

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 : 4Ω – 16Ω (SYSTEM-1 or SYSTEM-2)
8Ω – 16Ω (SYSTEM-1 + 2)
- Damping Factor : More than 30 at 8Ω (20Hz – 20kHz)

Pre-Amplifier Section

- Input Sensitivity/Impedance : PHONO 2.5mV/47kΩ
AUX, TUNER, TAPE PLAY 150mV/50kΩ
- Output Level : TAPE REC.-1, -2 150mV
DIN REC. 30mV
- Phono Equalizer Deviation : ±0.5dB 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 ⁺⁰/₋₁dB
- Loudness Control : +6dB at 100Hz
(at -30dB Volume Control) +4dB at 10kHz
- Tone Controls : Bass ±8dB at 100Hz
Treble ±8dB 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)

	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

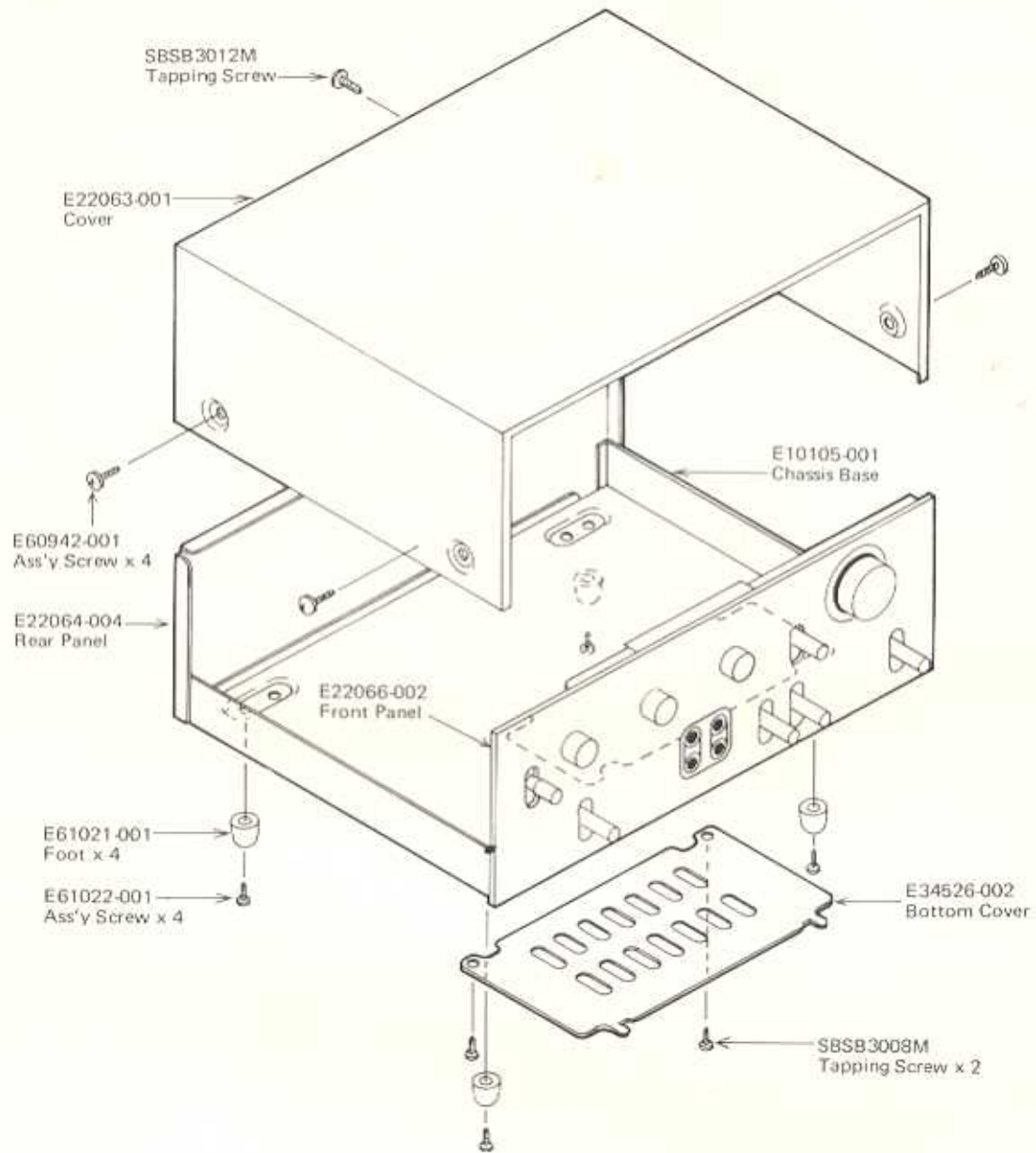


Fig. 1

Main Parts Location

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

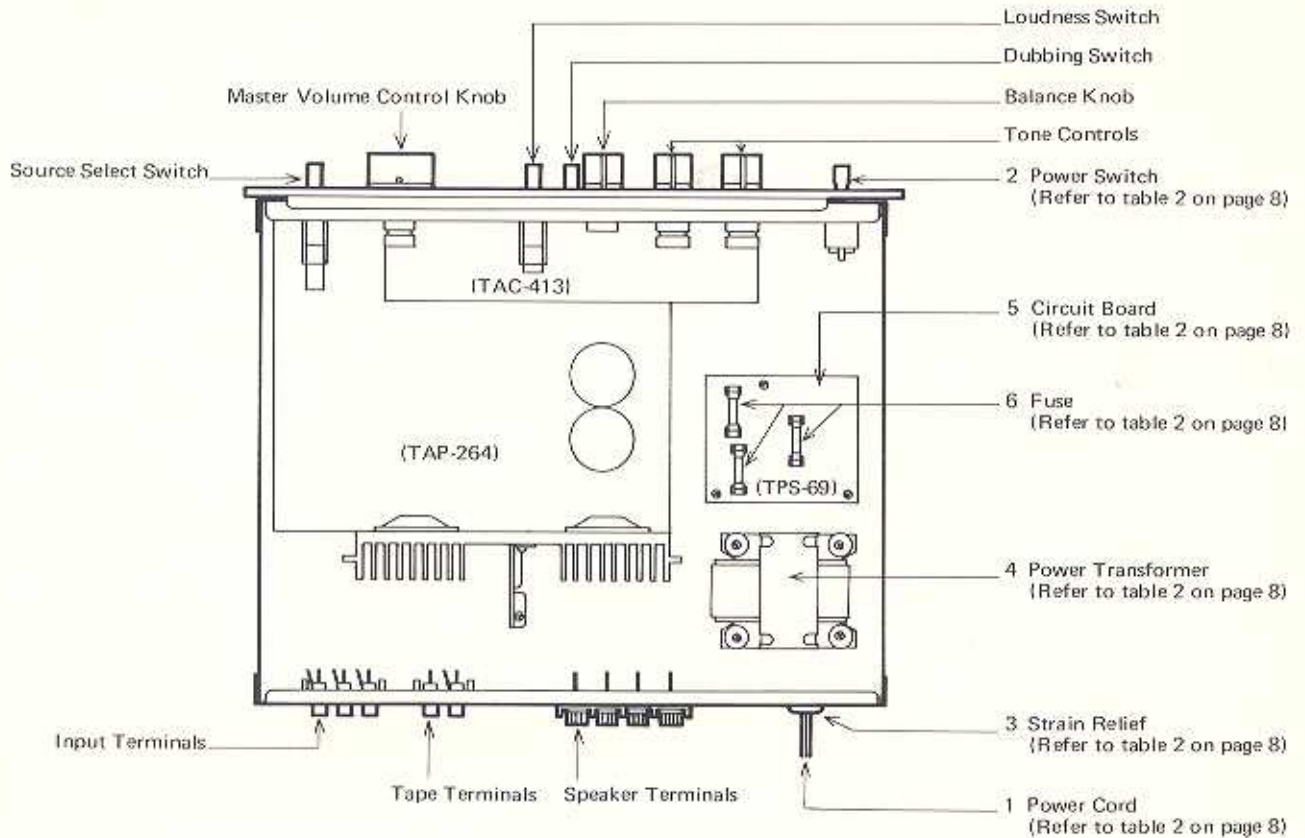


Fig. 2

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

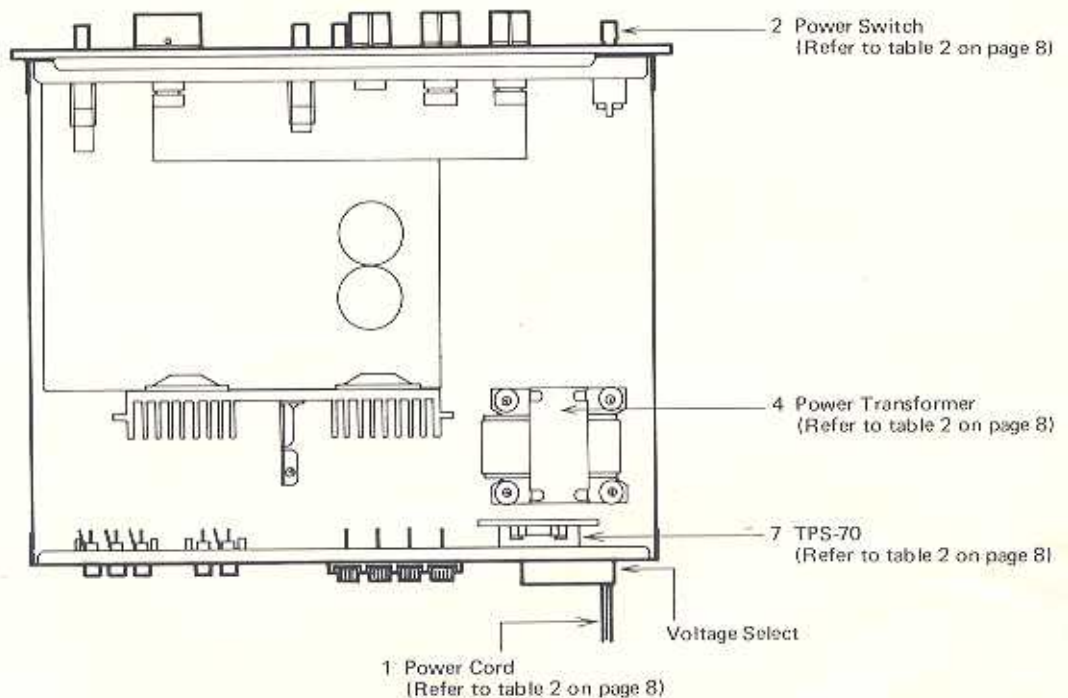


Fig. 3

Exploded View and Part Numbers

(1) Front

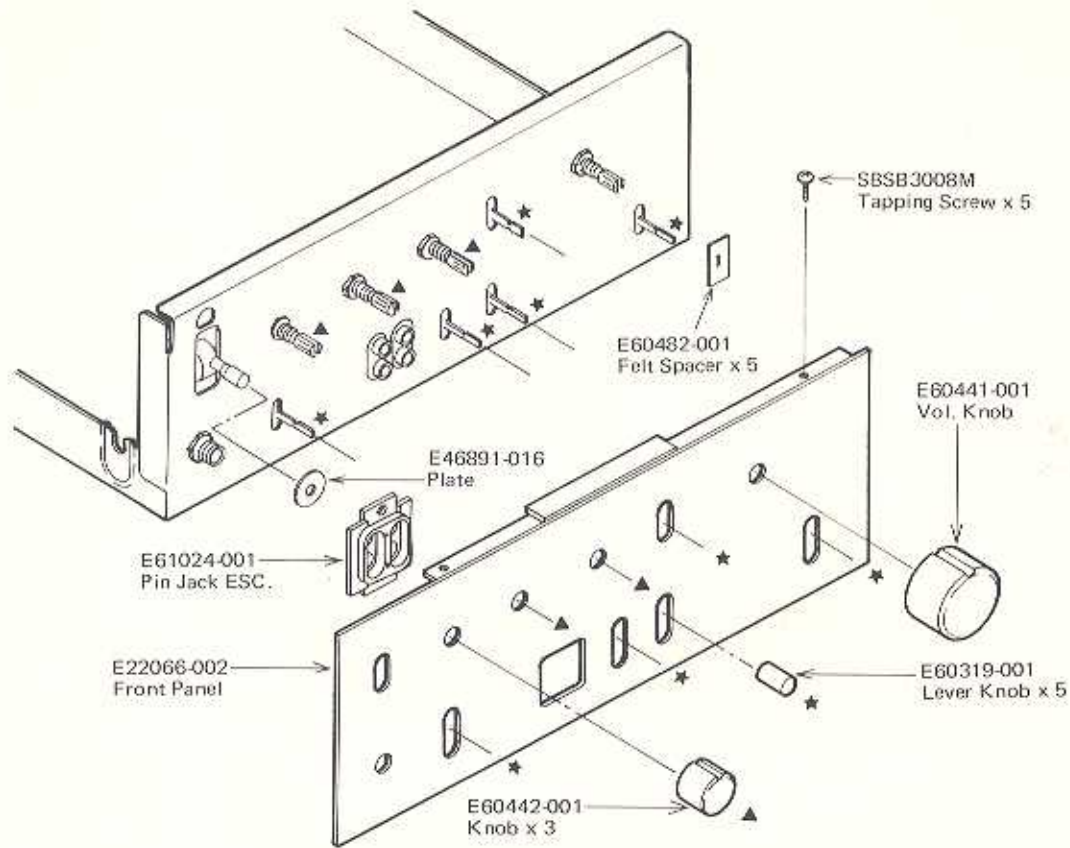


Fig. 4

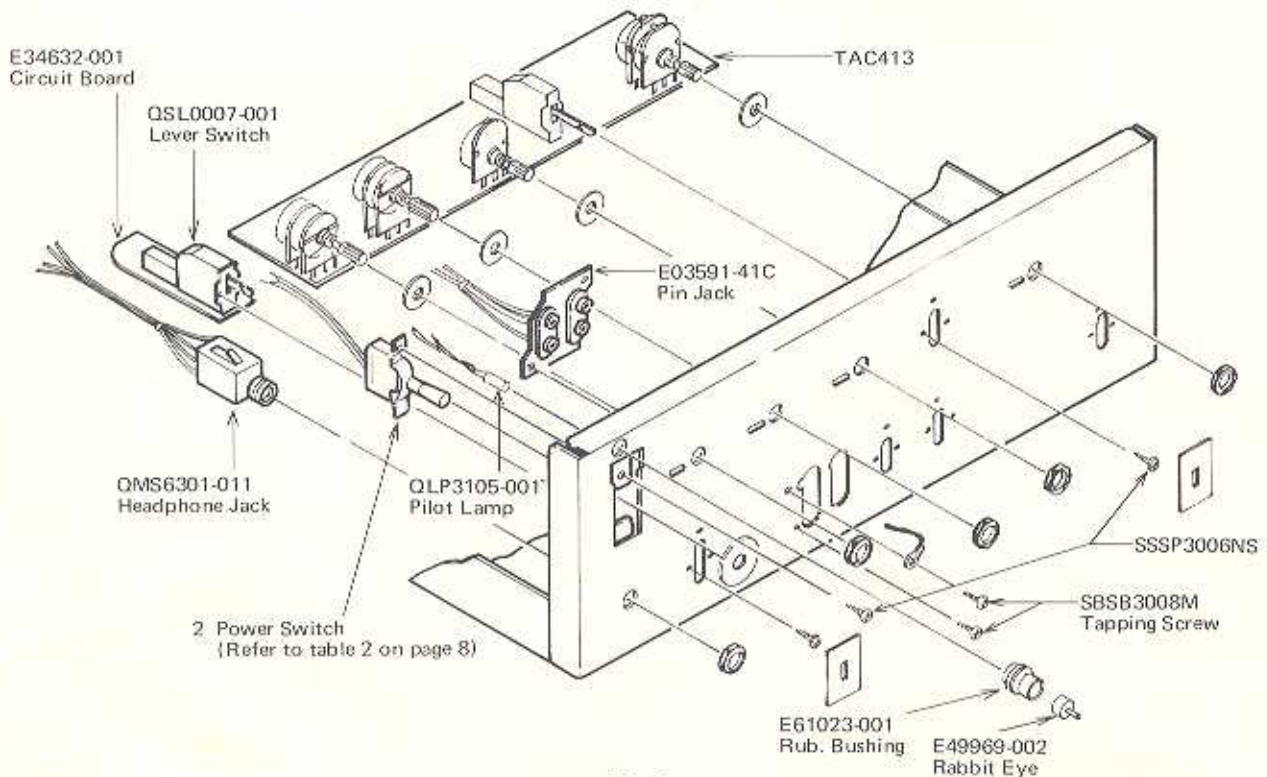


Fig. 5

(2) Rear

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

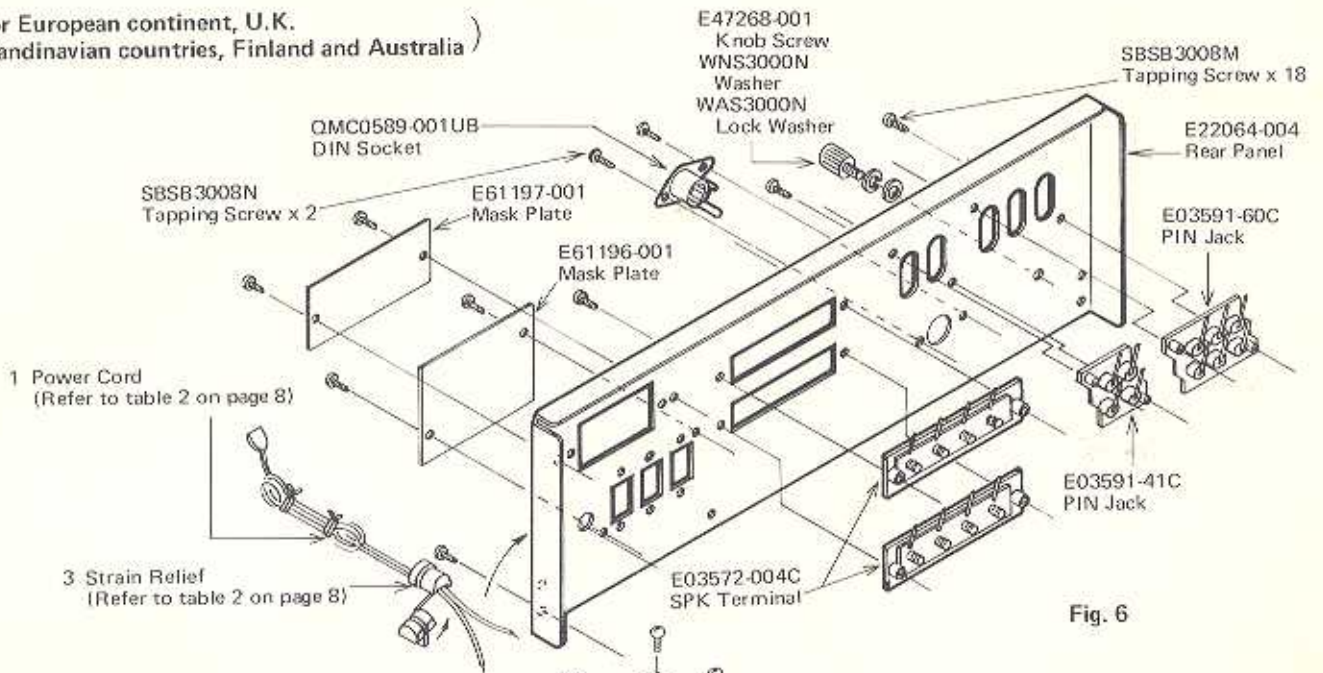


Fig. 6

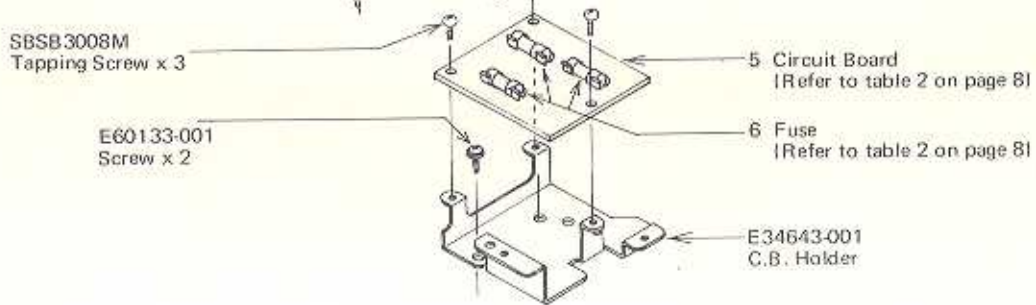


Fig. 7

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

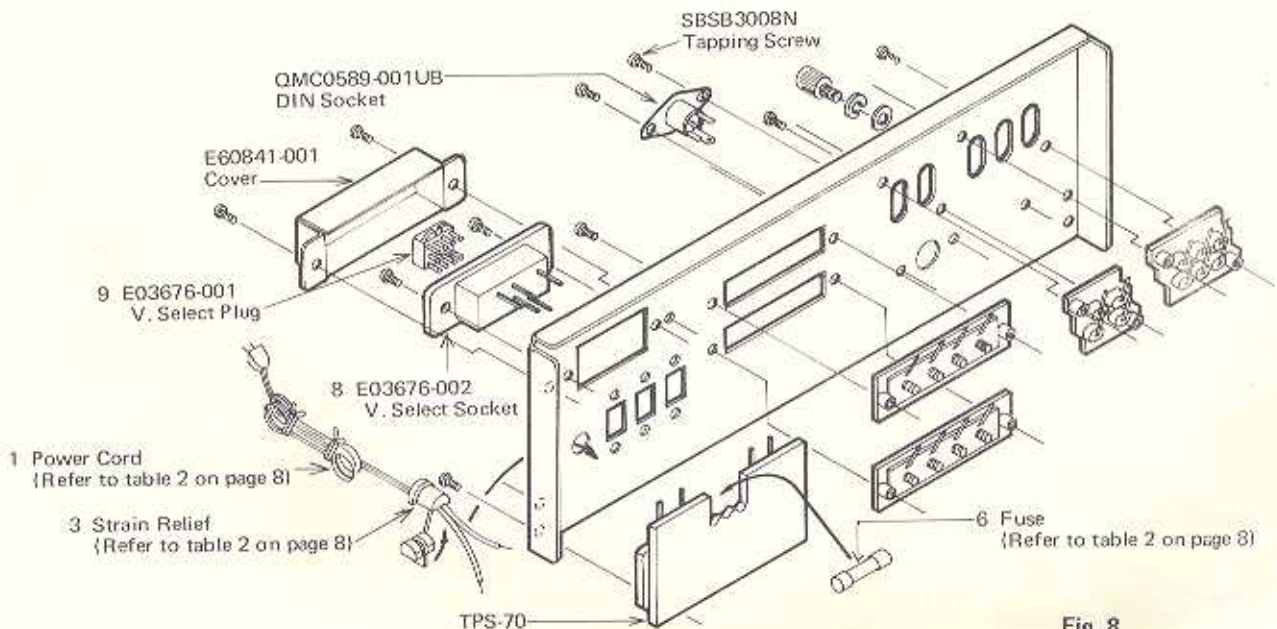


Fig. 8

(3) Chassis Base

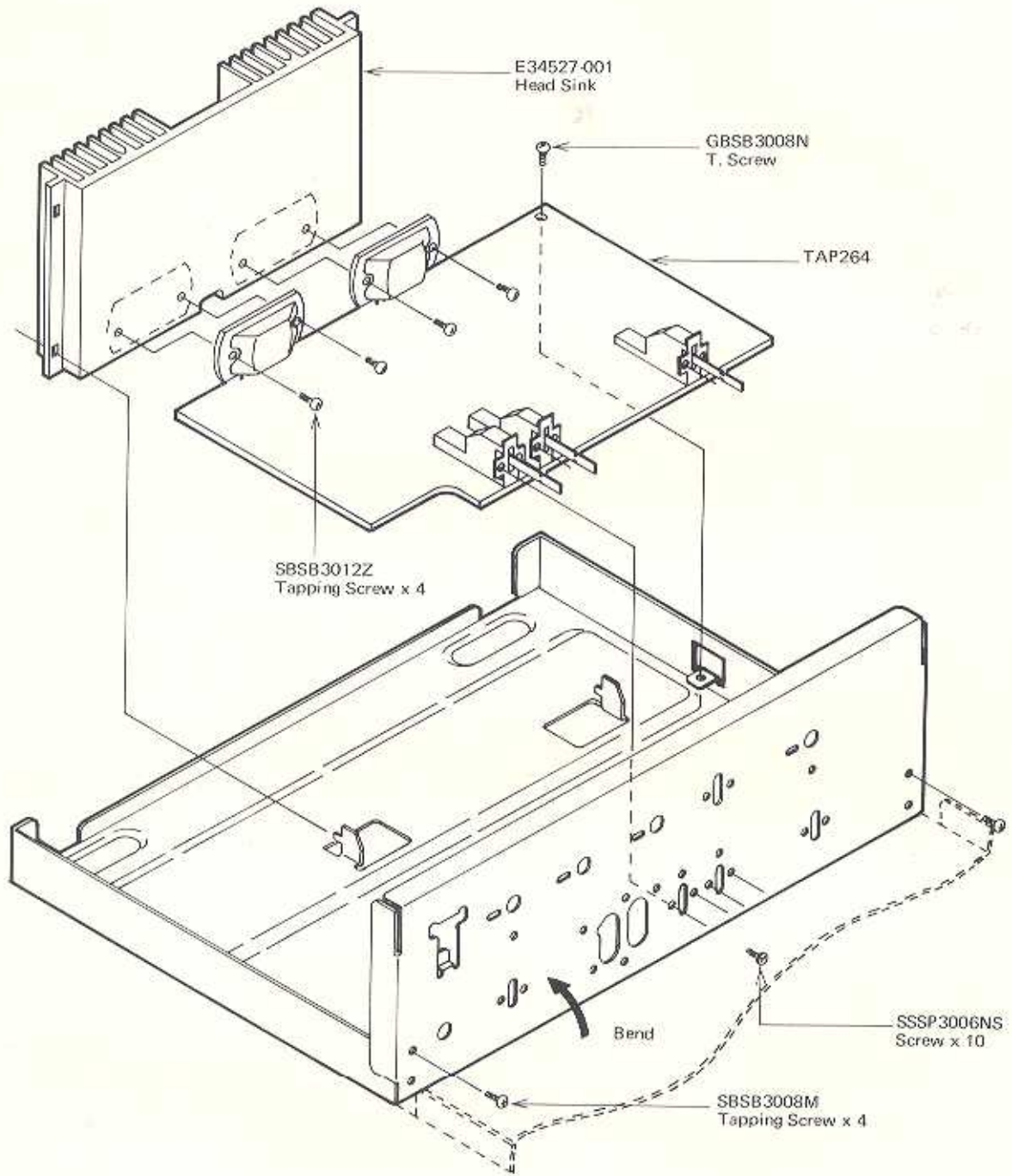


Fig. 9

(4) Power Transformer

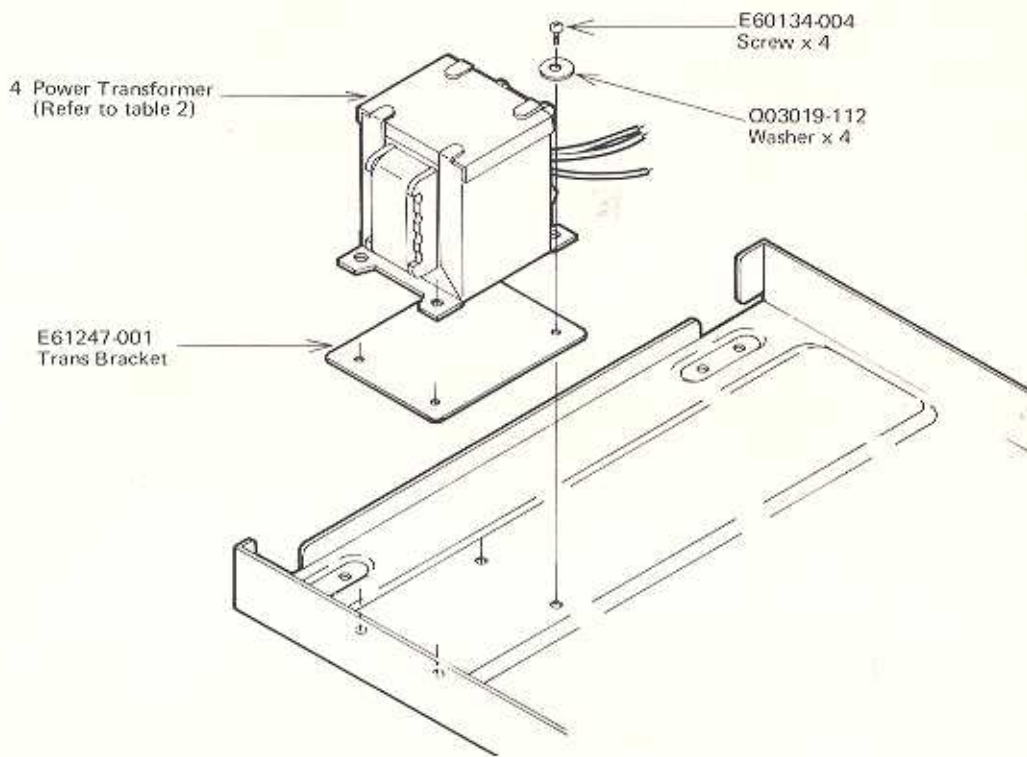


Fig. 10

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) QMF60S1-1R8 (1.8A 220,240V)
		(Secondary)	QMF51A2- 3R15BS (3.15AT)	QMF51A2-3R15 (3.15AT)	QMF51A2-3R15 (3.15AT)	—
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

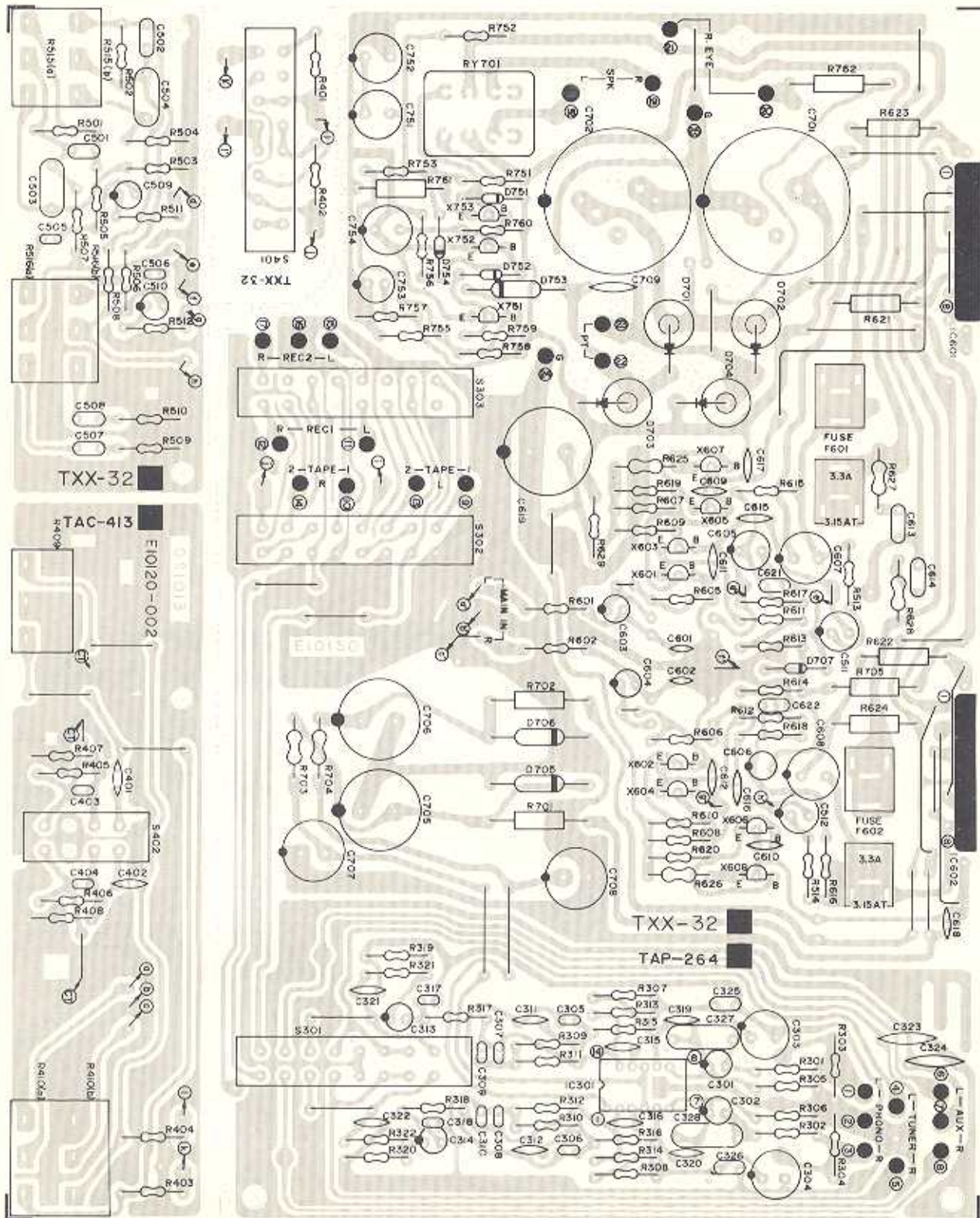


Fig. 11

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	SIB01-02			Silicon Diode
D754	1S2473			"

Resistors

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

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

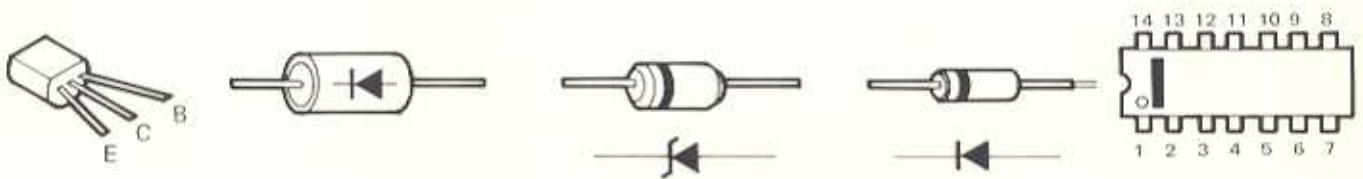
Capacitors

Item No.	Part No.	Rating			Description
C301,302	QEB41EM-475	4.7 μF	$\pm 20\%$	25V	L.L.C. Electrolytic Capacitor
C303,304	" -336	33 μF	-	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 μF	$\pm 20\%$	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 μF	+100%-0%	"	"
C401,402	QCS11HJ-181	180PF	$\pm 5\%$	"	"
C403,404	QFM41HK-153	0.015 μF	$\pm 10\%$	"	Mylar Capacitor
C501,502	" -333	0.033 μF	-	"	"
C503,504	" -224	0.22 μF	-	"	"
C505,506	" -222	2200PF	-	"	"
C507,508	" -223	0.022 μF	-	"	"
C509,510	QEW41CA-106	10 μF	+100%-10%	16V	Electrolytic Capacitor
C601,602	QCS11HJ-470	47PF	$\pm 5\%$	50V	Ceramic Capacitor
C603,604	QEB41EM-475	4.7 μF	$\pm 20\%$	25V	L.L.C. Electrolytic Capacitor
C605,606	" -336	33 μF	-	"	"
C607,608	QEW41HA-476	47 μF	+100%-10%	50V	Electrolytic Capacitor
C609,610	QCS11HJ-150	15PF	$\pm 5\%$	"	Ceramic Capacitor
C611,612	" -181	180PF	-	"	"
C613,614	QFM41HK-473	0.047 μF	$\pm 10\%$	"	Mylar Capacitor
C615,616	QCS11HJ-470	47PF	$\pm 5\%$	"	Ceramic Capacitor
C617,618	" -560	56PF	-	"	"
C619	QEW41HA-227	220 μF	+100%-10%	"	Electrolytic Capacitor
C701,702	QEW71GH-688	6800 μF	+50%-10%	42V	"
C705,706	QEW41CA-107	100 μF	+100%-10%	16V	"
C707,708	" -477	470 μF	-	"	"
C709	QCF12HP-103	0.01 μF	+100%-0%	500V	Ceramic Capacitor
C751	QEW41CA-107	100 μF	+100%-10%	10V	Electrolytic Capacitor
C753	QEW41HA-475	4.7 μF	-	50V	"
C754	QEW41AA-107	100 μF	-	10V	"

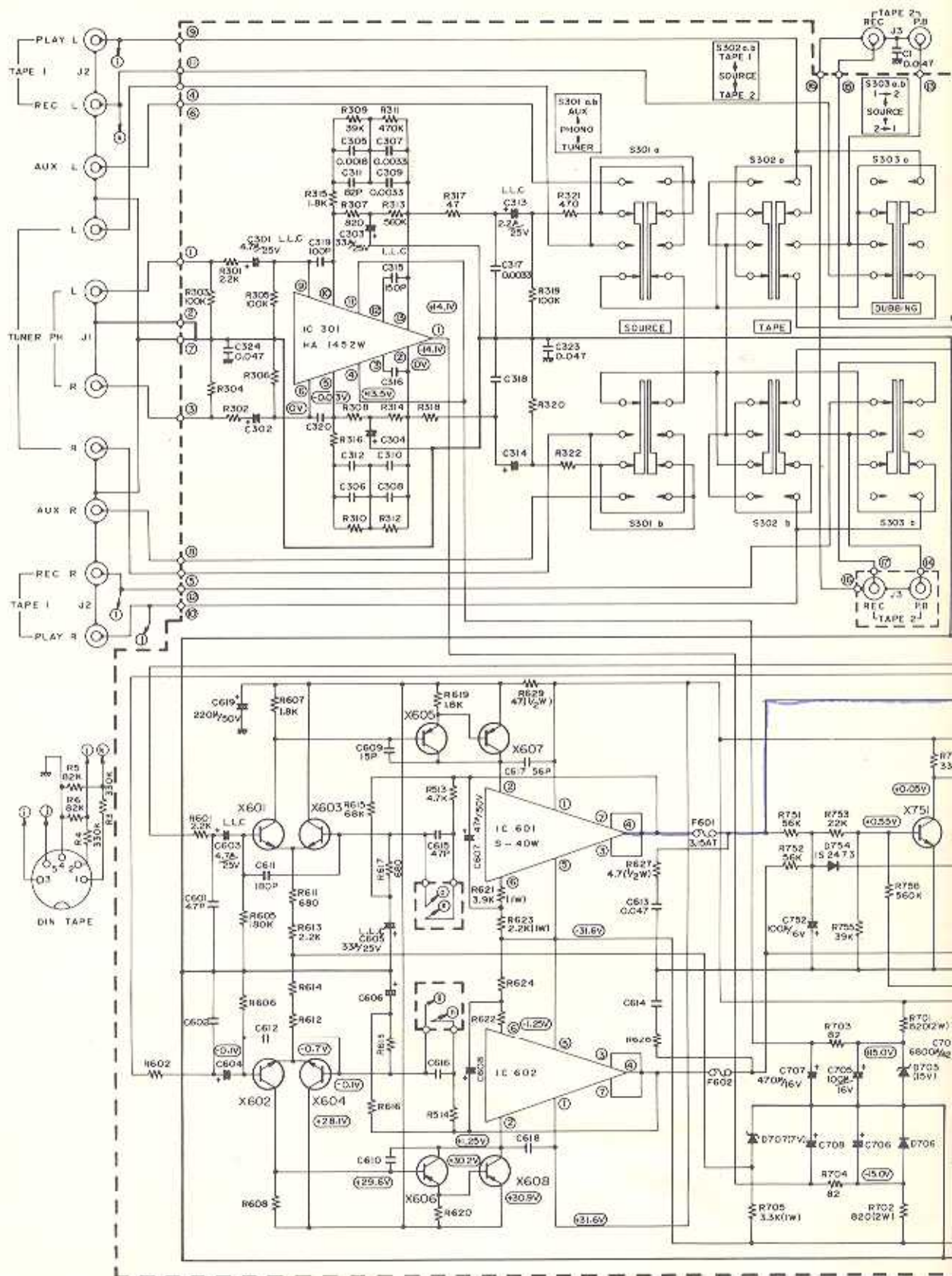
Others

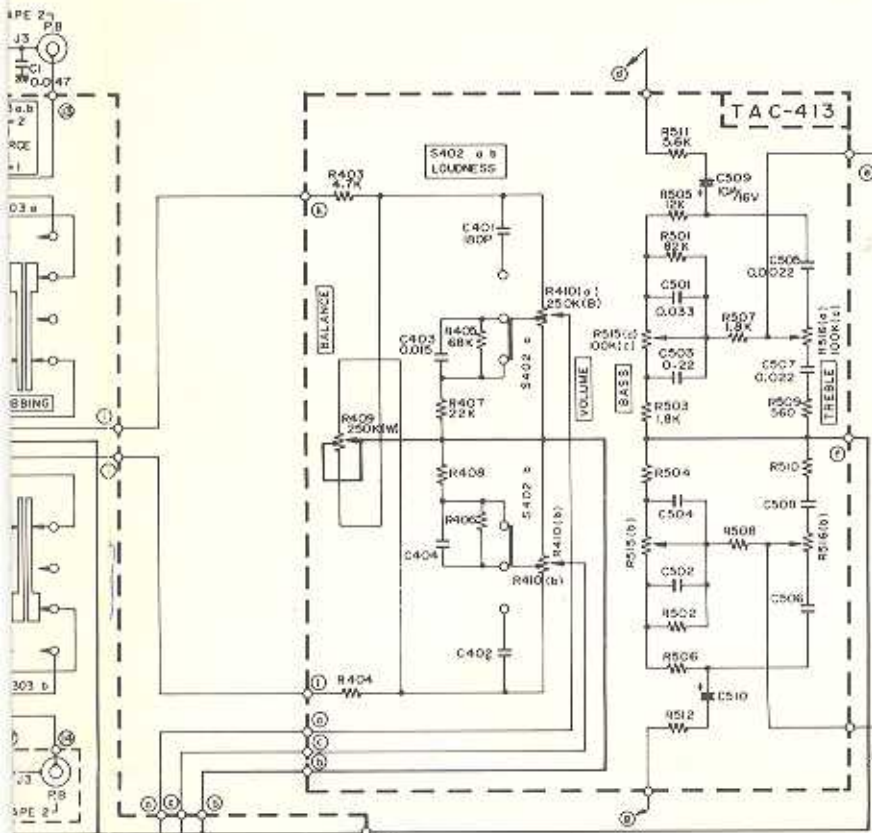
Item No.	Part No.	Rating	Description
S301	QSL4312-004		Lever Switch (Source)
S302,303	QSL4312-003		" (Tape)
S402	QSL2212-004		" (Loudness)
RY701	ESK1D24-216		Tab
	E43727-002		Fuse Clip
	E48965-002		

Transistor, IC and Diode Lead Identification



Integrated Amplifier JA-S11 Schematic Diagram





IC 301	HA1452W
IC 601	S-40W
X601~604	2SC1775AV(F)
X605, 606	2SA872AV(E)
X607, 608	2SB560(E)
X751, 752	2SC1775AV(F)
X753	2SD438(E)
D701~704	S-3
D705, 706	E0771-16
D707	E0771-15
D751, 752, 754	1S2473
D753	S1B01-02

○ : MEASURED WITH CIRCUIT TESTER (20KΩ/V)
 □ : MEASURED WITH VTVM

