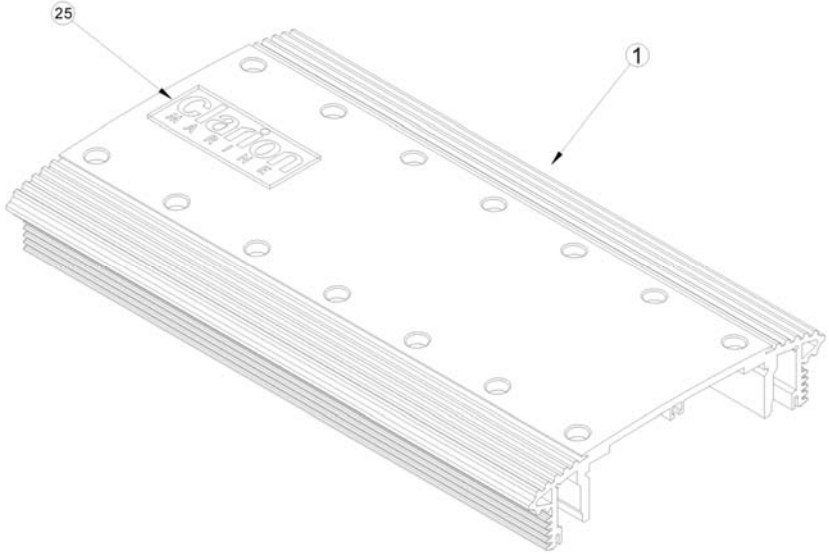
■TROUBLESHOOTING

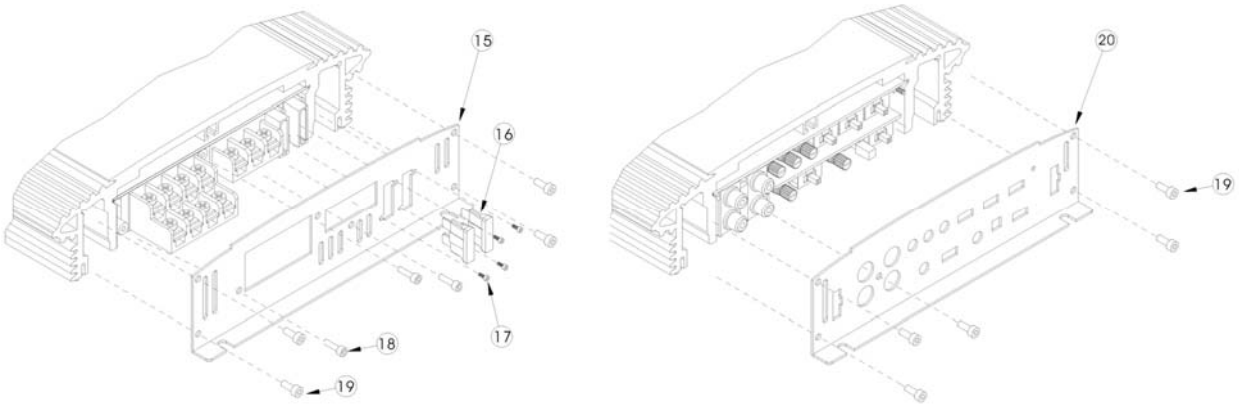
Problem	Possible Cause	Solution
No audio	Low or no turn-on voltage	Check remote connections at amplifier and main unit.
	Blown fuse	Replace with new fast-blow fuse (same rating)
	Power wires not connected	· Check Power and ground connection at amplifier · Check battery connections.
	Speakers not connected or blown	· Check speaker connections at amplifier. · Measure coil impedance.
Audio cycles on and off	Thermal protection circuits are shutting amplifier off	· Check location for adequate ventilation. · Consult an authorized Clarion dealer.
Distorted Sound	Gain controls is not set properly, or damage speaker cones.	· Adjust gain control. · Check each speaker cone for signs of damage(e.g., frozen cone, burning smell, etc).
Sound lacks punch	Speakers wired incorrectly, which causes cancellation of bass frequencies	Check polarity of wires from amplifier to each speakers as illustrated in connection examples.
Whining or ticking noise in the sound with engine on	Amplifier is picking up alternator noise or radiated noise	· Check power and ground connections on amplifier. · Check or move audio cables. · Install an in-line noise filter on main units power wire. · Test for weak battery or add water to battery. · Check alternator and / or voltage regulator.

■EXPLODED VIEW / PART LIST:

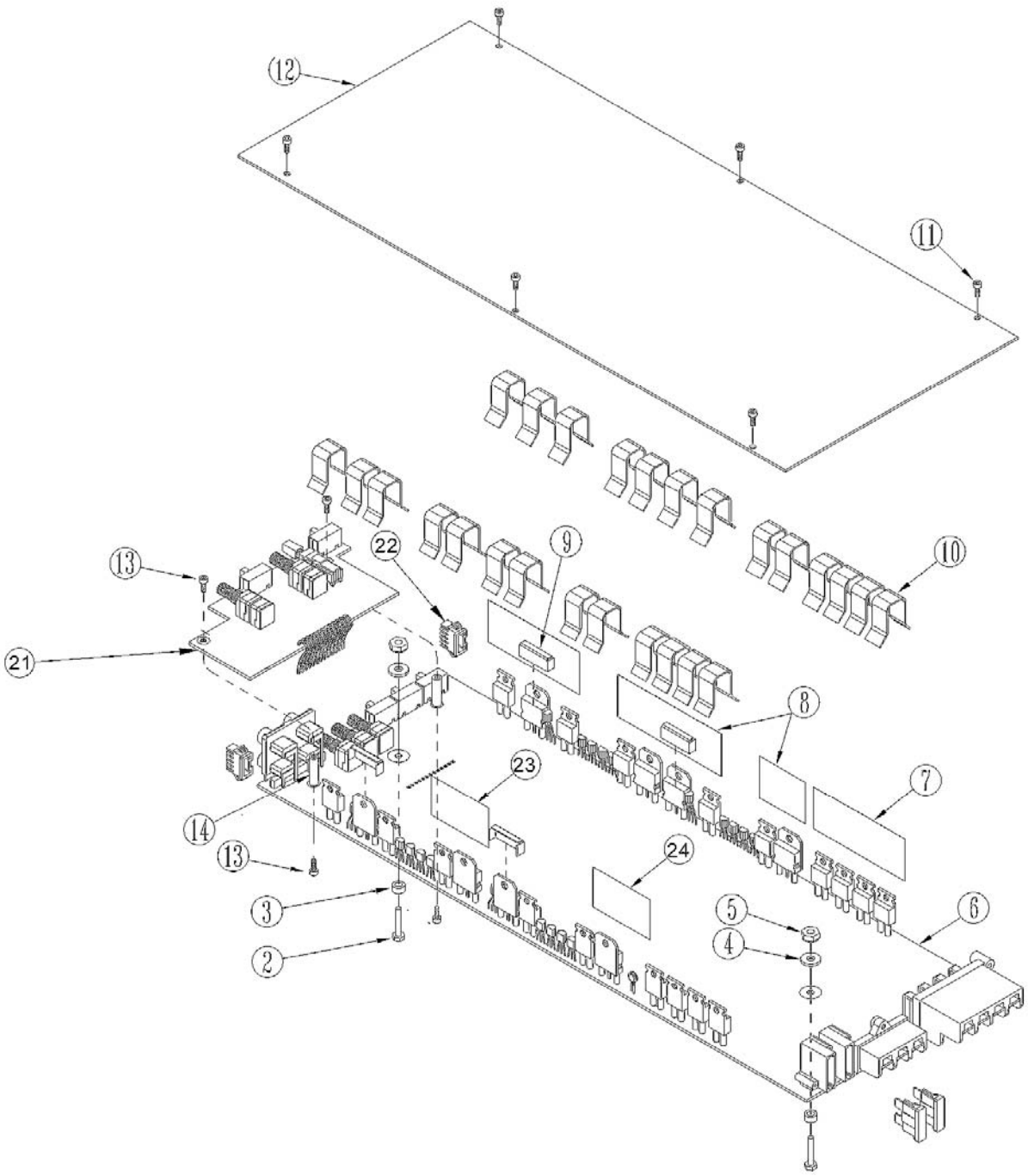
TOP VIEW



SIDE VIEW



BOTTOM VIEW



REF NO	PART NO	DESCRIPTION	Q'TY
1	77-00295-00	HEATSINK APX480M	1
2-5	YH-00007-00	SCREW A+B+C+D	2
6	11-00601-00	P.C.B.	1
6	78-00284-00	SILICON TUBE 2mm*6mm	16
6	78-00292-00	SILICON TUBE 2mm*8mm	36
6	78-00348-00	SILICON TUBE 1mm*8mm	43
7	78-00305-00	MICA 25*30mm	4
8	78-00306-00	MICA 25*40mm	8
9	74-00165-00	IC CLIP	4
10	74-00153-00	CLIP	26
11	ST-RP230-08	SCREW RP3*8	6
12	72-00398-00	BOTTOM COVER 380mm	1
12	78-00296-00	SPONGE 10*20mm	10

REF NO	PART NO	DESCRIPTION	Q'TY
13	SM-RP230-06	SCREW RP 3*6	4
14	74-00154-00	COPPER TUBE	2
15	71-00577-00	REAR PANNEL	1
16	76-00279-00	FUSE ATU-25A	2
17	ST-RP120-08	SCREW RP 2*8mm	4
18	ST-IH130-12	SCREW 3*12	3
19	ST-IH130-08	SCREW 3*8	9
20	71-00576-00	FRONT PANNEL	1
21	11-4320X-01	P.C.B. XOVER	1
22	34-00150-04	INPUT CONNECTOR	2
23	78-00307-00	MICA 25*50mm	2
24	78-00310-00	KAPTON 25mm*65mm	1
25	75-00002-MM	CLARION MARINE BADGE	1

■ELECTRICAL PART LIST:

MAIN PWB SECTION

REF No	PARTNO	DES	SPEC	Q'ty
C1 C3 C47 C10 C12 C17 C22-24 C26-32 C40 C47 C49 C50 C52 C54 C55 C59 C72 C76-78 C80-84 C86 C90-92 C98 C108 C110 C113 C118	03-21040-04	POLY CAP	104J	43
C11 C18 C100 C105	03-21020-04	POLY CAP	102J	4
C13 C14 C34 C35 C66 C67 C89 C94 C95 C106 C111 C119	04-20330-02	CERAMIC -NPO-	33P/J 100V	12
C19 C42 C51 C93	03-24740-04	POLY CAP	474J	4
C2 C117	02-24701-21	ELE. CAPACITOR	47uF/16V	2
C20 C25 C75 C87	02-21002-00	ELE. CAP -NP-	100uf/16V	4
C21 C39 C85	03-21030-04	POLY CAP	103J	3
C33 C36 C68 C69	04-20100-02	CERAMIC -NPO-	10P/J 50V	4
C37 C38 C56 C57	02-21003-41	E/C.16*26 L ESR	1000uf/50V 105C	4
C41	03-24720-04	POLY CAP	472J	1
C45	03-24730-04	POLY CAP	473J	1
C46 C58	03-26820-04	POLY CAP	682J	2
C5 C6 C43 C44 C48 C60 C61 C62 C88 C96 C102 C104 C114-116	02-21001-41	ELE. CAPACITOR	10uf/50V	15
C53 C65	02-26803-21	ELE. CAPACITOR	6800uf/16V ESR	2
C70 C71	02-24702-21	ELE. CAPACITOR	470uf/16V	2
C73	02-21000-41	ELE. CAPACITOR	1uf/50V	1
C79 C101	03-22720-04	POLY CAP	272J	2
C8 C15 C63 C74 C97 C103 C107 C112	04-20680-02	CERAMIC -NPO-	68P/J 50V	8
C9 C16 C99 C109	03-21510-05	CAPACITOR	151P/K	4
D1-4	09-40008-00	RECT ULTRAFAST	FES8DT,MUR820	4
D14 DA6 D24 D25	09-14934-00	DIODE FAST 100V	1N4934,1N4734	4
D26	09-15401-01	DIODE	IN5402 3A/200V	1
D5-13 D15 D17-23 D27 D28	09-14148-01	DIODE 1N4148	DO-35 50mA 100V	19
DZ1	09-20100-03	ZENER DIODE	HZ11-2TA 10V	1
DZ2 DZ4	09-20160-03	ZENER DIODE	HZ16-2TA 16V	2
DZ3	09-20120-03	ZENER DIODE	1N759A 12V 1/2W	1
DZ5 DZ6	09-00510-00	ZENER DIODE	1N5262B 51V	2
FH1 FH2	76-00239-00	FUSE HOLD	JEF-703E	2
J1	32-00639-01	TERMINAL 4P*2	JSZ8B-04	1
J2	26-00348-00	CABLE (GRAY)	13PIN 60mm 3*3	1
J3	32-00669-00	TERMINAL	ST-113U-3P	1
J4	32-20425-03	RCA JACK 4P	WSP-204V-06	1
L1-4	20-00107-00	COIL (17-1/2)	SMALL ZIBBLE	4
L5	01-00060-00	Jumper	2mm*19mm	1
LED1	19-00302-04	LED BLUE -DOT-	SB434C	1
M1-4	08-50N06-00	FET	FQP50N06	4
Q1 Q10 Q43 Q52	08-00035-00	TRANSISTOR 'ST'	TIP35C	4
Q2 Q6 Q7 Q11 Q15 Q16 Q23 Q24 Q27-29 Q32 Q33 Q36 Q37 Q42 Q47 Q48 Q51 Q56 Q57	08-10006-01	T.R	MPSA06	21
Q3 Q12 Q44 Q53	08-00031-00	TRANSISTOR	TIP31C	4
Q4 Q5 Q13 Q14 Q19-22 Q25 Q26 Q30 Q31 Q34 Q35 Q38 Q39 Q41 Q45 Q46 Q54 Q55	08-10056-01	T.R	MPSA56	21
Q40	08-26715-00	TRANSISTOR	2N6715 2A 50V	1
Q8 Q17 Q49 Q58	08-00032-00	TRANSISTOR	TIP32C	4
Q9 Q18 Q50 Q59	08-00036-00	TRANSISTOR 'ST'	TIP36C	4
R 253	01-51040-63	RESISTOR 1%	100 K 1/8W	1
R1 R241	01-52710-63	RESISTOR 1%	274 ohm 1/8W	2
R10 R237	01-53420-63	RESISTOR 1%	3.48 K 1/8W	2
R104	01-13000-22	RESISTOR -MO-	30 ohm 1/2W	1
R11 R16 R36 R53 R90 R94 R116 R121 R142 R146	01-55001-43	RESISTOR 1%	5.1 ohm 1/4W	10
R110	01-52200-63	RESISTOR 1%	221 ohm 1/8W	1
R113	01-53120-22	RESISTOR 1%	3.16 K 1/2W	1
R115 R127 R136 R147 R151 R204 R213 R214	01-51030-63	RESISTOR 1%	10 K 1/8W	8
R12 R13 R15 R19 R22 R25 R26 R37 R38 R106-109 R119 R123 R130 R132 R186	01-54720-63	RESISTOR 1%	4.75 K 1/8W	18
R124	01-51538-63	RESISTOR 1%	15.8 K 1/8W	1
R125	01-54710-43	RESISTOR 1%	475 ohm 1/4W	1
R126	01-53340-63	RESISTOR 1%	332 K 1/8W	1
R128	01-54340-63	RESISTOR 1%	432 K 1/8W	1
R131	01-54700-63	RESISTOR 1%	47.5 ohm 1/8W	1
R133 R134 R230 R231	01-52130-63	RESISTOR 1%	21 K 1/8W	4
R138 R154 R201 R227	01-55910-63	RESISTOR 1%	590 ohm 1/8W	4

R14 R20 R42 R57 R64 R79 R155 R174 R199 R208	01-58220-63	RESISTOR 1%	8.25 K 1/8W	10
R149	01-51420-63	RESISTOR 1%	1.43 K 1/8W	1
R166 R205	01-12750-63	RESISTOR	2.7 M 1/8W	2
R17 R18 R24 R27 R212 R215 R222 R224	01-10001-22	RESISTOR -MO-	0.1 ohm 1/2W	8
R170	01-59320-63	RESISTOR 1%	9.31 K 1/8W	1
R171	01-54730-63	RESISTOR 1%	47.5 K 1/8W	1
R187 R206 R226 R240	01-52230-63	RESISTOR 1%	22.1 K 1/8W	4
R190 R200 R232 R236	01-53330-63	RESISTOR 1%	33.2 K 1/8W	4
R223 R225	01-51000-63	RESISTOR 1%	10 ohm 1/8W	2
R228	01-54740-63	RESISTOR 1%	475 K 1/8W	1
R229	01-55120-63	RESISTOR 1%	5.11 K 1/8W	1
R23 R118 R129 R202	01-53910-43	RESISTOR 1%	392 ohm 1/4W	4
R252	01-52430-63	RESISTOR 1%	24.3 K 1/8W	1
R28 R31 R32 R35 R49 R50 R66 R69 R71 R74 R81 R84 R86 R89 R114 R153 R156 R158 R161 R163 R175 R177 R180 R182 R193 R195 R196 R216 R218 R219 R234 R235 R238 R239 R250 R251	01-52206-63	RESISTOR 1%	22.1 ohm 1/8W	36
R29 R46 R188 R207	01-59000-63	RESISTOR 1%	909 ohm 1/8W	4
R2-9 R62 R63 R137 R242-249	01-51010-63	RESISTOR 1%	100 ohm 1/8W	19
R30 R34 R48 R52 R194 R198 R217 R221	01-54710-63	RESISTOR 1%	475 ohm 1/8W	8
R33 R43 R51 R58 R167 R197 R210 R220	01-56320-63	RESISTOR 1%	6.34 K 1/8W	8
R39 R40 R100 R101 R139 R140 R191 R192 R233 R254 R255	01-52030-63	RESISTOR 1%	20 K 1/8W	11
R41 R47 R150 R185 R203	01-52120-63	RESISTOR 1%	2.15 K 1/8W	5
R44 R60 R61 R103 R168 R209	01-59300-63	RESISTOR 1%	93.1 ohm 1/8W	6
R45 R59 R169 R211	01-55618-63	RESISTOR 1%	56.2 ohm 1/8W	4
R54 R105	01-57510-63	RESISTOR 1%	750 ohm 1/8W	2
R55 R56 R75 R91 R92 R97 R143 R144 R172 R173	01-51830-63	RESISTOR 1%	18.2 K 1/8W	10
R65 R70 R80 R85 R157 R162 R176 R181	01-56800-63	RESISTOR 1%	681 ohm 1/8W	8
R67 R72 R76 R82 R87 R99 R111 R117 R145 R152 R160 R165 R179 R184	01-51020-63	RESISTOR 1%	1 K 1/8W	14
R68 R73 R83 R88 R93 R102 R141 R148 R159 R164 R178 R183 R189	01-52020-63	RESISTOR 1%	2 K 1/8W	13
R78 R96	01-51101-63	RESISTOR 1%	1.1 K 1/8W	2
R98 R112	01-52440-63	RESISTOR 1%	243 K 1/8W	2
SW1-3	18-30001-01	SWITCH SV65020	-0203-6H-01-FN	3
TH1 TH2	13-11003-00	THERMISTOR RES.	TDC05D410L 100K	2
U1	07-00337-00	I.C. 'FSC'	KA337TU	1
U13	07-00393-01	I.C	LM393N	1
U14	07-03525-01	I.C. 'FSC'	KA3525A	1
U15	07-00317-00	I.C. 'FSC'	KA317TU	1
U2 U5 U11	07-00072-01	I.C 'ST'	TL072CN	3
U3 U7 U8	07-05532-00	I.C.	NJM5532DD	3
U4	07-00074-01	I.C. 'ST'	TLO74CN	1
U6 U10	07-00035-00	I.C.	4N35 LITEON	2
U9 U12	07-00837-00	I.C. 'ON'	MC33079N,LM837N	2
VR1 VR2 VR6 VR7	13-00207-00	TRIM-6-VERT-500	500 ohm	4
VR3-5	15-20203-15	VR 20KB*2	RK097122011K	3
X1	20-00146-00	TRANSFORMER	APA4320	1

CROSS-OVER

REF No	PARTNO	DES	SPEC	Q'ty
C1 C3 C5 C7 C15-18	03-25630-04	POLY CAP	563J	8
C11-14	04-20680-02	CERAMIC -NPO-	68P/J 50V	4
C2 C4 C6 C8	03-25620-04	POLY CAP	562J	4
C9 C10 C19 C20	03-21040-04	POLY CAP	104J	4
J1	26-00372-00		#26*2	1
R13-20	01-54720-63	RESISTOR 1%	4.75 K 1/8W	8
R1-4 R7-10 R21-26 R31-32	01-52020-63	RESISTOR 1%	2 K 1/8W	16
R5 R11 R27 R28	01-51420-63	RESISTOR 1%	1.43 K 1/8W	4
R6 R12 R29 R30	01-53420-63	RESISTOR 1%	3.48 K 1/8W	4
S1	18-00862-00	SW SP70300-0402	11SB-N W/ KNOB	1
SW1-2	18-30001-01	SWITCH SV65020	-0203-6H-01-FN	2
U1 U4	07-00072-01	I.C 'ST'	TL072CN	2
U2 U3	07-00074-01	I.C. 'ST'	TLO74CN	2
VR1 VR2	15-40050-05	VR C50K*4	RK097142001E	2