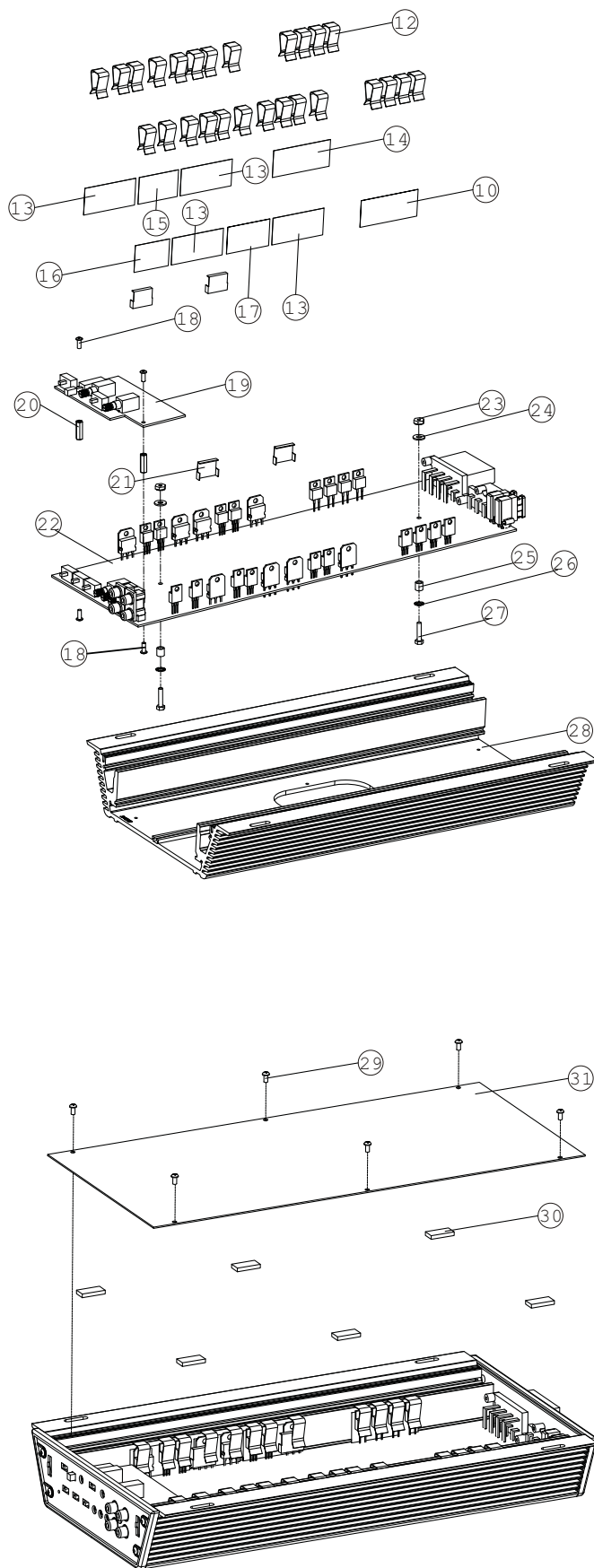
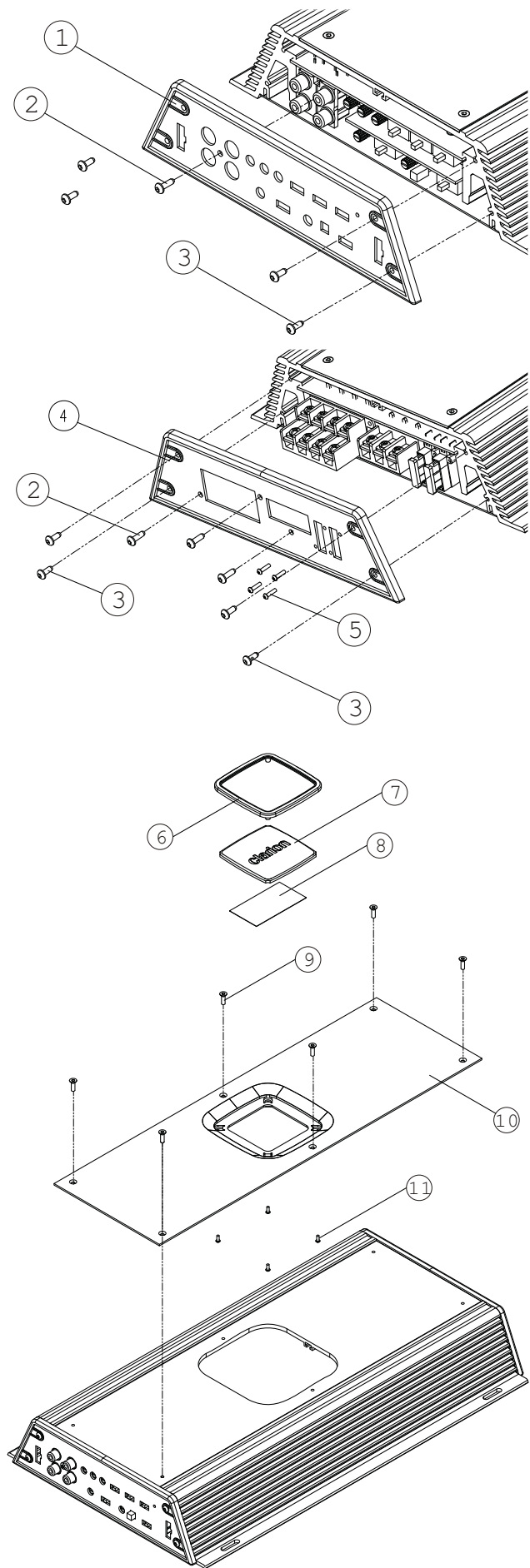


■TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
NO AUDIO	LOW OR NO REMOTE TURN-ON VOLTAGE	CHECK REMOTE CONNECTIONS AT AMPLIFIER AND SOURCE UNIT.
	BLOWN AMPLIFIER FUSE	REPLACE WITH NEW FAST-BLOW FUSE (SAME RATING).
	POWER WIRES NOT CONNECTED	CHECK BATTERY AND GROUND WIRING AT AMPLIFIER; ALSO CHECK BATTERY CONNECTIONS.
	SPEAKER LEADS SHORTED	CHECK SPEAKER CONTINUITY TO GROUND, IT SHOULD NOT SHOW A COMMON GROUND.
	SPEAKERS NOT CONNECTED OR ARE 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 AUDIO DEALER.
DISTORTED AUDIO.	GAIN IS NOT SET PROPERLY, OR DAMAGED SPEAKER CONES	REVIEW SETTING GAIN; INSPECT EACH SPEAKER CONE FOR SIGNS OF DAMAGE (I.E., FROZEN CONE, BURNING SMELL, ETC.)
AMPLIFIER FUSE KEEPS BLOWING	INCORRECT WIRING OR SHORT CIRCUIT	REVIEW INSTALLATION AND CHECK ALL WIRING CONNECTION.
WHINING OR TICKING NOISE IN THE AUDIO WITH ENGINE ON.	AMPLIFIER IS PICKING UP ALTERNATION NOISE OR RADIATED NOISE	TURN DOWN INPUT GAIN AND MOVE AUDIO CABLES AWAY FROM POWER WIRES. CHECK POWER AND GROUND CONNECTIONS ON AMPLIFIER AND INSTALL AN IN-LINE NOISE FILTER ON SOURCE UNIT'S POWER WIRE. ALSO CHECK THE ALTERNATOR AND /OR VOLTAGE. TEST FOR WEAK BATTERY OR ADD WATER TO BATTERY.

■EXPLODED VIEW / PARTS LIST

REF	PART NO	DESCRIPTION	Q'TY
1	71-00765-00	FRONT PANEL PC BLACK [6C] APX490M	1
2	ST-IH430-10-S	SUS TAPPING SCREW T3.0*10mm HEX SOCKET BLACK	4
3	ST-IH430-08-S	SUS TAPPING SCREW T3.0*8mm HEX SOCKET BLACK	8
4	71-00766-00	REAR PANEL PC BLACK [6C] APX490M	1
5	ST-RP420-08-S	SUS TAPPING SCREW T2.0*8mm ROUND BLACK	4
6	10-00722-00	VR BOARD APX490M v1.07	1
7	75-00241-00	LOGO ABS	1
8	76-00443-00	LIGHT GUIDE PLATE M-TYPE FR-1 0.25	1
9	SM-NF230-08-S	SUS MACHINE SCREW M3*8mm FLAT HEX SOCKET NI	6
10	72-00507-00	TOP COVER L=376.1	1
11	ST-RP420-05-S	SUS TAPPING SCREW T2*5mm ROUND BLACK	4
12	74-00153-00	CLIP BLACK	26
13	78-00395-00	MICA 25mm*52mm	4
14	78-00478-00	MICA 25mm*58mm	2
15	78-00306-00	MICA 25mm*40mm	1
16	78-00383-00	MICA 25mm*35mm	1
17	78-00477-00	MICA 25mm*43mm	1
18	SM-RP430-08-S	SUS MACHINE SCREW M3.0*8mm ROUND BLACK	4
19	75-00242-00	LOGO FRAME ABS	1
20	76-00441-00	PLASTIC BAR HEX H-16	2
21	74-00213-00	TRANSISTOR CLIP	4
22	10-00721-00	PCB APX490 v1.07	1
23	YH-00026-00	NUT K/NUT6#-32TSZ	2
24	YH-00025-00	WASHER PW4.2*10*1.0SZ	2
25	YH-00024-03	COPPER RING CU COVER6.3*6.5*4.0NO	2
26	YH-00029-00	NUT BW3.5*8*0.5SZ	2
27	YH-00027-01	SCREW W/O '+'	2
28	77-00385-00	HEATSINK L=376.1 APX490M 877C	1
29	ST-RP430-06-S	SUS TAPPING SCREW T3.0*6mm ROUND BLACK	6
30	78-00296-00	SPONGE 10*20mm, 3mm	6
31	72-00506-00	BOTTOM COVER APX490M BLACK	1



■ ELECTRICAL PART LIST (Main Board)

PART NO	DESCRIPTION	Q'TY	REF NO
04-21040-87	CERAMIC 104/Z 50V 0805	41	C1 C2 C9 C11 C13 C20 C21 C22 C23 C24 C30 C37 C45 C51 C52 C54 C55 C57 C61 C63 C68 C69 C76 C84 C86 C89 C92 C99 C100 C101 C102 C103 C106 C109 C113 C116 C119 C124 C125 C128 C129
02-24701-31	E/C 47uf 25V 105° 6.3*11	2	C126 C127
02-21001-41	E/C 10uf 50V 5*11	15	C16 C17 C18 C19 C47 C65 C66 C94 C95 C96 C97 C104 C105 C120 C130
04-20330-86	CERAMIC 33P/J 50V 0805	12	C26 C34 C39 C40 C67 C73 C75 C77 C80 C81 C112 C114
02-21002-00	NP CAPACITOR 100uf 16V 8*11	4	C27 C36 C78 C87
04-22730-85	CERAMIC 273/K 50V 0805	4	C3 C4 C122 C123
04-20100-86	CERAMIC 10P/J 50V 0805	4	C31 C38 C83 C88
04-21020-85	CERAMIC 102/K 50V 0805	4	C32 C35 C82 C90
02-21003-41	E/C 1000uf 50V LOW ESR 16*26	4	C42 C43 C58 C59
04-24720-86	CERAMIC 472/K 50V 0805	1	C46
04-24740-86	CERAMIC 474/Z 25V 0805	2	C48 C74
04-26820-85	CERAMIC 682/K 50V 0805	2	C49 C56
04-20680-85	CERAMIC 68P/J 50V 0805	8	C5 C15 C62 C64 C91 C93 C107 C121
04-21030-85	CERAMIC 103/K 50V 0805	2	C50 C72
04-24730-85	CERAMIC 473/K 50V 0805	1	C53
06-00104-03	CAP MMYL ECQV 1H104JL 50V P=5	8	C6 C7 C25 C28 C29 C33 C41 C44
02-26803-21	E/C 6800uf 16V LOW ESR 18*30	3	C60 C79 C111
02-24702-21	E/C 470uf 16V 105° 8*11	2	C70 C71
04-21500-85	CERAMIC 150P/J 50V 0805	8	C8 C10 C12 C14 C108 C110 C115 C117
02-21000-41	E/C 1uf 50V 5*11	1	C85
04-22720-85	CERAMIC 272/J 50V 0805	2	C98 C118
34-00150-02	5P BASE H7755R-05 L-120mm	2	CH1+ CH1- CH2+ CH2- GND CH3+ CH3- CH4 +CH4- GND
09-40008-00	MUR820PBF / U08A20C 'MOSPEC'	4	D1 D2 D3 D4
78-00348-00	SILICONE TUBE 1mm*8mm	38	D1 D2 D3 D4 Q2 Q3 Q7 Q8 U16 U17 Q45 Q46 Q50 Q51 TH2 M1 M2 M3 M4
09-04934-85	DL4934-MELF 1A 100V SMD	4	D15 D16 D22 D29
09-15401-01	1N5402 3A/200V DC-201AD	1	D32
09-14148-85	DIODE 1N4148-SOD80 miniMELF	23	D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D17 D18 D19 D20 D21 D23 D24 D25 D26 D27 D28 D30 D31
09-20100-85	ZENER 10V DL-35 miniMELF	1	DZ1
09-20120-85	ZENER 12V DL-35 miniMELF	1	DZ2
09-20160-85	ZENER 16V DL-35(miniMELF)	2	DZ3 DZ6
09-20680-85	ZENER 68V DL-35 miniMELF	2	DZ4 DZ5
76-00239-00	FUSE HOLDER JEF-703E	2	FH1 FH2
76-00437-00	FUSE ATU-35A	0	FH1 FH2
76-00224-01	FUSE ATC-30A 'UL' GREEN	2	FH1 FH2
32-00639-03	TERMINAL BLOCK 4P*2 JSZ8B-04 NI	1	J1
26-00348-00	CABLE GRAY 13PIN 60mm 3*3	1	J2
32-00669-01	TERMINAL ST-113U-3P NI	1	J3
32-20425-06	RCA JACK 4P WSP-204V-06 NI	1	J4
20-00184-00	OUTPUT COIL SE-1000-ZIB	4	L1 L2 L3 L4
19-00302-04	LED SB434C -DOT- BLUE	1	LED1
08-02807-00	HEXFET IRF2807 82A 75V ^	4	M1 M2 M3 M4
76-00407-00	TEST PIN JT-1P-CIW	3	P3 P7 P8
78-00284-00	SILICONE TUBE 2mm*6mm	16	Q1 Q5 Q6 Q10 Q43 Q47 Q48 Q52
08-00035-00	TRANSISTOR TIP35C 25A/100V 'ST'	4	Q1 Q6 Q47 Q52
08-10006-85	TRANSISTOR MMBTA06LT1 SOT-23 'ON'	13	Q11 Q12 Q17 Q18 Q21 Q22 Q25 Q29 Q30 Q33 Q34 Q41 Q42
08-10647-01	TRANSISTOR 2SB647 1A TO-92	4	Q13 Q15 Q37 Q38
08-10667-01	TRANSISTOR 2SD667 1A TO-92	4	Q14 Q16 Q36 Q40
08-10056-85	TRANSISTOR MMBTA56LT1 SOT-23 'ON'	10	Q19 Q20 Q23 Q24 Q26 Q27 Q28 Q31 Q32 Q35
08-00031-00	TRANSISTOR TIP31C 4A/100V 'ST'	4	Q2 Q7 Q46 Q51
04-21040-06	CERAMIC 104/K 100V	4	Q2-Q3 Q7-Q8 Q46-Q45 Q50-Q51
08-00032-00	TRANSISTOR TIP32C 4A/100V 'ST'	4	Q3 Q8 Q45 Q50
08-26715-00	TRANSISTORMPS651G 'ON' 2N6715 TO-237	1	Q39
08-10006-01	TRANSISTORMPSA06 TO-92 'ON'	4	Q4 Q9 Q44 Q49
78-00323-00	SILICONE TUBE 1mm*10mm	8	Q4 Q9 Q44 Q49
08-00036-00	TRANSISTOR TIP36C 25A/100V 'ST'	4	Q5 Q10 Q43 Q48
01-56320-86	RESISTOR 6.34 K 1% 1206	2	R1 R4
01-56000-85	RESISTOR 60.4 ohm 1% 1206	2	R104 R106

PART NO	DESCRIPTION	Q'TY	REF NO
01-54710-86	RESISTOR 475 ohm 1% 1206	1	R111
01-51010-85	RESISTOR 100 ohm 1% 0805	1	R117
01-54730-85	RESISTOR 47.5 K 1% 0805	1	R118
01-51030-85	RESISTOR 10 K 1% 0805	10	R119 R121 R122 R130 R183 R184 R185 R186 R187 R211
01-55910-85	RESISTOR 590 ohm 1% 0805	4	R124 R125 R160 R161
01-51420-85	RESISTOR 1.43 K 1% 0805	1	R132
01-51530-87	RESISTOR 15.8 K 1% 0805	1	R133
01-53330-85	RESISTOR 33.2 K 1% 0805	4	R141 R144 R198 R201
01-52230-85	RESISTOR 22.1 K 1% 0805	4	R142 R143 R199 R200
01-54340-85	RESISTOR 432 K 1% 0805	1	R159
01-52020-85	RESISTOR 2 K 1% 0805	17	R16 R17 R67 R71 R75 R77 R80 R84 R148 R149 R153 R157 R166 R170 R173 R209 R210
01-53340-86	RESISTOR 332 K 1% 0805	1	R174
01-52750-85	RESISTOR 2.7 M 1% 0805	2	R176 R177
01-52520-84	RESISTOR 2.49 K 1% 0805	2	R19 R28 R204 R208
01-52120-85	RESISTOR 2.15 K 1% 0805	1	R194
01-51410-85	RESISTOR 143 ohm 1% 0805	1	R196
01-51000-86	RESISTOR 10 ohm 1% 1206	2	R197 R205
01-58220-85	RESISTOR 8.25 K 1% 0805	10	R2 R31 R69 R73 R82 R86 R151 R155 R164 R168
01-59320-85	RESISTOR 9.31 K 1% 0805	1	R206
01-55001-87	RESISTOR 5.1 ohm 1% 1206	10	R21 R24 R25 R30 R53 R54 R58 R59 R137 R140
01-52710-85	RESISTOR 274 ohm 1% 0805	2	R216 R218
01-53520-85	RESISTOR 3.48 K 1% 0805	2	R217 R219
01-52430-86	RESISTOR 24.3 K 1% 0805	1	R228
01-51040-85	RESISTOR 100 K 1% 0805	1	R230
01-52210-85	RESISTOR 221 ohm 1% 0805	1	R231
01-54740-85	RESISTOR 475 K 1% 0805	1	R240
01-55101-85	RESISTOR 5.11 K 1% 0805	1	R241
01-59010-85	RESISTOR 909 ohm 1% 0805	4	R27 R35 R195 R202
01-54720-85	RESISTOR 4.75 K 1% 0805	22	R3 R15 R18 R22 R23 R26 R39 R40 R41 R42 R103 R110 R113 R115 R116 R123 R126 R127 R128 R129 R131 R175
01-10001-73	RESISTOR 0.1 ohm 2W 5% MO	8	R32 R33 R34 R36 R236 R237 R238 R239
01-53910-86	RESISTOR 392 ohm 1% 1206	4	R37 R38 R188 R189
01-55618-85	RESISTOR 56.2 ohm 1% 0805	8	R43 R46 R49 R52 R179 R182 R190 R193
01-56800-85	RESISTOR 681 ohm 1% 0805	8	R44 R45 R50 R51 R180 R181 R191 R192
01-52130-85	RESISTOR 21 K 1% 0805	4	R47 R48 R134 R135
01-52200-85	RESISTOR 22.1 ohm 1% 0805	36	R5 R8 R10 R13 R20 R29 R66 R68 R70 R72 R79 R81 R83 R85 R120 R152 R154 R156 R158 R165 R167 R169 R171 R178 R203 R207 R214 R215 R220 R223 R224 R227 R232 R233 R234 R235
01-52030-85	RESISTOR 20 K 1% 0805	23	R55 R56 R57 R61 R76 R87 R89 R91 R92 R93 R94 R97 R98 R100 R107 R109 R136 R145 R146 R147 R229 R242 R243
01-54710-85	RESISTOR 475 ohm 1% 0805	8	R6 R7 R11 R12 R221 R222 R225 R226
01-51430-85	RESISTOR 14 K 1% 0805	2	R60 R99
01-53630-85	RESISTOR 36.5 K 1% 0805	2	R62 R101
01-53530-85	RESISTOR 35.7 K 1% 0805	4	R63 R90 R102 R105
01-51830-85	RESISTOR 18.2 K 1% 0805	8	R64 R65 R95 R96 R138 R139 R162 R163
01-51020-85	RESISTOR 1 K 1% 0805	4	R74 R78 R150 R172
01-57530-85	RESISTOR 75 K 1% 0805	2	R88 R108
01-56820-85	RESISTOR 6.81 K 1% 0805	4	R9 R14 R212 R213
18-30001-01	SW SV65020F-0203-6H-01-FN	3	SW1 SW2 SW3
13-11003-00	TH 100K NTC 6mm DIA	2	TH1 TH2
07-00072-85	IC TL072CDR 'TI' SOIC SMD	4	U1 U2 U4 U12
07-00837-85	IC MC33079N LM837N 'ON' SMD	2	U10 U14
07-00393-85	IC LM393DT 'SGS' SMD	1	U13
07-03525-85	IC SG3525AP SO16 SMD 'ST'	1	U15
07-00337-00	IC KA337TU TO-220 'FSC'	1	U16
07-00317-00	IC KA317TU TO-220 'FSC'	1	U17
07-00074-85	IC TL074CDR 'TI' SOIC SMD	2	U3 U5
07-05532-85	IC NJM5532M JRC SOIC SMD	3	U6 U7 U8
07-00817-00	IC H11A817 'FSC'	2	U9 U11
13-00207-00	TRIM-6-VERT-500 500 ohm ^	4	VR1 VR2 VR6 VR7
15-20203-29	B20K*2 F09125G B20Kb L15KQA	3	VR3 VR4 VR5
20-00244-00	TRANSFORMER APX4360-1	1	X1

■ ELECTRICAL PART LIST (VR Board)

PART NO	DESCRIPTION	Q'TY	REF NO
01-51420-85	RESISTOR 1.43 K 1% 0805	4	R12 R15 R25 R26
01-52020-85	RESISTOR 2 K 1% 0805	16	R5 R6 R7 R8 R9 R10 R13 R14 R17 R18 R19 R20 R21 R22 R24 R27
01-53520-85	RESISTOR 3.48 K 1% 0805	4	R11 R16 R23 R28
01-54720-85	RESISTOR 4.75 K 1% 0805	8	R1 R2 R3 R4 R29 R30 R31 R32
04-20680-85	CERAMIC 68P/J 50V 0805	4	C9 C10 C11 C12
04-21040-87	CERAMIC 104/Z 50V 0805	4	C13 C14 C17 C18
06-00562-00	CAP MMYL ECQB 1H562JF 50V P=5	4	C2 C4 C6 C8
06-00563-00	CAP MMYL ECQB 1H563JF 50V P=5	8	C1 C3 C5 C7 C15 C16 C19 C20
07-00072-85	IC TL072CDR 'TI' SOIC SMD	2	U2 U3
07-00074-85	IC TL074CDR 'TI' SOIC SMD	2	U1 U4
15-40050-11	C50K*4 F09145G C50Kb L15KQA	2	VR1 VR2
18-00159-00	SW-4P2T JFPB-41S-A(N)	1	S1
18-30001-01	SW SV65020F-0203-6H-01-FN	2	SW1 SW2