



Service Bulletin

No. : MZ07-041

Date: March 23, 2007

Model: MA9S2

Subject: Improvement for Oscillation and adjust audio quality with this modification.

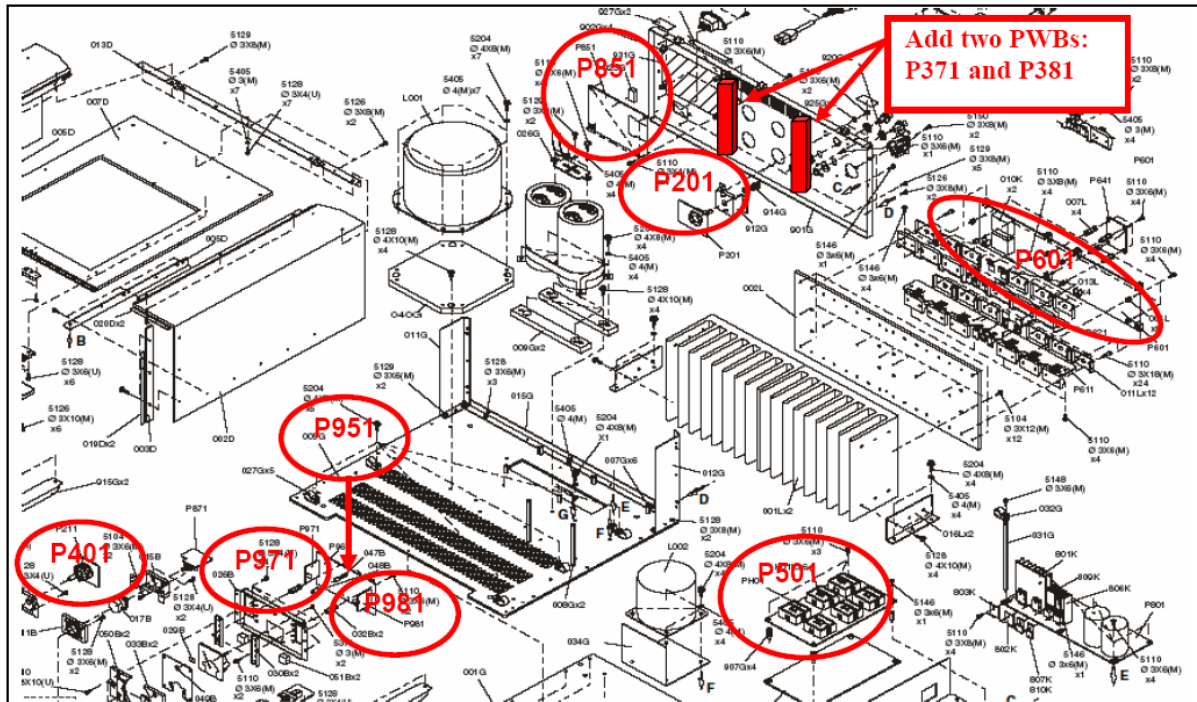
Symptom: Depending on the connection condition in the case of bi-wiring connections, the amplifier may oscillate and activate the protective circuit. (It occurs when speakers are connected to the unit in a bi-wire configuration.)

Solution:

1. Add two PWBs: P371 and P381.
2. Remove 4 parts, add 12 parts and replace 6 parts on the following PWBs: P201 P401 P501 P601 P851 P951 P971 P981
3. For details, refer to Pages 3 to 15.

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NECESSARY PART Part No: 90M-ZK000720R (OSILLATION IMPROVEMENT KIT)

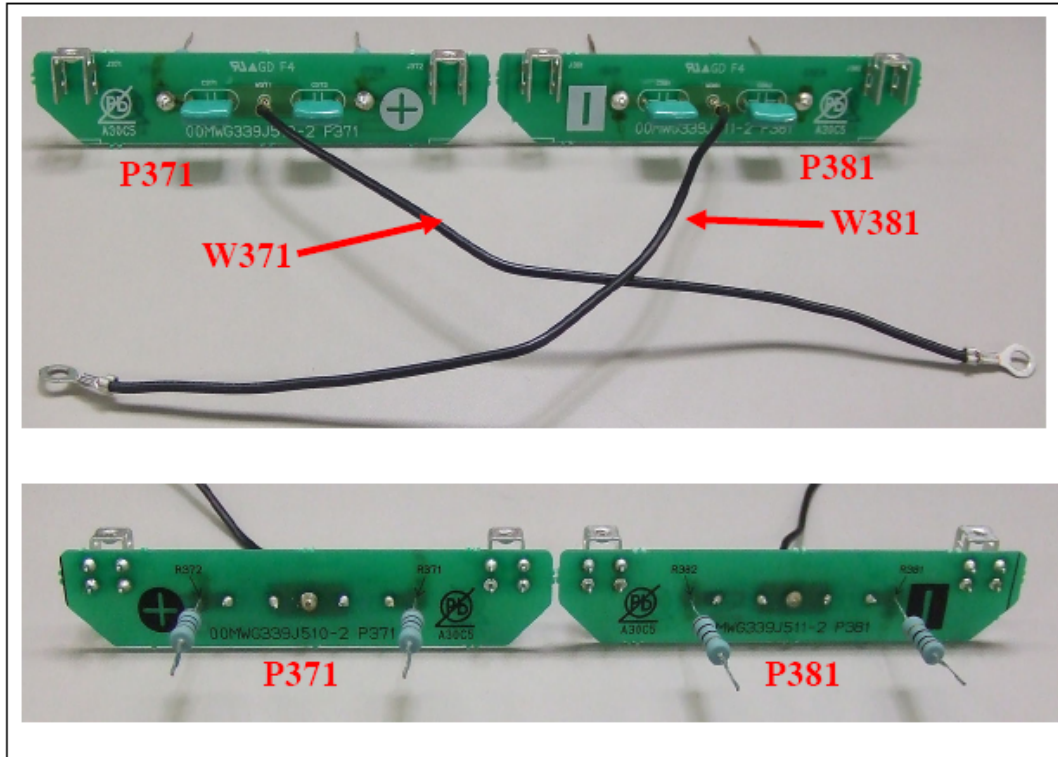


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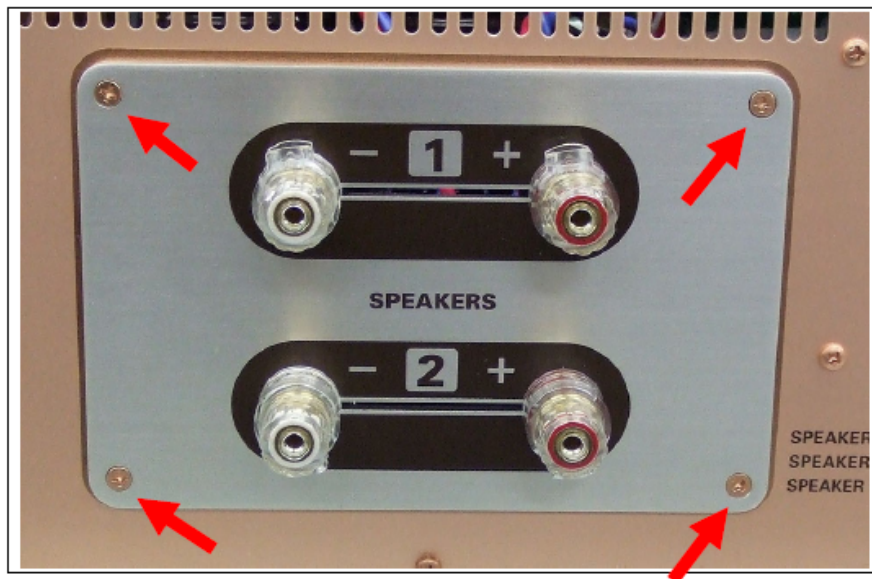
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NO. 1 ADDING A PWB

1) Screw down a PWB ASSY P371 and a P381 to the REAR PANEL.

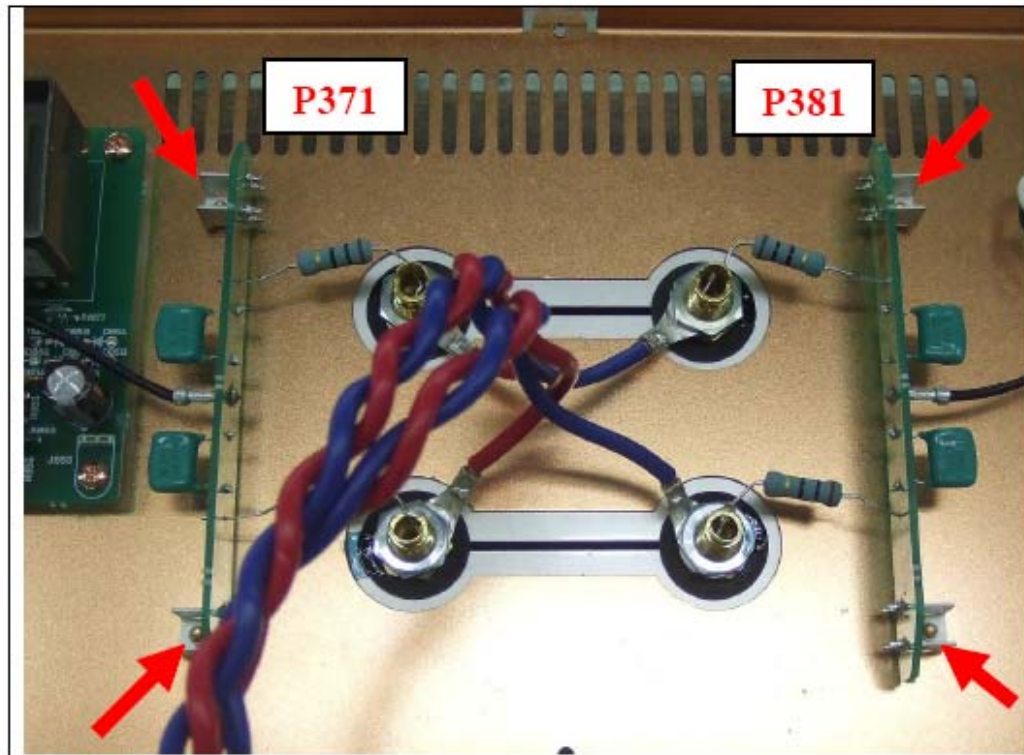


2) The screws to be used are preexisting on the REAR PANEL. Slacken the screws once and then screw up the arrowed terminals.



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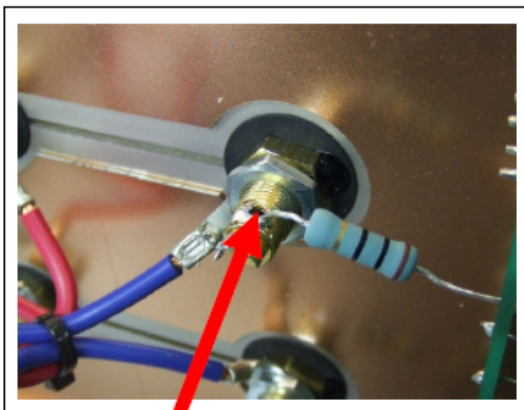


3) Insert the leads of the R371, R372, R381, R382 in the speaker terminals and solder them.

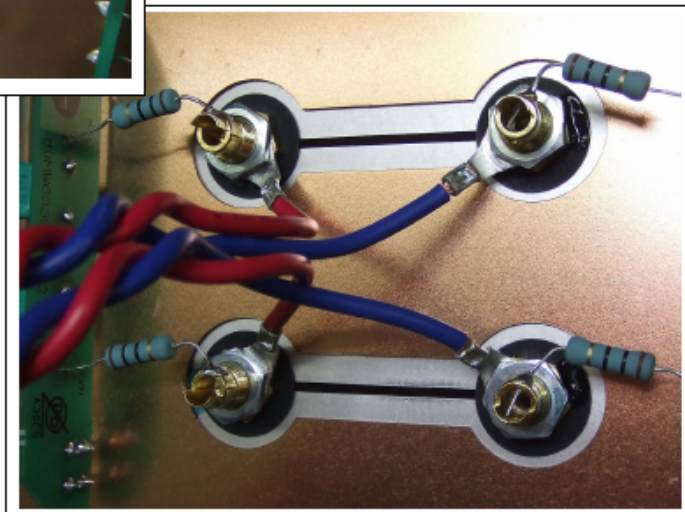
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3) Insert the leads of the R371, R372, R381, R382 in the speaker terminals and solder them.



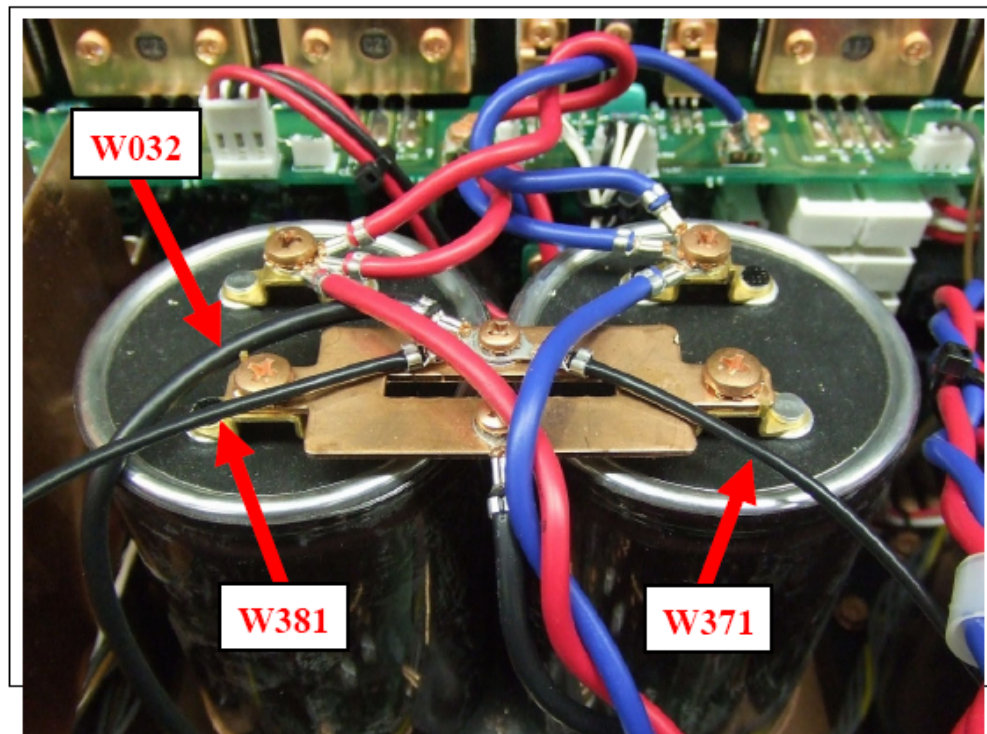
Insert the lead in the terminal and solder it.



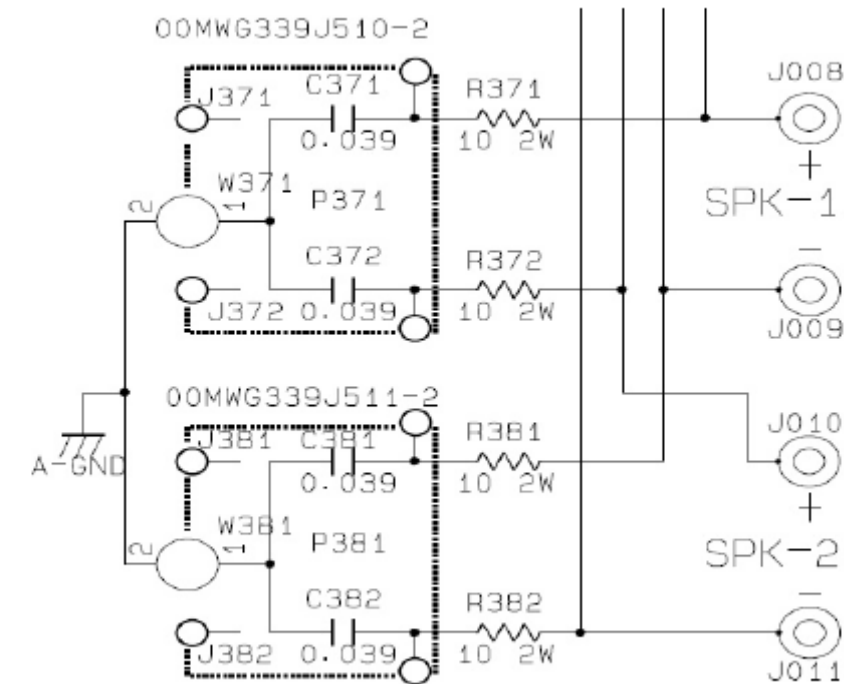
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4) Screw down a layer of the earth lugs in the order of W302, W381 and W371 with the preexisting a screw.



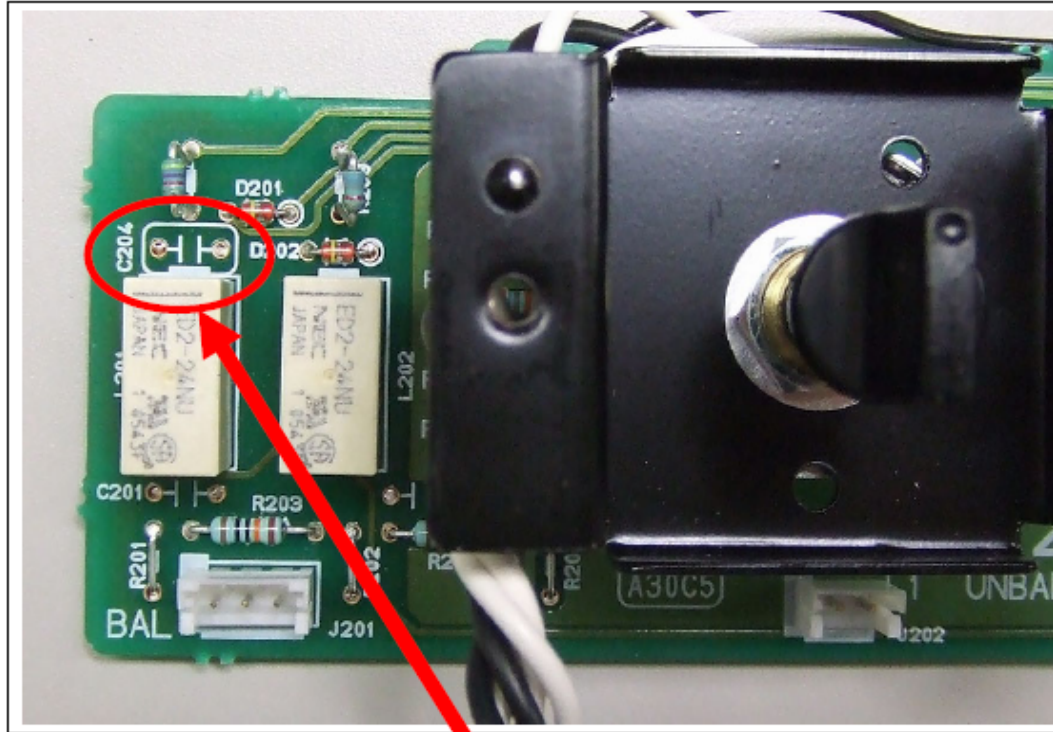
Circuit diagram of the additional PWBs (PWB ASSY P371 & P381)



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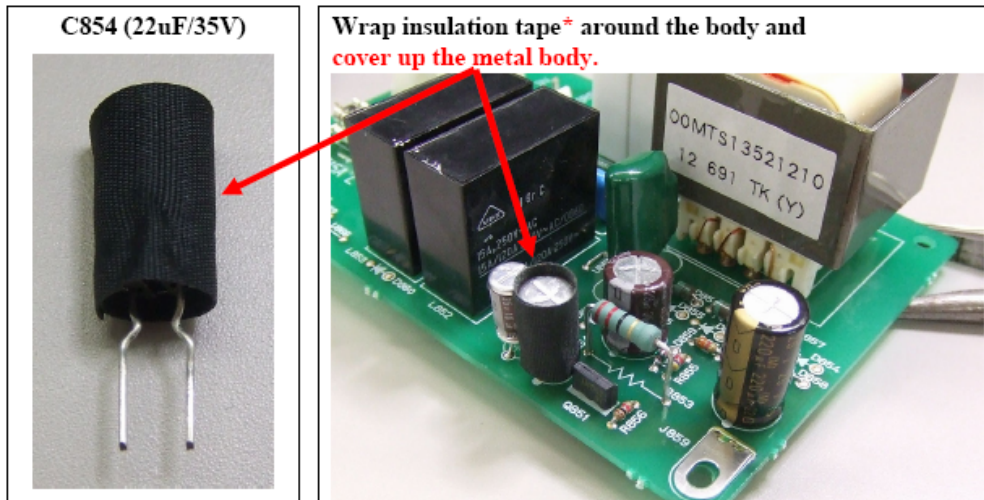
NO. 2 REMOVING C204 FROM PWB P201



Remove C204 (220pF)

NO. 3 REPLACE C853, C854 & C856, ADD J859 ON PWB P851

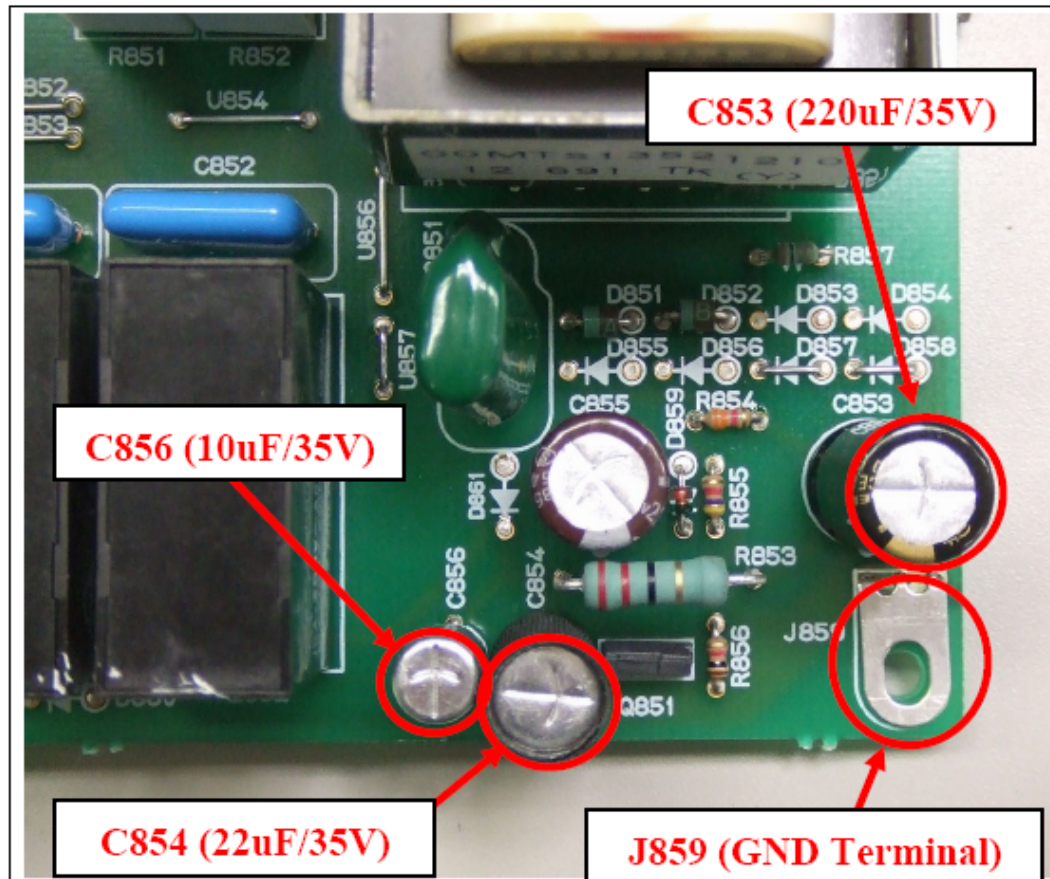
- 1) Wrap insulation tape* around the C854 capacitor in order to avoid contact and short with the other capacitor that stands side by side.



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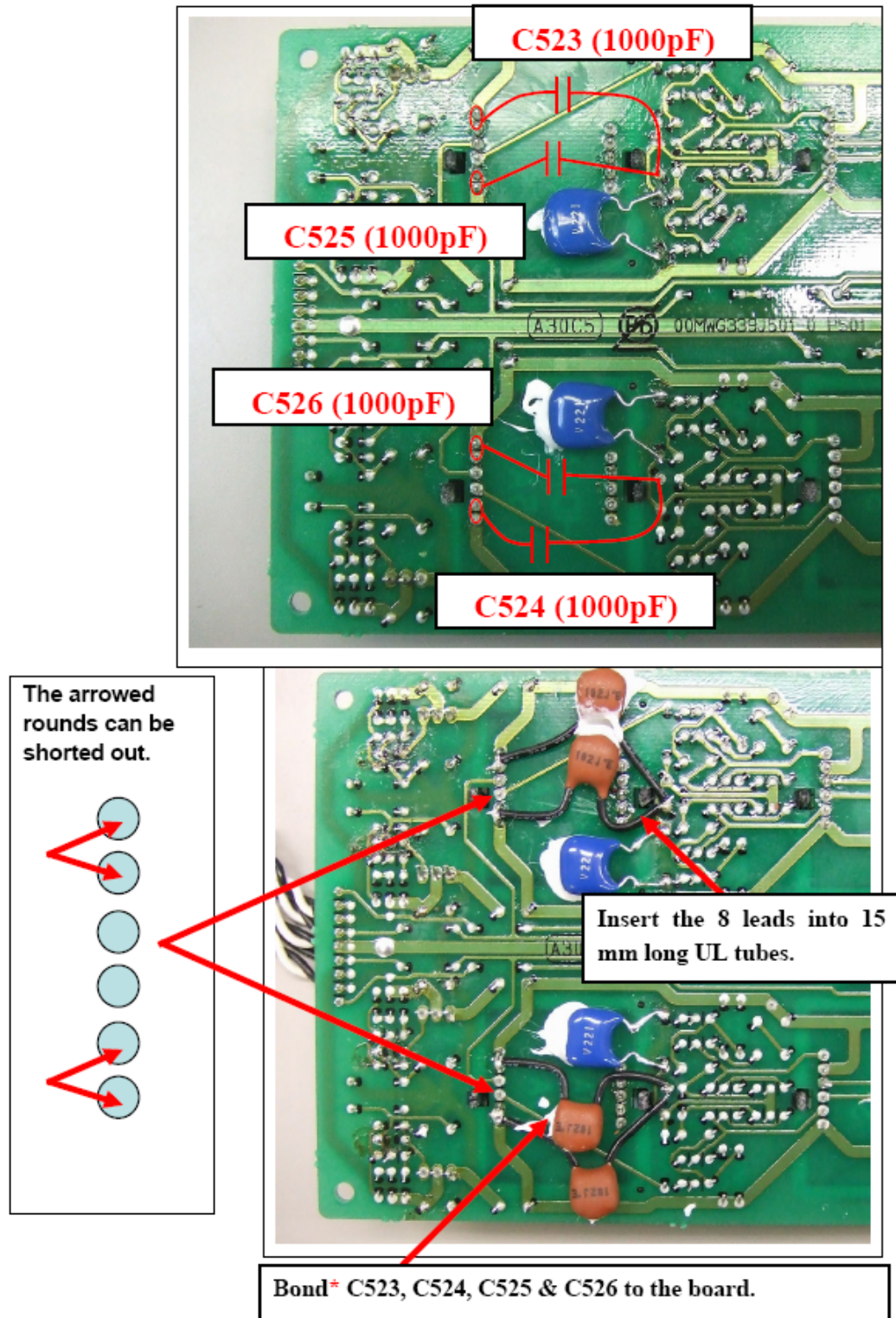
2) Replace the C853, C854 & C856 capacitors; then add a J859 ground terminal.



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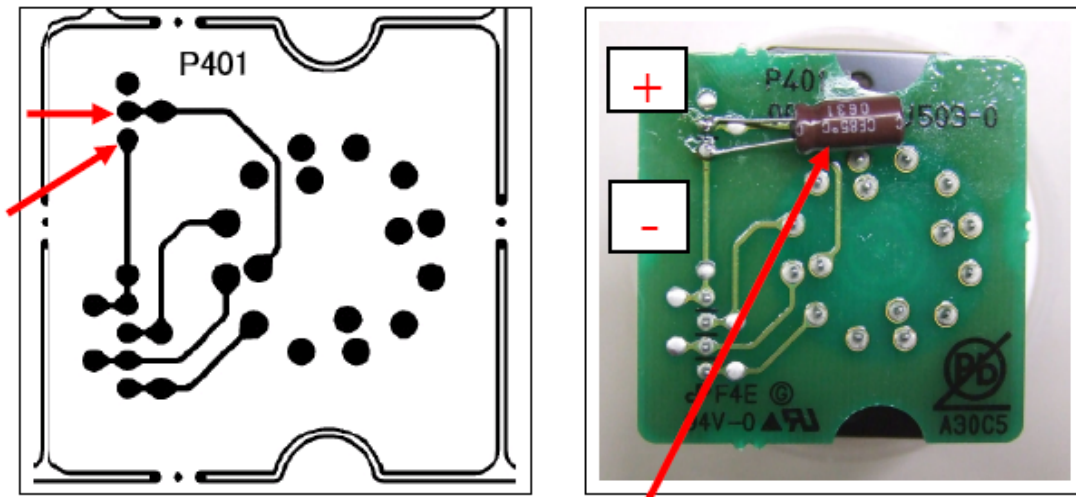
NO.4 ADD C523, C524, C525 & C526 TO PWB P501



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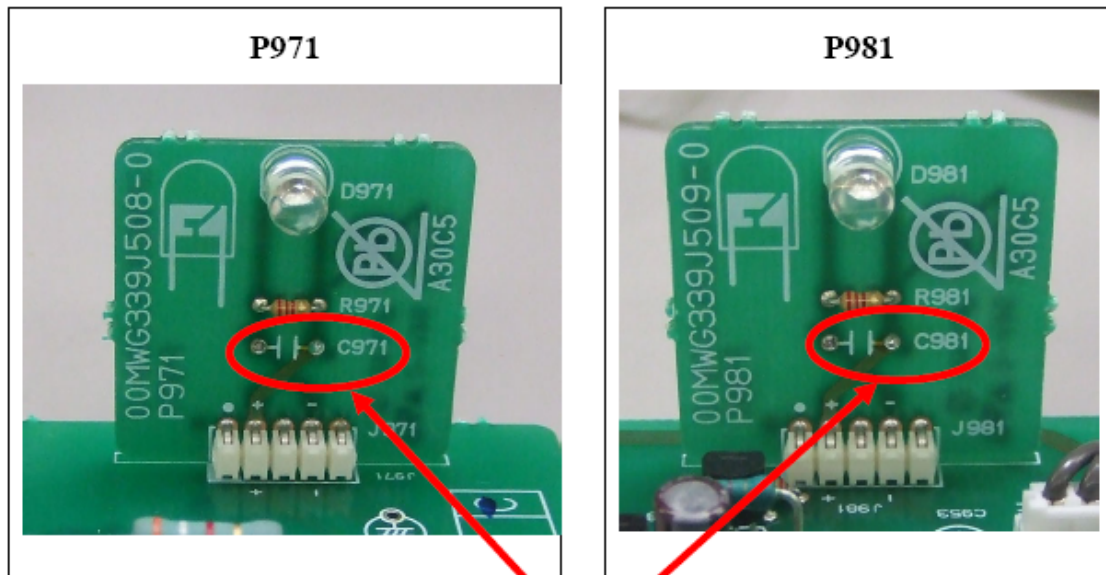
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NO. 5 ADD A C401 TO PWB P401



C401 (22uF/50V)
Solder and then bond* to the board.

NO. 6 REMOVE C971 & C981 FROM PWBs P971 & P981



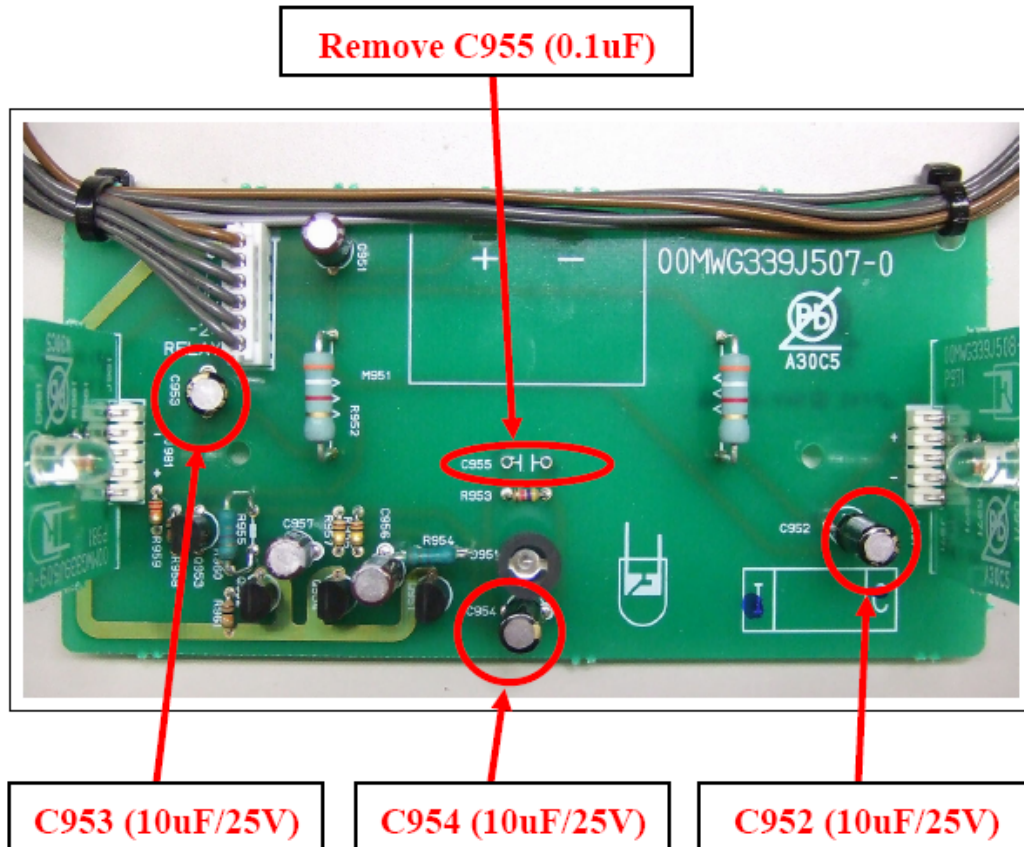
Remove C971 (0.1uF) & C981(01.uF)

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NO. 7 REPLACE C952, C953 & C954 FROM PWB P951; REMOVE C955; ADD C958 & C959

- 1) Replace the C952, C953 & C954 capacitors; and remove the C955.



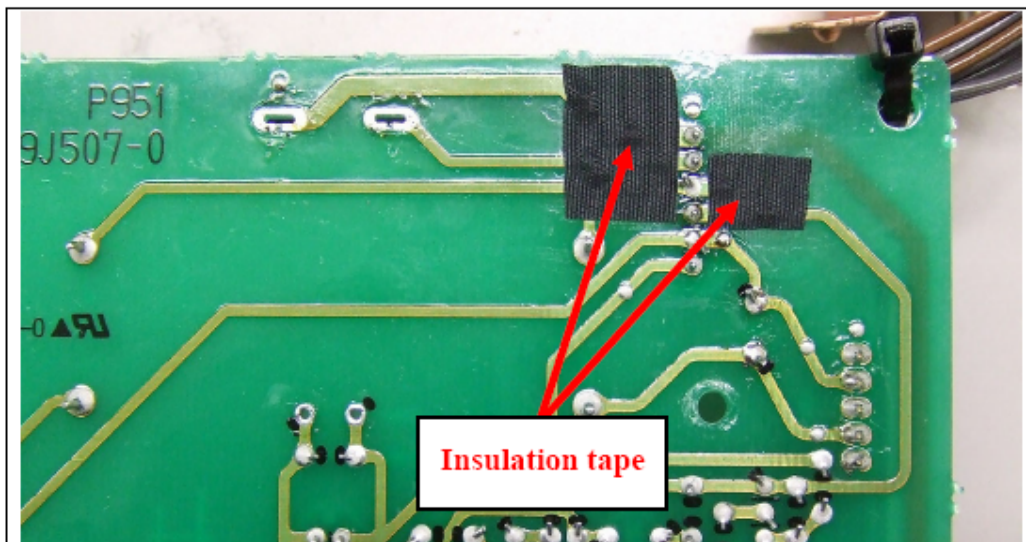
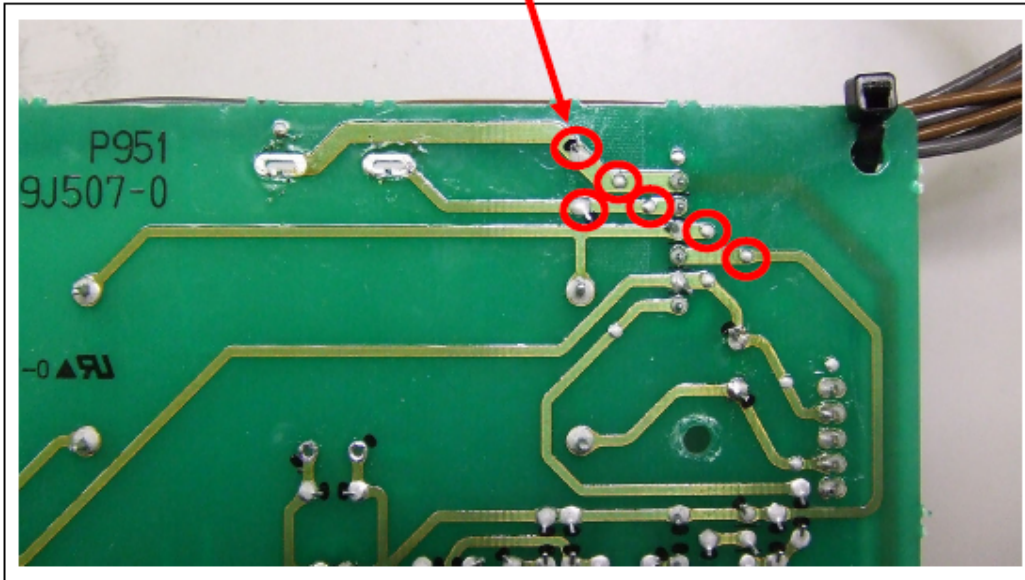
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2) Add C958 & C959.

Firstly, for insulation purposes, put strips of insulation tape* on the PWB P951.

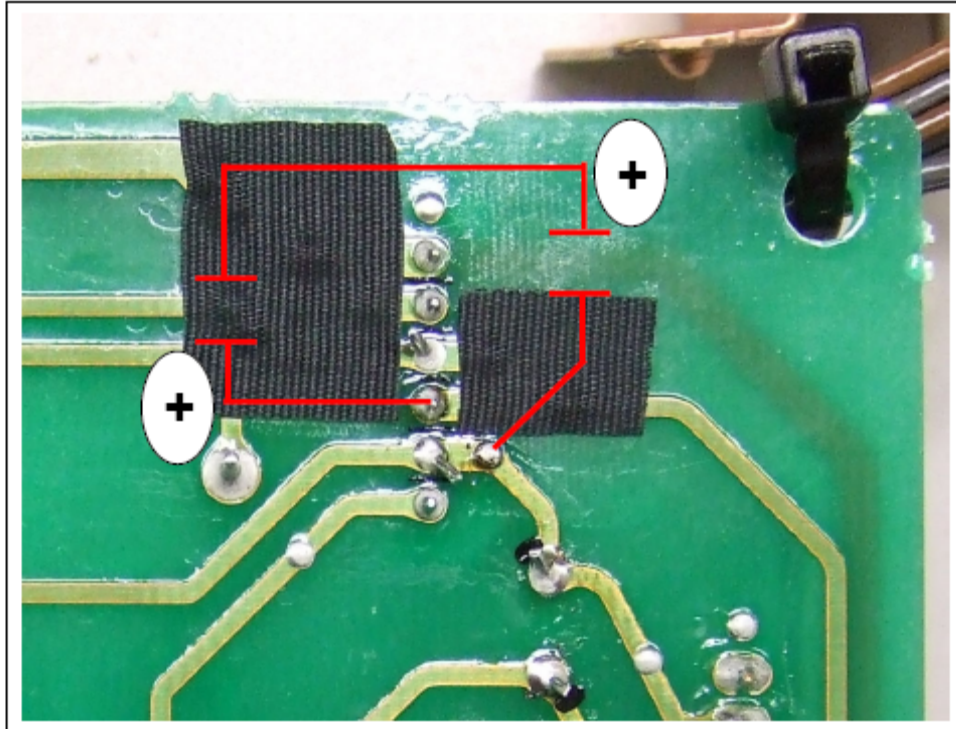
Cover the circled 6 lands with insulation tape*.



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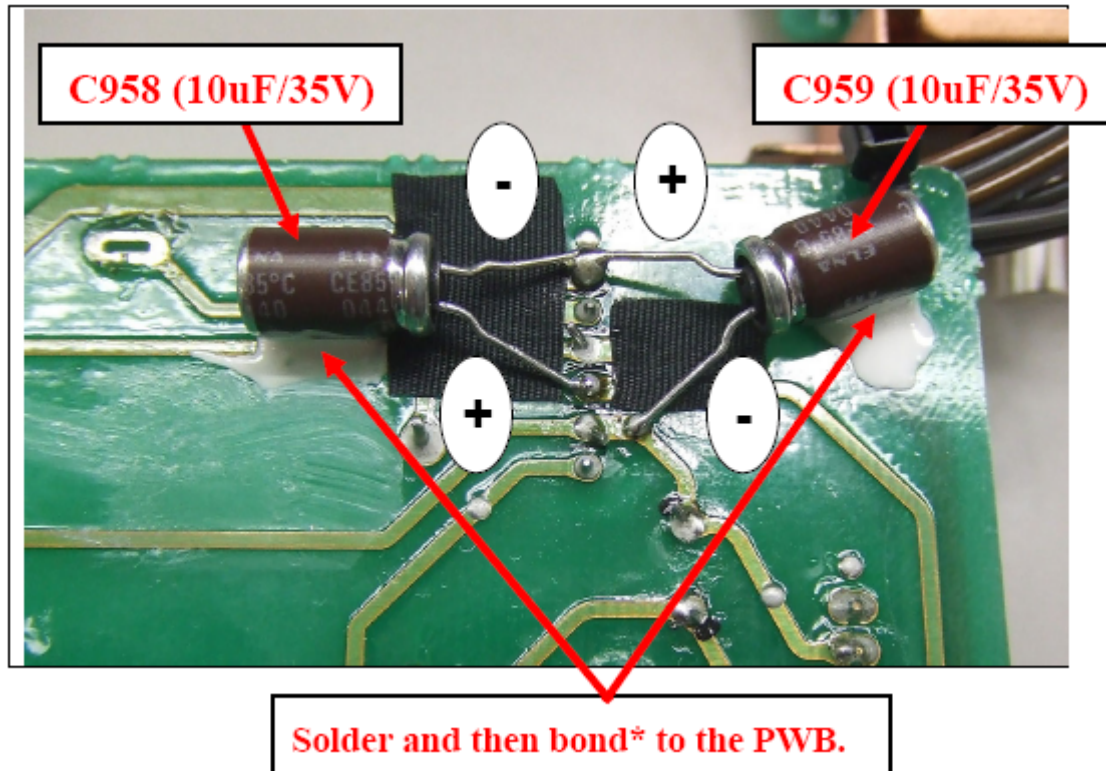
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Soldering positions for C958 & C959.



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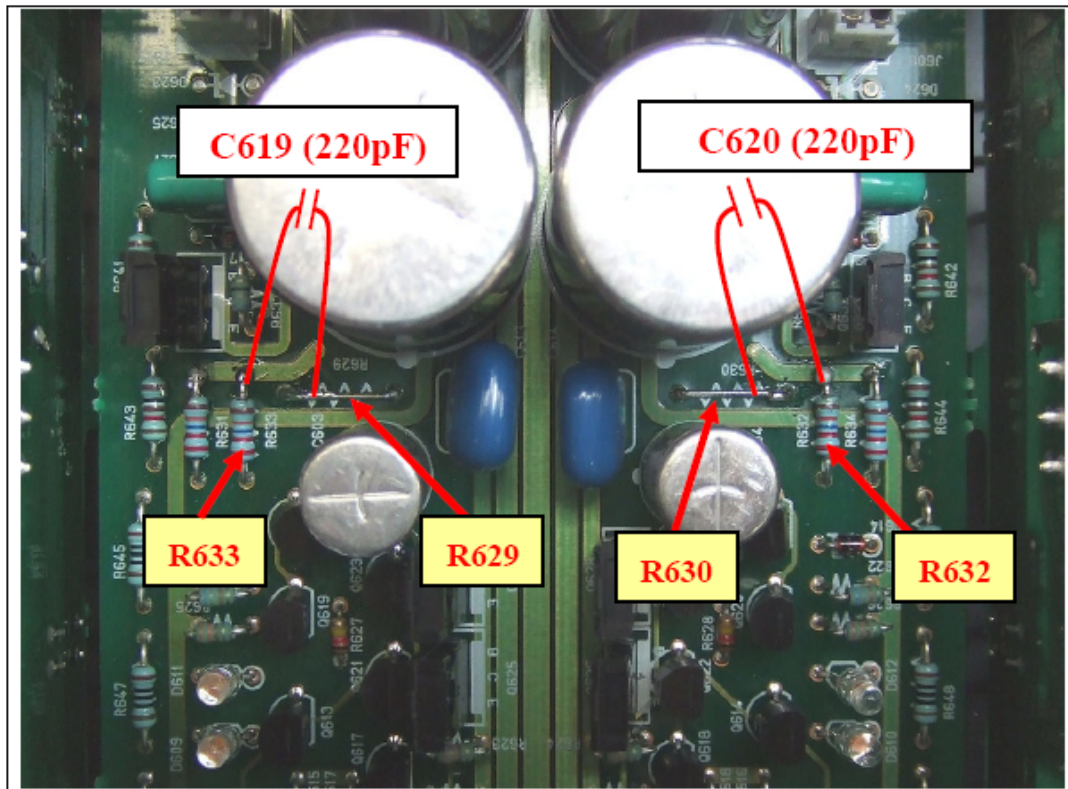


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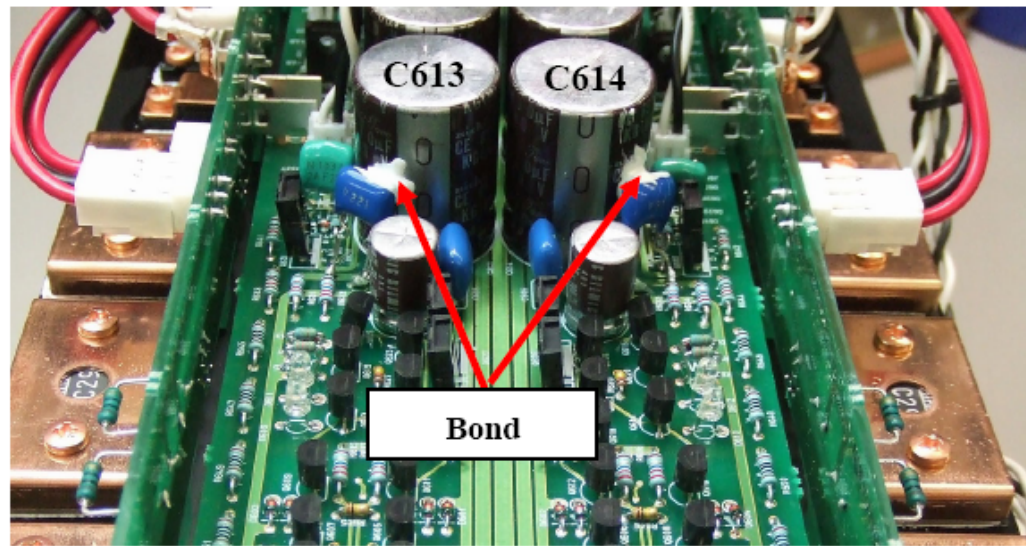
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NO. 8 ADD A C619 & C620 TO PWB P601

- 1) Solder C619 to one lead each of R633 and R629.
- 2) Solder C620 to one lead each of R630 and R632.



Solder and then bond close to C613 & C614.



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Parts:

CHANGED PARTS LIST

No	PWB NAME	POS. NO	OLD PART		NEW PARTS		QTY	
			PART NO.	DESCRIPTION	PART NO.	DESCRIPTION		
1	P201	C204	00MOF56221540	STAR(126)100VDC221J4-10	-	-	1	REMOVED
2	P371	C371 C372	-	-	00MOF55393580	0.039UF 100V +- 5% FAS	2	ADDED
3		J371 J372	-	-	00MYL01010140	M1698 PWB GND TERMINAL	2	ADDED
4		R371 R372	-	-	00MGA05100020	10 OHM +- 5% 2W	2	ADDED
5		W371	-	-	00MYB00183100	SRF-51T-4 AWG18 BLK OFC	1	ADDED
6	P381	C381 C382	-	-	00MOF55393580	0.039UF 100V +- 5% FAS	2	ADDED
7		J381 J382	-	-	00MYL01010140	M1698 PWB GND TERMINAL	2	ADDED
8		R381 R382	-	-	00MGA05100020	10 OHM +- 5% 2W	2	ADDED
9		W381	-	-	00MYB00183100	SRF-51T-4 AWG18 BLK OFC	1	ADDED
10	P401	C401	-	-	00MOA22605020	22 UF M 50V RA-2	1	ADDED
11	P501	C523 C524 C525 C526	-	-	00MOF55102570	DTG 1000PF 100V	4	ADDED
12	P601	C619 C620	-	-	00MOF56221540	STAR(126)100VDC221J4-10	2	ADDED
13	P851	C853	00MOA22703520	220UF 35V M RA-2	00MOA227035R0	ROA-35V 221M-I6#PE-S13(220UF 35V)	1	REPLACED
14		C854	00MOA47603520	47UF M 35V RA-2	00MOA226035Z0	ROS-35V 220M-G3#PE-T2(22UF 35V)	1	REPLACED
15		C856	00MOA10605020	10 UF M 50V RA-2	00MOA106035Z0	ROS-35V 100M-F3#PE-T2(10UF 35V)	1	REPLACED
16		J859	-	-	00MYL01010240	GND TERMINAL	1	ADDED
17	P951	C952 C953 C954	00MOA10602520	10 UF M 25V RA-2	00MOA106025R0	ROA-25V 100M-E3#PE-T2(10UF 25V)	3	REPLACED
18		C955	00MDD38104010	50V DC 0.1UF+80-20%	-	-	1	REMOVED
19		C958 C959	-	-	00MOA106035Z0	ROS-35V 100M-F3#PE-T2(10UF 35V)	2	ADDED
20	P971	C971	00MDD38104010	50V DC 0.1UF+80-20%	-	-	1	REMOVED
21	P981	C981	00MDD38104010	50V DC 0.1UF+80-20%	-	-	1	REMOVED

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Ref#	Description	Part Number
NA	Parts Kit	90M-ZK000720R

For the 'INSULATION TAPE' and 'BOND', please use the following:
ELECTRICAL INSULATION TAPE TERAOKA's electrical insulation Tape No.570
(UL 510 Flame Retardant) or the equivalent
BOND SONY Chemical SC608LVZ Sony Chemical Corp. Self-extinguishing
adhesive) or the equivalent.

Serial Number Range:

A1000634000001 through A1000702000025.
A1000702000026 and afterwards: already corrected in production.

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