

AIWA®

SERVICE MANUAL

S/M Code No. 85-011
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STEREO PREAMPLIFIER

MODEL NO.

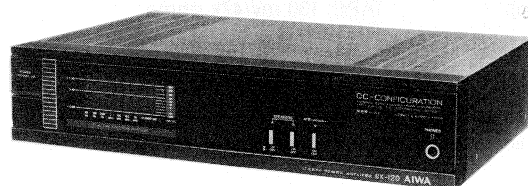
GX-120



STEREO POWER AMPLIFIER

MODEL NO.

BX-120

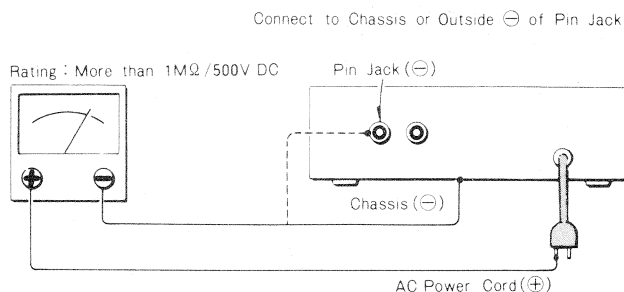


TYPE. HB, UB, EB, KB, ZB

Follow the instructions carefully, which will allow the user to optimise the products' performance and give many years of service.

1. No scratch and melting shall be made to covered lead-wires of an a.c. primary circuit including mains leads.
2. No illegibility shall be given to the specification plate, the caution labels, the fuse labels and others.
3. When, on pattern sides of circuit boards, additional repair-parts have been made up, the parts shall be firmly glued to circuit boards or other components, unless the parts can be attached firmly.
4. The following matters shall be maintained as they are, when repairing.
 - 1) Soldering of lead-wire ends
 - * Care should be taken of the space distance in an a.c. primary circuit as well as soldering.
 - 2) Wiring and holding of lead-wires with wire-clips and binders
 - 3) Materials of lead-wires
 - * e.g.; For UL models, lead-wires to be used shall be approved or accepted by the UL.
 - 4) Location of all kinds of insulators
 - 5) Setting of voltage selector switch
 - * Set the Voltage Selector Switch to 240V, 220V, or 120V, According to your Local Voltage.

5. After repaired, the insulation resistance or leakage current shall be measured with $500 \pm 5V$ D.C and shall be not less than $1M\Omega$.
Measuring Point



6. General instructions for mechanism repair

- 1) E-rings and poly slider washers shall be replaced with new ones, if once those have been removed. — No re-utilization due to unreliability.
- 2) Regular spare-parts shall always be used for repair, because using irregular parts and tampering with the products shall cause deterioration, malfunction and damage.

SPECIFICATIONS

GX-120

Total harmonic distortion:	TUNER, AUX, TAPE PLAY, CD 0.02% (1 kHz) PHONO (MM) 0.01% (1 kHz, REC OUT)
Frequency response:	30 Hz to 50 kHz (+0.5/-3 dB)
S/N ratio:	IHF A curve short circuited GX-120E, H, K, G, U PHONO (MM) 80 dB TUNER, AUX, TAPE 83 dB GX-120Z PHONO (MM) 76 dB TUNER, AUX, TAPE 83 dB
Input jacks (Sensitivity/input impedance):	PHONO (MM) 3 mV/47k ohms TUNER 150 mV/47k ohms CD 320 mV/27k ohms TAPE 150 mV/47k ohms AUX 150 mV/47k ohms MIC 1 mV/10 kOhm
Output jacks (Level/output impedance):	TAPE: 130 mV/47k ohms (REC OUT) OUTPUT: 1 V/47k ohms
RIAA deviation:	±0.5 dB (20 Hz ~ 20 kHz)

- Design and specifications are subject to change without notice.

BX-120

Effective output power:	BX-120H 100W+100W (10%, 8 ohms) BX-120G, E, K, Z 75W+75W (0.009%, 1 kHz, 8 ohms) < FTC Rule U mode only > 75 Watts per channel, Min. RMS at 8 ohms, from 20 Hz—20 kHz, with no more than 0.02% Total Harmonic Distortion.
Total harmonic distortion:	0.01% (50W+50W, 20 Hz—20 kHz, 8 ohms)
Frequency response:	10 Hz to 50 kHz (-1 dB)
S/N ratio:	IHF 110 dB, A curve short circuited
Input jacks (Sensitivity/ input impedance):	BX-120H 1V/47k ohms BX-120G, E, K, Z, U 800 mV/47k ohms
Output jacks (Level/ output impedance):	Headphones 1 mW/1 W (8Ω) Speakers (A or B) 8 to 16 ohms Speakers (A + B) 16 ohms More than 30 (8 ohms, 1 kHz)
Damping Factor:	More than 30 (8 ohms, 1 kHz)
Power requirements:	BX-120U AC 120V, 60 Hz BX-120G, K AC 240V, 50/60 Hz BX-120H AC 120V/220V/240V switchable, 50/60 Hz BX-120E, Z AC 220V, 50/60 Hz
Power consumption:	BX-120G, E, K, Z 350 W BX-120U 100 W BX-120H 118 W
Dimensions:	300 (W) × 71 (H) × 200 (D) mm
Weight:	4.5 kg

- Design and specifications are subject to change without notice.

ELECTRICAL MAIN PARTS LIST (GX-120)

• +++ mark denotes a component of assembled part which part code is represented by a previously stated component.
 • * -mark means less required items and availabilities may be limited.

CAPACITORS
 No mark, U, UF: μ F
 P, PF : pF

COILS
 MMH: mH
 UH : μ H

FUSE
 MMA:mA

ELECTRICAL MAIN

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
=== IC ===			D22	87-020-401	DIODE,1SS176	C170	* 87-018-032	CAP,CERA-SOL S 100P	△	82-788-674	AC CORD (E) (E,Z ONLY)	=== IC ===		
	87-020-291	IC,BA3812L	D23	87-027-606	DIODE,ZENER HZ7C2L	C171	* 87-015-679	CAP,ELECT,33-10	△	87-034-708	AC CORD (K) (K ONLY)		87-020-431	IC
	87-027-350	IC,1R2406G	D24	87-020-401	DIODE,1SS176	C172	* 87-015-679	CAP,ELECT,33-10	△	* 87-085-139	AC CORD BUSHING D (H,U ONLY)		87-027-298	IC
	87-027-895	IC,M5218L	D25	87-020-401	DIODE,1SS176	C173	* 87-015-698	CAP,ELECT 4.7-50	△	* 87-085-185	AC CORD BUSHING (E,K,Z ONLY)		87-020-429	IC
	87-027-925	IC,M5220	D26	87-020-401	DIODE,1SS176	C174	* 87-015-698	CAP,ELECT 4.7-50	△ SW22	87-031-685	ROTARY SW (VOLTAGE SELECTOR) (H ONLY)		87-027-895	IC
	87-020-145	IC,M54563	D27	87-020-401	DIODE,1SS176	C175	* 87-015-691	CAP,ELECT 0.1-50	△ T1	81-739-641	TRANSFORMER P.T (H) (H ONLY)		87-027-986	IC
	④ 87-020-379	IC,MN6632	D28	87-020-401	DIODE,1SS176	C177	* 87-015-692	CAP,ELECT 0.22-50V	△ T1	81-731-607	TRANSFORMER P.T (U) (U ONLY)		87-020-162	IC
	87-027-986	IC,NJM4560	D29	87-027-555	DIODE,ZENER HZ5C2	C178	* 87-015-692	CAP,ELECT 0.22-50V	△ T1	81-731-608	TRANSFORMER P.T (E) (E,Z ONLY)		87-020-207	IC
	④ 87-027-989	IC,TC4027BP	D30	87-020-401	DIODE,1SS176	D34	* 87-027-889	LED LN342GP (TAPE)	△ T1	81-731-609	TRANSFORMER P.T (K) (K ONLY)		④ 87-027-656	IC
	④ 87-020-039	IC,TC4051BP	D32	87-020-401	DIODE,1SS176	D35	* 87-027-889	LED LN342GP (TUNER)					87-027-787	IC
	④ 87-027-656	IC,TC4066BP	D33	87-020-401	DIODE,1SS176	D36	* 87-027-889	LED LN342GP (AUX)						
	④ 87-027-978	IC,TC9152P	D35	87-020-401	DIODE,1SS176	D37	* 87-027-889	LED LN342GP (PHONO)						
=== TRANSISTOR ===			D36	87-027-405	DIODE,ZENER RD2.2EB	D38	* 87-027-889	LED LN342GP (CD)				=== TRANSISTOR ===		
	89-110-155	TRANSISTOR,2SA1015,GR	D37	87-020-401	DIODE,1SS176	D40	* 87-020-393	LED,TLR-206RPH (MUTE)					* 89-503-890	FE
	89-210-670	TRANSISTOR,2SB1067	D38	87-020-401	DIODE,1SS176	D41	* 87-020-393	LED,TLR-206RPH (DSL)					89-110-155	TR
	89-318-155	TRANSISTOR,2SC1815,GR	D39	87-020-401	DIODE,1SS176	D42	* 87-020-393	LED,TLR-206RPH (GE)					89-110-203	TR
	89-320-011	TRANSISTOR,2SC2001K	D40	87-027-431	DIODE,ZENER RD-6.2EB	D43	87-020-401	DIODE,1SS176					89-111-246	TR
	89-309-456	TRANSISTOR,2SC945L,P	D41	87-020-401	DIODE,1SS176	D44	87-020-401	DIODE,1SS176					89-206-882	TR
	89-408-804	TRANSISTOR,2SD880,Y	D42	87-020-401	DIODE,1SS176	D45	87-020-401	DIODE,1SS176					89-318-155	TR
			D43	87-020-401	DIODE,1SS176	D46	87-020-401	DIODE,1SS176					89-318-154	TR
			D45	87-020-401	DIODE,1SS176	D47	87-020-401	DIODE,1SS176					89-320-011	TR
			D51	87-027-475	DIODE,ZENER HZ-6B1	D80	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-326-326	TR
			D65	87-020-401	DIODE,1SS176	D81	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-326-553	TR
			D66	87-027-606	DIODE,ZENER HZ7C2L	D82	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-333-810	TR
=== MAIN CIRCUIT BOARD SECTION ===			D67	87-027-475	DIODE,ZENER HZ-6B1	D83	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-407-182	TR
PCB-A	*	MAIN CIRCUIT BOARD	D68	87-020-401	DIODE,1SS176	D84	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-412-753	TR
C3	* 87-018-036	CAP,CERA-SOL S 220P	D69	87-020-401	DIODE,1SS176	D85	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-413-023	TR
C4	* 87-018-036	CAP,CERA-SOL S 220P	D70	87-020-401	DIODE,1SS176	D86	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)						
C7	* 87-018-024	CAP,CERA-SOL S 47P	D71	87-027-431	DIODE,ZENER RD-6.2EB	D87	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)						
C8	* 87-018-024	CAP,CERA-SOL S 47P	D72	87-020-400	DIODE,1SR35-200	D88	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)						
C53	* 87-018-044	CAP,CERA-SOL S 1000P	D73	87-027-376	DIODE,1B4B41	D89	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)						
C63	* 87-018-035	CAP,CERA-SOL 180P	D74	87-027-393	DIODE,ZENER HZ4C2	SW10	87-031-897	PUSH SW,SEA (POWER STANDBY/ON)						
C64	* 87-018-035	CAP,CERA-SOL 180P	J1	* 87-049-450	PIN JACK,4P (PHONO)	SW15	87-031-771	TACT SW EVQ-QSK04M (VOLUME-UP)						
C71	* 87-018-044	CAP,CERA-SOL S 1000P	J2	+++	PIN JACK,4P (CD)	SW16	87-031-771	TACT SW EVQ-QSK04M (VOLUME-DOWN)						
C73	* 87-018-042	CAP,CERA-SOL S 680P	J3	* 87-049-420	PIN JACK 4P-14 (AUX)	SW17	87-031-771	TACT SW EVQ-QSK04M (TAPE)						
C201	* 87-012-110	CAP,BEAD 270P (Z ONLY)	J4	+++	PIN JACK 4P-14 (REC OUT)	SW18	87-031-771	TACT SW EVQ-QSK04M (PHONO)						
C202	* 87-012-110	CAP,BEAD 270P (Z ONLY)	J5	81-739-630	JACK,ASSY (PLAYER SYNC)	SW19	87-031-771	TACT SW EVQ-QSK04M (TUNER)						
C203	* 87-018-115	CAP,CERA-SOL 47P (Z ONLY)	J6	+++	JACK,ASSY (REC/PLAY)	SW20	87-031-771	TACT SW EVQ-QSK04M (AUX)						
C204	* 87-018-115	CAP,CERA-SOL 47P (Z ONLY)	J7	+++	JACK,ASSY (CONTROL)	SW21	87-031-771	TACT SW EVQ-QSK04M (CD)						
C205	* 87-018-121	CAP,CERA-SOL 150P (Z ONLY)	J8	+++	JACK,ASSY (TUNER)	VR15	87-021-898	SLIDE VOLUME 100KB (40HZ)						
C206	* 87-018-121	CAP,CERA-SOL 150P (Z ONLY)	J9	+++	JACK,ASSY (CD SYNC)	VR16	87-021-898	SLIDE VOLUME 100KB (125HZ)						
C207	* 87-018-121	CAP,CERA-SOL 150P (Z ONLY)	J10	+++	JACK,ASSY (VIDEO SYNC)	VR17	87-021-898	SLIDE VOLUME 100KB (330HZ)						
C208	* 87-018-121	CAP,CERA-SOL 150P (Z ONLY)	J11	+++	JACK,ASSY (OUTPUT)	VR18	87-021-898	SLIDE VOLUME 100KB (1KHZ)						
C210	* 87-018-121	CAP,CERA-SOL 150P (Z ONLY)	J12	82-137-609	13P SOCKET (REMOTE CONTROL)	VR19	87-021-898	SLIDE VOLUME 100KB (2.5KHZ)						
D1	87-020-401	DIODE,1SS176	J13	82-675-661	JACK 6.3 (HP) (MIX MIC)	VR20	87-021-898	SLIDE VOLUME 100KB (6.3KHZ)						
D2	87-020-401	DIODE,1SS176	SW1	81-739-640	PUSH SW 3 (REC OUT)	VR21	87-021-898	SLIDE VOLUME 100KB (15KHZ)						
D3	87-027-225	DIODE,ZENER 05Z-5.1L (TP)	SW2	+++	PUSH SW 3 (MUTE)									
D5	87-020-401	DIODE,1SS176	SW5	+++	PUSH SW 3 (DSL)									
D6	87-020-401	DIODE,1SS176	VR1	87-021-922	VOLUME 50KW (BALANCE)									
D7	87-020-401	DIODE,1SS176	VR2	87-021-921	VOLUME 10KB (MIC VOLUME)									
D8	87-020-401	DIODE,1SS176												
D9	87-020-401	DIODE,1SS176												
=== FRONT CIRCUIT BOARD SECTION ===														
D10	87-020-401	DIODE,1SS176	PCB-B	81-740-620	FRONT CIRCUIT BOARD	△ CR1	* 87-019-110	POWER CIRCUIT BOARD						
D11	87-020-401	DIODE,1SS176	C141	* 87-015-696	CAP,ELECT 2.2-50	△ F1	87-035-139	SPARK KILLER 0.01 D						
D12	87-020-401	DIODE,1SS176	C142	* 87-015-696	CAP,ELECT 2.2-50	△ J14	* 87-049-017	FUSE T2.5A (E,Z ONLY)						
D13	87-020-401	DIODE,1SS176	C145	* 87-015-431	CAP,AL 0.68-25	△ J15	* 87-049-416	AC OUTLET (H,U ONLY)						
D14	87-020-401	DIODE,1SS176	C146	* 87-015-431	CAP,AL 0.68-25	△ J15	* 87-049-514	AC OUTLET (K ONLY)						
D15	87-020-401	DIODE,1SS176	C155	* 87-018-040	CAP,CERA-SOL S 470P	△ J14	* 87-049-514	AC OUTLET (K ONLY)						
D16	87-020-401	DIODE,1SS176	C156	* 87-018-040	CAP,CERA-SOL S 470P	△ J15	* 87-049-514	AC OUTLET (E,Z ONLY)						
D17	87-020-401	DIODE,1SS176	C159	* 87-018-036	CAP,CERA-SOL S 220P	△ J15	* 87-049-514	AC OUTLET (E,Z ONLY)						
D18	87-027-393	DIODE,ZENER HZ4C2	C160	* 87-018-036	CAP,CERA-SOL S 220P									
D19	87-020-401	DIODE,1SS176	C161	* 87-015-698	CAP,ELECT 4.7-50									
D20	87-027-555	DIODE,ZENER HZ5C2	C162	* 87-015-698	CAP,ELECT 4.7-50									
D21	87-020-401	DIODE,1SS176	C169	* 87-018-032	CAP,CERA-SOL S 100P									
						△	87-034-992	AC CORD (H) (H ONLY)					J1	81-738-630
						△	87-303-578	AC CORD (U) (U ONLY)					J3	+++

• +++ mark denotes a component of assembled part which part code is represented by a previously stated component.
 • * -mark means less required items and availabilities may be limited.

CAPACITORS COILS FUSE
 No mark, U, UF: μ F MMH: mH MMA: mA
 P, PF : pF UH : μ H

ELECTRICAL MAIN PARTS LIST (BX-120)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
D22	87-020-401	DIODE,1SS176	C170	* 87-018-032	CAP,CERA-SOL S 100P	Δ	82-788-674	AC CORD (E) (E,Z ONLY)	=== IC ===		
D23	87-027-606	DIODE,ZENER HZ7C2L	C171	* 87-015-679	CAP,ELECT,33-10	Δ	87-034-708	AC CORD (K) (K ONLY)			
D24	87-020-401	DIODE,1SS176	C172	* 87-015-679	CAP,ELECT,33-10	Δ	* 87-085-139	AC CORD BUSHING D (H,U ONLY)		87-020-431	IC,BA658
D25	87-020-401	DIODE,1SS176	C173	* 87-015-698	CAP,ELECT 4.7-50	Δ	* 87-085-185	AC CORD BUSHING (E,K,Z ONLY)		④ 87-027-298	IC,C-MOS4001 NOR
D26	87-020-401	DIODE,1SS176	C174	* 87-015-698	CAP,ELECT 4.7-50	Δ SW22	87-031-685	ROTARY SW (VOLTAGE SELECTOR) (H ONLY)		87-020-429	IC,LB1290
D27	87-020-401	DIODE,1SS176	C175	* 87-015-691	CAP,ELECT 0.1-50	Δ T1	81-739-641	TRANSFORMER P.T (H) (H ONLY)		87-027-895	IC,M5218L
D28	87-020-401	DIODE,1SS176	C177	* 87-015-692	CAP,ELECT 0.22-50V	Δ T1	81-731-607	TRANSFORMER P.T (U) (U ONLY)		87-027-986	IC,NJM4560
D29	87-027-555	DIODE,ZENER HZ5C2	C178	* 87-015-692	CAP,ELECT 0.22-50V	Δ T1	81-731-608	TRANSFORMER P.T (E) (E,Z ONLY)		87-020-162	IC,STK1070
D30	87-020-401	DIODE,1SS176	D34	* 87-027-889	LED LN342GP (TAPE)	Δ T1	81-731-609	TRANSFORMER P.T (K) (K ONLY)		④ 87-020-207	IC,TC4022BP
D32	87-020-401	DIODE,1SS176	D35	* 87-027-889	LED LN342GP (TUNER)					④ 87-027-656	IC,TC4066BP
D33	87-020-401	DIODE,1SS176	D36	* 87-027-889	LED LN342GP (AUX)					87-027-787	IC,UPC1237H
D35	87-020-401	DIODE,1SS176	D37	* 87-027-889	LED LN342GP (PHONO)						
D36	87-027-405	DIODE,ZENER RD2.2EB	D38	* 87-027-889	LED LN342GP (CD)				=== TRANSISTOR ===		
D37	87-020-401	DIODE,1SS176	D40	* 87-020-393	LED,TLR-206RPH (MUTE)						
D38	87-020-401	DIODE,1SS176	D41	* 87-020-393	LED,TLR-206RPH (DSL)					* 89-503-890	FET 2SK389
D39	87-020-401	DIODE,1SS176	D42	* 87-020-393	LED,TLR-206RPH (GE)					89-110-155	TRANSISTOR,2SA1015,GR
D40	87-027-431	DIODE,ZENER RD-6.2EB	D43	87-020-401	DIODE,1SS176					89-110-203	TRANSISTOR,2SA1020,O (EXCEPT H)
D41	87-020-401	DIODE,1SS176	D44	87-020-401	DIODE,1SS176					89-111-246	TRANSISTOR,2SA1124,R
D42	87-020-401	DIODE,1SS176	D45	87-020-401	DIODE,1SS176						
D43	87-020-401	DIODE,1SS176	D46	87-020-401	DIODE,1SS176					89-206-882	TRANSISTOR,2SB688 (EXCEPT H)
D45	87-020-401	DIODE,1SS176	D47	87-020-401	DIODE,1SS176					89-318-155	TRANSISTOR,2SC1815,GR
D51	87-027-475	DIODE,ZENER HZ-6B1	D80	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-318-154	TRANSISTOR,2SC1815,Y
D65	87-020-401	DIODE,1SS176	D81	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-320-011	TRANSISTOR,2SC2001K
D66	87-027-606	DIODE,ZENER HZ7C2L	D82	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)						
D67	87-027-475	DIODE,ZENER HZ-6B1	D83	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-326-326	TRANSISTOR,2SC2632,R
D68	87-020-401	DIODE,1SS176	D84	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-326-553	TRANSISTOR,2SC2655(O) (EXCEPT H)
D69	87-020-401	DIODE,1SS176	D85	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-333-810	TRANSISTOR,2SC3381
D70	87-020-401	DIODE,1SS176	D86	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-407-182	TRANSISTOR,2SD718 (EXCEPT H)
D71	87-027-431	DIODE,ZENER RD-6.2EB	D87	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-412-753	TRANSISTOR,2SD1275
D72	87-020-400	DIODE,1SR35-200	D88	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)					89-413-023	TRANSISTOR,2SD1302S
D73	87-027-376	DIODE,1B4B41	D89	* 87-020-399	LED,LN350GPH (VOLUME LEVEL)				=== MAIN CIRCUIT BOARD SECTION ===		
D74	87-027-393	DIODE,ZENER HZ4C2	SW10	87-031-897	PUSH SW,SEA (POWER STANDBY/ON)				PCB-A	*	MAIN CIRCUIT BOARD
J1	* 87-049-450	PIN JACK,4P (PHONO)	SW15	87-031-771	TACT SW EVQ-QSK04M (VOLUME-UP)				C92	* 87-018-131	CAP,CERA-SOL SS 1000P
J2	+++	PIN JACK,4P (CD)	SW16	87-031-771	TACT SW EVQ-QSK04M (VOLUME-DOWN)				C93	* 87-015-450	CAP,ELECT 220-25V BP
J3	* 87-049-420	PIN JACK 4P-14 (AUX)	SW17	87-031-771	TACT SW EVQ-QSK04M (TAPE)				C171	* 87-010-276	CAP,ELECT 56V-5600
J4	+++	PIN JACK 4P-14 (REC OUT)	SW18	87-031-771	TACT SW EVQ-QSK04M (PHONO)						
J5	81-739-630	JACK,ASSY (PLAYER SYNC)	SW19	87-031-771	TACT SW EVQ-QSK04M (TUNER)				C172	* 87-010-275	CAP,ELECT 56V-8200
J6	+++	JACK,ASSY (REC/PLAY)	SW20	87-031-771	TACT SW EVQ-QSK04M (AUX)				C173	* 87-010-276	CAP,ELECT 56V-5600
J7	+++	JACK,ASSY (CONTROL)	SW21	87-031-771	TACT SW EVQ-QSK04M (CD)				C174	* 87-010-275	CAP,ELECT 56V-8200
J8	+++	JACK,ASSY (TUNER)	VR15	87-021-898	SLIDE VOLUME 100KB (40HZ)				C181	* 89-663-815	CAP,CERA-SOL 0.01UF
J9	+++	JACK,ASSY (CD SYNC)	VR16	87-021-898	SLIDE VOLUME 100KB (125HZ)				C201	* 87-010-035	CAP,ELECT 2.2/50V
J10	+++	JACK,ASSY (VIDEO SYNC)	VR17	87-021-898	SLIDE VOLUME 100KB (330HZ)				D25	87-020-110	DIODE,1SS177
J11	+++	JACK,ASSY (OUTPUT)	VR18	87-021-898	SLIDE VOLUME 100KB (1KHZ)				D26	87-020-110	DIODE,1SS177
J12	82-137-609	13P SOCKET (REMOTE CONTROL)	VR19	87-021-898	SLIDE VOLUME 100KB (2.5KHZ)				D30	87-027-369	DIODE,ZENER 05Z-6.2L
J13	82-675-661	JACK 6.3 (HP) (MIX MIC)	VR20	87-021-898	SLIDE VOLUME 100KB (6.3KHZ)				D31	87-020-110	DIODE,1SS177
SW1	81-739-640	PUSH SW 3 (REC OUT)	VR21	87-021-898	SLIDE VOLUME 100KB (15KHZ)				D32	87-020-110	DIODE,1SS177
SW2	+++	PUSH SW 3 (MUTE)							D33	87-020-110	DIODE,1SS177
SW5	+++	PUSH SW 3 (DSL)							D34	87-020-400	DIODE,1SR35-200
VR1	87-021-922	VOLUME 50KW (BALANCE)							D48	87-020-400	DIODE,1SR35-200
VR2	87-021-921	VOLUME 10KB (MIC VOLUME)							D49	87-027-788	DIODE,D5FB20
									D51	87-020-400	DIODE,1SR35-200
									D52	87-020-400	DIODE,1SR35-200
									D53	87-020-110	DIODE,1SS177
									D54	87-020-110	DIODE,1SS177
									D55	87-027-097	DIODE,1S1555
									D56	87-027-555	DIODE,ZENER HZ5C2
									D57	87-027-686	DIODE,ZENER HZ12A1
									D58	87-020-110	DIODE,1SS177
									D59	87-020-110	DIODE,1SS177
									D60	87-020-110	DIODE,1SS177 (EXCEPT H)
									D61	87-020-110	DIODE,1SS177 (EXCEPT H)
									D62	87-020-110	DIODE,1SS177 (EXCEPT H)
									D63	87-020-110	DIODE,1SS177 (EXCEPT H)
									D64	87-027-479	DIODE,ZENER HZ27-2 (EXCEPT H)
									J1	81-738-630	JACK PLATE,ASSY (INPUT)
									J3	+++	JACK PLATE,ASSY (SPEAKERS A(L))

=== POWER CIRCUIT BOARD SECTION ===

Ref. No.	Part No.	Description
	PCB-C	* POWER CIRCUIT BOARD
Δ CR1	* 87-019-110	SPARK KILLER 0.01 D
Δ F1	87-035-139	FUSE T2.5A (E,Z ONLY)
Δ J14	* 87-049-017	AC OUTLET (H,U ONLY)
Δ J15	* +++	AC OUTLET (H,U ONLY)
Δ J14	* 87-049-416	AC OUTLET (K ONLY)
Δ J15	* +++	AC OUTLET (K ONLY)
Δ J14	* 87-049-514	AC OUTLET (E,Z ONLY)
Δ J15	* +++	AC OUTLET (E,Z ONLY)

=== MISCELLANEOUS ===

Ref. No.	Part No.	Description
Δ	87-034-992	AC CORD (H) (H ONLY)
Δ	87-303-578	AC CORD (U) (U ONLY)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
J4	+++	JACK PLATE,ASSY (SPEAKERS A(R))	AS11	87-031-897	PUSH SW,SEA (POWER STANDBY/ON)	AF4	87-035-191	FUSE,T3.15A (E,K,Z ONLY)
J2	87-049-360	JACK6.3 (PHONES)						
J5	* 81-738-631	SPEAKER-TERMINAL (SPEAKERS B)						
L1	* 87-005-158	INDUCTOR 1UH	=== DRIVER-1 CIRCUIT BOARD SECTION ===			=== VOLTAGE SELECTOR CIRCUIT BOARD SECTION (H ONLY) ===		
L2	* 87-005-158	INDUCTOR 1UH	PCB-C	*	DRIVER-1 CIRCUIT BOARD	PCB-G	*	VOLTAGE SELECTOR CIRCUIT BOARD
AR139	* 87-025-347	RES,MFO 2W10 (F)	C3	* 87-015-380	CAP,ELECT BP 4.7-25V		82-304-743	1P TERMINAL
AR140	* 87-025-347	RES,MFO 2W10 (F)	C7	* 87-018-121	CAP,CERA-SOL SS 150P	AF	87-033-147	FUSE CLAMP
AR223	* 87-025-348	RES,NONFLAM 1W270	C9	* 87-018-124	CAP,CERA-SOL SS 270P	AF1	87-035-312	FUSE, 7A
AR224	* 87-025-348	RES,NONFLAM 1W270	C13	* 87-018-117	CAP,CERA-SOL SS 68P	AF2	87-035-256	FUSE,3.15A
AR231	* 87-025-397	RES,NONFLAM 1K 2W	C17	* 87-018-104	CAP,CERA-SOL SS 10P	AS12	87-031-685	ROTARY SWITCH (VOLTAGE SELECTOR)
AR232	* 87-025-397	RES,NONFLAM 1K 2W	C19	* 87-018-099	CAP,CERA-SOL 3.9P			
AR301	* 87-029-383	RES,FUSIBLE 1W-3.3	C21	* 87-018-097	CAP,CERA-SOL SS 2.2P			
AR302	* 87-029-383	RES,FUSIBLE 1W-3.3	C25	* 87-018-129	CAP,CERA-SOL 680P	=== MISCELLANEOUS ===		
RY1	* 87-045-224	RELAY G2R 24V-2	C35	* 87-015-691	CAP,ELECT 0.1-50	AF	* 87-034-578	AC COORD,U (U ONLY)
RY2	* 87-045-223	RELAY G4W 24V-2	C53	* 87-018-106	CAP,CERA-SOL SS 15P	AF	* 82-788-674	AC COORD,E50 (E,Z ONLY)
S1	87-031-892	SW SUL (AFBS(SPEAKER A))	C59	* 87-018-123	CAP,CERA-SOL SS 220P	AF	* 87-034-708	AC COORD,K50B (K ONLY)
S5	+++	SW SUL (SPEAKERS A)	D1	87-027-469	DIODE,ZENER HZ16-2	AF	* 87-085-184	AC COORD BUSHING,D (H,U ONLY)
S6	+++	SW SUL (SPEAKERS B)	D3	87-020-110	DIODE,ISS177	AT1	* 87-085-185	AC COORD BUSHING (E,K,Z ONLY)
			D5	87-027-469	DIODE,ZENER HZ16-2	AT1	* 81-738-606	TRANSFORMER PT,H (H ONLY)
			D7	87-020-110	DIODE,ISS177	AT1	* 81-738-607	TRANSFORMER PT,U (U ONLY)
			D15	87-027-625	DIODE,ZENER 05Z-6.8U	AT1	* 81-738-608	TRANSFORMER PT,E (E,Z ONLY)
			D17	87-027-625	DIODE,ZENER 05Z-6.8U	AT1	* 81-738-609	TRANSFORMER PT,K (K ONLY)
			AR43	* 87-029-112	RES,FUSIBLE 1/4W-330			
			SFR1	* 87-021-856	SFR 100			
			=== FRONT CIRCUIT BOARD SECTION ===					
PCB-B	*	FRONT CIRCUIT BOARD	=== DRIVER-2 CIRCUIT BOARD SECTION ===					
C105	* 87-015-692	CAP,ELECT 0.22-50	PCB-D	*	DRIVER-2 CIRCUIT BOARD			
C106	* 87-015-692	CAP,ELECT 0.22-50	C4	* 87-015-380	CAP,ELECT BP 4.7-25V			
C107	* 87-015-696	CAP,ELECT 2.2-50	D2	87-027-469	DIODE,ZENER HZ16-2			
C108	* 87-015-694	CAP,ELECT 0.47-50V	D4	87-020-110	DIODE ISS177			
C111	* 87-015-696	CAP,ELECT 2.2-50	D6	87-027-469	DIODE,ZENER HZ16-2			
C112	* 87-015-694	CAP,ELECT 0.47-50V	D8	87-020-110	DIODE,ISS177			
C115	* 87-015-696	CAP,ELECT 2.2-50	C8	* 87-018-121	CAP,CERA-SOL SS 150P			
C116	* 87-015-694	CAP,ELECT 0.47-50V	C10	* 87-018-124	CAP,CERA-SOL SS 270P			
C119	* 87-015-696	CAP,ELECT 2.2-50	C14	* 87-018-117	CAP,CERA-SOL SS 68P			
C120	* 87-015-694	CAP,ELECT 0.47-50V	C18	* 87-018-104	CAP,CERA-SOL SS 10P			
C123	* 87-015-696	CAP,ELECT 2.2-50	C20	* 87-018-099	CAP,CERA-SOL 3.9P			
C124	* 87-015-694	CAP,ELECT 0.47-50V	C22	* 87-018-097	CAP,CERA-SOL SS 2.2P			
C125	* 87-018-129	CAP,CERA-SOL 680P	C26	* 87-018-129	CAP,CERA-SOL 680P			
C126	* 87-018-129	CAP,CERA-SOL 680P	C36	* 87-015-691	CAP,ELECT 0.1-50			
C127	* 87-015-696	CAP,ELECT 2.2-50	C54	* 87-018-106	CAP,CERA-SOL SS 15P			
C128	* 87-015-694	CAP,ELECT 0.47-50V	C60	* 87-018-123	CAP,CERA-SOL SS 220P			
C129	* 87-018-124	CAP,CERA-SOL SS 270P	D16	87-027-625	DIODE,ZENER,05Z-6.8U			
C130	* 87-018-124	CAP,CERA-SOL SS 270P	D18	87-027-625	DIODE,ZENER 05Z-6.8U			
C131	* 87-015-696	CAP,ELECT 2.2-50	AR44	* 87-029-112	RES,FUSIBLE 1/4W-330			
C132	* 87-015-694	CAP,ELECT 0.47-50V	SFR2	* 87-021-856	SFR 100			
C133	* 87-015-696	CAP,ELECT 2.2-50						
C134	* 87-015-691	CAP,ELECT 0.1-50	=== FUSE CIRCUIT BOARD SECTION ===					
C135	* 87-015-694	CAP,ELECT 0.47-50V	PCB-E	*	FUSE CIRCUIT BOARD (EXCEPT H)			
C137	* 87-015-690	CAP,ELECT 22-35V		82-304-743	1P TERMINAL (EXCEPT H)			
C138	* 87-015-682	CAP,ELECT 22-16	AF	87-033-147	FUSE CLAMP (EXCEPT H)			
C144	* 87-018-127	CAP,CERA-SOL SS 470P	AF1	87-035-313	FUSE,5A (U ONLY)			
C146	* 87-018-130	CAP,CERA-SOL 820P	AF1	87-035-190	FUSE,T2A (E,K,Z ONLY)			
C147	* 87-015-691	CAP,ELECT 0.1-50	=== FUSE SUB CIRCUIT BOARD SECTION ===					
C151	* 87-015-689	CAP,ELECT 35-10V	PCB-F	*	FUSE SUB CIRCUIT BOARD (EXCEPT H)			
D35	87-020-110	DIODE,ISS177	D65	87-027-185	DIODE,30D2FA (EXCEPT H)			
D36	87-020-110	DIODE,ISS177	D66	87-027-185	DIODE,30D2FA (EXCEPT H)			
D37	87-020-110	DIODE,ISS177	D67	87-027-185	DIODE,30D2FA (EXCEPT H)			
D38	87-020-110	DIODE,ISS177	D68	87-027-185	DIODE,30D2FA (EXCEPT H)			
D39	87-020-110	DIODE,ISS177	AF3	87-035-303	FUSE,4A (U ONLY)			
D40	87-020-110	DIODE,ISS177	AF3	87-035-191	FUSE,T3.15A (E,K,Z ONLY)			
D41	87-020-110	DIODE,ISS177	AF4	87-035-303	FUSE,4A (U ONLY)			
D42	87-020-110	DIODE,ISS177						
D43	* 87-020-393	LED,TLR-206RPH (AFBS(SPEAKER A))						
D45	87-027-686	DIODE,ZENER HZ12A1						
D46	87-020-110	DIODE ISS177						
D47	87-020-110	DIODE,ISS177						
FL	* 81-738-640	FL,OP1057GR						
AR229	* 87-029-390	RES,FUSIBLE 120 1/4W						

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (⊕).

▲ 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.

[GX-120]

Combination circuit board 81-729-610

PCB-A 81-739-611

PCB-B 81-739-612

[BX-120]

Combination circuit board 81-738-610

PCB-A 81-738-611

PCB-B 81-738-612

PCB-C 81-738-613

PCB-D 81-738-614

PCB-E 81-738-616 (EXCEPT H)

PCB-F 81-738-617 (EXCEPT H)

PCB-G 81-738-618 (H ONLY)

Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
(SPEAKERS A(R))) L (SPEAKERS B)	△S11	87-031-897	PUSH SW,SEA (POWER STANDBY/ON)	△F4	87-035-191	FUSE,T3.15A (E,K,Z ONLY)
	=== DRIVER-1 CIRCUIT BOARD SECTION ===			=== VOLTAGE SELECTOR CIRCUIT BOARD SECTION (H ONLY) ===		
	PCB-C	*	DRIVER-1 CIRCUIT BOARD	PCB-G	*	VOLTAGE SELECTOR CIRCUIT BOARD
	C3	* 87-015-380	CAP,ELECT BP 4.7-25V		82-304-743	1P TERMINAL
	C7	* 87-018-121	CAP,CERA-SOL SS 150P	△	87-033-147	FUSE CLAMP
	C9	* 87-018-124	CAP,CERA-SOL SS 270P	△F1	87-035-312	FUSE, 7A
	C13	* 87-018-117	CAP,CERA-SOL SS 68P	△F2	87-035-256	FUSE,3.15A
	C17	* 87-018-104	CAP,CERA-SOL SS 10P	△S12	87-031-685	ROTARY SWITCH (VOLTAGE SELECTOR)
	C19	* 87-018-099	CAP,CERA-SOL 3.9P			
	C21	* 87-018-097	CAP,CERA-SOL SS 2.2P			
	C25	* 87-018-129	CAP,CERA-SOL 680P			
	C35	* 87-015-691	CAP,ELECT 0.1-50			
	C53	* 87-018-106	CAP,CERA-SOL SS 15P			
	C59	* 87-018-123	CAP,CERA-SOL SS 220P			
	D1	87-027-469	DIODE,ZENER HZ16-2			
	D3	87-020-110	DIODE,1SS177			
	D5	87-027-469	DIODE,ZENER HZ16-2			
	D7	87-020-110	DIODE,1SS177			
	D15	87-027-625	DIODE,ZENER 05Z-6.8U			
	D17	87-027-625	DIODE,ZENER 05Z-6.8U			
	△R43	* 87-029-112	RES,FUSIBLE 1/4W-330			
	SFR1	* 87-021-856	SFR 100			
	=== DRIVER-2 CIRCUIT BOARD SECTION ===			=== MISCELLANEOUS ===		
	PCB-D	*	DRIVER-2 CIRCUIT BOARD	△	* 87-034-578	AC CORD,U (U ONLY)
	C4	* 87-015-380	CAP,ELECT BP 4.7-25V	△	* 82-788-674	AC CORD,E50 (E,Z ONLY)
	D2	87-027-469	DIODE,ZENER HZ16-2	△	* 87-034-708	AC CORD,K50B (K ONLY)
	D4	87-020-110	DIODE 1SS177	△	* 87-085-184	AC CORD BUSHING,D (H,U ONLY)
	D6	87-027-469	DIODE,ZENER HZ16-2	△	* 87-085-185	AC CORD BUSHING (E,K,Z ONLY)
	D8	87-020-110	DIODE,1SS177	△T1	* 81-738-606	TRANSFORMER PT,H (H ONLY)
	C8	* 87-018-121	CAP,CERA-SOL SS 150P	△T1	* 81-738-607	TRANSFORMER PT,U (U ONLY)
	C10	* 87-018-124	CAP,CERA-SOL SS 270P	△T1	* 81-738-608	TRANSFORMER PT,E (E,Z ONLY)
	C14	* 87-018-117	CAP,CERA-SOL SS 68P	△T1	* 81-738-609	TRANSFORMER PT,K (K ONLY)
	C18	* 87-018-104	CAP,CERA-SOL SS 10P			
	C20	* 87-018-099	CAP,CERA-SOL 3.9P			
	C22	* 87-018-097	CAP,CERA-SOL SS 2.2P			
	C26	* 87-018-129	CAP,CERA-SOL 680P			
	C36	* 87-015-691	CAP,ELECT 0.1-50			
	C54	* 87-018-106	CAP,CERA-SOL SS 15P			
	C60	* 87-018-123	CAP,CERA-SOL SS 220P			
	D16	87-027-625	DIODE,ZENER,05Z-6.8U			
	D18	87-027-625	DIODE,ZENER 05Z-6.8U			
	△R44	* 87-029-112	RES,FUSIBLE 1/4W-330			
	SFR2	* 87-021-856	SFR 100			
	=== FUSE CIRCUIT BOARD SECTION ===					
	PCB-E	*	FUSE CIRCUIT BOARD (EXCEPT H)			
		82-304-743	1P TERMINAL (EXCEPT H)			
	△	87-033-147	FUSE CLAMP (EXCEPT H)			
	△F1	87-035-313	FUSE,5A (U ONLY)			
	△F1	87-035-190	FUSE,T2A (E,K,Z ONLY)			
	=== FUSE SUB CIRCUIT BOARD SECTION ===					
	PCB-F	*	FUSE SUB CIRCUIT BOARD (EXCEPT H)			
	D65	87-027-185	DIODE,30D2FA (EXCEPT H)			
	D66	87-027-185	DIODE,30D2FA (EXCEPT H)			
	D67	87-027-185	DIODE,30D2FA (EXCEPT H)			
	D68	87-027-185	DIODE,30D2FA (EXCEPT H)			
	△F3	87-035-303	FUSE,4A (U ONLY)			
	△F3	87-035-191	FUSE,T3.15A (E,K,Z ONLY)			
	△F4	87-035-303	FUSE,4A (U ONLY)			

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

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2. To use solder iron less than 40W (less than 260°C) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark (⊕).

△ 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.

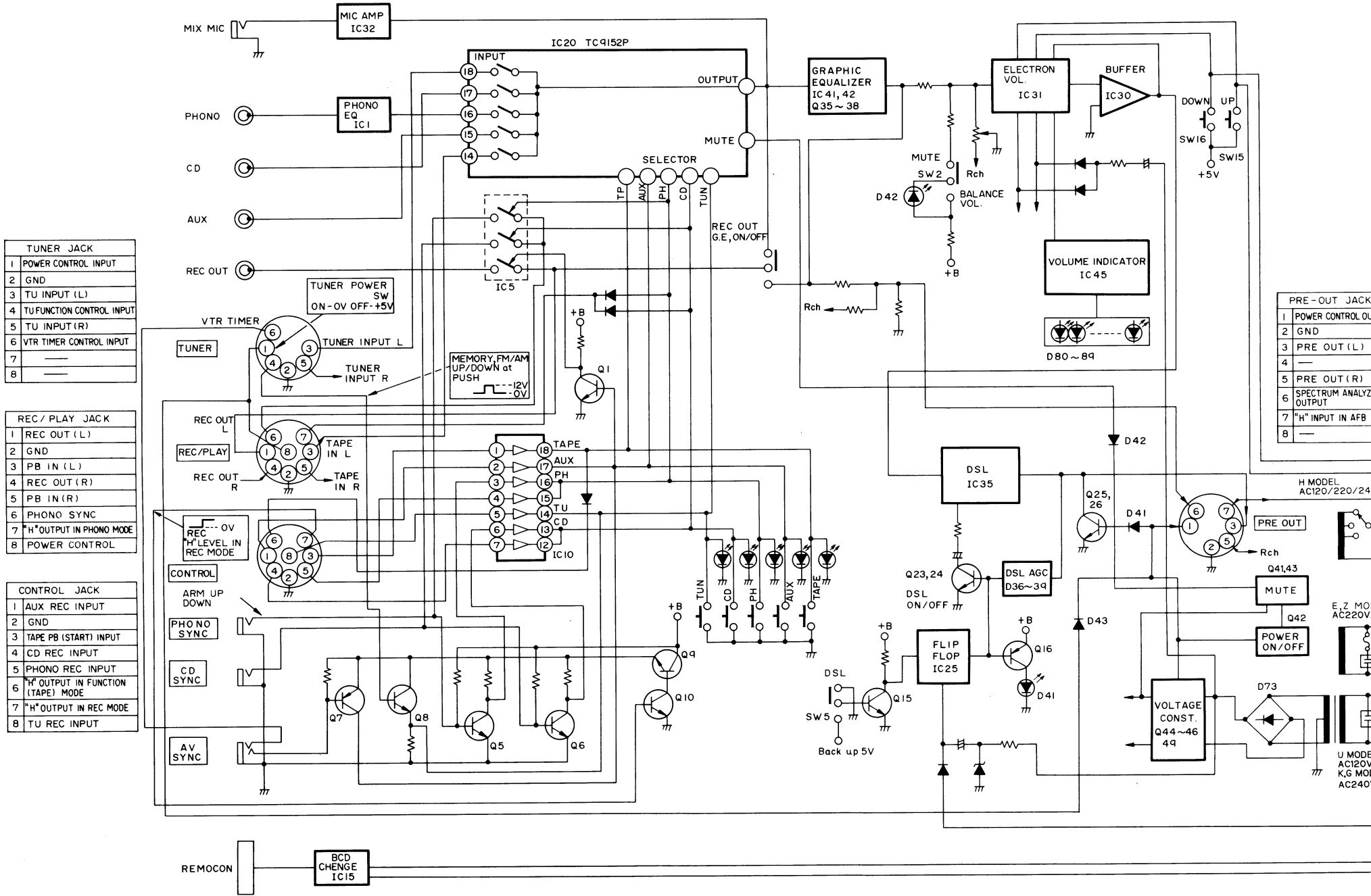
[GX-120]

Combination circuit board 81-729-610
PCB-A 81-739-611
PCB-B 81-739-612

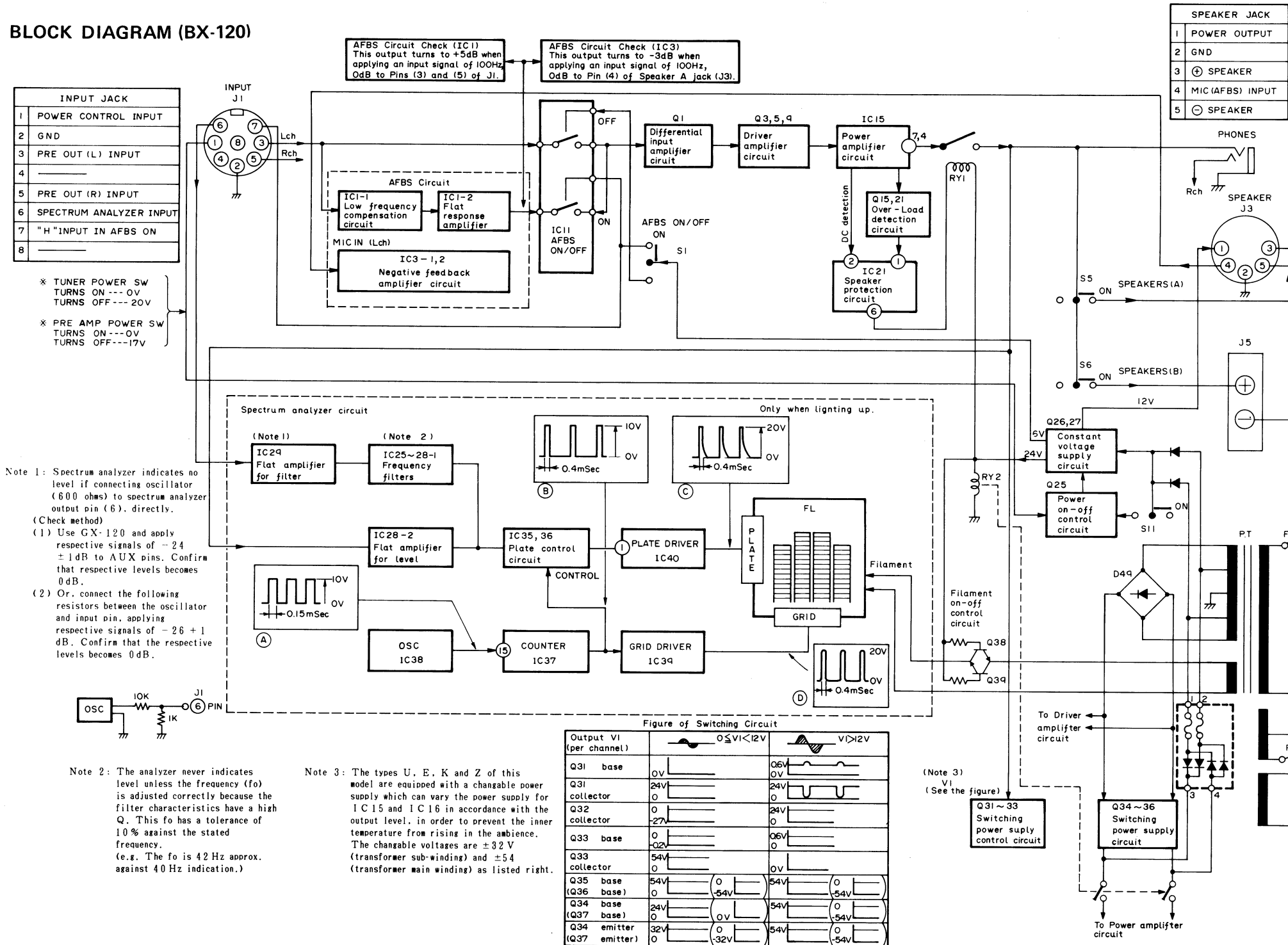
[BX-120]

Combination circuit board 81-738-610
PCB-A 81-738-611
PCB-B 81-738-612
PCB-C 81-738-613
PCB-D 81-738-614
PCB-E 81-738-616 (EXCEPT H)
PCB-F 81-738-617 (EXCEPT H)
PCB-G 81-738-618 (H ONLY)

BLOCK DIAGRAM (GX-120)

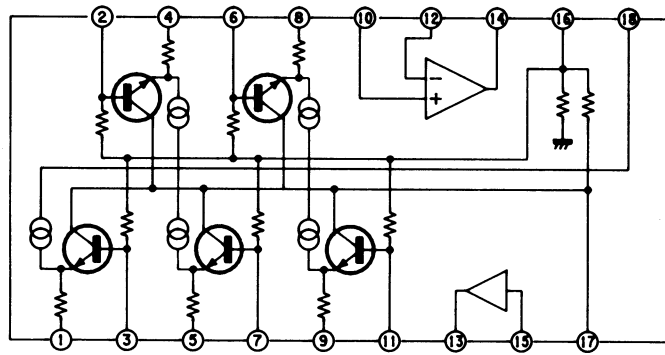


BLOCK DIAGRAM (BX-120)

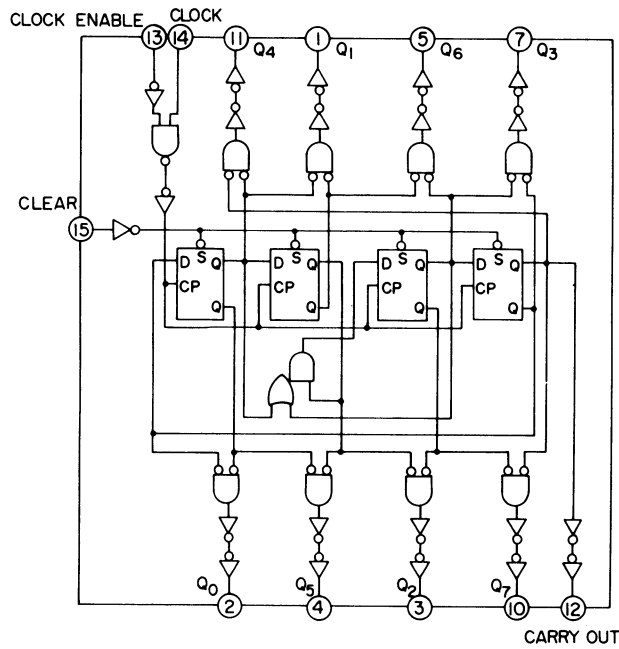


IC BLOCK DIAGRAM

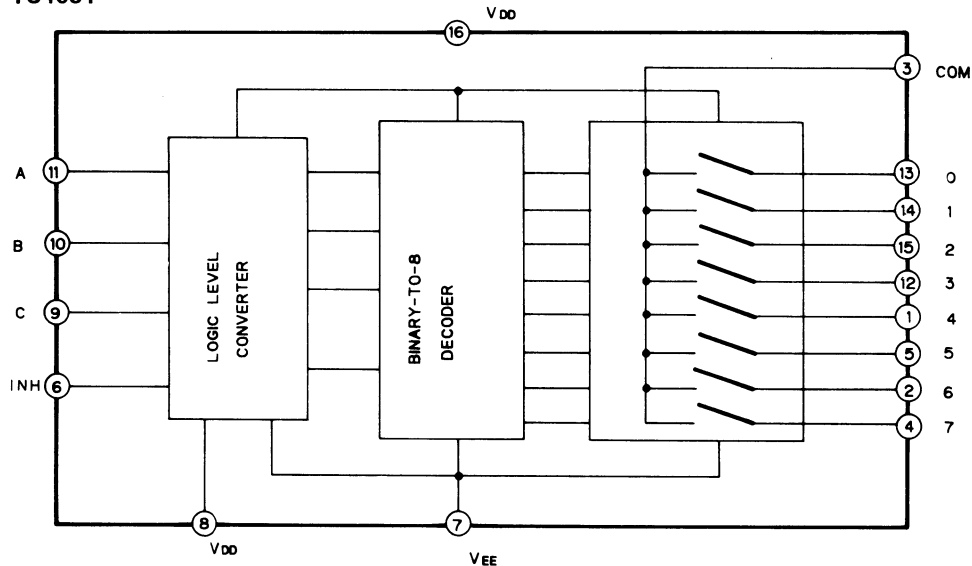
BA3812L



TC4022BP



TC4051



TRUTH TABLE

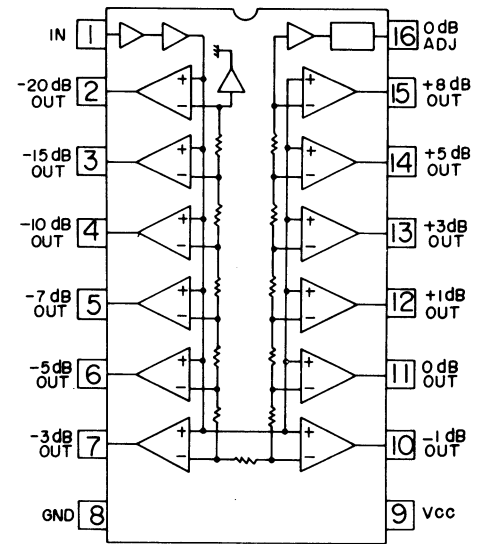
CONTROL INPUTS				"ON" CHANNEL
INHIBIT	C	B	A	
L	L	L	L	0
L	L	L	H	1
L	L	H	L	2
L	L	H	H	3
L	H	L	L	4
L	H	L	H	5
L	H	H	L	6
L	H	H	H	7
H	*	*	*	NOTE

* Don't Care

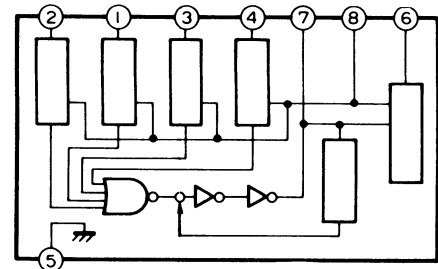
NOTES:

- The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
- Resistors with no designation have a rated power of 1/8W and a tolerance of ±5%.
- Capacitors with no designation have a dielectric strength of less than 50WV.
- The only capacitor tolerance indicated are ±5% (J) and ±10% (K).
- Ceramic capacitor symbols:
 - High dielectric constant system (YY)
 - High dielectric constant system (YW, YP, YZ)
 - Semiconductor ceramic
- Explanation of symbols
 - Mylar capacitor
 - Aluminum solid capacitor
 - Polypropylene film capacitor
 - Bi-polarized capacitor
 - Low-leakage capacitor
 - Tantalum capacitor
 - Styrol capacitor

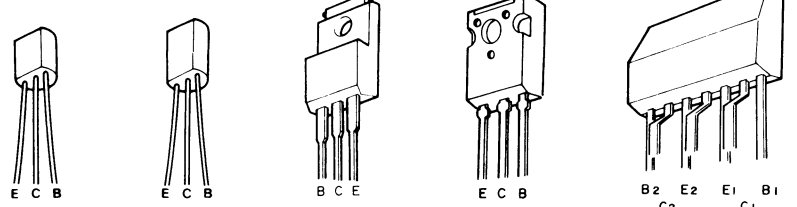
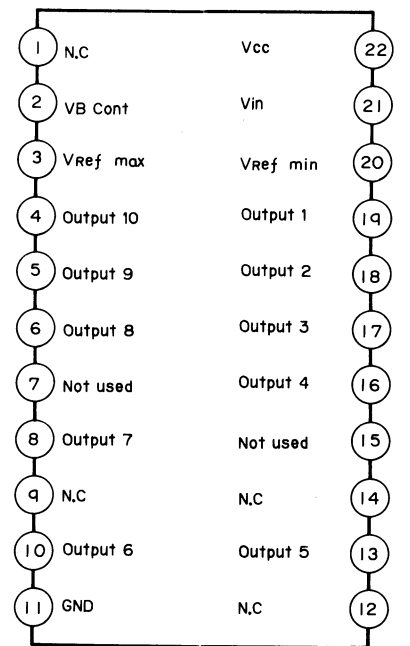
BA658



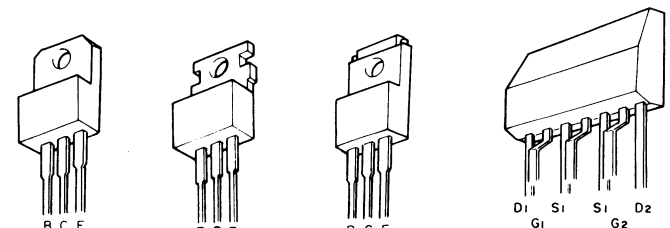
μPC 1237H



IR2406G



2SA1015
2SA1124
2SC945
2SC1815
2SC2001
2SC2632
2SD1302



2SD688
2SD718

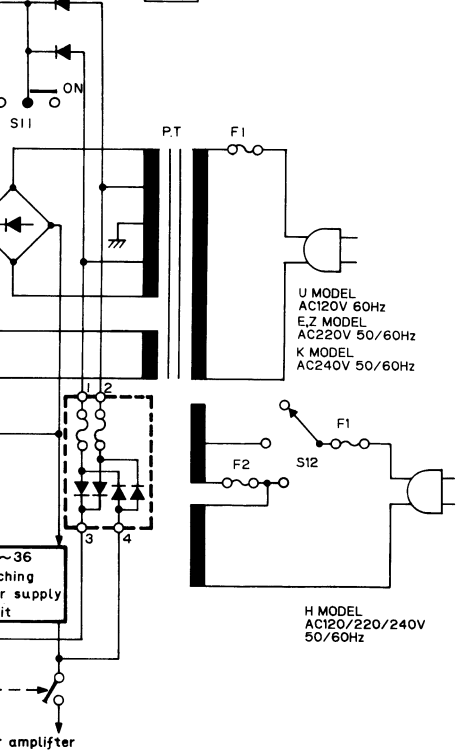
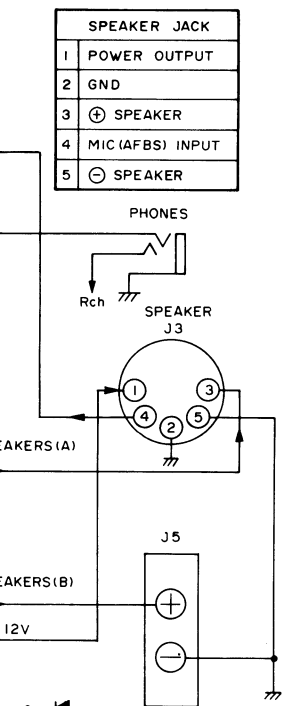
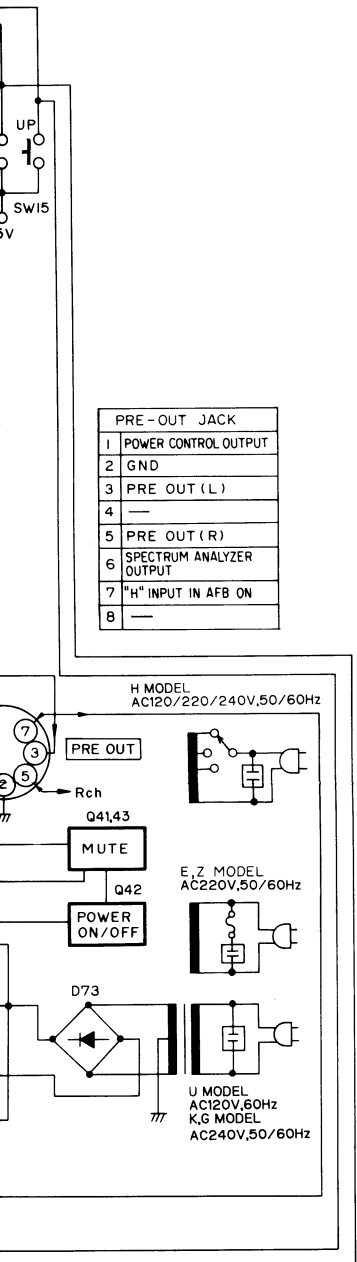
2SD880
2SD1275

2SK389

⚠ 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.

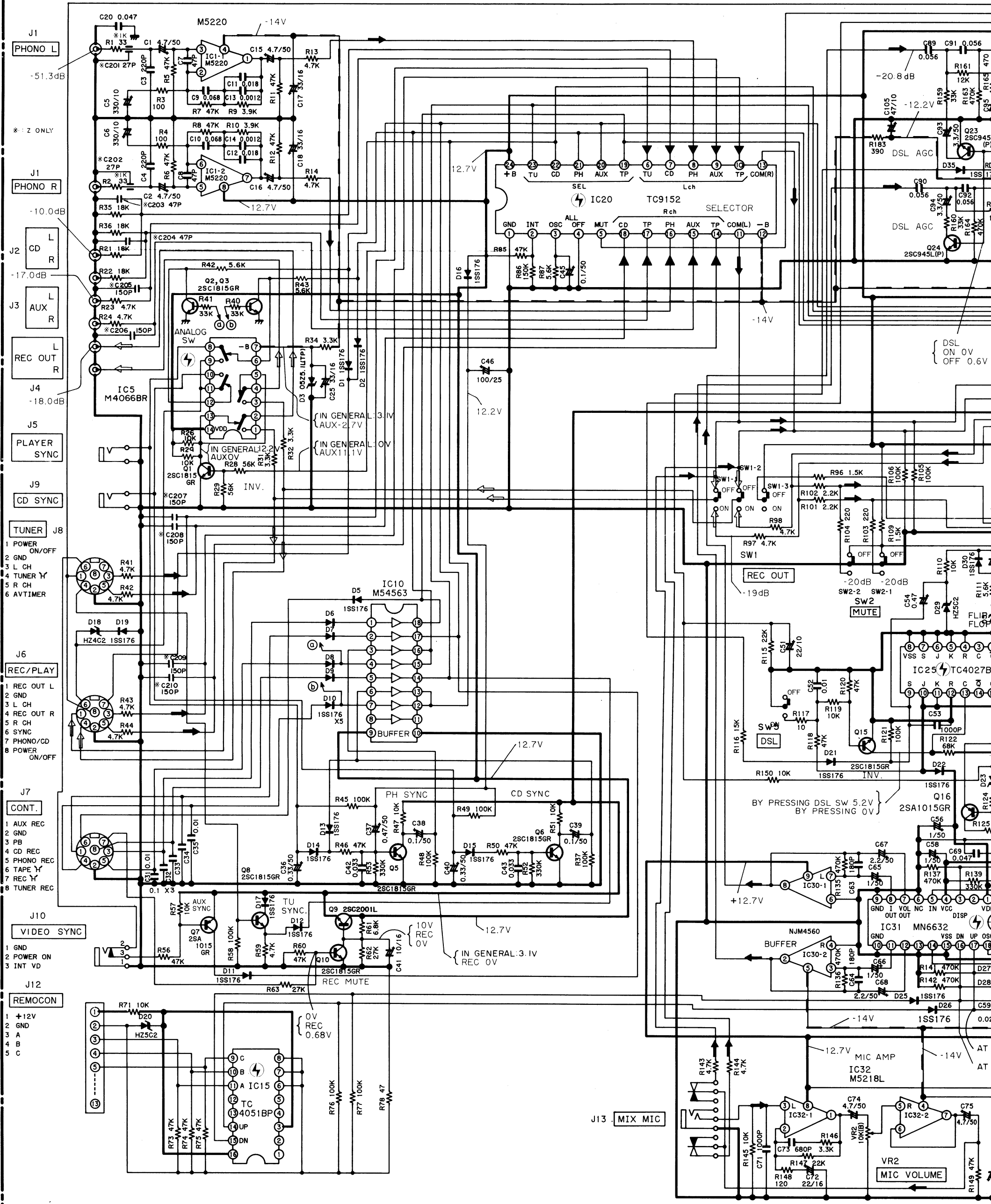
- This schematic diagram is subject to change without notice in the interests of improved performance.

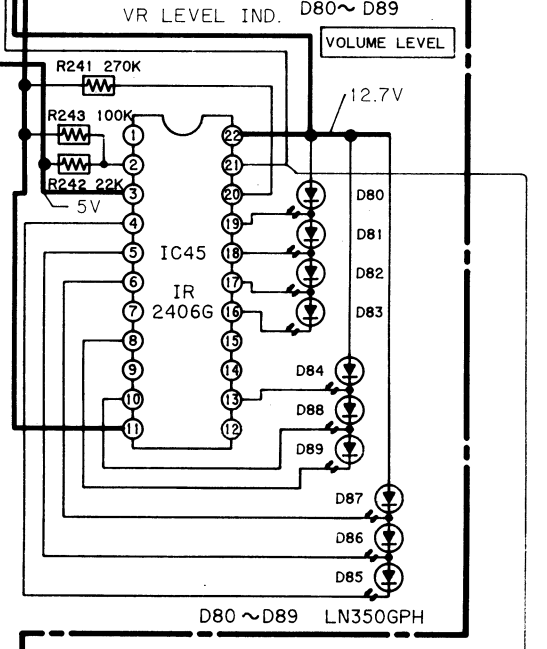
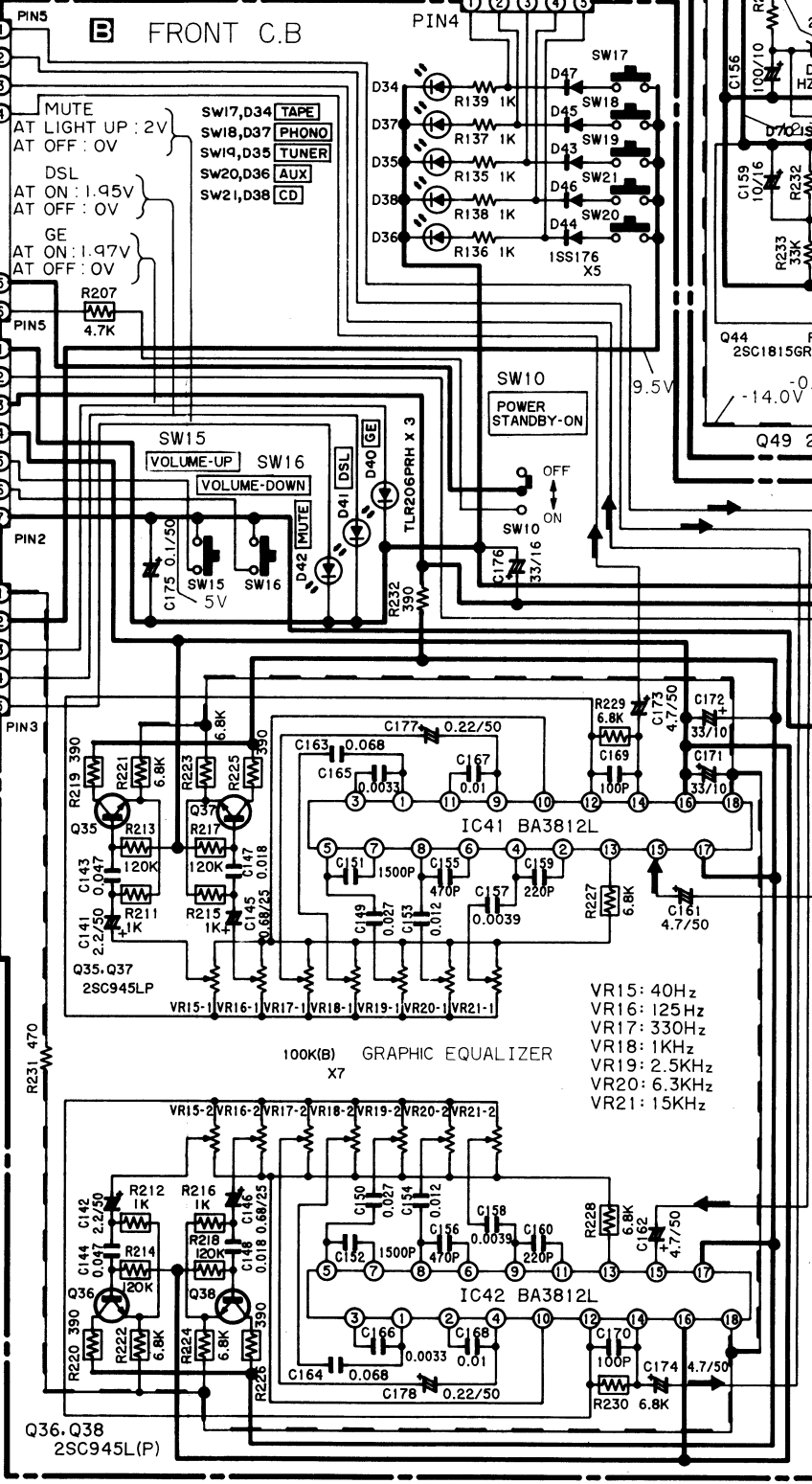
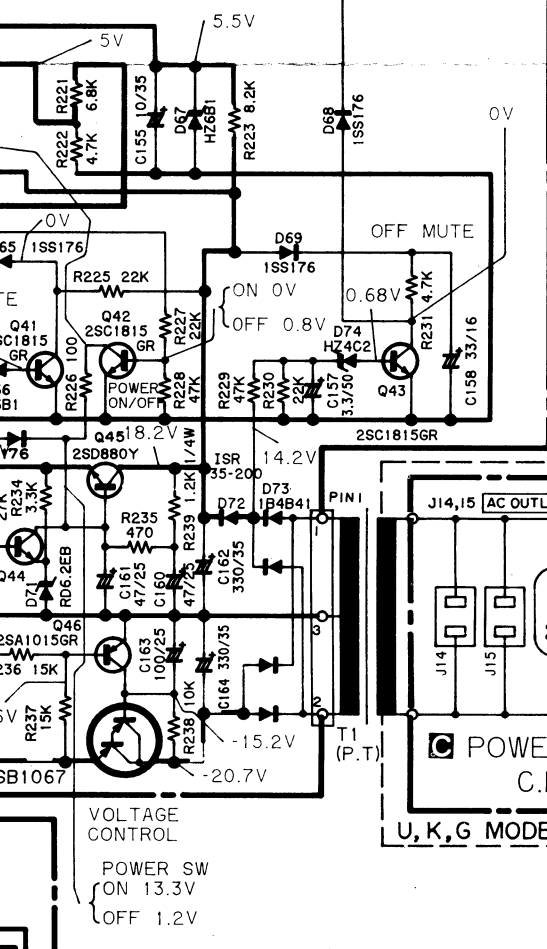
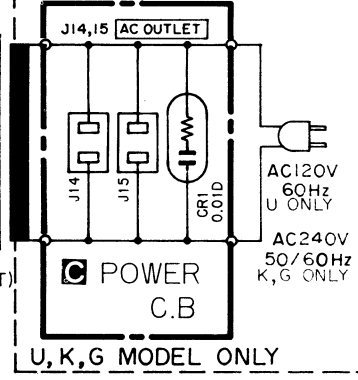
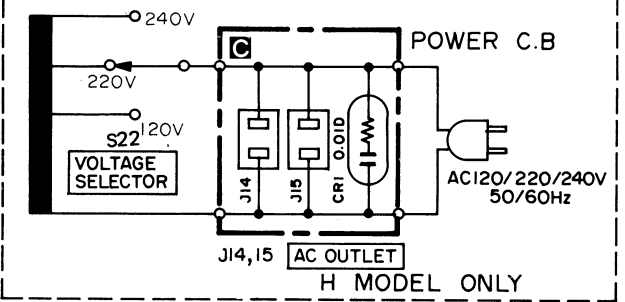
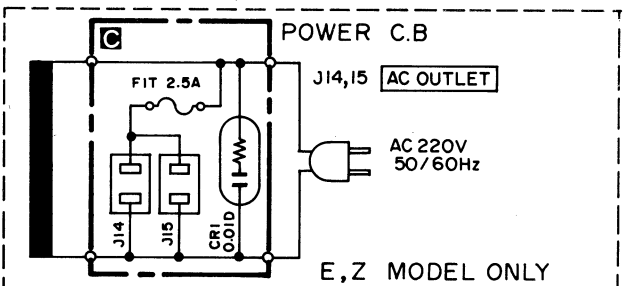
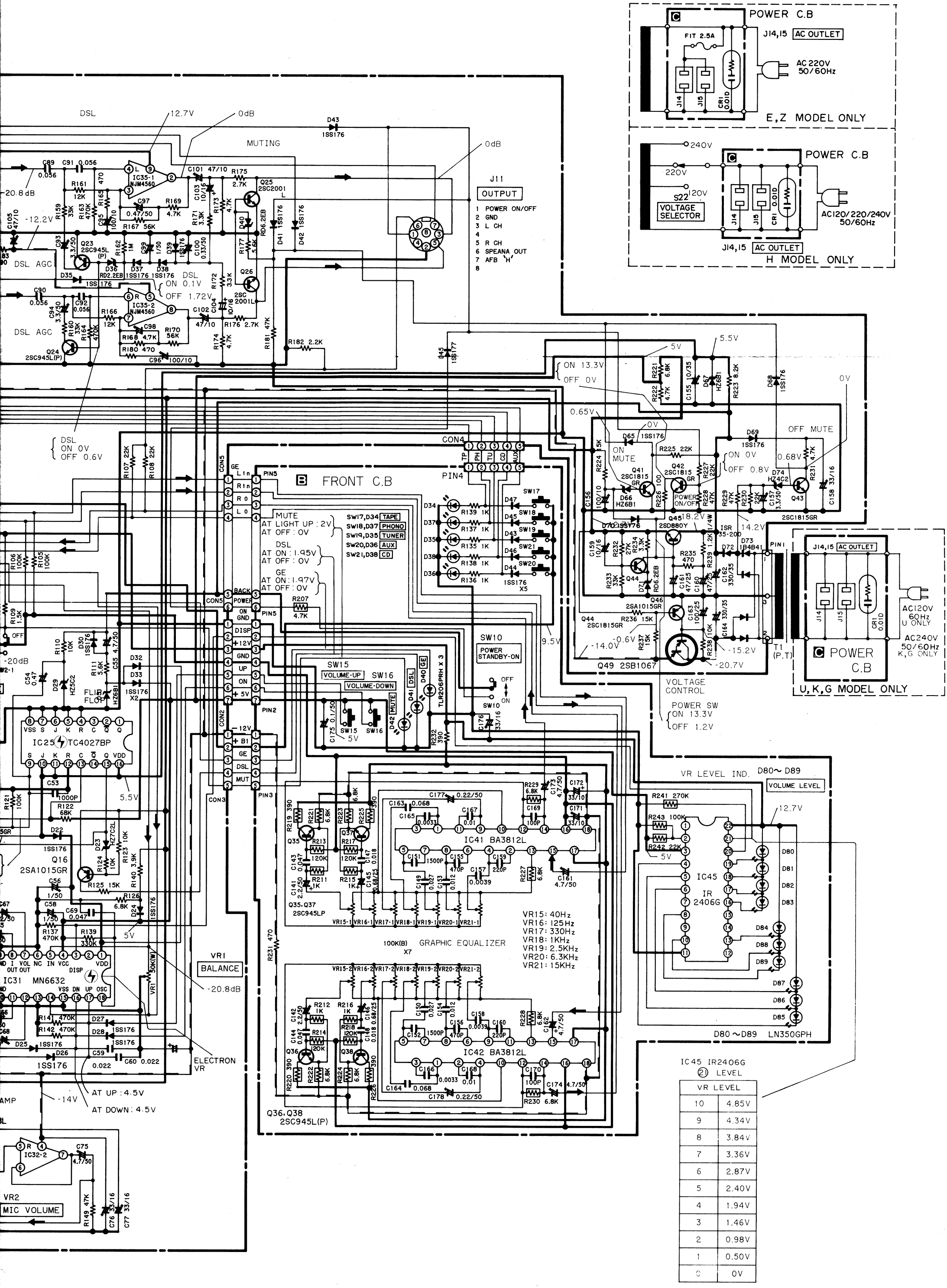


A MAIN C.B

PHONO AMP.

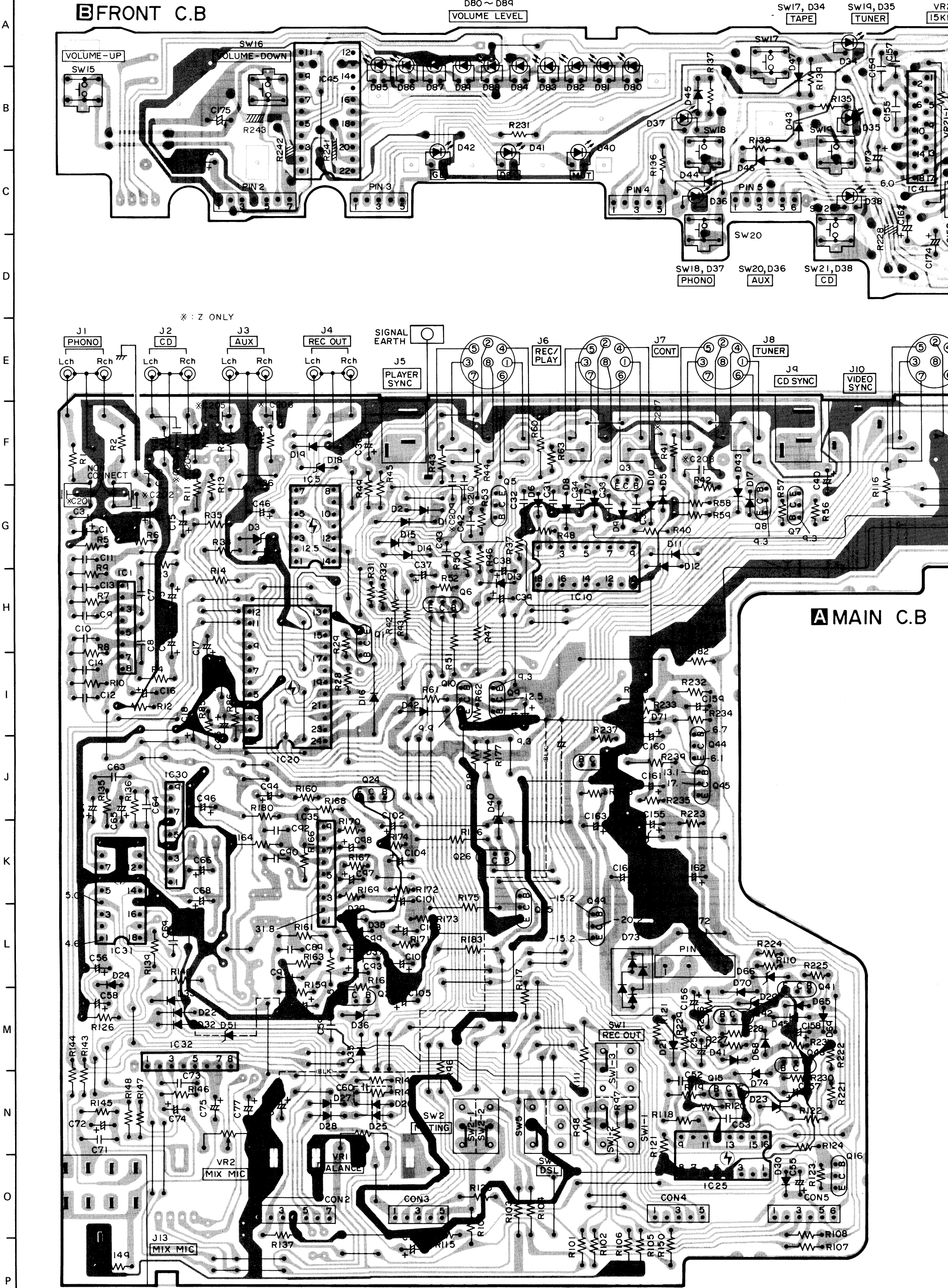
DSL

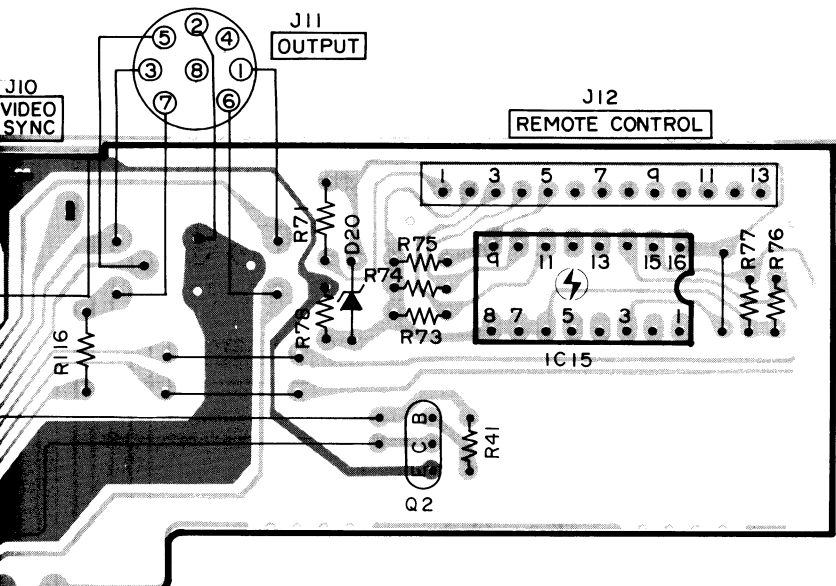
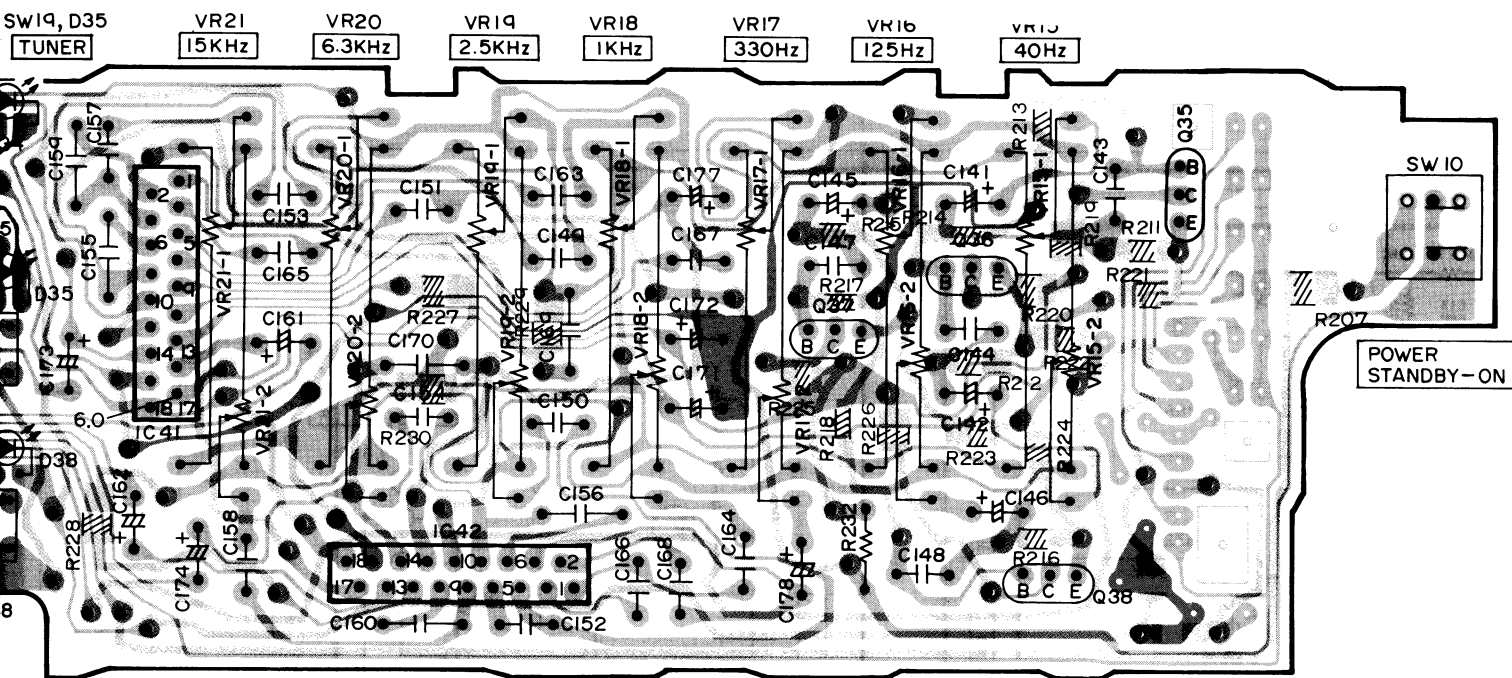




IC45 IR2406G
② LEVEL

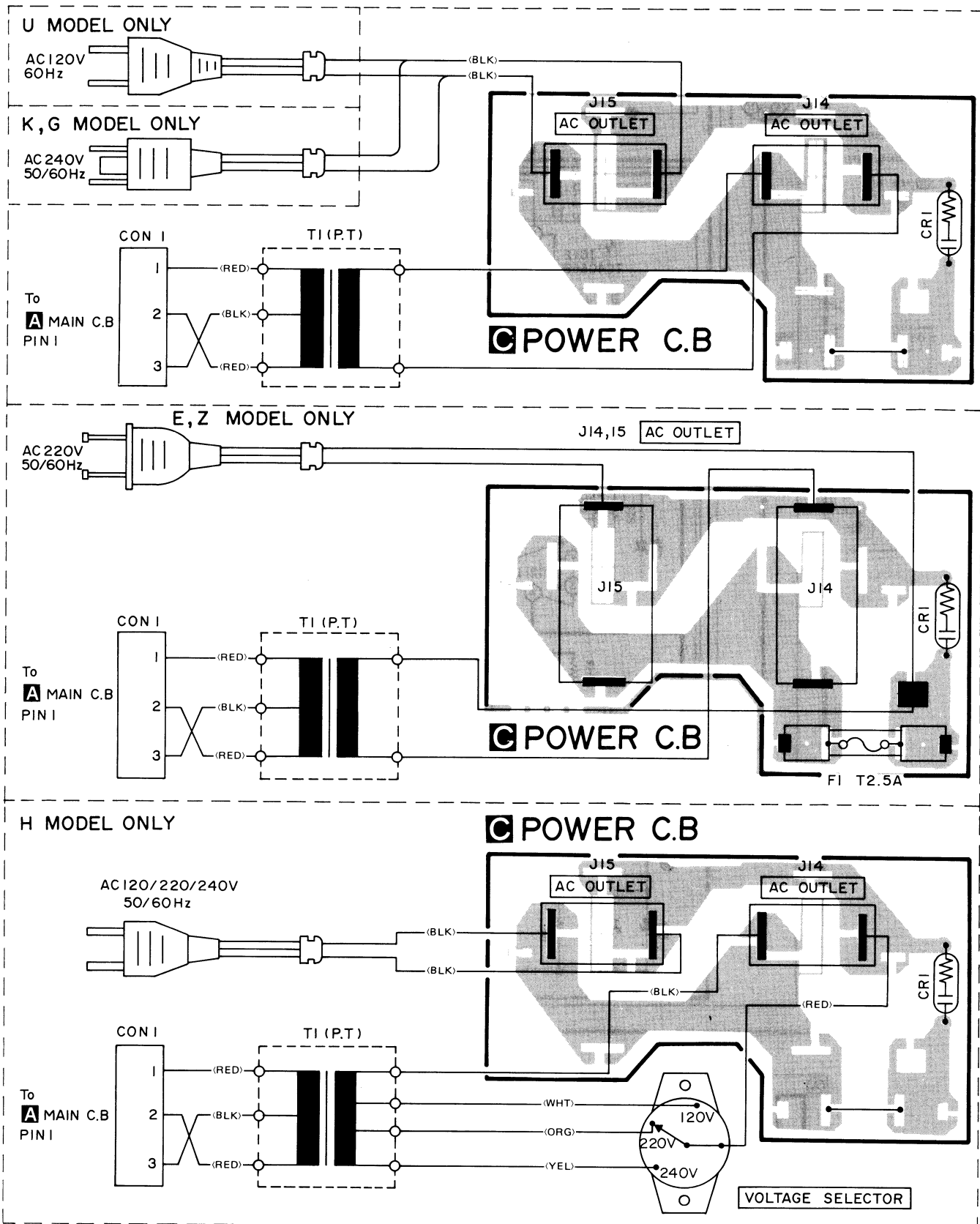
VR LEVEL	Voltage
10	4.85V
9	4.34V
8	3.84V
7	3.36V
6	2.87V
5	2.40V
4	1.94V
3	1.46V
2	0.98V
1	0.50V
C	0V



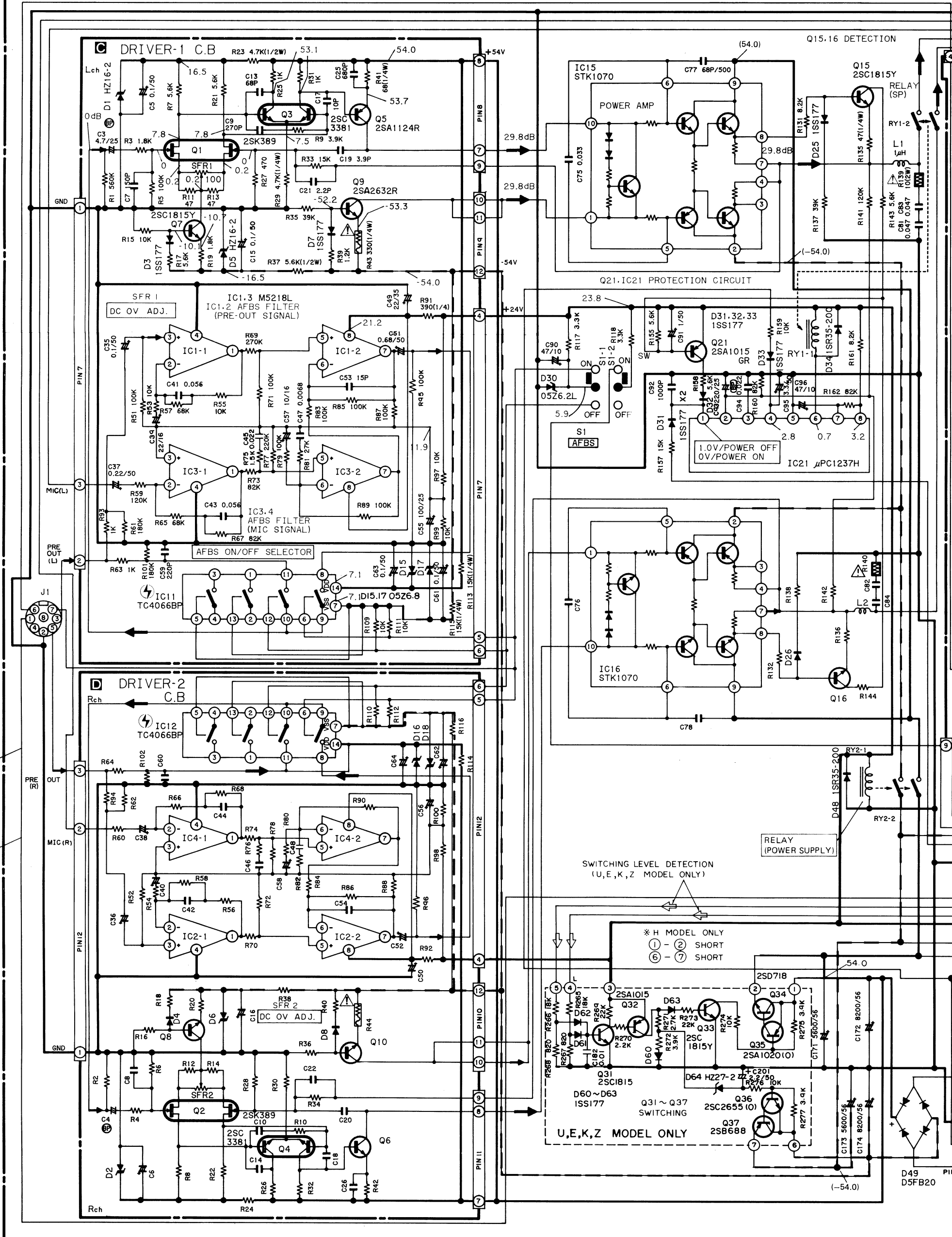


NOTES (1) Earth pattern Component side pattern Others pattern
(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

MAIN C.B



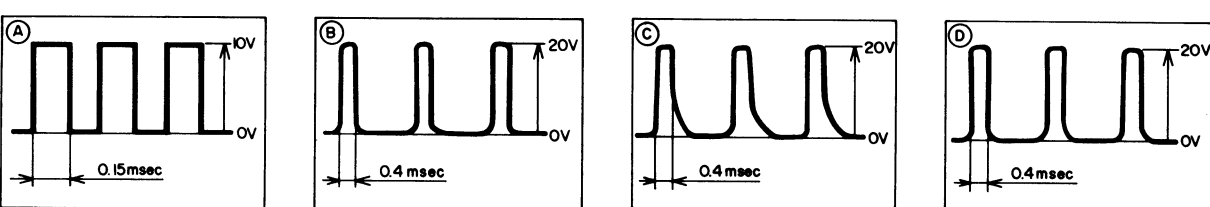
A MAIN C.B.



- INPUT**
- ① POWER ON/OFF
 - ② GND
 - ③ PRE OUT (L)
 - ④ NC
 - ⑤ PRE OUT (R)
 - ⑥ SIGNAL INPUT
 - ⑦ AFB 'H'
 - ⑧ NC

OV/TUNER POWER SW ON
20V/TUNER POWER SW OFF

OV/PRE AMP POWER SW ON
17V/PRE/AMP POWER SW OFF

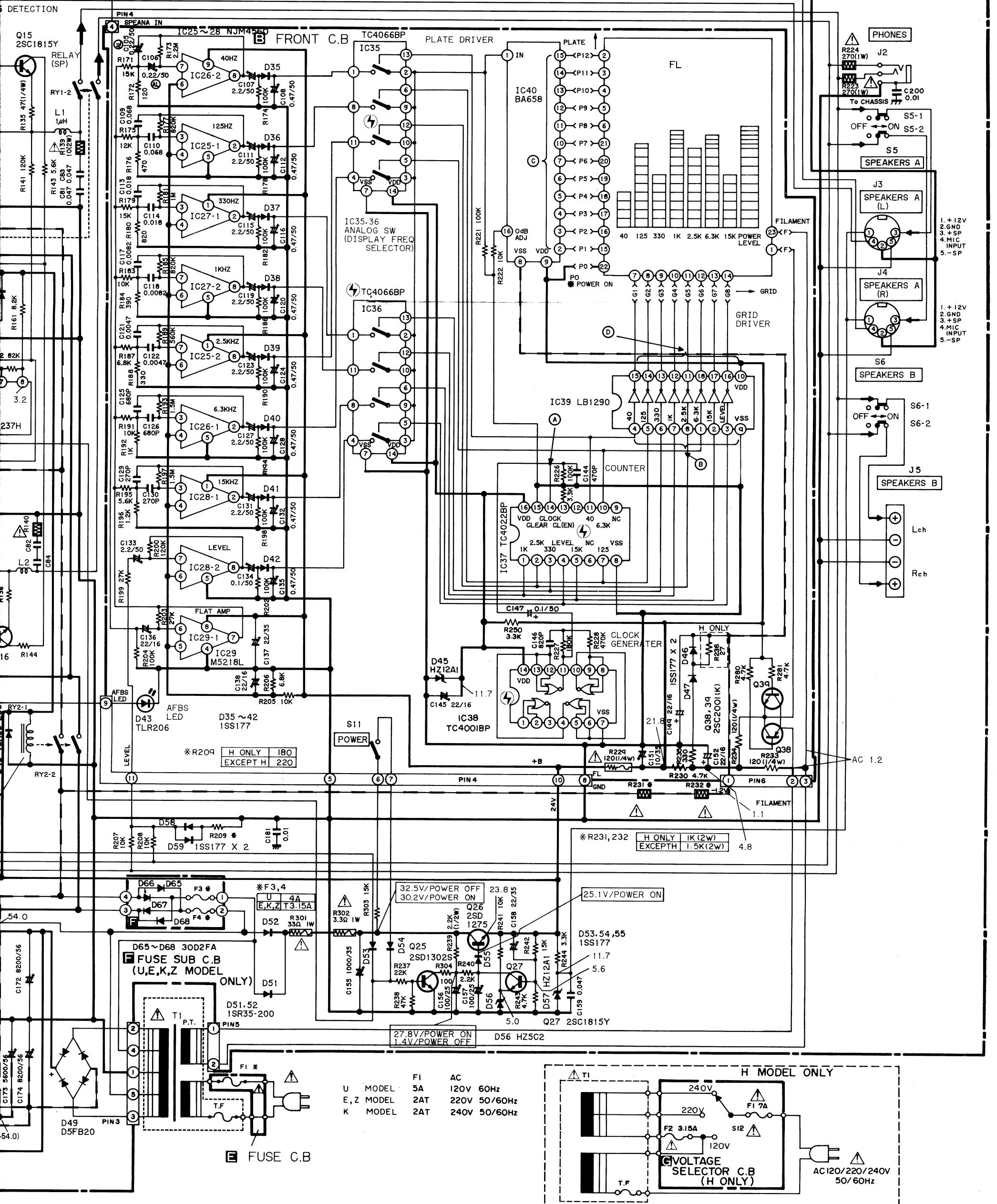


B (+) power supply
 B (-) power supply
 Signal path
 Rec path

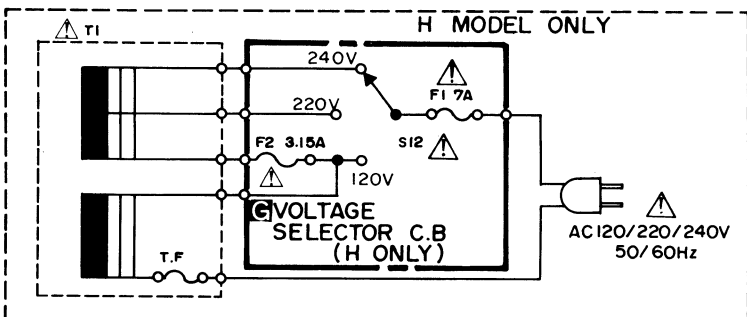
This is a safety-critical circuit. Please refer to the safety instructions for this system.

IC25 ~ 28 (SPECTRUM ANALYZE FREQ & LEVEL) AMP.

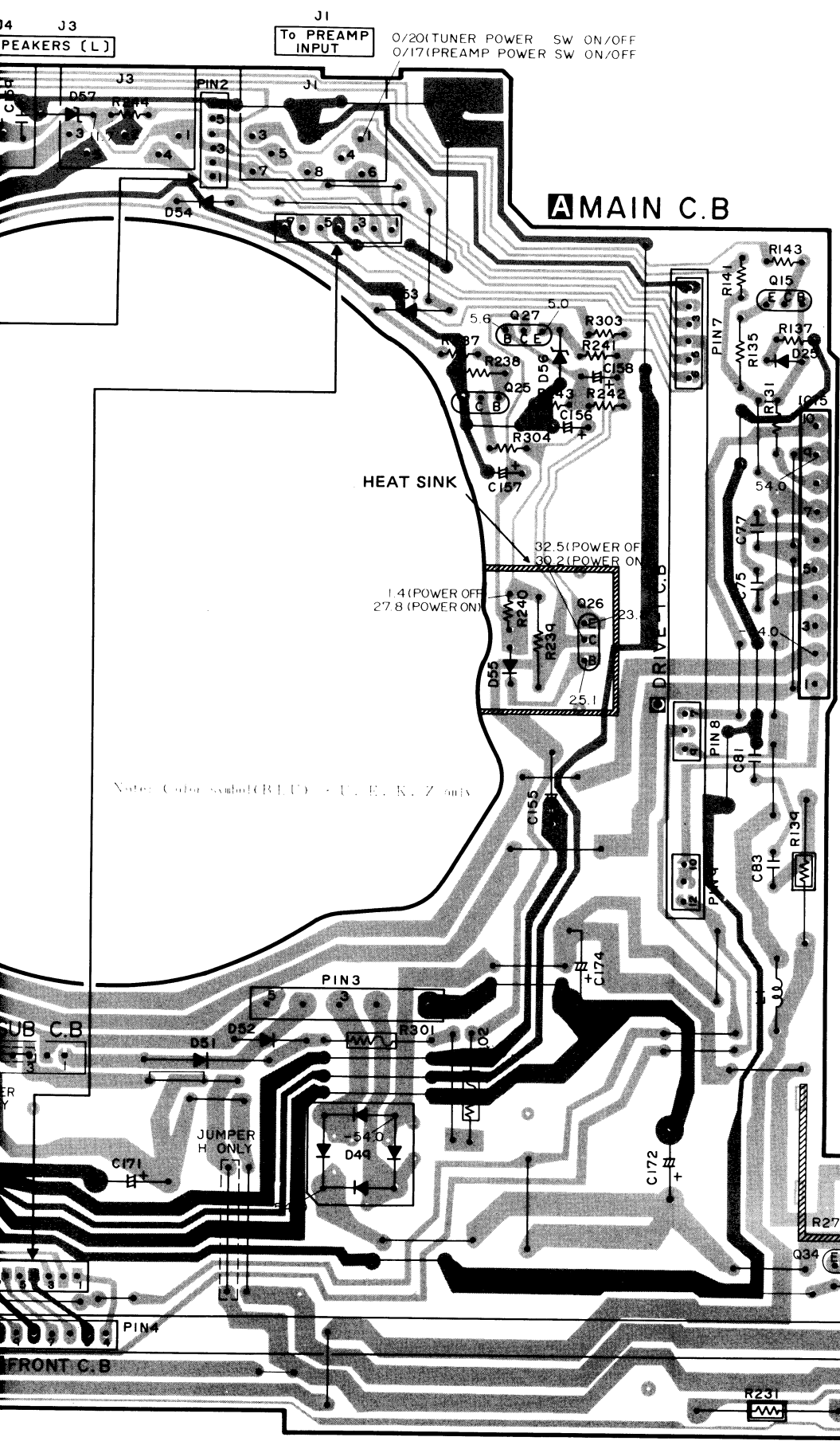
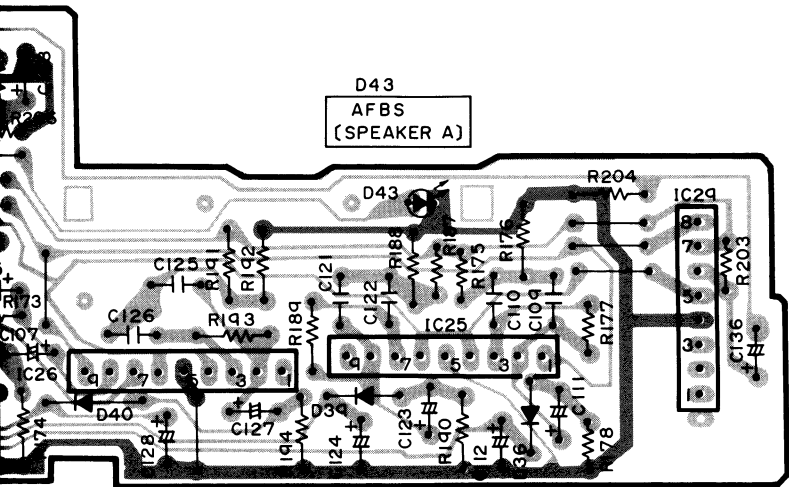
FILTER



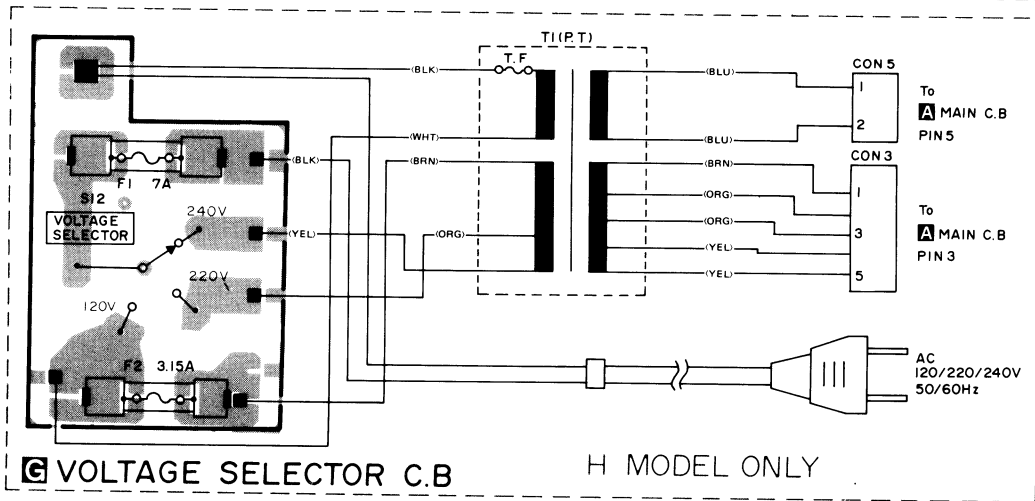
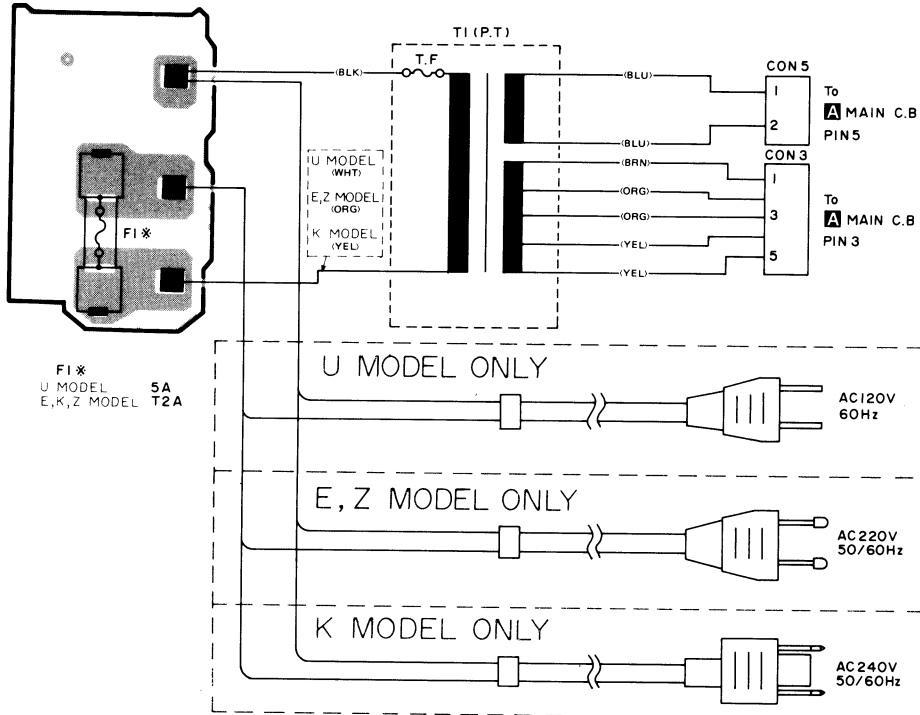
U	MODEL	FI	AC
E, Z	MODEL	5A	120V 60Hz
K	MODEL	2AT	220V 50/60Hz
		2AT	240V 50/60Hz



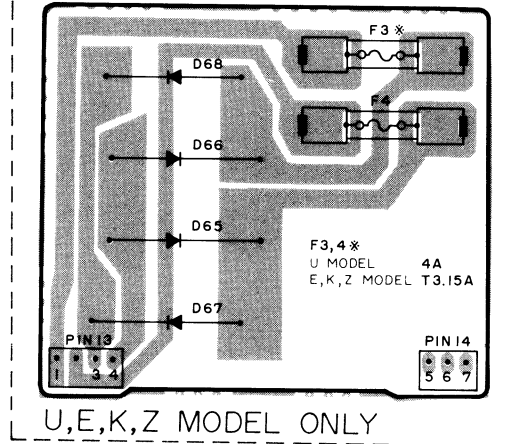
⚠ Safety component symbol
 This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.



FUSE C.B

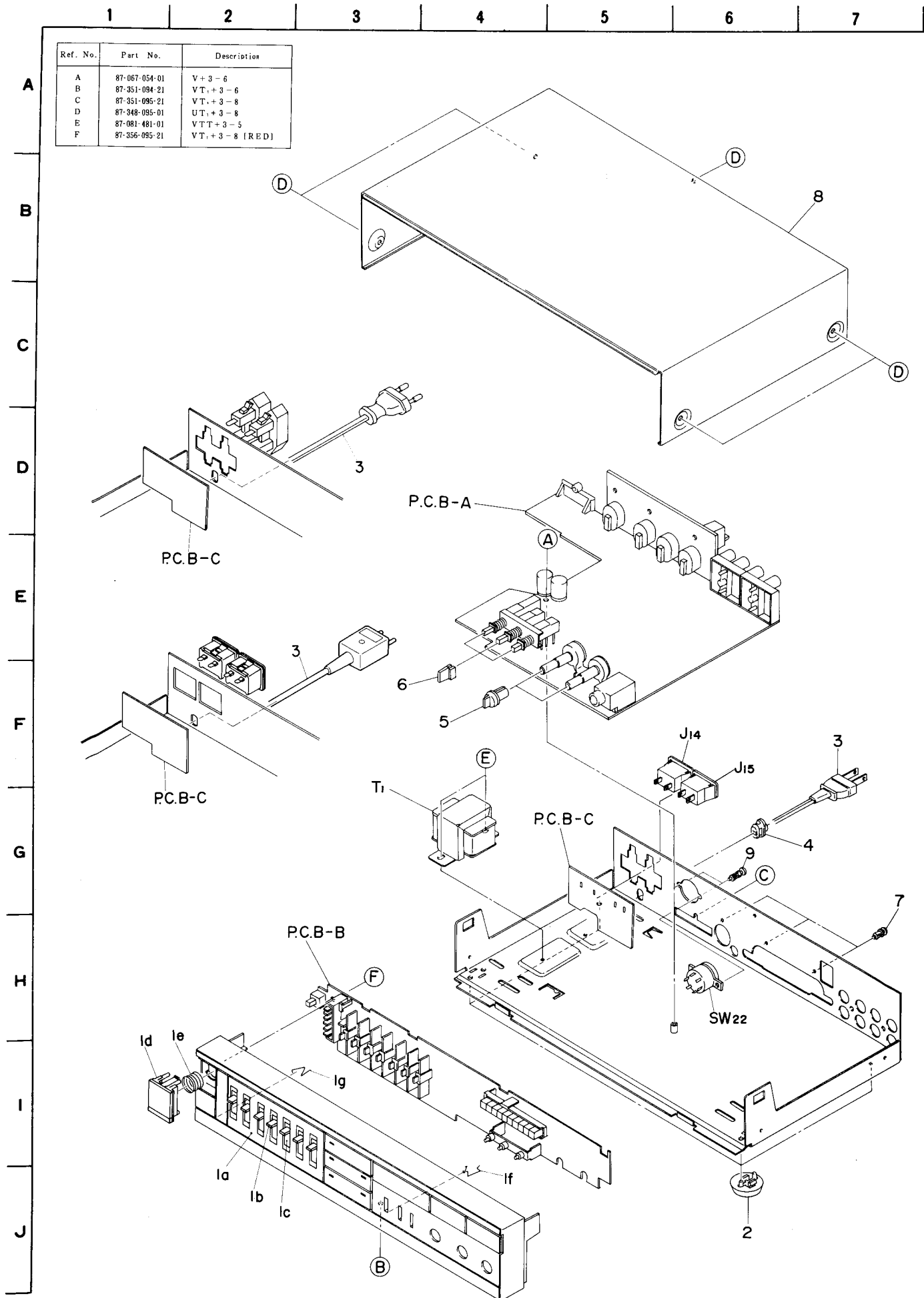


FUSE SUB C.B

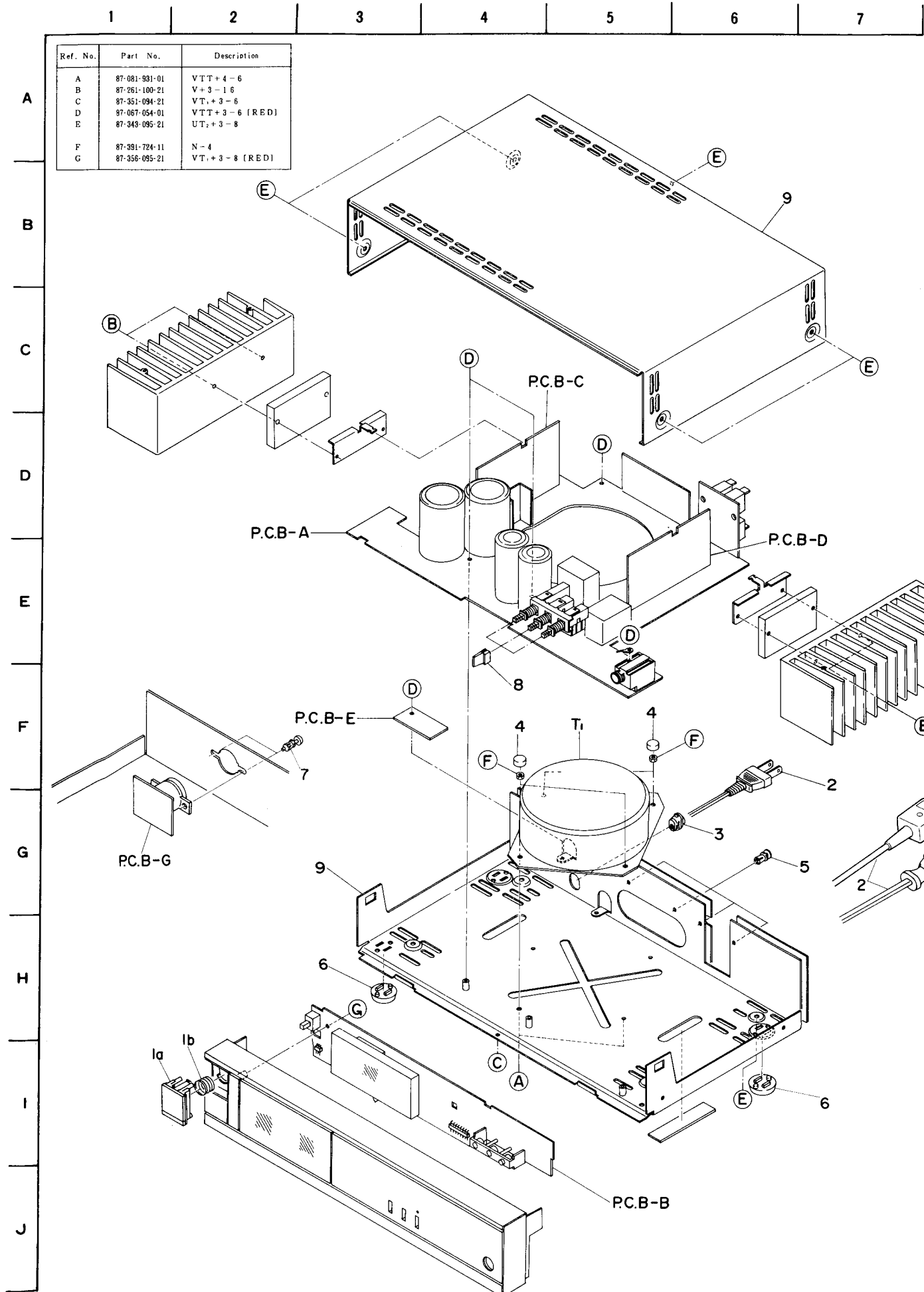


which are indicated by an C-MOS IC symbol mark (⊕).

EXPLODED VIEW GX-120



EXPLODED VIEW BX-120



PARTS LIST

MECHANICAL PARTS LIST

●※mark in this part list shows exclusive part
●★mark means less required items and availabilities may be limited.

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty
	1	★81-739-028	FRONT CABINET UB Ass'y	※	1
	1a	★81-740-007	PLATE G		1
	1b	★81-740-020	KNOB G		7
	1c	★81-740-021	SHEET G		7
	1d	★81-740-050	PUSH-KEY POWER B Ass'y		1
	1e	★81-740-208	C-SPRING, POWER		1
	1f	★81-740-211	T-SPRING, A		1
	1g	★81-740-212	T-SPRING, B		1
	2	★87-055-057	FOOT B		4
	3	★87-034-992	AC POWER CORD (H only)		1
		★87-034-578	AC POWER CORD (U only)		1
		★82-788-674	AC POWER CORD (E, Z only)		1
		★87-034-708	AC POWER CORD (K only)		1
	4	★87-085-184	CORD BUSHING (H, U only)		1
		★87-085-185	CORD BUSHING (E, K, Z only)		1
	5	★82-192-040	KNOB, B	FX-30	2
	6	★82-798-023	PUSH-BUTTON, MUT	MX-90	3
	7	★87-085-102	NYLON RIVET 3.5-5.5		3
	8	★81-735-056	STEEL CABINET TB		1
	9	★87-085-090	NYLON RIVET 3-6.5 (H only)		2

PARTS LIST

MECHANICAL PARTS LIST

●※ mark in this part list stows exclusive part.
●★-mark means less required items and availabilities may be limited.

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty
	1	★81-738-028	FRONT CABINET UB Ass'y	※	1
	1a	★81-740-050	PUSH-KEY POWER B Ass'y		1
	1b	★81-740-208	C-SPRING, POWER		1
	2	★87-034-992	AC POWER CORD (H only)		1
		★87-034-578	AC POWER CORD (U only)		1
		★82-788-674	AC POWER CORD (E, Z only)		1
		★87-034-708	AC POWER CORD (K only)		1
	3	★87-085-184	CORD BUSHING (H, U only)		1
		★87-085-185	CORD BUSHING (E, K, Z only)		1
	4	★82-781-206	PLATE NUT	SA-P 80	2
	5	★87-085-102	NYLON RIVET 3.5-5.5		4
	6	★87-055-057	FOOT B		4
	7	★87-085-090	NYLON RIVET 3-6.5 (H only)		2
	8	★82-798-023	PUSH-BUTTON, MUT	MX-90	3
	9	★81-738-035	STEEL CABINET PB	※	1

■ ACCESSORIES/PACKAGE LIST

GX-120

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty
	1	81-739-904	INSTRUCTION BOOKLET	※	1

BX-120

Part No. changed to	Ref. No.	Part No.	Description	Common Model	Q'ty
	1	★81-738-904	INSTRUCTION BOOKLET	※	1

AIWA Co., Ltd. Tokyo Japan