

JVC

SERVICE MANUAL

MODEL
A-S7

STEREO INTEGRATED AMPLIFIER



No. 2472
Apr. 1979

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

1. Specifications

Power Amplifier Section

Output Power (both channels driven): 50 watts per channel, min. RMS into 8 ohms from 20Hz – 20kHz with no more than 0.05% total harmonic distortion
 53 watts per channel into 8 ohms at 1kHz.
 THD = 0.05%

Total Harmonic Distortion (at 50W): 0.02% at 1kHz (both channels driven)

Intermodulation distortion: 0.05% at rated output
 Load Impedance: 4Ω – 16Ω (SYSTEM-1 or SYSTEM-2)
 8Ω – 16Ω (SYSTEM-1 and SYSTEM-2)
 Damping Factor: More than 50 at 8Ω (20Hz – 20kHz)

Pre-Amplifier Section

Input Sensitivity/Impedance: PHONO 2.5mV/47kΩ
 AUX, TUNER, TAPE
 PLAY 150mV/40kΩ

Output Level: TAPE REC.-1, -2 150mV
 Phono Equalizer Deviation: ±0.5dB from RIAA curve (20Hz – 20kHz)
 Phono Overload: 200mV (RMS) at 1kHz, 560mV (P-P)
 Signal to Noise Ratio: PHONO 70dB (RMS)
 AUX 80dB (RMS)
 Frequency Response: AUX, TUNER, TAPE PLAY 20Hz – 40kHz
 +0.5, -1dB
 Loudness Control: +6dB at 100Hz
 (at -30dB Volume Control) +3dB at 10kHz
 Tone Controls: Bass ±8dB at 100Hz
 Treble ±8dB at 10kHz
 Dimensions: 5-7/8"(H) x 16-1/2"(W) x 10-7/16"(D)
 (14.9cmx42cmx26.4cm)
 Weight: 15.84 lbs. (7.2kg)

	U.S.A. Canada	U.K., Europe Australia Other countries
Power Source	AC 120V, 60Hz	AC110/120/220/240V~ 50/60Hz
Power Consumption	220 watts 290VA	480 watts

2. Removal Procedures

2-(1) Top Cover

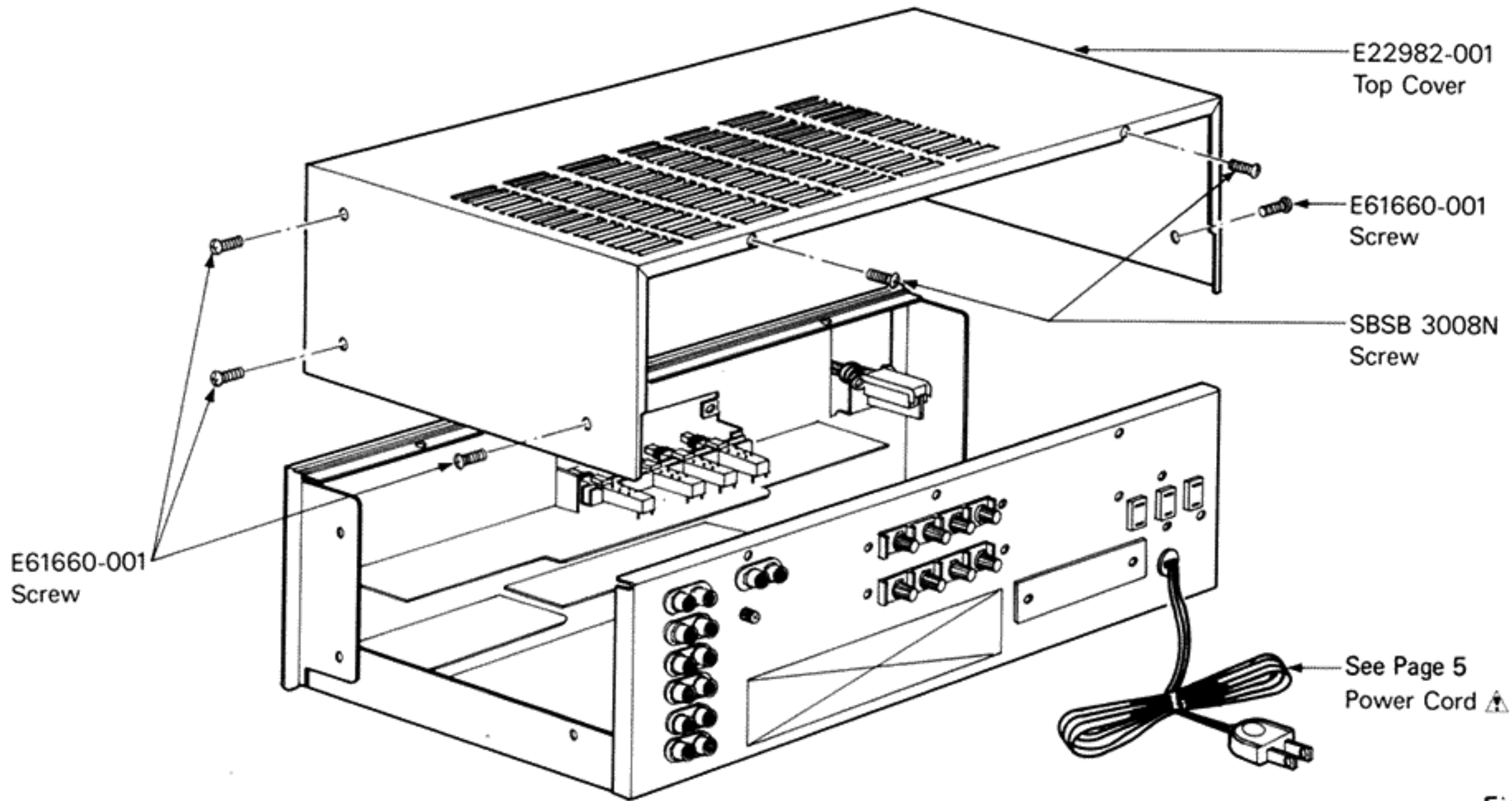


Fig. 1

⚠ : Safety Parts

2-(2) Removing of P.C. Board Ass'y

Precaution:

To protect electric circuit or personnel from high current, 2 electrolytic capacitors should be discharged by using 100 ohms, 1W resistor before taking the following procedure:

Procedures:

1. Disconnect AC plug at first.
2. Remove 4 screws
3. Slightly pull the rear panel together with P.C. Board.
4. Carefully place them as shown in Fig. 2-A.
5. When replacing P.C. Board to the chassis, be sure that the P.C. Board is locked into the both fasteners properly. Refer to Fig. 2-B.

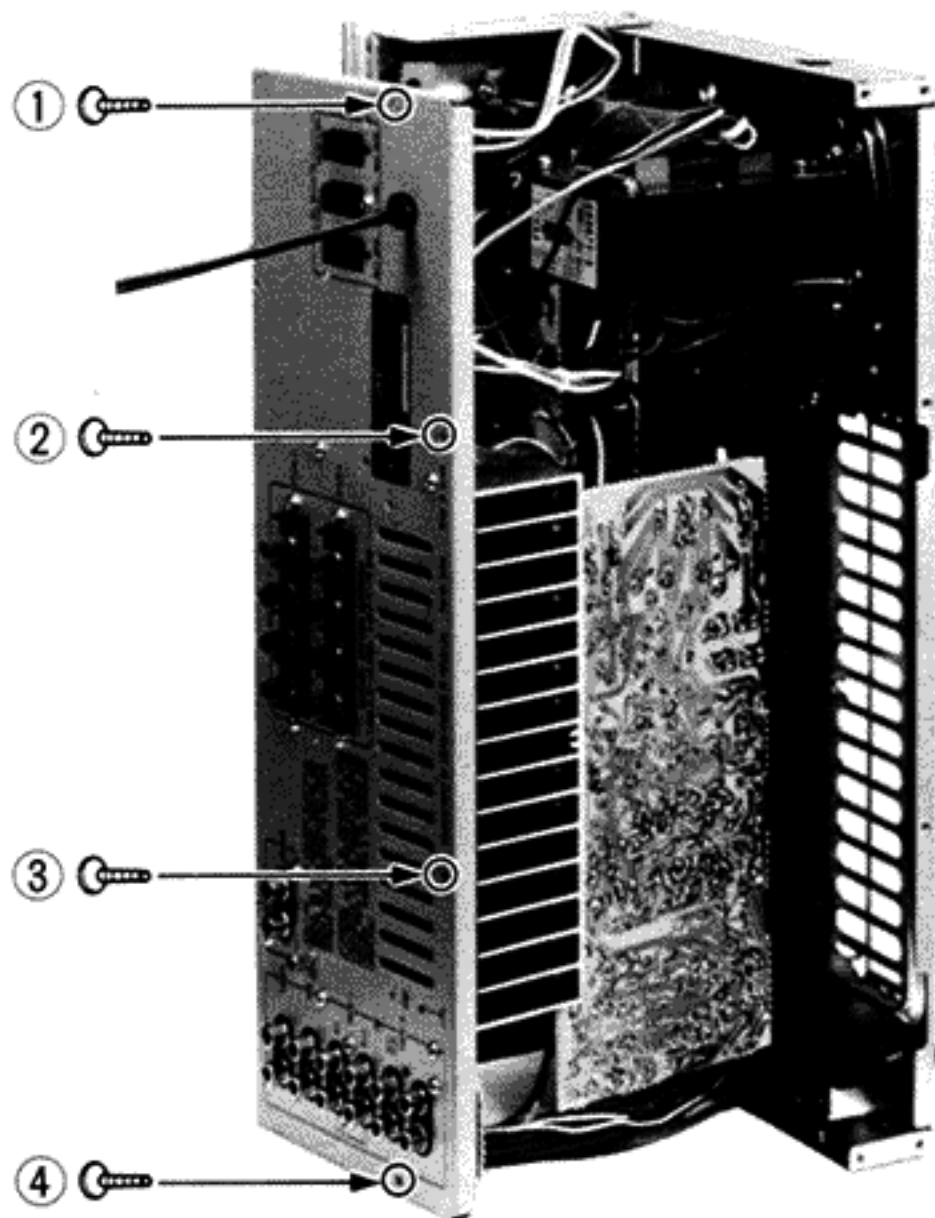


Fig. 2-A

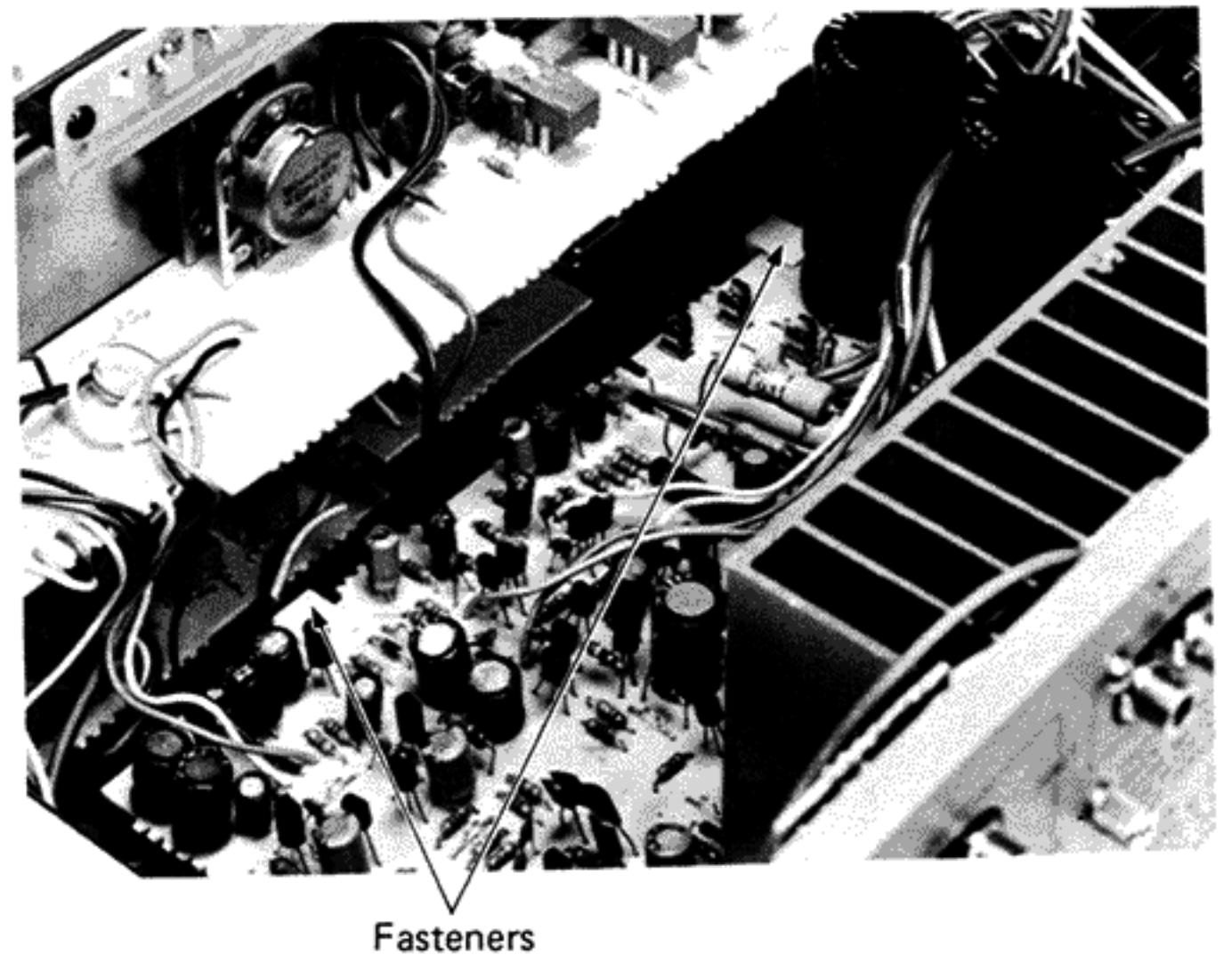
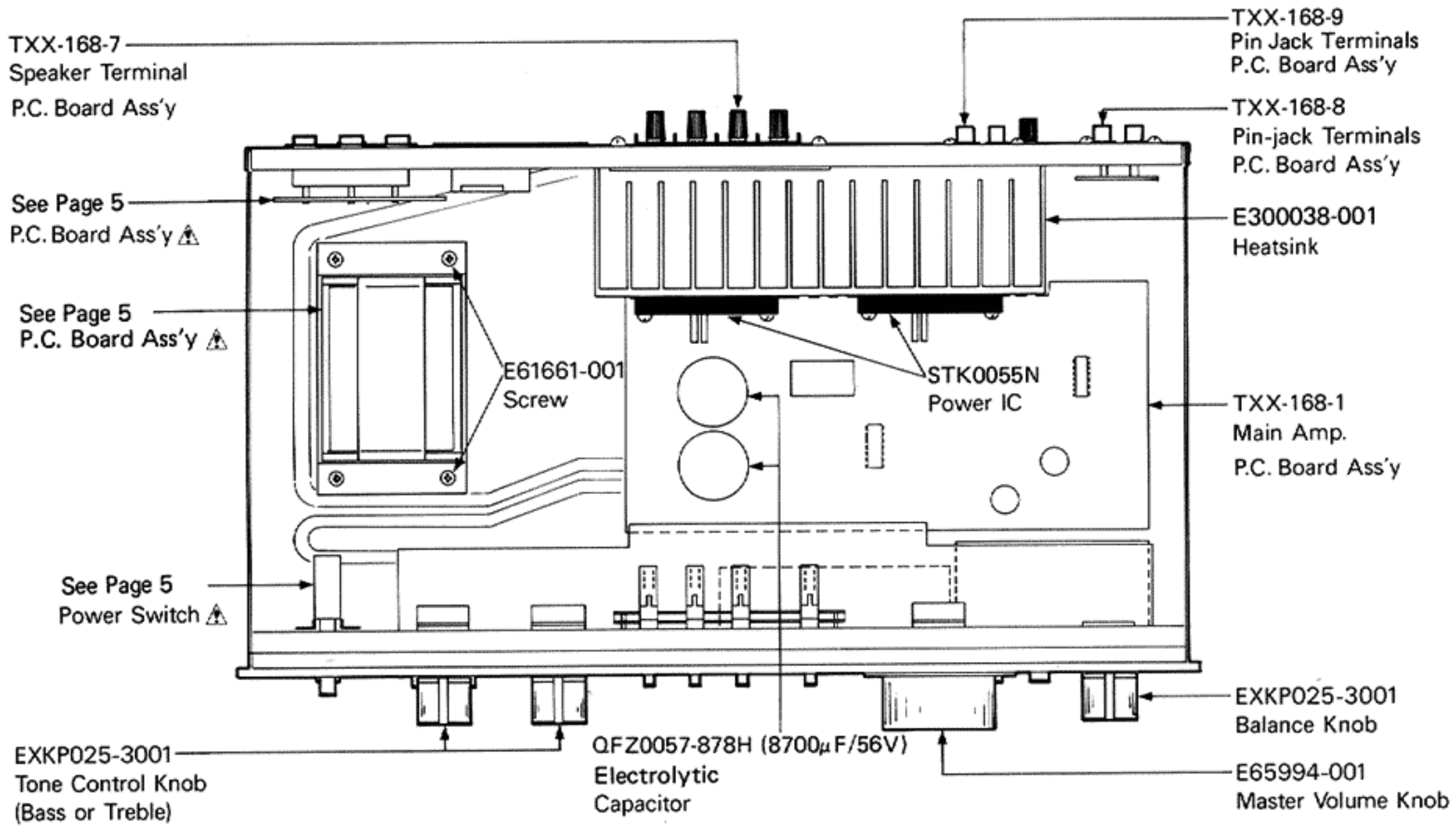


Fig. 2-B

3. Main Parts Location



⚠ : Safety Parts

Fig. 3

4. Exploded Views and Part Numbers

4-(1) Front Panel

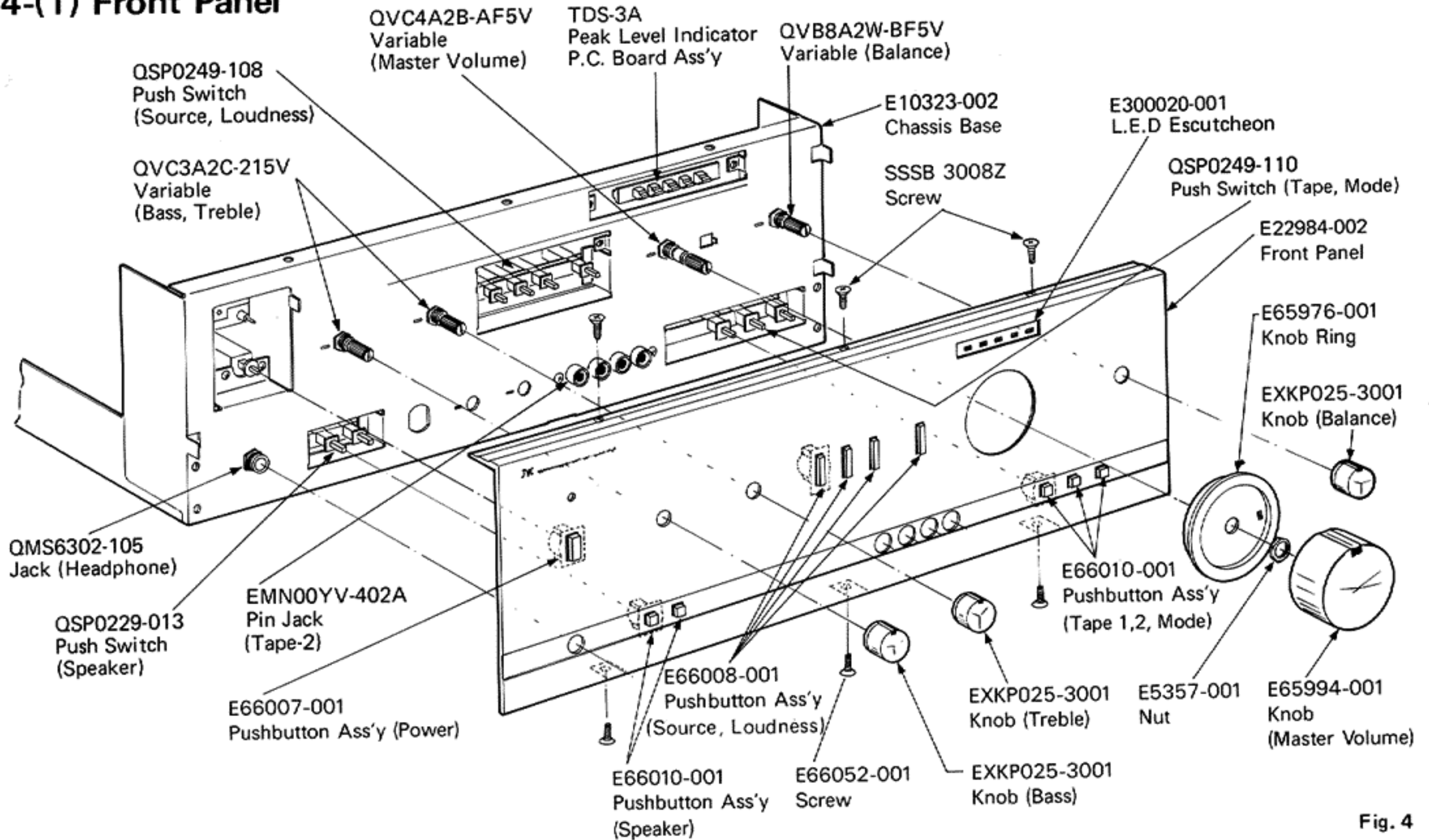


Fig. 4

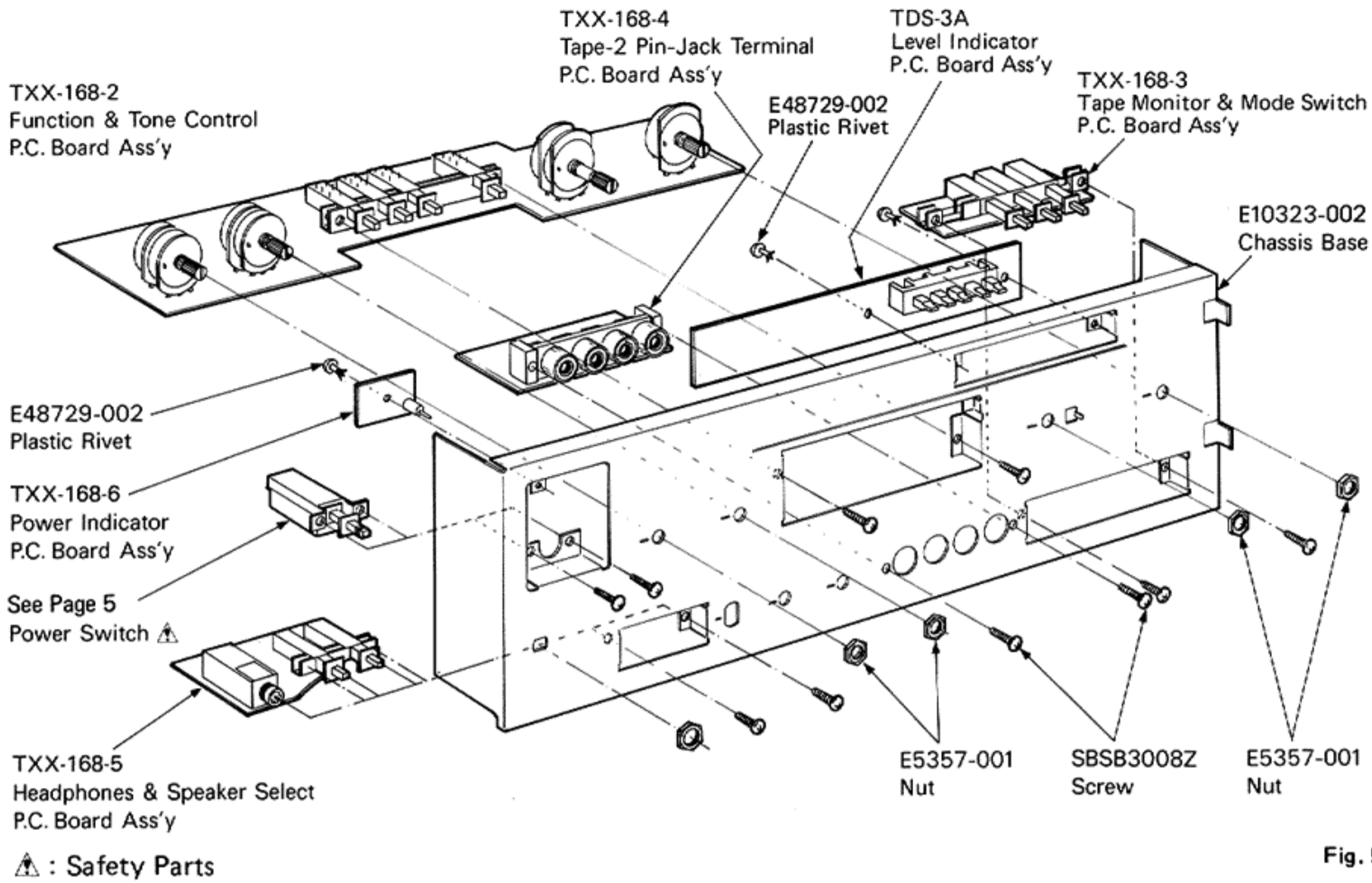


Fig. 5

4-(2) Rear Panel

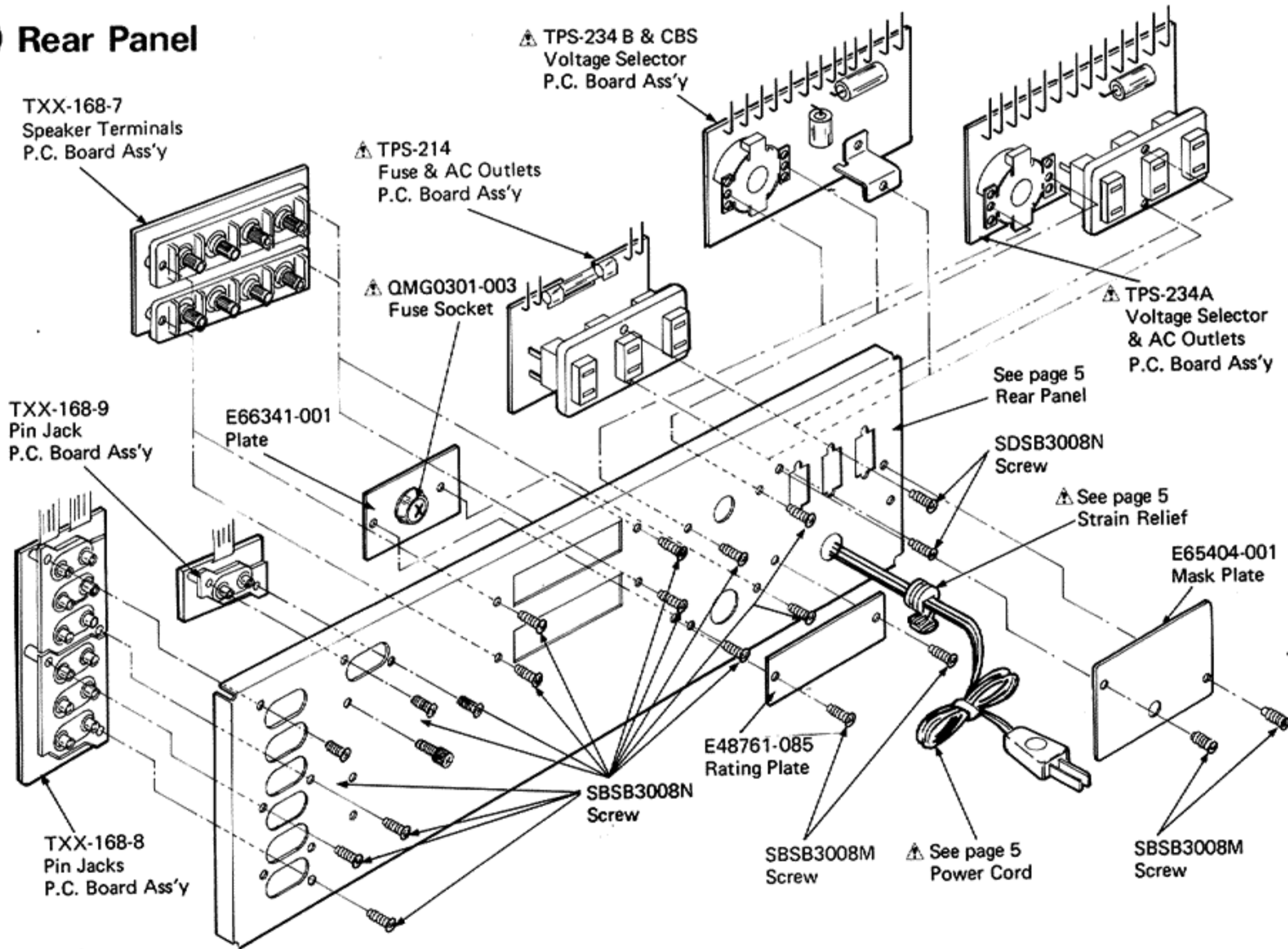


Fig. 6

4-(3) Chassis Base

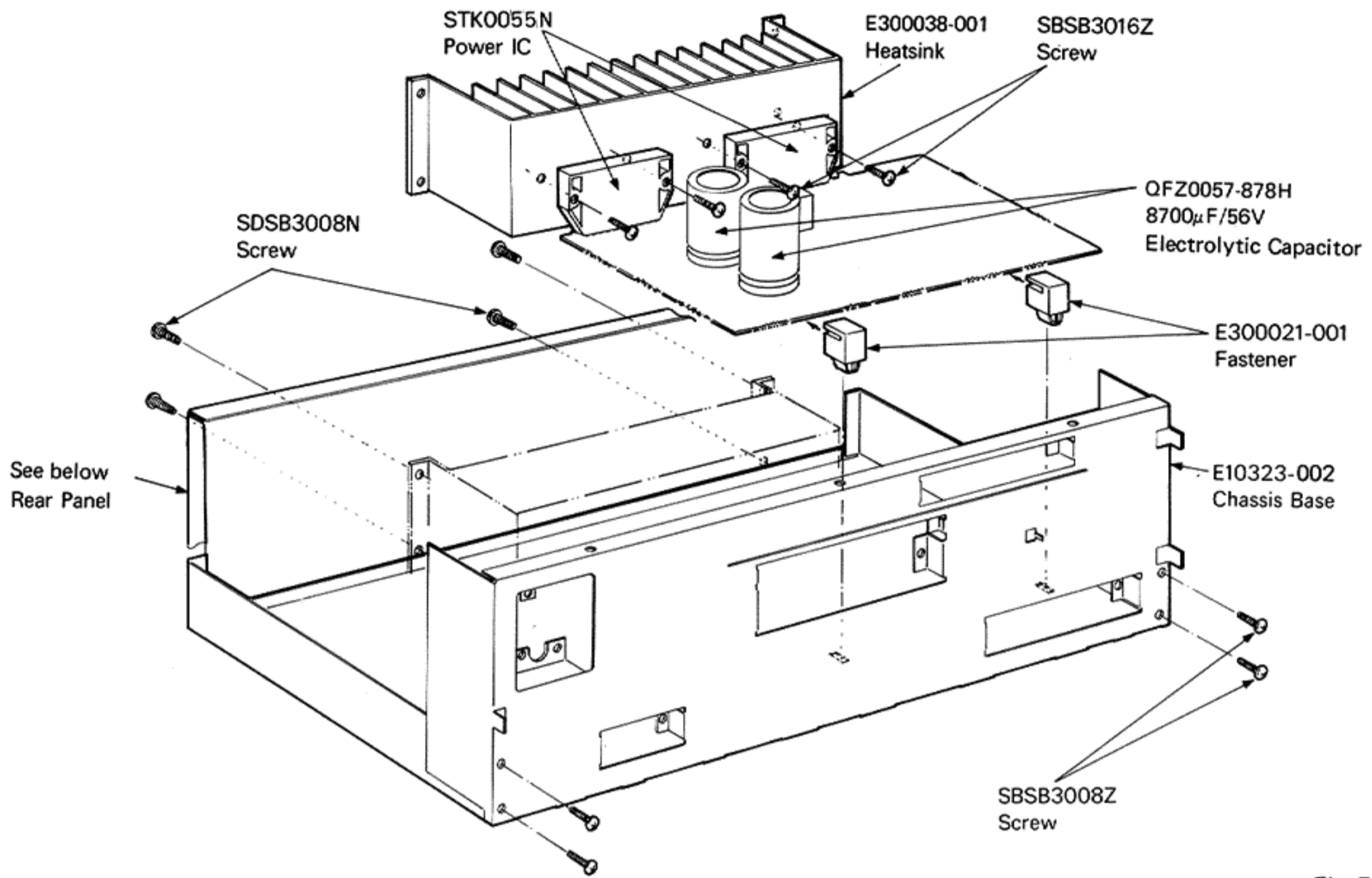


Fig. 7

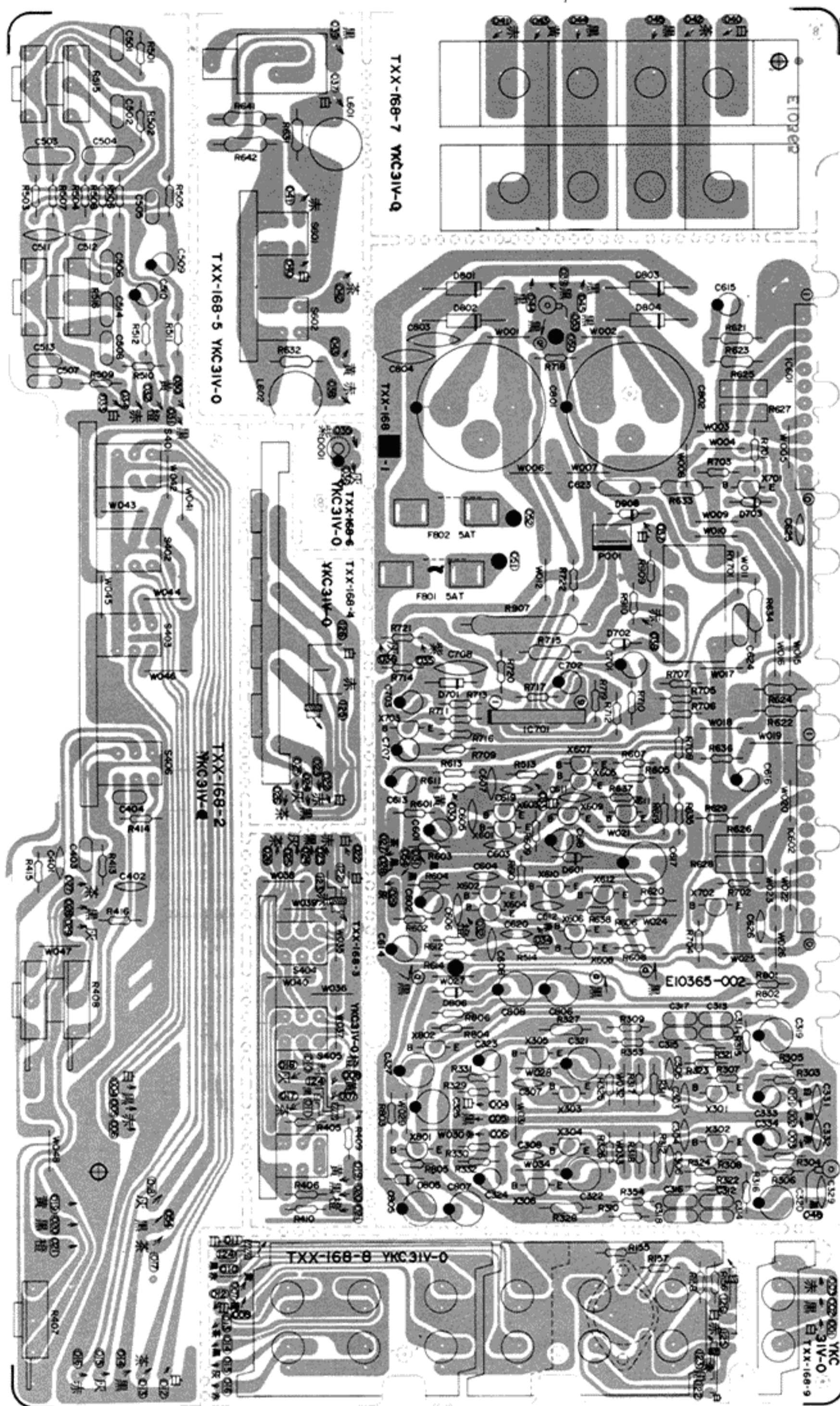
4-(4) Parts List with Specified Numbers for Designated Areas

	U.S.A.	Canada	U.K.	Europe	Australia	Other Countries
Power Cord	QMP1200-200	QMP1200-200	QMP9017-008BS	QMP3900-200	QMP2560-244	QMP7600-250
Power Switch	QSP1110-301	QSP1110-301	QSP2110-004BS	QSP2110-004	QSP2110-004	QSP2110-004
Strain Relief	QHS3876-162	QHS3876-162	QHS3876-162BS	QHS3876-162	QHS3876-162	QHS3876-162
Power Transformer	E03077-39B	E03077-39B	E03077-39CBS	E03077-39C	E03077-39C	E03077-39C
P.C. Board Ass'y	TXX-168A	TXX-168A	TXX-168B	TXX-168B	TXX-168B	TXX-168B
P.C. Board Ass'y	TPS-214A	TPS-214B	TPS-234CBS	TPS-234B	TPS-234B	TPS-234A
Fuse (Primary)	QMF61U1-5R0	QMF61U1-5R0	QMF51A2-2R0LBS	QMF51A2-2R0L	QMF51A2-2R0L	QMF51A2-2R0L
(Secondary)	—	—	QMF51A2-5R0SBS	QMF51A2-5R0S	QMF51A2-5R0S	QMF51A2-5R0S
P.C. Board Ass'y (LEVEL)	TDS 3A	TDS-3A	TDS-3A	TDS-3A	TSD-3A	TDS-3A
Fuse Socket	—	—	QMG0301-003BS	QMG0301-003	QMG0301-003	QMG0301-003
Mask Plate	—	—	E65494-001	E65494-001	E65494-001	—
Rear Panel	E22977-002	E22977-002	E22977-008	E22977-008	E22977-008	E22977-008
Plate	—	—	E66341-001	E66341-001	E66341-001	E66341-001

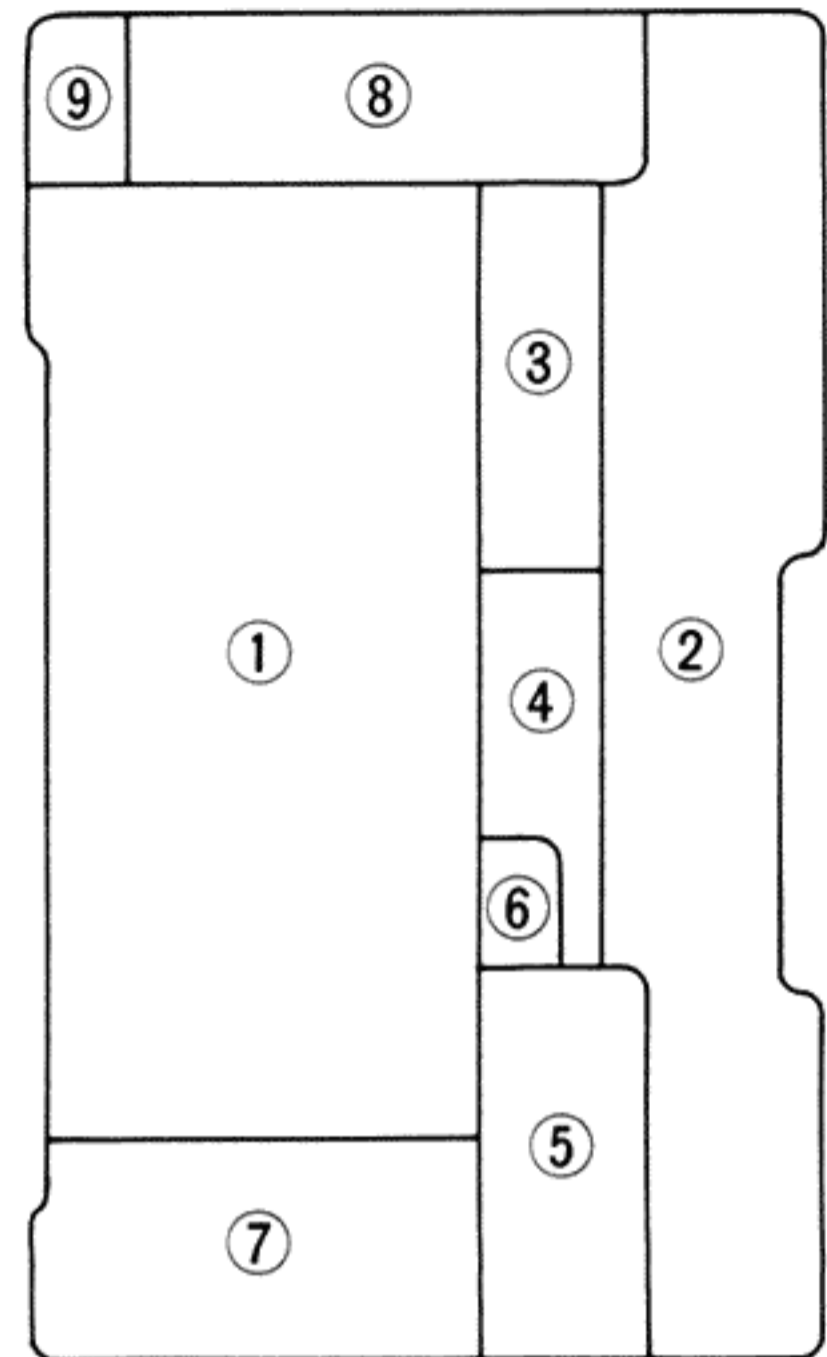
: Safety Parts

5. Printed Circuit Board Ass'y and Parts List

5-(1) TXX-168 Split-P.C. Board Ass'y



Each Individual P.C. Board Ass'y Locations



- ① TXX-168-1: Main Amp. P.C. Board Ass'y
- ② TXX-168-2: Functions & Tone Controls P.C. Board Ass'y
- ③ TXX-168-3: Tape Monitor & Mode Switch P.C. Board Ass'y
- ④ TXX-168-4: Tape-2 Pin-jack P.C. Board Ass'y
- ⑤ TXX-168-5: Headphones & Speaker Select P.C. Board Ass'y
- ⑥ TXX-168-6: Power Indicator P.C. Board Ass'y
- ⑦ TXX-168-7: Speaker Terminals P.C. Board Ass'y
- ⑧ TXX-168-8: Pin-Jack Terminals P.C. Board Ass'y
- ⑨ TXX-168-9: Pin-Jack Terminals P.C. Board Ass'y

Fig. 8

Note:

The specific symbols (“赤” “黒” “白” . . etc) on a surface of above P.C.Board are actually unrelated to the repair service and are significant denotement in order to process the proper assembly of P.C.Board at the factory.

TXX-168 Split-P.C. Board Ass'y
Parts List

Transistors

Item no.	Part No.	Rating		Description	
		Pc	fT		Maker
X301	2SA872AV(D,E)	0.3 W	120 MHz	Silicon	Hitachi
X302	2SA872AV(D,E)	"	"		
X303	2SC1775AV(E,F)	"	200MHz	"	"
X304	2SC1775AV(E,F)	"	"	"	"
X305	2SC2229(Y)	0.8 W	120MHz	"	Toshiba
X306	2SC2229(Y)	"	"	"	"
X601	2SC1775AV(F1)	0.3 W	200MHz	"	Hitachi
X602	2SC1775AV(F1)	"	"	"	"
X603	2SC1775AV(F1)	"	"	"	"
X604	2SC1775AV(F1)	"	"	"	"
X605	2SA872AV(E)	0.3 W	120MHz	Silicon	Hitachi
X606	2SA872AV(E)	"	"		
X607	2SA872AV(E)	"	"	"	"
X608	2SA872AV(E)	"	"	"	"
X609	2SA872AV(E)	"	"	"	"
X610	2SA872AV(E)	"	"	"	"
X611	2SC2229(Y)	0.8 W	"	"	Toshiba
X612	2SC2229(Y)	"	"	"	"
X701	2SC1775AV(F)	0.3 W	200MHz	Silicon	Hitachi
X702	2SC1775AV(F)	"	"		
X703	2SA872AV(E)	"	120MHz	"	"
X801	2SC2229(Y)	0.8 W	"	"	Toshiba
X802	2SA949(Y)	"	"	"	"

Diodes

Item no.	Part No.	Rating	Description	
				Maker
D001	TLR206		LED	Toshiba
D601	WZ-071A		Zener	
D701	ERB12-02RKL1		Silicon	S. Nihon
D702	IS2076-31		"	Musen
D703	IS2076-31		"	Fuji
D801	30D2FA-S	1.7 W	"	Hitachi
D802	30D2FA-S	"	"	"
D803	30D2FA-S	"	"	"
D804	30D2FA-S	"	"	"
D805	WZ-260	0.5 W	Zener	Nihon Inter
D806	WZ-260	"	"	"
D908	WZ-050	"	"	S.Nihon Musen

Integrated Circuits

Item no.	Part No.	Rating	Description	
				Maker
IC601	STK0055N		I.C. (Power)	Tokyo Sanyo
IC602	STK0055N			
IC701	TA7317P	0.5 W	I.C.	Toshiba

Coils & Transformers

Item no.	Part No.	Rating	Description
L601	E04059-1R2	1.2μH	Coil
L602	E04059-1R2	"	"

Capacitors

Item no.	Part No.	Rating		Description
C331	QCS21HJ-101	100 pF	50 V	Ceramic
C332	QCS21HJ-101	"	"	
C305	QCS21HJ-471	470pF	"	"
C306	QCS21HJ-471	470pF	"	"
C307	QCS21HJ-150	15 pF	"	"
C308	QCS21HJ-150	"	"	"
C311	QFM31HJ-682	6800 pF	"	Mylar
C312	QFM31HJ-682	"	"	
C313	QFM31HJ-822	8200 pF	"	"
C314	QFM31HJ-822	"	"	"
C315	QFM31HJ-332	3300 pF	"	"
C316	QFM31HJ-332	"	"	"
C317	QFM31HJ-222	2200 pF	"	"
C318	QFM31HJ-222	"	"	"
C319	QET50JR-227	220μF	6.3V	Electrolytic
C320	QET50JR-227	"	"	
C321	QET50JR-227	"	"	"
C322	QET50JR-227	"	"	"
C323	QET51HR-106	10μF	50 V	"
C324	QET51HR-106	"	"	"
C325	QET51HR-105	1μF	"	"
C327	QET51HR-105	"	"	"
C329	QCF21HP-103A	0.01μF	"	Ceramic
C333	QEB51EM-106	10μF	25 V	
C334	QEB51EM-106	"	"	Low leak current Electrolytic
C401	QCS21HJ-221	220 pF	50 V	Ceramic
C402	QCS21HJ-221	"	"	
C403	QFM31HK-333	0.033μF	"	Mylar
C404	QFM31HK-333	"	"	
C501	QFM31HK-333	"	"	"
C502	QFM31HK-333	"	"	"
C503	QFM31HK-224	0.22μF	"	"
C504	QFM31HK-224	"	"	"
C505	QFM31HK-222	2200 pF	"	"
C506	QFM31HK-222	"	"	"
C507	QFM31HK-223	0.022μF	"	"
C508	QFM31HK-223	"	"	"
C509	QET51ER-106	10μF	25 V	Electrolytic
C510	QET51ER-106	"	"	
C511	QCS21HJ-331	330 pF	50 V	Ceramic
C512	QCS21HJ-331	"	"	
C513	QFM31HK-332	3300 pF	"	Mylar
C514	QFM31HK-332	"	"	
C601	QET51HR-225H	2.2μF	"	Electrolytic
C602	QET51HR-225H	"	"	
C603	QCS21HJ-100	10 pF	"	Ceramic
C604	QCS21HJ-100	"	"	
C605	QCS21HJ-101	100 pF	"	"
C606	QCS21HJ-101	"	"	"
C607	QCS21HJ-100	10 pF	"	"
C608	QCS21HJ-100	10 pF	50 V	Ceramic
C611	QCS21HJ-390	39 pF	"	
C612	QCS21HJ-390	"	"	"
C613	QET51ER-476	47μF	25 V	Electrolytic
C614	QET51ER-476	"	"	
C615	QET51HR-475	4.7μF	50 V	"
C616	QET51HR-475	"	"	
C617	QET51ER-107	100μF	"	"
C618	QET51ER-226	22μF	25 V	"
C623	QFM31HK-473	0.047μF	50 V	Mylar
C624	QFM31HK-473	0.047μF	50 V	
C625	QCS21HJ-121	"	"	Ceramic











Capacitors


Item no.	Part No.	Rating	Description
C626	QCS21HJ-121	120 pF 50 V	Ceramic
C701	QET51AR-107	100μF 10 V	Electrolytic
C702	QET51ER-226	22μF 25 V	"
C703	QET51HR-225	2.2μF 25 V	"
C801	QFZ0057-878	8700μF 56V	"
C802	QFZ0057-878	"	"
C803	QCE22HP-103	0.01μF 500V	Ceramic
C804	QCE22HP-103	"	"
C805	QET51HR-226	22μF 50 V	Electrolytic
C806	QET51HR-226	"	"
C807	QET51HR-476	47μF "	"
C808	QET51HR-476	"	"

Resistors



Item no.	Part No.	Rating	Description
R155	See page 9		
R156	"		
R157	"		
R158	"		
R303	QRD141J-104S	100kΩ 1/4 W	Carbon
R304	QRD141J-104S	"	"
R305	QRD141J-104S	"	"
R306	QRD141J-104S	"	"
R307	QRD141J-101S	100Ω	"
R308	QRD141J-101S	"	"
R309	QRD141J-274S	270kΩ	"
R310	QRD141J-274S	"	"
R311	QRD141J-473SL	47kΩ	"
R312	QRD141J-473SL	"	"
R315	QRD141J-301S	300Ω	"
R316	QRD141J-301S	"	"
R317	QRD141J-392S	3.9kΩ	"
R318	QRD141J-392S	"	"
R321	QRD141J-153SL	15kΩ	"
R322	QRD141J-153SL	"	"
R323	QRD141J-204SL	200kΩ	"
R324	QRD141J-204SL	"	"
R325	QRD141J-221S	220Ω	"
R326	QRD141J-221S	"	"
R327	QRD129J-222	2.2kΩ 1/2 W	"
R328	QRD129J-222	"	"
R329	QRD141J-473S	47kΩ 1/4 W	"
R330	QRD141J-473S	"	"
R331	QRD141J-471S	470Ω	"
R332	QRD141J-471S	"	"
R353	QRD141J-121S	120Ω	"
R354	QRD141J-121S	"	"
R405	QRD141J-562S	5.6kΩ	"
R406	QRD141J-562S	"	"
R407	QVB8A2W-BF5V		Variable
R408	QVC4A2B-AF5V		"
R409	QRD141J-472S	4.7kΩ 1/4 W	Carbon
R410	QRD141J-472S	"	"
R413	QRD141J-223S	22kΩ	"
R414	QRD141J-223S	"	"
R501	QRD141J-823S	82kΩ	"
R502	QRD141J-823S	"	"
R503	QRD141J-182S	1.8kΩ	"
R504	QRD141J-182S	"	"

Resistors

Item no.	Part No.	Rating	Description
R505	QRD141J-123S	12kΩ 1/4 W	Carbon
R506	QRD141J-123S	"	"
R507	QRD141J-182S	1.8kΩ	"
R508	QRD141J-182S	"	"
R509	QRD141J-561S	560Ω	"
R510	QRD141J-561S	"	"
R511	QRD141J-562S	5.6kΩ	"
R512	QRD141J-562S	"	"
R513	QRD141J-472S	4.7kΩ	"
R514	QRD141J-472S	"	"
R515	QVC3A2C-215V		Variable
R516	QVC3A2C-215V		"
R601	QRD141J-222S	2.2kΩ 1/4 W	Carbon
R602	QRD141J-222S	"	"
R603	QRD141J-104S	100kΩ	"
R604	QRD141J-104S	"	"
R605	QRD141J-101S	100Ω	"
R606	QRD141J-101S	"	"
R607	QRD141J-101S	"	"
R608	QRD141J-101S	"	"
R609	QRD141J-472S	4.7kΩ	"
R610	QRD141J-472S	"	"
R611	QRD141J-511S	510Ω	"
R612	QRD141J-511S	"	"
R613	QRD141J-823S	82kΩ	"
R614	QRD141J-823S	"	"
R619	QRD149J-100S	10Ω	" 
R620	QRD149J-100S	"	" 
R621	QRD129J-472	4.7kΩ 1/2 W	" 
R622	QRD129J-472	"	" 
R623	QRD129J-272	2.7kΩ	" 
R624	QRD129J-272	"	" 
R625	QRM054K-R22	0.22Ω 5 W	Metal Plate
R626	QRM054K-R22	"	"
R627	QRM054K-R22	"	"
R628	QRM054K-R22	"	"
R629	QRD149J-101S	100Ω 1/4 W	Carbon 
R631	QRD129J-4R7	4.7Ω 1/2 W	"
R632	QRD129J-4R7	"	"
R633	QRX017J-100S	10Ω 1 W	Oxide Metal Film 
R634	QRX017J-100S	"	"
R635	QRD141J-222S	2.2kΩ 1/4 W	Carbon
R636	QRD141J-222S	"	"
R637	QRD149J-391S	390Ω	" 
R638	QRD149J-391S	"	" 
R641	QRG017J-221S	220Ω 1 W	Oxide Metal Film
R642	QRG017J-221S	"	"
R701	QRD141J-122S	1.2kΩ 1/4 W	Carbon
R702	QRD141J-122S	"	"
R703	QRD141J-681S	680Ω	"
R704	QRD141J-681S	"	"
R705	QRD141J-104S	100kΩ	"
R706	QRD141J-823S	82kΩ	"
R707	QRD141J-123S	12kΩ	"
R708	QRD141J-123S	12kΩ	"
R709	QRD141J-103S	10kΩ	"
R710	QRD141J-104S	100kΩ	"
R711	QRD141J-473S	47kΩ	"
R712	QRD141J-683S	68kΩ	"
R713	QRD141J-334S	330kΩ	"
R714	QRD141J-682S	6.8kΩ	"
R715	QRG017J-821S	820Ω 1 W	Oxide Metal Film
R716	QRD141J-332S	3.3kΩ 1/4 W	Carbon

 : Safety Parts



Resistors

Item no.	Part No.	Rating	Description
R717	QRD141J-183S	18kΩ 1/4 W	Carbon
R718	QRD141J-123S	12kΩ "	"
R719	QRD141J-224S	220kΩ "	"
R720	QRD149J-101S	100Ω "	" 
R721	QRD149J-100S	10Ω "	" 
R722	QRD141J-332S	3.3kΩ "	"
R801	See right-hand diagram		
R802	"	"	"
R803	QRD141J-332S	3.3kΩ 1/4 W	Carbon
R804	QRD141J-332S	" "	"
R805	QRD141J-332S	" "	"
R806	QRD141J-332S	" "	"
R907	QRG037J-102	1kΩ 3 W	Oxide Metal Film
R909	QRD141J-123S	12kΩ 1/4 W	Carbon
R910	QRD141J-123S	" "	"



Others


Item no.	Part No.	Rating	Description
2PIN 6PIN	E03572-007EJ		Speaker Terminal
	E03591-22D		2Pin Pin Jack
	E03591-62D		6Pin Pin Jack
	E03623-003 E43727-002		Din Socket Tab
S401 S404 S601	QMV5005-003		3P Plug Ass'y
	EWT011-015		Tab Wire Ass'y
	QSP0249-108		Push Switch
	QSP0249-110 QSP0229-013		" "
FRONT H.PHO RY701	EMN00YV-402A QMS6302-105 ESK6D24-212		4Pin Pin Jack Headphone Jack Relay

TXX-168A (For U.S.A. & Canada)

Item no.	Part no.	Rating	Description
R801	QRD149J-101S	100Ω 1/4 W	Carbon 
R802	QRD149J-101S	" "	" 
6PIN	E03591-62D		6Pin Pin Jack

TXX-168B (For U.K., Europe, Australia & Other countries)

Item no.	Part no.	Rating	Description
R801	QRZ0052-101	100Ω 1/4 W	Carbon 
R802	QRZ0052-101	" "	" 
R155	QRD141J-823S	82kΩ "	"
R156	QRD141J-823S	" "	"
R157	QRD141J-334S	330kΩ "	"
R158	QRD141J-334S E03623-003 E48965-002	" "	" Din Socket Fuse Clip

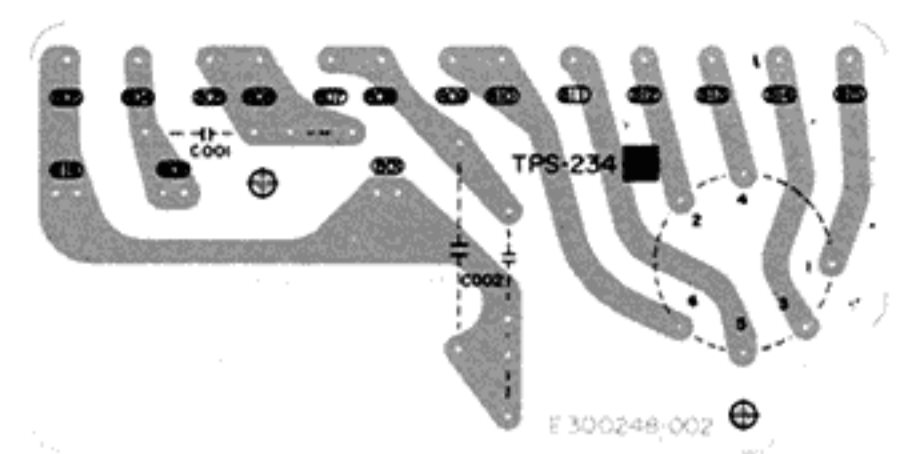
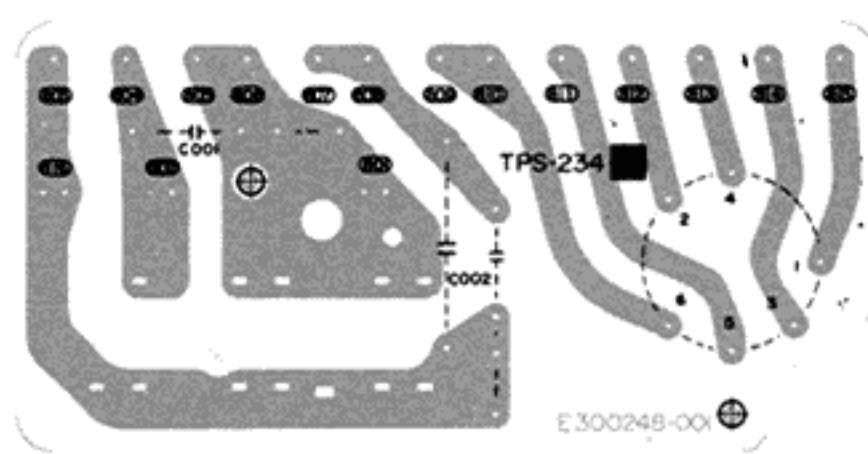
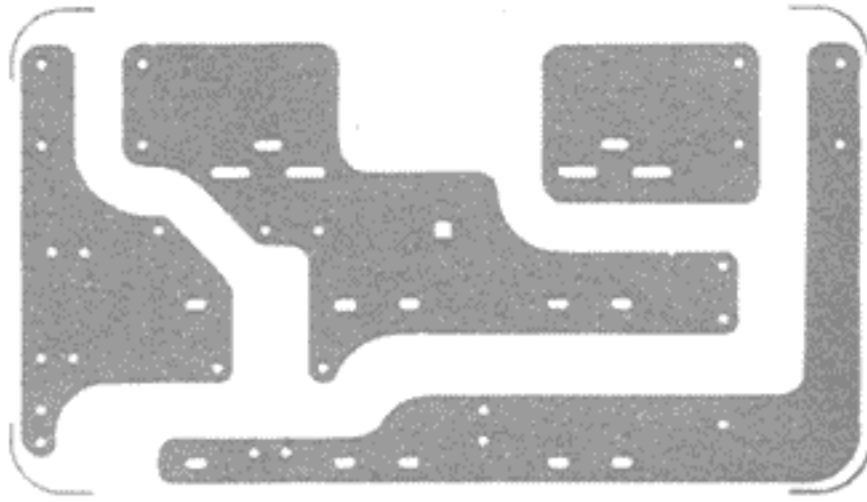
 : Safety Parts

5-(2) TPS-214, 234 Fuse, AC Outlet & Voltage Selector P.C. Board Ass'y

For U.S.A. & Canada TPS-214A (or B)

For Other Countries TPS-234A

For U.K., Europe & Australia
TPS-234B (or CBS)



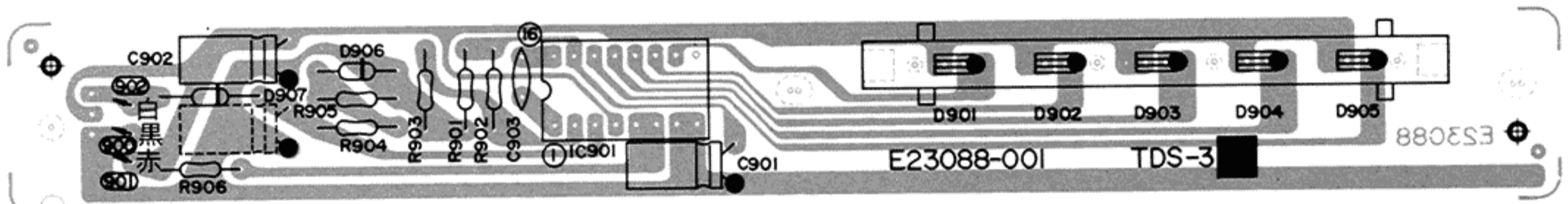
The following Part Numbers are listed on below.

Item no.	Description	Item no.	Description
1	Fuse clip	5	Capacitor
2	Tab	6	Line voltage selector
3	Tab	7	Bracket
4	AC outlet	8	Screw

Item No.	Description	U.S.A.	Canada	U.K.	Europe	Australia	Other Countries
5-(2)	P.C. Board Ass'y	TPS-214A	TPS-214B	TPS-234CBS	TPS-234B	TPS-234B	TPS-234A
1	Fuse Clip	E03675-004	E03675-004	—	—	—	—
2	Tab	E43727-001	E43727-001	E43727-001	E43727-001	E43727-001	E43727-001
3	Tab	E65508-001	E65508-001	E65508-001	E65508-001	E65508-001	E65508-001
4	AC Outlet	QMC0637-003	QMC0637-003	—	—	—	QMC0637-003
5	Capacitor	QCE22HP-103 (0.01 μ F, 500V)	QCZ9014-103 (0.01 μ F, 125V, AC)	QFZ9007-103BS (0.01 μ F)	QFZ9007-103 (0.01 μ F)	QFZ9007-103 (0.01 μ F)	QFZ9007-103 (0.01 μ F)
6	Line Voltage Selector	—	—	QSR0085-001BS	QSR0085-001	QSR0085-001	QSR0085-001
7	Bracket	—	—	E65586-001	E65586-001	E65586-001	—
8	Screw	—	—	SBSB3008Z	SBSB2008Z	SBSB3008Z	—

: Safety Parts

5-(3) TDS-3A, Paek Level Indicator P.C. Board Ass'y



Integrated Circuits

Item no.	Part No.	Rating	Description	Maker
IC901	LB1405	Pc	I.C.	Sanyo
		0.5 W		

Capacitors

Item no.	Part No.	Rating	Description
C901	QET51HR-474	0.47 μ F 50 V	Electrolytic
C902	QET51ER-226	22 μ F 25 V	"
C903	QCS21HJ-560	56 pF 50 V	Ceramic

Diodes

Item no.	Part No.	Rating	Description	Maker
D901	TLR205		LED	Toshiba
D902	TLR205		"	"
D903	TLR205		"	"
D904	TLR205		"	"
D905	TLR205		"	"
D906	1S2076-31		Silicon	Hitachi
D907	1S188FM		Germanium	Sanyo

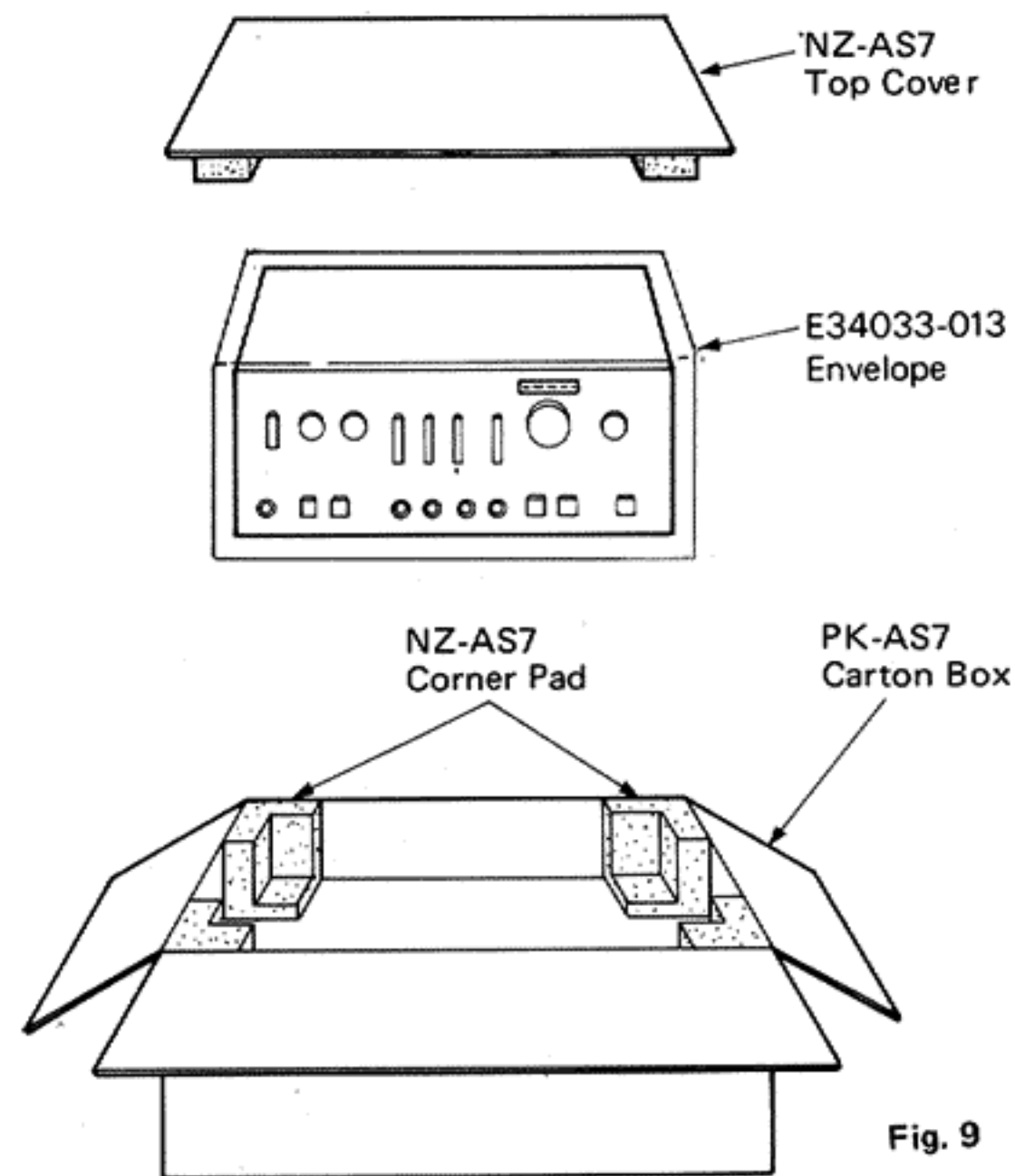
Resistors

Item no.	Part No.	Rating	Description
R901	QRD141J-183S	18k Ω 1/4 W	Carbon
R902	QRD141J-823S	82k Ω "	"
R903	QRD141J-273S	27k Ω "	"
R904	QRD141J-101S	100 Ω "	"
R905	QRD141J-123S	12k Ω "	"
R906	QRD141J-561S	560 Ω "	"

Others

Item no.	Part No.	Rating	Description
	EWS013-009		SKT Wire ass'y
	E300019-001		LED Holder

7. Packing Materials and Part Numbers



8. Accessories List

	U.S.A.	Canada	U.K.	Europe	Australia	Other Countries
Instruction book	E30580-727A	E30580-727A	E30580-727ABS	E30580-727A	E30580-727A	E30580-727A
JVC warranty card	BT20032B	BT20025C	BT20013B	—	BT20029B	—
Service procedure	BT20023	—	—	—	—	—
Special reply card	BT20024B	—	—	—	—	—
Fuse	—	—	—	—	—	QMF51A2-2R0L or QMF51A2-4R0S
Envelope	E41202-2	E41202-2	E41202-2	E41202-2	E41202-2	E41202-2

JVC

VICTOR COMPANY OF JAPAN, LIMITED, TOKYO, JAPAN