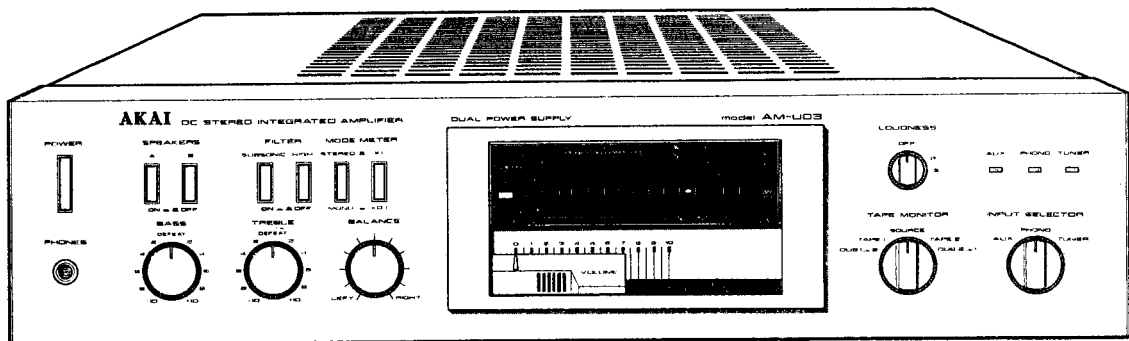


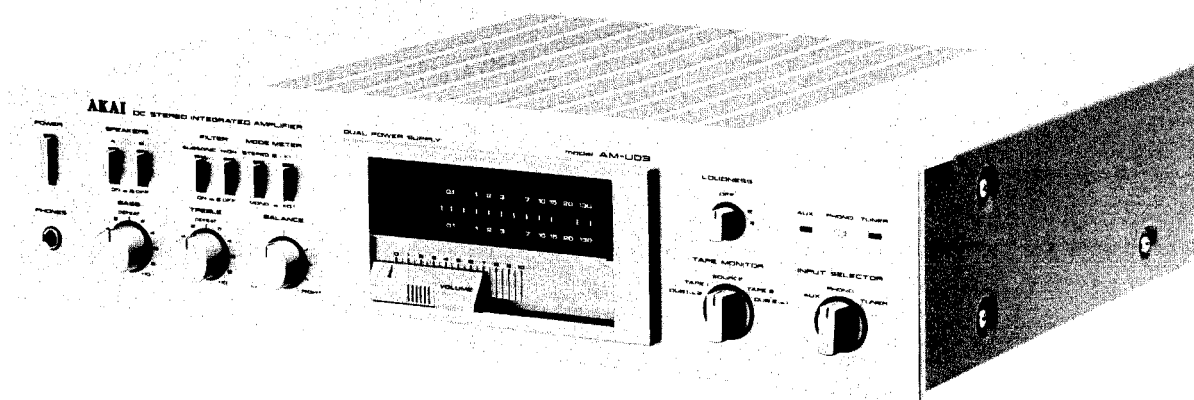
AKAI SERVICE MANUAL

AM-U03



DC STEREO INTEGRATED AMPLIFIER

MODEL **AM-U03**



DC STEREO INTEGRATED AMPLIFIER

MODEL AM-U03

ALSO APPLICABLE TO BLACK PANEL MODEL

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SECTION 1

SERVICE MANUAL

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For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

I. TECHNICAL DATA

POWER AMPLIFIER SECTION

RATED POWER OUTPUT (2-Channel Driven)	37 watts per channel, minimum RMS, at 8 ohms from 20 to 20,000 Hz with no more than 0.008% total harmonic distortion.
POWER BANDWIDTH (IHF)	6 Hz to 60 kHz/8 ohms (Total Harmonic Distortion: 0.07%)
SIGNAL TO NOISE RATIO (IHF) PHONO AUX	Better than 75 dB Better than 95 dB
RESIDUAL NOISE	Less than 0.5 mV at 8 ohms
CHANNEL SEPARATION (IHF) PHONO	Better than 60 dB at 1,000 Hz
DAMPING FACTOR	More than 45 (1 kHz, 8 ohms)
OUTPUT SPEAKERS HEADPHONE	A, B (4 to 16 ohms)/A + B (8 to 16 ohms) 4 to 16 ohms

PRE AMPLIFIER SECTION

INPUT SENSITIVITY/IMPEDANCE PHONO AUX TUNER TAPE MONITOR	3 mV/47 kohms 150 mV/100 kohms 150 mV/100 kohms PIN: 150 mV/100 kohms DIN: 150 mV/100 kohms
OUTPUT LEVEL/IMPEDANCE TAPE REC PRE OUT	PIN: 150 mV/1 kohms DIN: 30 mV/30 kohms 1 V/1 kohms
FREQUENCY RESPONSE PHONO (RIAA equalization) TUNER, AUX, TAPE MONITOR	30 Hz to 15 kHz ± 0.5 dB 6 Hz to 100 kHz +0 dB, -2 dB
TONE CONTROL BASS TREBLE	± 8.5 dB at 100 Hz ± 8.5 dB at 10 kHz
LOUDNESS CONTROL	at 100 Hz at 10 kHz 1. 3 dB 1. 2.5 dB 2. 6.5 dB 2. 5.0 dB 3. 10 dB 3. 7.5 dB (Volume control set at -30 dB position)
FILTER SUBSONIC HIGH	-3 dB at 18 Hz -3 dB at 10 kHz

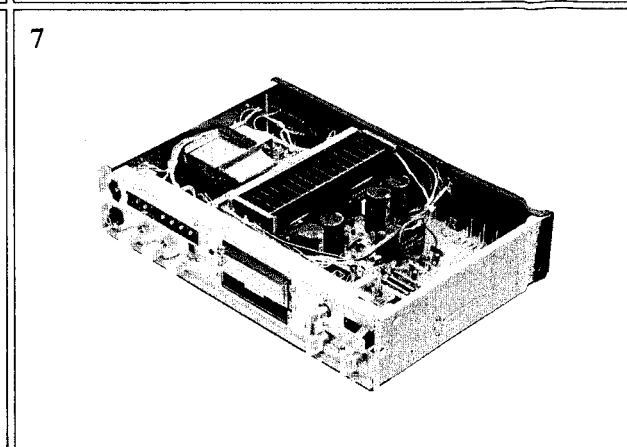
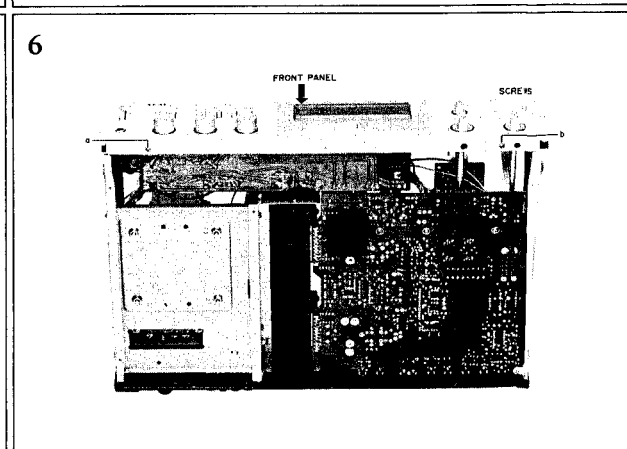
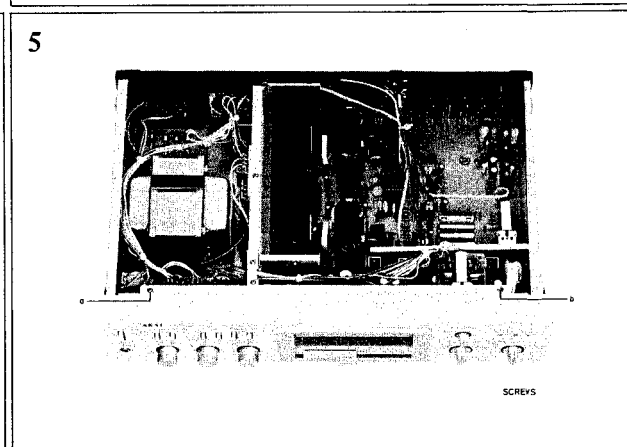
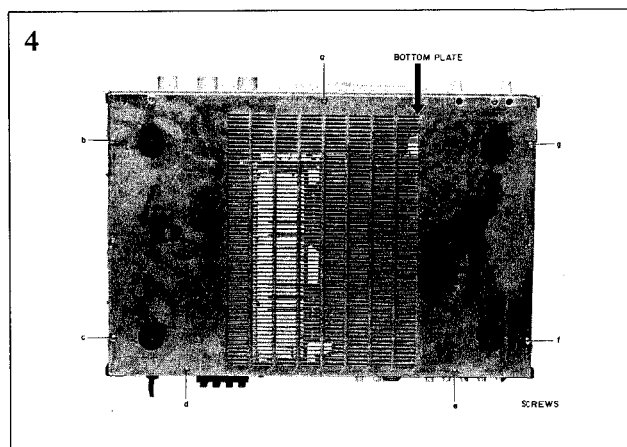
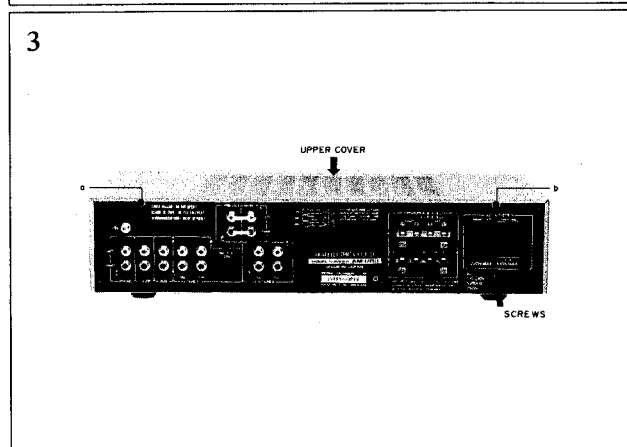
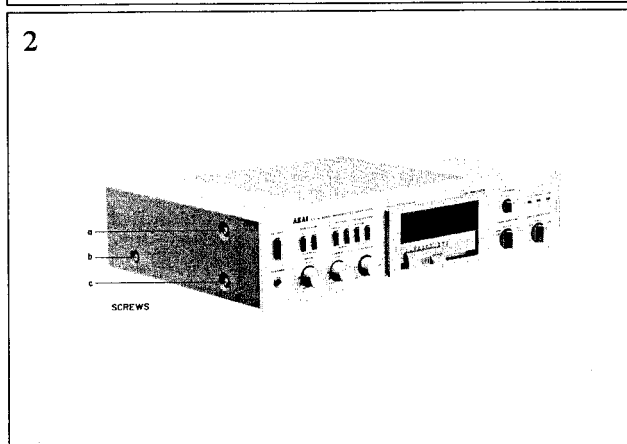
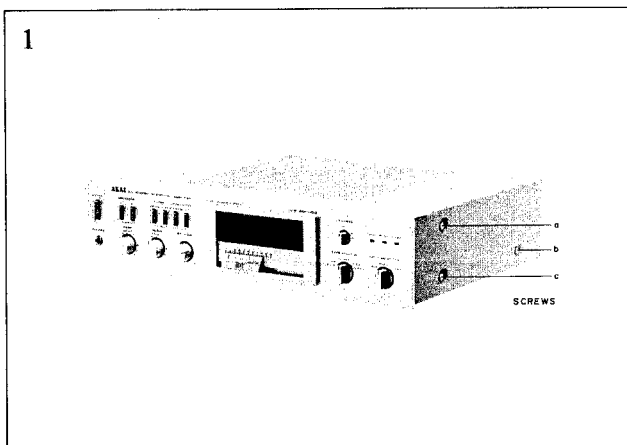
MISCELLANEOUS

POWER REQUIREMENTS	120 V, 60 Hz for USA and Canada 220 V, 50 Hz for Europe except UK 240 V, 50 Hz for UK and Australia 110 V/220 V/240 V, 50/60 Hz internally switchable for other countries
POWER CONSUMPTION	230 W
DIMENSIONS	440 (W) \times 105 (H) \times 300 (D) mm (17.3 \times 4.1 \times 11.8 inches)
WEIGHT	8.6 kg (18.9 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.



III. CONTROLS

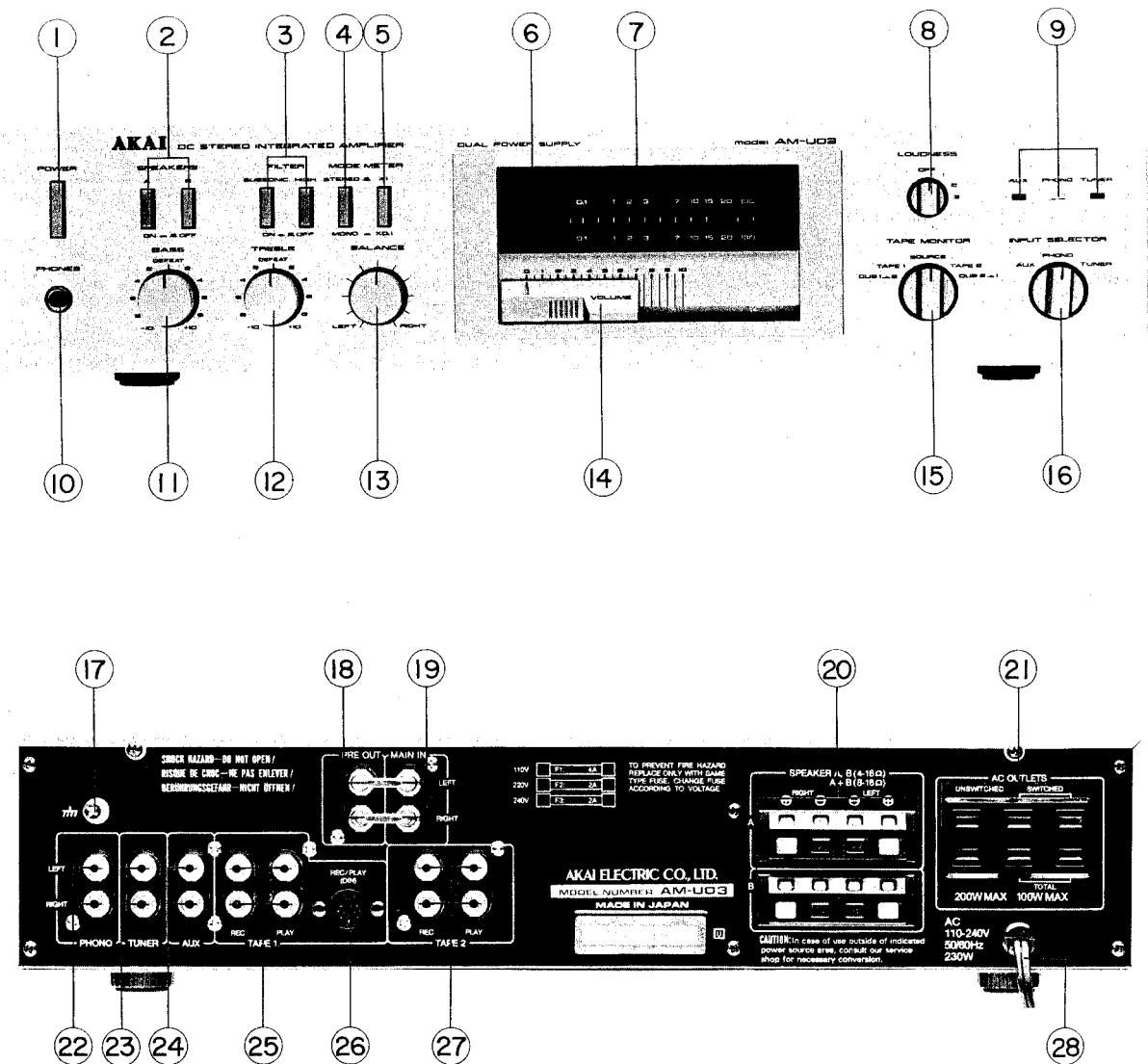


Fig. 1

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. POWER SWITCH 2. SPEAKER SYSTEM SELECTOR SWITCHES 3. FILTER SWITCHES 4. MODE SELECTOR 5. METER SWITCH 6. CLIPPING INDICATOR 7. FLD BAR METER 8. LOUDNESS SWITCH 9. INPUT SELECTOR INDICATOR 10. HEADPHONE JACK 11. BASS CONTROL 12. TREBLE CONTROL 13. STEREO BALANCE CONTROL 14. VOLUME CONTROL 15. TAPE MONITOR SWITCH 16. INPUT SELECTOR | <ol style="list-style-type: none"> 17. EARTH TERMINAL 18. PRE-OUT TERMINALS 19. MAIN-IN TERMINALS 20. A AND B SYSTEM SPEAKER TERMINALS 21. EXTRA AC OUTLETS
(Some models are not equipped with this facility.) 22. PHONO TERMINALS 23. TUNER TERMINALS 24. AUX TERMINALS 25. TAPE 1 SYSTEM REC/PLAY TERMINALS 26. TAPE 1 SYSTEM DIN JACK 27. TAPE 2 SYSTEM REC/PLAY TERMINALS 28. AC CORD (Some models are equipped with an AC Inlet instead of an AC cord. Connect with an appropriate power cord.) |
|--|--|

IV. PRINCIPAL PARTS LOCATION

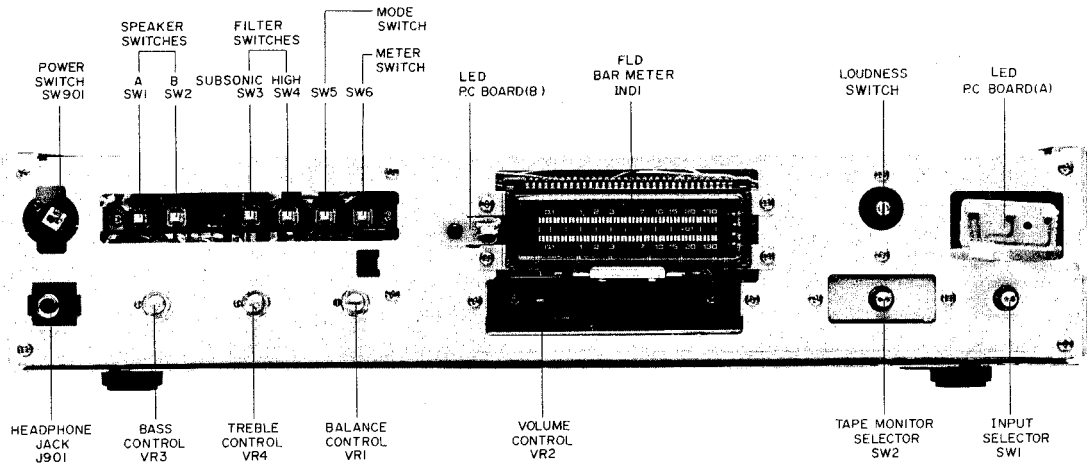


Fig. 2 Front View

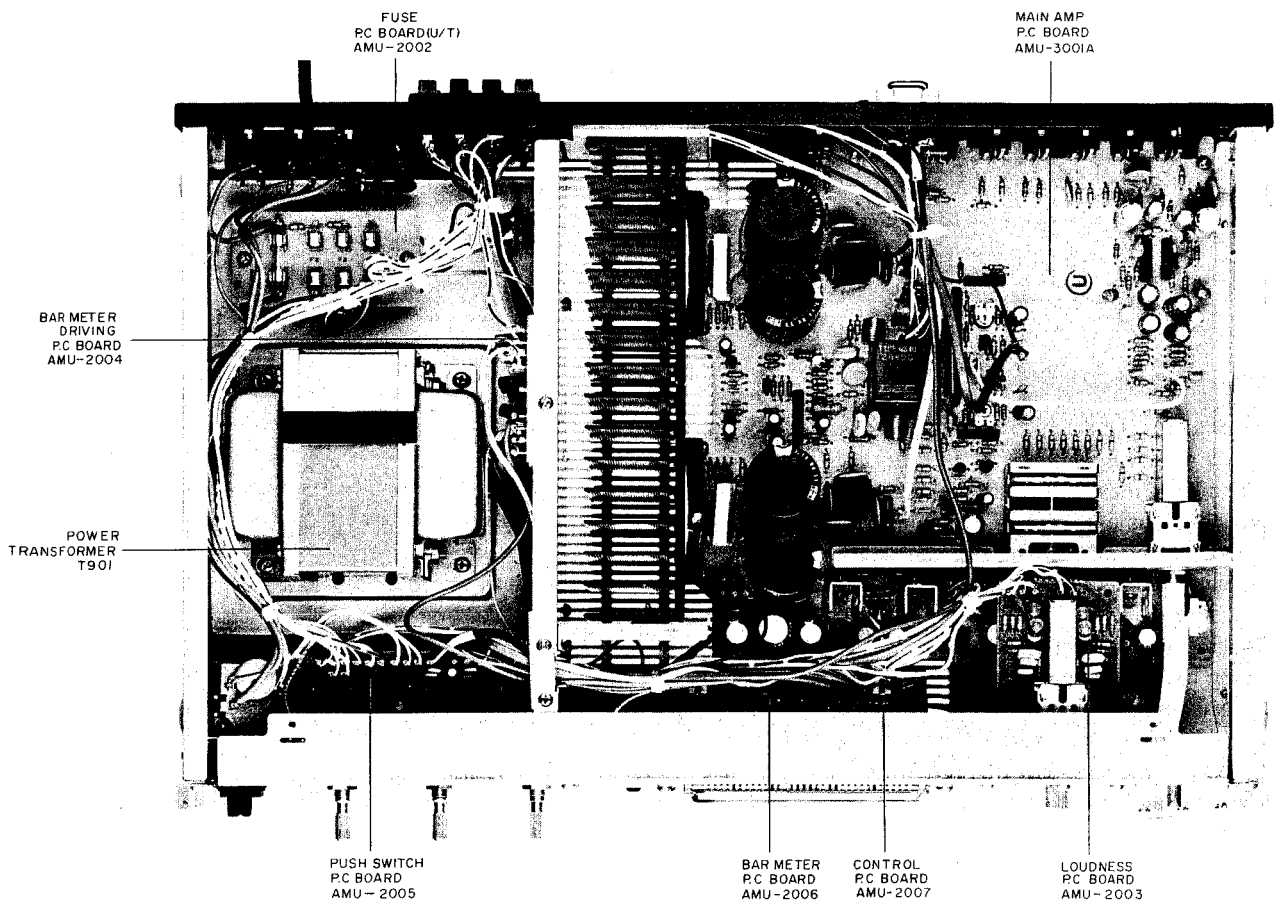


Fig. 3 Top View

V. VOLTAGE CONVERSION

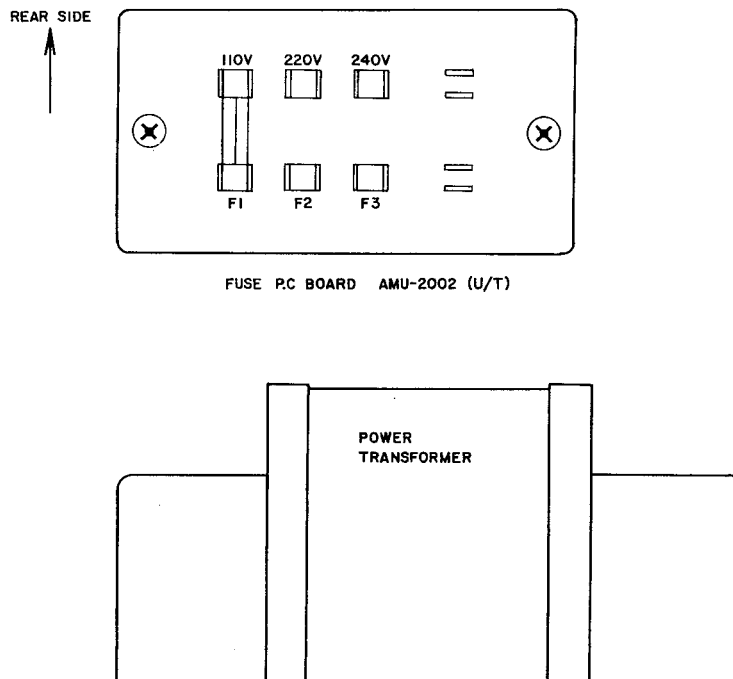


Fig. 4 Voltage Conversion (U/T Model)

Models for Canada, USA, Europe, UK and Australia are not equipped with this facility.

Each machine is preset at the factory according to destination but some machines can be set to 110 V, 220 V or 240 V as required.

If voltage change is necessary, this can be accomplished as follows.

- 1) Disconnect AC Power Cord.
- 2) Loosen holding screws and remove upper cover.
- 3) Remove existing line voltage fuse and insert required line voltage fuse in proper fuse holder, explicitly following instructions printed on rear panel.

110 V Area: 4 A

220 V Area: 2 A

240 V Area: 2 A

VI. LEVEL DIAGRAM

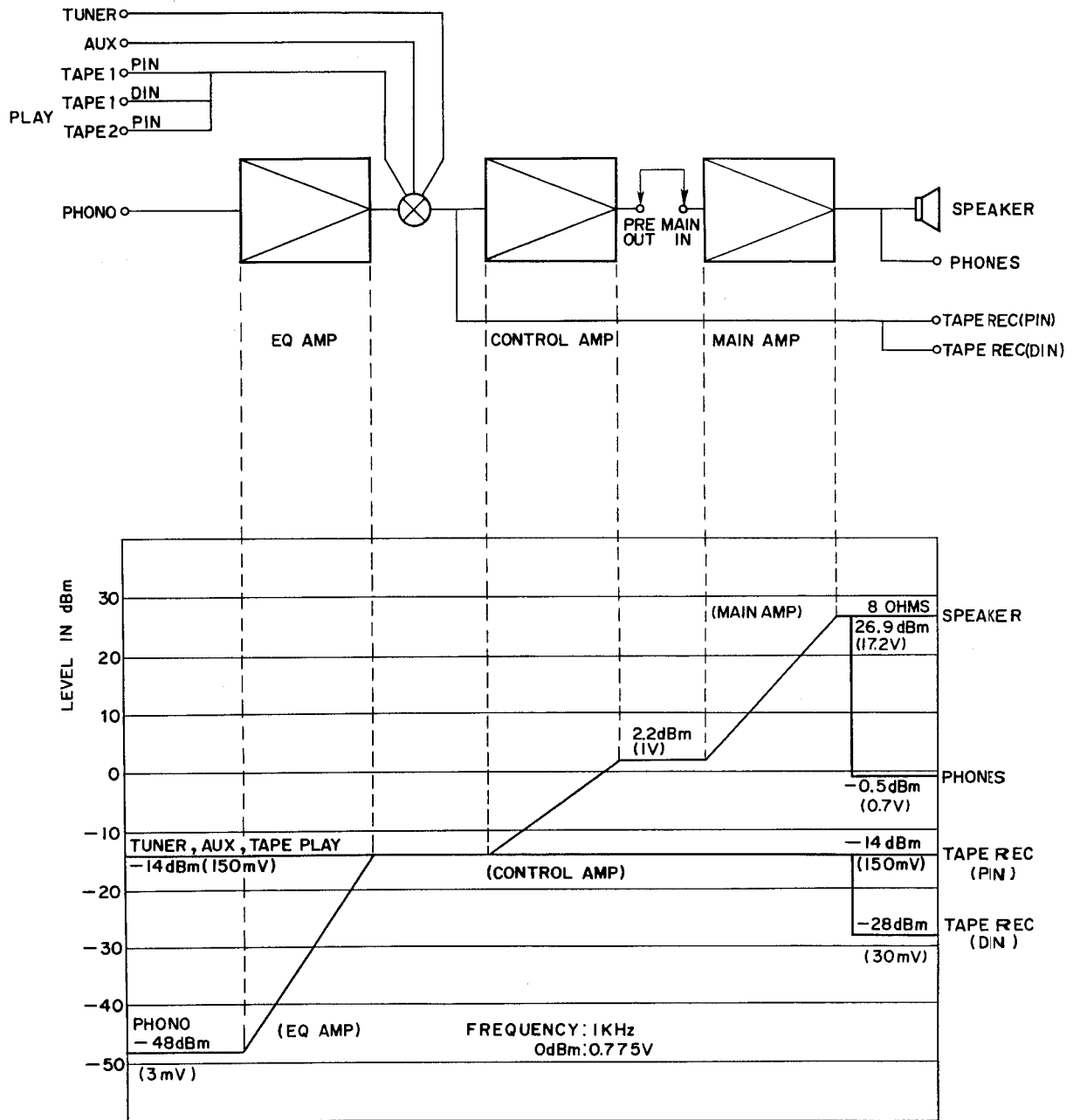


Fig. 5 Level Diagram

VII. ADJUSTMENT

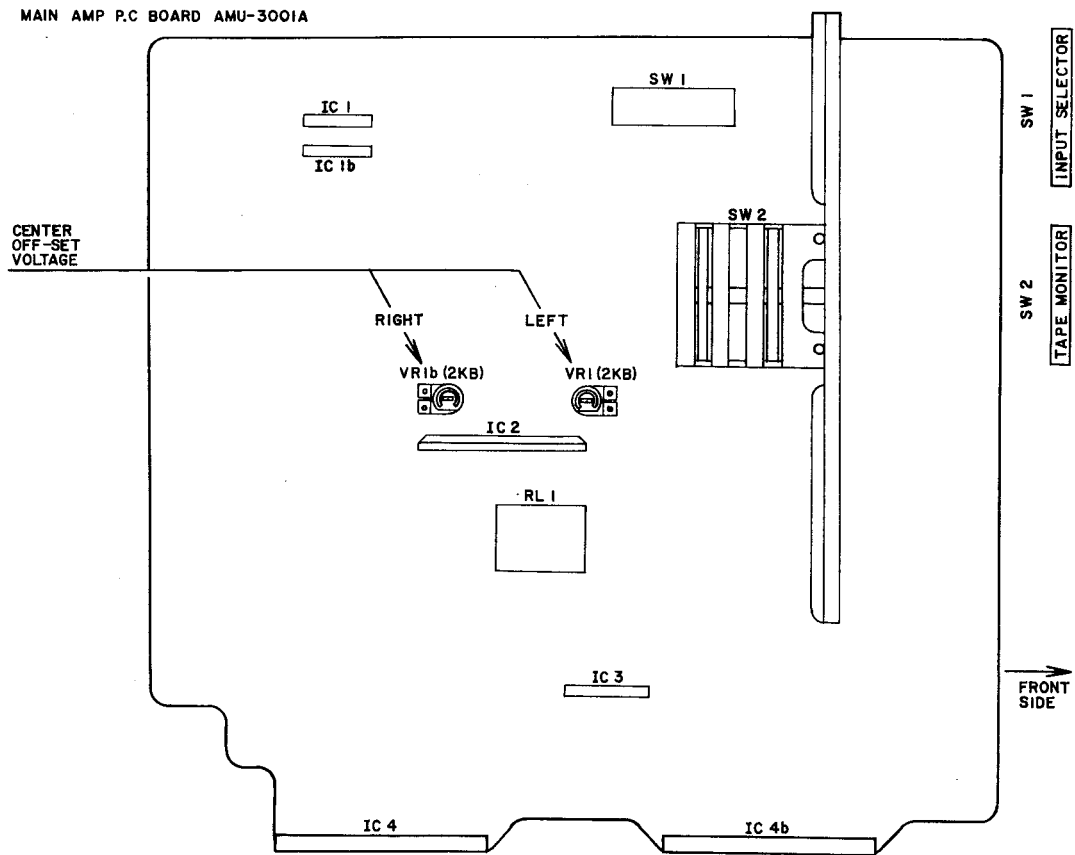


Fig. 6 Center Off-set Voltage

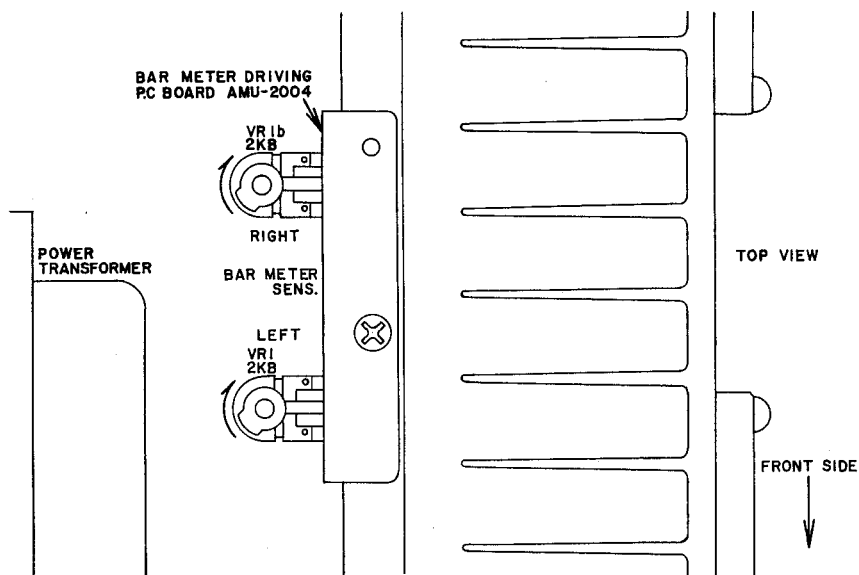


Fig. 7 Bar Meter Sens.

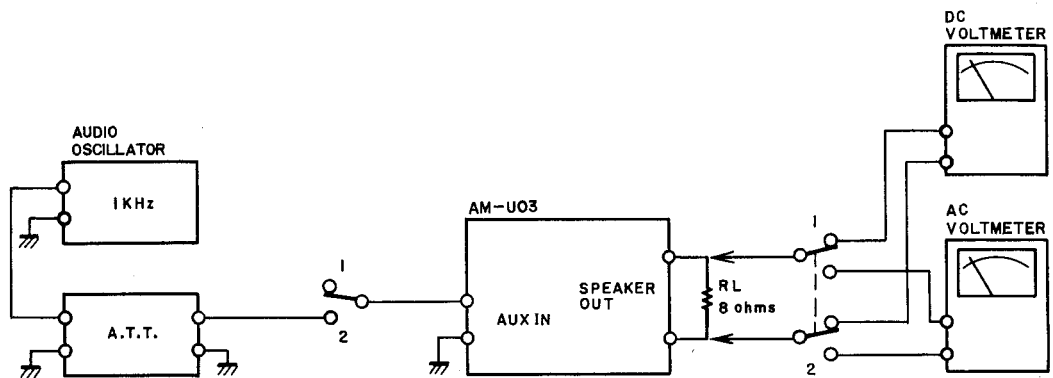


Fig. 8 Instrument Connections

1. CENTER OFF-SET VOLTAGE

ADJUSTMENT (Refer to Figs. 6, 8)

Connect the Digital Voltmeter or DC Voltmeter to the SPEAKER terminals. Adjust the VR1 (1 k Ω , left channel), VR1b (1 k Ω , right channel) on the Main Amp P.C Board, so that the Voltmeter reads 0 ± 10 mV.

2. BAR METER SENSITIVITY

ADJUSTMENT (Refer to Figs. 7, 8)

Set the METER switch to "x 1" position.

Connect load resistor ($R_L = 8$ ohms) to the SPEAKER terminals, and input a sine waves of 1 kHz to the AUX terminal.

Control the input signal level until the AC Voltmeter connected to the both ends of the load resistor read 8.9 V.

Under this condition, adjust VR1 (2 k Ω , left channel), VR1b (2 k Ω , right channel) so that the BAR METER indicate 10 W.

VIII. CLASSIFICATION OF VARIOUS P.C BOARDS

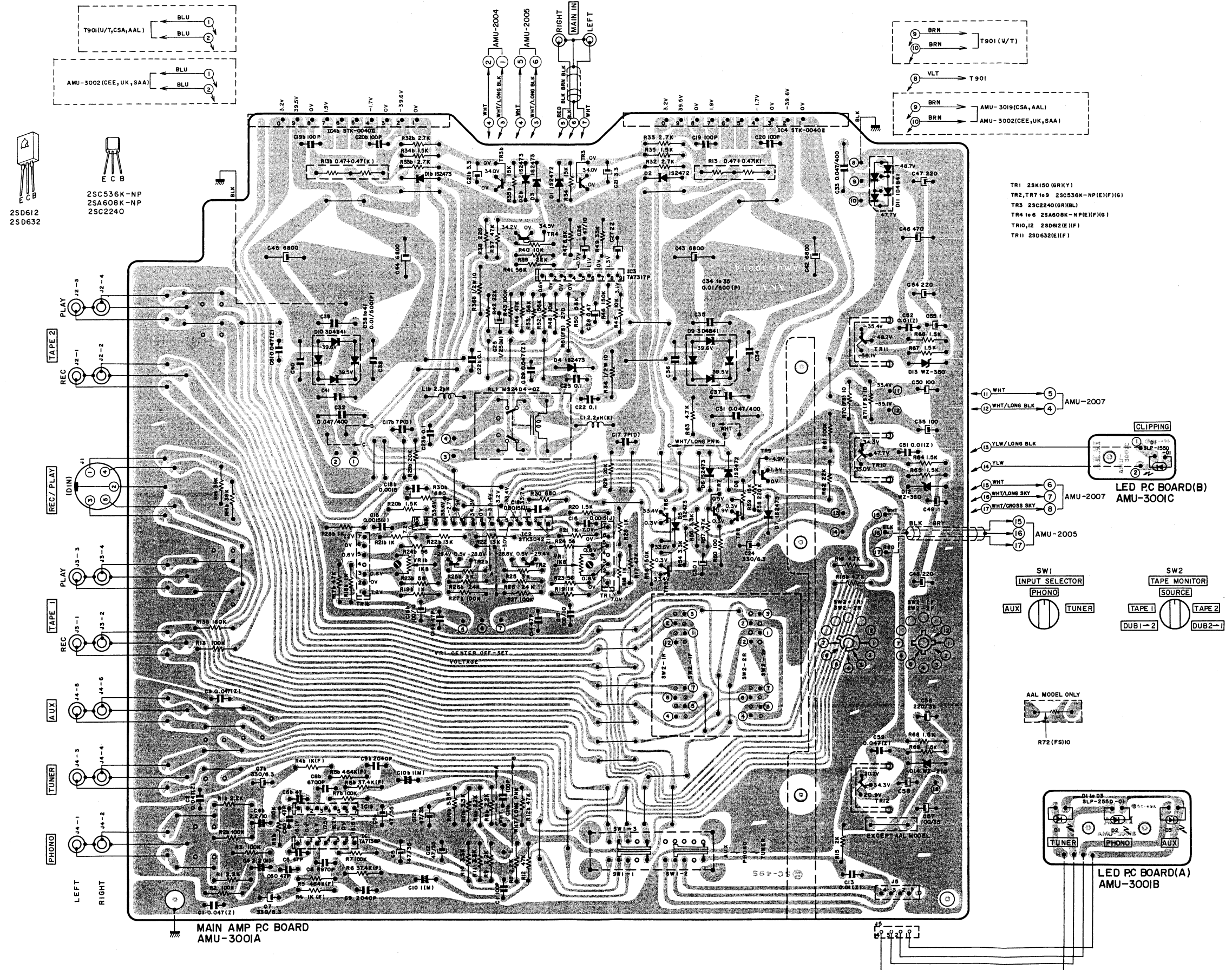
1. P.C BOARD TITLES AND IDENTIFICATION NUMBERS

P.C Board Title	P.C Board Number
Main Amp P.C Board	AMU-3001A
LED P.C Board (A)	AMU-3001B
LED P.C Board (B)	AMU-3001C
Loudness P.C Board	AMU-2003
Bar Meter Driving P.C Board	AMU-2004
Push Switch P.C Board	AMU-2005
Bar Meter P.C Board	AMU-2006
Control P.C Board	AMU-2007
Fuse P.C Board (U/T)	AMU-2002
Fuse P.C Board (CSA, AAL)	AMU-3019
Fuse P.C Board (CEE, UK, SAA)	AMU-3002

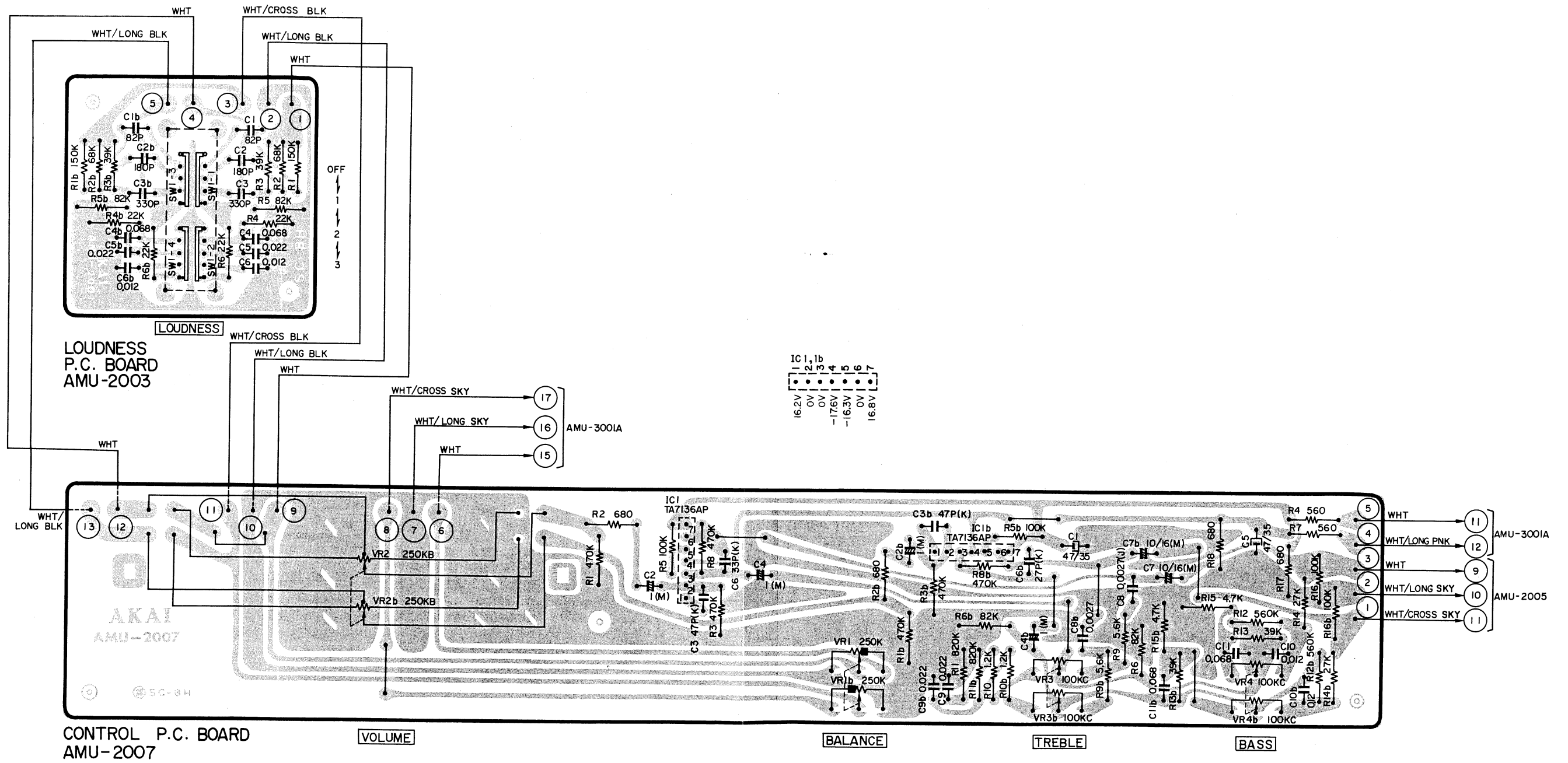
Chart-1

2. COMPOSITION OF VARIOUS P.C BOARDS

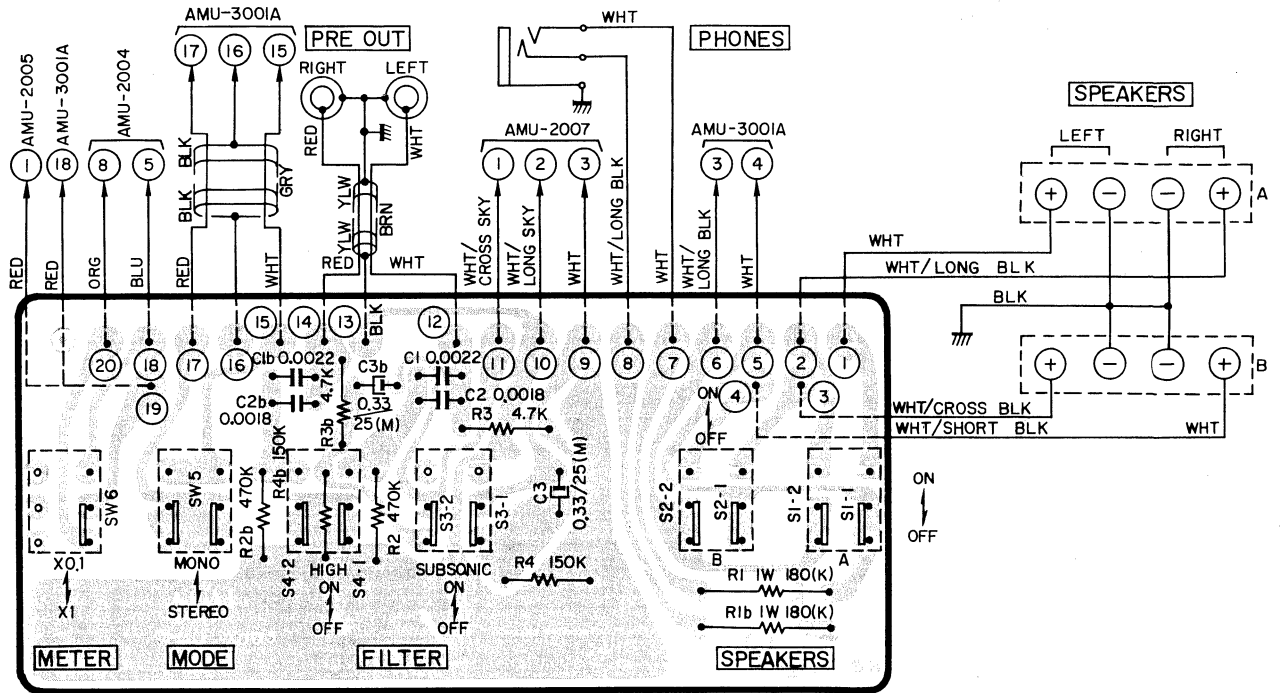
1) MAIN AMP P.C BOARD AMU-3001A, LED P.C BOARD (A) AMU-3001B and LED P.C BOARD AMU-3001C



2) CONTROL P.C BOARD AMU-2007 and LOUDNESS P.C BOARD AMU-2003

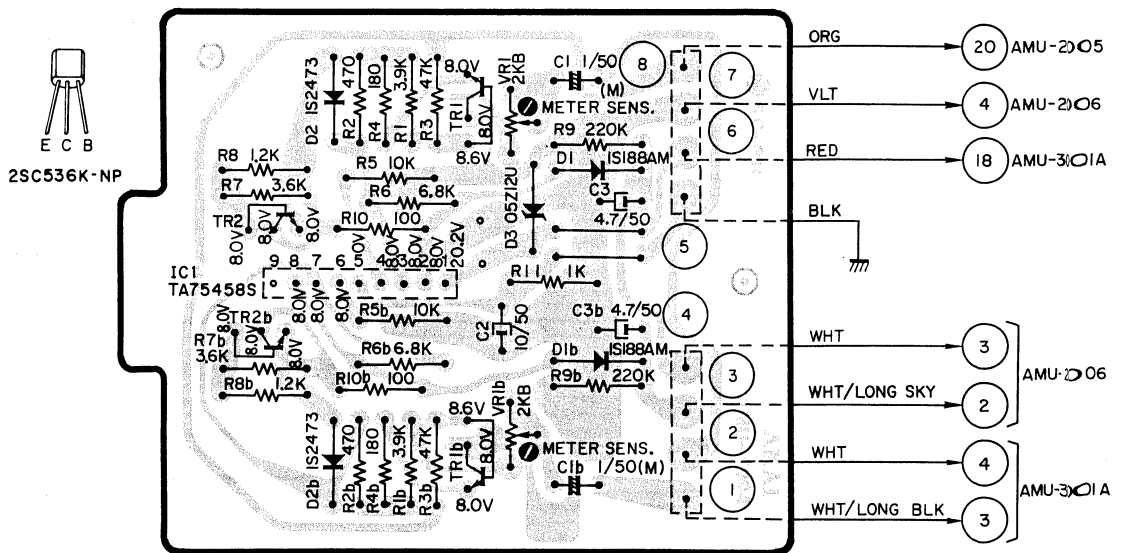


3) PUSH SWITCH P.C BOARD AMU-2005



PUSH SWITCH P.C BOARD
AMU-2005

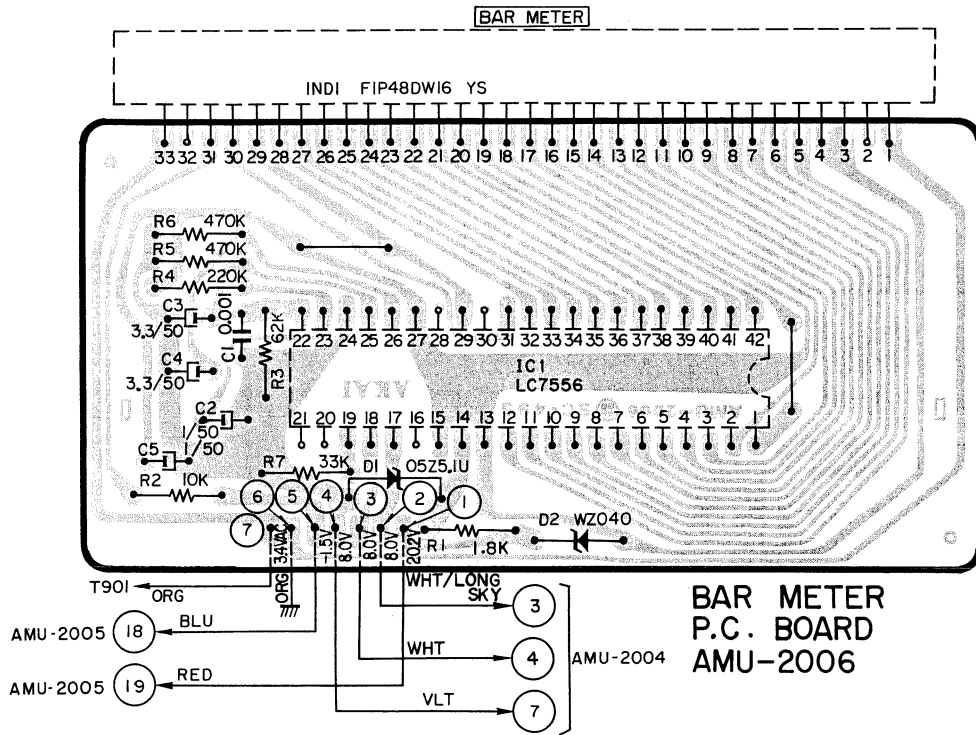
4) BAR METER DRIVING P.C BOARD AMU-2004



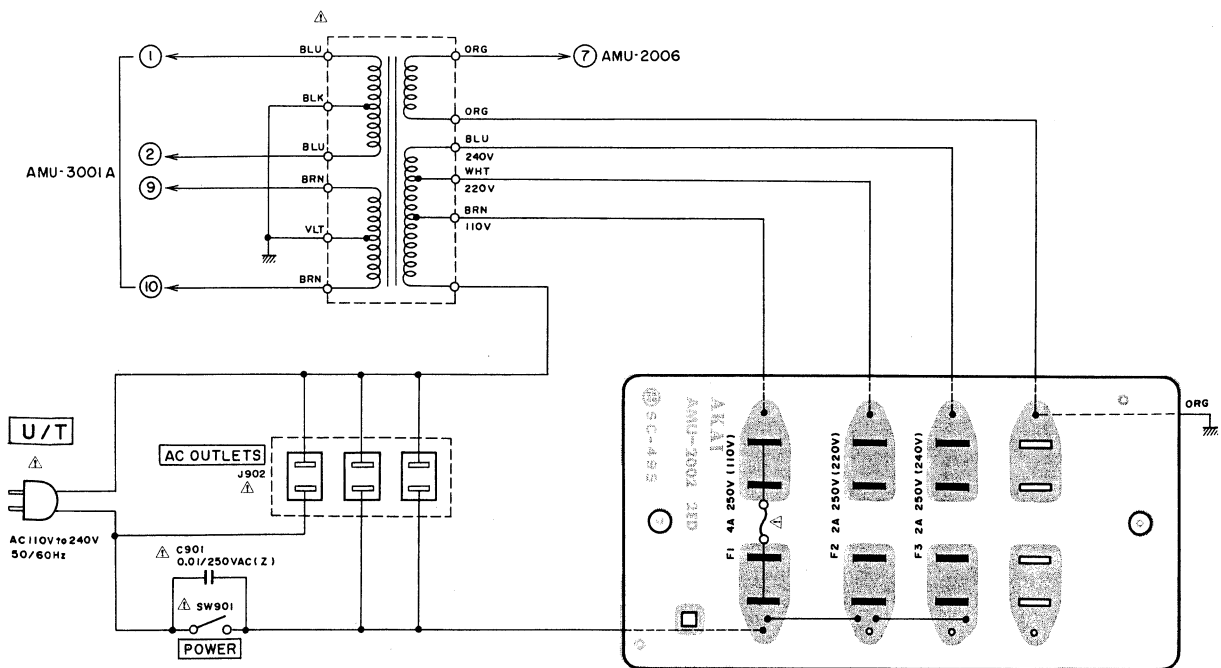
BAR METER DRIVING P.C BOARD
AMU-2004

TR1, TR2, TR1b, TR2b
2SC536K-NP (E,F)(G)

5) BAR METER P.C BOARD AMU-2006

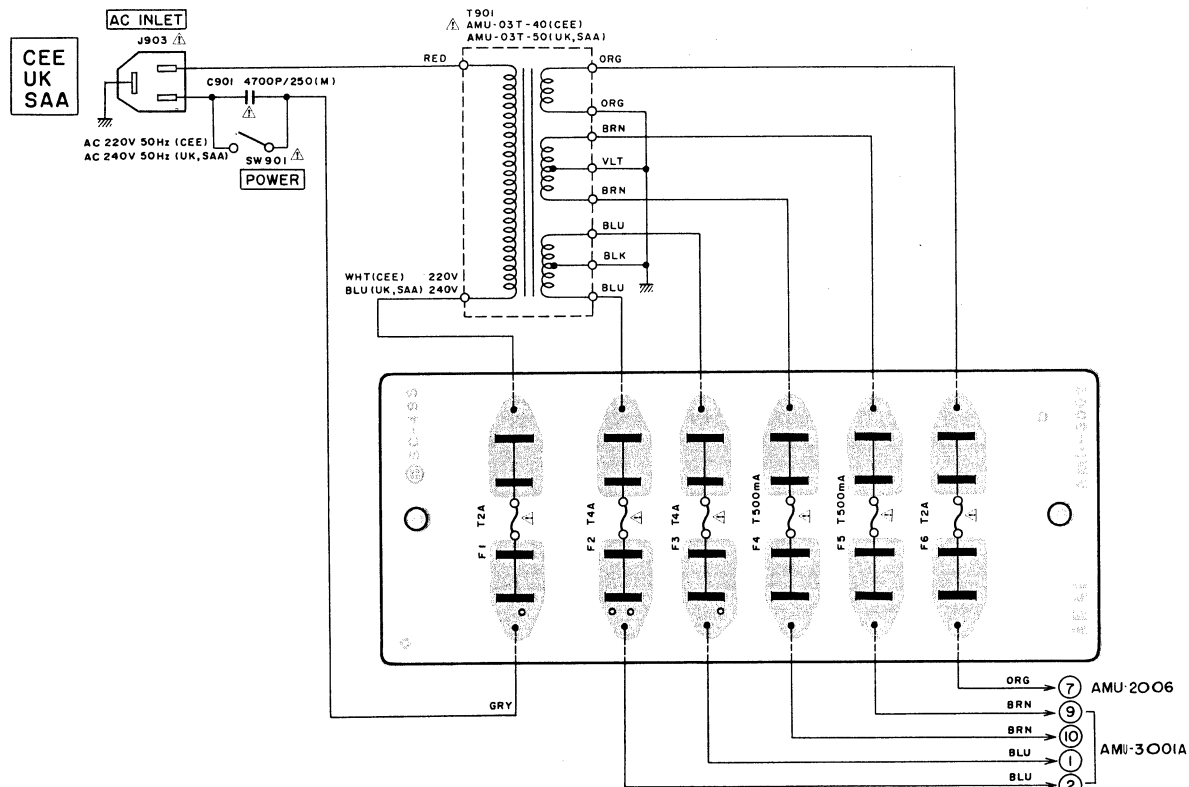


6) FUSE P.C BOARD AMU-2002 (2ED) (U/T)

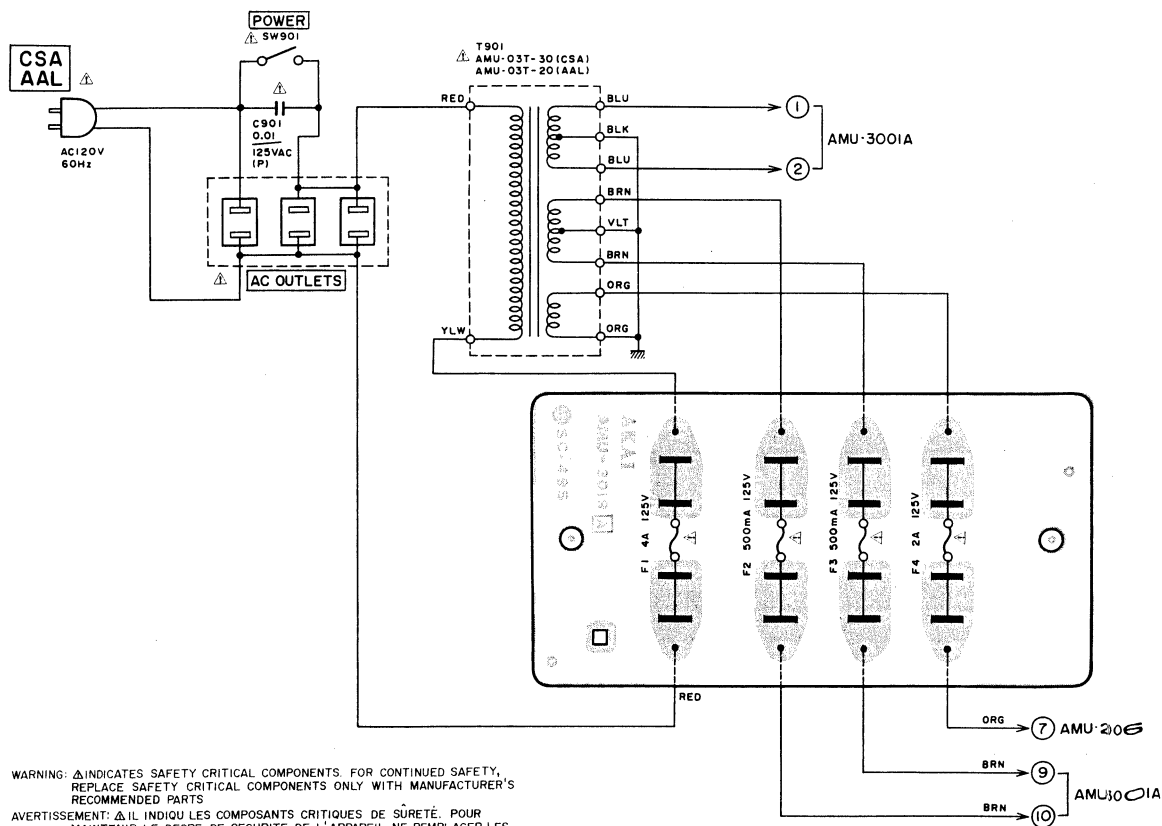


WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.
 AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

7) FUSE P.C BOARD AMU-3002 (CEE, UK, SAA)



8) FUSE P.C BOARD AMU-3019 (CSA, AAL)



WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

SECTION 2

PARTS LIST

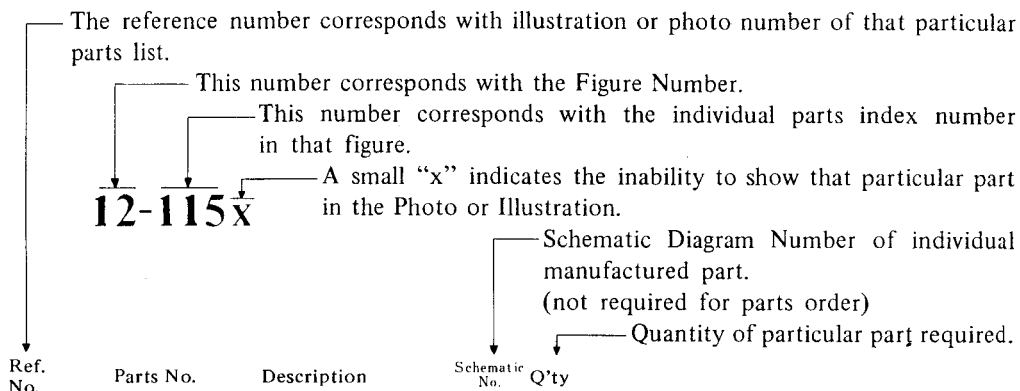
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1. RECOMMENDED SPARE PARTS LIST	22
2. MAIN AMP P.C BOARD (AMU-3001A) BLOCK	24
3. LOUDNESS P.C BOARD (AMU-2003) BLOCK	24
4. BAR METER DRIVE P.C BOARD (AMU-2004) BLOCK	24
5. PUSH SW. P.C BOARD (AMU-2005) BLOCK	24
6. BAR METER P.C BOARD (AMU-2006) BLOCK	25
7. CONTROL P.C BOARD (AMU-2007) BLOCK	25
8. ASSEMBLY BLOCK	26
9. FINAL ASSEMBLY BLOCK	28
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Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read List



FLYWHEEL BLOCK #13

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
12-115x	800425	Flywheel Block Assy. Comp.	RDG #13	1
12-116	244506	Flywheel Only	RD-233	1
12-117x	244754	Felt, Flywheel	RD-275	1
12-118	251324	Main Metal Case	RD-236	1
12-119	253080	Main Metal	RD-237	1

4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of Components of the Schematic Diagram or Service Manual.
5. Please utilize separate "Common List for Service Parts" for Resistor Parts orders.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.
It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

- CAUTION:**
1. When placing an order for parts, be sure to list the parts no. model no., and description. There are instances in which if any of this information is omitted, parts cannot be shipped or the wrong parts will be delivered.
 2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
 3. Because parts number and parts unit supply in the Preliminary Service Manual (Basic Parts List) may be partially changed, please use this parts list for all future reference.

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

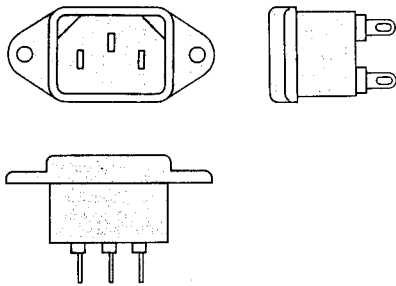
AVERTISSEMENT: ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.

AC INLET SYSTEM

This model is equipped with an AC INLET SYSTEM. Please refer to the AC INLET SYSTEM CHART below for the specific type. By the AC INLET SYSTEM, AC (mains) cord can be connected to and disconnected from the model because the model is provided with socket exclusively for AC (mains) cord on its main body. Please note, however, that certain models are not equipped with this system and has a built-in AC (mains) cord as before.

AC INLET SYSTEM CHART

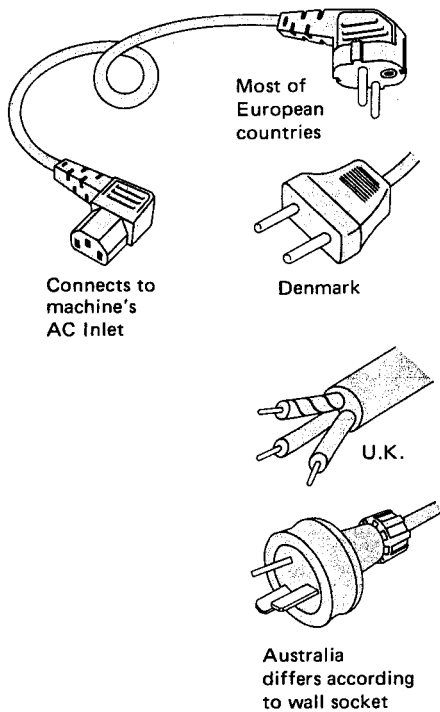
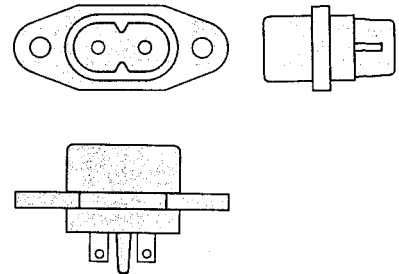
CLASS I



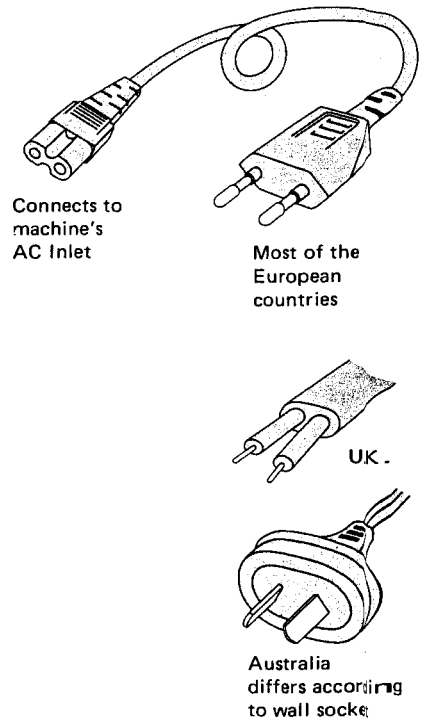
Picture 1
AC INLET
to be
installed
on machines

CLASS II

☐ This mark indicating double insulation will be attached to machine's rear panel



Picture 2
AC (mains)
cord



Parts List for AC (mains) Cord Set

	Standard	Description	Type of AC Inlet	Parts No.
Class I	CEE	Cord Set CEE (3 cores)	3P	EW302993
	BEAB	Cord Set BEAB (3 cores)	3P	EW302994
	SAA	Cord Set SAA (3 cores)	3P	EW302996
	U/T	Cord Set U/T (3 cores)	3P	EW302646
Class II	CEE	Cord Set CEE (2 cores)	2P	EW308144
	BEAB	Cord Set BEAB (2 cores)	2P	EW302995
	SAA	Cord Set SAA (2 cores)	2P	EW302991
	U/T	Cord Set U/T (2 cores)	2P	EW302899

1. RECOMMENDED SPARE PARTS LIST

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

Parts No.	Description	Notes
BA320959	Main Amp P.C Board Comp. AM-U03	Except AAL
BA325648	Main Amp P.C Board Comp. AM-U03 (AAL)	
BT325621	△ Power Trans. AM-U03T-20	AAL
BT325622	△ Power Trans. AM-U03T-30	CSA
BT325623	△ Power Trans. AM-U03T-40	CEE
BT325624	△ Power Trans. AM-U03T-50	UK, SAA
BT325620	△ Power Trans. AM-U03T-70	U/T
ED562386	Germanium Diode 1S188AM	
ED322772	LED SLP-155D-01	
ED322773	LED SLP-255D-01	
ED214457	Silicon Diode 1S2472	
ED316143	Silicon Diode 1S2473-HS	
ED324912	Silicon Stack 1D4B41	
ED322589	Silicon Stack 3D4B41	
ED322810	Zener Diode WZ-040	
ED557111	Zener Diode WZ-210	
ED325627	Zener Diode WZ-350	
ED323530	Zener Diode 05Z-12U	
ED322774	Zener Diode 05Z-5.1U	
EF306954	△ Fuse 2A 125V	CSA, AAL
EF306950	△ Fuse 2A 250V	U/T
EF306957	△ Fuse 4A 125V	CSA, AAL
EF306952	△ Fuse 4A 250V	U/T
EF309390	△ Fuse 500mA 125V	CSA, AAL
EF601301	△ Fuse (Semko T) 2AT	CEE, UK, SAA
EF690996	△ Fuse (Semko T) 4AT	CEE, UK, SAA
EF593706	△ Fuse (Semko T) 500MAT	CEE, UK, SAA
EI322791	IC LC7556	
EI325625	IC STK-0040(2)	
EI323563	IC STK-3042	
EI322588	IC TA7136AP	
EI323564	IC TA7317P	
EI322599	IC TA75458S	
EJ240535	△ 3-Throw AC Outlet	U/T, CSA, AAL
EJ296853	△ 3P Inlet CM-3	CEE, UK, SAA
EJ698051	DIN Jack	
EJ301199	Headphone Jack 3P64M	
EJ293365	Pin Jack 4P	
EJ322581	Pin Jack 4P (Red, White)	
EJ293376	Pin Jack 6P	

Parts No.	Description	Notes
EJ322582	Push Terminal 4P	
EO650823	Phase Compensation Coil 2.2 μ H (K)	
EP245305	Relay MS24D4-0Z	
ES310839	\triangle Push SW. SDG1P-E 5A/80A 250V	CEE, UK, SAA
ES665875	\triangle Push SW. SDG1P-J TV-3 UL/CSA	CSA, AAL
ES655806	\triangle Push SW. SDG1P-J TV-3 CSA	U/T
ES324348	Push SW. J-K2091	
ES322586	Rotary Slide SW. SRZW43N	
ES322776	Rotary Slide SW. SRZW44S	
ES325626	Rotary SW. SRJ2045	
ET311792	FET 2SK150 (GR) (Y) (BL)	
ET322778	Transistor 2SA608K-NP (E) (F) (G)	
ET322598	Transistor 2SB632K (E) (F)	
ET307195	Transistor 2SC2240 (GR) (BL)	
ET322775	Transistor 2SC536K-NP (E) (F) (G)	
ET310148	Transistor 2SD612K (E) (F)	
EV321635	Semi-Fixed/Vol. D8 Axial 1kB	
EV322789	Semi-Fixed/Vol. V10K8-1-2 2kB	
EV325630	Single-Axial 2-Throw/Vol. GM70E838A 100kC \times 2	
EV325629	Single-Axial 2-Throw/Vol. GM70E839A 100kC \times 2	
EV324346	Single-Axial 2-Throw/Vol. V16L4G3N 250kZ \times 2	
EV322781	2-Throw Slide/Vol. MDV3B001-250kB \times 2	
EW306428	\triangle AC Cord (U/T)	
EW305691	\triangle AC Cord CUL	CSA, AAL

2. MAIN AMP P.C BOARD (AMU-3001A)

BLOCK

Symbol No.	Parts No.	Description	Schematic No.
2-1	BA320959	Main Amp P.C Board Comp. AM-U03 (Except AAL)	AMU-3001A
2-2	BA325648	Main Amp P.C Board Comp. AM-U03 (AAL)	AMU-3001A
2-IC1	EI322588	IC TA7136AP	45-8-414
2-IC2	EI323563	IC STK-3042	45-8-423
2-IC3	EI323564	IC TA7317P	45-8-424
2-TR1	ET311792	FET 2SK150(GR)(Y)(BL)	45-12-22
2-TR2	ET322775	Transistor 2SC536K-NP(E)(F)(G)	45-1-362
2-TR3	ET307195	Transistor 2SC2240(GR)(BL)	45-1-302
2-TR4to6	ET322778	Transistor 2SA608K-NP(E)(F)(G)	45-1-375
2-TR7to9	ET322775	Transistor 2SC536K-NP(E)(F)(G)	45-1-362
2-TR10	ET310148	Transistor 2SD612K(E)(F)	45-1-308
2-TR11	ET322598	Transistor 2SB632K(E)(F)	45-1-374
2-TR12	ET310148	Transistor 2SD612K(E)(F)	45-1-308
2-D1,2	ED214457	Silicon Diode 1S2472	45-3-41
2-D3to7	ED316143	Silicon Diode 1S2473-HS	45-3-53
2-D8	ED214457	Silicon Diode 1S2472	45-3-41
2-D9,10	ED322589	Silicon Stack 3D4B41	45-2-96
2-D11	ED324912	Silicon Stack 1D4B41	45-2-100
2-D12,13	ED325627	Zener Diode WZ-350	45-6-67
2-D14	ED557111	Zener Diode WZ-210	45-6-67
2-SW1	ES322586	Rotary Slide SW. SRZW43N	25-6-189
2-SW2	ES325626	Rotary SW. SRJ2045	25-6-194
2-J1	EJ698051	DIN Jack	31-1-158
2-J2,3	EJ293365	Pin Jack 4P	31-1-197
2-J4	EJ293376	Pin Jack 6P	31-1-198
2-VR1	EV321635	Semi-Fixed/Vol. D8 Axial 1kB	36-10-280
2-RL1	EP245305	Relay MS24D4-0Z	47-1-28
2-L1	EO650823	Phase Compensation Coil 2.2μH(K)	23-1-239
2-R4	ER317686	Metal Oxide Film/R. 1/4WS 1K(F)	35-17-20
2-R5	ER322293	Metal Film/R. 1/4W 464K(F)	35-17-20
2-R6	ER322294	Metal Film/R. 1/4W 37.4K(F)	35-17-20
2-R31	ER322590	Cement/R. (Metal Plate) 5W(0.47+0.47) ohms(K)	35-16-84
2-R51	ER320538	Metal Oxide Film/R. F 1W 390 ohms(J)	35-19-4
2-R70,71	ER322787	Carbon/R. F 1/4WS 10 ohms(J)	35-11-30
2-R72	ER322787	Carbon/R. F 1/4WS 10 ohms(J) (AAL)	35-11-30
2-C4	EC324379	NP/C. 2.2μF(M) 50WV	24-17-36
2-C8	EC322788	Styrol/C. 6970PF(J) 50WV	24-11-18
2-C9	EC322800	Styrol/C. 2040PF(J) 50WV	24-11-18
2-C10	EC324376	NP/C. 1μF(M) 50WV	24-17-36
2-C25	EC320537	Solid Aluminum/C. 1μF(M) 25WV	24-19-3
2-C30to32	EC321088	Metallized Mylar/C. 0.047μF(K) 400WV	24-16-23
2-C42to45	EC324156	Elect./C. 6800μF 50WV	24-12-44
2-3	ZS447840	Tapping Screw, #2 BR 3x8	
2-4	ZS498273	Tapping Screw, #2 BR 3x8 W=8	

3. LOUDNESS P.C BOARD (AMU-2003)

BLOCK

Symbol No.	Parts No.	Description	Schematic No.
3-SW1	ES322776	Rotary Slide SW. SRZW44S	25-6-188
3-C2	EC321173	Styrol/C. 180PF(J) 50WV	24-11-14
3-C3	EC306988	Styrol/C. 330PF(J) 50WV	24-11-14

4. BAR METER DRIVE P.C BOARD

(AMU-2004) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
4-IC1	EI322599	IC TA75458S	45-8-415
4-TR1,2	ET322775	Transistor 2SC536K-NP(E)(F)(G)	45-1-362
4-D1	ED562386	Germanium Diode 1S188AM	45-3-24
4-D2	ED316143	Silicon Diode 1S2473-HS	45-3-53
4-D3	ED323530	Zener Diode 05Z-12U	45-6-76
4-VR1	EV322789	Semi-Fixed/Vol. V10K8-1-2 2kB	36-10-255
4-C1	EC657044	NP/C. (Vert.) 1μF(M) 50WV	24-17-26
4-1	ZS325495	Tapping Screw, #2 BR 3x6	

5. PUSH SW. P.C BOARD (AMU-2005) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
5-SW1to6	ES324348	Push SW. J-K2091	25-5-384
5-R1	ER511288	Metal Oxide Film/R. 1W 180 ohms(K)	35-15-10
5-C3	EC316569	Solid Aluminum/C. 0.22μF(K) 25WV	24-19-3

6. BAR METER P.C BOARD (AMU-2006)

BLOCK

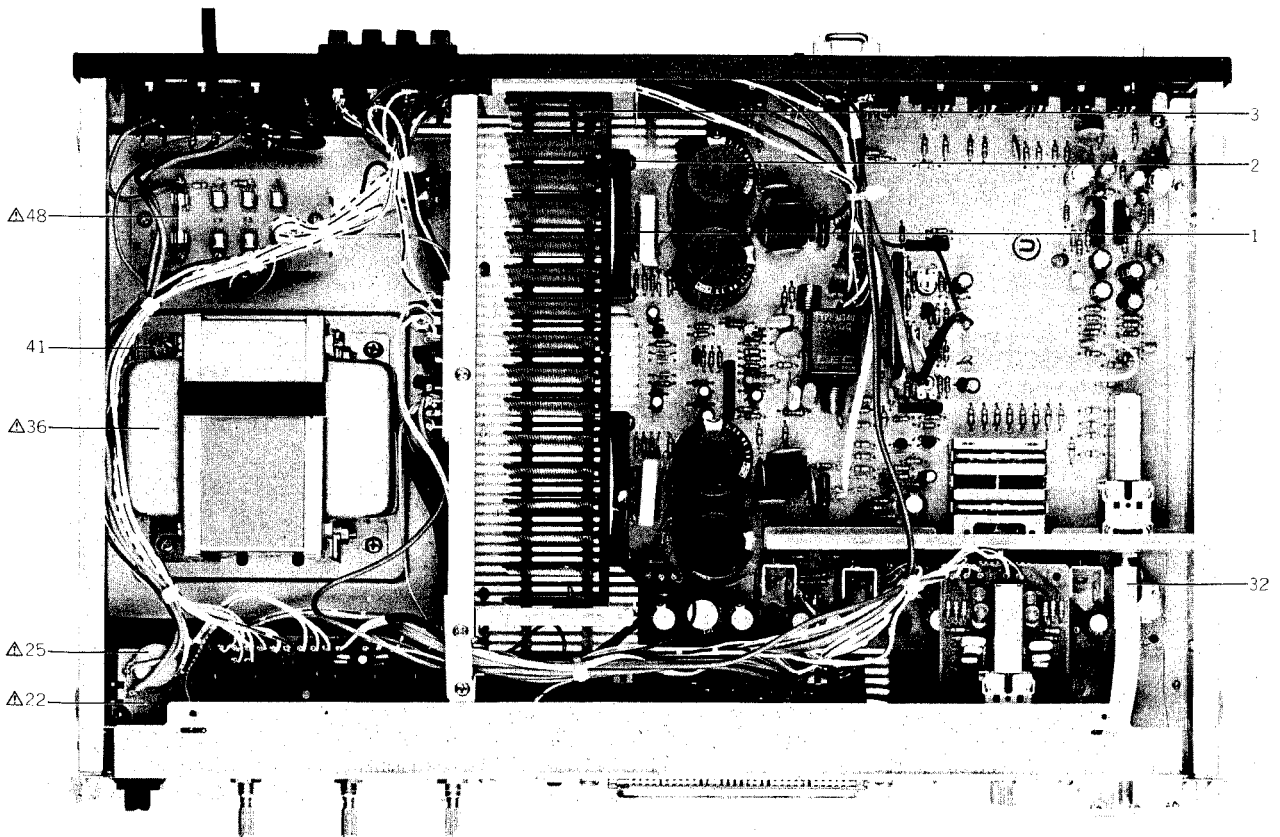
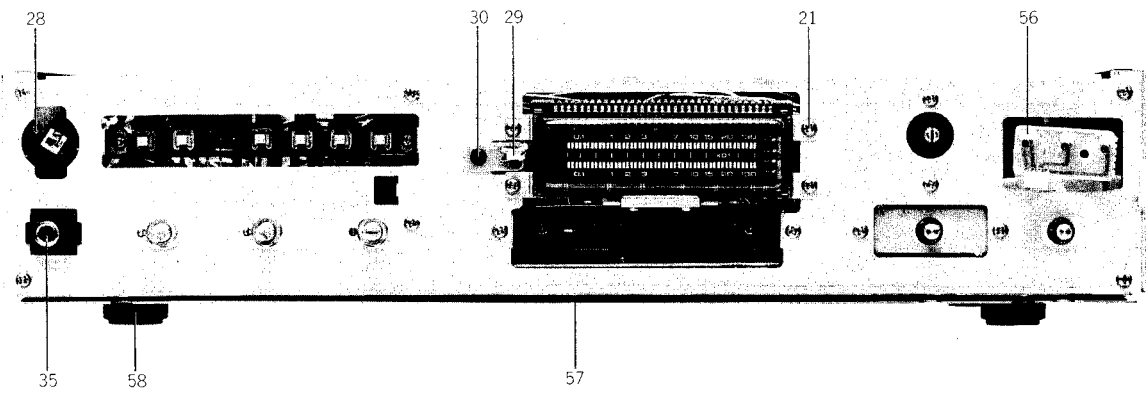
Symbol No.	Parts No.	Description	Schematic No.
6-IC1	EI322791	IC LC7556	45-8-425
6-D1	ED322774	Zener Diode 05Z-5.1U	45-6-76
6-D2	ED322810	Zener Diode WZ-040	45-6-67
6-IND1	EM322584	Bar Meter FIP48DW16YS	59-1-2
6-1	ZS422076	Screw, Pan 3x5	

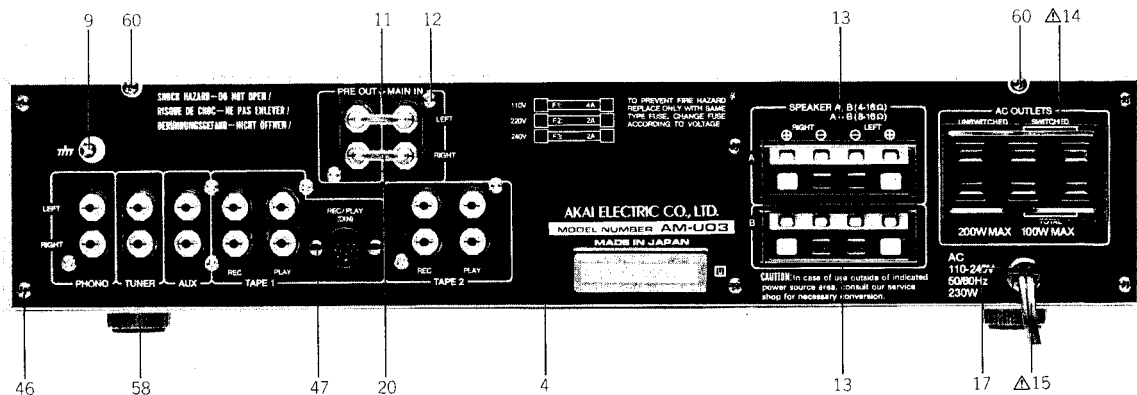
7. CONTROL P.C BOARD (AMU-2007)

BLOCK

Symbol No.	Parts No.	Description	Schematic No.
7-IC1	EI322588	IC TA7136AP	45-8-414
7-VR1	EV324346	Single-Axial 2-Throw/Vol. V16L4G3N 250kZx2	36-22-65
7-VR2	EV322781	2-Throw Slide/Vol. MDV3B001-250kBx2	36-27-8
7-VR3	EV325629	Single-Axial 2-Throw/Vol. GM70E839A 100kCx2	36-22-62
7-VR4	EV325630	Single-Axial 2-Throw/Vol. GM70E838A 100kCx2	36-22-63
7-C2	EC324376	NP/C. 1 μ F(M) 50VV	24-17-36
7-C4	EC324376	NP/C. 1 μ F(M) 50VV	24-17-36
7-C7	EC323260	NP/C. 10 μ F(M) 16VV	24-17-36
7-1	ZS422076	Screw, Pan 3x5	

8. ASSEMBLY BLOCK



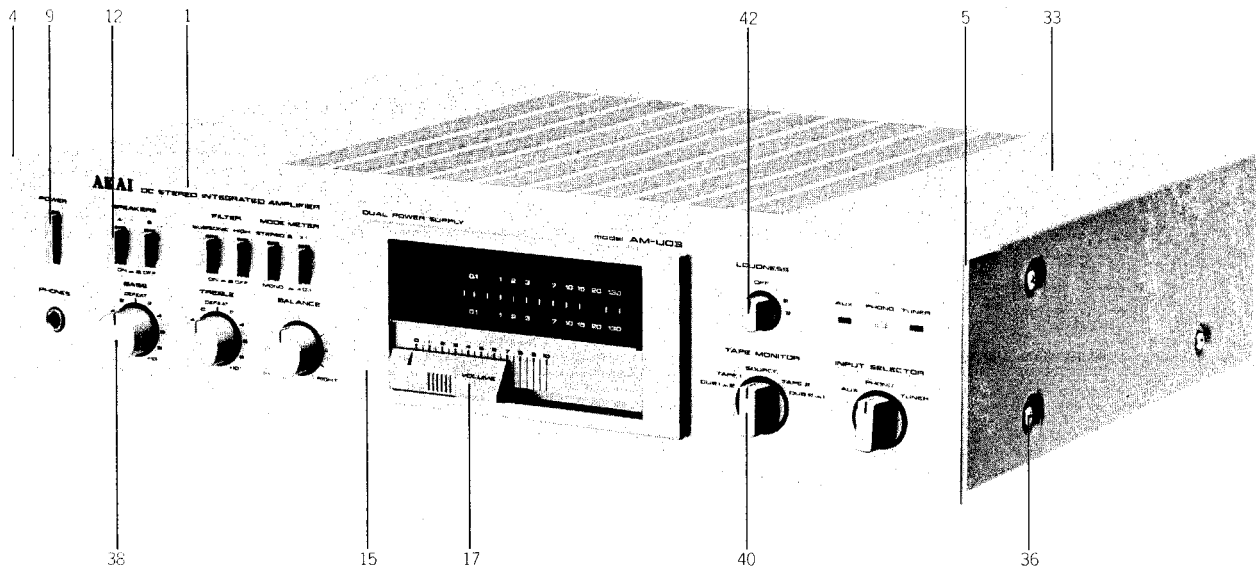


ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
HEAT SINK BLOCK							
8-1	EI325625	IC STK-0040(2)	45-8-445	8-27x	EC327382	Δ MP/C. (Vert.) 0.0047μF(M) 250WV (CEE, UK, SAA)	24-9-134
8-2	ZS462802	Tapping Screw, #2 BR 3x15		8-28	ZS422076	Screw, Pan 3x5	
8-3	ZS447840	Tapping Screw, #2 BR 3x8		8-29	ED322772	LED SLP-155D-01	45-15-38
REAR PANEL BLOCK							
8-4	SP325607	Rear Panel (A) (U/T)	AMU-3008	8-30	ZW698308	Nylon Rivet (NRB) 3x5.5(Black)	2-7-54
8-5x	SP325608	Rear Panel (B) (CSA)	AMU-3009	8-31	ZS462194	Tapping Screw, #2 Pan 3x8 W=8	
8-6x	SP325609	Rear Panel (C) (AAL)	AMU-3009	8-32	TA646773	Joint	AA-5240
8-7x	SP325610	Rear Panel (D) (CEE)	AMU-3010	8-33x	ZW270123	'E' Ring 4M	6-1-9
8-8x	SP325611	Rear Panel (E) (UK, SAA)	AMU-3010	8-34x	ZW322110	Washer (Nylon) D6.1x10x1t	
8-9	EJ325358	Earth Terminal	32-1-115	8-35	EJ301199	Headphone Jack 3P64M	31-2-83
8-10x	ZW652408	Washer (SPC) D3.2x10x0.5t		8-36	BT325620	Δ Power Trans. AM-U03T-70 (U/?)	38-4-809
8-11	EJ322581	Pin Jack 4P (Red, White)	32-1-106	8-37x	BT325622	Δ Power Trans. AM-U03T-30 (CSA)	38-4-811
8-12	ZS522865	Tapping Screw, #2 BR 3x12 (Black)		8-38x	BT325621	Δ Power Trans. AM-U03T-20 (AAL)	38-4-810
8-13	EJ322582	Push Terminal 4P	32-1-107	8-39x	BT325623	Δ Power Trans. AM-U03T-40 (CEI)	38-4-812
8-14	EJ240535	Δ 3-Throw AC Outlet (U/T, CSA, AAL)	31-1-173	8-40x	BT325624	Δ Power Trans. AM-U03T-50 (UK, SAA)	38-4-813
8-15	EW306428	Δ AC Cord (U/T)	26-3-64	8-41	ZS424056	Screw, Pan 4x10	
8-16x	EW305691	Δ AC Cord CUL (CSA, AAL)	26-3-65	8-42x	ZW413267	Flange Nut M4	
8-17	EZ631945	Strain Relief SR-4N-4 (U/T, CSA, AAL)	2-7-49	8-43x	ZS434250	Screw, Pan 4x8 w/Washer	
8-18x	EJ296853	Δ 3P Inlet CM-3 (CEE, UK, SAA)	31-1-199	8-44x	ZW413188	Nut, #1 M4	
8-19x	ZS463353	Tapping Screw, #2 BR 3x8 (Black)		8-45x	ZS406416	Tapping Screw, #2 Countersunk 3x8	
8-20	EJ554578	Short Plug	42-1-66	8-46x	ZS308846	Tapping Screw, #2 BR 3x8 (Oval Neck) (Blaci)	7-1-69
ASSEMBLY BLOCK							
8-21	ZS325495	Tapping Screw, #2 BR 3x6		8-47	ZW698308	Nylon Rivet (NRB) 3x5.5(Black)	2-7-54
8-22	ES655806	Δ Push SW. SDG1P-J TV-3 CSA (U/T)	25-5-187	8-48	EF306952	Δ Fuse 4A 250V (U/T)	39-1-64
8-23x	ES665875	Δ Push SW. SDG1P-J TV-3 UL/CSA (CSA, AAL)	25-5-199	8-49x	EF306950	Δ Fuse 2A 250V (U/T)	39-1-64
8-24x	ES310839	Δ Push SW. SDG1P-E 5A/80A 250V (CEE, UK, SAA)	25-5-310	8-50x	EF306957	Δ Fuse 4A 125V (CSA, AAL)	39-1-65
8-25	EC321302	Δ Ceramic/C. E 0.01μF(Z) 250VAC (U/T)	24-5-90	8-51x	EF309390	Δ Fuse 500mA 125V (CSA, AAL)	39-1-65
8-26x	EC314688	Δ Ceramic/C. DE7150 FZ 0.01μF(P) 125VAC (CSA, AAL)	24-5-87	8-52x	EF306954	Δ Fuse 2A 125V (CSA, AAL)	39-1-65
				8-53x	EF601301	Δ Fuse (Semko T) 2AT (CEE, UK, SAA)	39-1-53
				8-54x	EF609096	Δ Fuse (Semko T) 4AT (CEE, UK, SAA)	39-1-53
				8-55x	EF593706	Δ Fuse (Semko T) 500MAT (CEE, UK, SAA)	39-1-53

When ordering parts, please quote Parts Number, Description and Model Number.

9. FINAL ASSEMBLY BLOCK



FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
FRONT PANEL BLOCK				FINAL ASSEMBLY BLOCK			
9-1	SP320976	Front Panel Part AM-U03		9-24x	ZS322402	Special Tapping Screw, Pan 3x8	7-1-70
9-2x	SE322578	Escutcheon (A)	ATK-2013	9-25x	SE322549	LED Escutcheon	AMU-2040
9-3x	SE322559	Escutcheon	AMU-2045	9-26x	ZS468101	Tapping Screw #2, Pan 2.6x6	
9-4	TA322534	Pad (L)	AMU-2031				
9-5	TA322536	Pad (R)	AMU-2031				
9-6x	SP320977	Front Panel Part AM-U03-BL		9-27x	ZW324157	Washer (SPC) D6.2x13x0.25t	
9-7x	TA322535	Pad (L-BL)	AMU-2031	9-28x	ZW324158	Washer (SPC) D6.2x13x0.5t	
9-8x	TA322537	Pad (R-BL)	AMU-2031	9-29x	ZW324159	Washer (SPC) D6.2x13x0.8t	
9-9	SB322576	Button (A)	ATK-2012	9-30x	ZW265983	Washer (SPC) D6.2x13x1t	
9-10x	SB322577	Button (A-BL)	ATK-2012	9-31x	ZW324161	Washer (SPC) D6.2x13x1.6t	
9-11x	ZG322579	Spring (A)	ATK-2014	9-32x	ZS447840	Tapping Screw, #2 BR 3x8	
9-12	SB322557	Button	AMU-2044	9-33	SP322561	Upper Plate (A)	AMU-2047
9-13x	SB322558	Button (BL)	AMU-2044	9-34x	SP322563	Upper Plate (B) (AAL)	AMU-2047
9-14x	ZG322566	Spring	AMU-2050	9-35x	SP322562	Upper Plate (A-BL)	AMU-2047
9-15	SE322538	Bar Meter Escutcheon	AMU-2032	9-36	ZS322570	S-Tight Screw, Bind 4x8	
9-16x	SE322539	Bar Meter Escutcheon (BL)	AMU-2032	9-37x	ZS322580	S-Tight Screw, Bind 4x8 (Black)	
9-17	SK319996	Slide Knob Part AM-U02	AMU-2085	9-38	SK322550	Knob (A)	AMU-2041
9-18x	SK319997	Slide Knob Part AM-U02-BL	AMU-2085	9-39x	SK322551	Knob (A-BL)	AMU-2041
9-19x	SZ322544	Bar Meter Plate	AMU-2036	9-40	SK322553	Knob (B)	AMU-2042
9-20x	TA322546	Vol. Scale Plate	AMU-2038,2057	9-41x	SK322554	Knob (B-BL)	AMU-2042
9-21x	TA322547	Vol. Scale Plate (BL)	AMU-2038,2057	9-42	SK322555	Knob (C)	AMU-2043
9-22x	SZ322545	Bar Meter Filter	AMU-2037,2058	9-43x	SK322556	Knob (C-BL)	AMU-2043
9-23x	ZW616004	Washer (SPC) D3.1x8x1t		9-44x	ZW305013	Pop Rivet D3.2 (AAL)	7-6-9
				9-45x	ZW270088	'E' Ring 1.9M	6-1-9

When ordering parts, please quote Parts Number, Description and Model Number.

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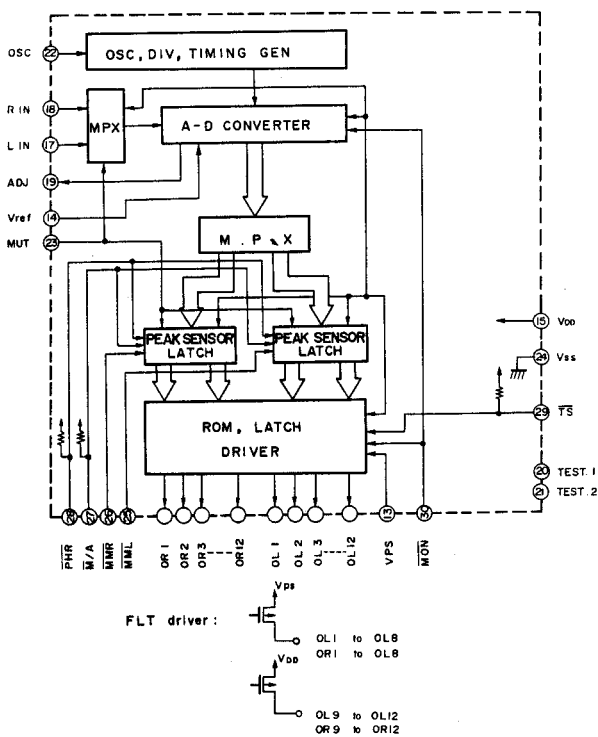
Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.
BA320959	2-1	ET307195	2-TR3	ZW305013	9-44x				
BA325648	2-2	ET310148	2-TR10	ZW322110	8-34x				
BT325620	8-36	ET310148	2-TR12	ZW324157	9-27x				
BT325621	8-38x	ET311792	2-TR1	ZW324158	9-28x				
BT325622	8-37x	ET322598	2-TR11	ZW324159	9-29x				
BT325623	8-39x	ET322775	2-TR2	ZW324161	9-31x				
BT325624	8-40x	ET322775	2-TR7to9	ZW413188	8-44x				
EC306988	3-C3	ET322775	4-TR1,2	ZW413267	8-42x				
EC314688	8-26x	ET322778	2-TR4to6	ZW616004	9-23x				
EC316569	5-C3	EV321635	2-VR1	ZW652408	8-10x				
EC320537	2-C25	EV322781	7-VR2	ZW698308	8-30				
EC321088	2-C30to32	EV322789	4-VR1	ZW698308	8-47				
EC321173	3-C2	EV324346	7-VR1						
EC321302	8-25	EV325629	7-VR3						
EC322788	2-C8	EV325630	7-VR4						
EC322800	2-C9	EW305691	8-16x						
EC323260	7-C7	EW306428	8-15						
EC324156	2-C42to45	EZ631945	8-17						
EC324376	2-C10	SB322557	9-12						
EC324376	7-C2	SB322558	9-13x						
EC324376	7-C4	SB322576	9-9						
EC324379	2-C4	SB322577	9-10x						
EC327382	8-27x	SE322538	9-15						
EC657044	4-C1	SE322539	9-16x						
ED214457	2-D1,2	SE322549	9-25x						
ED214457	2-D8	SE322559	9-3x						
ED316143	2-D3to7	SE322578	9-2x						
ED316143	4-D2	SK319996	9-17						
ED322589	2-D9,10	SK319997	9-18x						
ED322772	8-29	SK322550	9-38						
ED322774	6-D1	SK322551	9-39x						
ED322810	6-D2	SK322553	9-40						
ED323530	4-D3	SK322554	9-41x						
ED324912	2-D11	SK322555	9-42						
ED325627	2-D12,13	SK322556	9-43x						
ED557111	2-D14	SP320976	9-1						
ED562386	4-D1	SP320977	9-6x						
EF306950	8-49x	SP322561	9-33						
EF306952	8-48	SP322562	9-35x						
EF306954	8-52x	SP322563	9-34x						
EF306957	8-50x	SP325607	8-4						
EF309390	8-51x	SP325608	8-5x						
EF593706	8-55x	SP325609	8-6x						
EF601301	8-53x	SP325610	8-7x						
EF690996	8-54x	SP325611	8-8x						
EI322588	2-IC1	SZ322544	9-19x						
EI322588	7-IC1	SZ322545	9-22x						
EI322599	4-IC1	TA322534	9-4						
EI322791	6-IC1	TA322535	9-7x						
EI323563	2-IC2	TA322536	9-5						
EI322564	2-IC3	TA322537	9-8x						
EI325625	8-1	TA322546	9-20x						
EJ240535	8-14	TA322547	9-21x						
EJ293365	2-J2,3	TA646773	8-32						
EJ293376	2-J4	ZG322566	9-14x						
EJ296853	8-18x	ZG322579	9-11x						
EJ301199	8-35	ZS308846	8-46x						
EJ322581	8-11	ZS322402	9-24x						
EJ322582	8-13	ZS322570	9-36						
EJ325358	8-9	ZS322580	9-37x						
EJ554578	8-20	ZS325495	4-1						
EJ698051	2-J1	ZS325495	8-21						
EM322584	6-IND1	ZS406416	8-45x						
EO650823	2-L1	ZS422076	6-1						
EP245305	2-RL1	ZS422076	7-1						
ER317686	2-R4	ZS422076	8-28						
ER320538	2-R51	ZS424056	8-41						
ER322293	2-R5	ZS434250	8-43x						
ER322294	2-R6	ZS447840	2-3						
ER322590	2-R31	ZS447840	8-3						
ER322787	2-R70,71	ZS447840	9-32x						
ER322787	2-R72	ZS462194	8-31						
ER511288	5-R1	ZS462802	8-2						
ES310839	8-24x	ZS463353	8-19x						
ES322586	2-SW1	ZS468101	9-26x						
ES322776	3-SW1	ZS498273	2-4						
ES324348	5-SW1to6	ZS522865	8-12						
ES325626	2-SW2	ZW265983	9-30x						
ES655806	8-22	ZW270088	9-45x						
ES665875	8-23x	ZW270123	8-33x						

SECTION 3

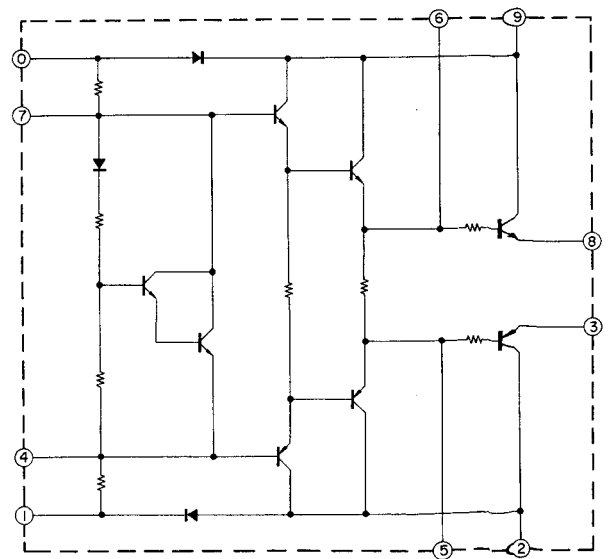
SCHEMATIC DIAGRAM

1. SCHEMATIC DIAGRAM OF ICs
2. AM-U03 NO. 1600842A SCHEMATIC DIAGRAM

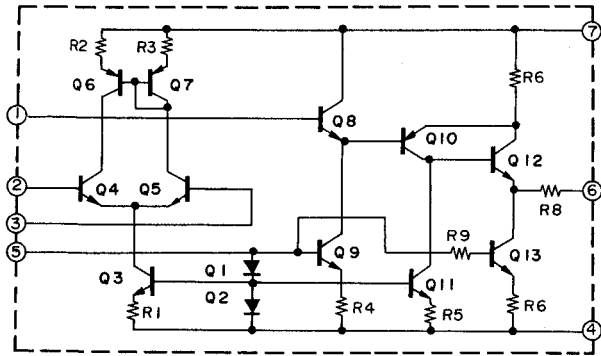
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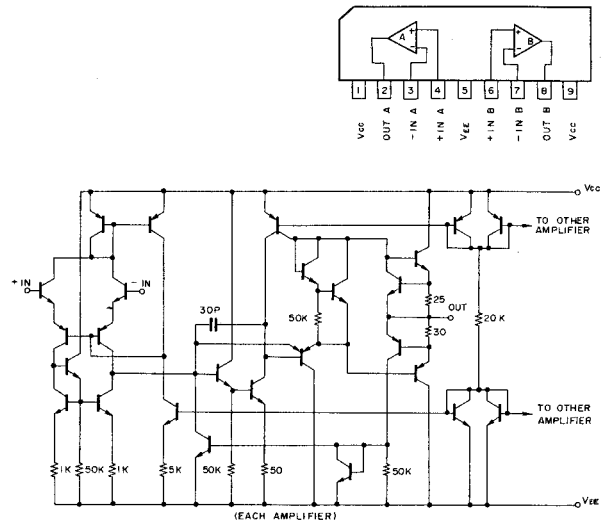
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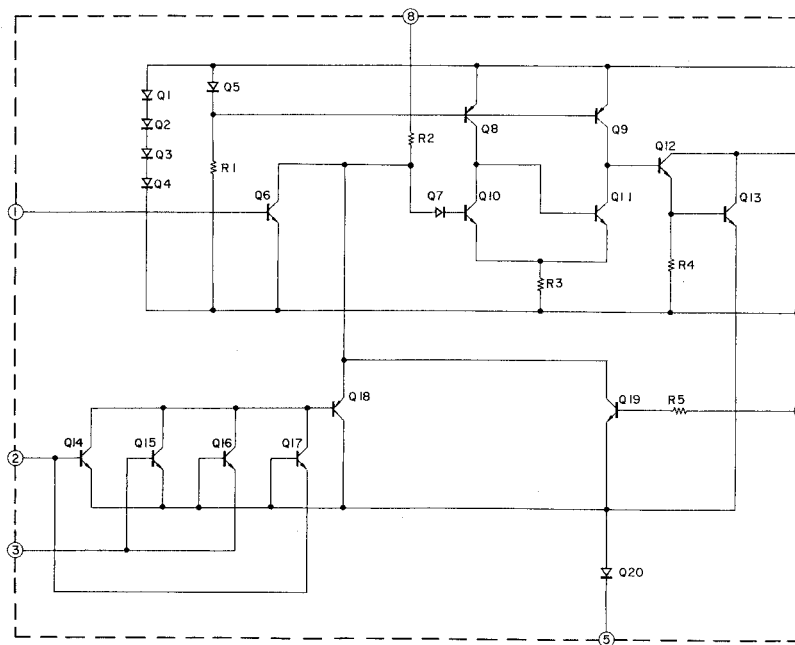
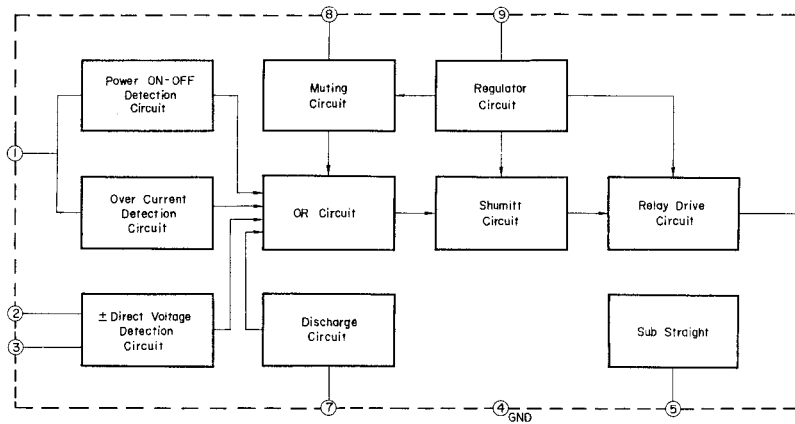
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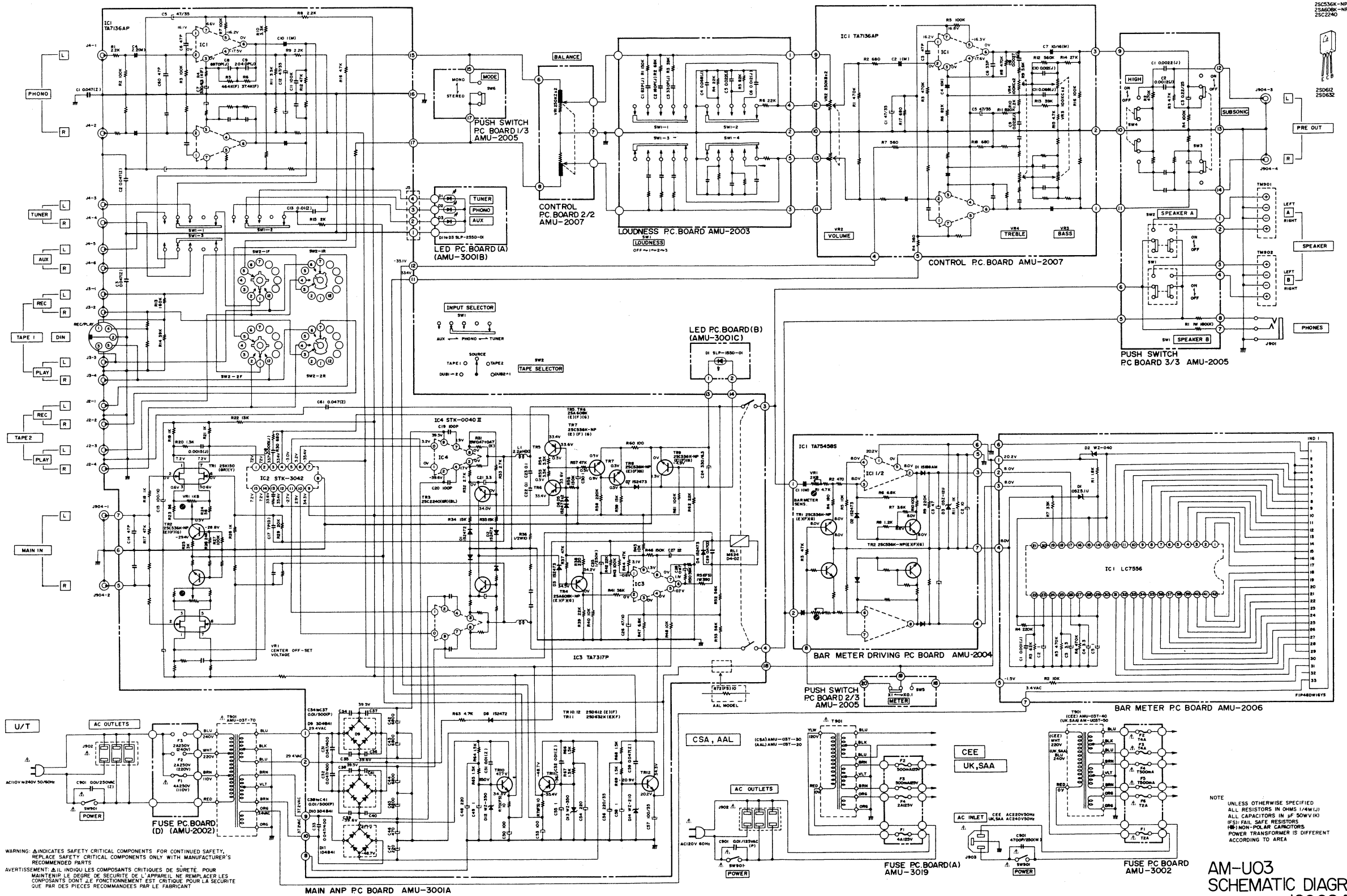
TA75458S



TA7317P



AM-U03



WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL. NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

NOTE: UNLESS OTHERWISE SPECIFIED ALL RESISTORS IN OHMS (1/4W/1%) ALL CAPACITORS IN μF (50WV/10%) IF NOT SPECIFIED OTHERWISE USE 50V/50% NON-POLAR CAPACITORS POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

AM-U03
SCHEMATIC DIAGRAM
No.1600842A