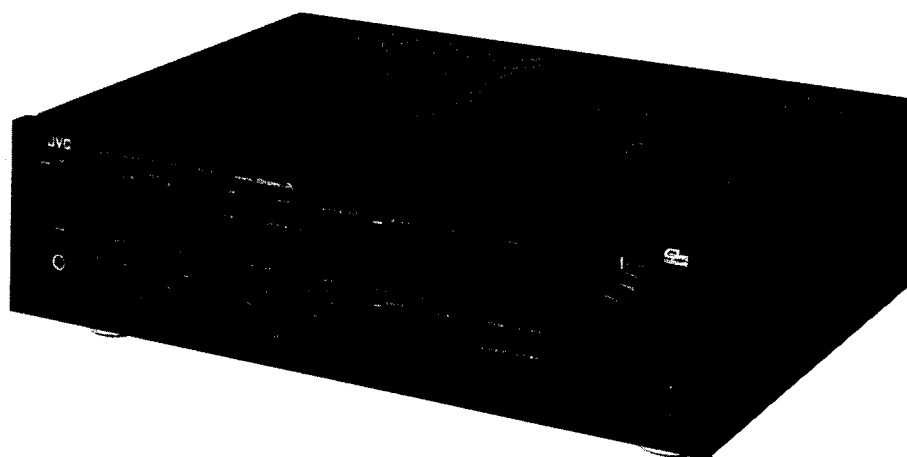


JVC

SERVICE MANUAL

MODEL No. **AX-700BK**



Contents

	Page		Page
Safety Precautions	1-2	Technical Explanations.....	1-6
Instruction Book		Schematic Diagram	Insertion
Block Diagram	1-3	Connection Diagram.....	Insertion
Removal Procedures.....	1-4	Parts List	Separate-volume Insertion
Adjustment Procedures.....	1-5	IC Equivalent Circuits.....	1-7

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes.

For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of the service manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in the service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.

When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

5. Leakage current check

(Electrical shock hazard testing)

After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the pro-

duct is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).

- Alternate check method.

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.).

This corresponds to 0.5 mA AC (r.m.s.).

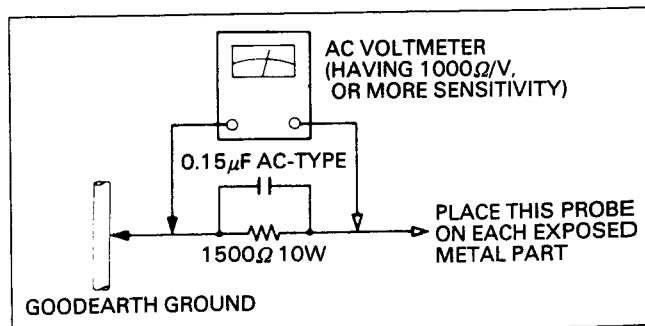
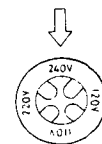


Fig. 1

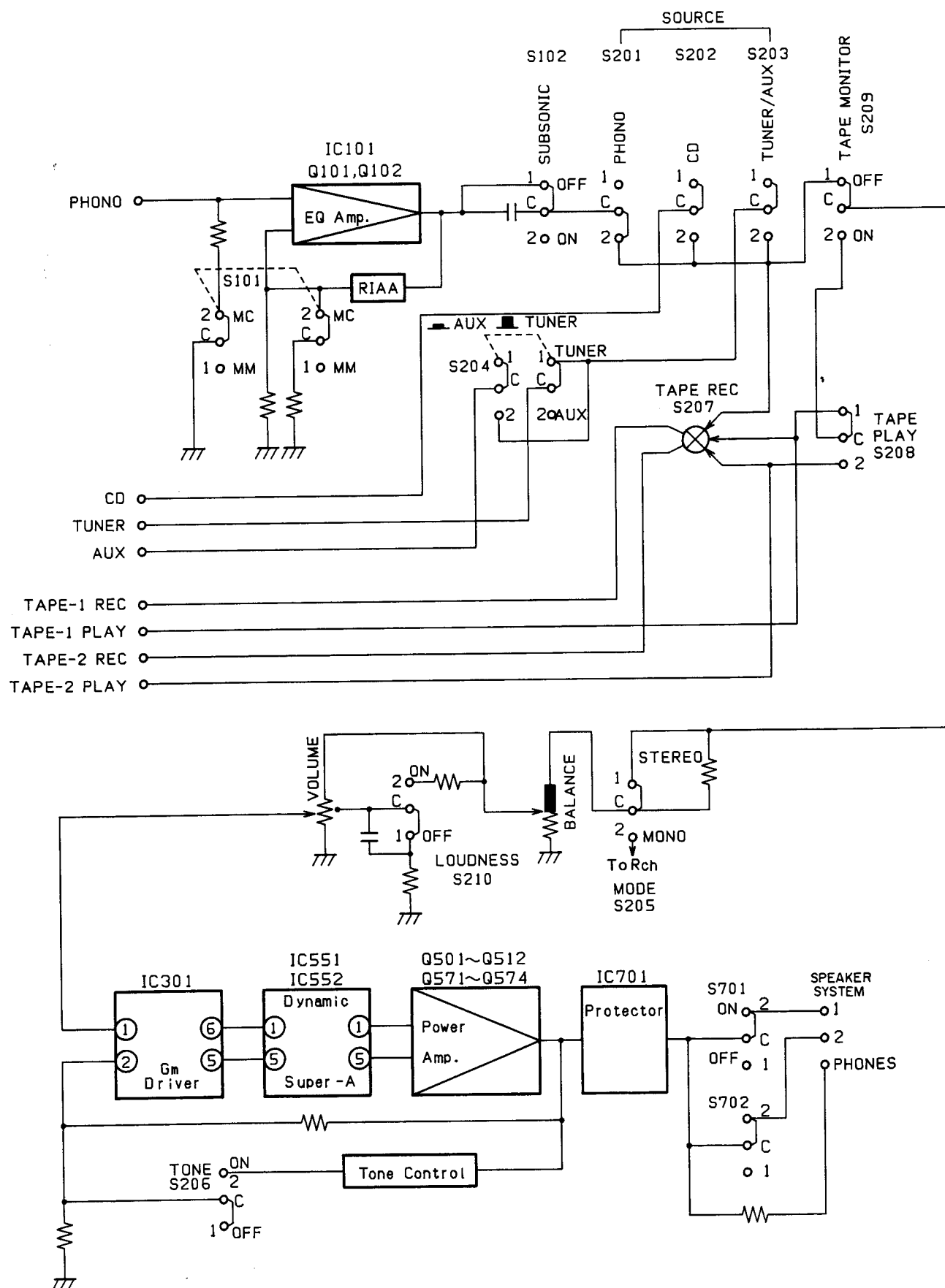
CHECKING YOUR LINE VOLTAGE (Except for Canada, U.K., Continental Europe and Australia)

Before inserting the power plug, please check this setting to see that it corresponds with the line voltage in your area. If it doesn't be sure to adjust the voltage selector switch to the proper setting before operating this equipment. The voltage selector switch is located on the rear panel.

CAUTION: Before setting the "Voltage selector switch" to the proper voltage, disconnect the power plug.



Block Diagram



Removal Procedures

■ Removal of the Power Amplifier P.C. Board

1. Remove the metal cover.
2. Remove the screw ① shown in Fig. 2 and screws ② – ⑤ retaining the heat sink bracket and chassis base.

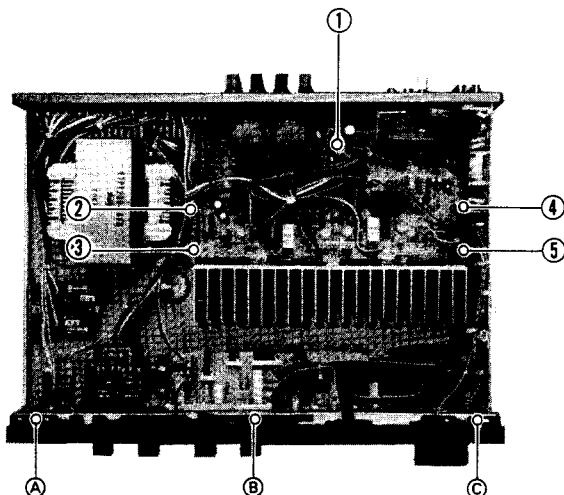


Fig. 2

3. Pull out the PC board as shown in Fig. 3.

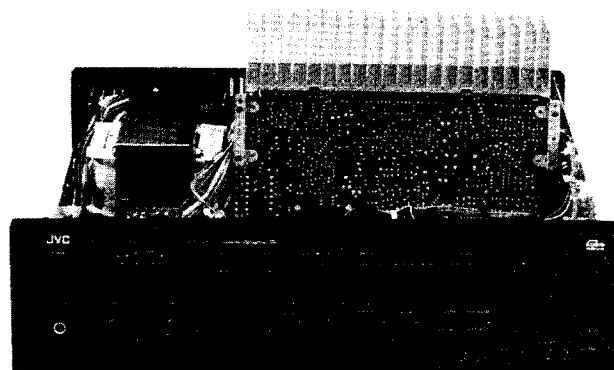


Fig. 3

■ Removal of the Front Panel

1. Pull off the volume knob.
2. Remove the plastic rivets A – C shown in Fig. 2.
3. Remove the three screws fixing the lower section of the front panel to remove the front panel.

■ Removal of the Front Bracket

Remove the screws F – H shown in Fig. 4, and set the front bracket upright as shown in Fig. 4.

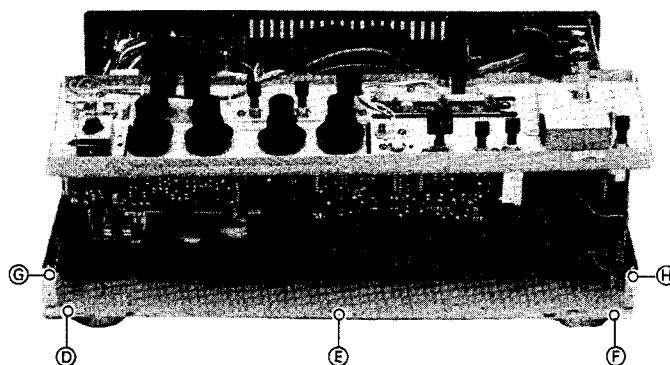


Fig. 4

■ Lubricating the Power Transistor

When replacing the power transistor, be sure to lubricate the adhered section of the heat sink before installation with silicon grease (Shin-etsu Kagaku G.746).

■ Removal of the Push Knobs

When removing the push knob direct-mounted to the push switch, set the push switch to OFF and pull off the push knob while opening the slip (cut-out section) on the side of the push knob using a screwdriver to prevent it from being damaged.

Adjustment Procedures

■ Ground Lead of the Power Amplifier P.C. Board

As this unit is grounded by connecting the ground lead to the chassis base, when the power amplifier P.C. board is removed, operation becomes unstable because of no grounding. For this, when operating with the power amplifier P.C. board removed from the chassis base, connect the ground lead ⑥ shown in Fig. 5 directly to the chassis with a screw.

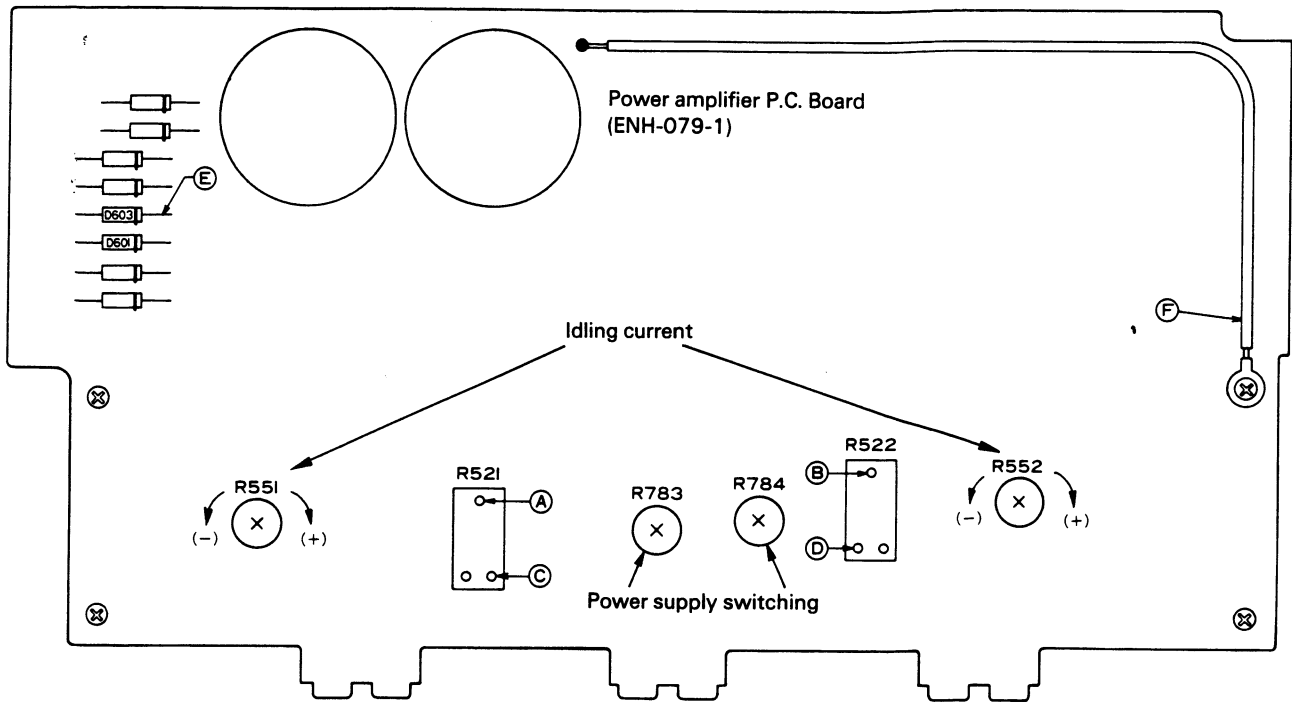


Fig. 5

■ Idling current adjustment

1. before turning the power ON, turn the semi-fixed resistors (R551 for Left channel and R552 for Right channel) of the power amplifier circuit board fully counterclockwise.

2. Turn the power ON and then adjust the semi-fixed resistors (R551 and R552) so that the voltage at the following test points of the power amplifier circuit board is within a range of the 9 mV ~ 13 mV.

"L" channel: measure the voltage between test point R521 ① and test point R521 ③ (emitter of Q510).

"R" channel: measure the voltage between test point R522 ② and test point R522 ④ (emitter of Q510).

3. Readjust resistors R551 and R552 about 5 minutes after the power is turned on (the heat-sink temperature must be sufficiently high) so that the voltage at the test points becomes 11 mV. Confirm that the voltage does not vary when the heat-sink temperature increase further.

Note: Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of AX-700BK or of other measuring equipments.

■ Power supply switching circuit adjustment

1. Before turning the power ON, turn the semi-fixed resistors (R783 for Left channel and R784 for Right channel) of the amplifier circuit board fully counterclockwise.
2. Turn the power ON and input a 1 kHz sine wave to the Left channel (or the Right channel) of the AUX. Then, connect a 7Ω dummy load to the speaker terminal, adjust either the amplifier's volume or the oscillator's volume to obtain 30 V output.
3. Measure voltage on the D603 cathode (⑤) and confirm that the range of "58V ± 3V" exists. Next, slowly rotate clockwise the semi-fixed resistors (R783/L or R784/R) and set voltage at the D603 cathode (⑤) to the level of 43.5V ± 3V.
4. Shift the dummy load from 7 ohms to 8 ohms and confirm that voltage at the D603 cathode (⑤) is 56V ± 3V. When this voltage is out of the range (50V ± 3V), readjust the semi-fixed resistors.

Note: Adjust on one channel at a time, either on the "L" channel or the "R" channel.

When you need dummy (7 ohms/8 ohms), consult with JVC.

Technical Explanations

■ Power Supply Switching Circuit

For the voltage applied to the power amplifier, the load impedance is detected by the impedance detecting circuit. When the load impedance exceeds 7 ohms, the power amplifier is operated in high voltage, and when the impedance is lower than 7 ohms, it is automatically changed to low-voltage operation. Thus the heating value (power loss) of the power amplifier is controlled so that the power supply circuit can drive the power amplifier at optimum efficiency.

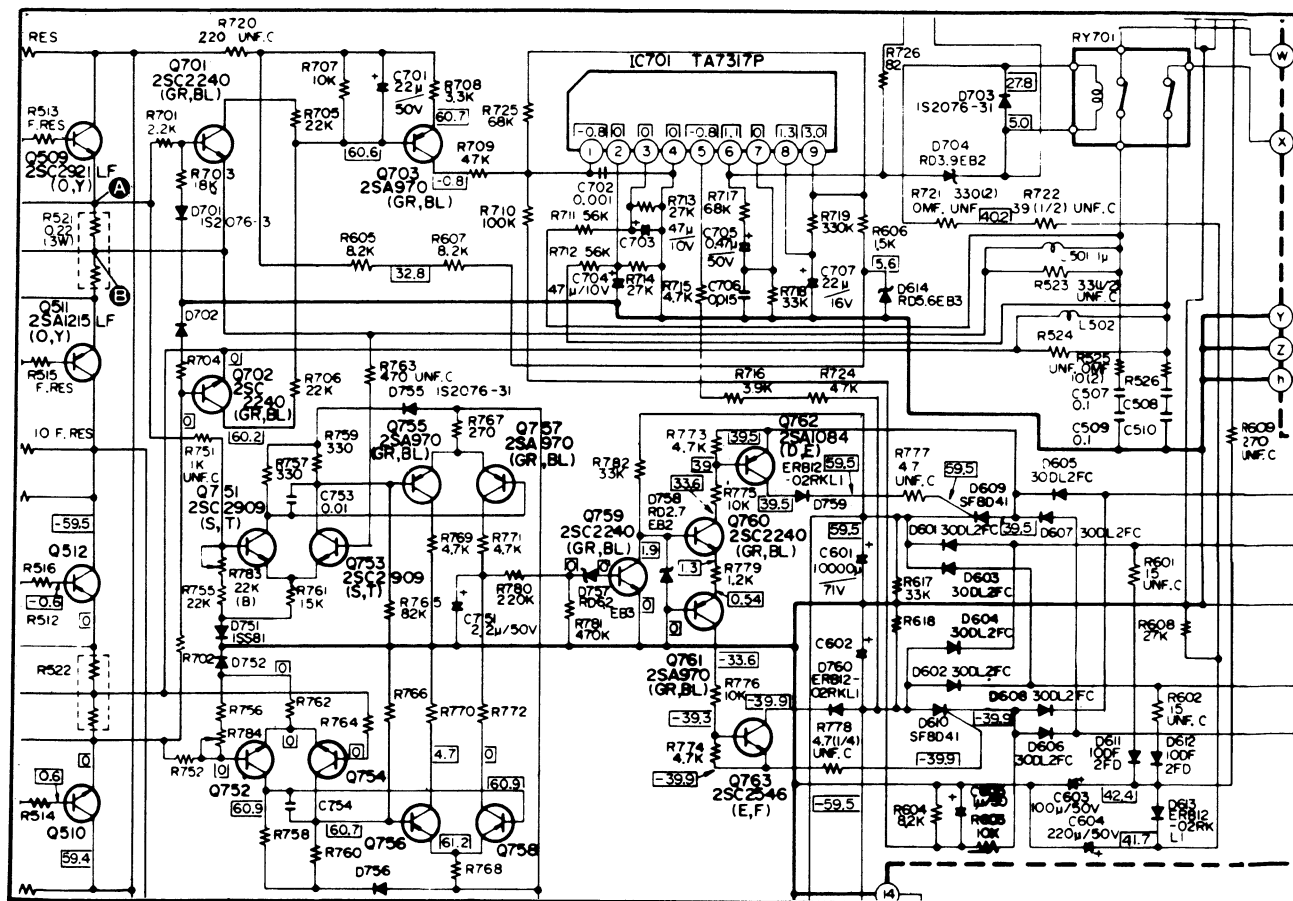


Fig. 6

■ L-Channel Operation Description

When the load impedance exceeds 7 ohms, or when the output power is low even if the impedance is lower than 7 ohms, Q759 is OFF and Q760 – Q763 are ON, so, the current flows to the gate of thyristor D609, D610 to turn the thyristor ON. For this, the high voltage signal is applied to C601 and C602 through D605 – D608 to operate the power amplifier.

When the load impedance is lower than 7 ohms and the output is high, the current and voltage are detected at the ⊕ side of R521 (emitter resistance of the power transistor) (point A) and output (point B) to obtain the impedance. With this, the detecting output is amplified by the two-stage amplifier consisting of Q751, Q753, Q755 and Q757.

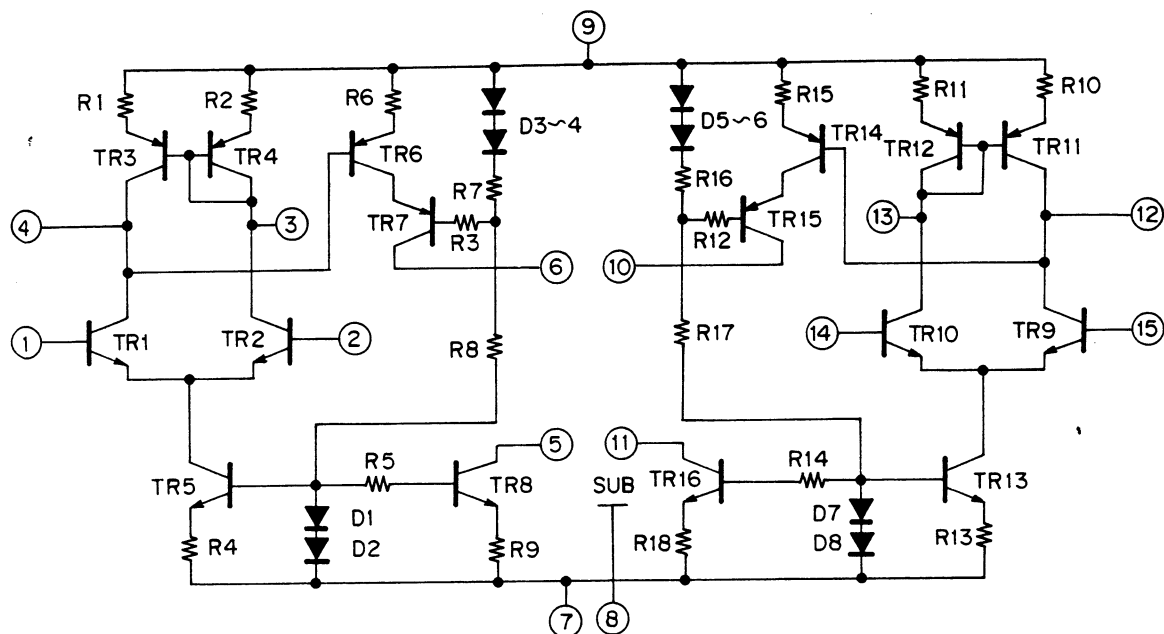
When the voltage applied to C751 exceeds 10 V, Q759 is turned ON and Q760 – Q763 are turned OFF, so the gate current to D609, D610 becomes nothing (zero); that is, D609 and D610 are cut off. For this, the low voltage signal is applied to C601 and C602 from D601 – D604. The power amplifier operates at the voltage which is 75% of the higher voltage, so that the operating efficiency in low impedance drive is improved.

IC Equivalent Circuits

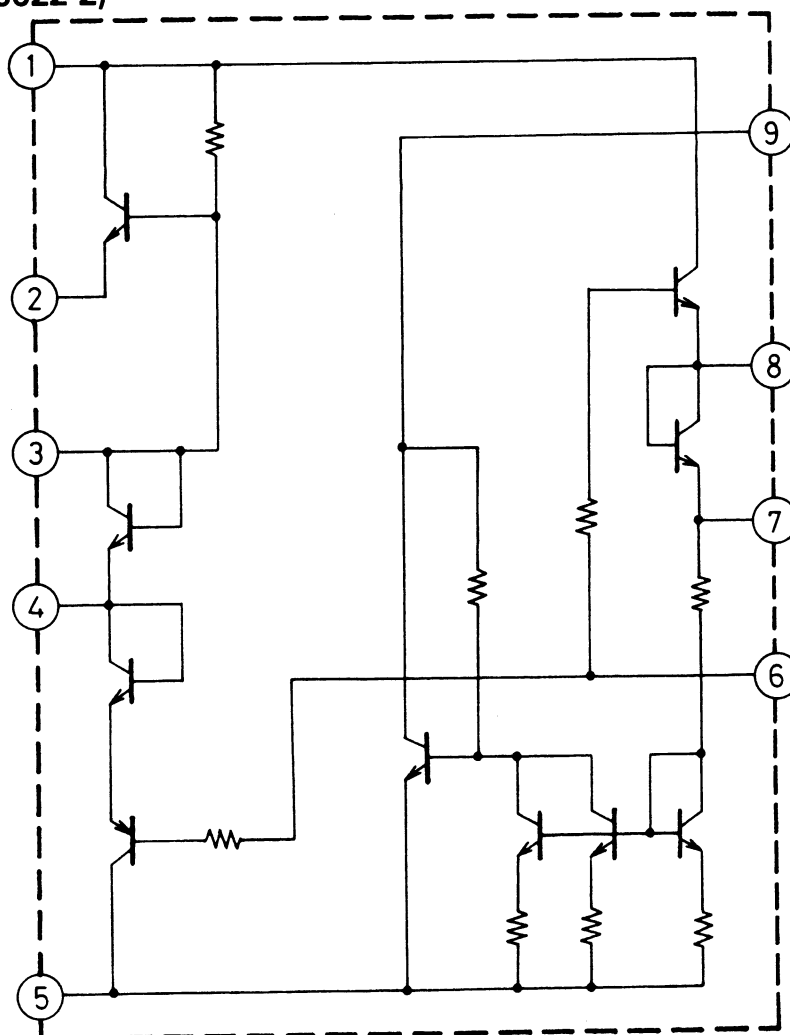
■ IC301 (STK3102 ⅢⅣ)

STK3102 MKⅢⅣ

Inner equivalent circuits



■ IC551, IC552 (VC-5022-2)



JVC

VICTOR COMPANY OF JAPAN, LIMITED

AUDIO PRODUCTS DIVISION, YAMATO PLANT, 1644, SHIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN

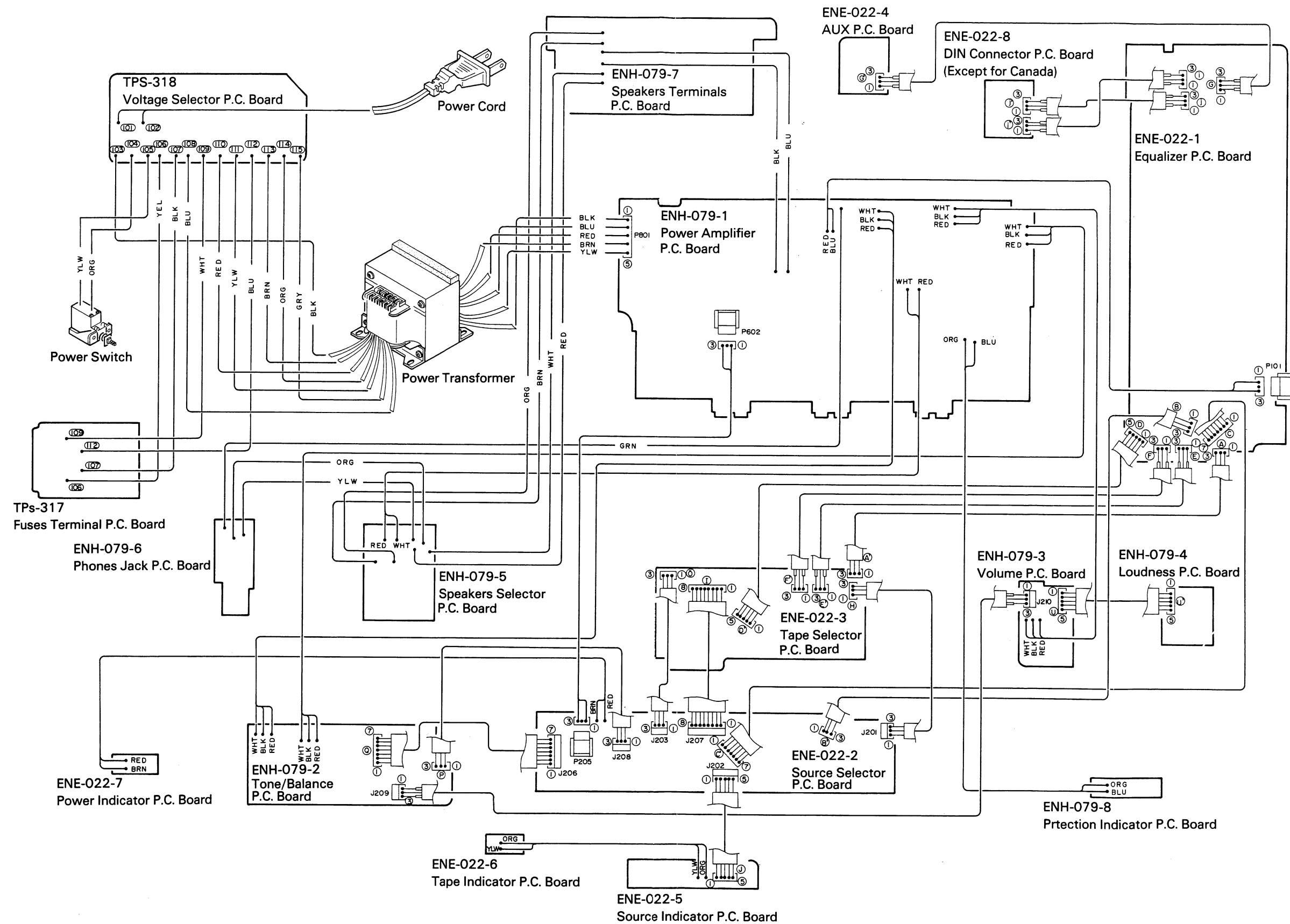


The schematic diagram is divided into several functional sections:

- ENE-022-1 through ENE-022-7:** These blocks represent the main processing and control stages, including input selection, tuning, and signal processing. They contain various integrated circuits (ICs) and discrete components.
- ENH-079-1 through ENH-079-6:** These blocks represent the audio output and control stages, including the amplifier, tone controls, and speaker drivers. They include components like transistors, capacitors, and resistors.
- AC BLOCK:** This block represents the power supply section, which provides the necessary voltage and current for the entire system.

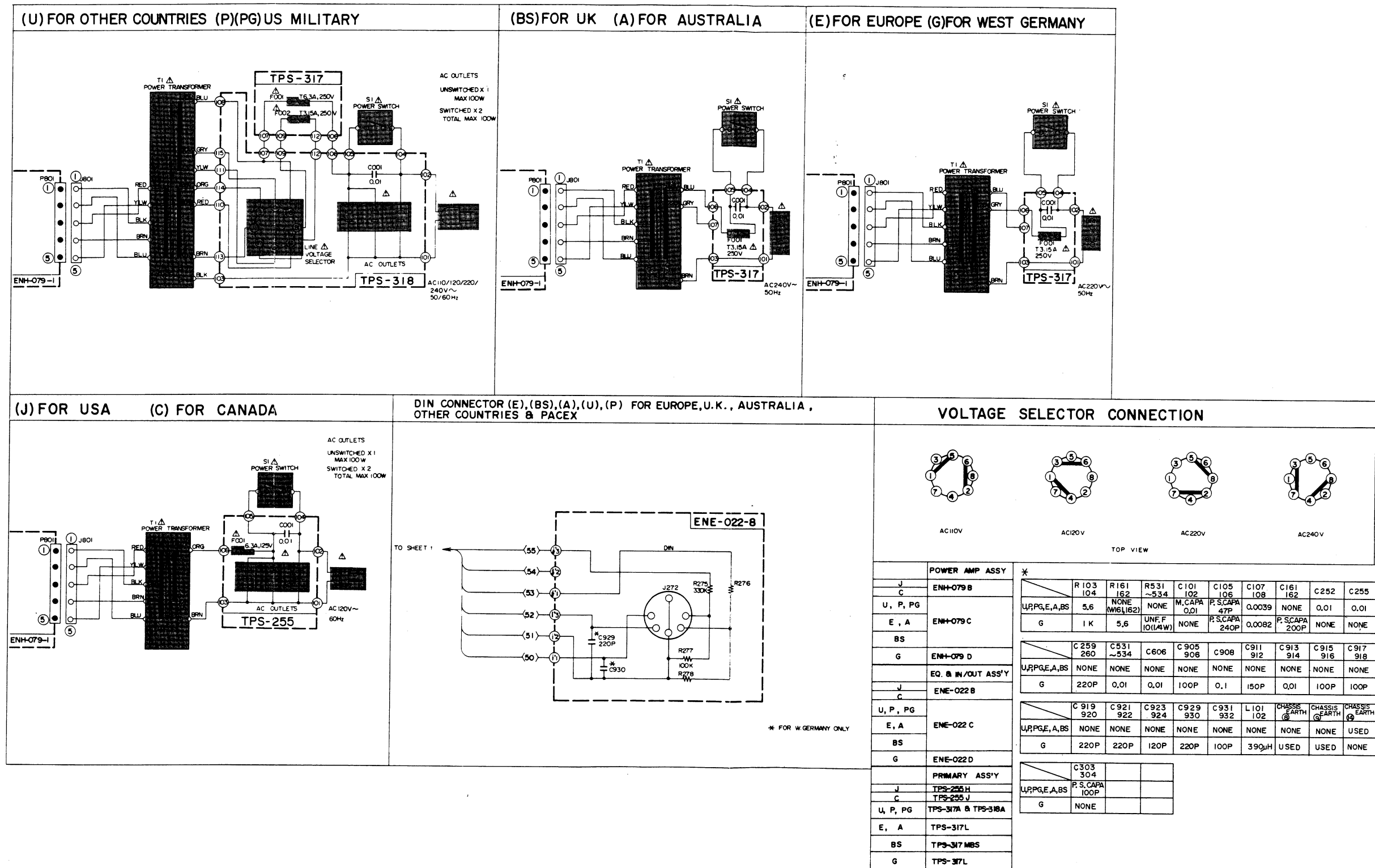
The diagram is highly detailed, showing the specific values of components (e.g., resistors, capacitors) and the connections between them. It also includes labels for various components and sections, such as "TO SHEET 2", "TUNER", "TUNER/AUX", "TUNER/PLAY", "TUNER/REC", "TUNER/TAPE", "TUNER/TAPE 2", "TUNER/TAPE 3", "TUNER/TAPE 4", "TUNER/TAPE 5", "TUNER/TAPE 6", "TUNER/TAPE 7", "TUNER/TAPE 8", "TUNER/TAPE 9", "TUNER/TAPE 10", "TUNER/TAPE 11", "TUNER/TAPE 12", "TUNER/TAPE 13", "TUNER/TAPE 14", "TUNER/TAPE 15", "TUNER/TAPE 16", "TUNER/TAPE 17", "TUNER/TAPE 18", "TUNER/TAPE 19", "TUNER/TAPE 20", "TUNER/TAPE 21", "TUNER/TAPE 22", "TUNER/TAPE 23", "TUNER/TAPE 24", "TUNER/TAPE 25", "TUNER/TAPE 26", "TUNER/TAPE 27", "TUNER/TAPE 28", "TUNER/TAPE 29", "TUNER/TAPE 30", "TUNER/TAPE 31", "TUNER/TAPE 32", "TUNER/TAPE 33", "TUNER/TAPE 34", "TUNER/TAPE 35", "TUNER/TAPE 36", "TUNER/TAPE 37", "TUNER/TAPE 38", "TUNER/TAPE 39", "TUNER/TAPE 40", "TUNER/TAPE 41", "TUNER/TAPE 42", "TUNER/TAPE 43", "TUNER/TAPE 44", "TUNER/TAPE 45", "TUNER/TAPE 46", "TUNER/TAPE 47", "TUNER/TAPE 48", "TUNER/TAPE 49", "TUNER/TAPE 50", "TUNER/TAPE 51", "TUNER/TAPE 52", "TUNER/TAPE 53", "TUNER/TAPE 54", "TUNER/TAPE 55", "TUNER/TAPE 56", "TUNER/TAPE 57", "TUNER/TAPE 58", "TUNER/TAPE 59", "TUNER/TAPE 60", "TUNER/TAPE 61", "TUNER/TAPE 62", "TUNER/TAPE 63", "TUNER/TAPE 64", "TUNER/TAPE 65", "TUNER/TAPE 66", "TUNER/TAPE 67", "TUNER/TAPE 68", "TUNER/TAPE 69", "TUNER/TAPE 70", "TUNER/TAPE 71", "TUNER/TAPE 72", "TUNER/TAPE 73", "TUNER/TAPE 74", "TUNER/TAPE 75", "TUNER/TAPE 76", "TUNER/TAPE 77", "TUNER/TAPE 78", "TUNER/TAPE 79", "TUNER/TAPE 80", "TUNER/TAPE 81", "TUNER/TAPE 82", "TUNER/TAPE 83", "TUNER/TAPE 84", "TUNER/TAPE 85", "TUNER/TAPE 86", "TUNER/TAPE 87", "TUNER/TAPE 88", "TUNER/TAPE 89", "TUNER/TAPE 90", "TUNER/TAPE 91", "TUNER/TAPE 92", "TUNER/TAPE 93", "TUNER/TAPE 94", "TUNER/TAPE 95", "TUNER/TAPE 96", "TUNER/TAPE 97", "TUNER/TAPE 98", "TUNER/TAPE 99", "TUNER/TAPE 100".

Connection Diagram



Schematic Diagram

■ Power Supply Section



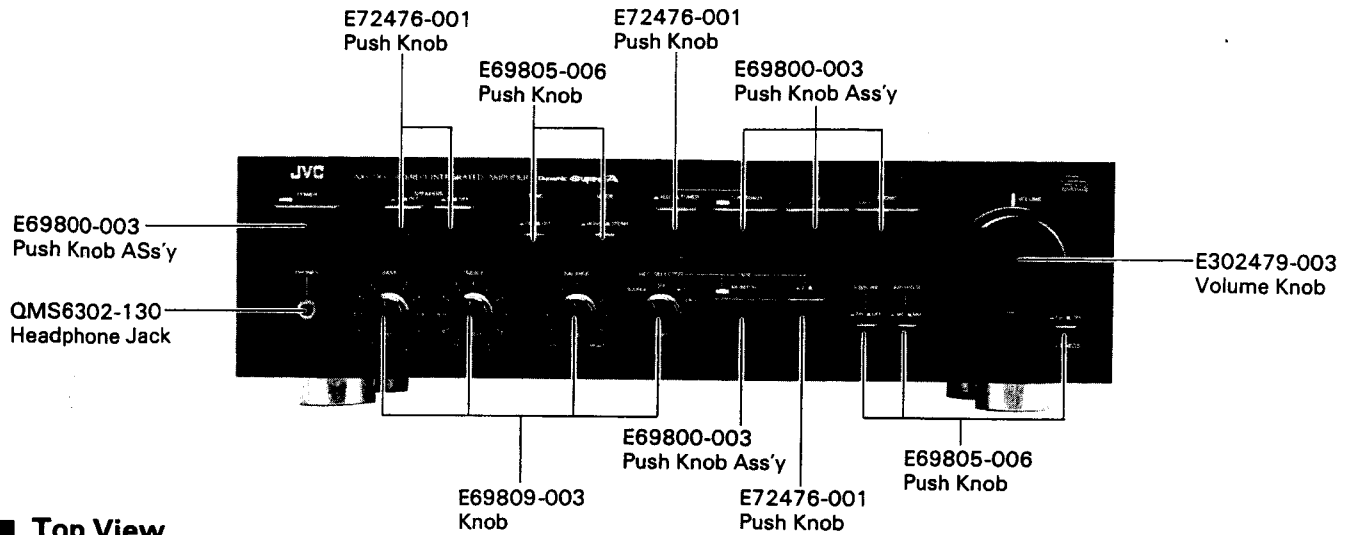
PARTS LIST

Contents

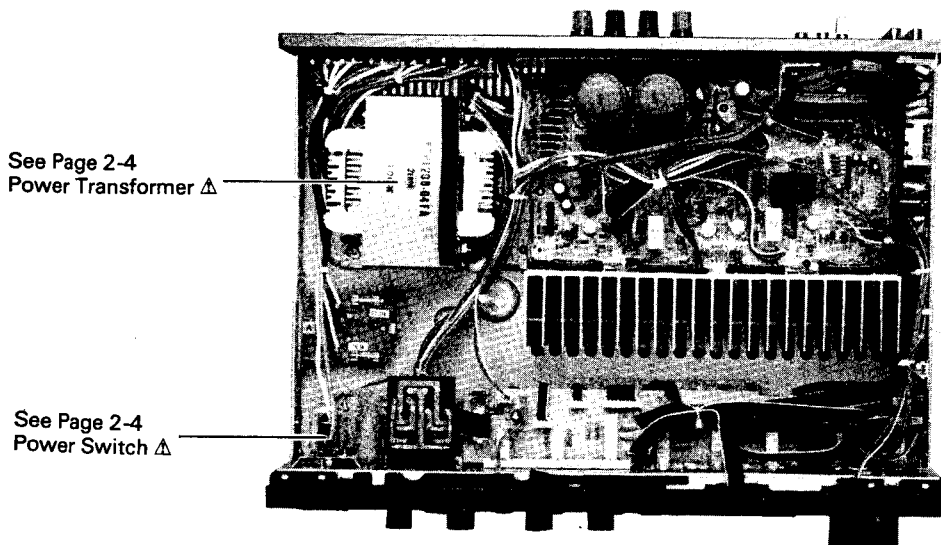
Main Parts Location	2-2
Exploded View and Parts List.....	2-3
Printed Circuit Board Ass'y and Parts List.....	2-6
■ ENH-079 □ Power Amplifier PC Board Ass'y	2-6
■ ENE-022 □ Equalizer PC Board Ass'y	2-11
■ TPS-255 J AC Outlet PC Board Ass'y.....	2-11
■ TPS-318 B Voltage Selector PC Board Ass'y.....	2-12
■ TPS-317 □ Fuse PC Board Ass'y	2-13
Packing Materials and Part Numbers	2-13
Accessories List.....	2-13

Main Parts Location

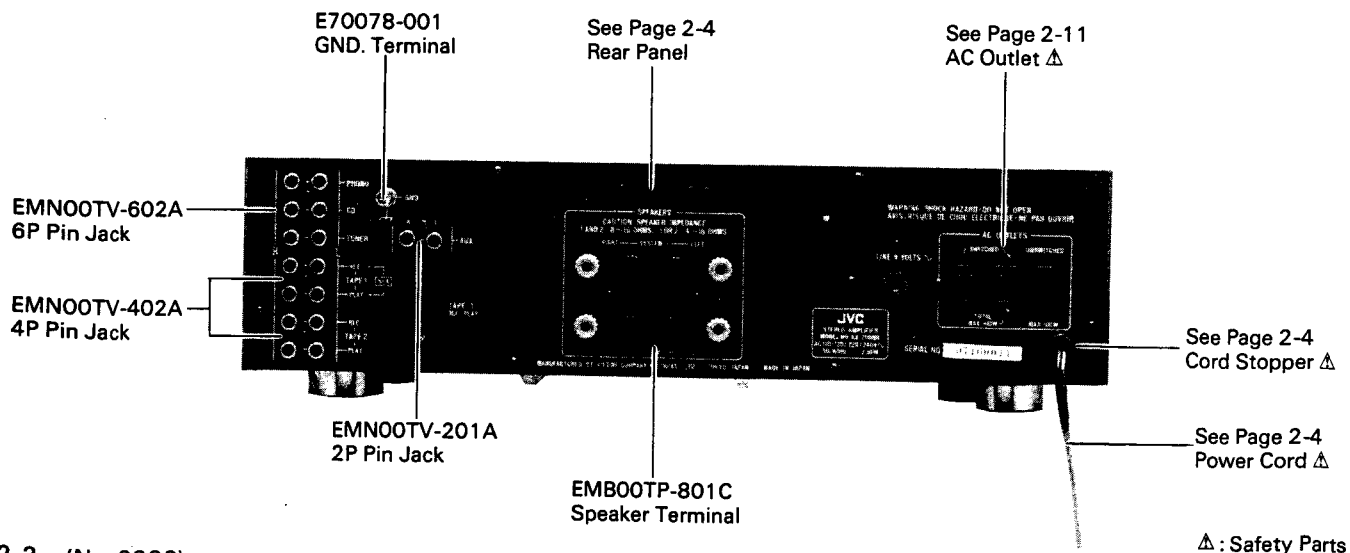
■ Front View



■ Top View

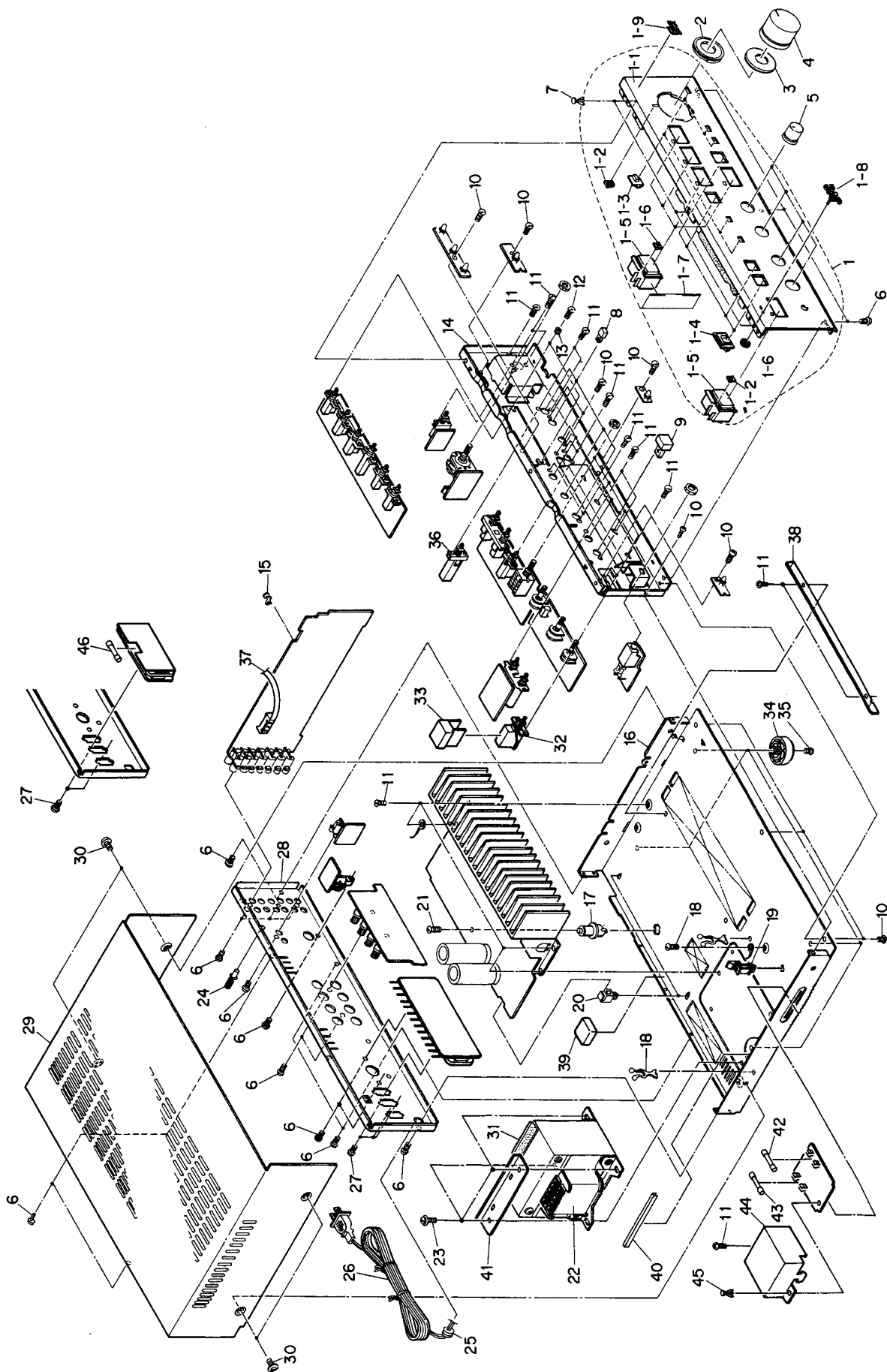


■ Rear View



Δ : Safety Parts

Exploded View and Parts List



△	Item No.	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AX700BKE	Front Panel Ass'y	1		
	1-1	E25151-002	Front Panel	1		
	1-2	E72473-001	Indicator	6		
	1-3	E69807-001	Push Knob Escutcheon	5		
	1-4	E72474-001	Push Knob Escutcheon	1		
	1-5	E69800-003	Push Knob Ass'y	5		
	1-6	E60912-003	Speed Nut	1		
	1-7	E70013-001	Spacer	1		
	1-8	E72968-001	JVC Mark	1		
	1-9	E70978-001	GM Mark	1		
	2	E72475-001	Knob Base	1		
	3	E66018-009	Spacer	1		
	4	E302479-003	Volume Knob	1		
	5	E69809-003	Knob	4		
	6	SBSB3008M	Screw	15		
	7	E48729-009	Plastic Rivet	3		
	8	E69805-006	Push Knob	5		
	9	E72476-001	Push Knob	4		
	10	SBSB3008Z	Screw	10		
	11	SBST3006Z	Screw	20		
	12	E70077-001	Screw	2		
	13	E69999-002	Bushing	2		
	14	E10787-001	Front Bracket	1		
	15	E69384-002	Fastener	1		
	16	E10653-009	Chassis Base	1		
	17	E49946-002	C.B.Holder	1		
	18	E303704-001	Wire Clamp	2		
	19	E34455-001	Fastener	1		
	20	E300021-001	Fastener	2		
	21	GBSB3008N	Screw	1		U,P,PG,E,G,A,BS
△	22	ETP1200-04CA	Power Transformer	1		C
△		ETP1200-04FA	Power Transformer	1		U,P,PG
△		ETP1200-04EA	Power Transformer	1		E,G,A
△		ETP1200-04EABS	Power Transformer	1		BS
	23	E65389-004	Screw	4		
△	24	E70078-001	GND Terminal	1		
△	25	QHS3876-162	Cord Stopper	1		Except BS
△		QHS3876-162BS	Cord Stopper	1		BS
△	26	QMP1480-200H	Power Cord	1		C
△		QMP7600-200	Power Cord	1		U,P,PG
△		QMP3900-200	Power Cor	1		E,G
△		QMP2560-244	Power Cord	1		A
△		QMP9017-008BS	Power Cord	1		BS
	27	SDSB3008M	Screw	2		
	28	E24265-004	Rear Panel	1		C
		E24265-005	Rear Panel	1		U,P,PG
		E24265-006	Rear Panel	1		E,G,A,BS
	29	E23923-008	Metal Cover	1		
	30	E61660-004	Screw	4		
	31	EXO105010N70S	Spacer	1		
△	32	QSP1106-005	Power Switch	1		Except BS
△		QSP1106-005BS	Power Switch	1		BS
	33	E71005-001	Switch Cover	1		Except C
	34	E72590-002	Foot	4		
	35	SBSB3010Z	Screw	4		
	37	QSH2002-221B	Flex Wire	1		
	38	E303585-001	Bracket	1		
	39	E3400-367	Felt Spacer	1		C
	40	E65778-002	Spacer	1		
	41	E73274-001	Transf. Plate	1		

△: Safety Parts

△	Item No.	Part Number	Part Name	Q'ty	Description	Areas
△	42	QMF51A2-6R3S	Fuse	1		U,P,PG
△		QMF51A2-3R15S	Fuse	1		E,G,A
△		QMF51E2-3R15SBS	Fuse	1		BS
△	43	QMF51A2-3R15S	Fuse	1		U,P,PG
	44	E303419-001	Protector	1		E,G,A,BS,U,P,PG
	45	E48729-008	Plastic Rivet	1		E,G,A,BS,U,P,PG
△	46	QMF61U1-6R3	Fuse	1		C

△ Safety Parts

The Marks for Designated Areas

C.....Canada

A.....Australia

E.....Europe

G.....West Germany

BS.....U.K.

P,PG.....U.S.Military Market

U.....Other Countries

No mark indicates all areas.

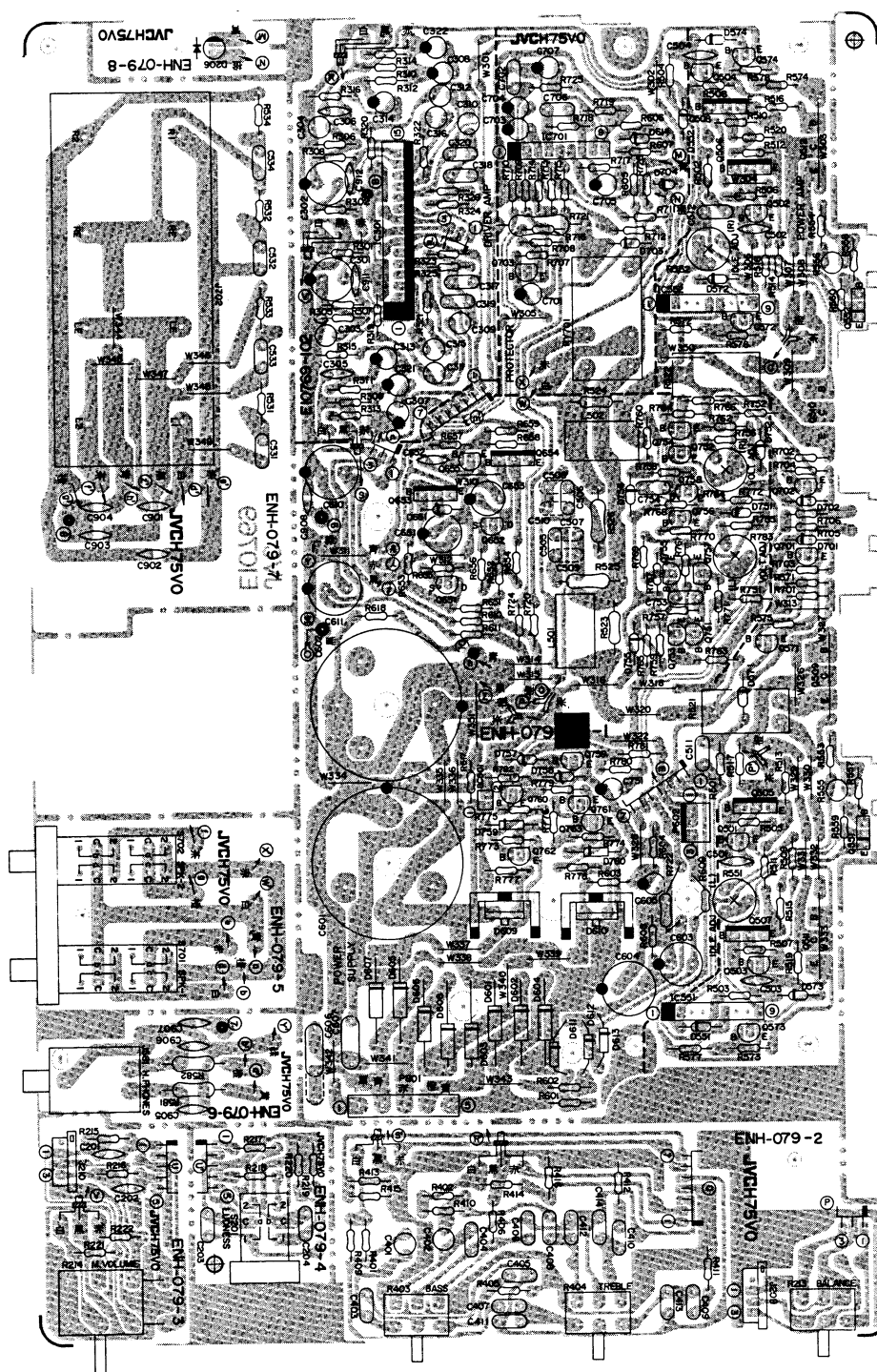
Printed Circuit Board Ass'y and Parts List

■ ENH-079 □ Power Amplifier P C Board Ass'y

Note: ENH-079 □ Varies according to the areas employed. See note (1) when placing on order.

Note (1)

P.C. Board Ass'y	Designated Areas
ENH-079 B	Canada
ENH-079 C	Europe, Australia, U.K. U.S.Military Market, & other Countries
ENH-079 D	West Germany



TRANSISTOR

ITEM	PART NUMBER	DESCRIPTION	AREA	
			MAKER	
Q501	2SC2909(S,T)	SILICON	SANYO	
Q502	2SC2909(S,T)	SILICON	SANYO	
Q503	2SA1207(S,T)	SILICON	SANYO	
Q504	2SA1207(S,T)	SILICON	SANYO	
Q505	2SD669A(B,C)	SILICON	HITACHI	
Q506	2SD669A(B,C)	SILICON	HITACHI	
Q507	2SB649A(B,C)	SILICON	HITACHI	
Q508	2SB649A(B,C)	SILICON	HITACHI	
Q509	2SC2921LF(O,Y)	SILICON		
Q510	2SC2921LF(O,Y)	SILICON		
Q511	2SA1215LF(O,Y)	SILICON		
Q512	2SA1215LF(O,Y)	SILICON		
Q551	2SD636(Q,R)	SILICON	MATSUSHITA	
Q552	2SD636(Q,R)	SILICON	MATSUSHITA	
Q571	2SC1815(Y)	SILICON	TOSHIBA	
Q572	2SC1815(Y)	SILICON	TOSHIBA	
Q573	2SA1015(Y)	SILICON	TOSHIBA	
Q574	2SA1015(Y)	SILICON	TOSHIBA	
Q651	2SK246(GR)	F.E.T	TOSHIBA	
Q652	2SK246(GR)	F.E.T	TOSHIBA	
Q653	2SD669A(B,C)	SILICON	HITACHI	
Q654	2SB649A(B,C)	SILICON	HITACHI	
Q655	2SA1015(Y,GR)	SILICON	TOSHIBA	
Q701	2SC2240(GR,BL)	SILICON	TOSHIBA	
Q702	2SC2240(GR,BL)	SILICON	TOSHIBA	
Q703	2SA970(GR,BL)	SILICON	TOSHIBA	
Q751	2SC2909(S,T)	SILICON	SANYO	
Q752	2SC2909(S,T)	SILICON	SANYO	
Q753	2SC2909(S,T)	SILICON	SANYO	
Q754	2SC2909(S,T)	SILICON	SANYO	
Q755	2SA970(GR,BL)	SILICON	TOSHIBA	
Q756	2SA970(GR,BL)	SILICON	TOSHIBA	
Q757	2SA970(GR,BL)	SILICON	TOSHIBA	
Q758	2SA970(GR,BL)	SILICON	TOSHIBA	
Q759	2SC2240(GR,BL)	SILICON	TOSHIBA	
Q760	2SC2240(GR,BL)	SILICON	TOSHIBA	
Q761	2SA970(GR,BL)	SILICON	TOSHIBA	
Q762	2SA1084(D,E)	SILICON	HITACHI	
Q763	2SC2546(E,F)	SILICON	HITACHI	

△ : SAFETY PARTS

I. C. S

△	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC301	STK3102MK3V	I.C.	SANYO	
	IC551	VC5022-2	I.C.	SANYO	
	IC552	VC5022-2	I.C.	SANYO	
	IC701	TA7317P	I.C.	TOSHIBA	

△ : SAFETY PARTS

DIODES

ITEM	PART NUMBER	DESCRIPTION		AREA
			MAKER	
D206	SLR-55DC3F	L.E.D.	ROHM	
D551	1S2076-31	SILICON	HITACHI	
D552	1S2076-31	SILICON	HITACHI	
D571	1S2076-31	SILICON	HITACHI	
D572	1S2076-31	SILICON	HITACHI	
D573	1S2076-31	SILICON	HITACHI	
D574	1S2076-31	SILICON	HITACHI	
D601	30DL2FC	SILICON	NIHONINTER	
D602	30DL2FC	SILICON	NIHONINTER	
D603	30DL2FC	SILICON	NIHONINTER	
D604	30DL2FC	SILICON	NIHONINTER	
D605	30DL2FC	SILICON	NIHONINTER	
D606	30DL2FC	SILICON	NIHONINTER	
D607	30DL2FC	SILICON	NIHONINTER	
D608	30DL2FC	SILICON	NIHONINTER	
D609	SF8D41	SILICON	TOSHIBA	
D610	SF8D41	SILICON	TOSHIBA	
D611	10DF2FD	SILICON	NIHONINTER	
D612	10DF2FD	SILICON	NIHONINTER	
D613	ERB12-02RKL1	SILICON		
D614	RD5.6EB3	ZENER	NEC	
D651	H224-1L	SILICON	HITACHI	
D701	1S2076-31	SILICON	HITACHI	
D702	1S2076-31	SILICON	HITACHI	
D703	1S2076-31	SILICON	HITACHI	

△ : SAFETY PARTS

△	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D704	RD3.9EB2	ZENER	NEC	
	D751	1SS81	SILICON	HITACHI	
	D752	1SS81	SILICON	HITACHI	
	D755	1S2076-31	SILICON	HITACHI	
	D756	1S2076-31	SILICON	HITACHI	
	D757	RD6.2EB3	ZENER	NEC	
	D758	RD2.7EB2	ZENER	NEC	
	D759	ERB12-02RKL1	SILICON		
	D760	ERB12-02RKL1	SILICON		

△ : SAFETY PARTS

CAPACITORS

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	C000	QCS21HJ-150A	15PF	50V	CERAMIC	B C C
	C000	QETB1AM-476H	47MF	10V	ELECTRO	
	C201	QCS21HJ-471	470PF	50V	CERAMIC	
	C202	QCS21HJ-471	470PF	50V	CERAMIC	
	C203	QFN81HJ-183	0.018MF	50V	MYLAR	
	C204	QFN81HJ-183	0.018MF	50V	MYLAR	
	C301	EEZ5001-475	4.7MF		ELECTRO	
	C302	EEZ5001-475	4.7MF		ELECTRO	
	C303	QFS81HJ-101	100PF	50V	POLY	
	C303	QFS81HJ-101	100PF	50V	POLY	
	C304	QFS81HJ-101	100PF	50V	POLY	
	C304	QFS81HJ-101	100PF	50V	POLY	
	C305	QCS21HJ-150A	15PF	50V	CERAMIC	
	C306	QCS21HJ-150	15PF	50V	CERAMIC	
	C307	QETB1HM-106	10MF	50V	ELECTRO	
	C308	QETB1HM-106	10MF	50V	ELECTRO	
	C309	QFS81HJ-121	120PF	50V	POLY	
	C310	QFS81HJ-121	120PF	50V	POLY	
	C311	QFS81HJ-220	22PF	50V	POLY	
	C312	QFS81HJ-220	22PF	50V	POLY	
	C313	QETB1CM-476	47MF	16V	ELECTRO	
	C314	QETB1CM-476	47MF	16V	ELECTRO	
	C315	QFS81HJ-331	330PF	50V	POLY	
	C316	QFS81HJ-331	330PF	50V	POLY	
	C317	QFN81HJ-473	0.047MF	50V	MYLAR	
	C318	QFN81HJ-473	0.047MF	50V	MYLAR	
	C319	QFN81HJ-473	0.047MF	50V	MYLAR	
	C320	QFN81HJ-473	0.047MF	50V	MYLAR	
	C321	QETB1HM-106	10MF	50V	ELECTRO	
	C322	QETB1HM-106	10MF	50V	ELECTRO	
	C401	QEN51HM-475	4.7MF	50V	NON POLE	
	C402	QEN51HM-475	4.7MF	50V	NON POLE	
	C403	QFN81HJ-153	0.015MF	50V	MYLAR	
	C404	QFN81HJ-153	0.015MF	50V	MYLAR	
	C405	QFN81HJ-823	0.082MF	50V	MYLAR	
	C406	QFN81HJ-823	0.082MF	50V	MYLAR	
	C407	QFN81HJ-332	3300PF	50V	MYLAR	
	C408	QFN81HJ-332	3300PF	50V	MYLAR	
	C409	QFN81HJ-183	0.018MF	50V	MYLAR	
	C410	QFN81HJ-183	0.018MF	50V	MYLAR	
	C411	QFP81HJ-221	220PF	50V	POLY	
	C412	QFP81HJ-221	220PF	50V	POLY	
	C413	QFN81HJ-122	1200PF	50V	MYLAR	
	C414	QFN81HJ-122	1200PF	50V	MYLAR	
	C501	QCS21HJ-220	22PF	50V	CERAMIC	
	C502	QCS21HJ-220	22PF	50V	CERAMIC	
	C503	QCS21HJ-220	22PF	50V	CERAMIC	
	C504	QCS21HJ-220	22PF	50V	CERAMIC	
	C507	QFN81HK-104	0.1MF	50V	MYLAR	
	C508	QFN81HK-104	0.1MF	50V	MYLAR	
	C509	QFN81HK-104	0.1MF	50V	MYLAR	
	C510	QFN81HK-104	0.1MF	50V	MYLAR	
	C531	QFN81HJ-103	0.01MF	50V	MYLAR	
	C532	QFN81HJ-103	0.01MF	50V	MYLAR	
	C533	QFN81HJ-103	0.01MF	50V	MYLAR	
	C534	QFN81HJ-103	0.01MF	50V	MYLAR	
	C601	EEZ7101-109	10MF		ELECTRO	
	C602	EEZ7101-109	10MF		ELECTRO	
	C603	QETB1HM-107H	100MF	50V	ELECTRO	
	C604	QETB1HM-227H	220MF	50V	ELECTRO	
	C605	QETB1HM-105	1MF	50V	ELECTRO	
	C606	EFZ0091-103			M.MYLAR	
	C610	QETB2AM-107M	100MF	100V	ELECTRO	
	C611	QETB2AM-107M	100MF	100V	ELECTRO	
	C651	QETB1EM-107H	100MF	25V	ELECTRO	
	C652	QCS21HJ-101	100PF	50V	CERAMIC	
	C653	QETB1HM-106	10MF	50V	ELECTRO	
	C701	QETB1HM-226	22MF	50V	ELECTRO	
	C702	QFN81HK-102	1000PF	50V	MYLAR	
	C703	QETB1AM-476	47MF	10V	ELECTRO	

△ : SAFETY PARTS

CAPACITORS

ITEM	PART NUMBER	DESCRIPTION	AREA
C704	QETB1AM-476H	47MF 10V ELECTRO	
C705	QETB1HM-474	0.47MF 50V ELECTRO	
C706	QFN81HK-153	0.015MF 50V MYLAR	
C707	QETB1CM-226	22MF 16V ELECTRO	
C751	QETB1HM-225	2.2MF 50V ELECTRO	
C753	QFN81HK-103	0.01MF 50V MYLAR	
C754	QFN81HK-103	0.01MF 50V MYLAR	
C905	QCS21HJ-101	100PF 50V CERAMIC	D
C906	QCS21HJ-101	100PF 50V CERAMIC	D
C908	QFN81HK-104	0.1MF 50V MYLAR	D
C911	QCS21HJ-151	150PF 50V CERAMIC	D
C912	QCS21HJ-151	150PF 50V CERAMIC	D
C913	QFM82AK-103	0.01MF 100V MYLAR	D
C914	QFM82AK-103	0.01MF 100V MYLAR	D
C919	QCS21HJ-560	56PF 50V CERAMIC	D
C920	QCS21HJ-560	56PF 50V CERAMIC	D
C927	QFV81HJ-474	0.47MF 50V T.FILM	D
C928	QFV81HJ-474	0.47MF 50V T.FILM	D
C931	QCS21HJ-101	100PF 50V CERAMIC	D
C932	QCS21HJ-101	100PF 50V CERAMIC	D

△ : SAFETY PARTS

RESISTORS

ITEM	PART NUMBER	DESCRIPTION	AREA
R213	QVD7A7M-1F5V	VARIABLE	
R214	QVZ1221-002	VARIABLE	
R215	QRD148J-105S	1M 1/4W CARBON	
R216	QRD148J-105S	1M 1/4W CARBON	
R217	QRD148J-333S	33K 1/4W CARBON	
R218	QRD148J-333S	33K 1/4W CARBON	
R219	QRD148J-273S	27K 1/4W CARBON	
R220	QRD148J-273S	27K 1/4W CARBON	
R221	QRD148J-105S	1M 1/4W CARBON	
R222	QRD148J-105S	1M 1/4W CARBON	
R301	QRD148J-561S	560 1/4W CARBON	
R302	QRD148J-561S	560 1/4W CARBON	
R305	QRD148J-913S	91K 1/4W CARBON	
R306	QRD148J-913S	91K 1/4W CARBON	
R307	QRD148J-101S	100 1/4W CARBON	
R308	QRD148J-101S	100 1/4W CARBON	
R309	QRD148J-823S	82K 1/4W CARBON	
R310	QRD148J-823S	82K 1/4W CARBON	
R311	QRD148J-163S	16K 1/4W CARBON	
R312	QRD148J-163S	16K 1/4W CARBON	
R313	QRD148J-104S	100K 1/4W CARBON	
R314	QRD148J-104S	100K 1/4W CARBON	
R315	QRZ0062-751	750 1/4W FUSIBLE	
R316	QRZ0062-751	750 1/4W FUSIBLE	
R319	QRD148J-272S	2.7K 1/4W CARBON	
R320	QRD148J-272S	2.7K 1/4W CARBON	
R321	QRD148J-101S	100 1/4W CARBON	
R322	QRD148J-101S	100 1/4W CARBON	
R323	QRD148J-682S	6.8K 1/4W CARBON	
R324	QRD148J-682S	6.8K 1/4W CARBON	
R325	QRD148J-682S	6.8K 1/4W CARBON	
R326	QRD148J-682S	6.8K 1/4W CARBON	
R401	QRD148J-203S	20K 1/4W CARBON	
R402	QRD148J-203S	20K 1/4W CARBON	
R403	QVZ1709-011	VARIABLE	
R404	QVZ1709-011	VARIABLE	
R405	QRD148J-362S	3.6K 1/4W CARBON	
R406	QRD148J-362S	3.6K 1/4W CARBON	
R409	QRD148J-472S	4.7K 1/4W CARBON	
R410	QRD148J-472S	4.7K 1/4W CARBON	
R411	QRD148J-821S	820 1/4W CARBON	
R412	QRD148J-821S	820 1/4W CARBON	
R413	QRD148J-123S	12K 1/4W CARBON	
R414	QRD148J-123S	12K 1/4W CARBON	
R415	QRD148J-222S	2.2K 1/4W CARBON	
R416	QRD148J-222S	2.2K 1/4W CARBON	
R501	QRZ0062-330	33 1/4W FUSIBLE	
R502	QRZ0062-330	33 1/4W FUSIBLE	
R503	QRZ0062-101	100 1/4W FUSIBLE	
R504	QRZ0062-101	100 1/4W FUSIBLE	
R505	QRD145J-100S	10 1/4W UNF. CARBON	
R506	QRD145J-100S	10 1/4W UNF. CARBON	
R507	QRD145J-100S	10 1/4W UNF. CARBON	
R508	QRD145J-100S	10 1/4W UNF. CARBON	
R509	QRZ0062-182	1.8K 1/4W FUSIBLE	
R510	QRZ0062-182	1.8K 1/4W FUSIBLE	
R511	QRZ0062-271	270 1/4W FUSIBLE	
R512	QRZ0062-271	270 1/4W FUSIBLE	
R513	QRZ0062-100	10 1/4W FUSIBLE	
R514	QRZ0062-100	10 1/4W FUSIBLE	

△ : SAFETY PARTS

ITEM	PART NUMBER	DESCRIPTION	AREA
R515	QRZ0062-100	10 1/4W FUSIBLE	
R516	QRZ0062-100	10 1/4W FUSIBLE	
R517	QRZ0061-2R2	2.2 1/4W FUSIBLE	
R518	QRZ0061-2R2	2.2 1/4W FUSIBLE	
R519	QRZ0062-100	10 1/4W FUSIBLE	
R520	QRZ0062-100	10 1/4W FUSIBLE	
R521	ERF032K-R22	CEMENT	
R522	ERF032K-R22	CEMENT	
R523	QRD125J-330	33 1/2W UNF. CARBON	
R524	QRD125J-330	33 1/2W UNF. CARBON	
R525	QRG022J-100A	10 2W O.M.FILM	
R526	QRG022J-100A	10 2W O.M.FILM	
R531	QRZ0062-100	10 1/4W FUSIBLE	D
R532	QRZ0062-100	10 1/4W FUSIBLE	D
R533	QRZ0062-100	10 1/4W FUSIBLE	D
R534	QRZ0062-100	10 1/4W FUSIBLE	D
R551	QVP4A0B-471	VARIABLE	
R552	QVP4A0B-471	VARIABLE	
R553	QRD148J-101S	100 1/4W CARBON	
R554	QRD148J-101S	100 1/4W CARBON	
R555	ERT-D2WFL351S	THERMISTER	
R556	ERT-D2WFL351S	THERMISTER	
R557	QRD148J-471S	470 1/4W CARBON	
R558	QRD148J-471S	470 1/4W CARBON	
R559	QRD148J-391S	390 1/4W CARBON	
R560	QRD148J-391S	390 1/4W CARBON	
R571	QRD145J-221S	220 1/4W UNF. CARBON	
R572	QRD145J-221S	220 1/4W UNF. CARBON	
R573	QRD145J-221S	220 1/4W UNF. CARBON	
R574	QRD145J-221S	220 1/4W UNF. CARBON	
R575	QRD145J-820S	82 1/4W UNF. CARBON	
R576	QRD145J-820S	82 1/4W UNF. CARBON	
R577	QRD145J-820S	82 1/4W UNF. CARBON	
R578	QRD145J-820S	82 1/4W UNF. CARBON	
R581	QRG022J-331A	330 2W O.M.FILM	
R582	QRG022J-331A	330 2W O.M.FILM	
R601	QRD145J-150S	15 1/4W UNF. CARBON	
R602	QRD145J-150S	15 1/4W UNF. CARBON	
R603	QRD148J-103S	10K 1/4W CARBON	
R604	QRD148J-822S	8.2K 1/4W CARBON	
R605	QRD148J-822S	8.2K 1/4W CARBON	
R606	QRD148J-152S	1.5K 1/4W CARBON	
R607	QRD148J-822S	8.2K 1/4W CARBON	
R608	QRD148J-273S	27K 1/4W CARBON	
R609	QRD145J-271S	270 1/4W UNF. CARBON	
R610	QRD145J-100S	10 1/4W UNF. CARBON	
R611	QRD145J-100S	10 1/4W UNF. CARBON	
R617	QRD148J-333S	33K 1/4W CARBON	
R618	QRD148J-333S	33K 1/4W CARBON	
R651	QRZ0062-391	390 1/4W FUSIBLE	
R652	QRZ0062-391	390 1/4W FUSIBLE	
R653	QRD145J-151S	150 1/4W UNF. CARBON	
R654	QRD145J-151S	150 1/4W UNF. CARBON	
R655	QRD148J-391S	390 1/4W CARBON	
R656	QRD148J-391S	390 1/4W CARBON	
R657	QRD148J-223S	22K 1/4W CARBON	
R658	QRD148J-433S	43K 1/4W CARBON	
R659	QRD148J-393S	39K 1/4W CARBON	
R701	QRD148J-222S	2.2K 1/4W CARBON	
R702	QRD148J-222S	2.2K 1/4W CARBON	
R703	QRD148J-183S	18K 1/4W CARBON	
R704	QRD148J-183S	18K 1/4W CARBON	
R705	QRD148J-223S	22K 1/4W CARBON	
R706	QRD148J-223S	22K 1/4W CARBON	
R707	QRD148J-103S	10K 1/4W CARBON	
R708	QRD148J-332S	3.3K 1/4W CARBON	
R709	QRD148J-473S	47K 1/4W CARBON	
R710	QRD148J-104S	100K 1/4W CARBON	
R711	QRD148J-563S	56K 1/4W CARBON	
R712	QRD148J-563S	56K 1/4W CARBON	
R713	QRD148J-273S	27K 1/4W CARBON	
R714	QRD148J-273S	27K 1/4W CARBON	
R715	QRD148J-472S	4.7K 1/4W CARBON	
R716	QRD148J-392S	3.9K 1/4W CARBON	
R717	QRD148J-683S	68K 1/4W CARBON	
R718	QRD148J-333S	33K 1/4W CARBON	
R719	QRD148J-334S	330K 1/4W CARBON	
R720	QRD145J-221S	220 1/4W UNF. CARBON	
R721	QRG026J-331	330 2W O.M.FILM	
R722	QRD125J-390	39 1/2W UNF. CARBON	
R724	QRD148J-472S	4.7K 1/4W CARBON	
R725	QRD148J-683S	68K 1/4W CARBON	
R726	QRD148J-820S	82 1/4W CARBON	
R751	QRD145J-102S	1K 1/4W UNF. CARBON	
R752	QRD145J-102S	1K 1/4W UNF. CARBON	

△ : SAFETY PARTS

RESISTORS

ITEM	PART NUMBER	DESCRIPTION	AREA
R755	QRD148J-223S	22K 1/4W CARBON	
R756	QRD148J-223S	22K 1/4W CARBON	
R757	QRD148J-331S	330 1/4W CARBON	
R758	QRD148J-331S	330 1/4W CARBON	
R759	QRD148J-331S	330 1/4W CARBON	
R760	QRD148J-331S	330 1/4W CARBON	
R761	QRD148J-153S	15K 1/4W CARBON	
R762	QRD148J-153S	15K 1/4W CARBON	
R763	QRD145J-471S	470 1/4W UNF. CARBON	
R764	QRD145J-471S	470 1/4W UNF. CARBON	
R765	QRD148J-823S	82K 1/4W CARBON	
R766	QRD148J-823S	82K 1/4W CARBON	
R767	QRD148J-271S	270 1/4W CARBON	
R768	QRD148J-271S	270 1/4W CARBON	
R769	QRD148J-472S	4.7K 1/4W CARBON	
R770	QRD148J-472S	4.7K 1/4W CARBON	
R771	QRD148J-472S	4.7K 1/4W CARBON	
R772	QRD148J-472S	4.7K 1/4W CARBON	
R773	QRD148J-472S	4.7K 1/4W CARBON	
R774	QRD148J-472S	4.7K 1/4W CARBON	
R775	QRD148J-103S	10K 1/4W CARBON	
R776	QRD148J-103S	10K 1/4W CARBON	
R777	QRD145J-4R7S	4.7 1/4W UNF. CARBON	
R778	QRD145J-4R7S	4.7 1/4W UNF. CARBON	
R779	QRD148J-122S	1.2K 1/4W CARBON	
R780	QRD148J-224S	220K 1/4W CARBON	
R781	QRD148J-474S	470K 1/4W CARBON	
R782	QRD148J-333S	33K 1/4W CARBON	
R783	QVP4A0B-223	VARIABLE	
R784	QVP4A0B-223	VARIABLE	

Δ : SAFETY PARTS

OTHERS

ITEM	PART NUMBER	DESCRIPTION	AREA
	EMV5102-005A	PLUG ASSY	
	ENZ7102-002	PROTECTOR	
	ENZ7102-002	PROTECTOR	
	EW22A-16EE		C D

Δ : SAFETY PARTS

ITEM	PART NUMBER	DESCRIPTION	AREA
	EW011-056	TERMINAL WIRE	B
	EW011-056	TERMINAL WIRE	C
	EW011-093	TERMINAL WIRE	D
	EW011-094	TERMINAL WIRE	D
	E10769-102	CIRCUIT BOARD	
	E300107-003	C.B. HOLDER	
	E300107-004	C.B. HOLDER	
	E302469-001	HEAT SINK	B
	E302469-002	HEAT SINK	C
	E302469-002	HEAT SINK	D
	E33754-001	TIE BAND	
	E60171-001	HEAT SINK	
	E65654-001	SPACER	
	E70208-001	PLATE	
	E73087-001	BRACKET	C
	E73087-001	BRACKET	D
	GBSB3008N	TAPPING SCREW	
	QMS6302-130	JACK ASSY	
	SBSB3008N	SCREW	C
	SBSB3008N	SCREW	D
	SBSB3008Z	SCREW	
	SBSB3008Z	SCREW	
	SBSB3012Z	SCREW	
	WBS3000N	WASHER	
	52868-3	LUG	
J209	E04365-003	SOCKET ASSY	D
J210	E04365-003	SOCKET ASSY	
J702	EMB00TP-801C	SPK. TERMINAL	
L501	EQL0003-1R0	INDUCTOR	
L502	EQL0003-1R0	INDUCTOR	
P602	QMV5005-003K	PULG ASSY	
S210	QSP0219-051	PUSH SWITCH	
S701	QST2282-E01	PUSH SWITCH	
S702	QST2282-E01	PUSH SWITCH	
RY701	ESK5024-214	RELAY	

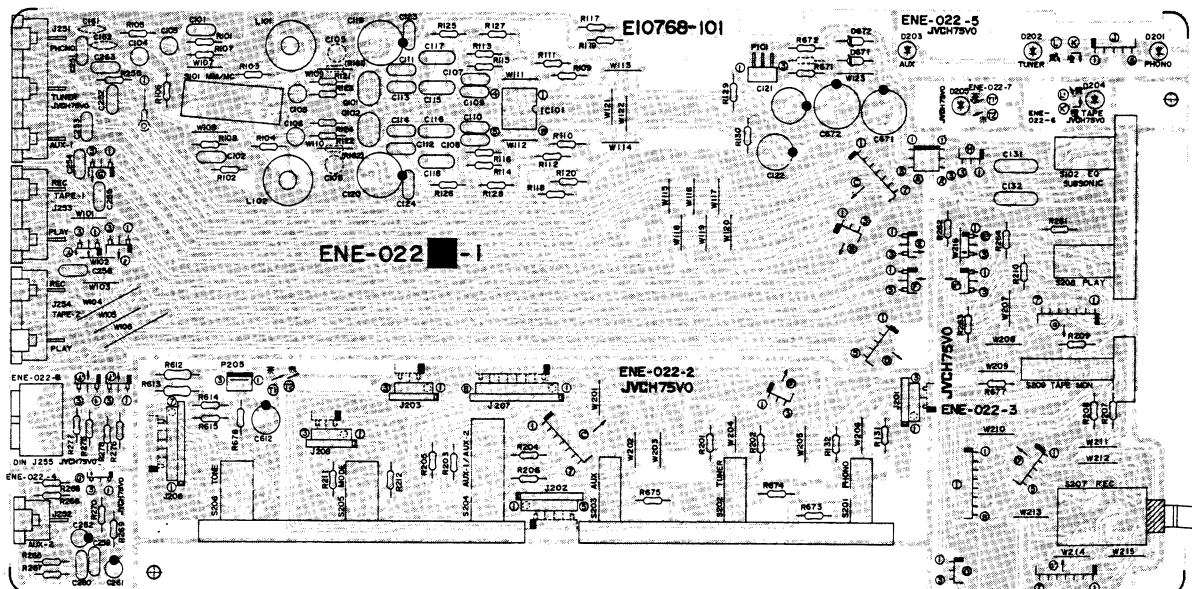
Δ : SAFETY PARTS

■ ENE-022 □ Equalizer PC Board Ass'y

Note: ENE-022 □ Varies according to the areas employed. See note (1) when placing on order.

Note (1)

P.C. Board Ass'y	Designated Areas
ENE-022 B	Canada
ENE-022 C	Europe, U.K, Australia, U.S. Military Market & Other Countries
ENE-022 D	West Germany



TRANSISTOR

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	Q101	2SK240V(BL,V)	F.E.T	
	Q102	2SK240V(BL,V)	F.E.T	
			TOSHIBA	
			TOSHIBA	

△ : SAFETY PARTS

I. C. S

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	IC101	NJM4560D-X	I.C.	

△ : SAFETY PARTS

DIODES

△	ITEM	PART NUMBER	DESCRIPTION	AREA
			MAKER	
	D201	SLR-55DC3F	L.E.D.	
	D202	SLR-55DC3F	L.E.D.	
	D203	SLR-55DC3F	L.E.D.	
	D204	SLR-55VC3F	L.E.D.	
	D205	SLR-55DC3F	L.E.D.	
			ROHM	
			ROHM	
			ROHM	
			ROHM	

△ : SAFETY PARTS

CAPACITORS

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C101	QFN81HK-103	0.01MF 50V MYLAR	B
	C101	QFN81HK-103	0.01MF 50V MYLAR	B
	C102	QFN81HK-103	0.01MF 50V MYLAR	C
	C102	QFN81HK-103	0.01MF 50V MYLAR	C
	C103	QFS81HJ-151	150PF 50V POLY	
	C104	QFS81HJ-151	150PF 50V POLY	
	C105	QFS81HG-241	240PF 50V POLY	D
	C105	QFS81HJ-470	47PF 50V POLY	B
	C105	QFS81HJ-470	47PF 50V POLY	C
	C106	QFS81HG-241	240PF 50V POLY	D
	C106	QFS81HJ-470	47PF 50V POLY	B
	C106	QFS81HJ-470	47PF 50V POLY	C
	C107	QFN81HJ-392	3900PF 50V MYLAR	B
	C107	QFN81HJ-392	3900PF 50V MYLAR	C
	C107	QFN81HJ-822	8200PF 50V MYLAR	D
	C108	QFN81HJ-392	3900PF 50V MYLAR	B
	C108	QFN81HJ-392	3900PF 50V MYLAR	C
	C108	QFN81HJ-822	8200PF 50V MYLAR	D
	C109	QFN81HJ-822	8200PF 50V MYLAR	
	C110	QFN81HJ-822	8200PF 50V MYLAR	
	C111	QFP81HJ-682	6800PF 50V POLY	
	C112	QFP81HJ-682	6800PF 50V POLY	
	C113	QFP81HJ-332	3300PF 50V POLY	
	C114	QFP81HJ-332	3300PF 50V POLY	
	C115	QFP81HJ-153	0.015MF 50V POLY	
	C116	QFP81HJ-153	0.015MF 50V POLY	
	C117	QFP81HJ-203	0.02MF 50V POLY	
	C118	QFP81HJ-203	0.02MF 50V POLY	
	C119	QETB0JM-228H	2200MF 6.3V ELECTRO	
	C120	QETB0JM-228H	2200MF 6.3V ELECTRO	
	C121	EEZ5001-106	10MF ELECTRO	
	C122	EEZ5001-106	10MF ELECTRO	
	C123	QFN81HK-473	0.047MF 50V MYLAR	
	C124	QFN81HK-473	0.047MF 50V MYLAR	
	C131	QFN81HJ-224	0.22MF 50V MYLAR	
	C132	QFN81HJ-224	0.22MF 50V MYLAR	
	C161	QFS81HG-201	200PF 50V POLY	D
	C162	QFS81HG-201	200PF 50V POLY	D
	C251	QFN81HK-154	0.15MF 50V MYLAR	
	C252	QFN81HK-103	0.01MF 50V MYLAR	B
	C252	QFN81HK-103	0.01MF 50V MYLAR	C
	C253	QFN81HK-103	0.01MF 50V MYLAR	
	C254	QFN81HK-103	0.01MF 50V MYLAR	
	C255	QFN81HK-103	0.01MF 50V MYLAR	B
	C255	QFN81HK-103	0.01MF 50V MYLAR	C
	C256	QFN81HK-103	0.01MF 50V MYLAR	
	C259	QCS21HJ-221	220PF 50V CERAMIC	
	C260	QCS21HJ-221	220PF 50V CERAMIC	
	C263	QFN81HK-473	0.047MF 50V MYLAR	
	C612	QETB1HM-476	47MF 50V ELECTRO	

△ : SAFETY PARTS

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C671	EEZ5001-107	100MF	
	C672	EEZ5001-107	100MF	
	C915	QCS21HJ-101	100PF 50V	
	C916	QCS21HJ-101	100PF 50V	
	C917	QCS21HJ-101	100PF 50V	
	C918	QCS21HJ-101	100PF 50V	
	C919	QCS21HJ-221	220PF 50V	
	C920	QCS21HJ-221	220PF 50V	
	C921	QCS21HJ-221	220PF 50V	
	C922	QCS21HJ-221	220PF 50V	
	C923	QCS21HJ-121	120PF 50V	
	C924	QCS21HJ-121	120PF 50V	
	C929	QCS21HJ-221	220PF 50V	
	C930	QCS21HJ-221	220PF 50V	

△ : SAFETY PARTS

RESISTORS

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R101	QRD148J-101S	100 1/4W CARBON	
	R102	QRD148J-101S	100 1/4W CARBON	
	R103	QRD148J-102S	1K 1/4W CARBON	D
	R103	QRD148J-5R6S	5.6 1/4W CARBON	B
	R103	QRD148J-5R6S	5.6 1/4W CARBON	C
	R104	QRD148J-102S	1K 1/4W CARBON	D
	R104	QRD148J-5R6S	5.6 1/4W CARBON	B
	R104	QRD148J-5R6S	5.6 1/4W CARBON	C
	R105	QRD148J-471S	470 1/4W CARBON	
	R106	QRD148J-471S	470 1/4W CARBON	
	R107	QRD148J-473S	47K 1/4W CARBON	
	R108	QRD148J-473S	47K 1/4W CARBON	
	R109	QRD148J-562S	5.6K 1/4W CARBON	
	R110	QRD148J-562S	5.6K 1/4W CARBON	
	R111	QRD148J-562S	5.6K 1/4W CARBON	
	R112	QRD148J-562S	5.6K 1/4W CARBON	
	R113	QRD148J-270S	27 1/4W CARBON	
	R114	QRD148J-270S	27 1/4W CARBON	
	R115	QRD148J-561S	560 1/4W CARBON	
	R116	QRD148J-561S	560 1/4W CARBON	
	R117	QRD148J-272S	2.7K 1/4W CARBON	
	R118	QRD148J-272S	2.7K 1/4W CARBON	
	R119	QRD148J-222S	2.2K 1/4W CARBON	
	R120	QRD148J-222S	2.2K 1/4W CARBON	
	R121	QRD148J-121S	120 1/4W CARBON	
	R122	QRD148J-121S	120 1/4W CARBON	
	R123	QRD148J-100S	10 1/4W CARBON	
	R124	QRD148J-100S	10 1/4W CARBON	
	R125	QRD148J-752S	7.5K 1/4W CARBON	
	R126	QRD148J-752S	7.5K 1/4W CARBON	
	R127	QRD148J-913S	91K 1/4W CARBON	
	R128	QRD148J-913S	91K 1/4W CARBON	
	R129	QRD148J-224S	220K 1/4W CARBON	
	R130	QRD148J-224S	220K 1/4W CARBON	
	R131	QRD148J-331S	330 1/4W CARBON	
	R132	QRD148J-331S	330 1/4W CARBON	
	R161	QRD148J-5R6S	5.6 1/4W CARBON	D
	R162	QRD148J-5R6S	5.6 1/4W CARBON	D
	R201	QRD148J-101S	100 1/4W CARBON	
	R202	QRD148J-101S	100 1/4W CARBON	
	R203	QRD148J-331S	330 1/4W CARBON	
	R204	QRD148J-331S	330 1/4W CARBON	
	R205	QRD148J-331S	330 1/4W CARBON	
	R206	QRD148J-331S	330 1/4W CARBON	
	R207	QRD148J-331S	330 1/4W CARBON	
	R208	QRD148J-331S	330 1/4W CARBON	
	R209	QRD148J-331S	330 1/4W CARBON	
	R210	QRD148J-331S	330 1/4W CARBON	
	R211	QRD148J-472S	4.7K 1/4W CARBON	
	R212	QRD148J-472S	4.7K 1/4W CARBON	
	R255	QRD148J-4R7S	4.7 1/4W CARBON	
	R261	QRD148J-105S	1M 1/4W CARBON	
	R262	QRD148J-105S	1M 1/4W CARBON	
	R263	QRD148J-105S	1M 1/4W CARBON	
	R264	QRD148J-105S	1M 1/4W CARBON	
	R275	QRD148J-334S	330K 1/4W CARBON	C
	R275	QRD148J-334S	330K 1/4W CARBON	D
	R276	QRD148J-334S	330K 1/4W CARBON	C
	R276	QRD148J-334S	330K 1/4W CARBON	D
	R277	QRD148J-104S	100K 1/4W CARBON	C
	R277	QRD148J-104S	100K 1/4W CARBON	D
	R278	QRD148J-104S	100K 1/4W CARBON	C
	R278	QRD148J-104S	100K 1/4W CARBON	D
	R612	QRD125J-471	470 1/2W UNF. CARBON	
	R613	QRD125J-471	470 1/2W UNF. CARBON	

△ : SAFETY PARTS

RESISTORS

△	ITEM	PART NUMBER	DESCRIPTION			AREA
△	R614	QRD148J-271S	270	1/4W	CARBON	
	R615	QRD148J-271S	270	1/4W	CARBON	
	R671	QRD145J-221S	220	1/4W	UNF. CARBON	
	R672	QRD145J-221S	220	1/4W	UNF. CARBON	
	R673	QRD148J-560S	56	1/4W	CARBON	
	R674	QRD148J-560S	56	1/4W	CARBON	
	R675	QRD148J-560S	56	1/4W	CARBON	
	R677	QRD148J-560S	56	1/4W	CARBON	

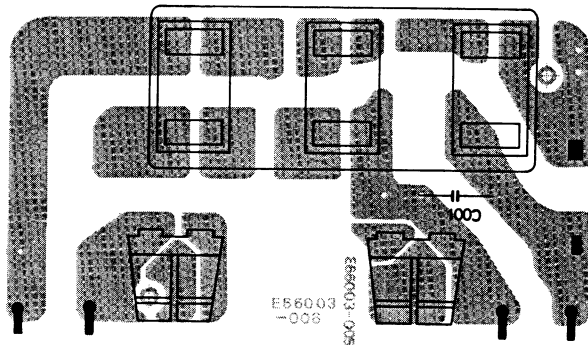
△ : SAFETY PARTS

OTHERS

△	ITEM	PART NUMBER	DESCRIPTION	AREA
		EWT011-019	TERMINAL WIRE	D
		E03532-001	SHIELD CASE	
		E10768-101	CIRCUIT BOARD	
	J201	E04365-003	SOCKET ASSY	
	J202	E04365-005	F.W.SOCKET	
	J203	E04365-003	SOCKET ASSY	
	J206	E04365-007	F.W.SOCKET	
	J207	E04365-008	8P CONNECTOR	
	J208	E04365-003	SOCKET ASSY	
	J251	EMN00TV-602A	PIN JACK ASSY	
	J252	EMN00TV-201A	PIN JACK ASSY	
	J253	EMN00TV-402A	PIN JACK ASSY	
	J254	EMN00TV-402A	PIN JACK ASSY	
	J255	EMC0589-002	DIN SOCKET	C
	J255	EMC0589-002	DIN SOCKET	D
	L101	EQL0111-391		D
	L102	EQL0111-391		D
	P101	QMV5004-003K	PULAG ASSY	
	P205	QMV5005-003K	PULAG ASSY	
	S101	QSS4201-501	SLIDE SWITCH	
	S102	QST22A1-E02	PUSH SWITCH	
	S201	QST53C2-E01	PUSH SWITCH	
	S202	QST53C2-E01	PUSH SWITCH	
	S203	QST53C2-E01	PUSH SWITCH	
	S204	QST23C1-E01	PUSH SWITCH	
	S205	QST23C1-E01	PUSH SWITCH	
	S206	QST23C1-E01	PUSH SWITCH	
△	S207	QSR6264-252	VOLTAGE SELECTOR	
	S208	QST22A1-E02	PUSH SWITCH	
	S209	QST5102-E02	PUSH SWITCH	

△ : SAFETY PARTS

■ TPS-255 J AC Outlet PC Board Ass'y



(for Canada only)

CAPACITORS

△	ITEM	PART NUMBER	DESCRIPTION		AREA
	C001	QCZ9019-103	0.01MF	CERAMIC	J

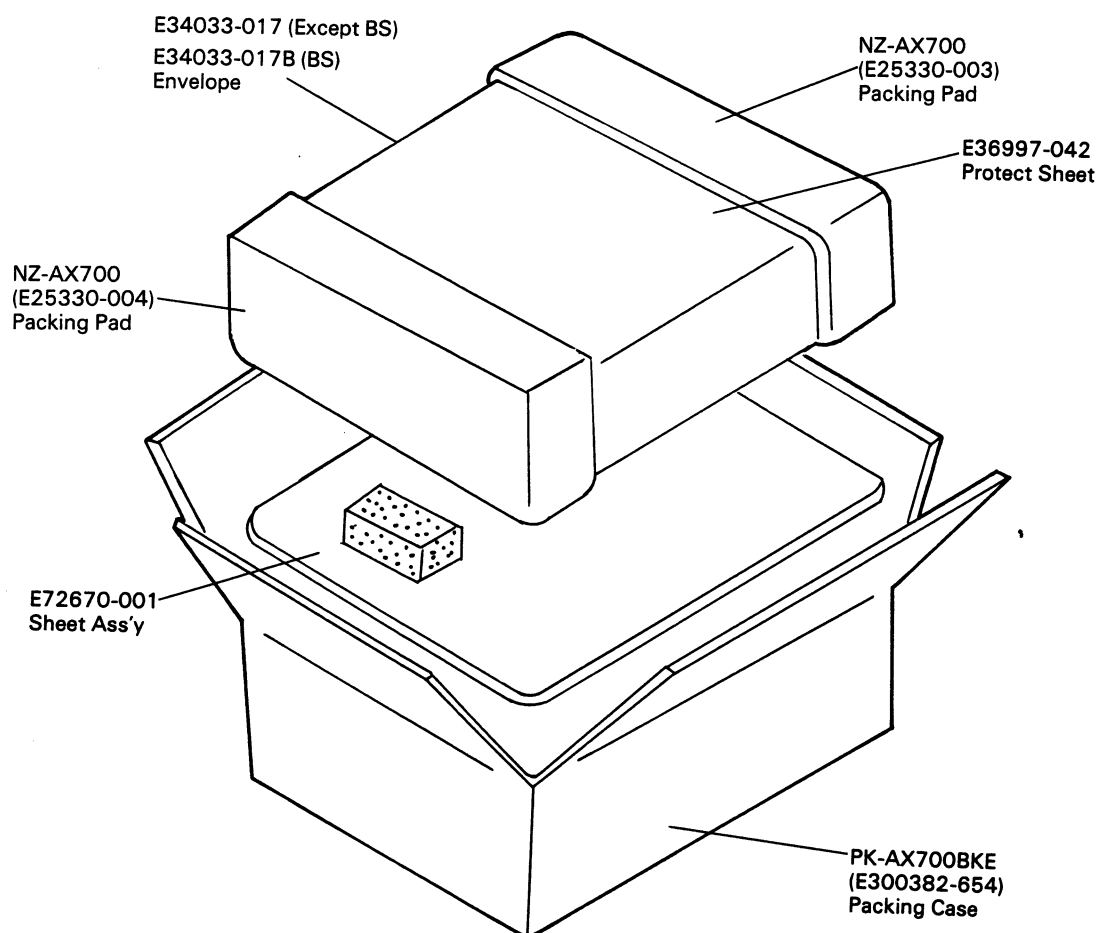
△ : SAFETY PARTS

OTHERS

△	ITEM	PART NUMBER	DESCRIPTION		AREA
		E03675-004	FUSE CLIP		
		E43727-001	TAB		
		E65508-001	TAB		
		E66003-005	CIRCUIT BOARD		
△		QMC0638-001	AC SOCKET		

△ : SAFETY PARTS

Packing Materials and Part Numbers



Accessories List

△	Part Number	Part Name	Description	Areas
	E30580-1286A E30580-1286ABS BT20025H BT20048B BT20064	Instruction Book Instruction Book Warranty Card Warranty Card Warranty Card		Except BS BS C P,PG G
	BT20029C BT20060 BT20071A BT20046B BT20066	Warranty Card Warranty Card Service Center Service Information EEC Agency		A BS C P,PG G,BS
	QZL1008-001 E41202-2 E41202-2B E35497-017 E35497-019	FTZ Information Sheet Envelope Envelope Caution Sheet Caution Sheet	110V 220V	G Except BS BS P U,PG
△	E73054-004 E04056	Foot Ass'y Siemens Plug		U

The Marks for Designated Areas

△ : Safety Parts

C.....Canada
 A.....Australia
 E.....Europe
 G.....West Germany
 BS.....U.K.
 P,PG.....U.S.Military Market
 U.....Other Countries
 No mark indicates all areas.

MEMO