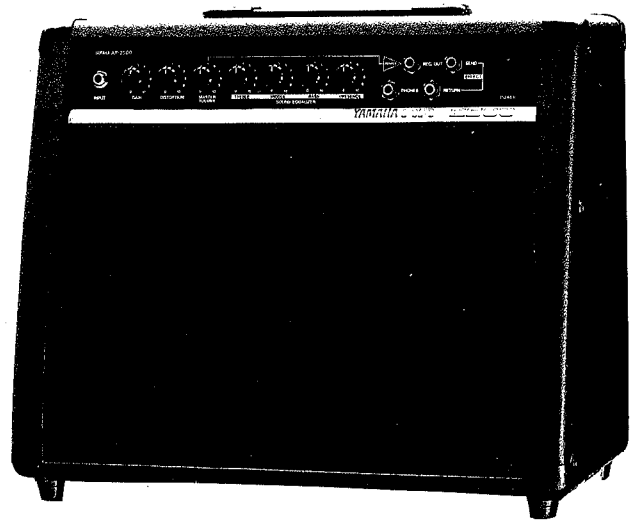


GUITAR AMPLIFIERS

AR-1500/AR-2500

SERVICE MANUAL



AR-2500

AR-1500/AR-2500

■ CONTENTS

SPECIFICATIONS.....	2
PANEL LAYOUT.....	2
CIRCUIT BOARD LAYOUT.....	3
BLOCK DIAGRAM.....	3
DISASSEMBLY PROCEDURE.....	4
IC BLOCK DIAGRAM.....	5
CIRCUIT BOARD.....	6
AR-1500 OVERALL CIRCUIT DIAGRAM.....	10
AR-2500 OVERALL CIRCUIT DIAGRAM.....	12
PARTS LIST.....	

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification, recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical, electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHAT SO EVER!

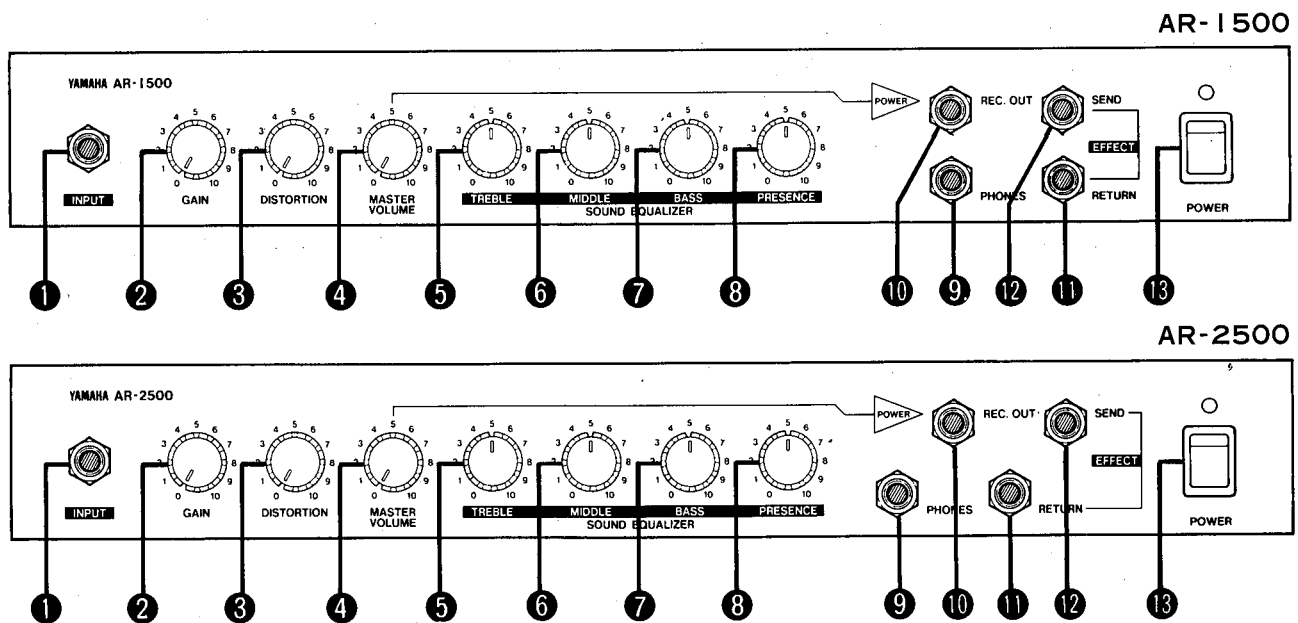
Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

SPECIFICATIONS

	AR-1500	AR-2500
Rated Output	15 Wr.m.s. (T.H.D. 10%)	25 Wr.m.s. (T.H.D. 24%)
Speaker	20 cm (4 Ω)	25 cm (8 Ω)
Controls	GAIN, DISTORTION, MASTER VOLUME, TREBLE, MIDDLE, BASS, PRESENCE	
Input Jacks	INPUT, EFFECT RETURN	
Output Jacks	REC OUT, PHONES, EFFECT SEND	
Power Requirements	120 V AC, 60Hz 220 V AC, 50Hz 240 V AC, 50Hz	
Power Consumption	20 W	20 W
Dimensions (W x H x D)	396 x 340 x 208 mm (15-9/16" x 13-3/8" x 8-3/16")	456 x 390 x 242 mm (17-15/16" x 15-3/8" x 9-1/2")
Weight	7.7 kg (17 lbs.)	10.2 kg (22 lbs. 8 oz)

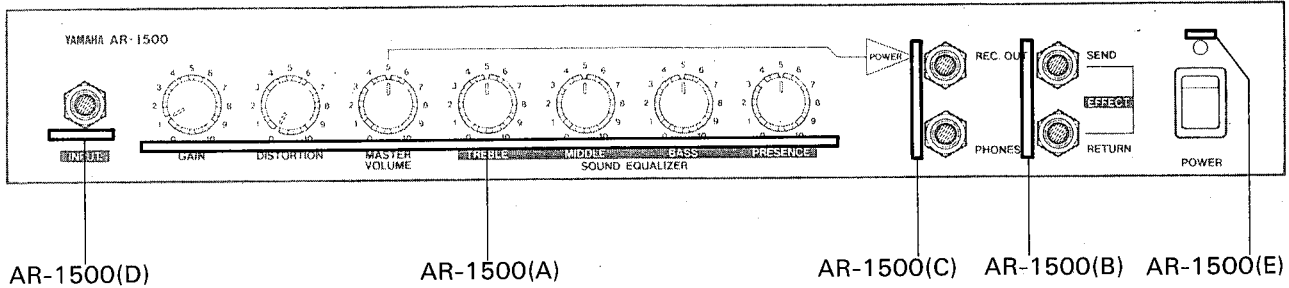
PANEL LAYOUT



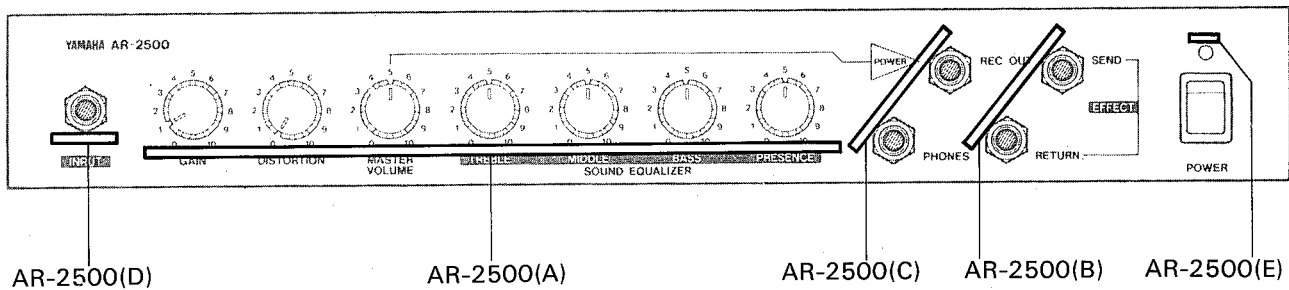
- | | |
|-----------------|-----------------|
| ① INPUT | ⑧ PRESENCE |
| ② GAIN | ⑨ PHONES |
| ③ DISTORTION | ⑩ REC. OUT |
| ④ MASTER VOLUME | ⑪ EFFECT RETURN |
| ⑤ TREBLE | ⑫ EFFECT SEND |
| ⑥ MIDDLE | ⑬ POWER |
| ⑦ BASS | |

CIRCUIT BOARD LAYOUT

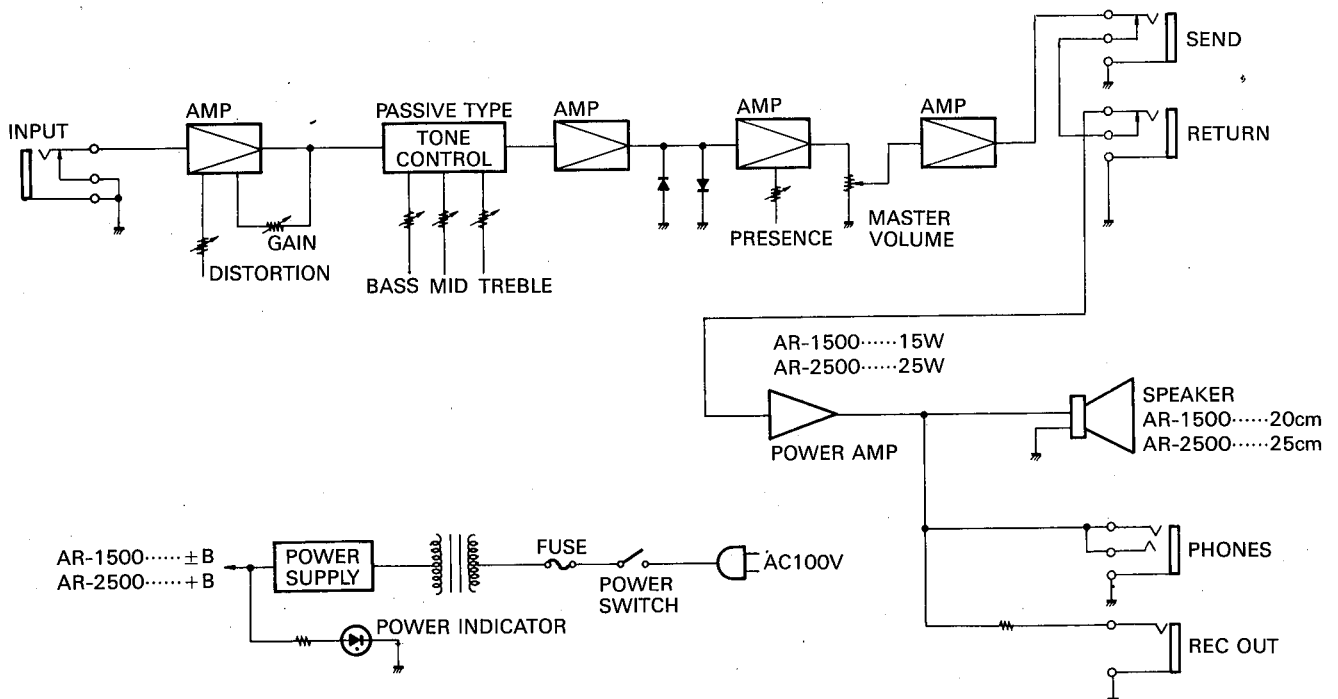
AR-1500



AR-2500



BLOCK DIAGRAM



AR-1500/AR-2500

■ DISASSEMBLY PROCEDURE

1. Back Board Removal

1-1. The back board can be removed by removing the screws marked in the figure as ①. (Fig. 1)

* There are eight (8) screws around the outer edge of the back board on an AR-1500, and ten (10) screws on an AR-2500.

2. Speaker Removal

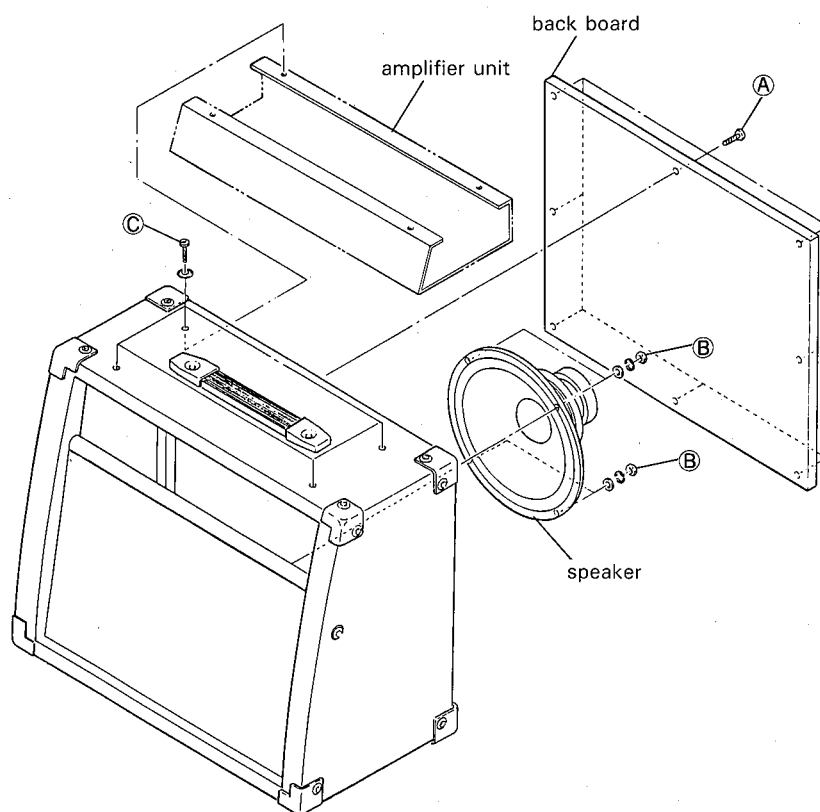
2-1. Remove the back board. (see procedure 1)

2-2. Remove the four (4) hexagonal nuts marked ②, then the speaker can be removed. (Fig. 1)

3. Amplifier Unit Removal

3-1. Remove the back board. (see procedure 1)

3-2. After the four (4) screws marked ③ have been removed, the amplifier unit can be taken out of the unit. (Fig. 1)



(Fig. 1)

4. Circuit Board Removal

4-1. Remove the back board. (see procedure 1)

4-2. Remove the amplifier unit. (see procedure 3)

4-3. Circuit board (A) removal

4-3-1. Remove the seven (7) knobs marked ④ and seven (7) hexagonal nuts marked ⑤. (Fig. 2)

4-3-2. Remove the two (2) screws marked ⑥, and then remove the circuit board (A) while pressing the tips of the spacers marked ⑦. (Fig. 2)

4-4. Circuit board (B) removal

4-4-1. Remove the circuit board (B) by removing the two (2) hexagonal nuts marked ⑧. (Fig. 2)

4-5. Circuit board (C) removal

4-5-1. Remove the circuit board (C) by removing the two (2) hexagonal nuts marked ⑨. (Fig. 2)

4-6. Circuit board (D) removal

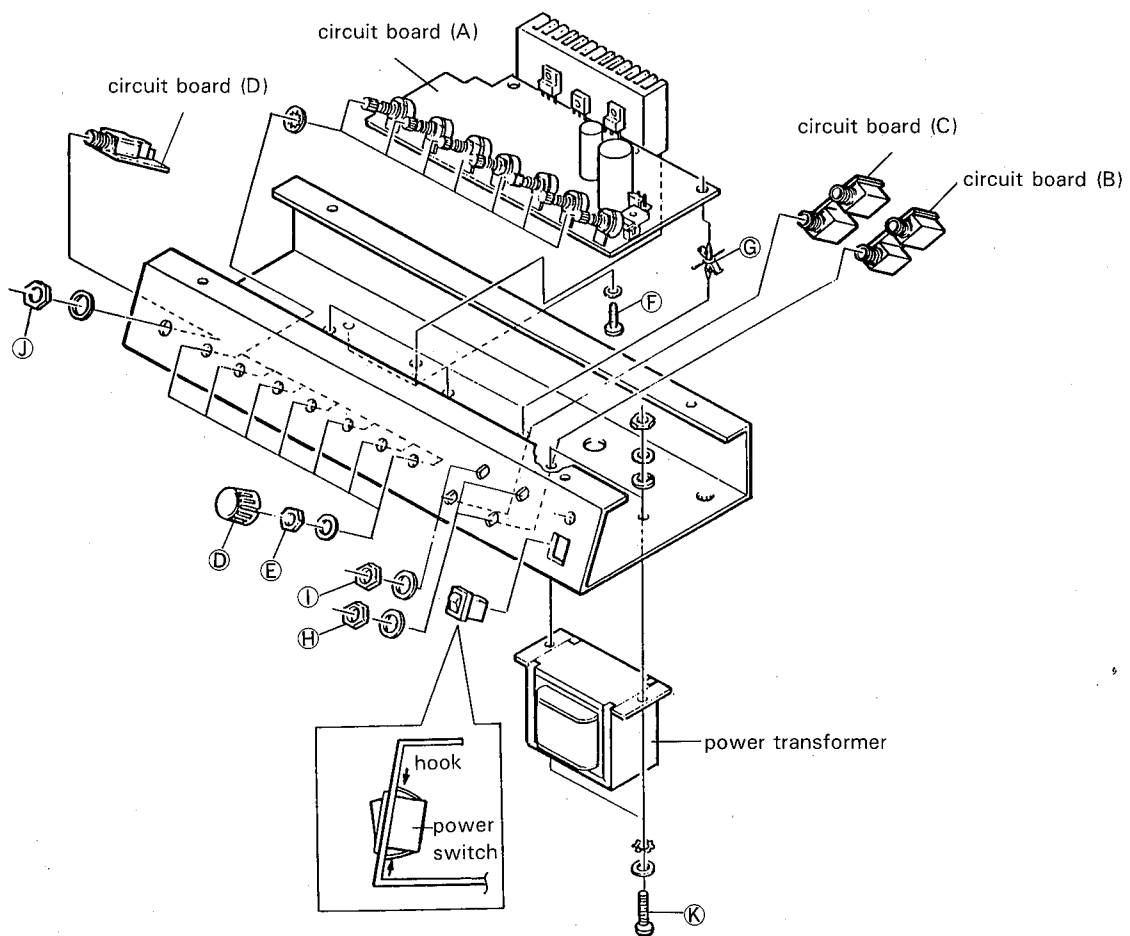
4-6-1. Remove the circuit board (D) by removing the hexagonal nut marked ⑩. (Fig. 2)

5. Power Switch Removal

- 5-1. Remove the back board. (see procedure 1)
- 5-2. Remove the amplifier unit. (see procedure 3)
- 5-3. While pressing the hooks, remove the power switch by pulling it out of the panel. (Fig. 2)

6. Power Transformer Removal

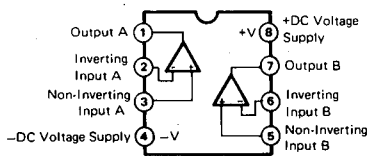
- 6-1. Remove the back board. (see procedure 1)
- 6-2. Remove the amplifier unit. (see procedure 3)
- 6-3. After the two (2) screws marked **K** have been removed, then the power transformer can be removed. (Fig. 2)



(Fig. 2)

IC BLOCK DIAGRAM

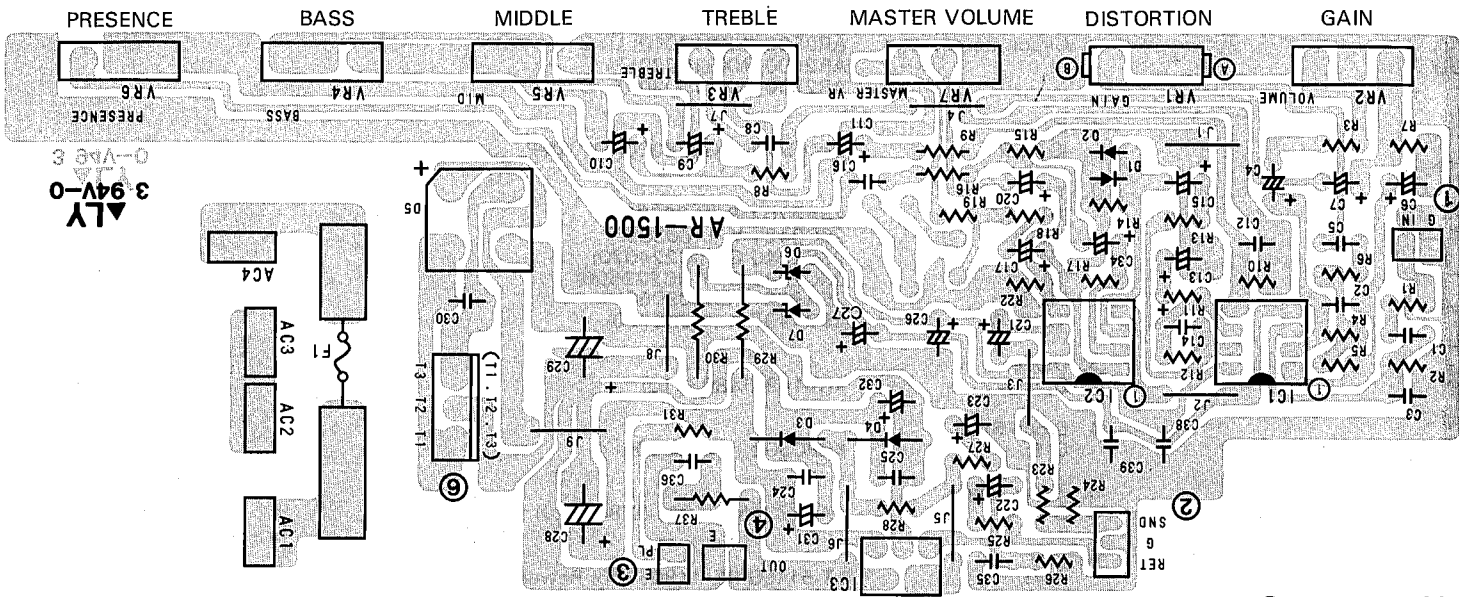
- **μPC4558C (IG028300)**
Dual Operational Amplifier



CIRCUIT BOARD

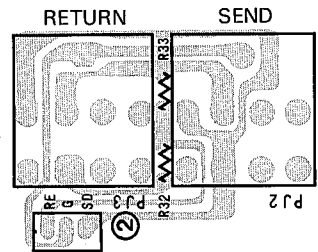
● AR-1500

AR-1500(A)



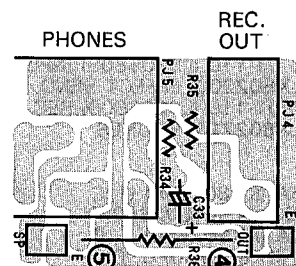
Component side

AR-1500(B)



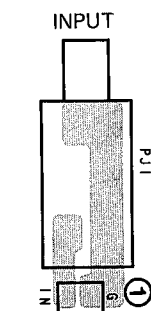
Component side

AR-1500(C)



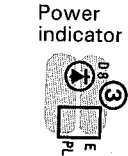
Component side

AR-1500(D)



Component side

AR-1500(E)



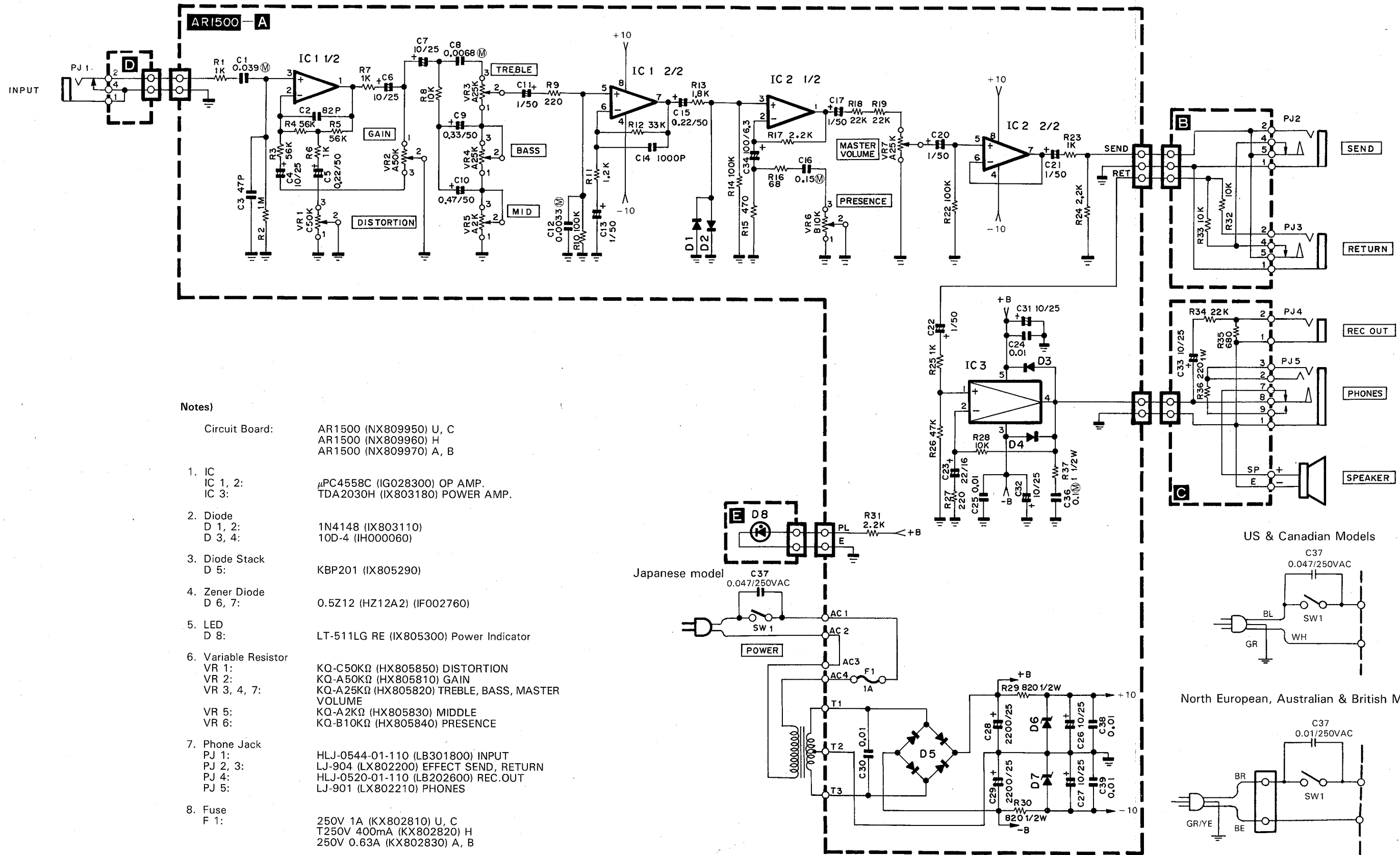
Component side

Notes)

- | | |
|----------------------|---|
| Circuit Board: | AR1500 (NX809950) U, C
AR1500 (NX809960) H
AR1500 (NX809970) A, B |
| 1. IC | μPC4558C (IG028300) OP AMP. |
| IC 1, 2: | TDA2030H (IX803180) POWER AMP. |
| IC 3: | |
| 2. Diode | |
| D 1, 2: | 1N4148 (IX803110) |
| D 3, 4: | 10D-4 (IH000060) |
| 3. Diode Stack | |
| D 5: | KBP201 (IX805290) |
| 4. Zener Diode | |
| D 6, 7: | 0.5Z12 (HZ12A2) (IF002760) |
| 5. LED | |
| D 8: | LT-511LG RE (IX805300) Power Indicator |
| 6. Variable Resistor | |
| VR 1: | KQ-C50KΩ (HX805850) DISTORTION |
| VR 2: | KQ-A50KΩ (HX805810) GAIN |
| VR 3, 4, 7: | KQ-A25KΩ (HX805820) TREBLE, BASS, MASTER VOLUME |
| VR 5: | KQ-A2KΩ (HX805830) MIDDLE |
| VR 6: | KQ-B10KΩ (HX805840) PRESENCE |
| 7. Phone Jack | |
| PJ 1: | HLJ-0544-01-110 (LB301800) INPUT |
| PJ 2, 3: | LJ-904 (LX802200) EFFECT SEND, RETURN |
| PJ 4: | HLJ-0520-01-110 (LB202600) REC.OUT |
| PJ 5: | LJ-901 (LX802210) PHONES |
| 8. Fuse | |
| F 1: | 250V 1A (KX802810) U, C
T250V 400mA (KX802820) H
250V 0.63A (KX802830) A, B |

AR-1500/AR-2500

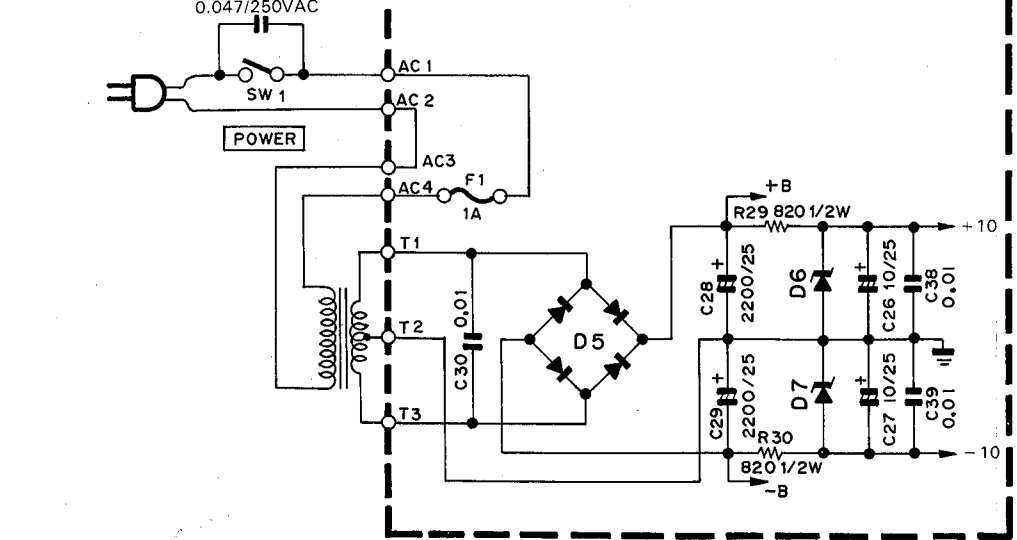
AR-1500 OVERALL CIRCUIT DIAGRAM



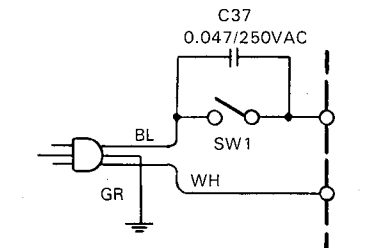
Notes)

- Circuit Board: AR1500 (NX809950) U, C
AR1500 (NX809960) H
AR1500 (NX809970) A, B
- 1. IC
IC 1, 2: μ PC4558C (IG028300) OP AMP.
IC 3: TDA2030H (IX803180) POWER AMP.
- 2. Diode
D 1, 2: 1N4148 (IX803110)
D 3, 4: 10D-4 (IH000060)
- 3. Diode Stack
D 5: KBP201 (IX805290)
- 4. Zener Diode
D 6, 7: 0.5Z12 (HZ12A2) (IF002760)
- 5. LED
D 8: LT-511LG RE (IX805300) Power Indicator
- 6. Variable Resistor
VR 1: KQ-C50K Ω (HX805850) DISTORTION
VR 2: KQ-A50K Ω (HX805810) GAIN
VR 3, 4, 7: KQ-A25K Ω (HX805820) TREBLE, BASS, MASTER VOLUME
VR 5: KQ-A2K Ω (HX805830) MIDDLE
VR 6: KQ-B10K Ω (HX805840) PRESENCE
- 7. Phone Jack
PJ 1: HLJ-0544-01-110 (LB301800) INPUT
PJ 2, 3: LJ-904 (LX802200) EFFECT SEND, RETURN
PJ 4: HLJ-0520-01-110 (LB202600) REC.OUT
PJ 5: LJ-901 (LX802210) PHONES
- 8. Fuse
F 1: 250V 1A (KX802810) U, C
T250V 400mA (KX802820) H
250V 0.63A (KX802830) A, B
- 9. Marked $\text{\textcircled{M}}$: Mylar capacitor

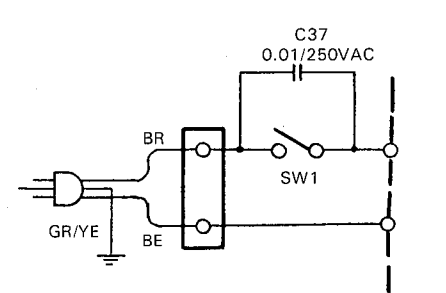
Japanese model



US & Canadian Models

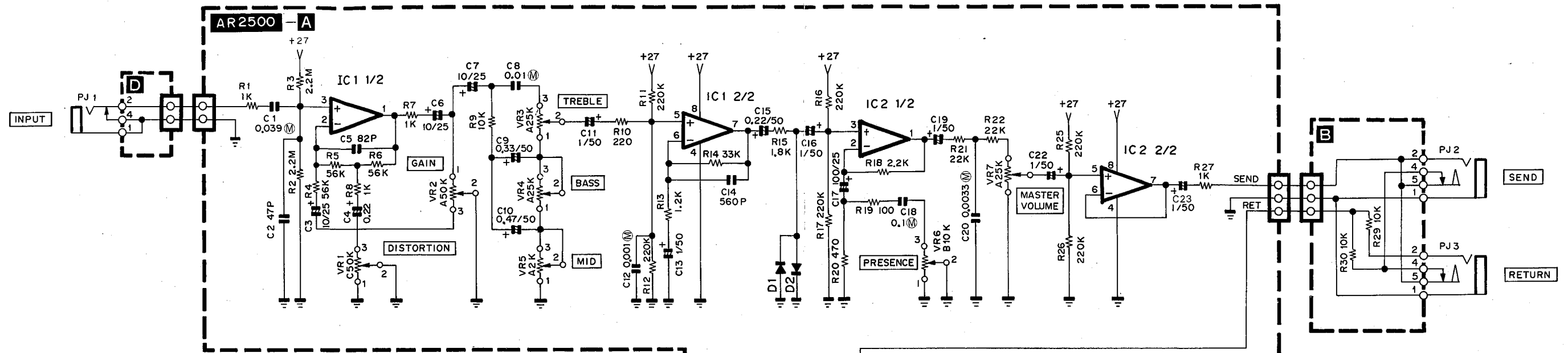


North European, Australian & British Models



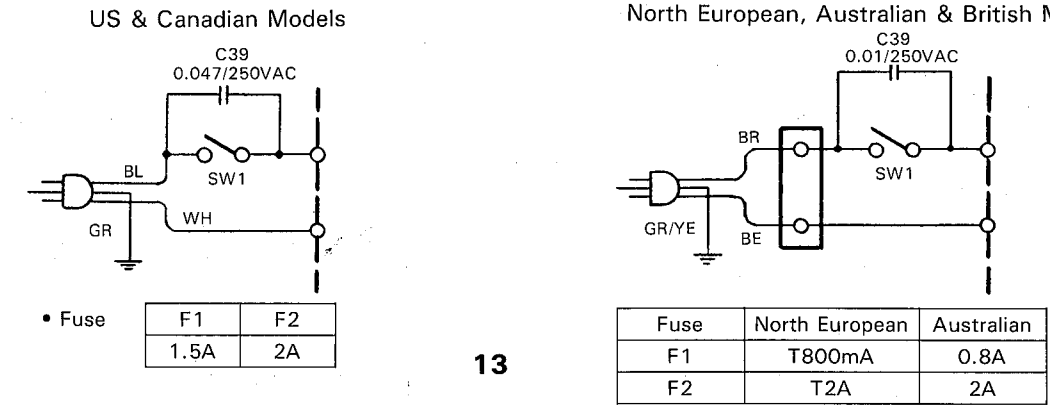
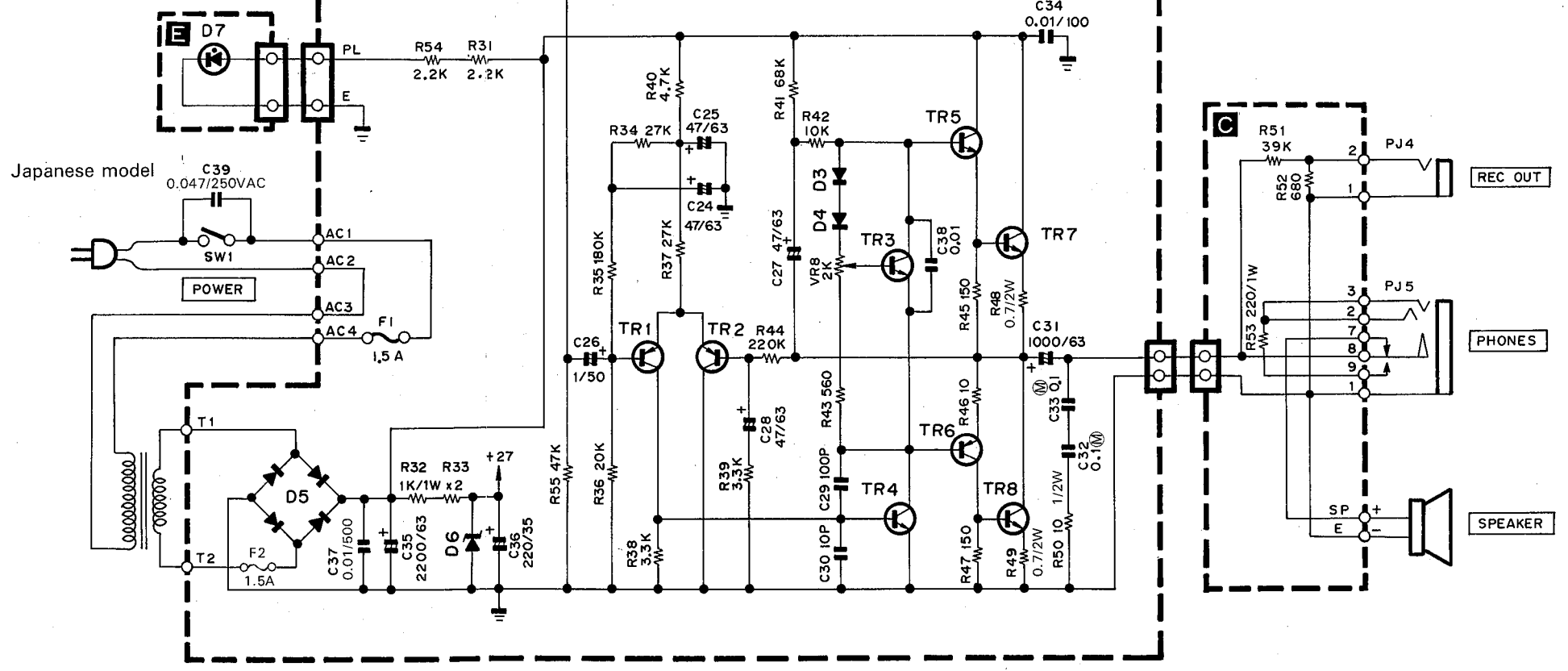
Fuse	North European	Australian
F1	T400mA	0.63A

AR-2500 OVERALL CIRCUIT DIAGRAM



Notes)

- Circuit Board: AR2500 (NX810010) U, C
 AR2500 (NX810020) H
 AR2500 (NX810030) A, B
- IC
 IC 1, 2: μ PC4558C (IG028300) OP AMP.
 - Transistor
 TR 1, 2: 2SA970 GR (IA097020)
 TR 3: 2SC3421 Y (IX803090)
 TR 4: 2SC2240 GR (IC224020)
 TR 5: 2SC2235 O, Y (IC223500)
 TR 6: 2SA965 Y (IX609060)
 TR 7, 8: 2SD1407 Y (IX802760)
 - Diode
 D 1-4: 1N4148 (IX803110)
 - Diode Stack
 D 5: KBPC302 (IX805310)
 - Zener Diode
 D 6: 1A227 (1N4750A) (IX805320)
 - LED
 D 7: LT-511LG RE (IX805300) Power Indicator
 - Variable Resistor
 VR 1: KQ-C50K Ω (HX805850) DISTORTION
 VR 2: KQ-A50K Ω (HX805810) GAIN
 VR 3, 4, 7: KQ-A25K Ω (HX805820) TREBLE, BASS, MASTER VOLUME
 VR 5: KQ-A2K Ω (HX805830) MIDDLE
 VR 6: KQ-B10K Ω (HX805840) PRESENCE
 - Trimmer Potentiometer
 VR 8: B2K Ω (HX805880)
 - Phone Jack
 PJ 1: HLJ-0544-01-110 (LB301800) INPUT
 PJ 2, 3: LJ-904 (LX802200) EFFECT SEND, RETURN
 PJ 4: HLJ-0520-01-110 (LB202600) REC. OUT
 PJ 5: LJ-901 (LX802210) PHONES
 - Fuse
 F 1: 250V 1.5A (KX802840) U, C
 T250V 800mA (KX802850) H
 250V 0.8A (KX802860) A, B
 250V 2A (KX802780) U, C
 T250V 2A (KX802790) H
 250V 2A (KX802800) A, B
 F 2: 250V 1.5A (KX802840) U, C
 T250V 800mA (KX802850) H
 250V 0.8A (KX802860) A, B
 250V 2A (KX802780) U, C
 T250V 2A (KX802790) H
 250V 2A (KX802800) A, B
 - R45-47: Flame proof carbon Resistor
 Marked $\text{\textcircled{M}}$: Mylar capacitor



Fuse	F1	F2
	1.5A	2A

Fuse	North European	Australian
F1	T800mA	0.8A
F2	T2A	2A

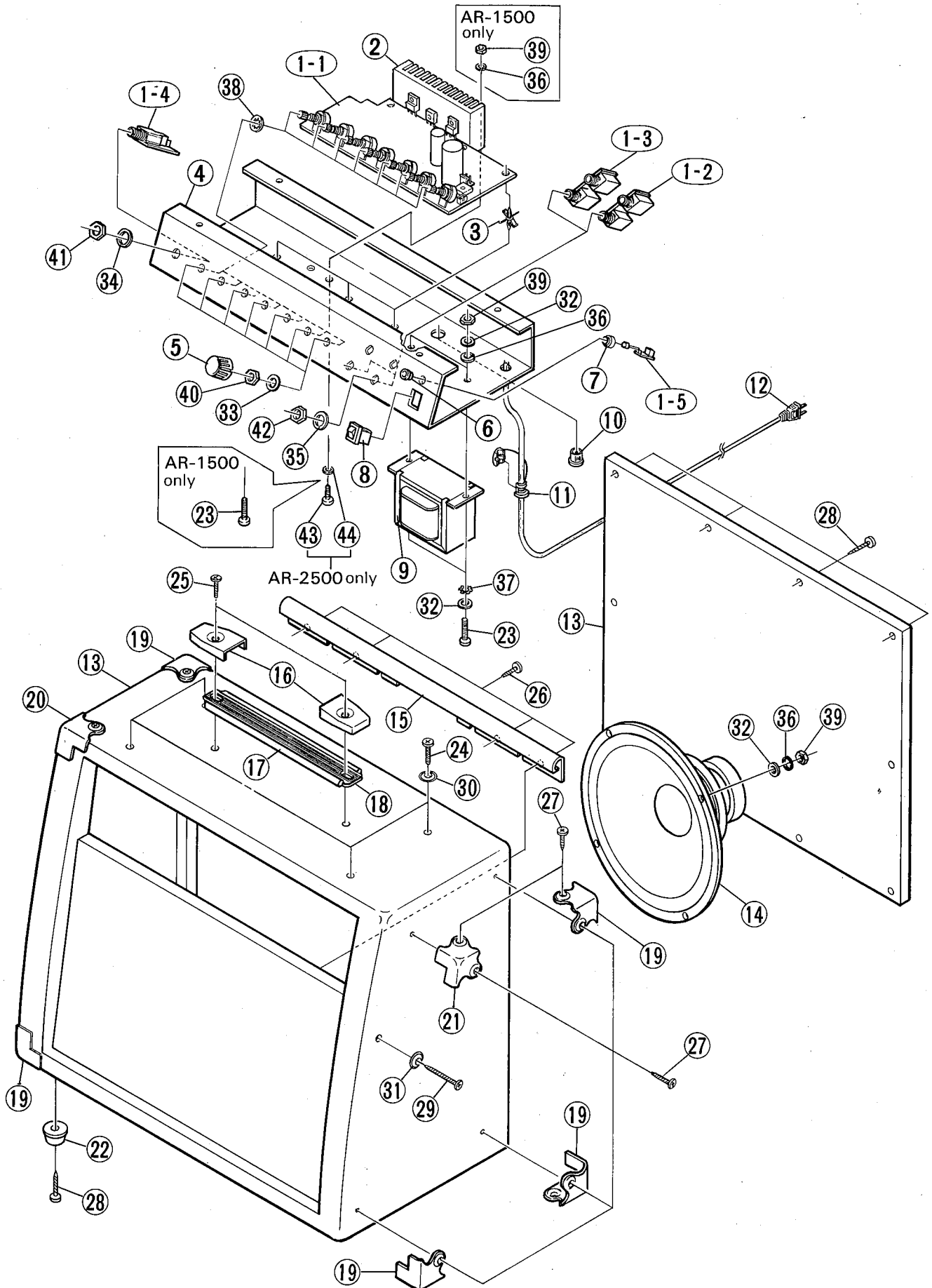
GUITAR AMPLIFIERS

AR-1500 AR-2500

PARTS LIST

J : Japanese model	A : Australian model
U : U.S. model	E : European model
C : Canadian model	D : German model
X : General model	B : British model
M : South African model	I : Indonesian model
H : North European model	

OVERALL ASSEMBLY



AR-1500/AR-2500

OVERALL ASSEMBLY (AR-1500)

Ref. No.	Part No.	Description	部品名	Remarks	ランク	
1	NX809950	Circuit Board	AR1500	A R 1 5 0 0 シート	U, C	
1	NX809960	Circuit Board	AR1500	A R 1 5 0 0 シート	H	
1	NX809970	Circuit Board	AR1500	A R 1 5 0 0 シート	A, B	
1-1		Circuit Board	AR1500 (A)	AR1500シート(A)		
1-2		Circuit Board	AR1500 (B)	AR1500シート(B)		
1-3		Circuit Board	AR1500 (C)	AR1500シート(C)		
1-4		Circuit Board	AR1500 (D)	AR1500シート(D)		
1-5		Circuit Board	AR1500 (E)	AR1500シート(E)		
2	AX808290	Heat Sink		放熱板		04
3	CX810250	Spacer	CS-0406	ロッキングカートスパーサー		01
4	AX808280	Chassis		シャーシ		09
5	CX810280	Knob		ツマミ		01
6	CX804930	LED Block	H-503	LEDブロック		01
7	CX808230	LED Cover		LEDカバー		01
8	KX800910	Power Switch	SDW-112A-22	パワースイッチ	U, C, A, B	03
8	KX802870	Power Switch	MSR5 6A/250V	パワースイッチ	H	
9	GX802870	Power Transformer	78TS-1223C	電源トランス	U, C	
9	GX802880	Power Transformer	78TS-1224A	電源トランス	H, A, B	
10	CX810240	Bushing	SB-19	ブッシュ		01
11	CX808450	Cord Strain Relief	SB6N-4	コードストッパー	U, C	01
11	CX808390	Cord Strain Relief	SBR5-1	コードストッパー	H, A, B	01
12	MX801170	AC Cord	SJT(AVG18) 120V	電源コード	U, C	
12	MX801180	AC Cord	VDE(0.75mm) 220V	電源コード	H	
12	MX801190	AC Cord	SAA(0.75mm) 240V	電源コード	A	
12	MX	AC Cord		電源コード	B	
13	DX806330	Cabinet		外装組立		20
14	JX800350	Speaker		スピーカー		10
15	DX806340	Panel	330mm Gold	飾り板		07
16	AX808300	Metal Fitting, Handle	BL	把手金具		02
17	CX810270	Handle Belt	BL	把手ベルト		01
18	BX800510	Handle Plate		把手プレート		03
19	AX808310	Corner Protector-A	BL	コーナー金具(A)		02
20	AX808320	Corner Protector-B	BL(Left)	コーナー金具(B)		02
21	AX808330	Corner Protector-C	BL(Right)	コーナー金具(C)		02
22	CX810260	Foot	BL	すべり座		01
23	EA340126	Pan Head Screw	4.0×12 FCM3BL	ナベ小ネジ		01
24	EF340306	Oval Head Screw	4.0×30 FCM3BL	丸皿小ネジ		01
25	EX801400	Round Head Screw	4.5×29 FCM3BL	丸小ネジ		01
26	EK020010	Trus Head Tapping Screw	3.0×10 ZMC2Y	トラスタッピングネジ		01
27	EH330160	Trus Head Tapping Screw	3.0×16 FCM3BL	トラスタッピングネジ		01
28	EH340208	Trus Head Tapping Screw	4.0×20 FCM3BL	トラスタッピングネジ		01
29	EM340506	Oval Head Tapping Screw	4.0×50 FCM3BL	丸皿タッピングネジ		01
30	EX802010	Washer-L	BL	座金(大)		01
31	EX802020	Washer-S	13.3mm BL	座金(小)		01
32	EV203046	Flat Washer	φ 4.0 FCM3BL	平座金		01
33	EV220070	Flat Washer	φ 7.0 ZMC2Y	平座金		01
34	LX200010	Flat Washer	φ 9.0 FNM3-3G	特殊平座金		01
35	ET500230	Flat Washer	φ 12.0 FNM3-3G	特殊平座金		01
36	EV300046	Spring Washer	φ 4.0 ZMC2Y	バネ座金		01
37	EV420046	Toothed Lock Washer	B φ 4.0 ZMC2Y	歯付座金 外歯形		01
38	EV410076	Toothed Lock Washer	A φ 7.0 ZMC2Y	歯付座金 内歯形		01
39	EV100046	Hexagonal Nut	φ 4.0 ZMC2Y	六角ナット		01
40	EV100706	Hexagonal Nut	φ 7.0 ZMC2Y	六角ナット		01
41	LX200060	Hexagonal Nut	φ 9.0 FNM3-3G	特殊六角ナット		01
42	EV101120	Hexagonal Nut	φ 12.0 FNM3-3G	特殊六角ナット		01

* New Parts (新規部品)

ランク: Japan only

OVERALL ASSEMBLY (AR-2500)

Ref. No.	Part No.	Description	部品名	Remarks	ランク	
1	NX810010	Circuit Board	AR2500	A R 2 5 0 0 シート	U,C	
1	NX810020	Circuit Board	AR2500	A R 2 5 0 0 シート	H	
1	NX810030	Circuit Board	AR2500	A R 2 5 0 0 シート	A,B	
1-1		Circuit Board	AR2500(A)	AR2500シート(A)		
1-2		Circuit Board	AR2500(B)	AR2500シート(B)		
1-3		Circuit Board	AR2500(C)	AR2500シート(C)		
1-4		Circuit Board	AR2500(D)	AR2500シート(D)		
1-5		Circuit Board	AR2500(E)	AR2500シート(E)		
2	AX808360	Heat Sink	MW-930	放熱板		06
3	CX810250	Spacer	CS-0406	ロッキングガードスパーサー		01
4	AX808350	Chassis		シャーシ		10
5	CX810280	Knob		ツマミ		01
6	CX804930	LED Block	H-503	L E D ブロック		01
7	CX808230	LED Cover		L E D カバー		01
8	KX800910	Power Switch	SDW-112A-22	パワースイッチ	U,C,A,B	03
8	KX802870	Power Switch	MSR5 6A/250V	パワースイッチ	H	
9	GX802890	Power Transformer	78TS-1221	電源トランス	U,C	
9	GX802900	Power Transformer	78TS-1222	電源トランス	H,A,B	
10	CX810310	Bushing	NB-1216	ブushing		01
11	CX808450	Cord Strain Relief	SB6N-4	コードストッパー	U,C	01
11	CX808390	Cord Strain Relief	SBR5-1	コードストッパー	H,A,B	01
12	MX801170	AC Cord	SJT (AWG18) 120V	電源コード	U,C	
12	MX801180	AC Cord	VDE (0.75mm) 220V	電源コード	H	
12	MX801190	AC Cord	SAA (0.75mm) 240V	電源コード	A	
12	MX	AC Cord		電源コード	B	
13	DX806370	Cabinet		外装組立		23
14	JX800360	Speaker		スピーカー		13
15	DX806380	Panel	390mm Gold	飾り板		08
16	AX808300	Metal Fitting, Handle	BL	把手金具		02
17	CX810270	Handle Belt	BL	把手ベルト		01
18	BX800510	Handle Plate		把手プレート		03
19	AX808310	Corner Protector-A	BL	コーナー金具(A)		02
20	AX808320	Corner Protector-B	BL(Left)	コーナー金具(B)		02
21	AX808330	Corner Protector-C	BL(Right)	コーナー金具(C)		02
22	AX810260	Foot	BL	すべり座		01
23	EA340126	Pan Head Screw	4.0×12 FCM3BL	ナベ小ネジ		01
24	EF340306	Oval Head Screw	4.0×30 FCM3BL	丸皿小ネジ		01
25	EX801400	Round Head Screw	4.5×29 FCM3BL	丸小ネジ		01
26	EK020010	Trus Head Tapping Screw	3.0×10 ZMC2Y	トラスタッピングネジ		01
27	EH330160	Trus Head Tapping Screw	3.0×16 FCM3BL	トラスタッピングネジ		01
28	EH340208	Trus Head Tapping Screw	4.0×20 FCM3BL	トラスタッピングネジ		01
29	EM340506	Oval Head Tapping Screw	4.0×50 FCM3BL	丸皿タッピングネジ		01
30	FX802010	Washer-L	BL	皿金(大)		01
31	EX802020	Washer-S	13.3mm BL	皿金(小)		01
32	EV203046	Flat Washer	φ 4.0 FCM3BL	平座金		01
33	EV220070	Flat Washer	φ 7.0 ZMC2Y	平座金		01
34	LX200010	Flat Washer	φ 9.0 FNM3-3G	特殊平座金		01
35	ET500230	Flat Washer	φ 12.0 FNM3-3G	特殊平座金		01
36	EV300046	Spring Washer	φ 4.0 ZMC2Y	バネ座金		01
37	EV420046	Toothed Lock Washer	B φ 4.0 ZMC2Y	歯付座金 外歯形		01
38	EV410076	Toothed Lock Washer	A φ 7.0 ZMC2Y	歯付座金 内歯形		01
39	EV100046	Hexagonal Nut	φ 4.0 ZMC2Y	六角ナット		01
40	EV100706	Hexagonal Nut	φ 7.0 ZMC2Y	六角ナット		01
41	LX200060	Hexagonal Nut	φ 9.0 FNM3-3G	特殊六角ナット		01
42	EV101120	Hexagonal Nut	φ 12.0 FNM3-3G	特殊六角ナット		01
43	EN020030	Pan Head Tapping Screw	3.0×8 ZMC2Y	ナベタッピングネジ 2種		01
44	EV200036	Flat Washer	φ 3.0 ZMC2Y	平座金		01

* New Parts (新規部品)

ランク: Japan only

ELECTRICAL PARTS (AR-1500)

Ref. No.	Part No.	Description	部品名	Remarks	ランク	
	NX809950	Circuit Board	AR1500	AR1500シート	U,C	
	NX809960	Circuit Board	AR1500	AR1500シート	H	
	NX809970	Circuit Board	AR1500	AR1500シート	A,B	
	IG028300	IC	μ PC4558C	IC	OP AMP.	03
	IX803180	IC	TDA2030H	IC	POWER AMP.	05
	IX803110	Diode	1N4148	ダイオード		01
	IH000060	Diode	10D-4	ダイオード		01
	IX805290	Diode Stack	KBP201	ダイオードスタック		03
	IF002760	Zener Diode	0.5Z12(HZ12A2)	ツェナーダイオード		01
	IX805300	LED	LT-511LG RE	LED	Power Indicator	01
	HX805810	Variable Resistor	A50K Ω	可変抵抗器	GAIN	03
	HX805820	Variable Resistor	A25K Ω	可変抵抗器	VOL. TREBLE, BASS	03
	HX805830	Variable Resistor	A2K Ω	可変抵抗器	MIDDLE	03
	HX805840	Variable Resistor	B10K Ω	可変抵抗器	PRESENCE	03
	HX805850	Variable Resistor	C50K Ω	可変抵抗器	DISTORTION	03
	LB301800	Phone Jack	HLJ-0544-01-110	ホーンジャック	INPUT	03
	LX802200	Phone Jack	LJ-904	ホーンジャック	EFF. SEND, RETURN	03
	LB202600	Phone Jack	HLJ-0520-01-110	ホーンジャック	REC. OUT	02
	LX802210	Phone Jack	LJ-901	ホーンジャック	PHONES	03
	KX802810	Fuse	250V 1A	ヒューズ	U,C	
	KX802820	Fuse	T 250V 400mA	ヒューズ	H	
	KX802830	Fuse	250V 0.63A	ヒューズ	A,B	
	CX805060	Fuse Holder	CQ-205SP	ヒューズホルダー	U,C	02
	CX802450	Fuse Holder	CQ-200S	ヒューズホルダー	H,A,B	01
	EA330126	Pan Head Screw	3.0 \times 12 FCM3BL	ナベ小ネジ	for IC (3pcs)	01
	EV300036	Spring Washer	ϕ 3.0 ZMC2Y	バネ座金	for IC (3pcs)	01
	EV420036	Toothed Lock Washer	B ϕ 3.0 ZMC2Y	歯付座金	for IC (3pcs)	01
	EV100036	Hexagonal Nut	ϕ 3.0 ZMC2Y	六角ナット	for IC (3pcs)	01
	KX800910	Power Switch	SDW-112A-22	パワースイッチ	U,C,A,B	03
	KX802870	Power Switch	MSR5 6A/250V	パワースイッチ	H	
	JX800350	Speaker		スピーカー		10
	GX802870	Power Transformer	78TS-1223C	電源トランス	U,C	
	GX802880	Power Transformer	78TS-1224A	電源トランス	H,A,B	
	MX801170	AC Cord	SJT(AWG18) 120V	電源コード	U,C	
	MX801180	AC Cord	VDE(0.75mm)220V	電源コード	H	
	MX801190	AC Cord	SAA(0.75mm)240V	電源コード	A	
	MX —	AC Cord		電源コード	B	

ELECTRICAL PARTS (AR-2500)

Ref. No.	Part No.	Description	部品名	Remarks	ランク	
	NX810010	Circuit Board	AR2500	AR2500シート	U,C	
	NX810020	Circuit Board	AR2500	AR2500シート	H	
	NX810030	Circuit Board	AR2500	AR2500シート	A,B	
	IG028300	IC	μPC4558C	IC	OP AMP.	03
	IA097020	Transistor	2SA970 GR	トランジスタ		01
	IX609060	Transistor	2SA965 Y	トランジスタ		03
	IC224020	Transistor	2SC2240 GR	トランジスタ		01
	IX803090	Transistor	2SC3421 Y	トランジスタ		
	IC223500	Transistor	2SC2235 O,Y	トランジスタ		01
	IX802760	Transistor	2SD1407 Y	トランジスタ		04
	IX803110	Diode	1N4148	ダイオード		01
	IX805310	Diode Stack	KBPC302	ダイオードスタック		03
	IX805320	Zener Diode	1AZ27 (1N4750A)	ツェナーダイオード		01
	IX805300	LED	LT-511LG RE	LED	Power Indicator	01
	HX805810	Variable Resistor	A50KΩ	可変抵抗器	GAIN	03
	HX805820	Variable Resistor	A25KΩ	可変抵抗器	VOL, TREBLE, BASS	03
	HX805830	Variable Resistor	A2KΩ	可変抵抗器	MIDDLE	03
	HX805840	Variable Resistor	B10KΩ	可変抵抗器	PRESENCE	03
	HX805850	Variable Resistor	C50KΩ	可変抵抗器	DISTORTION	03
	HX805880	Trimmer Potentiometer	B2KΩ	半固定抵抗		03
	LB301800	Phone Jack	HLJ-0544-01-110	ホンジャック	INPUT	03
	LX802200	Phone Jack	LJ-904	ホンジャック	EFF. (SEND, RETUR	03
	LB202600	Phone Jack	HLJ-0520-01-110	ホンジャック	REC. OUT	02
	LX802210	Phone Jack	LJ-901	ホンジャック	PHONES	03
	KX802840	Fuse	250V 1.5A	ヒューズ	U.C	
	KX802850	Fuse	T 250V 800mA	ヒューズ	H	
	KX802860	Fuse	250V 0.8A	ヒューズ	A,B	
	KX802780	Fuse	250V 2A	ヒューズ	U,C	
	KX802790	Fuse	T 250V 2A	ヒューズ	H	
	KX802800	Fuse	250V 2A	ヒューズ	A,B	
	CX805060	Fuse Holder	CQ-205SP	ヒューズホルダー	U,C	02
	CX802450	Fuse Holder	CQ-200S	ヒューズホルダー	H,A,B	01
	EN020030	Pan Head Tapping Screw	3.0×8 ZNC2Y	ナット	for TR (3pcs)	01
	KX800910	Power Switch	SDW-112A-22	パワースイッチ	U,C,A,B	03
	KX802870	Power Switch	MSR5 6A/250V	パワースイッチ	H	
	JX800360	Speaker		スピーカー		13
	GX802890	Power Transformer	78TS-1221	電源トランス	U,C	
	GX802900	Power Transformer	78TS-1222	電源トランス	H,A,B	
	MX801170	AC Cord	SJT (AWG18) 120V	電源コード	U,C	
	MX801180	AC Cord	VDE (0.75mm) 220V	電源コード	H	
	MX801190	AC Cord	SAA (0.75mm) 240V	電源コード	A	
	MX —	AC Cord		電源コード	B	