



EON15G2

G E N E R A T I O N 2

Technical Service Manual



Rev. A

7/16/2004

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Product Overview

- The second generation of one of the most successful and influential professional speaker systems ever.
- 15" Differential Drive® low-frequency driver with dual neodymium magnet for low-distortion and light weight.
- 1" throat diameter JBL compression driver with titanium diaphragm and ferro-fluid cooling.
- Bi-amplified 300 watts low-frequency and 90 watts high-frequency - **actual power delivered to the drivers.**
- Built in 3-input mixer. One balanced mic / line input, two balanced 1/4" phone line-level inputs. Two-band equalization.

- Balanced loop-through / mix output. "Daisy-chain" additional EON speakers or send the mixed output to a mixing console.
- 90° x 60° (nominal) constant directivity horn.
- Thermomaster® Total Thermal Management System®. A single piece, cast-aluminum baffle integrates the woofer frame, horn, and amplifier heat-sink. Air movement in the finned ports dissipates heat - no internal or external cooling fans are required.
- Rugged, light-weight, black co-polymer enclosure with cast aluminum baffle.
- Integral 35mm pole mount receptacle with securing thumb screw.
- Multi-angle enclosure for front of house or stage monitor application.
- Tailored dynamic processing protects amplifiers and speakers from being over-driven without producing extreme changes in frequency response as level varies.
- Extended low-frequency performance. Delivers powerful bass down to 39 Hz.

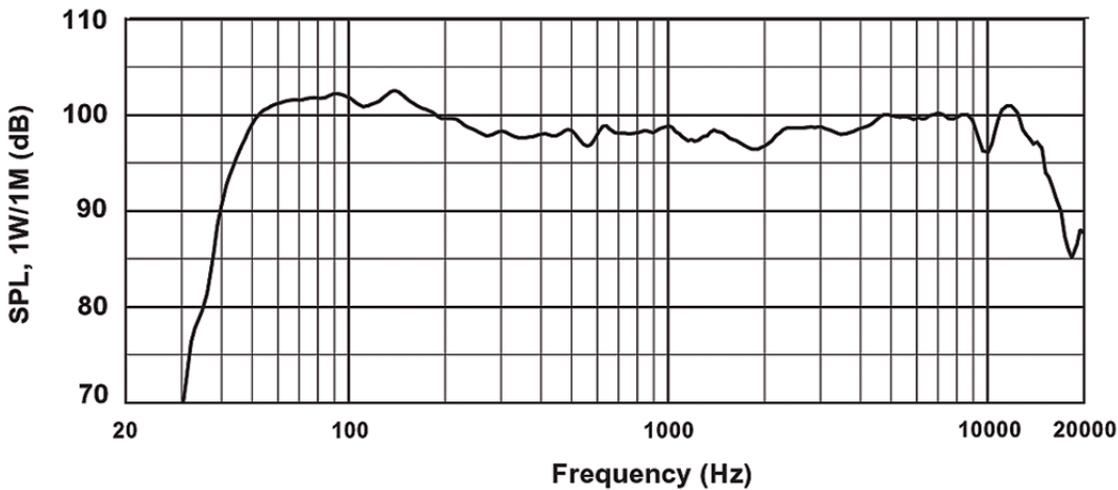
Specifications

Freq. Range (-10 dB):	39 Hz - 18 kHz	Freq. Response (± 3 dB):	42 Hz - 17 kHz
Horz. Coverage (-6 dB):	90° nominal	Vert. Coverage (-6 dB):	60° nominal
Rated Maximum SPL:	129 dB, @ 1 m (3.3 ft)		
Dimensions (H x W x D):	686 mm x 430 mm x 444 mm (27 in x 17 in x 17.5 in.)		
Net Weight:	21 kg (46 lbs.)		
LF Driver:	Integral frame with one 15" (380 mm) driver, dual neodymium magnet, 2" Differential-Drive® voice-coil.		
HF Driver:	JBL2418H-1 1" (throat diameter) compression driver with 1.75" diameter titanium diaphragm. Ferro-fluid cooled.		
Amplifier Power LF:	300 watts @ low-frequency driver impedance.		
Amplifier Power HF:	100 watts @ high-frequency driver impedance.		
Input 1 Sensitivity:	-44 dBu to -22 dBu for rated output (Mic/Line switch in MIC position) -12 dBu to +20 dBu for rated output (Mic/Line switch in LINE position)		
Input 2 & 3 Sensitivity:	-18 dBu to +20 dBu for rated output		
Output Level:	+20 dBu (peak), Loop/Mix switch in MIX position		

Audio Connectors

Input 1	XLR/F, balanced
Input 2 & 3	1/4" Phone, balanced (TRS)
Crossover Freq.	1.5 kHz
Limiting	Low frequency amplifier controlled by dynamic filter
Loop/Mix Out	XLR/M, balanced.
EQ:	High Frequency Shelving, ± 15 Low Frequency Shelving, ± 15 dB @ 120 Hz.
AC Input	110 - 230 VAC, 50 - 60 Hz., 175 watts rating per UL, detachable IEC power cable

Frequency Response

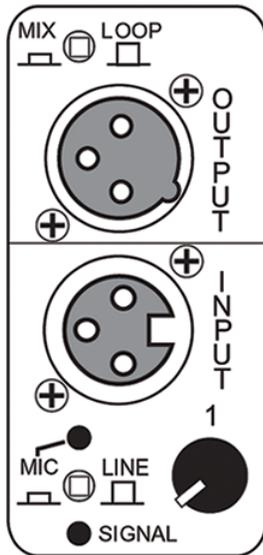


Notes:

JBL Professional is continually engaged in research activities to enable further product improvement. New materials, production methods and design refinements are instituted into the existing product without notification and, therefore, the information contained within this manual is subject to change without notice. Rest assured that your JBL Professional equipment will always equal or exceed the published design specifications unless otherwise stated.

Connectors, Controls and Indicator

The audio section of the EON15 G2 includes powerful features that enhance the flexibility of your EON15 G2 speakers.



Connectors

INPUT 1

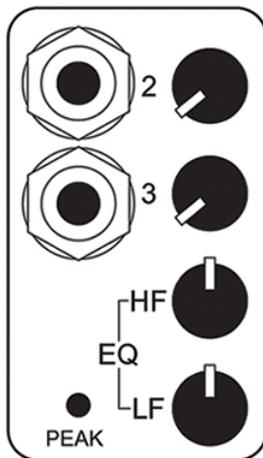
This balanced input accepts a standard XLR (female) connector. A broad range of signals (-44 dBu to +20 dBu nominal) from microphones, audio mixing consoles, and electronic musical instruments may be connected here. When using a single audio input to the speaker, this is the input to use. The sensitivity of this input is controlled by the MIC/LINE SWITCH and the INPUT 1 rotary control.

INPUT 2 & INPUT 3

These 1/4" phone jacks are intended for use with audio devices including cassette tape, CD, MP3 players, computer sound-card outputs, electronic keyboards, and electric/acoustic musical instruments. INPUTS 2 and 3 are balanced (TRS) but will accept unbalanced inputs with no special adapters needed. The level of these inputs is controlled by the INPUT 2 and INPUT 3 rotary controls.

OUT

This XLR (male) output connector works with the MIX/LOOP SWITCH to provide a method of sending audio from your EON15 G2.



Switches

MIC/LINE

The MIC/ LINE switch effects only INPUT 1. It selects between two sensitivity ranges. This switch is used to match the input sensitivity of the EON15 G2 with the output level of the device connected to INPUT 1. Depressing the MIC/LINE switch selects MIC (most sensitive).

CAUTION: Before adjusting this switch, be certain to rotate the INPUT 1 control fully counter-clockwise. After the MIC/LINE switch has been adjusted, slowly rotate the INPUT 1 control clock-wise until the desired volume has been reached.

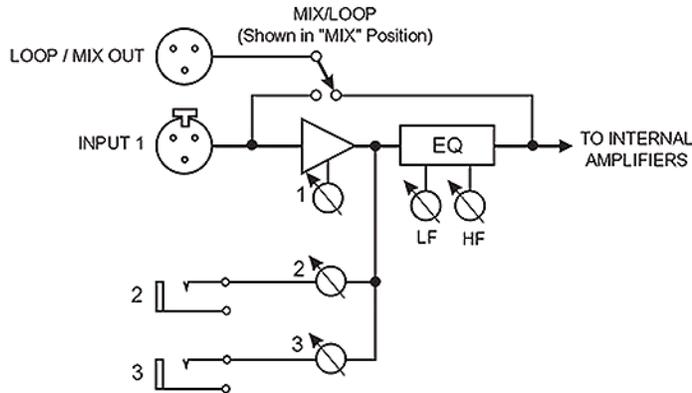
- Use the MIC position (depressed) when a microphone is connected to INPUT 1.
- Use the LINE position (disengaged) when a line level source such as an audio mixing console, audio playback device, or electronic musical instrument is connected to INPUT 1.

MIX/LOOP

This switch selects the source of the signal for the OUT connector.

CAUTION: Before adjusting this switch, be certain to set the input level control of any equipment connected to this output to its minimum gain (least sensitive) setting.

- In the disengaged position, only the signal from the INPUT 1 connector is routed directly to the OUT connector. Changing the other settings on the audio panel will not effect the OUT signal. The INPUT 2 and INPUT 3 inputs will not be present at the OUT connector. Use this setting when you want to feed multiple EON powered speakers the same signal.



- In the MIX position (depressed), a post-EQ blend of all inputs to the speaker (INPUT 1, 2, and 3) will be sent to the OUT connector. Any changes to input level settings or EQ will affect the OUT signal. See the SYSTEM EXAMPLES section for details on how this mode may be used.

Controls

INPUT 1

Adjusts the level of INPUT 1. Use this control to match the input sensitivity of the EON15 G2 to the output level of the mixer, microphone, or instrument connected to INPUT 1. It is a common misconception that this control changes the power of a system. Your EON15 G2 will produce its rated output power no matter where this control is set. The INPUT 1 control determines how much signal is required at the input in order to drive the system to full output.

INPUT 2 & INPUT 3

These controls adjust the level of the inputs connected to INPUTS 2 and 3.

LF EQ

This control allows up to 15 dB of cut or boost at 120 Hz. If the system seems too "boomy" or bass heavy, rotate this control counter clock-wise. If the system sounds too "thin" or lacks low-end power, rotate this control clock-wise. To set the low-frequency EQ to "flat" (no EQ cut or boost), set this control to the center detented position.

HF EQ

This control allows up to 15 dB of cut or boost at 5k Hz. If the system seems too "strident" or "tinny", rotate this control counter clock-wise. If the system sounds too "dark" or lacks "brilliance", rotate this control clock-wise. To set the high-frequency EQ to "flat" (no EQ cut or boost), set this control to the center detented position.

Indicators

PEAK

The PEAK LED (Light Emitting Diode) illuminates to indicate that the system is approaching clipping. The threshold for this light is actually about 2 dB below clipping. An occasional flickering of this light on the loudest peaks is acceptable. If this LED is on for more than the duration of brief dynamic peaks, the system is being overdriven. Continuously over-driving the system will result in unpleasant and fatiguing distortion and may lead to premature failure of your speaker system.

If the PEAK LED illuminates excessively:

- Reduce INPUT 1, 2, and 3.
- Reduce the output level of the mixer, musical instrument, or other source connected to the speaker.
- If there is a great deal of LF EQ or HF EQ boost, return the controls to the "flat" (centered) position.

SIGNAL

Illuminates to indicate a usable signal from INPUT 1.

MIC

This LED lights to indicate that the MIC/LINE switch is in the MIC (depressed) position.

Voltage Selection and Fuses

Changing Voltage

Your EON15-G2 will typically be set at the factory to accommodate the power mains voltage in your area. Before you set up your EON15-G2 for the first time it is a good idea to verify that the setting of the selector is appropriate for the power in your area. In the event that you do need to change the voltage:

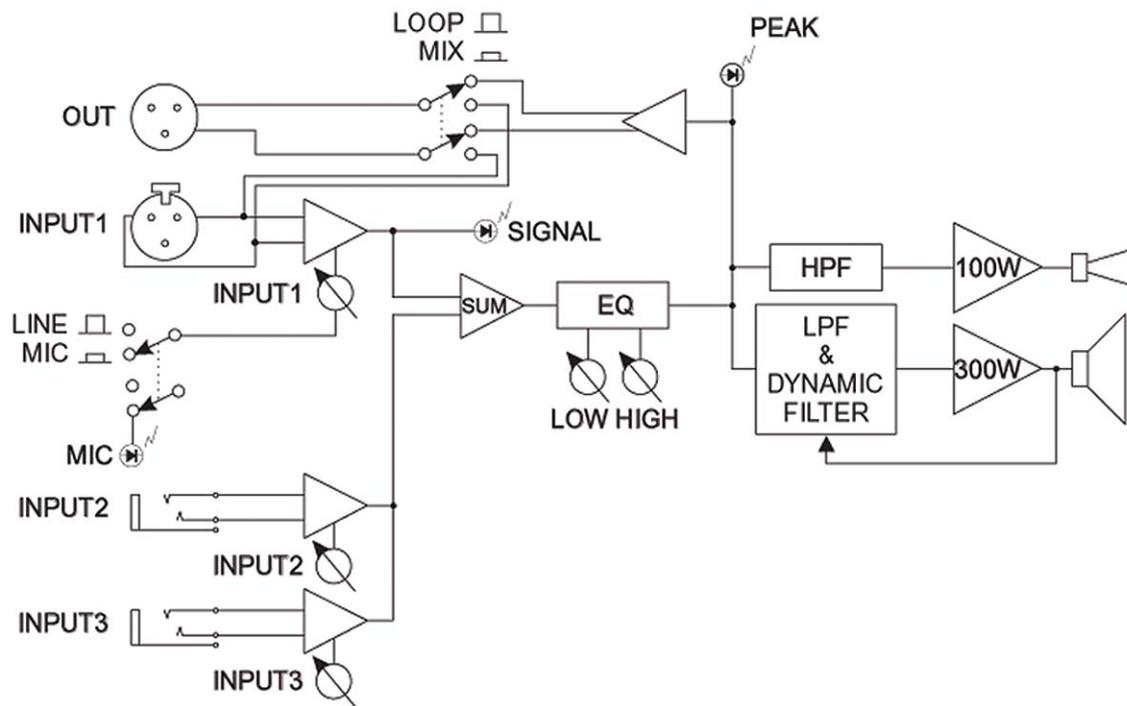
- Make sure that the speaker is powered off and the AC is disconnected from the speaker.
- Directly below the male IEC connector on the speaker is a voltage selector. Break the factory-applied seal and slide the switch to the appropriate setting.
- Set the voltage selector switch to the 115V or 230V setting as required for your area.
- After having reconfirmed that the correct voltage is selected, reconnect the AC (IEC connector) and power the unit up.

DO NOT UNDER ANY CIRCUMSTANCES OPERATE THE UNIT WITH THE WRONG VOLTAGE SELECTED. DOING SO MAY RESULT IN SERIOUS DAMAGE TO YOUR SPEAKER SYSTEM WHICH WILL NOT BE COVERED BY WARRANTY.

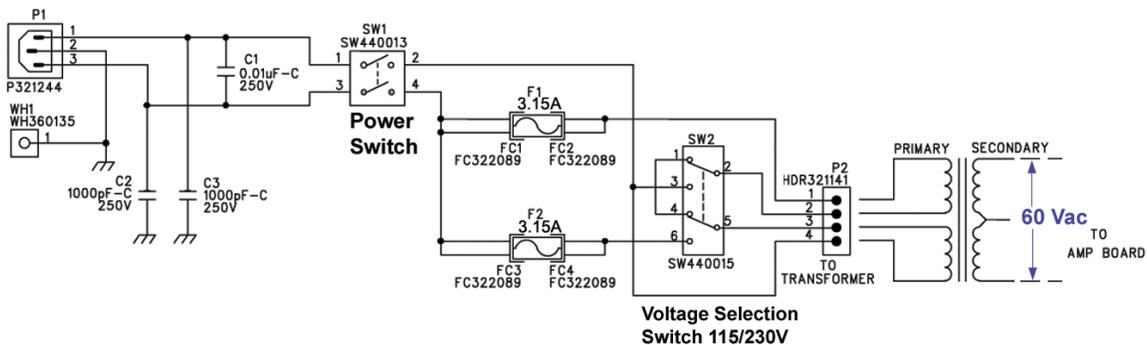
Fuse Replacement

The EON15 G2 has no user-serviceable fuses. Failure of fuses is most frequently a symptom of problems requiring service by a competent technician.

EON15 G2 Block Diagram



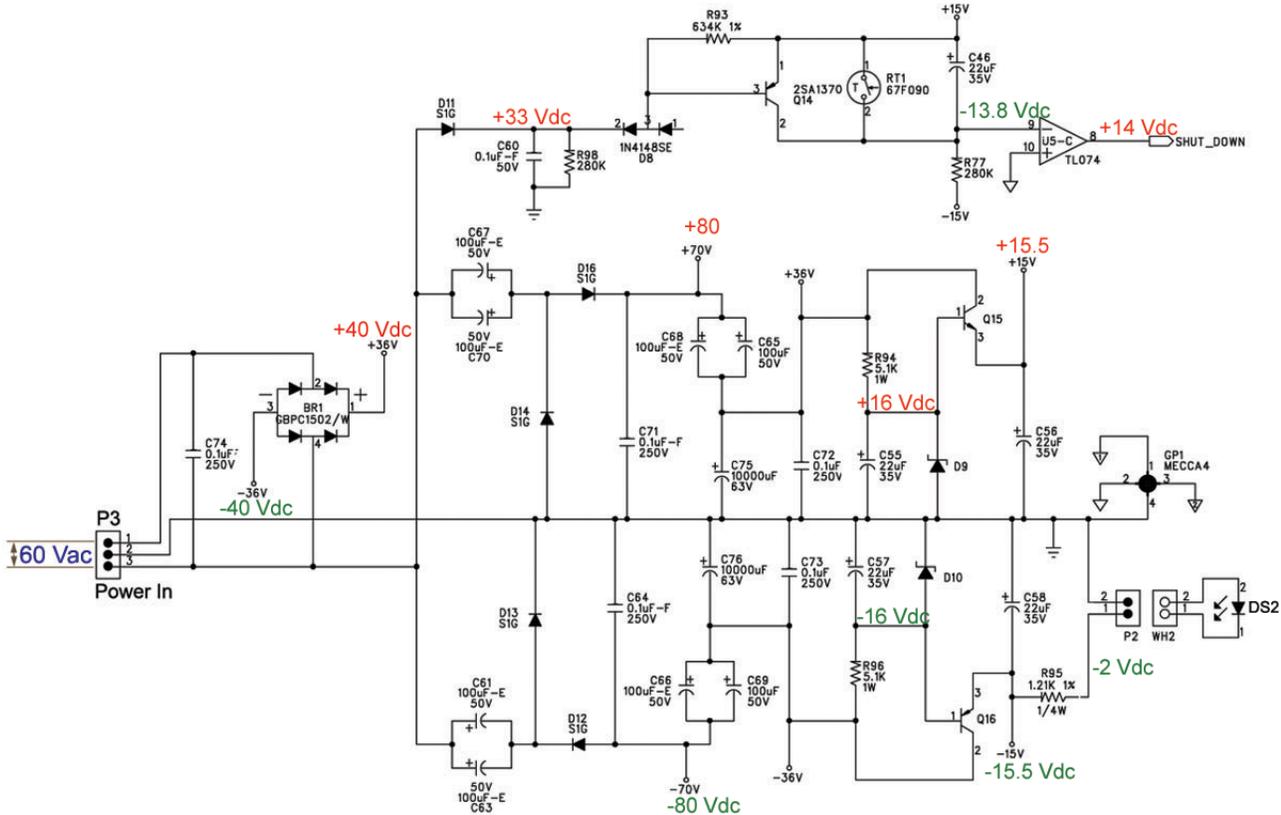
AC Input Module



The main line voltage is connected at input jack P1 on the ac input PCB. Capacitors C2 and C3 work in conjunction with C1 to help reduce the instantaneous line voltage spikes that cause static noise in the high frequency range. Pin 2, the AC ground, is connected to chassis ground. Pins 1 and 3 are connected to the 2-pole 2-position main power switch, SW1. Toggling of SW1 directs the ac voltage to travel through fuses, F1 and F2, to the voltage selector switch, SW2 that allows the customer to manually select between 120V or 230V. It is important to power down the equipment before this switch is operated to avoid possible driver damage. Electrically, this switch, SW2, determines which power transformer primary receives the applied alternating current so that the proper output voltage will result.

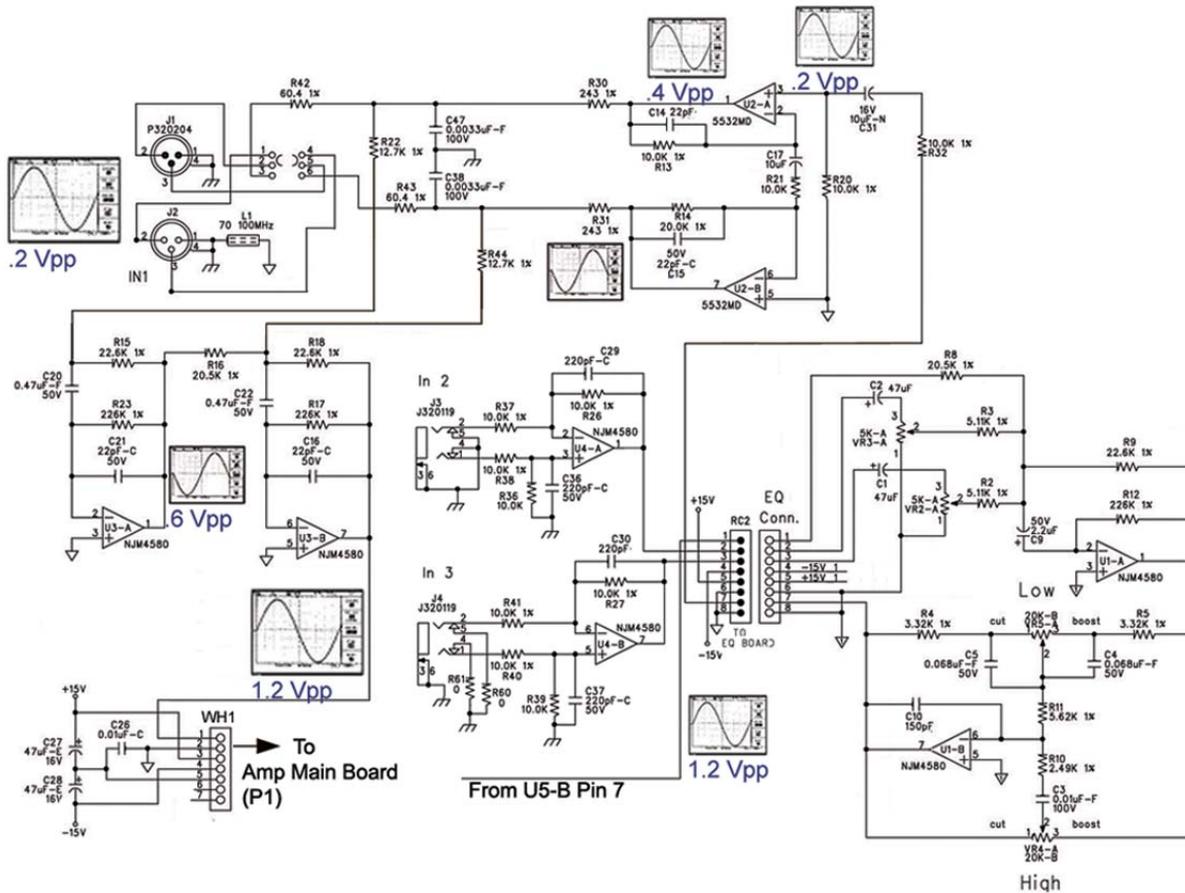
We will assume that the mains input voltage to the transformer is 115 Vac for this circuit description. The toroidal transformer output would then deliver 60Vac to the power supply connector P3 on the main amplifier PCB.

Power Supply



Initially, raw alternating current enters the EON15-G2 from the IEC connector on the AC input PCB and is directly connected to the power switch SW1 through the main fuses F1 & F2. Toggling SW2 directs the ac voltage to travel to the voltage selector switch that allows the customer to select between 120V or 230V. Electrically, this switch determines which power transformer primary is applied so that the proper output voltage will result. In either case, the voltage will be stepped down by the toroidal transformer windings. The toroidal transformer steps down the input alternating voltage from 120Vac to 60Vac and enters the main PCB at P3, where it is rectified into ± 40 Vdc by bridge rectifier BR1. It is filtered by capacitors C75 and C76 . . . the end result is a stable power supply. This voltage is used for the rails for the low and high frequency power amplifiers, which provides a full signal voltage swing from peak to peak of 80 volts. Simultaneously, this rectified voltage from BR1 is also passed through clamping diodes D9 and D10 and regulated at ± 15 Vdc by Q15 and Q16, respectively. This low voltage power supply drives the signal processing IC's and housekeeping/fault detection circuitry. Voltage doubling circuitry supplies the ± 80 Vdc necessary to supply the drivers and pre-drivers. By utilizing this bootstrap configuration, the adjacent stages are prevented from scavenging the voltage from the rails during demanding informational or musical passages. The LED DS2 is used as a pilot lamp. Delay is provided on initial power up by the time constant of C46 and R77. Once charge builds up at C46, Q14 biases off after 4 seconds allowing comparator U5C to toggle taking its output high. Directly connected to Q6 and Q1 this action enables both amplifiers. Upon power down, Q14 is instantaneously biased on causing the toggling of U5C, thereby, disabling both amplifiers until C46 is totally discharged via R93 and R98. Excessive heatsink temperature will cause RT1 to short, toggling U5C, and enabling amplifier shutdown.

Loop/Mix Input Circuitry

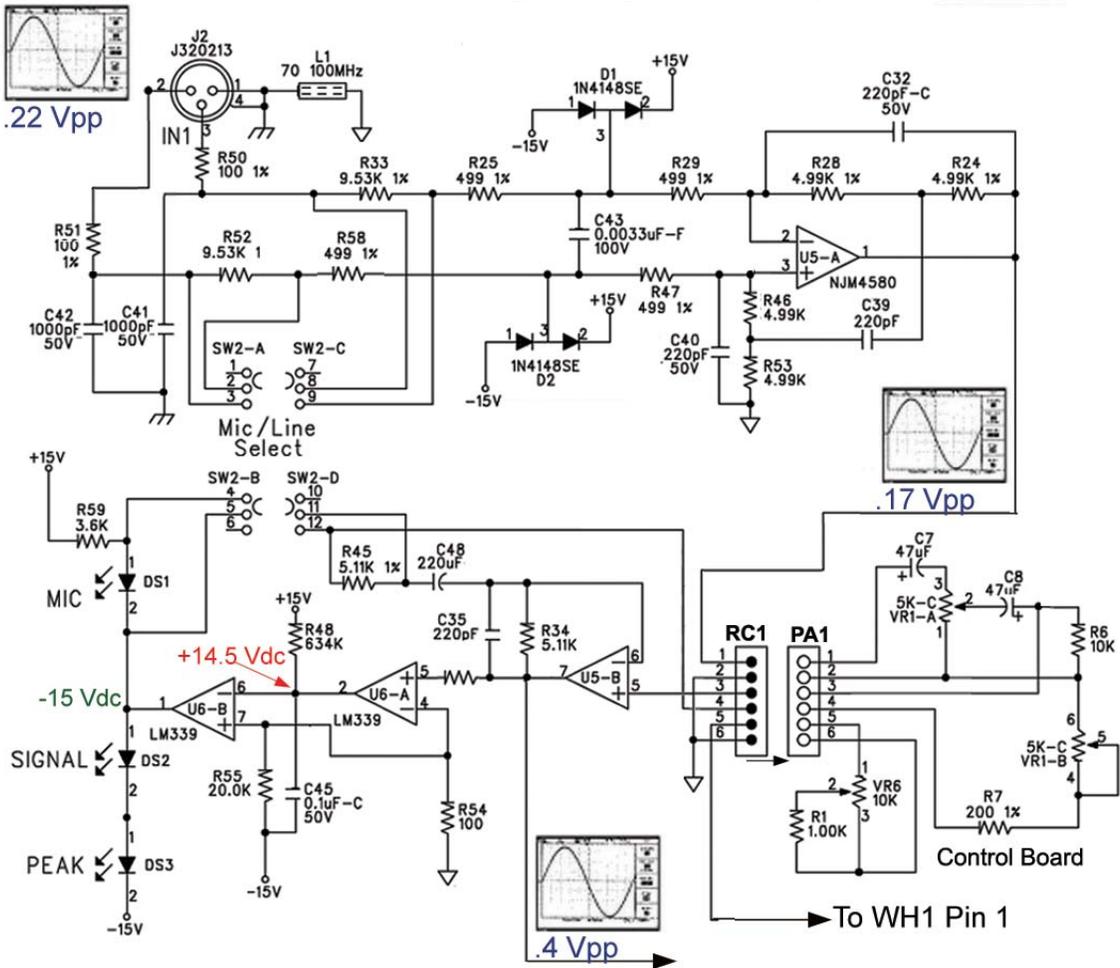


Shown above is the Input Loop/ Mixture Circuitry with the accompanying Channel 2 and 3 Input and Equalization Circuits for the EON 15-G2. NOTE: It is assumed that the technician is familiar with the main XLR input circuit for this discussion.

Balanced input signal enters the ¼” connectors at J3 and J4 for auxiliary input channel’s 2 and 3 and is isolated by IC’s U4-A and U4-B. The corresponding output signals traverse pins 2 and 3 of RC2 to the individual volume controls VR3 and VR2. At this point, all input signals (including the XLR input signal at pin 1 of RC2 from pin 7 of U5-B from input PCB) are summed at the non-inverting input of U1A on the EQ PCB. The resulting signal is output on pin 1 and is directly connected to the boost side of the equalization controls. A 12-dB cut or boost in signal can be achieved by this equalization amplifier which begins at the non-inverting input pin 6 of U1-B. This output signal is returned to the Input PCB via pin 7 of RC2 and is separated into two signal paths by isolation IC’s U2-A and U2-B. The desired output signal is determined by toggling the 3-pole, 2-throw switch SW1 between the original “pure” input signal and an equalized “mixture” of that input signal. This allows the user to loop or daisy chain additional sound reinforcement equipment utilizing either signal.

IC’s U3-A and U3-B provide further isolation from the loop/mix circuitry and J1 sending this “mixture” output signal to the main amplifier PCB via pin 1 of WH1.

Signal Input Circuitry

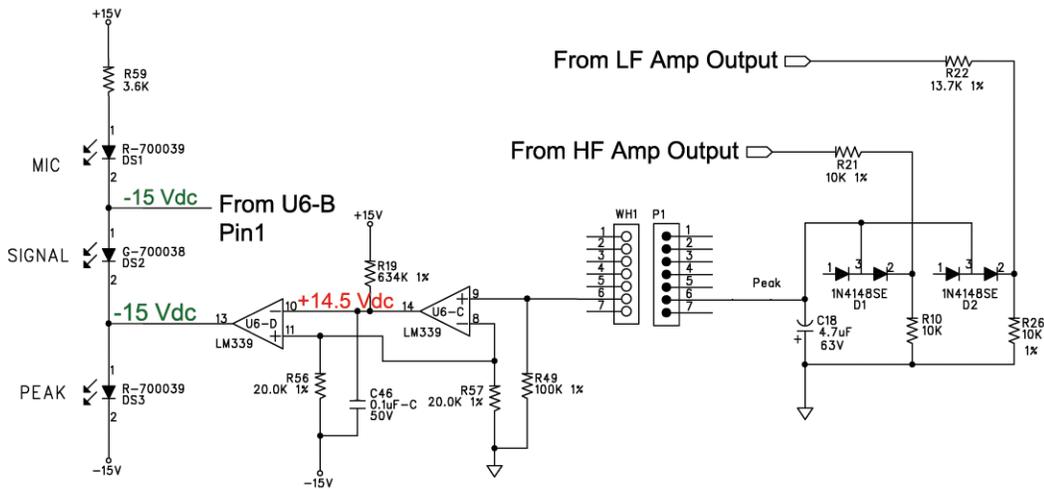


Voltage measurements are at frequency of 100 Hz with -20 dB on input at XLR (J2).

Balanced input is connected to J2 and travels to impedance selector switch SW2. This switch inserts R33, R52 and R45 for line level inputs and removes same for microphone level inputs. It also shorts the “mic” indicator LED (allowing the illumination of the “signal” LED) and changes the gain of summing amplifier IC U5B. D1 and D2 add input circuitry protection if the input signal is in excess of ± 15 Vdc. The signal travels to pins 2 and 3 of buffer amplifier U5A where the Common mode rejection cleans up the extraneous noise from being amplified.

The signal is output on pin 1 of U5 to the control PCB via connectors RC1/PA1 so the user can adjust to the desired level using volume control VR1. The signal is returned to the input PCB through RC1/PA1 and is input to pins 5 and 6 of U5B. This output on pin 7 of .4Vpp, branches into the mic/signal mode LED indication circuitry (comparator U6), and the equalization circuitry on pin 1 of RC2.

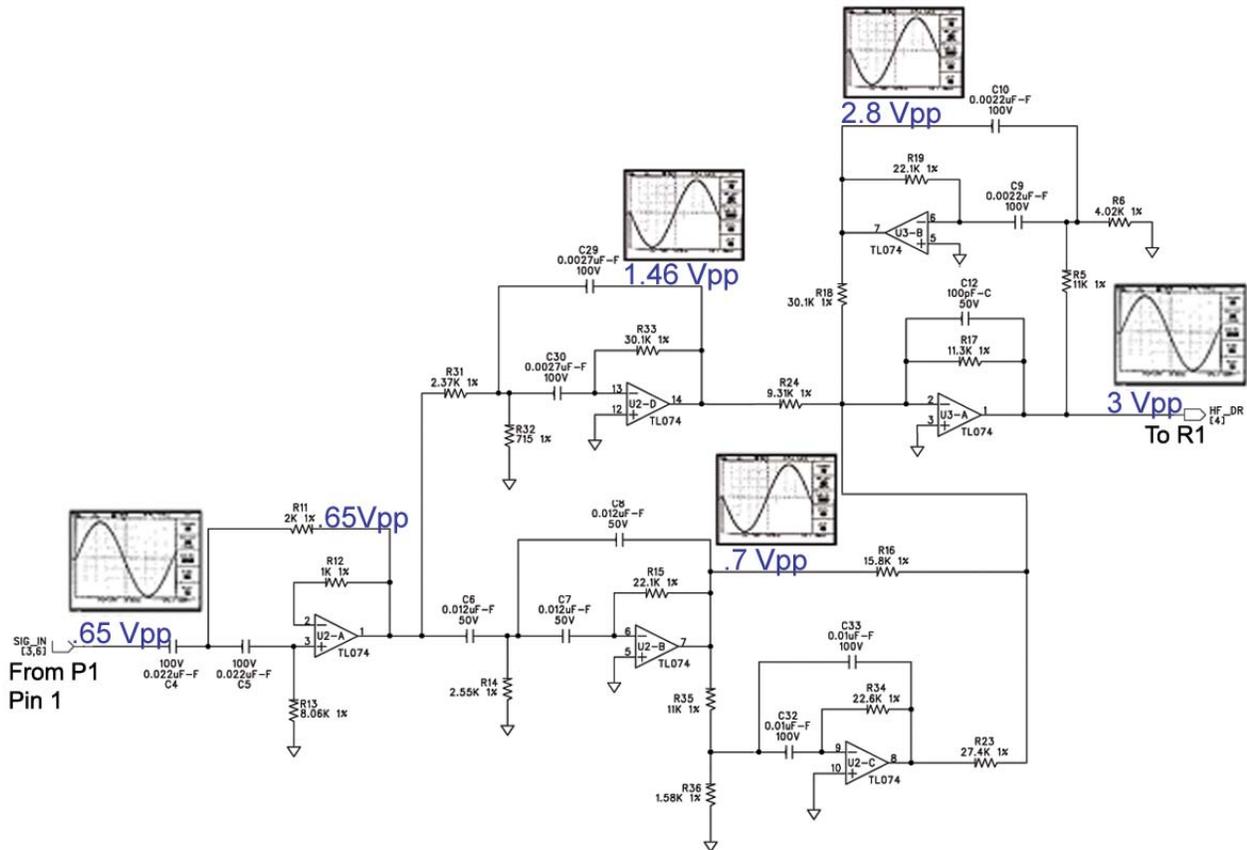
Signal Peak LED Circuitry



This is the signal indication circuitry for the EON15-G2 that is located on the signal input PCB. The presence of signal, the peak input signal and/or instantaneous signal overmodulation from both the high frequency and low frequency amplifiers is shown.

Indication consists of voltage network of LED diodes, DS1, DS2, and DS3 connected in series with each internal node encompassing IC detection circuitry. Any voltage from the low frequency amplifier or the high frequency amplifier that is above the voltage drop of D1 or D2 (located on main PCB) will toggle U6C. This, in turn, will toggle U6D and forward bias the “peak” LED (DS3) emitting light. Similarly, the “line” or “mic” mode is determined by the position of SW2 (not shown—see input circuitry description). U6A (not shown) to toggles and U6B (not shown) toggles when multi-switch SW2 is in the “mic” position thereby illuminating the LED.

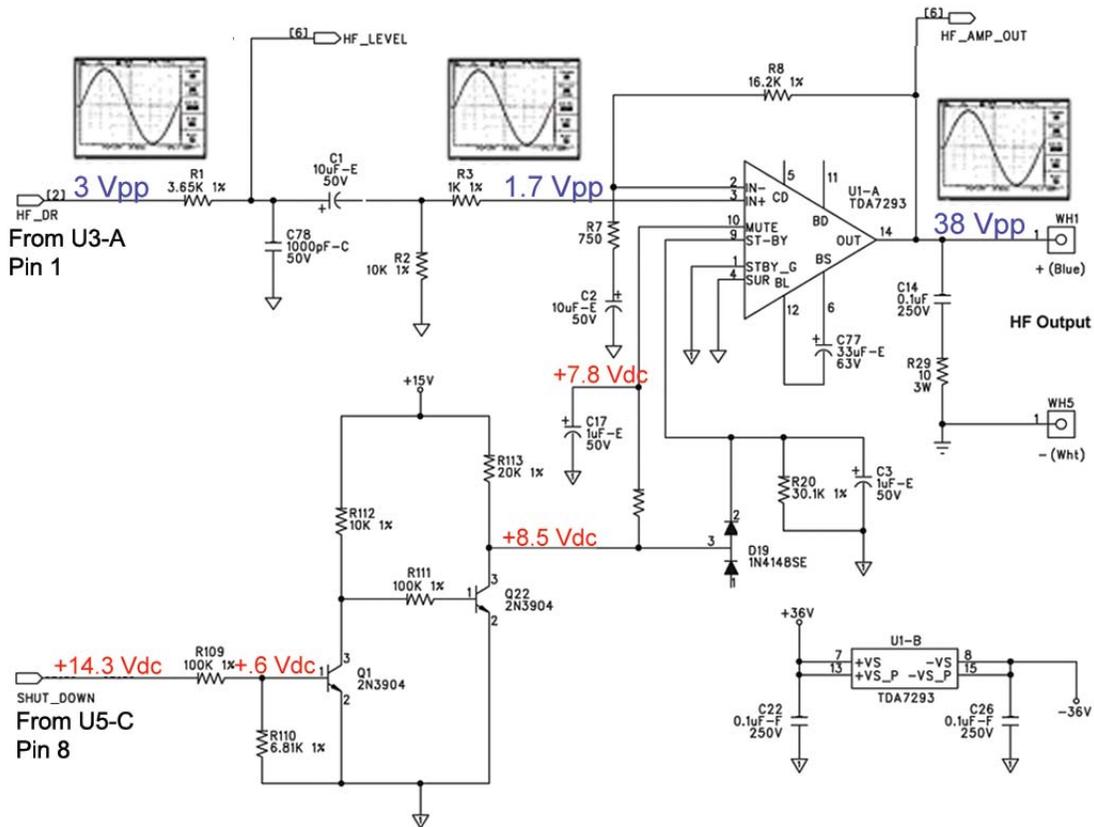
High Frequency Signal Processing



Voltage measurements are at frequency of 10Khz with -25dB on input at XLR (not shown).

Shown above is the high frequency signal processing circuitry for the EON 15-GII. Input audio signal is transferred from the input PCB to the Main Amplifier PCB via multi-pin connector cable. . Specifically, pin 1 of WH1 carries this signal to pin 1 of connector P1. A signal of .65Vpp enters the serially connected multipath high pass filters U2-A and U2-B. U2-D enhances the very high frequencies (midpoint 19khz) while U2-C enhances the lower frequencies of the high frequency spectrum (midpoint 3Khz). Both these outputs are summed and amplified at the inverting input of U3-A with an output voltage of 3Vpp which is connected to the high frequency main amplifier IC U1.

High Frequency Amplifier



Voltage measurements are at frequency of 10Khz with -25dB on input at XLR (not shown).

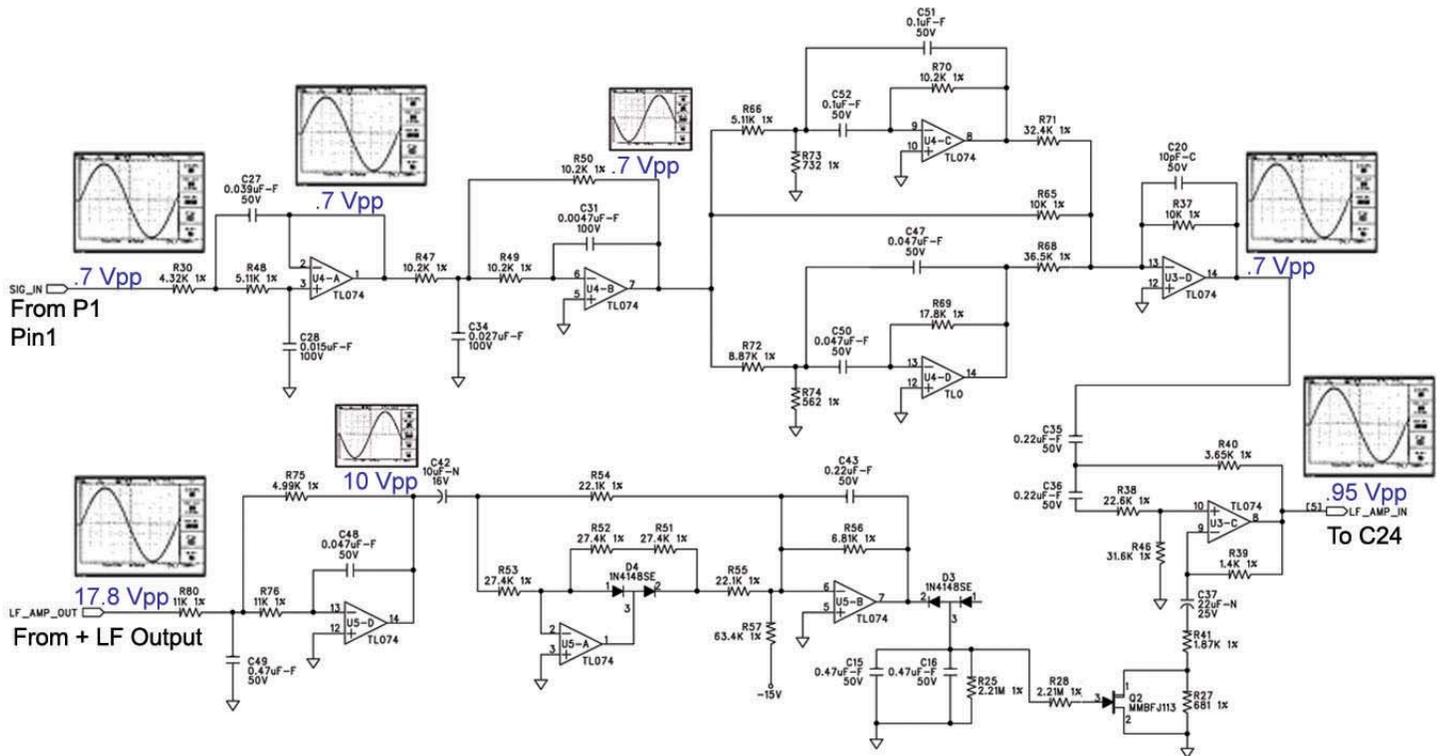
This is the high frequency power amplifier used in the EON15-G2 after serial number 27225. It uses a TDA7293 operational power amplifier in a non-inverting configuration with the normal peripheral components to provide proper equalization and operation. The nominal operating voltage of $\pm 40\text{Vdc}$ is applied to the IC via pins 7,13 and pins 8,15.

The negative feedback resistor, R8, in conjunction with R7 determine the amplifier's closed-loop gain. Signal output from pin 1 of U3A is capacitively coupled by C1 and serially reduced by R1 and connected to the non-inverting input of U1 at pin 3. Operating stability is increased by adding the supersonic frequency input filter through the shunt of R7 and C2 and by adding filter C14 and R29 on the output. These circuits dampen possible resonant oscillations.

Peak output/dc offset voltage from the IC output pin 14 travels to D1 and traverses through connector P1 is detected at U6 pin 9 on the Signal Input PCB.

The EON15G-2 has thorough IC thermal protection/muting circuitry. Comparator U5 (located on power supply description) toggles if sensor RT1 (on same) detects a heatsink temperature in excess of $\geq 60^\circ\text{C}$. or Q14 (on same) detects a loss of ac power. This resultant shutdown signal is sent to bias Q1 into conduction, which, ultimately, mutes the amplifier preventing possible driver damage.

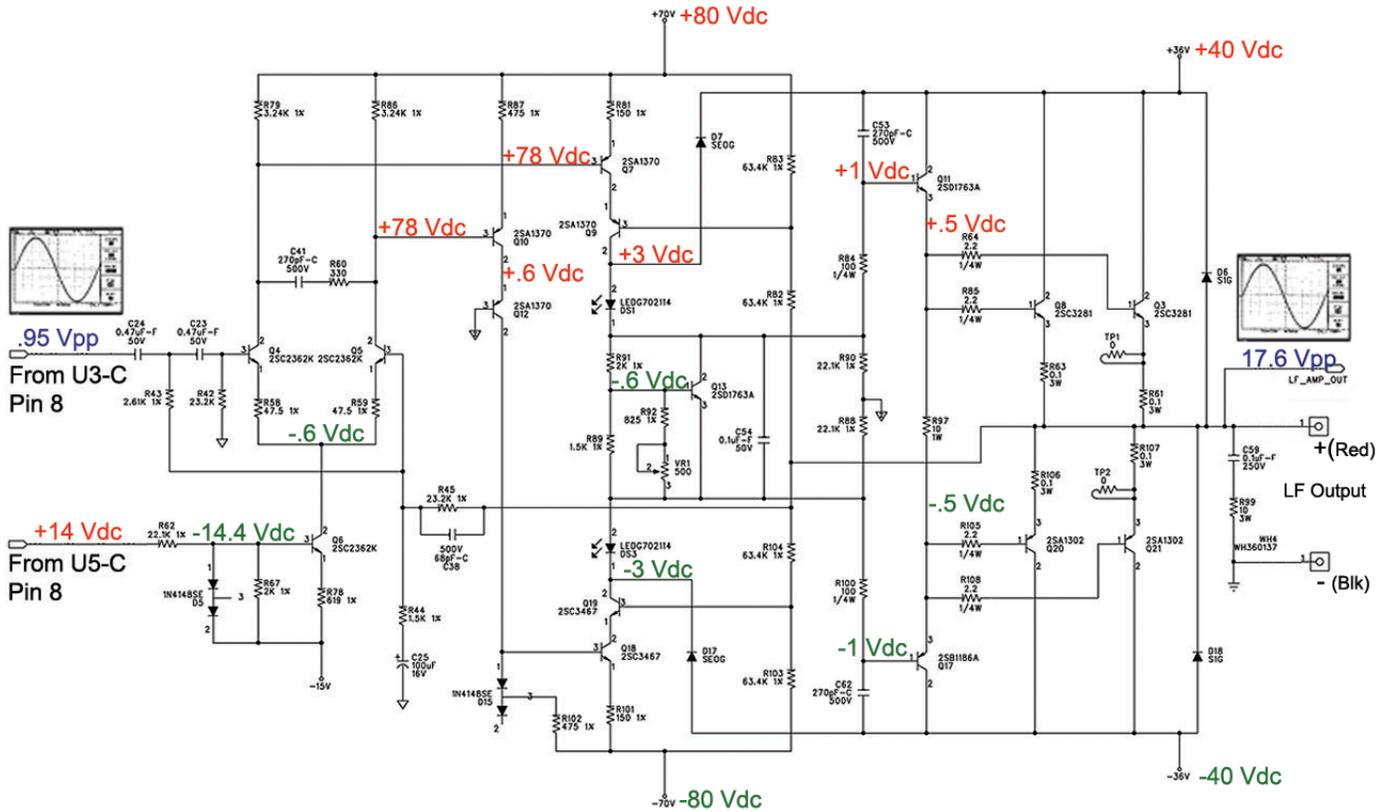
Low Frequency Signal Processing



Voltage measurements are at frequency of 100 Hz with -20 dB on input at XLR (not shown).

Shown above is the low frequency signal processing circuitry for the EON 15-G2. Signal of $.7V_{pp}$ enters from pin 1 of P1 to the serially connected low pass filters U4-A and U4-B. The signal diverges to U4-C and U4-D where the upper limit (midpoint 110.7Hz) and the lower limit (midpoint 62.2Hz) are enhanced and summed by U3-D. This processed signal is output from U3-D and is amplified by U3-C from $.7V_{pp}$ to $.95V_{pp}$ subject to limiting from the negative feedback loop consisting of U5 and Q2.

LF Amplifier Stage



All Voltage measured with reference to audio ground with no input signal

The low frequency amplifier uses discrete components configured in a push-pull drive architecture operating in the class AB region and have a measurable gain of 18.52 dB. The voltage rails for the power amplifier are ± 40 Vdc as rectified by bridge BR1 located in the Power Supply Module. The output and driver transistors are driven by the preceding stages, which make use of the bootstrap supply voltage of ± 80 Vdc. The low frequency processed signal from pin 8 of U3-C enters the differential amplifier consisting of Q4 and Q5 subject shutdown from Q6. Physically attached to the heatsink, Q13 dynamically controls the bias for the output transistors and is statically adjusted at VR1.

TROUBLESHOOTING GUIDE

Any successful electronic repair is dependent upon accurately diagnosing the symptoms that indicate faulty circuitry to the root cause and the subsequent, reliable repair to correct these faults. With this in mind, the purpose of this troubleshooting guide is to enable the service technician to quickly become familiar with the operating characteristics of the unit and to accurately diagnose the associated symptoms that indicate malfunctioning circuitry. In addition, this guide will facilitate the timely repair of the malfunctioning equipment so that it can be returned to a satisfied owner. Since the total 'repair time' equals the sum of the 'diagnoses' time plus the 'circuitry repair' time, and the 'circuitry repair' time is standard, the only other factor that can impact this total 'repair time' is the initial diagnoses time. Therefore, the successful technician, must be time efficient with respect to diagnosing and repairing malfunctioning equipment.

Visually inspect product. Many times a customer's problem with a unit can be located just by visually inspecting the product for gross faults. This visual inspection can also determine if the equipment has been abused when a claim for warranty service is involved.

Verify the fault that the customer is experiencing. If unable to reproduce the customer's complaint, notify the customer of your findings and obtain more information about the complaint.

Verify complaint and repair product as necessary if product is eligible for in-warranty status. It is the practice of JBL Professional to always give the customer "the benefit of doubt" concerning decisions of eligibility for in-warranty coverage. This not only is a good business practice in the long run but also promotes customer good faith and satisfaction.

If product status is out of warranty, troubleshoot and contact the customer with an estimate of the repair charges.

In either case, it is always wise to use the original JBL replacement components that are listed in the master parts list to insure the maximum performance of JBL equipment. To obtain more ordering information contact the website at www.JBLPRO.com.

Wait for the approval or the denial of the repair estimate and note the time and date of customer's decision.

If customer approves, repair unit and verify final, proper operation.

If customer denies the estimate, reassemble set and return to the customer.

If possible perform Safety Checkout before returning set to customer regardless if unit is repaired.

TROUBLESHOOTING THE EON 15-G2

This troubleshooting guide is meant for the experienced technician intent on restoring proper operation to the EON 15-G2. Isolation of the defective circuitry can be effectively accomplished by utilizing this guide and the circuit descriptions found on the previous pages. Troubleshooting electronic circuitry entails a cause and effect analysis and the individual faults are separated into generalized categories. Current, voltage and signal irregularities will constitute the bulk of the necessary repairs to the EON 15-G2.

Excessive current draw problems (shorted component)

Shorted Output Components

U1, Q3, Q8, Q20, Q21, Q11, Q17

Shorted Power supply components

C76, C75, BR1, Q15, Q16, D9 and D10

XFRMR primary/secondary shorted together

No voltage/missing voltage/low voltage problems (open/shorted component)

Verify proper a.c. input voltage.

If all internal voltages are absent,

Check that fuses F1 and F2 are ok? Should be TL3.15amp GMA.

If ok, check if transformer is open? Transformer should have continuity in primary and secondary windings. Unplug Secondary from Main PCB and verify a.c. output voltage. At pins 1&3 on P2, it should read 60Vac.

Power supply ok? $\pm 36\text{Vdc}$ at BR1?

$\pm 15\text{Vdc}$ at Q15E, Q16E?

$\pm 70\text{Vdc}$ at C65, C66

Supply voltages at collectors of all output transistors and U1 Pins 15 and 13

If not ok, repair, verify and continue.

Verify $\pm 15\text{V}$ at P1 pins 3& 4 on Main PCB and to P1 on input/output PCB

If absent, locate, repair and continue.

No sound (possible missing control voltage)

Verify $\pm 15\text{Vdc}$ at P1 pins 3 & 4 on input/output PCB

TROUBLESHOOTING THE EON15-G2 (cont.)

No sound (voltages are okay),

The quickest way to isolate this problem to a specific PCB is to start with a known good input/output PCB. Most failures are related the main amplifier or to components under the most stress.

If problem exists on the input PCB,

Verify signal input to unit at J2 pin 2.

Verify signal output from Input PCB at pin 1 of P1

If no signal then verify output signal on U4, U6, U2, U3.

Signal trace PCB accordingly using input circuit description.

If problem exists on Main amplifier Board,

Verify input signal to Main Amplifier PCB at pin 1 of P1

If no input signal at P1, check -15Vdc supply at pin 4 of P1.

If ok, verify status of mute pin 10 on HF output IC.

If mute pin 10 reads near 0 volts, change IC.

If mute pin 10 of HF output IC reads close to -15Vdc , recheck above results and signal trace PCB. The unit is detecting a fault or there exists a problem with the fault detection circuitry. Signal and voltage trace accordingly using circuit description.

Low output power problems

Verify proper operating voltages as above under "No Voltage. . ."

Verify proper level input to main at pin 1 of P1 for low frequency

“ “ “ pin 7 of P1 for high frequency

If input level is ok, verify signal at base of output transistors for LF

And pin 2 of U1 for HF

If ok, replace output transistors or U1

If not ok, signal trace back to fault using correct circuit description of module, repair and continue check out

No Illumination of Power On LED Indicator

Verify -15 volt at Q16, pin 4 of P1 and leg of R85

Verify -2V on opposite end of R85

If absent, change LED

No Illumination of Input Signal LED Indicator

Verify operating voltage of $\pm 15\text{V}$ on U6 of input/output PCB

Verify input signals at the input J2.

Verify input signal at pin 1 of RC2.

TROUBLESHOOTING THE EON 15-G2 (cont.)

If ok, replace LED.

If still bad, verify voltages at anode and cathode of DS2.

Verify threshold voltages on U6 on Input/output PCB

If any irregularity exists, replace IC U6

(LM339)

No Microphone LED indication

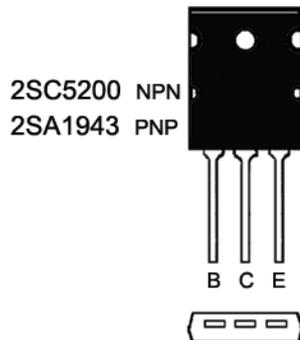
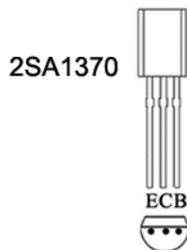
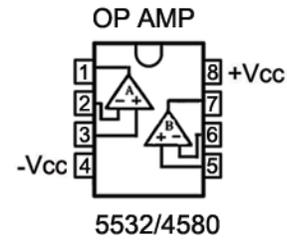
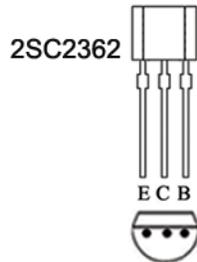
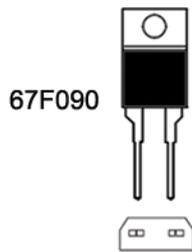
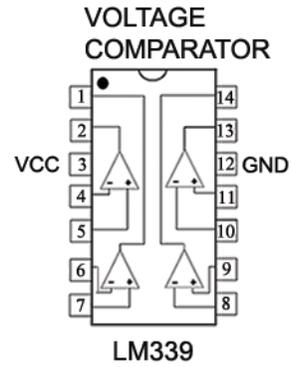
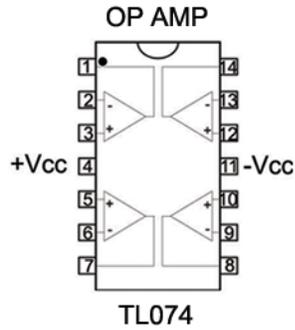
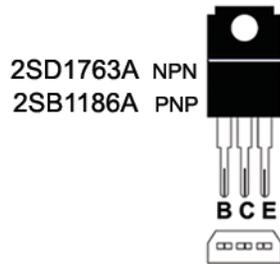
Verify 15 Volts at leg of R59

Verify mic/line switch is not in line mode

Verify LED element operation. If defective replace LED.

Verify continuity of SW2 contacts

Semiconductors



EON15-G2

Final Test Procedure

INITIAL POWER UP TEST

Setup—Serially connect a variac, isolation transformer and ammeter. Connect unit under test to variac. Mic /Line switch should be Line position. Volume control at fully CCW position and no load.

- Slowly increase the variac output voltage monitoring for excessive current usage
- Idle current should be less than .5 amps
- Power Green LED (FP) should be illuminated

GAIN TEST

Setup---Monitor LF and HF output on oscilloscope with 8 Ohm load, volume CCW

- Apply -20 dB at 80 Hz sine wave from generator to the “ XLR” input 1.
- Increase volume control fully CW. **LF Output** signal should be 25 dB, ± 1 dB.
- Change sine wave frequency to 10 kHz. **HF Output** signal should be 26 dB, ± 1 dB.

INPUT 2 & 3

Setup---Monitor HF output on oscilloscope with 8 Ohm load, volume CCW

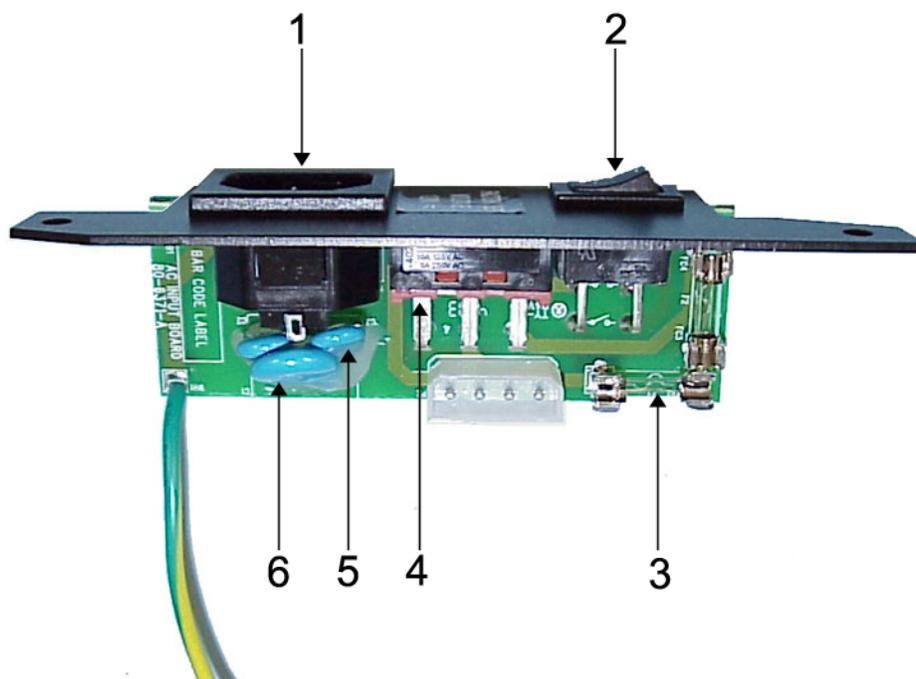
- Apply -20 dB at 10KHz sine wave from generator to the “ 1/4” Jack input 2
- Rotate the volume control (VR2&3) and verify smooth level change with no intermittent output.
- Repeat test for input 3

OUTPUT POWER TEST

Setup---Monitor **LF Output**

- Apply 80 HZ to input 1 and increase gain from generator until the peak LED begins to illuminate.
- The output voltage, at this point, should be approximately 18.5 Volts (AC).
- Perform the same test for “**HF**” **Output** with 10Khz on input 1.
- The output voltage, should be approximately 15 Volts (AC).

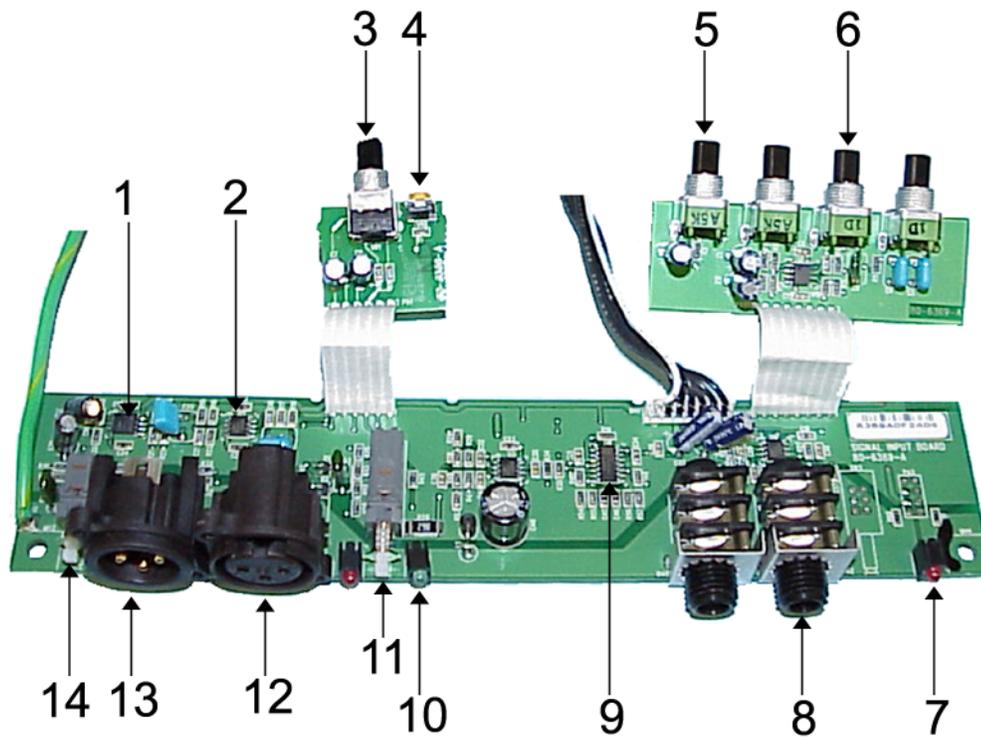
Pictorial Of Power Input PCB Assembly



Component Parts List

Item	Part No.	Qty	Description	Ref.Des
1	32-1244	1	Con Plug AC Receptacle 3 Pin	P1
2	44-0004	1	Switch Power	SW1
3	453-13222-00	2	Fuse 3.15 A Time Lag, 5X20 mm	F1,F2
4	44-0015	1	Switch Voltage Select 115V /230V	SW2
5	62-0049	2	Cap 1000 pf Cer 250 V 20%	C2,C3
6	62-0048	1	Cap 0.01 Mf Cer 250V 20%	C1

Pictorial Of Input PCB Assembly

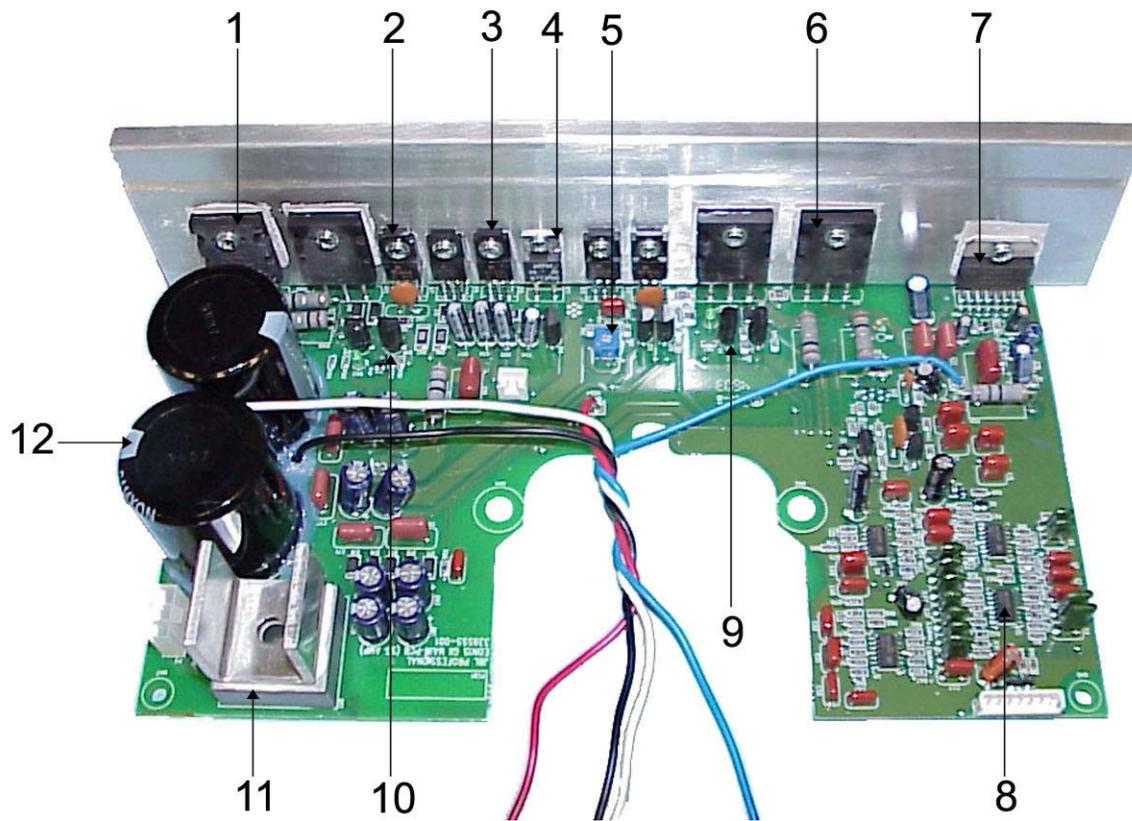


Component Parts List

Item	Part No.	Qty.	Description	Ref.Des.
1	72-1439	1	IC 5532 SM	U2
2	72-1480	4	IC NJM 4580 SM	U1-U3-U4-U5
3	40-0083	1	Pot 5K C 9mm Horiz	VR1
4	42-0006	1	Pot 10K Side Adjust BK	VR6
5	40-0082	2	Pot 5K A 9mm Rot 12.5 mm	VR2,VR3
6	40-0084	2	Pot 20K A 9mm Rot 12..5 mm	VR4,VR5
7	70-0039	2	LED Red R/A T-1 Housing	DS3,DS1

Item	Part No.	Qty.	Description	Ref.Des.
8	32-0119	2	Con, Jack, ¼ Phono	J3,J4
9	72-4034	1	IC LM339,Comparator	U6
10	70-0038	1	LED Green R/A T-1 Housing	DS2
11	44-0051	1	Switch 4PDT, 12 Pin	SW2
12	32-0213	1	Con Jack XLR R/A PCA A Series	J2
13	32-0204	1	Con, Plug XLR	J1
14	44-0050	1	Switch DPDT, 6 Pin	SW1

Pictorial Of Output PCB Assembly



Component Parts List

Item	Part No.	Qty.	Description	Ref.Des.	Item	Part No.	Qty.	Description	Ref.Des.
1	70-0032	2	XSTR 2SA1302 PNP	Q21,Q20	7	72-0021	1	IC TDA 7293	U1
2	70-0033	2	XSTR 2SB186A PNP	Q16,Q17,	8	72-1450	2	IC TL074	U2,U5
3	70-0034	3	XSTR 2SD1763A NPN	Q15,Q13,Q11	9	70-0037	5	XSTR 2SA1370 PNP	Q14,12,10,9,7
4	44-0016	1	Sw Therm 1A NC @ 60 Deg.	RT1	10	70-0036	2	XSTR 2SC3467	Q19,Q18
5	42-0009	1	Pot 500 omh ½ W	VR1	11	70-0047	1	Diode Bridge Rect	BR1
6	70-0031	2	XSTR 2SC3281 NPN Pwr	Q8,Q3	12	60-0002	2	Cap 10000 UF Elec 63V	C75,C76

Click here to view the JBL Limited Warranty Statement

<http://www.jblpro.com/pub/technote/warranty.pdf>

Click here for the Systems Exploded View / Mechanical Assembly Drawings

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15G2.pdf>

Click here to view the JBL Professional QA Codes

<http://www.jblproservice.com/protected/Domestic%20pdf/Electronic%20QA%20Codes.pdf>

<http://www.jblproservice.com/protected/Domestic%20pdf/Loudspeakers%20and%20Loudspeaker%20System%20QA%20Codes.pdf>

Click here for the Main Board Schematics

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%201st%20Version%20Main%20Amp%20Schematics.pdf>

Click here for the Main Board Parts List

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Main%20Board%20Parts%20List.pdf>

Click here for the Main Board Schematics
(Serial numbers above EON15-G2-27225)

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Main%20Board%20Schematics.pdf>

Click here for the Main Board Parts List

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Main%20Board%20Parts%20List.pdf>

Click here for the Main Board Layout Drawing

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Main%20Board%20Layout%20Drawing.pdf>

Click here for the Signal Input Board Schematic

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Signal%20Input%20Board%20Schematics.pdf>

Click here for the Input/Output Board Schematics

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Input-Output%20Board%20Schematics.pdf>

Click here for the Control Board Schematic

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Control%20Board%20Schematics.pdf>

Click here for the EQ Board Schematic

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20EQ%20Board%20Schematic.pdf>

Click here for the Input/Output/Control/EQ Boards Parts List

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20Input-Output-Control%20and%20EQ%20Board%20Parts%20List.pdf>

Click here for the A/C Input Module Schematic

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20AC%20Input%20Module%20Schematic.pdf>

Click here for the A/C Input Module Parts List

<http://www.jblproservice.com/pdf/EON-G2%20Series/EON15-G2%20AC%20Input%20Module%20Parts%20List.pdf>

Limited Warranty

The JBL Warranty on professional loudspeaker products (except for enclosures) remains in effect for five years from the date of the first consumer purchase. JBL amplifiers are warranted for three years from the date of original purchase. Enclosures and all other JBL products are warranted for two years from the date of original purchase.

Who is Protected by This Warranty?

Your JBL Warranty protects the original owner and all subsequent owners so long as: A.) Your JBL product has been purchased in the Continental United States, Hawaii or Alaska. (This Warranty does not apply to JBL products purchased elsewhere except for purchases by military outlets. Other purchasers should contact the local JBL distributor for warranty information.); and B.) The original dated bill of sale is presented whenever warranty service is required.

What is Covered by the JBL Warranty?

Except as specified below, your JBL Warranty covers all defects in material and workmanship. The following are not covered: Damage caused by accident, misuse, abuse, product modification or neglect; damage occurring during shipment; damage resulting from failure to follow instructions contained in your Instruction Manual; damage resulting from the performance of repairs by someone not authorized by JBL; claims based upon any misrepresentations by the seller; any JBL product on which the serial number has been defaced, modified or removed.

Who Pays for What?

JBL will pay all labor and material expenses for all repairs covered by this warranty. Please be sure to save the original shipping cartons because a charge will be made if replacement cartons are requested. Payment of shipping charges is discussed in the next section of this warranty.

How to Obtain Warranty Performance

If your JBL product ever needs service, write or telephone us at JBL Incorporated (Attn: Customer Service Department), 8500 Balboa Boulevard, P.O. Box 2200, Northridge, California 91329 (818/893-8411). We may direct you to an authorized JBL Service Agency or ask you to send your unit to the factory for repair. Either way, you'll need to present the original bill of sale to establish the date of purchase. Please do not ship your JBL product to the factory without prior authorization.

If transportation of your JBL product presents any unusual difficulties, please advise us and we may make special arrangements with you. Otherwise, you are responsible for transporting your product for repair or arranging for its transportation and for payment of any initial shipping charges. However, we will pay the return shipping charges if repairs are covered by the warranty.

Limitation of Implied Warranties

ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

EXCLUSION OF CERTAIN DAMAGES

JBL'S LIABILITY IS LIMITED TO THE REPAIR OR REPLACEMENT, AT OUR OPTION, OF ANY DEFECTIVE PRODUCT AND SHALL NOT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

NOTE: There may be a difference between this Warranty and the Warranty in your Instruction Manual. In the event of a difference, this Warranty will prevail.

Technical Manual



JBL EON15-G2

SPECIFICATIONS

ACOUSTIC & ELECTRICAL SPECIFICATIONS:

- Power Capacity: 300 Watts @ Low Frequency Driver Impedance.
100 Watts @ High Frequency Driver Impedance
- Frequency Range: 39 Hz – 18 kHz (± 10dB)
- Sensitivity: 129 dB SPL, 1 Watt @ 1 Meter
- Crossover Frequency: 1.5 kHz

SYSTEM COMPONENTS:

- Low Frequency Transducer: Integral Frame with one 15" (380 mm) Driver, Dual Neodymium Magnet, 2" Differential-Drive Voice Coil
- DC Resistance: 1.4 ohm ±10%
- High Frequency Transducer: JBL 2418H-1 1" (Throat Dia.) Compression Driver with 1.75 Dia. Titanium Diaphragm. Ferro-fluid Cooled.
- DC Resistance: 3.7 ohm ±10%
- Input 1 Sensitivity: -44 dBu to -22 dBu for Rated Output (Mic/Line Switch in Mic Position)
-12 dBu to +20 dBu for Rated Output (Mic/Line Switch in Line Position)

SYSTEM COMPONENTS: (CONT'D)

- Input 2 & 3 Sensitivity: -18 dBu to +20 dBu for Rated Output
- Output Level: +20 dBu (peak), Loop/Mix Switch in MIX position.
- Audio Connectors: Input 1: XLR/F Balanced
Input 2 & 3: 1/4" Phone, Balanced (TRS)

AURAL SWEEP TEST SPECIFICATIONS:

- A. System Aural Sweep Test: 200mv input RMS, pot at 1/2, tone flat.
- B. L.F. Aural Sweep Test: 4.0V Input, 20 Hz to 4 kHz
- C. H.F. Aural Sweep Test: 3.5V Input, 500 Hz to 20 kHz

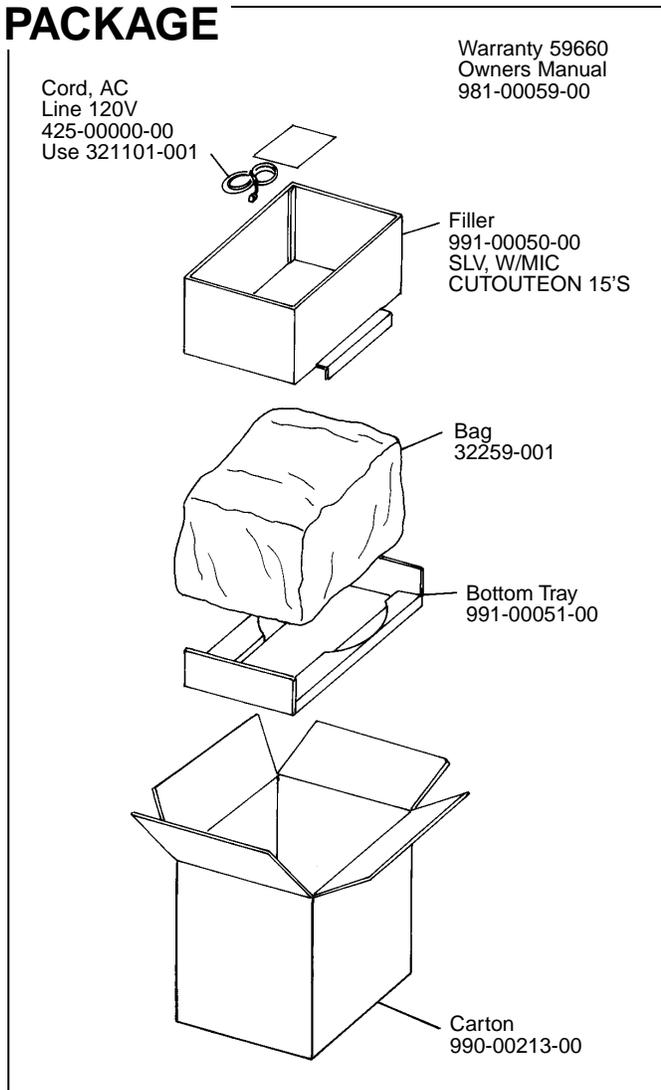
PHYSICAL SPECIFICATIONS:

- Enclosure Dimensions: 686mm x 430mm x 444mm D (27.0 x 17.0 x 17.5 in. D)
- Shipping Weight: 46 lbs. (21 kg.)

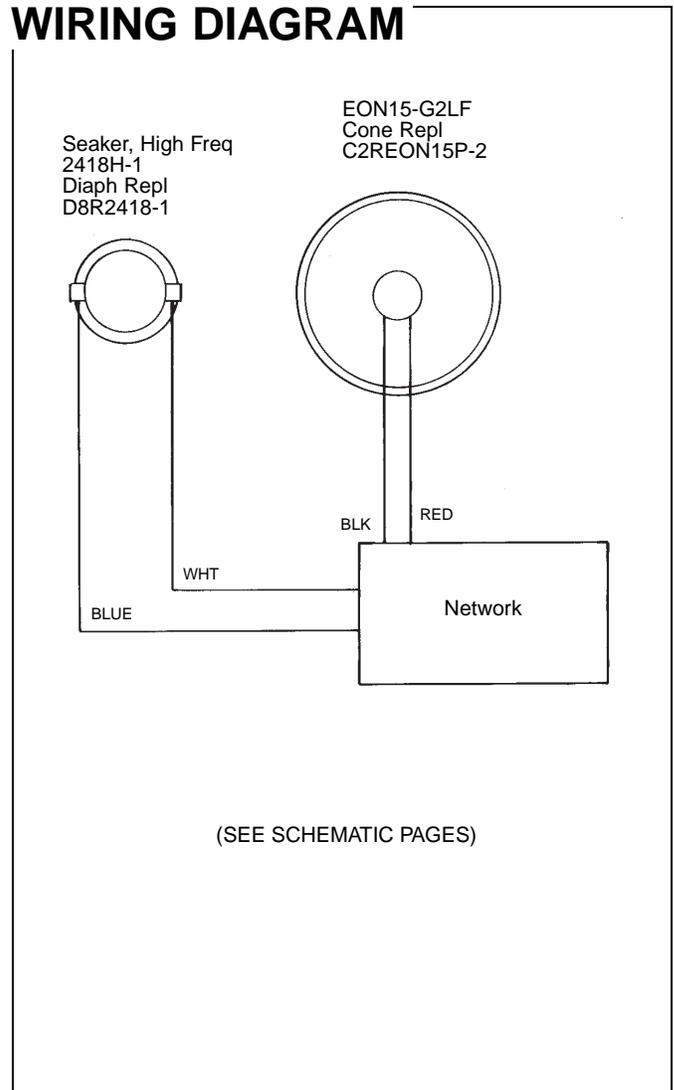
WARRANTY INFORMATION:

- Refer to Warranty Statement packed with each product.

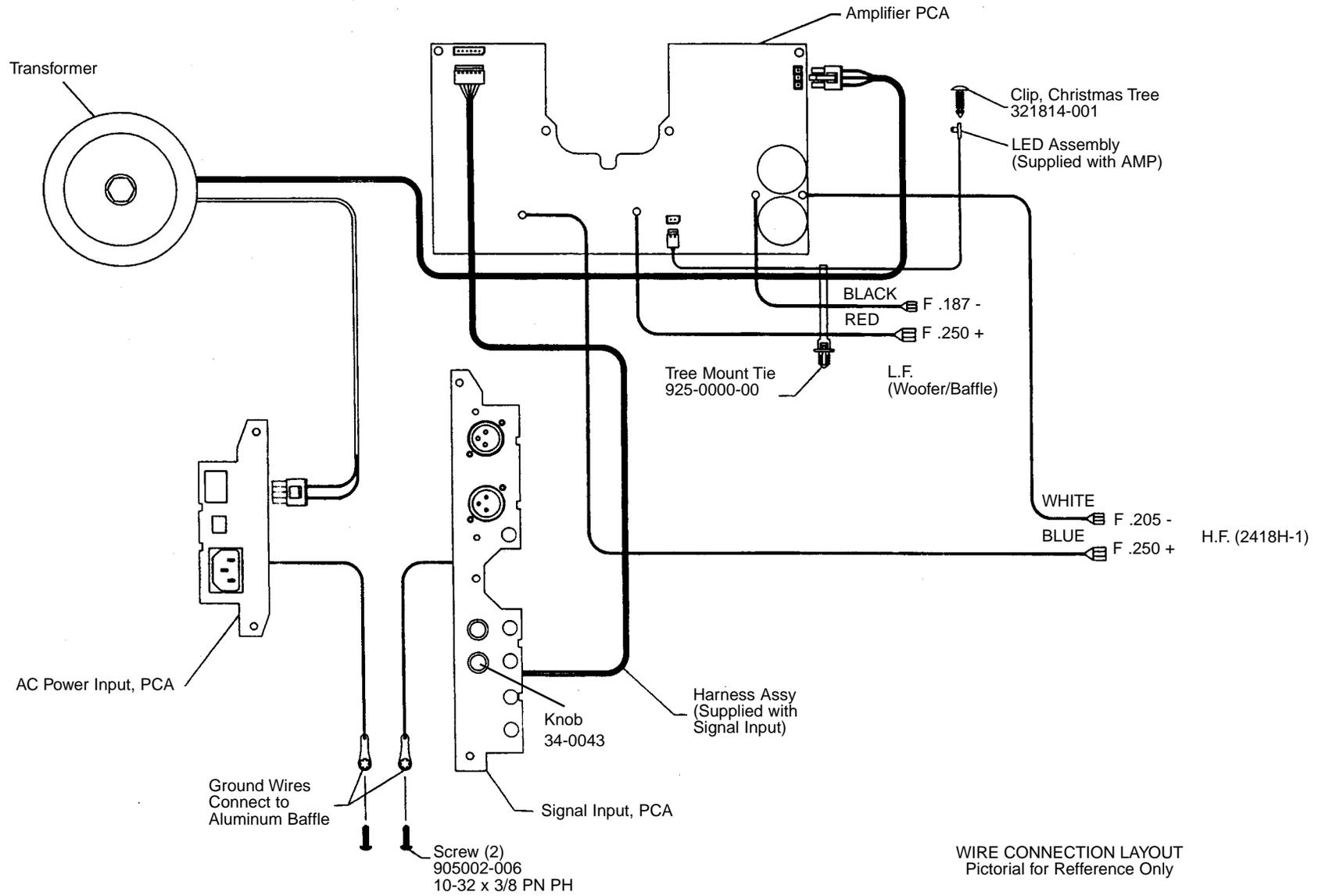
PACKAGE



WIRING DIAGRAM



JBL EON15-G2

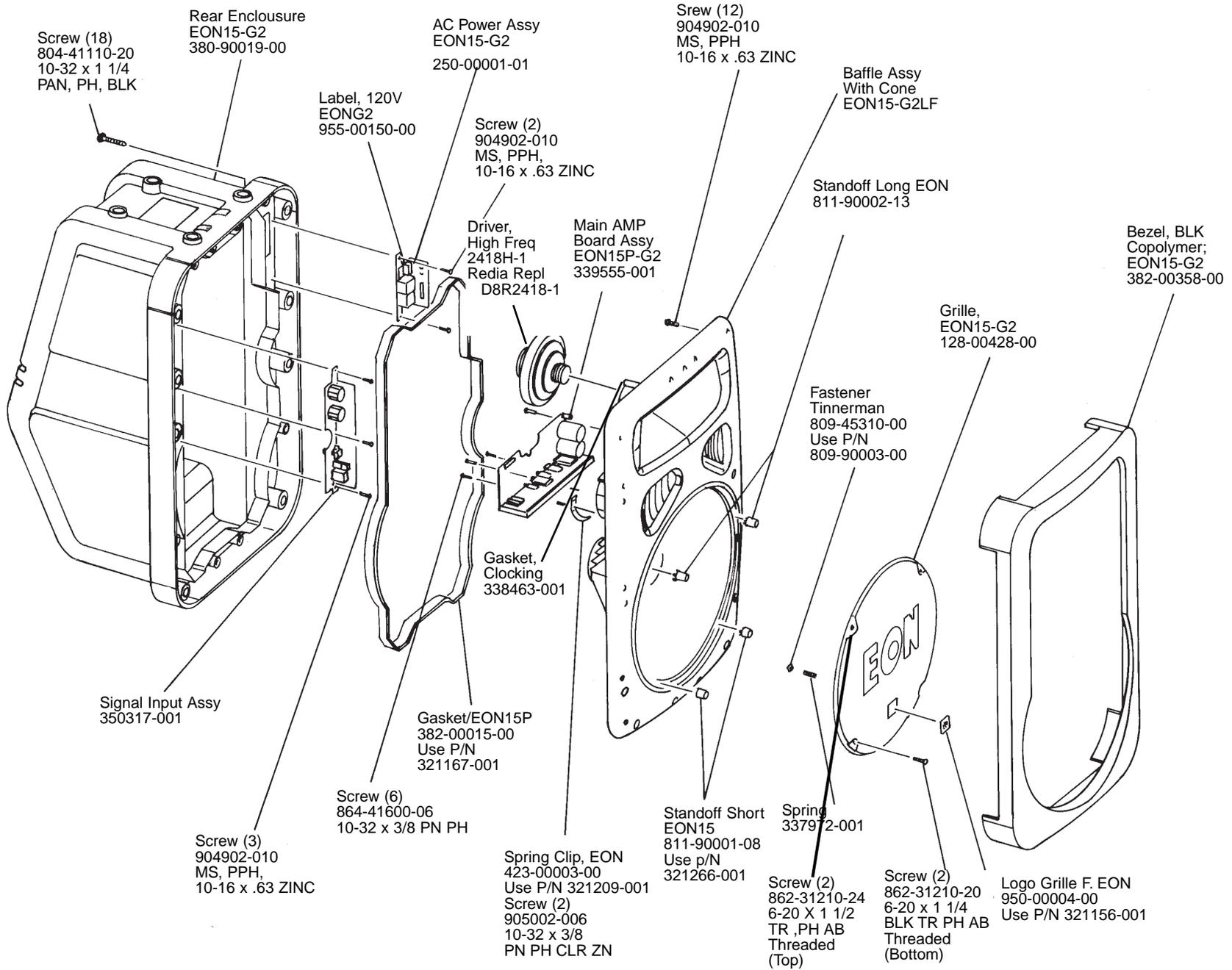


WIRE CONNECTION LAYOUT
Pictorial for Reference Only

JBL EON15-G2

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COMPONENT EXPLODED VIEW

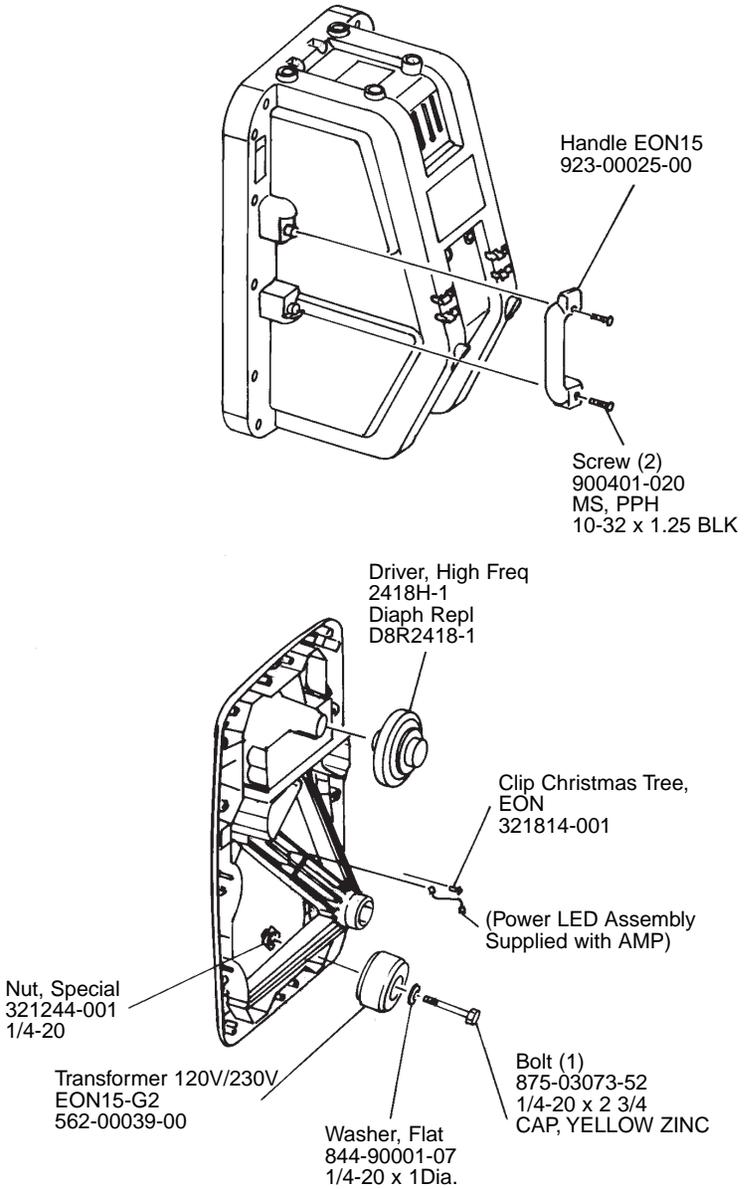
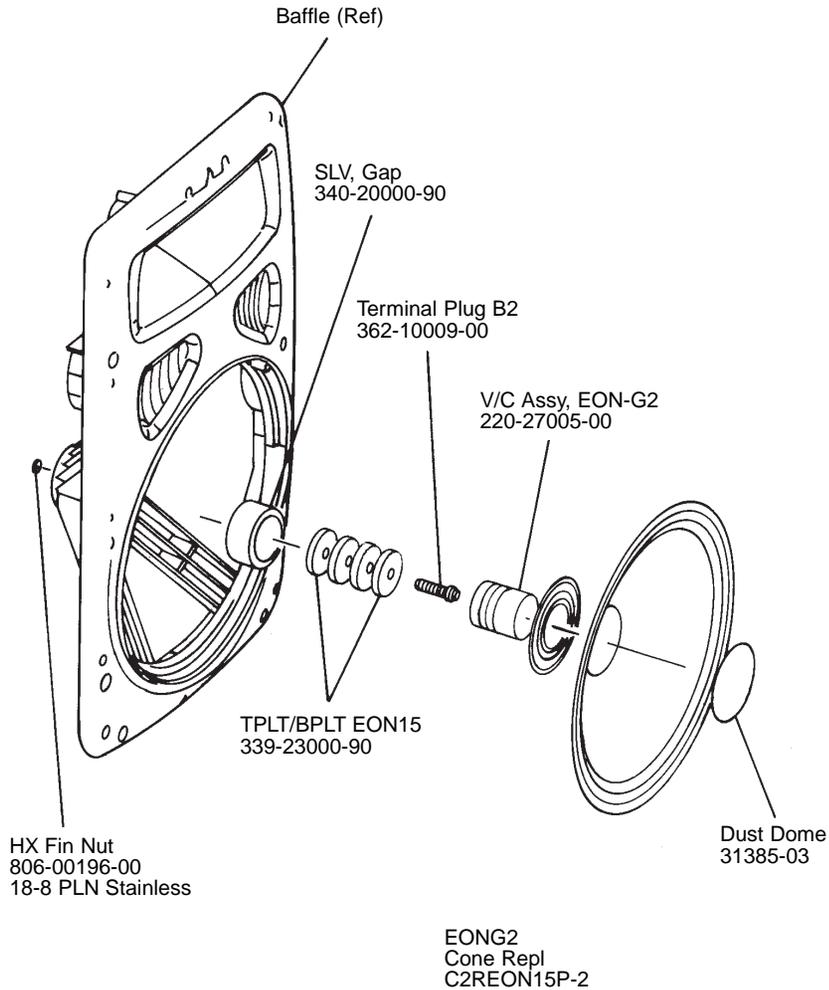


JBL EON15-G2

JBL EON15-G2

COMPONENT EXPLODED VIEW

JBL EON15-G2





JBL PROFESSIONAL

SERVICE PROCEDURES

July 1, 1998

ELECTRONIC FAILURE CODES

The following codes are an expanded version of the existing electronic failure codes. These codes should be used for all electronics excluding networks in speaker enclosures. Network failures should continue to use the transducer failure codes. Please utilize these codes on every warranty claim submitted to JBL Professional. Exclusion of these codes will result in the return of warranty claims.

We have designed these codes to be as simple and self-explanatory as possible. The failures are categorized by component, of which there is a heading. The actual failures are listed under the headings, and that is the code that should be used. Should you have problems deciding which code to use, please contact JBL Professional Technical department.



PROFESSIONAL

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ELECTRONIC FAILURE Q.A. CODES

July 1, 2004

Page 1

Q.A. CODE	DESCRIPTION OF DEFECT	WARRANTY STATUS	Q.A. CODE	DESCRIPTION OF DEFECT	WARRANTY STATUS
10.010	IC (Specify)		10.052	Capacitor - Burned due to Workmanship/Design	IN
10.011	IC - Open	IN	10.053	Capacitor - Shorted	IN
10.012	IC - Burned due to Workmanship/Design	IN	10.054	Capacitor - Thermally Sensitive	IN
10.013	IC - Shorted	IN	10.055	Capacitor - Noisy	IN
10.014	IC - Thermally Sensitive	IN	10.056	Capacitor - Leaky	IN
10.015	Noisy	IN	10.057	Capacitor - Dried Up	IN
10.016	Not Secured to Heat Sink	IN	10.058	Capacitor - Value Changed	IN
10.017	IC - Wrong Part (installed at factory)	IN	10.059	Capacitor - Broken	IN
10.018	IC - Burned	OUT	10.0591	Capacitor - Burned	OUT
10.020	TRANSISTOR (Specify)		10.060	DIODE/RECTIFIER/BRIDGE (Specify)	
10.021	Transistor - Open	IN	10.061	Open	IN
10.022	Transistor - Burned Due to Workmanship/Design	IN	10.062	Burned due to Workmanship/Design	IN
10.023	Transistor - Shorted	IN	10.063	Shorted	IN
10.024	Transistor - Thermally Sensitive	IN	10.064	Thermally Sensitive	IN
10.025	Transistor - Noisy	IN	10.065	Wrong Part (installed at factory)	IN
10.026	Transistor - Not Secured to Heat Sink	IN	10.066	Burned	OUT
10.027	Transistor - Wrong Part	IN			
10.028	Transistor - Burned	OUT	10.070	INDUCTOR (Specify)	
			10.071	Inductor - Open	IN
10.030	FET (Specify)		10.072	Inductor - Burned	IN
10.031	FET - Open	IN			
10.032	FET - Burned due to Workmanship/Design	IN	10.080	LED/LCD/VU METER (Specify)	
10.033	FET - Shorted	IN	10.081	No Characters/Missing	IN
10.034	FET - Thermally Sensitive	IN	10.082	No Back Light	IN
10.035	FET - Noisy	IN	10.083	Broken	IN
10.036	FET - Not Secured to Heat Sink	IN	10.084	Meter - Defective	IN
10.037	FET - Wrong Part	IN	10.085	Bezel - Broken	IN
10.038	FET - Burned	OUT			
			10.090	RELAY (Specify)	IN
10.040	RESISTOR (Specify)		10.091	Relay - Intermittent	IN
10.041	Resistor - Open	IN	10.092	Relay - Will Not Engage	IN
10.042	Resistor - Burned due to Workmanship/Design	IN	10.093	Relay - Pitted Contacts	IN
10.043	Resistor - Shorted	IN			IN
10.044	Resistor - Thermally Sensitive	IN	10.100	POTENTIOMETER (Specify)	
10.045	Resistor - Noisy	IN	10.101	Potentiometer - Dirty / Scratchy	IN
10.046	Resistor Pack Cracked	IN	10.102	Potentiometer - Open	IN
10.047	Resistor - Wrong Part	IN	10.103	Potentiometer - Broken, Cracked	IN
10.048	Resistor - Burned	OUT	10.104	Potentiometer - Wrong Part (installed at factory)	IN
10.050	CAPACITOR (Specify)		10.110	SWITCH (Specify)	
10.051	Capacitor - Open	IN	10.111	Switch - Intermittent	IN
			10.112	Switch - Broken	IN



JBL PROFESSIONAL

ELECTRONIC FAILURE Q.A. CODES

July 1, 2004
Page 2

Q.A. CODE	DESCRIPTION OF DEFECT	WARRANTY STATUS	Q.A. CODE	DESCRIPTION OF DEFECT	WARRANTY STATUS
10.113	Switch - Will Not Close	IN	10.172	Transformer - Burned due to Workmanship/Design	IN
10.114	Switch - Noisy	IN	10.173	Transformer - Noisy	IN
			10.175	Transformer - Shorted	IN
10.120	FUSE (Specify)		10.174	Transformer - Shorted	IN
10.121	Fuse - Open	IN	10.175	Transformer - Loose	IN
10.122	Fuse - High Resistance	IN	10.176	Transformer - Burned	OUT
10.123	Fuse - Wrong	IN			
10.124	Fuse - Loose	IN	10.180	CRYSTAL (Specify)	
			10.181	Crystal - Dead	IN
10.130	CONNECTOR (Specify)		10.182	Crystal - Wrong Frequency	IN
10.131	Connector - Intermittent	IN	10.183	Crystal - Thermally Sensitive	IN
10.132	Connector - Broken	IN			
10.133	Connector - Missing Pins	IN	10.190	CABLES (Specify)	
10.134	Connector - Installed Backwards	IN	10.191	Cables - Open	IN
10.135	Connector - Loose	IN	10.192	Cables - Noisy	IN
			10.193	Cables - Cut - Partially Open	IN
10.140	PCB (Specify)		10.194	Cables - Connector Installed Wrong	IN
10.141	PCB - Broken Trace	IN	10.195	Cables - Burned	IN
10.142	PCB - Burned Trace	IN			
10.143	PCB - Cracked	IN	10.200	Components/Touching Shorted	
10.144	PCB - Bad Feedthrough/via	IN			
10.145	PCB - Chemical Damage	IN	10.300	SOLDER PROBLEMS (Specify)	
10.146	PCB - Exchange Amp Board	IN	10.301	Cold Solder	IN
10.147	PCB - Exchange Signal Input Board	IN	10.302	No Solder	IN
10.148	PCB - Exchange DSP Board	IN	10.303	Splashes	IN
10.149	PCB - Exchange A/C Input Board	IN			
10.1491	PCB - Burned	OUT	10.400	MECHANICAL - (Specify)	
			10.401	Broken Binding post	IN
10.150	REGULATORS - (Specify)		10.402	Broken Fuse Holder	IN
10.151	Regulators - Open	IN	10.403	Open Line Cord	IN
10.152	Regulators - Burned due to Workmanship/Design	IN	10.404	Broken/Missing Knob	IN
10.153	Regulators - Shorted	IN	10.405	Dented Chassis	OUT
10.154	Regulators - Thermally Sensitive	IN	10.406	Damaged Front Panel	OUT
10.155	Regulators - Noisy	IN	10.407	Broken Fan	IN
10.156	Regulators - Broken	IN	10.408	Stopped/ Slow Fan	IN
10.157	Regulators - Out of Regulation	IN	10.409	Packing	IN
10.158	Regulators - Wrong Part	IN	10.410	Noisy Fan	OUT
10.159	Regulators - Burned	OUT			
			10.500	SOFTWARE (Specify)	
10.160	BULB/LAMP - (Specify)		10.510	Upgrade Software	IN
10.161	Open	IN	10.520	Upgrade Hardware	IN
			10.530	Reset to Factory Software	IN
10.170	TRANSFORMER - (Specify)				
10.171	Transformer - Open	IN	10.600	ADJUSTMENT (Specify)	
			10.601	Adjust Voltage	IN



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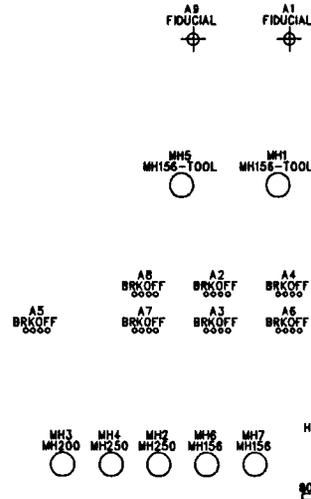
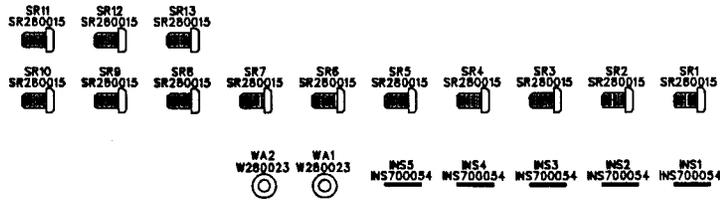
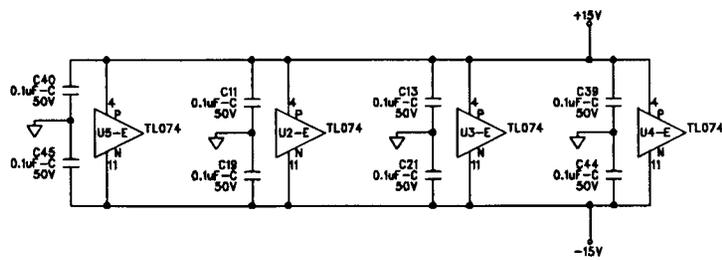
LOUDSPEAKERS AND LOUDSPEAKER SYSTEM Q.A. CODES

July 1, 2004

Page 1

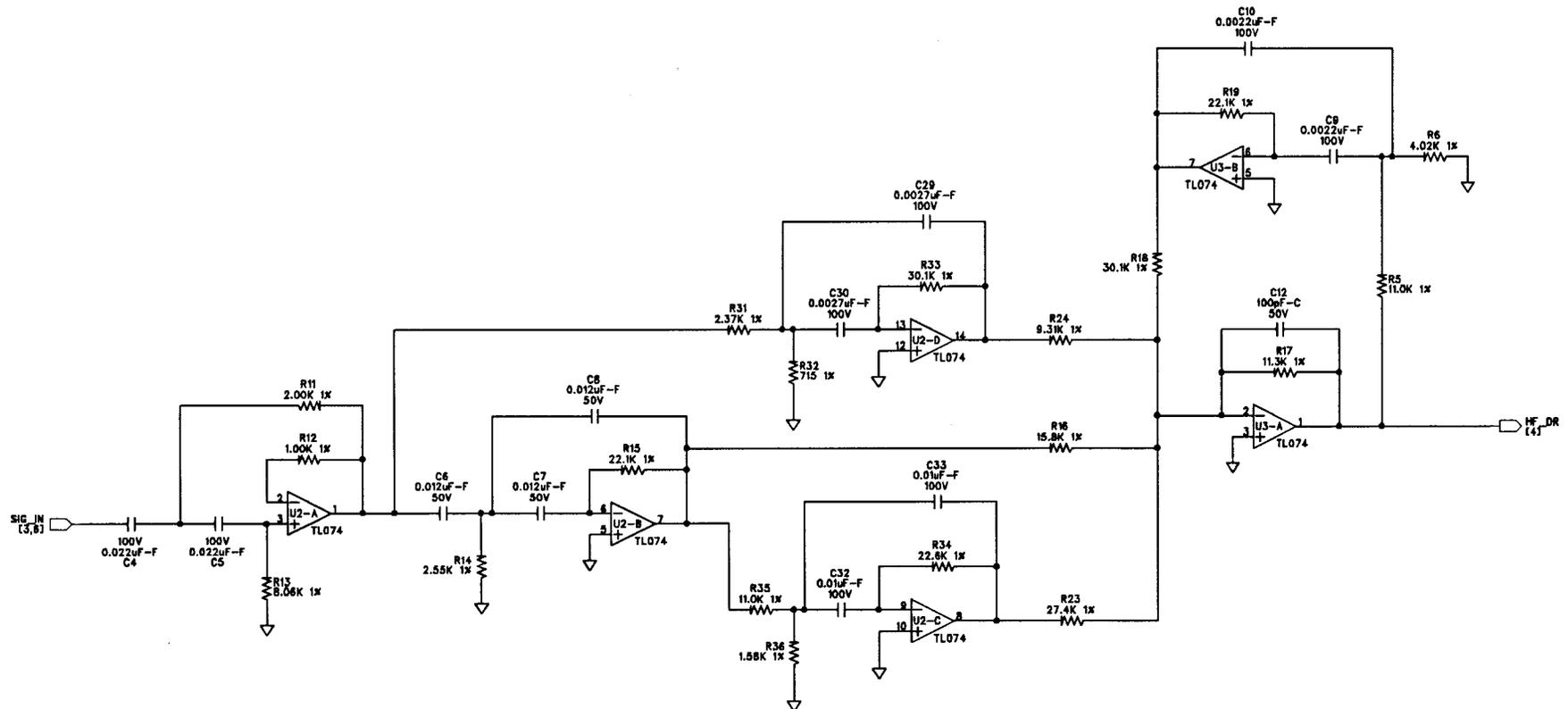
Q.A. CODE	DESCRIPTION OF DEFECT	WARRANTY STATUS	Q.A. CODE	DESCRIPTION OF DEFECT	WARRANTY STATUS
0.0	No Defects - Definition		3.11	Open - Break at Eyelet	IN
0.1	No Defects - Unclassified		3.12	Open - Solder Joint at Eyelet	IN
0.2	No Defects - Standard		3.13	Open - Solder Joint at Terminal	IN
0.3	No Defects - Non Standard		3.14	Open - Loose Terminal	IN
0.4	No Defects - Retrofit		3.15	Open - Voice Coil Pulled Loose	IN
0.5	No Defects - Not Accepted		3.16	Open - Voice Coil Driven Out of Gap	OUT
			3.17	Open - Voice Coil Burned (indicate burn type)	OUT
1.1	Rubbing - Unclassified (Specify)		3.18	Open - Voice Coil Burned at Crossover	OUT
1.2	Rubbing - High Wire	IN	3.19	Open - Voice Coil Inside - Bubbled Support	IN
1.3	Rubbing - Voice Coil Pulled Loose	IN	3.20	Open - Burned Lead	OUT
1.4	Rubbing - Crossover Lead	IN	3.21	Open - Tinsel Lead	IN
1.5	Rubbing - Excess Glue	IN	3.22	Open - Tinsel Lead Oxidized	OUT
1.6	Rubbing - Sunken Spider	IN	3.23	Open - Diaphragm Overdriven (indicate damage to diaphragm)	OUT
1.7	Rubbing - Cone Fatigue	OUT	3.24	Open - Beryllium Copper Lead (indicate location break)	IN
1.8	Rubbing - Torn Cone	IN	3.25	Open - Voice Coil Lead	IN
1.9	Rubbing - Torn Cone at Compliance	IN	3.28	Open - Ferro Fluid Drift	IN
1.10	Rubbing - Spider Loose at Frame	IN			
1.11	Rubbing - Spider Loose at Cone	IN	4.1	Shorted - Unclassified (Specify)	
1.12	Rubbing - Dented Dome	OUT	4.2	Shorted - Voice Coil Turns	IN
1.13	Rubbing - V.C. Driven Out of Gap *	OUT	4.2	Shorted - Voice Coil Turns: Rubbing	IN
1.14	Rubbing - Off Center Spider	IN	4.4	Shorted - Voice Coil to Pot Frame	IN
1.15	Rubbing - Chips in the Gap	IN	4.5	Shorted - Tinsel Leads (touching)	IN
1.16	Rubbing - Voice Coil Out of Round	IN	4.6	Shorted - Voice Coil to Crossover Lead	IN
1.17	Rubbing - Voice Coil Inside - Bubbled Support	IN			
1.18	Rubbing - Voice Coil Burned (indicate type of burn)	OUT	5.1	Defective Bond - Unclassified (Specify)	
1.19	Rubbing - Torn Spider	IN	5.2	Defective Bond - Voice Coil Support to Diaphragm	IN
			5.3	Defective Bond - Dome	IN
2.1	THRU		5.4	Defective Bond - Compliance (include CT)	IN
2.18	SAME AS ABOVE FOR RUBBING		5.5	Defective Bond - Lansaloy	IN
2.1	WITH PRESSURE		5.6	Defective Bond - Spider Inside	IN
			5.7	Defective Bond - Spider Outside	IN
3.1	Open - Unclassified (Specify)		5.8	Defective Bond - Compliance at Cone	IN
3.2	Open - Break at Crossover Lead	IN	5.9	Defective Bond - Compliance Deterioration	OUT
3.3	Open - Break at Weld	IN	5.10	Defective Bond - Cone	IN
3.4	Open - Internal Break in Voice Coil	IN	5.11	Defective Bond - (Loose/Shifted) Magnet	IN
3.5	Open - Break at Start Winding Bend	IN	5.12	Defective Bond - Loose Voice Coil Mass Ring	IN
3.6	Open - Break at Finish Winding Bend	IN			
3.7	Open - Break at V.C. Tube Inside	IN	6.1	External Damage - Unclassified (Specify)	OUT
3.8	Open - Break at V.C. Tube Outside	IN	6.2	External Damage - Dome	OUT
3.9	Open - Break at Cone Collar	IN	6.3	External Damage - Cone	OUT
3.10	Open - Break at Cone Collar Finish Lead	IN	6.4	External Damage - Frame Broken	OUT

JBL EON15-G2



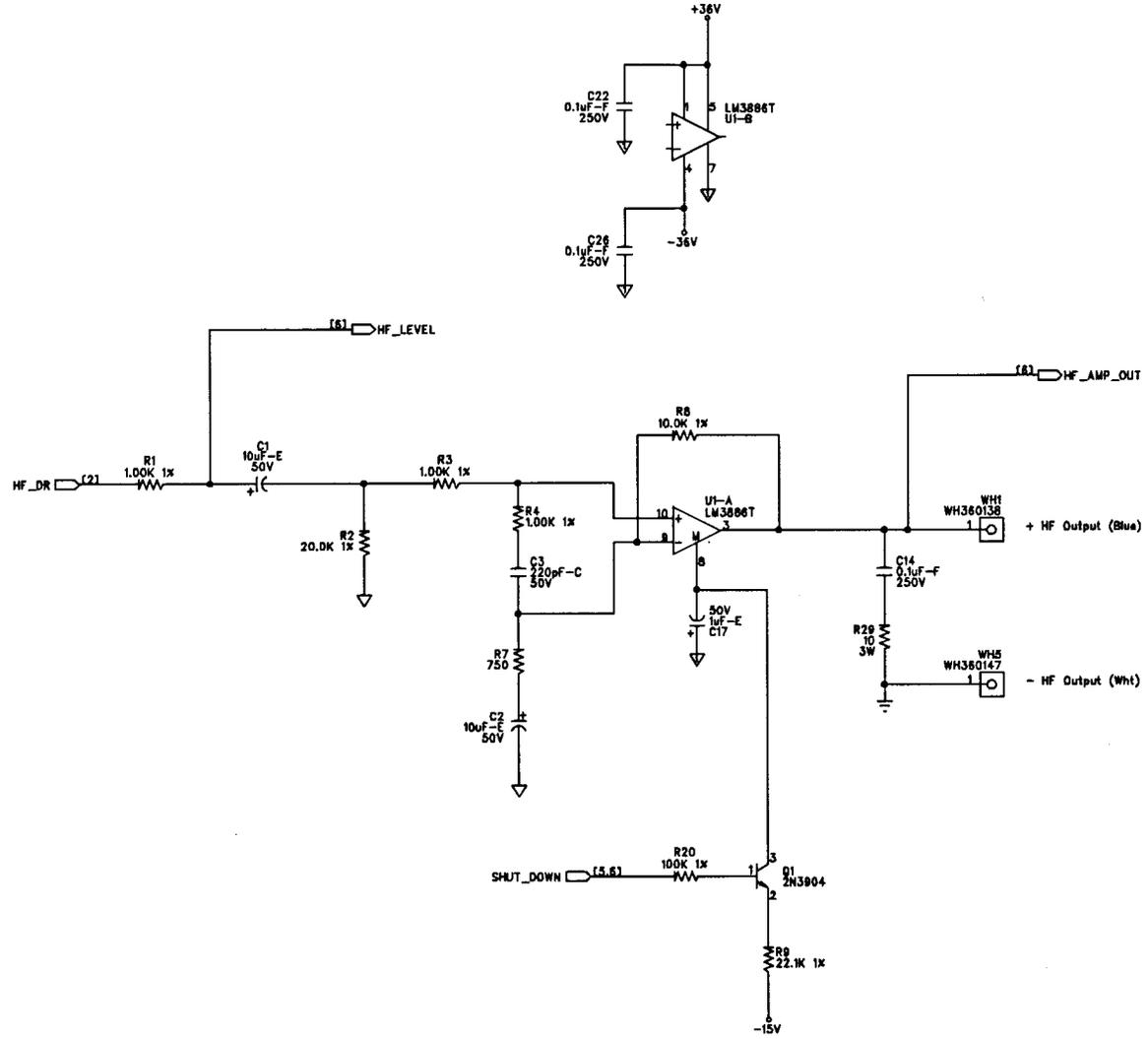
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TITLE: SCHEMATIC EON15 GII MAIN PCBA			
DESIGNER: Mark Corbridge		ENGINEER: Tim Shuttleworth / Don Sealey	
SIZE: A	DRAWING NO: 05-6370		REVISION: C0
START DATE: 03/15/00	FILENAME: 056370C0.SCH	SHEET: 1 OF 6	

JBL EON15-G2



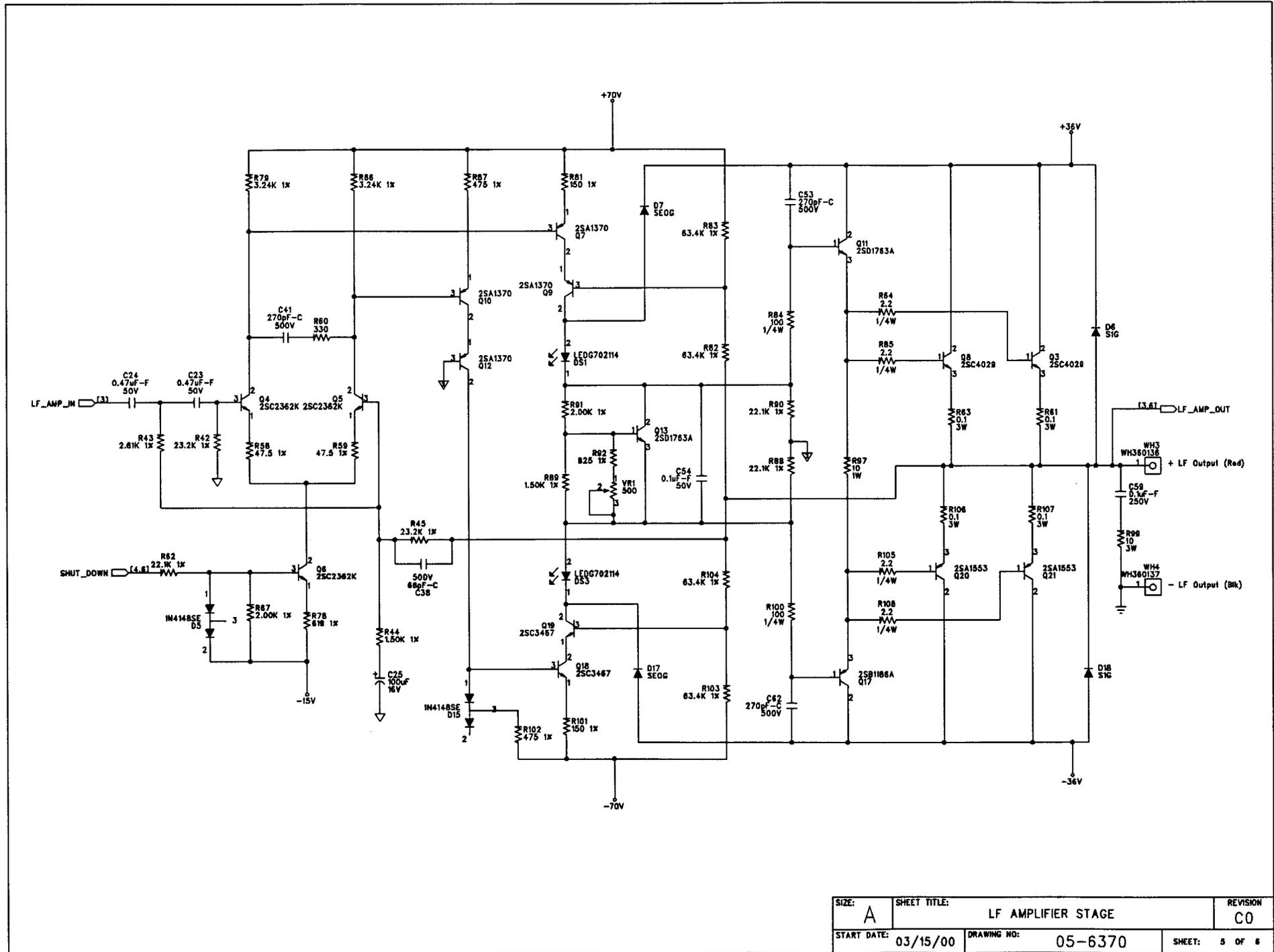
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JBL EON15-G2



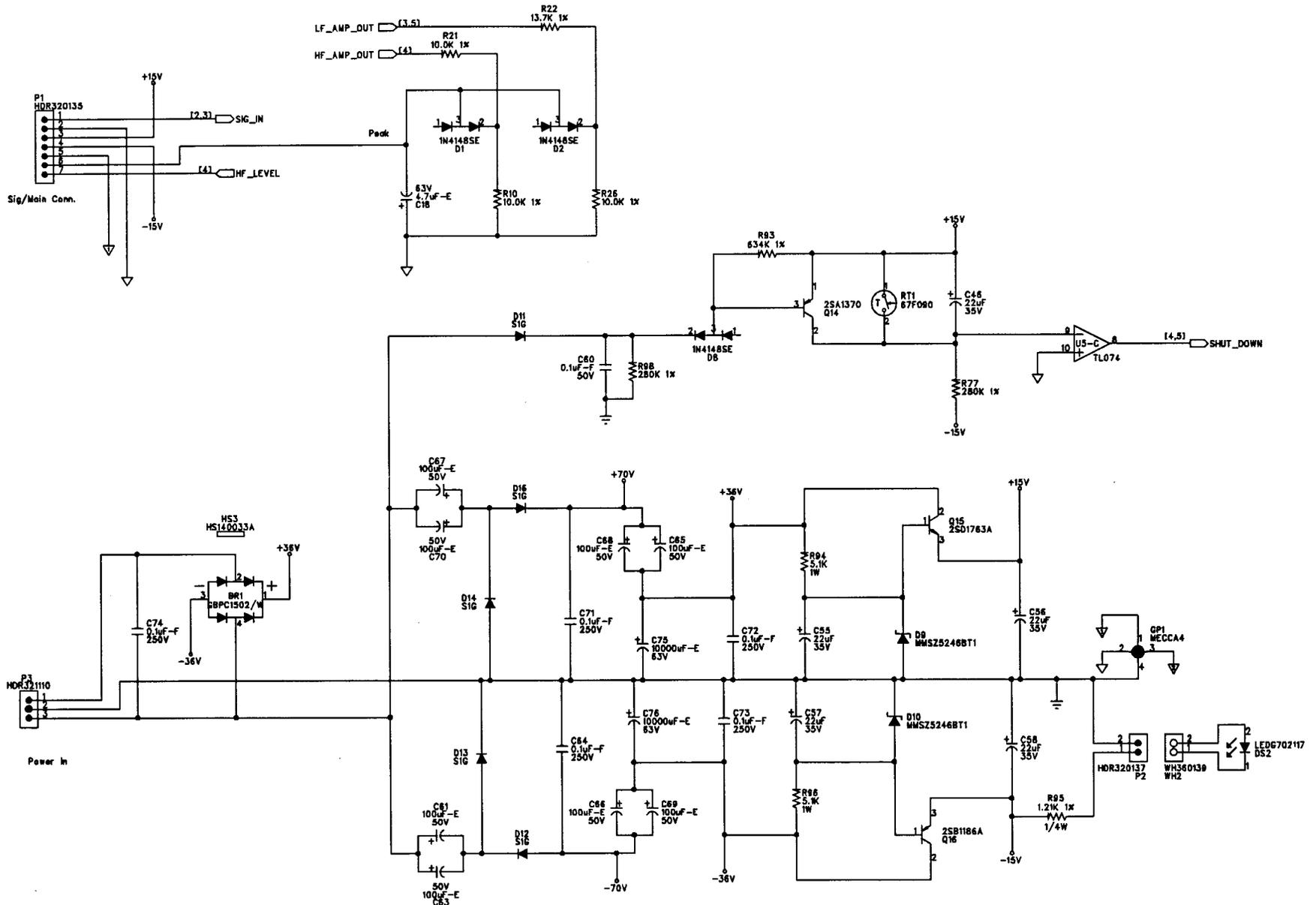
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JBL EON15-G2



SIZE: A	SHEET TITLE: LF AMPLIFIER STAGE	REVISION: C0
START DATE: 03/15/00	DRAWING NO: 05-6370	SHEET: 5 OF 6

JBL EON15-G2



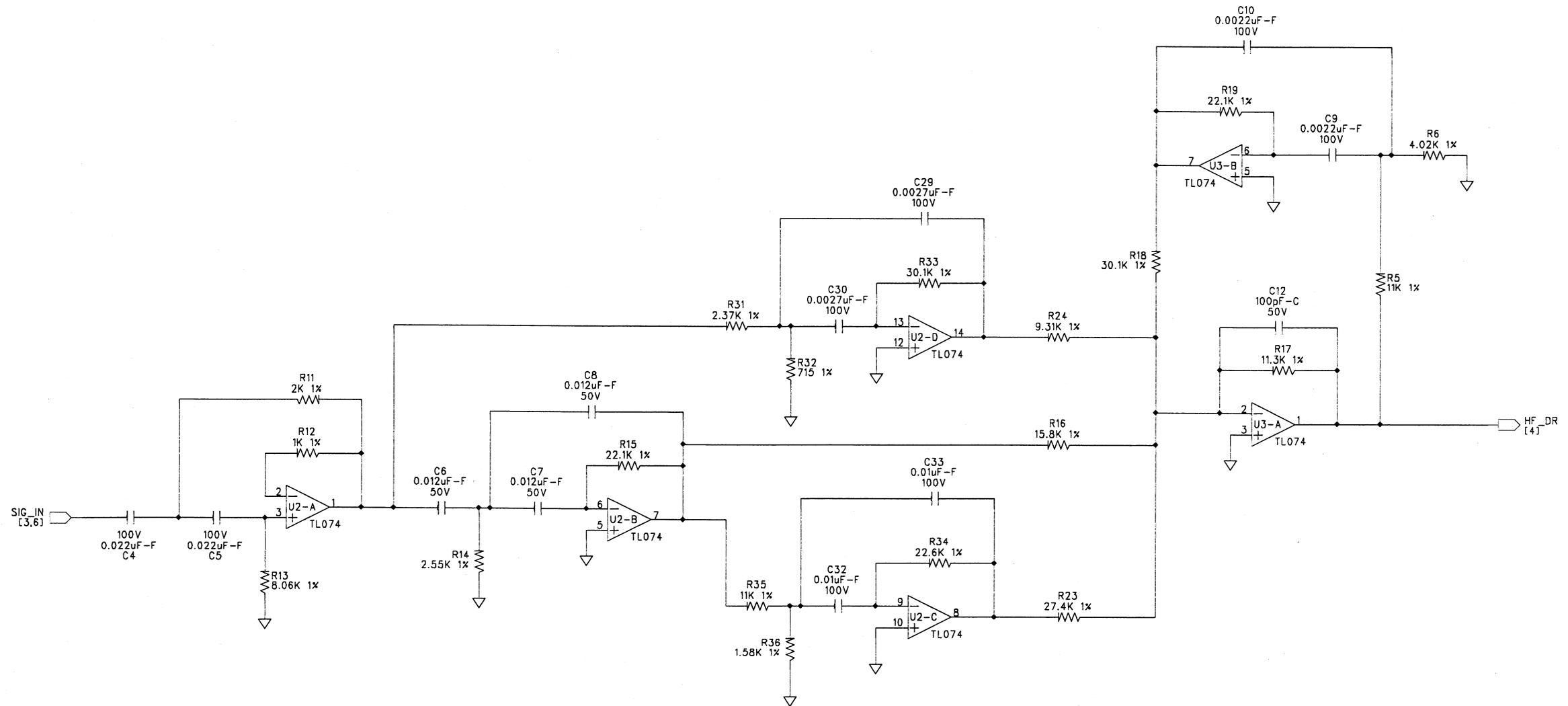
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Bill Of Materials for 339555-001.sch on Wed Feb 13 19:31:04 2002

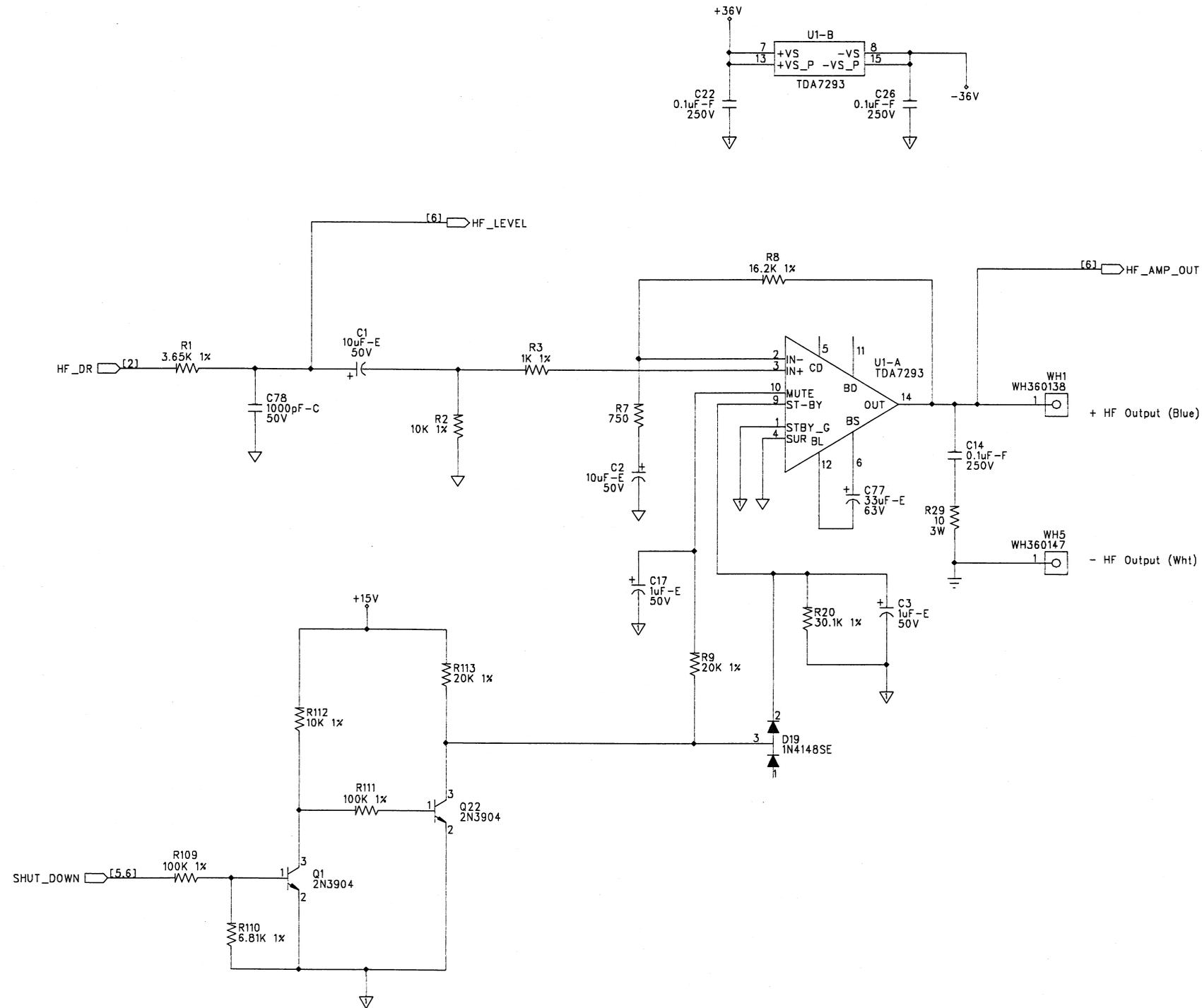
Qty	Reference	HMG#	Description	Audit	Schematic Part	PCB Decal
1	PCB1	339555	PCB 339555 JBL EON GII MAIN BOARD (ST AMP) RAW	BDP	80XXXXYY	BARCODE
1	BR1	70-0047	DIO BRGE RECT 200V 15A BK	PT2084	BR700047	BRI DGE2
7	A2-8	NON-PART	NON-PART, PCB ONLY, BREAKOFF PART	PT1481	BRKOFF	BRKOFF
2	C9-10	56-0002	CAP 0.0022uF FILM PTR 100V 5% RF TA	PT1001	C0.0022UF100JR	RFCC200
2	C29-30	56-0027	CAP 0.0027uF FILM PTR 100V 5% RF TA	PT1366	C0.0027UF100JR	RFCC200
1	C31	56-0004	CAP 0.0047uF FILM PTR 100V 5% RF TA	PT1201	C0.0047UF100JR	RFDC200
3	C6-8	56-0023	CAP 0.012uF FILM MTPT 50V 5% RF TA	PT2118	C0.012UF50JR	RFEC200
1	C28	56-0007	CAP 0.015uF FILM PTR 100V 5% RF TA	PT1198	C0.015UF100JR	RFDD200
2	C32-33	56-0006	CAP 0.01uF FILM PTR 100V 5% RF TA	PT1379	C0.01UF100JR	RFDD200
2	C4-5	56-0008	CAP 0.022uF FILM PTR 100V 5% RF TA	PT1399	C0.022UF100JR	RFED200
1	C34	56-0033	CAP 0.027uF FILM PTR 100V 5% RF TA	PT1282	C0.027UF100JR	RFEF200
1	C27	56-0034	CAP 0.039uF FILM MTPT 50V 5% RF TA	PT2099	C0.039UF50JR	RFEC200
3	C47-48 C50	56-0010	CAP 0.047uF FILM MTPT 50V 5% RF TA	PT1002	C0.047UF50JR	RFEC200
8	C11 C13 C19 C21 C39-40 C44-45	62-3139	CAP 0.1uF CER 50V 20% Y5V 0805 TA	PT1087	C0.1UC50M0805	0805
7	C22 C26 C64 C71-74	62-0076	CAP 0.1uF FILM MTPT 250V 5% RF BK	PT2143	C0.1UF250JR	RFMF300
2	C14 C59	62-0056	CAP 0.1uF FILM MTPL 250V 10% RF BK	PT2140	C0.1UF250KR1	RFNJ400
4	C51-52 C54 C60	56-0012	CAP 0.1uF FILM MTPT 50V 5% RF TA	PT1200	C0.1UF50JR	RFEC200
3	C35-36 C43	56-0014	CAP 0.22uF FILM MTPT 50V 5% RF TA	PT1077	C0.22UF50JR	RFED200
5	C15-16 C23-24 C49	56-0016	CAP 0.47uF FILM MTPT 50V 5% RF TA	PT1308	C0.47UF50JR	RFEF200
2	C75-76	60-0002	CAP 10000uF ELEC 63V 20% BULK	PT2103	C10000UE63MR	REZM400P
1	C78	62-3136	CAP 1000pF CER 50V 20% X7R 0805 TA	PT1109	C1000PC50M0805	0805
1	C12	62-3503	CAP 100pF CER 50V 5% COG 0805 TA	PT1786	C100PC50J0805	0805
1	C25	60-0201	CAP 100uF EL 16V 20% GP 6x8R 5LS TA	PT1378	C100UE16MR	REG200P
8	C61 C63 C65-70	60-1013	CAP 100uF EL 50V 20% GP 8x11R 5LS TA	PT1408	C100UE50MR	REJ200P
1	C20	62-3140	CAP 10pF CER 50V 5% COG 0805 TA	PT1088	C10PC50J0805	0805
2	C1-2	60-0090	CAP 10uF EL 50V 20% GP 5x11R 5LS TA	PT1206	C10UE50MR	REE200P
1	C42	60-0051-01	CAP 10uF ELNP 16V 20% GP 5x11R 5LS TA	PT1449	C10UN16MR	REE200
2	C3 C17	60-0044-01	CAP 1uF EL 50V 20% GP 5x7R 5LS TA	PT1079	C1UE50MR	RED200P
5	C46 C55-58	60-0010	CAP 22uF EL 35V 20% GP 5x11R 5LS TA	PT2110	C22UE35MR	REE200P
1	C37	60-0402	CAP 22uF ELNP 25V 20% GP 6x11R 5LS TA	PT1084	C22UN25MR	REG200
3	C41 C53 C62	62-0052	CAP 270pF CER 500V 5% TA	PT2097	C270PC500JR	RCLC200
1	C77	60-0324	CAP 33uF EL 63V 20% GP 6x11R 5LS TA	PT1436	C33UE63MR	REG200P
1	C18	60-0404	CAP 4.7uF EL 63V 20% LL 5x11R 5LS TA	PT1105	C4.7UE63MR	REE200P
1	C38	62-0050	CAP 68pF CER 500V 5% TA	PT2117	C68PC500JR	RCFC200
8	D1-5 D8 D15 D19	70-0113	DIO, MMBD4148SE, DUAL DIODE, 75V, 600mA, SOT-23, T&R	PT1326	DIN4148SE-S	SOT-23
2	D9-10	70-0154	DIO MMSZ5246BT1 ZENER 16V SOD-123 TA	PT2082	DMMSZ5246BT1-S	SOD-123
7	D6 D11-14 D16 D18	70-3203	DIO SIG RECT 400V 1.0A SMA TA	PT2081	DS1G-S	DO-214AC/SMA
2	D7 D17	70-3601	RECTIFIER, 400V, 1.5 AMP, SMB, T&R	PT1466	DSEOG-S	DO-214AA/SMB
2	A1 A9	NON-PART	NON-PART, FIDUCIAL, TARGET FOR AUTO INSERTION	PT1271	FIDUCIAL	FIDUCIAL
1	P1	32-0135	HDR 7 PIN .098 SPC 7X1 SHD VERT	PT2089	HDR320135	HC71V98SP
1	P2	32-0137	HDR 2 PN 0.098 SPC 2X1 SHR VRT MT	PT1854	HDR320137	HC21V98SP
1	P3	32-1110	HDR, 3 PIN, 0.165" SPC, 1 X 3, LCK, SHD, POL, VERT, MALE	PT1337	HDR321110	HC3LSP
1	HS1	14-6367	HEATSINK EON15GII	PT2221	HS146367	HS146367
1	HS3	14-0033-A	HEATSINK EON GII FOR BRIDGE	PT2102	HS140033A	PCBNULL
5	INS1-5	70-0054	INSULATOR MICA FOR TO-3P BK	PT1995	INS700054	PCBNULL
2	DS1 DS3	70-2114	LED, GRN, T1, RLC100, AMMO	PT1059	LEDG702114	RLC100
1	DS2	70-2117	LED, GRN, W/ SPACER, T1, RLD100, AMMO	PT1231	LEDG702117	RLD100
1	GP1	NON-PART	NON-PART, MECCA GND/PWR TIE POINT, 4 POS	PT1043	MECCA4	MECCA4
2	MH6-7	NON-PART	NON-PART, MOUNTING HOLE, 0.156" NON-PLATED, #6	PT1044	MH156	MH156
1	MH3	NON-PART	NON-PART MOUNTING HOLE 0.200" NON-PLATED	PT2132	MH200	MH200
2	MH2 MH4	NON-PART	NON-PART MOUNTING HOLE 0.250" NON-PLATED	PT2133	MH250	MH250
2	MH1 MH5	NON-PART	NON-PART, TOOLING PIN HOLE, 156MIL HOLE	PT1416	MH156-TOOL	MH156-TOOL
2	Q1 Q22	70-1058	XSTR, 2N3904, NPN, SOT-23, T&R	PT1203	Q2N3904-S	SOT-23
2	Q20-21	70-0032	XSTR 2SA1302 PNP PWR AMP 15A 100W HIFI BK	PT2242	Q2SA1302	T03P(L)(3)
5	Q7 Q9-10 Q12 Q14	70-0037	XSTR 2SA1370 PNP 200V 100mA TA	PT2088	Q2SA1370	T092(ECB)-V
2	Q16-17	70-0033	XSTR 2SB1186A PNP 1.5A 20W BK	PT2079	Q2SB1186A	T0220FP(BCE)-V
2	Q3 Q8	70-0031	XSTR 2SC3281 NPN PWR AMP 15A 100W HIFI BK	PT2241	Q2SC3281	T03P(L)(3)
2	Q18-19	70-0036	XSTR 2SC3467 NPN 200V 100mA TA	PT2086	Q2SC3467	T092(ECB)-V

3	Q4-6	70-0035	XSTR 2SC2362K NPN AMP 150V 500mA TA	PT2085 Q2SC2362K	TO92(ECB)-V
3	Q11 Q13 Q15	70-0034	XSTR 2SD1763A NPN 1.5A 20W BK	PT2080 Q2SD1763A	TO220FP(BCE)-V
1	Q2	70-1072	XSTR MMBFJ113 N-CHNL JFET SW TA	PT2060 QMMBFJ113-S	SOT-23
2	TP1-2	50-0317	RES 0.5% 1/4W CF RR TA	PT1008 R0-E5-R	RRA200
4	R61 R63 R106-107	50-0067	RES 0.1 5% 3W MOF FL AR TA	PT2055 R0.1-I5-A	AR200800
1	R95	52-0332	RES 1.21K 1% 1/4W SM 1210 TA	PT2096 R1.21KE1-1210	1210
1	R39	52-4527	RES 1.4K 1% 1/10W SM 0805 TA	PT2156 R1.4KC1-0805	0805
1	R36	52-4494	RES 1.58K 1% 1/10W SM 0805 TA	PT2167 R1.58KC1-0805	0805
2	R44 R89	52-3208	RES 1.5K 1% 1/10W SM 0805 TA	PT1733 R1.5KC1-0805	0805
1	R41	52-0320	RES 1.87K 1% 1/10W SM 0805 TA	PT2114 R1.87KC1-0805	0805
1	R97	50-0057	RES 10 5% 1W SM 2512 TA	PT1866 R10-G5-2512	2512
2	R29 R99	50-0063	RES 10 5% 3W MOF FL AR TA	PT2056 R10-I5-A	AR200800
4	R47 R49-50 R70	52-4562	RES 10.2K 1% 1/10W SM 0805 TA	PT1831 R10.2KC1-0805	0805
2	R84 R100	50-3604	RES 100 5% 1/4W SM 1210 TA	PT2057 R100-E5-1210	1210
2	R109 R111	52-1010	RES 100K 1% 1/10W SM 0805 TA	PT2014 R100KC1-0805	0805
7	R2 R10 R21 R26 R37	52-4500	RES 10K 1% 1/10W SM 0805 TA	PT1034 R10KC1-0805	0805
	R65 R112				
1	R17	52-4493	RES 11.3K 1% 1/10W SM 0805 TA	PT2166 R11.3KC1-0805	0805
4	R5 R35 R76 R80	52-3229	RES 11K 1% 1/10W SM 0805 TA	PT1712 R11KC1-0805	0805
1	R22	52-0308	RES 13.7K 1% 1/10W SM 0805 TA	PT2018 R13.7KC1-0805	0805
1	R16	52-0330	RES 15.8K 1% 1/10W SM 0805 TA	PT2116 R15.8KC1-0805	0805
2	R81 R101	52-1006	RES 150 1% 1/10W SM 0805 TA	PT1924 R150-C1-0805	0805
1	R8	52-4528	RES 16.2K 1% 1/10W SM 0805 TA	PT2111 R16.2KC1-0805	0805
1	R69	52-4491	RES 17.8K 1% 1/10W SM 0805 TA	PT2161 R17.8KC1-0805	0805
2	R3 R12	52-4505	RES 1K 1% 1/10W SM 0805 TA	PT1037 R1KC1-0805	0805
4	R64 R85 R105 R108	50-3605	RES 2.2 5% 1/4W SM 1210 TA	PT2058 R2.2-E5-1210	1210
2	R25 R28	52-3221	RES 2.21M 1% 1/10W SM 0805 TA	PT1720 R2.21MC1-0805	0805
1	R31	52-4497	RES 2.37K 1% 1/10W SM 0805 TA	PT2170 R2.37KC1-0805	0805
1	R14	52-0323	RES 2.55K 1% 1/10W SM 0805 TA	PT2072 R2.55KC1-0805	0805
1	R43	52-0319	RES 2.61K 1% 1/10W SM 0805 TA	PT2070 R2.61KC1-0805	0805
2	R9 R113	52-4501	RES 20K 1% 1/10W SM 0805 TA	PT1035 R20KC1-0805	0805
7	R15 R19 R54-55 R62	52-0317	RES 22.1K 1% 1/10W SM 0805 TA	PT2068 R22.1KC1-0805	0805
	R88 R90				
2	R34 R38	52-0314	RES 22.6K 1% 1/10W SM 0805 TA	PT2065 R22.6KC1-0805	0805
2	R42 R45	52-0318	RES 23.2K 1% 1/10W SM 0805 TA	PT2069 R23.2KC1-0805	0805
4	R23 R51-53	52-3249	RES 27.4K 1% 1/10W SM 0805 TA	PT1701 R27.4KC1-0805	0805
2	R77 R98	52-3242	RES 280K 1% 1/10W SM 0805 TA	PT1696 R280KC1-0805	0805
3	R11 R67 R91	52-4506	RES 2K 1% 1/10W SM 0805 TA	PT1038 R2KC1-0805	0805
2	R79 R86	52-4509	RES 3.24K 1% 1/10W SM 0805 TA	PT1040 R3.24KC1-0805	0805
2	R1 R40	52-3205	RES 3.65K 1% 1/10W SM 0805 TA	PT1736 R3.65KC1-0805	0805
3	R18 R20 R33	52-3220	RES 30.1K 1% 1/10W SM 0805 TA	PT1721 R30.1KC1-0805	0805
1	R46	52-0315	RES 31.6K 1% 1/10W SM 0805 TA	PT2066 R31.6KC1-0805	0805
1	R71	52-4490	RES 32.4K 1% 1/10W SM 0805 TA	PT2162 R32.4KC1-0805	0805
1	R60	50-1517	RES 330 5% 1/10W SM 0805 TA	PT1020 R330-C5-0805	0805
1	R68	52-4492	RES 36.5K 1% 1/10W SM 0805 TA	PT2160 R36.5KC1-0805	0805
1	R6	52-4524	RES 4.02K 1% 1/10W SM 0805 TA	PT1838 R4.02KC1-0805	0805
1	R30	52-4520	RES 4.32K 1% 1/10W SM 0805 TA	PT1835 R4.32KC1-0805	0805
1	R75	52-4511	RES 4.99K 1% 1/10W SM 0805 TA	PT1041 R4.99KC1-0805	0805
2	R58-59	52-4553	RES 47.5 1% 1/10W SM 0805 TA	PT1819 R47.5-C1-0805	0805
2	R87 R102	52-3231	RES 475 1% 1/10W SM 0805 TA	PT1710 R475-C1-0805	0805
2	R48 R66	52-3206	RES 5.11K 1% 1/10W SM 0805 TA	PT1735 R5.11KC1-0805	0805
2	R94 R96	50-3603	RES 5.1K 5% 1W SM 2512 TA	PT2059 R5.1KG5-2512	2512
1	R74	52-4487	RES 562 1% 1/10W SM 0805 TA	PT2165 R562-C1-0805	0805
2	R56 R110	52-4515	RES 6.81K 1% 1/10W SM 0805 TA	PT1281 R6.81KC1-0805	0805
1	R78	52-3216	RES 619 1% 1/10W SM 0805 TA	PT1725 R619-C1-0805	0805
5	R57 R82-83 R103-104	52-0220	RES 63.4K 1% 1/10W SM 0805 TA	PT2071 R63.4KC1-0805	0805
1	R93	52-3213	RES 634K 1% 1/10W SM 0805 TA	PT1728 R634KC1-0805	0805
1	R27	52-4555	RES 681 1% 1/10W SM 0805 TA	PT1818 R681-C1-0805	0805
1	R32	52-4496	RES 715 1% 1/10W SM 0805 TA	PT2169 R715-C1-0805	0805
1	R73	52-4488	RES 732 1% 1/10W SM 0805 TA	PT2164 R732-C1-0805	0805
1	R7	50-1530	RES 750 5% 1/10W SM 0805 TA	PT1029 R750-C5-0805	0805
1	R13	52-0312	RES 8.06K 1% 1/10W SM 0805 TA	PT2064 R8.06KC1-0805	0805
1	R72	52-4489	RES 8.87K 1% 1/10W SM 0805 TA	PT2163 R8.87KC1-0805	0805

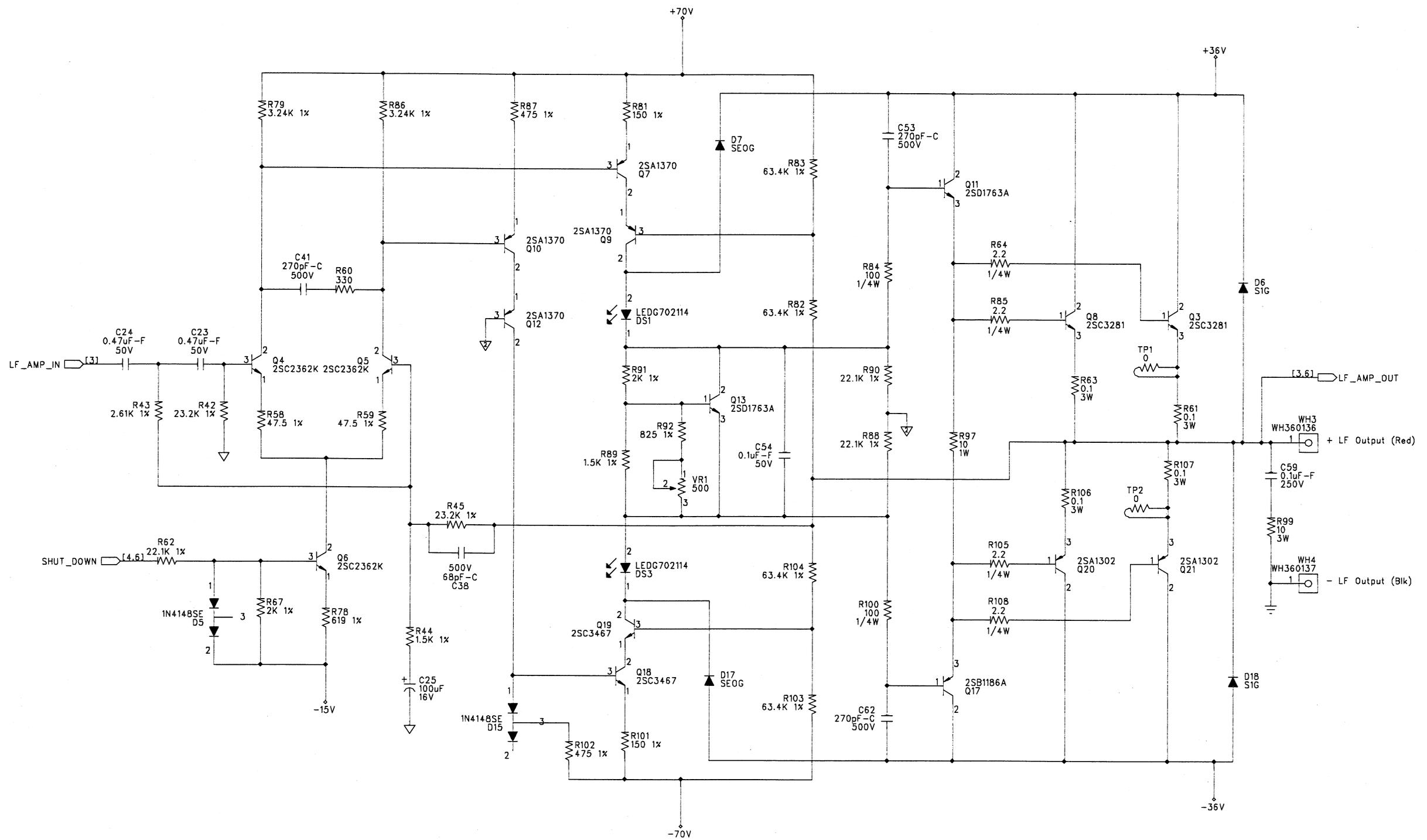
1	R92	52-4557	RES 825 1% 1/10W SM 0805 TA	PT1812 R825-C1-0805	0805
1	R24	52-4495	RES 9.31K 1% 1/10W SM 0805 TA	PT2168 R9.31KC1-0805	0805
13	SR1-13	28-0015	SCREW 4-40 W/SQ CONE WASHER PAN PH	PT2147 SR280015	PCBNULL
1	RT1	44-0016	SW THERM 1A NO NC@60 DEG.	PT2023 SW440016	TO220(2)-V
1	U1	72-0021	IC TDA7293 120V 100 W DMOS AUDIO AMP W/ MUTE/ST-BY VERT BK	PT2695 UTDA7293	MULTI WATT15-V
4	U2-5	72-1450	IC, TL074, OP-AMP, QUAD, JFET, -INPUT, SO14, T&R	PT1049 UTL074-S	SO14
1	VR1	42-0009	POT 500 1/2W 1/4" TOP ADJ TA	PT2100 VR500-420009	VRTRIM2
1	WA1	28-0023	WASHER #4 SHLDER BLK NYLON .031 HEIGHT	PT2171 WA280023	PCBNULL
1	WH3	36-0136	WIRE HAR 1C 18AWG RED 22.5" W/ FSTON	PT2090 WH360136	PA1X1-000-100
1	WH4	36-0137	WIRE HAR 1C 18AWG BLK 24" W/ FSTON	PT2091 WH360137	PA1X1-000-100
1	WH1	36-0138	WIRE HAR 1C 18AWG BLU 14" W/ FSTON	PT2092 WH360138	PA1X1-000-100
1	WH2	36-0139	WIRE HAR 2C 24AWG WHT/BLK 15"	PT2093 WH360139	WH360139
1	WH5	36-0147	WIRE HAR 1C 18AWG WHT 17" W/ FSTON	PT2094 WH360147	PA1X1-000-100



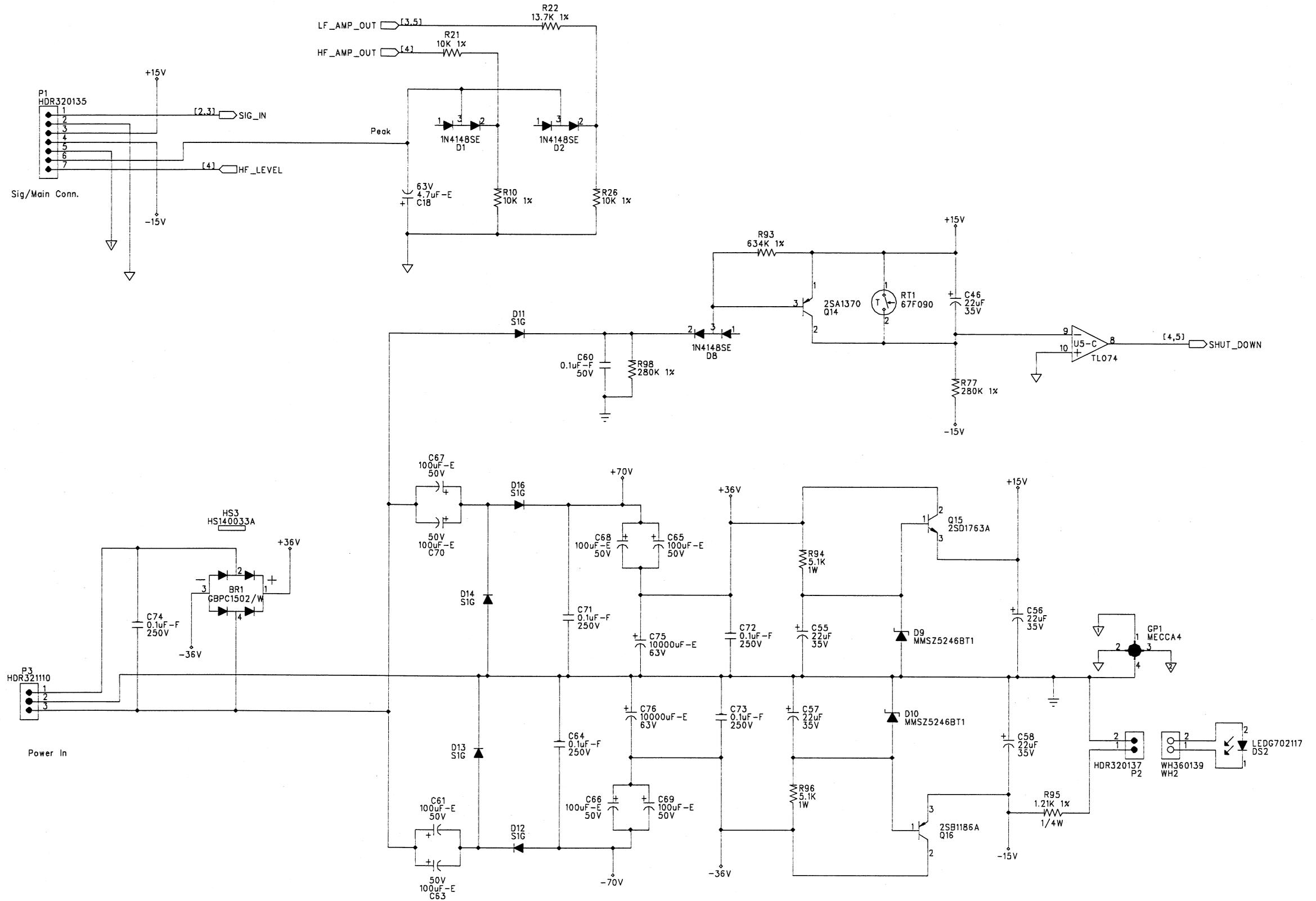
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DATE: 02/13/02	DRAWING NO: 339555	SHEET: 2 OF 6



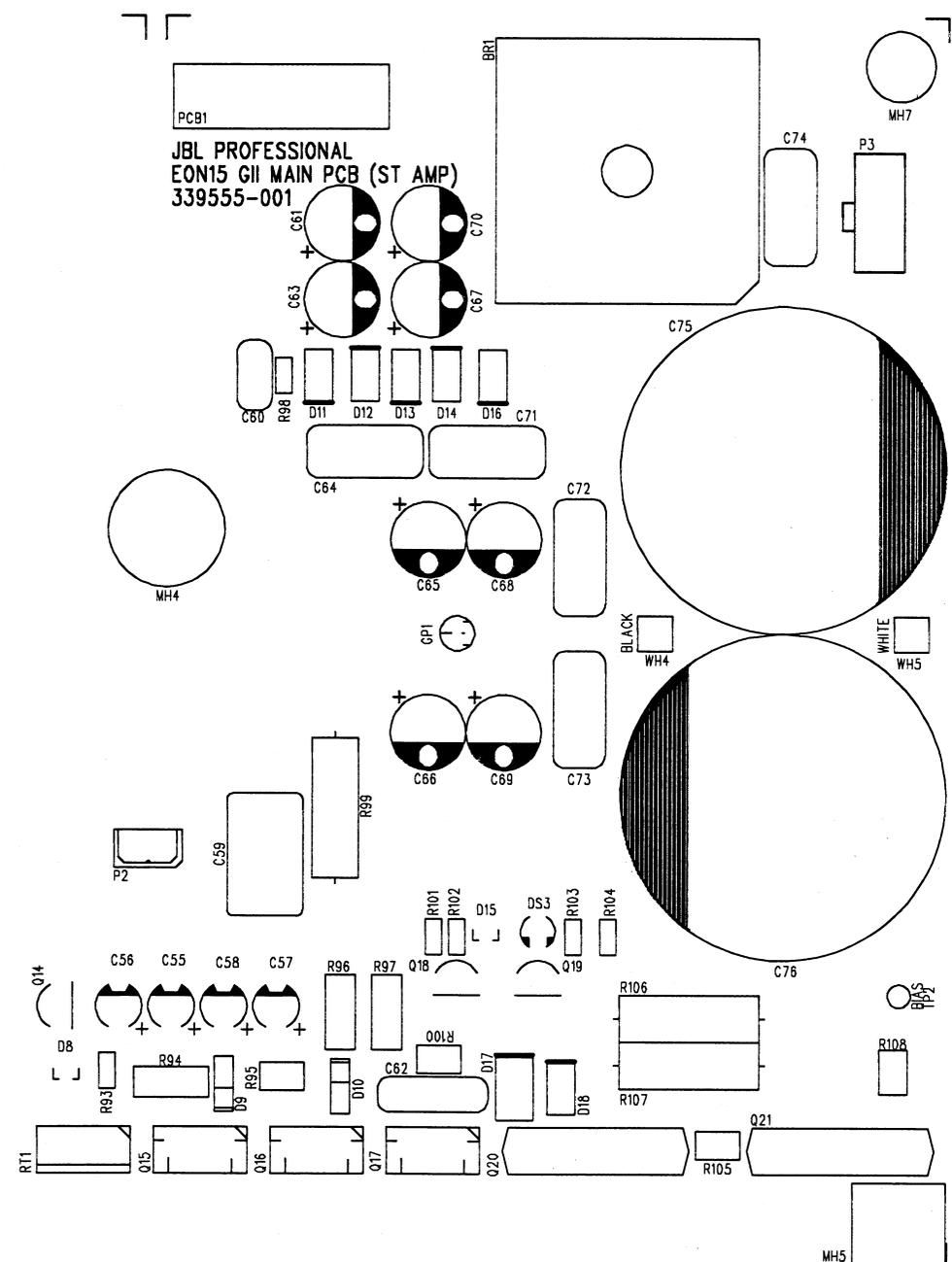
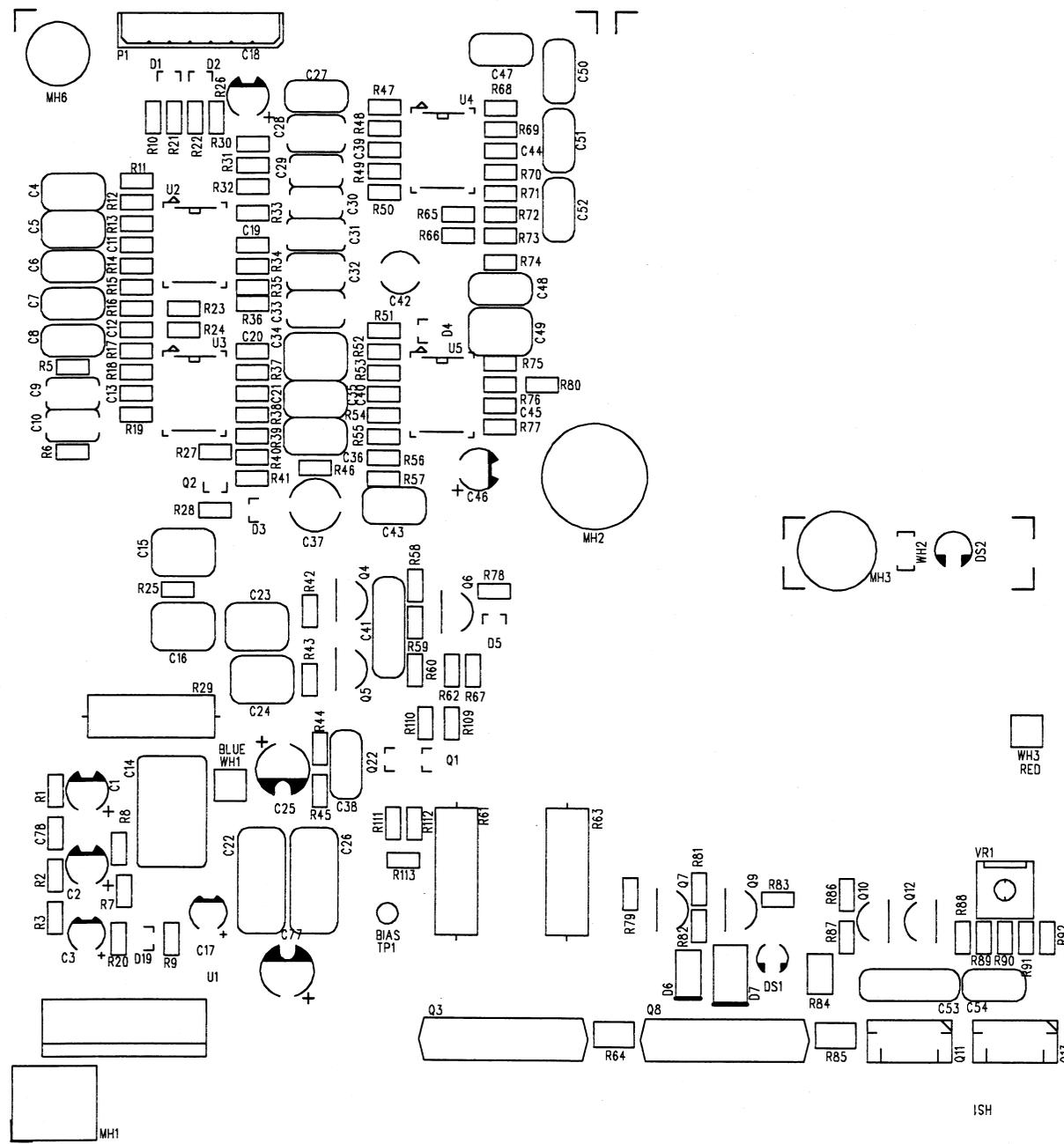
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DATE: 02/13/02	DRAWING NO: 339555	SHEET: 4 OF 6



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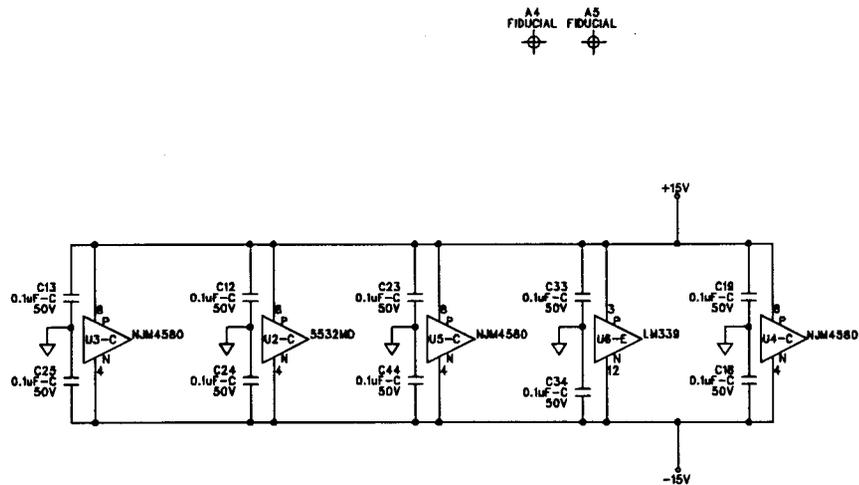
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DATE: 02/13/02	DRAWING NO: 339555	SHEET: 6 OF 6



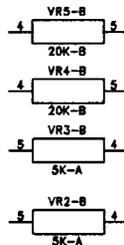
339555-001

SILKSCREEN - COMPONENT SIDE

JBL EON15-G2



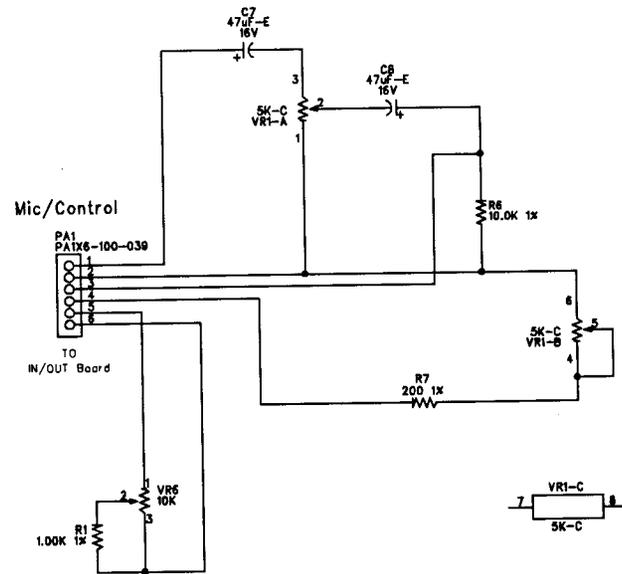
A4 FIDUCIAL
A5 FIDUCIAL



A1 BRKOFF
A2 BRKOFF
A3 BRKOFF

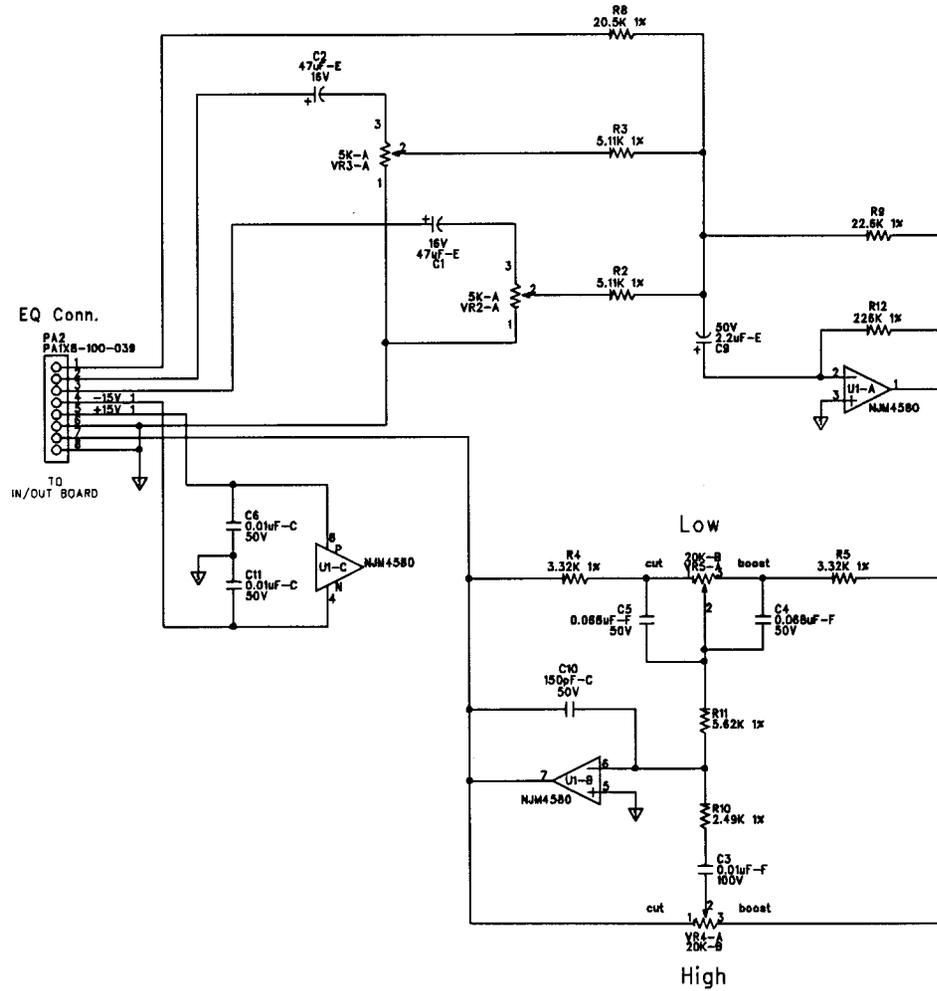
MH14 MH13
MH156-TOOL MH156-TOOL
PCB1
80-6369-A

REVISION HISTORY			
JBL Professional 8780 South Sandy Parkway Sandy Utah 84070			
TITLE:			
SCHEMATIC EON15 GII SIGNAL INPUT PCBA			
DESIGNER:		ENGINEER:	
MARK CORBRIDGE		Tim Shuttleworth / Don Sealey	
SIZE:	DRAWING NO:	REVISION	
A	05-6369	A0	
START DATE:	FILENAME:	SHEET: 1 OF 4	
03/08/00	056369A0.SCH		



SIZE: A	SHEET TITLE: CONTROL BOARD	REVISION A0
START DATE: 03/08/00	DRAWING NO: 05-6369	SHEET: 3 OF 4

JBL EON15-G2



SIZE: A	SHEET TITLE: EQ BOARD	REVISION: A0
START DATE: 03/08/00	DRAWING NO: 05-6369	SHEET: 4 OF 4

Bill Of Materials for 056369A0

Qty	Reference	HMG#	Description	Audit	Schematic Part	PCB Decal
1	PCB1	80-6369-A	PCB 80-6369-A SIGNAL INPUT BOARD	PT2129	80XXXXYY	BARCODE
3	A1-3	NON-PART	NON-PART, PCB ONLY, BREAKOFF PART	PT1481	BRKOFF	BRKOFF
3	C38 C43 C47	56-0003	CAP, 0.0033uF, FILM, 100V, 5%, RFCC200, AMMO	PT1103	C0.0033UF100JR	RFCC200
3	C6 C11 C26	62-3142	CAP, 0.01uF, CER, 50V, 10%, 0805, T&R	PT1118	C0.01UC50KS	0805
1	C3	56-0006	CAP, 0.01uF, FILM, 100V, 5%, RFDD200, AMMO	PT1379	C0.01UF100JR	RFDD200
2	C4-5	56-0011	CAP, 0.068uF, FILM, 50V, 5%, RFEC200, AMMO	PT1076	C0.068UF50JR	RFEC200
12	C12-13 C18-19 C23-25 C33-34 C44-46	62-3139	CAP, 0.1uF, CER, 50V, 20%, 0805, T&R	PT1087	C0.1UC50MS	0805
2	C20 C22	56-0016	CAP, 0.47uF, FILM, 50V, 5%, RFEF200, AMMO	PT1308	C0.47UF50JR	RFEF200
2	C41-42	62-3136	CAP, 1000pF, CER, 50V, 20%, 0805, T&R	PT1109	C1000PC50MS	0805
2	C17 C31	60-0051-01	CAP, 10uF, ELEC-NP, 16V, 20%, REE200, AMMO	PT1449	C10UN16MR	REE200
1	C10	62-3504	CAP 150pF CER 50V 10% 0805 TA	PT2015	C150PC50KS	0805
1	C9	60-0400	CAP, 2.2uF, ELEC, 50V, 20%, REE200P, AMMO	PT1083	C2.2UE50MR	REE200P
8	C29-30 C32 C35-37 C39-40	62-3138	CAP, 220pF, CER, 50V, 10%, 0805, T&R	PT1286	C220PC50KS	0805
1	C48	60-1068	CAP, 220uF, ELEC-NP, 16V, 20%, REM200, BULK	PT1823	C220UN16MR	REM200
4	C14-16 C21	62-3134	CAP, 22pF, CER, 50V, 5%, 0805, T&R	PT1107	C22PC50JS	0805
6	C1-2 C7-8 C27-28	60-0054-01	CAP, 47uF, ELEC, 16V, 20%, REE200P, AMMO	PT1108	C47UE16MR	REE200P
2	D1-2	70-0113	DIO, MMBD4148SE, DUAL DIODE, 75V, 600mA, SOT-23, T&R	PT1326	D1N4148SE-S	SOT-23
2	A4-5	NON-PART	NON-PART, FIDUCIAL, TARGET FOR AUTO INSERTION	PT1271	FIDUCIAL	FIDUCIAL
2	J3-4	32-0119	CON, JACK, 1/4 PHONO, FULL NOSE THREAD, SLIMLINE	PT1359	J320119	J320119
1	J2	32-0213	CON JACK XLR R/A PCA A SERIES NON-LOCKING	PT2016	J320213	XLRF-2
1	DS2	70-0038	LED GRN T-1 R/A HOUSING	PT2145	LEDG700038	RLAK100HE-G
2	DS1 DS3	70-0039	LED RED R/A T-1 HOUSING	PT2146	LEDR700039	RLAK100HE-R
1	L1	26-0215	IND, FERRITE BEAD, 70 OHM @ 100MHz, RIC200, AMMO	PT1262	LFB260215	RIC200
2	MH3-4	NON-PART	NON-PART, TOOLING PIN HOLE, 156MIL HOLE	PT1416	MH156-TOOL	MH156-TOOL
1	J1	32-0204	CON, PLUG, XLR, R/A, PCA A SERIES	PT1218	P320204	XLRM-1
1	PA1	NON-PART	NON-PART PAD ARRAY 6 PN 0.1"SPC 0.039" HLE	PT2134	PA1X6-100-039	PA1X6-100-039
1	PA2	NON-PART	NON-PART PAD ARRAY 8 PN 0.1"SPC 0.039" HLE	PT2135	PA1X8-100-039	PA1X8-100-039
1	PA3	NON-PART	NON-PART PAD ARRAY 2 X 4 8 PN 0.1"SPC 0.039" HLE	PT2136	PA2X4-100-039	PA2X4-100-039
2	R60-61	50-1531	RES 0 5% 1/10W SM 0805 TA	PT1099	R0-C5-0805	0805
1	R1	52-4505	RES 1.00K 1% 1/10W SM 0805 TA	PT1037	R1.00KC1-0805	0805
14	R6 R13 R20-21 R26-27 R32 R35-41	52-4500	RES 10.0K 1% 1/10W SM 0805 TA	PT1034	R10.0KC1-0805	0805
3	R50-51 R54	52-3235	RES 100 1% 1/10W SM 0805 TA	PT1706	R100-C1-0805	0805
1	R49	52-1010	RES 100K 1% 1/10W SM 0805 TA	PT2014	R100KC1-0805	0805
2	R22 R44	52-4484	RES 12.7K 1% 1/10W SM 0805 TA	PT2157	R12.7KC1-0805	0805
1	R10	52-0307	RES 2.49K 1% 1/10W SM 0805 TA	PT2019	R2.49KC1-0805	0805
4	R14 R55-57	52-4501	RES 20.0K 1% 1/10W SM 0805 TA	PT1035	R20.0KC1-0805	0805
2	R8 R16	52-4486	RES 20.5K 1% 1/10W SM 0805 TA	PT2159	R20.5KC1-0805	0805
1	R7	52-3224	RES 200 1% 1/10W SM 0805 TA	PT1717	R200-C1-0805	0805
3	R9 R15 R18	52-0314	RES 22.6K 1% 1/10W SM 0805 TA	PT2065	R22.6KC1-0805	0805
3	R12 R17 R23	52-4485	RES 226K 1% 1/10W SM 0805 TA	PT2158	R226KC1-0805	0805
2	R30-31	52-4546	RES 243 1% 1/10W SM 0805 TA	PT1809	R243-C1-0805	0805
2	R4-5	52-3218	RES 3.32K 1% 1/10W SM 0805 TA	PT1723	R3.32KC1-0805	0805
1	R59	50-0058	RES 3.6K 5% 1W SM 2512 TA	PT2013	R3.6KG5-2512	2512
4	R24 R28 R46 R53	52-4511	RES 4.99K 1% 1/10W SM 0805 TA	PT1041	R4.99KC1-0805	0805
4	R25 R29 R47 R58	52-4504	RES 499 1% 1/10W SM 0805 TA	PT1102	R499-C1-0805	0805
4	R2-3 R34 R45	52-3206	RES 5.11K 1% 1/10W SM 0805 TA	PT1735	R5.11KC1-0805	0805
1	R11	52-0309	RES 5.62K 1% 1/10W SM 0805 TA	PT2017	R5.62KC1-0805	0805
2	R42-43	52-4503	RES 60.4 1% 1/10W SM 0805 TA	PT1128	R60.4-C1-0805	0805
2	R19 R48	52-3213	RES 634K 1% 1/10W SM 0805 TA	PT1728	R634KC1-0805	0805
2	R33 R52	52-4483	RES 9.53K 1% 1/10W SM 0805 TA	PT2155	R9.53KC1-0805	0805
1	RC1	32-3227	RIBBON CABLE 6 CND 0.1" SPC 1.75" LG	PT2137	RC6-323227	PA1X6-100-039
1	RC2	32-3228	RIBBON CABLE 8 CND 0.1" SPC 1.75" LG	PT2138	RC8-323228	PA1X8-100-039
1	SW1	44-0050	SWITCH DPDT MINI IN-OUT 6 PIN E-SWITCH	PT1256	SW440050	SW440050
1	SW2	44-0051	SWITCH, 4PDT, MINI IN-OUT, 12 PIN, E-SWITCH	PT1257	SW440051	SW440051
1	SW3	OMIT	OMIT SWITCH DPDT MINI IN-OUT 6 PIN E-SWITCH (44-0050)	PT2042	SW440050-0	SW440050

JBL EON15-G2

056369a0.pps

1	U2	72-1439	IC, 5532MD, DUAL BIPOLAR OPAMP, SO8-200	PT1306	U5532MD-S	SO8-200
1	U6	72-4034	IC, LM339, QUAD COMPARATOR, SO14, T&R	PT1048	ULM339-S	SO14
4	U1 U3-5	72-1480	IC, NJM4580, DUAL OP-AMP, SO8	PT1374	UNJM4580-S	SO8
1	VR6	42-0006	POT 10K SIDE ADJUST BK	PT2022	VR10K420006	VRTRIM4
2	VR4-5	40-0084	POT 20K B 9mm ROT 12.5mm D-SHAFT	PT2121	VR20K400084	VR9-12.5DH
2	VR2-3	40-0082	POT 5K A 9mm ROT 12.5mm D-SHAFT	PT2119	VR5K400082	VR9-12.5DH
1	VR1	40-0083	POT 5K C 9mm HOR 15mm D-SFT	PT2120	VR5K400083	VR9X2-12.5DH
2	WA1-2	28-0187-A	WASHER, GROUNDING FOR 32-0118/32-0119	PT1361	WA280187A	WA280187A
1	WH2	36-0135	WIRE HAR 1 C 18AWG GRN 12 " W/ LUG	PT2076	WH360135	PA1X1-000-100
1	WH1	36-0167	WIRE HAR 7C 24AWG BLK 18"	PT2139	WH360167	WH360167

4

3

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1



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REVISIONS						
CHG	LTR	DESCRIPTION	DRFT	D.C	DATE	APPR
22931	A	RELEASE -00	KW	RA	8/7/00	TS
24183	B	OBS -00, RELEASE -01	RA	RA	11/20/01	TS
24375	C	ADDED LABEL PAGE	RA	RA	3/7/02	<i>[Signature]</i>

D

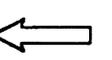
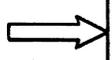
PART NO.	DESCRIPTION
250-00001-00	OBSOLETE
250-00001-01	AC INP ASSY, EON 15-G2

D



C

C



B

B

A

A

NOTES: (UNLESS OTHERWISE SPECIFIED)

METRIC

TOLERANCES
UNLESS OTHERWISE SPECIFIED
 XX ± 0.3 MM
 X ± 1.0 MM
 ANGULAR ± 0.5°
 DIMS ARE MM
 BREAK SHARP EDGES 0.1 MM
 ALL DIMENSIONS ARE FINISHED DIMENSIONS
 DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCH-SIZES
 BREAK SHARP EDGES .016 INCH

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
 X.XXX ± .005 INCH
 X.XX ± .010 INCH
 X.X ± .020 INCH ANGULAR TOLERANCE OF 0°±30'
 FRACTIONAL DIMENSIONS ± 1/32

ALL DIMENSIONS ARE FINISHED DIMENSIONS

DO NOT SCALE DRAWING

DRAWN	DATE
KW	8/7/00
DESIGNER	DATE
ENGR	DATE
TS	8/7/00
MODELS USED ON	

JBL JBL PROFESSIONAL
 A Harman International Company
 Northridge, California 91329 U.S.A.

TITLE
AC INPUT MODULE

SIZE **B** DRAWING NO. **250-00001** REV **C**

SCALE NONE SHEET OF

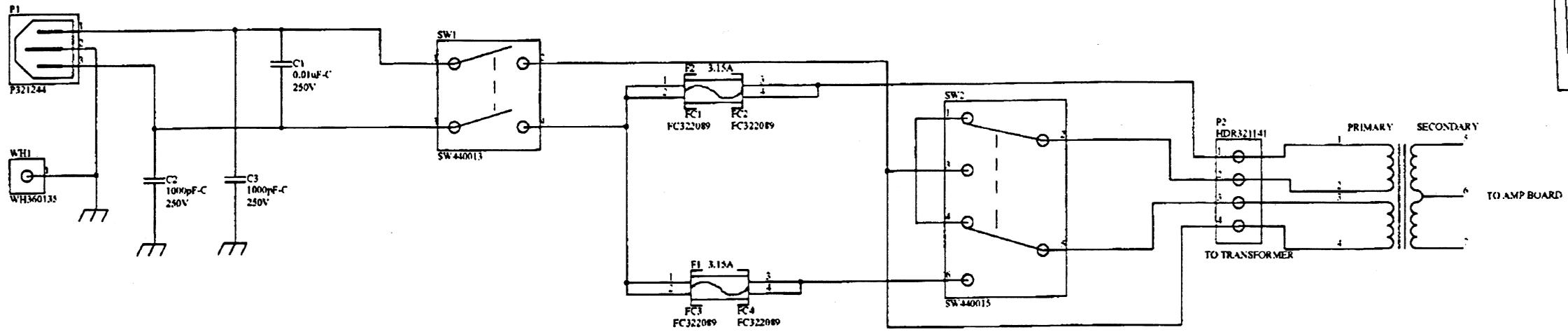
4

3

2

1





		JBL PROFESSIONAL A Harman International Company Northridge, California 91329 U.S.A.	
AC INPUT MODULE			
TITLE	DRAWING NO.	REV	
SIZE	B	250-00001	C
SCALE	NONE	SHEET	OF

SIZE	B	DWG. TITLE	AC Input Module	REV. NO.	B0
START DATE:	11-19-01	DRAWING NO.	05-6371	SHEET	1 OF 1

FILM GRAPHIC

CAUTION ATTENTION
TO REDUCE THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE T3.15A 250-FUSE
UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE DE T3.15A 250V~

SCALE: 1:1

15.1

51

CAUTION ATTENTION
TO REDUCE THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE T3.15A 250-FUSE
UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE DE T3.15A 250V~

SCALE: 2:1

	JBL PROFESSIONAL A Harman International Company Northridge, California 91329 U.S.A.		
	TITLE AC INPUT MODULE		
SIZE	DRAWING NO.	REV	
B	250-00001	C	
SCALE	NONE	SHEET	OF

BOM MATERIAL LISTING LISTING INDENTED EFFECTIVE COMPONENTS

W/O SIGNED LINE WITH CUSTOMER P/N

From Class To 99 From Item 80-8552-00-00 To 80-8552-00-00

Facility Prt Cancellation & Rescheduling Window Y Customer : 201252

Level	Bub No	Seq	It	Child	Rv It	Qty	Cum	Reqd	CW	RW	Cost	Lead	Lead	Fac	Must	Approval	Spec.	Lot	Incr.
Parent	80-8552-00-00				Customer P/N	No CI		UOM	EA	UM	EA	EA	EA	EA	EA	EA	EA	EA	EA
1	100	1	M	70-8552-00-00	MS,EON 15G2&SUBG2 AC	03	70		.000000	.000	EA	3/09/01	0WKS	0WKS			N		
1	190	9	P	920 92-3603-01-00	LBL-PALLET,A122,PEACO I200	02	92		.014300	.014	EA	5/31/01	3WKS	2WKS			24	24	N
				V 92-3603-01-00	BETTER														
				V 92-3603-01-00	CHUNG TAI														
1	200	3	P	920 92-6014-00-00	LBL-BLANK FOR S/N,VDS I150	04	92		.014000	.014	EA	8/08/01	3WKS	2WKS			24	24	N
				V THT-53-423-3	BRADY														
				V 92-6014-00-00	MILLION														
				V 92-6014-00-00	BETTER														
1	210	4	P	932 93-9005-00-00	CARTON-SHEET EON10G2 I110	01	93		.043000	.043	EA	4/16/01	3WKS	2WKS			24	24	N
				V 93-9005-00-00	GRAND YICK														
1	220	5	P	932 93-9006-00-00	CARTON-INST EON10G2 R I120	01	93		.229000	.229	EA	4/16/01	3WKS	2WKS			24	24	N
				V 93-9006-00-00	GRAND YICK														
1	230	6	P	932 93-9019-00-00	CARTON-INST EON10G2 I130	01	93		.171500	.171	EA	8/08/01	3WKS	2WKS			24	24	N
				V 93-9019-00-00	GRAND-YICK														
1	250	7	P	940 94-6003-00-00	BUBBLE BAG(ANTI-STATI I140	01	94		1.000000	1.000	EA	4/16/01	3WKS	2WKS			24	24	N
				V 94-6003-00-00	WAH FUNG														
1	300	8	P	980 98-8426-10-00	EXP CTN EON10G2 R.0 20-5200-A I100	01	98		.014300	.014	EA	8/08/01	3WKS	2WKS			24	24	N
				V 98-8426-10-00	GRAND YICK														
1	500	2	M	85-8552-00-00	PROD ASSY,EON 15G2&SU	01	85		1.000000	1.000	EA	3/09/01	0WKS	0WKS					N
.2	200	1	P	322 31-8859-00-00	PANEL EON15G2 AC INPU I10	01	31		1.000000	1.000	EA	3/09/01	4WKS	2WKS			30	30	N
				V 31-8859-00-00	WAI HING														
.2	300	2	P	920 92-8863-10-00	LABEL CAUTION EON10G2 I10	01	92		1.000000	1.000	EA	3/09/01	0WKS	0WKS			24	24	N
				V 92-8863-10-00	BETTER														
.2	500	3	M	50-8552-00-00	PCB ASSY,EON 15G2&SUB	02	50		1.000000	1.000	EA	3/09/01	0WKS	0WKS					N
..3	100	1	P	22A 22-3102-65-10	C-CR,1000PF,250V,20% C2,3	03	22		2.000000	2.000	EA	3/09/01	4WKS	2WKS			88	88	N
				V ECK-ATS102ME	PANASONIC														

		JBL PROFESSIONAL A Harman International Company Northridge, California 91329 U.S.A.	
TITLE AC INPUT MODULE			
SIZE B	DRAWING NO. 250-00001		REV C
SCALE NONE		SHEET OF	

..3	150	2 P	22A 22-3103-65-00	C-CR,0.01UF,250V,20% 62-0048	03 22	1.000000	1.000 EA	3/09/01	4WKS 2WKS	88 88	N	200	200
			V AC10B102KL7	PAN OVERSEAS									
			C1										
			V ECK-ATS103MF	PANASONIC					4/21/01				
..3	200	3 P	351 35-8670-10-00	PCB EON15G2 AC INPUT 80-6371	02 35	1.000000	1.000 EA	3/09/01	4WKS 2WKS	52 52	N	100	10
			V AC16F103ML0	PAN OVERSEAS									
			V 35-8670-10-00	TAITON					5/28/01 5/14/01				
..3	230	4 P	402 40-A971-00-00	HEADER 1X4PIN SHROUDE 32-1141	01 40	1.000000	1.000 EA	3/09/01	4WKS 2WKS	77 77	N	2000	1000
			P2										
			V 15-24-4049	MOLEX					5/25/01				
..3	240	5 P	402 40-A972-00-00	POWER JACK 3PIN RECEP 32-1244	01 40	1.000000	1.000 EA	3/09/01	4WKS 2WKS	44 44	N	1000	100
			P1										

BOM203

VTECH COMMUNICATIONS LTD. (CMS) 11/15/01 19.16.34 PAGE 2
 BOM MATERIAL LISTING LISTING INDENTED EFFECTIVE COMPONENTS W/O SIGNED LINE WITH CUSTOMER P/N
 From Class To 99 From Item 80-8552-00-00 To 80-8552-00-00 Facility Prt Cancellation & Rescheduling Window Y Customer : 201252

Level	Bub No	Seq No	It Ty	Child CC	Description	Rv It Customer P/N	Qty No Cl	Cum	Eff Reqd	CW Qty	RW UM	Cost Date	Lead	Lead Fac	Must Approval	Spec. Cd	Lot Date	Incr. C.O.	Size	Lot Size
..3	280	6 P	421	42-7295-00-00	SW VOLT SELECT 120/23	44-0015	01 42	1.000000	1.000 EA	3/09/01	4WKS 2WKS	56 56	N	900	300					
				V 42R05-3113-150	POWER DYNAMICS											7/23/01				
				SW2																
..3	290	7 P	421	42-7296-00-00	PROWER SW ON/OFF	44-0013	01 42	1.000000	1.000 EA	3/09/01	4WKS 2WKS	44 44	N	500	100					
				V 4021.4723	MARQUARDT											6/04/01				
				SW1																
..3	320	8 P	440	44-7317-10-00	FUSE, TIME DELAY:IEC-P	32-0052	01 44	2.000000	2.000 EA	11/15/01	0WKS 0WKS	66 66	N	500	100					
				V A8C23112R000-01	SIBER AMERICA															
				V GDC-3.15A	BUSSMANN															
..3	330	9 P	442	44-7319-00-00	FUSE CLIP, FOR 2AG OR	32-2089	01 44	4.000000	4.000 EA	3/09/01	4WKS 2WKS	48 48	N	1000	1000					
				FC1-4																
				V 111-501	LITTLEFUSE															
..3	350	10 P	465	46-7544-00-00	CABLE ASSY 1 WAY GRE/	36-0135	02 46	1.000000	1.000 EA	3/09/01	4WKS 2WKS	44 44	N	500	100					
				WH1																
				V 46-7544-00-00	CHUNG YI											5/18/01				
..3	500	11 P	920	92-6014-00-00	LBL-BLANK FOR S/N,VDS		04 92	.525000	.525 EA	3/09/01	3WKS 2WKS	24 24	N	20000	1000					
				LAB1																
				V THT-53-423-3	BRADY											9/20/96				
				V 92-6014-00-00	MILLION															
				V 92-6014-00-00	BETTER															
..3	520	12 P	920	92-8317-04-00	VTN SERIAL BARCODE LB		03 92	1.000000	1.000 EA	3/09/01	3WKS 2WKS	24 24	N	1000	500					
				LAB2																
				V 92-8317-04-00	MAN HING											11/27/98				
				V 92-8317-04-00	BETTER											11/27/98				

>> End of BOM Report <<

		JBL PROFESSIONAL A Harman International Company Northridge, California 91329 U.S.A.	
TITLE AC INPUT MODULE			
SIZE B	DRAWING NO. 250-00001		REV C
SCALE NONE		SHEET OF	