

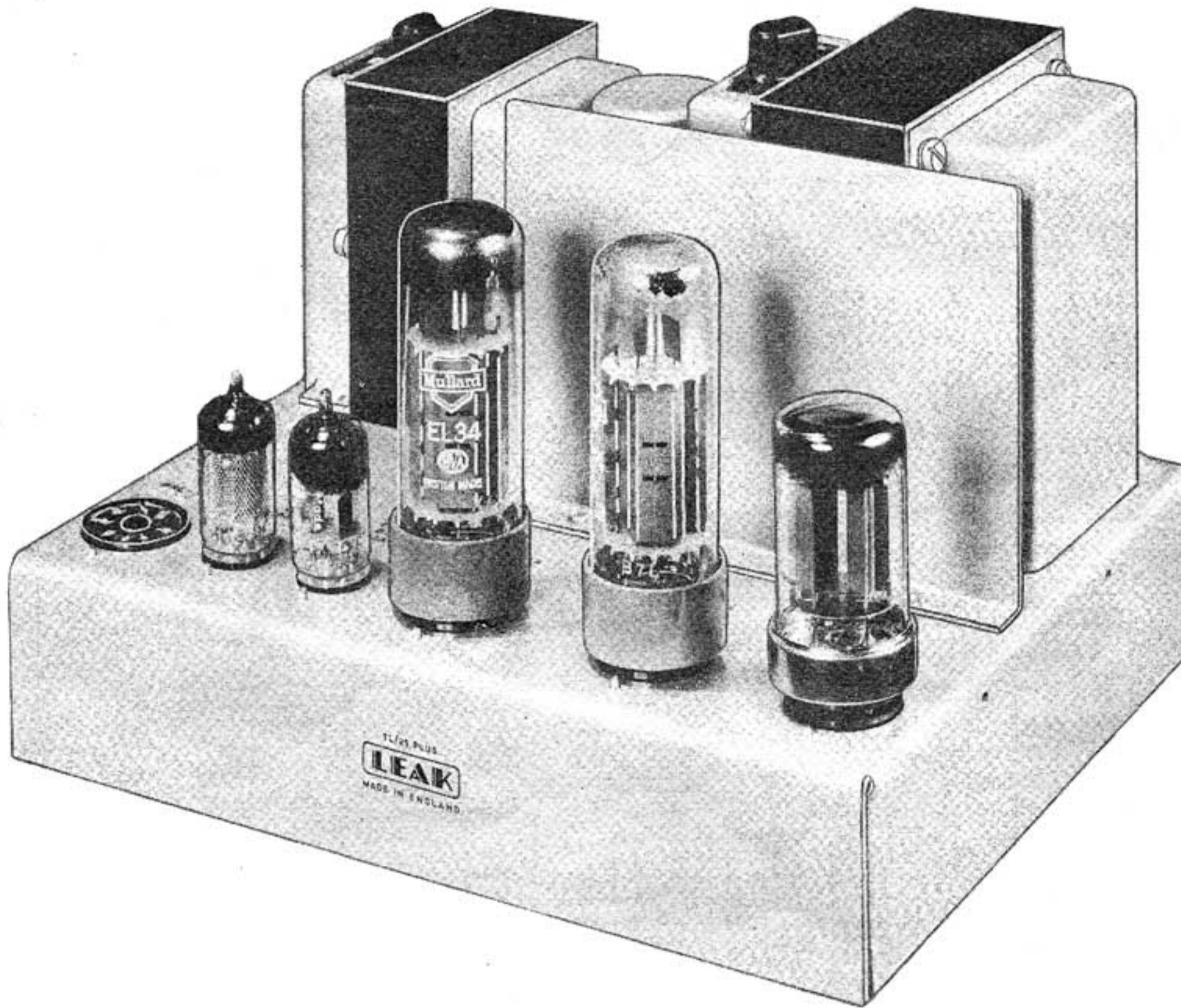
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scans by nuppleri



LEAK MODEL  
TL/25 Plus



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TL/25 Plus

|              |   |        |                                     |
|--------------|---|--------|-------------------------------------|
| TRADE NAME   | Leak TL/ 25 Plus  |        |                                     |
| IMPORTER     | British Industries Corp., 80 Shore Road, Port Washington, N. Y. |        |                                     |
| TYPE SET     | AC Operated Audio Amplifier                                     |        |                                     |
| TUBES        | Five  |        |                                     |
| POWER SUPPLY | 105/ 110/ 117 Volts AC-60 Cycles                                | RATING | 115 Watts, 1.15 Amp. @117 Volts AC. |

**HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana**

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# PARTS LIST AND DESCRIPTIONS

## TUBES (GENERAL ELECTRIC, SYLVANIA)

| ITEM No. | USE                 | TYPE        | NOTES |
|----------|---------------------|-------------|-------|
| V1       | AF Amplifier        | EF86        | ①     |
| V2       | AF Amp. -Phase Inv. | ECC81/12AT7 | ②     |
| V3       | Output              | EL34/6CA7   | ③     |

| ITEM No. | USE       | TYPE      | NOTES |
|----------|-----------|-----------|-------|
| V4       | Output    | EL34/6CA7 | ③     |
| V5       | Rectifier | GZ34/5U4  | ④     |

- ① Alternate Types 6267, Z729.
- ② Alternate Type B039.
- ③ Alternate Types KT66, 5881.
- ④ Alternate Types 5V4, 5AR4.

## ELECTROLYTIC CAPACITORS

| ITEM No. | RATING |       | REPLACEMENT DATA |                  |                           |                  |                  |                  |                  |
|----------|--------|-------|------------------|------------------|---------------------------|------------------|------------------|------------------|------------------|
|          | CAP.   | VOLT. | LEAK PART No.    | AEROVOX PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. | PYRAMID PART No. | SANGAMO PART No. | SPRAGUE PART No. |
| C1A      | 16     | 550   |                  | PRS600V16        | BRHV616                   |                  |                  |                  | R2722 *          |
| B        | 16     | 550   |                  | PRS600V16        | BRHV616                   |                  |                  |                  |                  |
| C2A      | 8      | 450   |                  | PRS450V168       | BBRD16845                 |                  | TDDL-25          | MTD-308          | R2694 *          |
| B        | 16     | 450   |                  |                  |                           |                  |                  |                  |                  |
| C3       | 1      | 350   |                  | PRS450V1         | BRI45                     |                  |                  | MMT-4501         | R1260 *          |
| C4       | 50     | 12    |                  | PRS25V50         | BBR50-25                  | TC29             | TD-50-25         | MT-0250          | TVA-1206         |
| C5       | 50     | 50    |                  | PRS50V50         | BR505                     | TC39             | TD-50-50         | MT-0550          | TVA-1308         |
| C6       | 50     | 50    |                  | PRS50V50         | BR505                     | TC39             | TD-50-50         | MT-0550          | TVA-1308         |

\* Not normally in distributors stock. Available thru distributor on order to manufacturer.

## FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

| ITEM No. | RATING |      | LEAK PART No. | AEROVOX PART No. | CENTRALAB PART No. | CORNELL-DUBILIER PART No. | MALLORY PART No. | SPRAGUE PART No. | NOTES |
|----------|--------|------|---------------|------------------|--------------------|---------------------------|------------------|------------------|-------|
|          | CAP.   | VOLT |               |                  |                    |                           |                  |                  |       |
| C7       | 1000   |      |               | BPD-001          | DD-102             | LT6D1                     | UC-521           | 5HK-D1           | 5%    |
| C8       | 150    |      |               | 1469-00015       | DD-151             | 5R5T15                    | MCE236           | MS-315           |       |
| C9       | .1     | 350  |               | P488N-1          | DF-104             | CUB4P1                    | GEM-401          | 4TM-P1           |       |
| C10      | .1     | 350  |               | P488N-1          | DF-104             | CUB4P1                    | GEM-401          | 4TM-P1           |       |
| C11      | .25    | 350  |               | P488N-25         |                    | CUB4P25                   | GEM-4025         | 4TM-P25          |       |
| C12      | .25    | 350  |               | P488N-25         |                    | CUB4P25                   | GEM-4025         | 4TM-P25          |       |

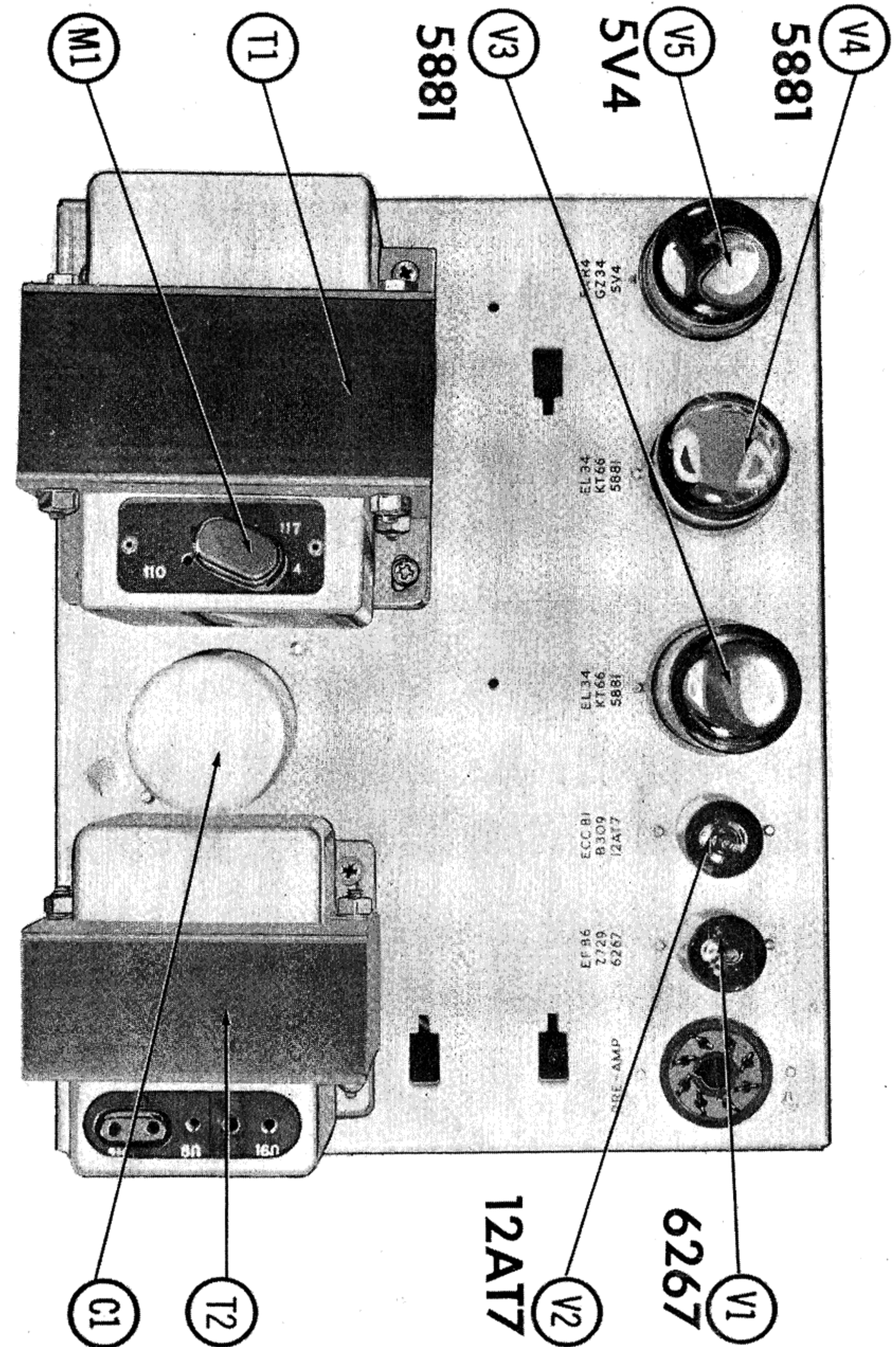
## RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

| ITEM No. | RATING |      | LEAK PART No. | NOTES |
|----------|--------|------|---------------|-------|
|          | OHMS   | WATT |               |       |
| R1       | 22K    | X    |               |       |
| R2       | 1meg   | X    |               |       |
| R3       | 150K   | X    |               |       |
| R4       | 1meg   | X    |               |       |
| R5       | 100K   | X    | 1             |       |
| R6       | 2200Ω  | X    |               |       |
| R7       | 100Ω   | X    |               |       |
| R8       | 18K    | X    |               |       |
| R9       | 1.5meg | X    |               |       |
| R10      | 91K 5% | X    | 1             |       |
| R11      | 1000Ω  | X    |               |       |

| ITEM No. | RATING  |      | LEAK PART No. | NOTES |
|----------|---------|------|---------------|-------|
|          | OHMS    | WATT |               |       |
| R12      | 22K     | X    | 1             |       |
| R13      | 1.5meg  | X    |               |       |
| R14      | 100K 5% | X    | 1             |       |
| R15      | 27K     | X    | 1             |       |
| R16      | 10K     | X    |               |       |
| R17      | 1meg    | X    |               |       |
| R18      | 440Ω 5% | X    | 2             |       |
| R19      | 10K     | X    |               |       |
| R20      | 1meg    | X    |               |       |
| R21      | 440Ω 5% | X    | 2             |       |
| R22      | 100Ω 5% | X    | 2             |       |

# CHASSIS—TOP VIEW



# PARTS LIST AND DESCRIPTIONS (Continued)

## TRANSFORMER (POWER)

| ITEM No. | RATING                        |               |          | REPLACEMENT DATA |                     |                |              |                  |                     |                |
|----------|-------------------------------|---------------|----------|------------------|---------------------|----------------|--------------|------------------|---------------------|----------------|
|          | PRI.                          | SEC. 1        | SEC. 2   | LEAK PART No.    | Halldorson PART No. | Merit PART No. | Ram PART No. | Stancor PART No. | Thordarson PART No. | Triad PART No. |
|          |                               | SEC. 3        | SEC. 4   |                  |                     |                |              |                  |                     |                |
| T1       | 117V @ 1.15A Tap @ 110V, 105V | 740VCT @.150A | 5V @1.5A | 3974             | P9316 ①             | P3173 ①        |              | PC8411 ①         | 22R33 ①             | R-16A ①        |
|          | SEC. 3                        | SEC. 4        | SEC. 5   |                  |                     |                |              |                  |                     |                |
|          | 6.3VCT @3.4A                  |               |          |                  |                     |                |              |                  |                     |                |

① Drill new mounting holes. Primary taps not provided.

## TRANSFORMER (AUDIO OUTPUT)

| ITEM No. | IMPEDANCE                      |                  | REPLACEMENT DATA |                     |                |              |                  |                     | NOTES |                |                             |
|----------|--------------------------------|------------------|------------------|---------------------|----------------|--------------|------------------|---------------------|-------|----------------|-----------------------------|
|          | PRI.                           | SEC.             | LEAK PART No.    | Halldorson PART No. | Merit PART No. | Ram PART No. | Stancor PART No. | Thordarson PART No. |       | Triad PART No. |                             |
|          |                                | CT Taps@         |                  |                     |                |              |                  |                     |       |                |                             |
| T2       | 7000Ω CT Screen Taps@ 2000Ω CT | 16Ω Taps@ 8Ω, 4Ω | 3925             | H-4103 ①            |                |              |                  |                     |       | S-142A ①       | ① Drill new mounting holes. |

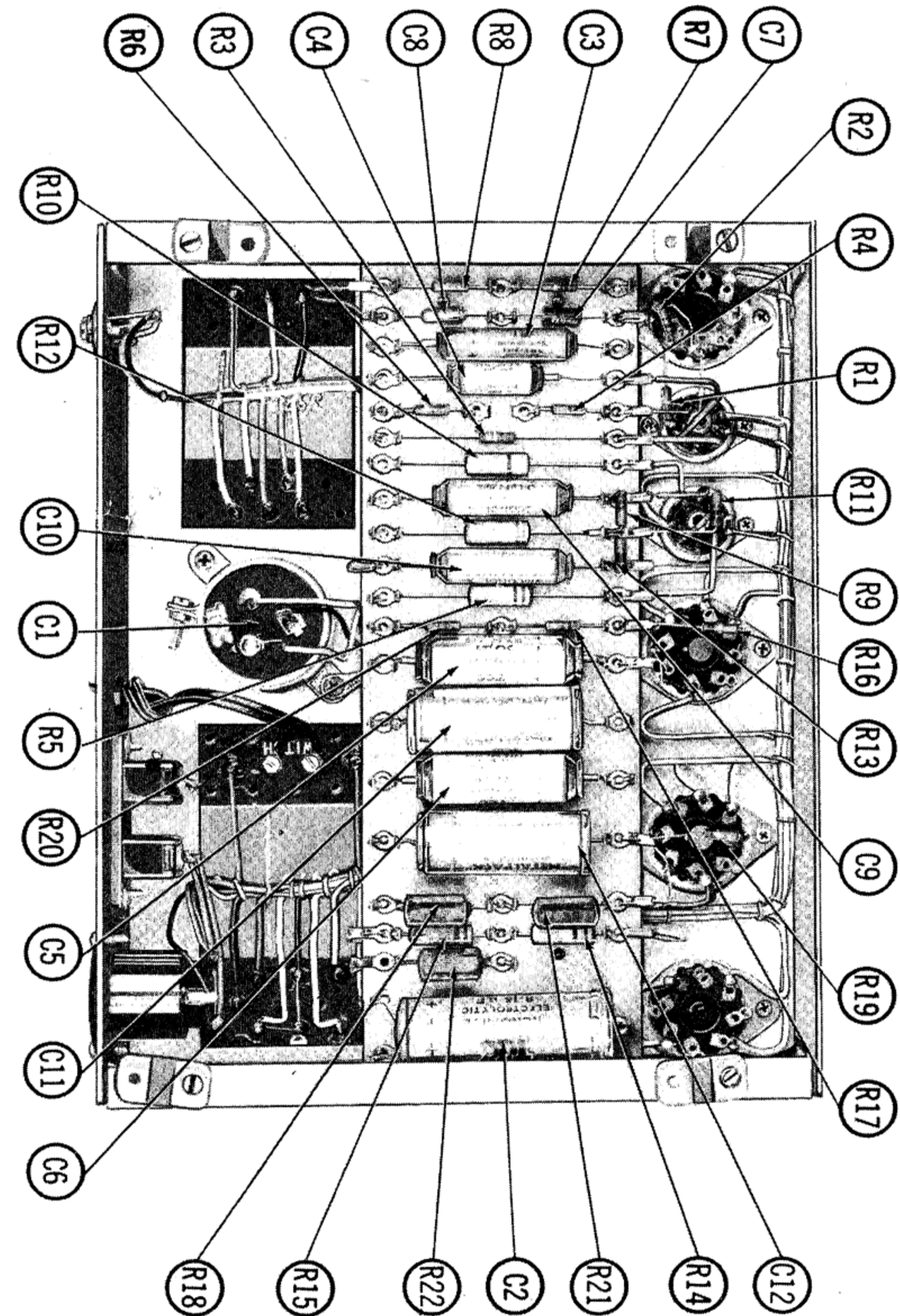
## FUSES

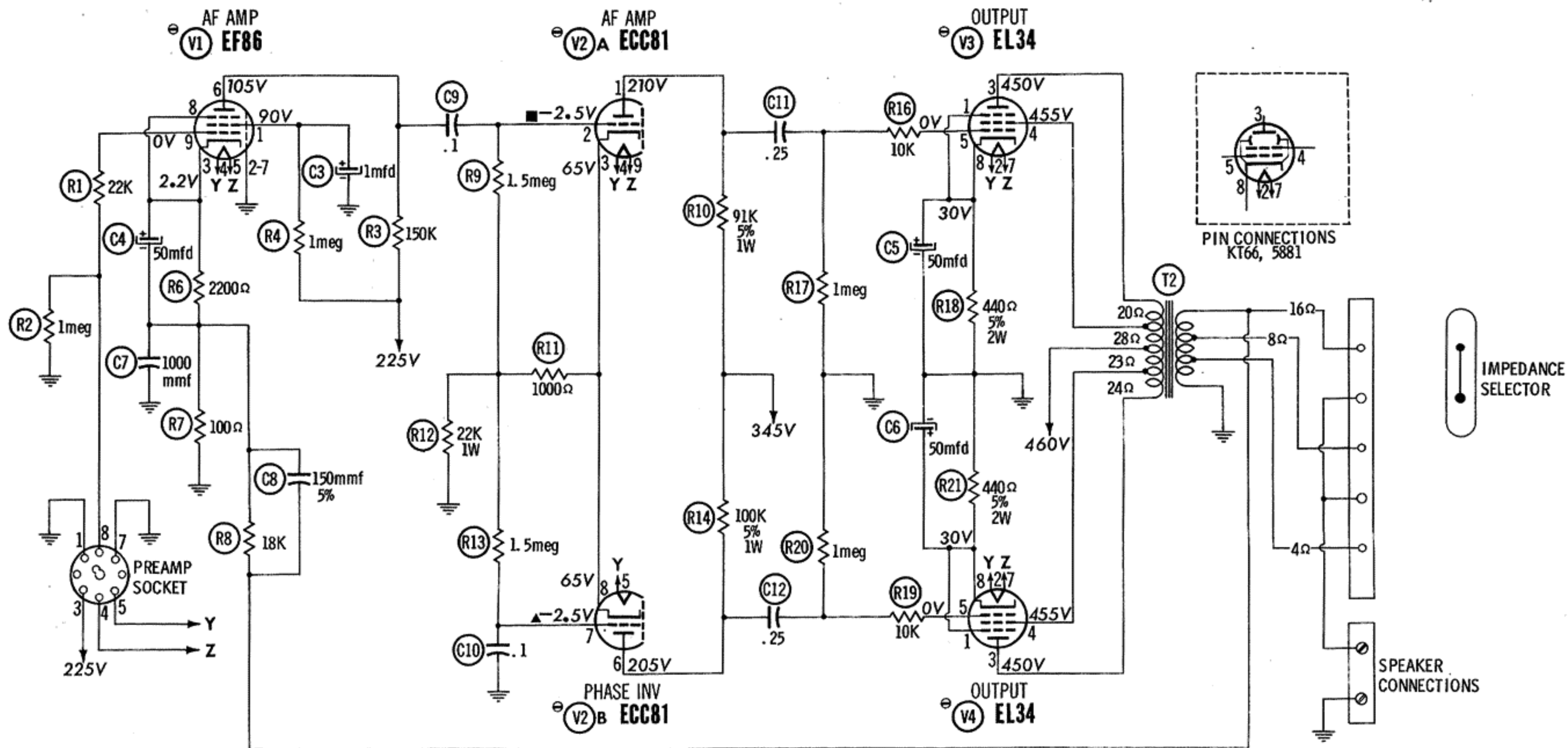
| ITEM No. | TYPE | RATING  | REPLACEMENT DATA |        |                     |        |               |        |  |  |  |
|----------|------|---------|------------------|--------|---------------------|--------|---------------|--------|--|--|--|
|          |      |         | LEAK PART No.    |        | LITTELFUSE PART No. |        | BUSS PART No. |        |  |  |  |
|          |      |         | FUSE             | HOLDER | FUSE                | HOLDER | FUSE          | HOLDER |  |  |  |
| M1       |      | 2A 250V |                  |        |                     |        |               |        |  |  |  |

## WIRING DATA

|   |  |
|---|--|
| General-use Unshielded Hook-up Wire ..... | Use BELDEN No. 8530 (Solid) Available in Ten Colors<br>8524 (Stranded) Available in Ten Colors |
| Power Cord .....                          | Use BELDEN No. 1765-B (6 Ft. Length)<br>1725-K (7½ Ft. Length)                                 |

## CHASSIS—BOTTOM VIEW





RESISTANCE READINGS

| ITEM | TUBE          | Pin 1 | Pin 2  | Pin 3 | Pin 4 | Pin 5 | Pin 6 | Pin 7  | Pin 8 | Pin 9 |
|------|---------------|-------|--------|-------|-------|-------|-------|--------|-------|-------|
| V1   | EF86          | †1meg | 0Ω     | 2300Ω | .1Ω   | .1Ω   | †275K | 0Ω     | 2300Ω | 1meg  |
| V2   | ECC81<br>12A7 | †120K | 1.5meg | 23K   | .1Ω   | .1Ω   | †130K | 1.5meg | 23K   | .1Ω   |
| V3   | EL34<br>6CA7  | 440Ω  | .1Ω    | †148Ω | †128Ω | 1meg  | NC    | .1Ω    | 440Ω  |       |
| V4   | EL34<br>6CA7  | 440Ω  | .1Ω    | †147Ω | †123Ω | 1meg  | NC    | .1Ω    | 440Ω  |       |
| V5   | GZ34<br>5U4   | NC    | ‡      | NC    | 91Ω   | NC    | 95Ω   | NC     | ‡     |       |

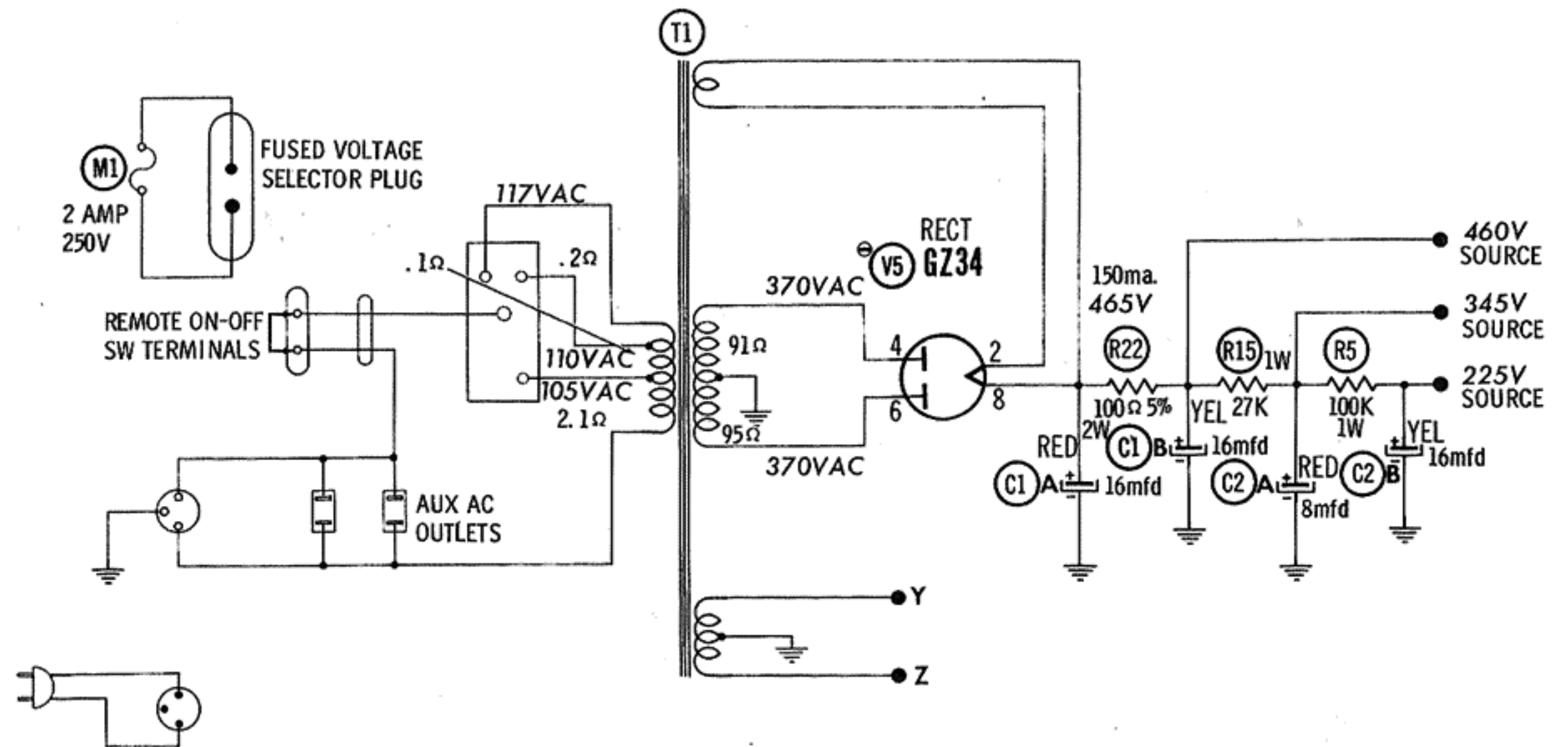
‡ THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC CAPACITOR CONNECTED IN THE ASSOCIATED CIRCUIT.  
 † MEASURED FROM PIN 8 OF V5.  
 ‡ MEASURED FROM PIN 3 OF V2.  
 † MEASURED FROM PIN 8 OF V2.  
 NC NO CONNECTION.

⊖ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

A PHOTOFACIT STANDARD NOTATION SCHEMATIC  
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1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance of component values makes possible a variation of ±15% in voltage and resistance readings.
6. All controls at minimum, proper output load connected.



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