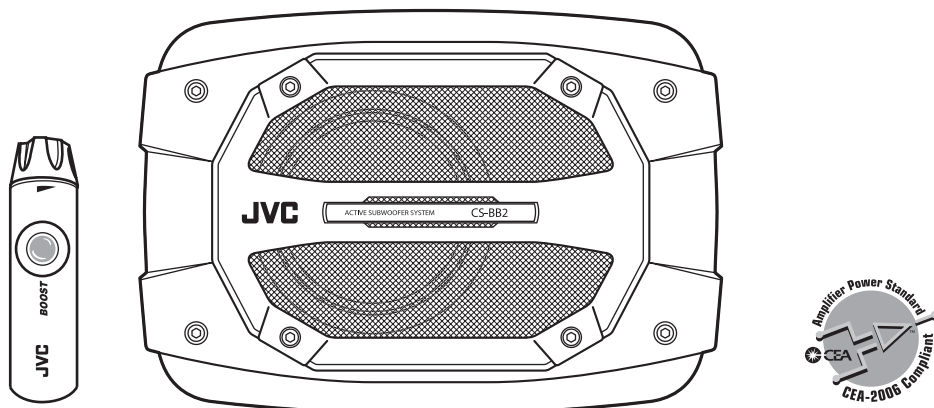


JVC

SERVICE MANUAL

ACTIVE SUBWOOFER SYSTEM

CS-BB2J, CS-BB2U



Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

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SPECIFICATION

Type	Closed Active Subwoofer (Built-in amplifier)
Speaker Unit	14 cm (5-9/16 in.) cone
Input Terminal	LINE IN (1 system), 0.19 V/25 k Ω SPEAKER (1 system), 3.7 V
Power Output	32 W RMS x 2 channels at 2 Ω and [\leq or =] 1% THD + N
Signal-to-Noise Ratio	75 dBA (reference: 1 W into 2 Ω)
Maximum Amplifier Power Output	60 W + 60 W (Impedance 2 Ω + 2 Ω)
Cut-off Frequency	110 Hz (L.P.F. switch "ON", -12 dB/oct low pass filter)
Crossover Frequency	20 Hz to 200 Hz (L.P.F. switch "ON") 20 Hz to 500 Hz (L.P.F. switch "OFF")
Sound Pressure Level	88 dB/ m (with line input: 0.03 V)
Level Control	-50 dB to 0 dB (Center) to + 10 dB
Power Requirement	DC 14.4 V (11 V to 16 V allowance), Negative ground
Dimensions (W/H/D)	290 mm \times 60.5 mm \times 200 mm (11-7/16 in. \times 2-7/16 in. \times 7-7/8 in.)
Mass	2.1 kg (4.7lbs) (Excluding accessories)

Design and specifications are subject to change without notice.

SECTION 1 PRECAUTION

1.1 Safety Precautions

 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3 DISASSEMBLY

3.1 Removing the almi plate (See fig.1)

- (1) Remove the six screws **A**, two screws **B** and one screw **C** attaching the almi plate.
- (2) Remove the almi plate from main body.

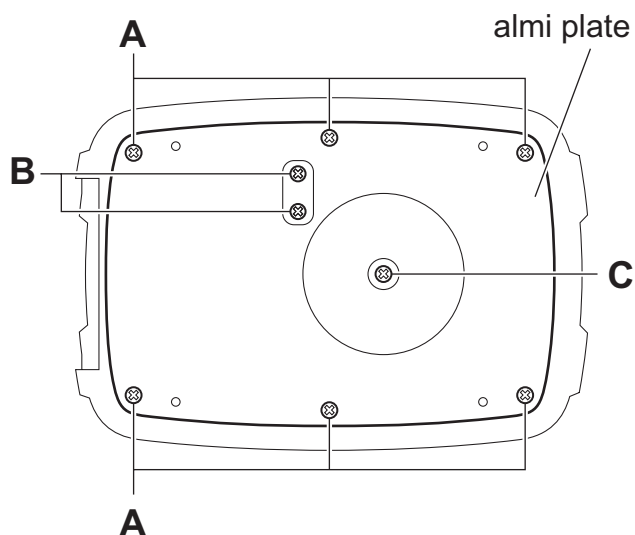


Fig.1

3.2 Removing the main board
(See fig.2 to 4)

- Remove the almi plate.
 - (1) Remove the five screws **D** and one screw **D'** attaching the main board. (See fig.2)
 - (2) Remove the one screw **E** attaching the main board. (See fig.3)
 - (3) Take out the main board, and then remove the wire from speaker terminal. (See fig.4)

Reference:

When attach the screw **D'**, spring and washer are attached with screw **D'**. (See fig.2)

Caution:

When reassembly, wire should connect as same as before disassembly. (See fig.4)

3.3 Removing the speaker
(See fig.4)

- Remove the almi plate.
- Remove the main board.
 - (1) Remove the base cabinet.
 - (2) Remove the four screws **F** attaching the speaker.
 - (3) Shift up the speaker and take out.

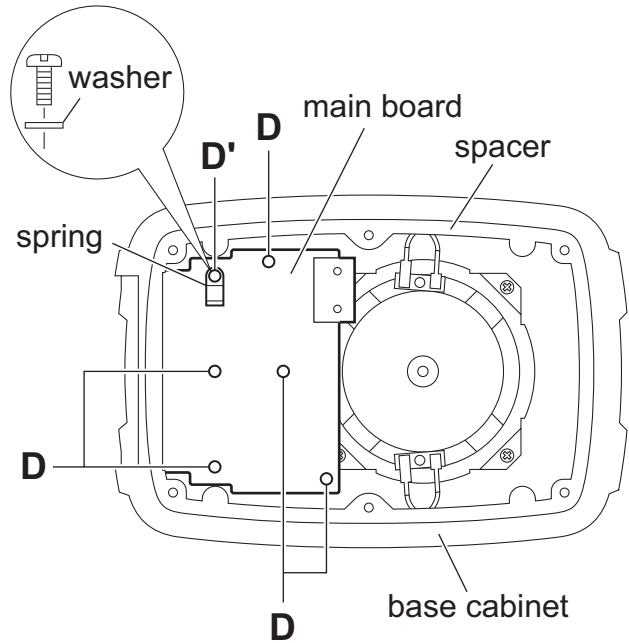


Fig.2

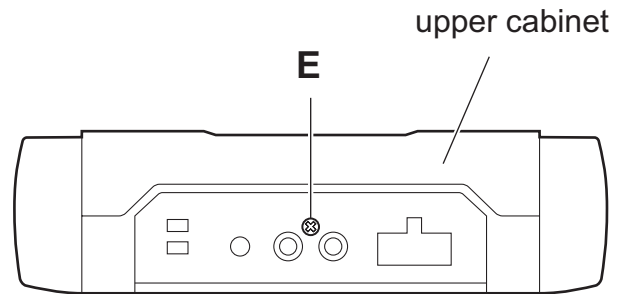


Fig.3

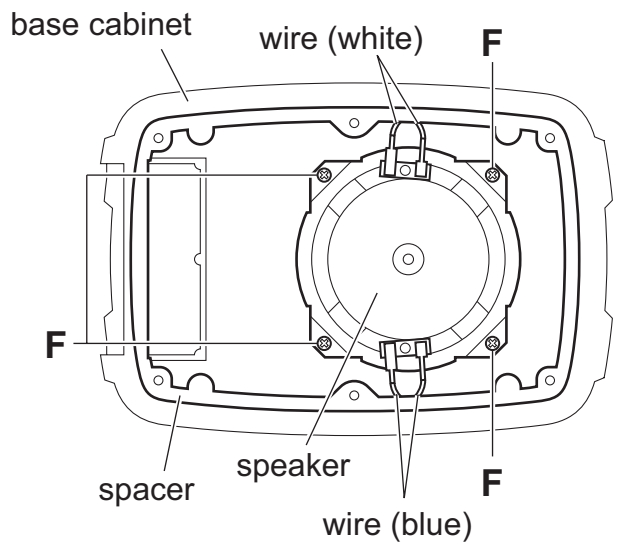


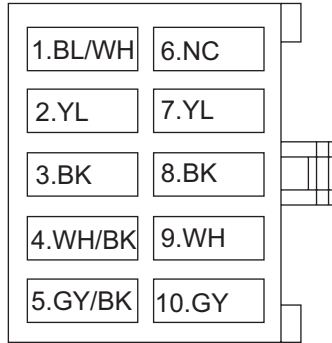
Fig.4

SECTION 4 ADJUSTMENT

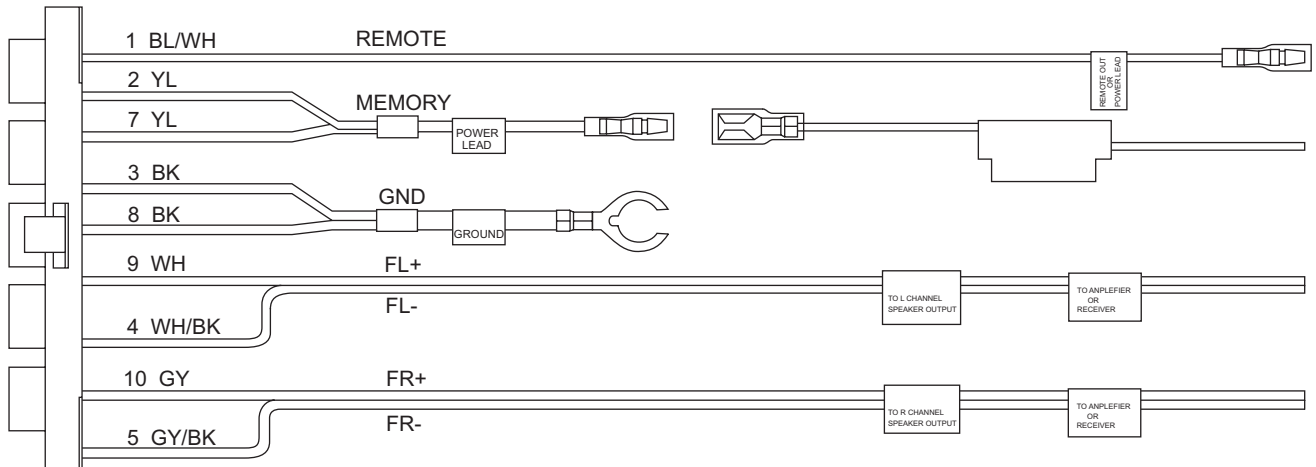
This service manual does not describe ADJUSTMENT.

SECTION 5 TROUBLESHOOTING

5.1 10 PIN CORD DIAGRAM



BK	Black	GY	Gray
BL	Blue	YL	Yellow
WH	White		



RR	Rear Right	REMOTE	Remote Out
FR	Front Right	GND	Ground
FL	Front Left	MEMORY	Memory Backup Battery+
RL	Rear Left		



JVC

Victor Company of Japan, Limited
Mobile Entertainment Business Group Mobile Entertainment Category 10-1,1chome,Ohwatari-machi,Maebashi-city,Gumma-ken, 371-8543,Japan

(No.MA252)

PARTS LIST

CS-BB2J,CS-BB2U

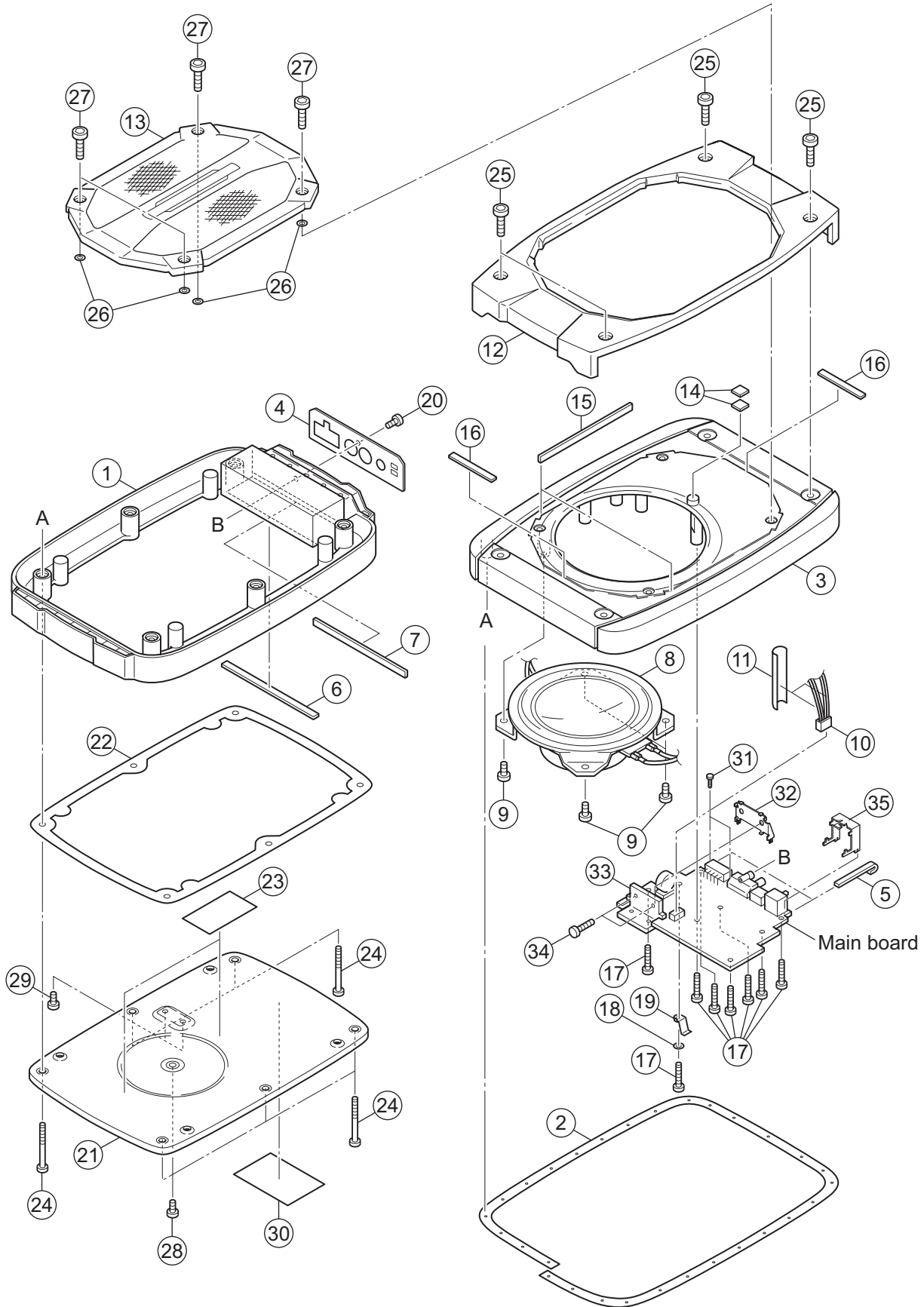
* All printed circuit boards and its assemblies are not available as service parts.

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Exploded view of general assembly and parts list

Block No. M 1 M M



General Assembly

Block No. [M][1][M][M]

△	Symbol No.	Part No.	Part Name	Description	Local
	1	LV10905-003A	BASE CABINET		
	2	LV34988-001A	SPACER		
	3	LV10906-002A	UPPER CABINET		
	4	LV43784-002A	INPUT LABEL		
	5	LV43801-001A	SPACER	(x2)	
	6	LV43801-003A	SPACER		
	7	LV43801-002A	SPACER		
	8	LE10014-019A	SPEAKER		
	9	QYSBSF4010ZA	TAP SCREW	M4 x 10mm(x4)	
	10	WJJ0473-001A-E	E-SI C WIRE C-C		
	11	LV43938-001A	CUSHION	(x2)	
	12	LV10907-002A	UPPER COVER		
	13	LV34921-004A	GRILL ASSY		
	14	LV43801-004A	SPACER	(x2)	
	15	LV43801-005A	SPACER	(x2)	
	16	LV43801-001A	SPACER	(x2)	
	17	QYSDSF3016ZA	TAP SCREW	M3 x 16mm(x8)	
	18	LV43955-001A	WASHER		
	19	GN40028-001A	LEAF SPRING		
	20	QYSDSF3008MA	TAP SCREW	M3 x 8mm	
	21	LV34922-001A	ALMI PLATE		
	22	LV34923-002A	SPACER		
	23	LV43803-001A	SPACER	(x2)	
	24	QYSDSF4045NA	TAP SCREW	M4 x 45mm(x6)	
	25	LV43785-001A	SPECIAL SCREW	(x4)	
	26	GN30007-016A	SPACER	(x4)	
	27	LV43785-001A	SPECIAL SCREW	(x4)	
	28	QYSDSP4008MA	SCREW	M4 x 8mm	
	29	QYSDSP3008MA	SCREW	M3 x 8mm(x2)	
	30	LV37031-001A	NAME PLATE		
	31	QYSDSF3010MA	TAP SCREW	M3 x 10mm(x2)	
	32	GN40036-001A	IC BRACKET		
	33	LV34929-001A	SUB HEATSINK		
	34	QYSDSP3012ZA	SCREW	M3 x 12mm(x2)	
	35	LV34991-001A	SW BLACKET		

Electrical parts list

Main board

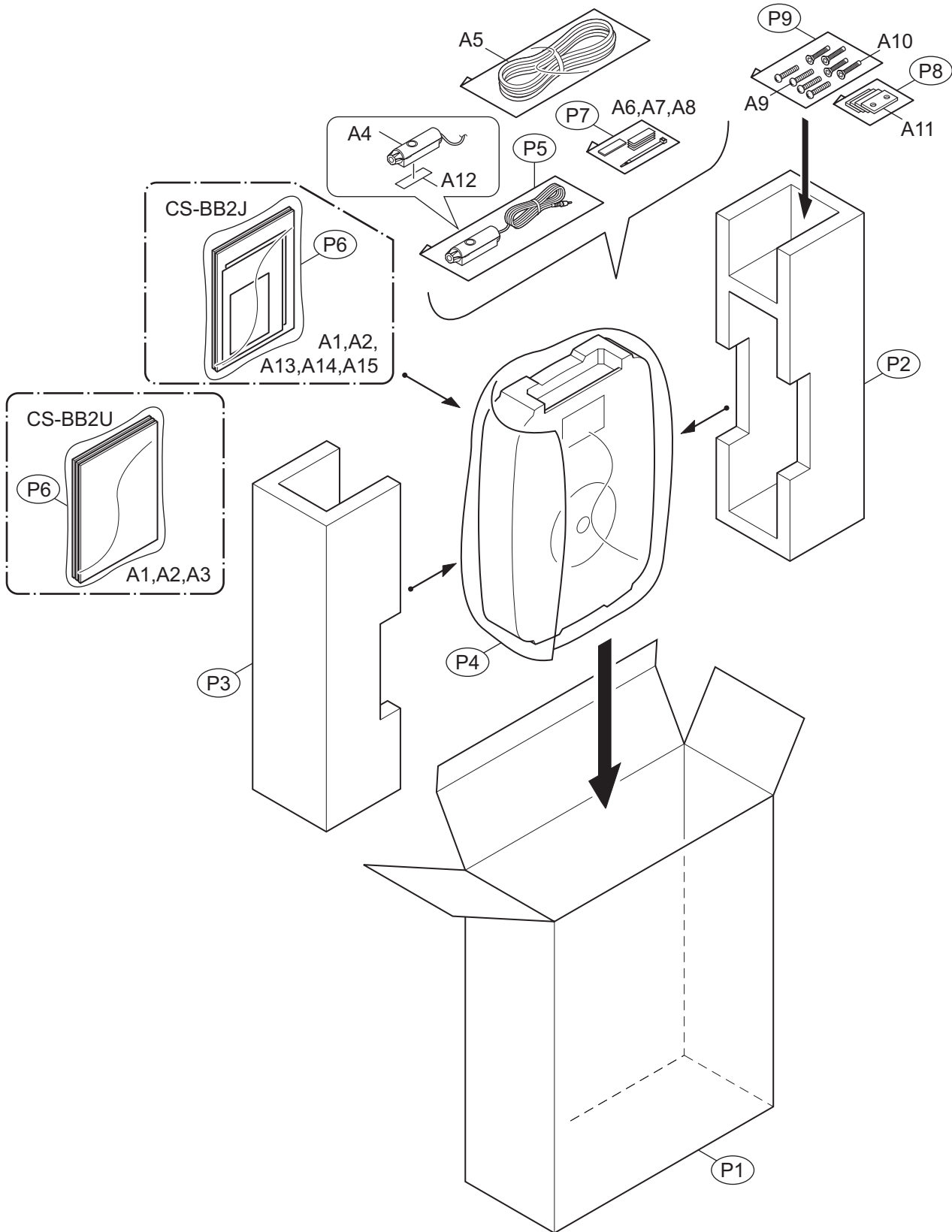
Block No. [0][1]					△ Symbol No.	Part No.	Part Name	Description	Local
△ Symbol No.	Part No.	Part Name	Description	Local					
IC101	NJM4580L	IC			C521	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
IC301	NJM2777D	IC			C601	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
IC311	NJM4580L	IC			C602	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
IC321	NJM4580L	IC			C603	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
IC331	NJM4580L	IC			C604	QETM1EM-108	E CAPACITOR	1000uF 25V M	
IC511	NJM78M08FA	IC			C605	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
IC701	TDA8560Q	IC			C701	QDX31EM-473Z	C CAPACITOR	0.047uF 25V M	
					C702	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
					C703	QFV61HJ-334Z	MF CAPACITOR	0.33uF 50V J	
					C704	QFV61HJ-334Z	MF CAPACITOR	0.33uF 50V J	
					R101	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R102	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R103	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R104	QRE141J-474Y	C RESISTOR	470kΩ 1/4W J	
					R105	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R106	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R107	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
					R108	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R109	QRE141J-273Y	C RESISTOR	27kΩ 1/4W J	
					R110	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R111	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R112	QRE141J-224Y	C RESISTOR	220kΩ 1/4W J	
					R113	QRE141J-224Y	C RESISTOR	220kΩ 1/4W J	
					R114	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R201	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R202	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R203	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R204	QRE141J-474Y	C RESISTOR	470kΩ 1/4W J	
					R205	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R206	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R207	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
					R208	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R209	QRE141J-273Y	C RESISTOR	27kΩ 1/4W J	
					R210	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R211	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R212	QRE141J-224Y	C RESISTOR	220kΩ 1/4W J	
					R213	QRE141J-224Y	C RESISTOR	220kΩ 1/4W J	
					R214	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R302	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R304	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
					R305	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R306	QRE141J-203Y	C RESISTOR	20kΩ 1/4W J	
					R311	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R312	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
					R313	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
					R314	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
					R315	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R316	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
					R317	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R318	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R319	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R321	QRE141J-433Y	C RESISTOR	43kΩ 1/4W J	
					R322	QRE141J-363Y	C RESISTOR	36kΩ 1/4W J	
					R323	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
					R324	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
					R331	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J	
					R332	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J	
					R333	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
					R334	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
					R336	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R511	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
					R512	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
					R521	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
					R522	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	
					R601	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R602	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
					R603	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
					R604	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
					R605	QRE141J-154Y	C RESISTOR	150kΩ 1/4W J	
					R606	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
					R607	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
					R701	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
					R702	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
					R703	QRE141J-152Y	C RESISTOR	1.5kΩ 1/4W J	
					R801	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
Q511	2SB1322/RS-T	TRANSISTOR							
Q512	DTC144ESA-T	DIGI TRANSISTOR							
Q601	DTA144ESA-T	DIGI TRANSISTOR							
Q602	DTC144ESA-T	DIGI TRANSISTOR							
Q603	DTC144ESA-T	DIGI TRANSISTOR							
Q604	DTA144ESA-T	DIGI TRANSISTOR							
Q701	2SD1302/ST-T	TR.IM							
D301	MTZJ10A-T2	Z DIODE							
D302	MTZJ4.7A-T2	Z DIODE							
D501	1N5401-F64	DIODE							
D511	1SS133-T2	SI DIODE I/M							
D512	1SS133-T2	SI DIODE I/M							
D513	MTZJ10A-T2	Z DIODE							
D601	1SR139-400-T2	SI DIODE							
D602	MTZJ3.6A-T2	ZENER DIODE IM							
D603	1SS133-T2	SI DIODE I/M							
D604	1SS133-T2	SI DIODE I/M							
D801	SLR-342MC-T	LED							
D802	SLR-342MC-T	LED							
C101	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C102	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C103	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z						
C104	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z						
C105	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M						
C106	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M						
C107	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M						
C201	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C202	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C203	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z						
C204	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z						
C205	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M						
C206	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M						
C207	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M						
C210	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M						
C301	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C302	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M						
C303	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C304	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C310	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M						
C311	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M						
C312	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M						
C313	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M						
C314	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M						
C320	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M						
C321	QFV61HJ-104Z	MF CAPACITOR	0.1uF 50V J						
C322	QFV61HJ-104Z	MF CAPACITOR	0.1uF 50V J						
C323	QFV61HJ-104Z	MF CAPACITOR	0.1uF 50V J						
C324	QFV61HJ-104Z	MF CAPACITOR	0.1uF 50V J						
C330	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M						
C331	QFV61HJ-473Z	MF CAPACITOR	0.047uF 50V J						
C332	QFV61HJ-563Z	MF CAPACITOR	0.056uF 50V J						
C333	QFV61HJ-183Z	MF CAPACITOR	0.018uF 50V J						
C334	QFV61HJ-124Z	MF CAPACITOR	0.12uF 50V J						
C340	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M						
C501	QETM1CM-338	E CAPACITOR	3300uF 16V M						
C502	QDX31EM-104Z	C CAPACITOR	0.1uF 25V M						
C503	QFV61HJ-104Z	MF CAPACITOR	0.1uF 50V J						
C504	QFV61HJ-103Z	MF CAPACITOR	0.01uF 50V J						
C511	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M						
C512	QDX31EM-104Z	C CAPACITOR	0.1uF 25V M						
C513	QDX31EM-104Z	C CAPACITOR	0.1uF 25V M						
C514	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M						

△ Symbol No.	Part No.	Part Name	Description	Local
R802	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
VR801	QVQ0294-Z24	V RESISTOR		
L501	QQR0703-001	CHOKO COIL		
CJ101	QNN0068-001	JACK ASSY		
CJ301	QNS0240-001	3.5 JACK		
CN101	QGA4201F2-10	CONNECTOR	W-B (1-10)	
CN301	QGB2022K1-06	CONNECTOR	B-B (1-6)	
CN401	QGB2022K2-06	CONNECTOR	B-B (1-6)	
CN701	QGA3901C1-04	CONNECTOR	W-B (1-4)	
CN801	QGA2001C1-03	CONNECTOR	W-B (1-3)	
S401	QSW0991-001	SLIDE SWITCH		
S402	QSW0991-001	SLIDE SWITCH		
S801	QSW0799-001	PUSH SW		

Packing materials and accessories parts list

Block No. **M 3 M M**

No additional / supplemental order of WARRANTY CARDS are available.



Packing and Accessories

Block No. [M][3][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
A 1	LVT1544-001A	INST BOOK	ENG	
A 2	LVT1544-002A	INST BOOK	SPA FRE	BB2J
A 2	LVT1544-003A	INST BOOK	CHI(TAIWAN) TAI	BB2U
A 3	LVT1544-004A	INST BOOK	ARA PER	BB2U
A 4	RM-RK80C	REMOTE CONTROLLER		
A 5	QAM0650-002	CAR CABLE		
A 6	GN40033-001A	MAGIC TAPE	(x4)	
A 7	LV41413-001A	DOUBLE FACE		
A 8	QZW0004-001	WIRE CLAMP		
A 9	QYSDSA4016MA	TAP SCREW	M4 x 16mm(x4)	
A 10	QYSSSA4020MA	TAP SCREW	M4 x 20mm(x4)	
A 11	LV43826-001A	STAY	(x4)	
A 12	LV41298-002A	CAUTION LABEL		
A 13	-----	WARRANTY CARD	BT-51018-4	BB2J
A 14	BT-51034-2	J=REGIST CARD		BB2J
A 15	-----	WARRANTY CARD	BT-52006-2	BB2J
P 1	LV36780-002A	CARTON		
P 2	LV21719-001A	CUSHION(L)		
P 3	LV21720-001A	CUSHION(U)		
P 4	QPC04003515P	POLY BAG	40cm x 35cm	
P 5	QPA01503505	POLY BAG	15cm x 35cm	
P 6	QPC02503515P	POLY BAG	25cm x 35cm	
P 7	QPA00701005	POLY BAG	7cm x 10cm	
P 8	QPA00701005	POLY BAG	7cm x 10cm	
P 9	QPA00701005	POLY BAG	7cm x 10cm	

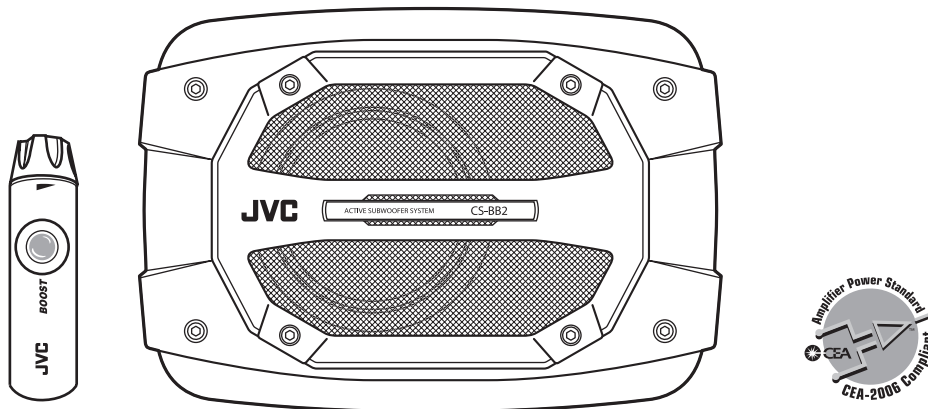
JVC

SCHEMATIC DIAGRAMS

ACTIVE SUBWOOFER SYSTEM

CS-BB2J,CS-BB2U

CD-ROM No.SML200603




Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

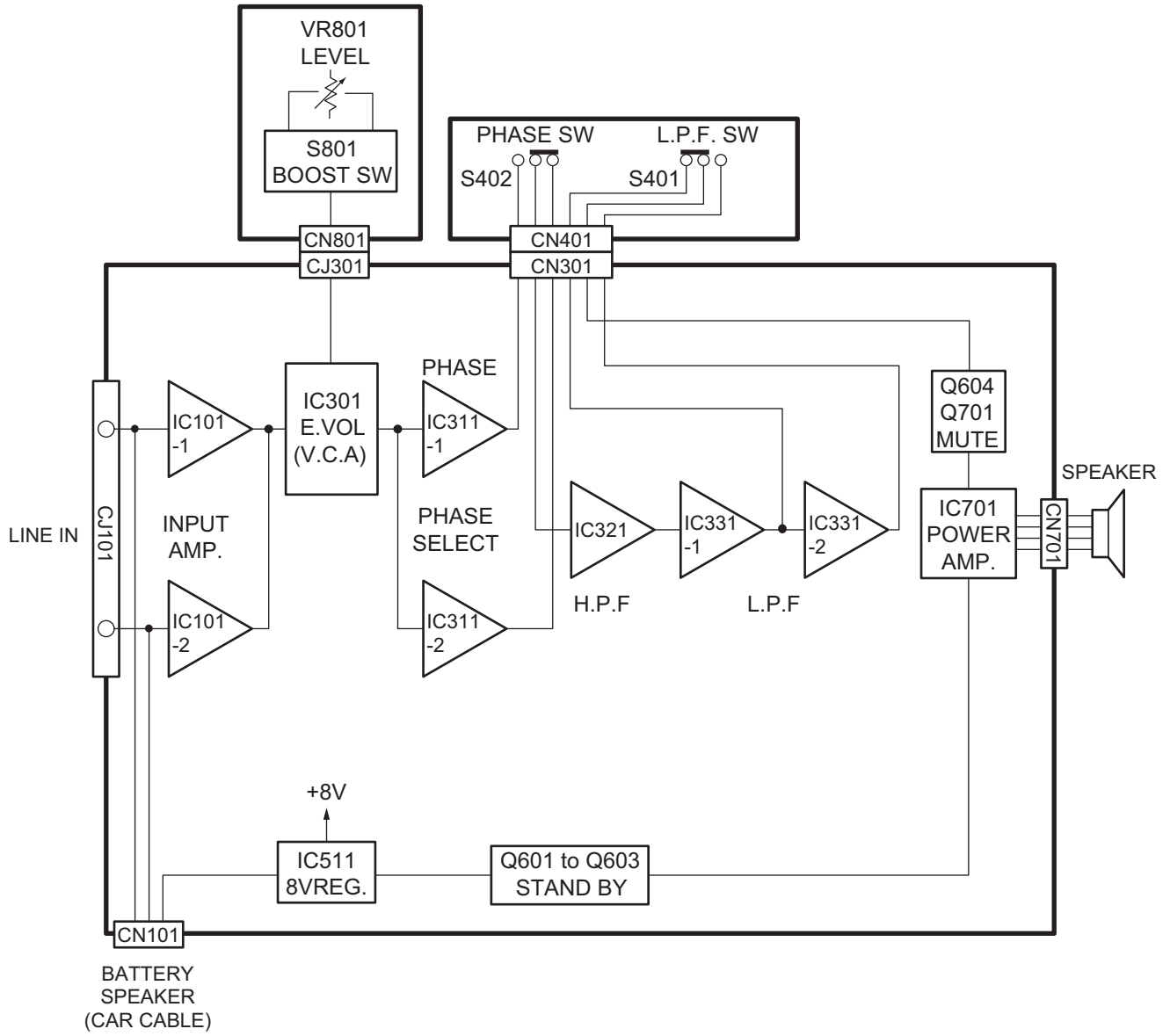
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Standard schematic diagrams	2-3
Printed circuit boards	2-5 to 6

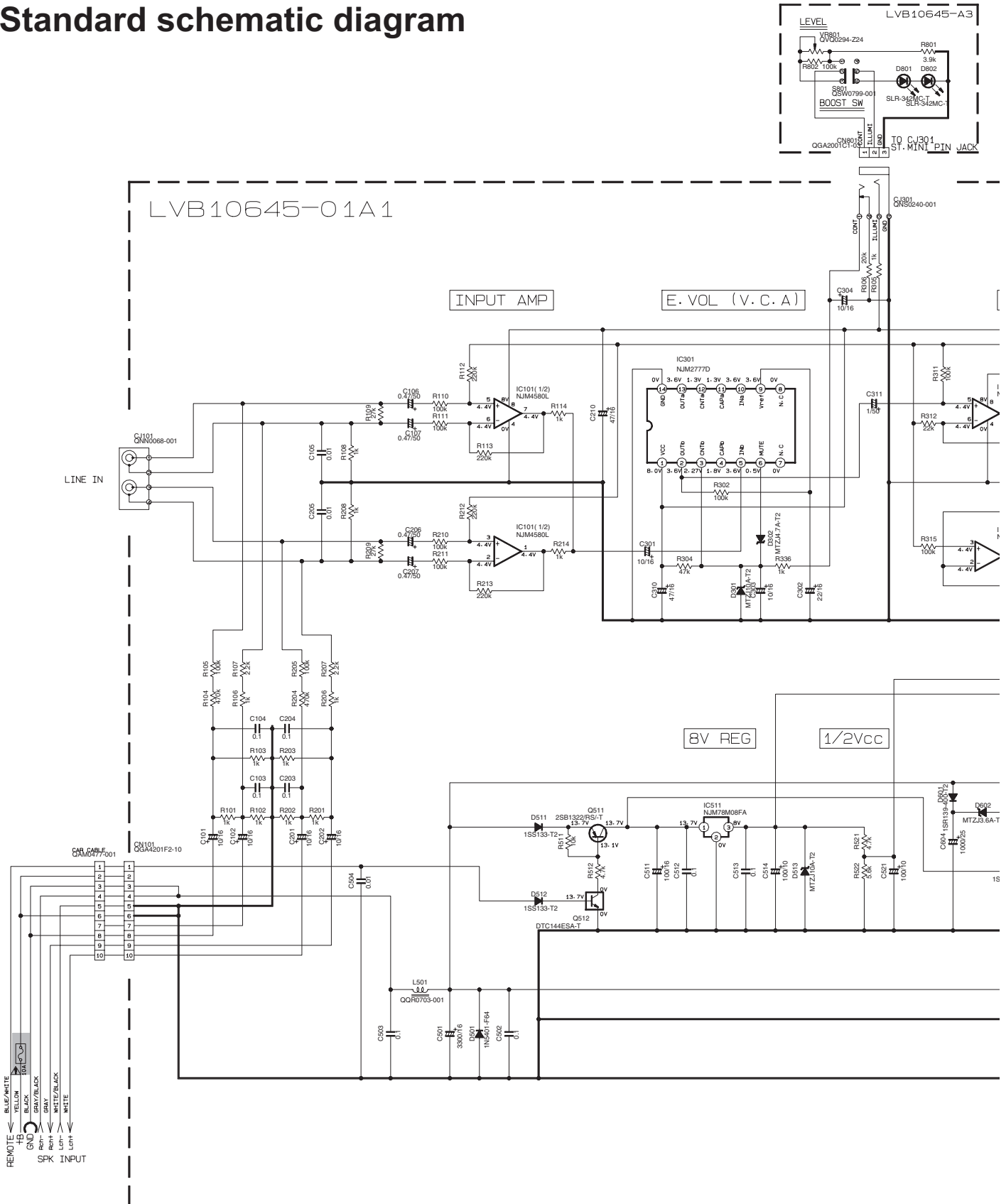
Safety precaution

 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

Block diagram

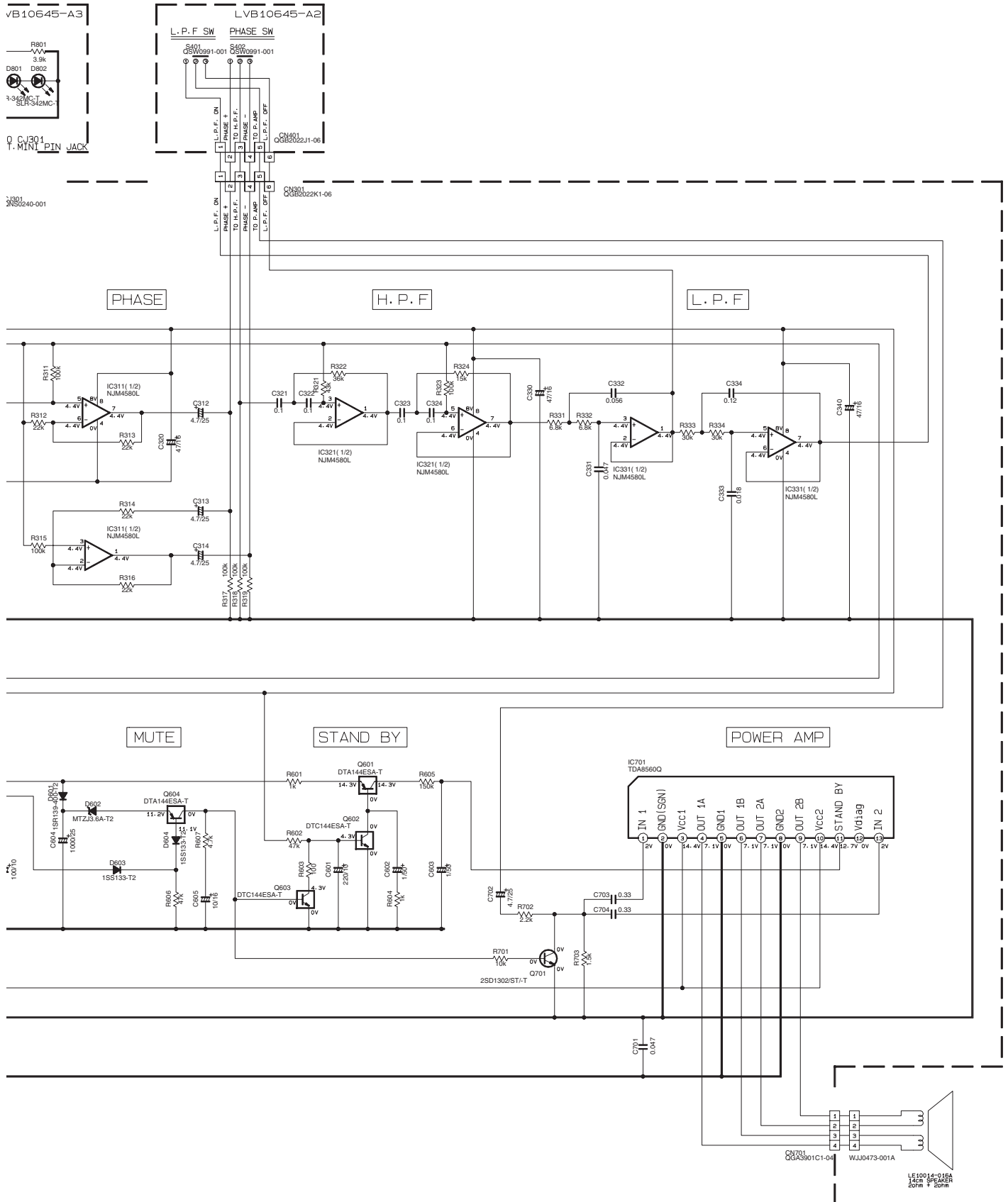


Standard schematic diagram



- NOTES**
1. VOLTAGES ARE DC-MEAS CONDITION --- REMOTE
 2. UNLESS OTHERWISE SPECIFIED:
 - ALL RESISTORS ARE :
 - ALL RESISTANCE VAL
 - ALL CAPACITANCE VAL
 - ALL INDUCTANCE VAL
 - ALL E-CAPACITORS AT
 - NON-POLARISED E
 - 50V ±5% MYLAR C

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.



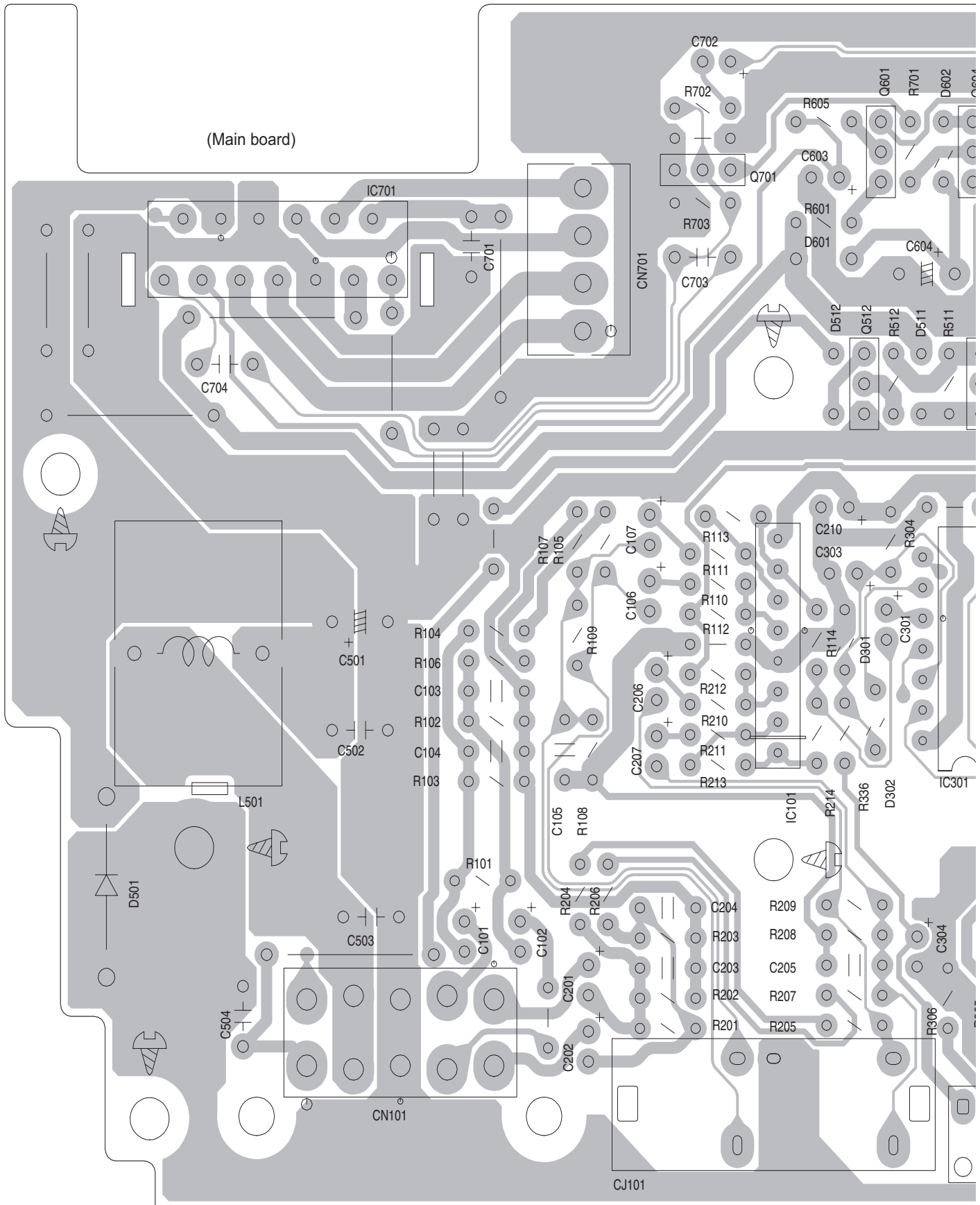
NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION --- REMOTE ON
 - UNLESS OTHERWISE SPECIFIED.
 - ALL RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
 - ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
 - ALL RESISTANCE VALUES ARE IN OHM(Ω).
 - ALL CAPACITANCE VALUES ARE IN pF(pF).
 - ALL INDUCTANCE VALUES ARE IN μH(μH).
 - ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
- NON-POLARISED ELECTROLYTIC CAPACITOR
 50V ±5% MYLAR CAPACITOR

	47k 	DTC144ESA-T
	47k 	DTA144ESA-T

Printed circuit board

■ Main board Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)



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