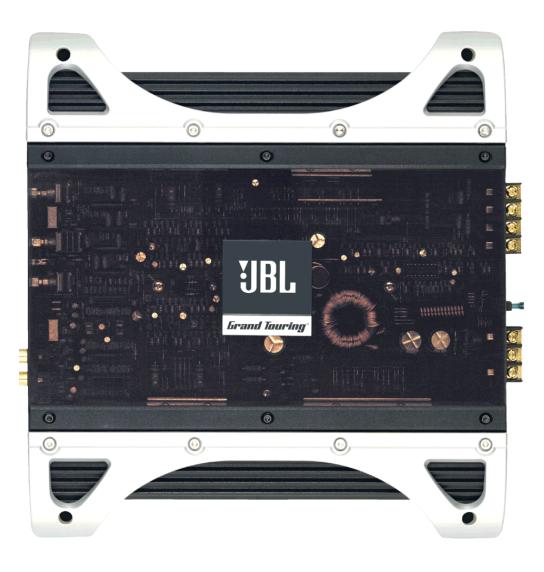


GTO Series 75.2 75.211

2 CHANNEL POWER AMPLIFIER

SERVICE MANUAL



JBL Consumer Products 250 Crossways Park Dr. Woodbury, New York 11797

Rev1 3/2005

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GTO 75.2/75.2II Specifications

Output Power: 97W RMS x 2 channels @ 4 ohms; ≤1% THD + N

(14.4V supply) 145W RMS x 2 channels @ 2 ohms; ≤1% THD + N

290W RMS x 1 channels @ 4 ohms; ≤1% THD + N

Signal-to-noise ratio: 82dBA (reference 1W into 4 ohms)

Dynamic power: 190W @ 2 ohms Effective damping factor: 6.39 @ 4 ohms

Frequency response: 10Hz – 90kHz (–3dB)

Maximum input signal: 5.5V

Maximum sensitivity: GTO 75.2 - 230mV

GTO 75.2II - 75mV

DC Offset <50mV (-50%)
Output regulation: .098dB @ 4 ohms

 $\begin{array}{ll} \text{Idle Current} & 1.0\text{A} \\ \text{Input Impedance} & 22\text{k}\Omega \\ \end{array}$

Max Current Draw 23A @ 4 ohms

37A @ 2 ohms

Dimensions: 11 5/8 x 12 5/16 x 2 3/8" (L x W x D)

(295mm x 313mm x 60mm)

Fuse: 30A

JBL continually strives to update and improve existing products, as well as create new ones. The specifications and details in this and related JBL publications are therefore subject to change without notice.

features

- 2-Channel Operation
- Advanced MOSFET Oversized Floating Rail Power Supply
- Floating Ground Factory Head Unit Speaker Level input
- Variable Input Sensitivity (250mV 6V)
- Fully Complementary Output Stage with Class-AB Voltage Amplification
- Gold-plated Power, Input and Output Connectors
- 2-Ohm Stable (Stereo)

Test Conditions and Notes

- All tests to be done, unless otherwise specified, from 10Hz to 90KHz at 14.4V DC into 4 ohm loads and adjust the units gain so that with a .250 volt input signal the unit is at its maximum rated output. All measurements will be done using an Audio precision system one and the supply voltage.
- An A+ line voltage of 14.4V DC shall be applied to the unit under test for all measurements unless otherwise specified. The voltage applied to the unit shall be measured at the power connection on the Amplifier.
- Signal Source

Unless otherwise specified, all tests shall be conducted with the Audio Signal Generator output configured to be balanced, less than or equal to 50 ohm source impedance, and floating. The signal source "GND" shall be connected to the Amplifier PWR GND at the Amplifier.

- Output Load
 - Unless otherwise specified, all tests shall be conducted with 4 ohm resistive loads having less than 10% reactive components at any frequency below 90KHz. Each resistor shall have a value that remains within 1% while dissipating the rated output of the unit under test.
- Power Indicator LED steadily illuminates for normal operation. LED blinks when protection circuitry is engaged, and during power up.

Power Amplifier

GTO 75.2/75.2II

INSTALLATION

WARNING: Playing loud music in an automobile can hinder your ability to hear traffic and permanently damage your hearing. We recommend listening at low or moderate levels while driving your car. JBL accepts no liability for hearing loss, bodily injury or property damage resulting from the use or misuse of this product.

IMPORTANT: To get the best performance from your JBL Grand Touring® Series amplifiers, we strongly recommend that installation be entrusted to a qualified professional. Although these instructions explain how to install GTO amplifiers in a general sense, they do not show specific installation methods that may be required for your particular vehicle. If you do not have the necessary tools or experience, do not attempt the installation yourself. Instead, please ask your authorized JBL car audio dealer about professional installation.

INSTALLATION **WARNINGS AND TIPS**

- Always wear protective eyewear when using tools.
- Turn off the audio system and other electrical devices before you start. Disconnect the (-) negative lead from your vehicle's battery.
- · Check clearances on both sides of a planned mounting surface before drilling any holes or installing any screws. Remember that the screws can extend behind the surface.
- · At the installation sites, locate and make a note of all fuel lines, hydraulic brake lines, vacuum lines and electrical wiring. Use extreme caution when cutting or drilling in and around these areas.

- · Before drilling or cutting holes, use a utility knife to remove unwanted fabric or vinyl to keep material from snagging
- · When routing cables, keep input-signal cables away from power cables and speaker wires
- When making connections, make certain they are secure and properly insulated.
- If the amplifier's fuse must be replaced, use only the same type and rating as that of the original. Do not substitute another kind.

CHOOSING A LOCATION AND MOUNTING THE **AMPLIFIER**

Choose a mounting location in the trunk or cargo area where the amplifier will not be damaged by shifting cargo. Amplifier cooling is essential for proper amplifier operation. If the amplifier is to be installed in an enclosed space, make sure there is sufficient air circulation for the amplifier to cool itself.

When mounting the amplifier under a seat. ensure that it is clear of all moving seat parts and does not affect the seat adjustments. Mount the amplifier so it is not damaged by the feet of backseat passengers. Make sure that the amplifier is mounted securely using nuts and bolts or the supplied mounting screws.

Mount the amplifier so that it remains dry - never mount an amplifier outside the vehicle or in the engine compartment.

POWER CONNECTIONS

The GTO amplifiers are capable of delivering extremely high power levels, and require a heavy-duty and reliable connection to the vehicle's electrical system in order to perform optimally. See Figure 1 for connection location. Please adhere to the following instructions carefully:

Ground Connection

Connect the amplifier's Ground (GND) terminal to a solid point on the vehicle's metal chassis, as close to the amplifier as possible. Refer to the chart below to determine minimum wire-gauge size. Scrape away any paint from this location; use a startype lock washer to secure the connection.

Power Connection

Connect a wire (see chart at right for appropriate gauge) directly to the vehicle's positive battery terminal, and install an appropriate fuse holder within 18" of the battery terminal. Do not install the fuse at this time. Route the wire to the amplifier's location, and connect it to the amplifier's Positive (+12V) terminal. Be sure to use appropriate grommets whenever routing wires through the firewall or other sheet metal. Failure to adequately protect the positive wire from potential damage may result in a vehicle fire. When you are done routing and connecting this wire, you may install the fuse at the battery.

Remote Connection

Connect the amplifier's Remote (REM) terminal to the source unit's Remote Turn-On lead using a minimum of 18-gauge wire.

NOTE: When using the speaker level inputs, connect the remote (REM) terminal to the source unit. If your source unit does not have a remote turn-on connection, connect the amplifier's (REM) terminal to the vehicle's accessory circuit.

Speaker Connections

Refer to the application guides on the pages that follow. Speaker connections should be made using a minimum of 16-gauge wire.

High-Level Input Connections The GTO75.2/75.2II

amplifiers are equipped with speaker-level

inputs that allow you to add an amplifier to head units that do not have RCA line outputs. The speaker outputs for the source unit should be connected to the amplifier using the supplied connector (square four-wire plug). Remember to check for proper polarity.

NOTE: When using the high-level inputs, the AUX outputs can be used to pass a line-level signal to another amplifier.

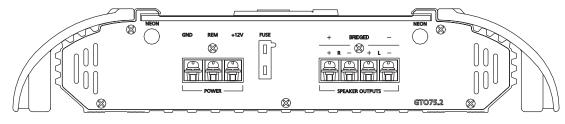
Wire Gauge Chart

Amplifier	Maximum	Minimum	
Model	Current Draw	Wire Gauge	
GTO75.2/7	5.2II 34A	#8 AWG	

These recommendations assume 7' - 10' wire runs. If your installation differs markedly, you will need to adjust the wire gauge accordingly.

IMPORTANT NOTE: If you are planning to use optional neon tubes, install them before making any electrical connections to the amplifier (refer to"Installing Neon Tubes" on page 5).

Figure 1. Terminal connection end plate.



GTO Amp OM 2/3/04 3:54 PM Page 3

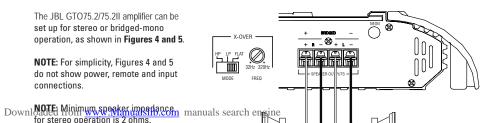
Power Amplifier



CONNECTIONS - GTO75.2/75.2II

The JBL GTO75.2/75.2II amplifier can be set up for stereo or bridged-mono operation, as shown in Figures 4 and 5.

NOTE: For simplicity, Figures 4 and 5 do not show power, remote and input connections.





INSTALLATION AND SETUP

SETTING THE CROSSOVER(S)

Determine your system plans and set the crossover mode switch accordingly. If you plan to use the GTO75.2/75.2/I to drive full-range speakers, set the crossover mode to FLAT and skip to "Setting Input Sensitivity."

Initially set the crossover frequency control midway. While listening to music, adjust the crossover for the least perceived distortion from the speakers, allowing them to reproduce as much bass as possible.

Systems using a separate subwoofer set the crossover mode to HP (high pass) for your full-range speakers. Adjust the crossover frequency to limit bass and provide increased system volume with less distortion.

For subwoofers, choose the highest frequency that removes vocal information from the sound of the subwoofer.

If using the GTO75.2/75.2II to drive a subwoofer(s), set the crossover mode to LP (low pass).

SETTING INPUT SENSITIVITY

- 1. Initially turn the INPUT LEVEL control(s) to minimum (counter clockwise).
- 2. Reconnect the (–) negative lead to the vehicle's battery. Apply power to the audio system and play a dynamic music trock
- 3. On the source unit, increase the volume control to 3/4 volume. Slowly increase the INPUT LEVEL control(s) toward three o'clock until you hear slight distortion in the music. Then reduce the INPUT LEVEL slightly until distortion is no longer heard.

NOTE: After the source unit is on, red LEDs (on the top panel) will light, indicating the amplifier is on. If not, check the wiring, especially the remote connection from the source unit. Also refer to "Troubleshooting" on the next page.

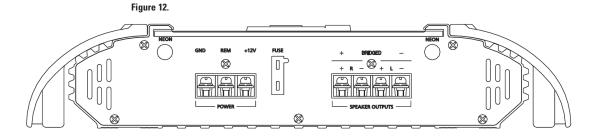
AUX OUTPUT

The GTO75.2/75.2II amplifiers are equipped with full-range outputs that can be used to connect additional amplifiers.

NOTE: When using the high-level inputs, the AUX outputs can be used to pass a line-level signal to another amplifier.

INSTALLING NEON TUBES (OPTIONAL)

- Using a Phillips screwdriver, remove all screws on the amplifier's output/power end panel and set them aside.
- Using a 3/32-inch Allen wrench, remove only the screws on the amplifier's (top) clear cover and set them aside.
- 3. Remove the end panel and slide the cover off. Set both parts aside.
- 4. Locate the enclosed hardware bag and remove the four clips. Each clip has a square end and a larger round end. Using a round end, press two clips onto each neon tube (e.g., Street Glow AN9 or equivalent), as shown in Figure 13.
- 5. For each tube, align both clips so the square ends slide onto an exposed extrusion edge, as shown in Figure 9. Do not cover any screw holes. When installed correctly, each neon tube will sit under an extrusion and not be visible when viewed from directly above.
- Route each neon tube's power cable through its respective NEON hole on the end panel (see Figure 13).
- Slide the cover back into place and reinstall its screws. Then, replace the end panel and reinstall its screws.
- 8. Finish the installation of the neon tubes as instructed in their owner's manual.



Power Amplifier

INSTALLATION AND SETUP

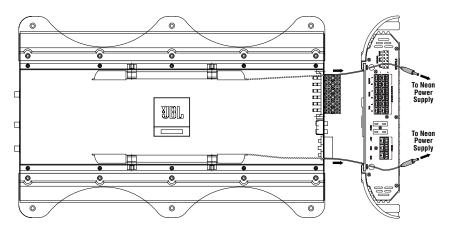
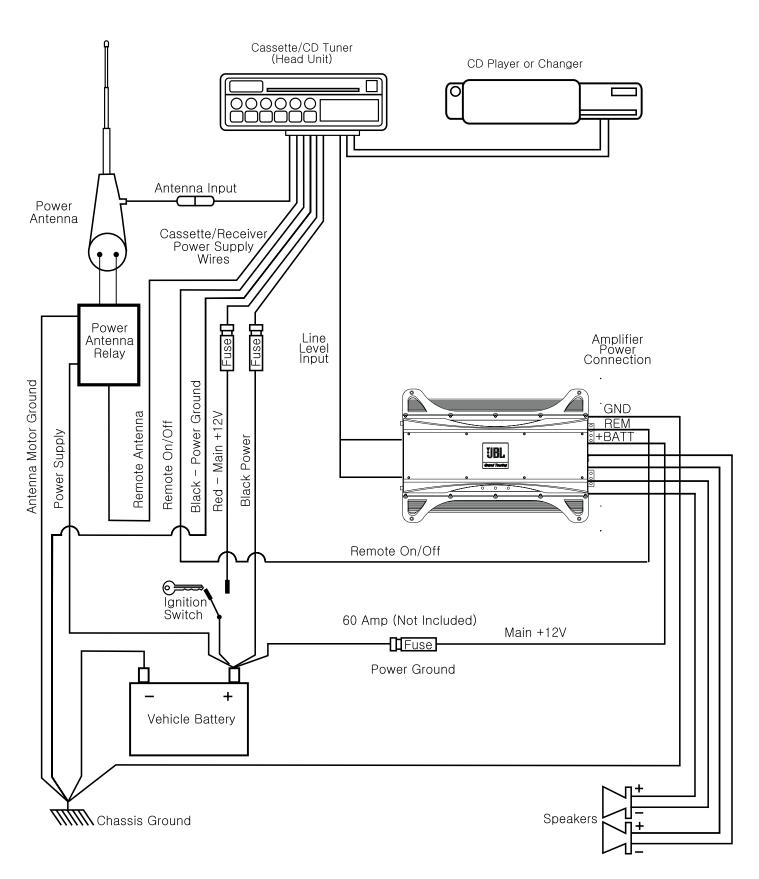


Figure 13. Installing neon tubes in a JBL GTO amplifier.

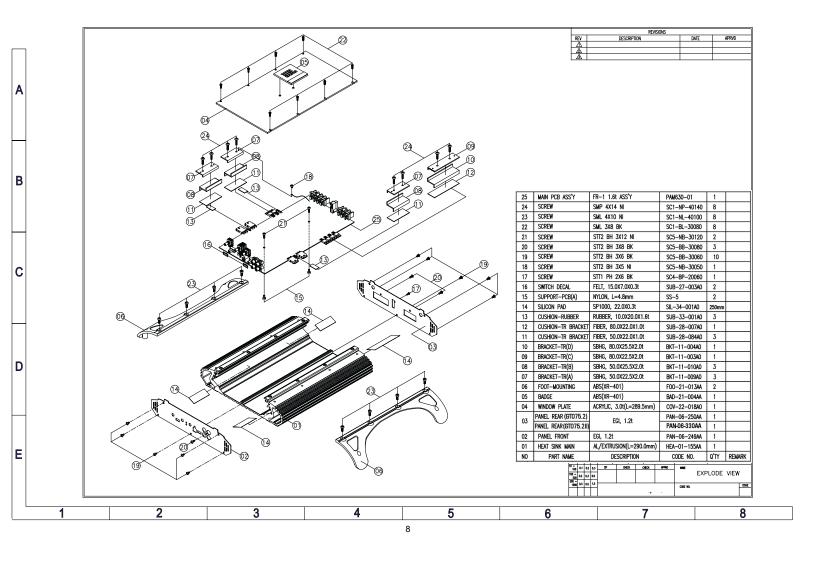
TROUBLESHOOTING

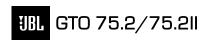
SYMPTOM	LIKELY CAUSE	SOLUTION
No audio (POWER LED is off)	No voltage at BATT+ or REM terminals, or bad or no ground connection	Check voltages at amplifier terminals with VOM
No audio (PROTECT LED flashes every 4 seconds)	DC voltage on amplifier output	Amplifier may need service; see enclosed warranty card for service information
No audio (PROTECT LED is on)	Amplifier is overheated	Make sure amplifier cooling is not blocked at mounting location; verify speaker system impedance is within specified limits (see "Specifications" on the next page)
No audio (PROTECT and POWER LEDs flash)	Voltage less than 9V on BATT+ connection	Check vehicle charging system for defective voltage regulator

SYMPTOM	LIKELY CAUSE	SOLUTION
No audio (PROTECT LED is on)	Voltage more than 16V or less than 8.5V on BATT+ connection regulator	Check vehicle charging system for defective voltage
Distorted audio	Input sensitivity is not set properly, or amplifier or source unit is defective	Check INPUT LEVEL setting; or check speaker wires for shorts or grounds
Distorted audio and PROTECT LED flashes	Short circuit in speaker or wire	Remove speaker leads one at a time to locate shorted speaker or wire, then repair
Music lacks "punch"	Speakers are not connected properly	Check speaker connections for proper polarity



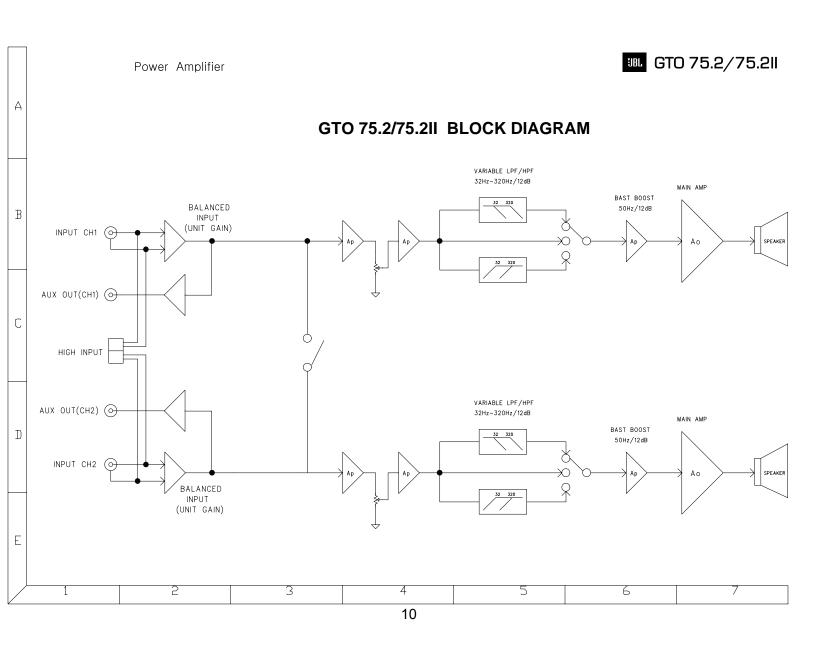


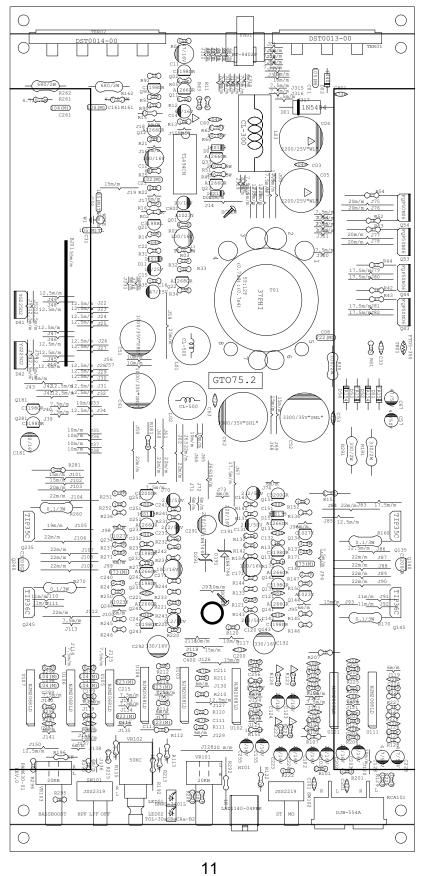




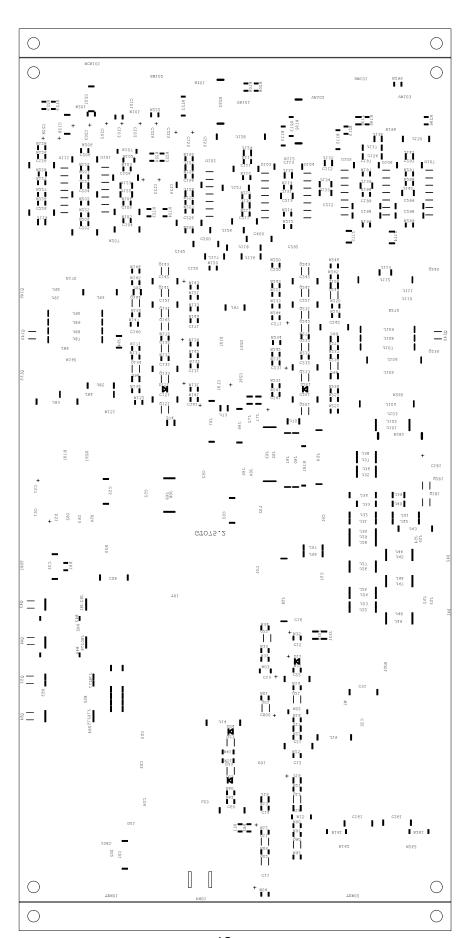
GTO 75.2/75.2II Mechanical Parts List

PART NO	DESCRIPTION		MFR PARTS	Q'TY
PART NO HEA-01-154A0 HEA-01-155AA PAN-06-249AA PAN-06-250AA PAN-06-330AA COV-22-018A0 BAD-21-004AA FOO-21-013AA BKT-14-523A0 BKT-11-009A0 BKT-11-010A0	HEAT SINK MAIN HEAT SINK MAIN HEAT SINK MAIN PANEL FRONT PANEL REAR (GTO 75.2) PANEL REAR (GTO 75.2II) WINDOW PLATE BADGE FOOT MOUNTING BRACKET LAMP BRACKET TR(A) BRACKET TR(B)	AL/EXTRUSION AL/EXTRUSION(L=290.0mm) EGI, 1.2t EGI, 1.2t EGI, 1.2t ACRYLIC, 3.0t(L=289.5mm) ABS(XR-401) ABS(XR-401) SK-5/BK SBHG, 50.0x22.5x2.0t SBHG, 50.0x25.5x2.0t	W/Spray black color W/Painting & silkscreen W/Painting & silkscreen W/Painting & silkscreen W/Painting & silkscreen W/Hot stamp & silkscreen W/Spray silkcolor W/Heat treatment	Q'TY 1 1 1 1 1 2 4 3 3
BKT-11-010A0 BKT-11-003A0 BKT-11-004A0 SUB-28-084A0 SUB-28-007A0 SUB-33-001A0 SIL-34-001A0 SS-5 SUB-27-003A0 SUB-28-002A0 SUB-28-519A0	BRACKET TR(C) BRACKET TR(D) CUSHION TR BRACKET(A) CUSHION TR BRACKET(B) CUSHION RUBBER SILICON PAD SUPPORT PCB SWITCH DECAL PAPER SPACER(A) PAPER SPACER(B)	SBHG, 80.0x22.5x2.0t SBHG, 80.0x22.5x2.0t SBHG, 80.0x25.5x2.0t FIBER, 50.0x22.0x1.0t FIBER, 80.0x22.0x1.0t RUBBER, 10.0x20.0x1.6t SP1000, 22.0x0.3t NYLON, L=4.8mm FELT, 15.0x7.0x0.3t FIBER, 200.0x6.0x0.5t FIBER, 200.0x8.0x0.5t		3 1 3 1 3 250mm 2 2 1
SC4-BP-20060 SC5-NB-30050 SC5-BB-30060 SC5-BB-30080 SC5-NB-30120 SC1-BL-30080 SC1-NL-40100 SC1-NP-40140 SC4-NP-40250	SCREW	STT1 PH 2x6 BK STT2 BH 3x5 NI STT2 BH 3x6 BK STT2 BH 3x8 BK STT2 BH 3x12 NI SML 3x8 BK SML 4x10 NI SMP 4x14 NI STT1 PH 4x25 NI	FUSE HOLDER GROUND WIRE SIDE PANEL + H/SINK RCA(1), TERMINAL(2) PCB + HEAT SINK WINDOW + H/SINK FOOT + H/SINK BRACKET TR ACCESSORY	1 1 10 3 2 8 8 8





Printed Circuit Board (BOTTOM View)





PART NO	NOMENCATURE	DESCRIPTION	MFR PARTS	REF NO	Q'TY
TRS-00-00087	TRANSISTOR	SMALL SIGNAL PNP	KTA1023Y	Q01,144,244	3
TRS-00-00088	TRANSISTOR	SMALL SIGNAL NPN	KTC1027Y	Q134,234	2
TRS-00-00091	TRANSISTOR	SMALL SIGNAL PNP	KTA1268GR	Q22	1
TRS-00-00111		SMALL SIGNAL NPN	KTC3200GR	Q151,251	2
TRS-00-00090		SMALL SIGNAL PNP	KTA1266GR	Q11,12,23,33,133,141,142,233,241,242	
TRS-00-00110		SMALL SIGNAL NPN	KTC3198GR	Q02,90,131,132,143,181,231,232,243,28	
TRS-00-00109		SMALL SIGNAL NPN	KTC3198BL	Q21	1
1110 00 00100	110 110101011		TTTOTTOBL	Q	
DIO-00-00108	DIODE	FAST RECOVERY	FR154	D51,52,53,54	4
DIO-00-00003	DIODE	RECTIFIER	IN4004	D02	1
DIO-00-00006	DIODE	SWITCHING SIGNAL	1SS133 /1N4148	D03,04,11,151,251	5
RES-00-00577	RESISTOR	METAL FILM 1/5WF	750 OHM	R108,208	2
RES-00-00437	RESISTOR	METAL FILM 1/5WF	1K OHM	R120,220	2
RES-00-00386	RESISTOR	METAL FILM 1/5WF	1.1K OHM	R172,272	2
RES-00-00523	RESISTOR	METAL FILM 1/5WF	4.7K OHM	R62	1
RES-00-00589	RESISTOR	METAL FILM 1/5WF	9.4K OHM	R257	1
RES-00-00402	RESISTOR	METAL FILM 1/5WF	10K OHM	R125,126,225,226	4
RES-00-00399	RESISTOR	METAL FILM 1/5WF	10.5K OHM	R60	1
RES-00-00425	RESISTOR	METAL FILM 1/5WF	15K OHM	R171,271	2
RES-00-00421	RESISTOR	METAL FILM 1/5WF	15.2K OHM	R155,255	2
RES-00-00467		METAL FILM 1/5WF	22K OHM	R101,121,201,221	4
RES-00-00537	RESISTOR	METAL FILM 1/5WF	47K OHM	R102,103,105,106,202,203,205,206,256	9
RES-00-00591	RESISTOR	METAL FILM 1/5WF	91K OHM	R156	1
RES-00-00610	RESISTOR	CARBON FILM 1/5WJ	10 OHM	R15	1
RES-00-00660	RESISTOR	CARBON FILM 1/5WJ	22 OHM	R133,134,143,144,233,234,243,244	8
RES-00-00716	RESISTOR	CARBON FILM 1/5WJ	47 OHM	R43,44,53,54,136,146,236,246	8
RES-00-00615	RESISTOR	CARBON FILM 1/5WJ	120 OHM	R150,250	2
RES-00-00747	RESISTOR	CARBON FILM 1/5WJ	750 OHM	R16	1
RES-00-00633	RESISTOR	CARBON FILM 1/5WJ	1K OHM	R31,42,52,92,107,127,128,131,135,141	24
				R145,192,195,196,207,227,228,231,235	,241
				R245,292,295,296	
RES-00-00598	RESISTOR	CARBON FILM 1/5WJ	1.5K OHM	R151,251	2
RES-00-00644	RESISTOR	CARBON FILM 1/5WJ	2.7K OHM	R147,247	2
RES-00-00676	RESISTOR	CARBON FILM 1/5WJ	3.9K OHM	R12,137,237	3
RES-00-00702	RESISTOR	CARBON FILM 1/5WJ	4.7K OHM	R01,02,11	3
RES-00-00720	RESISTOR	CARBON FILM 1/5WJ	5.6K OHM	R113,115,132,142,213,215,232,242	8
RES-00-00734	RESISTOR	CARBON FILM 1/5WJ	6.8K OHM	R199,299	2
RES-00-00751	RESISTOR	CARBON FILM 1/5WJ	8.2K OHM	R05	1
RES-00-00608	RESISTOR	CARBON FILM 1/5WJ	10K OHM	R13,14,61,110,111,112,114,122,210,211	13
				R212,214,222	
RES-00-00623	RESISTOR	CARBON FILM 1/5WJ	15K OHM	R34,35,152,252	4
RES-00-00658	RESISTOR	CARBON FILM 1/5WJ	22K OHM	R32,91	2
RES-00-00663	RESISTOR	CARBON FILM 1/5WJ	24K OHM	R21,22	2
RES-00-00687	RESISTOR	CARBON FILM 1/5WJ	33K OHM	R33	1
RES-00-00697	RESISTOR	CARBON FILM 1/5WJ	39K OHM	R197,297	2
RES-00-00714	RESISTOR	CARBON FILM 1/5WJ	47K OHM	R90	1
RES-00-00730	RESISTOR	CARBON FILM 1/5WJ	56K OHM	R04,181,281	3
RES-00-00742	RESISTOR	CARBON FILM 1/5WJ	68K OHM	R25	1
RES-00-00604	RESISTOR	CARBON FILM 1/5WJ	100K OHM	R129,229	2
RES-00-00620	RESISTOR	CARBON FILM 1/5WJ	150K OHM	R198,298	2
RES-00-00706	RESISTOR	CARBON FILM 1/5WJ	430K OHM	R63	1



PART NO	NOMENCATURE	DESCRIPTION	MFR PARTS	REF NO	Q'TY
RES-00-00664	RESISTOR	CARBON FILM 1/5WJ	270K OHM	R123,124,223,224	4
RES-00-00053	RESISTOR	METAL FILM 1/2WJ	4.7 OHM	R161,261	2
RES-00-00018	RESISTOR	METAL FILM 1/2WJ	10 OHM	R03	1
RES-00-00038	RESISTOR	METAL FILM 1/2WJ	220 OHM	R41,51	2
ELC-00-00223	CAPACITOR	ELECTROLYTIC "SMS"	2.2/50V	C120,131,141,220,231,241	6
ELC-00-00229	CAPACITOR	ELECTROLYTIC "SMS"	4.7/50V	C128,228	2
ELC-00-00195	CAPACITOR	ELECTROLYTIC "SMS"	10/16V	C155,255,800	3
ELC-00-00203	CAPACITOR	ELECTROLYTIC "SMS"	10/25V	C15	1
ELC-00-00197	CAPACITOR	ELECTROLYTIC "SMS"	22/16V	C102,103,123,124,202,203,223,224	8
ELC-00-00198		ELECTROLYTIC "SMS"	47/16V	C11,14	2
ELC-00-00205		ELECTROLYTIC "SMS"	47/25V	C16	1
ELC-00-00227		ELECTROLYTIC "SMS"	47/50V	C57,67	2
ELC-00-00199		ELECTROLYTIC "SMS"	100/16V	C12,13,17,171,181,271	6
ELC-00-00200		ELECTROLYTIC "SMS"	220/16V	C191,291	2
ELC-00-00201	CAPACITOR	ELECTROLYTIC "SMS"	330/16V	C192,292	2
MYC-00-00020	CAPACITOR	MYLAR 5% 100V	102(M) J	C21	1
MYC-00-00031		MYLAR 5% 100V	222(M) J	C08	1
MYC-00-00038		MYLAR 5% 100V	473(M) J	C140,240	2
MYC-00-00045		MYLAR 5% 100V	823(M) J	C113,115,213,215	4
MYC-00-00094		MYLAR 5% 100V	104(M) J	C161,198,199,261,298,299	6
MYC-00-00085	CAPACITOR	MYLAR 5% 63V "TL"	105(M) J	C01,31,32	3
CEC-00-00077	CAPACITOR	CERAMIC DISK 50V "NPO"	10P F	C104,204	2
CEC-00-00084	CAPACITOR	CERAMIC DISK 50V "NPO"	18P F	C156	1
CEC-00-00090	CAPACITOR	CERAMIC DISK 50V "NPO"		C105,106,126,205,206,226	6
CEC-00-00097		CERAMIC DISK 50V "NPO"		C256	1
CEC-00-00103		CERAMIC DISK 50V "NPO"		C111,197,211,297	4
CEC-00-00108		CERAMIC DISK 50V "NPO"		C121,221	2
CEC-00-00073		CERAMIC DISK 50V "NPO"		C132,142,151,232,242,251	6
CEC-00-00074		CERAMIC DISK 50V	102P F	C101,201	2
CEC-00-00102		CERAMIC DISK 50V	473P F	C33,53,63,200,400,801	6
CEC-00-00076	CAPACITOR	CERAMIC DISK 50V	104P F	C03,22,60	3
JUP-00-00043	JUMPER	00HM JUMPER	6m/m	J15,16,17,18,71,72,73,74,95	33
				J96,98,99,100,119,121,124,125,129,130	
				J132,135,136,138,141,180,181,310,311,	312
IIID 00 00044	U.M. 4DED	001114 11114050	7.5 /	J314,330,331	00
JUP-00-00044	JUMPER	0OHM JUMPER	7.5m/m	J01,02,03,04,10,11,12,13,39,40	33
				J70,94,113,114,115,122,123,131,133,13-	
				J139,140,313,315,316,317,318,319,320, J322,323,324	,321
JUP-00-00045	JUMPER	00HM JUMPER	10m/m	J33,35,36,37,38,56,57,64,65,97	17
				J116,117,120,137,154,335,336	
JUP-00-00052	JUMPER	00HM JUMPER	11m/m	J91,92,110,111	4
JUP-00-00046	JUMPER	00HM JUMPER	12.5m/m	J07,08,09,22,23,24,25,26,27,28	31
				J29,30,31,32,34,41,42,44,45,46	
				J47,48,49,52,53,54,55,85,86,127 J150	
JUP-00-00047	JUMPER	00HM JUMPER	15m/m	J14,19,43,66,68,69,93,101,102,118	11
				J126	
JUP-00-00048		00HM JUMPER	17.5m/m	J05,06,67,79,80,81,82,83	8
JUP-00-00074		0OHM JUMPER	19m/m	J105	1
JUP-00-00049		00HM JUMPER	20m/m	J75,76,77,78103,128	6
JUP-00-00075	JUMPER	0OHM JUMPER	22m/m	J59,60,61,62,63,84,87,88,89,90	16
		4	1	J104,106,107,108,109,112	



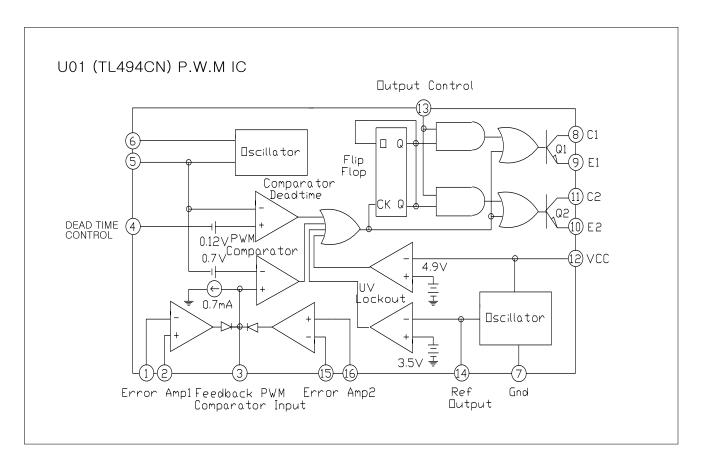
PART NO	NOMENCATURE	DESCRIPTION	MFR PARTS	REF NO	Q'TY
JUP-00-00042	JUMPER	00HM JUMPER	25m/m	J58	1
ICO-00-00022		P.W.M	TL494CN	U01	1
ICO-00-00112	I.C	DUAL OPAMP (SIP-08P)	NJM2068LD	U101,102,103,104,105,106,107,111	8
FET-00-00023	F.E.T	N-CH MOSFET	FQP50N06	Q43,44,53,54	4
TRS-00-00188	TRANSISTOR	AUDIO POWER NPN	TIP35C	Q135,235	2
	TRANSISTOR	AUDIO POWER PNP	TIP36C	Q145,245	2
	TRANSISTOR	SMALL SIGNAL NPN	KTC3200GR	Q140,240	2
183-00-00111	TRANSISTOR	SWALL SIGNAL NEW	KTC3200GK	Q140,240	2
DIO-00-00152		FAST RECOVERY	YG225D2	D41,42	2
DIO-00-00048	DIODE	RECTIFIER	1N5404	D01	1
DIO-00-00206	DIODE	ZENER 1W 15V	1N4744A	D191,291	2
DIO-00-00303	LED	BLUE 3PHI	TOL-30aSBaCAa-B2	21 ED02	1
DIO-00-00303		RED 3PHI	HNRD-3401L	LED01	1
DIO-00-00276	LLD	NED SFIII	TINKD-340TE	LLDOT	'
RES-00-01046	RESISTOR	MOR/S 2WJ	100 OHM	R30	1
RES-00-01269	RESISTOR	MOR/S 2WJ	330 OHM	R191,291	2
RES-00-01041	RESISTOR	MOR/S 2WJ	680 OHM	R162,262	2
RES-00-00895	RESISTOR	WIRE WOUND 3WJ	0.1 OHM	R160,170,260,270	4
TI IO 00 00040	THERMOTOR	FOLCALTO DECLOTOD	ETDE 050	T1104	4
THS-00-00013	THERMISTOR	50K NTC RESISTOR	FTD5-350	TH01	1
ELC-00-00183	CAPACITOR	ELECTROLYTIC "SHL"	1000/35V	C51,61	2
ELC-00-00603	CAPACITOR	ELECTROLYTIC "SHL"	3300/35V	C52,62	2
ELC-00-00727	CAPACITOR	ELECTROLYTIC "WL"	2200/25V	C04,05	2
SWI-00-00033		SLIDE SWITCH	JSS2319	SW101	1
SWI-00-00024	SWITCH	SLIDE SWITCH	JSS2219	SW102	1
VOL-00-00335	VOLUME	V12L5(9x5)G(PH2D)N15S	3B20KB 2!	VR101,103	2
VOL-00-00334		V12L5(9x5)G(4R)(PH2D)N1		VR102	1
JUP-00-00005	JUMPER	METAL JUMPER	55m/m	BJ01	1
COR-TF-00385	CORE	5(0.7X9):12(0.7X4)	37PHI ISU	T01	1
COK-17-00300	CORE	5(0.7 \ 9). 12(0.7 \ 4)	37 FHI 130	101	1
COI-00-00023	INDUCTOR	BAR COIL	CL-300	L03	1
COI-00-00034		DRUM COIL	CL-500	L01,02	2
TER-00-00241	TERMINAL	GOLD PLATED(3P)	DST0013-00	TER01	1
TER-00-00242	TERMINAL	GOLD PLATED(4P)	DST0014-00	TER02	1
14.0 00 00042	DCA IACK	COLD DI ATED	D ID 5544	DC 4404	1
JAC-00-00043	RCA JACK	GOLD PLATED	DJB-554A	RCA101	1
CON-00-00128	WAFER		LAD1140-04PBK	HI01	1
WIR-00-00208	WIRE ASS'Y	300m/m	CHD1140-04PBK	ACCESSORY	1
HOD-UU-UUUU	FUSE HOLDER		WF-9402	FH01	1
	. JOE HOLDEN		0.02		•
WIR-00-00015	WIRE	AWG #22 BLACK 3.2PHI RI	N60m/m	W1	1

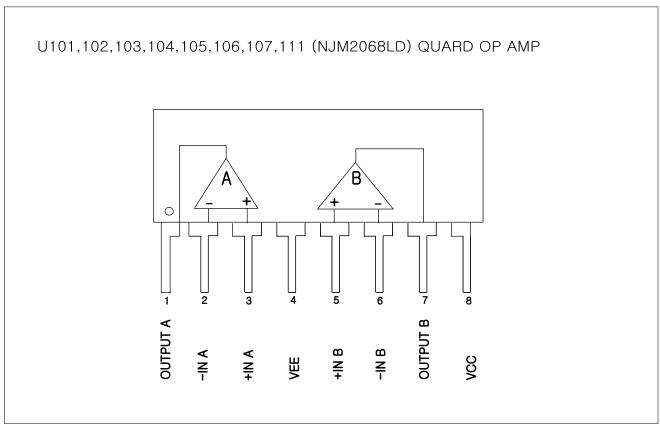
PART NO	NOMENCATURE	DESCRIPTION	MFR PARTS	REF NO	Q'TY
TUB-00-00008	TEFLON TUBE	0.7PHI	10m/m	Q140,240,TH01	4
TUB-00-00009	TEFLON TUBE	0.7PHI	15m/m	LED02	2
TUB-00-00006	TEFLON TUBE	0.7PHI	20m/m	LED01	2
FUS-AT-00006	AUTO FUSE		30A	SET1+ ASS'Y 1	2

GTO 75.2 Version II Electrical Parts List Addendum

The following chart below represents the only electrical parts differences in Version I and II models:

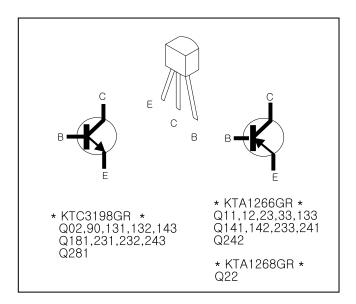
MO	DEL	PART NAME	PART NO	SPEC	DESIGNATORS
1	GTO 75.2	RESISTOR	RES-00-00577	1/5WF 750 OHM	R108,208
	GTO 75.2II	RESISTOR	RES-00-00474	1/5WF 240 OHM	R108,208
2	GTO 75.2	RESISTOR	RES-00-00421	1/5WF 15.2K OHM	R155,255
	GTO 75.2II	RESISTOR	RES-00-00588	1/5WF 9.1K OHM	R155,255
3	GTO 75.2	RESISTOR	RES-00-00589	1/5WF 9.4K OHM	R257
	GTO 75.2II	RESISTOR	RES-00-00541	1/5WF 5.1K OHM	R257
4	GTO 75.2	RESISTOR	RES-00-00437	1/5WF 1K OHM	R120,220
	GTO 75.2II	RESISTOR	RES-00-00545	1/5WF 5.6K OHM	R120,220
5	GTO 75.2	RESISTOR	RES-00-00386	1/5WF 1.1K OHM	R172,272
	GTO 75.2II	RESISTOR	RES-00-00590	1/5WF 910 OHM	R172,272
6	GTO 75.2	RESISTOR	RES-00-00425	1/5WF 15K OHM	R171,271
	GTO 75.2II	RESISTOR	RES-00-00500	1/5WF 30K OHM	R171,271

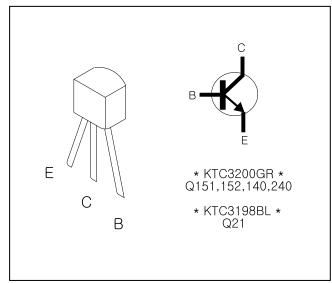


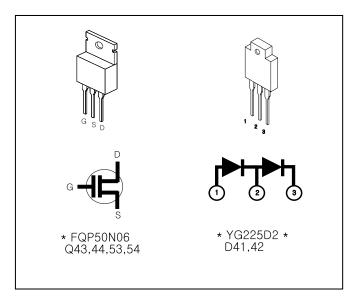


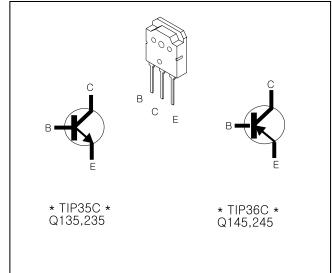


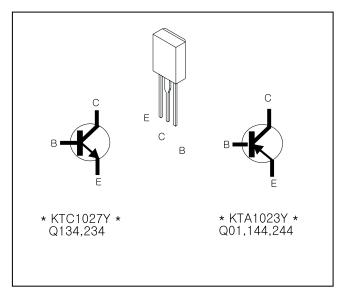
Transistor Diagrams



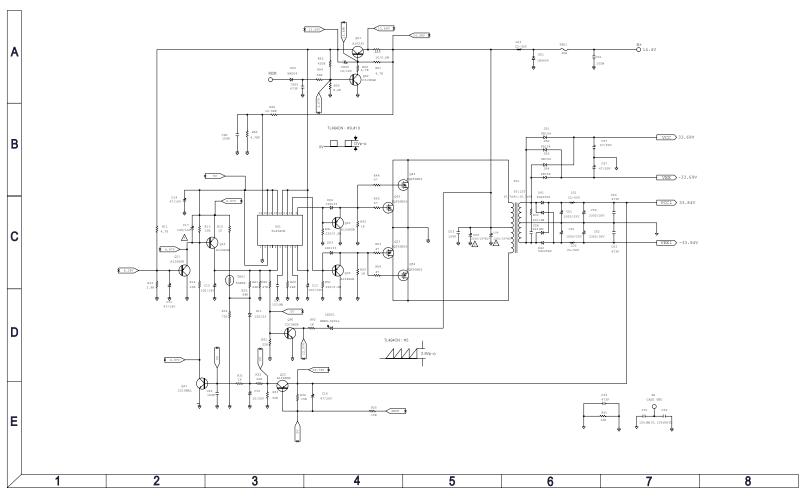




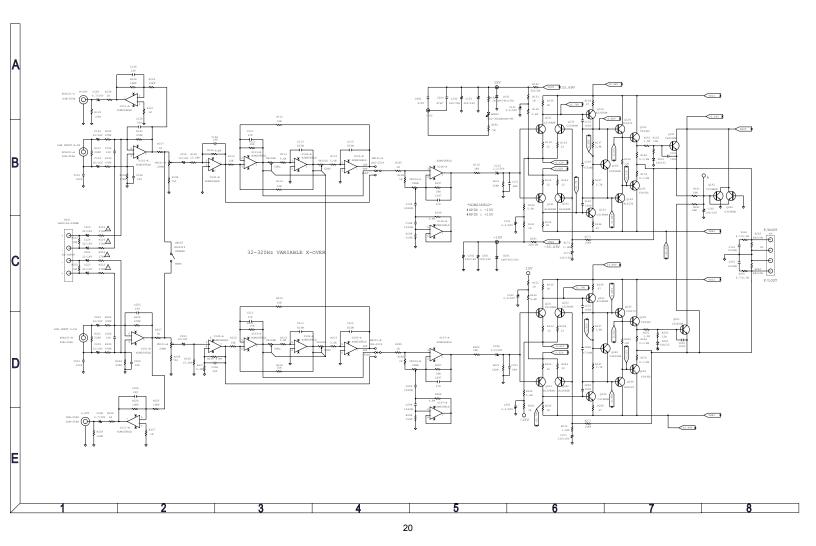


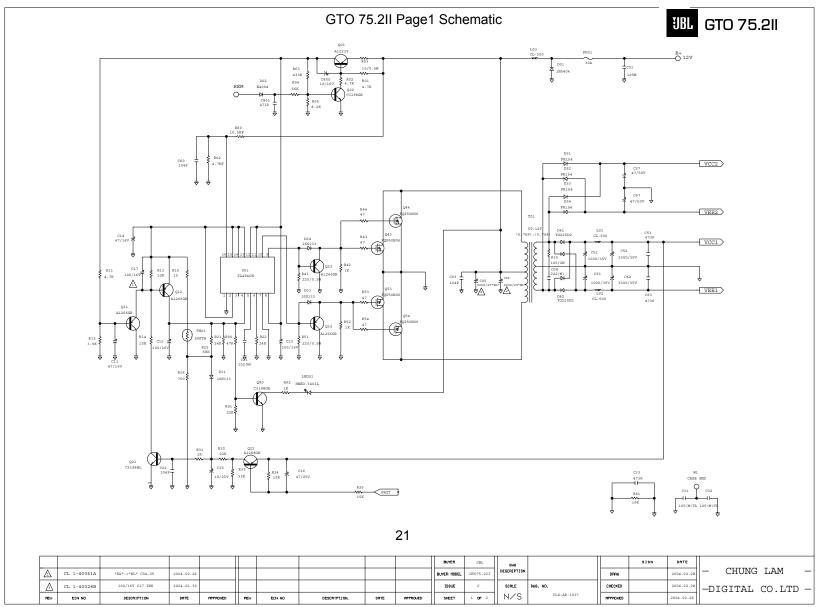








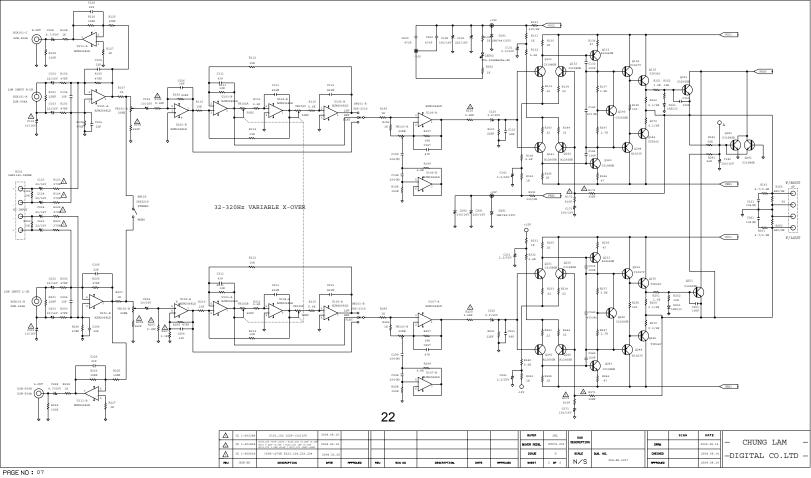




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