

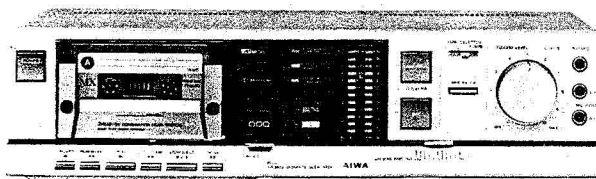
STEREO CASSETTE DECK

MODEL NO. AD-3200E, K

AIWA®

[SERVICE MANUAL]

Code No. 04-320-000-18



DATE OF ISSUE 7/1981

SPECIFICATIONS

Semiconductors:	6 ICs, 61 transistors, 40 diodes, 32 LED's	(400Hz, THD3%)	(METAL, CrO ₂ , DOLBY NR C ON)
Power supply:	E model AC 220V, 50/60 Hz K model AC 240V, 50/60 Hz	Channel separation: (1 kHz, 0 VU)	More than 67 dB (LH DOLBY NR C ON)
Power consumption:	14W	Cross talk: (1 kHz, 0 VU)	More than 30 dB
Dimensions:	420(W) x 110(H) x 250(D) mm	Erasing ratio: (125 Hz, 0 VU, +10 dB)	More than 60 dB
Weight:	5.5 kg	Bias frequency:	More than 57 dB
Track type:	4 tracks 2 channel	Frequency response:	85 kHz
Tape speed:	4.8 cm/s ± 1.5%		METAL 20 ~ 18,000 Hz
Wow and flutter:	Less than 0.038% (WRMS)		CrO ₂ 20 ~ 17,000 Hz
Automatic stop system:	Full auto stop		LH 20 ~ 16,000 Hz
Automatic shut-off action time:	Less than 5s.	Motor:	DC EG motor
Pinch roller pressure:	125 ± 15 g (1.23 ± 0.15N)	Head:	DX head (for Rec/Pb) Ferrite head (for Erase)
Take-up torque:	35 ⁺¹⁵ ₋₅ g-cm (343 ⁺¹⁴⁷ ₋₄₉ mN·m)	Inputs:	MIC max. sensitivity 0.3 mV (200 Ω ~ 10 kΩ suitable)
FF & rewind torque:	110 ± 20 g-cm (1078 ± 196 mN·m)		LINE IN max. sensitivity 50 mV (Optimum load impedance more than 50 kΩ)
FF & rewind time:	90 ± 5 s. (C-60)	Outputs:	LINE OUT Standard level 0.55V (0 VU) (Optimum load impedance more than 50 kΩ)
Playback output: (TTA-161)	0.775 ± 0.05V (LINE)		PHONES 8Ω
Playback noise:	Less than 1.8mV (METAL, CrO ₂ , DOLBY B NR ON) Less than 2.2 mV (LH DOLBY NR B ON)		
Rec./PB output: (TTA-119G)	0 VU ± 1 dB (LINE)		
Rec./Pb distortion:	Less than 1.5% (METAL) Less than 2.0% (CrO ₂) Less than 1.5% (LH)		
Rec./Pb SN ratio: (Unweighted)	More than 41/46 dB (METAL, DOLBY NR B OFF/ON) More than 43/46 dB (CrO ₂ , DOLBY NR B OFF/ON) More than 41/46 dB (LH, DOLBY NR B OFF/ON)		
(WTD-A)	More than 70 dB		

- Specifications and external appearance are subject to change without due to product improvement.
- Noise Reduction System and Headroom Extension System manufactured under license from Dolby Laboratories Licensing Corporation.
- The name "Dolby" and  symbol are trademarks of Dolby Laboratories Licensing Corporation.

EXPLODED VIEW-1



PARTS LIST

MECHANICAL PARTS

■ * mark in this part list shows exclusive part

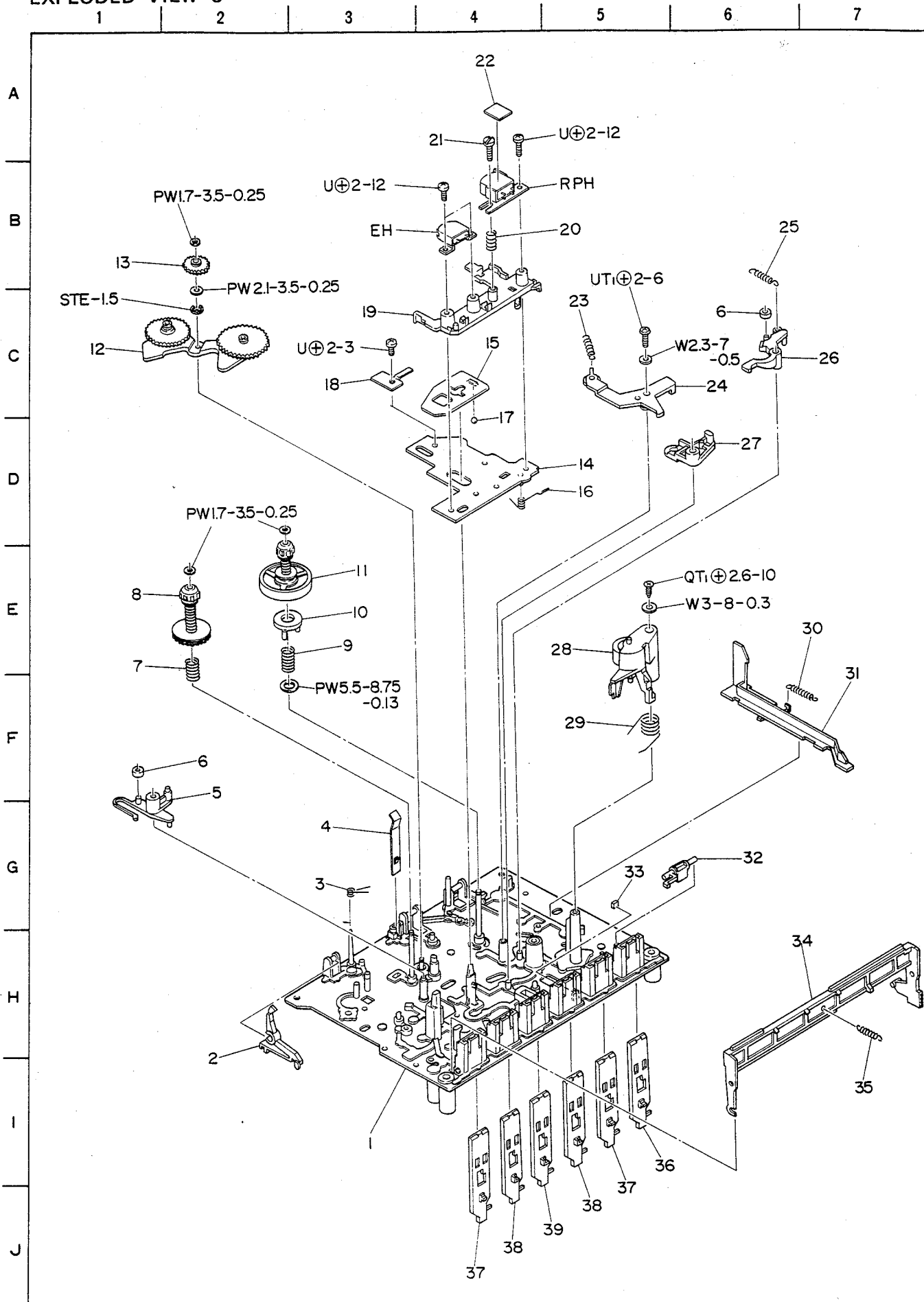
Ref. No.	Pat No.	Part No. Changed to	Description	Common Model	Q'ty	
1-1	82-176-009-01		Knob, REC A ₂	AD-3100	1	
1-2	82-175-029-01		Knob, REC B	AD-3500	1	
1-3	82-177-001-01		Panel, Front C	*	1	
1-4	82-175-031-01		Guide, DOLBY	AD-3500	1	
1-5	82-175-008-01		Decorative ring	AD-3500	1	
1-6	82-175-032-01		Guide, FUNCTION	AD-3500	1	
1-7	82-176-016-01		Guide, DOLBY 2	AD-3100	1	
1-8	82-175-010-01		Cap	AD-3500	2	
1-9	82-176-215-01		Adhesive sheet, 7φ	AD-3100	2	
1-10	82-175-213-01		Screw, 3-6.5	AD-3500	2	
1-11	82-175-004-01		Window, Cassette	AD-3500	1	
1-12	82-175-033-01		Cassette plate	AD-3500	1	
1-13	82-304-044-01		Guide, Light		1	
1-14	82-175-036-01		Instruction sheet, Bias	AD-3500	1	
1-15	82-175-011-01		Window, Meter	AD-3500	1	
1-16	82-177-005-01		Plate, Meter	*	1	
1-17	82-176-216-01		Leaf washer, 9.6-13-0.8	AD-3100	2	
1-18	87-081-910-01		FW 4-8-0.65		1	
1-19	87-081-911-01		FW 3.6-8-0.5		2	
1-20	82-176-218-01		Himeron cloth, Bottom	AD-3100	1	
1-21	82-175-034-01		Push-key	AD-3500	1	
1-22	82-177-003-01		Cassette box, C	*	1	
1-23	82-175-203-01		P-spring, Cassette holder	AD-3500	1	
1-24	82-175-212-01		T-spring, Cassette open	AD-3500	1	
1-25	82-177-002-01		Decorative plate B, Cassette	*	1	
1-26	82-175-210-01		Holder, Oil dump	AD-3500	1	
1-27	82-175-207-01		Oil-dump bearing	AD-3500	1	
1-28	82-534-264-01		Gear, Oil dump		1	
1-29	82-176-220-01		G-cushion, Oil dump	AD-3100	1	
1-30	82-177-008-01		Cabinet, Front C	*	1	
1-31	82-168-025-01		Rubber foot	AD-3600	1	
1-32	87-085-161-01		Foot		1	
1-33	82-162-228-01		G-cushion, Foot		1	
1-34	82-168-018-01		Cabinet, Bottom	AD-3600	1	
1-35	82-175-009-01		Cabinet, Steel	AD-3500	1	

1	2	3	4	5	6	7
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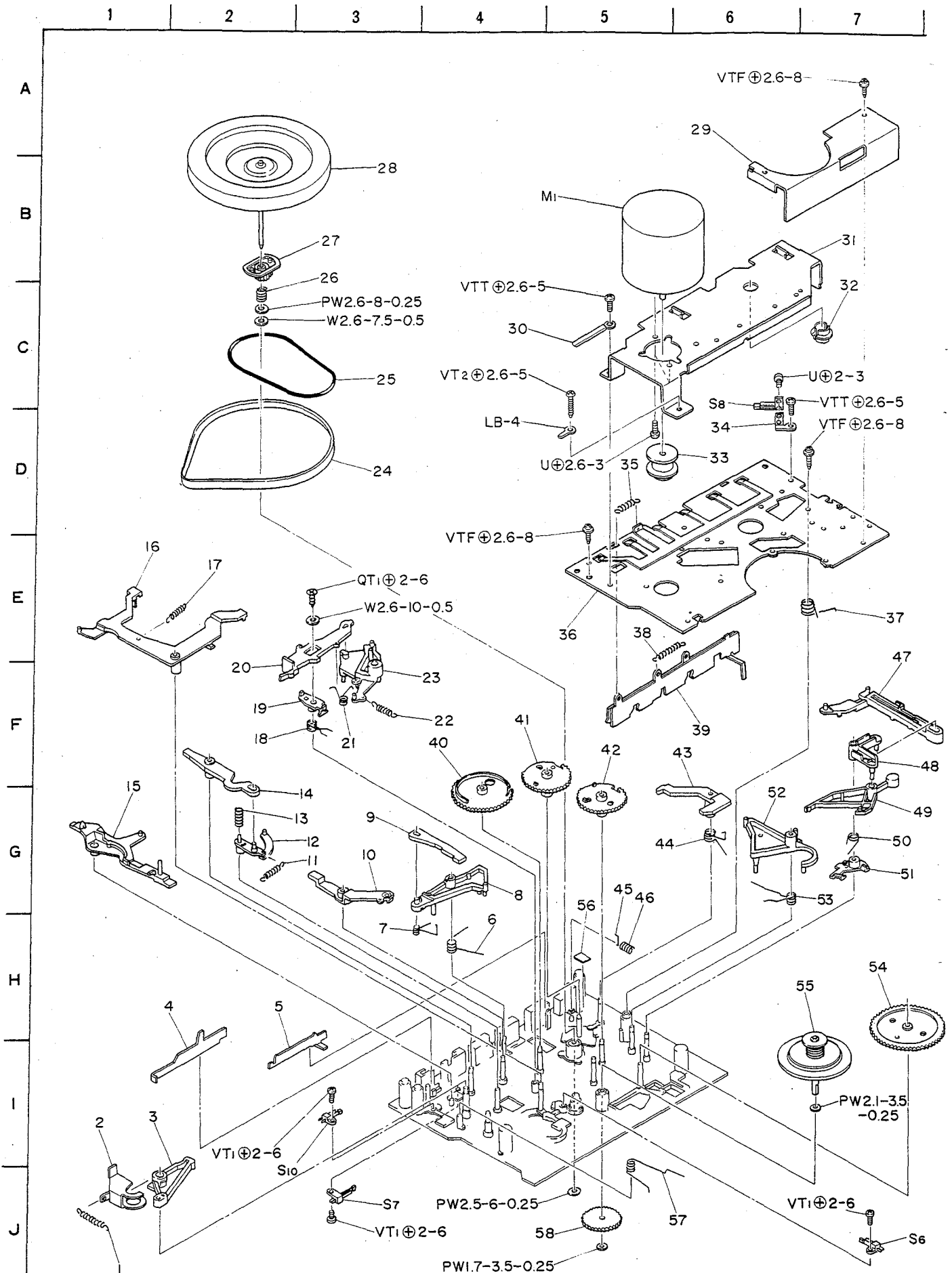
Ref. No.	Pat No.	Part No. Changed to	Description	Common Model	Q'ty	
2-1	82-176-005-01		Push-button, POWER B	AD-3100	3	
2-2	82-175-203-01		Holder, Power-button	AD-3500	3	
2-3	82-175-205-01		C-spring, POWER	AD-3500	3	
2-4	87-040-146-01		Counter		1	
2-5	82-176-008-01		Knob, Slide volume B	AD-3100	1	
2-6	82-176-006-01		Push-button, FUNCTION B	AD-3100	1	
2-7	82-176-007-01		Knob, Slide switch B	AD-3100	1	
2-8	82-175-202-01		Holder, Circuit board	AD-3500	1	
2-9	82-175-208-01		Chassis A, Amp.	AD-3500	1	
2-10	82-176-212-01		Holder, Cabinet L	AD-3100	1	
2-11	87-038-039-01		Wire binder		2	
2-12	82-176-204-01		Holder, Pulley	AD-3100	1	
2-13	87-071-019-01		Roller 7φ		1	
2-14	87-085-166-01		Holder, AC power cord		1	
2-15	82-168-232-01		U-cushion	AD-3600	2	
2-16	82-538-210-01		Belt, Counter		1	
2-17	82-176-202-01		Holder, Mechanism ass'y	AD-3100	1	
2-18	82-176-201-01		Lever, REC	AD-3100	1	
2-19	82-176-211-01		String, REC switch	AD-3100	1	
2-20	82-176-205-01		E-spring, REC	AD-3100	1	
2-21	82-168-213-01		Holder, Circuit board	AD-3600	1	
2-22a	82-177-004-01		Panel, Rear E (E model only)	*	1	
2-22b	82-177-010-01		Panel, Rear K (K model only)	*	1	
2-23a	87-034-877-01		AC power cord, EE (E model only)		1	
2-23b	87-034-872-01		AC power cord, BS (K model only)		1	
2-24	82-304-656-01		Heat sink		1	
2-25	87-084-063-01		Nylon rivet, 3-55		1	
2-26	82-176-213-01		Holder, Cabinet R	AD-3100	1	
2-27	82-175-209-01		Chassis B, Amp.	AD-3500		

EXPLODED VIEW-3



Ref. No.	Pat No.	Part No. Changed to	Description	Common Model	Q'ty	
3-1	82-585-325-01		Outsert ass'y	AD-3100	1	
3-2	82-585-255-01		REC blocking lever		1	
3-3	82-585-294-01		T-spring, Center shift		1	
3-4	82-585-319-01		P-spring, Cassette holder		1	
3-5	82-585-252-01		Lever, Brake L		1	
3-6	82-585-286-01		G-cushion, Brake		2	
3-7	82-585-290-01		C-spring, Back tension		1	
3-8	82-585-215-01		Supply reel platform ass'y		1	
3-9	82-585-292-01		C-spring, slip disk		1	
3-10	82-585-272-01		Slip disk T		1	
3-11	82-585-210-01		Take-up reel platform ass'y		1	
3-12	82-585-231-01		FR Lever ass'y		1	
3-13	82-585-235-01		Gear, REW A		1	
3-14	82-585-208-01		Chassis, Slide		1	
3-15	82-585-284-01		P-spring, Slide		1	
3-16	82-585-295-01		T-spring, Slide		1	
3-17	87-073-005-01		Steel ball 2φ		1	
3-18	82-585-349-01		Holder, Idler lever		1	
3-19	82-585-209-01		Head base		1	
3-20	82-585-291-01		C-spring, RPH		1	
3-21	82-176-219-01		Azimuth adjust screw		1	
3-22	87-057-620-01		Label, Head		1	
3-23	82-585-313-01		E-spring, Play idler		1	
3-24	82-585-223-01		Play idler lever ass'y		1	
3-25	82-585-312-01		E-spring, Brake R		1	
3-26	82-585-253-01		Lever, Brake R		1	
3-27	82-585-265-01		Lever, REV		1	
3-28	82-585-364-01		Pinch Lever B ass'y		1	
3-29	82-585-296-01		T-spring, Pinch lever		1	
3-30	82-585-311-01		E-spring, Lid lock		1	
3-31	82-585-254-01		Eject slide plate		1	
3-32	82-585-279-01		Eject lever A		1	
3-33	82-585-338-01		G-cushion, Play lever		1	
3-34	82-585-278-01		Lock plate		1	
3-35	82-585-317-01		E-spring, Lock button		1	
3-36	82-585-361-01		Plate, PAUSE button		1	
3-37	82-585-337-01		Plate, REC button		2	
3-38	82-585-343-01		Plate, FR button A		2	
3-39	82-585-277-01		Plate, FR button		1	

EXPLODED VIEW-4



Ref. No.	Pat No.	Part No. Changed to	Description	Common Model	Q'ty	
4-1	82-585-314-01		E-spring, REC		1	
4-2	82-585-267-01		REC Lever B		1	
4-3	82-585-266-01		REC Lever A		1	
4-4	82-585-281-01		Slide plate, Motor switch		1	
4-5	82-585-283-01		Slide plate, FR auto		1	
4-6	82-585-306-01		T-spring, Play lever		1	
4-7	82-585-307-01		T-spring, REC lever		1	
4-8	82-585-249-01		Lever, Play		1	
4-9	82-585-250-01		Lever, REC drive		1	
4-10	82-585-258-01		Trigger Lever, PLAY		1	
4-11	82-585-308-01		E-spring, REW lever		1	
4-12	82-585-260-01		Lever, REW		1	
4-13	82-439-369-01		Slip spring	TPR-300	1	
4-14	82-585-259-01		Trigger Lever, REW		1	
4-15	82-585-261-01		Trigger Lever, REC		1	
4-16	82-585-257-01		Trigger Lever, FF		1	
4-17	82-585-301-01		E-spring, Trigger PLAY		1	
4-18	82-585-297-01		T-spring, FR lever A		1	
4-19	82-585-264-01		FR Lever D		1	
4-20	82-585-263-01		FR Lever C		1	
4-21	82-585-298-01		T-spring, FR lever B		1	
4-22	82-585-311-01		E-spring, Lid lock		2	
4-23	82-585-262-01		FR lever B		1	
4-24	82-176-207-01		Rubber belt, Flywheel B	AD-3100	1	
4-25	82-585-336-01		Rubber belt, FR B		1	
4-26	82-176-208-01		C-spring, Flywheel B	AD-3100	1	
4-27	82-585-243-01		Gear, Flywheel		1	
4-28	82-585-229-01		Flywheel ass'y		1	
4-29	82-176-217-01		Cover, auto gear	AD-3100	1	
4-30	87-038-039-01		Wire binder		1	
4-31	82-585-281-01		Holder, Motor		1	
4-32	82-585-326-01		Thrust bearing B		1	
4-33	82-585-242-01		Motor pulley		1	
4-34	82-585-323-01		Holder, PAUSE switch		1	
4-35	82-585-315-01		E-spring, Slide plate		1	
4-36	82-585-203-01		Mechanism chassis B ass'y		1	
4-37	82-585-321-01		T-spring, Auto kick		1	
4-38	82-585-332-11		E-spring, REC lock		1	
4-39	82-585-327-01		Slide plate key ass'y		1	
4-40	82-585-244-01		Gear, Play cam		1	
4-41	82-585-246-01		Gear, PAUSE cam		1	
4-42	82-585-245-01		Gear, FR cam		1	
4-43	82-585-256-01		Trigger lever, PAUSE		1	
4-44	81-585-304-01		T-spring, Trigger PAUSE		1	
4-45	82-585-362-01		Shaft lock B		1	
4-46	82-585-285-01		C-spring, Lock		1	
4-47	82-585-270-01		Plate, Auto kick		1	
4-48	82-585-269-01		Lever, auto B		1	
4-49	82-585-268-01		Lever, auto A		1	
4-50	82-585-299-01		T-spring, Auto eject		1	
4-51	82-585-271-01		Lever, Auto eject		1	
4-52	82-585-248-01		Lever, PAUSE		1	
4-53	82-585-300-01		T-spring, FR cam		1	
4-54	82-585-247-01		Gear, Auto kick		1	
4-55	82-587-217-01		FR slip pulley ass'y	CS-880	1	
4-56	82-585-357-01		Mylar 4-6-0.1		1	
4-57	82-585-303-01		T-spring, Trigger REC		1	
4-58	82-585-216-01		Gear, Drive		1	

ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
1	82-177-851-01		Printed indiv., Packing	*	1	
2	82-176-852-01		Cushion L, Printed indiv.	*	1	
3	82-176-853-01		Cushion R, Printed indiv.	*	1	
4	87-051-136-11		Poly-vinyl sack		1	
5	87-056-607-01		Poly-vinyl sack		1	
6a	82-177-901-01		Instructions booklet (E model only)	*	1	
6b	82-177-902-01		Instructions booklet (K model only)	*	1	
7	87-051-175-01		Poly-tube A		1	
8	87-056-008-11		Label, AC power cord (K model only)		1	
9	86-944-012-01		Connection cord, CW-129BSK		2	
10	87-056-009-41		Distributors list		2	

ELECTRICAL MAIN PARTS LIST

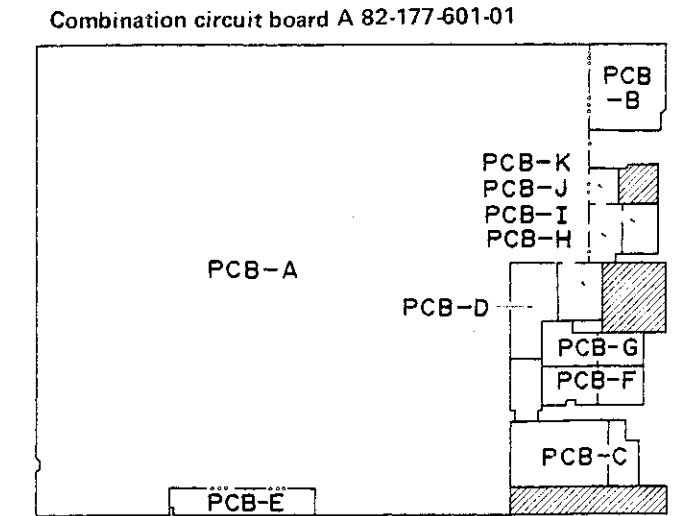
Symbol No.	Part No.	Description
◀ MAIN CIRCUIT BOARD SECTION ▶		
PCB-A	*	Main circuit board
IC1,2	87-027-738-01	IC, HA11226
IC5	87-027-235-01	IC, NJM4558D
IC6	87-027-739-01	IC, NJM4556D
Q1	89-408-804-51	Transistor, 2SD880Y(GR)
Q2,4,5,6, 703,704	89-318-156-01	Transistor, 2SC1815(BL)
Q3	89-313-834-51	Transistor, 2SC1383RS
Q7,821,822	89-107-335-01	Transistor, 2SA733(K)
Q101,701, 702	89-320-011-01	Transistor, 2SC2001(K)
Q102	89-313-846-01	Transistor, 2SC1384(R)
Q301,302, 303,304	89-322-406-01	Transistor, 2SC2240(BL)
Q305,306, 307,308, 501,502, 503,504, 601,602, 603,604, 605,606, 607,608, 609,610, 611,612, 801~820, 823,824	89-309-456-01	Transistor, 2SC945L(P)
D1	87-027-662-01	Zener diode, HZ22-1 L
D2	87-027-686-01	Zener diode, HZ12A1
D3,4	87-027-376-01	Diode, 1B4841
D5	87-027-365-01	Diode, S5277B
D6,7,8,9, 10,12,13, 14,803, 804,807, 808,809, 810,813, 814,816, 816,817, 821,822, 823,824	87-027-097-01	Diode, 1S1555
D11	87-027-479-01	Zener diode, HZ27-2
D701,702, 805,806, 811,812, 819,820	88-052-188-01	Diode, 1S188(FM)
D801,802, 825	87-027-475-01	Zener diode, HZ-6B1
L101	82-176-628-01	OSC coil
L601,602	82-304-701-01	Coil, 22mH
L603,604	87-005-093-01	Micro inductor coil, 4.7mH
L801,802, 803,804	87-005-147-01	Coil, 36mH
LPF1,2	87-030-061-01	Low-pass filter, 85K
J1,2,3,4	87-049-055-01	Pin jack, 4P (LINE IN L,R, LINE OUT L,R)
S1	82-177-632-01	Slide switch (REC/PB)
SFR101,102	87-021-570-01	Semi-fixed resistor, 100kΩ-B
SFR301,302, 701,702	87-021-569-01	Semi-fixed resistor, 50kΩ-B
SFR601,602	87-021-568-01	Semi-fixed resistor, 20kΩ-B
SFR801,802, 803,804	87-021-565-01	Semi-fixed resistor, 2kΩ-B

Symbol No.	Part No.	Description
SFR805,806	87-021-567-01	Semi-fixed resistor, 10kΩ-B
< Resistors >		
R101	87-029-029-01	68Ω ¼W Fuse resistor
R7,8	87-025-323-01	180Ω 2W Metal film resistor
R10	87-025-072-01	100Ω 1W Metal film resistor
R829,830	87-025-271-01	5.1kΩ ¼W Metal film resistor
R823,824, 863,864	87-025-272-01	13kΩ ¼W Metal film resistor
< Capacitors >		
C835,836	87-015-329-01	0.33μF 50V Electrolytic LL
C301,302	87-015-247-01	10μF 25V Electrolytic LL
C853,854	87-015-427-01	0.15μF 25V Aluminum solid
C833,834	87-015-429-01	0.33μF 25V Aluminum solid
C617,618	87-014-037-01	150pF PP
C105	87-014-128-01	1500pF 630V PP
C859,860 863,864	87-014-063-01	1800pF PP
C815,816, 823,824, 845,846, 869,870	87-014-118-81	0.015μF ±2% PP
◀ MIC CIRCUIT BOARD SECTION ▶		
PCB-B	*	MIC circuit board
J5,6	87-049-051-01	Jack, 3.5φ w/switch
◀ DOLBY SW CIRCUIT BOARD SECTION ▶		
PCB-C	*	Dolby SW circuit board
S2,4	82-175-627-01	Push-switch (DOLBY-NR, DOLBY B/C)
PIN	87-032-638-01	Pin, 8P
◀ LED-1 CIRCUIT BOARD SECTION ▶		
PCB-D	*	LED-1 circuit board
D51	87-027-671-01	LED, LN417YP
D52	87-027-543-01	LED, LN317GP
D53	87-027-542-01	LED, LN217RP
◀ LH BIAS FINE CIRCUIT BOARD SECTION ▶		
PCB-E	*	LH bias fine circuit board
VR2	87-021-680-01	Slide volume 500Ω-B (LH BIAS FINE)
◀ MPX FILTER SW CIRCUIT BOARD SECTION ▶		
PCB-F	*	MPX filter SW circuit board
S3	82-177-630-01	Push-switch (MPX FILTER)
PIN	87-032-636-01	Pin, 6P
◀ REC VR CIRCUIT BOARD SECTION ▶		
PCB-G	*	REC VR circuit board
VR1	87-021-679-01	Volume, 50kΩ-A (RECORD LEVEL)
PIN	87-032-635-01	Pin, 5P
◀ LED-2 CIRCUIT BOARD SECTION ▶		
PCB-H	*	LED-2 circuit board
D54	87-027-778-01	LED, LT9000D (R)
D55	87-027-779-01	LED, LT9002N (G)
◀ TAPE SELECTOR CIRCUIT BOARD SECTION ▶		
PCB-I	*	Tape selector circuit board
S5	82-160-628-01	Slide switch (TAPE SELECTOR)

Symbol No.	Part No.	Description
◀ POWER SW CIRCUIT BOARD SECTION ▶		
PCB-J	*	Power SW circuit board
S11	87-031-668-01	Push-switch (POWER)
◀ HEADPHONE CIRCUIT BOARD SECTION ▶		
PCB-K	*	Headphone circuit board
J7	82-168-633-01	Jack, 6.3φ(PHONES)
PIN	87-032-633-01	Pin, 3P
◀ FUSE CIRCUIT BOARD SECTION ▶		
PCB-L	82-177-625-01	Fuse circuit board
F1,2	87-035-219-01	Fuse, "T" 500mA
	87-098-013-01	Fuse label, "T" 500mA
	87-033-147-01	Fuse clamp
◀ LED MODULE CIRCUIT BOARD SECTION ▶		
PCB-M	87-027-759-01	LED module circuit board
◀ LED-3 CIRCUIT BOARD SECTION ▶		
PCB-N	82-176-639-01	LED-3 circuit board
D56	87-027-646-01	LED, SEL1112R
D57	87-027-647-01	LED, SEL1941D
D58	87-027-648-01	LED, SEL1331G
◀ MISCELLANEOUS ▶		
T1	82-176-653-01	Power transformer (E model only)
T1	82-176-654-01	Power transformer (K model only)
RPH	87-046-200-01	REC/PB head
EH	87-046-196-01	Erase head
M1	87-045-135-01	Motor, DC-EG
PL1	82-176-635-01	Pilot lamp, 14V 40mA
S6,7	87-031-615-01	Leaf switch (CUE/REV, PLAY)
S8	87-031-548-01	Leaf switch (PAUSE)
S9	87-031-491-01	Micro switch (REC)
S10	87-031-361-01	Leaf switch (MOTOR)
	87-034-877-01	AC power cord (E model only)
	87-034-872-01	AC power cord (K 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.

Note; Combination Circuit Board
The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary, please order the entire circuit board.



Description	Symbol No.	Part No.	Description
	SFR805,806	87-021-567-01	Semi-fixed resistor, 10k Ω -B
			< Resistors >
	R101	87-029-029-01	68 Ω 1/4W Fuse resistor
	R7,8	87-025-323-01	180 Ω 2W Metal film resistor
	R10	87-025-072-01	100 Ω 1W Metal film resistor
30Y(GR)	R829,830	87-025-271-01	5.1k Ω 1/4W Metal film resistor
315(BL)	R823,824, 863,864	87-025-272-01	13k Ω 1/4W Metal film resistor
83RS			< Capacitors >
33(K)	C835,836	87-015-329-01	0.33 μ F 50V Electrolytic LL
01(K)	C301,302	87-015-247-01	10 μ F 25V Electrolytic LL
84(R)	C853,854	87-015-427-01	0.15 μ F 25V Aluminum solid
40(BL)	C833,834	87-015-429-01	0.33 μ F 25V Aluminum solid
	C617,618	87-014-037-01	150pF PP
5L(P)	C105	87-014-128-01	1500pF 630V PP
	C859,860	87-014-063-01	1800pF PP
	863,864		
	C815,816, 823,824, 845,846, 869,870	87-014-118-81	0.015 μ F $\pm$ 2% PP
			< MIC CIRCUIT BOARD SECTION >
	PCB-B	*	MIC circuit board
	J5,6	87-049-051-01	Jack, 3.5 ϕ w/switch
			< DOLBY SW CIRCUIT BOARD SECTION >
	PCB-C	*	Dolby SW circuit board
	S2,4	82-175-627-01	Push-switch (DOLBY-NR, DOLBY B/C)
	PIN	87-032-638-01	Pin, 8P
			< LED-1 CIRCUIT BOARD SECTION >
	PCB-D	*	LED-1 circuit board
	D51	87-027-671-01	LED, LN417YP
	D52	87-027-543-01	LED, LN317GP
	D53	87-027-542-01	LED, LN217RP
			< LH BIAS FINE CIRCUIT BOARD SECTION >
	PCB-E	*	LH bias fine circuit board
2	VR2	87-021-680-01	Slide volume 500 Ω -B (LH BIAS FINE)
			< MPX FILTER SW CIRCUIT BOARD SECTION >
	PCB-F	*	MPX filter SW circuit board
1	S3	82-177-630-01	Push-switch (MPX FILTER)
	PIN	87-032-636-01	Pin, 6P
			< REC VR CIRCUIT BOARD SECTION >
4.7mH	PCB-G	*	REC VR circuit board
	VR1	87-021-679-01	Volume, 50k Ω -A (RECORD LEVEL)
	PIN	87-032-635-01	Pin, 5P
			< LED-2 CIRCUIT BOARD SECTION >
	PCB-H	*	LED-2 circuit board
	D54	87-027-778-01	LED, LT9000D (R)
	D55	87-027-779-01	LED, LT9002N (G)
			< TAPE SELECTOR CIRCUIT BOARD SECTION >
	PCB-I	*	Tape selector circuit board
20k Ω -B 2k Ω -B	S5	82-160-628-01	Slide switch (TAPE SELECTOR)

Symbol No.	Part No.	Description
		< POWER SW CIRCUIT BOARD SECTION >
PCB-J	*	Power SW circuit board
S11	87-031-668-01	Push-switch (POWER)
		< HEADPHONE CIRCUIT BOARD SECTION >
PCB-K	*	Headphone circuit board
J7	82-168-633-01	Jack, 6.3 ϕ (PHONES)
PIN	87-032-633-01	Pin, 3P
		< FUSE CIRCUIT BOARD SECTION >
PCB-L	82-177-625-01	Fuse circuit board
F1,2	87-035-219-01	Fuse, "T" 500mA
	87-098-013-01	Fuse label, "T" 500mA
	87-033-147-01	Fuse clamp
		< LED MODULE CIRCUIT BOARD SECTION >
PCB-M	87-027-759-01	LED module circuit board
		< LED-3 CIRCUIT BOARD SECTION >
PCB-N	82-176-639-01	LED-3 circuit board
D56	87-027-646-01	LED, SEL1112R
D57	87-027-647-01	LED, SEL1941D
D58	87-027-648-01	LED, SEL1331G
		< MISCELLANEOUS >
T1	82-176-653-01	Power transformer (E model only)
T1	82-176-654-01	Power transformer (K model only)
RPH	87-046-200-01	REC/PB head
EH	87-046-196-01	Erase head
M1	87-045-135-01	Motor, DC-EG
PL1	82-176-635-01	Pilot lamp, 14V 40mA
S6,7	87-031-615-01	Leaf switch (CUE/REV, PLAY)
S8	87-031-548-01	Leaf switch (PAUSE)
S9	87-031-491-01	Micro switch (REC)
S10	87-031-361-01	Leaf switch (MOTOR)
	87-034-877-01	AC power cord (E model only)
	87-034-872-01	AC power cord (K model only)

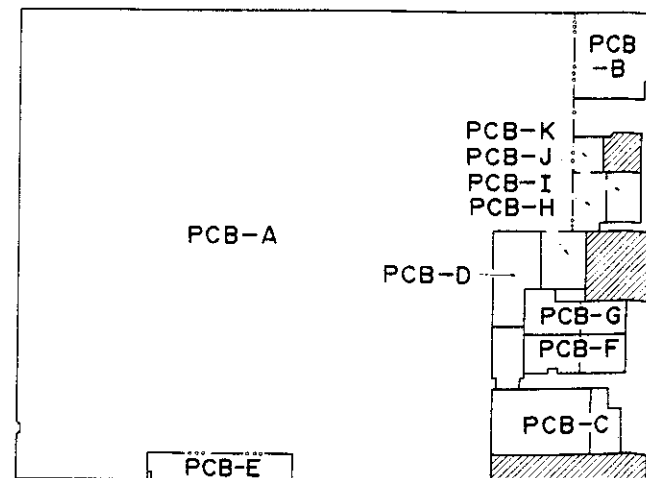
 Safety component symbol

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.

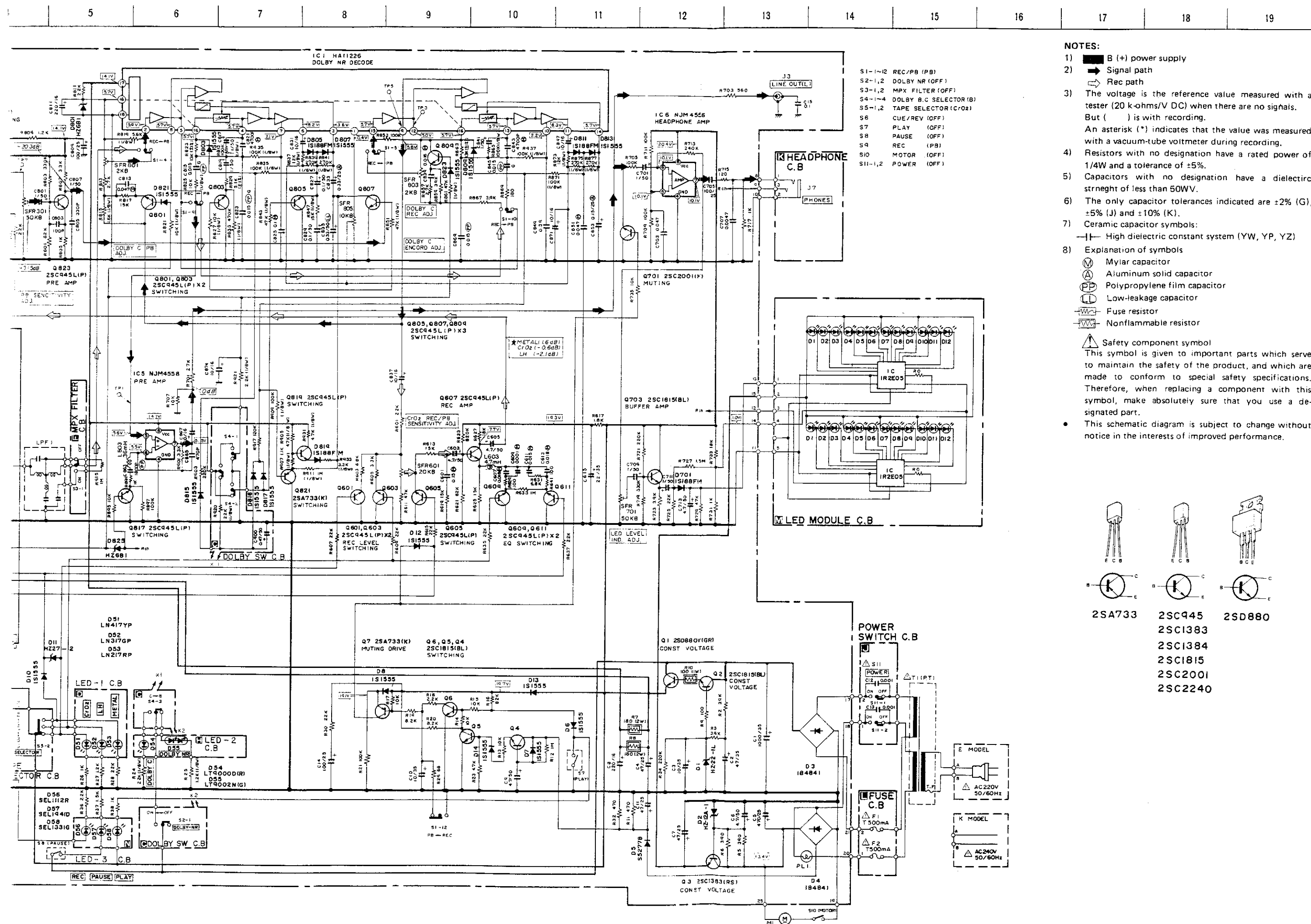
Note: Combination Circuit Board

The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary, please order the entire circuit board.

Combination circuit board A 82-177-601-01

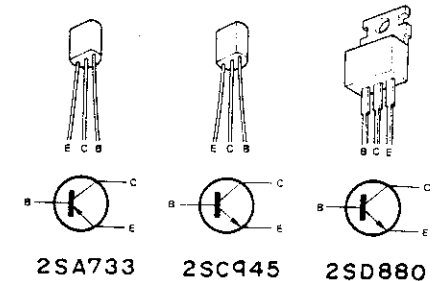


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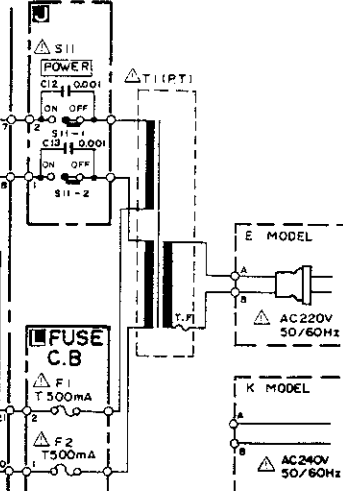


NOTES:

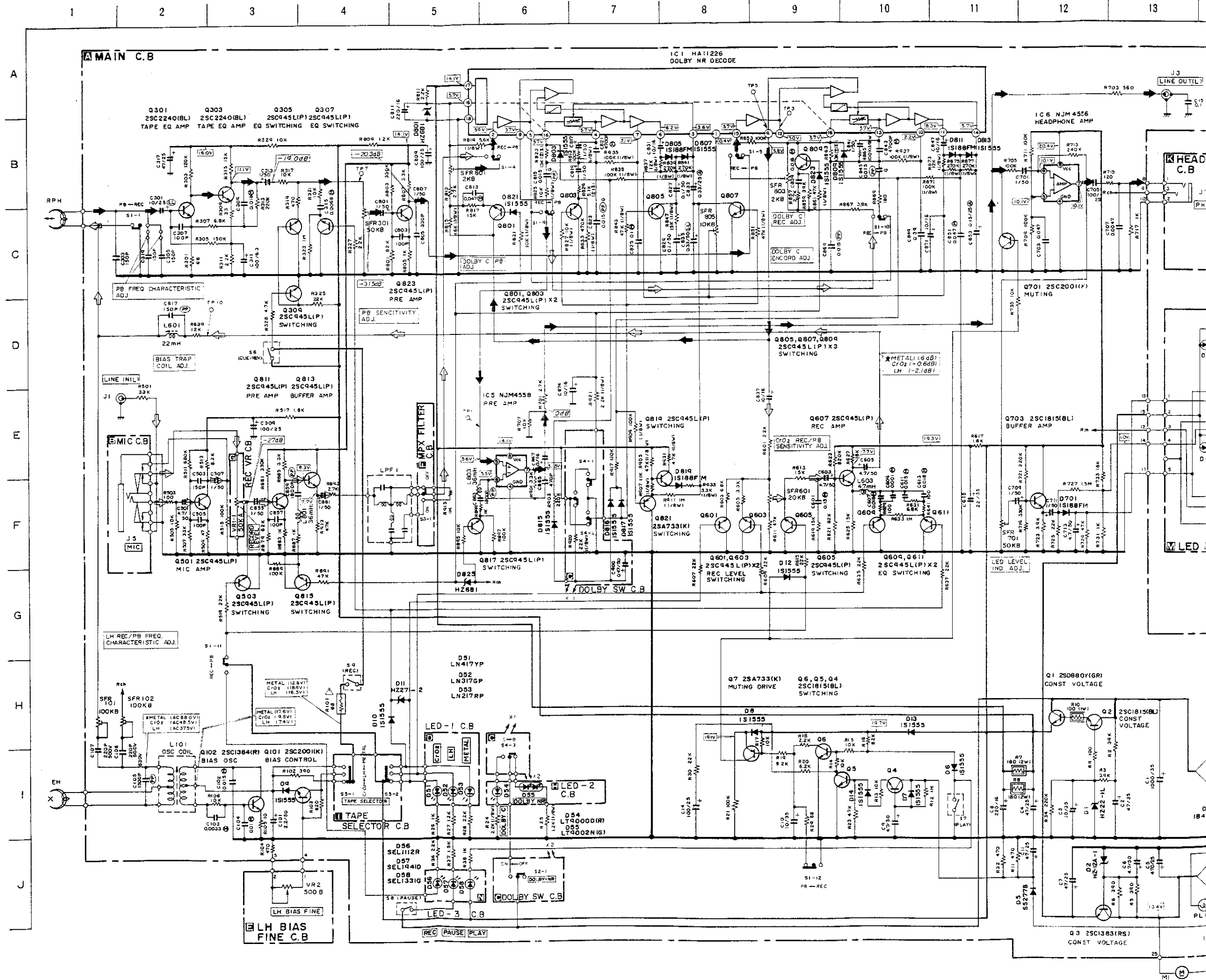
- 1) B (+) power supply
- 2) Signal path
Rec path
- 3) The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals. But () is with recording.
An asterisk (*) indicates that the value was measured with a vacuum-tube voltmeter during recording.
- 4) Resistors with no designation have a rated power of 1/4W and a tolerance of $\pm 5\%$.
- 5) Capacitors with no designation have a dielectric strength of less than 50WV.
- 6) The only capacitor tolerances indicated are $\pm 2\%$ (G), $\pm 5\%$ (J) and $\pm 10\%$ (K).
- 7) Ceramic capacitor symbols:
— High dielectric constant system (YW, YP, YZ)
- 8) Explanation of symbols
Mylar capacitor
Aluminum solid capacitor
Polypropylene film capacitor
Low-leakage capacitor
Fuse resistor
Nonflammable resistor
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.
- This schematic diagram is subject to change without notice in the interests of improved performance.

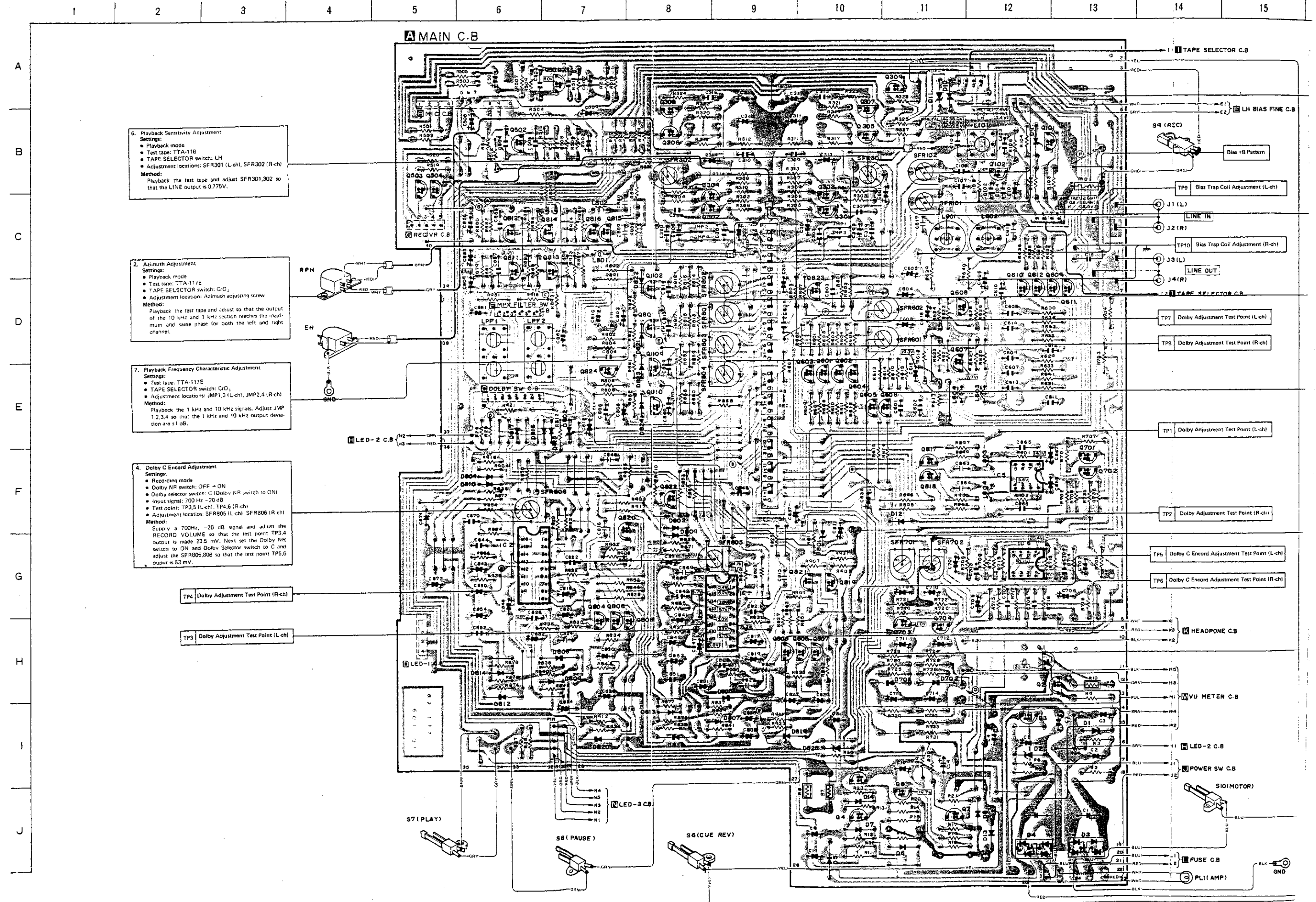


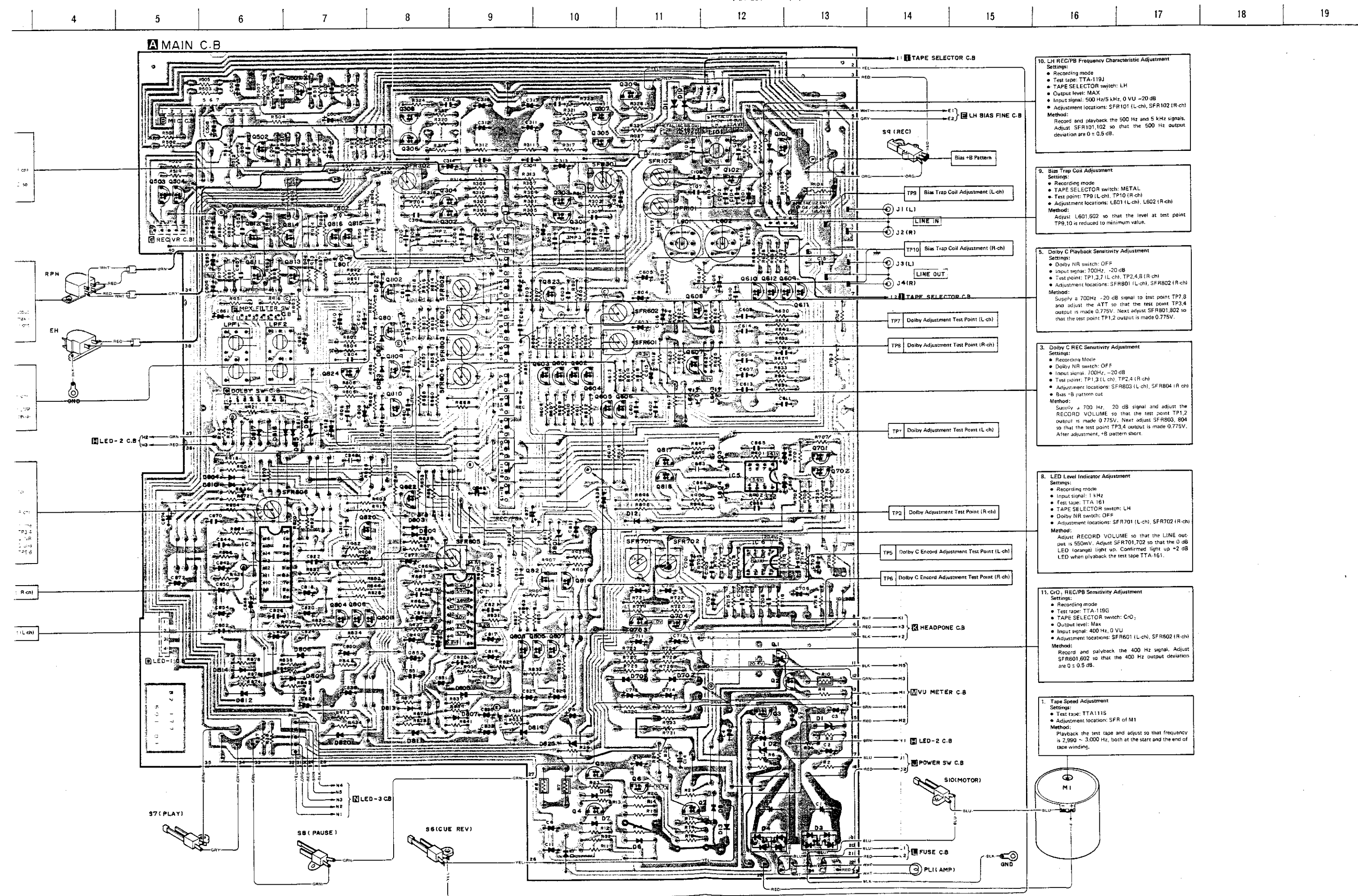
POWER SWITCH C.B.



SCHEMATIC DIAGRAM

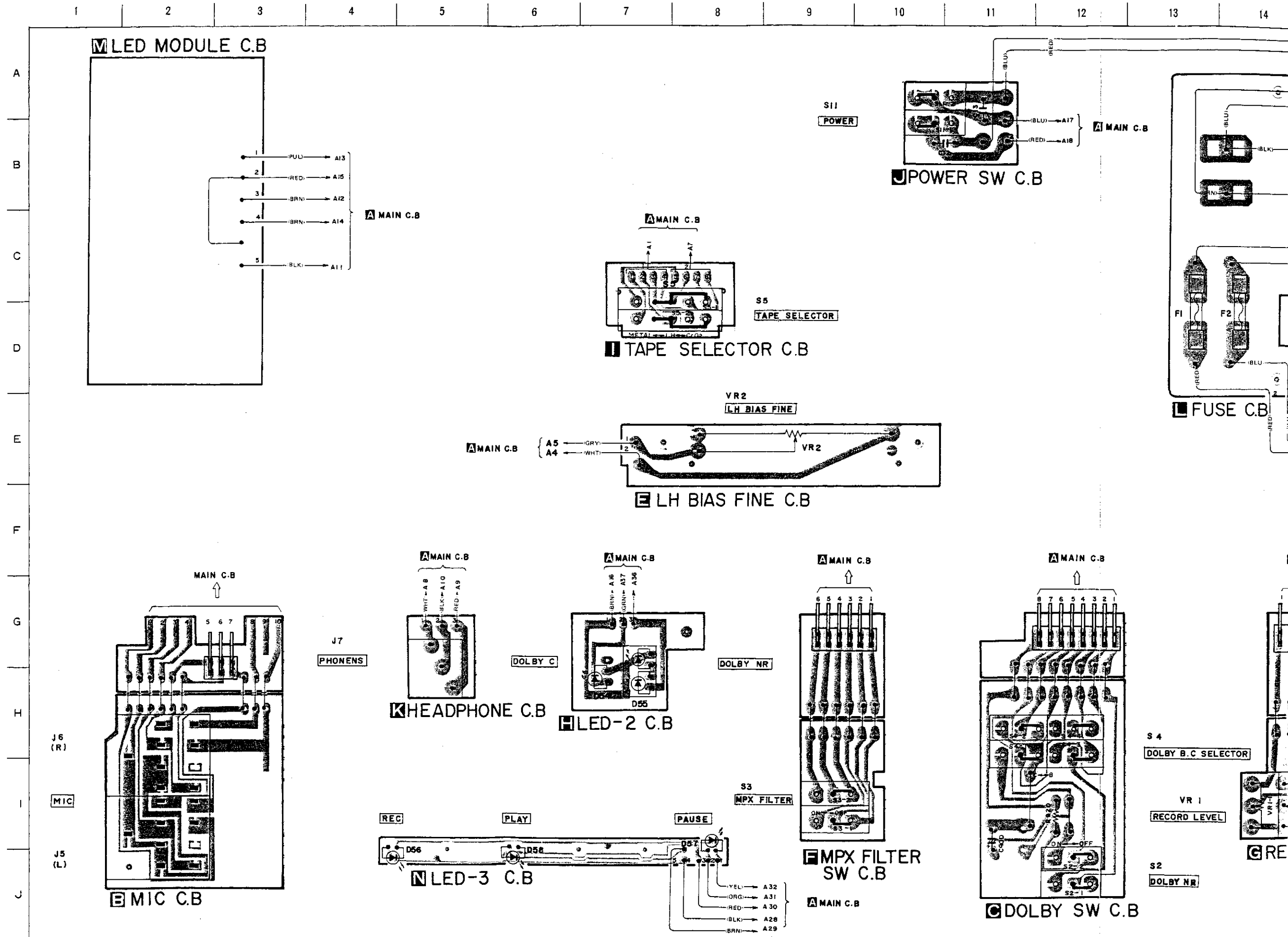






- NOTES (1) B(+) Pattern Others pattern
 (2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.
 An asterisk (*) indicates that the value was measured with a vacuum-tube voltmeter during recording.

WIRING-2



B(+) Pattern Others pattern

The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.
An asterisk (*) indicates that the value was measured with a vacuum-tube voltmeter during recording.

4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
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