



Stereophonic

THE FISHER X-100

SERVICE

MANUAL



MODEL X-100

CHASSIS SERIAL NUMBERS
FROM 10001 TO 19999 INCLUSIVE

PRICE: \$1.00

FISHER RADIO CORPORATION • NEW YORK

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PARTS DESCRIPTION LIST

CAPACITORS

10% tolerance for all fixed capacitors, unless otherwise noted or marked GMV (guaranteed minimum value.)

| Symbol | Description | Part No. |
|--------------------|---|-----------|
| C1, 2 | Ceramic, 330uuf, 1000V | C50072-1 |
| C3, 4 | Ceramic, .02uf, 20%, 500V | C50089-5 |
| C5, 6 | Ceramic, .01uf, 20%, 500V | C50089-3 |
| C7 | Ceramic, 24uuf, 5%, N150, 1000V | C50070-8 |
| C8 | Ceramic, 18uuf, N470, 1000V | C50070-13 |
| C9, 10 | Ceramic, .001uf, 1000V | C50072-3 |
| C11, 12 | Mylar, .022uf, 250V | C50197-49 |
| C13, 14 | Ceramic, .0022uf, 1000V | C50072-5 |
| C15 | Electrolytic, 3 section: A: 100uf, 150V B: 40 uf, 450V C: 40uf, 450V | C50180-14 |
| C16 | Electrolytic, 20uf, 350V | C692-131 |
| C17, 18, 19, 20 | Mylar, .047uf, 250V | C50197-52 |
| C21, 22 | Mylar, .022uf, 250V | C50197-49 |
| C23 | Ceramic, 68uuf, N750, 1000V | C50070-15 |
| C24 | Ceramic, 560uuf, 1000V | C50072-14 |
| C25 | Ceramic, 68uuf, N750, 1000V | C50070-15 |
| C26 | Ceramic, 560uuf, 1000V | C50072-14 |
| C27 | Electrolytic, 2 section: A: 40uf, 450V B: 60uf, 450V | C663-136 |
| C28, 29 | Mylar, .015uf, 250V | C50197-58 |
| C30, 31 | Ceramic, 10uuf, 1000V | C50070-11 |
| C32, 33 | Electrolytic, 25uf, 6V | C639-114 |
| C34, 35 | Ceramic, 390uuf, 1000V | C50072-6 |
| C36, 37, 38, 39 | Mylar, .047uf, 400V | C50197-30 |
| C40, 41 | Ceramic, 33uuf, N750, 1000V | C50070-15 |
| C42, 43 | Ceramic, 330uuf, 1000V | C50072-1 |

RESISTORS AND POTENTIOMETERS

In Ohms, 10% tolerance, 1/2 Watt, unless otherwise noted. K=KILOHM, M=MEGOHM.

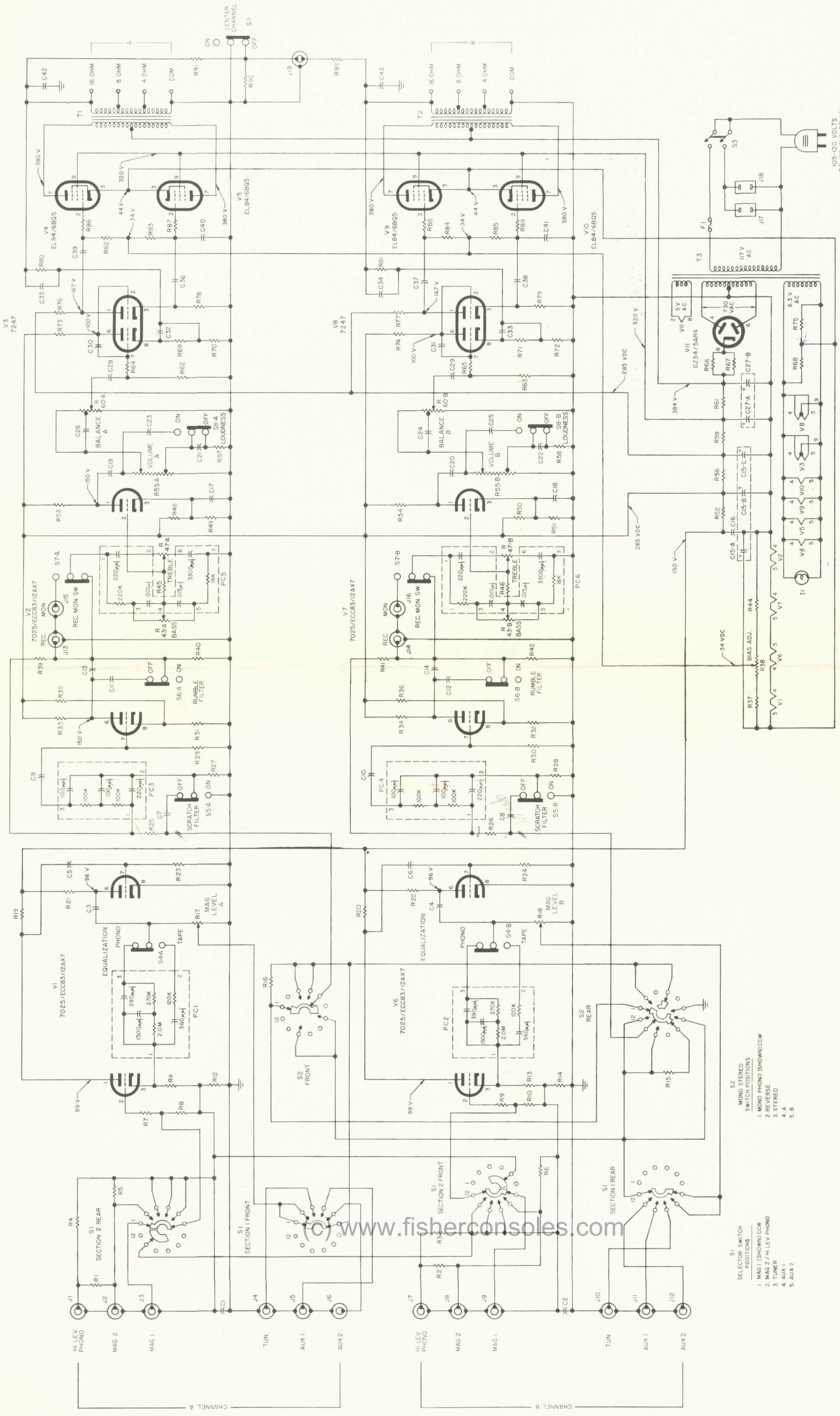
| Symbol | Description | Part No. |
|---------|------------------------------------|------------|
| R1, 2 | Composition, 120K | RC20BF124K |
| R3, 4 | Composition, 270K | RC20BF274K |
| R5, 6 | Dep. Carbon, 100K, 5%, 1/3 W | R33DC104J |
| R7 | Dep. Carbon, 10K, 5%, 1/3 W | R33DC103J |
| R8 | Dep. Carbon, 100K, 5%, 1/3 W | R33DC104J |
| R9 | Dep. Carbon, 10K, 5%, 1/3 W | R33DC103J |
| R10 | Dep. Carbon, 100K, 5%, 1/3 W | R33DC104J |
| R11 | Dep. Carbon, 2.7K, 5%, 1/3 W | R33DC272J |
| R12 | Composition, 15 | RC20BF150K |
| R13 | Dep. Carbon, 2.7K, 5%, 1/3 W | R33DC272J |
| R14 | Composition, 15 | RC20BF150K |
| R15, 16 | Dep. Carbon, 100K, 5%, 1/3 W | R33DC104J |
| R17, 18 | Potentiometer, 250K, preamp. level | R50160-46 |
| R19, 20 | Dep. Carbon, 330K, 5%, 1/3 W | R33DC334J |
| R21, 22 | Dep. Carbon, 220K, 5%, 1/3 W | R33DC224J |
| R23, 24 | Composition, 2.2M | RC20BF225K |
| R25, 26 | Composition, 560K | RC20BF564K |
| R27, 28 | Composition, 10M | RC20BF106K |
| R29, 30 | Composition, 2.2M | RC20BF225K |
| R31, 32 | Composition, 470 | RC20BF471K |
| R33, 34 | Dep. Carbon, 100K, 5%, 1/3 W | R33DC104J |
| R35, 36 | Composition, 220K, 1W | RC30BF224K |
| R37 | Composition, 1.8K | RC20BF182K |

| | | |
|--------------------|------------------------------|------------|
| R38 | Potentiometer, 5K, bias adj. | R50103-4 |
| R39 | Composition, 2.2M | RC20BF225K |
| R40 | Composition, 330K | RC20BF334K |
| R41 | Composition, 2.2M | RC20BF225K |
| R42 | Composition, 330K | RC20BF334K |
| R43 | Potentiometer, 1M, bass | R50160-43A |
| R44 | Composition, 10K | RC20BF103K |
| R45, 46 | Composition, 39K | RC20BF393K |
| R47 | Potentiometer, 1M, treble | R50160-43A |
| R48 | Composition, 100K, 5%, 1W | RC20BF104J |
| R49 | Composition, 270 | RC20BF271K |
| R50 | Composition, 100K, 5%, 1W | RC30BF104J |
| R51 | Composition, 270 | RC20BF271K |
| R52 | Composition, 100K | RC20BF104K |
| R53, 54 | Dep. Carbon, 100K, 5%, 1/3 W | R33DC104J |
| R55 | Potentiometer, 500K, vol. | R50160-44 |
| R56 | Composition, 2.7K | RC20BF272K |
| R57, 58 | Dep. Carbon, 22K, 5%, 1/3 W | R33DC223J |
| R59 | Composition, 3.3K, 1W | RC30BF332K |
| R60 | Potentiometer, 500K, bal. | R50160-45 |
| R61 | Wirewound, 2.2K, 7W | R563-148 |
| R62, 63 | Composition, 470K | RC20BF474K |
| R64, 65 | Composition, 47K | RC20BF473K |
| R66, 67 | Wirewound, 250, 7W | R539-121 |
| R68 | Composition, 220 | RC20BF221K |
| R69 | Composition, 3.9K | RC20BF392K |
| R70 | Composition, 220 | RC20BF221K |
| R71 | Composition, 3.9K | RC20BF392K |
| R72 | Composition, 220 | RC20BF221K |
| R73, 74 | Composition, 560K | RC20BF564K |
| R75 | Composition, 220 | RC20BF221K |
| R76, 77, 78, 79 | Composition, 47K, 5%, 1W | RC30BF473J |
| R80, 81 | Dep. Carbon, 2.7K, 5%, 1/3 W | R33DC272J |
| R82, 83, 84, 85 | Dep. Carbon, 330K, 5%, 1/3 W | R33DC334J |
| R86, 87, 88, 89 | Dep. Carbon, 2.7K, 5%, 1/3 W | R33DC272J |
| R90 | Composition, 1K | RC20BF102K |
| R91, 92 | Composition, 4.7K | RC20BF472K |

MISCELLANEOUS

| Symbol | Description | Part No. |
|-------------------|-----------------------------------|-------------|
| F1 | Fuse, 3.2 amp., slo-blo | F3319 |
| I1 | Lamp, #47 | I50009-1 |
| J17, 18 | AC receptacle | J546-129 |
| PC1, 2 | Printed circuit equalization | PC50187-3 |
| PC3, 4 | Printed circuit high freq. filter | PC50187-2 |
| PC5, 6 | Printed circuit tone control | PC50187-4 |
| S1 | Switch, selector | S781-129 |
| S2 | Switch, mono stereo | S781-130 |
| S3 | Switch, power | Part of R55 |
| S4, 5, 6, 7, 8 | Switch, slide | S50200-2 |
| T1 | Transformer, output | T781-116-1 |
| T2 | Transformer, output | T781-116-2 |
| T3 | Transformer, power | T781-115 |
| — | Dress panel | AS781-108 |
| — | Tube shield | E3286 |
| — | Knob, dual, rear | E50153-1 |
| — | Knob, dual, front | E50152 |
| — | Knob | E50133-2 |
| — | Jewel, green | 150162-4 |
| — | Fuse holder | X1036 |

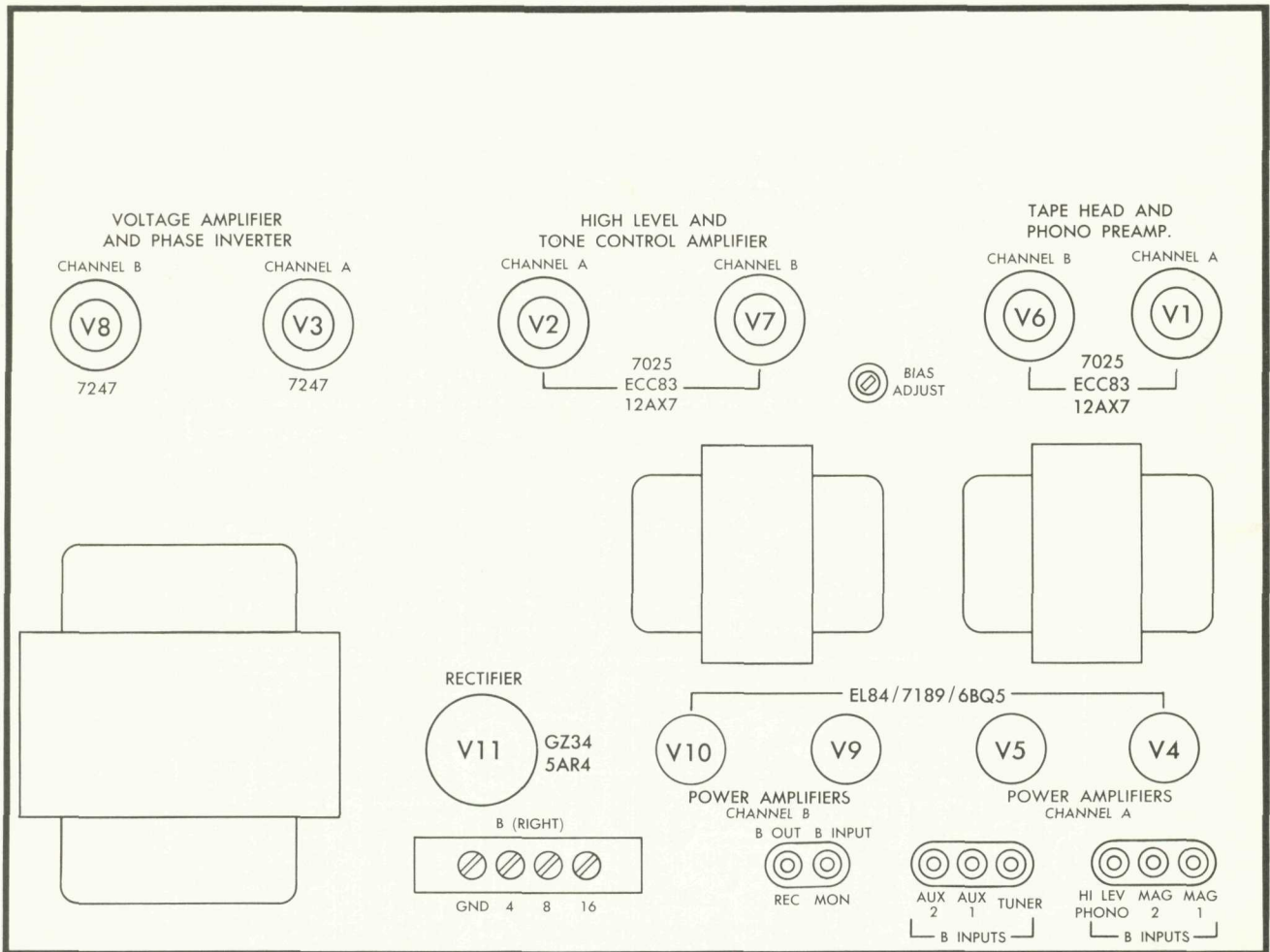
SCHEMATIC DIAGRAM



| RESISTORS | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 | R16 | R17 | R18 | R19 | R20 | R21 | R22 | R23 | R24 | R25 | R26 | R27 | R28 | R29 | R30 | R31 | R32 | R33 | R34 | R35 | R36 | R37 | R38 | R39 | R40 | R41 | R42 | R43 | R44 | R45 | R46 | R47 | R48 | R49 | R50 | R51 | R52 | R53 | R54 | R55 | R56 | R57 | R58 | R59 | R60 | R61 | R62 | R63 | R64 | R65 | R66 | R67 | R68 | R69 | R70 | R71 | R72 | R73 | R74 | R75 | R76 | R77 | R78 | R79 | R80 | R81 | R82 | R83 | R84 | R85 | R86 | R87 | R88 | R89 | R90 | R91 |
|------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| CAPACITORS | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C18 | C19 | C20 | C21 | C22 | C23 | C24 | C25 | C26 | C27 | C28 | C29 | C30 | C31 | C32 | C33 | C34 | C35 | C36 | C37 | C38 | C39 | C40 | C41 | C42 | C43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

P.781 SCHEMATIC AW#1718A

TUBE LAYOUT



SERVICE NOTES

BIAS ADJUST CONTROL

This control, located on top of the chassis (see Tube Layout), establishes the bias voltage on the grids of the power amplifier tubes in each channel. Adjust this control as follows:

- 1 — Turn on the power, leaving the Master Volume control at MINIMUM. The position of the other controls is not significant.
- 2 — Connect the positive lead of a DC voltmeter to cathode (pin #3) of any of the power amplifier tubes (V4, 5, 9 or 10,) and the ground lead to chassis ground. Turn the Bias Adjust to obtain a reading of + 44 volts DC.



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