Spring, REC lever	AF-3030	1
4-17	82-385-281-01		REC blocking lever	AD-6300	1
4-18	82-300-233-01		Spring, Back tension		1
4-19	82-300-228-01		Lever, Back tension ass'y		1
4-20	82-300-232-01		Felt, Back tension		1
4-21	82-300-234-01		Supply-reel platform ass'y		1
4-22	82-385-618-01		Shield plate, Head	AD-6300	1
4-23	82-385-340-01		Cushion	AD-6300	1
4-24	82-302-234-01		Spring, Pause lever	*	1
4-25	82-385-396-01		Collar, Lock lever	AD-6300	1
4-26	82-439-466-01		Back plate		1
4-27	82-439-460-01		Take-up reel platform ass'y		1
4-28	82-439-422-01		Pinch lever ass'y		1
4-29	82-385-232-01		Lid lock lever ass'y	AD-6300	1

Ref. No.	Part No.	Description	Q'ty
4-101	87-253-036-01	U + 2-8	4
4-102	87-253-097-11	U + 3-12	1
4-103	87-351-072-01	VT ₁ + 2.6-5	2
4-104	87-341-074-01	UT ₁ + 2.6-8	1
4-105	87-329-074-01	QT ₁ + 2.6-8	1
4-106	87-480-071-01	VS + 2.6-4	3
4-107	87-480-072-01	VWS + 2.6-5	2

Ref. No.	Part No.	Description	Q'ty
4-108	87-410-325-01	W4-10-0.8	1
4-109	87-441-003-01	STE-1.5	1
4-110	87-441-005-01	STE-2	1
4-111	87-450-412-01	LB-2	1
4-112	87-450-414-01	LB-4	1
4-113	87-342-073-01	UT ₂ + 2.6-6 (Black)	1
4-114	87-321-073-01	QT ₁ + 2.6-6	1





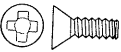





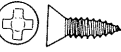




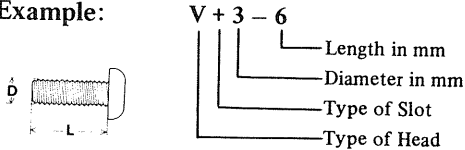
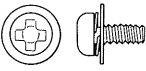
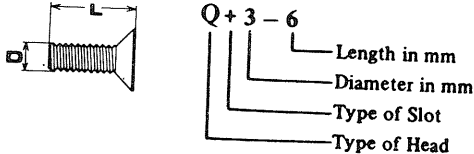

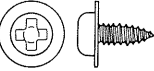

The following is the part number list of the ☆☆☆☆ marked parts of the PM-1 mechanism.

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
1-6	82-439-457-01	Lock plate	1	2-49	82-422-237-11	Main belt	1
1-13	82-385-332-01	Spring B, Head adjusting	1	2-50	82-385-307-01	Flywheel ass'y	1
1-14	87-046-126-01	Rec./Pb head	1	2-51	82-385-314-21	Rubber belt	1
1-25	82-439-237-01	Cassette lock lever	1	2-52	82-385-311-01	Screw for thrust	1
1-31	87-046-127-01	Erase head	1	2-60	82-385-309-11	Worm gear B ass'y	1
2-31	87-480-071-01	Mounting screw, REC plate spring	1				

The parts, numbers for the PM-1 mechanism are changed as the following list.

Ref. No.	Part No.	Description	Q'ty
2-27	82-439-468-01	Spring, Push-button	1
2-43	82-439-462-01	Driver rubber	1
2-56	82-439-463-01	Play idler ass'y	1

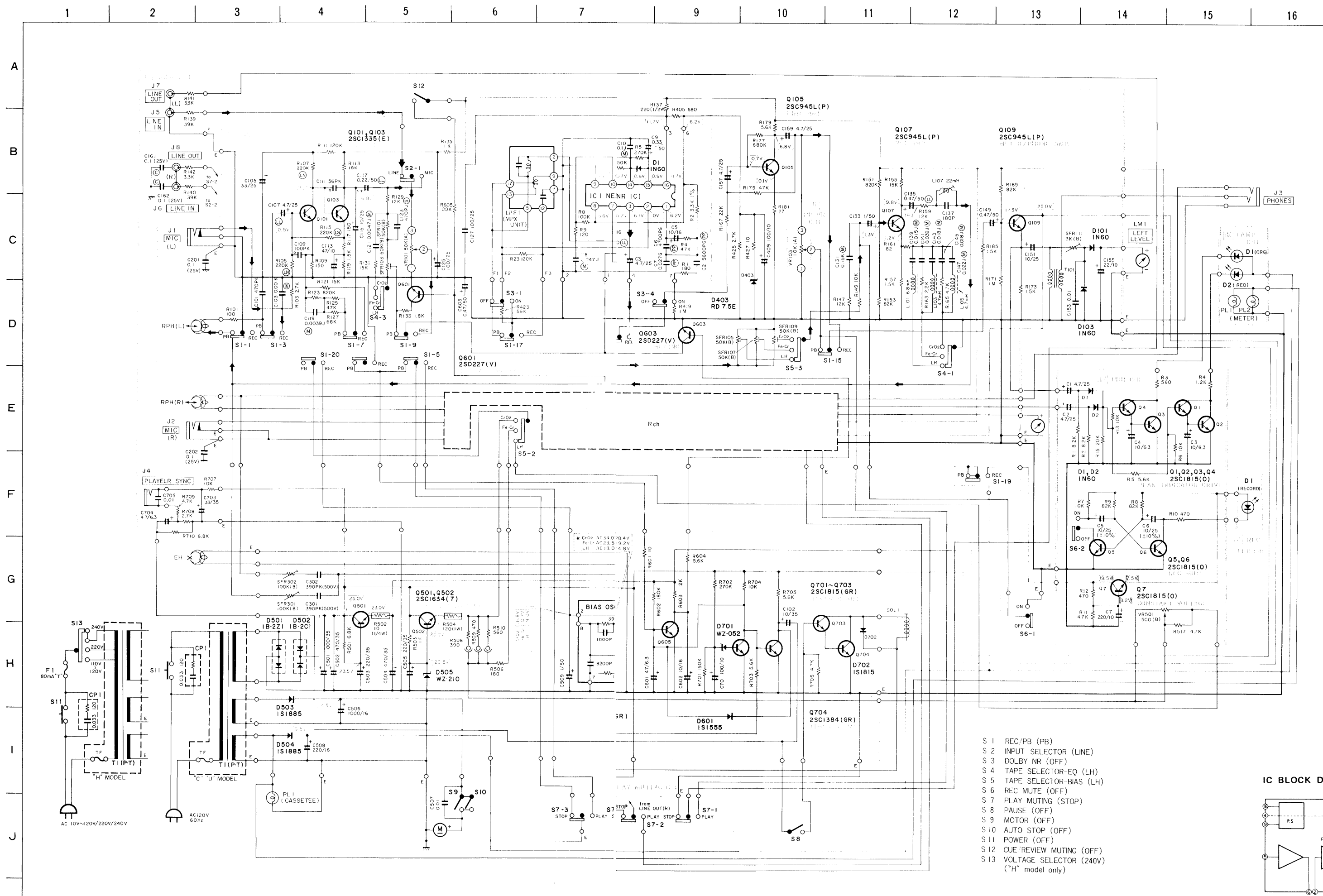
HARDWARE NOMENCLATURE

V: Pan head screw		STE: E ring	
U: Binding head screw		WTE: Crown washer	
Q: Flat countersunk head screw		W: Washer	
VT1: Pan head tapping screw		PW: Poly-slider washer	
UT1: Binding head tapping screw		SW: Spring washer	
QT1: Flat countersunk head tapping screw		N: Nut	
UT2: Binding head tapping screw		LB: Lug terminal plate	
VS: Pan head screw with spring washer		Example:	
VWS: Pan head tapping screw with spring washer and washer			
VTT: Pan head tap-tight screw			
VFT: Flange and Pan head tapping screw			
QTT: Flat countersunk tap-tight screw			

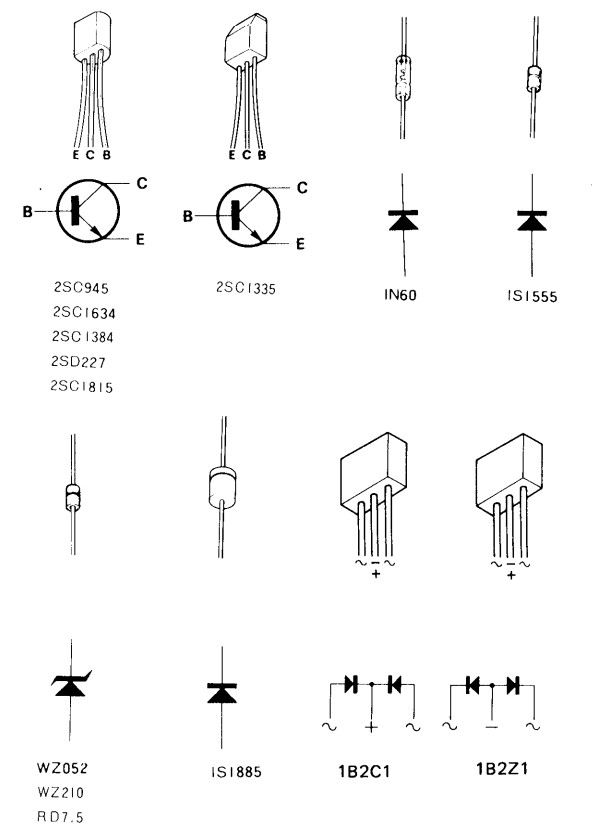
ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1a	82-302-856-01		Printed indiv., Packing (H, C model only)	*	1
1b	82-302-854-01		Printed indiv., Packing (U model only)	*	1
2	82-397-852-01		Cushion, Printed indiv. (H, C model only)	AD-6550	2
3	82-397-863-01		Cushion L, Printed indiv. (U model only)	AD-6550	1
4	82-397-864-01		Cushion R, Printed indiv. (U model only)	AD-6550	1
5	87-051-131-11		Poly-vinyl sack (for AC cord) (H, C model only)		1
6	87-051-135-11		Poly-vinyl sack (for AC cord) (U model only)		1
7	87-056-564-01		Curly stopper (H, C model only)		2
8	87-056-500-01		Curly stopper (U model only)		2
9	87-056-607-01		Poly-vinyl sack		1
10	82-302-905-01		Instructions booklet (H, C model only)	*	1
11	82-302-908-01		Instructions booklet (U model only)	*	1
12	82-372-931-01		Label, Head		1
13	87-051-175-01		Poly-tude A		1
14	87-056-009-31		Distributors list (H, C model only)		1
15	87-056-013-01		Guarantee card (C model only)		1
16	87-056-024-11		Service station list (U model only)		1
17	87-056-028-01		Card, Limited warranty (U model only)		1
18	80-291-645-01		Tape cassette DMC-130A		1
19	86-944-619-01		Connection cord CW-129KS		2
20	87-032-845-01		Siemens plug (H model only)		1
21	87-058-023-01		Cord binder		1
22	87-058-024-01		Head cleaning pole ass'y		1

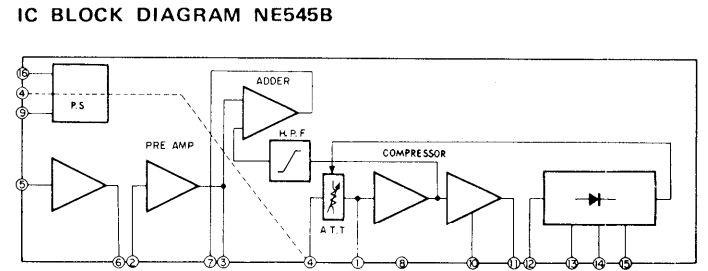
SCHEMATIC DIAGRAM



- NOTES:
- 1) — B(+) power supply
 - 2) — Signal path
 - 3) — Rec. path
 - 4) The voltage is the reference value measured with a tester (50 k-ohms/V DC) when there are no signals. An asterisk (*) indicates that the value was measured with a vacuum-tube voltmeter during recording.
 - 5) Resistors with no designation have a rated power of 1/4W and a tolerance of ±5%.
 - 6) Capacitors with no designation have a dielectric strength of less than 50VV.
 - 7) The only capacitor tolerances indicated are ±2% (G), ±5% (J) and ±10% (K).
 - 8) Explanation of symbols:
 - (M) Mylar capacitor
 - (S) Styrol capacitor
 - (LL) Low-leakage capacitor
 - (PP) Polypropylene film capacitor
 - (LN) Low-noise resistor
 - (F) Fuse resistor
- * This schematic diagram is subject to change without notice in the interests of improved performance.



- S 1 REC/PB (PB)
- S 2 INPUT SELECTOR (LINE)
- S 3 DOLBY NR (OFF)
- S 4 TAPE SELECTOR-EQ (LH)
- S 5 TAPE SELECTOR BIAS (LH)
- S 6 REC MUTE (OFF)
- S 7 PLAY MUTING (STOP)
- S 8 PAUSE (OFF)
- S 9 MOTOR (OFF)
- S 10 AUTO STOP (OFF)
- S 11 POWER (OFF)
- S 12 CUE REVIEW MUTING (OFF)
- S 13 VOLTAGE SELECTOR (240V) ("H" model only)



ELECTRICAL MAIN PARTS LIST

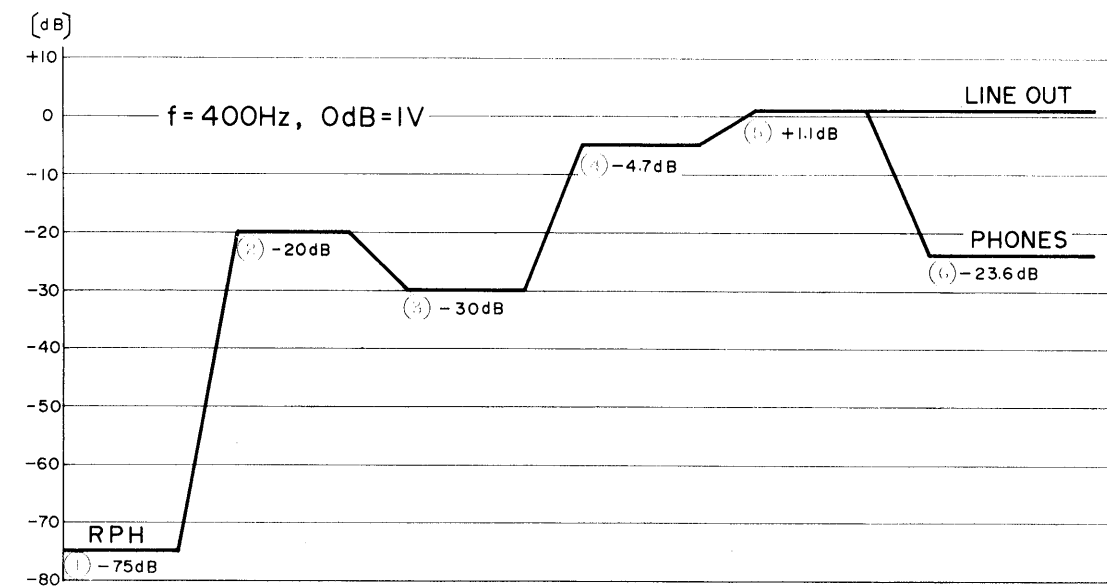
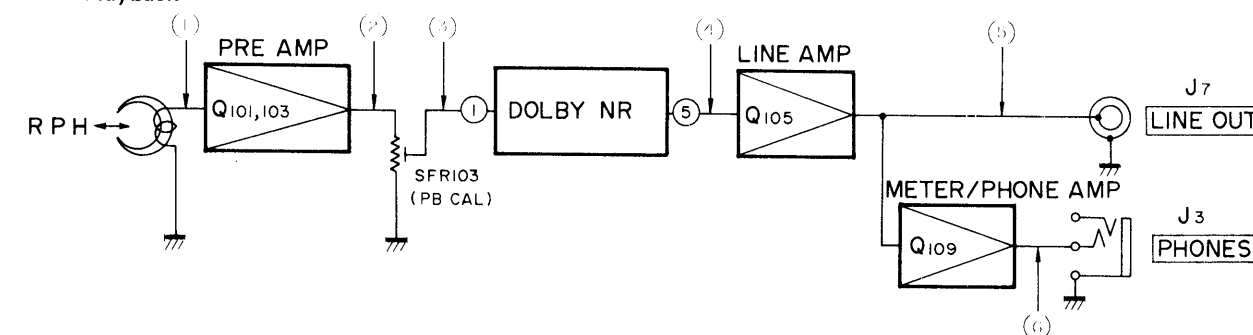
Symbol No.	Part No.	Description
◀ POWER CIRCUIT BOARD SECTION ▶		
PCB-A	82-302-609-11	Power circuit board
◀ POWER SECTION ▶		
Q501,502	89-316-347-01	Transistor, 2SC1634 (7)
D501	87-026-060-01	Diode, 1B2Z1
D502	87-026-059-01	Diode, 1B2C1
D503,504	87-027-083-01	Diode, 1S1885
D505	82-385-622-01	Zener diode, WZ-210
F1	87-035-123-01	Fuse, "T" 80mA (H model only)
	87-098-005-01	Fuse label, "T" 80mA (H model only)
	87-032-744-01	Fuse clamp (H model only)
	◀ Resistors ▶	
R502	87-029-017-01	10Ω 1/4W Fuse resistor
R504	82-302-618-01	120Ω 1W Fuse resistor
◀ MUTING SECTION ▶		
Q605	89-318-155-01	Transistor, 2SC1815 (GR)
D601	87-027-097-01	Diode, 1S1555
	◀ Capacitor ▶	
C603	87-015-240-01	0.47μF 50V Electrolytic LL
◀ TIMER START SECTION ▶		
Q701,702,703	89-318-155-01	Transistor, 2SC1815 (GR)
Q704	89-313-846-01	Transistor, 2SC1384 (R)
D701	87-026-069-01	Zener diode, WZ-052
D702	87-027-083-01	Diode, 1S1885
◀ BIAS OSC SECTION ▶		
L107,108	82-371-644-01	Coil, 22mH
SFR301,302	87-021-446-01	Semi-fixed resistor, 100kΩ-B
OSC UNIT	82-385-609-11	OSC unit
◀ MAIN CIRCUIT BOARD SECTION ▶		
PCB-B	82-302-603-11	Main circuit board
Q101,102, 103,104	89-313-355-01	Transistor, 2SC1335 (E)
Q105,106, 107,108, 109,110	89-309-456-01	Transistor, 2SC945L (P)
Q601,602, 603,604	89-402-275-01	Transistor, 2SD227 (V)
D101,102, 103,104	88-051-060-01	Diode, 1N60
D403	82-371-647-01	Zener diode, RD-7.5 (E)
L101,102	82-371-648-01	Micro inductor, 6.8mH
L103,104, 105,106	87-005-093-01	Micro inductor, 4.7mH
T101,102	82-370-610-01	Matching transformer
S1	87-031-390-01	Slide switch (REC/PB)
S2,3	82-385-608-01	Push switch ass'y (INPUT SELECTOR, DOLBY-NR)
S4,5	82-385-607-01	Slide switch (EQ, BIAS)
SFR101,102, 103,104, 105,106, 107,108, 109,110	87-021-432-01	Semi-fixed resistor, 50kΩ-B
SFR111,112	87-021-444-01	Semi-fixed resistor, 3kΩ-B
	◀ Capacitors ▶	
C117,118	87-015-328-01	0.22μF 50V Electrolytic LL
C133,134	87-015-241-01	1μF 50V Electrolytic LL
C107,108	87-015-246-01	4.7μF 25V Electrolytic LL

Symbol No.	Part No.	Description
◀ DOLBY CIRCUIT BOARD SECTION ▶		
PCB-C,D	82-385-650-11	Dolby circuit board
IC1	87-027-151-01	IC, NE545B
D1	88-051-060-01	Diode, 1N60
LPF1	82-385-611-01	Low-pass filter
	87-032-640-01	Pin, 10P
	◀ Resistor ▶	
R2	82-371-652-01	3.3kΩ 1/4W +1%
	◀ Capacitors ▶	
C6	82-371-643-01	0.0047μF PP
C2	82-371-642-01	0.0056μF PP
C7	82-371-641-01	0.027μF PP
C1	87-015-328-01	0.22μF 50V Electrolytic LL
◀ SWITCH CIRCUIT BOARD SECTION ▶		
PCB-E	82-302-607-11	Switch circuit board
◀ PRB CIRCUIT BOARD SECTION ▶		
PCB-F	82-302-633-01	PRB circuit board
Q1,2,3,4,5,6, 7	89-318-153-01	Transistor, 2SC1815 (O)
D1,2	88-051-060-01	Diode, 1N60
VR501	82-302-629-01	Volume, 1kΩ-B (LH BIAS FINE)
S6	82-302-627-01	Push switch (REC MUTE)
	◀ Capacitor ▶	
C5,6	82-302-616-01	10μF 25V Electrolytic LL
◀ JACK CIRCUIT BOARD SECTION ▶		
PCB-G	82-302-605-11	Jack circuit board
J4,5,6,7,8	82-301-608-01	Jack plate ass'y (PLAYER SYNC, LINE IN, LINE OUT)
◀ REC VR CIRCUIT BOARD SECTION ▶		
PCB-H	82-385-646-01	REC VR circuit board
VR101,102	82-385-640-01	Volume, 50kΩ-A (RECORD LEVEL)
◀ PB VR CIRCUIT BOARD SECTION ▶		
PCB-I	82-302-632-11	PB VR circuit board
VR103,104	82-302-622-11	Volume, 10kΩ-A (OUTPUT LEVEL)
◀ REC LED CIRCUIT BOARD SECTION ▶		
PCB-J	82-302-615-11	REC LED circuit board
D1	87-027-218-01	Light emitting diode (RECORD)
◀ LAMP CIRCUIT BOARD SECTION ▶		
PCB-K	82-302-610-11	Lamp circuit board
D1	87-026-086-01	Light emitting diode, ORG (+3 dB)
D2	87-026-083-01	Light emitting diode, RED (+7 dB)
PL1,2	82-302-614-01	Pilot lamp 8V 0.1A (METER)
◀ PLAY MUTING CIRCUIT BOARD SECTION ▶		
PCB-L	82-397-621-11	Play muting circuit board
S7	87-031-239-01	Slide switch (PLAY MUTING)
◀ MISCELLANEOUS ▶		
T1	82-302-652-01	Power transformer (H model only)
T1	82-385-614-01	Power transformer (C model only)
T1	82-385-616-01	Power transformer (U model only)

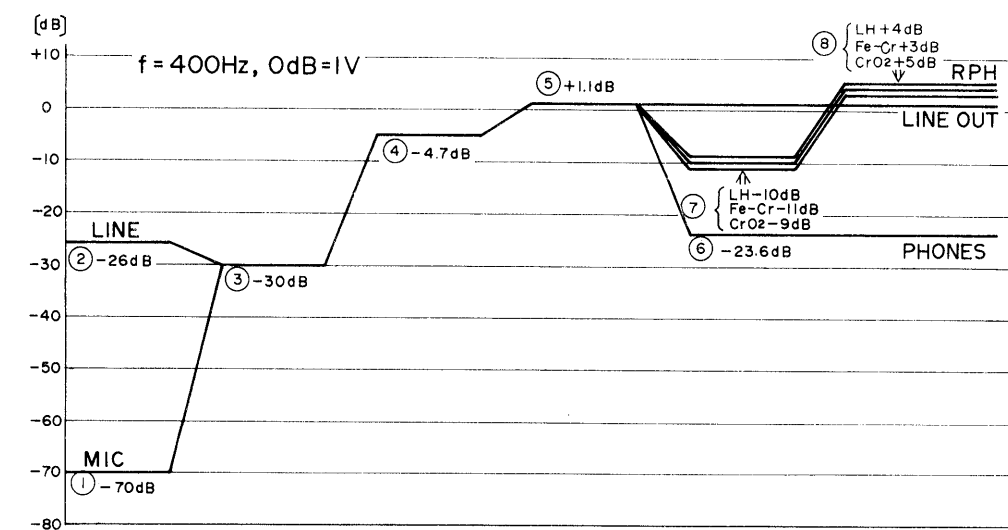
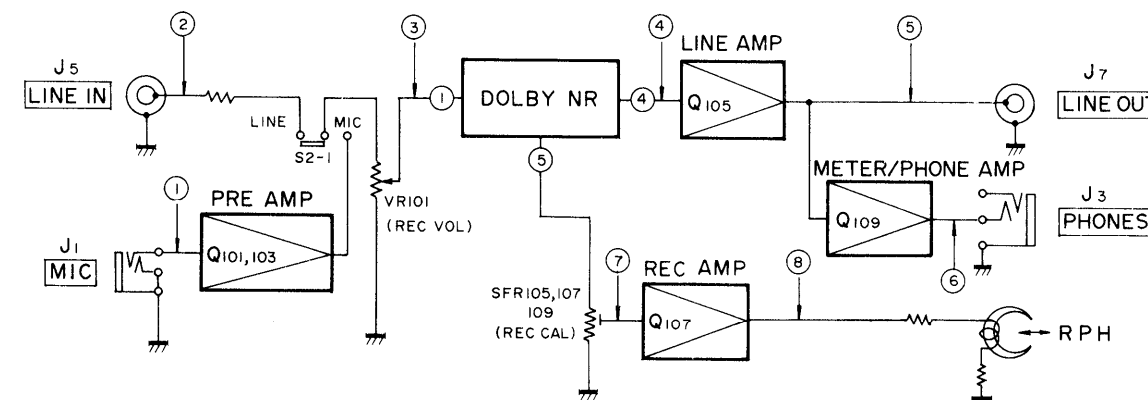
Symbol No.	Part No.	Description
LM1,2	82-302-611-01	Level meter
RPH	87-046-130-01	REC/PB head
EH	87-046-131-01	Erase head
J1,2,3	82-302-612-01	Jack (MIC, PHONES)
CP1	87-028-036-01	Compound capacitor (H, U model only)
CP1	87-019-081-01	Compound capacitor (C model only)
SOL1	82-302-613-11	Plunger
PL1	82-380-603-01	Pilot lamp, 50mA (CASSETTE)
M	82-470-616-31	Motor
S8	87-031-418-01	Micro switch (PAUSE)
S9	87-031-261-01	Micro switch (MOTOR)
S10	87-031-393-01	Leaf switch (AUTO STOP)
S11	87-031-408-01	Push switch (POWER) (H model only)
S11	87-031-372-01	Push switch (POWER) (C, U model only)
S13	87-031-439-01	Rotary switch (VOLTAGE SELECTOR) (H model only)
	87-033-140-01	Splice connector

LEVEL DIAGRAM

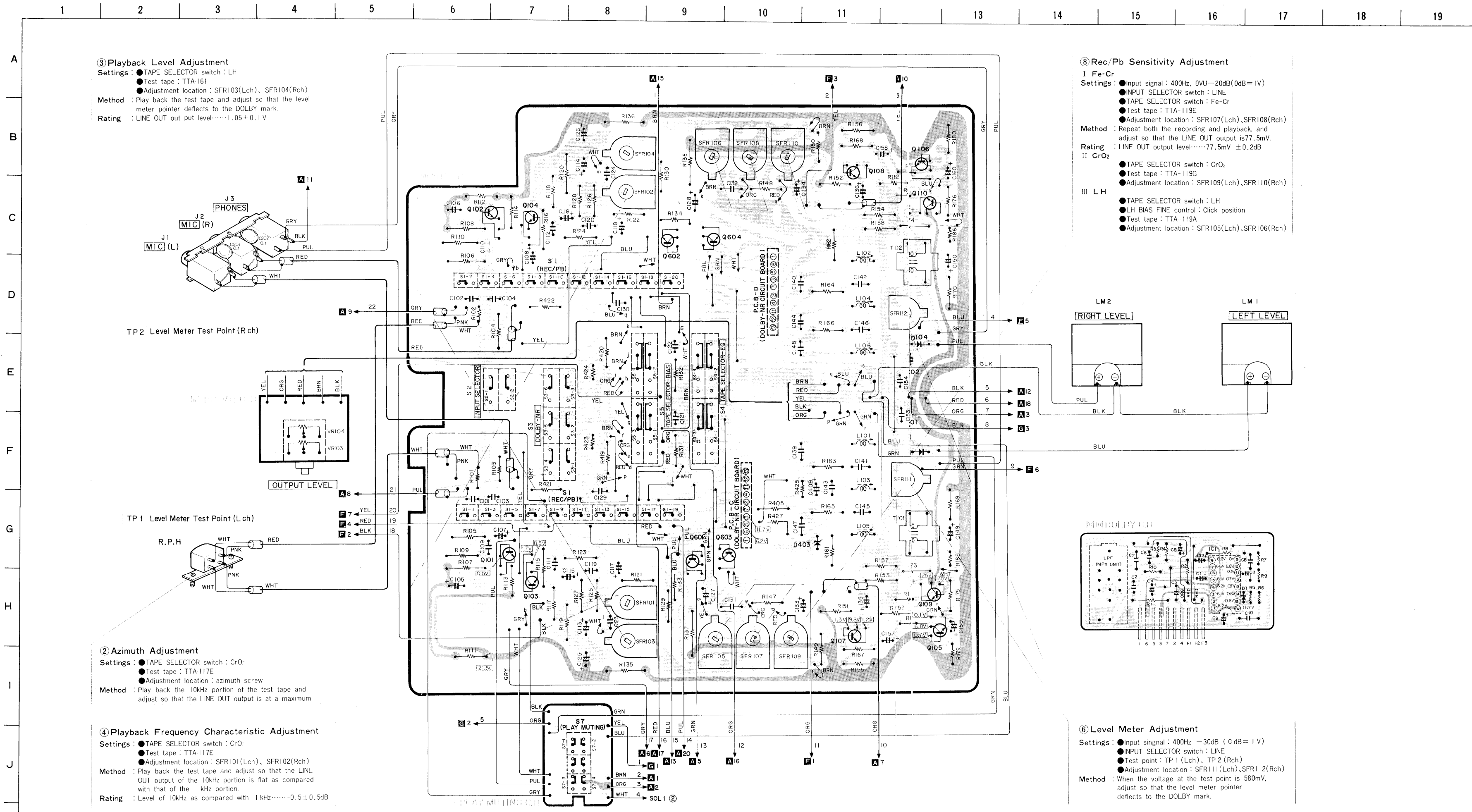
● Playback



● Recording



WIRING-2



③ Playback Level Adjustment
 Settings : ● TAPE SELECTOR switch : LH
 ● Test tape : TTA-161
 ● Adjustment location : SFR103(Lch), SFR104(Rch)
 Method : Play back the test tape and adjust so that the level meter pointer deflects to the DOLBY mark.
 Rating : LINE OUT output level.....1.05±0.1V

⑧ Rec/Pb Sensitivity Adjustment
 I Fe-Cr
 Settings : ● Input signal : 400Hz, 0VU-20dB(0dB=1V)
 ● INPUT SELECTOR switch : LINE
 ● TAPE SELECTOR switch : Fe-Cr
 ● Test tape : TTA-119E
 ● Adjustment location : SFR107(Lch),SFR108(Rch)
 Method : Repeat both the recording and playback, and adjust so that the LINE OUT output is 77.5mV.
 Rating : LINE OUT output level.....77.5mV ±0.2dB
 II CrO₂
 Settings : ● TAPE SELECTOR switch : CrO₂
 ● Test tape : TTA-119G
 ● Adjustment location : SFR109(Lch),SFR110(Rch)
 III LH
 Settings : ● TAPE SELECTOR switch : LH
 ● LH BIAS FINE control : Click position
 ● Test tape : TTA-119A
 ● Adjustment location : SFR105(Lch),SFR106(Rch)

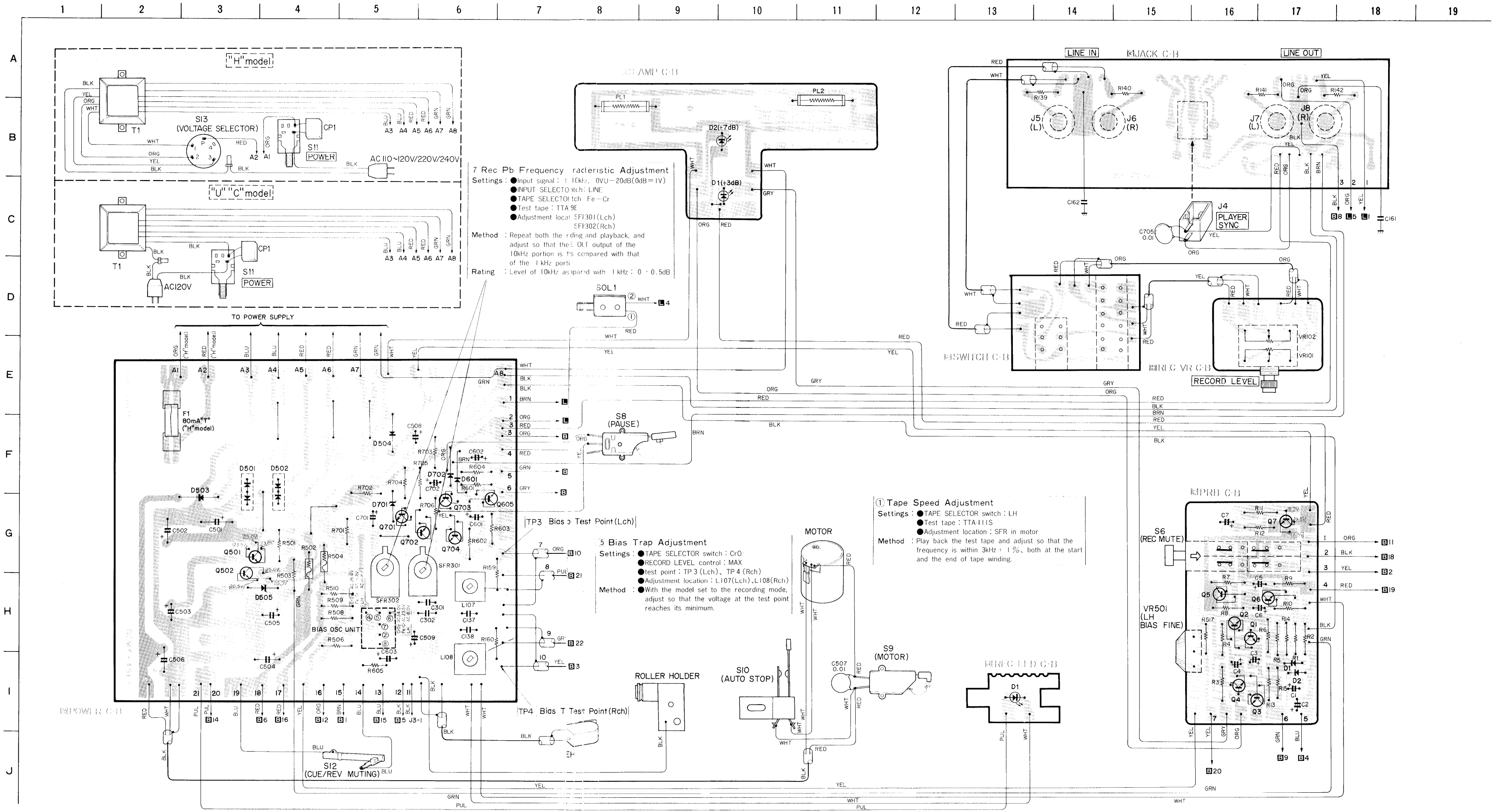
② Azimuth Adjustment
 Settings : ● TAPE SELECTOR switch : CrO₂
 ● Test tape : TTA-117E
 ● Adjustment location : azimuth screw
 Method : Play back the 10kHz portion of the test tape and adjust so that the LINE OUT output is at a maximum.

④ Playback Frequency Characteristic Adjustment
 Settings : ● TAPE SELECTOR switch : CrO₂
 ● Test tape : TTA-117E
 ● Adjustment location : SFR101(Lch), SFR102(Rch)
 Method : Play back the test tape and adjust so that the LINE OUT output of the 10kHz portion is flat as compared with that of the 1kHz portion.
 Rating : Level of 10kHz as compared with 1kHz.....0.5±0.5dB

⑥ Level Meter Adjustment
 Settings : ● Input signal : 400Hz -30dB (0dB=1V)
 ● INPUT SELECTOR switch : LINE
 ● Test point : TP 1 (Lch), TP 2 (Rch)
 ● Adjustment location : SFR111(Lch),SFR112(Rch)
 Method : When the voltage at the test point is 580mV, adjust so that the level meter pointer deflects to the DOLBY mark.

NOTES (1) B(+) Pattern Others pattern (2) The voltage is the reference value measured with a fester (50K ohm/DC) when there are no signals.

WIRING-1



7 Rec Pb Frequency characteristic Adjustment
 Settings: ● Input signal : 1 kHz, 0VU-20dB(0dB=1V)
 ● INPUT SELECTOR switch: LINE
 ● TAPE SELECTOR switch: Fe-Cr
 ● Test tape : TTA 9E
 ● Adjustment location: SF1301(Lch), SF1302(Rch)
 Method : Repeat both the recording and playback, and adjust so that the output of the 10kHz portion is 15 compared with that of the 1 kHz portion.
 Rating : Level of 10kHz as compared with 1 kHz : 0 ± 0.5dB

5 Bias Trap Adjustment
 Settings: ● TAPE SELECTOR switch : CrO
 ● RECORD LEVEL control : MAX
 ● test point : TP 3 (Lch), TP 4 (Rch)
 ● Adjustment location : L107(Lch), L108(Rch)
 Method : ● With the model set to the recording mode, adjust so that the voltage at the test point reaches its minimum.

1 Tape Speed Adjustment
 Settings: ● TAPE SELECTOR switch : LH
 ● Test tape : TTA-111S
 ● Adjustment location : SFR in motor
 Method : Play back the test tape and adjust so that the frequency is within 3kHz ± 1%, both at the start and the end of tape winding.

NOTES (1) B(+) Pattern Others pattern (2) The voltage is the reference value measured with a tester (50K ohms/VDC) when there are no signals.