

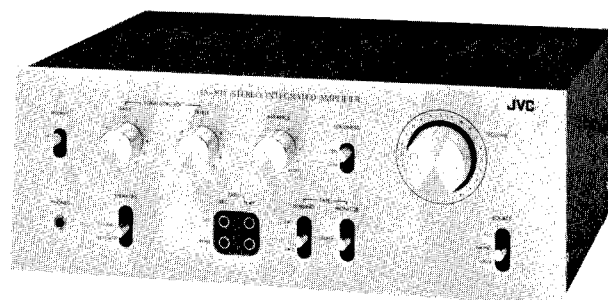
# JVC

# SERVICE MANUAL

MODEL

## JA-S11

STEREO INTEGRATED AMPLIFIER



# Contents

	Page
Specifications . . . . .	2
Removal of Top Cover and Bottom Plate . . . . .	3
Main Parts Location . . . . .	4
Exploded View and Part Numbers	
(1) Front . . . . .	5
(2) Rear . . . . .	6
(3) Chassis Base . . . . .	7
(4) Power Transformer . . . . .	8
Special Parts List with Specified Numbers by Areas (table 1) . . . . .	8
Circuit Board Ass'y and Parts List	
(1) TXX-32C (TAP-264B and TAC-413) Main and Tone Control C.B. Ass'y . . . . .	9
(2) TPS-69 AC Primary C.B. Ass'y . . . . .	13
(3) TPS-70 AC Primary C.B. Ass'y . . . . .	13
Packing Materials List . . . . .	14
Accessories List . . . . .	14

*www.manualscenter.com*

# Specifications

## Power Amplifier Section

- Output Power (both channels driven) : 30 watts per channel, min. RMS into 8 ohms, from 20Hz – 20kHz with no more than 0.1% total harmonic distortion  
33 watts per channel into 8 ohms at 1kHz. THD = 0.1%
- Total Harmonic Distortion (at 30W) (both channels driven) : 0.05% at 1kHz
- Intermodulation distortion : 0.1% at rated output
- Load Impedance : 4 $\Omega$  – 16 $\Omega$  (SYSTEM-1 or SYSTEM-2)  
8 $\Omega$  – 16 $\Omega$  (SYSTEM-1 + 2)
- Damping Factor : More than 30 at 8 $\Omega$  (20Hz – 20kHz)

## Pre-Amplifier Section

- Input Sensitivity/Impedance : PHONO 2.5mV/47k $\Omega$   
AUX, TUNER, TAPE PLAY 150mV/50k $\Omega$
- Output Level : TAPE REC.-1, -2 150mV  
DIN REC. 30mV
- Phono Equalizer Deviation :  $\pm 0.5$ dB from RIAA curve (25Hz – 15kHz)
- Phono Overload : 150mV (RMS) at 1kHz, 420mV (P-P)
- Signal to Noise Ratio : PHONO 65dB (RMS)  
AUX 85dB (RMS)
- Frequency Response : AUX, TUNER, TAPE PLAY 25Hz – 40kHz  $\begin{matrix} +0 \\ -1 \end{matrix}$ dB
- Loudness Control (at -30dB Volume Control) : +6dB at 100Hz  
+4dB at 10kHz
- Tone Controls : Bass  $\pm 8$ dB at 100Hz  
Treble  $\pm 8$ dB at 10kHz

- Power Source : Refer to table 1
- Power Consumption : Refer to table 1
- Dimensions : 5-3/32"(H) x 15-11/32"(W) x 13"(D)  
(15.2cm x 39.0cm x 33.0cm)
- Weight : 15.4 lbs. (7.0kg)

[www.manualscenter.com](http://www.manualscenter.com)

	U.K. Australia	European continent Scandinavian countries Finland	Other countries except U.S.A. and Canada
Power supply	AC 240V, 50Hz	AC 220V, 50Hz	AC 110/120/220/240V, 50/60Hz
Power consumption	160 watts	235 watts	235 watts

(Table 1)

# Removal of Top Cover and Bottom Plate

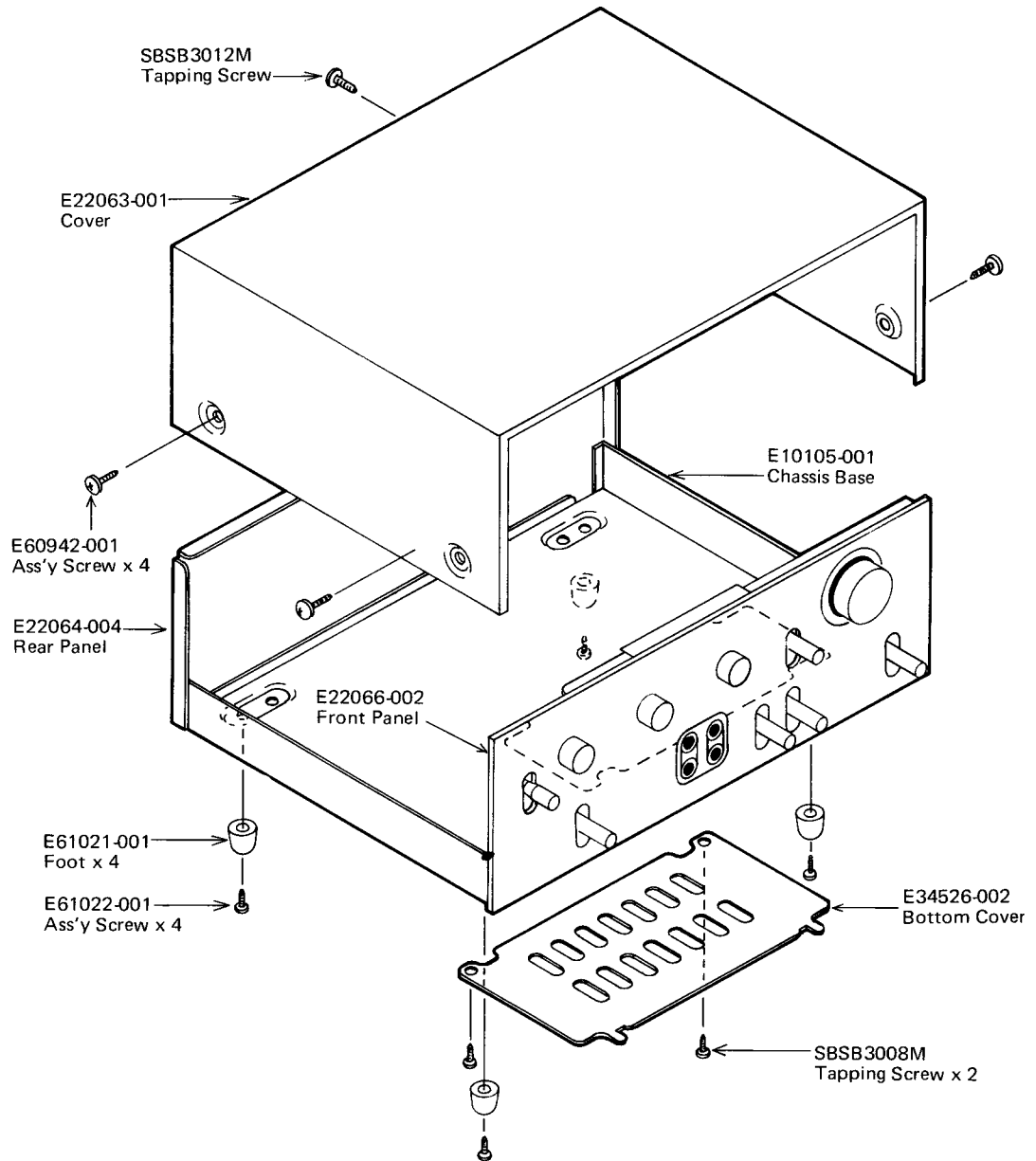


Fig. 1

[www.manualscenter.com](http://www.manualscenter.com)

# Main Parts Location

( For European continent, U.K.  
Scandinavian countries, Finland and Australia )

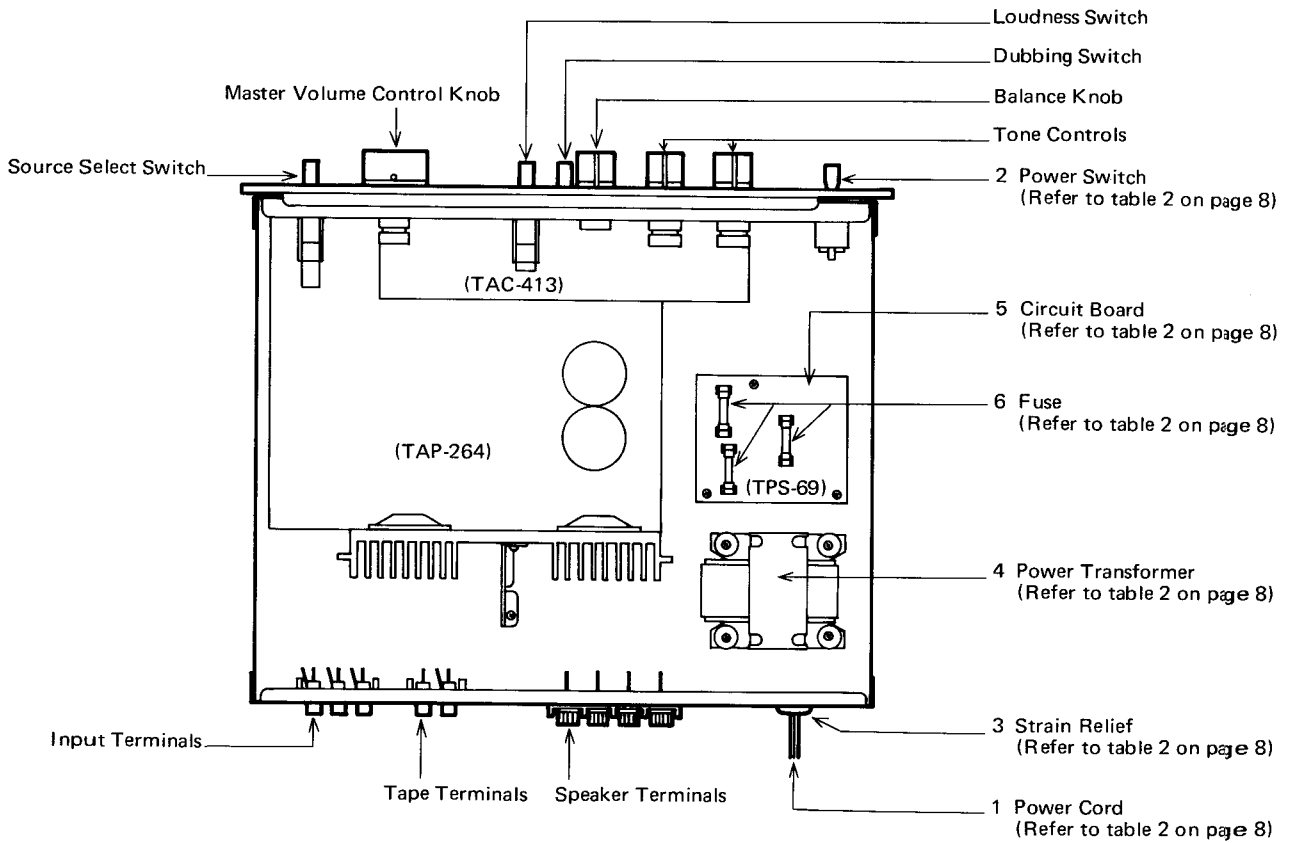


Fig. 2

( For Other countries except U.S.A. and Canada )

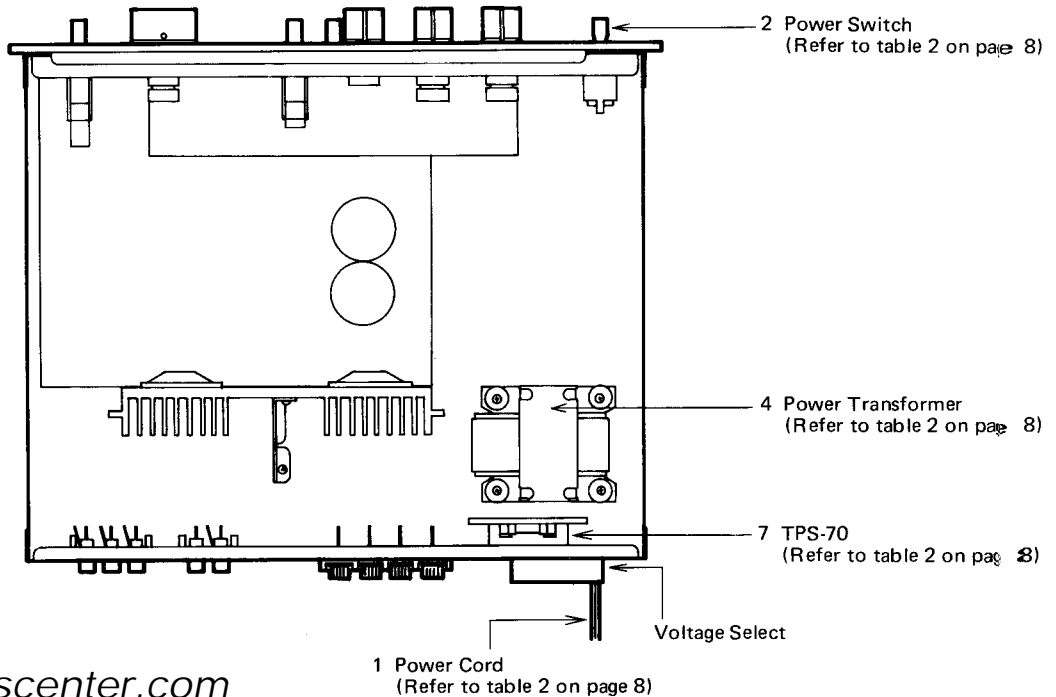


Fig. 3

# Exploded View and Part Numbers

(1) Front

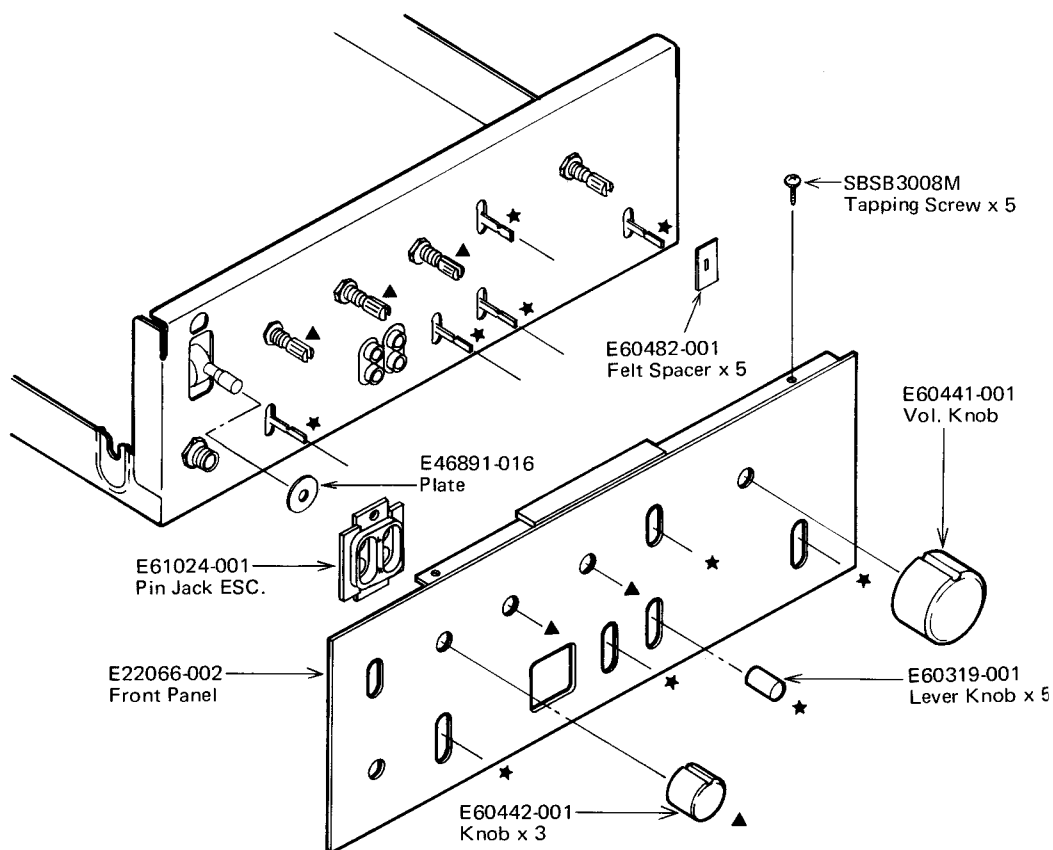


Fig. 4

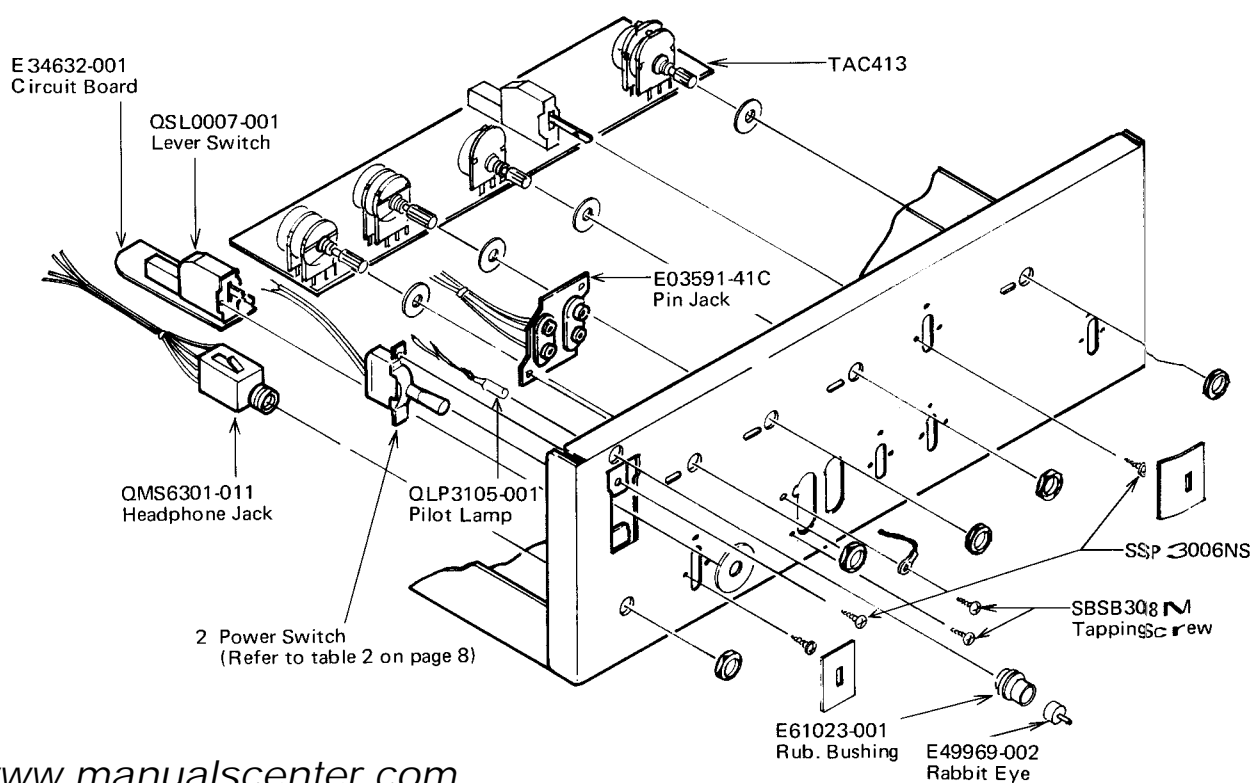
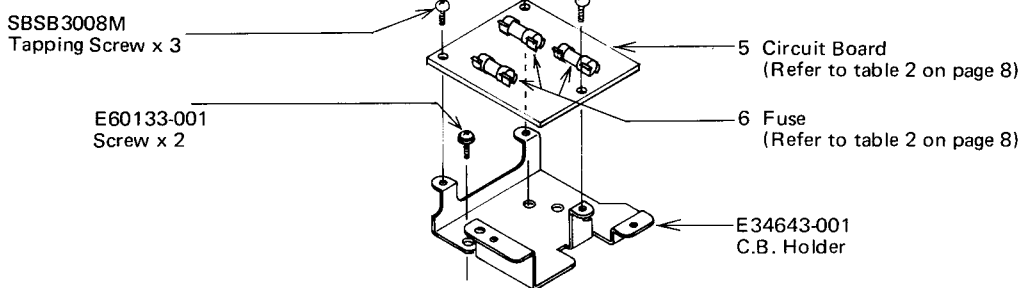
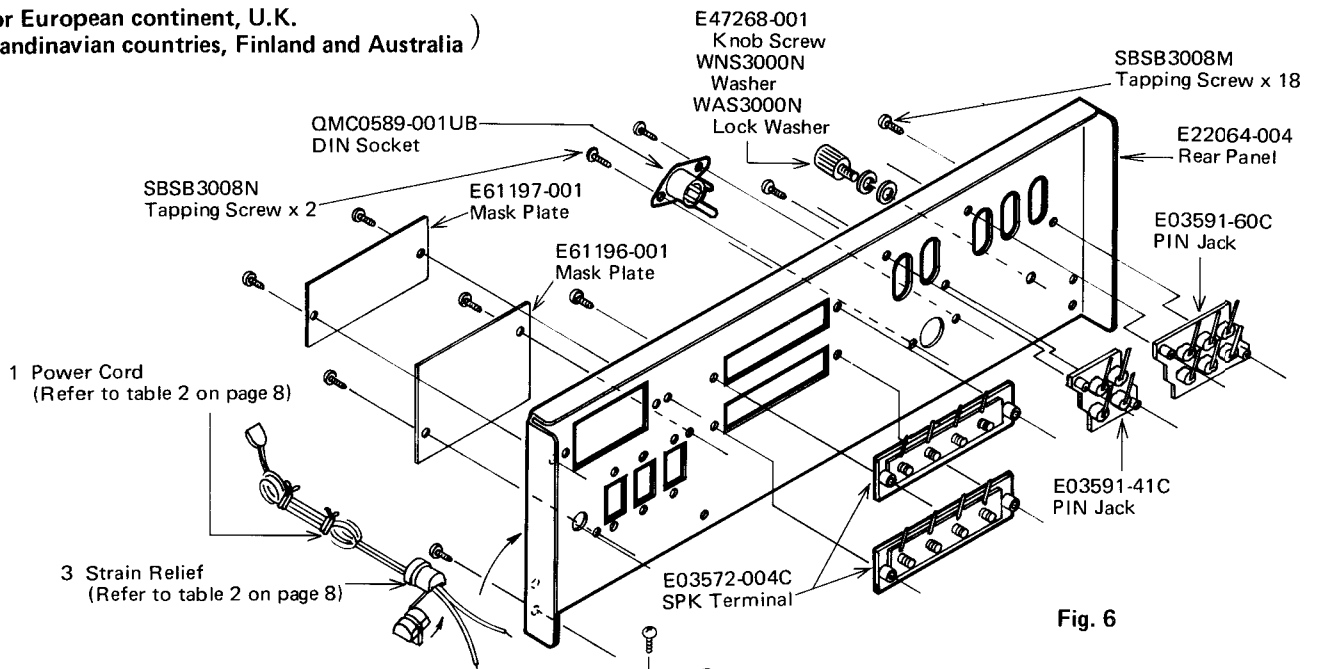


Fig. 5

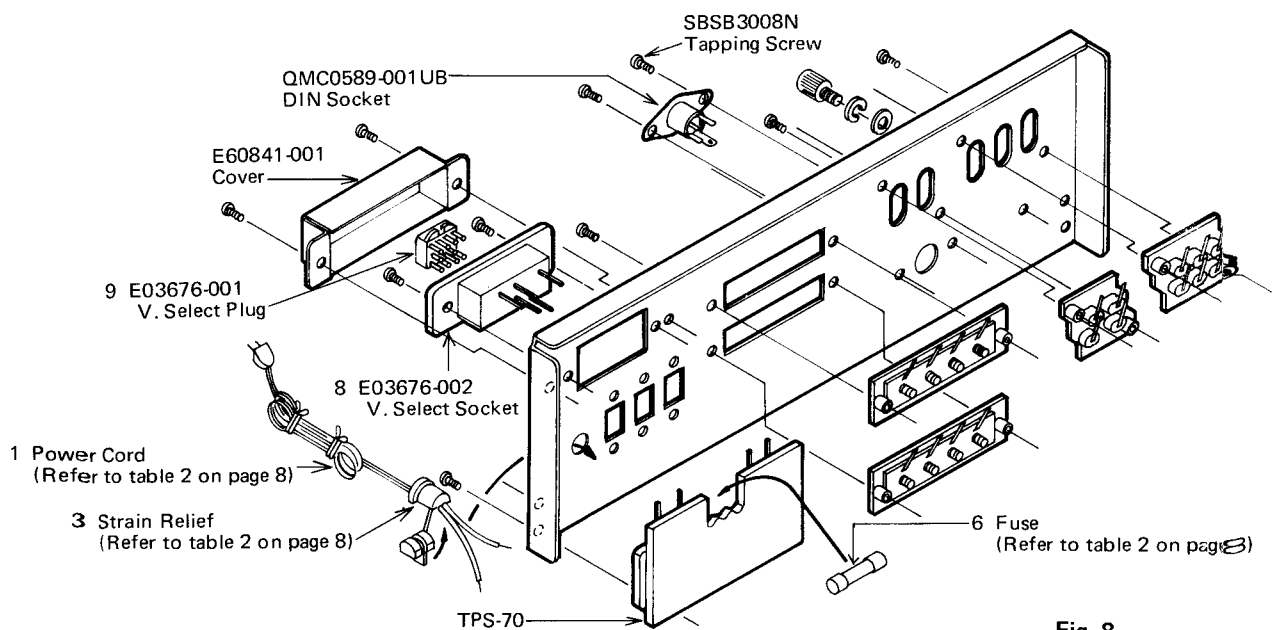
[www.manualscenter.com](http://www.manualscenter.com)

(2) Rear

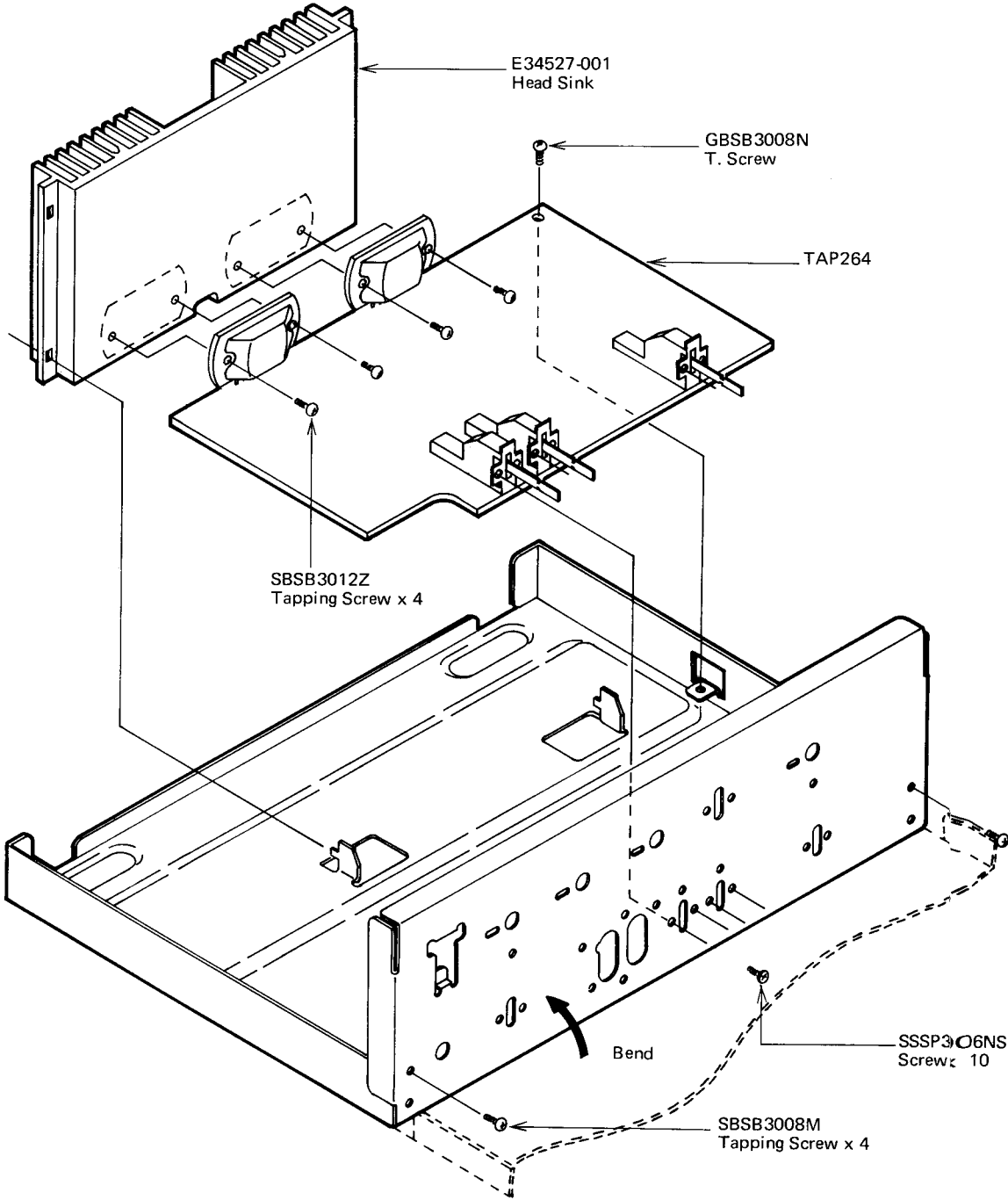
( For European continent, U.K.  
Scandinavian countries, Finland and Australia )



( For Other countries except U.S.A. and Canada )



(3) Chassis Base



[www.manualscenter.com](http://www.manualscenter.com)

Fig. 9



**(4) Power Transformer**

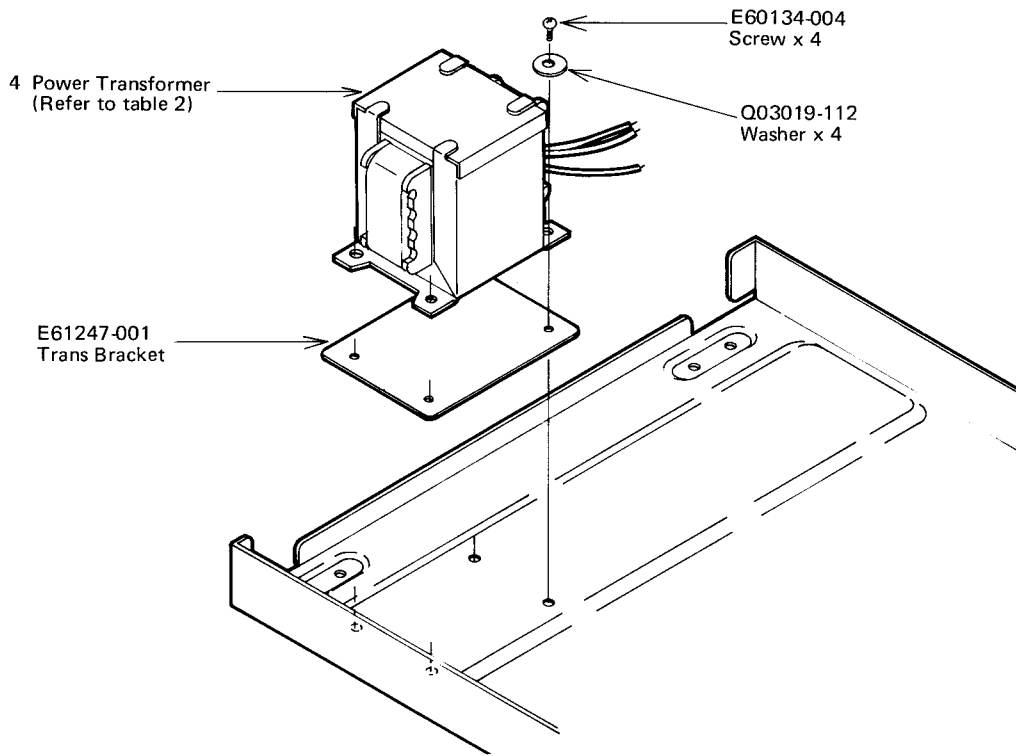


Fig. 10

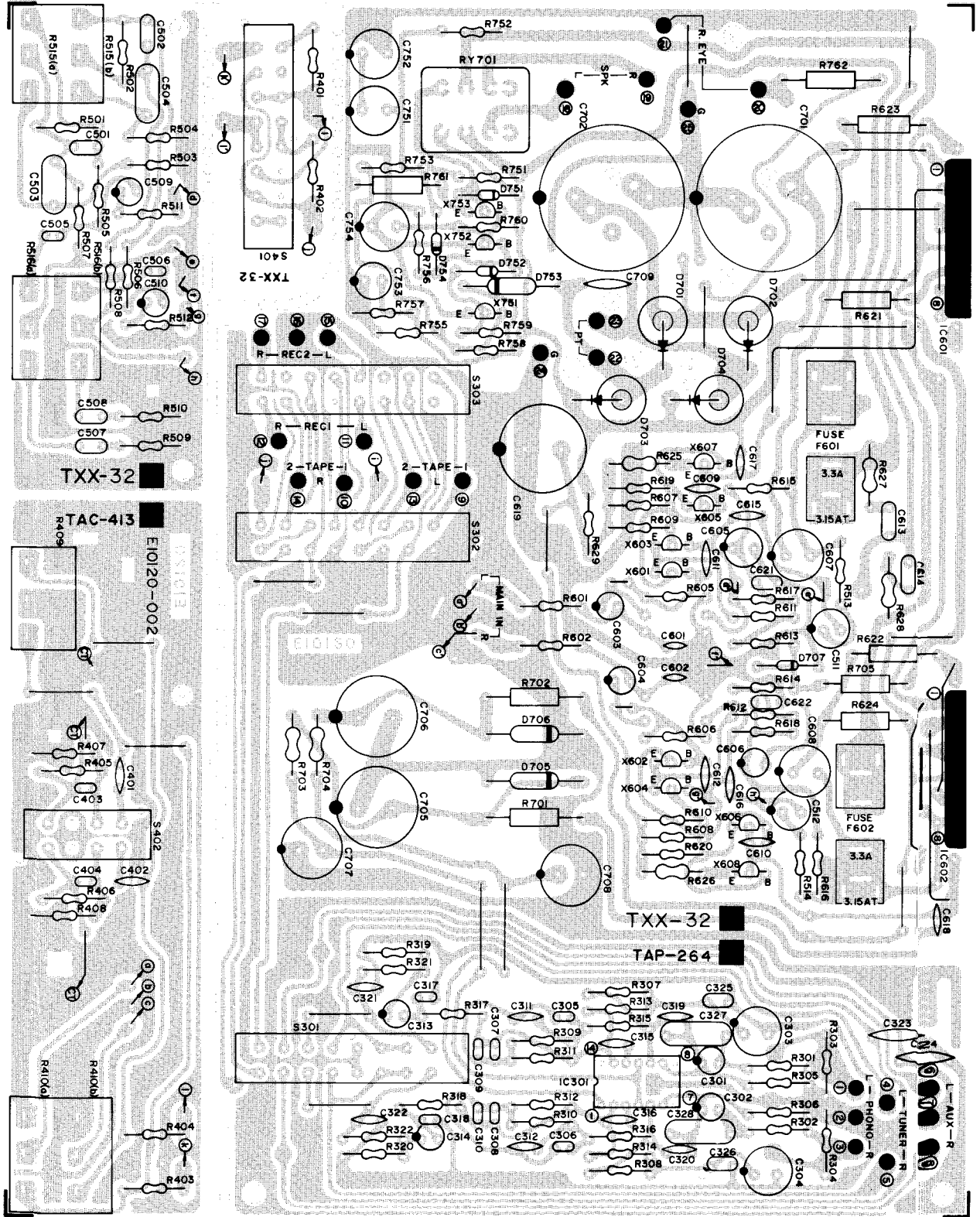
## Special Parts List with Specified Numbers by Areas (table 2)

Page	Item No.	Description	Part Number			
			for U.K.	for European continent Scandinavian countries Finland	for Australia	for Other countries except U.S.A. and Canada
6	1	Power Cord	QMP9020-003BS	QMP3910-224	E03551-002	QMP1200-244
6	2	Power Switch	QSL2235-103BS	QSL2235-103	QSL2235-103	QSL1135-011G
6	3	Strain Relief	QHS6374-252BS	QHS3876-162	QHS6374-252	QHS3876-162
8	4	Power Trans	E03075-33CBS	E03075-33C	E03075-33C	E03075-33B
6	5	Circuit Board	E34633-001BS	E34633-001	E34633-001	_____
6	6	Fuse (Primary)	QMF51A2- 2R0BS (2AT)	QMF51A2-2R0 (2AT)	QMF51S2-2R0 (2AT)	QMF60S1-3R3 (3.3A 100,120V)
		(Secondary)	QMF51A2- 3R15BS (3.15AT)	QMF51A2-3R15 (3.15AT)	QMF51A2-3R15 (3.15AT)	QMF60S1-1R3 (1.8A 220,240V)
6	7	AC outlet Ass'y	_____	_____	_____	TPS-70
6	8	Voltage Select Plug	_____	_____	_____	E03676-002
6	9	Voltage Select Socket	_____	_____	_____	E03676-001

(Table 2)

# Circuit Board Ass'y and Parts List

(1) TXX-32C (TAP-264B and TAC-413)  
Main and Tone Control C.B. Ass'y



### Transistors

Item No.	Part No.	Rating		Description
		Pc	fT	
X601~604	2SC1775AV(F1)	300mW	200MHz	Silicon Transistor
X605,606	2SA872AV(E)	300mW	120MHz	"
X607,608	2SB560(E)	750mW	100MHz	"
X751,752	2SC1775AV(F)	300mW	200MHz	
X753	2SD438(E)	750mW	100MHz	

### Integrated Circuits

Item No.	Part No.	Rating	Description
IC301	HA1452W		Equalize Amp.
IC601,602	S-40W		Power Amp.

### Diodes

Item No.	Part No.	Rating		Description
D701~704	DS2P			Silicon Diode
D705,706	QEB01-15Z	15V	1W	Zener Diode
D707	WZ-071A	7V	500mW	"
D753	S1B01-02			Silicon Diode
D754	1S2473			"

### Resistors

Item No.	Part No.	Rating			Description
R301,302	QRD141J-222	2.2k $\Omega$	$\pm 5\%$	1/4W	Carbon Resistor
R303~306	" -104	100k $\Omega$	"	"	"
R307,308	" -821	820 $\Omega$	"	"	"
R309,310	" -393	39k $\Omega$	"	"	"
R311,312	" -474	470k $\Omega$	"	"	"
R313,314	" -564	560k $\Omega$	"	"	"
R315,316	" -182	1.8k $\Omega$	"	"	"
R317,318	" -470	47 $\Omega$	"	"	"
R319,320	" -104	100k $\Omega$	"	"	"
R321,322	" -471	470 $\Omega$	"	"	"
R403,404	" -472	4.7k $\Omega$	"	"	"
R405,406	" -683	68k $\Omega$	"	"	"
R407,408	" -223	22k $\Omega$	"	"	"
R409	QVB8A2W-6F5E	250k $\Omega$ (W)			Variable Resistor (Balance)
R410	QVC4A2B-9F5	250k $\Omega$ (B)			" (Master Volume)
R501,502	QRD141J-823	82k $\Omega$	$\pm 5\%$	1/4W	Carbon Resistor
R503,504	" -182	1.8k $\Omega$	"	"	"
R505,506	" -123	12k $\Omega$	"	"	"
R507,508	" -182	1.8k $\Omega$	"	"	"
R509,510	" -561	560 $\Omega$	"	"	"
R511,512	" -562	5.6k $\Omega$	"	"	"
R513,514	" -472	4.7k $\Omega$	"	"	"
R515,516	QVC3A2C-215	100k $\Omega$ (C)			Variable Resistor (Tone)
R601,602	QRD141J-222	2.2k $\Omega$	$\pm 5\%$	1/4W	Carbon Resistor
R605,606	" -184	180k $\Omega$	"	"	"
R607,608	" -182	1.8k $\Omega$	"	"	"
R611,612	" -681	680 $\Omega$	"	"	"
R613,614	" -683	68k $\Omega$	"	"	"

Item No.	Part No.	Rating			Description
R617,618	QRD141J-681	680 $\Omega$	$\pm 5\%$	1/4W	Carbon Resistor
R619,620	" -182	1.8k $\Omega$	"	"	"
R621,622	QRG017J-392	3.9k $\Omega$	"	1W	Oxide Metal Film Resistor
R623,624	" -222	2.2k $\Omega$	"	"	"
R627,628	QRD126J-4R7	4.7 $\Omega$	"	"	Unflamable Carbon Resistor
R629	" -470	47 $\Omega$	"	"	"
R701,702	QRG027J-821	820 $\Omega$	"	2W	Oxide Metal Film Resistor
R703,704	QRD141J-820	82 $\Omega$	"	1/4W	Carbon Resistor
R705	QRG017J-332	3.3k $\Omega$	"	1W	Oxide Metal Film Resistor
R751,752	QRD141J-563	56k $\Omega$	"	1/4W	Carbon Resistor
R753	" -223	22k $\Omega$	"	"	"
R755	" -393	39k $\Omega$	"	"	"
R757	" -103	10k $\Omega$	"	"	"
R758	" -564	560k $\Omega$	"	"	"
R759	" -334	330k $\Omega$	"	"	"
R760	" -823	82k $\Omega$	"	"	"
R761	QRG017J-181	180 $\Omega$	"	1W	Oxide Metal Film Resistor
R762	QRG027J-681	680 $\Omega$	"	2W	"
R763	QRD141J-104	100k $\Omega$	"	1/4W	Carbon Resistor

### Capacitors

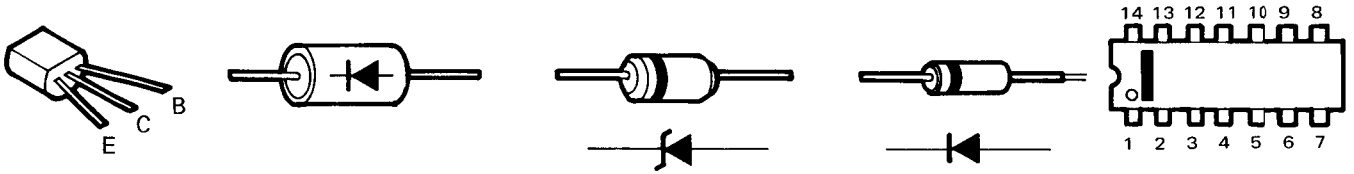
Item No.	Part No.	Rating			Description
C301,302	QEB41EM-475	4.7 $\mu$ F	$\pm 20\%$	25V	L.L.C. Electrolytic Capacitor
C303,304	" -336	33 $\mu$ F	"	50V	"
C305,306	QFM41HJ-182	1800PF	$\pm 5\%$	"	Mylar Capacitor
C307~310	" -332	3300PF	"	"	"
C311,312	QCS11HJ-820	82PF	"	"	Ceramic Capacitor
C313,314	QEB41EM-225	2.2 $\mu$ F	$\pm 20\%$	25V	L.L.C. Electrolytic Capacitor
C315,316	QCS11HJ-151	150PF	$\pm 5\%$	50V	Ceramic Capacitor
C317,318	QFM41HK-332	3300PF	$\pm 10\%$	"	Mylar Capacitor
C319,320	QCS11HJ-101	100PF	$\pm 5\%$	"	Ceramic Capacitor
C323,324	QCF11HP-473	0.047 $\mu$ F	+100%-0%	"	"
C401,402	QCS11HJ-181	180PF	$\pm 5\%$	"	"
C403,404	QFM41HK-153	0.015 $\mu$ F	$\pm 10\%$	"	Mylar Capacitor
C501,502	" -333	0.033 $\mu$ F	"	"	"
C503,504	" -224	0.22 $\mu$ F	"	"	"
C505,506	" -222	2200PF	"	"	"
C507,508	" -223	0.022 $\mu$ F	"	"	"
C509,510	QEW41CA-106	10 $\mu$ F	+100%-10%	16V	Electrolytic Capacitor
C601,602	QCS11HJ-470	47PF	$\pm 5\%$	50V	Ceramic Capacitor
C603,604	QEB41EM-475	4.7 $\mu$ F	$\pm 20\%$	25V	L.L.C. Electrolytic Capacitor
C605,606	" -336	33 $\mu$ F	"	"	"
C607,608	QEW41HA-476	47 $\mu$ F	+100%-10%	50V	Electrolytic Capacitor
C609,610	QCS11HJ-150	15PF	$\pm 5\%$	"	Ceramic Capacitor
C611,612	" -181	180PF	"	"	"
C613,614	QFM41HK-473	0.047 $\mu$ F	$\pm 10\%$	"	Mylar Capacitor
C615,616	QCS11HJ-470	47PF	$\pm 5\%$	"	Ceramic Capacitor
C617,618	" -560	56PF	"	"	"
C619	QEW41HA-227	220 $\mu$ F	+100%-10%	"	Electrolytic Capacitor
C701,702	QEW71GH-688	6800 $\mu$ F	+50%-10%	42V	"
C705,706	QEW41CA-107	100 $\mu$ F	+100%-10%	16V	"
C707,708	" -477	470 $\mu$ F	"	"	"
C709	QCF12HP-103	0.01 $\mu$ F	+100%-0%	500V	Ceramic Capacitor
C751	QEW41CA-107	100 $\mu$ F	+100%-10%	10V	Electrolytic Capacitor
C753	QEW41HA-475	4.7 $\mu$ F	"	50V	"
C754	QEW41AA-107	100 $\mu$ F	"	10V	"

**Others**

Item No.	Part No.	Rating	Description
S301	QSL4312-004		Lever Switch (Source)
S302,303	QSL4312-003		" (Tape)
S402	QSL2212-004		" (Loudness)
RY701	ESK1D24-216		
	E43727-002		Tab
	E48965-002		Fuse Clip

*www.manualscenter.com*

**Transistor, IC and Diode Lead Identification**



(2) TPS-69 Primary C.B. Ass'y

( For European continent, U.K.  
Scandinavian countries, Finland and Australia )

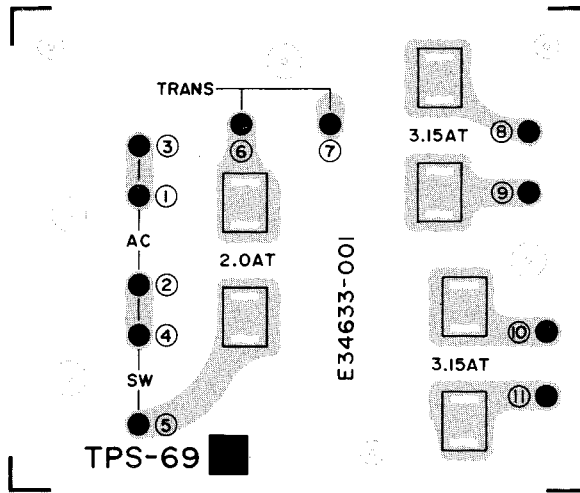


Fig. 12

(3) TPS-70 Primary C.B. Ass'y

( For Other countries except U.S.A. and Canada )

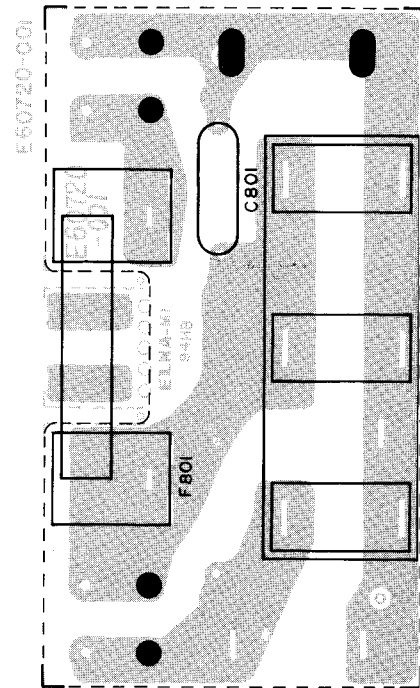


Fig. 13

[www.manualscenter.com](http://www.manualscenter.com)

TPS-69 ( For European continent, U.K.  
Scandinavian countries, Finland and Australia )

Item No.	Part No.	Rating	Description
	E43727-002 QHW2052-001 E48965-002		Tab Wire Clamp Fuse Clip

TPS-70 ( For Other countries except U.S.A. and Canada )

Item No.	Part No.	Rating	Description
	QMC0637-001 E03675-003 E43727-001 E40130		AC Socket Fuse Clip Tab "

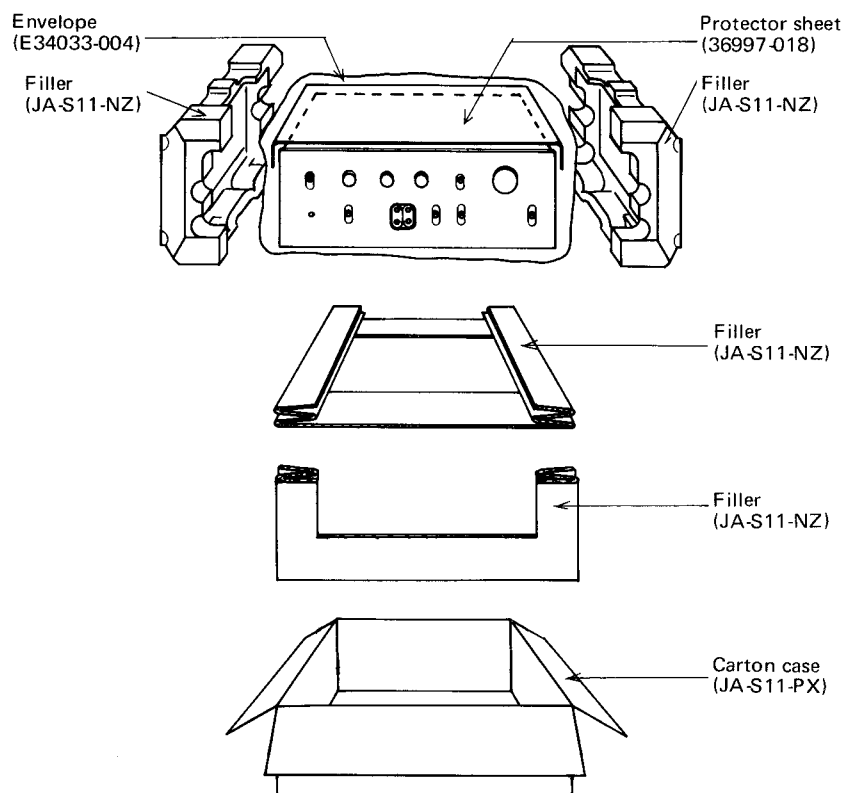
### Differences Between Models Intended For Different Areas

	European continent Scandinavian countries Finland	U.K. Australia	Other areas except U.S.A. and Canada
Power supply	AC 220V, 50Hz	AC 240V, 50/60Hz	AC 100 – 240V selectable, 50/60Hz
Power consumption	235 watts	160 watts	235 watts
Line voltage selector	Not fitted	Not fitted	Fitted
Power outlet	Not fitted	Not fitted	Fitted

This amplifier has been preset to the line voltage in the areas where it is to be sold as shown in the above table. To conform with local safety standards in some countries, power outlets might not be provided.

(Table 3)

## Packing Materials List

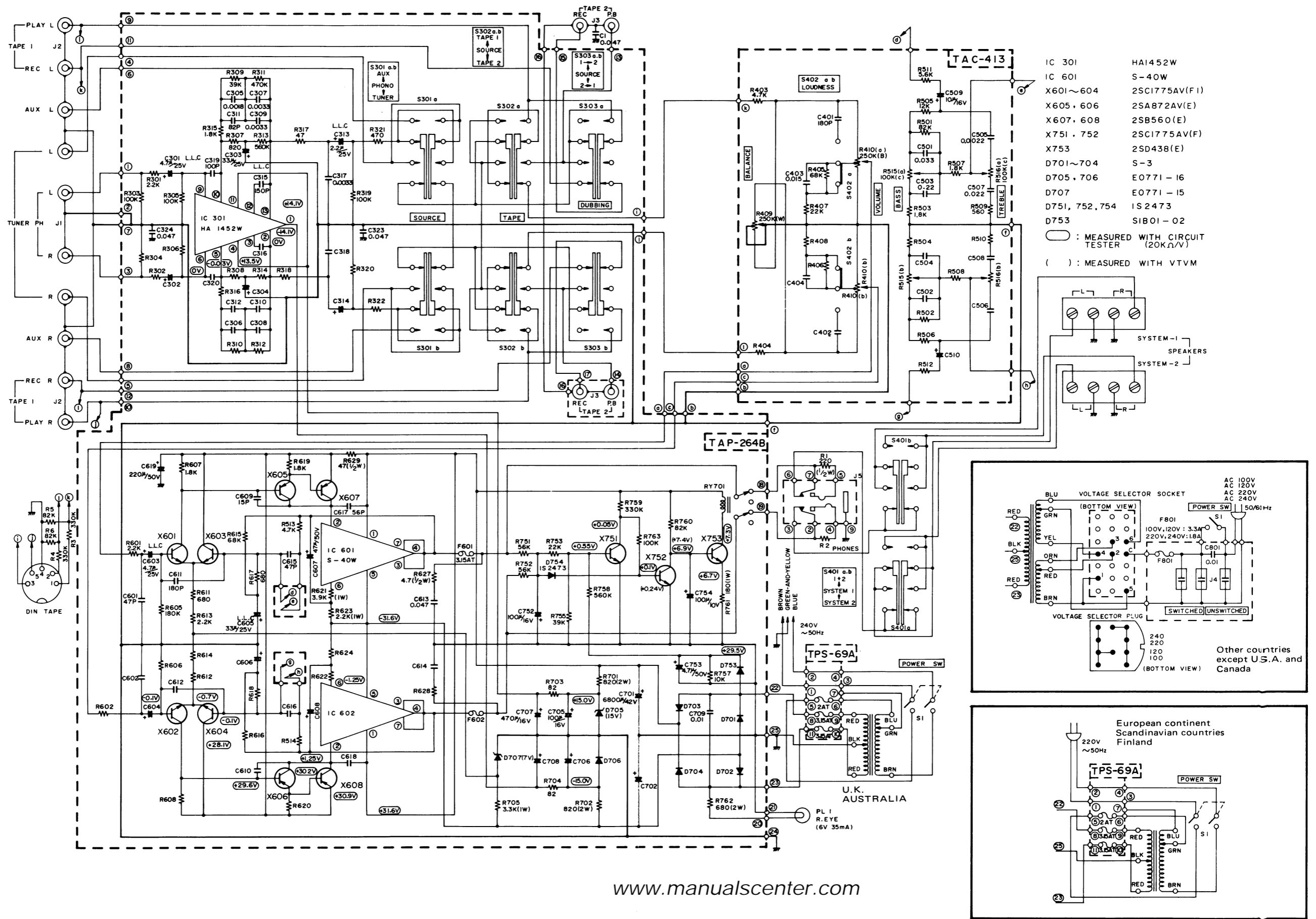


## Accessories List

[www.manualscenter.com](http://www.manualscenter.com)

Part No.	Part Name	Remarks	Q'ty
E30580-524A	Instruction Book		1
E41202-2	Envelope	for Accessories	1
QMF60S1-3R3	Fuse	3.3A: 100/120V	1
QMF60S1-1R8	"	1.8A: 220/240V U-Type only	1
QMF51A2-3R15	"	Protect	2
E64208-001	Envelope	for Fuse	1

# Integrated Amplifier JA-S11 Schematic Diagram



- |                |               |
|----------------|---------------|
| IC 301         | HA1452W       |
| IC 601         | S-40W         |
| X601~604       | 2SC1775AV(F1) |
| X605, 606      | 2SA872AV(E)   |
| X607, 608      | 2SB560(E)     |
| X751, 752      | 2SC1775AV(F)  |
| X753           | 2SD438(E)     |
| D701~704       | S-3           |
| D705, 706      | EO771-16      |
| D707           | EO771-15      |
| D751, 752, 754 | 1S2473        |
| D753           | S1B01-02      |
- : MEASURED WITH CIRCUIT TESTER (20KΩ/V)  
 ( ) : MEASURED WITH VTVM

