

## ARAGON 004 SERIES MARK II UPGRADE

PLEASE READ THROUGH THE INSTRUCTIONS COMPLETELY BEFORE BEGINNING

1. Disconnect line cord and remove top cover
2. De-solder and remove the following parts from each driver/output PCB:  
2004: R7, R23, R1, R2, R32, R33, R39, R10, C5 and C8  
4004: R7, R23, R1, R2, R32, R33, R9, R10, R38, R39, C5 and C8
3. Replace R7 and R23 with diode supplied. Note position of diode at R7 and R23 on assembly drawing.
4. Replace the remaining parts with the parts supplied as per the assembly drawing. Please note all resistors should be spaced off the PCB approximately 5 mm or 2/10 inch.
5. Solder 1MFD axial cap in parallel with 47 MFD cap.

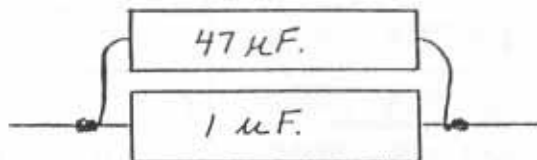


Diagram #2

Attach cap assembly to bottom of driver output board as per drawing "A" NOTE POLARITY ON 47 MFD CAPACITOR

6. Check all screw terminals for tightness. Do not over tighten "Aragon" and "Mondial" transistors.  
*\* GA - Replace Large Gold Ballast Resistor on Bottom of Chassis - 60Ω 50w 1%*
7. Plug amp into VARIAC and bring up voltage slowly while measuring DC millivolts across each emitter resistor (R11-14 & R34-37). Locate resistor with highest mv value and adjust to 10 mv + .5 using bias trimpot (near center of PCB).
8. Put 20k ohm resistor across input of one channel. Measure DC offset at speaker output terminals. Adjust trimpot (the one near the edge of the PCB) for reading of 0.0 +.1mv.
9. Repeat for other driver board.
10. Allow amp to idle 15 minutes and repeat steps 7, 8 & 9. Run under load for 1 hour or more then remove input and allow amp to idle 15 minutes and repeat test procedure (steps 7,8,9) Remove paper from adhesive backing and place SOUNDCOAT dampening sheet on inside of top cover, above the transformers.
11. Place MarkII plaque on rear panel above the fuse holder.

Parts list - MKII 076008

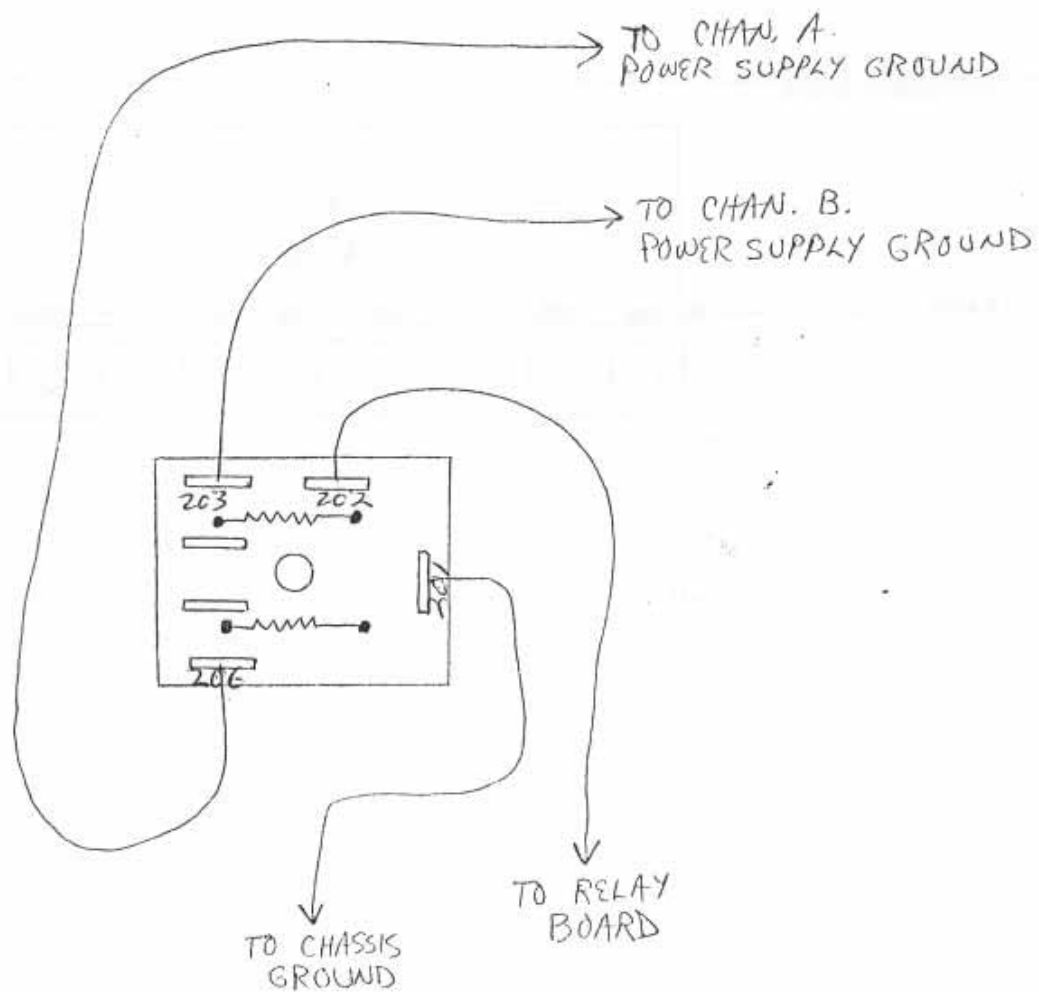
PART NUMBER	QTY.	DESCRIPTION	SYMBOL
105181	3	CAP, 62PF, 200v	C1, C4, C13
105182	2	CAP, 680PF, 300v	C2, C12
104126	1	CAP, 100PF, 200v	C3
105190	2	CAP, 0.1uF, 200v - Actual	C5, C8
104120	2	CAP, 1000uF, 16v	C6, C7
105183	1	CAP, 270PF, 250v	C9
104121	2	CAP, 470uF, 40v	C10, C11
100028	3	TRANS, MJE15030	Q1, Q2, Q13
100032	1	TRANS, 2SA968	Q3
100033	1	TRANS, 2SA970	Q4
100026	1	TRANS, 2SC2240	Q5
100029	1	TRANS, 2SC2238	Q6
100030	2	TRANS, MJE15031	Q7, Q8
100027	4	TRANS, 2SD 424	Q9, Q10, Q11, Q12
100031	4	TRANS, 2SB 554	Q14, Q15, Q16, Q17
102050	2	DIODE, 1N4148	D1, D2
107022	1	RES, 1K, 1/4w	R15
107011-315	1	RES, 15K, 1/4w	R3
107011-0825	1	RES, 825ohm, 1/4w	R4
107011-215	5	RES, 1.5K, 1/4w	R20, R5, R6, R21, R22
107011-047	4	RES, 47.5ohm, 1/2w	R9, R10, R38, R39 *
107027	8	RES, 0.33ohm, 2w METAL OXIDE - FLAMEPROOF	R11, R12, R13, R14, R34, R35 R36, R37 *
107011-110	4	RES, 100ohm, 1/4w	R16, R17, R18, R19
107030	1	RES, 49.9 K, 1/4w	R24
107011-320	5	RES, 20K, 1/4w	R25, R26, R27, R30, R31
107029	2	RES, 46.4K, 1/4w	R28, R29
102055	2	DIODE 1N5306	R7, R23
107028	1	RES, 3.01K, 1/4w	R8
107532	2	POT, 5K	RV1, RV2
103141	1	I.C., NTE 2323	U1
103142	1	I.C., MPQ 7091	U2
107011-100	2	RES, 100ohm flameproof	R2, R33 *
107011-111	2	RES, 1Kohm flameproof	R1, R32 *
104123	2	CAP, 47uF	Bottom see Diagram 2-20A

YOM supply

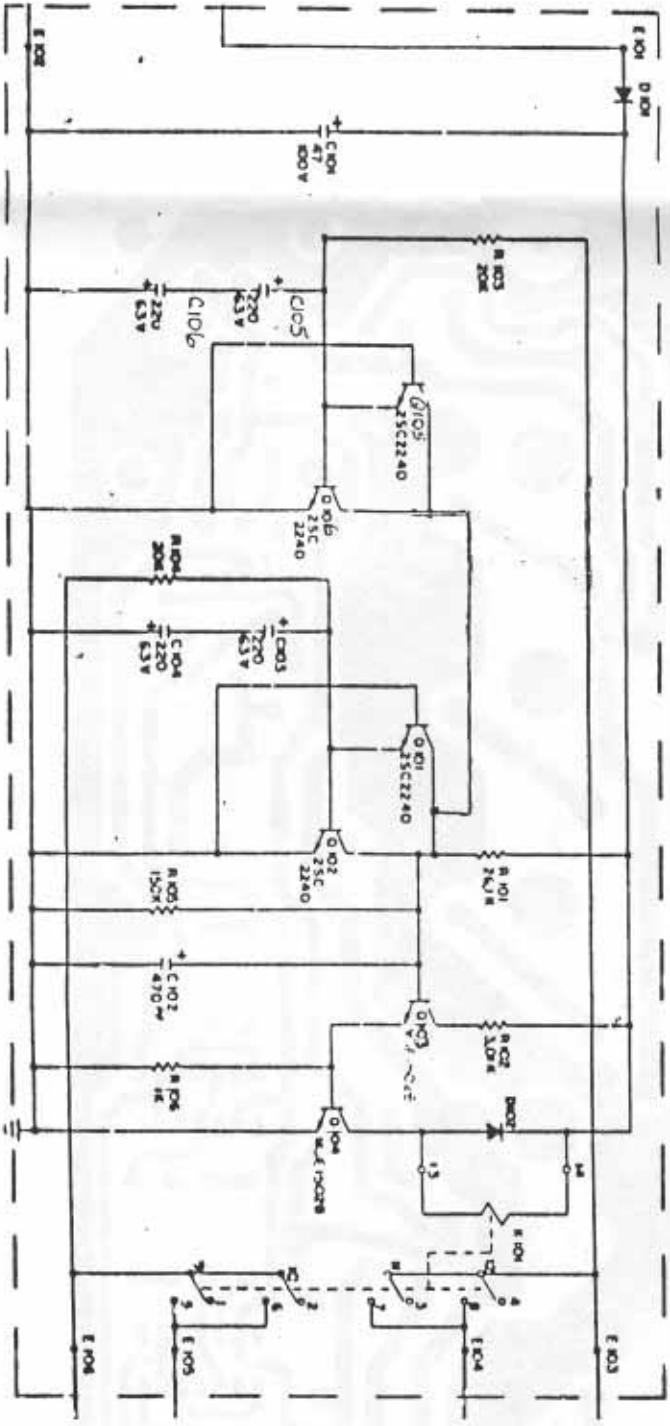




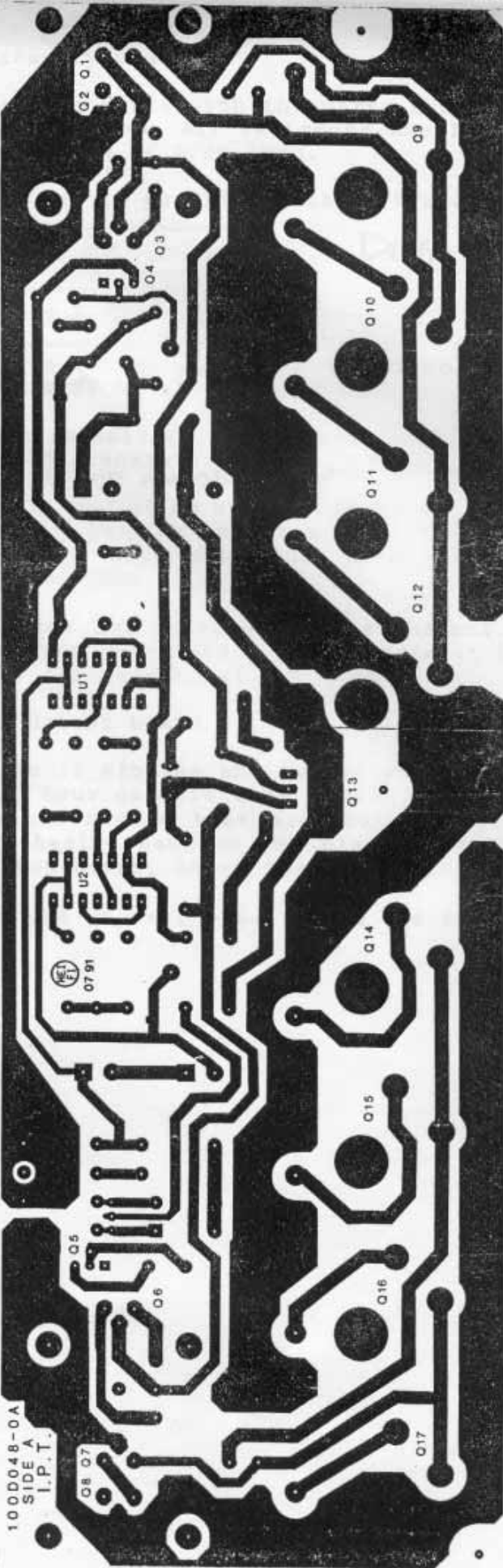
# PROPER CONNECTIONS TO CHASSIS GROUND CIRCUIT BOARD



R.P./lc. 11/16/57



*Reamy PCB*



100D048-0A  
SIDE A  
I.P.T.

100N048A09E04N001

*Bottom of Driver PCB's -*

*Diagram #2A  
DIPMAN*