

JVC

Contents

SERVICE MANUAL

MODEL
JA-S44

DC STEREO INTEGRATED AMPLIFIER



No. 2451
MAR. 1978

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Warning!

When replacing the parts marked with \triangle , be sure to use the designated parts to ensure safety.

POWER SPECIFICATIONS

Designated Areas	Line Voltage & Frequency	Power Consumption
U.S.A., CANADA	AC 120 V, 60 Hz	230 watts, 287 VA
U.K., AUSTRALIA	AC 240 V \sim , 50 Hz	508 watts
CONTINENTAL EUROPE SCANDINAVIAN COUNTRIES FINLAND	AC 220 V \sim , 50 Hz	508 watts
OTHER AREAS	AC 110/120/220/240 V Selectable 50/60 Hz	508 watts

1. Specifications

CIRCUITRY

POWER AMPLIFIER SECTION

Output Power:

Total Harmonic Distortion (1 kHz):

Intermodulation Distortion:

Damping Factor:

Load Impedance:

DC Power
Amplifier

45 watts per channel, min. RMS, both channels driven, into 8 Ω from 20 Hz to 20,000 Hz with no more than 0.02 % total harmonic distortion

48 watts RMS per channel into 8 Ω (1 kHz, 0.02 % THD)
60 watts RMS per channel into 4 Ω (1 kHz, 0.05 % THD)

0.005 % at 45 W Output

0.02 % at 1 W Output

0.01 % at 45 W Output

More than 30 (20 – 20 kHz, 8 Ω)

4 – 16 Ω (SYSTEM 1 or 2)

8 – 16 Ω (SYSTEM 1 + 2)

PREAMPLIFIER SECTION

Input Sensitivity (Impedance)

PHONO:

TUNER:

AUX:

TAPE PLAY:

Phono Overload Capacity:

RIAA Phono Equalization:

Output Level

TAPE REC:

Signal-to-Noise Ratio (RMS)

PHONO (IHF A Network):

TUNER, AUX, TAPE PLAY

(IHF A Network):

Frequency Response:

Tone Controls:

Subsonic Filter:

Loudness Control (-30 dB Volume Control):

2.5 mV (47 k Ω)

160 mV (50 k Ω)

160 mV (50 k Ω)

160 mV (50 k Ω)

200 mV (RMS)

± 0.3 dB from RIAA Curve

160 mV

80 dB

100 dB

5 Hz – 100 kHz (+0, -2 dB)

S.E.A.: Center Frequencies 40, 250, 1 k, 5 k, 15 kHz

S.E.A.: Control Range ± 12 dB

-6 dB/oct. at 18 Hz

+6 dB at 100 Hz, +4 dB at 10 kHz

GENERAL

Power Source:

Dimensions (H x W x D):

Weight:

See page 1.

149 x 420 x 317 (mm)

6 x 16-3/4 x 12-5/8 (inches)

10 kg (22 lbs.)

2. Block Diagram

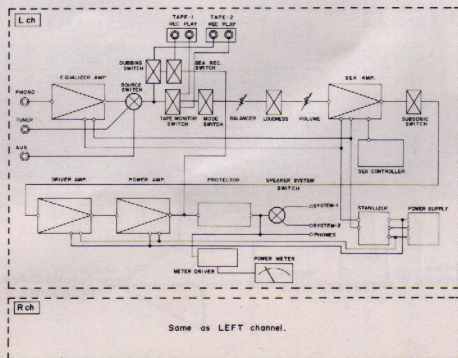


Fig. 1

3. Removal of Top Cover and Bottom Plates

Procedure (Top Cover)

1. Remove 6 screws (Item No. 1) from the top cover (Item No. 2).
2. Remove 2 screws (Item No. 3) from the rear panel back of top cover.

Procedure (Bottom Plate)

1. Remove 2 screws (Item No. 4) from the sub bottom plate (Item No. 5).
2. Remove 7 screws (Item No. 6) from the bottom plate (Item No. 7).

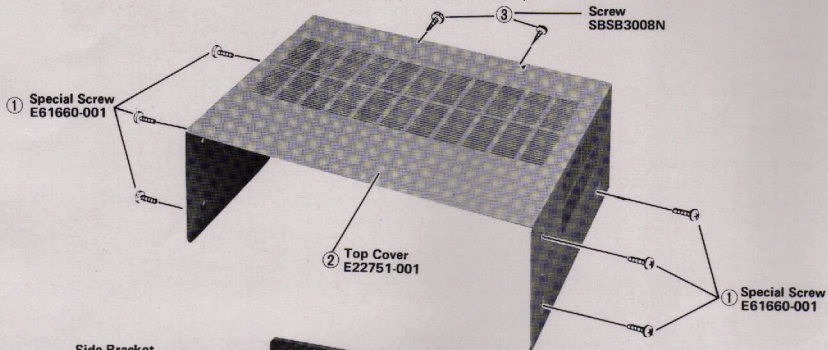


Fig. 2

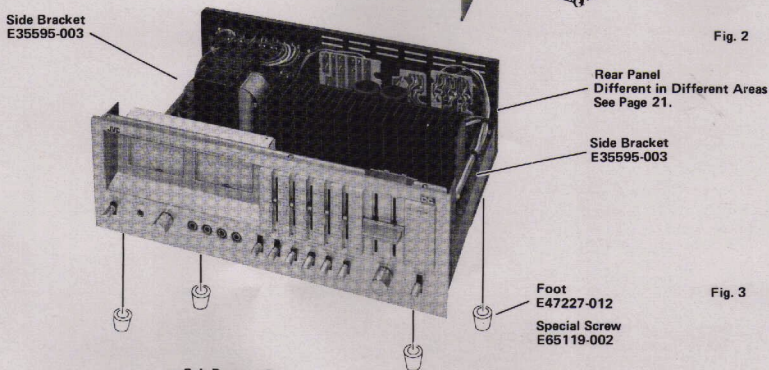


Fig. 3

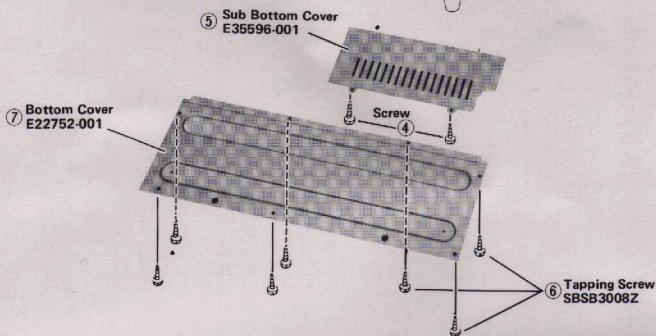


Fig. 4

4. Main Parts Locations

Top View

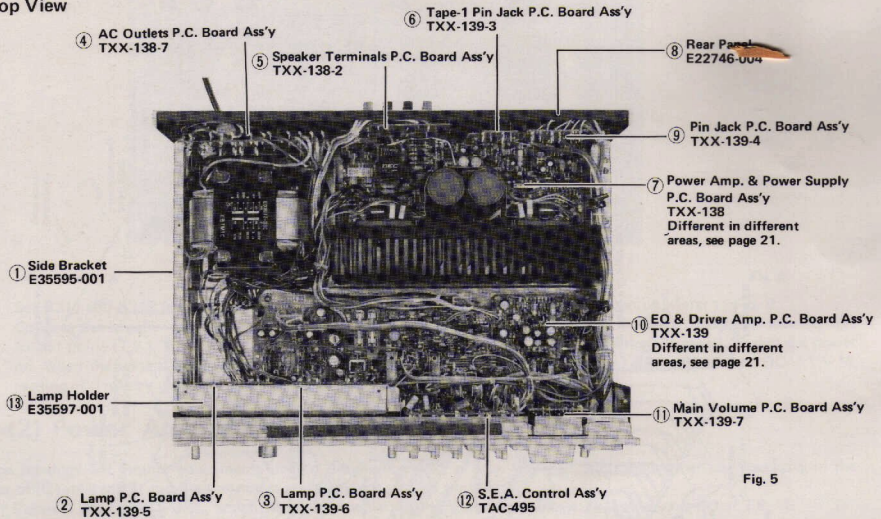


Fig. 5

Bottom View

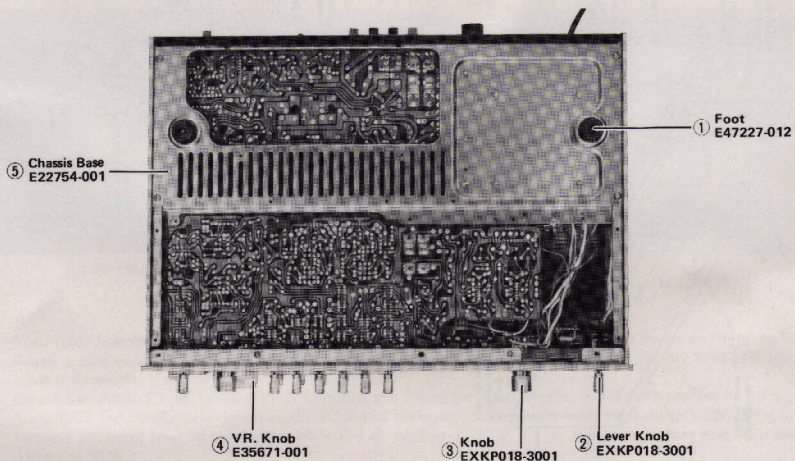
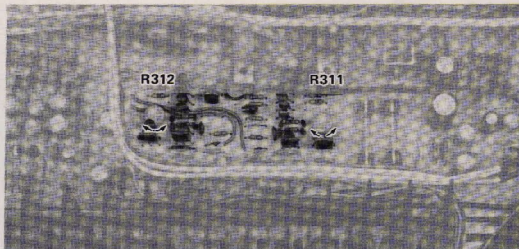


Fig. 6

6. Adjustment Procedures

6-(1) Power Amp. Center Voltage



TXX-139-1
Power Amp. P.C. Board Ass'y

Fig. 8

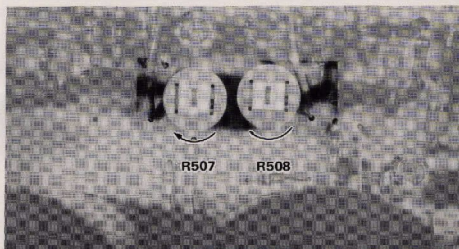
- 1) Set R311 and R312 (semi-fixed resistors) to center position before switching the power on. Refer to Fig. 8.
- 2) Connect the negative lead of a high sensitivity DC V.T.V.M., which can accurately indicate voltage less than 10 mV, to test point (T.P.) "C", and its positive lead to T.P. "E" left channel (or T.P. "A" right channel). Switch the power on. When the voltage has been stabilized after the power has been switched on, adjust R311, R312 for a DC V.T.V.M. reading of 0 mV by gradually turning them.

6-(2) Power Amp. Idling Current

This set does not require adjustments due to the employment of ICs. However, adjustments become necessary in the case of IC replacement and the test points are offered for such an occasion.

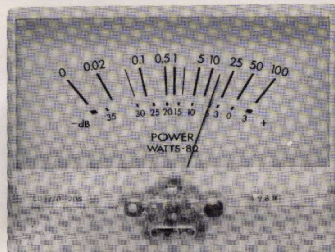
- 1) Connect the DC V.T.V.M., which was used when adjusting the center voltage, to the left channel of T.P. "E" - "D" (or T.P. "A" - "B").
- 2) After the power has been switched on for 2 or 3 minutes, confirm that the DC V.T.V.M. reading is between 6.6 mV and 17.6 mV. If the DC V.T.V.M. reading is out of this range, check the transistors of the driver amplifier.

6-(3) Power Meter



TXX-138-1 Driver Amp. P.C. Board Ass'y

Fig. 9



Power Meter

Fig. 10

- 1) Turn R507 and R508 (semi-fixed resistors) fully counterclockwise before switching the power on. Refer to Fig. 9.
- 2) Apply a sine wave of 1 kHz to the AUX or TUNER terminals, while connecting a dummy load of 8 ohms to the speaker terminals.
- 3) Connect an AC V.T.V.M. to the speaker terminals and adjust the input level for a V.T.V.M. reading of 8.9 V.
- 4) Turn R507 and R508 clockwise gradually and adjust them so that the power meters deflect to 10 W. Refer to Fig. 10.
- 5) Increase the input level to obtain the AC V.T.V.M. reading of 20 V, 1 kHz and then confirm that the power meters deflect to 50 W.

7. Printed Circuit Board Ass'y and Parts List

7-(1) TXX-138 Power Amp. & Power Supply P.C. Board Ass'y

The Number of TXX-138 □ -1 P.C. Board Ass'y varies according to the area employed.

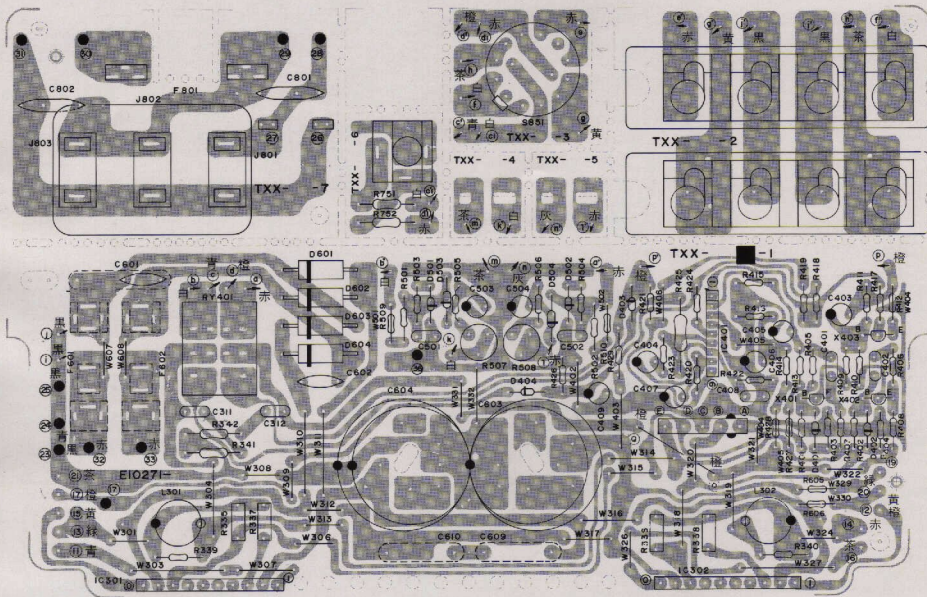
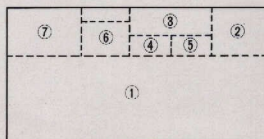


Fig. 11

Locations



- ① TXX-138 □ -1 : Power Amp. & Power Supply P.C. Board Ass'y
- ② TXX-138-2 : Speaker Terminals P.C. Board Ass'y
- ③ TXX-138-3 : Speaker Switch P.C. Board Ass'y
- ④ TXX-138-4 : Power Meter (Left) P.C. Board Ass'y
- ⑤ TXX-138-5 : Power Meter (Right) P.C. Board Ass'y
- ⑥ TXX-138-6 : Headphones P.C. Board Ass'y
- ⑦ TXX-138-7 : AC Outlets P.C. Board Ass'y

Note: In □ should be indicated "A", "B" or "C" according to the table below when placing an order.

P.C. Board Ass'y	Designated Areas
TXX-138 [A] -1	U.S.A. and Canada
TXX-138 [B] -1	U.K., Australia and Europe
TXX-138 [C] -1	Other Countries

Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	ft		
X401	2SC1775AV (E, F)	0.3 W	200 MHz	Silicon	Hitachi
X402	2SC1775AV (E, F)	"	"		"
X403	2SA872AV (D, E)	"	120 MHz		"

Integrated Circuits

Item No.	Part Number	Rating		Description	Maker	
		Pc				
IC301	STK0050	0.5 W		Power Integrated Circuit	Tokyo Sanyo	
IC302	STK0050			"	"	"
IC401	TA7317P			I. C.	Toshiba	

Diodes

Item No.	Part Number	Rating	Description	Maker
D401	1S2473		Silicon	Toyo Dengu
D402	1S2473		"	"
D403	1S2473		"	"
D404	1S2473		"	"
D501	1S2076-32		"	"
D502	1S2076-32		"	"
D503	1S188FM		Ge. Diode	Japan International
D504	1S188FM		"	
D601	30D2FA-S		Silicon	
D602	30D2FA-S		"	"
D603	30D2FA-S		"	"
D604	30D2FA-S	"	"	

Coils

Item No.	Part Number	Rating		Description
LEFT	TXX-138-4	1.0 μ H		
L301	E04059-1R0			
L302	E04059-1R0			

Capacitors

Item No.	Part Number	Rating		Description
C311	QFM31HK-473	0.047 μ F	50 V	Mylar
C312	QFM31HK-473	"	"	"
C401	QFM31HK-104	0.1 μ F	"	"
C402	QFM31HK-104	"	"	"
C403	QEW51CA-226	22 μ F	16 V	Electrolytic
C404	QEW51HA-474	0.47 μ F	50 V	"
C405	QEW51AA-476	47 μ F	10 V	"
C406	QEW51AA-476	"	"	"
C407	QEW51CA-226	22 μ F	16 V	"
C408	QFM31HK-153	0.015 μ F	50 V	Mylar
C409	QEW51HA-475	4.7 μ F	"	Electrolytic
C501	QFM31HK-223	0.022 μ F	"	Mylar
C502	QFM31HK-223	"	"	"
C503	QEW51AA-476	47 μ F	10 V	Electrolytic
C504	QEW51AA-476	"	"	"
C601	QCF12HP-103	0.01 μ F	500 V	Ceramic
C602	QCF12HP-103	"	"	"
C603	QEY5601-141	10000 μ	56 V	Electrolytic
C604	QEY5601-141	"	"	"
C801	QCZ9002-103A	0.01 μ F	150 V	Ceramic
C801	QCZ9013-103	"	125 V	"
C802	QCZ9002-103A	"	150 V	"
C802	QCZ9013-103	"	125 V	"

Resistors

Item No.	Part Number	Rating		Description
R335	QRM054K-R22	0.22 Ω	5 W	Metal Plate
R336	QRM054K-R22	"	"	"
R337	QRM054K-R22	"	"	"
R338	QRM054K-R22	"	"	"
R339	QRX129J-4R7	4.7 Ω	1/2 W	Oxide Metal Film
R340	QRX129J-4R7	"	"	"
R341	QRX017J-100S	10 Ω	1 W	"
R342	QRX017J-100S	"	"	"
R401	QRD146J-681S	680 Ω	1/4 W	Carbon
R402	QRD146J-681S	"	"	"
R403	QRD141J-562S	5.6 k Ω	"	"
R404	QRD141J-562S	"	"	"
R405	QRD141J-101S	100 Ω	"	"
R406	QRD141J-101S	"	"	"
R407	QRD146J-471S	470 Ω	"	"
R408	QRD146J-471S	"	"	"
R409	QRD141J-123S	12 k Ω	"	"
R410	QRD141J-123S	"	"	"
R411	QRD141J-103S	10 k Ω	"	"
R413	QRD141J-473S	47 k Ω	"	"
R414	QRD141J-473S	"	"	"
R415	QRD141J-273S	27 k Ω	"	"
R416	QRD141J-273S	"	"	"
R417	QRD141J-473S	47 k Ω	"	"
R418	QRD141J-124S	120 k Ω	"	"

Resistors

Item No.	Part Number	Rating		Description
R419	QRD141J-683S	68 k Ω	1/4 W	Carbon
R420	QRD141J-204S	200 k Ω	"	"
R421	QRD141J-183S	18 k Ω	"	"
R422	QRD141J-333S	33 k Ω	"	"
R423	QRD141J-563S	56 k Ω	"	"
R424	QRD141J-332S	3.3 k Ω	"	"
R425	QRG027J-561	560 Ω	2 W	Oxide Metal Film
R426	QRD141J-223S	22 k Ω	1/4 W	Carbon
R427	QRD141J-103S	10 k Ω	"	"
R428	QRD141J-103S	"	"	"
R429	QRD126J-270	27 Ω	1/2 W	"
R501	QRG129J-821	820 Ω	"	Oxide Metal Film
R502	QRG129J-821	"	"	"
R503	QRD141J-220S	22 Ω	1/4 W	Carbon
R504	QRD141J-220S	"	"	"
R505	QRD141J-681S	680 Ω	"	"
R506	QRD141J-681S	"	"	"
R507	QVP4A0B-222	2.2 k Ω	"	Variable
R508	QVP4A0B-222	"	"	"
R509	QRD146J-680S	68 Ω	1/4 W	Carbon
R510	QRD146J-680S	"	"	"
R605	QRD146J-5R6S	5.6 Ω	"	"
R606	QRD146J-5R6S	"	"	"
R751	QRG017J-221S	220 Ω	1 W	Oxide Metal Film
R752	QRG017J-221S	"	"	"

Others

Item No.	Part Number	Rating	Description
	E03572-011		Speaker Terminal
	E03628-5UD		5 Pin Plug
	E03675-002		Fuse Clip
	E03733-0606		SKT Wire Assy
	E03733-0607		"
	E45524-001		C. Clip
	E48965-002		Fuse Clip
	QMC0637-001		AC Socket
	QMS6302-102		Headphone Jack
	QSR0083-001		Rotary Switch
PRI F	E03675-003		Fuse Clip
RY401	ESK6D24-211		Relay
SEC, F	E45524-001		C. Clip

7-(2) TXX-139 Equalizer & Driver Amp. P.C. Board Ass'y

The number of TXX-139 □ -1 P.C. Board Ass'y varies according to the areas employed.

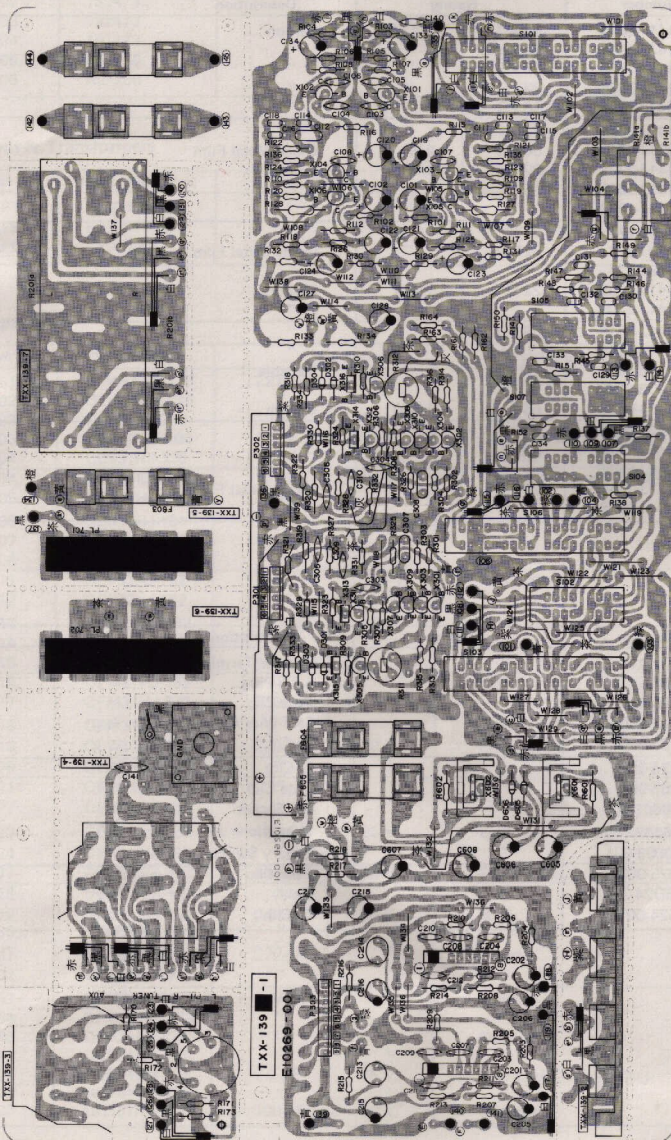
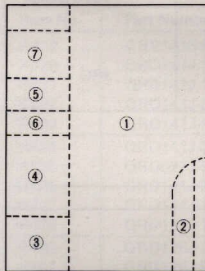


Fig. 12

Locations



- ① TXX-139 -1 : Equalizer & Driver Amp. P.C. Board Ass'y
- ② TXX-139-2 : Tape-2 Pin Jack P.C. Board Ass'y
- ③ TXX-139-3 : Tape-1 Pin Jack P.C. Board Ass'y
- ④ TXX-139-4 : Input Pin Jack P.C. Board Ass'y
- ⑤ TXX-139-5 : Lamp (Left) P.C. Board Ass'y
- ⑥ TXX-139-6 : Lamp (Right) P.C. Board Ass'y
- ⑦ TXX-139-7 : Main Volume Control P.C. Board Ass'y

Note: In should be indicated "A" or "B" according to the table below when placing an order.

P.C. Board Ass'y	Designated Areas
TXX-139 <input type="checkbox"/> A -1	U.S.A., Canada and Other Countries
TXX-139 <input type="checkbox"/> B -1	U.K., Australia and Europe

Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X101	2SA872AV (D, E)	0.3 W	120 MHz	Silicon	Hitachi
X102	2SA872AV (D, E)		"		
X103	2SC1775AV (F)	"	200 MHz	"	"
X104	2SC1775AV (F)		"		
X105	2SD438 (D, E)	0.75 W	100 MHz	"	Sanyo
X106	2SD438 (D, E)	"	"	"	"
X301	2SC1775AV (F1)		0.3 W		
X302	2SC1775AV (F1)	"	"	"	"
X303	2SC1775AV (F1)	"	"	"	"
X304	2SC1775AV (F1)	"	"	"	"
X305	2SC1775AV (E, F)	"	"	"	"
X306	2SC1775AV (E, F)		"		
X307	2SA872AV (D, E)	0.3 W	120 MHz	Silicon	Hitachi
X308	2SA872AV (D, E)		"		
X309	2SA872AV (D, E)	"	"	"	"
X310	2SA872AV (D, E)	"	"	"	"
X311	2SA872AV (D, E)		"		
X312	2SA872AV (D, E)	"	"	"	"
X313	2SC1904 (B, V)	1 W	130 MHz	"	Fujitsu
X314	2SC1904 (B, V)		"		
X315	2SC1904 (B, V)	"	"	"	"
X316	2SC1904 (B, V)		"		
X601	2SD330V (D, E)	20 W	8 MHz	"	Toyo Dengu
X602	2SB514V (D, E)		"		

Integrated Circuits

Item No.	Part Number	Rating		Description	Maker
		Pc			
IC201	HA1457W	0.5 W		I. C.	Hitachi
IC202	HA1457W		"		

Diodes

Item No.	Part Number	Rating	Description	Maker
D301	1S2473		Silicon	Toyo Dengu
D302	1S2473		"	"
D303	1S2473		"	"
D304	1S2473		"	"
D605	WZ-260		Zener Diode	JRC
D606	WZ-260		"	"

Coils & Transformers

Item No.	Part Number	Rating	Description
LEFT	TXX-139-5		Pin Jack Ass'y
TAPE	E03591-40D		
TAPE	TXX-139-3		

Capacitors

Item No.	Part Number	Rating		Description
C101	QEW51EA-226	22 μ F	25 V	Electrolytic
C102	QEW51EA-226	"	"	"
C103	QCS31HJ-330	33 pF	50 V	Ceramic
C103	QEB51EM-106	10 μ F	25 V	Low Leak Current Electrolytic
C104	QCS31HJ-330	33 pF	50 V	Ceramic
C104	QEB51EM-106	10 μ F	25 V	Low Leak Current Electrolytic
C105	QCS31HJ-101	100 pF	"	"
C106	QCS31HJ-101	"	"	"
C107	QCS31HJ-150	15 pF	"	"
C108	QCS31HJ-150	"	"	"
C111	QFP32AJ-752	7500 pF	100 V	Polypropylene
C112	QFP32AJ-752	"	"	"
C113	QFM31HJ-822	8200 pF	50 V	Mylar
C114	QFM31HJ-822	"	"	"
C115	QFM31HJ-182	1800 pF	"	"
C116	QFM31HJ-182	"	"	"
C117	QFM31HJ-332	3300 pF	"	"
C118	QFM31HJ-332	"	"	"
C119	QEW51AA-227	220 μ F	10 V	Electrolytic
C120	QEW51AA-227	"	"	"
C121	QEW51AA-227	"	"	"
C122	QEW51AA-227	"	"	"
C123	QEB51EM-106	10 μ F	25 V	Low Leak Current Electrolytic
C124	QEB51EM-106	"	"	"
C127	QEW51VA-107	100 μ F	35 V	Electrolytic
C128	QEW51VA-107	"	"	"
C129	QFM31HK-183	0.018 μ F	50 V	Mylar
C130	QFM31HK-183	"	"	"
C131	QCS31HJ-271	270 pF	"	Ceramic
C132	QCS31HJ-271	"	"	"
C133	QFM31HK-473	0.047 μ F	"	Mylar
C134	QFM31HK-473	"	"	"
C140	OCF31HP-473	"	"	Ceramic
C141	QCF31HP-473	"	"	"
C201	QEB51EM-225	2.2 μ F	25 V	Low Leak Current Electrolytic
C202	QEB51EM-225	"	"	"
C203	QCS31HJ-101	100 pF	50 V	Ceramic

Capacitors

Item No.	Part Number	Rating		Description
C204	QCS31HJ-101	100 pF	50 V	Ceramic
C205	QEW51AA-476	47 μ F	10 V	Electrolytic
C206	QEW51AA-476	"	"	"
C207	QCS31HJ-560	56 pF	50 V	Ceramic
C208	QCS31HJ-560	"	"	"
C209	QCS31HJ-271	270 pF	"	"
C210	QCS31HJ-271	"	"	"
C211	QCS31HJ-820	82 pF	"	"
C212	QCS31HJ-820	"	"	"
C213	QEZ0046-475	4.7 μ F		Electrolytic
C214	QEZ0046-475	"		"
C215	QEW51CA-476	47 μ F	16 V	"
C216	QEW51CA-476	"	"	"
C217	QEW51EA-476	47 μ F	25 V	Electrolytic
C218	QEW51EA-476	"	"	"
C303	QCS31HJ-121	120 pF	50 V	Ceramic
C304	QCS31HJ-121	"	"	"
C305	QCS31HJ-271	270 pF	"	"
C306	QCS31HJ-271	"	"	"
C307	QFM31HK-473	0.047 μ F	"	Mylar
C308	QFM31HK-473	"	"	"
C309	QCS31HJ-5R0	5 pF	"	Ceramic
C310	QCS31HJ-5R0	"	"	"
C605	QEW51HA-226	22 μ F	"	Electrolytic
C606	QEW51HA-226	"	"	"
C607	QEW51VA-227	220 μ F	35 V	"
C608	QEW51VA-227	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R101	QRD141J-273SL	27 k Ω	1/4 W	Carbon
R102	QRD141J-273SL	"	"	"
R103	QRD141J-104SL	100 k Ω	"	"
R104	QRD141J-104SL	"	"	"
R105	QRD141J-104SL	"	"	"
R106	QRD141J-104SL	"	"	"
R107	QRD141J-101S	100 Ω	"	"
R108	QRD141J-101S	"	"	"
R109	QRD141J-224SL	220 k Ω	"	"
R110	QRD141J-224SL	"	"	"
R111	QRD141J-473SL	47 k Ω	"	"
R112	QRD141J-473SL	"	"	"
R115	QRD141J-301S	300 Ω	"	"
R116	QRD141J-301S	"	"	"
R117	QRD141J-392SL	3.9 k Ω	"	"
R118	QRD141J-392SL	"	"	"
R119	QRD141J-822SL	8.2 k Ω	"	"
R120	QRD141J-822SL	"	"	"
R121	QRD141J-153SL	15 k Ω	"	"
R122	QRD141J-153SL	"	"	"
R123	QRD141J-184SL	180 k Ω	"	"
R124	QRD141J-184SL	"	"	"
R125	QRD141J-221S	220 Ω	"	"
R126	QRD141J-221S	"	"	"
R127	QRG017J-222S	2.2 k Ω	1 W	Oxide Metal Film

Resistors

Item No.	Part Number	Rating		Description
R128	QRG017J-222S	2.2 k Ω	1 W	Oxide Metal Film
R129	QRD141J-473SL	47 k Ω	1/4 W	Carbon
R130	QRD141J-473SL	"	"	"
R131	QRD141J-471S	470 Ω	"	"
R132	QRD141J-471S	"	"	"
R133	QRG129J-560	56 Ω	1/2 W	Oxide Metal Film
R134	QRG129J-560	"	"	"
R135	QRD141J-103SL	10 k Ω	1/4 W	Carbon
R136	QRD141J-103SL	"	"	"
R137	QRD141J-562S	5.6 k Ω	"	"
R138	QRD141J-562S	"	"	"
R141	QVC3A2M-1F5V			Variable
R143	QRD141J-223S	22 k Ω	1/4 W	Carbon
R144	QRD141J-223S	"	"	"
R145	QRD141J-104S	100 k Ω	"	"
R146	QRD141J-104S	"	"	"
R147	QRD141J-105S	1 M Ω	"	"
R148	QRD141J-105S	"	"	"
R149	QRD141J-393S	39 k Ω	"	"
R150	QRD141J-393S	"	"	"
R151	QRD141J-105S	1 M Ω	"	"
R152	QRD141J-105S	"	"	"
R161	QRD141J-332S	3.3 k Ω	"	"
R162	QRD141J-332S	"	"	"
R163	QRD146J-681S	680 Ω	"	"
R164	QRD146J-681S	"	"	"
R170	QRD141J-104S	100 k Ω	"	"
R171	QRD141J-104S	"	"	"
R172	QRD141J-334S	330 k Ω	"	"
R173	QRD141J-334S	"	"	"
R201	QVZ6104-001			Variable
R203	QRD141J-184S	180 k Ω	1/4 W	Carbon
R204	QRD141J-184S	"	"	"
R205	QRD141J-102S	1 k Ω	"	"
R206	QRD141J-102S	"	"	"
R207	QRD141J-202S	2 k Ω	1/4 W	Carbon
R208	QRD141J-202S	"	"	"
R209	QRD141J-102S	1 k Ω	"	"
R210	QRD141J-102S	"	"	"
R211	QRD141J-682S	6.8 k Ω	"	"
R212	QRD141J-682S	"	"	"
R213	QRD141J-103S	10 k Ω	"	"
R214	QRD141J-103S	"	"	"
R215	QRD141J-562S	5.6 k Ω	"	"
R216	QRD141J-562S	"	"	"
R217	QRG129J-151	150 Ω	1/2 W	Oxide Metal Film
R218	QRG129J-151	"	"	"
R301	QRD141J-271S	270 Ω	1/4 W	Carbon
R302	QRD141J-271S	"	"	"
R303	QRD141J-273S	27 k Ω	"	"
R304	QRD141J-273S	"	"	"
R305	QRD149J-101S	100 Ω	"	"
R306	QRD149J-101S	"	"	"
R307	QRD149J-101S	"	"	"
R308	QRD149J-101S	"	"	"
R309	QRD146J-680S	68 Ω	"	"

Resistors

Item No.	Part Number	Rating		Description
R310	QRD146J-680S	68 Ω	1/4 W	Carbon
R311	QVP4A0B-221	220 Ω		Variable
R312	QVP4A0B-221	"		"
R313	QRD141J-470S	47 Ω	1/4 W	Carbon
R314	QRD141J-470S	"	"	"
R315	QRD141J-470S	"	"	"
R316	QRD141J-470S	"	"	"
R317	QRD141J-391S	390 Ω	"	"
R318	QRD141J-391S	"	"	"
R319	QRG129J-821	820 Ω	1/2 W	Oxide Metal Film
R320	QRG129J-821	"	"	"
R321	QRX129J-330	33 Ω	"	"
R322	QRX129J-330	"	"	"
R323	QRG129J-271	270 Ω	"	"
R324	QRG129J-271	"	"	"
R325	QRD141J-273S	27 k Ω	1/4 W	Carbon
R326	QRD141J-273S	"	"	"
R327	QRD141J-113S	11 k Ω	"	"
R328	QRD141J-113S	"	"	"
R329	QRD141J-273S	27 k Ω	"	"
R330	QRD141J-273S	"	"	"
R331	QRD146J-681S	680 Ω	"	"
R332	QRD146J-681S	"	"	"
R333	QRG129J-121	120 Ω	1/2 W	Oxide Metal Film
R334	QRG129J-121	"	"	"
R601	QRG129J-272	2.7 k Ω	"	"
R602	QRG129J-272	"	"	"

Others

Item No.	Part Number	Rating	Description
	E03043-40CW		Pin Jack Ass'y
	E03623-002		DIN Socket
	E03732-009A		Plug
	E03763-001		GND Terminal
	E45524-001		C. Clip
	E48965-002		Fuse Clip
	E60171-003		Heat Sink
	E65119-001		Special Screw
	E65554-001		VR. Bracket
	52868-3		Lug
S101	QSL8309-011		Lever Switch
S102	QSL4309-011		"
S103	QSL8309-011		"
S104	QSL4209-011		"
S105	QSL4209-011		"
S106	QSL8209-011		"
S107	QSL4209-011		"
6PIN	E03732-006A		Pin Jack
PHONO	E03591-60D		"
	E35619-001		Circuit Board
	E43727-001		Tab
	E65586-001		Tab
	QSR0085-001		Voltage Selector

7-(3) TPS-194A & 197A AC Outlets & Voltage Selector P.C. Board Ass'y

The number of the P.C. Board Ass'y mentioned above vary according to the areas employed.

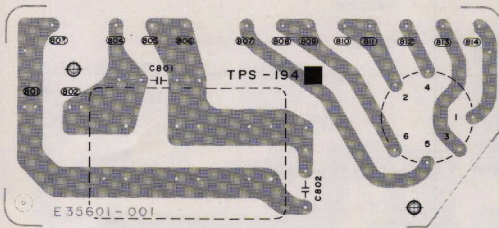


Fig. 13

TPS-194A P.C. Board Ass'y

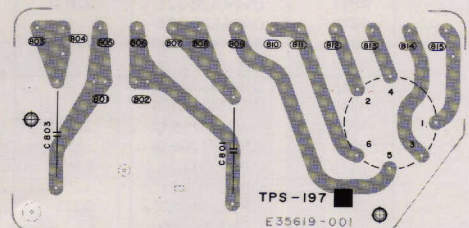


Fig. 14

TPS-197A P.C. Board Ass'y

TPS-194A (Parts List) Designated Area: for areas other than U.S.A., Canada, U.K., Australia and Europe.

Capacitors

Item No.	Part Number	Rating	Description
C801	QCZ9002-103A	0.01 μ F	Ceramic
C802	QCZ9002-103A	"	"

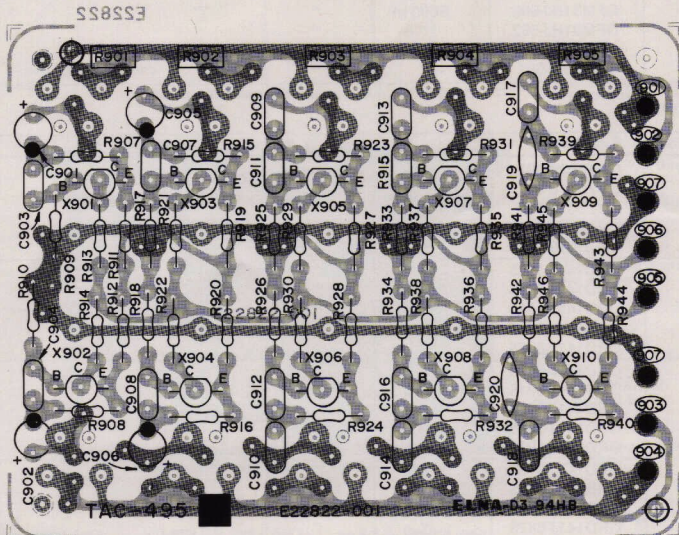
Others

Item No.	Part Number	Rating	Description
	E35601-001		Circuit Board
	E43727-001		Tab
	QMC0637-002		AC Outlet Ass'y
	QSR0085-001		Line Voltage Selector
			Selectable 110 V, 120V, 220 V, 240 V

TPS-197A (Parts List) Designated Area: for U.K., Australia and Europe

Item No.	Part Number	Rating	Description
	QSR0085-001		Line Voltage Selector
			Selectable 110 V, 120 V, 220 V, 240 V

7-(4) TAC-495A S.E.A. (Sound Effect Amp.) Control P.C. Board Ass'y



Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	ft		
X901	2SC1775AV (E, F)	0.3 W	200 MHz		Hitachi
X902	2SC1775AV (E, F)	"	"		"
X903	2SC1775AV (E, F)	"	"		"
X904	2SC1775AV (E, F)	"	"		"
X905	2SC1775AV (E, F)	"	"		"
X906	2SC1775AV (E, F)	"	"		"
X907	2SC1775AV (E, F)	"	"		"
X908	2SC1775AV (E, F)	"	"		"
X909	2SC1775AV (E, F)	"	"		"
X910	2SC1775AV (E, F)	"	"		"

Capacitors

Item No.	Part Number	Rating		Description
		Value	Voltage	
C901	QEB51EM-475	4.7 μ F	25 V	Low Leak Current Electrolytic
C902	QEB51EM-475	"	"	"
C903	QFM31HJ-223	0.022 μ F	50 V	Mylar
C904	QFM31HJ-223	"	"	"
C905	QEB51HM-474	0.47 μ F	"	Low Leak Current Electrolytic
C906	QEB51HM-474	"	"	"
C907	QFM31HJ-822	8200 pF	"	Mylar
C908	QFM31HJ-822	"	"	"
C909	QFM31HK-124	0.12 μ F	"	"
C910	QFM31HK-124	"	"	"
C911	QFM31HJ-332	3300 pF	"	"
C912	QFM31HJ-332	"	"	"
C913	QFM31HJ-273	0.027 μ F	"	"
C914	QFM31HJ-273	"	"	"
C915	QFM31HJ-102	1000 pF	"	"

Capacitors

Item No.	Part Number	Rating		Description
C916	QFM31HJ-102	1000 pF	50 V	Mylar
C917	QFM31HJ-562	5600 pF	"	"
C918	QFM31HJ-562	"	"	"
C919	QFP32AJ-681	680 pF	100 V	Polypropylene
C920	QFP32AJ-681	"	"	"

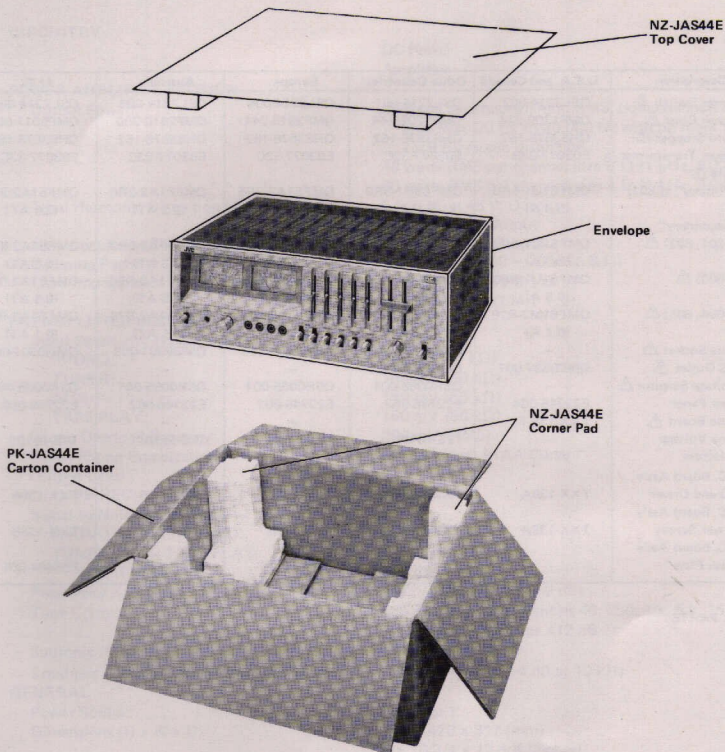
Resistors

Item No.	Part Number	Rating		Description
R901	QVZ5010-002	50 k Ω	W-Curve	
R902	QVZ5010-002	"	"	
R903	QVZ5010-002	"	"	
R904	QVZ5010-002	"	"	
R905	QVZ5010-002	"	"	
R907	QRD141J-122S	1.2 k Ω	1/4 W	Carbon
R908	QRD141J-122S	"	"	
R909	QRD141J-134S	130 k Ω	"	"
R910	QRD141J-134S	"	"	"
R911	QRD141J-682S	6.8 k Ω	"	"
R912	QRD141J-682S	"	"	"
R913	QRD141J-391S	390 Ω	"	"
R914	QRD141J-391S	"	"	"
R915	QRD141J-122S	1.2 k Ω	"	"
R916	QRD141J-122S	"	"	"
R917	QRD141J-913S	91 k Ω	"	"
R918	QRD141J-913S	"	"	"
R919	QRD141J-682S	6.8 k Ω	"	"
R920	QRD141J-682S	"	"	"
R921	QRD141J-391S	390 Ω	"	"
R922	QRD141J-391S	"	"	"
R923	QRD141J-122S	1.2 k Ω	"	"
R924	QRD141J-122S	"	"	"
R925	QRD141J-513S	51 k Ω	"	"
R926	QRD141J-513S	"	"	"
R927	QRD141J-682S	6.8 k Ω	"	"
R928	QRD141J-682S	"	"	"
R929	QRD141J-391S	390 Ω	"	"
R930	QRD141J-391S	"	"	"
R931	QRD141J-122S	1.2 k Ω	"	"
R932	QRD141J-122S	"	"	"
R933	QRD141J-333S	33 k Ω	"	"
R934	QRD141J-333S	"	"	"
R935	QRD141J-682S	6.8 k Ω	"	"
R936	QRD141J-682S	"	"	"
R937	QRD141J-391S	390 Ω	"	"
R938	QRD141J-391S	"	"	"
R939	QRD141J-122S	1.2 k Ω	"	"
R940	QRD141J-122S	"	"	"
R941	QRD141J-243S	24 k Ω	"	"
R942	QRD141J-243S	"	"	"
R943	QRD141J-682S	6.8 k Ω	"	"
R944	QRD141J-682S	"	"	"
R945	QRD141J-391S	390 Ω	"	"
R946	QRD141J-391S	"	"	"

Others

Item No.	Part Number	Rating	Description
	E03733-0902		SKT. Wire Ass'y
	E65559-001		S.E.A. Bracket

8. Packing Materials and Part Numbers



9. Accessories List

Item No.	Parts Number	Description	Q'ty
1	E30580-677A	Instruction Book	1
2	See Table Below	Warranty Card	1
3	E64207-002	Envelope for Instruction Book and Warranty Card	1
4	BT20024B	"Do It Better" (For U.S.A. only)	1
5	BT20023	Service Procedures (For U.S.A. only)	1
6	QMF60RI-5R0	Fuse (For U.S. Military Market and Others)	1
7	QMF60RI-2R3	"	1
8	E64208-001	Envelope for Fuses (For U.S. Military Market and Others)	1
9	E7958-N	Fuse Label (For U.S. Military Market and Others)	1
10	E64216-002	Caution Tag (With Power Cord for U.S. Military Market only)	1

Warranty Card

U.S.A.	Canada	U.S. Military Market	Europe	Australia	U.K.
BT20032	BT20025B	BT20032	-	BT20029	BT20013B

10. Parts List with Specified Numbers for Designated Areas

Page	Item No.	Description	U.S.A. and Canada	Other Countries	Europe	Australia	U.K.
5		Power Switch Δ	OSL2214-002	OSL2214-001	OSL2214-004	OSL2214-004	OSL2214-004BS
5		Power Cord Δ	QMP1200-244	QMP1200-244	QMP3910-244	QMP2610-200	QMP9017-008BS
5		Cord Stopper Δ	QHS3876-162	QHS3876-162	QHS3876-162	QHS3876-162	QHS3876-162BS
5		Power Transformer Δ	E03077-33B	E03077-33C	E03077-33C	E03077-33C	E03077-33CBS
		Fuse Δ					
		"Primary" (F801)	QMF61U1-5R0 (5.0 A)	QMF60R1-5R0 (5.0 A)	QMF51A2-2R5 (2.5 AT)	QMF51A2-2R5 (2.5 AT)	QMF51A2-2R5 (2.5 AT)
		"Secondary" (F601, 602) Δ	QMF61U1-8R0 (8.0 A)	QMF60R1-8R0 (8.0 A)	QMF51A2-6R3 (6.3 AT)	QMF51A2-6R3 (6.3 AT)	QMF51A2-6R3 (6.3 AT)
		(F603) Δ	QMF61U1-R50 (0.5 A)	QMF60R1-R50 (0.5 A)	QMF51A2-R50 (0.5 AT)	QMF51A2-R50 (0.5 AT)	QMF51A2-R50 (0.5 AT)
		(F604, 605) Δ	QMF61M2-R10 (0.1 A)	QMF60R1-R10 (0.1 AT)	QMF51A2-R10 (0.1 AT)	QMF51A2-R10 (0.1 AT)	QMF51A2-R10 (0.1 AT)
		Fuse Socket Δ	—	QMG0201-003	QMG0301-003	QMG0301-003	QMG0301-003
5		AC Outlet Δ	QMC0637-001	QMC0637-002	—	—	—
		Voltage Selector Δ	—	QSR0085-001	QSR0085-001	QSR0085-001	QSR0085-001BS
3		Rear Panel	E22746-004	E22746-002	E22746-002	E22746-002	E22746-002
		Fuse Board Δ	TXX-138-7	—	—	—	—
17		Line Voltage Selectors	—	TPS-194A	TPS-197A	TPS-197A	TPS-197BS
5, 12		P.C. Board Ass'y EQ and Driver	TXX-139A	TXX-139A	TXX-139B	TXX-139B	TXX-139B
		P.C. Board Ass'y	—	—	—	—	—
5, 7		Power Supply	TXX-138A	TXX-138C	TXX-138B	TXX-138B	TXX-138B
		P.C. Board Ass'y	—	—	—	—	—
		Mask Plate	—	—	E65494-001	E65494-001	E65494-001

NOTE: Δ SAFETY PARTS

11. JA-S44 Schematic Diagram

A

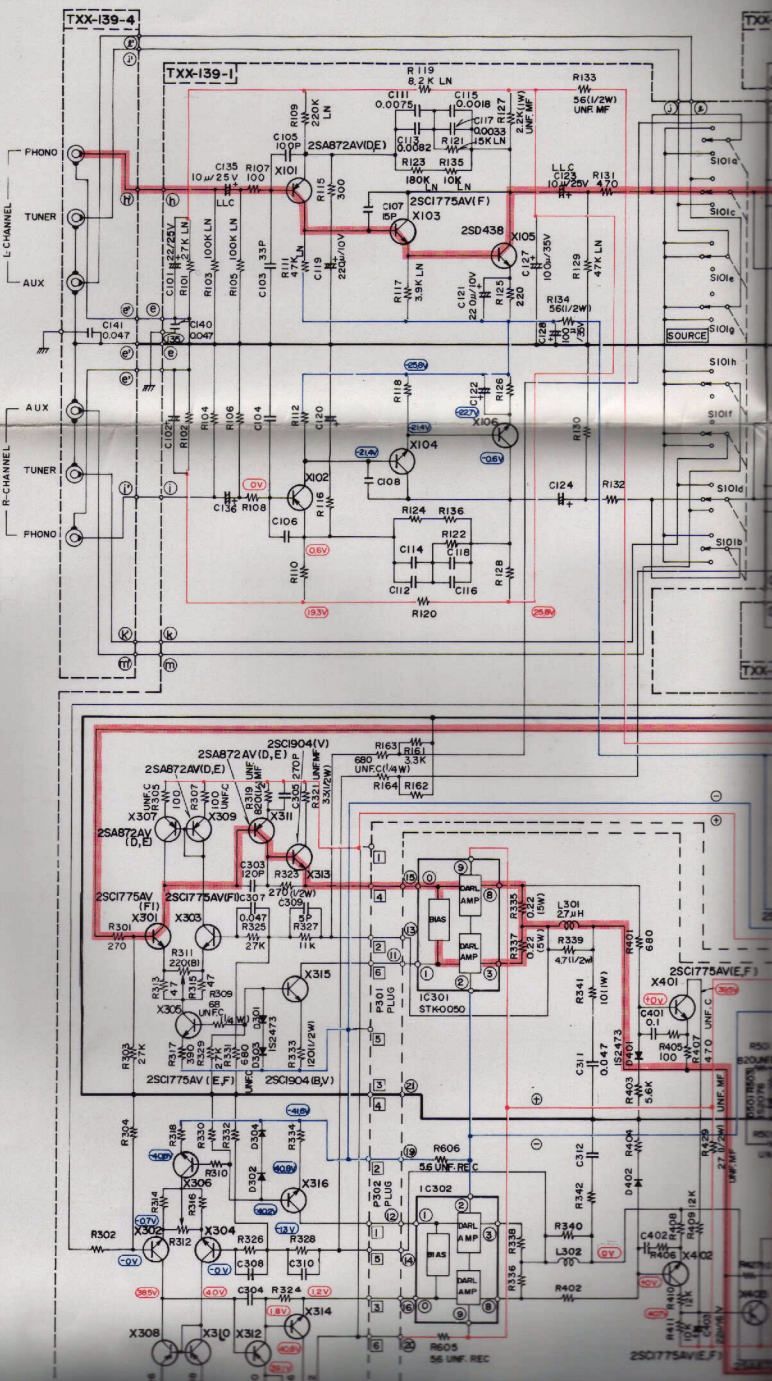
B

1

2

3

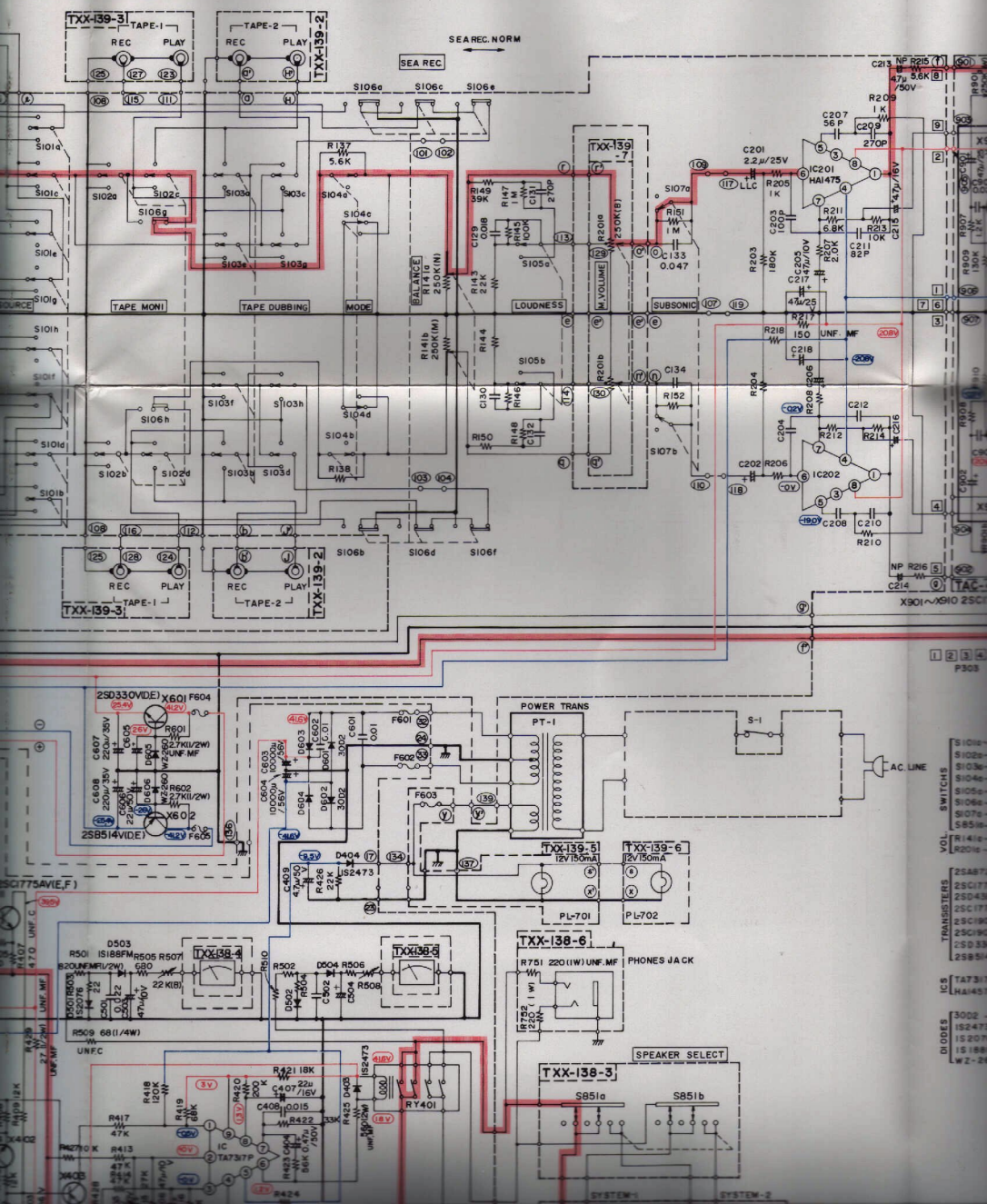
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C

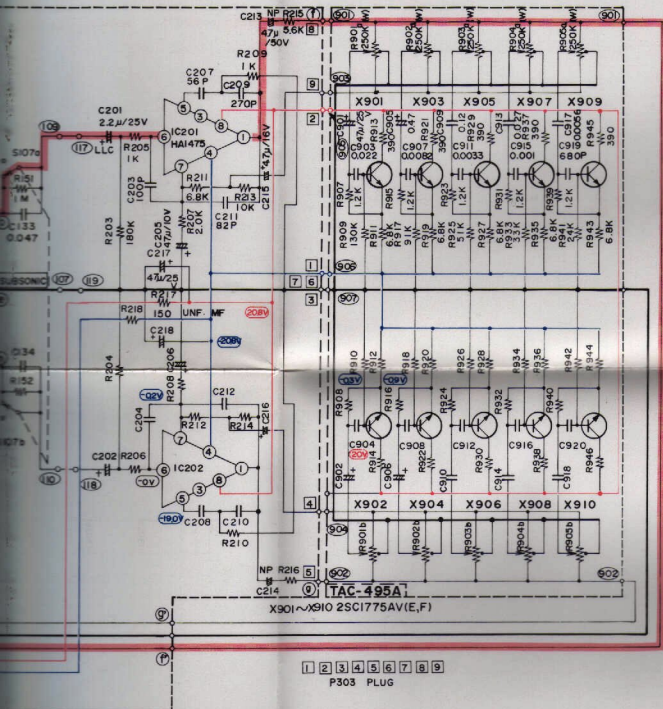
D

E



E

F



S101a-h --- SOURCE SWITCH
 S102a-d --- TAPE MONITOR SWITCH
 S103a-h --- TAPE DOUBBING SWITCH
 S104a-d --- MODE SWITCH
 S105a-b --- LOUDNESS SWITCH
 S106a-b --- SEA REC SWITCH
 S107a-b --- SUBSONIC SWITCH
 S851a-b --- SPEAKER SELECT SWITCH
 VOL
 R141a-b --- BALANCE
 R201a-b --- M. VOLUME

TRANSISTERS
 2SAB72AV(D.E) --- X101, 102, 307, 308, 309, 310, 311, 312
 2SC1775AV(F) --- 305, 306, 401, 402, 901 - 910
 2SD438 --- X105, 106
 2SC1775AV(F) --- X301, 302, 303, 304, 103, 104
 2SC1904(V) --- X313, 314,
 2SC1904A(V) --- X315, 316
 2SD330(V) --- X601
 2SB514(V) --- X602

ICs
 T47317P --- IC401
 HA1457 --- IC201, 202

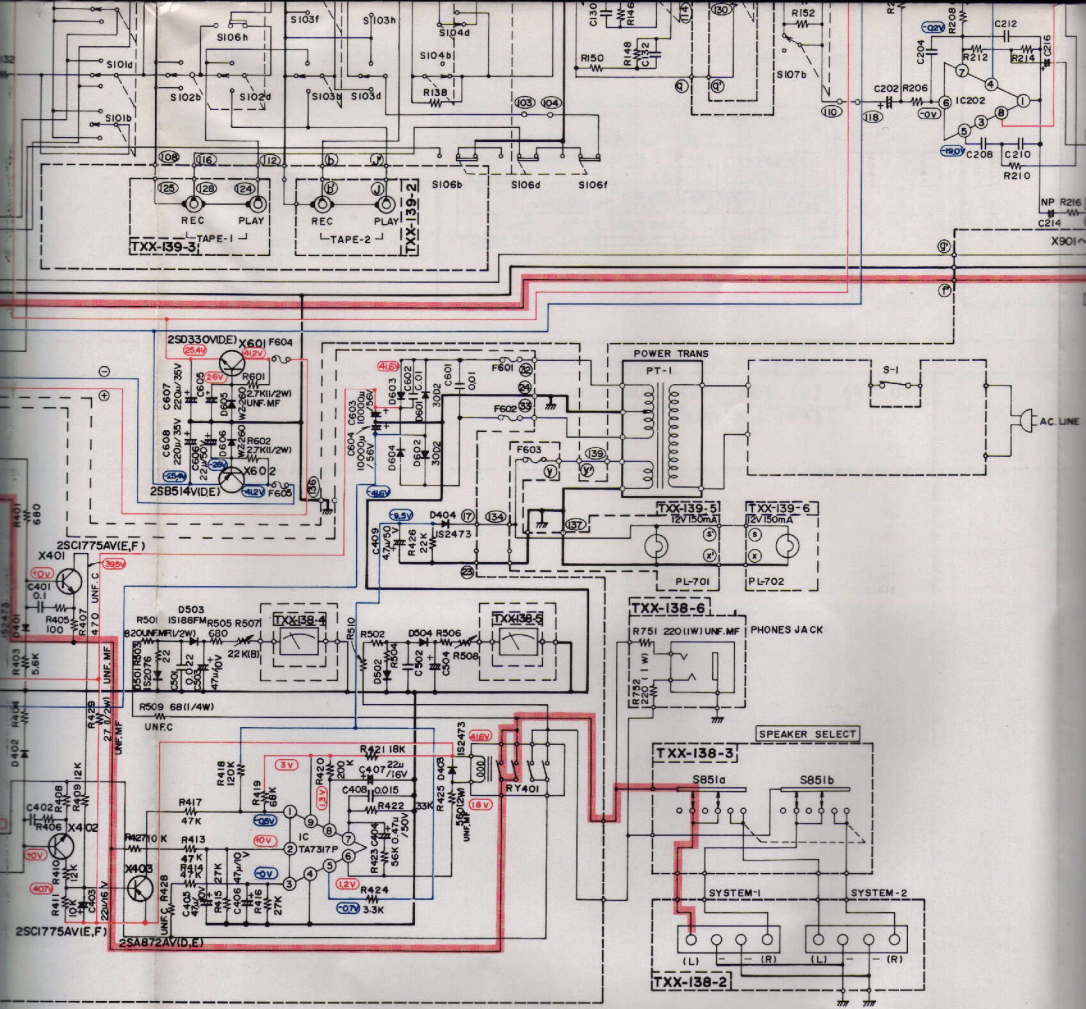
DIODES
 30D2 --- D601, D604
 1S2473 --- D401, 402, 403, 404, 301 - 304
 1S2078 --- D501, 502
 1S188FM --- D503, 504
 WZ-260 --- D603, 606

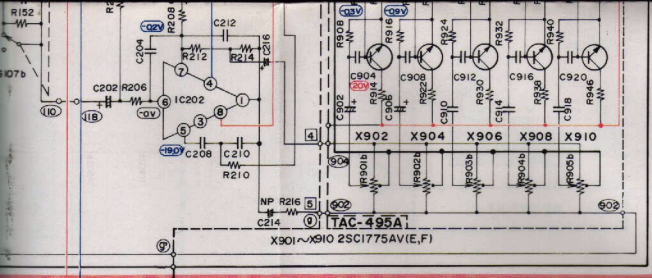
1

2

3

4





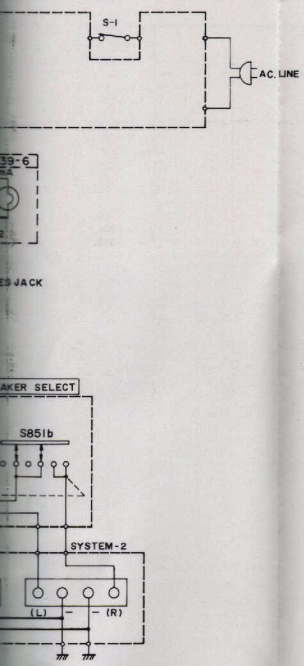
1 2 3 4 5 6 7 8 9
P303 PLUG

- SWITCHES**
- S101a-h --- SOURCE SWITCH
 - S102a-d --- TAPE MONITOR SWITCH
 - S103e-h --- TAPE DUBBING SWITCH
 - S104a-d --- MODE SWITCH
 - S105a-b --- LOUDNESS SWITCH
 - S106a-b --- SEA REC SWITCH
 - S107a-b --- SUBSONIC SWITCH
 - S851a-b --- SPEAKER SELECT SWITCH
- VOL.**
- R141a-b --- BALANCE
 - R201a-b --- M. VOLUME

- TRANSISTERS**
- 2SAB72AV(D,E) --- X101, 102, 307, 308, 309, 310, 311, 312
 - 2SC1775AV(E,F) --- 305, 306, 401, 402, 901-910
 - 2SD438 --- X105, 106
 - 2SC1775AV(F) --- X301, 302, 303, 304, 103, 104
 - 2SC1904(V) --- X313, 314
 - 2SC1904B(V) --- X315, 316
 - 2SD330VDD --- X601
 - 2SB514V(D,E) --- X602

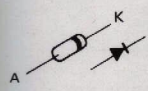
- ICs**
- TA7317P --- IC401
 - HA1457 --- IC201, 202

- DIODES**
- 30D2 --- D601, D604
 - 1S2473 --- D401, 402, 403, 404, 301-304
 - 1S2076 --- D501, 502
 - 1S188FM --- D503, 504
 - WZ-2F0 --- D605, 606



E

F



D401 ~ 404, D301 ~ 304
D501, 502, D503, 504

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. This is the standard circuit diagram.
The design and contents are subject to change without notice.

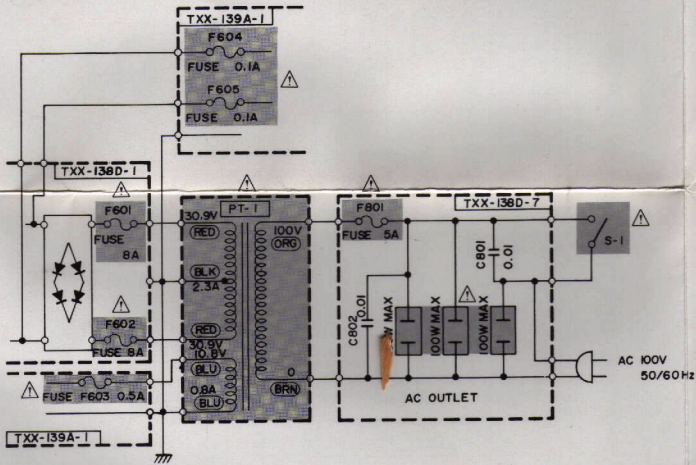
2

3

4

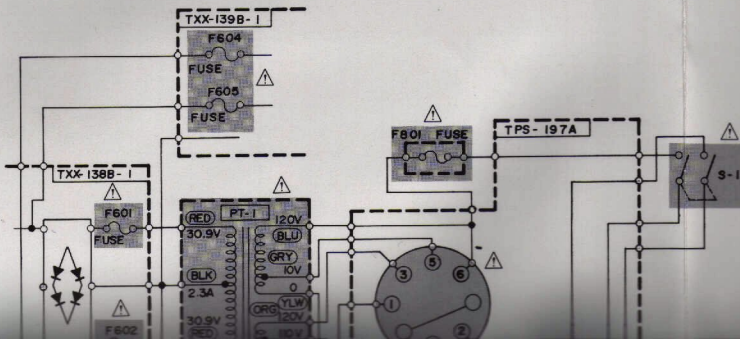
AC POWER SUPPLY BLOCK

(D) FOR JAPAN AC100V 50/60Hz.

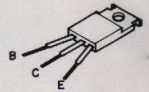
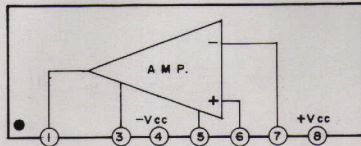


(E, A, BS) [E] FOR EUROPE: AC220V, 50Hz ~ .
 [A] FOR AUSTRALIA: AC240V, 50Hz ~ .
 [BS] FOR UK: AC240V, 50Hz ~ .

(U, P, F) [U]
 [FP]

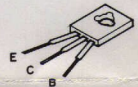
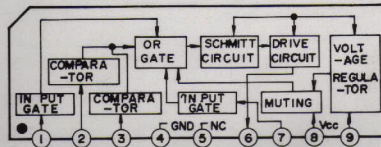


IC201, 202 HAI457

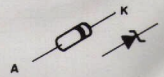


X601, X602.

IC104 TA7317 P



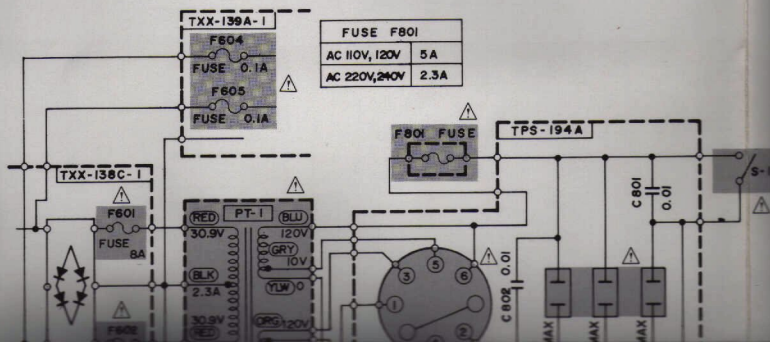
X313, 314
X315, 316

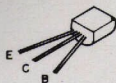


D605, 606

AC POWER SUPPLY BLOCK

(U, P, F) [U] FOR OTHER COUNTRIES:
[FP] FOR PACEX:

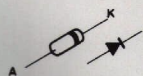




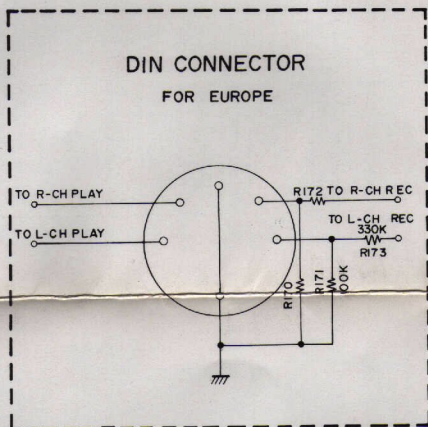
X101, 102, 307~312
 X103, 104, 308, 306
 X401, 402, 901~910
 X105, 106
 X301~304



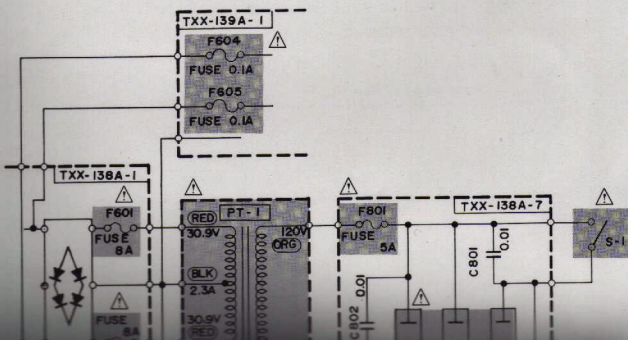
D601 604

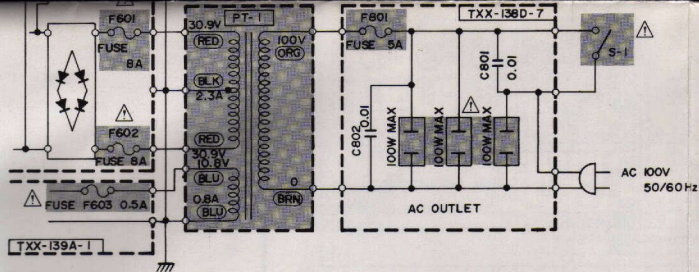


D401~404, D301~304
 D501, 502, D503, 504



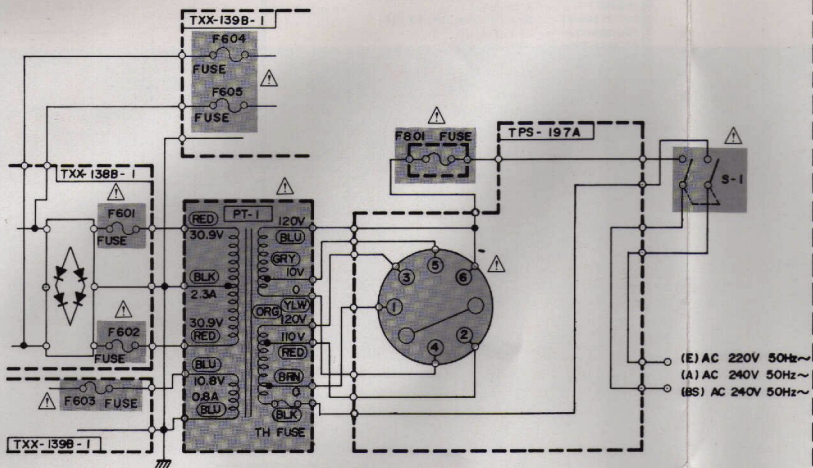
(J, C): FOR AMERICA, CANADA AC 120V 60Hz.



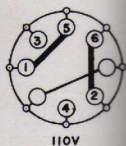


(E, A, BS) [E] FOR EUROPE: AC220V, 50Hz ~ .
 [A] FOR AUSTRALIA: AC240V, 50Hz ~ .
 [BS] FOR UK: AC240V, 50Hz ~ .

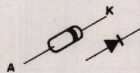
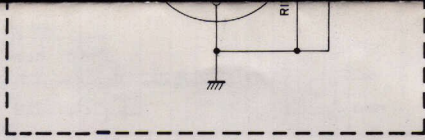
(U, P, F) [U]
 [P]
 [F]



	TXX-138	TXX-139	F601	F601	F602	F603	F604	F605
(E) EUROPE	TXX-138B	TXX-139B	2.5AT	8AT	8AT	500mAT	100mAT	100mAT
(A) AUSTRALIA	TXX-138B	TXX-139B	2.5AT	8AT	8AT	500mAT	100mAT	100mAT
(BS) FOR UK	TXX-138B	TXX-139B	2.5AT	8AT	8AT	500 mAT	100mAT	100mAT



110V

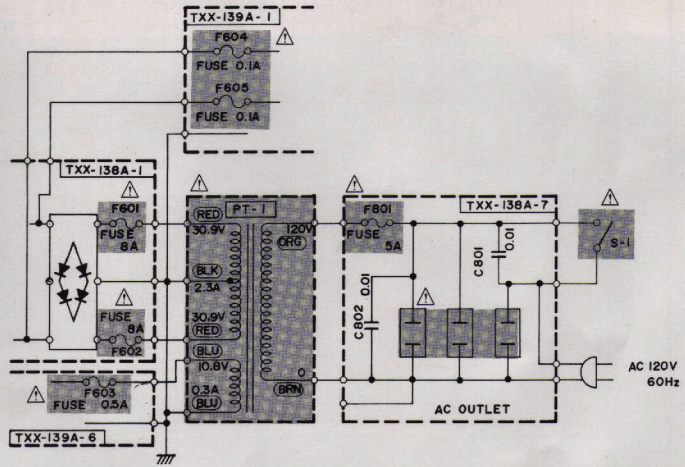


D401~404, D301~304
D501, 502, D503, 504

(J, C): FOR AMERICA, CANADA AC 120V 60Hz.

S-1

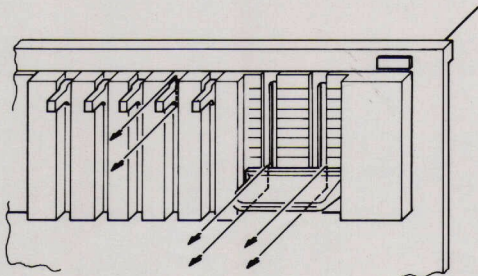
AC 110, 120
220, 240V
50/60Hz



A	B	C
J.C	E. BS. A	U.P.F
J.C U.P.F	E. BS. A	

(1) Removal of sliding knobs

The S.E.A. knobs and the volume knob can be easily removed. First run the dial string or piece of thin wire behind the knob and then pull it in the direction of the arrow as shown in the figure.



(2) Fuse alteration

	before alteration	after alteration
F604/F605	0.1A (100 mAT)	0.2A (200 mAT)

JVC

VICTOR COMPANY OF JAPAN, LIMITED