

4/71 for. #

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VT-40



AMPLIFIER PERFORMANCE

60 watts RMS (over 138 watts peak music power)

AMPLIFIER FRONT PANEL

Single channel - two inputs, each with volume control; treble, mid-range, bass, reverb controls. Sensitivity switches, ultra hi, midrange selector switch (three positions).

Power and Standby (with indicator lights) and polarity switches. Fuse Holder post for 4 amps fuse.

AMPLIFIER REAR PANEL

External speaker jack and two external amplifier jacks.

SPEAKER SYSTEM

Four (4) 10" special Ampeg design speakers

NOTE: Foot Switch is standard with VT-40

AMPLIFIER DIMENSIONS AND SHIPPING WEIGHT:

24" Wide
22" High
11 1/2" Deep

Weight - 61 lbs.

| | |
|------------------------|---|
| TRADE NAME | Model No. VT-40 |
| MANUFACTURER | The Ampeg Co., Industrial Park, Linden, N. J. |
| TYPE SET | Audio Amplifier - One Channel - Two Inputs |
| TUBES | (3) 12AX7, (1) 12DW7, (1) 12AU7, (1) 6K11, (1) 6CG7, (4) 7027A. |
| SOLID STATE COMPONENTS | (10) Silicon Diodes |
| POWER SUPPLY | 120v A.C. 50/60 Hz, Rating 4 Amps. |
| POWER OUTPUT | 60 Watts RMS (2, 4 or 8 Ohms) Impedance 138 Watts Peak Music Power |

REPLACEMENT PARTS FOUND ON POWER P. C. BOARD

| DESCRIPTION | STOCK NO. |
|--|-----------|
| Power Amplifier P. C. Board Less Parts | 64-60-074 |
| Power Amplifier P. C. Board With Parts | 06565010 |
| 1 Amp 800 P.I.V. Silicon Diode | 64100210 |
| 1 Amp 1000 P.I.V. Silicon Diode | 64100180 |

| RESISTORS | | | | |
|-----------------|------|---------------|------------|-----------|
| CRKT SYMBOL NO. | OHM | WATTS | TOLERANCE | STOCK NO. |
| R26 | 1.5k | $\frac{1}{2}$ | $\pm 10\%$ | 59100080 |
| R40 | 2.2k | $\frac{1}{2}$ | $\pm 10\%$ | 59100100 |
| R7, R13, R23 | 3.3k | $\frac{1}{2}$ | $\pm 10\%$ | 59100120 |
| R48 | 4.7k | $\frac{1}{2}$ | $\pm 10\%$ | 59100140 |
| R4, R11 | 6.8k | $\frac{1}{2}$ | $\pm 10\%$ | 59100160 |
| R19, R21, R49 | 10k | $\frac{1}{2}$ | $\pm 10\%$ | 59100180 |
| R3, R10 | 33k | $\frac{1}{2}$ | $\pm 10\%$ | 59100240 |
| R20 | 100k | $\frac{1}{2}$ | $\pm 10\%$ | 59100260 |
| R44 | 120k | $\frac{1}{2}$ | $\pm 10\%$ | 59100280 |
| R14 | 180k | $\frac{1}{2}$ | $\pm 10\%$ | 59100300 |
| R5, R12 | 390k | $\frac{1}{2}$ | $\pm 10\%$ | 59100320 |
| R25, R27, R16 | 1m | $\frac{1}{2}$ | $\pm 10\%$ | 59100340 |
| R28, R31, R18 | 47k | 1 | $\pm 10\%$ | 59100520 |
| R39 | 56k | $\frac{1}{2}$ | $\pm 5\%$ | 59100680 |
| R22 | 220k | $\frac{1}{2}$ | $\pm 10\%$ | 59100800 |
| R15 | 270k | $\frac{1}{2}$ | $\pm 10\%$ | 59100900 |
| R17 | 1k | $\frac{1}{2}$ | $\pm 10\%$ | 59101030 |
| R24 | 33 | $\frac{1}{2}$ | $\pm 10\%$ | 59101250 |
| R32, R33 | 100k | $\frac{1}{2}$ | $\pm 5\%$ | 59101800 |
| R38 | 68k | $\frac{1}{2}$ | $\pm 5\%$ | 59101840 |
| R30 | 1m | $\frac{1}{2}$ | $\pm 5\%$ | 59101950 |
| R29 | 820k | $\frac{1}{2}$ | $\pm 5\%$ | 59101960 |
| R6 | 68k | $\frac{1}{2}$ | $\pm 10\%$ | 59100210 |

CAPACITORS

| CRKT SYMBOL NO. | MFD | VOLT | TYPE | STOCK NO. |
|--------------------|-------|------|--------------|-----------|
| C13 | .0005 | | Ceramic Disc | 12100650 |
| C2, C5 | 10 | 25v | Electrolytic | 12400200 |
| C14, C21 | 10 | 100v | Electrolytic | 12401480 |
| C15 | .047 | 600v | Flat Foil | 12700400 |
| C11 | .1 | 400v | Flat Foil | 12700650 |
| C8 | .47 | 400v | Flat Foil | 12700900 |
| C3, C4, C6, C7, C9 | .01 | 400v | Flat Foil | 12701250 |
| C10, C12 | .33 | 400v | Flat Foil | 12701360 |

POWER TRANSFORMER

| RATING AT FULL POWER | | | | STOCK NO. |
|----------------------|------------|---------------|---------------|-----------|
| PRIMARY I | PRIMARY II | SECONDARY I | SECONDARY II | |
| 120v | 120v | 594 at 150 MA | 6.3 at 4 Amps | 89300770 |

AUDIO OUTPUT TRANSFORMER

| IMPEDANCE | | D. C. RESISTANCE | | STOCK NO. |
|-----------|------------|------------------|---|-----------|
| PRIMARY | SECONDARY | PRIMARY | SECONDARY | |
| 6k P.P. | 2-4-8 Ohms | 300 Ohms | Yel. - 2 Ohms-.175 Ohms Grn. - 4 Ohms-.268 Ohms Org. - 8 Ohms-.418 Ohms | 89500300 |

SPEAKER

| RATING | | | | STOCK NO. |
|-----------------|------|-------|----------------|-----------|
| MFG. NO. | SIZE | FIELD | V.C. IMPEDANCE | |
| CTS #58-10184-1 | 10" | P.M. | 8 Ohms | 69100020 |

VT-40

A.C. VOLTAGE READINGS

INPUT: 0.3v A.C. at 400 Hg

OUTPUT: 8.95 v at 2 Ohms 3/4 Power Output
 12.65v at 4 Ohms 3/4 Power Output
 17.9 v at 8 Ohms 3/4 Power Output

(TREBLE, BASS, MIDRANGE AND REVERB CONTROLS AT MIDDLE POSITION)

| PIN NO. | | | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|-----|---|-----|----|-----|-----|
| CRKT SYMBOL NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| V1 12AX7 | 5.8 | .5 | | Fil | Fil | 10 | .3 | | Fil | | | |
| V2 12AX7 | 5.8 | .5 | | Fil | Fil | 10 | .3 | | Fil | | | |
| V3 12DW7 | | .32 | .3 | Fil | Fil | 3.5 | .28 | | Fil | | | |
| V4 12AU7 | 38 | 3.4 | | Fil | Fil | 38 | 3.4 | | Fil | | | |
| V5 7027A | | Fil | 250 | | 38 | | Fil | | | | | |
| V6 7027A | | Fil | 250 | | 38 | | Fil | | | | | |
| V201 6K11 | Fil | .1 | .5 | 5 | 5.2 | | .1 | | 5.2 | | .47 | Fil |
| V202 6CG7 | 4.2 | .48 | | Fil | Fil | 2.3 | 2 | | | | | |
| V203 12AX7 | | | | Fil | Fil | | | | | | | |

NOTE: THESE READINGS WERE TAKEN WITH A 10M INPUT IMP VTVM

| TUBES | | | |
|-----------------|-------|--------------------------|-----------|
| CRKT SYMBOL NO. | TUBE | USE | STOCK NO. |
| V1 | 12AX7 | Preamplifier Channel One | 93700000 |
| V2 | 12AX7 | Preamplifier Channel Two | 93700000 |
| V3 | 12DW7 | Driver | 93700020 |
| V4 | 12AU7 | Phase Inverter | 93700420 |
| V5, V6 | 7027A | Power Output | 93400250 |
| V201 | 6K11 | Midrange | 93700520 |
| V202 | 6CG7 | Echo Reverb Driver | 93700150 |
| V203 | 12AX7 | Reverb Amp. | 93700000 |

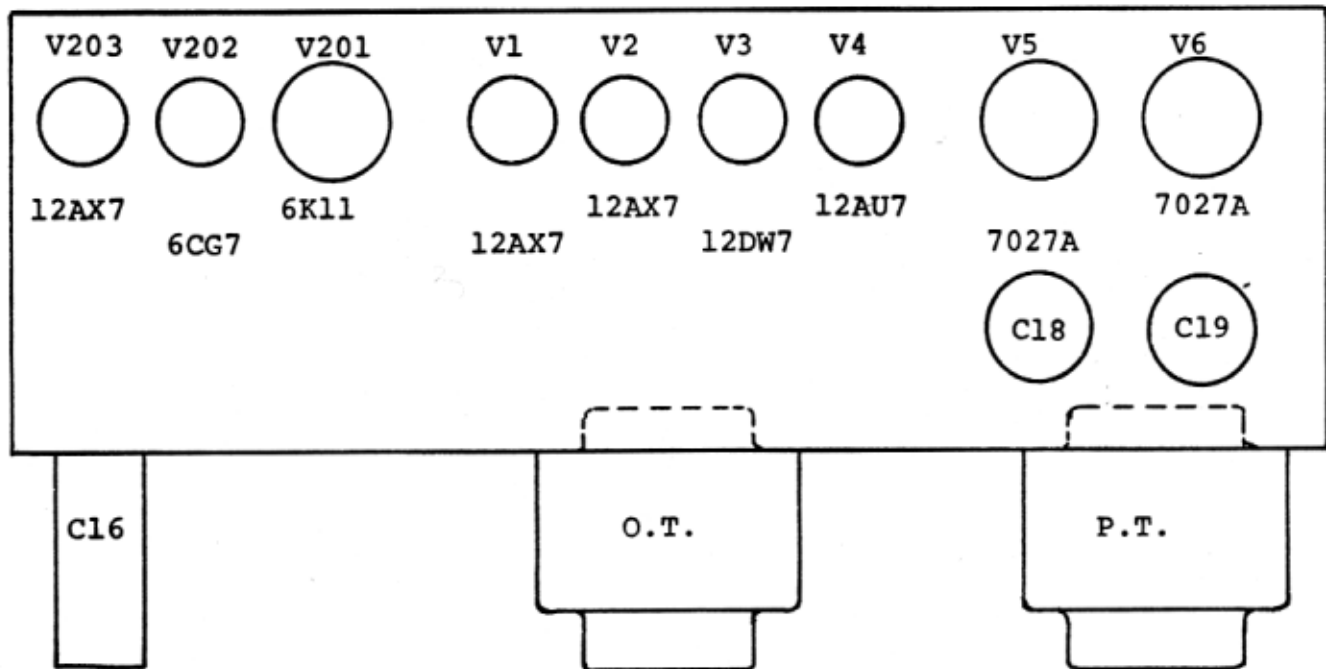
MISCELLANEOUS ELECTRONIC PARTS

| CRKT SYMBOL NO. | DESCRIPTION | STOCK NO. |
|--------------------|--|-----------|
| C1 | .005 mfd Ceramic Disc Capacitor | 12100800 |
| C19 | 70-40-40 mfd/450v Electrolytic Capacitor | 12400060 |
| C16 | 40-40-40 mfd/500v Electrolytic Capacitor | 12400070 |
| C17 | 20-20 mfd/450v Electrolytic Capacitor | 12400800 |
| C18 | 40-40-40 mfd/450v Electrolytic Capacitor | 12400900 |
| C20 | .047 mfd/600v Mold Capacitor | 12701390 |
| UR1 | Hum Control 100 Ohm W.W. | 24101070 |
| SW1, SW2, SW3, SW5 | DP3T Rocker Switch | 24300800 |
| SW7, SW6 | Power & Standby Switch S.P.S.T. | 24300890 |
| SW8 | Polarity Switch S.P.D.T. | 24300910 |
| SW4 | Foot Switch | 24300200 |
| | Fuse Holder | 38240290 |
| | Fuse MTH 4 Amps | 38240040 |
| J3, J4 | Jack #2S-1663 | 38300030 |
| J2 | Jack #12A | 38300060 |
| J5 | Jack #13A | 38300120 |
| J1 | Jack #13E | 38300290 |
| | Pilot Light (Red) | 38450280 |
| | Pilot Light (Amber) | 38450290 |
| R2, R9 | 6.8k \pm 10% $\frac{1}{2}$ w Resistor (Carbon) | 59100160 |
| R45, R46 | 100k \pm 10% 2w Resistor (Carbon) | 59100170 |
| R1 | 220k \pm 10% $\frac{1}{2}$ w Resistor (Carbon) | 59100800 |
| R8 | 5.6m \pm 10% $\frac{1}{2}$ w Resistor (Carbon) | 59100940 |
| R35, R34 | 47k \pm 10% $\frac{1}{2}$ w Resistor (Carbon) | 59101510 |
| R36, R37 | 470 Ohm \pm 10% 2w Resistor (Carbon) | 59101600 |
| R43 | 1k \pm 10% 10w Resistor (W.W.) | 59300150 |
| R41, R42 | 3k \pm 10% 10w Resistor (W.W.) | 59300240 |
| D7, D8, D9, D10 | 1 Amp 1400 P.I.V. Silicon Diode | 64100240 |
| | Reverb Unit Type 4C | 63100060 |
| | A.C. Line Cord | 97200000 |
| | 9 Pin Socket P.C. Type | 38630320 |
| | 8 Pin Socket | 38630210 |

MISCELLANEOUS NON-ELECTRONIC PARTS

| DESCRIPTION | STOCK NO. |
|---------------------|-----------|
| Black Knob | 38150260 |
| Corner (2 Tab) | 38180020 |
| Corner (3 Tab) | 38180030 |
| Handle | 38270130 |
| Overlay Panel | 38420690 |
| Strain Relief (6W1) | 38780020 |
| Strain Relief (4K4) | 38780050 |
| Logo | 40300070 |

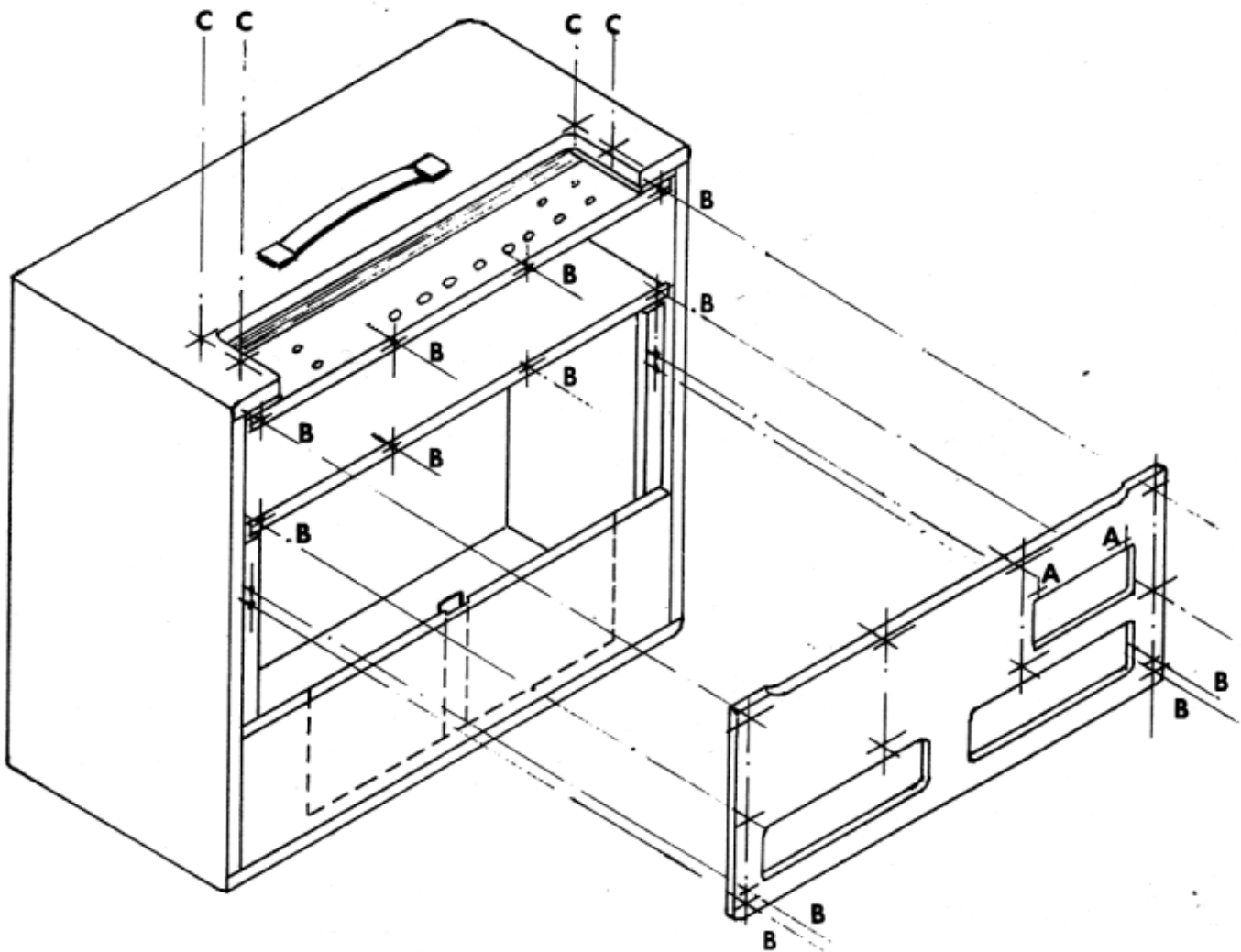
CHASSIS LAYOUT TUBE LOCATION



MECHANICAL DISASSEMBLY

TO REMOVE CHASSIS FROM CABINET FOR SERVICING FOLLOW STEPS -

- 1) UNFASTEN TWO SCREWS MARKED "A" AND ALL SCREWS MARKED "B", REMOVE REAR COVER.
- 2) UNPLUG REVERB LEADS FROM REVERB UNIT (AT THE BOTTOM OF CABINET) AND DISCONNECT SPEAKER LEADS.
- 3) NOW HOLD CHASSIS FROM FALLING DOWN WHILE UNFASTENING FOUR SCREWS MARKED "C". PULL CHASSIS OUT GENTLY NOT TO TEAR VINYL COVER FROM CABINET.



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NOTES:

- 1) FOR COMPONENTS FOUND ON ECHO P. C. BOARD 64-60-070 - REFER TO MODEL VT-22 AND V-4, PAGES 152, 153.
 - 2) FOR COMPONENTS FOUND ON TONE CONTROL P. C. BOARD 64-60-071 - REFER TO MODEL VT-22 AND V-4, PAGES 151, 152.
 - 3) FOR PICTORIAL VIEWS OF ECHO P. C. BOARD 64-60-070 - REFER TO MODEL VT-22 AND V-4, PAGE 158.
 - 4) FOR PICTORIAL VIEWS OF TONE CONTROL P. C. BOARD 64-60-071 - REFER TO MODEL VT-22 AND V-4, PAGE 159.
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