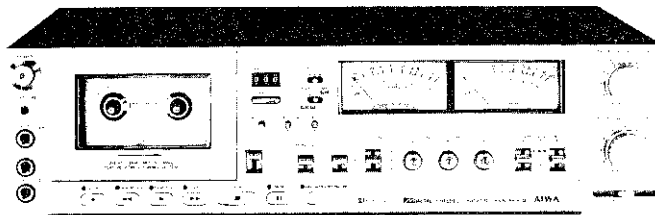


FLAT RESPONSE TUNING SYSTEM STEREO CASSETTE DECK

MODEL NO. **AD-6900MKII** H,U,E,K

AIWA® [SERVICE MANUAL]

Code No. 04-690-000-54



Shown above is AD-6900MKII.H

DATE OF ISSUE 7/1979

SPECIFICATIONS

Semiconductors: 20 IC's, 90 transistors, 78 diodes, 10 FET's 6 LED's & 1 PIN diode

Power source: AC 110V/120V/220V/240V (H model)
AC 110~120V/220V/240V (E model)
AC 120V/240V (K model) (switchable) 50/60 Hz
AC 120V, 60 Hz (U model)

Power consumption: 26W

Dimensions: 450(W) x 120(H) x 327(D) mm
[17-3/4"(W) x 4-3/4"(H) x 12-7/8"(D)]

Weight: 9.5 kg [20.9 lbs.]

Track system: 4-track 2-channel stereo

Tape speed: 4.8 cm/sec. $\pm 0.5\%$

Wow & flutter: Less than 0.04% (WRMS) at Pb

Automatic stop system: Full auto-stop

Automatic shut-off action time: 2 ± 0.5 s.

Pinch roller pressure: 450 ± 40 g (4.41 ± 0.39 N)

Take-up torque: 50 ± 10 g-cm (490 ± 98 mN-m)

FF & rewind torque: 155 ± 25 g-cm (1519 ± 245 mN-m)

FF & rewind time: 65 ± 5 s. (w/c-60 cassette)

Playback output: 0.58 ± 0.06 V (LINE)

Playback noise: Less than 3.5 mV (LH, DOLBY OFF)
(Un-Weighted) Less than 1.0 mV (Fe-Cr, CrO₂, METAL, DOLBY ON)

Rec./Pb output: 0 VU ± 1.0 dB (LINE)

Rec./Pb distortion: Less than 1.5% (LH, CrO₂)
(400 Hz 0 VU) Less than 1.0% (Fe-Cr, METAL)

Rec./Pb S/N: More than 40/45 dB (LH, DOLBY OFF/ON)
(400 Hz 0 VU) More than 43/46 dB (Fe-Cr, CrO₂, METAL, DOLBY OFF/ON)

Channel separation: More than 30 dB
(1 kHz 0 VU)

Cross talk: More than 60 dB
(1 kHz 0 VU)

Erasing ratio: More than 60 dB
(400 Hz 0 VU ± 10 dB)

VU meter display error: 0 VU ± 0.5 dB
(0 VU)

Peak meter display error: (0 VU ± 7 dB) ± 7 dB ± 1 dB
(0 VU ± 10 dB) ± 10 dB ± 1 dB
(0 VU ± 20 dB) ± 20 dB ± 2 dB

Bias frequency: 105 kHz

Frequency response: LH tape, 20~16,000 Hz
 $25 \sim 14,000$ Hz ($+2$ -3 dB)
Fe-Cr tape, 20~20,000 Hz
 $25 \sim 18,000$ Hz ($+2$ -3 dB)

Motor: 38 pulse FG servo motor (for capstan)
DC servo motor

Head: V-cut combination ferrite head (for Rec./Pb)
Double cap ferrite head (for Erasure)

Input: MIC: Max. input sensitivity 0.25 mV
(200 Ω ~ 10 k Ω suitable)
LINE IN: Max. input sensitivity 75 mV
(More than 50 k Ω)
DIN: Max. input sensitivity 0.25 mV (50 k Ω)
(H,E,K model)

Output: LINE OUT: Standard output level 0.41 V (0 VU)
Optimum load impedance More than 50 k Ω
DIN: Standard output level 0.41 V (0 VU)
Optimum load impedance More than 50 k Ω
(H,E,K model)
PHONES: 8 Ω ~ 150 Ω

Remote control unit specifications

Number of channels: 7

Clock frequency: 40 kHz $\pm 1\%$

Power requirements: 4.5V UM-3 (size 'AA') x 3

Current consumption: 500 mA (when transmitting)
5 μ A (during shutdown)
under normal conditions)

Transmission directivity: About $\pm 45^\circ$

Coverage range: About 8 meters

Semiconductors used: 2 ICs, 5 transistors, 1 diodes, 2 L.E.D.s

Usable temperature range: $+0^\circ\text{C}$ to $+35^\circ\text{C}$

Dimensions: 50 (W) x 25 (H) x 150 (D) mm
2"(W) x 1"(H) x 5-15/16"(D)

Weight: 163g 0.36 lbs

- 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

1. To Remove Cassette Lid, Blinder and Cassette Plate

- 1) Remove the cassette lid.
- 2) Remove the blinder.
- 3) Remove 2 screws, securing the cassette plate in place.
(Refer to Fig. 1)

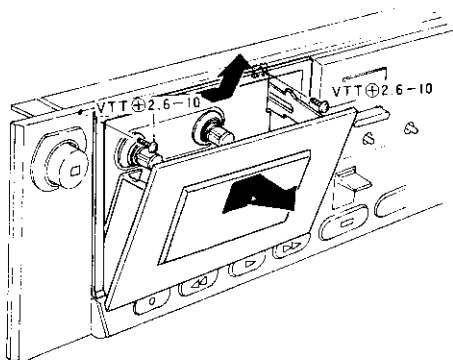


Fig. 1

2. To Remove Front Panel

- 1) Remove the connector.
- 2) Pull out the 13 knobs.
- 3) Remove 6 screws.
(Refer to Fig. 2)

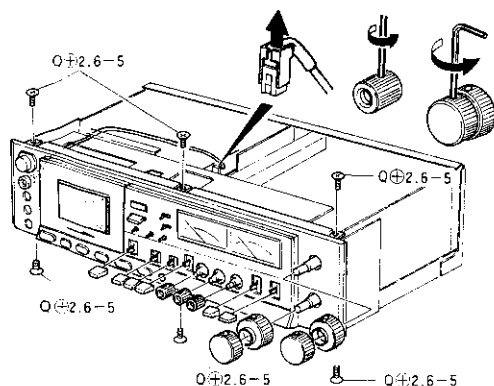


Fig. 2

3. To Remove Mechanism

- 1) Remove 2 screws, securing the player shync circuit board in place.
- 2) Remove 4 screws, securing the power transformer in place.
- 3) Remove 2 screws, securing the power switch holder in place.
- 4) Remove the counter belt and main belt.
- 5) Remove the rod stoppers and take out the selector rods.
(Refer to Fig. 3)

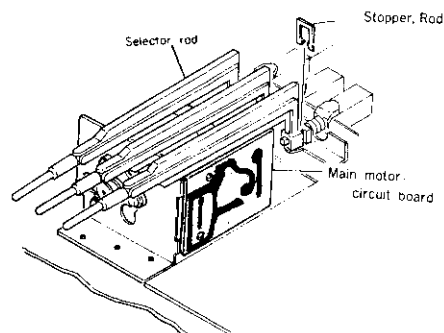


Fig. 3

- 6) Remove 10 screws.
(Refer to Fig. 4 and Fig. 5)

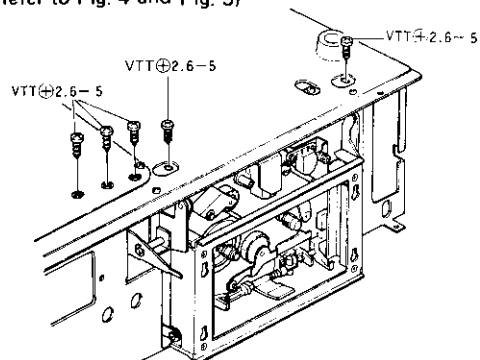


Fig. 4

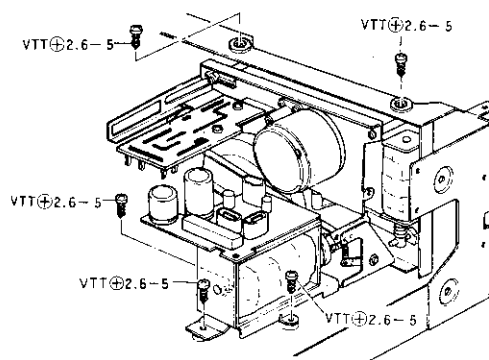
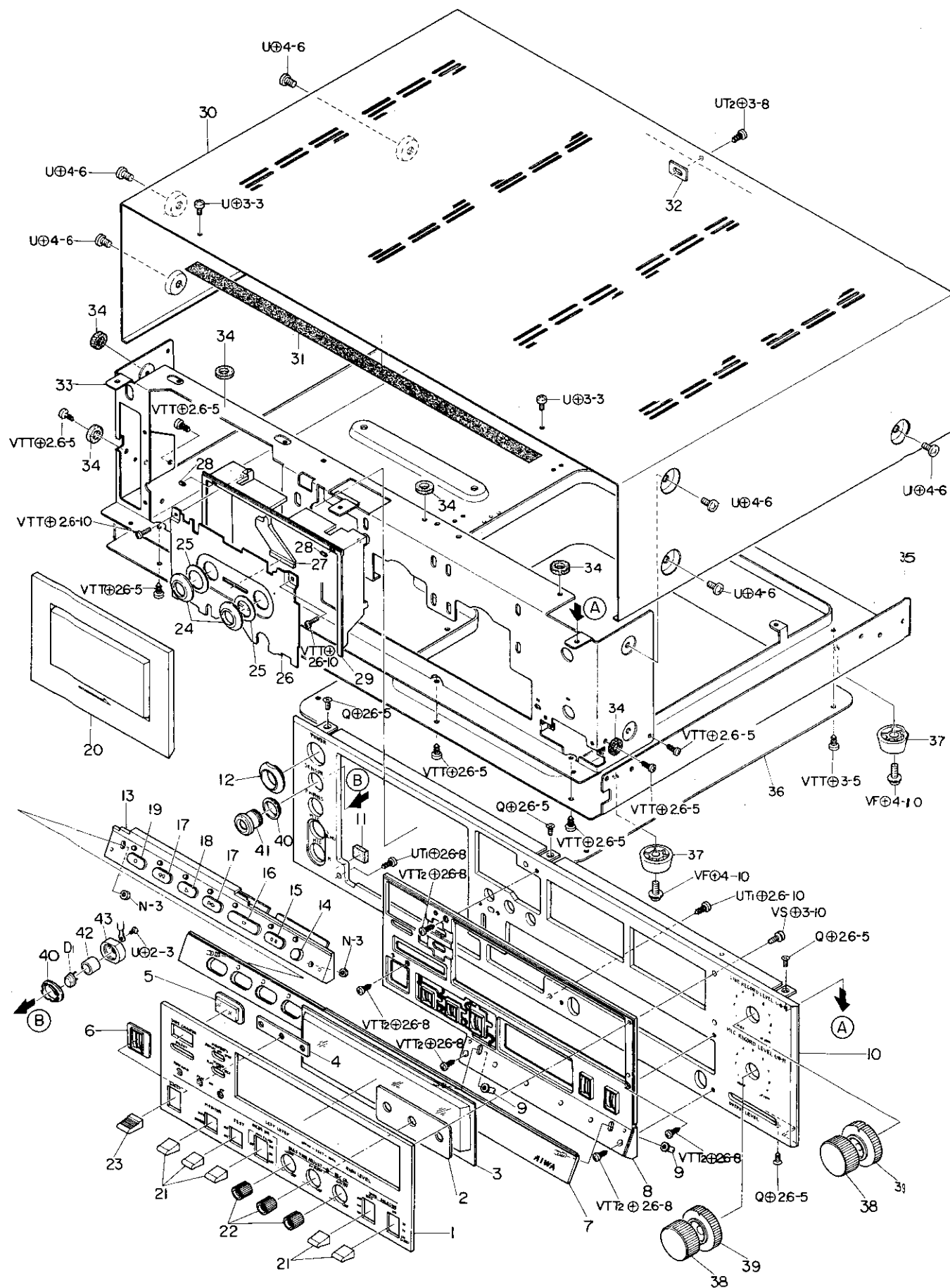


Fig. 5

☆☆☆☆☆☆☆☆☆☆ MEMO ☆☆☆☆☆☆☆☆☆

Lined area for writing the memo.

EXPLODED VIEW-1



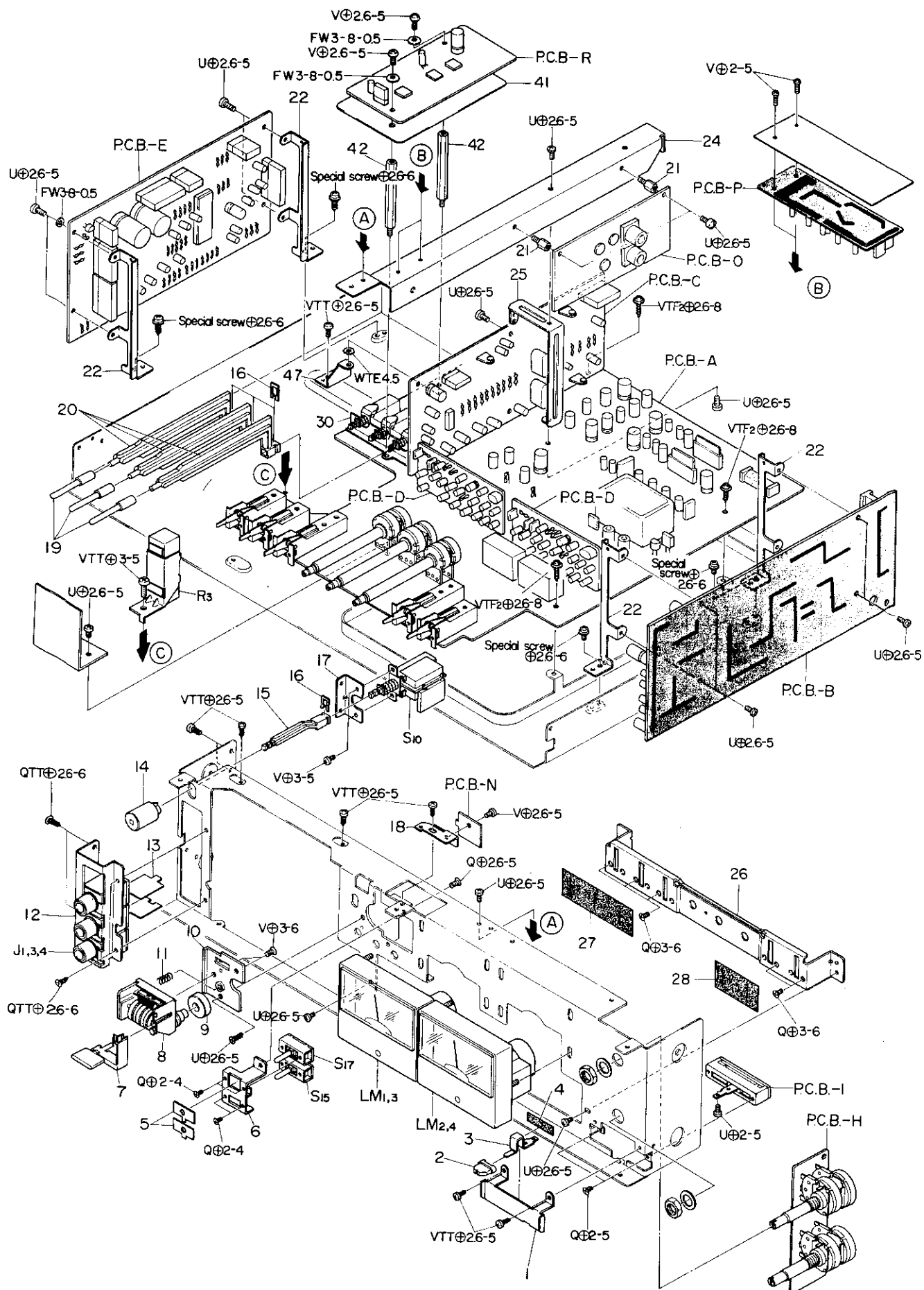
PARTS LIST

MECHANICAL PARTS

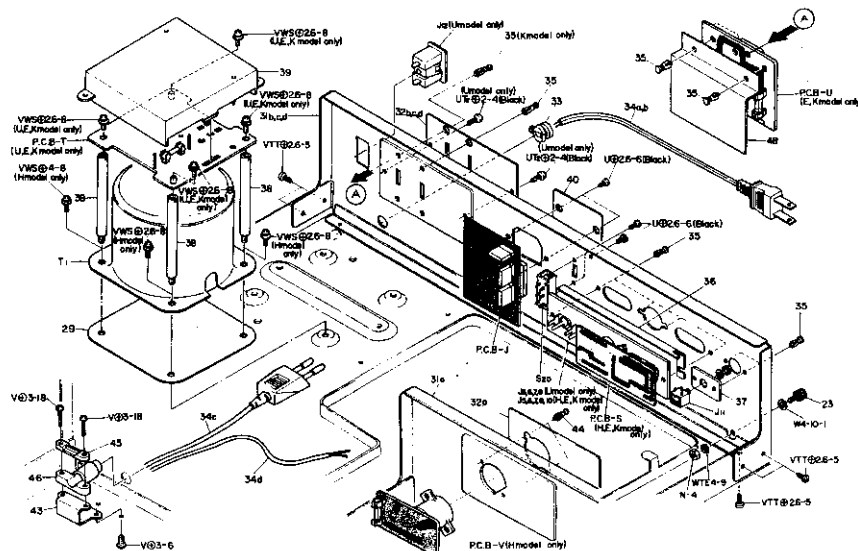
■ * mark in this part list shows exclusive part
(which is used) for only Model AD-6900MKII.

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1-1	82-328-002-01		Front panel A	*	1
1-2	82-328-019-01		Bias cover	*	1
1-3	82-304-026-01		Window, Meter	AD-6900	1
1-4	82-304-255-01		Guide, Push button	AD-6900	1
1-5	82-304-061-01		Window, Meter	AD-6900	1
1-6	82-328-017-01		Cover, Eject	*	1
1-7	82-153-051-01		Front panel B ass'y		1
1-8	82-328-003-01		Front panel M	*	1
1-9	82-304-245-01		Nut 3-9	AD-6900	2
1-10a	82-153-038-01		Base, Front panel (H,E,K model only)		1
1-10b	82-153-037-01		Base, Front panel (U model only)		1
1-11	82-303-367-01		G cushion, Actuating lock		1
1-12	82-478-012-01		Ring, Power button		1
1-13	82-304-653-01		Switch board ass'y	AD-6900	1
1-14	82-304-087-01		Push-key, REC MUTE ass'y	AD-6900	1
1-15	82-304-085-01		Push-key, PAUSE ass'y	AD-6900	1
1-16	82-304-086-01		Push-key, STOP ass'y	AD-6900	1
1-17	82-304-084-01		Push-key, FF ass'y	AD-6900	2
1-18	82-304-083-01		Push-key	AD-6900	
1-19	82-304-082-01		Push-key REC ass'y	AD-6900	1
1-20	09-047-137-01		Cassette lid ass'y	*	5
	82-328-014-01		Cassette lid ass'y	*	1
	82-304-043-01		Window, Cassette	AD-6900	1
1-21	82-328-024-01		Knob, Selector	*	5
1-22	82-328-009-01		Knob C ass'y	*	3
1-23	82-328-025-01		Knob, Eject key	*	1
1-24	82-397-039-01		Ring, Leel platform	AD-6550	2
1-25	82-397-290-01		Adhesive sheet	AD-6550	2
1-26	82-304-045-01		Cassette plate	AD-6900	1
1-27	82-304-044-01		Guide, Light	AD-6900	1
1-28	82-328-020-01		S cushion, Lid	*	2
1-29	82-328-023-01		Blinder	*	1
1-30	82-307-007-01		Steel cabinet	AD-6700	1
1-31	82-397-245-01		Himeron cloth, Cabinet	AD-6550	1
1-32	82-380-439-01		Spacer, Back panel	AD-6500	1
1-33	82-304-202-01		Chassis, Front	AD-6900	1
1-34	82-304-302-01		G cushion, Spacer	AD-6900	7
1-35	82-304-201-01		Chassis, Amp.	AD-6900	1
1-36	82-304-203-01		Back cover	AD-6900	1
1-37	87-085-161-01		Foot		4
1-38	82-328-005-01		Knob A ass'y	*	2
1-39	82-328-007-01		Knob B ass'y	*	2
1-40	82-307-026-01		Guide, Pipe	AD-6700	2
1-41	82-153-048-01		Pipe		1
1-42	82-307-234-01		G cushion	AD-6700	1
1-43	82-307-235-01		Nut	AD-6700	1
[U model only]					
	87-052-014-01		Side panel L ass'y		1
	87-052-016-01		Side panel R ass'y		1

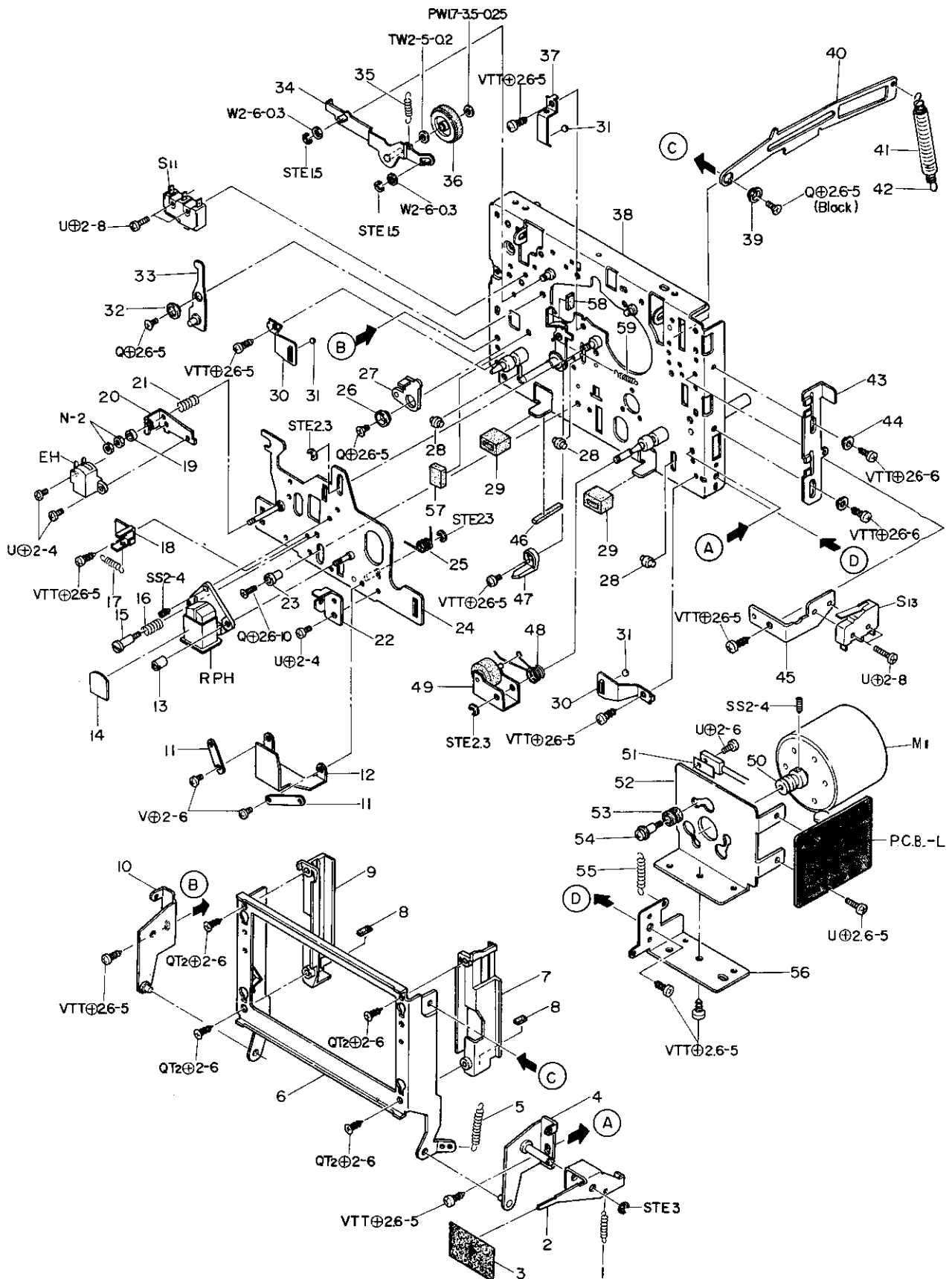
EXPLODED VIEW-2



Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
2-1	82-328-018-01		Cover, PB volume	*	1
2-2	82-328-011-01		Knob D ass'y	*	1
2-3	82-304-254-01		Holder, Volume	AD-6900	1
2-4	82-304-291-01		Himeron cloth, PB volume	AD-6900	1
2-5	82-304-048-01		Selector cover	AD-6900	1
2-6	82-304-205-01		Holder B, Switch	AD-6900	1
2-7	82-304-027-01		Button, Reset	AD-6900	1
2-8	87-040-100-01		Counter	AD-6900	1
2-9	82-379-617-01		Ring magnet	AD-1800	1
2-10	82-304-206-01		Holder, Counter	AD-6900	1
2-11	82-304-303-01		C spring, Reset	AD-6900	1
2-12	82-304-634-01		Jack ass'y	AD-6900	1
2-13	82-304-647-01		Jack shield plate	AD-6900	1
2-14	82-321-015-01		AC switch button silver ass'y		1
2-15	82-304-210-01		Rod, Power	AD-6900	1
2-16	82-385-383-01		Stopper, Rod	AD-6300	4
2-17	82-304-258-01		Holder, Power	AD-6900	1
2-18	82-397-265-01		Holder, Hall IC	AD-6550	1
2-19	82-304-028-01		Push button	AD-6900	3
2-20	82-304-211-01		Rod selector	AD-6900	3
2-21	82-307-229-01		Holder, Circuit board	AD-6700	2
2-22	82-304-207-01		Holder A, Circuit board	AD-6900	4
2-23	87-033-088-01		Earth terminal		1
2-24	82-307-232-01		Holder C, Circuit board	AD-6700	1
2-25	82-304-262-01		Holder D, Circuit board	AD-6900	1
2-26	82-304-204-01		Holder A, Switch	AD-6900	1
2-27	82-304-273-01		Himeron cloth, Selector A	AD-6900	1
2-28	82-304-274-01		Himeron cloth, Selector B	AD-6900	1
2-29	82-304-735-01		Shield plate, Power transformer	AD-6900	1
2-30	82-304-300-01		Holder, Selector switch	AD-6900	1
2-31a	82-307-031-01		Back panel (H model only)	AD-6700	1
2-31b	82-307-029-01		Back panel (U model only)	AD-6700	1
2-31c	82-307-032-01		Back panel (E model only)	AD-6700	1
2-31d	82-307-033-01		Back panel (K model only)	AD-6700	1
2-32a	82-153-040-01		Name plate, Spec. (H model only)		1
2-32b	82-153-044-01		Name plate, Spec. (U model only)		1
2-32c	82-153-042-01		Name plate, Spec. (E model only)		1
2-32d	82-153-043-01		Name plate, Spec. (K model only)		1
2-33	87-085-101-01		Cord bushing		1
2-34a	87-034-826-01		AC power cord (H model only)		1
2-34b	87-034-874-01		AC power cord (U model only)		1
2-34c	87-034-877-01		AC power cord (E model only)		1
2-34d	87-034-872-01		AC power cord (K model only)		1
2-35	87-085-102-01		Nylon rivet		1
2-36	82-386-629-01		Shield plate, Jack	AD-1250	1
2-37	82-387-273-01		Holder, Jack	AD-6800	1
2-38	82-304-325-01		Holder I, Circuit board (U,E,K model only)	AD-6900	4
2-39	82-304-326-01		Shield case, Fuse (U,E,K model only)	AD-6900	1
2-40	82-307-028-01		Sheet, Brind	AD-6700	1
2-41	82-307-654-11		Shield sheet, Remote	AD-6700	1
2-42	82-307-236-01		Holder B, Circuit board	AD-6700	2
2-43	82-397-244-01		Holder, AC power cord (E,K model only)	AD-6550	1
2-44	87-085-090-01		Nylon rivet (H model only)		2
2-45	87-085-094-01		Holder A, AC power cord (E,K model only)		1
2-46	87-085-095-01		Holder B, AC power cord (E,K model only)		1
2-47	82-304-306-01		Holder F, Circuit board	AD-6900	1
2-48	82-304-749-01		Insulation plate, V selector	AD-6900	1

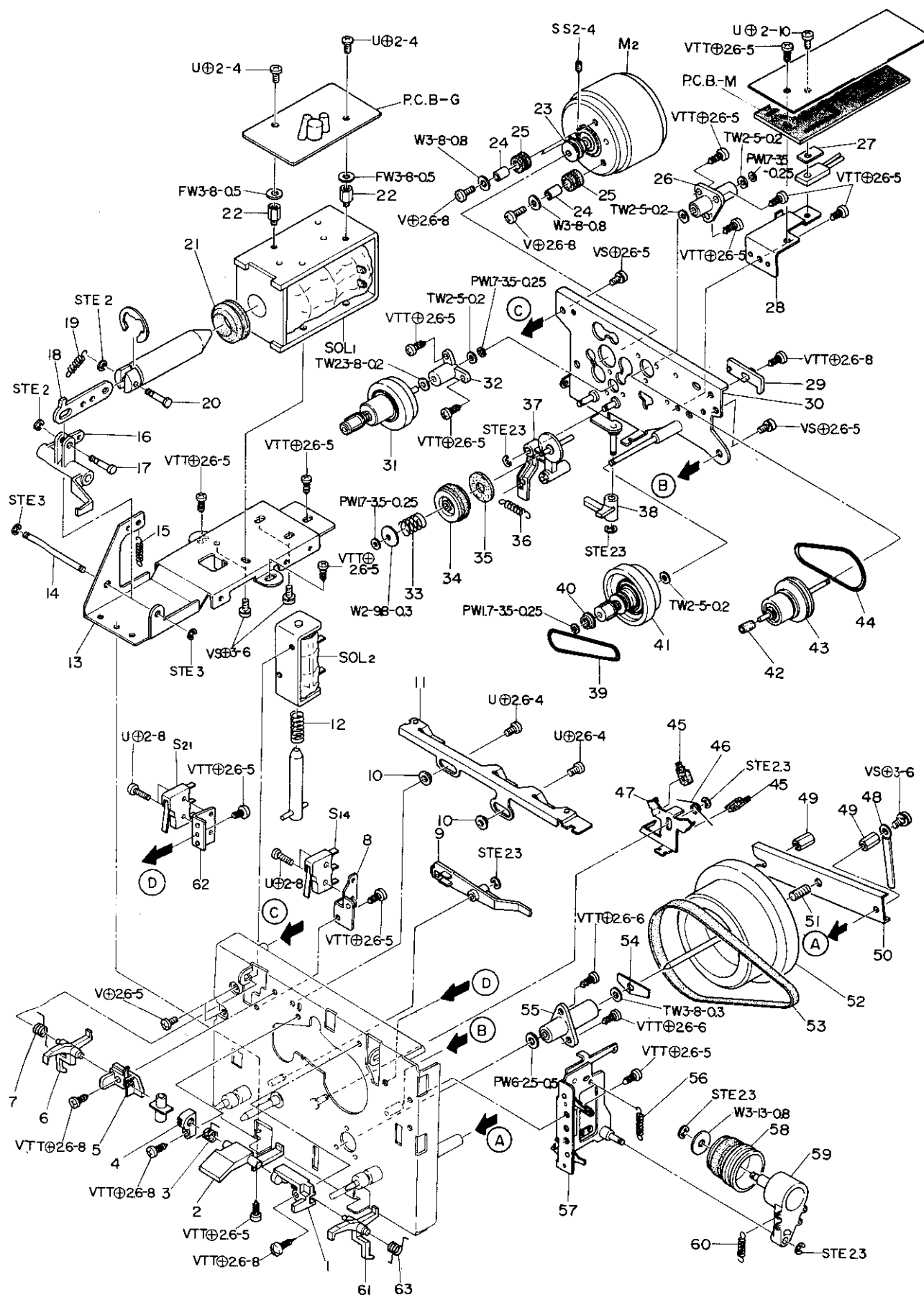


EXPLODED VIEW-3



Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
3-1	82-304-264-01		Spring, Eject lever	AD-6900	1
3-2	82-304-236-01		Lever, Eject key	AD-6900	1
3-3	82-304-275-01		Himeron cloth, Eject	AD-6900	1
3-4	82-304-215-01		Holder, Cassette box R ass'y	AD-6900	1
3-5	82-304-252-01		Spring, Cassette lid	AD-6900	1
3-6	82-304-212-01		Cassette box ass'y	AD-6900	1
3-7	82-304-046-01		Cassette, holder R	AD-6900	1
3-8	82-304-284-01		Cushion, Cassette	AD-6900	2
3-9	82-304-047-01		Cassette holder L	AD-6900	1
3-10	82-304-219-01		Holder, Cassette box L ass'y	AD-6900	1
3-11	82-365-280-01		Holder, Wire		2
3-12	82-304-308-01		Shield plate,	AD-6900	1
3-13	82-304-317-01		Nut, Azimuth	AD-6900	1
3-14	82-304-069-01		Label, Head	AD-6900	1
3-15	82-304-289-01		Screw, Rec./Pb. head	AD-6900	1
3-16	82-304-290-01		Spring, Rec./Pb. head	AD-6900	1
3-17	82-303-377-01		Spring A, Erase head		1
3-18	82-303-375-01		Stopper, Erase head		1
3-19	82-303-371-01		Collar, Erase head		1
3-20	82-303-374-01		Holder, Erase head		1
3-21	82-303-376-01		Spring, Erase head		1
3-22	82-303-294-01		Holder, Spring		1
3-23	82-303-306-01		Flange collar, Actuating		1
3-24	82-303-236-01		Actuating chassis ass'y		1
3-25	82-303-315-01		Spring, Actuating		1
3-26	82-303-295-01		Flange collar, Actuating lock		1
3-27	82-303-288-01		Lever, Actuating lock		1
3-28	82-303-302-01		Roller, Actuating		3
3-29	82-303-312-01		Cushion, Actuating		2
3-30	82-303-299-01		Spring, Actuating B		2
3-31	82-215-341-01		Steel ball		3
3-32	82-303-303-01		Flange collar idler lever		1
3-33	82-303-337-01		Lever, Play idler B ass'y		1
3-34	82-303-342-01		Lever, Play idler ass'y		1
3-35	82-303-325-01		Spring, Play idler		1
3-36	82-303-274-01		Play idler ass'y		1
3-37	82-303-298-01		Spring, Actuating A		1
3-38	82-304-201-01		Mechanism chassis ass'y		1
3-39	82-304-287-01		Flange collar, Cassette lid	AD-6900	1
3-40	82-304-239-01		Lock plate, Cassette lid	AD-6900	1
3-41	87-830-504-01		UL tube 5φ x 40		1
3-42	82-304-318-01		Spring, Lock plate	AD-6900	1
3-43	82-304-237-01		Slide plate, Eject	AD-6900	1
3-44	82-304-241-01		Flange collar, Eject	AD-6900	1
3-45	82-304-235-01		Holder, Lead switch	AD-6900	1
3-46	82-303-372-01		Felt, Erase head		1
3-47	82-303-290-01		Guide, Cassette lid		1
3-48	82-303-316-01		Spring, Pinch lever		1
3-49	82-303-260-01		Pinch roller ass'y		1
3-50	82-303-301-01		Motor pulley, Flywheel		1
3-51	82-304-701-01		Spacer, Insulation	AD-6900	1
3-52	82-304-256-01		Holder, Motor A	AD-6900	1
3-53	87-087-029-01		Rubber cushion		3
3-54	87-081-483-01		Motor screw, M2.6		3
3-55	82-304-265-01		Spring, Eject	AD-6900	1
3-56	82-304-257-01		Holder, Motor B	AD-6900	1
3-57	82-303-367-01		Cushion, Actuating		1
3-58	82-303-382-01		Felt, Brake		1
3-59	82-303-326-01		Spring, Back tension		1

EXPLODED VIEW-4



ELECTRICAL MAIN PARTS LIST

Symbol No.	Part No.	Description
◀ REC/PB CIRCUIT BOARD SECTION ▶		
PCB-A	82-328-601-01	REC/PB circuit board
IC1,2	82-304-682-01	IC, TA7220 (P)
Q1,2	89-314-005-01	Transistor, 2SC1400 (E)
Q3,4	87-027-245-01	FET, 2SK68A (M)
Q5,6,7,8	89-312-222-01	Transistor, 2SC1222 (E)
101,102		
Q103,104	89-318-154-01	Transistor, 2SC1815 (Y)
105,106		
301,303		
305,306		
Q201,202	89-405-712-01	Transistor, 2SD571 (L)
203,251		
Q204	89-206-051-01	Transistor, 2SB605 (K)
Q205	89-405-711-01	Transistor, 2SD571 (K)
Q206	89-402-344-01	Transistor, 2SD234 (Y)
Q302	89-316-348-01	Transistor, 2SC1634 (B)
Q307,308	89-402-275-01	Transistor, 2SD227 (V)
309,310		
Q311,312	89-320-011-01	Transistor, 2SC2001 (K)
Q401~414	89-309-455-01	Transistor, 2SC945L (Q)
D201,203	87-027-163-01	Diode, 1B4B1
D202	82-372-631-01	Zener diode, XZ-315
D204,205	87-027-283-01	Zener diode, 05Z-13U
D206,207	87-027-083-01	Diode, 1S1885
208		
D209	87-027-436-01	Zener diode, HZ11B1
D210	87-027-199-01	Zener diode, 05Z-15U
D251,304	87-026-069-01	Zener diode, WZ-052
309		
D252,253	87-027-097-01	Diode, 1S555
301,302		
305,308		
310,401		
402,403		
L1,2,3,4	82-371-622-01	Coil, 23mH
L101,102	82-385-636-01	Coil, 6.8mH
L103,104	82-304-714-01	Coil, 3.3mH
L105,106	82-304-715-01	Coil, 3.9mH
L107,108	82-304-701-01	Coil, 22mH
LPF101,102	82-397-634-01	Low-pass filter
OSC UNIT	82-328-602-01	OSC unit
RY1,S9	84-184-612-01	Relay, HA212N (STOP MUTING)
VR7,8,9,10	82-304-623-11	Volume, 50kΩ x 2, 20kΩ x 1 (REC CAL, BIAS FINE ADJ)
13,14		
VR11,12,15	82-304-624-11	Volume, 50kΩ x 3 (REC CAL, BIAS FINE ADJ)
S1,2	82-304-627-01	Lever switch (MONITOR, TEST)
S3,4	82-304-629-01	Lever switch (DOLBY-NR, BIAS)
S5	82-304-628-01	Lever switch (EQ)
S6,7,8	82-304-626-01	Push switch (PEAK HOLD, PEAK, VU)
SFR1,2,3,4	87-021-363-01	Semi-fixed resistor, 47kΩ-B
105,106		
SFR101,102	87-021-366-01	Semi-fixed resistor, 10kΩ-B
103,104,252		
SFR251	87-021-406-01	Semi-fixed resistor, 4.7kΩ-B
SFR253,254	87-021-367-01	Semi-fixed resistor, 100kΩ-B
Th1,2	82-304-720-01	Thermistor, 1.7kΩ
Th3,4	82-304-722-01	Thermistor, 20kΩ
< Resistors >		
R217	87-029-108-01	1Ω ½W Fuse resistor
R218	87-029-067-01	4.7Ω ½W Fuse resistor

Symbol No.	Part No.	Description
△ R202	87-029-016-01	22Ω ¼W Fuse resistor
△ R209	87-029-017-01	10Ω ¼W Fuse resistor
△ R210	87-029-007-01	22Ω ¼W Fuse resistor
< Capacitors >		
C21,22	87-015-327-01	0.1μF 50V Electrolytic LL
C115,116	87-968-410-01	100pF 500V Dipped mica
C35,36	87-014-033-01	100pF ±5% PP
C25,26	87-014-047-01	390pF ±5% PP
C17,18	82-304-648-01	0.018μF ±2% PP
◀ FRTS CIRCUIT BOARD SECTION ▶		
PCB-B	82-304-607-31	Frts circuit board
IC1,2	87-027-137-01	IC, TA-7122AP
IC3	87-027-235-01	IC, NJM-4558D
Q1,2	82-371-625-01	FET, 2SK30 (D)
Q3,4,5,6	89-312-222-01	Transistor 2SC1222 (E)
Q7,8,12	89-402-275-01	Transistor, 2SD227 (V)
Q9,10,11	89-318-154-01	Transistor, 2SC1815 (Y)
13,14		
D1,2	87-027-171-01	Zener diode, RD2.7E
D3,4,5,6	87-026-066-01	Diode, M8513A (O)
SFR1,2	87-021-525-01	Semi-fixed resistor, 3kΩ-B
SFR3	87-021-481-01	Semi-fixed resistor, 100kΩ-B
SFR4	87-021-431-01	Semi-fixed resistor, 30kΩ-B
SFR5	87-021-480-01	Semi-fixed resistor, 50kΩ-B
SFR6	87-021-434-01	Semi-fixed resistor, 20kΩ-B
PIN-1	87-032-897-01	Pin, 3P
R92	82-304-684-01	< Resistors > 47Ω 10W Cement resistor
< Capacitors >		
C49,50	87-015-241-01	1μF 50V Electrolytic LL
C57,58	87-015-242-01	2.2μF 50V Electrolytic LL
C33,34	87-015-243-01	3.3μF 50V Electrolytic LL
C53,54	87-015-246-01	4.7μF 25V Electrolytic LL
C43,44	87-015-247-01	10μF 25V Electrolytic LL
C2,4	87-014-049-01	470pF ±5% PP
◀ PEAK METER CIRCUIT BOARD SECTION ▶		
PCB-C	82-304-606-51	Peak meter circuit board
IC1,3,101	87-027-183-01	IC, NUM-4558
IC2	87-027-184-01	IC, μPC324C
Q1,2	89-107-505-01	Transistor, 2SA-750 (E)
Q3,4	87-027-198-01	FET, 2SK68 (N)
Q5,6,7,8	87-027-245-01	FET, 2SK68A (N)
Q9,10,12	89-107-335-61	Transistor, 2SA733 (K, P)
Q11,13,101	89-309-455-61	Transistor, 2SC945 L (P, Q)
102,103		
104		
D1~8	87-027-253-01	Diode, M8513A (AIWA)
D9,10,11	87-027-097-01	Diode, 1S1555
12,43,44		
D41	82-371-647-01	Zener diode, RD-7.5E
D101,102,103	88-052-188-11	Diode, 1S188 (FM)
104,105,106		
Th1,2	82-304-721-01	Thermistor, 5kΩ
SFR1,2	87-021-522-01	Semi-fixed resistor, 1MΩ-B
SFR3,4	87-021-524-01	Semi-fixed resistor, 10kΩ-B
SFR5,6	87-021-512-01	Semi-fixed resistor, 2kΩ-B
SFR101,102	87-021-520-01	Semi-fixed resistor 5kΩ-B
PIN-3	87-032-904-01	Pin, 4P
PIN	87-032-635-01	Pin, 5P
PIN-2	87-032-906-01	Pin, 6P
PIN	87-032-638-01	Pin, 8P

Symbol No.	Part No.	Description
< Capacitors >		
C5,6,101,102	87-015-379-01	1μF 50V Electrolytic BP
C1,2,103,104	87-015-380-01	4.7μF 25V Electrolytic BP
C7,8	87-014-082-01	0.47μF 50V Mylar
◀ DOLBY-NR CIRCUIT BOARD SECTION ▶		
PCB-D	82-304-728-11	Dolby-NR circuit board
IC1,2	82-304-729-01	IC, CR-713
D1	82-371-647-01	Zener diode, RD-7.5 (E)
D3,4	88-051-060-01	Diode, 1N60
	87-032-898-01	IC socket, 16P
PIN	87-032-646-01	Pin, 16P
< Resistor >		
R9,10	82-371-652-01	3.3kΩ ¼W ±1%
< Capacitors >		
C1,2	87-015-241-01	1μF 50V Electrolytic LL
C9,10	87-015-247-01	10μF 25V Electrolytic LL
C11,12	82-371-643-01	4700pF ±2% PP
C3,4	82-371-642-01	5600pF ±2% PP
C13,14	82-371-641-01	0.027μF ±2% PP
◀ MICROPROCESSOR CIRCUIT BOARD SECTION ▶		
PCB-E	82-319-602-31	Microprocessor circuit board
IC1	87-027-425-01	IC, μPD-546C-66
IC2,3,4	87-027-426-01	IC, 1R-2403
Q1,2,3,4	89-309-455-01	Transistor, 2SC945L (Q)
5,6,10,12		
Q7,9,11	89-404-143-01	Transistor, 2SD414 (Q)
Q8	89-402-344-01	Transistor, 2SD234 (Y)
Q13	89-309-457-01	Transistor, 2SC945L (K)
D1	88-052-188-11	Diode, 1S188 (FM)
D2,3,4,6,	87-027-097-01	Diode, 1S1555
7,8,9,11		
12,16		
D5	87-027-416-01	Zener diode, HZ3C2
D10	87-026-069-01	Zener diode, WZ-052
D13,14	87-027-365-01	Diode, S5277 (B)
D15	87-027-140-01	Zener diode, 05Z-6.2U
D17	87-027-171-01	Zener diode, RD2.7E
D18	87-027-097-01	Diode, 1S1555
RY1,S18	82-304-651-01	Relay, L
RY2,S19	84-196-630-01	Relay, BR211AD
X1	87-008-186-01	Ceramic, CSB400R1
PIN-6,7	87-032-904-01	Pin, 4P
PIN-22	87-032-905-01	Pin, 5P
PIN-5	87-032-906-01	Pin, 6P
PIN-9	87-032-908-01	Pin, 8P
PIN-8	87-032-909-01	Pin, 9P
PIN-4	87-032-910-01	Pin, 10P
PIN-10	87-032-912-01	Pin, 12P
△ R51	87-029-015-01	< Resistor > 10Ω ¼W Fuse resistor (E,K model only)
◀ TERMINAL CIRCUIT BOARD SECTION ▶		
PCB-G	82-304-753-01	Terminal circuit board
Q1	89-309-455-01	Transistor, 2SC945L (Q)
D1	87-027-365-01	Diode, S5277B
D2	88-052-188-11	Diode, 1S188 (FM)
◀ VOLUME CIRCUIT BOARD-2 SECTION ▶		
PCB-H	82-304-691-21	Volume circuit board-2
VR1,2	82-304-680-11	Volume, 20kΩ-A (MIC RECORD LEVEL)
VR3,4	82-304-681-11	Volume, 50kΩ-A (LINE RECORD LEVEL)

Symbol No.	Part No.	Description
◀ VOLUME CIRCUIT BOARD-1 SECTION ▶		
PCB-I	82-304-605-11	Volume circuit board-1
VR5,6	82-304-622-01	Slide volume, 10kΩ-A (OUTPUT LEVEL)
◀ REMOTE CONTROL JACK CIRCUIT BOARD SECTION ▶		
PCB-J	82-307-653-11	Remote control jack circuit board
J9	82-307-669-01	Connector
◀ SWITCH CIRCUIT BOARD SECTION ▶		
PCB-K	82-304-740-11	Switch circuit board ass'y
D1,6	87-026-112-01	Light emitting diode, SEL-1033 (RED)
D2,3,4,5	87-026-113-01	Light emitting diode, SEL-303E (GRN)
◀ DME CIRCUIT BOARD SECTION ▶		
PCB-N	82-307-655-01	DME circuit board
DME	82-397-642-11	DME-101A
◀ METAL CIRCUIT BOARD SECTION ▶		
PCB-O	82-304-752-01	Metal circuit board
L1,2	82-304-714-01	Coil, 3.3mH
SFR1,2	87-021-366-01	Semi-fixed resistor, 10kΩ-B
PIN-19	87-032-903-01	Pin, 3P
PIN-18,20	87-032-904-01	Pin, 4P
◀ EQ CIRCUIT BOARD SECTION ▶		
PCB-P	82-304-713-11	EQ circuit board
Q1~6	89-318-154-01	Transistor, 2SC1815 (Y)
◀ THERMISTOR CIRCUIT BOARD SECTION ▶		
PCB-Q	82-304-719-01	Thermistor circuit board
Th1	82-304-720-01	Thermistor, 1.7kΩ
Th2	82-304-721-01	Thermistor, 5kΩ
◀ RX CIRCUIT BOARD SECTION ▶		
PCB-R	82-307-640-21	RX circuit board
IC1	87-027-355-01	IC, LF357
IC2	87-027-235-01	IC, 4558
IC3	87-027-300-01	IC, 555 TIMER
Q1	89-309-455-61	Transistor, 2SC945L (P,Q)
D2	88-052-188-11	Diode, 1S188 (FM)
D3	87-027-097-01	Diode, 1S1555
PIN-21	87-032-903-01	Pin, 3P
◀ JACK CIRCUIT BOARD SECTION ▶ = H,E,K model		
PCB-S	82-304-734-11	Jack circuit board
Q1	89-316-347-01	Transistor, 2SC1634 (7)
D1	87-027-097-01	Diode, 1S1555
RY1,S19	84-184-612-01	Relay, Reed HA212N
J5,6,7,8,10	82-304-737-01	jack 4P w/DIN (LINE OUT LINE IN, DIN)
◀ FUSE CIRCUIT BOARD SECTION ▶		
△ PCB-T	82-304-731-01	Fuse circuit board (U,E,K model only)
△ F1	87-035-298-01	Fuse, 1.25A (U model only)
	87-098-166-01	Fuse caution label (U model only)
△ F3,5,6	87-035-107-01	Fuse label (U model only)
	87-035-107-01	Fuse, "T" 315mA (E,K model only)
	87-098-011-01	Fuse label, "T" 315mA (E,K model only)
△ F4	87-035-063-01	Fuse, "T" 630mA (E,K model only)
	87-098-014-01	Fuse label, "T" 630mA (E,K model only)

Symbol
△ F7
△ F8
△ C1
△ C1,2
△ S22
△ S22-1,2
△ F1
△ F2
△ S22
△ PCB-V
△ S22
△ F1
△ T1
△ T1
△ T1
D1
RH,PH
EH
M1,PCB-I
M2,PCB-I
LM1,2,3
△ CP1
PL3
SOL1
SOL2
J1,3,4
J5,6,7,8

Symbol No.	Part No.	Description
△ R202	87-029-016-01	22Ω ½W Fuse resistor
△ R209	87-029-017-01	10Ω ¼W Fuse resistor
△ R210	87-029-007-01	22Ω ¼W Fuse resistor
< Capacitors >		
C21,22	87-015-327-01	0.1μF 50V Electrolytic LL
C115,116	87-968-410-01	100pF 500V Dipped mica
C35,36	87-014-033-01	100pF ±5% PP
C25,26	87-014-047-01	390pF ±5% PP
C17,18	82-304-648-01	0.018μF ±2% PP

<< FRTS CIRCUIT BOARD SECTION >>

PCB-B	82-304-607-31	Frts circuit board
IC1,2	87-027-137-01	IC, TA-7122AP
IC3	87-027-235-01	IC, NJM-4558D
Q1,2	82-371-625-01	FET, 2SK30 (D)
Q3,4,5,6	89-312-222-01	Transistor 2SC1222 (E)
Q7,8,12	89-402-275-01	Transistor, 2SD227 (V)
Q9,10,11	89-318-154-01	Transistor, 2SC1815 (Y)
13,14		
D1,2	87-027-171-01	Zener diode, RD2.7E
D3,4,5,6	87-026-066-01	Diode, M8513A (O)
SFR1,2	87-021-525-01	Semi-fixed resistor, 3kΩ-B
SFR3	87-021-481-01	Semi-fixed resistor, 100kΩ-B
SFR4	87-021-431-01	Semi-fixed resistor, 30kΩ-B
SFR5	87-021-480-01	Semi-fixed resistor, 50kΩ-B
SFR6	87-021-434-01	Semi-fixed resistor, 20kΩ-B
PIN-1	87-032-897-01	Pin, 3P
< Resistors >		
R92	82-304-684-01	47Ω 10W Cement resistor
< Capacitors >		
C49,50	87-015-241-01	1μF 50V Electrolytic LL
C57,58	87-015-242-01	2.2μF 50V Electrolytic LL
C33,34	87-015-243-01	3.3μF 50V Electrolytic LL
C53,54	87-015-246-01	4.7μF 25V Electrolytic LL
C43,44	87-015-247-01	10μF 25V Electrolytic LL
C2,4	87-014-049-01	470pF ±5% PP

<< PEAK METER CIRCUIT BOARD SECTION >>

PCB-C	82-304-606-51	Peak meter circuit board
IC1,3,101	87-027-183-01	IC, NUM-4558
IC2	87-027-184-01	IC, μPC324C
Q1,2	89-107-505-01	Transistor, 2SA-750 (E)
Q3,4	87-027-198-01	FET, 2SK68 (N)
Q5,6,7,8	87-027-245-01	FET, 2SK68A (N)
Q9,10,12	89-107-335-61	Transistor, 2SA733 (K, P)
Q11,13,101	89-309-455-61	Transistor, 2SC945 L (P, Q)
102,103		
104		
D1~8	87-027-253-01	Diode, M8513A (AIWA)
D9,10,11	87-027-097-01	Diode, 1S1555
12,43,44		
D41	82-371-647-01	Zener diode, RD-7.5E
D101,102,103	88-052-188-11	Diode, 1S188 (FM)
104,105,106		
Th1,2	82-304-721-01	Thermistor, 5kΩ
SFR1,2	87-021-522-01	Semi-fixed resistor, 1MΩ-B
SFR3,4	87-021-524-01	Semi-fixed resistor, 10kΩ-B
SFR5,6	87-021-512-01	Semi-fixed resistor, 2kΩ-B
SFR101,102	87-021-520-01	Semi-fixed resistor 5kΩ-B
PIN-3	87-032-904-01	Pin, 4P
PIN	87-032-635-01	Pin, 5P
PIN-2	87-032-906-01	Pin, 6P
PIN	87-032-638-01	Pin, 8P

Symbol No.	Part No.	Description
C5,6,101,102	87-015-379-01	< Capacitors >
C1,2,103,104	87-015-380-01	1μF 50V Electrolytic BP
C7,8	87-014-082-01	4.7μF 25V Electrolytic BP
		0.47μF 50V Mylar

<< DOLBY-NR CIRCUIT BOARD SECTION >>

PCB-D	82-304-728-11	Dolby-NR circuit board
IC1,2	82-304-729-01	IC, CR-713
D1	82-371-647-01	Zener diode, RD-7.5 (E)
D3,4	88-051-060-01	Diode, 1N60
	87-032-898-01	IC socket, 16P
	87-032-646-01	Pin, 16P

<< Resistor >>

R9,10	82-371-652-01	3.3kΩ ¼W ±1%
< Capacitors >		
C1,2	87-015-241-01	1μF 50V Electrolytic LL
C9,10	87-015-247-01	10μF 25V Electrolytic LL
C11,12	82-371-643-01	4700pF ±2% PP
C3,4	82-371-642-01	5600pF ±2% PP
C13,14	82-371-641-01	0.027μF ±2% PP

<< MICROPROCESSOR CIRCUIT BOARD SECTION >>

PCB-E	82-319-602-31	Microprocessor circuit board
IC1	87-027-425-01	IC, μPD-546C-66
IC2,3,4	87-027-426-01	IC, 1R-2403
Q1,2,3,4	89-309-455-01	Transistor, 2SC945L (Q)
5,6,10,12		
Q7,9,11	89-404-143-01	Transistor, 2SD414 (Q)
Q8	89-402-344-01	Transistor, 2SD234 (Y)
Q13	89-309-457-01	Transistor, 2SC945L (K)
D1	88-052-188-11	Diode, 1S188 (FM)
D2,3,4,6	87-027-097-01	Diode, 1S1555
7,8,9,11		
12,16		
D5	87-027-416-01	Zener diode, HZ3C2
D10	87-026-069-01	Zener diode, WZ-052
D13,14	87-027-365-01	Diode, S5277 (B)
D15	87-027-140-01	Zener diode, 05Z-6.2U
D17	87-027-171-01	Zener diode, RD2.7E
D18	87-027-097-01	Diode, 1S1555
RY1,S18	82-304-651-01	Relay, L
RY2,S19	84-196-630-01	Relay, BR211AD
X1	87-008-186-01	Ceramic, CSB400R1
PIN-6,7	87-032-904-01	Pin, 4P
PIN-22	87-032-905-01	Pin, 5P
PIN-5	87-032-906-01	Pin, 6P
PIN-9	87-032-908-01	Pin, 8P
PIN-8	87-032-909-01	Pin, 9P
PIN-4	87-032-910-01	Pin, 10P
PIN-10	87-032-912-01	Pin, 12P

△ R51	87-029-015-01	< Resistor >
		10Ω ¼W Fuse resistor
		(E,K model only)

<< TERMINAL CIRCUIT BOARD SECTION >>

PCB-G	82-304-753-01	Terminal circuit board
Q1	89-309-455-01	Transistor, 2SC945L (Q)
D1	87-027-365-01	Diode, S5277B
D2	88-052-188-11	Diode, 1S188 (FM)

<< VOLUME CIRCUIT BOARD-2 SECTION >>

PCB-H	82-304-691-21	Volume circuit board-2
VR1,2	82-304-680-11	Volume, 20kΩ-A (MIC RECORD LEVEL)
VR3,4	82-304-681-11	Volume, 50kΩ-A (LINE RECORD LEVEL)

Symbol No.	Part No.	Description
<< VOLUME CIRCUIT BOARD-1 SECTION >>		
PCB-I	82-304-605-11	Volume circuit board-1
VR5,6	82-304-622-01	Slide volume, 10kΩ-A (OUTPUT LEVEL)

<< REMOTE CONTROL JACK CIRCUIT BOARD SECTION >>

PCB-J	82-307-653-11	Remote control jack circuit board
J9	82-307-669-01	Connector

<< SWITCH CIRCUIT BOARD SECTION >>

PCB-K	82-304-740-11	Switch circuit board ass'y
D1,6	87-026-112-01	Light emitting diode, SEL-1033 (RED)
D2,3,4,5	87-026-113-01	Light emitting diode, SEL-303E (GRN)

<< DME CIRCUIT BOARD SECTION >>

PCB-N	82-307-655-01	DME circuit board
DME	82-397-642-11	DME-101A

<< METAL CIRCUIT BOARD SECTION >>

PCB-O	82-304-752-01	Metal circuit board
L1,2	82-304-714-01	Coil, 3.3mH
SFR1,2	87-021-366-01	Semi-fixed resistor, 10kΩ-B
PIN-19	87-032-903-01	Pin, 3P
PIN-18,20	87-032-904-01	Pin, 4P

<< EQ CIRCUIT BOARD SECTION >>

PCB-P	82-304-713-11	EQ circuit board
Q1~6	89-318-154-01	Transistor, 2SC1815 (Y)

<< THERMISTOR CIRCUIT BOARD SECTION >>

PCB-Q	82-304-719-01	Thermistor circuit board
Th1	82-304-720-01	Thermistor, 1.7kΩ
Th2	82-304-721-01	Thermistor, 5kΩ

<< RX CIRCUIT BOARD SECTION >>

PCB-R	82-307-640-21	RX circuit board
IC1	87-027-355-01	IC, LF357
IC2	87-027-235-01	IC, 4558
IC3	87-027-300-01	IC, 555 TIMER
Q1	89-309-455-61	Transistor, 2SC945L (P,Q)
D2	88-052-188-11	Diode, 1S188 (FM)
D3	87-027-097-01	Diode, 1S1555
PIN-21	87-032-903-01	Pin, 3P

<< JACK CIRCUIT BOARD SECTION >> = H,E,K model

PCB-S	82-304-734-11	Jack circuit board
Q1	89-316-347-01	Transistor, 2SC1634 (7)
D1	87-027-097-01	Diode, 1S1555
RY1,S19	84-184-612-01	Relay, Reed HA212N
J5,6,7,8,10	82-304-737-01	jack 4P w/DIN (LINE OUT LINE IN, DIN)

<< FUSE CIRCUIT BOARD SECTION >>

△ PCB-T	82-304-731-01	Fuse circuit board (U,E,K model only)
△ F1	87-035-298-01	Fuse, 1.25A (U model only)
△ F3,5,6	87-098-166-01	Fuse caution label (U model only)
	87-098-163-01	Fuse label (U model only)
	87-035-107-01	Fuse, "T" 315mA (E,K model only)
	87-098-011-01	Fuse label, "T" 315mA (E,K model only)
	87-035-063-01	Fuse, "T" 630mA (E,K model only)
△ F4	87-098-014-01	Fuse label, "T" 630mA (E,K model only)

Symbol No.	Part No.	Description
△ F7	87-035-117-01	Fuse, "T" 1.25A (E,K model only)
	87-098-017-01	Fuse label, "T" 1.25A (E,K model only)
△ F8	87-035-064-01	Fuse, "T" 1A (E,K model only)
	87-098-016-01	Fuse label, "T" 1A (E,K model only)
	87-033-147-01	Fuse clamp
△ C1	87-019-096-01	< Capacitors >
△ C1,2	87-019-096-01	0.01μF 250V Line capacitor (E model only)
		0.01μF 250V Line capacitor (K model only)

<< VOLTAGE SELECTOR CIRCUIT BOARD SECTION >> = E,K model

△ PCB-U	82-304-730-01	Voltage selector circuit board
△ S22	87-031-364-01	Slide switch (VOLTAGE SELECTOR) (K model only)
△ S22-1,2	87-031-364-01	Slide switch (VOLTAGE SELECTOR) (E model only)
△ F1	87-035-075-01	Fuse, "T" 500mA
△ F2	87-098-013-01	Fuse label, "T" 500mA
	87-035-107-01	Fuse, "T" 315mA (K model only)
	87-098-011-01	Fuse label, "T" 315mA (K model only)
	87-032-744-01	Fuse clamp

<< VOLTAGE SELECTOR CIRCUIT BOARD SECTION >> = H model

△ PCB-V	82-304-733-11	Voltage selector circuit board
△ S22	82-304-732-01	Rotary switch (VOLTAGE SELECTOR)
△ F1	87-035-075-01	Fuse, "T" 500mA
	87-098-013-01	Fuse label, "T" 500mA
	87-033-147-01	Fuse clamp

<< MISCELLANEOUS >>

△ T1	82-153-601-01	Power transformer (H model only)
△ T1	82-304-646-21	Power transformer (U model only)
△ T1	82-153-603-01	Power transformer (E model only)
△ T1	82-153-604-01	Power transformer (K model only)
D1	87-027-366-01	PIN diode, M133HLF AW
RH,PH	82-304-635-21	RH, PH combination head
EH	87-046-173-01	Erase head
M1,PCB-L	82-304-637-11	Main motor, DC-EG
M2,PCB-M	82-304-638-01	Sub motor, DC-EG
LM1,2,3,4	82-328-607-01	Meter (PEAK/VU)
△ CP1	87-028-036-01	Compound capacitor 0.033μF 120Ω (U model only)
PL3	82-304-718-01	Pilot lamp 8V (CASSETTE WINDOW)
SOL1	82-304-639-01	Solenoid (FWD)
SOL2	82-304-640-11	Solenoid (FR)
J1,3,4	82-307-644-01	Jack ass'y (PHONES, MIC)
J5,6,7,8	82-306-670-01	Pin jack, 4P (LINE OUT, LINE IN) (U model only)

[RC-100 REMOTE CONTROL SECTION]

Symbol No.	Part No.	Description
J11	87-032-882-01	Jack, 2.5 ϕ (PLAYER SYNC)
▲ J12	87-032-674-01	Jack (AC OUTLET) (U model only)
▲ S10	87-031-408-01	Push switch (POWER) (H,E,K model only)
▲ S10	87-031-480-01	Push switch (POWER) (U model only)
S11	82-304-723-01	Micro switch (PLAY DETECTION)
S13,14,21	82-304-724-01	Micro switch (CASSETTE DETECTION, ERASE PREVENTION DETECTION, CrO ₂ AUTO)
S15,17	82-304-630-01	Slide switch (TIMER, MEMORY)
S16	87-040-100-11	Counter (MEMORY COUNTER)
S20	82-375-623-01	Slide switch (DIN OUTPUT LEVEL) (H,E,K model only)
▲	87-034-826-01	AC power cord (H model only)
▲	87-034-874-01	AC power cord (U model only)
▲	87-034-877-01	AC power cord (E model only)
▲	87-034-872-01	AC power cord (K model only)
▲	87-085-101-01	Cord bushing (U model only)
▲ F9	87-035-107-01	Fuse, "T" 315mA (E,K model only)
	87-098-011-01	Fuse label, "T" 315mA (E,K model only)
▲	87-033-161-01	Fuse holder, 1P (E,K model only)
CON-1	82-304-703-01	Connector ass'y, 3P
CON-19	82-328-605-01	Connector ass'y, 3P
CON-21	82-307-650-11	Connector ass'y, 3P
CON-3	82-304-657-11	Connector, ass'y, 4P
CON-6	82-328-608-01	Connector ass'y, 4P
CON-7	82-328-617-01	Connector ass'y, 4P
CON-13	82-304-668-01	Connector ass'y, 4P
CON-18	82-328-603-01	Connector ass'y, 4P
CON-20	82-328-604-01	Connector ass'y, 4P
CON-22	82-307-668-01	Connector ass'y, 5P
CON-12	82-304-669-01	Connector ass'y, 5P
CON-2	82-304-659-11	Connector ass'y, 6P
CON-5	82-328-619-01	Connector ass'y, 6P
CON-11	82-304-670-01	Connector ass'y, 6P
CON-9	82-328-620-01	Connector ass'y, 8P
CON-8	82-328-609-01	Connector ass'y, 9P
CON-4	82-328-618-01	Connector ass'y, 10P
CON-10	82-328-610-01	Connector ass'y, 12P
	< Resistor >	
R3	82-304-738-01	47 Ω 10W Cement resistor
	< Capacitor >	
▲ C1	87-019-096-01	0.01 μ F 250V Line (H model only)



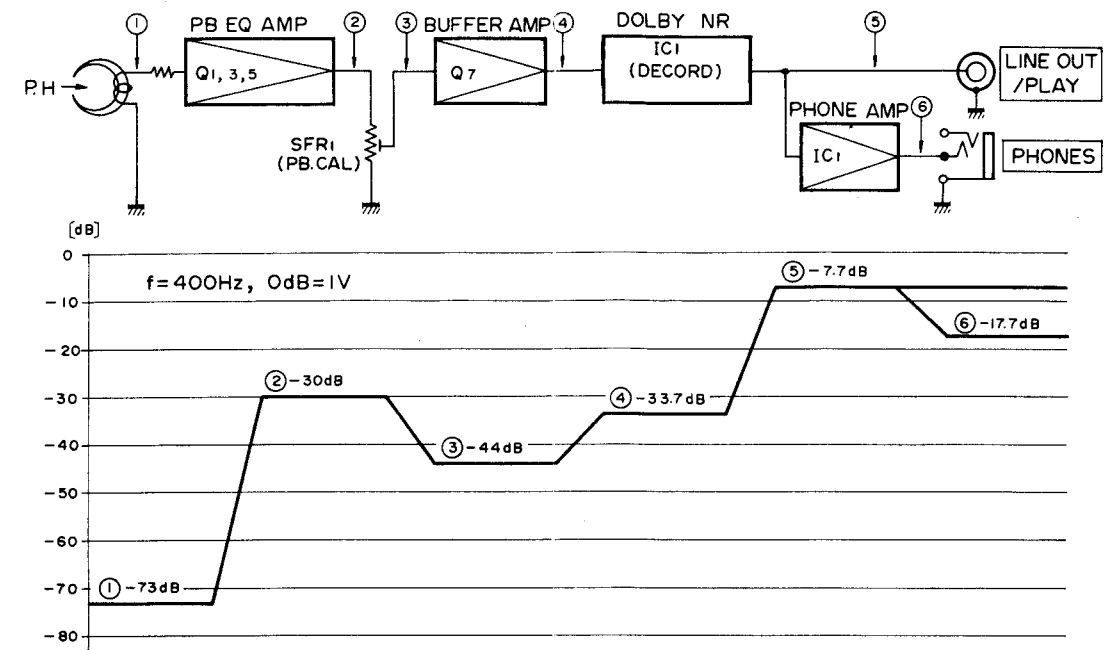
Safety component symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

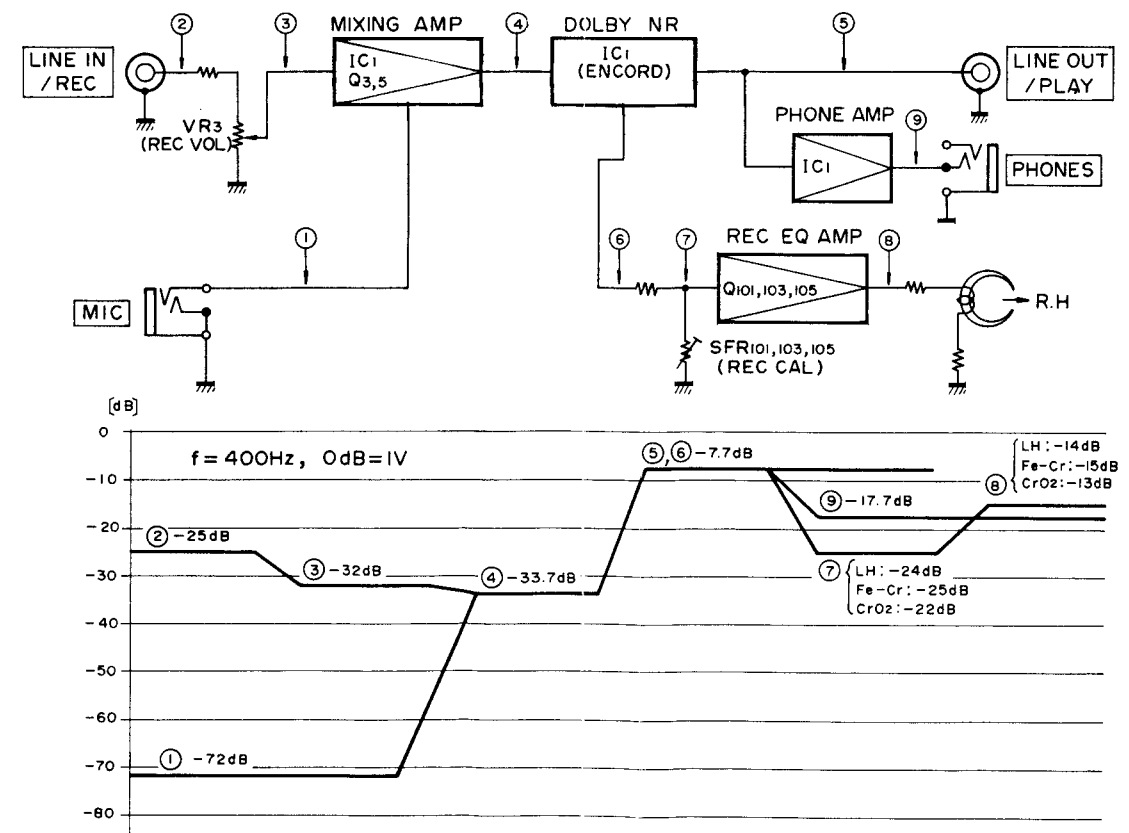
Symbol No.	Part No.	Description
◀ REMOTE CONTROL CIRCUIT BOARD SECTION ▶		
PCB-A	82-307-639-01	Remote control circuit board
◀ TX CIRCUIT BOARD SECTION ▶		
PCB-B	82-307-638-11	TX circuit board
IC1	87-027-421-01	IC, TC4028
IC2	87-027-424-01	IC, M58484
Q1~4	89-309-455-61	Transistor, 2SC945L (P,Q)
Q5	89-404-673-01	Transistor, 2SD467 (C)
D1	87-027-363-01	Light emitting diode, GL-520
D2	87-027-097-01	Diode, 1S1555
D3	87-027-356-01	Light emitting diode, GL-9PR-6
X1	87-008-191-01	Ceramic, SFB-455R

LEVEL DIAGRAM

• PLAYBACK



• RECORD

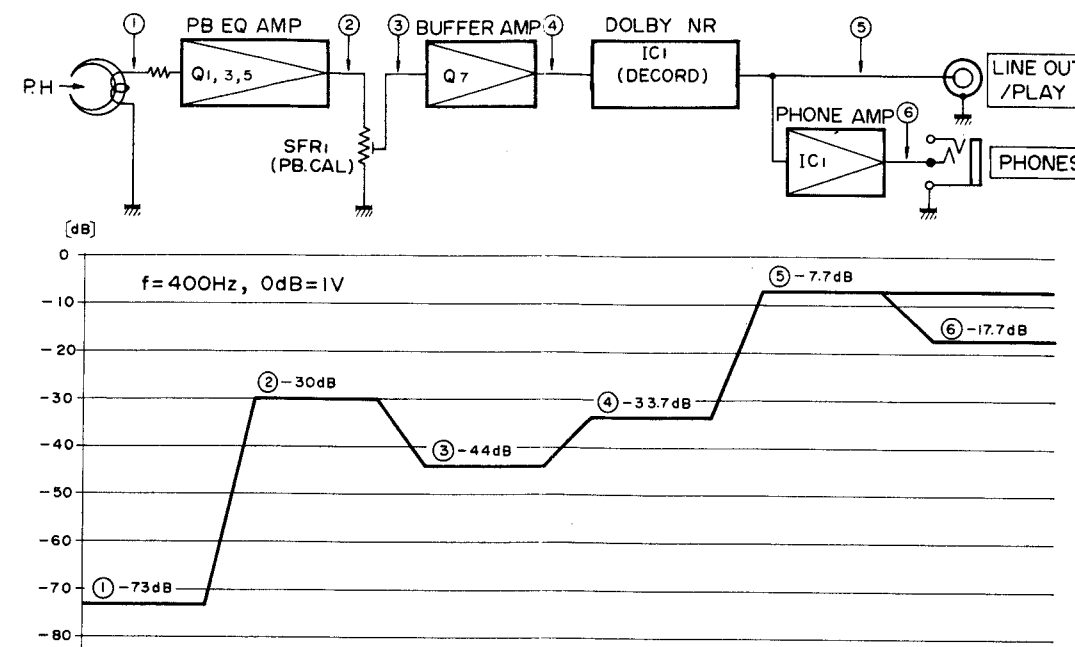


[RC-100 REMOTE CONTROL SECTION]

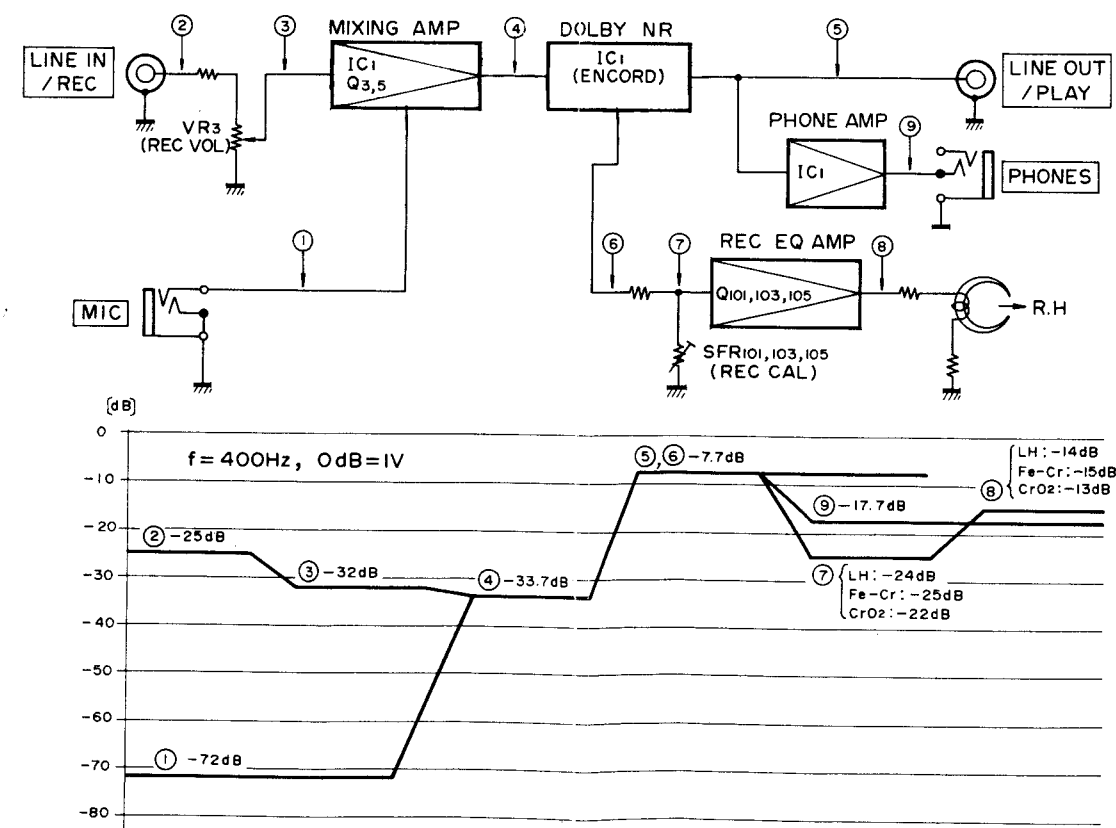
Symbol No.	Part No.	Description
« REMOTE CONTROL CIRCUIT BOARD SECTION »		
PCB-A	82-307-639-01	Remote control circuit board
« TX CIRCUIT BOARD SECTION »		
PCB-B	82-307-638-11	TX circuit board
IC1	87-027-421-01	IC, TC4028
IC2	87-027-424-01	IC, M58484
Q1~4	89-309-455-61	Transistor, 2SC945L (P,Q)
Q5	89-404-673-01	Transistor, 2SD467 (C)
D1	87-027-363-01	Light emitting diode, GL-520
D2	87-027-097-01	Diode, 1S1555
D3	87-027-356-01	Light emitting diode, GL-9PR-6
X1	87-008-191-01	Ceramic, SFB-455R

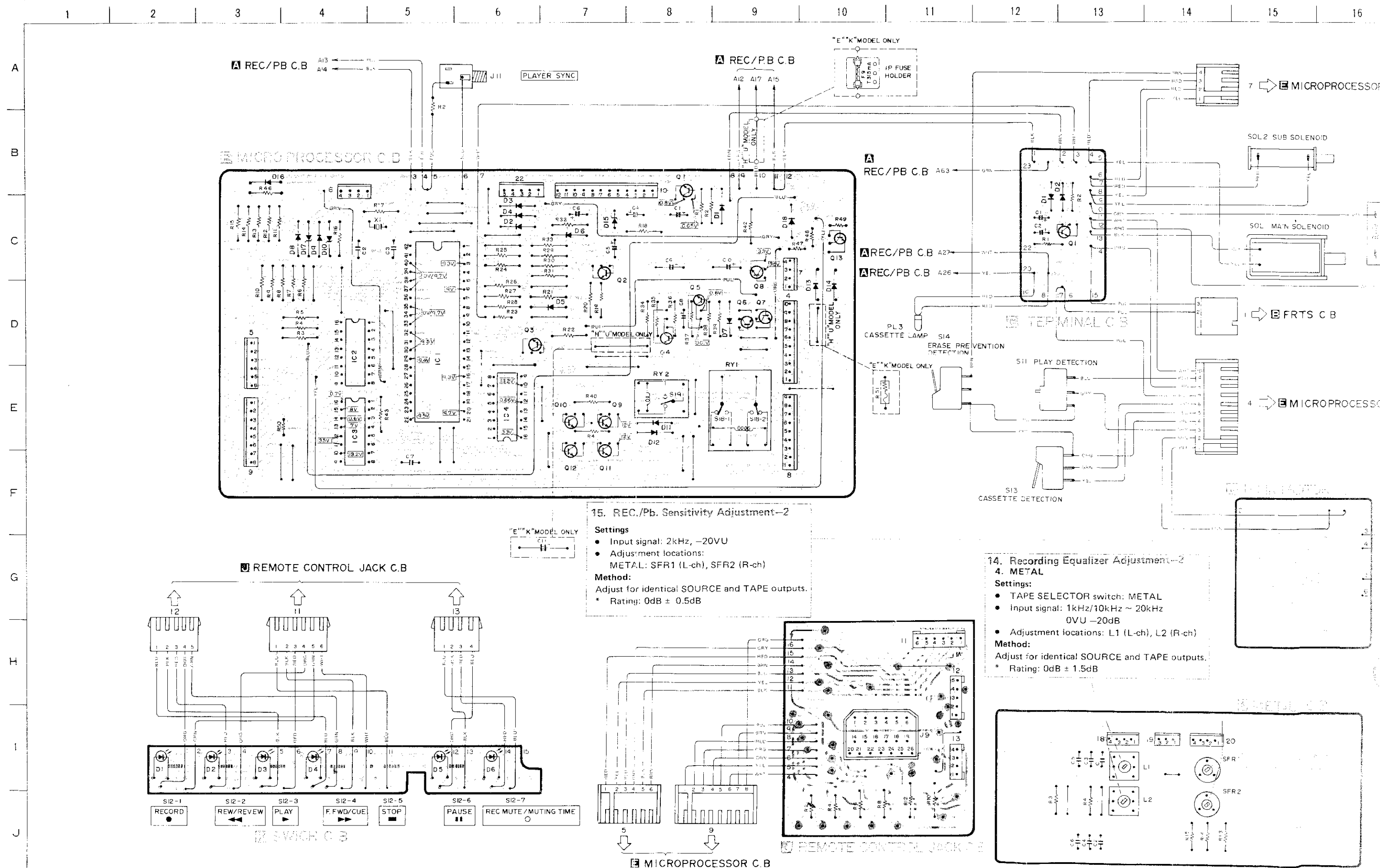
LEVEL DIAGRAM

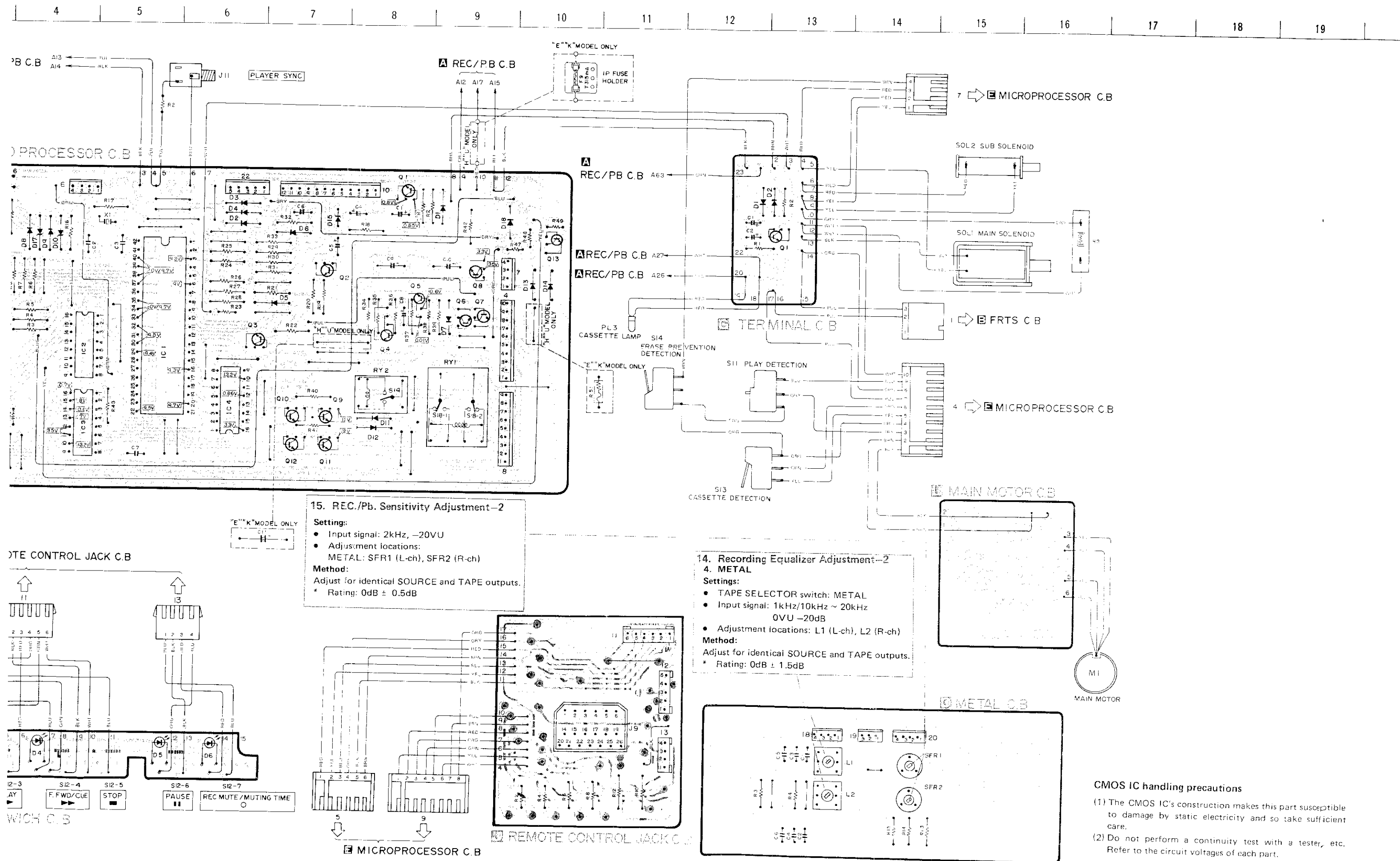
• PLAYBACK



• RECORD

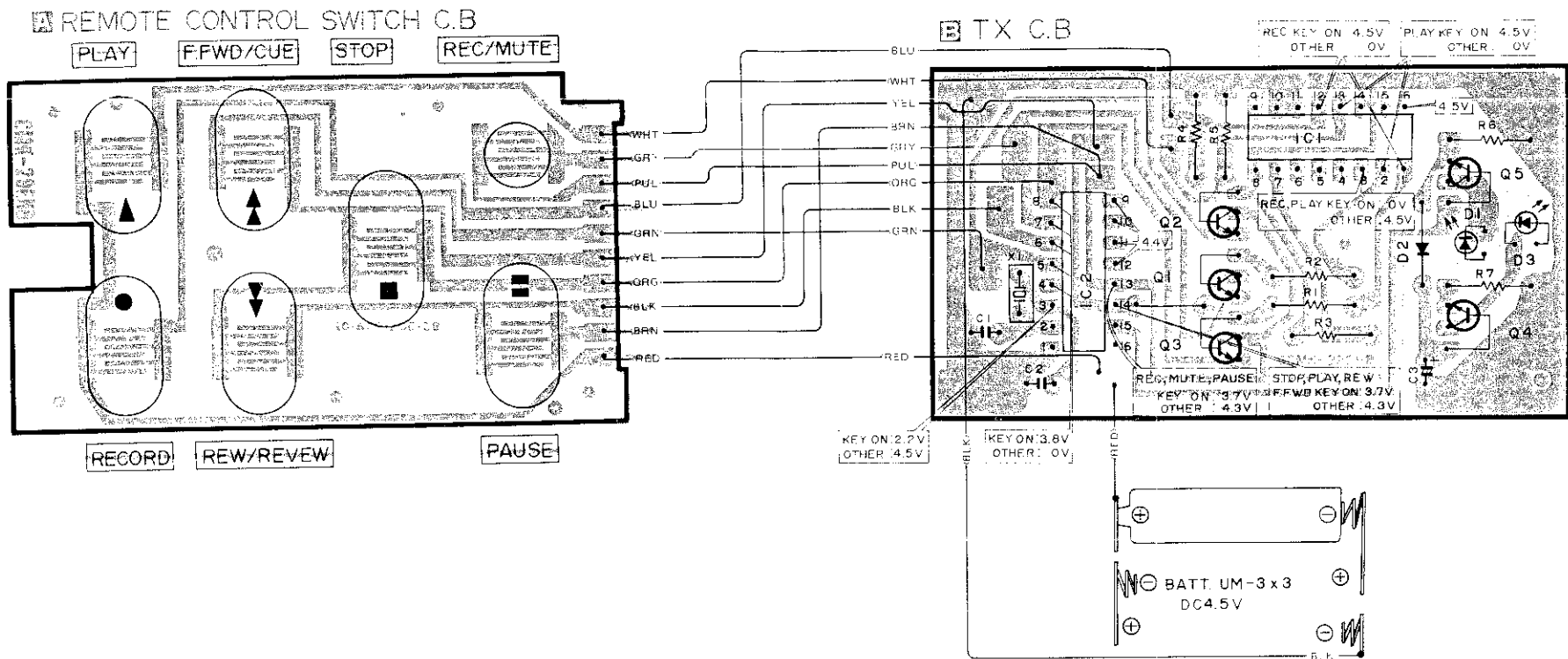




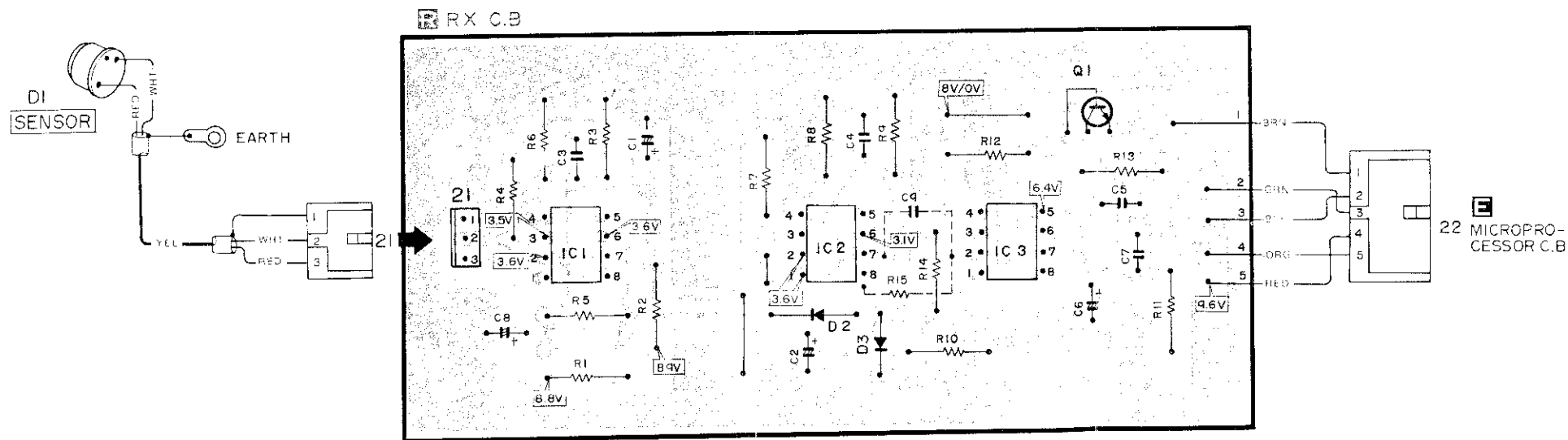


WIRING-4

< REMOTE CONTROL SECTION >

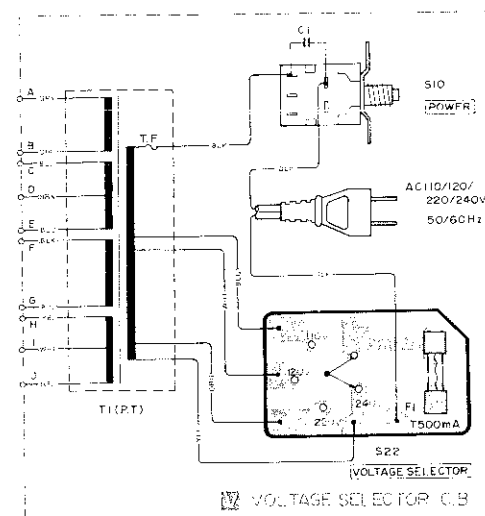


< RECEIVER SECTION >

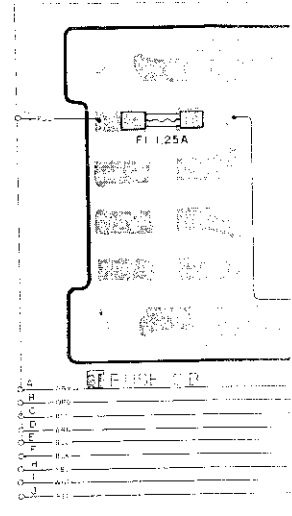


< POWER SECTION >

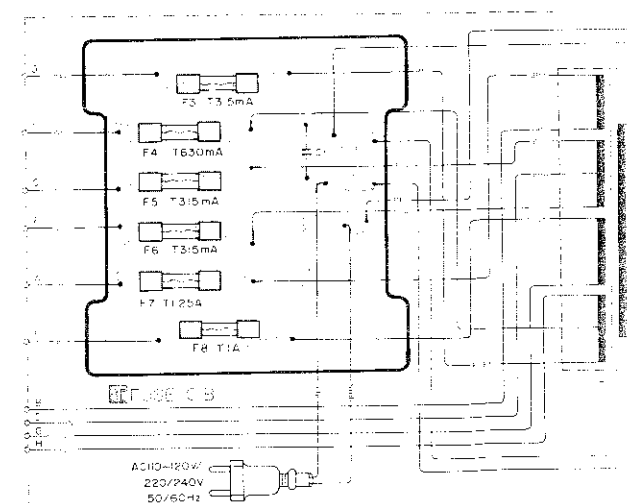
H MODEL



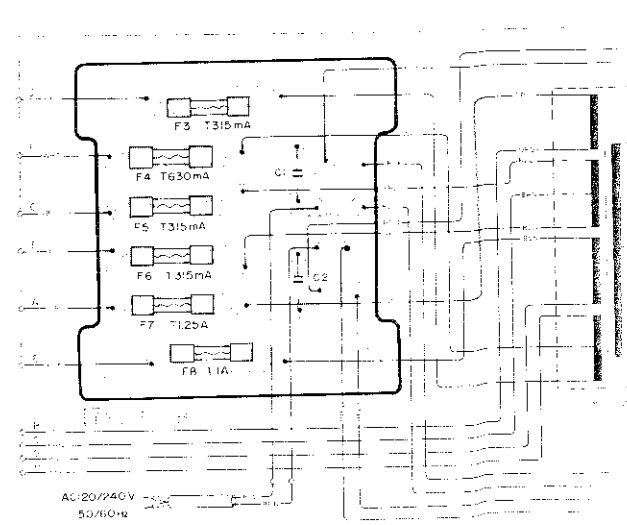
U MODEL



E MODEL



K MODEL

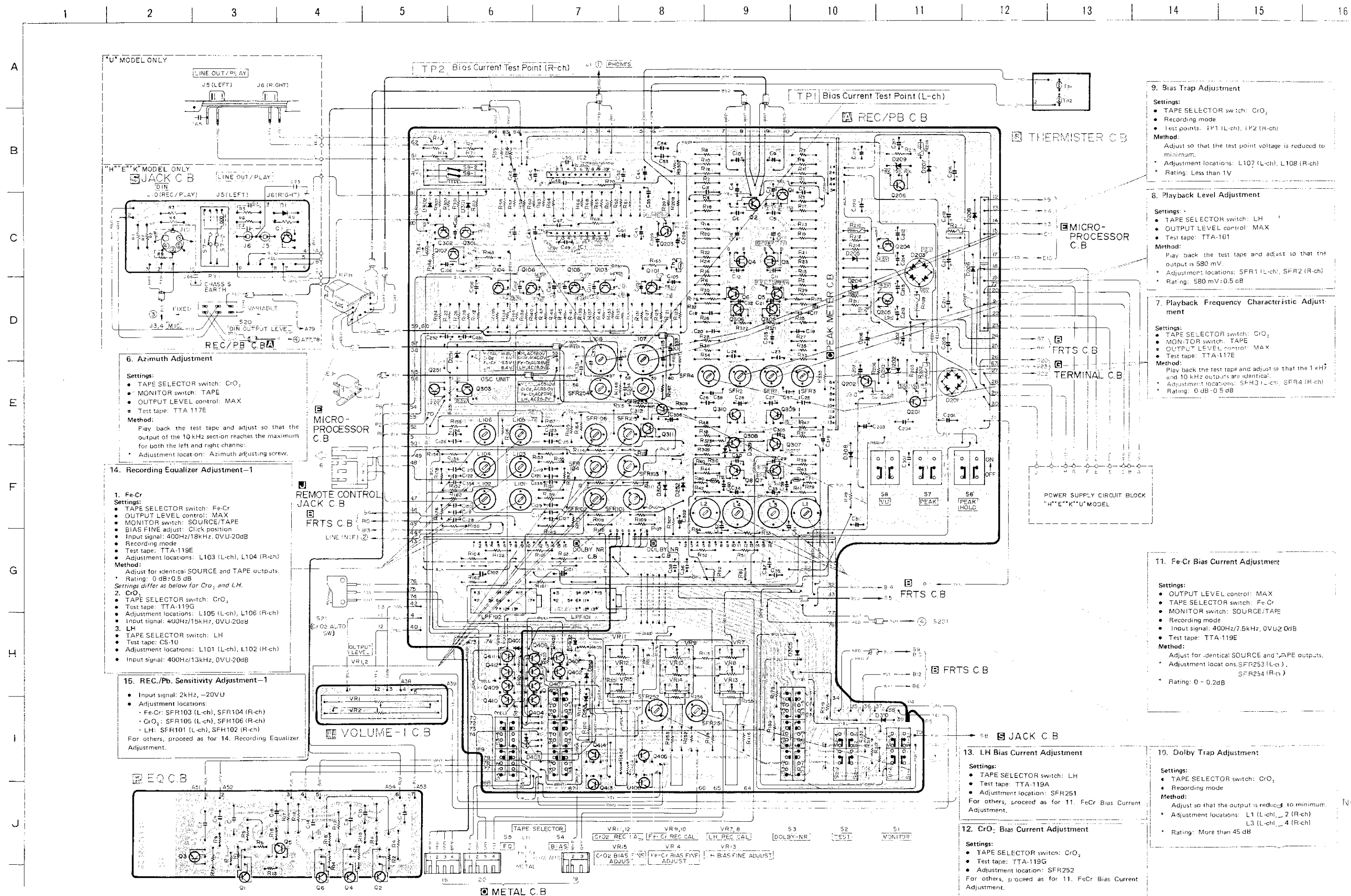


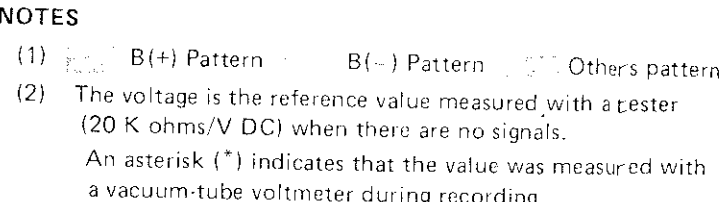
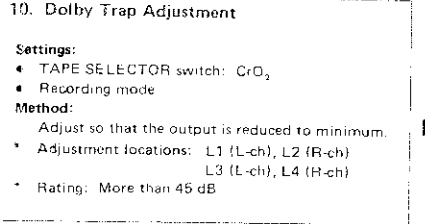
NOTES

- (1) B(+) Pattern Others pattern
- (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

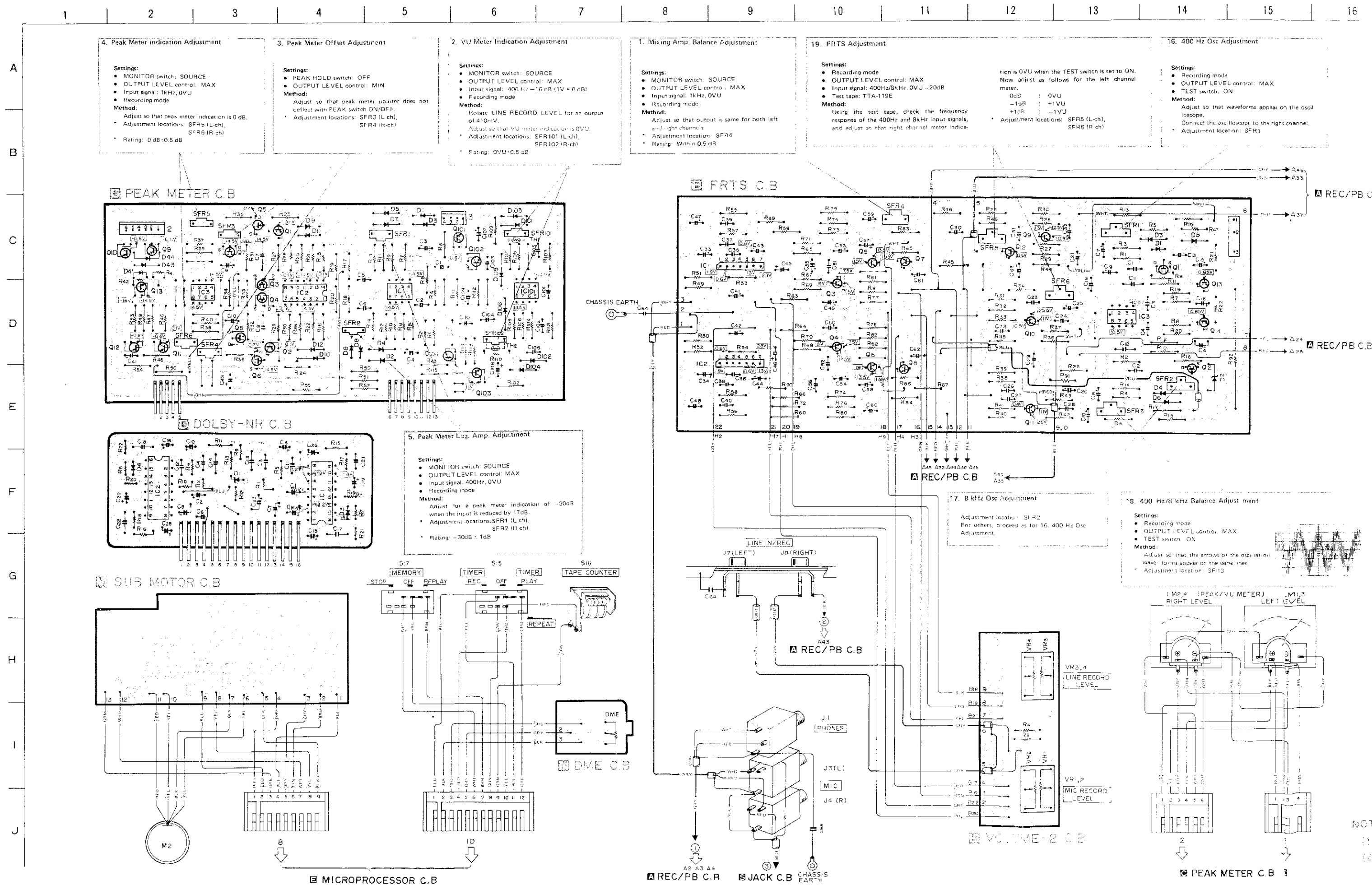
CMOS IC handling precautions

- (1) The CMOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care.
- (2) Do not perform a continuity test with a tester, etc. Refer to the circuit voltages of each part.





WIRING-2



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Peak Meter Offset Adjustment

Settings:
 PEAK HOLD switch: OFF
 OUTPUT LEVEL control: MIN

Method:
 Adjust so that peak meter pointer does not deflect with PLAK switch ON/OFF.
 Adjustment locations: SFR3 (L-ch), SFR4 (R-ch)

2. VU Meter Indication Adjustment

Settings:
 • MONITOR switch: SOURCE
 • OUTPUT LEVEL control: MAX
 • Input signal: 400 Hz -16 dB (1V = 0 dB)
 • Recording mode

Method:
 Rotate LINE RECORD LEVEL for an output of 410mV.
 Adjust so that VU meter indication is 0VU.
 Adjustment locations: SFR101 (L-ch), SFR102 (R-ch)
 Rating: 0VU-0.5 dB

1. Mixing Amp. Balance Adjustment

Settings:
 • MONITOR switch: SOURCE
 • OUTPUT LEVEL control: MAX
 • Input signal: 1kHz, 0VU
 • Recording mode

Method:
 Adjust so that output is same for both left and right channels.
 Adjustment location: SFR4
 Rating: Within 0.5 dB

19. FRTS Adjustment

Settings:
 • Recording mode
 • OUTPUT LEVEL control: MAX
 • Input signal: 400Hz/8kHz, 0VU - 20dB
 • Test tape: TTA-119E

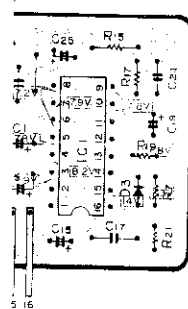
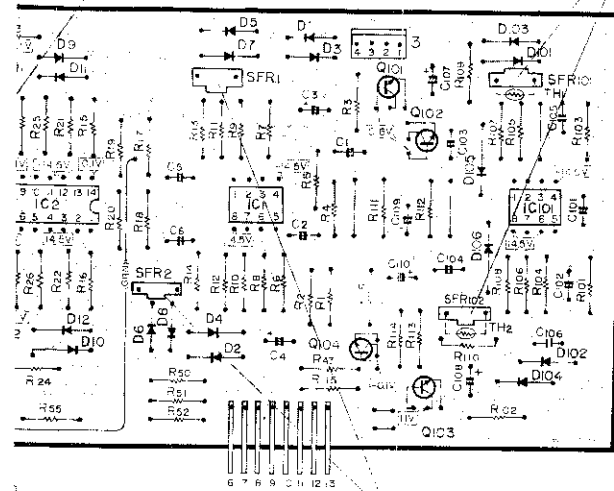
Method:
 Using the test tape, check the frequency response of the 400Hz and 8kHz input signals, and adjust so that right channel meter indicates

tion is 0VU when the TEST switch is set to ON. Now adjust as follows for the left channel meter.
 0dB : 0VU
 -1dB : +1VU
 +1dB : -1VU
 Adjustment locations: SFR5 (L-ch), SFR6 (R-ch)

16. 400 Hz Osc Adjustment

Settings:
 • Recording mode
 • OUTPUT LEVEL control: MAX
 • TEST switch: ON

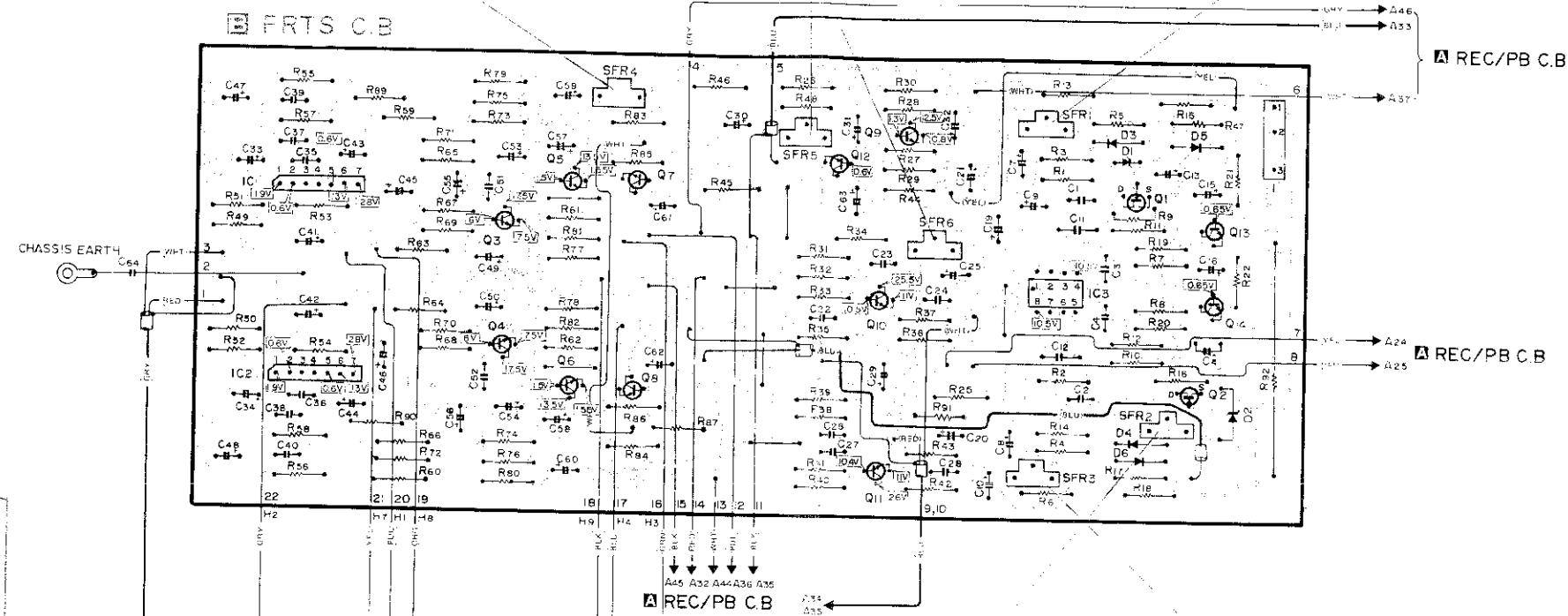
Method:
 Adjust so that waveforms appear on the oscilloscope.
 Connect the oscilloscope to the right channel.
 Adjustment location: SFR1



5. Peak Meter Log Amp Adjustment

Settings:
 • MONITOR switch: SOURCE
 • OUTPUT LEVEL control: MAX
 • Input signal: 400Hz, 0VU
 • Recording mode

Method:
 Adjust for a peak meter indication of -30dB when the input is reduced by 17dB.
 Adjustment locations: SFR1 (L-ch), SFR2 (R-ch)
 Rating: -30dB - 1dB



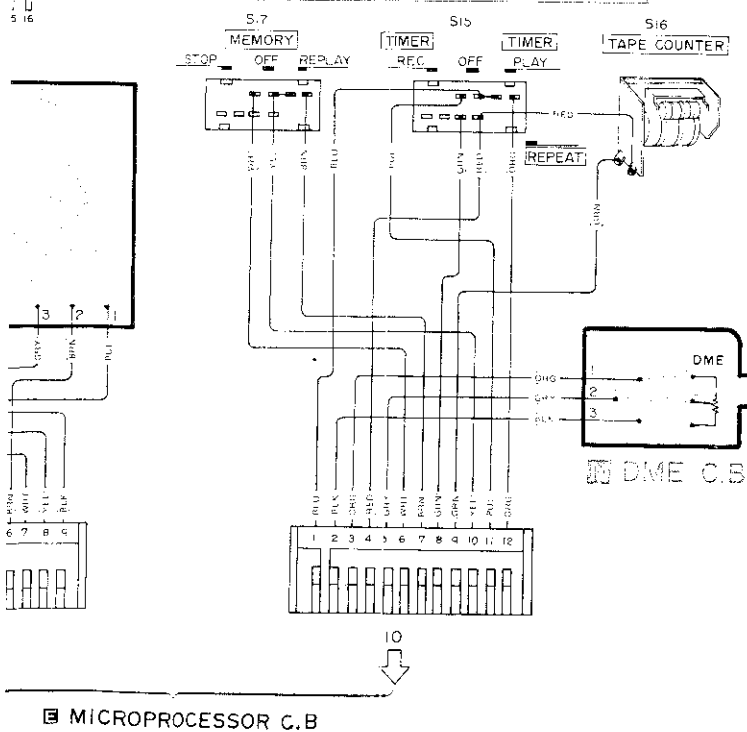
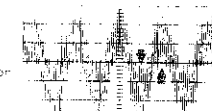
17. 8 kHz Osc Adjustment

Adjustment location: SFR2
 For others, proceed as for 16. 400 Hz Osc Adjustment.

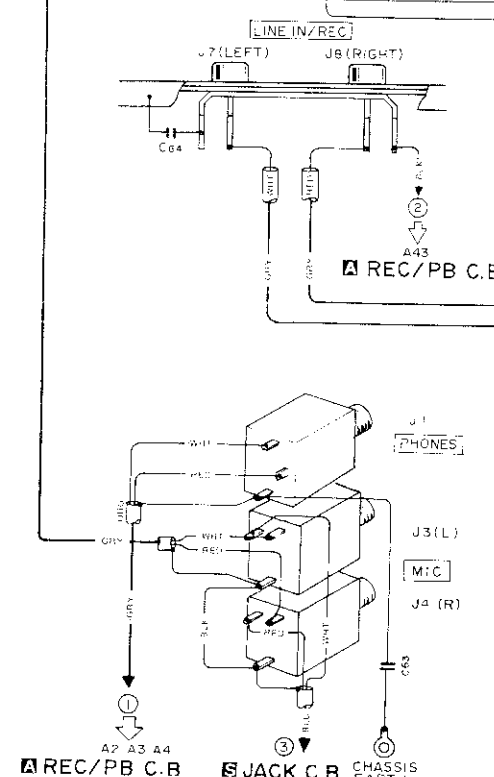
18. 400 Hz/8 kHz Balance Adjustment

Settings:
 • Recording mode
 • OUTPUT LEVEL control: MAX
 • TEST switch: ON

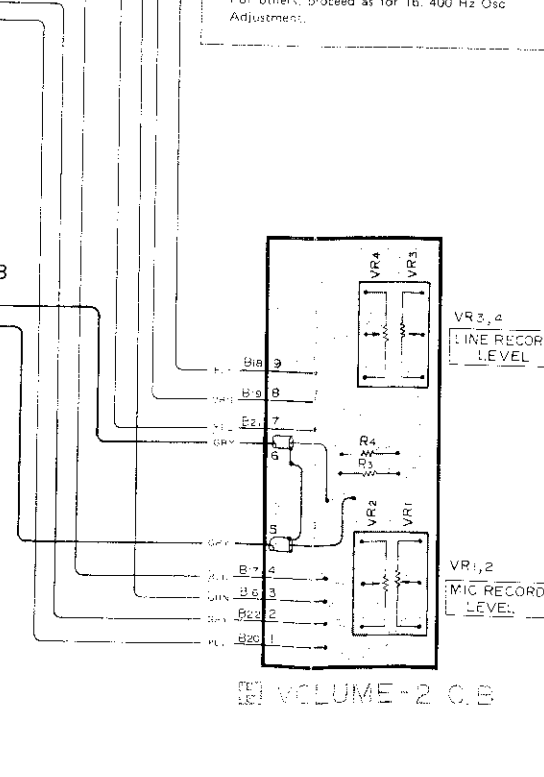
Method:
 Adjust so that the strove of the osc. list on wave forms appear on the same lines.
 Adjustment location: SFR3



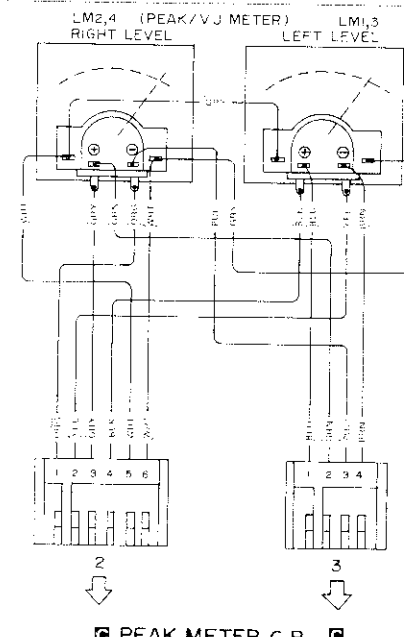
MICROPROCESSOR C.B.



JACK C.B.



VOLUME-2 C.B.



PEAK METER C.B.

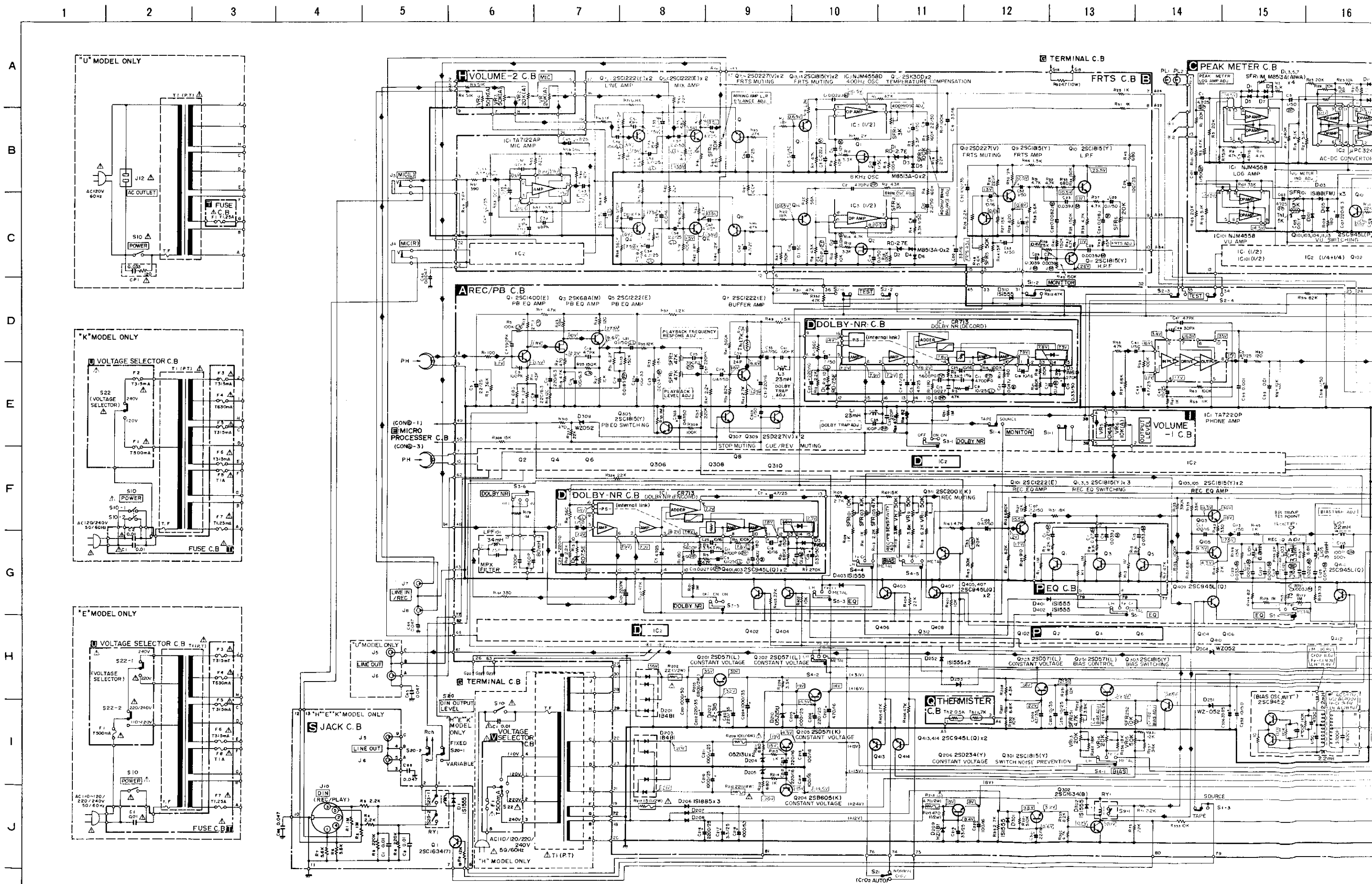
CMOS IC handling precautions

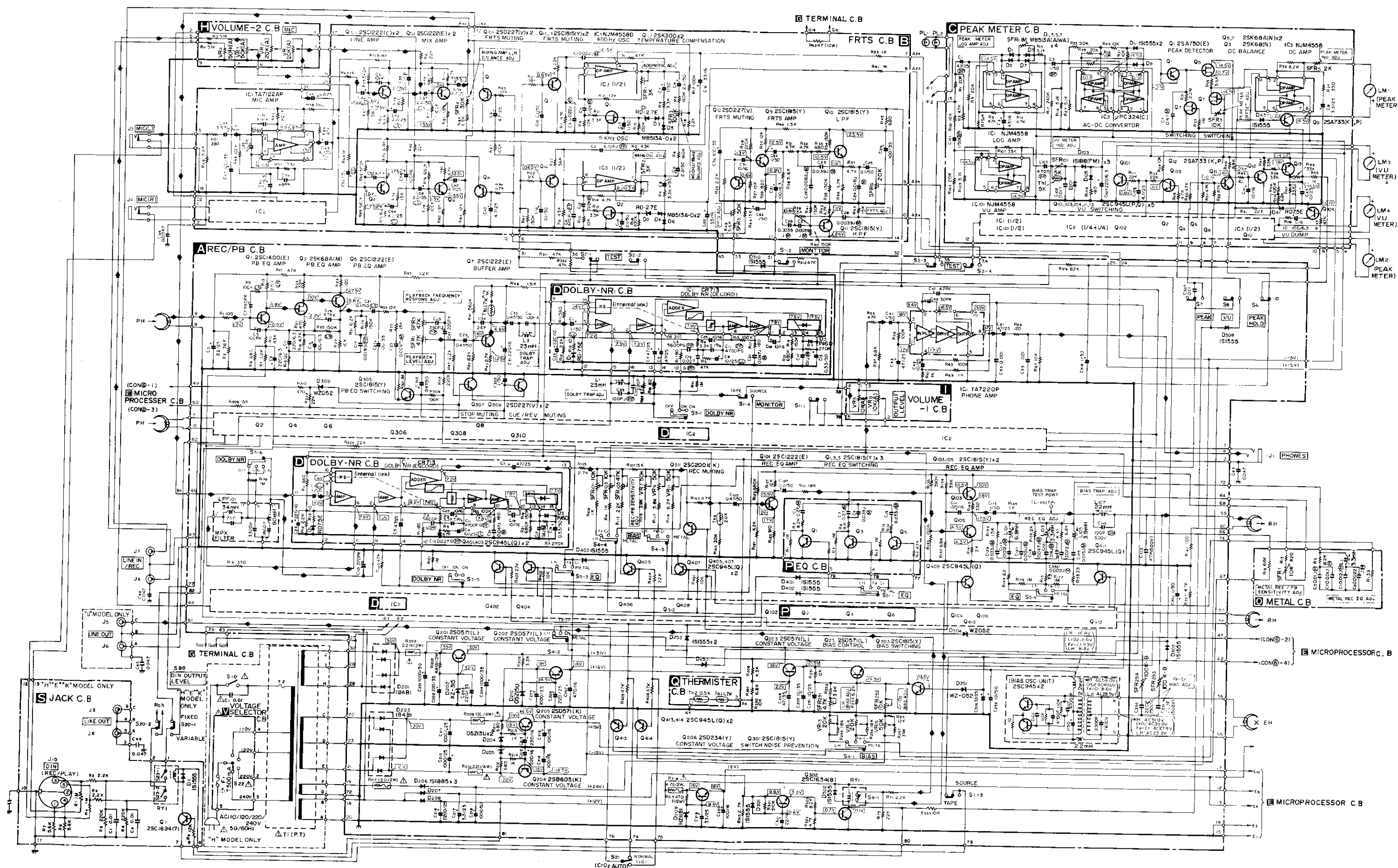
- (1) The CMOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care.
- (2) Do not perform a continuity test with a tester, etc. Refer to the circuit voltages of each part.

NOTES

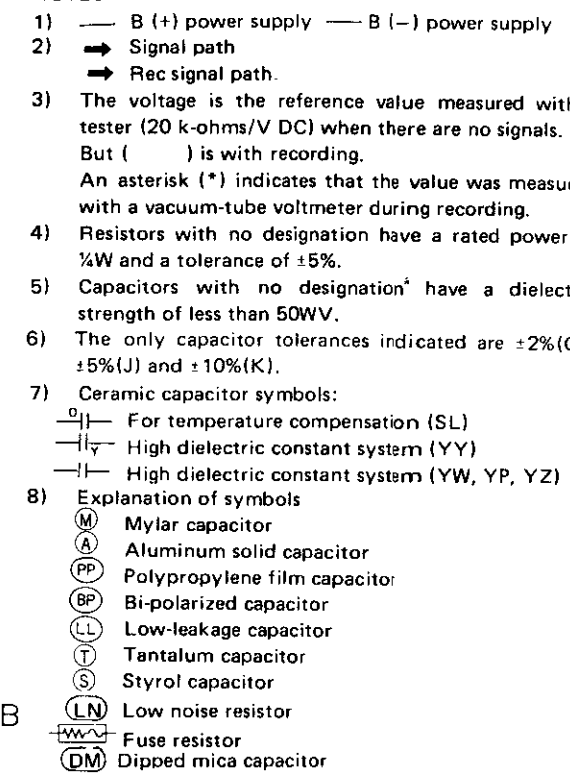
- (1) B(+) Pattern B(-) Pattern Others pattern
- (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

SCHEMATIC DIAGRAM -1

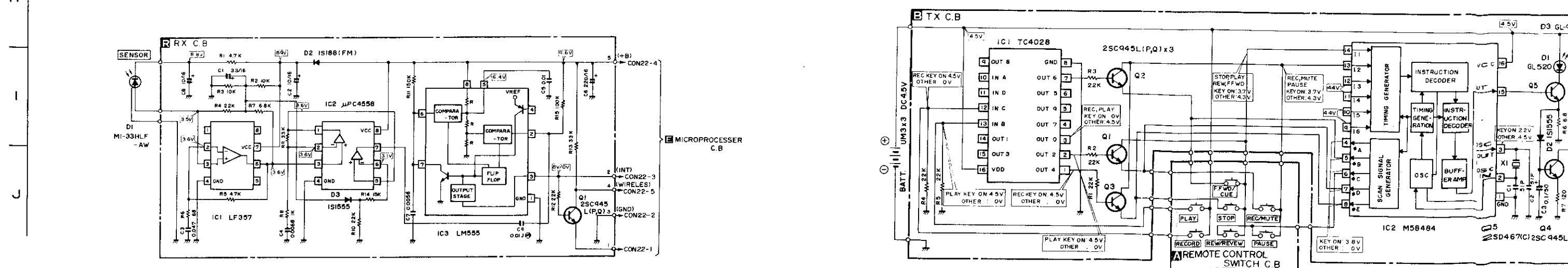


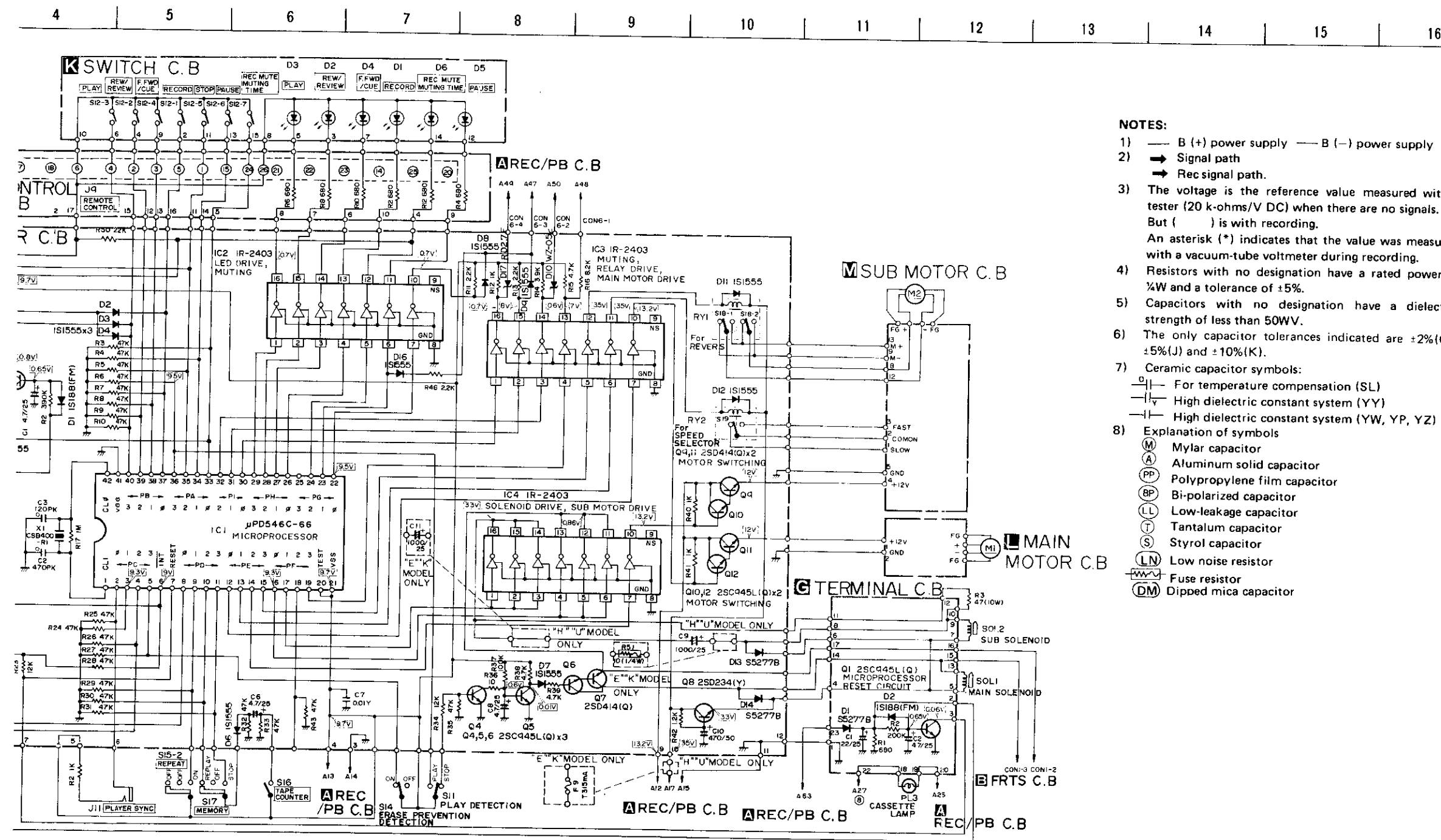


< CONTROL SECTION >

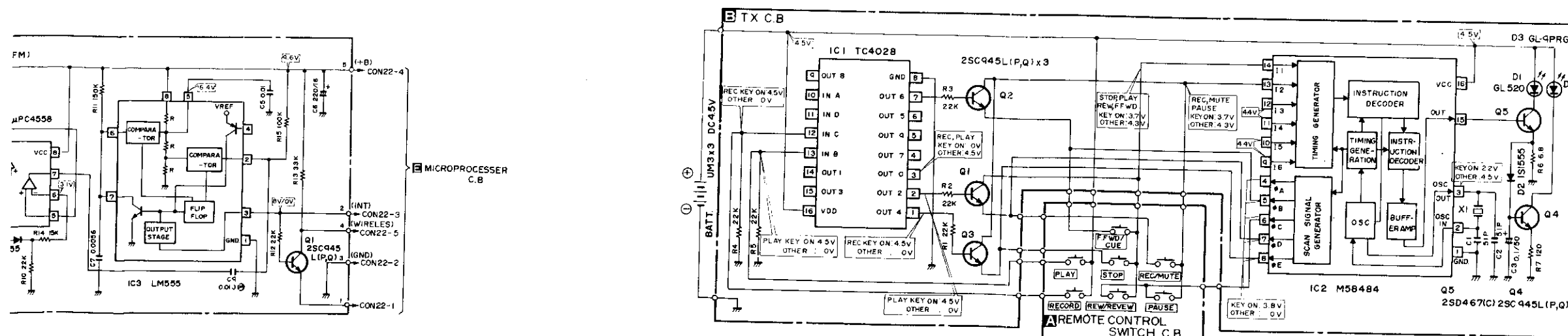


< REMOTE CONTROL SECTION >





< REMOTE CONTROL SECTION >



Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
4-1	82-303-285-01		Guide, Cassette R		1
4-2	82-303-347-01		Lever, Cassette pressure		1
4-3	82-303-355-01		Spring, Cassette pressure		1
4-4	82-303-348-01		Holder, Cassette pressure		1
4-5	82-303-289-01		Guide, Cassette L		1
4-6	82-303-346-01		Lever, Rec.-blocking		1
4-7	82-303-354-01		Spring, Rec.-blocking		1
4-8	82-303-350-01		Holder, Rec.-blocking		1
4-9	82-303-286-01		Lever, Brake		1
4-10	82-304-286-01		Flange collar B	AD-6900	2
4-11	82-304-238-01		Slide lever, Cassette pressure	AD-6900	1
4-12	82-481-311-01		Spring, Plunger		1
4-13	82-304-233-01		Holder, Plunger	AD-6900	1
4-14	82-304-244-01		Shaft, Play lever	AD-6900	1
4-15	82-304-248-01		Spring, Plunger	AD-6900	1
4-16	82-304-232-01		Lever, PLAY	AD-6900	1
4-17	82-304-243-01		Shaft B, Plunger	AD-6900	1
4-18	82-304-234-01		Slide plate, PLAY	AD-6900	1
4-19	82-304-249-01		Spring, Actuating	AD-6900	1
4-20	82-304-242-01		Shaft A, Plunger	AD-6900	1
4-21	82-304-283-01		Cushion, Plunger	AD-6900	1
4-22	82-304-307-01		Screw, Plunger	AD-6900	2
4-23	82-303-300-01		FR motor pulley		1
4-24	87-085-135-01		Bushing 3-4-5		3
4-25	87-087-029-01		Rubber cushion		3
4-26	82-303-340-01		Shaft bearing ass'y		1
4-27	82-304-701-01		Spacer, Insulation	AD-6900	1
4-28	82-303-259-01		Holder, Motor circuit board		1
4-29	82-304-260-01		Guide, Lock plate	AD-6900	1
4-30	82-303-233-01		Mechanism chassis sub ass'y		1
4-31	82-303-360-01		Supply reel platform ass'y		1
4-32	82-303-358-01		Shaft bearing ass'y		1
4-33	82-303-322-01		Spring, FR idler		1
4-34	82-303-271-01		FR idler pulley ass'y		1
4-35	82-303-335-01		Felt 6.4-14		1
4-36	82-303-353-01		Spring, FR lever		1
4-37	82-303-277-01		FR lever ass'y		1
4-38	82-303-292-01		FR eject lever		1
4-39	82-304-247-01		Rubber belt, Counter	AD-6900	1
4-40	82-392-352-01		Cap, Take-up reel platform	AD-6550	1
4-41	82-303-249-01		Take-up reel platform ass'y		1
4-42	82-303-309-01		Rubber, Main drive		1
4-43	82-303-330-01		Slip pulley ass'y		1
4-44	82-303-385-01		Rubber belt B, FR		1
4-45	82-439-426-01		Brake shoe A		2
4-46	82-303-318-01		Spring, Brake		1
4-47	82-303-297-01		Slide plate, Brake		1
4-48	87-038-039-01		Wire binder		1
4-49	82-303-314-01		Nut 2.6		2
4-50	82-303-291-01		Plate, Flywheel		1
4-51	82-385-311-01		Screw for thrust	AD-6300	1
4-52	82-303-246-01		Flywheel ass'y		1
4-53	82-303-310-01		Rubber belt, Flywheel		1
4-54	82-303-224-01		Spring, Flywheel		1
4-55	82-392-256-01		Shaft bearing ass'y	AD-6550	1
4-56	82-304-251-01		Spring, Lock lever	AD-6900	1
4-57	82-304-221-01		Lock lever ass'y	AD-6900	1
4-58	82-397-354-01		Drum wheel C ass'y	AD-6550	1
4-59	82-304-312-01		Idler oil E ass'y	AD-6900	1
4-60	82-304-250-01		Spring, Oil	AD-6900	1
4-61	82-303-349-01		Lever, CrO ₂		1
4-62	82-303-351-01		Holder, CrO ₂		1
4-63	82-303-356-01		T spring, CrO ₂		1

ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
1a	82-153-857-01		Printed indiv., Packing (H,E,K model only)	*	1	
1b	82-153-853-01		Printed indiv., Packing (U model only)	*	1	
2	82-304-852-11		Cushion L, Printed indiv.	AD-6900	1	
3	82-304-853-11		Cushion R, Printed indiv.	AD-6900	1	
4	82-307-858-01		Sub cushion, Rear	AD-6700	2	
5a	87-051-131-11		Poly-vinyl sack (for AC power cord) (H model only)		1	
5b	87-051-135-11		Poly-vinyl sack (for AC power cord) (U,E,K model only)		1	
6	87-056-564-01		Curl stopper		2	
7	87-056-607-01		Poly-vinyl sack (for case)		1	
8a	82-153-904-01		Instructions booklet (H model only)	*	1	
8b	82-153-907-01		Instructions booklet (U model only)	*	1	
8c	82-153-905-01		Instructions booklet (E model only)	*	1	
8d	82-153-906-01		Instructions booklet (K model only)	*	1	
9	87-051-132-01		Poly-vinyl sack		1	
10	87-051-175-01		Poly-tube A (for instruction)		1	
11	87-056-008-11		Label, AC power cord (K model only)		1	
12	87-056-009-41		Distributors list		1	
13	87-056-014-01		Tag, Main voltage (K model only)		1	
14	87-056-034-01		Service station list (U model only)		1	
15	87-056-035-01		Card, Limited warranty (U model only)		1	
16	87-056-036-01		Guarantee card (U model only)		1	
17	87-056-042-01		Label, Metal POP		1	
18	82-304-951-01		Driber	AD-6900	1	
19	86-121-100-01		Remote control unit, RC-100		1	
20a	86-944-012-01		Connection cord, CW-129BSK (H,U,K model only)		2	
20b	86-925-015-01		Connection cord, CW-115BSK (E model only)		1	
21	87-032-845-01		Siemens plug (H model only)		1	
22	87-047-063-01		Battery, SUM-3AE		3	
23	87-058-023-01		Cord binder		1	
24	87-058-024-01		Head cleaning pole ass'y		1	