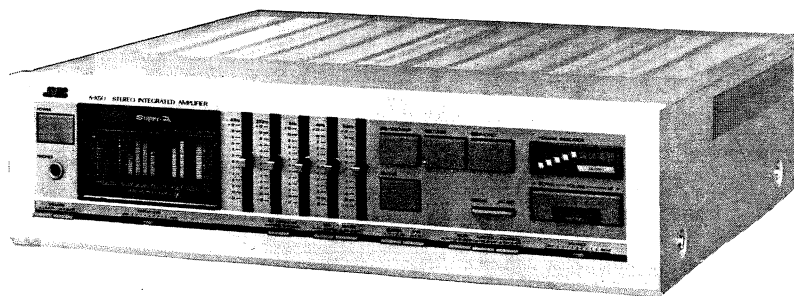


JVC

SERVICE MANUAL

MODEL
A-X50

STEREO INTEGRATED AMPLIFIER



No. 2606
Mar. 1982

Contents

	Page
1. Specifications	1
2. Main Parts Locations	
2-(1) Top View	2
2-(2) Front View	2
2-(3) Rear View	2
3. Block Diagram	3
4. Exploded View and Part Numbers	4
5. Power Amplifier Idling Current Adjustment	5
6. Printed Circuit Board Ass'y and Parts List	
6-(1) TXX-379□ Equalizer Amp. P.C. Board Ass'y.	6
6-(2) TXX-380□ Power Amp. P.C. Board Ass'y ...	8
6-(3) TXX-381□ SEA P.C. Board Ass'y	11
6-(4) TXX-382□ Spectro Peak Indicator P.C. Board Ass'y	13
6-(5) TXX-396A Volume Indicator P.C. Board Ass'y	15
6-(6) TPS-255E AC P.C. Board Ass'y	16
6-(7) TPS-317□ Fuse P.C. Board Ass'y	16
6-(8) TPS-318A Volume Selector P.C. Board Ass'y.	16
7. A-X50 Schematic Diagram	17
8. Packing Materials and Part Numbers	20
9. Accessories List	20
10. Parts List with Specified Numbers for Designated Areas	back cover
11. Power Specifications	back cover

Warning: When replacing the parts marked with Δ , be sure to use the designated parts to ensure safety.

1. Specifications

CIRCUITRY

Preamplifier : ICL MC/MM equalizer with EL-FETs in its initial stage

Power amplifier : DC-servo "Super-A" power amplifier

ALLOVER CHARACTERISTICS

Output power (VIDEO/AUX IN \rightarrow SP. OUT)

 1 kHz : 68 watts RMS per channel min.
(8 ohms, 0.001 % total harmonic distortion measured by JVC Audio Analyze System)

 75 watts RMS per channel min.
(8 ohms, 0.7 % total harmonic distortion)

 20 Hz - 20 kHz : 65 watts RMS per channel min.
(both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007 % total harmonic distortion.)

Total harmonic distortion (VIDEO/AUX IN \rightarrow SP. OUT)

 : 0.007 % (20 Hz - 20 kHz, 8 ohms) at 65 watts

 (PHONO IN \rightarrow SP. OUT)
at Volume -30 dB : 0.01 % (20 Hz - 20 kHz, 8 ohms) at 65 watts

Intermodulation distortion (VIDEO/AUX IN \rightarrow SP. OUT)

 : 0.005 % (60 Hz: 7 kHz = 4 : 1, 8 ohms) at 65 watts

Power band width (VIDEO/AUX IN \rightarrow SP. OUT)

 : 5 Hz - 40 kHz (IHF, 0.02 %, 8 ohms both channels driven)

Frequency characteristic : 3 Hz - 200 kHz +0, -3 dB (8 ohms)

Damping factor : 75 (1 kHz, 8 ohms)

Input terminals

 Input sensitivity/impedance (1 kHz)

 PHONO (MM) : 2.5 mV/47 kohm

 PHONO (MC) : 200 μ V/100 ohms

 TUNER : 150 mV/30 kohms

 VIDEO/AUX : 150 mV/30 kohms

 TAPE-1, 2 : 150 mV/30 kohms

Signal-to-noise ratio

PHONO (MM) : 87 dB

PHONO (MC) : 68 dB

TUNER : 108 dB

VIDEO/AUX : 108 dB

TAPE-1, 2 : 108 dB

(IHF A Network short circuit)

PHONO (MM) : 85 dB (Rec out)

PHONO (MC) : 77 dB (Rec out)

TUNER : 81 dB (Speaker out)

VIDEO/AUX : 81 dB (Speaker out)

TAPE-1, 2 : 81 dB (Speaker out)

(IHF A-202)

Tone controls : S.E.A. center frequencies
63, 250, 1k, 4k, 16 kHz
S.E.A. control range \pm 12 dB

Subsonic filter : 18 Hz (-6 dB/oct)

Loudness control : 100 Hz: +6 dB, 10 kHz: +4 dB
(at VOLUME -30 dB)

Muting level : -20 dB

EQUALIZER

PHONO overload capacity

 PHONO (MM) : 200 mV (1 kHz, 0.005 % THD)

 PHONO (MC) : 15 mV (1 kHz, 0.005 % THD)

PHONO RIAA deviation : MM: \pm 0.3 dB (20 Hz - 20 kHz)
MC: \pm 0.5 dB (20 Hz - 20 kHz)

Total harmonic distortion

 PHONO (MM) : 0.005 % (at 8 V output, 20 Hz - 20 kHz)

 PHONO (MC) : 0.05 % (at 8 V output, 20 Hz - 20 kHz)

Recording output

Output level/impedance

 TAPE REC-1, 2 : 150 mV/660 ohms (PHONO)

GENERAL

Power source : See back cover.

Dimensions : 4-5/8"(H) x 17-1/8"(W) x
14-3/8"(D)
(11.7 cm(H) x 43.5 cm(W) x
36.5 cm(D))

Weight : 18.9 lbs. (8.6 kg)

Design and specifications subject to change without notice.

2. Main Parts Locations

2-(1) Top View

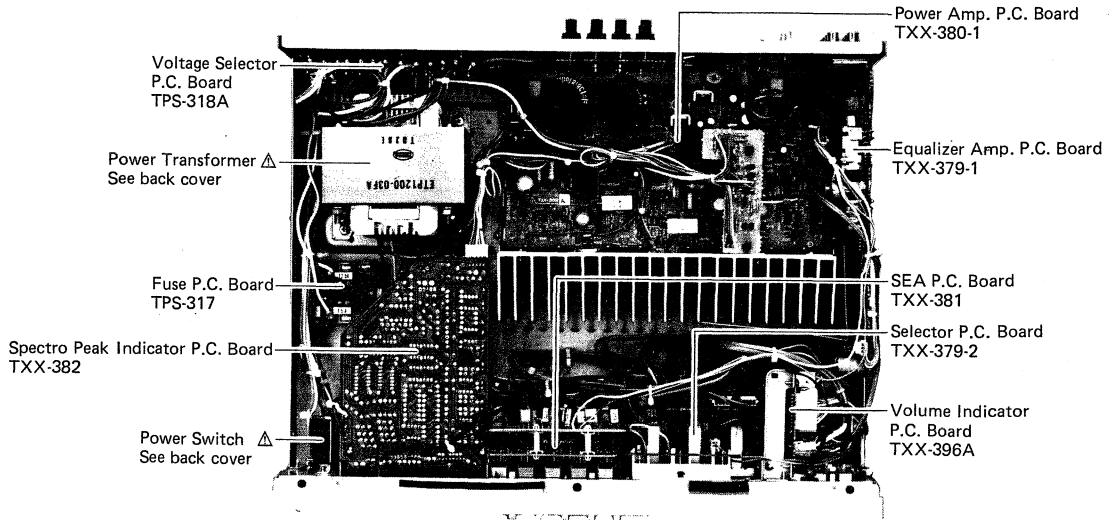


Fig. 1

2-(2) Front View

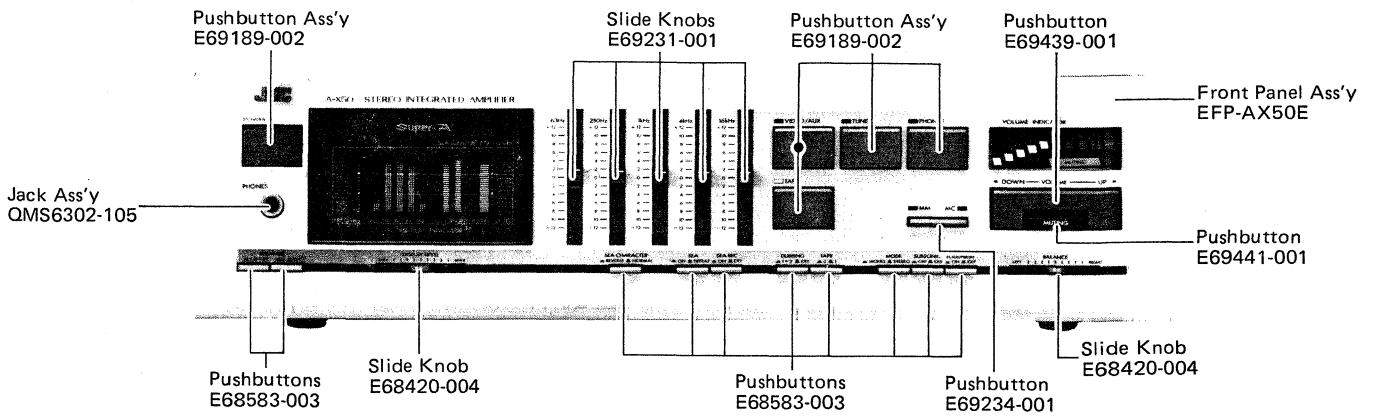


Fig. 2

2-(3) Rear View

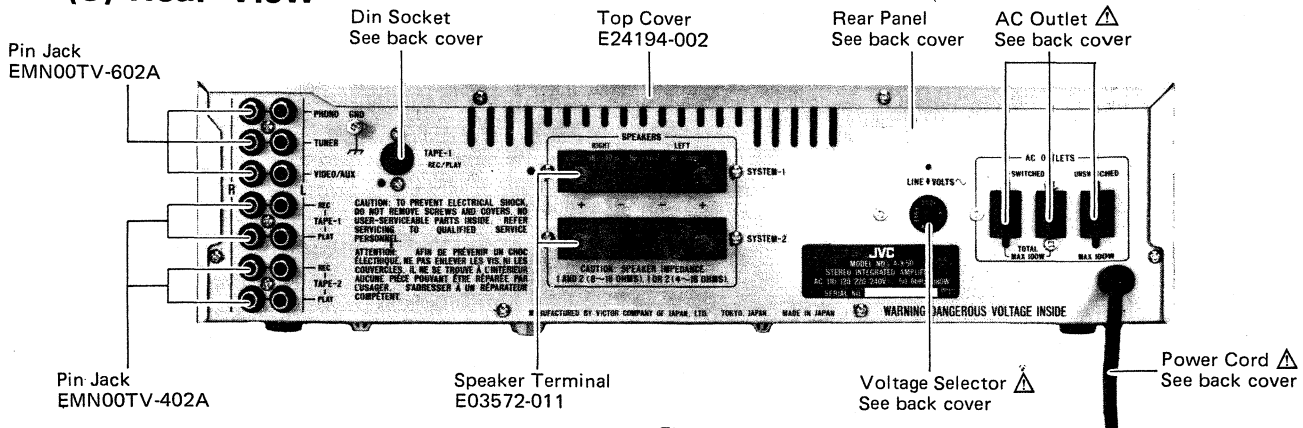


Fig. 3

3. Block Diagram

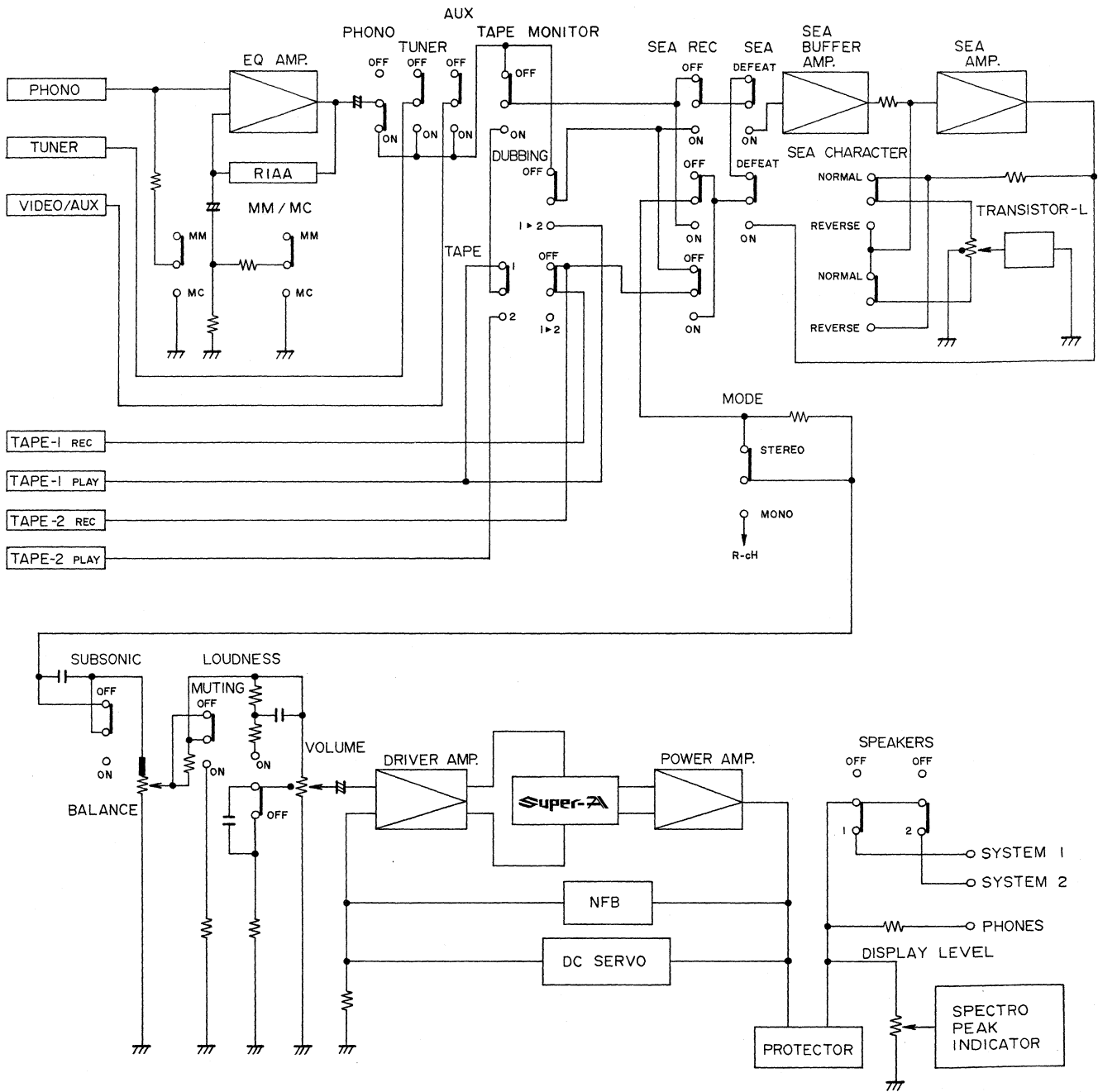


Fig. 4

4. Exploded View and Part Numbers

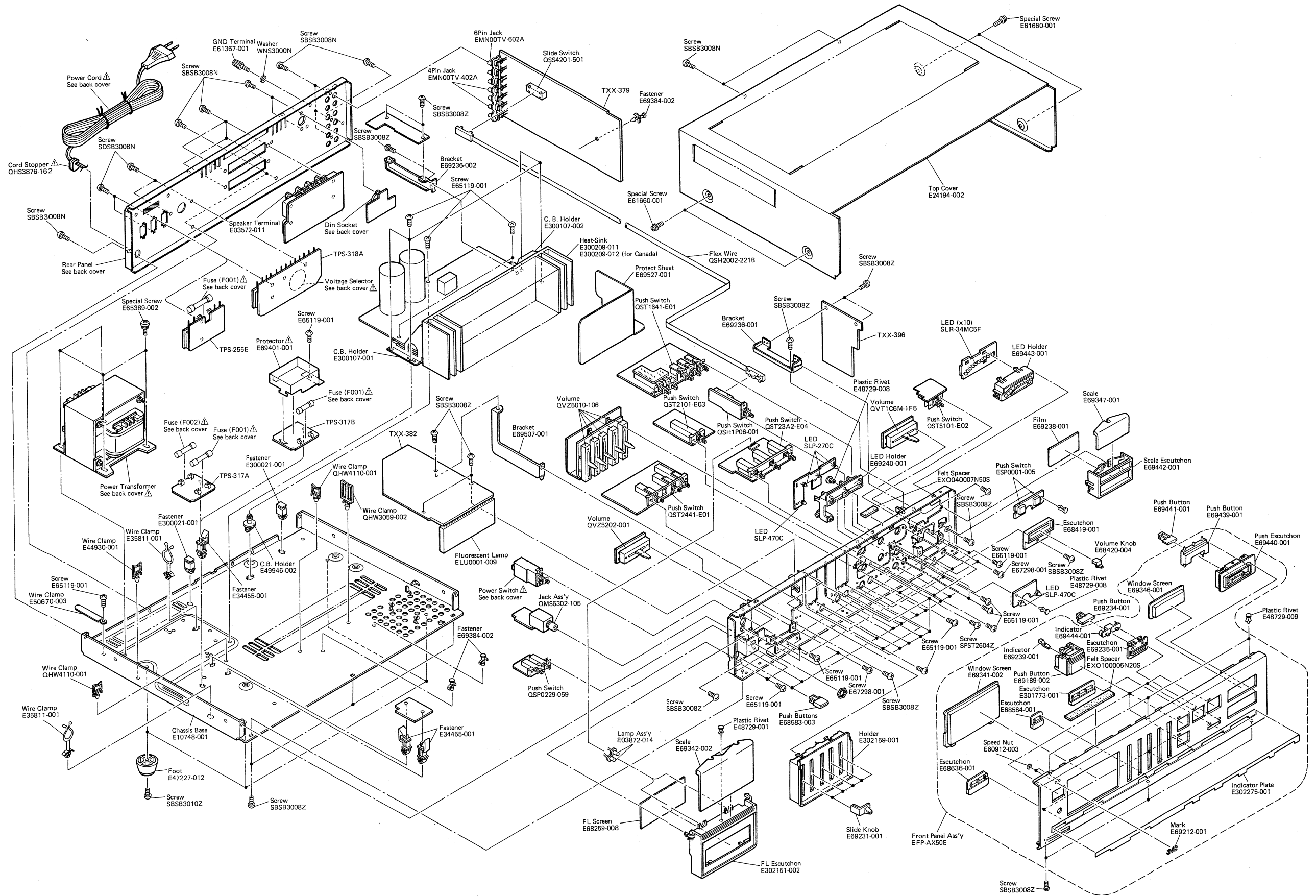


Fig. 5

5. Power Amplifier Idling Current Adjustment

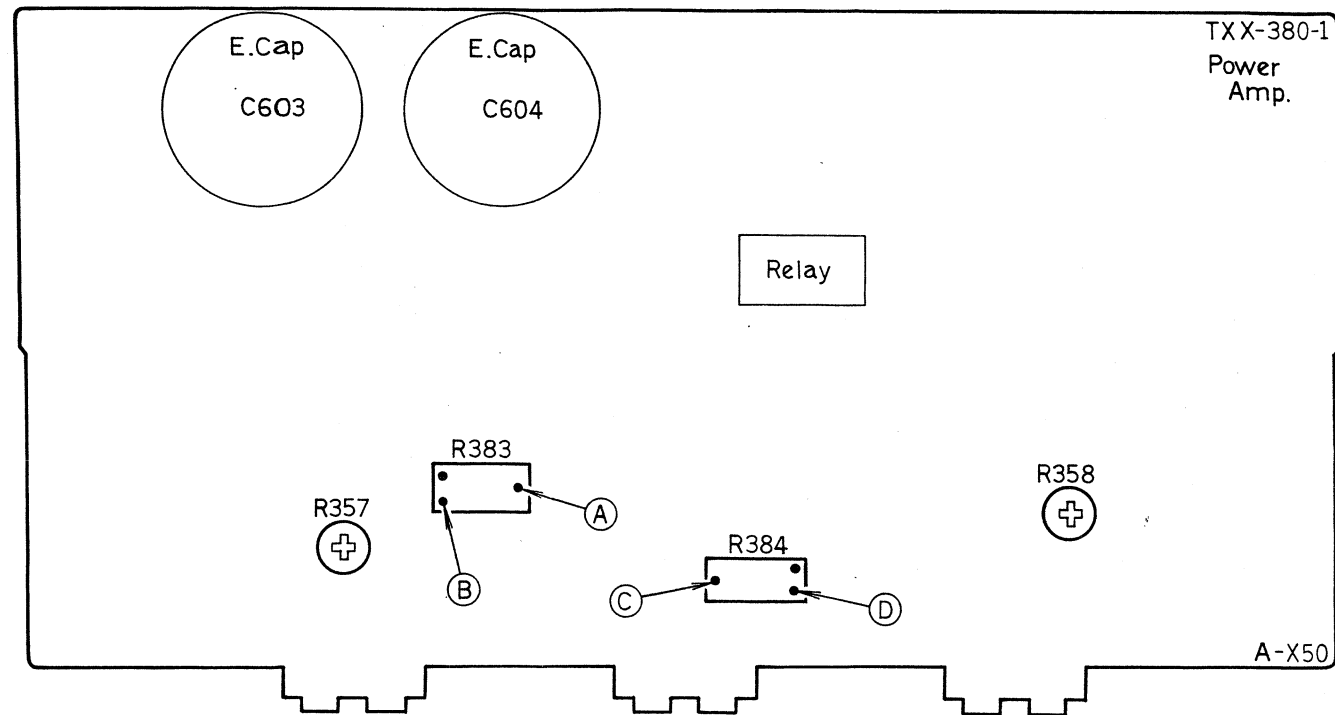


Fig. 6

- Before turning on the power, turn the semi-fixed resistors (R357 for L channel and R358 for R channel) of the power amplifier circuit board fully counterclockwise.
- Adjust the semi-fixed resistors (R357 and R358) so that the voltage at the following test points of the power amplifier circuit board is within a range of 9 mV – 13 mV after the power is turned on.
L channel: Measure the voltage between test point (B) (emitter of Q379) and output at the test point (A).
R channel: Measure the voltage between test point (D) (emitter of Q380) and output at the test point (C).
- Readjust resistors R357 and R358 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 increases further.
Note: Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of A-X50 or of other measuring equipment.

6. Printed Circuit Board Ass'y and Parts List

6-(1) TXX-379□ Equalizer Amp. P.C. Board Ass'y

Note: TXX-379□-1 varies according to the areas employed. See note (1) when placing an order.

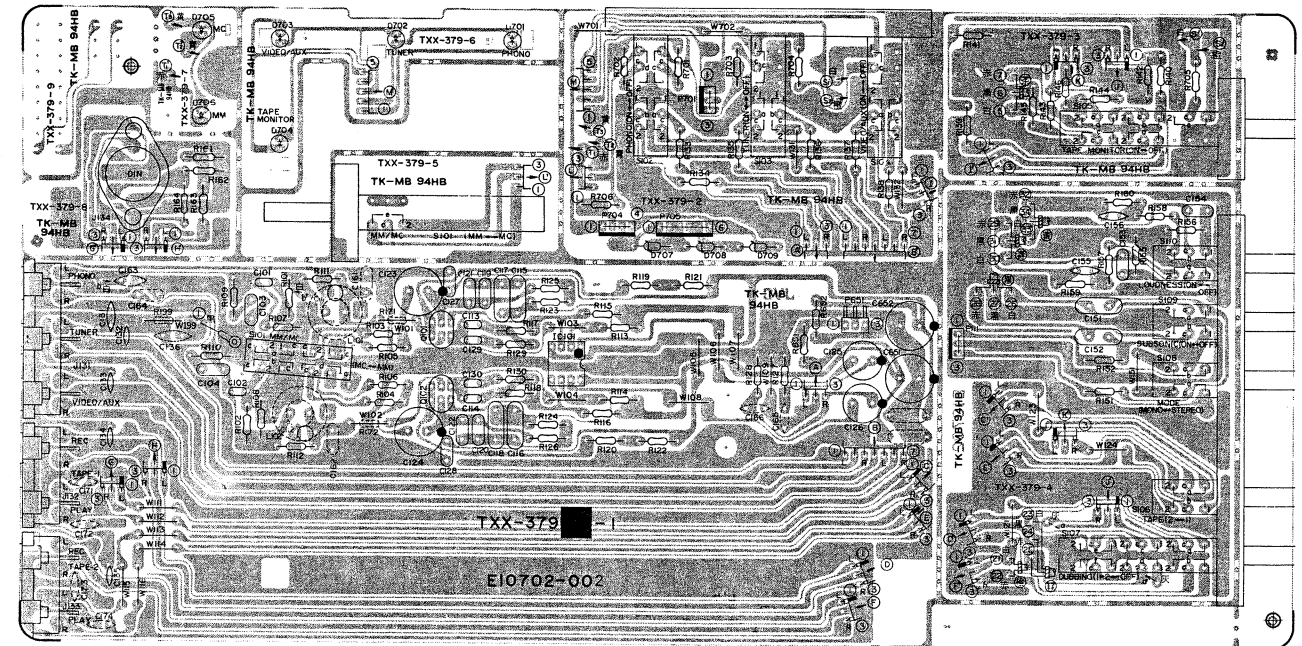


Fig. 7

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A. and Canada	TXX-379[A]
West Germany	TXX-379[C]
All Other Areas	TXX-379[B]

Note (2) The symbols (赤, 黒, 白 ... etc) on P.C. Board surface are factory process only.

Transistors

Item No.	Part Number	Rating	Description	Maker
Q101	2SK240(BL,V)		F.E.T.	Toshiba
Q102	2SK240(BL,V)		"	"

Integrated Circuit

Item No.	Part Number	Rating	Description	Maker
IC101	NJM4560D-X			JRC

Diodes

Item No.	Part Number	Rating	Description	Maker
D701	SLP-270C		L.E.D.	Sanyo
D702	SLP-270C		"	"
D703	SLP-270C		"	"
D704	SLP-470C		"	"
D705	SLP-470C		"	"
D706	SLP-470C		"	"
D707	RD7.5EB3		Zener	NEC
D708	RD7.5EB3		"	"
D709	RD7.5EB3		"	"

Coils

Item No.	Part Number	Rating	Description
L101	EQL0111-151	150μH	Inductor (for C)
L102	EQL0111-151	"	" (")

Capacitors

Item No.	Part Number	Rating	Description
C101	QFM81HK-103	0.01 μF 50 V	Mylar (for A,B)
C101	QFP31HJ-471	470 pF	Poly (for C)
C102	QFP31HJ-471	"	" (")
C102	QFM81HK-103	0.01 μF	Mylar (for A,B)
C103	QFP31HJ-221	220 pF	Poly (for A,B)
C103	QCS21HJ-151	150 pF	Ceramic (for C)

Capacitors

Item No.	Part Number	Rating	Description
C104	QFP31HJ-151	150 pF 50 V	Poly (for A,B)
C111	QFS81HJ-560	56 pF	Polyst (for A,B)
C112	QFS81HJ-560	"	" (")
C113	QFM81HK-392	3900 pF	Mylar
C114	QFM81HK-392	"	"
C115	QFP31HJ-822	8200 pF	Polypropylene
C116	QFP31HJ-822	"	"
C117	QFP31HJ-273	0.027 μF	"
C118	QFP31HJ-273	"	"
C119	QFP31HJ-682	6800 pF	"
C120	QFP31HJ-682	"	"
C121	QFP31HJ-332	3300 pF	"
C122	QFP31HJ-332	"	"
C123	QET50JM-228H	2200 μF 6.3 V	Electrolytic
C124	QET50JM-228H	"	"
C125	EEZ5001-475	4.7 μF 100 V	"
C126	EEZ5001-475	"	"
C127	QFM81HK-473	0.047 μF 50 V	Mylar
C128	QFM81HK-473	"	"
C129	QFM81HK-822	8200 pF	"
C130	QFM81HK-822	"	"
C131	QCF21HP-223A	0.022 μF	Ceramic
C132	QCF21HP-103A	0.01 μF	"
C133	QCF21HP-103A	"	"
C134	QCF21HP-103A	"	"
C135	QCF21HP-103A	"	"
C136	QCF21HP-473A	0.047 μF	" (for C)
C151	QFM81HK-224	0.22 μF	Mylar
C152	QFM81HK-224	"	"
C153	QFM81HK-823	0.082 μF	"
C154	QFM81HK-823	"	"
C155	QCS21HJ-391	390 pF	Ceramic
C156	QCS21HJ-391	"	"
C161	QFP31HJ-301	300 pF	Poly (for C)
C162	QDP31HJ-301	"	" (")
C164	QFP21HJ-331	330 pF	Ceramic (for C)
C165	QCS21HJ-121	120 pF	" (")
C166	QCS21HJ-121	"	" (")
C167	QCS21HJ-391	390 pF	" (")
C168	QCS21HJ-391	"	" (")
C171	QCS21HJ-101	100 pF	" (")
C172	QCS21HJ-101	"	" (")
C173	QCS21HJ-101	"	" (")
C174	QCS21HJ-101	"	" (")
C651	QET51HM-227H	220 μF	Electrolytic
C652	QET51HM-227H	"	"

Resistors

Item No.	Part Number	Rating	Description
R117	QRD141J-270S	27 Ω 1/4 W	Carbon
R118	QRD141J-270S	"	"
R119	QRD141J-272S	2.7 kΩ	"
R120	QRD141J-272S	"	"
R121	QRD141J-222S	2.2 kΩ	"
R122	QRD141J-222S	"	"
R123	QRD141J-913S	91 kΩ	"
R124	QRD141J-913S	"	"
R125	QRD141J-752S	7.5 kΩ	"
R126	QRD141J-752S	"	"
R127	QRD141J-224S	220 kΩ	"
R128	QRD141J-224S	"	"
R129	QRD141J-561S	560 Ω	"
R130	QRD141J-561S	"	"
R133	QRD141J-331S	330 Ω	"
R134	QRD141J-331S	"	"
R135	QRD141J-331S	"	"
R136	QRD141J-331S	"	"
R137	QRD141J-331S	"	"
R138	QRD141J-331S	"	"
R139	QRD141J-331S	"	"
R140	QRD141J-331S	"	"
R141	QRD141J-105S	1 MΩ	"
R142	QRD141J-105S	"	"
R143	QRD141J-331S	330 Ω	"
R144	QRD141J-331S	"	"
R145	QRD141J-105S	1 MΩ	"
R146	QRD141J-105S	"	"
R151	QRD141J-472S	4.7 kΩ	"
R152	QRD141J-472S	"	"
R155	QRD141J-103S	10 kΩ	"
R156	QRD141J-103S	"	"
R157	QRD141J-333S	33 kΩ	"
R158	QRD141J-333S	"	"
R159	QRD141J-105S	1 MΩ	"
R160	QRD141J-105S	"	"
R161	QRD141J-823S	82 kΩ	" (for B,C)
R162	QRD141J-823S	"	" (")
R163	QRD141J-334S	330 kΩ	" (")
R164	QRD141J-334S	"	" (")
R171	QRD141J-5R6S	5.6 Ω	" (for C)
R172	QRD141J-5R6S	"	" (")
R199	QRD141J-4R7S	4.7 Ω	" (")
R651	QRD141J-101S	100 Ω	"
R652	QRD141J-101S	"	"
R701	QRD141J-390S	39 Ω	"
R702	QRD141J-390S	"	"
R703	QRD141J-390S	"	"
R704	QRD141J-390S	"	"
R705	QRD141J-181S	180 Ω	"
R706	QRD141J-390S	39 Ω	"

Resistors

Item No.	Part Number	Rating	Description
R101	QRD141J-101S	100 Ω 1/4 W	Carbon
R102	QRD141J-101S	"	"
R103	QRD141J-130S	13 Ω	"
R104	QRD141J-130S	"	"
R105	QRD141J-161S	160 Ω	"
R106	QRD141J-161S	"	"
R107	QRD141J-473S	4.7 kΩ	"
R108	QRD141J-473S	"	"
R109	QRD141J-471S	470 Ω	"
R110	QRD141J-471S	"	"
R111	QRD141J-5R6S	5.6 Ω	" (for A,B)
R111	QRD141J-152S	1.5 kΩ	" (for C)
R112	QRD141J-152S	"	" (")
R112	QRD141J-5R6S	5.6 Ω	" (for A,B)
R113	QRD141J-562S	5.6 kΩ	"
R114	QRD141J-562S	"	"
R115	QRD141J-562S	"	"
R116	QRD141J-562S	"	"

Others

Item No.	Part Number	Rating	Description
	E10702-002		Circuit Board
	E69240-001		LED Holder
	E03532-001		Shield Case (for C)
J131	EMN00TV-602A		6P Pin Jack
J132	EMN00TV-402A		Pin Jack Ass'y
J133	EMN00TV-402A		"
J134	E03623-003		DIN Socket (for B,C)
P111	QMV5005-003		3P Plug Ass'y
P651	QMV5004-003		"
P701	QMV5005-003		"
P704	QMV5005-004		4P Plug Ass'y
P705	QMV5005-006		6P Plug Ass'y
S101	QSS4201-501		Slide Switch (-a, b, c, d)
S101	QSH1P06-001		Push Switch (-e)
S102	QST23A2-E04		"
S105	QST2101-E03		"
S106	QST1641-E01		"

6-(2) TXX-380 Power Amp. P.C. Board Ass'y

Note: TXX-380-1 varies according to the areas employed. See note (1) when placing an order.

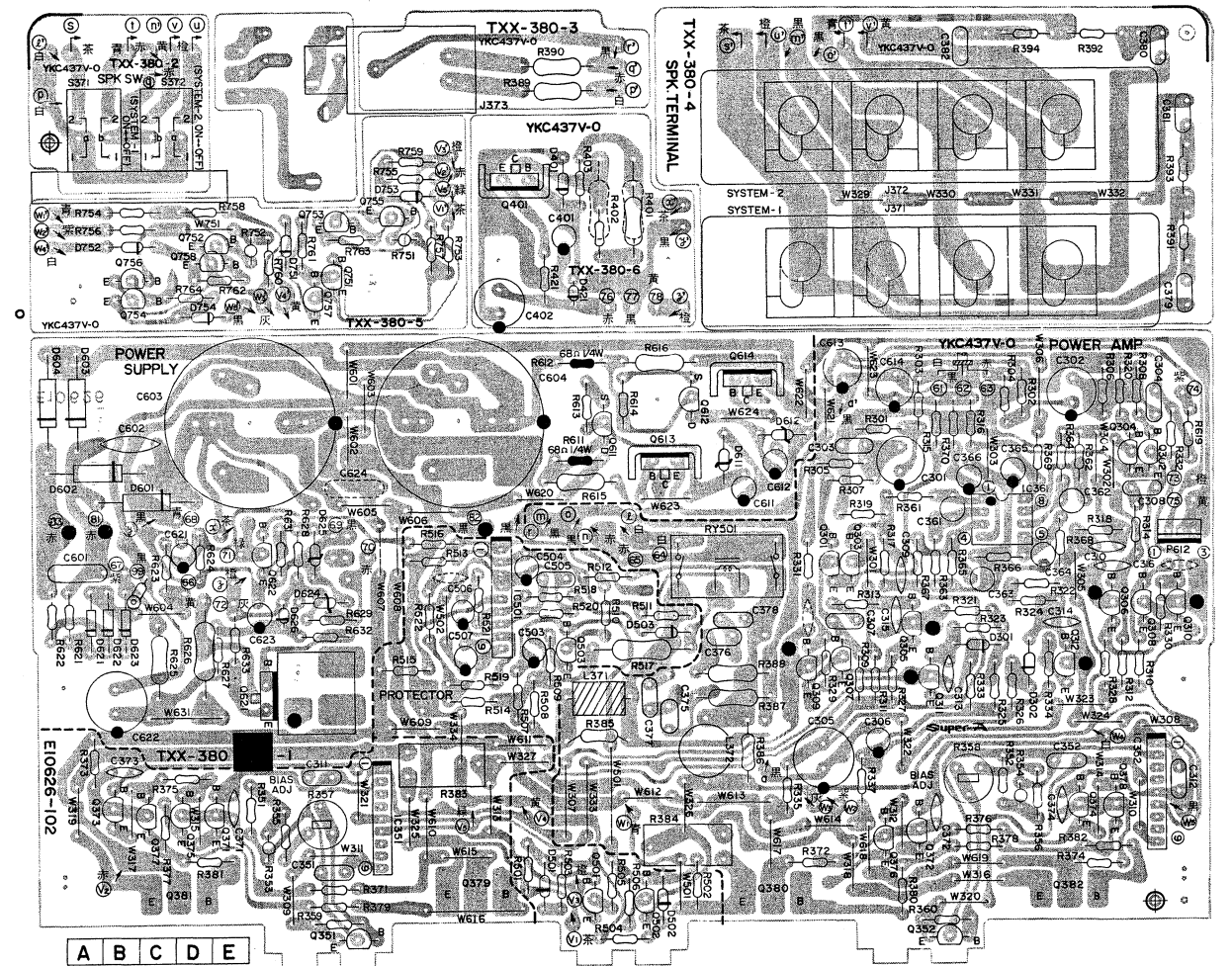


Fig. 8

Note (1)

Designated Areas	P.C. Board Ass'y
Canada	TXX-380 [B]
West Germany	TXX-380 [C]
All Other Areas	TXX-380 [A]

Note (2) The symbols (赤, 黒, 白... etc.) on P.C. Board surface are factory process only.

Transistors

Item No.	Part Number	Rating	Description	Maker
Q301	2SC2240(GR,BL)			Silicon Toshiba
Q302	2SC2240(GR,BL)			"
Q303	2SC2240(GR,BL)			"
Q304	2SC2240(GR,BL)			"
Q305	2SA970(GR,BL)			"
Q306	2SA970(GR,BL)			"
Q307	2SA970(GR,BL)			"
Q308	2SA970(GR,BL)			"
Q309	2SA970(GR,BL)			"
Q310	2SA970(GR,BL)			"

Transistors

Item No.	Part Number	Rating	Description	Maker
Q311	2SC2240(GR,BL)			Silicon Toshiba
Q312	2SC2240(GR,BL)			"
Q351	2SC2240(GR,BL)			"
Q352	2SC2240(GR,BL)			"
Q371	2SC2240(GR,BL)			"
Q372	2SC2240(GR,BL)			"
Q373	2SA970(GR,BL)			"
Q374	2SA970(GR,BL)			"
Q375	2SC2235(O,Y)			"
Q376	2SC2235(O,Y)			"
Q377	2SA965(O,Y)			"
Q378	2SA965(O,Y)			"
Q379	2SD845LB(R,O)			"
Q380	2SD845LB(R,O)			"
Q381	2SB755LB(R,O)			"
Q382	2SB755LB(R,O)			"
Q401	2SD313V(E)			Sanyo
Q501	2SC2240(GR,BL)			Toshiba
Q502	2SC2240(GR,BL)			"
Q503	2SA970(GR,BL)			"
Q611	2SK105(H)			F.E.T. NEC
Q612	2SK105(H)			"

6-(3) TXX-381□ SEA P.C.Board Ass'y

Note: TXX-381□-1 varies according to the areas employed. See note (1) when placing an order.

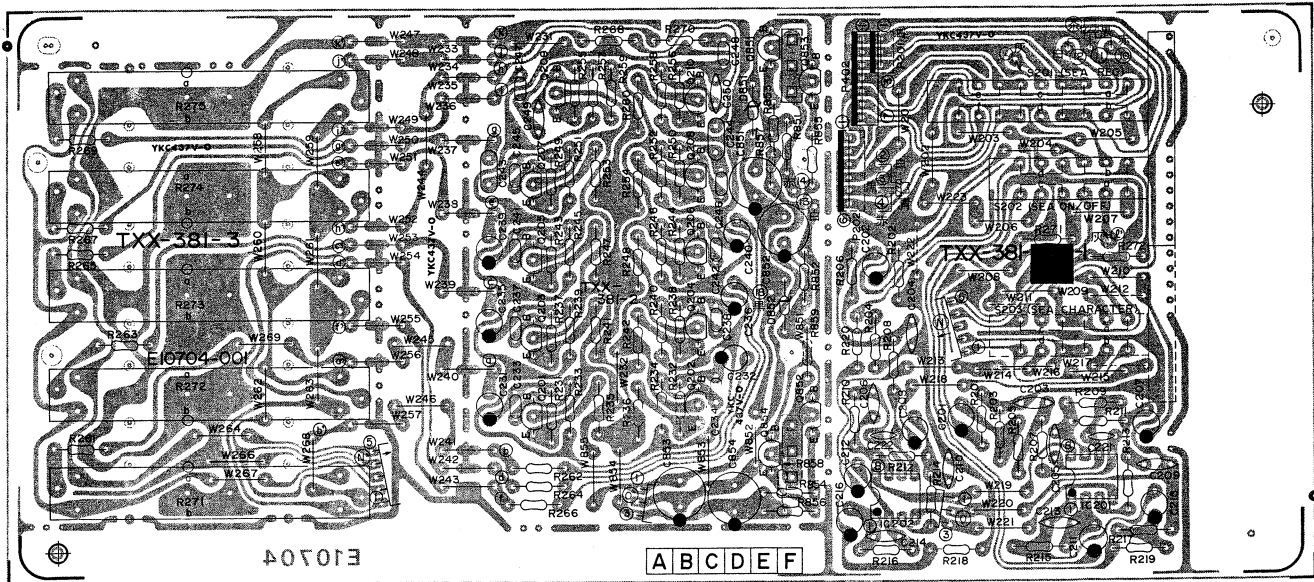


Fig. 9

Note (1)

Designated Areas	P.C. Board Ass'y
West Germany	TXX-381[D]
All Other Areas	TXX-381[C]

Note (2) The symbols (赤, 黒, 白 ... etc.) on P.C. Board surface are factory process only.

Transistors

Item No.	Part Number	Rating	Description	
			Material	Maker
Q201	2SC2240(GR)		Silicon	Toshiba
Q202	2SC2240(GR)		"	"
Q203	2SC2240(GR)		"	"
Q204	2SC2240(GR)		"	"
Q205	2SC2240(GR)		"	"
Q206	2SC2240(GR)		"	"
Q207	2SC2240(GR)		"	"
Q208	2SC2240(GR)		"	"
Q209	2SC2240(GR)		"	"
Q210	2SC2240(GR)		"	"

Integrated Circuits

Item No.	Part Number	Rating	Description	
			Material	Maker
IC201	NJM4560D-X			JRC
IC202	NJM4560D-X			"

Capacitors

Item No.	Part Number	Rating		Description
		Value	Voltage	
C201	QET51HR-475H	4.7 μF	50 V	Electrolytic
C202	QET51HR-475H	"	"	"
C203	QCS21HJ-470	47 pF	"	Ceramic (for C)
C203	QCS21HJ-681	680 pF	"	" (for D)
C204	QCS21HJ-470	47 pF	"	" (for C)

Capacitors

Item No.	Part Number	Rating		Description
C204	QCS21HJ-681	680 pF	50 V	Ceramic (for D)
C205	QCS21HJ-101	100 pF	"	"
C206	QCS21HJ-101	"	"	"
C207	QET51CR-476	47 μ F	16 V	Electrolytic
C208	QET51CR-476	"	"	"
C209	QCS21HJ-330A	33 pF	50 V	Ceramic
C210	QCS21HJ-330A	"	"	"
C211	QET51CR-476	47 μ F	16 V	Electrolytic
C212	QET51CR-476	"	"	"
C213	QCS21HJ-470	47 pF	50 V	Ceramic
C214	QCS21HJ-470	"	"	"
C215	QET51HR-475H	4.7 μ F	"	Electrolytic
C216	QET51HR-475H	"	"	"
C231	QET51HR-475H	"	"	"
C232	QET51HR-475H	"	"	"
C233	QFM81HK-683	0.068 μ F	"	Mylar
C234	QFM81HK-683	"	"	"
C235	QET51HR-105	1 μ F	"	Electrolytic
C236	QET51HR-105	"	"	"
C237	QFM81HK-273	0.027 μ F	"	Mylar
C238	QFM81HK-273	"	"	"
C239	QEB51HM-334	0.33 μ F	"	L.L.C. Electrolytic
C240	QEB51HM-334	"	"	"
C241	QFM81HK-822	8200 pF	"	Mylar
C242	QFM81HK-822	"	"	"
C243	QFM81HK-683	0.068 μ F	"	"
C244	QFM81HK-683	"	"	"
C245	QFM81HK-122	1200 pF	"	"
C246	QFM81HK-122	"	"	"
C247	QFM81HK-183	0.018 μ F	"	"
C248	QFM81HK-183	"	"	"
C249	QCS21HJ-331	330 pF	"	Ceramic
C250	QCS21HJ-331	"	"	"
C853	QET51ER-227	220 μ F	25 V	Electrolytic
C854	QET51ER-227	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R201	QRD141J-104S	100 k Ω	1/4 W	Carbon
R202	QRD141J-104S	"	"	"
R203	QRD141J-104S	"	"	"
R204	QRD141J-104S	"	"	"
R205	QRD141J-102S	1 k Ω	"	"
R206	QRD141J-102S	"	"	"
R207	QRD141J-101S	100 Ω	"	"
R208	QRD141J-101S	"	"	"
R209	QRD141J-102S	1 k Ω	"	"
R210	QRD141J-102S	"	"	"
R211	QRD141J-302S	3 k Ω	"	"
R212	QRD141J-302S	"	"	"
R213	QRD141J-101S	100 Ω	"	"
R214	QRD141J-101S	"	"	"
R215	QRD141J-302S	3 k Ω	"	"
R216	QRD141J-302S	"	"	"
R217	QRD141J-224S	220 k Ω	"	"
R218	QRD141J-224S	"	"	"
R219	QRD141J-331S	330 Ω	"	"
R220	QRD141J-331S	"	"	"
R231	QRD141J-471S	470 Ω	"	"
R232	QRD141J-471S	"	"	"
R233	QRD141J-473S	47 k Ω	"	"
R234	QRD141J-473S	"	"	"
R235	QRD141J-562S	5.6 k Ω	"	"

Resistors

Item No.	Part Number	Rating		Description
R236	QRD141J-562S	5.6 k Ω	1/4 W	Carbon
R237	QRD141J-511S	510 Ω	"	"
R238	QRD141J-511S	"	"	"
R239	QRD141J-303S	30 k Ω	"	"
R240	QRD141J-303S	"	"	"
R241	QRD141J-562S	5.6 k Ω	"	"
R242	QRD141J-562S	"	"	"
R243	QRD141J-471S	470 Ω	"	"
R244	QRD141J-471S	"	"	"
R245	QRD141J-223S	22 k Ω	"	"
R246	QRD141J-223S	"	"	"
R247	QRD141J-562S	5.6 k Ω	"	"
R248	QRD141J-562S	"	"	"
R249	QRD141J-511S	510 Ω	"	"
R250	QRD141J-511S	"	"	"
R251	QRD141J-393S	39 k Ω	"	"
R252	QRD141J-393S	"	"	"
R253	QRD141J-562S	5.6 k Ω	"	"
R254	QRD141J-562S	"	"	"
R255	QRD141J-511S	510 Ω	"	"
R256	QRD141J-511S	"	"	"
R257	QRD141J-363S	36 k Ω	"	"
R258	QRD141J-363S	"	"	"
R259	QRD141J-562S	5.6 k Ω	"	"
R260	QRD141J-562S	"	"	"
R261	QRD141J-101S	100 Ω	"	"
R262	QRD141J-101S	"	"	"
R263	QRD141J-680S	68 Ω	"	"
R264	QRD141J-680S	"	"	"
R265	QRD141J-151S	150 Ω	"	"
R266	QRD141J-151S	"	"	"
R267	QRD141J-101S	100 Ω	"	"
R268	QRD141J-101S	"	"	"
R269	QRD141J-121S	120 Ω	"	"
R270	QRD141J-121S	"	"	"
R271	QVZ5010-106	100 k Ω		S. Variable
R272	QVZ5010-106	"		"
R273	QVZ5010-106	"		"
R274	QVZ5010-106	"		"
R275	QVZ5010-106	"		"
R851	QRD149J-680S	68 Ω	1/4 W	Carbon \triangle
R857	QRD149J-820S	82 Ω	"	" \triangle
R858	QRD149J-820S	"	"	" \triangle
R859	QRD149J-680S	68 Ω	"	" \triangle

Others

Item No.	Part Number	Rating	Description
	E10704-001		Circuit Board
	E300796-001		Fastener
P201	QMV5005-003		3P Plug Ass'y
P202	QMV5005-006		6P Plug Ass'y
S201	QST2441-E01		Push Switch

6-(4) TXX-382□ Spectro Peak Indicator P.C. Board Ass'y

Note: TXX-382□-1 varies according to the areas employed. See note (1) when placing an order.

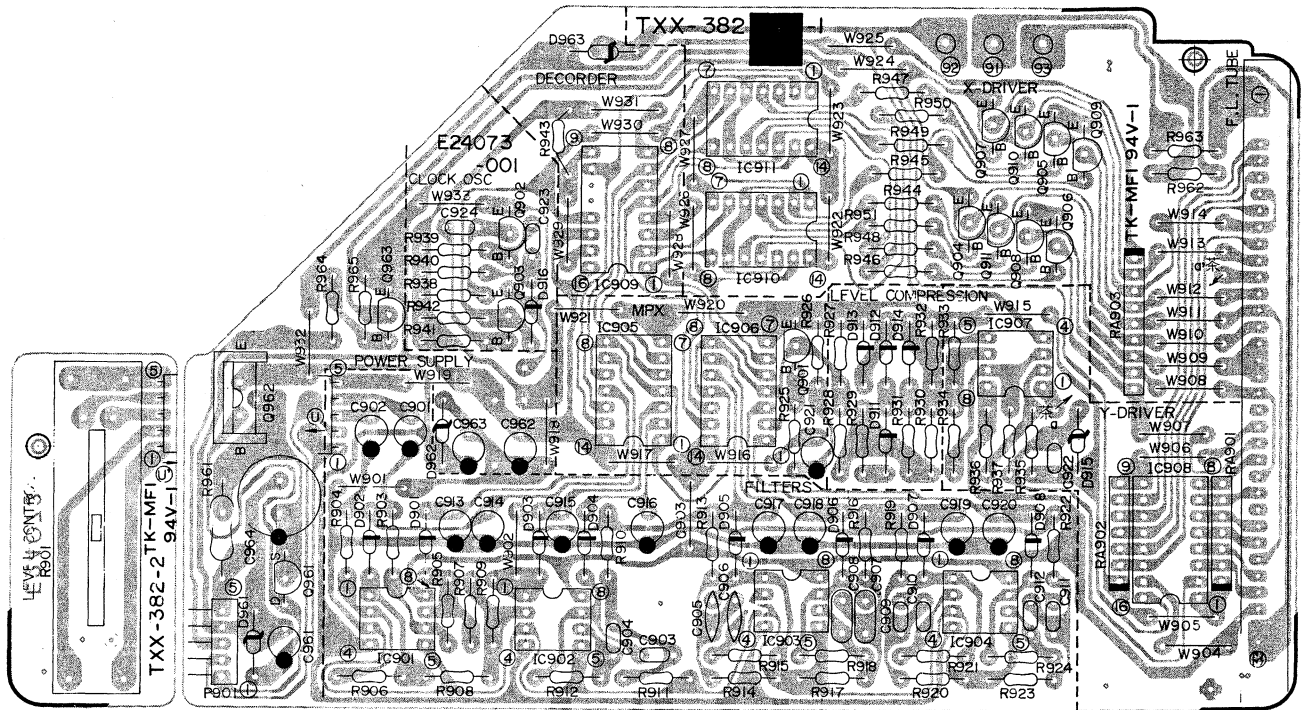


Fig. 10

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A. and Canada	TXX-382[A]
Europe, U.K., Australia and West Germany	TXX-382[C]
All Other Areas	TXX-382[B]

Note (2) The symbols (赤 , 黒 , 白 ... etc.) on P.C. Board surface are factory process only.

Transistors

Item No.	Part Number	Rating	Description	
				Maker
Q901	2SC458(C,D)		Silicon	Hitachi
Q902	2SA1029(C,D)		"	"
Q903	2SA1029(C,D)		"	"
Q904	2SA1029(C,D)		"	"
Q905	2SA1029(C,D)		"	"
Q906	2SA1029(C,D)		"	"
Q907	2SA1029(C,D)		"	"
Q908	2SA1029(C,D)		"	"
Q909	2SA1029(C,D)		"	"
Q910	2SA1029(C,D)		"	"
Q911	2SA1029(C,D)		"	"
Q961	2SK105(F)		F.E.T.	NEC
Q962	2SB507V(D,E)		Silicon	Sanyo
Q963	2SA1029(C,D)		"	Hitachi

Integrated Circuits

Item No.	Part Number	Rating	Description	
				Maker
IC901	NJM4558D			JRC
IC902	NJM4558D			"
IC903	NJM4558D			"
IC904	AN6552			Matsushita
IC905	TC4016BP			Toshiba
IC906	TC4016BP			"
IC907	AN6552			Matsushita
IC908	HA12010			Hitachi

Integrated Circuits

Item No.	Part Number	Rating	Description	Maker
IC909	TC4017BP			Toshiba
IC910	TC4011BP			"
IC911	TC4011BP			"

Diodes

Item No.	Part Number	Rating	Description	Maker
D901	1S2076-31		Silicon	Hitachi
D902	1S2076-31		"	"
D903	1S2076-31		"	"
D904	1S2076-31		"	"
D905	1S2076-31		"	"
D906	1S2076-31		"	"
D907	1S2076-31		"	"
D908	1S2076-31		"	"
D911	1S2076-31		"	"
D912	1S2076-31		"	"
D913	1S2076-31		"	"
D914	1S2076-31		"	"
D915	RD5.1EB2		Zener	NEC
D916	1S2076-31		Silicon	Hitachi
D961	RD27EB3		Zener	NEC
D962	RD13EB3		"	"
D963	RD5.1EB2		"	"

Capacitors

Item No.	Part Number	Rating	Description
C901	QET51HM-225	2.2 μ F 50 V	Electrolytic
C902	QET51HM-225	" "	"
C903	QFM81HK-273	0.027 μ F "	Mylar
C904	QFM81HK-273	" "	"
C905	QCS21HJ-471	470 pF "	Ceramic
C906	QCS21HJ-471	" "	"
C907	QFM81HK-683	0.068 μ F "	Mylar
C908	QFM81HK-683	" "	"
C909	QFM81HK-682	6800 pF "	"
C910	QFM81HK-682	" "	"
C911	QFM81HK-182	1800 pF "	"
C912	QFM81HK-182	" "	"
C913	QET51HM-225	2.2 μ F "	Electrolytic
C914	QET51HM-225	" "	"
C915	QET51HM-225	" "	"
C916	QET51HM-225	" "	"
C917	QET51HM-225	" "	"
C918	QET51HM-225	" "	"
C919	QET51HM-225	" "	"
C920	QET51HM-225	" "	"
C921	QET51EM-226	22 μ F 25 V	"
C922	QFM81HK-103	0.01 μ F 50 V	Mylar
C923	QFM81HK-472	4700 pF "	"
C924	QFM81HK-222	2200 pF "	"
C961	QET51HM-105	1 μ F "	Electrolytic
C962	QET51EM-226	22 μ F 25 V	"
C963	QET51EM-226	" "	"
C964	QET51HM-227	220 μ F 50 V	"

Resistors

Item No.	Part Number	Rating	Description
R901	QVZ5202-001	50 k Ω	Variable
R903	QRD141J-103S	10 k Ω 1/4 W	Carbon
R904	QRD141J-103S	" "	"

Resistors

Item No.	Part Number	Rating	Description
R905	QRD141J-753S	75 k Ω 1/4 W	Carbon
R906	QRD141J-753S	" "	"
R907	QRD141J-203S	20 k Ω "	"
R908	QRD141J-203S	" "	"
R909	QRD141J-103S	10 k Ω "	"
R910	QRD141J-333S	33 k Ω "	"
R911	QRD141J-182S	1.8 k Ω "	"
R912	QRD141J-304S	300 k Ω "	"
R913	QRD141J-303S	30 k Ω "	"
R914	QRD141J-182S	1.8 k Ω "	"
R915	QRD141J-274S	270 k Ω "	"
R916	QRD141J-563S	56 k Ω "	"
R917	QRD141J-332S	3.3 k Ω "	"
R918	QRD141J-514S	510 k Ω "	"
R919	QRD141J-333S	33 k Ω "	"
R920	QRD141J-182S	1.8 k Ω "	"
R921	QRD141J-304S	300 k Ω "	"
R922	QRD141J-333S	33 k Ω "	"
R923	QRD141J-182S	1.8 k Ω "	"
R924	QRD141J-304S	300 k Ω "	"
R925	QRD141J-562S	5.6 k Ω "	"
R926	QRD141J-243S	24 k Ω "	"
R927	QRD141J-104S	100 k Ω "	"
R928	QRD141J-473S	47 k Ω "	"
R929	QRD141J-272S	2.7 k Ω "	"
R930	QRD141J-224S	220 k Ω "	"
R931	QRD141J-392S	3.9 k Ω "	"
R932	QRD141J-683S	68 k Ω "	"
R933	QRD141J-123S	12 k Ω "	"
R934	QRD141J-133S	13 k Ω "	"
R935	QRD141J-331S	330 Ω "	"
R936	QRD141J-333S	33 k Ω "	"
R937	QRD141J-122S	1.2 k Ω "	"
R938	QRD141J-472S	4.7 k Ω "	"
R939	QRD141J-224S	220 k Ω "	"
R940	QRD141J-242S	2.4 k Ω "	"
R941	QRD141J-104S	100 k Ω "	"
R942	QRD141J-242S	2.4 k Ω "	"
R943	QRD141J-473S	47 k Ω "	"
R944	QRD141J-103S	10 k Ω "	"
R945	QRD148J-103S	" "	"
R946	QRD141J-103S	" "	"
R947	QRD141J-103S	" "	"
R948	QRD141J-103S	" "	"
R949	QRD148J-103S	" "	"
R950	QRD141J-103S	" "	"
R951	QRD141J-103S	" "	"
R961	QRG017J-220S	22 Ω 1 W	O.M. Film Δ
R962	QRD149J-3R3S	3.3 Ω 1/4 W	Carbon Δ (for A,B)
R962	QRD149J-3R9S	3.9 Ω "	" Δ (for C)
R963	QRD149J-2R7S	2.7 Ω "	" Δ (for A)
R964	QRD141J-103S	10 k Ω "	Carbon
R965	QRD141J-333S	33 k Ω "	"
RA901	ERGS6XK-334	330 k Ω "	Resistor Array
RA902	ERGS6XK-334	" "	"
RA903	ERGS8XK-123	12 k Ω "	"

Others

Item No.	Part Number	Rating	Description
P901	E24073-001		Circuit Board
	ELU0001-009		Fluorescent Lamp
	SBSB3008Z		Tapping Screw
	E67357-002		Heat Sink
	QMV5004-005		5 Pin Plug Ass'y

6-(5) TXX-396A Volume Indicator P.C.Board Ass'y

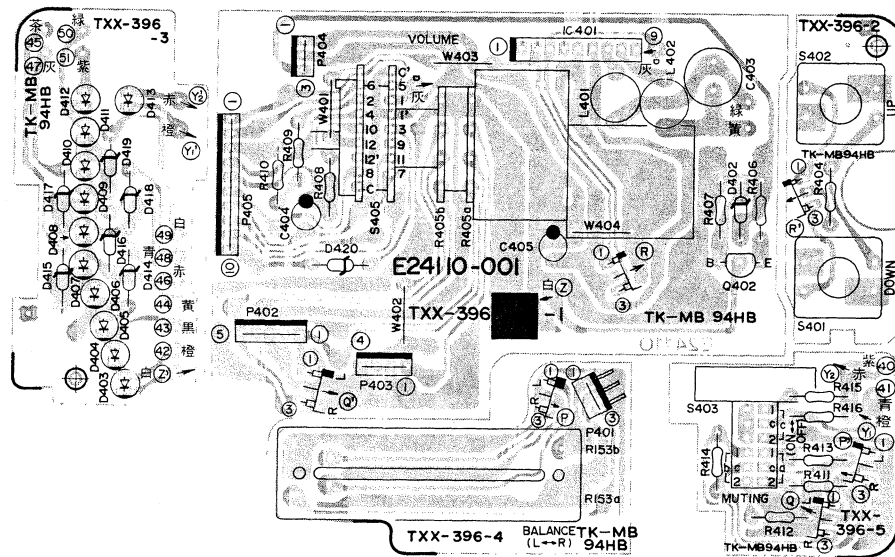


Fig. 11

Note: The symbols (赤, 黒, 白 ... etc.) on P.C. Board surface are factory process only.

Transistor

Item No.	Part Number	Rating	Description
Q402	2SC458(C,D)		Silicon Maker Hitachi

Capacitors

Item No.	Part Number	Rating	Description
C403	QEZ0046-106	10 μ F 50 V	N.P. Electrolytic
C404	QET51HM-475	4.7 μ F "	Electrolytic
C405	QET51AM-476	47 μ F 10 V	"

Integrated Circuit

Item No.	Part Number	Rating	Description
IC401	BA6208A		Maker ROHM

Resistors

Item No.	Part Number	Rating	Description
R153	QVT1C6M-1F5	250 k Ω	Variable
R404	QRD148J-472S	4.7 k Ω 1/4 W	Carbon
R405	QVZ1716-003	100 k Ω	Variable
R406	QRD148J-121S	120 Ω 1/4 W	Carbon
R407	QRD148J-332S	3.3 Ω "	"
R408	QRD148J-220S	22 Ω "	"
R409	QRD148J-391S	390 Ω "	"
R410	QRD148J-391S	" "	"
R411	QRD148J-103S	10 k Ω "	"
R412	QRD148J-103S	" "	"
R413	QRD148J-823S	82 k Ω "	"
R414	QRD148J-823S	" "	"
R415	QRD148J-390S	39 Ω "	"
R416	QRD148J-271S	270 Ω "	"

Diodes

Item No.	Part Number	Rating	Description
D402	RD2.7EB2		Zener Maker NEC
D403	SLR-34MC5F		LED ROHM
D404	SLR-34MC5F		" "
D405	SLR-34MC5F		" "
D406	SLR-34MC5F		" "
D407	SLR-34MC5F		" "
D408	SLR-34MC5F		" "
D409	SLR-34MC5F		" "
D410	SLR-34MC5F		" "
D411	SLR-34MC5F		" "
D412	SLR-34MC5F		" "
D413	SLR-34DC5F		" "
D414	RD13EB3		Zener NEC
D415	RD11EB3		" "
D416	RD9.1EB3		" "
D417	RD6.8EB3		" "
D418	RD4.7EB2		" "
D419	RD2.7EB2		" "
D420	RD15EB3		" "

Others

Item No.	Part Number	Rating	Description
	E24110-001		Circuit Board
	E69236-001		Bracket
	E69443-001		LED Holder
	SBSB3008Z		Tapping Screw
P401	QMV5004-003		3P Plug Ass'y
P402	QMV5005-005		5P Plug Ass'y
P403	QMV5005-004		4P Plug Ass'y
P404	QMV5005-003		3P Plug Ass'y
P405	QMV5005-010		10P Plug Ass'y
S401	ESP0001-005		Push Switch
S402	ESP0001-005		"
S403	QST5101-E02		"

Coils

Item No.	Part Number	Rating	Description
L401	EQL2002-200K		Inductor
L402	EQL2002-200K		"

6-(6) TPS-255E AC P.C. Board Ass'y (For U.S.A. & Canada)

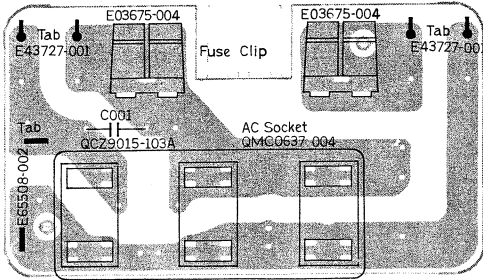
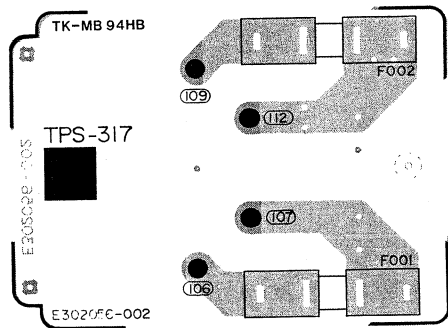


Fig. 12

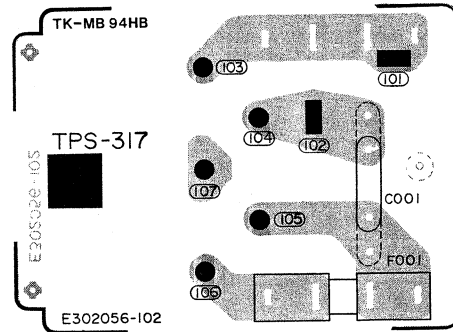
Item No.	Part Number	Rating	Description
J811	QMC0637-004		AC Socket Δ
C001	QCZ9014-103A	0.01 μ F	Ceramic Δ
	E03675-004		Fuse Clip Δ
	E66003-004		Circuit Board Δ

6-(7) TPS-317 Fuse P.C. Board Ass'y

Note: TPS-317 varies according to the areas employed. See note (1) when placing an order.



(for A)
Fig. 13



(for D & EBS)
Fig. 14

Note (1)

Designated Areas	P.C. Board Ass'y
U.S. Military Market & Other Countries	TPS-317 A
Europe, Australia	TPS-317 D
U.K.	TPS-317 EBS

Item No.	Part Number	Rating	Description
C001	QFZ9016-103	0.01 μ F	Film (for B) Δ
C001	QFZ9016-103BS	"	" (for CBS) Δ
	EMG7331-001		Fuse Clip Δ
	E302056-002		Circuit Board (for)
	E303056-102		" (for D)
	E302056-102BS		" (for EBS)

6-(8) TPS-318A Voltage Selector P.C. Board Ass'y (For U.S. Military Market & Other Countries)

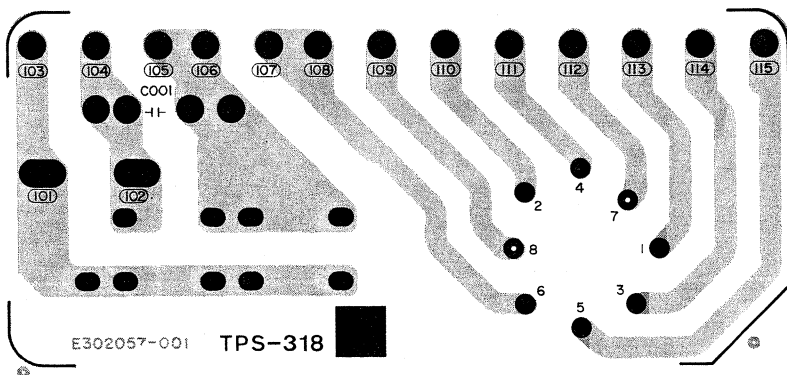
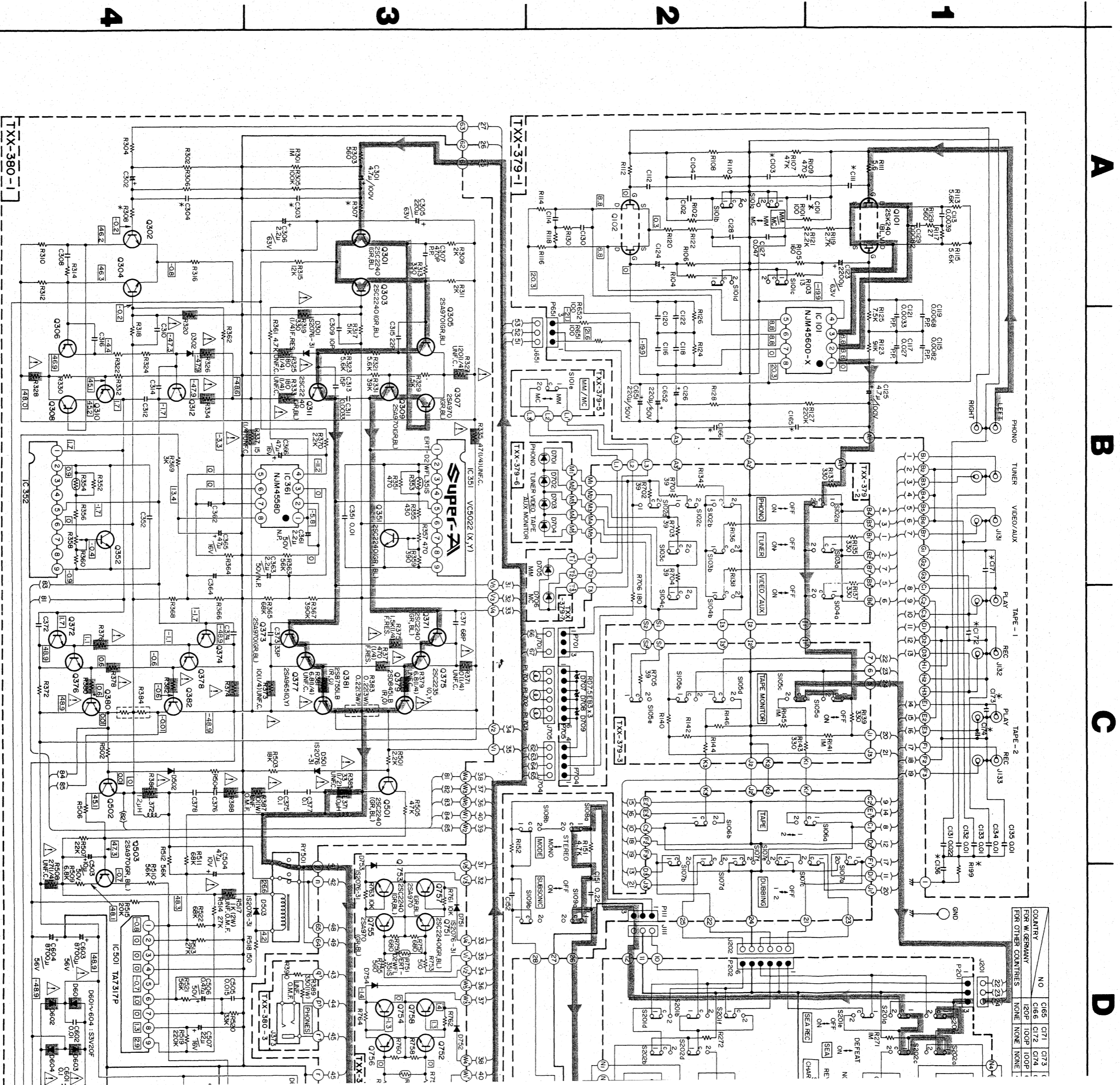


Fig. 15

Item No.	Part Number	Rating	Description
C001	QSR0085-006U	0.01 μ F	Voltage Selector Δ
	QMC0637-004		AC Socket Δ
	QFH53BM-103M		Metalized Mylar Δ
	E302057-001		Circuit Board

7. A-X50 Schematic Diagram



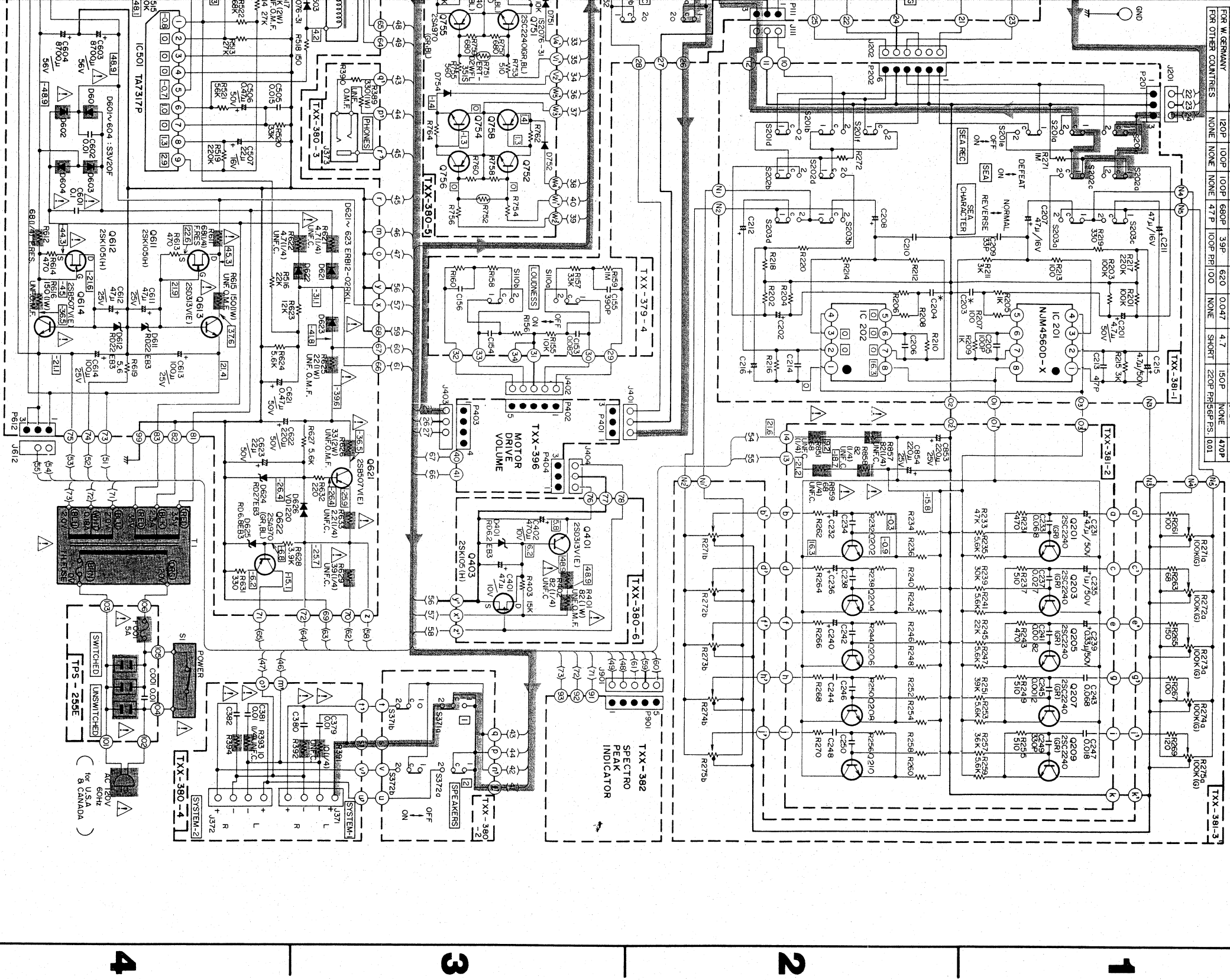
Printed Circuit Board Ass'y Locations

P.C. Board Ass'y	Description	Page
TXX-379□	Equalizer Amp. P.C. Board Ass'y	6
TXX-380□	Power Amp. P.C. Board Ass'y	8
TXX-381□	SEA P.C. Board Ass'y	11
TXX-382□	Spectro Peak Indicator P.C. Board Ass'y	13
TXX-396A	Volume Indicator P.C. Board Ass'y	15
TPS-255E	AC P.C. Board Ass'y	16
TPS-317□	Fuse P.C. Board Ass'y	16
TPS-318A	Volume Selector P.C. Board Ass'y	16

Notes:

1. Voltage values in are positive.
 2. Voltage values in are negative.
 3. indicates positive B power supply.
 4. indicates negative B power supply.
 5. indicates signal path.
 6. When replacing the parts in the darkened area () and those marked with , be sure to use the designated parts to ensure safety.
 7. Parts in red indicate transistors or ICs.
 8. This is the standard circuit diagram.
- The design and contents are subject to change without notice.

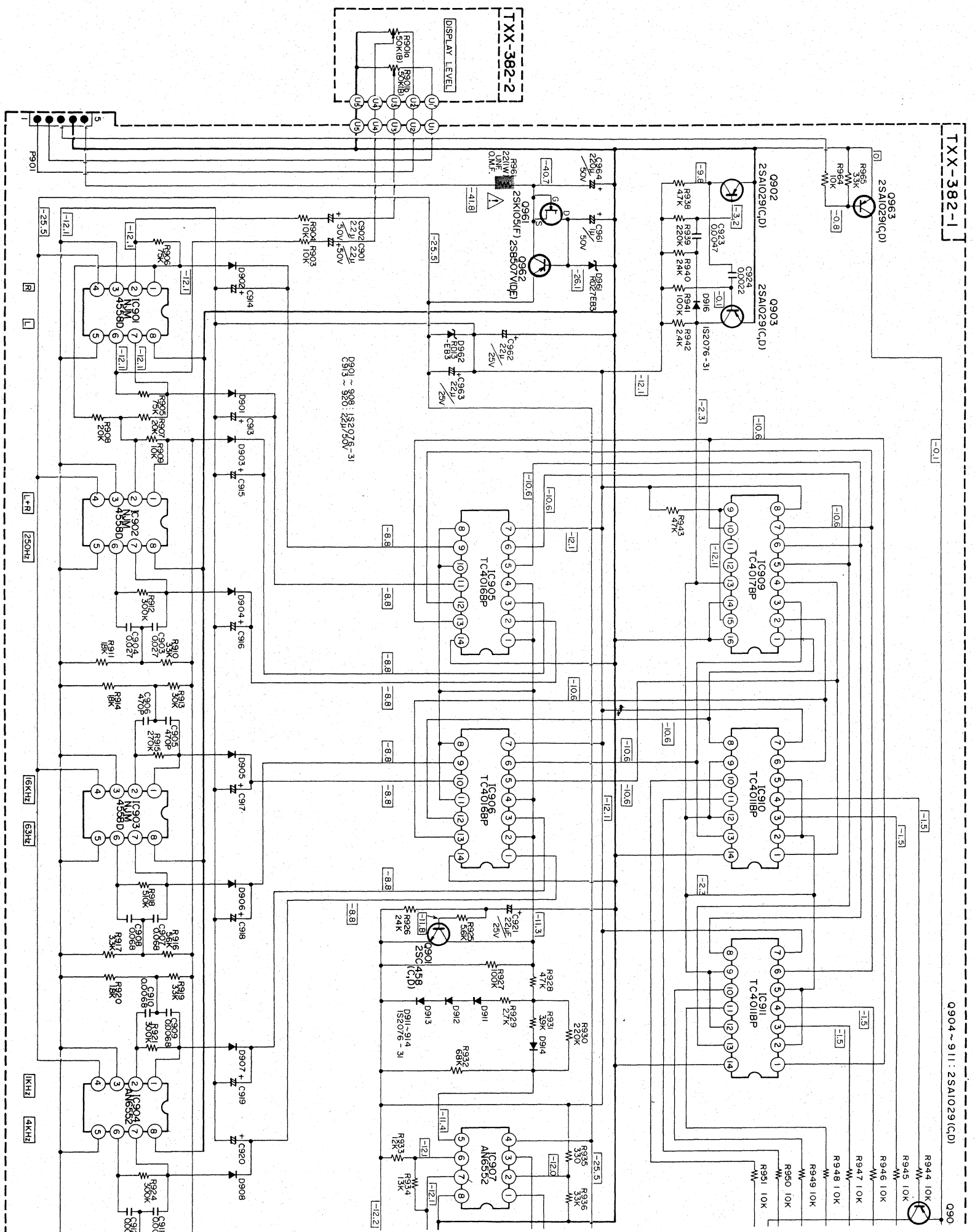
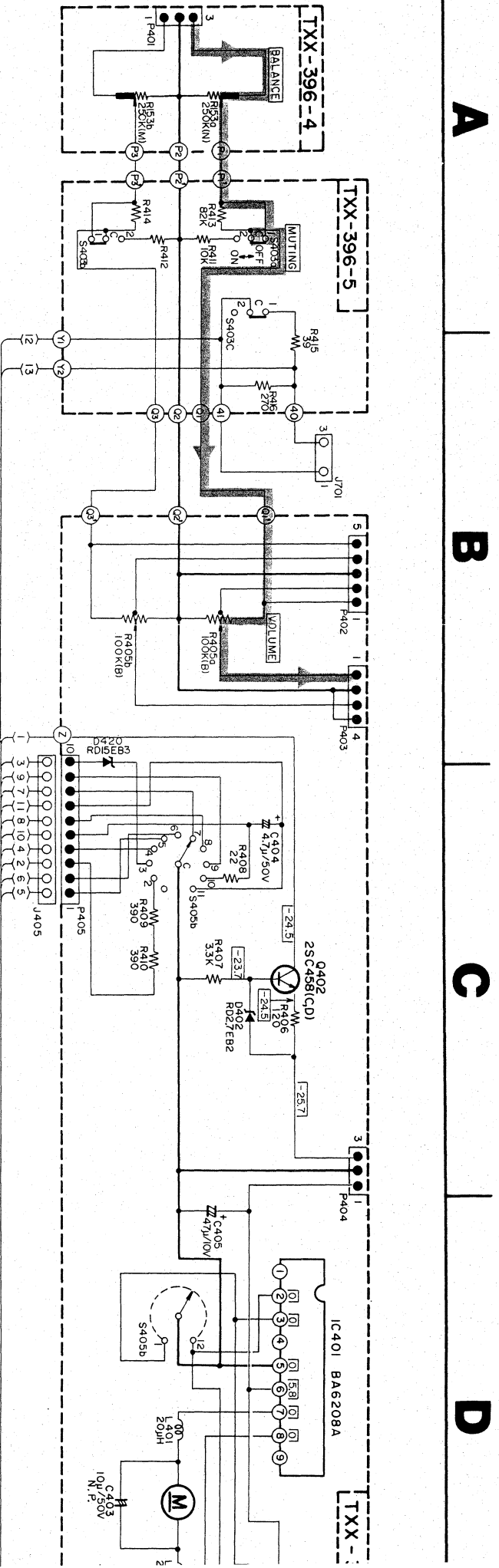
COUNTRY	N.O.	C165	C171	C173	C203	C303	R307	C136	R199	C103	C111	C101
FOR W. GERMANY		C166	C172	C174	C204	C304	R308	0.047	4.7	150P	NONE	470P
FOR OTHER COUNTRIES		NONE	NONE	NONE	47 P	100P	100	NONE	SHORT	200P	PR156P	PS1.001



D E F

1 2 3 4

A-X50 Schematic Diagram



P.C. Board Ass'y	Description	Page
TXX-3790	Equalizer Amp. P.C. Board Ass'y	6
TXX-3800	Power Amp. P.C. Board Ass'y	8
TXX-3810	SEA P.C. Board Ass'y	11
TXX-3820	Spectro Peak Indicator P.C. Board Ass'y	13
TXX-396A	Volume Indicator P.C. Board Ass'y	15
TPS-255E	AC P.C. Board Ass'y	16
TPS-317	Fuse P.C. Board Ass'y	16
TPS-318A	Volume Selector P.C. Board Ass'y	16

Printed Circuit Board Ass'y. Locations

A

B

C

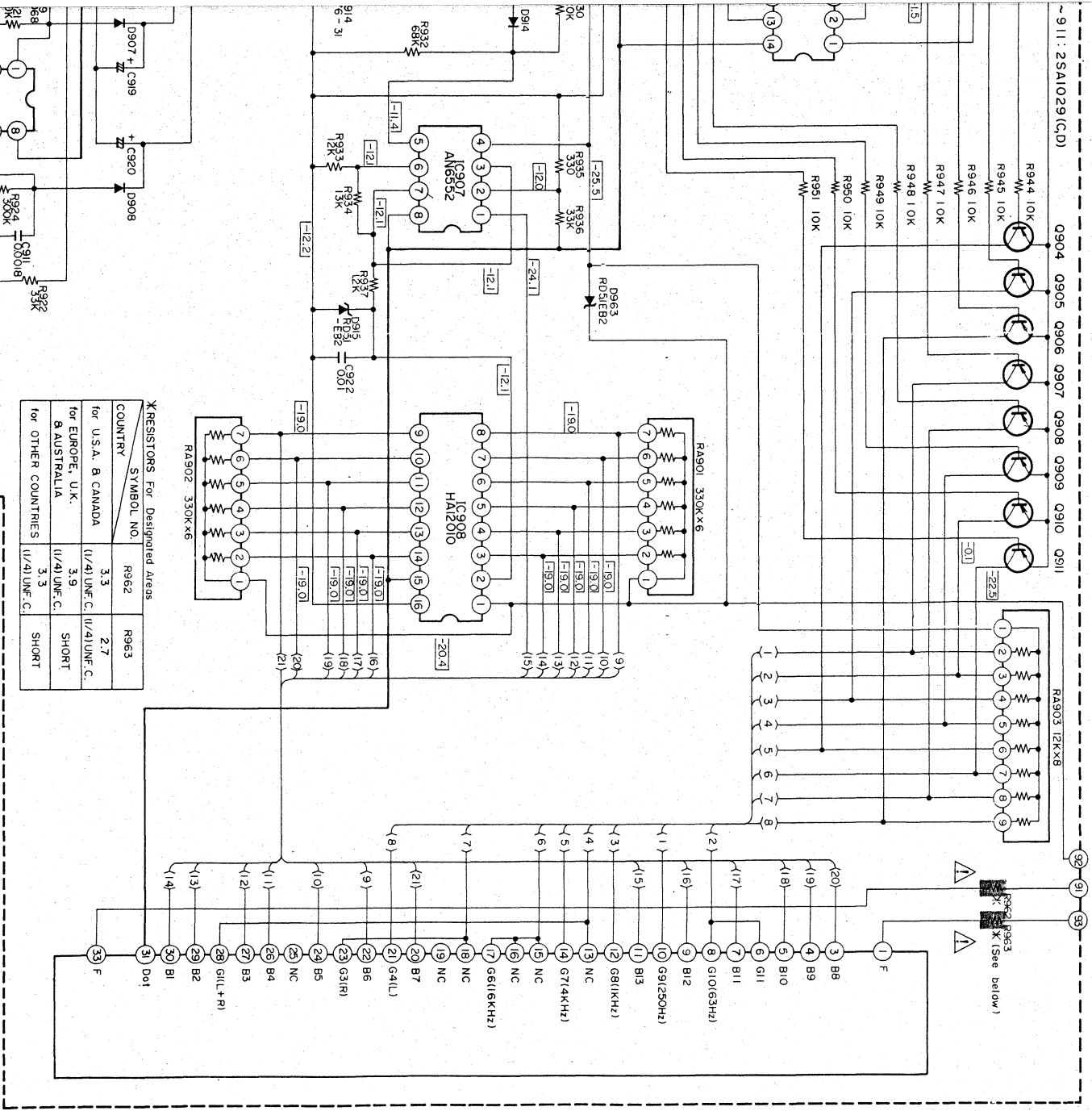
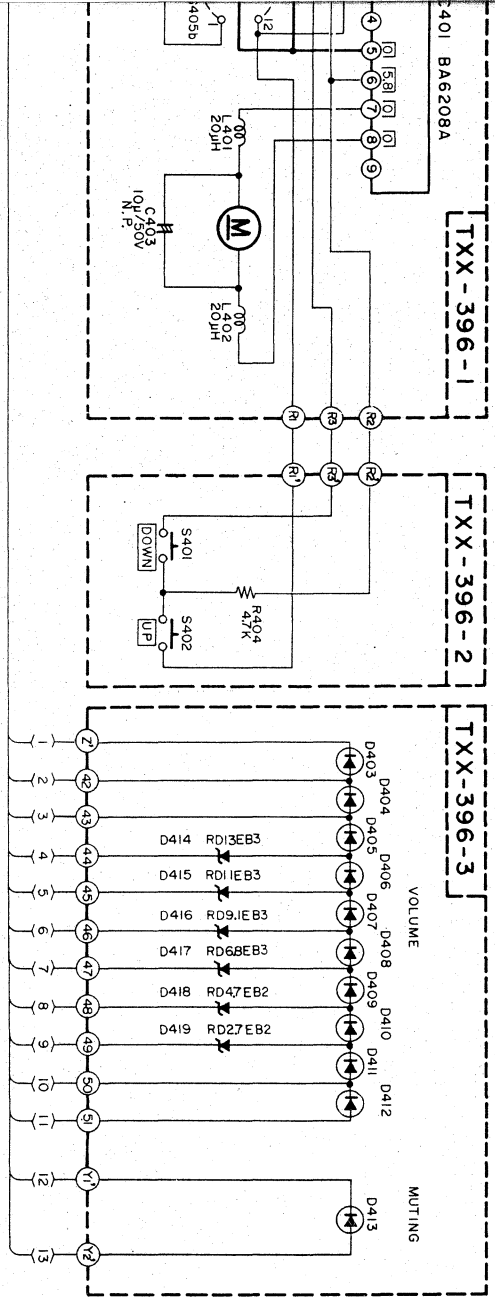
D

- Notes:**
1. Voltage values in \square are positive.
 2. Voltage values in \square are negative.
 3. \square indicates positive B power supply.
 4. \square indicates negative B power supply.
 5. \square indicates signal path.
 6. When replacing the parts in the darkened area (\blacksquare) and those marked with Δ , be sure to use the designated parts to ensure safety.
 7. Parts in red indicate transistors or ICs.
 8. This is the standard circuit diagram. The design and contents are subject to change without notice.

D

E

F



RESISTORS for Designated Areas

COUNTRY	SYMBOL NO.	R962	R963
for U.S.A. & CANADA		3.3	2.7
for EUROPE, U.K.	(1/4) UNF.C.	3.9	SHORT
for AUSTRALIA	(1/4) UNF.C.	3.3	SHORT
for OTHER COUNTRIES	(1/4) UNF.C.	3.3	SHORT

D

E

F

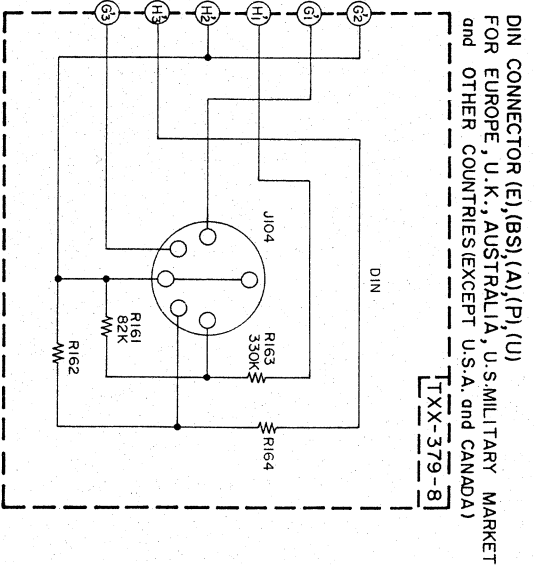
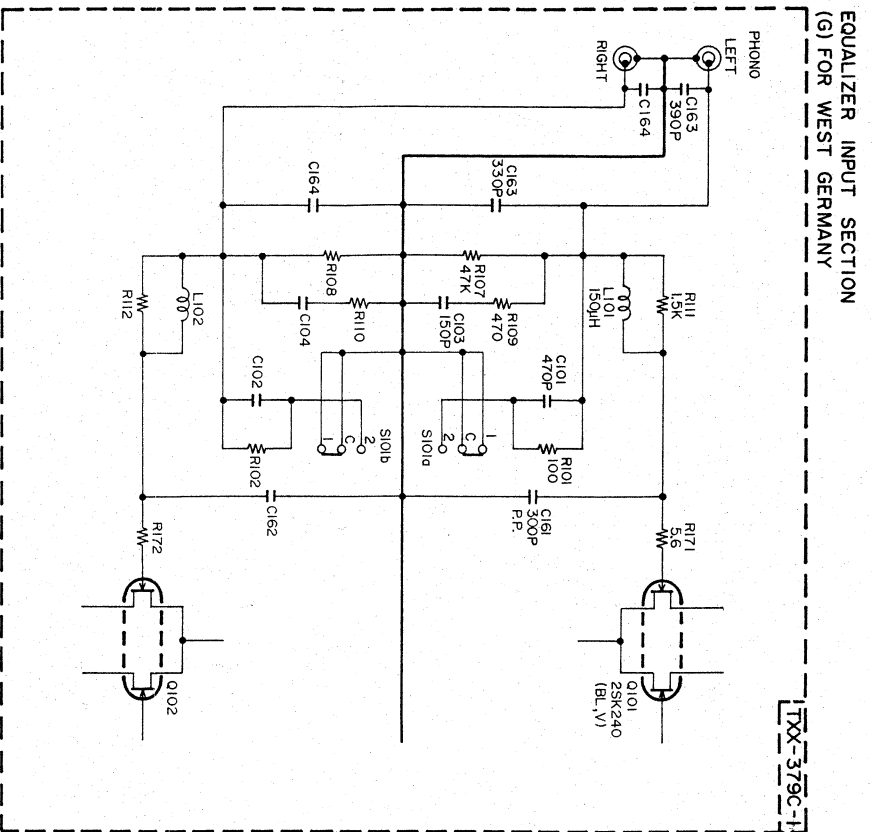
4

3

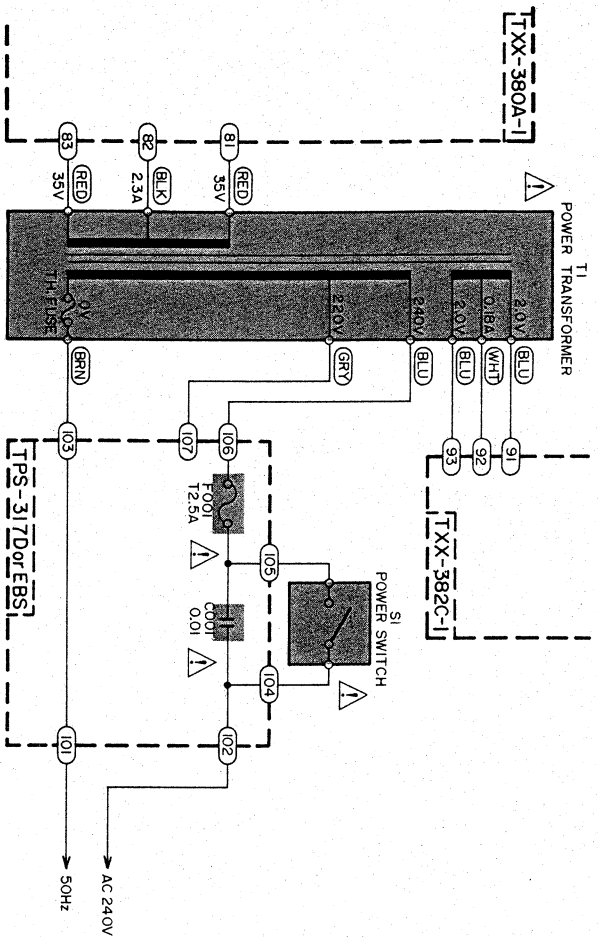
2

1

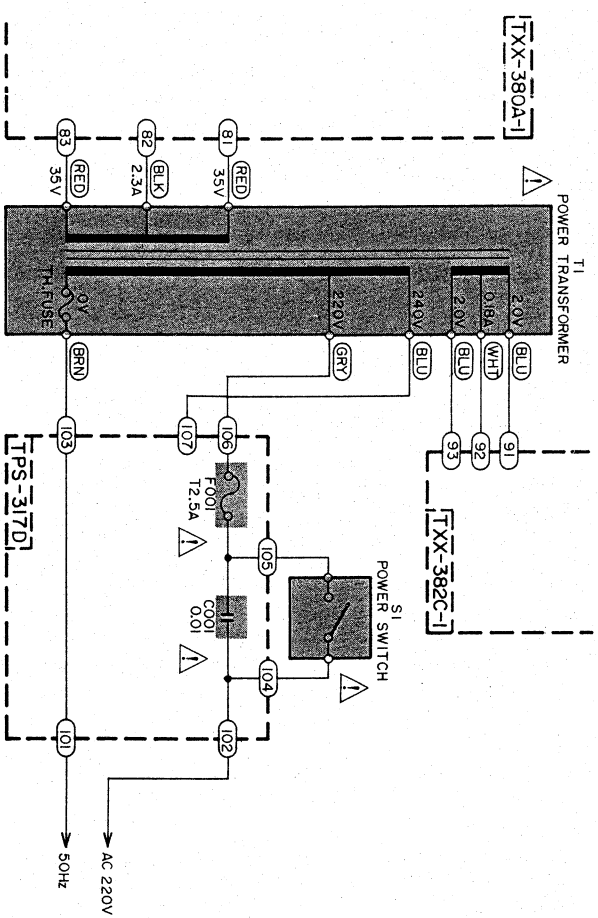
A-X50 Schematic Diagram



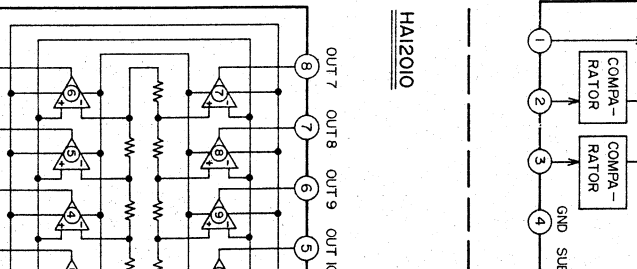
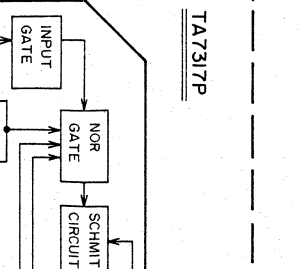
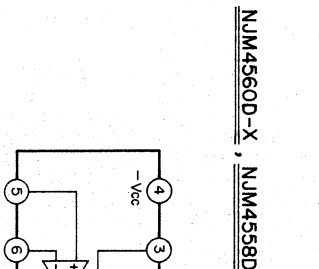
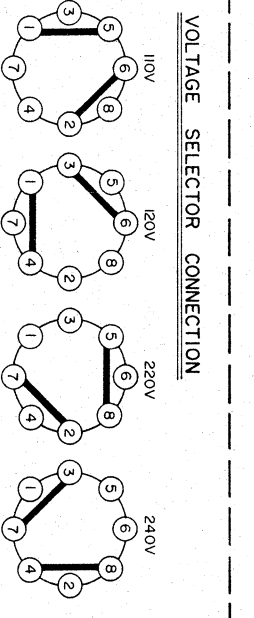
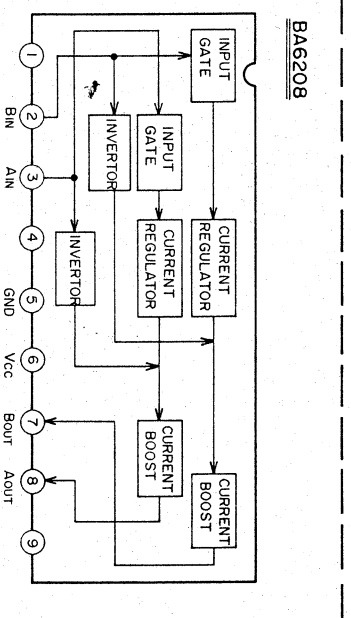
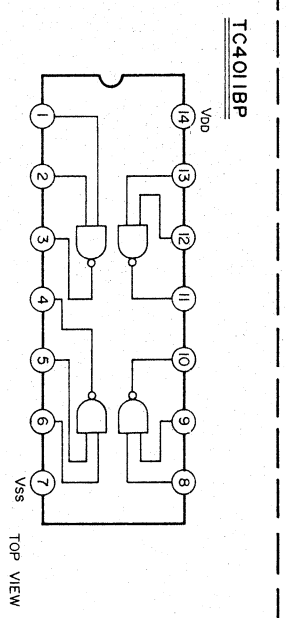
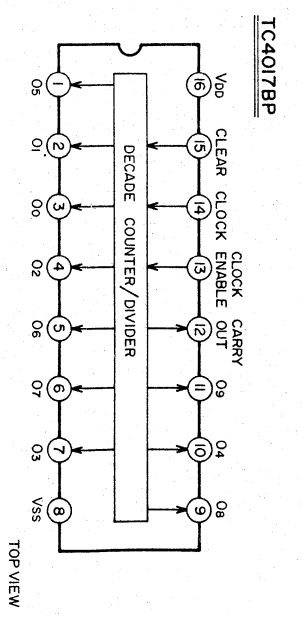
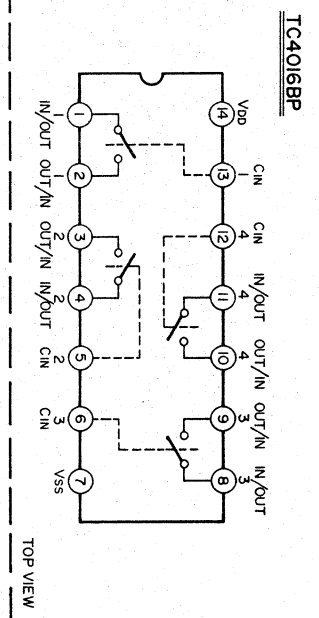
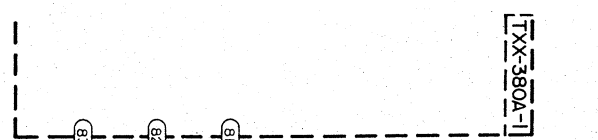
FOR U.K. and AUSTRALIA



FOR EUROPE

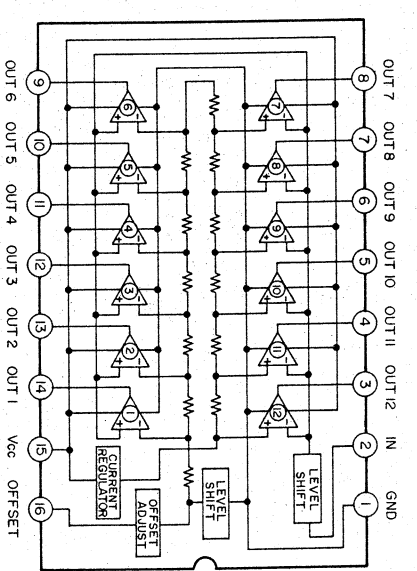
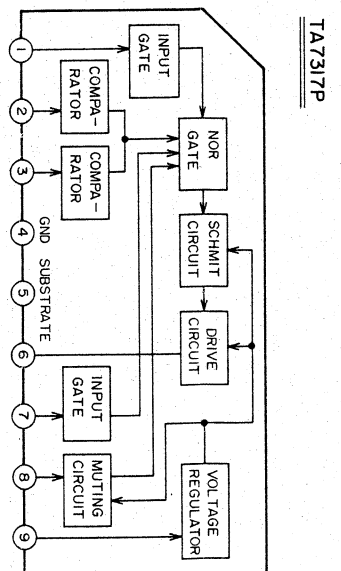
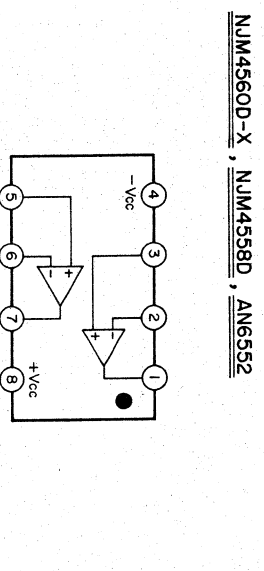


FOR

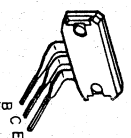
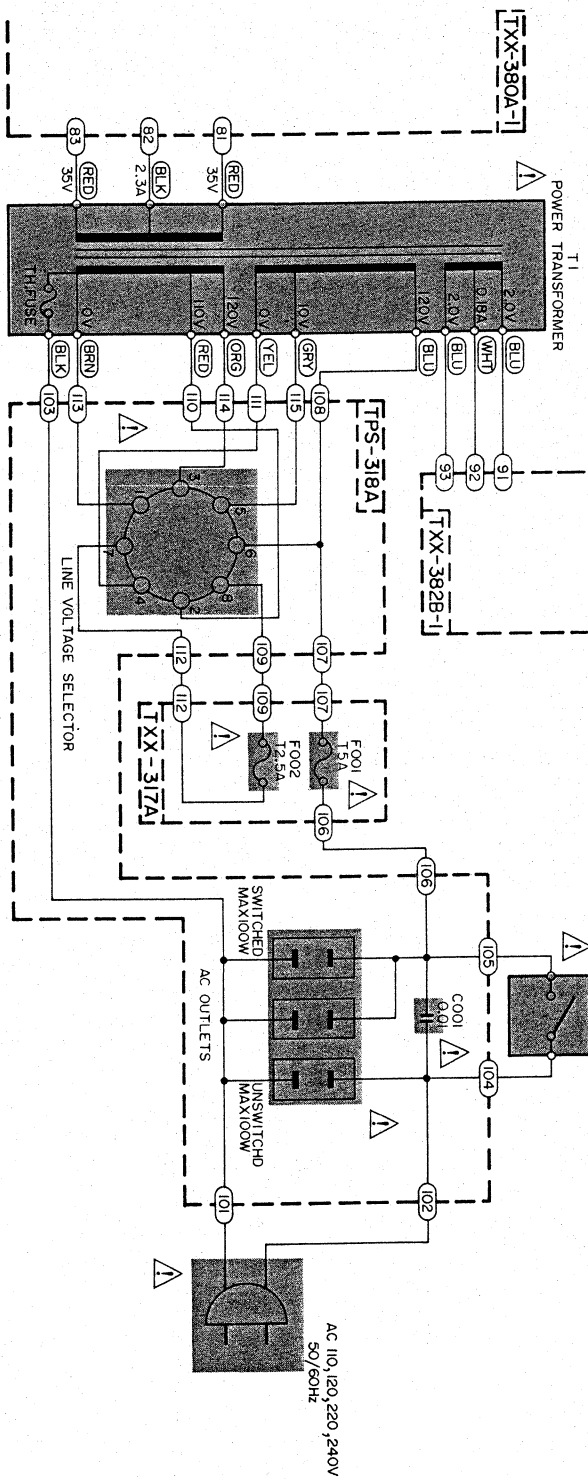


Notes:
1. When replacing the parts in the darkened area (■) and those marked with Δ, be sure to use the designated parts to ensure safety.

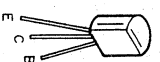
2. Parts in red indicate transistors or ICs.
3. This is the standard circuit diagram. The design and contents are subject to change without notice.



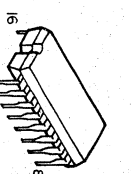
FOR OTHER COUNTRIES (EXCEPT U.S.A. and CANADA)



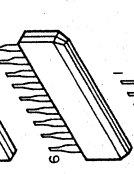
25D84SLBR,O1 0379, 380
25F75SLBR,O1 0381, 382



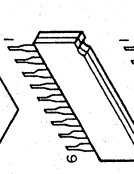
25C2240IGR,BL 0201 ~ 210
25C2240IGR,BL 0301 ~ 304
25A1094(D,E) 0311, 312
25C2546E,F 0605 ~ 610
25C2240IGR,BL 0611, 612
25C2240IGR,BL 0351, 352
25A1029(C,D) 0371, 372
25A970IGR,BL 0501, 502
25A970IGR,BL 0305 ~ 310
25A970IGR,BL 0373, 374
25C2235(I,Y) 0503
25A965(I,Y) 0622
25A965(I,Y) 0375, 376
25C2240IGR,BL 0377, 378
25C2240IGR,BL 0751 ~ 754
25A970IGR,BL 0755 ~ 758
25A1029(C,D) 0902 ~ 911, 0963
25C458(C,D) 0402, 901



HA12010 IC908
TC4017BP IC909



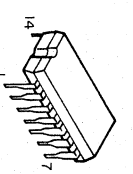
TA7317P IC501



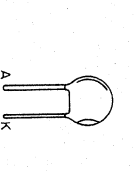
VC5022(I,X,Y) IC351, 352
BA6208A IC401



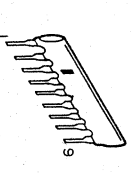
NUM4560D-X IC101
NUM4558D IC201, 202
AN6552 IC361
IC901 ~ 904
IC907



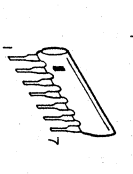
TC4011BP IC910, 911
TC4016BP IC905, 906



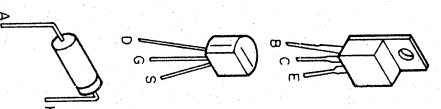
VD1220 D626



ERG88XK-123 RA903



ERG56XK-334 RA901, 902



25K105(I,H) 0611, 612, 0403
25K105(F) 0961

33V20F
ERRB2-Q2RKL
IS2076-31

0601 ~ 604
0621 ~ 623
0301, 302
0501, 502
0751 ~ 754
0503
0901 ~ 908
0916
0911 ~ 914
0415, 420
0402
0419
0707 ~ 709

RD11EB3
RD27EB2
RD75EB3
RD91EB3
RD47EB2
RD68EB3
RD13EB3
RD62EB3
RD27EB3
RD51EB2
RD915

8. Packing Materials and Part Numbers

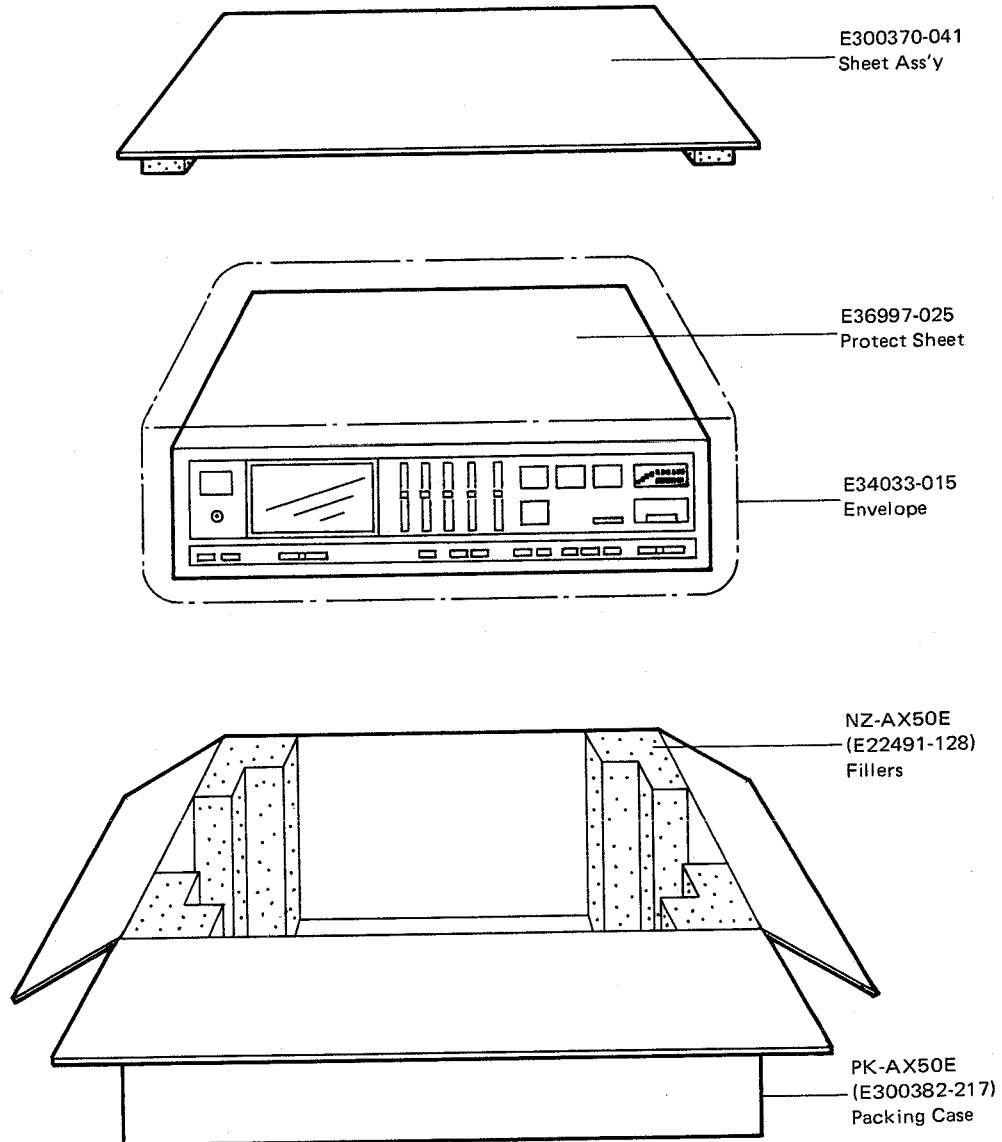


Fig. 16

9. Accessories List

Description	U.S.A. and Canada	Europe and West Germany	U.K.	Australia	U.S. Military Market and Other Countries
Instruction Book	E30580-917A	E30580-917A	E30580-917ABS	E30580-917A	E30580-917A
Warranty Card	BT20048 (for U.S.A.) BT20025E (for Canada)	BT20054-002A (for W. Germany only)	BT20013C	BT20029C	BT20048 (for U.S. Military Market only)
Service Information Card	BT20046A (for U.S.A. only)	—	—	—	BT20046A (for U.S. Military Market only)
JVC Safety Instruction	BT20044D (for U.S.A. only)	—	—	—	—
Envelope for Instruction Book	E41202-2	E41202-2	E41202-2	E41202-2	E41202-2
Envelope for Warranty Card	E66416-003	—	—	—	—
Siemens Plug	—	—	—	—	E04056

10. Parts List with Specified Numbers for Designated Areas

Item No.	Description	U.S.A. & Canada	U.K.	Europe & West Germany	Australia	U.S. Military Market & Other Countries
1	Power Transformer \triangle	ETP1200-03JA	ETP1200-03EABS	ETP1200-03EA	ETP1200-03EA	ETP1200-03FA
2	Power Switch \triangle	QSP1110-310	QSP1106-002BS	QSP1106-002	QSP1106-002	QSP1106-002
3	Switch Cover \triangle	—	E67520-002	E67520-002	E67520-002	—
4	Fuse \triangle	QMF61U1-5R0	QMF51A2-2R5LBS	QMF51A2-2R5L	QMF51A2-2R5L	QMF51A2-5R0S or QMF51A2-2R5L
5	Rear Panel	E24127-001	E24127-002	E24127-002	E24127-002	E24127-003
6	Power Cord \triangle	QMP1200-200	QMP9017-008BS	QMP3900-200	QMP2560-244	QMP7600-250
7	Cord Stopper \triangle	QHS3876-162	QHS3876-162BS	QHS3876-162	QHS3876-162	QHS3876-162
8	Din Socket	—	E03623-003	E03623-003	E03623-003	E03623-003
9	AC Outlet \triangle	QMC0637-004	—	—	—	QMC0637-004
10	Voltage Selector \triangle	—	—	—	—	QSR0085-006U

\triangle : Safety Parts

11. Power Specifications

Areas	U.S.A. & Canada	U.K. & Australia	Europe & West Germany	U.S. Military Market & Other Countries
Line Voltage & Frequency	AC120 V, 60 Hz	AC240 V, 50 Hz	AC220 V, 50 Hz	AC110/120/220/240 V Selectable, 50/60 Hz
Power Consumption	30 watts, 390 VA	380 watts	380 watts	380 watts

JVC

VICTOR COMPANY OF JAPAN, LIMITED, TOKYO, JAPAN