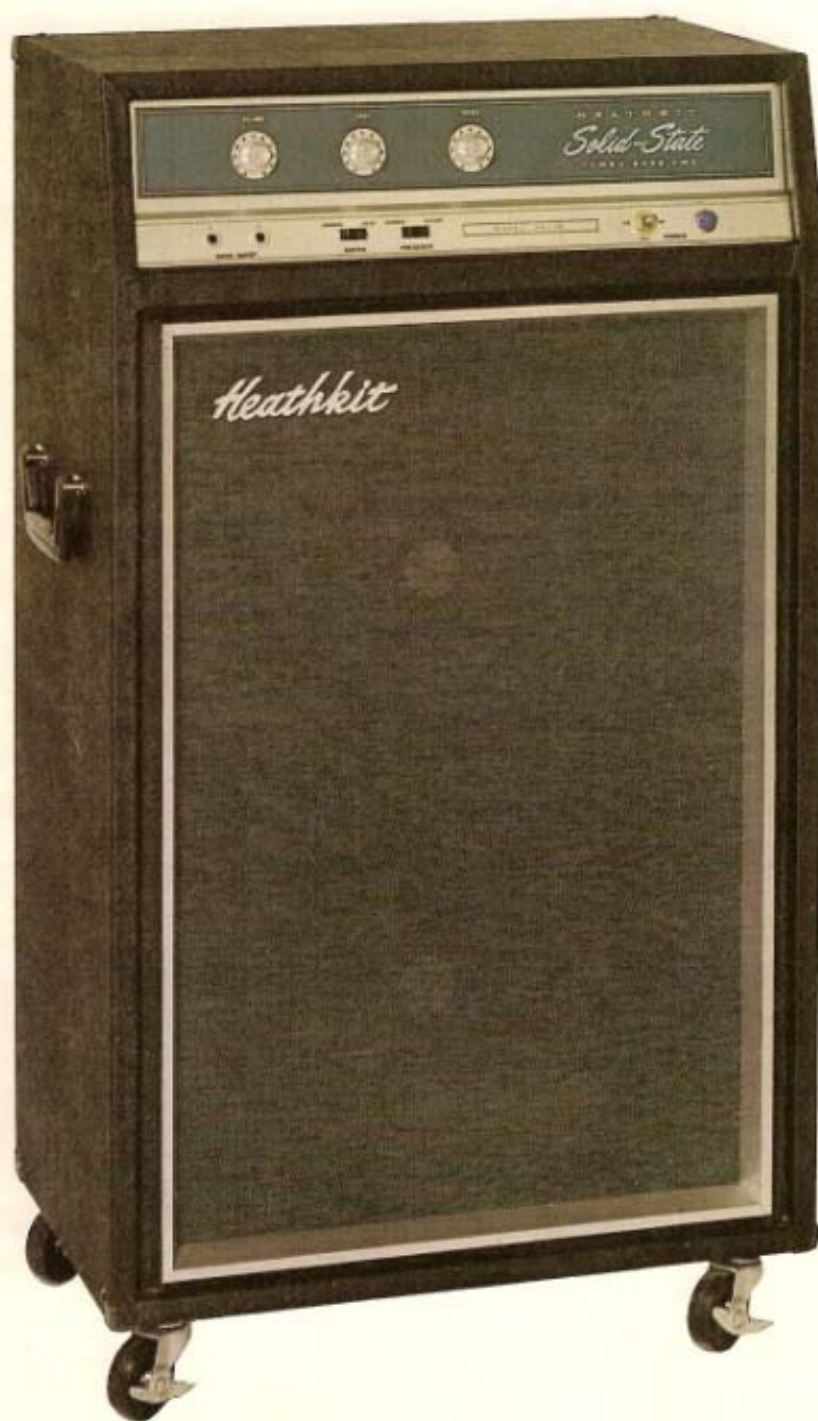




Solid-State 120-watt Bass Amplifier



HEATHKIT TA-38 Solid-State 120-Watt Combo Bass Amp

**Now — A Super Power Solid-State Bass Amplifier —
For Super Performance Of Bass Guitars, Organs, And
Other Instruments**

- **120-Watts of Music Power.** The 11 transistor, 11 diode circuit of the TA-38 will easily produce 120 watts of EIA music power, 240 watts peak, or 100 watts of continuous power. This very high power, combined with an advanced circuit design, is your assurance of distortion-free performance regardless of output level, regardless of sudden changes in input signal level. And the all solid-state construction eliminates the heat and failure problems that occur with tube-type amplifiers.

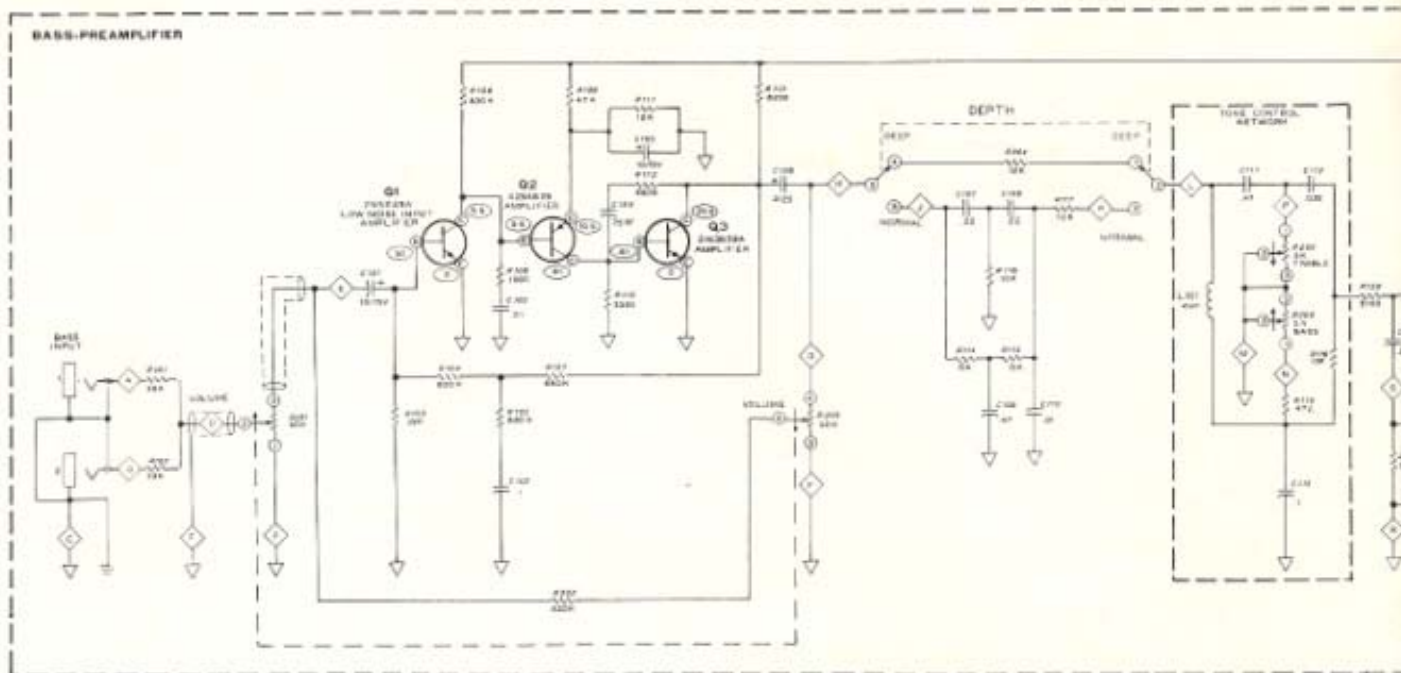
- **"Blow-Out" Proof.** The two 12" heavy-duty speakers in the TA-38 have been carefully designed to handle every watt that the amplifier can deliver, whether it be the continuous sound of electronic organ, or the sudden peak of a bass guitar string. Unlike many other amplifier-speaker combinations, the Heathkit TA-38 cannot be "blown", no matter how large the input signal.

- **Wide Range Controls,** designed with the professional musician in mind. The Volume, Bass and Treble Controls, Depth, Presence, On/Off and Line Reverse Switches and the two bass inputs are all front-panel mounted for time-saving convenience. And the Bass & Treble Controls, coupled with the rocker-type Depth & Presence Switches give the new TA-38 the widest range of tonal variation of any bass amp on the market. This wide range of tonal possibilities, combined with a frequency response that is tailored for bass frequencies, makes the TA-38 the ideal bass amp not only for bass guitars, but also for combo organs, amplified brass and reeds, virtually any instrument that produces tones in the bass frequency range.

- **Extremely Low Distortion And Noise.** Even when driven continuously at full output, or subjected to sudden signals that drive it to peak, the TA-38 still runs free of distortion and internally generated noise.

- **Rock-Solid Construction.** The TA-38 cabinet is made from $\frac{3}{4}$ " pressed wood for vibration-free performance at any power level. The amplifier and speaker sections are completely isolated from each other and the back of the speaker compartment is sealed virtually airtight. In use, the TA-38 is not likely to bounce or roll, due to its heavy weight (120 pounds) and locking, detachable casters. The smooth ball bearing casters and carrying handles make fast work out of moving and set-up.

- **Easy Assembly.** The TA-38 amplifier goes together on one well laid out circuit board. Then just mount the speakers, controls and power supply components. Total construction time is about 15 hours, and the famous Heathkit manual, with its clear, simple instructions and giant fold-out pictorials make it even more of a pleasure. Now check the schematic and specifications for the world's best bass amp — the Heathkit TA-38.



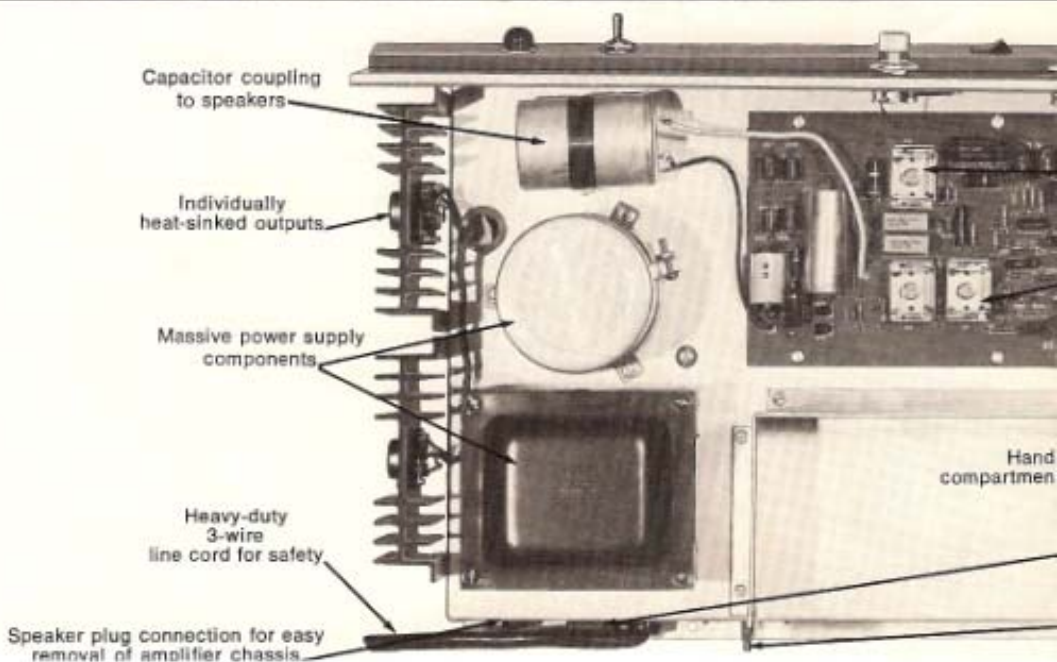
**SCHEMATIC OF THE
HEATHKIT®
SOLID-STATE
COMBO BASS AMPLIFIER
TA-3B**

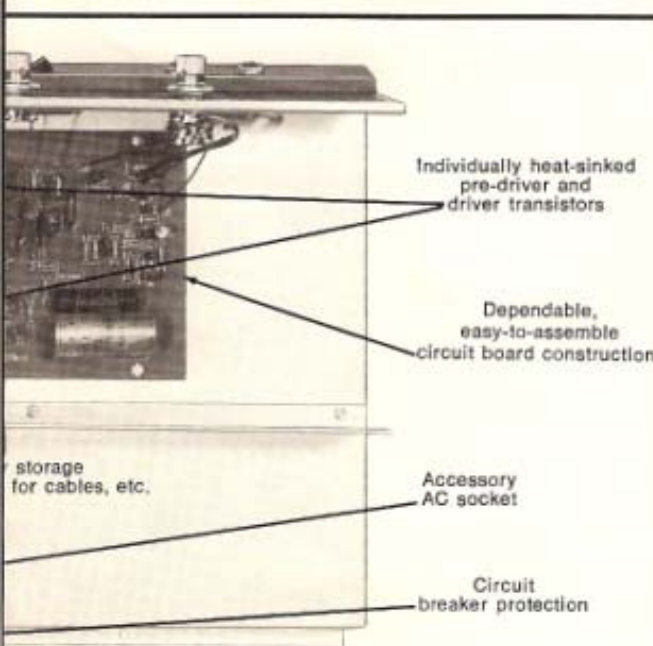
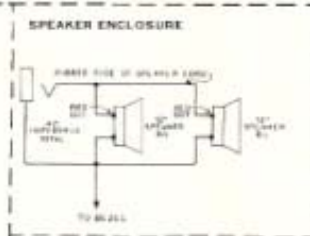
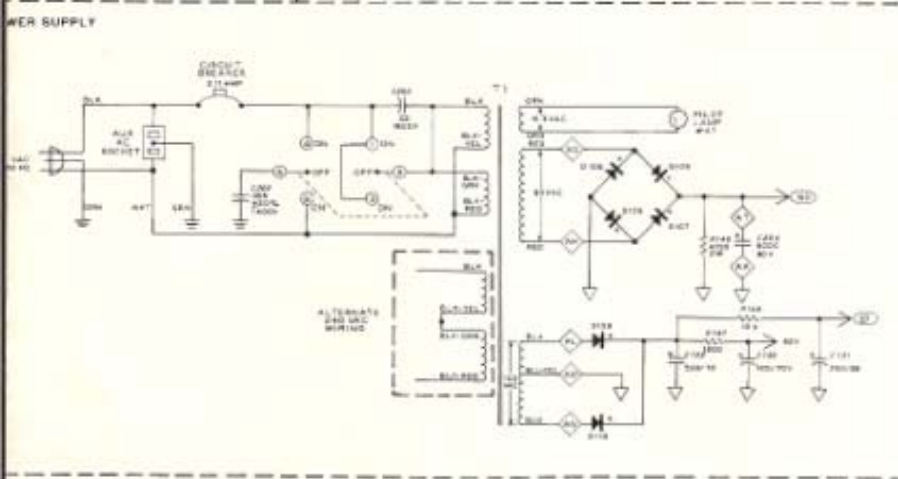
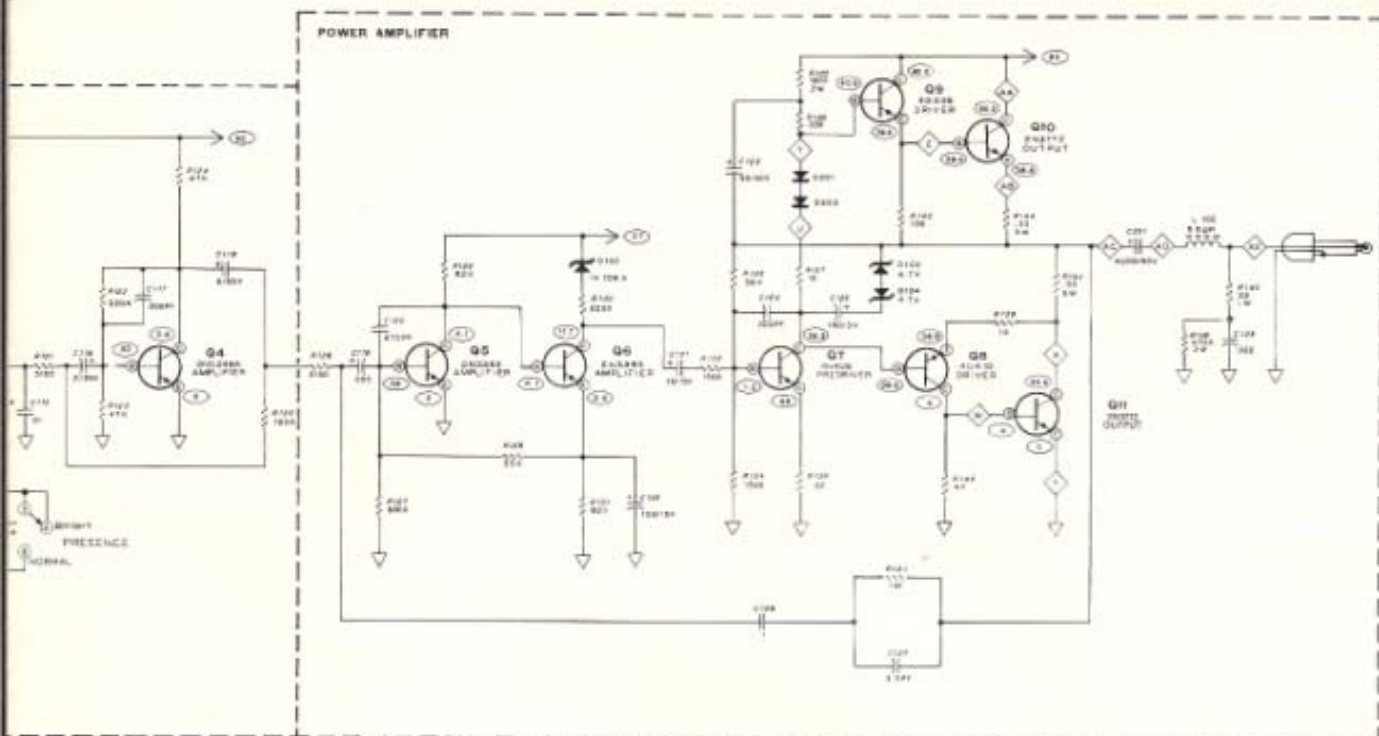
NOTES:

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| <p>1. RESISTOR AND CAPACITOR NUMBERS ARE IN THE FOLLOWING GROUPS:
100-199 PARTS ON CIRCUIT BOARD.
200-299 PARTS MOUNTED ON THE CHASSIS.</p> <p>2. ALL RESISTORS ARE 1/2 WATT 5% LOW NOISE UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (K=1,000, M=1,000,000).</p> <p>3. ALL CAPACITOR VALUES ARE IN μF UNLESS MARKED OTHERWISE.</p> <p>4. ○ THIS SYMBOL INDICATES A POSITIVE DC VOLTAGE MEASUREMENT, TAKEN WITH A HIGH IMPEDANCE VOLTMETER FROM THE POINT INDICATED TO CHASSIS GROUND. VOLTAGES MAY VARY $\pm 20\%$.</p> | <p>5. ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.</p> <p>6. ◇ INDICATES LETTERED HOLE IN CIRCUIT BOARDS.</p> <p>7. ▽ INDICATES COMMON FOIL CONNECTION ON CIRCUIT BOARDS.</p> <p>8. ≡ INDICATES CHASSIS GROUND.</p> |
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Each of the conservatively rated output transistors is individually mounted in a large heat sink to rapidly dissipate heat and improve performance.





The two 12" speakers are of special heavy duty aluminum dome design and are tailored to handle the full bass frequency range at very high power levels without overloading.

Each 12" speaker uses a giant 3 pound, 6 ounce magnet assembly for low distortion response and crisp, natural sound, even at high driving levels.

SPECIFICATIONS

AMPLIFIER

Continuous Power (RMS)	100 watts into a 4 ohm load.
Music Power*	120 watts (240 watts peak) into a 4 ohm load.
Music Reproduction Range	40 Hz to 5 kHz.
Harmonic Distortion	1% or less @ 80 watts into a 4 ohm load.
Intermodulation Distortion	1.5% or less at 80 watts into a 4 ohm load. (Tone controls set for equal response at 60 Hz and 6 kHz.)
Hum And Noise**	-70 dB.
Bass Control Cut	30 dB at 40 Hz.
Treble Control Cut	45 dB at 1 kHz.
Depth Switch Boost	20 dB at 40 Hz.
Presence Switch Boost	15 dB at 1 kHz.
Input Sensitivity***	3 mV at 1 kHz.
Input Impedance	41 k ohm.
Output Impedance	4 ohm.

SPEAKER SYSTEM

Speakers	Two 12 inch Hi-Efficiency, heavy-duty; specially designed for low frequency response.
Magnet	54 oz. Ferrite.
Frequency Response	Full bass guitar frequency range.
Power Rating	100 watts rms.
Nominal Impedance	4 ohm.

*EIA (Electronics Industries Association) music rating standards.

**Measured with all controls at maximum, switches normal.

***For 20 volts output (100 watts into a 4 ohm load).



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