

TA-A57/D509

SERVICE MANUAL

AEP Model

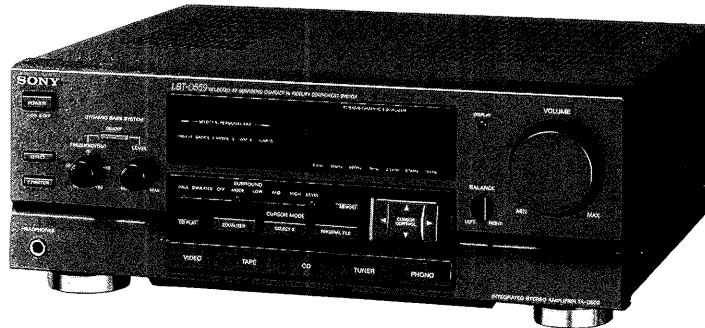
UK Model

TA-D509

E Model

Australian Model

TA-A57



This set is the Amplifier section in LBT-A57CD/A57CDM/D509CD/D559CD.

This photo is TA-D509.

SPECIFICATIONS

TA-A57

Continuous RMS power output

60 W + 60 W
(6 ohms, at 1 kHz, 5% THD)

Peak music power output 750W (4 speakers driven)

Input	Jack type	Sensitivity	Impedance
VIDEO	Phono	245 mV	47 kohms
PHONO (MM)	Phono	3.3 mV	47 kohms
MIC	Phono	1 mV	10 kohms

Audio output	Jack type	Voltage	Impedance
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms	
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more	

Frequency response 15 Hz to 50 kHz ± 0 dB

Power requirements
TYPE I
120V/220V/240V AC, adjustable with the voltage selector, 50/60Hz
TYPE II
120V/220V/230—240V AC, adjustable with the voltage selector, 50/60Hz

Power consumption 180W

Weight Approx. 5.9 kg (12 lbs 15 oz)
Dimensions Approx. 355 x 135 x 330 mm
(14 x 5 $\frac{1}{4}$ x 12 $\frac{7}{8}$ inches)
(w/h/d, including projections)

Design and specifications are subject to change without notice.

TA-D509

Continuous RMS power output

60 W + 60 W
(6 ohms, at 1 kHz, 5% THD)
50 W + 50 W (6 ohms, DIN, 1 kHz)
90 W + 90 W
(6 ohms, at 1 kHz, 10% THD)

Music power output

Input	Jack type	Sensitivity	Impedance
VIDEO	Phono	245 mV	47 kohms
PHONO (MM)	Phono	3.3 mV	47 kohms

Audio output	Jack type	Voltage	Impedance
SURROUND SPEAKER	Phono	Accepts speakers of 16 ohms	
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more	

Frequency response 15 Hz to 50 kHz ± 0 dB
Power requirements 220—230V AC, 50/60Hz
(AEP, G, IT, EE model)
240V AC, 50/60Hz (UK model)

Power consumption 150 W
Weight Approx. 5.9 kg (12 lbs 15 oz)
Dimensions Approx. 355 x 135 x 330 mm
(14 x 5 $\frac{1}{4}$ x 12 $\frac{7}{8}$ inches)
(w/h/d, including projections)

Design and specifications are subject to change without notice.

• Abbreviations

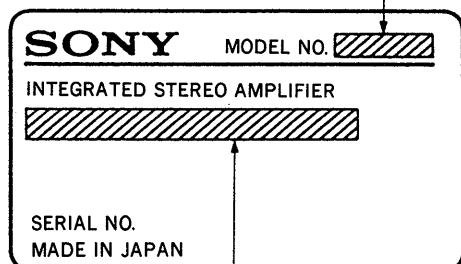
G : German model
IT : Italian model
EE : East European model

INTEGRATED STEREO AMPLIFIER
SONY®

MODEL IDENTIFICATION

—Specification Label—

E, EA, AUS, MY, SP model: TA-A57
AEP, UK, G, IT, EE model: TA-D509



AEP, IT, EE model : AC: 220V~230V~50/60Hz 150W
UK model : AC: 240V~50/60Hz
G model : SYSTEM LBT-D509
AC: 220V~230V~50/60Hz 150W
E, EA, AUS model : AC: 120V/220V/240V~50/60Hz 180W
MY, SP model : AC: 120V/220V/230V~240V~50/60Hz 180W

• Abbreviations

EA : Saudi Arabia model
AUS: Australian model
MY : Malaysia model
SP : Singapore model
G : German model
IT : Italian model
EE : East European model

SAFETY-RELATED COMPONENT WARNING!!

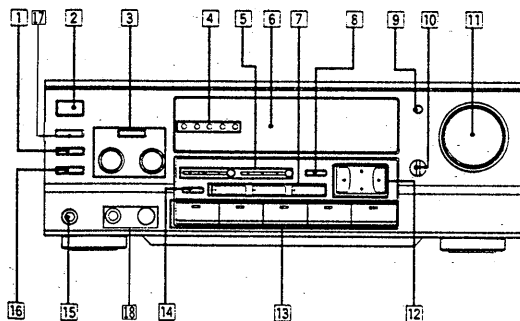
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL		
1-1.	Location of Controls	2
2. SERVICE NOTES		
2-1.	Removal of Fan Case	3
2-2.	Removal of Joint	3
3. DIAGRAMS		
3-1.	Circuit Boards Location	4
3-2.	Semiconductor Lead Layouts	5
3-3.	Printed Wiring Boards—Main Section—	6
3-4.	Schematic Diagram—Main Section—	9
3-5.	Schematic Diagram—Panel Section—	14
3-6.	Printed Wiring Boards—Panel Section—	17
4. EXPLODED VIEWS		
4-1.	Front Panel Section	19
4-2.	Chassis Section	20
5. ELECTRICAL PARTS LIST		21

SECTION 1 GENERAL

1-1. LOCATION OF CONTROLS



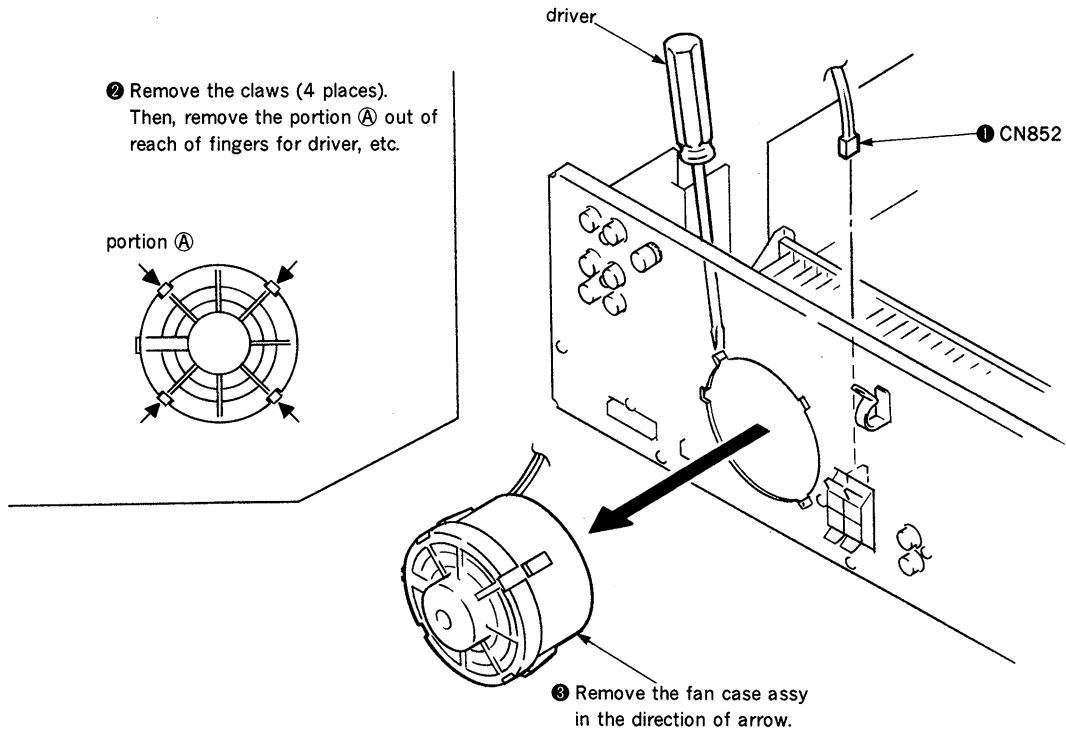
- 1 EFFECT button and indicator
- 2 POWER switch
- 3 DYNAMIC BASS SYSTEM controls (ON/OFF, FREQUENCY, LEVEL)
- 4 SELECT 5/PERSONAL FILE setting indicators
- 5 SURROUND controls (MODE, LEVEL and indicators)
- 6 Display window
- 7 CURSOR MODE buttons (EQUALIZER, SELECT 5, PERSONAL FILE and indicators)
- 8 MEMORY button and indicator
- 9 DISPLAY button
- 10 BALANCE control
- 11 VOLUME control
- 12 CURSOR CONTROL section
- 13 Function selectors and indicators
- 14 EQ FLAT button
- 15 HEADPHONES jack
- 16 P. FUNCTION button and indicator
- 17 KARAOKE P.O.N button and indicator (TA-A57 only)
- 18 MIC (microphone) jack and MIC LEVEL control (TA-A57 only)

This section is extracted from instruction manual.

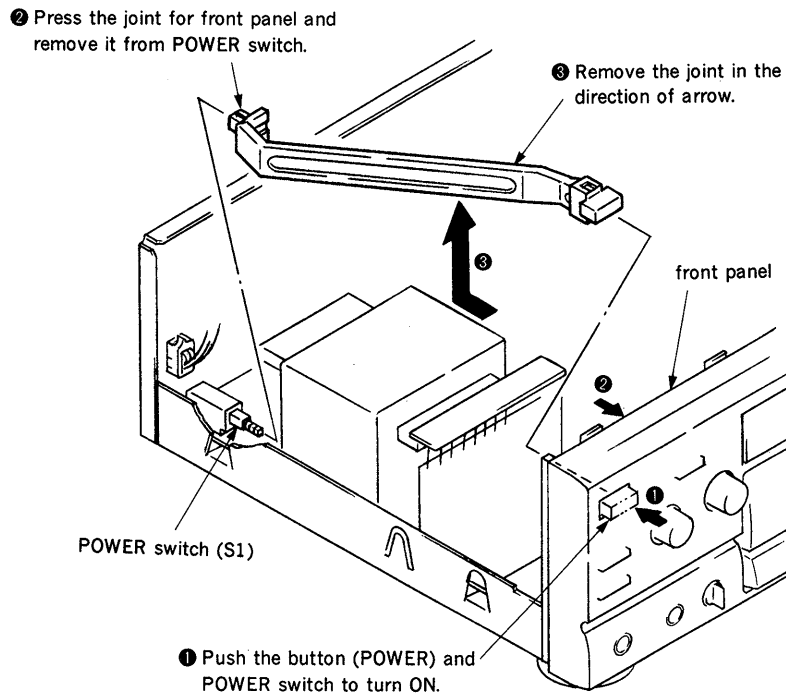
SECTION 2 SERVICE NOTES

Note : Follow the disassembly procedure in the numerical order given.

2-1. REMOVAL OF FAN CASE (TA-D509 : UK model only)

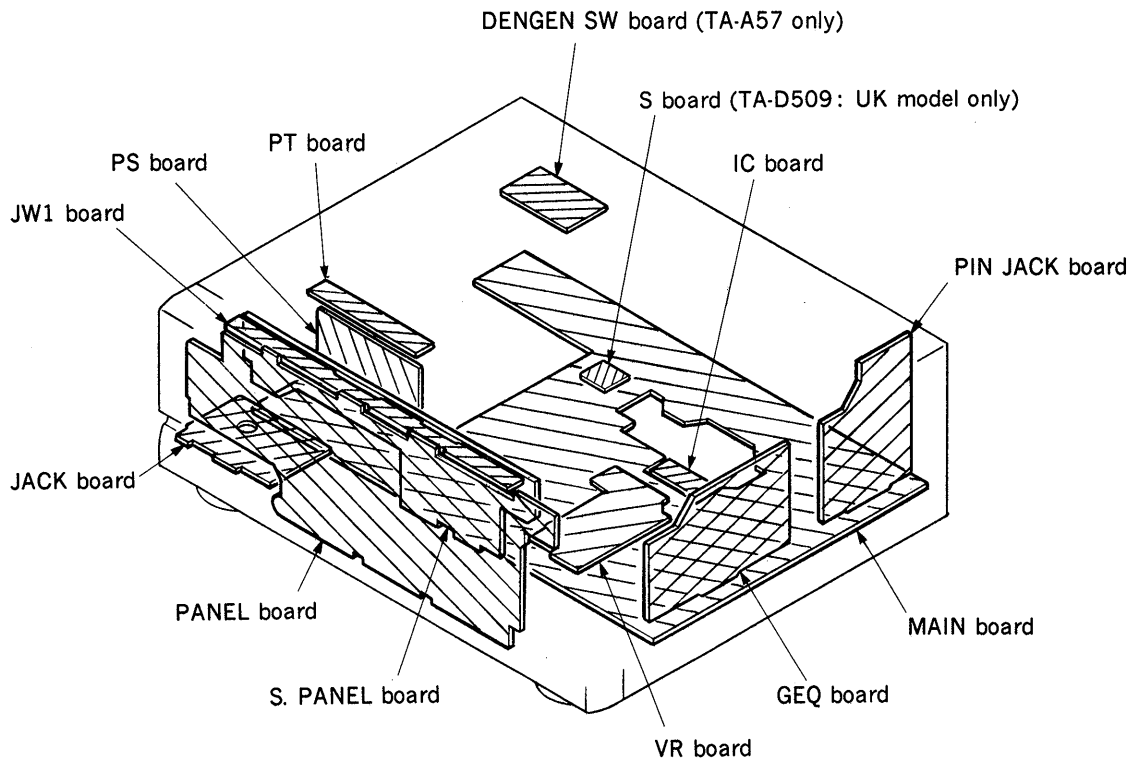


2-2. REMOVAL OF JOINT



SECTION 3 DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



LB1639
M5218AP
μPC393C

A diagram of a 4-bit shift register. It is represented as a horizontal rectangle. On the left side, there is a semi-circular notch. Above the rectangle, there are four input pins labeled 8, 7, 6, and 5 from left to right. Below the rectangle, there are four output pins labeled 1, 2, 3, and 4 from left to right.

LC7522K

LM35DZ



MC14066BCP

A diagram of a 14-pin DIP package. The package is rectangular with a notch on the left side. There are 14 pins in total, 7 on each long side. The pins are numbered 1 through 14. On the top side, the pins are numbered 14 on the left and 8 on the right. On the bottom side, the pins are numbered 1 on the left and 7 on the right.

M5F79M07

IN GND OUT

M5218AL
M5218AL-22
μPC1237HA

Diagram of a 10-pin D-sub connector. The pins are numbered 1 through 8 from left to right. The connector has a D-shaped shield and a 10-pin header.

M5289P

STK401-050
STK401-090

A diagram of a 12-pin connector. It is a rectangular component with two circular mounting holes on the top edge. Below the component, there are two groups of three pins each. The left group is labeled '12' and the right group is labeled '0'. A dashed line connects the two groups of pins.

TA7807S

A diagram of a 3-pin DIN connector. It consists of a rectangular body with a circular feature on top. Three pins extend from the bottom. The pins are labeled from left to right: IN, GND, and OUT.

μ PD78042GF-018-3B9

(TOP VIEW)

The top view shows a rectangular plate with overall dimensions of 65 units by 80 units. The top edge has a width of 64 units, and the right edge has a height of 40 units. The bottom edge has a width of 64 units, and the left edge has a height of 25 units. There are two circular holes, each with a diameter of 14 units. The center of the left hole is located 24 units from the left edge and 41 units from the top edge. The center of the right hole is located 24 units from the right edge and 41 units from the top edge. A dimension line labeled 'INDEX' points to the center of the left hole.

DTA114ES
DTC114ES
DTC124ES
2SC2603-EF
2SC3622A-LK

A diagram of a three-core cable. It shows a rectangular outer jacket with three internal conductors. The conductors are labeled E, C, and B from left to right. Each conductor is shown with a solid line and a dashed line, representing different phases or components.

DTA124ES
letter side

A diagram of a three-strapped harness. It shows a rectangular chest plate with three vertical straps hanging from it. The straps are labeled from left to right as E, C, and B. The chest plate has a small rectangular detail on its left side.

2SB733-34
letter side

2SB1094-LK

A diagram of a 3-pin DIN connector. It shows a rectangular housing with three pins extending downwards. The pins are labeled B, C, and E from left to right. Pin B is the leftmost, pin C is in the middle, and pin E is the rightmost. The housing has a circular feature on its top surface.

2SC1841-PAFAEA

A diagram of a three-pronged electrical plug. The top part is a rounded rectangular cap with a dashed vertical line down the center. Three vertical prongs extend downwards from the cap. The left prong is labeled 'E', the middle prong is labeled 'C', and the right prong is labeled 'B'.

2SK246-GR

A diagram of a 3-pin transistor package. It shows a cylindrical body with three vertical pins extending downwards. The pins are labeled from left to right as S, G, and D.

HZS30-2L
HZS7C2L
UZ-4.7BSA
UZL-6L3
UZL-6M2
UZL-7L3
11E2

UZP-6.2B
1N4148M
1S1585
10E2N

The diagram shows a vertical metal rod. A cylindrical sacrificial anode is attached to the rod. An arrow points from the label "cathode" to the upper part of the rod. Another arrow points from the label "anode" to the cylindrical sacrificial anode.

RBV-602-01

SEL2210S

A schematic diagram of a diode. It consists of a triangle pointing towards a vertical line. The triangle is labeled 'anode' and the vertical line is labeled 'cathode'.

SEL3210S-CD

A diagram of a Daniell cell. It shows two vertical electrodes. The left electrode is labeled 'long' and 'anode'. The right electrode is labeled 'short' and 'cathode'. The electrodes are connected at the top by a wire. The cell is represented by two vertical lines of different lengths, with the longer line on the left and the shorter line on the right.

SML1860A

A diagram of a 5-pin D-sub connector. It consists of a rectangular housing with five pins extending downwards. The pins are labeled from left to right as A, C, and A, with the middle pin (C) being longer than the two outer pins (A).

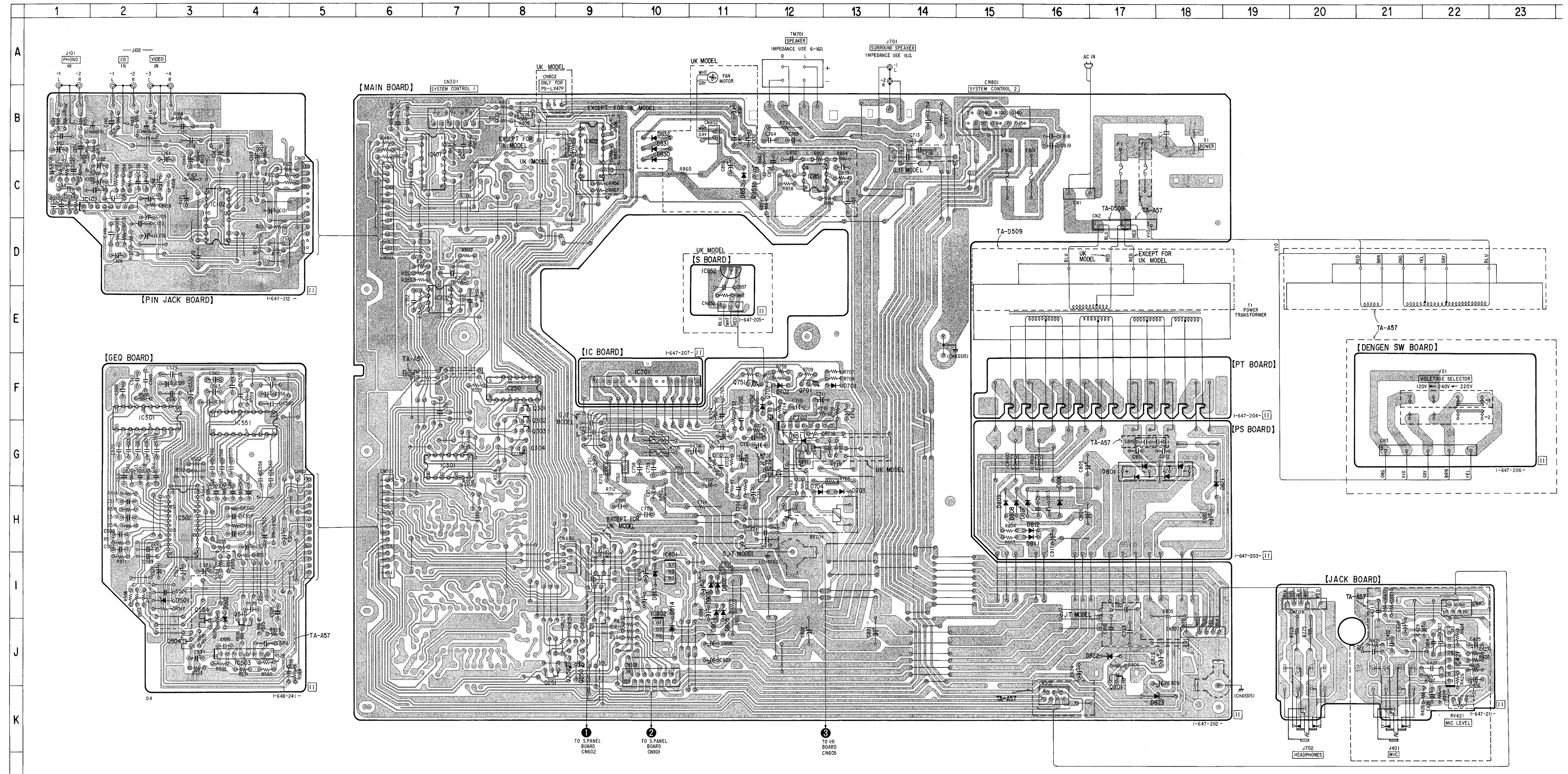
- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D501	I-3	IC301	G-7
D502	I-3	IC302	E-7
D701	F-13	IC401	C-7
D702	F-12	IC402	B-9
D703	H-13	IC421	J-22
D704	H-12	IC501	F-2
D705	F-11	IC502	H-3
D801	G-17	IC503	J-4
D802	I-11	IC551	G-4
D803	I-11	IC701	F-10
D804	I-11	IC702	G-12
D805	I-11	IC801	I-10
D806	H-16	IC802	J-10
D807	H-15	IC851	C-12
D808	H-15	IC852	D-11
D809	H-15		
D811	H-16	Q250	J-9
D812	H-16	Q251	J-8
D813	I-10	Q252	J-9
D814	J-10	Q301	F-8
D821	G-18	Q302	F-8
D822	J-17	Q303	G-8
D823	K-17	Q304	G-8
D830	C-10	Q504	J-3
D831	B-10	Q510	I-4
D832	B-10	Q554	I-3
D851	G-12	Q701	F-12
D852	C-11	Q702	F-12
		Q751	F-11
IC101	C-2	Q801	J-17
IC102	C-3	Q851	C-11
IC250	F-8		

Note:

- ○ — : parts extracted from the component side.
- ■■■■ : Pattern on the side which is seen.
- Abbreviations
 G : German model
 IT : Italian model

3-3. PRINTED WIRING BOARDS—MAIN SECTION— • Refer to page 5 for Semiconductor Lead Layouts.



SECTION 4 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts

Example :

KNOB, BALANCE (WHITE)... (RED)

Parts Color Cabinet's Color

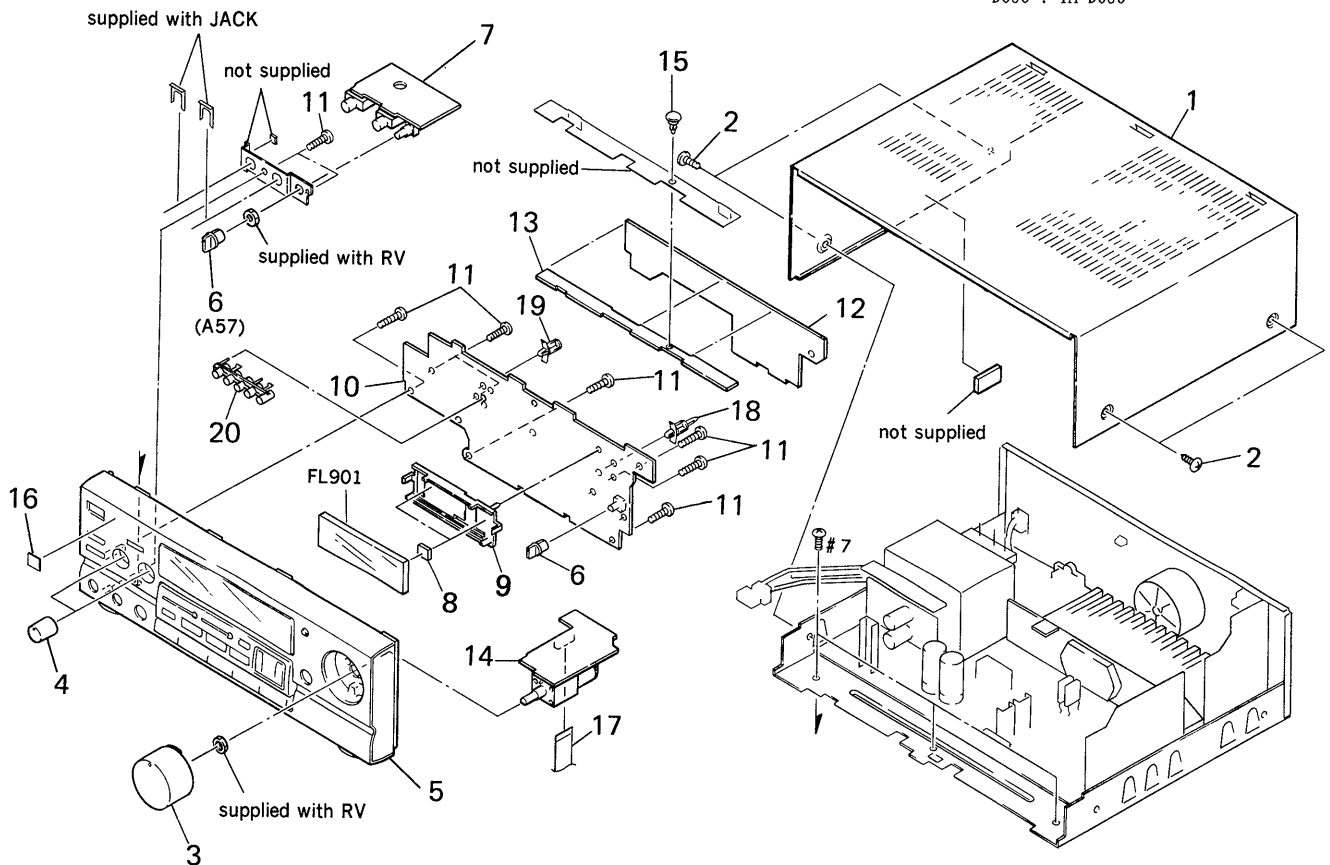
- Hardware (# mark) list is given in the last of this parts list.

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

● Abbreviations

G : German model
IT : Italian model
EE : East European model
AUS : Australian model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
A57 : TA-A57
D509 : TA-D509

4-1. FRONT PANEL SECTION

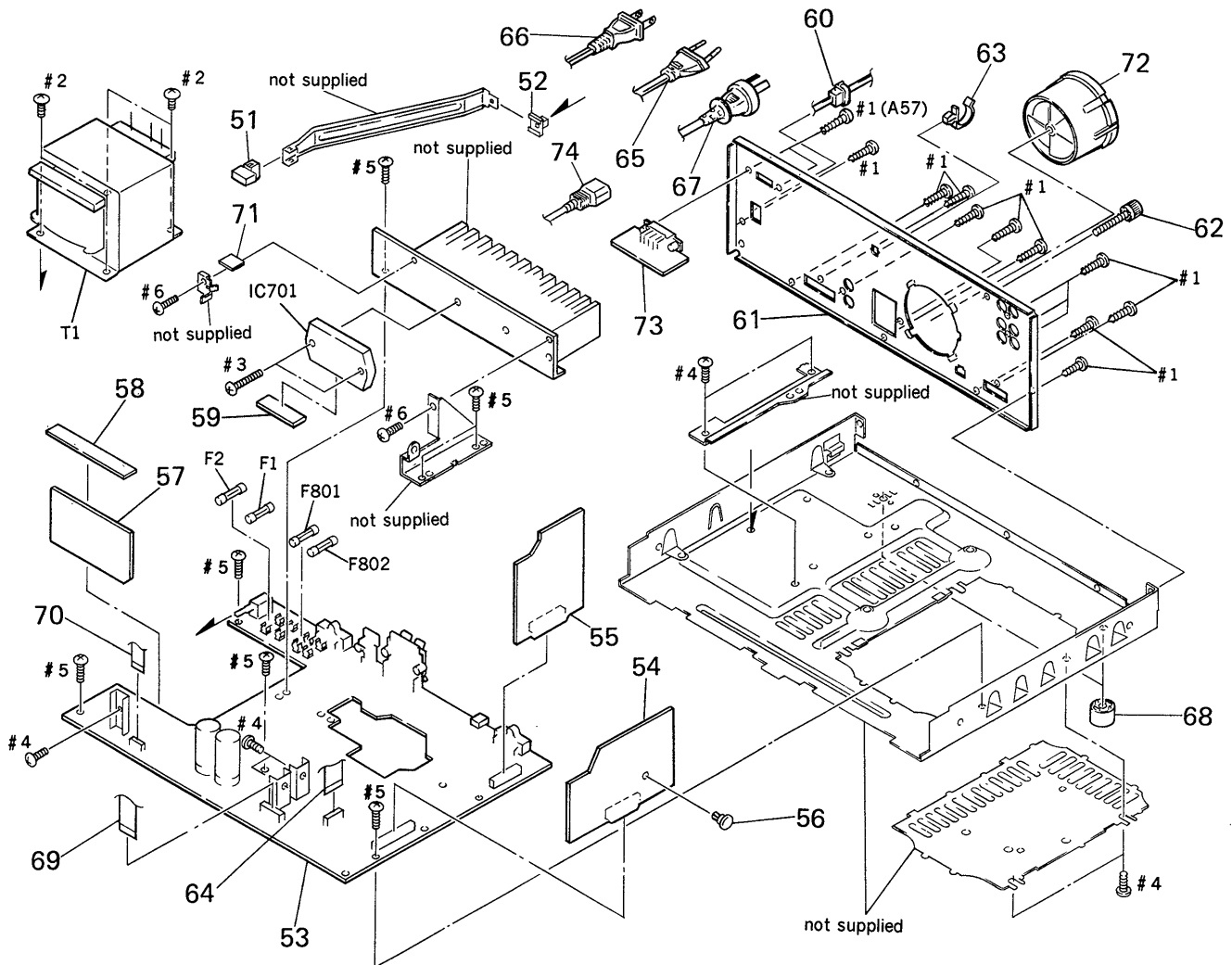


Ref. No.	Part No.	Description	Remark
1	4-949-912-31	CASE (AEP, E, G, IT, EE, AUS, EA)	
* 1	4-949-912-51	CASE (UK, MY, SP)	
2	3-363-099-01	SCREW (CASE 3 TP2)	
3	X-4943-445-1	KNOB (VOLUME) ASSY	
4	4-950-651-11	KNOB (DIA. 16), ROUND	
5	X-4943-439-1	PANEL ASSY, FRONT (AEP, G, IT, EE)	
5	X-4943-440-1	PANEL ASSY, FRONT (UK)	
5	X-4943-441-1	PANEL ASSY, FRONT (A57)	
6	4-950-652-11	KNOB (DIA. 12), ROUND	
* 7	1-647-211-11	JACK BOARD	
* 8	4-921-941-01	CUSHION (FL)	
* 9	4-923-103-01	HOLDER, FL TUBE	

Ref. No.	Part No.	Description	Remark
* 10	A-4360-075-A	PANEL BOARD, COMPLETE (D509)	
* 10	A-4360-076-A	PANEL BOARD, COMPLETE (A57)	
11	4-951-620-01	SCREW (2.6X8), +BVTP	
* 12	A-4360-078-A	S. PANEL BOARD, COMPLETE	
* 13	1-647-213-11	JW1 BOARD	
* 14	A-4360-079-A	VR BOARD, COMPLETE	
15	3-531-576-01	RIVET	
16	3-703-710-41	STICKER, SONY SYMBOL (12)	
17	1-575-905-31	WIRE, FLAT TYPE (9 CORE)	
18	4-943-687-01	HOLDER, PC BOARD	
* 19	3-350-847-21	HOLDER, PCB	
* 20	4-957-100-01	HOLDER (5 GANG), LED	
FL901	1-517-151-11	INDICATOR TUBE, FLUORESCENT	

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

4-2. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
	51	4-942-061-11 BUTTON (POWER)	
	52	4-866-342-00 JOINT (B), KNOB	
* 53	A-4360-064-A	MAIN BOARD, COMPLETE (AEP, EE)	
* 53	A-4360-065-A	MAIN BOARD, COMPLETE (G, IT)	
* 53	A-4360-066-A	MAIN BOARD, COMPLETE (UK)	
* 53	A-4360-067-A	MAIN BOARD, COMPLETE (E, AUS, EA)	
* 53	A-4360-068-A	MAIN BOARD, COMPLETE (MY, SP)	
* 54	A-4360-830-A	GEQ BOARD, COMPLETE (D509)	
* 54	A-4360-831-A	GEQ BOARD, COMPLETE (A57)	
* 55	A-4360-082-A	PIN JACK BOARD, COMPLETE (D509)	
* 55	A-4360-083-A	PIN JACK BOARD, COMPLETE (A57)	
	56	3-531-576-21 RIVET	
* 57	1-647-203-11	PS BOARD	
* 58	1-647-204-11	PT BOARD	
* 59	1-647-207-11	IC BOARD	
* 60	3-703-244-00	BUSHING (2104), CORD (AUS, EA, MY, SP, D509)	
* 60	3-703-571-11	BUSHING (S) (4516), CORD (E)	
* 61	4-957-102-11	PANEL (B3120), BACK (AEP, IT, EE)	
* 61	4-957-102-21	PANEL (B3120), BACK (UK)	
* 61	4-957-102-31	PANEL (B3120), BACK (G)	
* 61	4-957-102-41	PANEL (B3120), BACK (E, AUS, EA)	
* 61	4-957-102-51	PANEL (B3120), BACK (MY, SP)	

Ref. No.	Part No.	Description	Remark
	62	4-947-010-01 SCREW, FEEDER FIXED	
* 63	4-949-235-01	HOK	
64	1-690-114-31	WIRE, FLAT TYPE (7 CORE)	
Δ 65	1-575-654-11	CORD, POWER (AEP, G, IT, EE, EA, MY, SP)	
Δ 66	1-575-656-11	CORD, POWER (E)	
Δ 67	1-690-608-11	CORD, POWER (AUS)	
68	4-931-169-01	FOOT	
69	1-690-094-11	WIRE, FLAT TYPE (15 CORE)	
70	1-690-992-11	WIRE, FLAT TYPE (7 CORE) (A57)	
* 71	1-647-205-11	S BOARD (UK)	
72	X-4942-029-1	CASE ASSY, FAN (UK)	
* 73	1-647-206-11	DENGEN SW BOARD (A57)	
Δ 74	1-575-669-21	CORD, POWER (UK)	
Δ F1	1-532-259-00	FUSE, TIME-LAG (T1. 6A)	
Δ F2	1-532-259-00	FUSE, TIME-LAG (T1. 6A)	
Δ F801	1-532-203-00	FUSE, TIME-LAG (T2A)	
Δ F802	1-532-203-00	FUSE, TIME-LAG (T2A)	
IC701	8-749-922-91	IC STK401-050 (D509)	
IC701	8-749-922-95	IC STK401-090 (A57)	
Δ T1	1-423-527-11	TRANSFORMER, POWER (D509)	
Δ T1	1-423-528-11	TRANSFORMER, POWER (E, AUS, EA, MY)	
Δ T1	1-423-602-11	TRANSFORMER, POWER (SP)	

SECTION 5 ELECTRICAL PARTS LIST

DENGEN SW

GEQ

NOTE:

- 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.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

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

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

- Abbreviations
G : German model
IT : Italian model
EE : East European model
AUS : Australian model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
A57 : TA-A57
D509 : TA-D509

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

Ref. No.	Part No.	Description	Remark
*	1-647-206-11	DENGEN SW BOARD (A57) *****	
		< CONNECTOR >	
* CN3	1-573-565-11	PIN, CONNECTOR 5P (A57) < SWITCH >	
Δ VS1	1-572-009-11	SELECTOR, VOLTAGE (VOLTAGE SELECTOR) (A57) *****	
*	A-4360-830-A	GEQ BOARD, COMPLETE (D509)	
*	A-4360-831-A	GEQ BOARD, COMPLETE (A57) *****	
		< CAPACITOR >	
C505	1-162-286-31	CERAMIC 220PF 10% 50V	
C506	1-126-163-11	ELECT 4.7uF 20% 50V	
C507	1-136-177-00	FILM 1uF 5% 50V	
C508	1-136-163-00	FILM 0.068uF 5% 50V	
C509	1-136-173-00	FILM 0.47uF 5% 50V	
C510	1-136-158-00	FILM 0.027uF 5% 50V	
C511	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C512	1-110-340-11	MYLAR 270PF 5% 50V	
C513	1-130-484-00	MYLAR 0.012uF 5% 50V	
C514	1-130-469-00	MYLAR 680PF 5% 50V	
C515	1-136-159-00	FILM 0.033uF 5% 50V	
C516	1-130-474-00	MYLAR 0.0018uF 5% 50V	
C517	1-136-163-00	FILM 0.068uF 5% 50V	
C518	1-130-478-00	MYLAR 0.0039uF 5% 50V	
C519	1-136-168-00	FILM 0.18uF 5% 50V	
C520	1-136-153-00	FILM 0.01uF 5% 50V	
C521	1-124-034-51	ELECT 33uF 20% 16V	
C523	1-162-282-31	CERAMIC 100PF 10% 50V	
C524	1-162-282-31	CERAMIC 100PF 10% 50V	
C525	1-126-163-11	ELECT 4.7uF 20% 50V	
C526	1-164-159-11	CERAMIC 0.1uF 50V	
C527	1-124-034-51	ELECT 33uF 20% 16V	
C528	1-136-169-00	FILM 0.22uF 5% 50V (A57)	

Ref. No.	Part No.	Description	Remark
C529	1-164-159-11	CERAMIC 0.1uF 50V	
C530	1-164-159-11	CERAMIC 0.1uF 50V	
C531	1-126-163-11	ELECT 4.7uF 20% 50V (A57)	
C532	1-124-034-51	ELECT 33uF 20% 16V	
C533	1-124-034-51	ELECT 33uF 20% 16V	
C534	1-162-219-31	CERAMIC 68PF 5% 50V (A57)	
C535	1-130-471-00	MYLAR 0.001uF 5% 50V (A57)	
C555	1-162-286-31	CERAMIC 220PF 10% 50V	
C556	1-126-163-11	ELECT 4.7uF 20% 50V	
C557	1-136-173-00	FILM 0.47uF 5% 50V	
C558	1-136-158-00	FILM 0.027uF 5% 50V	
C559	1-136-177-00	FILM 1uF 5% 50V	
C560	1-136-163-00	FILM 0.068uF 5% 50V	
C561	1-130-484-00	MYLAR 0.012uF 5% 50V	
C562	1-130-469-00	MYLAR 680PF 5% 50V	
C563	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C564	1-110-340-11	MYLAR 270PF 5% 50V	
C565	1-136-159-00	FILM 0.033uF 5% 50V	
C566	1-130-474-00	MYLAR 0.0018uF 5% 50V	
C567	1-136-163-00	FILM 0.068uF 5% 50V	
C568	1-130-478-00	MYLAR 0.0039uF 5% 50V	
C569	1-136-168-00	FILM 0.18uF 5% 50V	
C570	1-136-153-00	FILM 0.01uF 5% 50V	
C571	1-124-034-51	ELECT 33uF 20% 16V	
C575	1-126-163-11	ELECT 4.7uF 20% 50V	
C578	1-136-169-00	FILM 0.22uF 5% 50V (A57)	
C579	1-164-159-11	CERAMIC 0.1uF 50V	
C580	1-164-159-11	CERAMIC 0.1uF 50V	
		< CONNECTOR >	
CN102	1-691-185-11	CONNECTOR (BOARD TO BOARD) 15P	
		< DIODE >	
D501	8-719-000-54	DIODE UZL-6L3	
D502	8-719-987-63	DIODE 1N4148M (A57)	

GEQ	IC	JACK
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Ref. No.	Part No.	Description	Remark
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< IC >

IC501	8-759-633-78	IC M5289P	
IC502	8-759-822-26	IC LC7522K	
IC503	8-759-636-73	IC M5218AL-22 (A57)	
IC551	8-759-633-78	IC M5289P	

< TRANSISTOR >

Q504	8-729-224-62	TRANSISTOR 2SK246-GR (A57)	
Q510	8-729-900-63	TRANSISTOR DTA124ES (A57)	
Q554	8-729-224-62	TRANSISTOR 2SK246-GR (A57)	

< RESISTOR >

R507	1-247-887-00	CARBON 220K 5% 1/4W	
R508	1-249-427-11	CARBON 6.8K 5% 1/4W	
R509	1-249-427-11	CARBON 6.8K 5% 1/4W	
R510-516			
	1-247-903-00	CARBON 1M 5% 1/4W	
R517	1-249-408-11	CARBON 180 5% 1/4W	
R518	1-249-417-11	CARBON 1K 5% 1/4W	
R519	1-249-417-11	CARBON 1K 5% 1/4W	
R520	1-249-435-11	CARBON 33K 5% 1/4W (A57)	
R525	1-249-429-11	CARBON 10K 5% 1/4W (A57)	
R529	1-249-429-11	CARBON 10K 5% 1/4W (A57)	
R530	1-249-413-11	CARBON 470 5% 1/4W (A57)	
R531-533			
	1-249-429-11	CARBON 10K 5% 1/4W (A57)	
R534	1-249-427-11	CARBON 6.8K 5% 1/4W (A57)	
R535	1-247-895-00	CARBON 470K 5% 1/4W (A57)	
R536	1-249-441-11	CARBON 100K 5% 1/4W (A57)	
R557	1-247-887-00	CARBON 220K 5% 1/4W	
R558	1-249-427-11	CARBON 6.8K 5% 1/4W	
R559	1-249-427-11	CARBON 6.8K 5% 1/4W	
R560-566			
	1-247-903-00	CARBON 1M 5% 1/4W	
R570	1-249-435-11	CARBON 33K 5% 1/4W (A57)	
R575	1-249-429-11	CARBON 10K 5% 1/4W (A57)	
R584	1-249-427-11	CARBON 6.8K 5% 1/4W (A57)	
R585	1-247-895-00	CARBON 470K 5% 1/4W (A57)	

* 1-647-207-11 IC BOARD

< IC >

IC701	8-749-922-91	IC STK401-050 (D509)	
IC701	8-749-922-95	IC STK401-090 (A57)	

Ref. No.	Part No.	Description	Remark
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* 1-647-211-11 JACK BOARD

< CAPACITOR >

C421	1-162-294-31	CERAMIC 0.001uF 10% 50V (A57)	
C422	1-136-167-00	FILM 0.15uF 5% 50V (A57)	
C423	1-162-219-31	CERAMIC 68PF 5% 50V (A57)	
C424	1-162-286-31	CERAMIC 220PF 10% 50V (A57)	
C425	1-126-163-11	ELECT 4.7uF 20% 50V (A57)	
C426	1-126-163-11	ELECT 4.7uF 20% 50V (A57)	
C427	1-162-286-31	CERAMIC 220PF 10% 50V (A57)	
C428	1-126-163-11	ELECT 4.7uF 20% 50V (A57)	
C429	1-124-034-51	ELECT 33uF 20% 16V (A57)	
C430	1-124-034-51	ELECT 33uF 20% 16V (A57)	
C431	1-162-306-11	CERAMIC 0.01uF 20% 16V (A57)	

< CONNECTOR >

* CN401	1-568-826-11	SOCKET, CONNECTOR 7P (A57)	
CN709	1-691-767-11	PLUG (MICRO CONNECTOR) 5P	

< IC >

IC421	8-759-636-73	IC M5218AL-22 (A57)	
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< JACK >

J401	1-507-854-00	JACK, PHONE (MIC) (A57)	
J702	1-507-854-00	JACK, PHONE (HEADPHONES)	

< RESISTOR >

R421	1-249-441-11	CARBON 100K 5% 1/4W (A57)	
R422	1-249-429-11	CARBON 10K 5% 1/4W (A57)	
R423	1-249-417-11	CARBON 1K 5% 1/4W (A57)	
R424	1-249-440-11	CARBON 82K 5% 1/4W (A57)	
R425	1-249-429-11	CARBON 10K 5% 1/4W (A57)	
R426	1-249-427-11	CARBON 6.8K 5% 1/4W (A57)	
R427	1-249-440-11	CARBON 82K 5% 1/4W (A57)	
R428	1-249-409-11	CARBON 220 5% 1/4W (A57)	
R429	1-249-429-11	CARBON 10K 5% 1/4W (A57)	
R430	1-249-405-11	CARBON 100 5% 1/4W (A57)	

Ref. No.	Part No.	Description	Remark		
R432	1-249-405-11	CARBON	100	5%	1/4W (A57)
R725	1-247-749-11	CARBON	560	5%	1/2W
R775	1-247-749-11	CARBON	560	5%	1/2W
< VARIABLE RESISTOR >					
RV421	1-223-334-11	RES, VAR, CARBON 50K (MIC LEVEL)	(A57)		

*	1-647-213-11	JW1 BOARD			

*	A-4360-064-A	MAIN BOARD, COMPLETE	(AEP, EE)		
*	A-4360-065-A	MAIN BOARD, COMPLETE	(G, IT)		
*	A-4360-066-A	MAIN BOARD, COMPLETE	(UK)		
*	A-4360-067-A	MAIN BOARD, COMPLETE	(E, AUS, EA)		
*	A-4360-068-A	MAIN BOARD, COMPLETE	(MY, SP)		

*	1-533-293-11	FUSE HOLDER			
*	3-309-144-31	HEAT SINK			
*	4-941-237-01	HEAT SINK			
*	4-942-204-01	PLATE, GROUND			
	7-685-871-01	SCREW +BVTT 3X6 (S)			
< CAPACITOR >					
△C1	1-161-744-00	CERAMIC	0.01uF		400V
C301	1-162-293-31	CERAMIC	820PF	10%	50V
C302	1-162-207-31	CERAMIC	22PF	5%	50V
C351	1-162-293-31	CERAMIC	820PF	10%	50V
C352	1-162-207-31	CERAMIC	22PF	5%	50V
C401	1-162-286-31	CERAMIC	220PF	10%	50V
C451	1-162-286-31	CERAMIC	220PF	10%	50V
C701	1-126-161-11	ELECT	2.2uF	20%	50V
C702	1-162-282-31	CERAMIC	100PF	10%	50V
C703	1-162-286-31	CERAMIC	220PF	10%	50V
C704	1-124-994-11	ELECT	100uF	20%	10V
C706	1-124-122-11	ELECT (D509)	100uF	20%	50V
C706	1-124-572-11	ELECT (A57)	100uF	20%	63V
C707	1-124-122-11	ELECT (D509)	100uF	20%	50V
C707	1-124-572-11	ELECT (A57)	100uF	20%	63V
C708	1-136-163-00	FILM	0.068uF	5%	50V
C709	1-136-163-00	FILM	0.068uF	5%	50V
C710	1-124-587-11	ELECT	220uF	20%	6.3V
C711	1-124-587-11	ELECT	220uF	20%	6.3V
C712	1-124-994-11	ELECT	100uF	20%	10V
C713	1-136-163-00	FILM	0.068uF	5%	50V

Ref. No.	Part No.	Description	Remark		
C714	1-136-163-00	FILM	0.068uF	5%	50V
C715	1-162-199-31	CERAMIC	10PF	5%	50V
C716	1-162-291-31	CERAMIC (G, IT)	560PF	10%	50V
C717	1-162-291-31	CERAMIC (G, IT)	560PF	10%	50V
C719	1-164-159-11	CERAMIC (G, IT)	0.1MF		50V
C721	1-161-494-00	CERAMIC (G, IT)	0.022uF		25V
C722	1-164-159-11	CERAMIC (G, IT)	0.1MF		50V
C723	1-164-159-11	CERAMIC (G, IT)	0.1MF		50V
C724	1-161-377-00	CERAMIC (G, IT)	0.0047uF	30%	16V
C725	1-164-159-11	CERAMIC (G, IT)	0.1MF		50V
C751	1-126-161-11	ELECT	2.2uF	20%	50V
C752	1-162-282-31	CERAMIC	100PF	10%	50V
C753	1-162-286-31	CERAMIC	220PF	10%	50V
C754	1-124-994-11	ELECT	100uF	20%	10V
C758	1-136-163-00	FILM	0.068uF	5%	50V
C759	1-136-163-00	FILM	0.068uF	5%	50V
C763	1-136-163-00	FILM	0.068uF	5%	50V
C764	1-136-163-00	FILM	0.068uF	5%	50V
C765	1-162-199-31	CERAMIC	10PF	5%	50V
C801	1-126-224-11	ELECT (D509)	4700uF	20%	42V
C801	1-126-258-11	ELECT (A57)	4700uF	20%	56V
C802	1-126-224-11	ELECT (D509)	4700uF	20%	42V
C802	1-126-258-11	ELECT (A57)	4700uF	20%	56V
C803	1-124-910-11	ELECT	47uF	20%	50V
C804	1-124-910-11	ELECT	47uF	20%	50V
C807	1-126-059-11	ELECT	10uF	20%	50V
C808	1-126-059-11	ELECT	10uF	20%	50V
C809	1-124-994-11	ELECT	100uF	20%	10V
C810	1-124-994-11	ELECT	100uF	20%	10V
C816	1-164-159-11	CERAMIC (G, IT)	0.1MF		50V
C818	1-161-021-11	CERAMIC	0.047uF	10%	25V
C819	1-161-021-11	CERAMIC	0.047uF	10%	25V
C823	1-126-059-11	ELECT	10uF	20%	50V
C824	1-126-696-11	ELECT	33uF	20%	35V
C825	1-126-059-11	ELECT	10uF	20%	50V
C830	1-124-910-11	ELECT (UK)	47uF	20%	50V

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			
C831	1-161-021-11	CERAMIC (UK)	0.047uF	10%	25V	
C832	1-161-021-11	CERAMIC (UK)	0.047uF	10%	25V	
C852	1-164-159-11	CERAMIC (UK)	0.1uF		50V	
C853	1-164-159-11	CERAMIC (UK)	0.1uF		50V	
C854	1-136-169-00	FILM (UK)	0.22uF	5%	50V	
C855	1-136-169-00	FILM (UK)	0.22uF	5%	50V	
C856	1-126-059-11	ELECT (UK)	10uF	20%	50V	
< CONNECTOR >						
* CN1	1-564-321-00	PIN, CONNECTOR 2P				
CN2	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P (D509)				
* CN2	1-535-140-00	BASE POST 22MM (10MM PITCH) 3P (A57)				
* CN301	1-566-858-41	SOCKET, CONNECTOR 11P (SYSTEM CONTROL 1)				
* CN302	1-568-826-11	SOCKET, CONNECTOR 7P (A57)				
* CN303	1-568-834-11	SOCKET, CONNECTOR 15P				
CN501	1-691-170-11	PIN, CONNECTOR 13P				
CN503	1-691-172-11	PIN, CONNECTOR 15P				
* CN601	1-568-826-11	SOCKET, CONNECTOR 7P				
* CN702	1-564-506-11	PLUG, CONNECTOR 3P				
CN707	1-691-767-11	PLUG (MICRO CONNECTOR) 5P				
* CN801	1-566-859-11	SOCKET, CONNECTOR 15P (SYSTEM CONTROL 2)				
* CN802	1-566-210-11	PIN, CONNECTOR 3P (ONLY FOR PS-LX47P) (UK)				
* CN851	1-564-506-11	PLUG, CONNECTOR 3P (UK)				
* CN852	1-564-505-11	PLUG, CONNECTOR 2P (UK)				
< DIODE >						
D701-705	8-719-987-63	DIODE 1N4148M				
D802-805	8-719-933-50	DIODE HZS7C2L				
D813	8-719-987-63	DIODE 1N4148M				
D814	8-719-987-63	DIODE 1N4148M				
D822	8-719-934-22	DIODE HZS30-2L				
D823	8-719-014-74	DIODE UZP-6.2B				
D830-832	8-719-200-82	DIODE 11ES2 (UK)				
D851	8-719-987-63	DIODE 1N4148M (UK)				
D852	8-719-987-63	DIODE 1N4148M (UK)				
< IC >						
IC250	8-759-202-61	IC TC4094BP				
IC301	8-759-000-49	IC MC14066BCP				
IC302	8-759-634-51	IC M5218AP				

Ref. No.	Part No.	Description	Remark			
IC401	8-759-000-48	IC MC14052BCP				
IC402	8-759-000-48	IC MC14052BCP (EXCEPT UK)				
IC702	8-759-111-68	IC uPC1237HA				
IC801	8-759-071-48	IC TA7807S				
IC802	8-759-604-95	IC M5F79M07				
IC851	8-759-103-93	IC uPC393C (UK)				
< JACK >						
* J701	1-569-130-11	JACK, PIN 2P (SURROUND SPEAKER)				
< COIL >						
* L701	1-420-872-00	COIL, AIR CORE				
* L751	1-420-872-00	COIL, AIR CORE				
< TRANSISTOR >						
Q250	8-729-900-80	TRANSISTOR DTC114ES				
Q251	8-729-900-80	TRANSISTOR DTC114ES				
Q252	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q301-303	8-729-900-63	TRANSISTOR DTA124ES				
Q304	8-729-900-80	TRANSISTOR DTC114ES				
Q701	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
Q702	8-729-900-63	TRANSISTOR DTA124ES				
Q751	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
Q801	8-729-141-83	TRANSISTOR 2SB1094-LK				
Q851	8-729-140-93	TRANSISTOR 2SB733-34 (UK)				
< RESISTOR >						
R250-252	1-249-413-11	CARBON 470 5% 1/4W				
R253	1-249-425-11	CARBON 4.7K 5% 1/4W				
R254	1-249-429-11	CARBON 10K 5% 1/4W				
R255	1-249-429-11	CARBON 10K 5% 1/4W				
R256	1-249-417-11	CARBON 1K 5% 1/4W (EXCEPT UK)				
R257	1-249-417-11	CARBON 1K 5% 1/4W (EXCEPT UK)				
R258	1-249-413-11	CARBON 470 5% 1/4W (A57)				
R301	1-247-897-11	CARBON 560K 5% 1/4W				
R302	1-249-437-11	CARBON 47K 5% 1/4W				
R303	1-247-897-11	CARBON 560K 5% 1/4W				
R304	1-249-429-11	CARBON 10K 5% 1/4W				
R319	1-249-432-11	CARBON 18K 5% 1/4W				
R320	1-249-435-11	CARBON 33K 5% 1/4W				
R327-329	1-249-433-11	CARBON 22K 5% 1/4W				
R351	1-247-897-11	CARBON 560K 5% 1/4W				
R352	1-249-437-11	CARBON 47K 5% 1/4W				
R353	1-247-897-11	CARBON 560K 5% 1/4W				

Ref. No.	Part No.	Description	Remark		
R354	1-249-429-11	CARBON	10K	5%	1/4W
R401	1-249-417-11	CARBON	1K	5%	1/4W
R402	1-249-417-11	CARBON	1K	5%	1/4W
R403	1-249-413-11	CARBON	470	5%	1/4W
R404	1-249-405-11	CARBON	100	5%	1/4W
R405	1-249-425-11	CARBON (EXCEPT UK)	4. 7K	5%	1/4W
R406	1-249-426-11	CARBON (EXCEPT UK)	5. 6K	5%	1/4W
R407	1-249-421-11	CARBON (EXCEPT UK)	2. 2K	5%	1/4W
R451	1-249-417-11	CARBON	1K	5%	1/4W
R452	1-249-417-11	CARBON	1K	5%	1/4W
R453	1-249-413-11	CARBON	470	5%	1/4W
R454	1-249-405-11	CARBON	100	5%	1/4W
R455	1-249-425-11	CARBON (EXCEPT UK)	4. 7K	5%	1/4W
R456	1-249-426-11	CARBON (EXCEPT UK)	5. 6K	5%	1/4W
R457	1-249-421-11	CARBON (EXCEPT UK)	2. 2K	5%	1/4W
R461-463					
	1-249-417-11	CARBON	1K	5%	1/4W
R701	1-249-417-11	CARBON	1K	5%	1/4W
R702	1-249-438-11	CARBON	56K	5%	1/4W
R703	1-249-413-11	CARBON	470	5%	1/4W
R704	1-249-438-11	CARBON	56K	5%	1/4W
△R705	1-212-881-11	FUSIBLE	100	5%	1/4W F
△R706	1-212-881-11	FUSIBLE	100	5%	1/4W F
R707	1-249-417-11	CARBON	1K	5%	1/4W
R708	1-249-430-11	CARBON	12K	5%	1/4W
R709	1-249-441-11	CARBON	100K	5%	1/4W
△R710	1-217-156-00	METAL PLATE	0. 22		5W
R711	1-247-727-11	CARBON	10	5%	1/2W
R712	1-247-727-11	CARBON	10	5%	1/2W
R713	1-249-437-11	CARBON	47K	5%	1/4W
R714	1-249-429-11	CARBON	10K	5%	1/4W
R715	1-249-441-11	CARBON	100K	5%	1/4W
R716	1-249-417-11	CARBON	1K	5%	1/4W
R718	1-249-437-11	CARBON	47K	5%	1/4W
R719	1-249-486-11	CARBON	12K	5%	1/2W
△R720	1-216-456-00	METAL OXIDE (D509)	820	5%	2W F
△R720	1-216-457-00	METAL OXIDE (A57)	1. 2K	5%	2W F
R721	1-247-727-11	CARBON	10	5%	1/2W
R751	1-249-417-11	CARBON	1K	5%	1/4W
R752	1-249-438-11	CARBON	56K	5%	1/4W
R753	1-249-413-11	CARBON	470	5%	1/4W
R754	1-249-438-11	CARBON	56K	5%	1/4W

Ref. No.	Part No.	Description	Remark		
R757	1-249-417-11	CARBON	1K	5%	1/4W
R758	1-249-430-11	CARBON	12K	5%	1/4W
R759	1-249-441-11	CARBON	100K	5%	1/4W
△R760	1-217-156-00	METAL PLATE	0. 22		5W
R761	1-247-727-11	CARBON	10	5%	1/2W
R762	1-247-727-11	CARBON	10	5%	1/2W
R763	1-249-437-11	CARBON	47K	5%	1/4W
R771	1-247-727-11	CARBON	10	5%	1/2W
△R801	1-216-481-11	METAL OXIDE	1. 2K	5%	3W F
△R802	1-216-481-11	METAL OXIDE	1. 2K	5%	3W F
R805	1-247-761-11	CARBON	5. 6K	5%	1/2W
R806	1-249-421-11	CARBON	2. 2K	5%	1/4W
R851	1-249-421-11	CARBON	2. 2K	5%	1/4W (UK)
R852	1-249-441-11	CARBON	100K	5%	1/4W (UK)
R853	1-249-417-11	CARBON	1K	5%	1/4W (UK)
R854	1-249-426-11	CARBON	5. 6K	5%	1/4W (UK)
R855	1-249-438-11	CARBON	56K	5%	1/4W (UK)
R856-859					
	1-249-417-11	CARBON	1K	5%	1/4W (UK)
R860	1-247-730-11	CARBON	18	5%	1/2W (UK)
R861	1-249-389-11	CARBON	4. 7	5%	1/4W (UK)
< RELAY >					
RY701	1-515-765-11	RELAY			
< SWITCH >					
△S1	1-554-920-51	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)			
< TERMINAL >					
TM701	1-537-240-11	TERMINAL BOARD (CHECKER PIN) (SPEAKER)			

*	A-4360-075-A	PANEL BOARD, COMPLETE (D509)			
*	A-4360-076-A	PANEL BOARD, COMPLETE (A57)			

*	4-921-941-01	CUSHION (FL)			
*	4-923-103-01	HOLDER, FL TUBE			
*	4-957-100-01	HOLDER (5 GANG), LED			
< CAPACITOR >					
C601	1-126-161-11	ELECT	2. 2uF	20%	50V
C602	1-162-282-31	CERAMIC	100PF	10%	50V
C603	1-162-282-31	CERAMIC	100PF	10%	50V
C604	1-126-161-11	ELECT	2. 2uF	20%	50V
C605	1-126-300-11	ELECT	0. 47uF	20%	50V
C606	1-124-250-00	ELECT	0. 15uF	20%	50V
C607	1-126-301-11	ELECT	1uF	20%	50V
C608	1-126-059-11	ELECT	10uF	20%	50V
C609	1-126-059-11	ELECT	10uF	20%	50V

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

PANEL

Ref. No.	Part No.	Description	Remark
C611	1-164-159-11	CERAMIC 0.1uF	50V
C612	1-164-159-11	CERAMIC 0.1uF	50V
C651	1-126-161-11	ELECT 2.2uF	20% 50V
C652	1-162-282-31	CERAMIC 100PF	10% 50V
C653	1-162-282-31	CERAMIC 100PF	10% 50V
C654	1-126-161-11	ELECT 2.2uF	20% 50V
C655	1-126-300-11	ELECT 0.47uF	20% 50V
C656	1-124-250-00	ELECT 0.15uF	20% 50V
C657	1-126-301-11	ELECT 1uF	20% 50V
C902	1-125-486-11	DOUBLE LAYERS 0.22F	5.5V
C905	1-161-379-00	CERAMIC 0.01uF	20% 25V
C909	1-164-159-11	CERAMIC 0.1uF	50V
C911	1-164-159-11	CERAMIC 0.1uF	50V
C912	1-164-159-11	CERAMIC 0.1uF	50V
C921	1-162-294-31	CERAMIC 0.001uF	10% 50V
C922	1-164-159-11	CERAMIC 0.1uF	50V
C924	1-164-159-11	CERAMIC 0.1uF	50V
C941-946	1-162-290-31	CERAMIC 470PF	10% 50V
C948-950	1-162-290-31	CERAMIC 470PF	10% 50V
C961	1-162-291-31	CERAMIC 560PF	10% 50V
< VIBRATOR >			
CF901	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)	
< COMPOSITION CIRCUIT BLOCK >			
CP901	1-236-985-11	COMPOSITION CIRCUIT BLOCK (100kX9)	
CP902-904	1-232-998-11	COMPOSITION CIRCUIT BLOCK (100kX7)	
< DIODE >			
D601	8-719-987-63	DIODE 1N4148M	
D602	8-719-026-72	LED SML1860A	(DYNAMIC BASS SYSTEM ON/OFF)
D603	8-719-026-72	LED SML1860A	(DYNAMIC BASS SYSTEM ON/OFF)
D651	8-719-987-63	DIODE 1N4148M	
D684	8-719-987-63	DIODE 1N4148M	
D907	8-719-987-63	DIODE 1N4148M	
D911	8-719-313-69	LED SEL3210S-CD (P. FUNCTION)	
D912	8-719-313-69	LED SEL3210S-CD (EFFECT)	
D913	8-719-313-69	LED SEL3210S-CD (KARAOKE PON) (A57)	
D916	8-719-313-69	LED SEL3210S-CD (OFF)	
D917	8-719-313-69	LED SEL3210S-CD (HIGH)	
D918	8-719-313-69	LED SEL3210S-CD (MID)	
D919	8-719-313-69	LED SEL3210S-CD (LOW)	
D920	8-719-313-69	LED SEL3210S-CD (SIMULATED)	
D921	8-719-313-69	LED SEL3210S-CD (HALL)	

Ref. No.	Part No.	Description	Remark
D922	8-719-301-39	LED SEL2210S (HALL/1)	
D923	8-719-301-39	LED SEL2210S (DANCE/2)	
D924	8-719-301-39	LED SEL2210S (MOVIE/3)	
D925	8-719-301-39	LED SEL2210S (WM/4)	
D926	8-719-301-39	LED SEL2210S (CAR/5)	
D930-936			
	8-719-987-63	DIODE 1N4148M	
D938	8-719-987-63	DIODE 1N4148M	
D939	8-719-313-69	LED SEL3210S-CD (PHONO)	
D940	8-719-313-69	LED SEL3210S-CD (TUNER)	
D941	8-719-313-69	LED SEL3210S-CD (CD)	
D942	8-719-313-69	LED SEL3210S-CD (MEMORY)	
D943	8-719-313-69	LED SEL3210S-CD (PERSONAL FILE)	
D944	8-719-313-69	LED SEL3210S-CD (TAPE)	
D945	8-719-313-69	LED SEL3210S-CD (SELECT 5)	
D946	8-719-313-69	LED SEL3210S-CD (EQUALIZER)	
D947	8-719-313-69	LED SEL3210S-CD (VIDEO)	
D948-955			
	8-719-987-63	DIODE 1N4148M	
< FLUORESCENT INDICATOR >			
FL901	1-517-151-11	INDICATOR TUBE, FLUORESCENT	
< IC >			
IC601	8-759-634-50	IC M5218AL	
IC901	8-759-164-69	IC uPD78042GF-018-3B9	
IC903	8-759-991-11	IC XR1091DCP	
< TRANSISTOR >			
Q601	8-729-224-62	TRANSISTOR 2SK246-GR	
Q602	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q603	8-729-900-36	TRANSISTOR DTC124ES	
Q604	8-729-900-61	TRANSISTOR DTA114ES	
Q651	8-729-224-62	TRANSISTOR 2SK246-GR	
Q652	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q911	8-729-900-80	TRANSISTOR DTC114ES	
Q912	8-729-900-80	TRANSISTOR DTC114ES	
Q913	8-729-900-80	TRANSISTOR DTC114ES (A57)	
Q916-923			
	8-729-900-80	TRANSISTOR DTC114ES	
Q924-926			
	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q931-936			
	8-729-900-80	TRANSISTOR DTC114ES	
Q942	8-729-141-26	TRANSISTOR 2SC3622A-LK	
< RESISTOR >			
R601	1-249-441-11	CARBON 100K 5%	1/4W
R602	1-249-429-11	CARBON 10K 5%	1/4W

Ref. No.	Part No.	Description	Remark		
R603	1-247-903-00	CARBON	1M	5%	1/4W
R604	1-249-420-11	CARBON	1.8K	5%	1/4W
R605	1-249-434-11	CARBON	27K	5%	1/4W
R606	1-247-881-00	CARBON	120K	5%	1/4W
R607	1-249-412-11	CARBON	390	5%	1/4W
R608	1-249-427-11	CARBON	6.8K	5%	1/4W
R611	1-249-415-11	CARBON	680	5%	1/4W
R612	1-249-441-11	CARBON	100K	5%	1/4W
R613	1-249-435-11	CARBON	33K	5%	1/4W
R614	1-249-425-11	CARBON	4.7K	5%	1/4W
R622	1-249-425-11	CARBON	4.7K	5%	1/4W
R651	1-249-441-11	CARBON	100K	5%	1/4W
R652	1-249-429-11	CARBON	10K	5%	1/4W
R653	1-247-903-00	CARBON	1M	5%	1/4W
R654	1-249-420-11	CARBON	1.8K	5%	1/4W
R655	1-249-434-11	CARBON	27K	5%	1/4W
R656	1-247-881-00	CARBON	120K	5%	1/4W
R657	1-249-412-11	CARBON	390	5%	1/4W
R658	1-249-427-11	CARBON	6.8K	5%	1/4W
R681	1-249-433-11	CARBON	22K	5%	1/4W
R911	1-249-416-11	CARBON	820	5%	1/4W
R912	1-249-416-11	CARBON	820	5%	1/4W
R913	1-249-416-11	CARBON	820	5%	1/4W (A57)
R916-922					
	1-249-411-11	CARBON	330	5%	1/4W
R923-925					
	1-249-441-11	CARBON	100K	5%	1/4W
R927	1-249-441-11	CARBON	100K	5%	1/4W
R928	1-249-396-11	CARBON	18	5%	1/6W
R929	1-249-441-11	CARBON	100K	5%	1/4W
R931	1-249-441-11	CARBON	100K	5%	1/4W
R932	1-249-396-11	CARBON	18	5%	1/6W
R935-938					
	1-249-411-11	CARBON	330	5%	1/4W
R951	1-249-405-11	CARBON	100	5%	1/4W
R953	1-249-419-11	CARBON	1.5K	5%	1/4W
R954	1-249-417-11	CARBON	1K	5%	1/4W
R956-959					
	1-249-396-11	CARBON	18	5%	1/6W
R963	1-249-437-11	CARBON	47K	5%	1/4W
R964	1-249-417-11	CARBON	1K	5%	1/4W
< VARIABLE RESISTOR >					
RV601	1-238-977-11	RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM LEVEL)			
RV602	1-238-977-11	RES, VAR, CARBON 100K/100K (DYNAMIC BASS SYSTEM FREQUENCY (Hz))			
RV604	1-241-385-11	RES, VAR, CARBON 100K (BALANCE)			

Ref. No.	Part No.	Description	Remark		
< SWITCH >					
S901	1-554-303-21	SWITCH, TACTILE (DISPLAY)			
S902	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL ▲)			
S903	1-554-303-21	SWITCH, TACTILE (MEMORY)			
S904	1-554-303-21	SWITCH, TACTILE (SURROUND LEVEL)			
S905	1-554-303-21	SWITCH, TACTILE (SURROUND MODE)			
S906	1-554-303-21	SWITCH, TACTILE (DYNAMIC BASS SYSTEM ON/OFF)			
S907	1-554-303-21	SWITCH, TACTILE (KARAOKE PON) (A57)			
S909	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL ►)			
S910	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL ◀)			
S911	1-554-303-21	SWITCH, TACTILE (PERSONAL FILE)			
S912	1-554-303-21	SWITCH, TACTILE (SELECT 5)			
S913	1-554-303-21	SWITCH, TACTILE (EQUALIZER)			
S914	1-554-303-21	SWITCH, TACTILE (EQ FLAT)			
S915	1-554-303-21	SWITCH, TACTILE (EFFECT)			
S917	1-554-303-21	SWITCH, TACTILE (PHONO)			
S918	1-554-303-21	SWITCH, TACTILE (CURSOR CONTROL ▼)			
S919	1-554-303-21	SWITCH, TACTILE (TUNER)			
S920	1-554-303-21	SWITCH, TACTILE (CD)			
S921	1-554-303-21	SWITCH, TACTILE (TAPE)			
S922	1-554-303-21	SWITCH, TACTILE (VIDEO)			
S923	1-554-303-21	SWITCH, TACTILE (P. FUNCTION)			

*	A-4360-082-A	PIN JACK BOARD, COMPLETE (D509)			
*	A-4360-083-A	PIN JACK BOARD, COMPLETE (A57)			

< CAPACITOR >					
C101	1-162-288-31	CERAMIC	330PF	10%	50V
C102	1-126-161-11	ELECT	2.2uF	20%	50V
C103	1-162-282-31	CERAMIC	100PF	10%	50V
C104	1-162-219-31	CERAMIC	68PF	5%	50V
C105	1-124-910-11	ELECT	47uF	20%	50V
C106	1-130-480-00	MYLAR	0.0056uF	5%	50V
C107	1-130-473-00	MYLAR	0.0015uF	5%	50V
C108	1-124-464-11	ELECT	0.22uF	20%	50V
C109	1-124-034-51	ELECT	33uF	20%	16V
C110	1-162-286-31	CERAMIC	220PF	10%	50V
C111	1-126-233-11	ELECT	22uF	20%	50V
C112	1-162-286-31	CERAMIC	220PF	10%	50V
C113	1-126-233-11	ELECT	22uF	20%	50V
C119	1-162-286-31	CERAMIC	220PF	10%	50V
C120	1-164-159-11	CERAMIC	0.1uF		50V
C121	1-124-034-51	ELECT	33uF	20%	16V
C151	1-162-288-31	CERAMIC	330PF	10%	50V
C152	1-126-161-11	ELECT	2.2uF	20%	50V
C153	1-162-282-31	CERAMIC	100PF	10%	50V

Ref. No.	Part No.	Description	Remark		
C154	1-162-219-31	CERAMIC	68PF	5%	50V
C155	1-124-910-11	ELECT	47uF	20%	50V
C156	1-130-480-00	MYLAR	0.0056uF	5%	50V
C157	1-130-473-00	MYLAR	0.0015uF	5%	50V
C158	1-124-464-11	ELECT	0.22uF	20%	50V
C159	1-124-034-51	ELECT	33uF	20%	16V
C160	1-162-286-31	CERAMIC	220PF	10%	50V
C161	1-126-233-11	ELECT	22uF	20%	50V
C162	1-162-286-31	CERAMIC	220PF	10%	50V
C163	1-126-233-11	ELECT	22uF	20%	50V
C169	1-162-286-31	CERAMIC	220PF	10%	50V
C170	1-164-159-11	CERAMIC	0.1uF		50V
C171	1-124-034-51	ELECT	33uF	20%	16V

< CONNECTOR >

* CN101 1-691-183-11 CONNECTOR (BOARD TO BOARD) 13P

< IC >

IC101 8-759-636-73 IC M5218AL-22
 IC102 8-759-000-48 IC MC14052BCP

< JACK >

J101 1-565-352-11 JACK, PIN 2P (PHONO)
 J102 1-565-258-11 JACK, PIN 4P (CD, VIDEO)

< RESISTOR >

R101 1-249-417-11 CARBON 1K 5% 1/4W
 R102 1-249-441-11 CARBON 100K 5% 1/4W
 R103 1-249-417-11 CARBON 1K 5% 1/4W
 R104 1-249-441-11 CARBON 100K 5% 1/4W
 R105 1-249-416-11 CARBON 820 5% 1/4W

R106 1-247-897-11 CARBON 560K 5% 1/4W
 R107 1-249-437-11 CARBON 47K 5% 1/4W
 R108 1-249-417-11 CARBON 1K 5% 1/4W
 R109 1-249-441-11 CARBON 100K 5% 1/4W
 R110 1-249-405-11 CARBON 100 5% 1/4W

R112 1-249-423-11 CARBON 3.3K 5% 1/4W
 R113 1-249-429-11 CARBON 10K 5% 1/4W
 R114 1-249-417-11 CARBON 1K 5% 1/4W
 R115 1-247-903-00 CARBON 1M 5% 1/4W
 R120 1-249-405-11 CARBON 100 5% 1/4W

R122-124

1-249-417-11 CARBON 1K 5% 1/4W
 R151 1-249-417-11 CARBON 1K 5% 1/4W
 R152 1-249-441-11 CARBON 100K 5% 1/4W
 R153 1-249-417-11 CARBON 1K 5% 1/4W
 R154 1-249-441-11 CARBON 100K 5% 1/4W

R155 1-249-416-11 CARBON 820 5% 1/4W

Ref. No.	Part No.	Description	Remark		
R156	1-247-897-11	CARBON	560K	5%	1/4W
R157	1-249-437-11	CARBON	47K	5%	1/4W
R158	1-249-417-11	CARBON	1K	5%	1/4W
R159	1-249-441-11	CARBON	100K	5%	1/4W
R160	1-249-405-11	CARBON	100	5%	1/4W
R162	1-249-423-11	CARBON	3.3K	5%	1/4W
R163	1-249-429-11	CARBON	10K	5%	1/4W
R164	1-249-417-11	CARBON	1K	5%	1/4W
R165	1-247-903-00	CARBON	1M	5%	1/4W
R170	1-249-405-11	CARBON	100	5%	1/4W

* 1-647-203-11 PS BOARD

< CAPACITOR >

C805 1-124-887-00 ELECT 3300uF 20% 16V
 C806 1-124-887-00 ELECT 3300uF 20% 16V
 C811 1-101-006-00 CERAMIC (A57) 0.047uF 50V
 C811 1-136-165-00 FILM (D509) 0.1uF 5% 50V
 C812 1-101-006-00 CERAMIC (A57) 0.047uF 50V

C812 1-136-165-00 FILM (D509) 0.1uF 5% 50V
 C813 1-161-021-11 CERAMIC 0.047uF 10% 25V
 C814 1-161-021-11 CERAMIC 0.047uF 10% 25V
 △C815 1-102-394-11 CERAMIC 0.01uF 250V
 C817 1-126-162-11 ELECT 3.3uF 20% 50V
 C822 1-124-920-11 ELECT 330uF 20% 63V

< DIODE >

D801 8-719-302-38 DIODE RBV-602-01
 D806-809 8-719-200-77 DIODE 10E2N
 D811 8-719-987-63 DIODE 1N4148M
 D812 8-719-987-63 DIODE 1N4148M
 D821 8-719-200-77 DIODE 10E2N

< IC LINK >

△ICP801 1-532-843-21 LINK, IC (PRF2500) (2.5A)
 △ICP802 1-532-843-21 LINK, IC (PRF2500) (2.5A)

< RESISTOR >

R803 1-249-428-11 CARBON 8.2K 5% 1/4W
 R804 1-249-428-11 CARBON 8.2K 5% 1/4W

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

PT

S

S. PANEL

VR

Ref.No.	Part No.	Description	Remark
*	1-647-204-11	PT BOARD *****	

*	1-647-205-11	S BOARD (UK) *****	
		< CAPACITOR >	
C857	1-162-306-11	CERAMIC 0.01uF 20% 16V (UK)	
		< CONNECTOR >	
* CN850	1-564-506-11	PLUG, CONNECTOR 3P (UK)	
		< IC >	
IC852	8-759-947-34	IC LM35DZ (UK)	
		< RESISTOR >	
R862	1-249-405-11	CARBON 100 5% 1/4W (UK)	

*	A-4360-078-A	S. PANEL BOARD, COMPLETE *****	
		< CAPACITOR >	
C901	1-124-473-11	ELECT 1000uF 20% 10V	
C903	1-124-994-11	ELECT 100uF 20% 10V	
C904	1-164-159-11	CERAMIC 0.1uF 50V	
C906	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C907	1-136-159-00	FILM 0.033uF 5% 50V	
C908	1-164-159-11	CERAMIC 0.1uF 50V	
C923	1-126-059-11	ELECT 10uF 20% 50V	
C925	1-126-059-11	ELECT 10uF 20% 50V	
C938	1-126-101-11	ELECT 100uF 20% 16V	
		< CONNECTOR >	
* CN602	1-568-826-11	SOCKET, CONNECTOR 7P	
* CN606	1-568-828-11	SOCKET, CONNECTOR 9P	
* CN901	1-568-834-11	SOCKET, CONNECTOR 15P	
		< DIODE >	
D901	8-719-000-81	DIODE UZL-7L3	
D902	8-719-987-63	DIODE 1N4148M	
D903	8-719-200-82	DIODE 11ES2	
D904	8-719-200-82	DIODE 11ES2	
D905	8-719-987-63	DIODE 1N4148M	
D908	8-719-987-63	DIODE 1N4148M	
D909	8-719-987-63	DIODE 1N4148M	

Ref.No.	Part No.	Description	Remark
D910	8-719-200-82	DIODE 11ES2	
D928	8-719-987-63	DIODE 1N4148M	
D929	8-719-000-60	DIODE UZL-6M2	
D980	8-719-200-82	DIODE 11ES2	
D981	8-719-987-63	DIODE 1N4148M	
		< IC >	
IC902	8-759-635-63	IC M51943BSL	
		< COIL >	
L901	1-408-080-00	INDUCTOR 100uH	
L921	1-408-121-00	INDUCTOR 22uH	
L922	1-408-121-00	INDUCTOR 22uH	
		< TRANSISTOR >	
Q901	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q902	8-729-620-05	TRANSISTOR 2SC2603-EF	
		< RESISTOR >	
R623	1-249-441-11	CARBON 100K 5% 1/4W	
R624	1-249-435-11	CARBON 33K 5% 1/4W	
R625	1-249-426-11	CARBON 5.6K 5% 1/4W	
R674	1-249-435-11	CARBON 33K 5% 1/4W	
R675	1-249-426-11	CARBON 5.6K 5% 1/4W	
R901	1-249-429-11	CARBON 10K 5% 1/4W	
R902-904			
	1-249-433-11	CARBON 22K 5% 1/4W	
R905	1-249-441-11	CARBON 100K 5% 1/4W	
R906	1-249-417-11	CARBON 1K 5% 1/4W	
R907	1-249-441-11	CARBON 100K 5% 1/4W	
R941-943			
	1-249-417-11	CARBON 1K 5% 1/4W	
R944	1-249-429-11	CARBON 10K 5% 1/4W	
R945-947			
	1-249-417-11	CARBON 1K 5% 1/4W	
R948	1-249-429-11	CARBON 10K 5% 1/4W	
R952	1-249-393-11	CARBON 10 5% 1/4W	
R961	1-249-429-11	CARBON 10K 5% 1/4W	
R962	1-249-429-11	CARBON 10K 5% 1/4W	

*	A-4360-079-A	VR BOARD, COMPLETE *****	
		< CAPACITOR >	
C627	1-126-300-11	ELECT 0.47uF 20% 50V	
C628	1-164-159-11	CERAMIC 0.1uF 50V	
C677	1-126-300-11	ELECT 0.47uF 20% 50V	
C917	1-124-472-11	ELECT 470uF 20% 10V	
C935	1-124-443-00	ELECT 100uF 20% 10V	

VR

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
* CN605	1-564-506-11	PLUG, CONNECTOR 3P	
* CN607	1-568-828-11	SOCKET, CONNECTOR 9P	
< DIODE >			
D681-683	8-719-815-85	DIODE 1S1585	
D971	8-719-010-32	DIODE UZ-4.7BSA	
D972	8-719-200-82	DIODE 11ES2	
D973	8-719-200-82	DIODE 11ES2	
< IC >			
IC904	8-759-820-62	IC LB1639	
< TRANSISTOR >			
Q605	8-729-900-63	TRANSISTOR DTA124ES	
Q621	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q671	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q681	8-729-900-61	TRANSISTOR DTA114ES	
< RESISTOR >			
R620	1-249-425-11	CARBON 4.7K 5% 1/4W	
R621	1-249-417-11	CARBON 1K 5% 1/4W	
R670	1-249-425-11	CARBON 4.7K 5% 1/4W	
R671	1-249-417-11	CARBON 1K 5% 1/4W	
R682	1-249-425-11	CARBON 4.7K 5% 1/4W	
R974	1-249-405-11	CARBON 100 5% 1/4W	
R975	1-249-433-11	CARBON 22K 5% 1/4W	
R976	1-249-433-11	CARBON 22K 5% 1/4W	
R977	1-249-412-11	CARBON 390 5% 1/4W	
< VARIABLE RESISTOR >			
RV603	1-223-404-11	RES, VAR, CARBON 100K/100K/10K (VOLUME)	

Ref. No.	Part No.	Description	Remark
MISCELLANEOUS			

17	1-575-905-31	WIRE, FLAT TYPE (9 CORE)	
64	1-690-114-31	WIRE, FLAT TYPE (7 CORE)	
△65	1-575-654-11	CORD, POWER (AEP, G, IT, EE, EA, MY, SP)	
△66	1-575-656-11	CORD, POWER (E)	
△67	1-690-608-11	CORD, POWER (AUS)	
69	1-690-094-11	WIRE, FLAT TYPE (15 CORE)	
70	1-690-992-11	WIRE, FLAT TYPE (7 CORE) (A57)	
△74	1-575-669-21	CORD, POWER (UK)	
△F1	1-532-259-00	FUSE, TIME-LAG (T1. 6A)	
△F2	1-532-259-00	FUSE, TIME-LAG (T1. 6A)	
△F801	1-532-203-00	FUSE, TIME-LAG (T2A)	
△F802	1-532-203-00	FUSE, TIME-LAG (T2A)	
△T1	1-423-527-11	TRANSFORMER, POWER (D509)	
△T1	1-423-528-11	TRANSFORMER, POWER (E, AUS, EA, MY)	
△T1	1-423-602-11	TRANSFORMER, POWER (SP)	

HARDWARE LIST

#1	7-621-849-00	SCREW (BV/RING)
#2	7-682-560-04	SCREW +BVTT 4X6 (S)
#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2
#4	7-685-871-01	SCREW +BVTT 3X6 (S)
#5	7-682-548-04	SCREW +BVTT 3X8 (S)
#6	7-685-645-79	SCREW +BVTP 3X6 TYPE2
#7	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S

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