

## MODEL: GT480

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### SPECIFICATIONS

Maximum power output (2 Ohms): 400W x 2ch

RMS power Output: 150W x 2ch

Bridged Power Output: 800W x 1ch

Frequency response: 9Hz - 50KHz

S/N Ratio: 103dB

Low Pass Crossover (Variable) 45Hz - 90Hz

High Pass Crossover (Fixed) 150Hz

Bass Boost (Variable) 0 - +18dB

Power Source Voltage: 14.4V

Ground: Negative

External dimensions: 236(W)x55(H)x286(D)mm

# To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

## 1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them. The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring. For proper circuit construction, use of insulation tubes, bonding, gaps to PCB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection. If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair. Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots. If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile. Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

## 5. Cautions regarding chips.

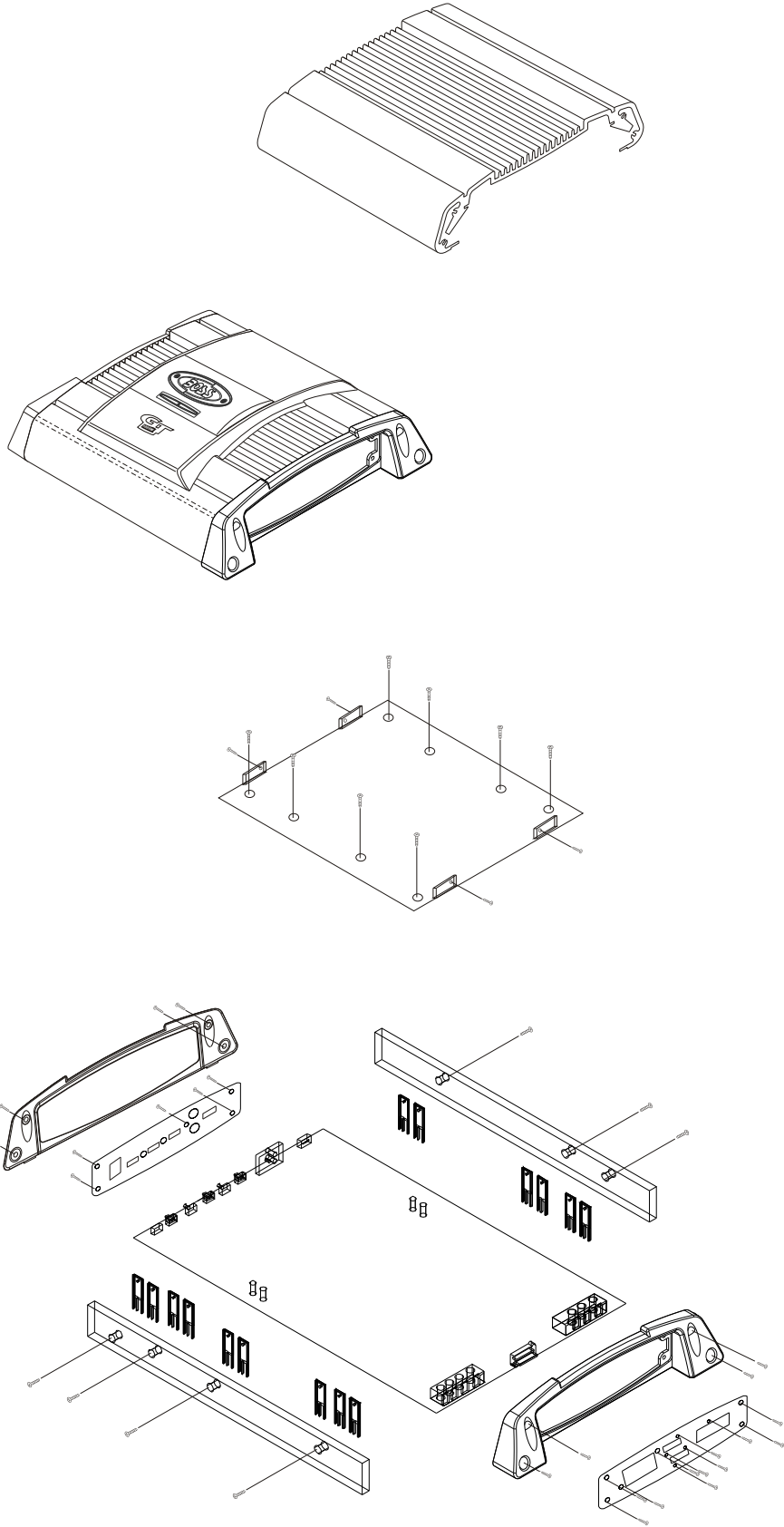
Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

## 6. Cautions in handling flexible PCB

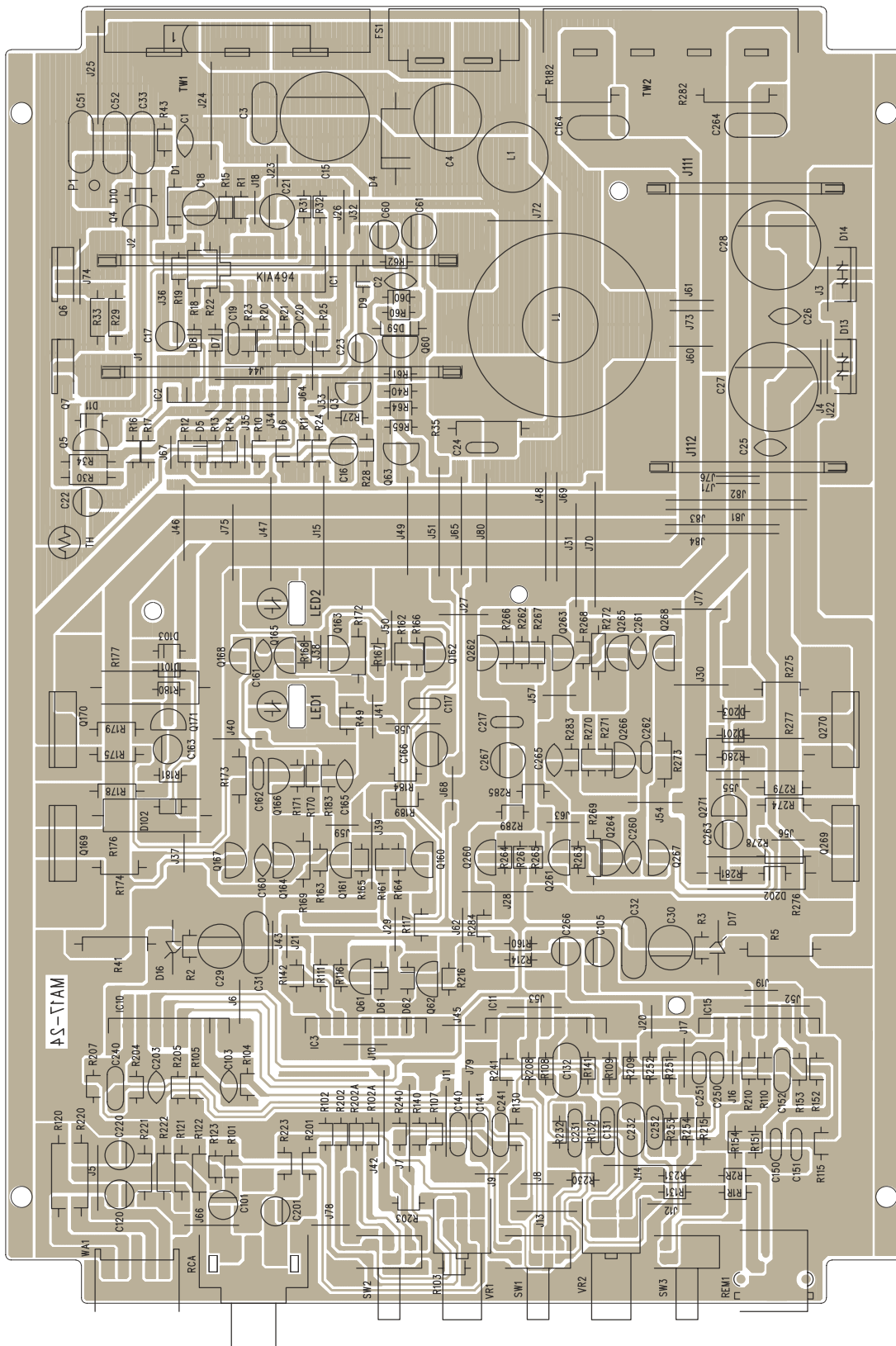
Before working with a soldering iron, make sure that the iron tip temperature is around 270... Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

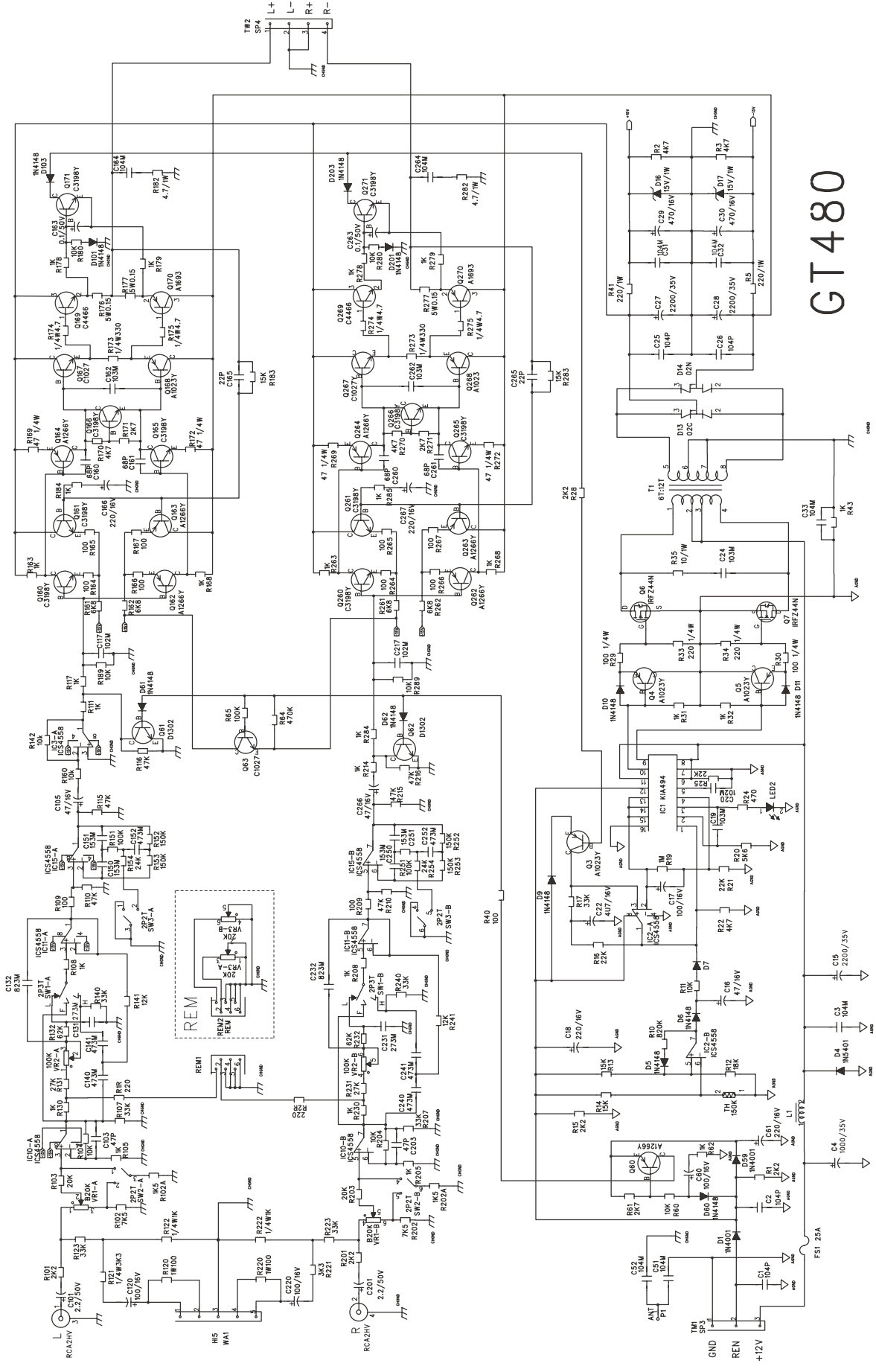
EXPLODED VIEW



# PRINTED CIRCUIT BOARD - 1



# CIRCUIT DIAGRAM 1



GT480

# PARTS LIST - 1

Part Number	desc	Location	qty
CR-00290X0-V0S00	RCA Jack	RCA	1
CT-SOCKET0-3MA22	Power Terminal		1
CT-SOCKET0-4MA22	Speaker Terminal		1
CW-50000X0-H0025	High Input Jack	WA1	1
EC-C4104X0-Z6769	C Cap 0.1(Z)	C1,2,25,26	4
EC-C4220X0-D5050	C Cap 22PF(D)	C165,265	2
EC-C4470X0-Z5050	C Cap 47PF(Z)	C103,203	2
EC-C4680X0-J5050	C Cap 68PF(J)	C160,161,260,261	4
EC-E2107X0-M50A1	E Cap 100UF/16	C17,120,220,60	4
EC-E2227X0-M63A1	E Cap 220UF/16	C18,21,166,267	4
EC-E2476X0-M50A1	E Cap 47UF/16V	C16,105,266	3
EC-E2477X0-MA0A3	E Cap 470UF/16	C29,30,61	3
EC-E4104X0-M50A1	E Cap 0.1UF/50	C163,263	2
EC-E4225X0-M50A1	E Cap 2.2UF/50	C101,201	2
EC-E4475X0-M50A1	E Cap 4.7UF/50	C22,23	2
EC-E6108X0-MA3B5	E Cap 1000/35V	C4	1
EC-E6228X0-MA3B5	E Cap 2200/35V	C27,28,15	3
EC-M5102X0-J5590	Mylar Cap 0.001	C20,117,217	3
EC-M5103X0-J5590	Mylar Cap 0.01	C19,24,162,262	4
EC-M5104X0-JA0A3	Mylar Cap 0.1	C3,31~33,51,52,164,264	8
EC-M5153X0-J5785	Mylar Cap 0.015	C150,151,250,251	4
EC-M5273X0-J66A1	Mylar Cap 0.027	C131,231	2
EC-M5473X0-J80A1	Mylar Cap 0.047	C140,141,152,240,241,252	6
EC-M5823X0-K0000	Mylar Cap 0.082J	C132,232	2
ED-R2502C0-H0000	Diode ESAC25-02C	D13	1
ED-R2502N0-H0000	Diode ESAC25-02N	D14	1
ED-R4001X0-H0000	Diode IN-4001	D1,59	2
ED-R5401X0-H0000	Diode IN-5401	D4	1
ED-S4148X0-H0000	Diode IN-4148	D5~11,60~62,101~103,201~203	16
ED-Z15VXX0-H4744	ZENER IN4744	D16,17	2
EE-R225X70-76002	LED Red 2.5X7MM	LED2	1
EE-R525X70-76002	LED Green 2.5X7MM	LED1	1
EO-IX000X0-HB9XX	Transformer	T1	1
EO-VMA924X-V8025	Coil	L1	1
ER-HG153X0-HXXXX	THERMISTOR 150K	TH	1

## PARTS LIST - 2

Part Number	desc	Location	qty
ER-OG047X0-H2526	Resistor 4.7 1/4W	R174,175,274,275	4
ER-OG047X0-HA04C	Resistor 4.7 1W	R182,282	2
ER-OG100X0-HA04C	Resistor 10 1W	R35	1
ER-OG101X0-H1214	Resistor 100 1/8W	R109,164~167,209,264~267	10
ER-OG101X0-H2526	Resistor 100 1/4W	R29,30	2
ER-OG101X0-HA04C	Resistor 100 1W	R120,220	2
ER-OG102X0-H1214	Resistor 1K 1/8W	R31,32,43,62,105,108,111,117,130,163,168,184,205,208, 214,230,263,268,284,000	20
ER-OG102X0-H2526	Resistor 1K 1/4W	R122,222,178,179,278,279	6
ER-OG103X0-H1214	Resistor 10K 1/8W	R11,60,104,142,160,180,181,189,204,280,281,289	12
ER-OG104X0-H1214	Resistor 100K 1/8W	R151,251	2
ER-OG105X0-H1214	Resistor 1M 1/8W	R19	1
ER-OG122X0-H1214	Resistor 1.2K 1/8W	R49	1
ER-OG123X0-H1214	Resistor 12K 1/8W	R141,241	2
ER-OG133X0-H1214	Resistor 13K 1/8W	R14	1
ER-OG152X0-H1214	Resistor 1.5K 1/8W	R102A,202A	2
ER-OG153X0-H1214	Resistor 15K 1/8W	R13,183,283	3
ER-OG154X0-H1214	Resistor 150K 1/8W	R23,152,153,252,253	5
ER-OG183X0-H1214	Resistor 18K 1/8W	R12	1
ER-OG203X0-H1214	Resistor 20K 1/8W	R103,203	2
ER-OG221X0-H1214	Resistor 220 1/8W	R1R,R2R	2
ER-OG221X0-H2526	Resistor 220 1/4W	R33,34	2
ER-OG222X0-H1214	Resistor 2.2K 1/8W	R1,15,28,101,201,40	6
ER-OG223X0-H1214	Resistor 22K 1/8W	R16,21,25,65	4
ER-OG243X0-H1214	Resistor 24K 1/8W	R154,254	2
ER-OG272X0-H1214	Resistor 2.7K 1/8W	R61,171,271	3
ER-OG273X0-H1214	Resistor 27K 1/8W	R131,231	2
ER-OG331X0-H2526	Resistor 330 1/4W	R173,273	2
ER-OG331X0-HA04C	Resistor 330 1W	R5,41	2
ER-OG332X0-H2526	Resistor 3.3K 1/4W	R121,221	2
ER-OG333X0-H1214	Resistor 33K 1/8W	R17,107,140,207,240,123,223	7
ER-OG470X0-H2526	Resistor 47 1/4W	R169,172,269,272	4
ER-OG471X0-H1214	Resistor 470 1/8W	R24	1
ER-OG472X0-H1214	Resistor 4.7K 1/8W	R18,22,170,270,2,3	6
ER-OG473X0-H1214	Resistor 47K 1/8W	R27,110,115,210,215,216,116	7

## PARTS LIST - 3

Part Number	desc	Location	qty
ER-OG474X0-H1214	Resistor 470K 1/8W	R64	1
ER-OG562X0-H1214	Resistor 5.6K 1/8W	R20	1
ER-OG623X0-H1214	Resistor 62K 1/8W	R132,232	2
ER-OG682X0-H1214	Resistor 6.8K 1/8W	R161,162,261,262	4
ER-OG752X0-H1214	Resistor 7.5K 1/8W	R102,202	2
ER-OG824X0-H1214	Resistor 820K 1/8W	R10	1
ER-WG.15X0-HXXXX	Resistor 0.15 5W	R176,177,276,277	4
ES-S2219X0-H0006	Switch JSS2219	SW2~3	2
ES-S23D29X-V0098	Switch SK23D39	SW1	1
ET-C1023X0-PY000	Transistor KTA1023-Y	Q3~5,168,268	5
ET-C1027X0-NY000	Transistor KTC1027-Y	Q63,167,267	3
ET-C1266X0-PY000	Transistor A1266Y	Q60,162~164,262~264	7
ET-C1302K0-N0000	Transistor KTD-1302	Q61,62	2
ET-C1694X0-PY000	Transistor 2SA1694	Q170,270	2
ET-C3198K0-NY000	Transistor KTC3198-Y	Q160,161,165,166,171,260,261,265,266,271	10
ET-C4467X0-NY000	Transistor 2SC4467	Q169,269	2
ET-FFZ44X0-X0000	Mosfet IRFZ 44N	Q6,7	2
EW-BG30XX0-01XCU	Connection copper plate 30MM	J111,112	2
EW-BG60XX0-01XCU	Connection copper plate 60MM	J1,2	4
EW-CS06XX0-05AA0	Bare Wire 6MM	J21,45,59,38,9,8,20,63,57,19,16,55,56,23,18,33,35,67,36	19
EW-CS07XX0-05AA0	Bare Wire 7MM	J37,78,79	3
EW-CS08XX0-05AA0	Bare Wire 8MM	J6,43,10,29,41,68,62,12,60,73,61,76,71,32,26	15
EW-CS09XX0-05AA0	Bare Wire 9MM	J17,27,40,64,77	5
EW-CS10XX0-05AA0	Bare Wire 10MM	J22,3,4,30,54,53,58,66	8
EW-CS11XX0-05AA0	Bare Wire 11MM	J13,50	2
EW-CS12XX0-05AA0	Bare Wire 12MM	J5,52,72,74	4
EW-CS13XX0-05AA0	Bare Wire 13MM	J11,28	2
EW-CS14XX0-05AA0	Bare Wire 14MM	J39,46,76	3
EW-CS15XX0-05AA0	Bare Wire 15MM	J44	1
EW-CS18XX0-05AA0	Bare Wire 18MM	J14,24,25,42,49,65	6
EW-CS19XX0-05AA0	Bare Wire 19MM	J31,47	2
EW-CS20XX0-05AA0	Bare Wire 20MM	J34,48,51,69,80	5
EW-CS21XX0-05AA0	Bare Wire 21MM	J83,84	2
EW-CS22XX0-05AA0	Bare Wire 22MM	J15	1
EW-CS23XX0-05AA0	Bare Wire 23MM	J70	1



## PARTS LIST - 4

Part Number	desc	Location	qty
EW-CS26XX0-05AA0	Bare Wire 26MM	J81,82	2
II-4558LX0-V0008	IC NJM4558L	IC2,3,10,11,15	5
II-494P0X0-H0016	IC KIA-494AP	IC1	1
VR-BN104X0-V0A26	VR 100KB T12	VR2	1
VR-BN203X0-V0A26	VR 20KB T12	VR1	1