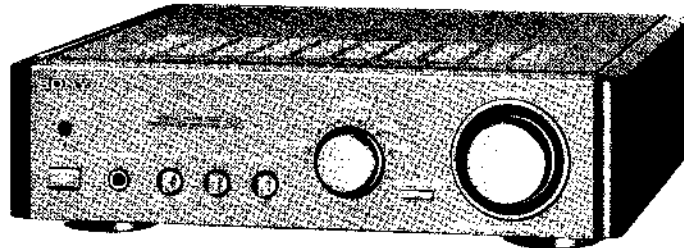


TA-S2

SERVICE MANUAL

AEP Model
UK Model



TA-S2 is the integrated stereo amplifier section in SHC-S2. (UK model only)

SPECIFICATIONS

Amplifier selection

Continuous RMS power output
(German model)
40 + 40 watts (4 ohms at 1 kHz,
DIN)
48 + 48 watts (4 ohms at 1 kHz,
5 % THD)
(other models)
40 + 40 watts (6 ohms at 1 kHz,
DIN)
50 + 50 watts (6 ohms at 1 kHz,
5 % THD)

Music power output
(German model)
100 + 100 watts (4 ohms at 1
kHz, 10 % THD)
(other models)
85 + 85 watts (6 ohms at 1 kHz,
10 % THD)

Total harmonic distortion
0.01% at rated 15 W 1 kHz
output (SOURCE DIRECT ON)

Residual noise
Less than 150 μ V, 6 ohms,
Network A

Frequency response
PHONO MM (20 Hz - 20 kHz):
RIAA equalization curve ± 0.5
dB
TUNER, CD, TAPE, MD, DAT/
VIDEO, ADAPTOR IN: 10 Hz -
50 kHz ± 3 dB

Input sensitivity

PHONO: MM, 2.5 mV, 50
kilohms
TUNER, CD, TAPE, MD, DAT/
VIDEO, ADAPTOR IN: 150
mV, 50 kilohms

Maximum input capability (1 kHz)

PHONO: MM, 150 mV at 1 kHz

S/N (network)

PHONO: 85 dB(A) (SOURCE
DIRECT ON)
CD: 100 dB(A) (SOURCE
DIRECT ON)

Output voltage impedance

TAPE, MD, DAT/VIDEO,
ADAPTOR: 150 mV, 2 kilohms
HEADPHONES: 25 milliwatts
at 8 ohms, Accepts low and
high impedance headphones.

Tone controls

BASS: ± 7 dB at 100 Hz
TREBLE: ± 6 dB at 10 kHz

General

System

Pure-complementary SEPP
MOS FET power amplifier

Power requirements

220 - 230 V AC, 50/60 Hz

Power consumption

(German model) 90 W
(other models) 85 W

— Continued on next page —

INTEGRATED STEREO AMPLIFIER
SONY[®]

TABLE OF CONTENTS

Mains 1 switched, 175 W max.

Dimensions
 Approx. 310 × 90 × 360 mm (12 1/4 × 3 5/8 × 14 1/4 inches)
 (w/h/d)

Mass
 Approx. 5.5 kg (12 lb 2 oz)

Supplied accessories
 Remote commander RM-S1 (1)
 Sony SUM-3 (NS) (2)
 Audio bus cable (1)

The above values are measured at 230 V AC.
 (Models for European countries.)

Design and specifications are subject to change without notice.

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.	GENERAL	3
2.	ELECTRICAL ADJUSTMENTS	4
3.	DIAGRAMS	
3-1.	Circuit Boards Location	4
3-2.	Block Diagram	5
3-3.	Printed Wiring Boards	8
3-4.	Schematic Diagram	11
3-5.	Semiconductor Lead Layouts	15
3-6.	IC Pin Function	
	• IC301 Main Controller (TMP87C846N-4109)	16
4.	EXPLODED VIEWS	
4-1.	Front Panel and Case Section	17
4-2.	Main Board Section	18
5.	ELECTRICAL PARTS LIST	19

SAFETY-RELATED COMPONENT WARNING !!

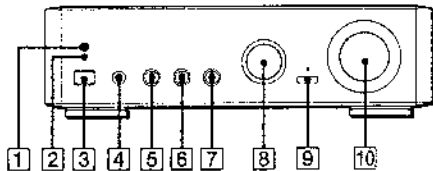
COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

This section is extracted from
instruction manual.

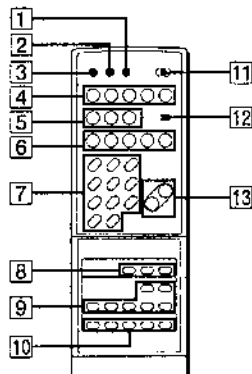
Index to Parts and Controls

Front Panel



- 1 Remote sensor
- 2 ON/STANDBY indicator (7)
- 3 POWER switch (7)
- 4 HEADPHONES jack (7)
- 5 BASS control (7)
- 6 TREBLE control (7)
- 7 BALANCE control (7)
- 8 FUNCTION control (7)
- 9 SOURCE DIRECT control (7)
- 10 ATTENUATOR control (7)

Remote Commander



- 1 MUTING button (7)
 - 2 SOURCE DIRECT button
 - 3 FUNCTION button
- Each time you press FUNCTION, the function changes as follows:
DAT/VIDEO → MD → TAPE → CD →
TUNER → PHONO → ...

- 4 Cassette deck operating buttons
 - ◀ (reverse side play)
 - ▷ (upper side play)
 - (stop)
 - ◀◀/▶▶ (fast leftward / rightward) (AMS*)
- 5 Tuner operating buttons
 - SHIFT: Each time you press SHIFT, the letter (A - C) changes as follows:
A → B → C → ...
 - PRESET -/+ : Press - or + to select the number (0 - 9).
- 6 CD operating buttons
 - ▷ (play)
 - || (pause)
 - (stop)
 - ◀◀/▶▶ (AMS*)
- 7 Tuner/CD numeric buttons
- 8 Tape control buttons
 - REC (recording)
 - REC MUTE (recording mute)
 - || (pause)
- 9 CD control buttons
 - CHECK: Press the button to check the programme.
 - CLEAR: Press the button to erase a specific track.
 - CONTINUE: Press the button to play tracks continuously.
 - SHUFFLE: Press the button to play tracks in random order.
 - PROGRAM: Press the button to play tracks in the desired order.
 - REPEAT: Press the button to play tracks repeatedly.
 - TIME: Press the button to change the time to be displayed.
- 10 MD control buttons
 - ▷ (play)
 - || (pause)
 - (stop)
 - ◀◀/▶▶ (AMS*)
- 11 SYSTEM POWER switch (8)
- 12 TUNER/CD switch
- 13 ATTENUATOR +/- buttons

*AMS: Automatic Music Sensor

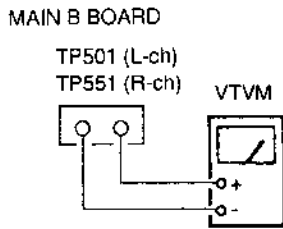
SECTION 2 ELECTRICAL ADJUSTMENTS

Note :

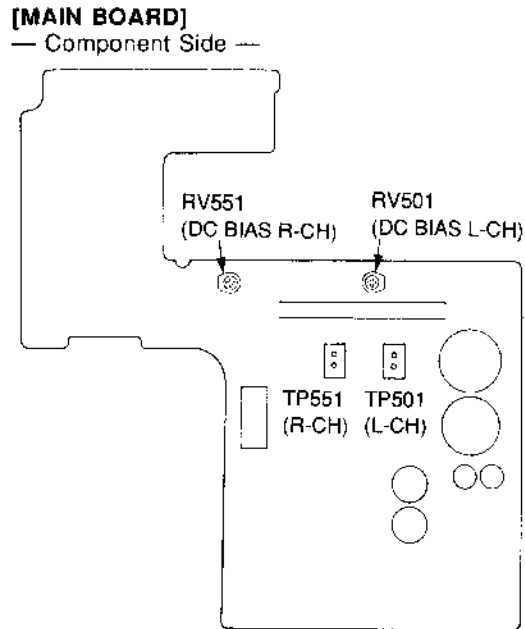
1. DC BIAS adjustments should be made four minutes after the POWER switch is turned on (POWER ON).
2. After replacing the power transistors, DC BIAS adjustments should be made.

DC Bias Adjustment (with no signal input)

Procedure :

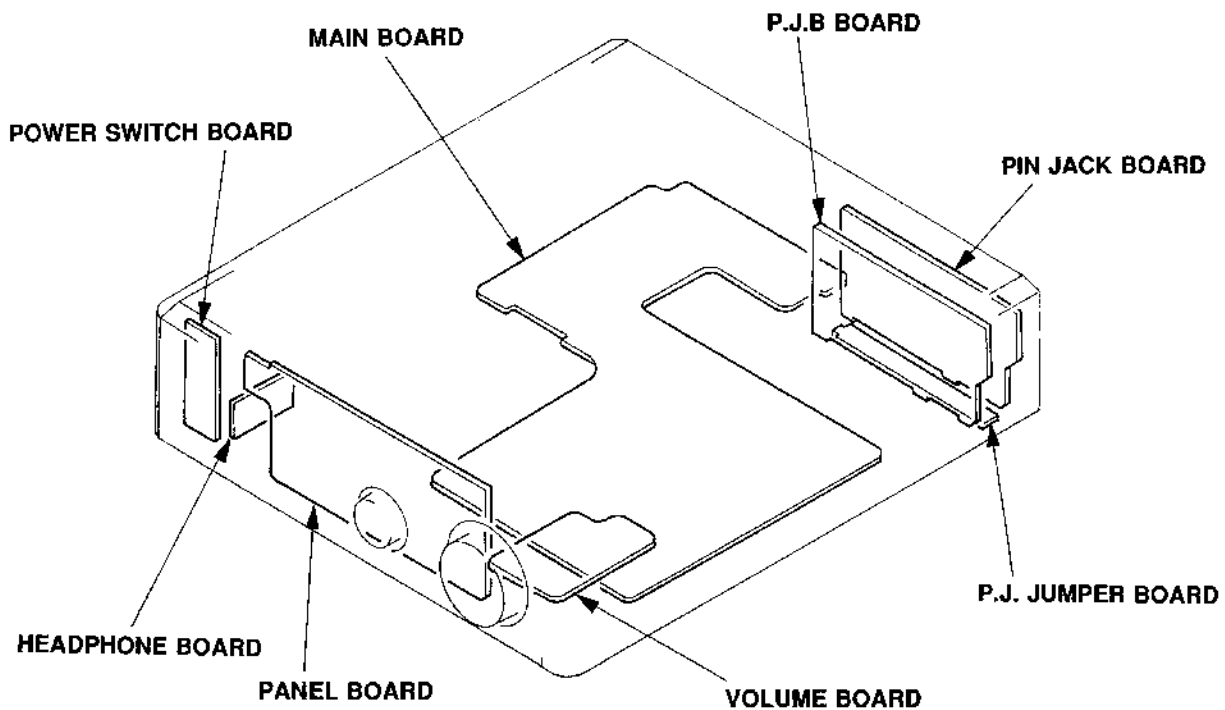


	Adjustment part	Reading on VTVM
L ch	RV501	15mV
R ch	RV551	15mV

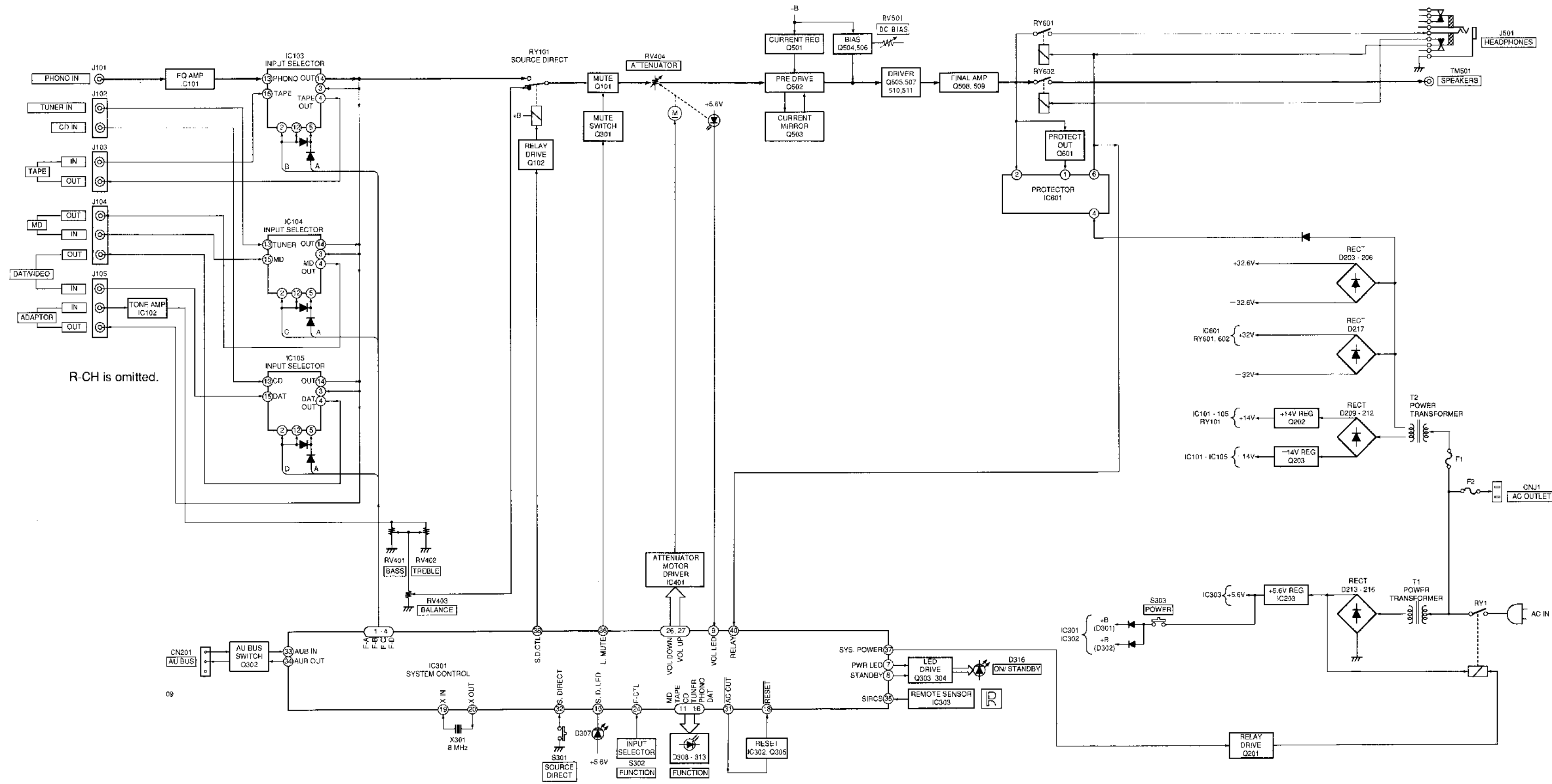


SECTION 3 DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



3-2. BLOCK DIAGRAM



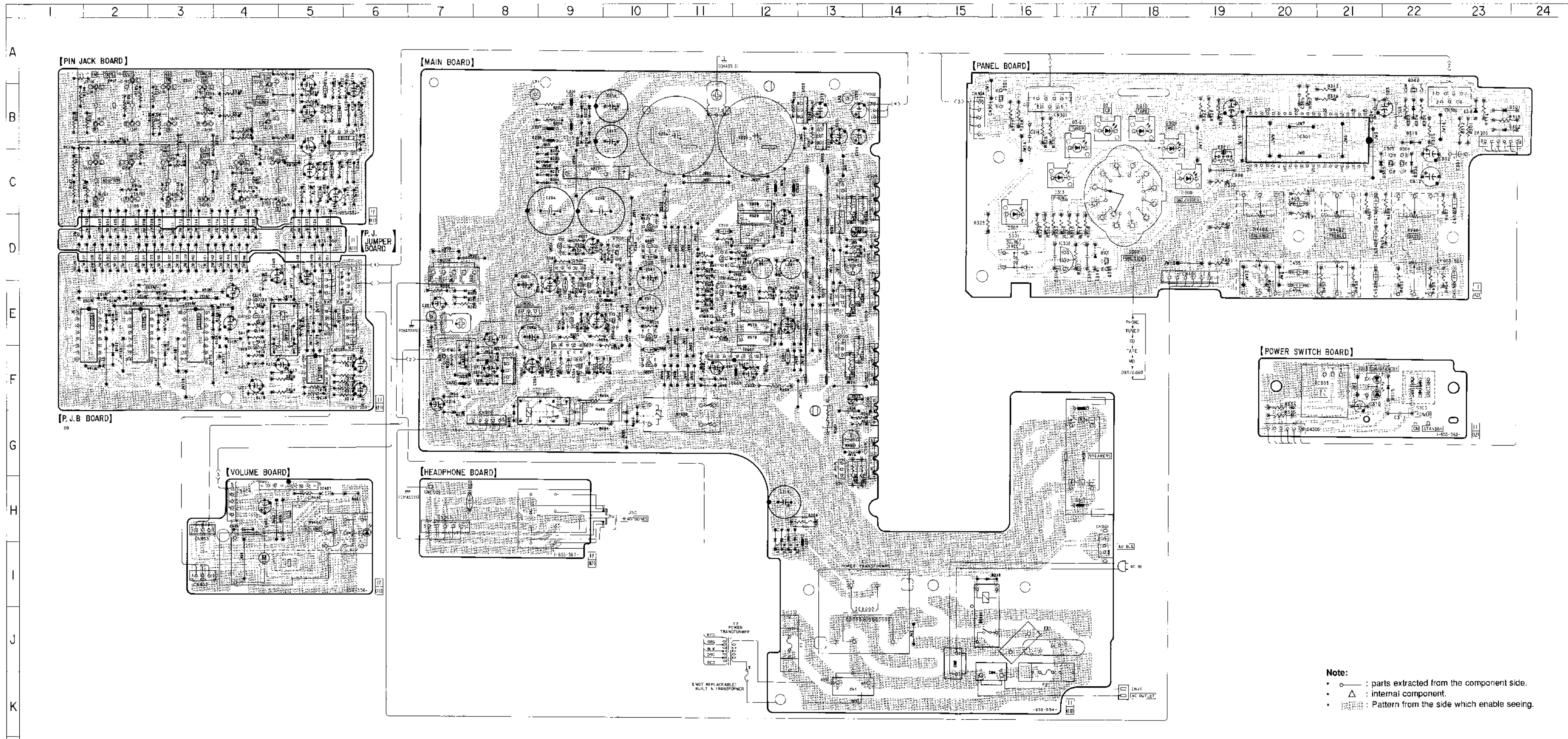
R-CH is omitted.

3-3. PRINTED WIRING BOARDS

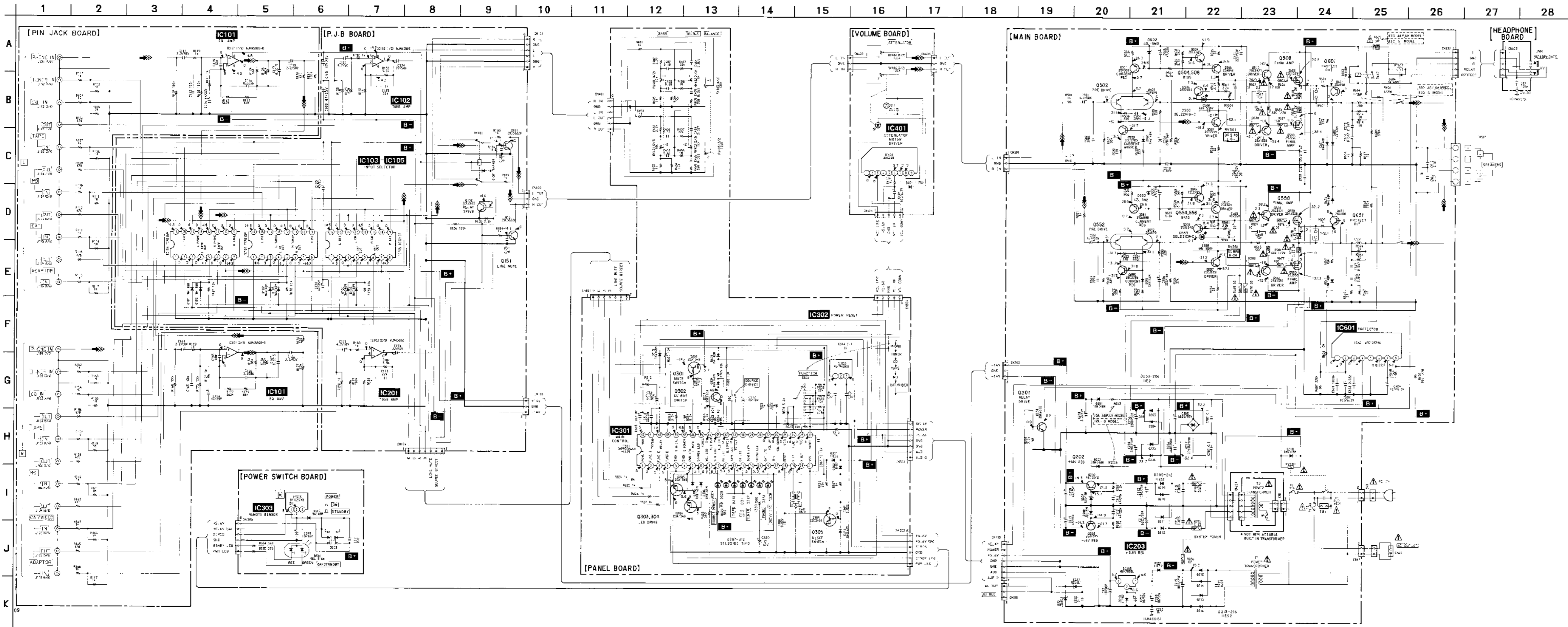
- See page 4 for Circuit Boards Location.
- See page 15 for Semiconductor Lead Layouts.

• Semiconductor Location

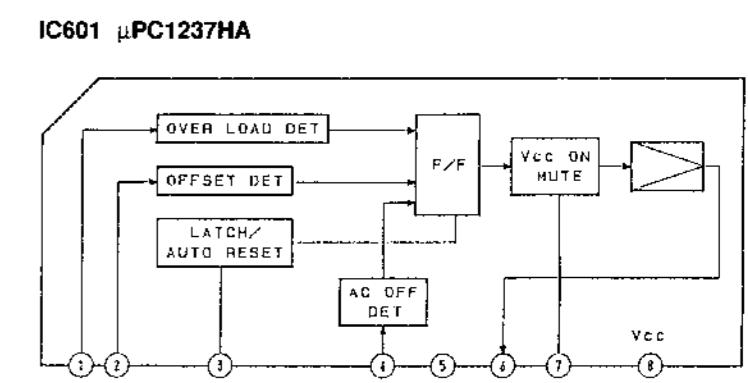
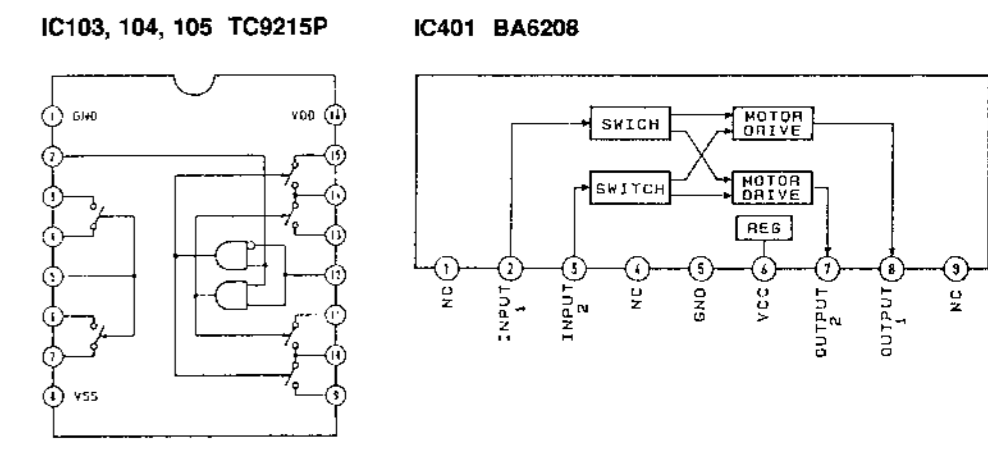
Ref. No.	Location	Ref. No.	Location
D101	E-2	Q101	E-4
D102	F-2	Q102	E-4
D103	E-3	Q151	F-4
D104	E-4	Q201	F-7
D105	E-3	Q202	B-13
D106	F-3	Q203	B-13
D107	E-5	Q301	B-16
D201	E-7	Q302	B-22
D202	E-7	Q303	C-22
D203	C-9	Q304	C-22
D204	C-9	Q305	D-17
D205	C-9	Q501	D-9
D206	C-9	Q502	D-9
D207	B-13	Q503	E-9
D208	B-13	Q504	D-10
D209	B-9	Q505	D-10
D210	B-9	Q506	D-14
D211	B-9	Q507	D-10
D212	B-9	Q508	C-14
D213	I-12	Q509	E-14
D214	I-12	Q510	C-13
D215	I-12	Q511	E-13
D216	I-12	Q551	E-9
D217	C-9	Q552	F-9
D218	I-15	Q553	F-9
D219	F-8	Q554	E-10
D220	G-7	Q555	E-10
D221	F-8	Q556	F-14
D222	F-8	Q557	F-10
D301	B-23	Q558	F-14
D302	B-23	Q559	G-14
D304	B-22	Q560	E-13
D305	C-21	Q561	H-13
D306	C-22	Q601	D-11
D307	D-16	Q651	E-11
D308	C-18		
D309	B-18		
D310	B-18		
D311	B-17		
D312	B-17		
D313	C-16		
D314	D-17		
D315	F-22		
D316	F-21		
D318	B-23		
D319	B-22		
D401	H-6		
D501	E-10		
D502	D-9		
D503	D-13		
D551	F-9		
D552	E-9		
D553	F-13		
D601	D-11		
D602	D-12		
D603	G-8		
D604	G-10		
D651	E-11		
D652	E-12		
IC101	B-5		
IC102	F-5		
IC103	E-2		
IC104	E-3		
IC105	E-2		
IC203	F-8		
IC301	B-20		
IC302	D-17		
IC303	F-21		
IC401	H-5		
IC601	F-12		



3-4. SCHEMATIC DIAGRAM
 • See page 16 for IC Pin Functions. (IC301)



• IC BLOCK DIAGRAMS

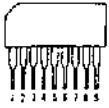


- Note:**
- All capacitors are in μF unless otherwise noted. pF , μF , 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - Δ : internal component.
 - \square : nonflammable resistor.
 - --- : fusible resistor.
 - --- : panel designation.

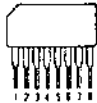
- Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.
- B+ : B+ Line
 - B- : B- Line
 - --- : adjustment for repair.
 - Voltage are dc with respect to ground under no-signal conditions.
 - Voltages are taken with a VOM (Input impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
 - Signal path.
 - --- : PHONO
 - Abbreviation
 - G: German model.

3-5. SEMICONDUCTOR LEAD LAYOUTS

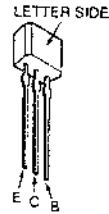
BA6208



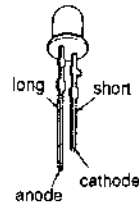
μPC1237HA



2SC403SP-51



SLR34UW5



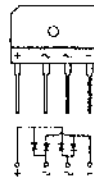
GP1U50XB



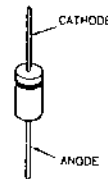
**DTA114ES
DTA124ES
DTC124ES
2SC2603-EF
2SC3622A-LK**



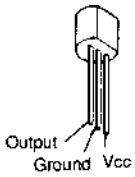
D5SBA20F01



**1N4148M
10E2**



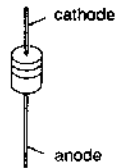
M51943BSL



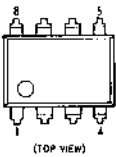
**2SA949-OY-E6
2SA988-PAFAEA
2SA2229-OY-E6**



**HZS6A1L
UZL-6L1
UZL-6M2
UZL-15M
11ES2**



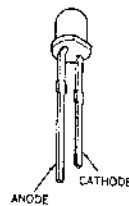
**NJM4580D
NJM4580D-D**



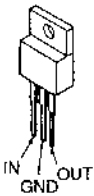
2SA979-FG



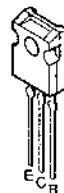
SEL1516W



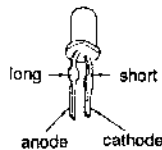
TA7805S



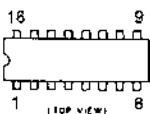
**2SA1358-OY
2SC3421-OY**



SEL2210S-TH10



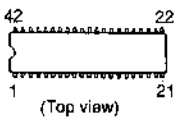
TC9215P



**2SB1094-LK
2SD2012**



TMP87C846N-4109



3-6. IC PIN FUNCTION

• IC301 MAIN CONTROLLER (TMP87C846N-4109)

Pin No.	Pin Name	I/O	Function
1	FUNC A	O	Output control A terminal, normal: "L".
2	FUNC B	O	Output control B terminal, normal: "L".
3	FUNC C	O	Output control C terminal, normal: "L".
4	FUNC D	O	Output mute control terminal, normal: "L".
5	GND	—	GND terminal.
6	GND	—	GND terminal.
7	PWR LED	O	Power LED drive signal. (ON: L)
8	STANDBY LED	O	Standby LED drive signal. (ON: L)
9	VOL LED	O	Attenuator volume LED drive signal. (ON: L)
10	S.D. LED	O	Source direct LED drive signal. (ON: L)
11	MD LED	O	Function LED drive signal. (ON: L)
12	TAPE LED	O	Function LED drive signal. (ON: L)
13	CD LED	O	Function LED drive signal. (ON: L)
14	TUNER LED	O	Function LED drive signal. (ON: L)
15	PHONO LED	O	Function LED drive signal. (ON: L)
16	DAT LED	O	Function LED drive signal. (ON: L)
17	TEST	I	GND terminal.
18	RESET	I/O	Reset signal. (Reset: L)
19	XIN	I	Clock signal input terminal.
20	XOUT	O	Clock signal output terminal.
21	V _{SS}	—	GND terminal.
22	VAREF	I	A/D conversion power supply terminal.
23	N.C	—	Not used.
24	FUNC	I	Position data of input selector switch.
25	V _{DD}	—	Power supply terminal.
26	VOL DOWN	O	Attenuator volume down control signal, normal: "L".
27	VOL UP	O	Attenuator volume up control signal, normal: "L".
28	—	—	Not used. (Open)
29	—	—	Not used. (Open)
30	—	—	Not used. (Open)
31	AC CUT	I	AC cut signal. (Active: L)
32	S. DIRECT	I	Source direct key input terminal. (Active: L)
33	AUB IN	I	AU BUS signal input terminal, normal: "H".
34	AUB OUT	O	AU BUS signal output terminal, normal: "L".
35	SIRCS	I	SIRCS signal input terminal, normal: "H".
36	L. MUTE	O	Line mute control signal. (Active: L)
37	S. POWER	O	System power supply control signal. (Active: H)
38	S.D. CTL	O	Source direct control signal. (Active: H)
39	—	—	Not used. (GND)
40	RELAY	I	RELAY signal input terminal. (Active: L)
41	TA/TAE	I	TA/TAE select signal input terminal.
42	V _{DD}	—	Power supply (+5V) terminal.

SECTION 4 EXPLODED VIEWS

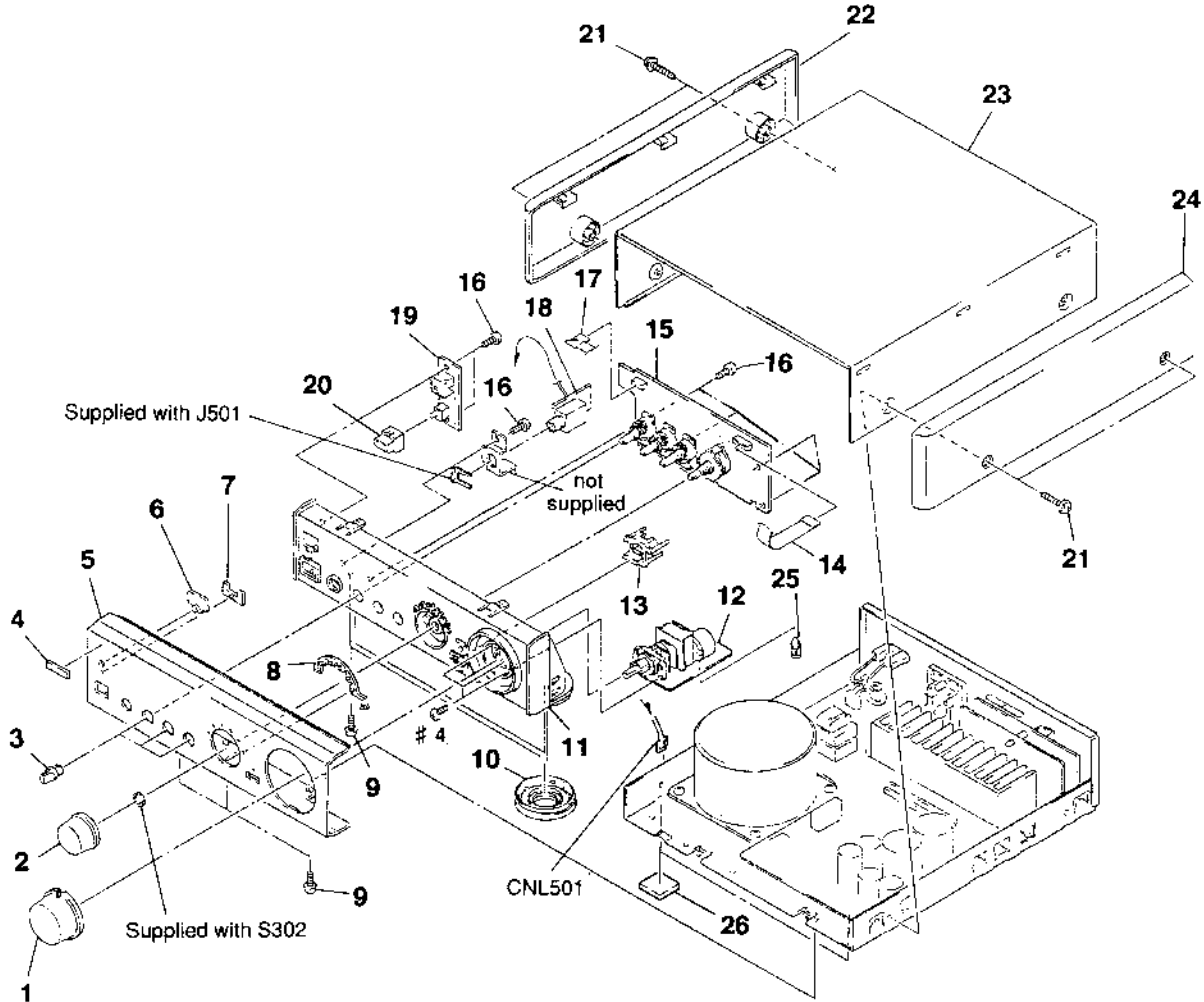
NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
G : German model

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

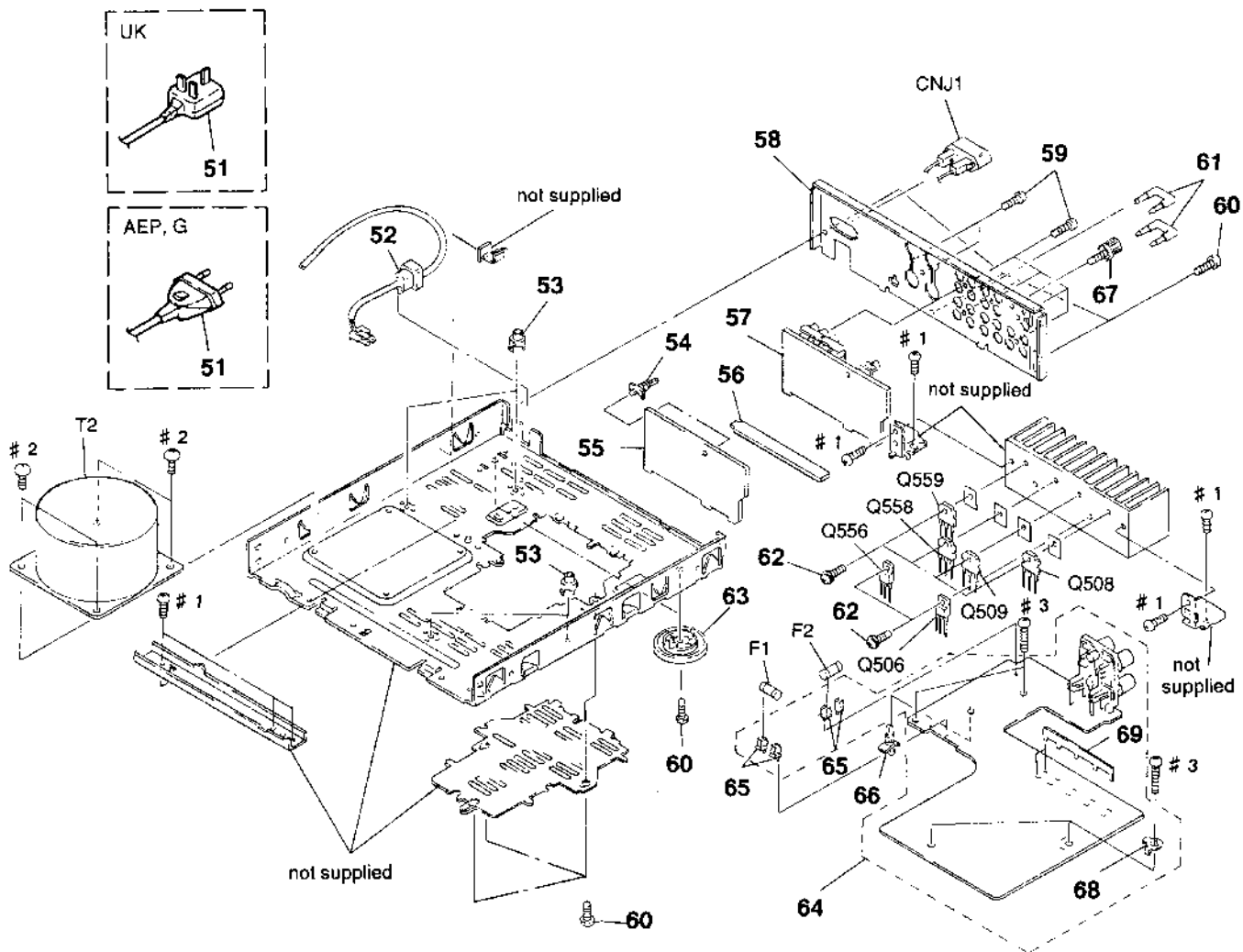
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

4-1. FRONT PANEL AND CASE SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-4945-130-1	KNOB (DIA. 43) ASSY		* 15	A-4371-640-A	PANEL BOARD, COMPLETE (G)	
2	X-4945-131-1	KNOB (DIA. 31) ASSY		16	4-951-620-01	SCREW (2. 6X8), +BVTP	
3	4-968-107-01	KNOB (DIA. 13)		17	1-696-986-11	WIRE (FLAT TYPE) (7 CORE)	
4	4-969-961-11	EMBLEM (NO. 4), SONY		* 18	1-653-563-11	HEADPHONE BOARD	
5	4-968-087-01	PANEL, FRONT		* 19	1-653-562-11	POWER SWITCH BOARD	
6	4-968-092-01	FILTER		20	4-968-098-01	BUTTON (P)	
7	4-968-091-01	INDICATOR (PO)		21	4-969-954-01	SCREW (SIDE PANEL)	
8	4-968-090-01	INDICATOR (FU)		22	X-4945-476-1	PANEL (L) ASSY, SIDE	
9	3-704-515-21	SCREW (BV/RING)		23	4-967-150-11	CASE	
10	X-4945-079-1	RING ASSY, FOOT		24	X-4945-477-1	PANEL (R) ASSY, SIDE	
11	X-4945-344-1	BASE ASSY, PANEL		* 25	3-350-847-21	HOLDER, PCB	
* 12	1-653-556-11	VOLUME BOARD		26	3-342-416-01	SHEET (F), INSULATING	
13	4-968-089-01	BUTTON (1)		* CNL501	1-690-880-11	LEAD (WITH CONNECTOR)	
14	1-751-801-11	WIRE (FLAT TYPE) (7 CORE)					
* 15	A-4371-633-A	PANEL BOARD, COMPLETE (AEP, UK)					

4-2. MAIN BOARD SECTION



The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
\triangle 51	1-575-651-21	CORD, POWER (AEP,G)		* 64	A-4371-637-A	MAIN BOARD, COMPLETE (G)	
\triangle 51	1-696-571-11	CORD, POWER (UK)		65	1-533-293-11	FUSE HOLDER	
* 52	3-703-244-00	BUSHING (2104), CORD (AEP,UK)		66	4-943-687-01	HOLDER, PC BOARD	
52	3-703-244-11	BUSHING (2104), CORD (G)		67	4-947-010-01	SCREW, FEEDER FIXED	
* 53	4-968-100-01	SUPPORT, PC		68	1-537-770-11	TERMINAL BOARD, GROUND	
54	4-924-098-11	HOLDER, PC BOARD		* 69	1-560-242-31	BUS BAR 5P	
* 55	1-653-559-11	P. J. B BOARD		\triangle CNJ1	1-526-794-11	OUTLET, AC	
* 56	1-653-558-11	P. J. JUMPER BOARD		\triangle F1	1-532-078-00	FUSE, TIME LAG (T1A 250V)	
* 57	1-653-557-11	PIN JACK BOARD		\triangle F2	1-532-259-00	FUSE, TIME LAG (T1.6A 250V)	
* 58	4-967-149-12	PANEL, BACK (AEP)		Q506	8-729-209-15	TRANSISTOR 2SD2012	
* 58	4-967-149-22	PANEL, BACK (G)		Q508	8-729-232-45	TRANSISTOR 2SK1529-Y	
* 58	4-967-149-31	PANEL, BACK (UK)		Q509	8-729-232-46	TRANSISTOR 2SJ200-Y	
59	3-704-515-41	SCREW (BV/RING)		Q556	8-729-209-15	TRANSISTOR 2SD2012	
60	3-704-515-21	SCREW (BV/RING)		Q558	8-729-232-45	TRANSISTOR 2SK1529-Y	
61	1-535-706-11	PLUG, JUMPER		Q559	8-729-232-46	TRANSISTOR 2SJ200-Y	
62	3-905-609-01	SCREW (TRANSISTOR)		\triangle T2	1-426-823-11	TRANSFORMER, POWER (G)	
63	X-4945-129-1	FOOT ASSY		\triangle T2	1-426-824-11	TRANSFORMER, POWER (AEP, UK)	
* 64	A-4371-636-A	MAIN BOARD, COMPLETE (AEP, UK)					

**SECTION 5
ELECTRICAL PARTS LIST**

NOTE:

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
G : German model

- **RESISTORS**
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- **SEMICONDUCTORS**
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- **CAPACITORS**
uF: μ F
- **COILS**
uH: μ H

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-653-363-11	HEADPHONE BOARD *****		C222	1-136-165-00	FILM 0.1uF 5%	50V
		< CONNECTOR >		C223	1-164-159-11	CERAMIC 0.1uF	50V
* CN503	1-564-508-11	PLUG, CONNECTOR 5P		C501	1-124-927-11	ELECT 4.7uF 20%	100V
* CNL501	1-690-880-31	LEAD (WITH CONNECTOR)		C502	1-164-077-11	CERAMIC 220PF 10%	50V
		< JACK >		C504	1-164-083-11	CERAMIC 680PF 10%	50V
J501	1-507-854-21	JACK, LARGE TYPE (HEADPHONES)		C505	1-124-910-11	ELECT 47uF 20%	50V
*****				C506	1-124-120-11	ELECT 220uF 20%	25V
*	A-4371-636-A	MAIN BOARD, COMPLETE (AEP, UK) *****		C508	1-102-989-00	CERAMIC 88PF 5%	500V
*	A-4371-637-A	MAIN BOARD, COMPLETE (G) *****		C509	1-124-910-11	ELECT 47uF 20%	50V
	1-533-293-11	FUSE HOLDER		C510	1-164-023-11	CERAMIC 15PF 5%	50V
	1-537-770-21	TERMINAL BOARD, GROUND		C511	1-126-053-11	ELECT 220uF 20%	50V
*	1-560-242-31	BUS BAR 5P		C512	1-136-173-00	FILM 0.47uF 5%	50V
		< CAPACITOR >		C513	1-136-161-00	FILM 0.047uF 5%	50V
				C514	1-136-161-00	FILM 0.047uF 5%	50V
Δ C1	1-161-744-51	CERAMIC 0.01uF	400V	C517	1-136-153-00	FILM 0.01uF 5%	50V
C201	1-124-925-11	ELECT 2.2uF 20%	100V	C518	1-136-157-00	FILM 0.022uF 5%	50V
C203	1-126-057-11	ELECT 2200uF 20%	50V	C551	1-124-927-11	ELECT 4.7uF 20%	100V
C204	1-126-057-11	ELECT 2200uF 20%	50V	C552	1-164-077-11	CERAMIC 220PF 10%	50V
C205	1-125-686-11	ELECT 6800uF 20%	50V	C554	1-164-083-11	CERAMIC 680PF 10%	50V
C206	1-125-686-11	ELECT 6800uF 20%	50V	C555	1-124-910-11	ELECT 47uF 20%	50V
C207	1-136-165-00	FILM 0.1uF 5%	50V	C556	1-124-120-11	ELECT 220uF 20%	25V
C208	1-136-165-00	FILM 0.1uF 5%	50V	C558	1-102-989-00	CERAMIC 68PF 5%	500V
C209	1-124-910-11	ELECT 47uF 20%	50V	C559	1-124-910-11	ELECT 47uF 20%	50V
C210	1-124-910-11	ELECT 47uF 20%	50V	C560	1-164-023-11	CERAMIC 15PF 5%	50V
C211	1-124-910-11	ELECT 47uF 20%	50V	C561	1-126-053-11	ELECT 220uF 20%	50V
C212	1-124-910-11	ELECT 47uF 20%	50V	C562	1-136-173-00	FILM 0.47uF 5%	50V
C213	1-126-027-11	ELECT 1000uF 20%	25V	C563	1-136-161-00	FILM 0.047uF 5%	50V
C214	1-126-027-11	ELECT 1000uF 20%	25V	C564	1-136-161-00	FILM 0.047uF 5%	50V
C215	1-136-159-00	FILM 0.033uF 5%	50V	C567	1-136-153-00	FILM 0.01uF 5%	50V
C216	1-136-159-00	FILM 0.033uF 5%	50V	C601	1-164-085-11	CERAMIC 0.001uF 10%	50V
C217	1-126-059-11	ELECT 10uF 20%	50V	C602	1-124-994-11	ELECT 100uF 20%	6.3V
C218	1-126-059-11	ELECT 10uF 20%	50V	C603	1-136-157-00	FILM 0.022uF 5%	50V
C219	1-126-027-11	ELECT 1000uF 20%	25V	C604	1-124-994-11	ELECT 100uF 20%	6.3V
C220	1-136-153-00	FILM 0.01uF 5%	50V			< CONNECTOR >	
C221	1-126-056-11	ELECT 10uF 20%	50V	* CN1	1-565-792-11	PIN, CONNECTOR 2P	
				CN2	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P	
				CN4	1-564-321-00	PIN, CONNECTOR 2P	
				* CN201	1-565-561-11	PIN, CONNECTOR 3P (AU BUS)	
				* CN202	1-564-506-11	PLUG, CONNECTOR 3P	
				* CN203	1-568-826-11	SOCKET, CONNECTOR 7P	
				* CN204	1-564-242-00	PIN, CONNECTOR 5P	
				CN501	1-564-506-11	PLUG, CONNECTOR 3P	

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* CN502	1-564-508-11	PLUG, CONNECTOR 5P				< TRANSISTOR >	
		< DIODE >					
D201	8-719-987-63	DIODE 1N4148M		Q201	8-729-620-05	TRANSISTOR 2SC2603-EF	
D202	8-719-987-63	DIODE 1N4148M		Q202	8-729-209-15	TRANSISTOR 2SD2012	
D203	8-719-200-02	DIODE 10E2		Q203	8-729-141-83	TRANSISTOR 2SB1094-LK	
D204	8-719-200-02	DIODE 10E2		Q501	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D205	8-719-200-02	DIODE 10E2		Q502	8-729-620-18	TRANSISTOR 2SA979-FG	
D206	8-719-200-02	DIODE 10E2		Q503	8-729-119-78	TRANSISTOR 2SC403SP-51	
D207	8-719-001-91	DIODE UZL-15M		Q504	8-729-119-78	TRANSISTOR 2SC403SP-51	
D208	8-719-001-91	DIODE UZL-15M		Q505	8-729-021-74	TRANSISTOR 2SA949-OY-TPE6	
D209	8-719-200-82	DIODE 11ES2		Q506	8-729-209-15	TRANSISTOR 2SD2012	
D210	8-719-200-82	DIODE 11ES2		Q507	8-729-021-73	TRANSISTOR 2SC2229-OY-TPE6	
D211	8-719-200-82	DIODE 11ES2		Q508	8-729-232-45	TRANSISTOR 2SK1529-Y	
D212	8-719-200-82	DIODE 11ES2		Q509	8-729-232-46	TRANSISTOR 2SJ200-Y	
D213	8-719-200-82	DIODE 11ES2		Q510	8-729-020-82	TRANSISTOR 2SC3421-OY	
D214	8-719-200-82	DIODE 11ES2		Q511	8-729-020-83	TRANSISTOR 2SA1358-OY	
D215	8-719-200-82	DIODE 11ES2		Q551	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D216	8-719-200-82	DIODE 11ES2		Q552	8-729-620-18	TRANSISTOR 2SA979-FG	
D217	8-719-510-68	DIODE D5SBA20F01		Q553	8-729-119-78	TRANSISTOR 2SC403SP-51	
D218	8-719-987-63	DIODE 1N4148M		Q554	8-729-119-78	TRANSISTOR 2SC403SP-51	
D219	8-719-200-82	DIODE 11ES2		Q555	8-729-021-74	TRANSISTOR 2SA949-OY-TPE6	
D220	8-719-200-82	DIODE 11ES2		Q556	8-729-209-15	TRANSISTOR 2SD2012	
D221	8-719-933-33	DIODE HZS6A1L		Q557	8-729-021-73	TRANSISTOR 2SC2229-OY-TPE6	
D222	8-719-933-33	DIODE HZS6A1L		Q558	8-729-232-45	TRANSISTOR 2SK1529-Y	
D501	8-719-987-63	DIODE 1N4148M		Q559	8-729-232-46	TRANSISTOR 2SJ200-Y	
D502	8-719-000-60	DIODE UZL-6M2		Q560	8-729-020-82	TRANSISTOR 2SC3421-OY	
D503	8-719-900-19	DIODE SLR34UW5		Q561	8-729-020-83	TRANSISTOR 2SA1358-OY	
D551	8-719-987-63	DIODE 1N4148M		Q601	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D552	8-719-000-60	DIODE UZL-6M2		Q651	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D553	8-719-900-19	DIODE SLR34UW5				< RESISTOR >	
D601	8-719-987-63	DIODE 1N4148M		△R201	1-249-421-11	CARBON 2.2K 5% 1/4W F	
D602	8-719-987-63	DIODE 1N4148M		R202	1-259-454-11	CARBON 12K 5% 1/6W (G)	
D603	8-719-987-63	DIODE 1N4148M		R202	1-259-456-11	CARBON 15K 5% 1/6W (AEP, UK)	
D604	8-719-987-63	DIODE 1N4148M		R203	1-259-454-11	CARBON 12K 5% 1/6W (G)	
D651	8-719-987-63	DIODE 1N4148M		R203	1-259-456-11	CARBON 15K 5% 1/6W (AEP, UK)	
D652	8-719-987-63	DIODE 1N4148M		R204	1-219-136-11	FUSIBLE 0.22 10% 1/4W	
		< FUSE >		R205	1-219-136-11	FUSIBLE 0.22 10% 1/4W	
△F1	1-532-078-00	FUSE, TIME LAG (T1A 250V)		△R206	1-212-873-11	FUSIBLE 47 5% 1/4W F	
△F2	1-532-259-00	FUSE, TIME LAG (T1.6A 250V)		R207	1-259-440-11	CARBON 3.3K 5% 1/6W	
		< IC >		R208	1-259-440-11	CARBON 3.3K 5% 1/6W	
IC203	8-759-231-53	IC TA7805S		R501	1-259-428-11	CARBON 1K 5% 1/6W	
IC601	8-759-111-68	IC uPC1237HA		R502	1-259-464-11	CARBON 33K 5% 1/6W	
		< COIL >		R503	1-259-416-11	CARBON 330 5% 1/6W	
* L501	1-420-872-00	COIL, AIR CORE		R504	1-259-436-11	CARBON 2.2K 5% 1/6W	
* L551	1-420-872-00	COIL, AIR CORE		R505	1-259-412-11	CARBON 220 5% 1/6W	
				R506	1-259-462-11	CARBON 27K 5% 1/6W	
				R507	1-259-446-11	CARBON 5.6K 5% 1/6W	
				R508	1-259-422-11	CARBON 560 5% 1/6W	
				R509	1-259-440-11	CARBON 3.3K 5% 1/6W	
				R510	1-259-438-11	CARBON 2.7K 5% 1/6W	

The components identified by mark △ or dotted line with mark △ are critical for safety.
 Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R511	1-259-436-11	CARBON	2.2K 5% 1/6W	R604	1-249-792-11	CARBON	390 5% 1/2W (AEP, UK)
R513	1-259-464-11	CARBON	33K 5% 1/6W	△R605	1-215-914-11	METAL OXIDE	330 5% 3W F(G)
R514	1-259-380-11	CARBON	10 5% 1/6W	△R605	1-215-915-11	METAL OXIDE	470 5% 3W F(AEP, UK)
R515	1-259-380-11	CARBON	10 5% 1/6W	R606	1-259-452-11	CARBON	10K 5% 1/6W
R516	1-259-388-11	CARBON	22 5% 1/6W	R607	1-259-484-11	CARBON	220K 5% 1/6W
R517	1-259-388-11	CARBON	22 5% 1/6W	R608	1-259-470-11	CARBON	56K 5% 1/6W
△R521	1-212-857-00	FUSIBLE	10 5% 1/4W F	R609	1-247-764-11	CARBON	10K 5% 1/2W
R522	1-259-412-11	CARBON	220 5% 1/6W	R651	1-259-428-11	CARBON	1K 5% 1/6W
R523	1-259-412-11	CARBON	220 5% 1/6W	R652	1-259-456-11	CARBON	15K 5% 1/6W
R524	1-259-388-11	CARBON	22 5% 1/6W	R653	1-259-484-11	CARBON	220K 5% 1/6W
R525	1-259-388-11	CARBON	22 5% 1/6W	R654	1-249-661-11	CARBON	330 5% 1/2W (G)
△R526	1-212-881-11	FUSIBLE	100 5% 1/4W F	R654	1-249-792-11	CARBON	390 5% 1/2W (AEP, UK)
△R527	1-212-881-11	FUSIBLE	100 5% 1/4W F			< VARIABLE RESISTOR >	
△R528	1-217-151-00	METAL PLATE	0.22 2W F	RV501	1-241-761-11	RES, ADJ, CERMET 1K (DC BIAS L-CH)	
△R529	1-217-151-00	METAL PLATE	0.22 2W F	RV551	1-241-761-11	RES, ADJ, CERMET 1K (DC BIAS R-CH)	
△R530	1-212-857-00	FUSIBLE	10 5% 1/4W F			< RELAY >	
△R531	1-212-994-00	FUSIBLE	330 5% 1/2W F	△RY201	1-515-849-11	RELAY	
R551	1-259-428-11	CARBON	1K 5% 1/6W	RY601	1-515-727-11	RELAY	
R552	1-259-464-11	CARBON	33K 5% 1/6W	RY602	1-515-676-11	RELAY	
R553	1-259-416-11	CARBON	330 5% 1/6W			< TRANSFORMER >	
R554	1-259-436-11	CARBON	2.2K 5% 1/6W	△T1	1-449-071-21	TRANSFORMER, POWER	
R555	1-259-412-11	CARBON	220 5% 1/6W			< BASE POST >	
R556	1-259-462-11	CARBON	27K 5% 1/6W	TB1	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	
R557	1-259-446-11	CARBON	5.6K 5% 1/6W			< TERMINAL >	
R558	1-259-422-11	CARBON	560 5% 1/6W	TM501	1-537-530-41	TERMINAL BOARD (SPEAKERS)	
R559	1-259-440-11	CARBON	3.3K 5% 1/6W	* TP501	1-535-115-00	TERMINAL	
R560	1-259-438-11	CARBON	2.7K 5% 1/6W	* TP551	1-535-115-00	TERMINAL	
R561	1-259-436-11	CARBON	2.2K 5% 1/6W			*****	
R563	1-259-464-11	CARBON	33K 5% 1/6W			* 1-653-558-11 P. J. JUMPER BOARD	
R564	1-259-380-11	CARBON	10 5% 1/6W			*****	
R565	1-259-380-11	CARBON	10 5% 1/6W			*****	
R566	1-259-388-11	CARBON	22 5% 1/6W			* 1-653-559-11 P. J. B BOARD	
R567	1-259-388-11	CARBON	22 5% 1/6W			*****	
△R569	1-212-869-00	FUSIBLE	33 5% 1/4W F			< CAPACITOR >	
△R570	1-212-869-00	FUSIBLE	33 5% 1/4W F	C119	1-126-022-11	ELECT	47uF 20% 25V
△R571	1-212-857-00	FUSIBLE	10 5% 1/4W F	C120	1-126-022-11	ELECT	47uF 20% 25V
R572	1-259-412-11	CARBON	220 5% 1/6W	C121	1-124-927-11	ELECT	4.7uF 20% 100V
R573	1-259-412-11	CARBON	220 5% 1/6W	C123	1-162-207-31	CERAMIC	22PF 5% 50V
R574	1-259-388-11	CARBON	22 5% 1/6W	C124	1-124-916-11	ELECT	22uF 20% 63V
R575	1-259-388-11	CARBON	22 5% 1/6W	C125	1-164-159-11	CERAMIC	0.1uF 50V
△R576	1-212-881-11	FUSIBLE	100 5% 1/4W F	C169	1-126-022-11	ELECT	47uF 20% 25V
△R577	1-212-881-11	FUSIBLE	100 5% 1/4W F				
△R578	1-217-151-00	METAL PLATE	0.22 2W F				
△R579	1-217-151-00	METAL PLATE	0.22 2W F				
△R580	1-212-857-00	FUSIBLE	10 5% 1/4W F				
△R581	1-212-994-00	FUSIBLE	330 5% 1/2W F				
R601	1-259-428-11	CARBON	1K 5% 1/6W				
R602	1-259-456-11	CARBON	15K 5% 1/6W				
R603	1-259-484-11	CARBON	220K 5% 1/6W				
R604	1-249-661-11	CARBON	330 5% 1/2W (G)				

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

P.J.B **PANEL**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C170	1-126-022-11	ELECT	47uF 20% 25V	R184	1-259-428-11	CARBON 1K 5% 1/6W	
C171	1-124-927-11	ELECT	4.7uF 20% 100V			< RELAY >	
C173	1-162-207-31	CERAMIC	22PF 5% 50V				
C174	1-124-916-11	ELECT	22uF 20% 63V	RY101	1-515-893-11	RELAY	
C175	1-164-159-11	CERAMIC	0.1uF 50V				
		< CONNECTOR >					
* CN101	1-564-509-11	PLUG, CONNECTOR 6P		*	A-4371-633-A	PANEL BOARD, COMPLETE (AEP, UK)	
* CN102	1-564-506-11	PLUG, CONNECTOR 3P				*****	
* CN103	1-564-506-11	PLUG, CONNECTOR 3P					
* CN104	1-568-826-11	SOCKET, CONNECTOR 7P		*	A-4371-640-A	PANEL BOARD, COMPLETE (G)	
		< DIODE >				*****	
D101	8-719-987-63	DIODE 1N4148M				< CAPACITOR >	
D102	8-719-987-63	DIODE 1N4148M		C301	1-125-623-11	DOUBLE LAYERS 0.22F 5.5V	
D103	8-719-987-63	DIODE 1N4148M		C302	1-126-157-11	ELECT 10uF 20% 16V	
D104	8-719-987-63	DIODE 1N4148M		C303	1-124-994-11	ELECT 100uF 20% 10V	
D105	8-719-987-63	DIODE 1N4148M		C305	1-164-159-11	CERAMIC 0.1uF 50V	
				C306	1-164-159-11	CERAMIC 0.1uF 50V	
D106	8-719-987-63	DIODE 1N4148M		C307	1-126-157-11	ELECT 10uF 20% 16V	
D107	8-719-987-63	DIODE 1N4148M		C308	1-161-494-00	CERAMIC 0.022uF 25V	
		< IC >		C309	1-161-494-00	CERAMIC 0.022uF 25V	
IC102	8-759-711-35	IC NJM4580D		C312	1-124-994-11	ELECT 100uF 20% 10V	
IC103	8-759-051-63	IC TC9215P		C313	1-161-494-00	CERAMIC 0.022uF 25V	
IC104	8-759-051-63	IC TC9215P					
IC105	8-759-051-63	IC TC9215P		C314	1-164-159-11	CERAMIC 0.1uF 50V	
		< TRANSISTOR >		C402	1-137-189-11	FILM 0.18uF 5% 50V	
Q101	8-729-141-26	TRANSISTOR 2SC3622A-LK		C403	1-136-175-00	FILM 0.68uF 5% 50V	
Q102	8-729-620-05	TRANSISTOR 2SC2603-BF		C404	1-136-158-00	FILM 0.027uF 5% 50V	
Q151	8-729-141-26	TRANSISTOR 2SC3622A-LK		C405	1-136-164-00	FILM 0.082uF 5% 50V	
		< RESISTOR >		C452	1-137-189-11	FILM 0.18uF 5% 50V	
R128	1-259-500-11	CARBON 1M 5% 1/6W		C453	1-136-175-00	FILM 0.68uF 5% 50V	
R129	1-259-476-11	CARBON 100K 5% 1/6W		C454	1-136-158-00	FILM 0.027uF 5% 50V	
R130	1-259-428-11	CARBON 1K 5% 1/6W		C455	1-136-164-00	FILM 0.082uF 5% 50V	
R131	1-259-428-11	CARBON 1K 5% 1/6W		C521	1-164-070-11	CERAMIC 100PF 5% 50V	
R132	1-259-442-11	CARBON 3.9K 5% 1/6W				< CONNECTOR >	
R133	1-259-428-11	CARBON 1K 5% 1/6W		* CN301	1-568-826-11	SOCKET, CONNECTOR 7P	
R134	1-259-428-11	CARBON 1K 5% 1/6W		* CN302	1-568-826-11	SOCKET, CONNECTOR 7P	
R135	1-259-436-11	CARBON 2.2K 5% 1/6W		* CN304	1-564-508-11	PLUG, CONNECTOR 5P	
R136	1-259-476-11	CARBON 100K 5% 1/6W		* CN401	1-564-509-11	PLUG, CONNECTOR 6P	
R137	1-259-452-11	CARBON 10K 5% 1/6W				< DIODE >	
R138	1-259-452-11	CARBON 10K 5% 1/6W		D301	8-719-200-82	DIODE 11ES2	
R139	1-259-452-11	CARBON 10K 5% 1/6W		D302	8-719-200-82	DIODE 11ES2	
R178	1-259-500-11	CARBON 1M 5% 1/6W		D304	8-719-987-63	DIODE 1N4148M	
R179	1-259-476-11	CARBON 100K 5% 1/6W		D305	8-719-987-63	DIODE 1N4148M	
R180	1-259-428-11	CARBON 1K 5% 1/6W		D306	8-719-987-63	DIODE 1N4148M	
R181	1-259-428-11	CARBON 1K 5% 1/6W		D307	8-719-313-43	DIODE SEL2210S-TH10 (SOURCE DIRECT)	
R182	1-259-442-11	CARBON 3.9K 5% 1/6W		D308	8-719-313-43	DIODE SEL2210S-TH10 (DAT/VIDEO)	
R183	1-259-428-11	CARBON 1K 5% 1/6W		D309	8-719-313-43	DIODE SEL2210S-TH10 (MD)	
				D310	8-719-313-43	DIODE SEL2210S-TH10 (TAPE)	
				D311	8-719-313-43	DIODE SEL2210S-TH10 (CD)	

PANEL PIN JACK

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D312	8-719-313-43	DIODE SEL2210S-TH10 (TUNER)		R409	1-259-418-11	CARBON 390 5% 1/6W	
D313	8-719-313-43	DIODE SEL2210S-TH10 (PHONO)		R451	1-259-428-11	CARBON 1K 5% 1/6W	
D314	8-719-987-63	DIODE 1N4148M		R452	1-259-438-11	CARBON 2.7K 5% 1/6W	
D318	8-719-987-63	DIODE 1N4148M		R453	1-259-428-11	CARBON 1K 5% 1/6W	
D319	8-719-987-63	DIODE 1N4148M		R454	1-259-452-11	CARBON 10K 5% 1/6W	
		< IC >		R457	1-259-460-11	CARBON 22K 5% 1/6W	
IC301	8-759-284-90	IC TMP87C846N-4109		R458	1-259-500-11	CARBON 1M 5% 1/6W	
IC302	8-759-635-63	IC M51943BSL		R459	1-259-418-11	CARBON 390 5% 1/6W	
		< TRANSISTOR >				< VARIABLE RESISTOR >	
Q301	8-729-900-63	TRANSISTOR DTA124ES		RV401	1-241-972-11	RES, VAR, CARBON 10K/10K (BASS)	
Q302	8-729-620-05	TRANSISTOR 2SC2603-EF		RV402	1-241-974-11	RES, VAR, CARBON 10K/10K (TREBLE)	
Q303	8-729-900-61	TRANSISTOR DTA114ES		RV403	1-241-973-11	RES, VAR, CARBON 100K/100K (BALANCE)	
Q304	8-729-900-61	TRANSISTOR DTA114ES				< SWITCH >	
Q305	8-729-900-36	TRANSISTOR DTC124ES		S301	1-554-303-21	SWITCH, TACTILE (SOURCE DIRECT)	
		< RESISTOR >		S302	1-692-974-11	SWITCH, ROTARY (FUNCTION)	
R301	1-249-429-11	CARBON 10K 5% 1/4W				< VIBRATOR >	
R302	1-249-433-11	CARBON 22K 5% 1/4W		X301	1-579-125-11	VIBRATOR, CERAMIC (8MHz)	
R303	1-249-429-11	CARBON 10K 5% 1/4W				*****	
△R304	1-249-393-11	CARBON 10 5% 1/4W F		*	1-653-557-11	PIN JACK BOARD	
R305	1-249-429-11	CARBON 10K 5% 1/4W				*****	
R306	1-249-429-11	CARBON 10K 5% 1/4W				< CAPACITOR >	
△R307	1-249-417-11	CARBON 1K 5% 1/4W F		C111	1-124-925-11	ELECT 2.2uF 20% 100V	
R308	1-249-426-11	CARBON 5.6K 5% 1/4W		C113	1-162-282-31	CERAMIC 100PF 10% 50V	
R309	1-249-433-11	CARBON 22K 5% 1/4W		C114	1-124-910-11	ELECT 47uF 20% 50V	
R310	1-249-431-11	CARBON 15K 5% 1/4W		C115	1-162-219-31	CERAMIC 68PF 5% 50V	
△R311	1-249-427-11	CARBON 6.8K 5% 1/4W F		C116	1-130-480-00	MYLAR 0.0056uF 5% 50V	
△R312	1-249-417-11	CARBON 1K 5% 1/4W F		C117	1-130-473-00	MYLAR 0.0015uF 5% 50V	
△R313	1-249-423-11	CARBON 3.3K 5% 1/4W F		C118	1-124-925-11	ELECT 2.2uF 20% 100V	
△R314	1-249-423-11	CARBON 3.3K 5% 1/4W F		C161	1-124-925-11	ELECT 2.2uF 20% 100V	
△R315	1-249-417-11	CARBON 1K 5% 1/4W F		C163	1-162-282-31	CERAMIC 100PF 10% 50V	
△R316	1-249-425-11	CARBON 4.7K 5% 1/4W F		C164	1-124-910-11	ELECT 47uF 20% 50V	
△R321	1-249-417-11	CARBON 1K 5% 1/4W F		C165	1-162-219-31	CERAMIC 68PF 5% 50V	
△R322	1-249-417-11	CARBON 1K 5% 1/4W F		C166	1-130-480-00	MYLAR 0.0056uF 5% 50V	
R323	1-249-429-11	CARBON 10K 5% 1/4W		C167	1-130-473-00	MYLAR 0.0015uF 5% 50V	
△R324	1-249-417-11	CARBON 1K 5% 1/4W F		C168	1-124-925-11	ELECT 2.2uF 20% 100V	
△R325	1-249-417-11	CARBON 1K 5% 1/4W F				< IC >	
△R326	1-249-417-11	CARBON 1K 5% 1/4W F		IC101	8-759-710-59	IC NJM4580D-D	
△R327	1-249-417-11	CARBON 1K 5% 1/4W F				< JACK >	
△R328	1-249-414-11	CARBON 560 5% 1/4W F		* J101	1-764-389-11	JACK, PIN 2P (PHONO IN)	
△R329	1-249-414-11	CARBON 560 5% 1/4W F		J102	1-766-261-11	JACK, PIN 4P (TUNER/CD IN)	
△R330	1-249-414-11	CARBON 560 5% 1/4W F		J103	1-565-304-11	JACK, PIN 4P (TAPE IN/OUT)	
R333	1-249-433-11	CARBON 22K 5% 1/4W		J104	1-565-303-11	JACK, PIN 6P (MD IN/OUT)	
R401	1-259-428-11	CARBON 1K 5% 1/6W					
R402	1-259-438-11	CARBON 2.7K 5% 1/6W					
R403	1-259-428-11	CARBON 1K 5% 1/6W					
R404	1-259-452-11	CARBON 10K 5% 1/6W					
R407	1-259-460-11	CARBON 22K 5% 1/6W					
R408	1-259-500-11	CARBON 1M 5% 1/6W					

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PIN JACK

POWER SWITCH

VOLUME

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
J105	1-565-303-11	JACK, PIN 6P (DAT/VIDEO/ADAPTOR IN/OUT)		R171	1-259-428-11	CARBON	1K 5% 1/6W
		< RESISTOR >		R172	1-259-494-11	CARBON	560K 5% 1/6W
R102	1-259-428-11	CARBON	1K 5% 1/6W	R173	1-259-472-11	CARBON	68K 5% 1/6W
R103	1-259-500-11	CARBON	1M 5% 1/6W	R174	1-259-470-11	CARBON	56K 5% 1/6W
R104	1-259-428-11	CARBON	1K 5% 1/6W	R175	1-259-490-11	CARBON	390K 5% 1/6W
R105	1-259-500-11	CARBON	1M 5% 1/6W	R176	1-259-412-11	CARBON	220 5% 1/6W
R106	1-259-420-11	CARBON	470 5% 1/6W	R177	1-259-476-11	CARBON	100K 5% 1/6W
R107	1-259-428-11	CARBON	1K 5% 1/6W	*****			
R108	1-259-500-11	CARBON	1M 5% 1/6W	*	1-653-562-11	POWER SWITCH BOARD	
R109	1-259-420-11	CARBON	470 5% 1/6W			*****	
R110	1-259-428-11	CARBON	1K 5% 1/6W			< CAPACITOR >	
R111	1-259-500-11	CARBON	1M 5% 1/6W	C310	1-126-157-11	ELECT	10uF 20% 16V
R112	1-259-420-11	CARBON	470 5% 1/6W	C311	1-162-306-11	CERAMIC	0.01uF 30% 16V
R113	1-259-428-11	CARBON	1K 5% 1/6W			< DIODE >	
R114	1-259-500-11	CARBON	1M 5% 1/6W	D315	8-719-987-63	DIODE	1N4148M
R115	1-259-420-11	CARBON	470 5% 1/6W	D316	8-719-313-40	DIODE	SEL1516W (ON/STANDBY)
R116	1-259-428-11	CARBON	1K 5% 1/6W			< IC >	
R117	1-259-500-11	CARBON	1M 5% 1/6W	IC303	8-749-922-36	IC	GP1U50XB
R118	1-259-476-11	CARBON	100K 5% 1/6W			< RESISTOR >	
R119	1-259-428-11	CARBON	1K 5% 1/6W	△R334	1-249-414-11	CARBON	560 5% 1/4W F
R120	1-259-476-11	CARBON	100K 5% 1/6W	△R335	1-249-410-11	CARBON	270 5% 1/4W F
R121	1-259-428-11	CARBON	1K 5% 1/6W			< SWITCH >	
R122	1-259-494-11	CARBON	560K 5% 1/6W	S303	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)	
R123	1-259-472-11	CARBON	68K 5% 1/6W	*****			
R124	1-259-470-11	CARBON	56K 5% 1/6W	*	1-653-556-11	VOLUME BOARD	
R125	1-259-490-11	CARBON	390K 5% 1/6W			*****	
R126	1-259-412-11	CARBON	220 5% 1/6W			< CAPACITOR >	
R127	1-259-476-11	CARBON	100K 5% 1/6W	C406	1-164-159-11	CERAMIC	0.1uF 50V
R152	1-259-428-11	CARBON	1K 5% 1/6W	C407	1-124-443-00	ELECT	100uF 20% 10V
R153	1-259-500-11	CARBON	1M 5% 1/6W			< CONNECTOR >	
R154	1-259-428-11	CARBON	1K 5% 1/6W	* CN402	1-564-506-11	PLUG, CONNECTOR 3P	
R155	1-259-500-11	CARBON	1M 5% 1/6W	CN403	1-564-506-11	PLUG, CONNECTOR 3P	
R156	1-259-420-11	CARBON	470 5% 1/6W	* CN404	1-564-508-11	PLUG, CONNECTOR 5P	
R157	1-259-428-11	CARBON	1K 5% 1/6W			< DIODE >	
R158	1-259-500-11	CARBON	1M 5% 1/6W	D401	8-719-200-82	DIODE	11ES2
R159	1-259-420-11	CARBON	470 5% 1/6W			< IC >	
R160	1-259-428-11	CARBON	1K 5% 1/6W	IC401	8-759-962-08	IC	BA6208
R161	1-259-500-11	CARBON	1M 5% 1/6W				
R162	1-259-420-11	CARBON	470 5% 1/6W				
R163	1-259-428-11	CARBON	1K 5% 1/6W				
R164	1-259-500-11	CARBON	1M 5% 1/6W				
R165	1-259-420-11	CARBON	470 5% 1/6W				
R166	1-259-428-11	CARBON	1K 5% 1/6W				
R167	1-259-500-11	CARBON	1M 5% 1/6W				
R168	1-259-476-11	CARBON	100K 5% 1/6W				
R169	1-259-428-11	CARBON	1K 5% 1/6W				
R170	1-259-476-11	CARBON	100K 5% 1/6W				

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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< RESISTOR >				***** HARDWARE LIST *****	
△R410	1-249-389-11	CARBON 4.7 5% 1/4W F					
		< VARIABLE RESISTOR >					
RV404	1-241-921-21	RES, VAR, CARBON 120K/120K (ATTENUATOR)		#1	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	
*****				#2	7-682-560-04	SCREW +BVTT 4X6 (S)	
		MISCELLANEOUS		#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2	
		*****		#4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
14	1-751-801-11	WIRE (FLAT TYPE) (7 CORE)					
17	1-696-986-11	WIRE (FLAT TYPE) (7 CORE)					
△51	1-575-651-21	CORD, POWER (AEP, G)					
△51	1-696-571-11	CORD, POWER (UK)					
61	1-535-706-11	PLUG, JUMPER					
65	1-533-293-11	FUSE HOLDER					
68	1-537-770-11	TERMINAL BOARD, GROUND					
* 69	1-560-242-31	BUS BAR 5P					
△CNJ1	1-526-794-11	OUTLET, AC					
* CNL501	1-690-880-11	LEAD (WITH CONNECTOR)					
△F1	1-532-078-00	FUSE, TIME LAG (T1A 250V)					
△F2	1-532-259-00	FUSE, TIME LAG (T1.6A 250V)					
Q506	8-729-209-15	TRANSISTOR 2SD2012					
Q508	8-729-232-45	TRANSISTOR 2SK1529-Y					
Q509	8-729-232-46	TRANSISTOR 2SJ200-Y					
Q556	8-729-209-15	TRANSISTOR 2SD2012					
Q558	8-729-232-45	TRANSISTOR 2SK1529-Y					
Q559	8-729-232-46	TRANSISTOR 2SJ200-Y					
△T2	1-426-823-11	TRANSFORMER, POWER (G)					
△T2	1-426-824-11	TRANSFORMER, POWER (AEP, UK)					

		ACCESSORIES & PACKING MATERIALS					

	1-467-796-11	REMOTE COMMANDER (RM-S1)					
	1-590-219-11	CORD (WITH CONNECTOR)					
	3-759-590-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)					
	3-759-590-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, G)					
	3-759-590-51	MANUAL, INSTRUCTION (ENGLISH) (UK)					
	4-955-381-01	CASE, BATTERY (for RM-S1)					
*	4-968-991-01	CUSHION (AEP, G)					
*	4-968-992-61	INDIVIDUAL CARTON (AEP, G)					
*	4-970-588-11	PLATE (PIN JACK 4P), INDICATION					
*	4-970-607-01	PLATE (PIN JACK 8P), INDICATION					

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