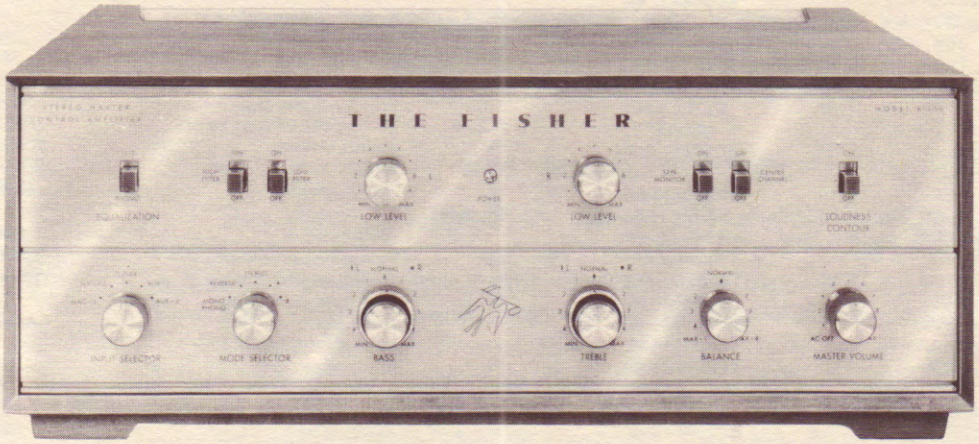
Stereophonic

THE FISHER X-100

SERVICE MANUAL



MODEL X-100

CHASSIS SERIAL NUMBERS
FROM 30001 TO 39999 INCLUSIVE

PRICE: $1.00

FISHER RADIO CORPORATION · NEW YORK

THE FISHER X-100 CHASSIS SERIAL NUMBERS FROM 30001 TO 39999 INCLUSIVE

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, .039uf, 250V	C50197-61
C13, 14	Ceramic, .0015uf, 1000V	C50072-10
C15	Electrolytic, 3 section:	C50180-14
	A: 100uf, 150V	
	B: 40 uf, 450V	
	C: 40uf, 450V	
C16	Electrolytic, 20uf, 350V	C692-131
C17, 18	Mylar, .047uf, 250V	C50197-52
C19, 20	Mylar, .033uf, 250V	C50197-51
C21, 22	Mylar, .022uf, 250V	C50197-49
C23	Ceramic, 33uuf, N750, 1000V	C50070-15
C24	Ceramic, 560uuf, 1000V	C50072-14
C25	Ceramic, 33uuf, N750, 1000V	C50070-15
C26	Ceramic, 560uuf, 1000V	C50072-14
C27	Electrolytic, 2 section:	
	A: 40uf, 500V	
	B: 60uf, 450V	C50180-34
C30, 31	Ceramic, 7uuf, 1000V	C50070-20
C32, 33	Electrolytic, 25uf, 6V	C639-114
C34, 35	Ceramic, 560uuf, 1000V	C50072-14
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

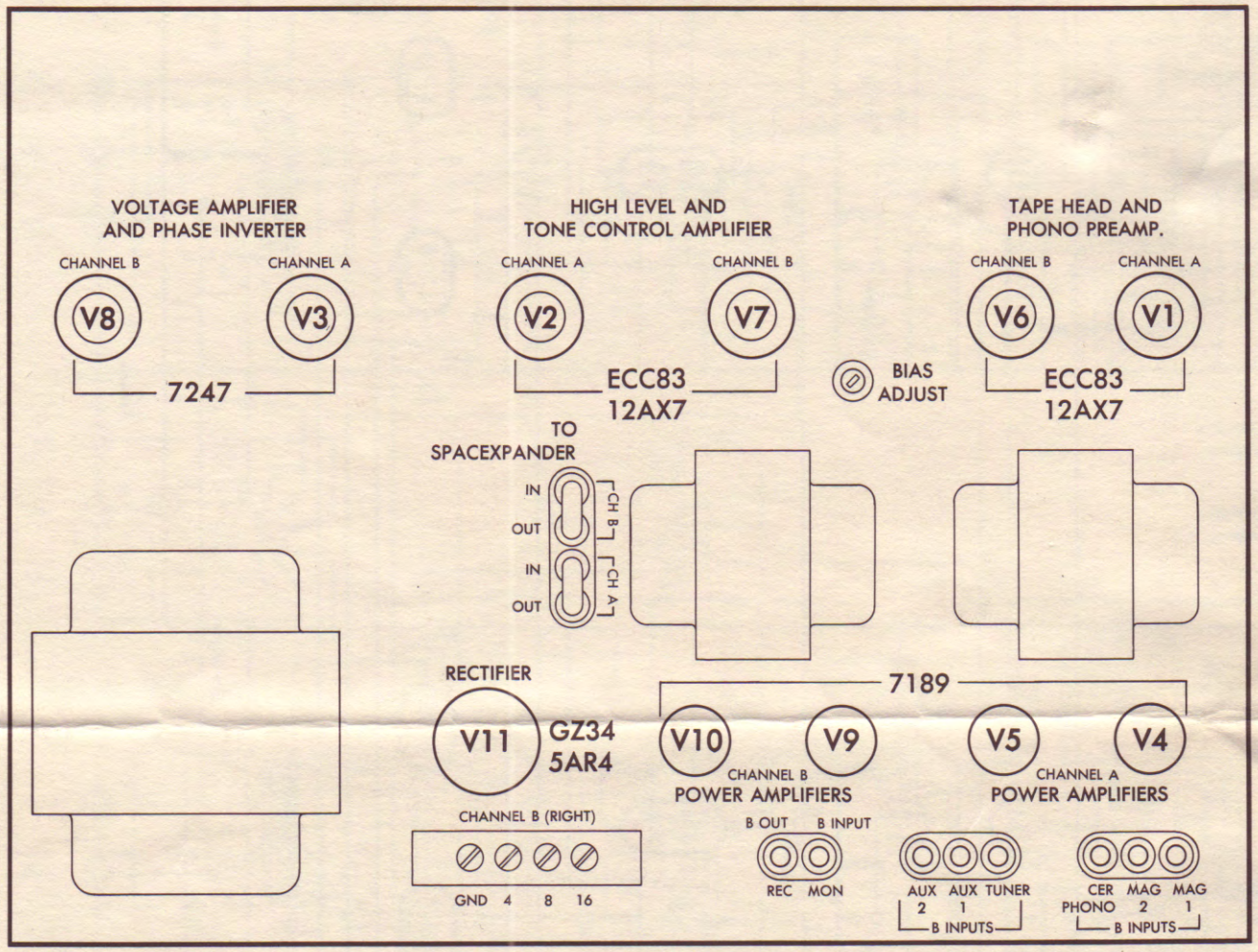
In Ohms, 10% tolerance, ½ Watt, unless otherwise noted. K=KILOHM, M=MEGOHM.

Symbol	Description	Part No.
R1, 2	Composition, 120K	RC20BF124K
R3, 4	Composition, 270K	RC20BF274K
R5, 6	Dep. Carbon, 100K, 5%, ⅓ W	R33DC104J
R7	Dep. Carbon, 10K, 5%, ⅓ W	R33DC103J
R8	Dep. Carbon, 100K, 5%, ⅓ W	R33DC104J
R9	Dep. Carbon, 10K, 5%, ⅓ W	R33DC103J
R10	Dep. Carbon, 100K, 5%, ⅓ W	R33DC104J
R11	Glass, 2.7K, 5%, ½ W	R20G272J
R12	Composition, 15	RC20BF150K
R13	Glass, 2.7K, 5%, ½ W	R20G272J
R14	Composition, 15	RC20BF150K
R15, 16	Dep. Carbon, 100K, 5%, ⅓ W	R33DC104J
R17, 18	Potentiometer, 250K, preamp. level	R50160-98
R19, 20	Glass, 330K, 5%, 1W	R30G334J
R21, 22	Dep. Carbon, 220K, 5%, ⅓ 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%, ⅓ 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	R50160-93
R44	Composition, 10K	RC20BF103K
R45, 46	Composition, 39K	RC20BF393K
R47	Potentiometer, 1M, treble	R50160-93
R48	Composition, 100K, 5%, 1W	RC30BF104J
R49	Composition, 270	RC20BF271K
R50	Composition, 100K, 5%, 1W	RC30BF104J
R51	Composition, 270	RC20BF271K
R52	Composition, 100K	RC20BF104K
R53, 54	Dep. Carbon, 100K, 5%, ⅓ W	R33DC104J
R55	Potentiometer, 500K, vol.	R50160-113
R56	Composition, 2.7K	RC20BF272K
R57, 58	Dep. Carbon, 22K, 5%, ⅓ W	R33DC223J
R59	Composition, 3.3K, 1W	RC30BF332K
R60	Potentiometer, 500K, bal.	R50160-114
R61	Glass, 2.2K, 3W	RPG3W222K
R64, 65	Composition, 47K	RC20BF473K
R66, 67	Glass, 125, 7W	RPG7W125K
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, 1.8K, 5%	RC20BF182J
R82, 83, 84, 85	Dep. Carbon, 330K, 5%, ⅓ W	R33DC334J
R86, 87, 88, 89	Dep. Carbon, 2.7K, 5%, ⅓ 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	S781-129CX
S2	Switch, mode selector	S781-130CX
S3	Switch, power	Part of R55
S4, 5, 6, 7, 8	Switch, slide	S50200-5
T1	Transformer, output	T781-116-1
T2	Transformer, output	T781-116-2
T3	Transformer, power	T781-115
—	Dress panel	AS781-123
—	Tube shield	E3286
—	Knob, dual, rear	E50221
—	Knob, dual, front	E50323
—	Knob	E50325-1
—	Jewel, green	150162-4
—	Fuse holder	X1036

TUBE LAYOUT



INS-100

SERVICE NOTES

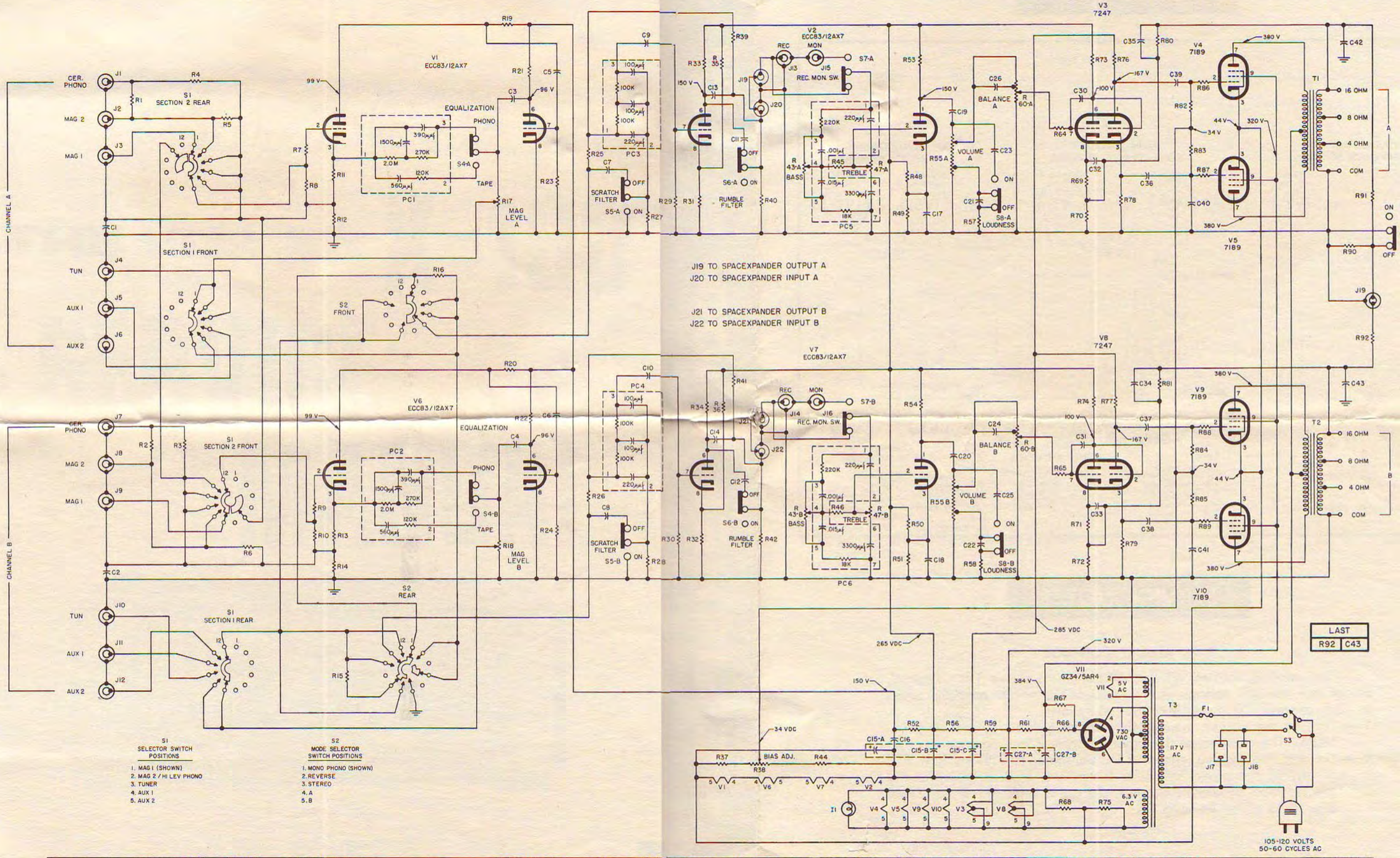
BIAS ADJUST CONTROL

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.

SCHEMATIC DIAGRAM



S1 SELECTOR SWITCH POSITIONS
1. MAG 1 (SHOWN)
2. MAG 2 / HI LEV PHONO
3. TUNER
4. AUX 1
5. AUX 2

S2 MODE SELECTOR SWITCH POSITIONS
1. MONO PHONO (SHOWN)
2. REVERSE
3. STEREO
4. A
5. B

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