



*Stereophonic*

# THE FISHER 500-C

# SERVICE MANUAL



MODEL 500-C

CHASSIS SERIAL NUMBERS  
FROM 30001 TO 49999 INCLUSIVE

PRICE: \$1.00

FISHER RADIO CORPORATION · NEW YORK



**THE FISHER 500-C**

CHASSIS SERIAL NUMBERS FROM 30001 TO 49999 INCLUSIVE



## PARTS DESCRIPTION LIST

### CAPACITORS

10% tolerance for all fixed capacitors, unless otherwise noted or marked GMV (guaranteed minimum value). All capacitors not marked with are pF (uuf).

Symbol	Description	Part No.
C1, 2	Ceramic, 100, GMV, N1500, 1000V	C50070-5
C3	Ceramic, 21, 5%, N750, 1000V	C50070-32
C4	Ceramic, 8, 5%, NPO, 1000V	C50070-45
C5	Ceramic Trimmer	C662-123
C6	Ceramic, 1000, GMV, 500V	C50089-2
C8	FM Variable	C966-109-1
C9	Ceramic, 1000, GMV, 500V	C50089-2
C11	Ceramic, Feedthru, 1000, GMV	C592-187
C12	Ceramic Trimmer	C662-123
C13, 14	Ceramic, .01uf, 20%, 500V	C50089-3
C15	Ceramic, 8, 5%, NPO, 1000V	C50070-45
C16, 17	Mylar, .022uf, 250V	C50197-49
C18	Ceramic, 68, 5%, N750, 1000V	C50070-35
C19	Ceramic Trimmer	C662-123
C20	Ceramic, 24, 5%, N150, 1000V	C50070-8
C21	Ceramic, 100, 5%, N1500, 1000V	C50070-19
C22, 23	Ceramic, 100, N1500, 1000V	C50070-6
C24	Ceramic, 8, ±.5, N330, 500V	CC205J09005
C26	Ceramic, 1000, 1000V	C50072-3
C27, 28	Ceramic, Feedthru, 1000, GMV	C592-187
C29	Ceramic, .02uf, +80 — 20%, 500V	C50089-4
C30	Ceramic, 120, N1500, 1000V	C50070-9
C31	Ceramic, 24, 5%, N150, 1000V	C50070-8
C32	Ceramic, 120, N1500, 1000V	C50070-9
C33	Ceramic, 24, 5%, N150, 1000V	C50070-8
C34	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C35, 36	Ceramic, 1000, 1000V	C50072-3
C37	Ceramic, 2700, 1000V	C50072-17
C38	Ceramic, 2200, 1000V	C50072-5
C39	Ceramic, .02uf, 20%, 500V	C50089-5
C40	Ceramic, 2200, 1000V	C50072-5
C41	Ceramic, .02uf, 20%, 500V	C50089-5
C42	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C43	Ceramic, .02uf, GMV, 1000V	C50071-6
C44, 45	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C46	Ceramic, 2700, 1000V	C50072-17
C47, 48	Ceramic, 100, 5%, N1500, 1000V	C50070-19
C49	Ceramic, 24, 5%, N150, 1000V	C50070-8
C50	Ceramic, .02uf, +80 — 20%, 500V	C50089-4
C51	Electrolytic, 2uf, 70V	C721-142
C52, 53	Mylar, .047uf, 400V	C50197-30
C54, 55	Ceramic, 820, 1000V	C50072-7
C56	Ceramic, 2700, 1000V	C50072-17
C57	Electrolytic, 5uf, 350V	C50283-7
C58	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C59	Mylar, .1uf, 125V	C50435-7
C60	Ceramic, 560, 1000V	C50072-14
C61	Mylar, .1uf, 125V	C50435-7
C62	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C63	Ceramic, 68, N2200, 1000V	C50070-12
C64, 65	Ceramic, .02uf, 20%, 500V	C50089-5
C66	Ceramic, 2700, 1000V	C50072-17
C67	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C68	Polystyrene, 1800, 5%, 125V	CP50394-11
C69, 70	Electrolytic, 50uf, 10V	C50283-6
C71	Ceramic, 330, 1000V	C50072-1
C72	Mylar, .1uf, 125V	C50435-7
C75, 76	Ceramic, 330, 1000V	C50072-1
C77	Mylar, .047uf, 630V	C50197-101
C78	Mylar, .047uf, 250V	C50197-52
C79	Mylar, .047uf, 630V	C50197-101

C80	Mylar, .047uf, 250V	C50197-52
C81	Ceramic, 1000, 1000V	C50072-3
C82	Ceramic, 18, N470, 1000V	C50070-13
C83	Ceramic, 1000, 1000V	C50072-3
C84	Ceramic, 18, N470, 1000V	C50070-13
C85	Electrolytic, 8uf, 50V	C629-138
C86	Mylar, .1uf, 125V	C50435-7
C89, 90	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C91	Electrolytic, 4 Section: A — 20uf, 300V B — 40uf, 400V C — 40uf, 450V D — 40uf, 500V	C50180-49
C92	Electrolytic, 4 Section: A — 50uf, 250V B — 50uf, 250V C — 50uf, 250V D — 200uf, 250V	C50180-48
C93, 94, 95, 96	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C97	Electrolytic, 2 Section: A — 1000uf, 35V B — 1000uf, 35V	C50180-38
C98	Electrolytic, 200uf, 250V	C50180-20
C99, 100, 101	Ceramic, 5000, +80 — 20%, 500V	C50089-6
C102, 103	Molded, .01uf, 20%, 600V	C2747
C104, 105	Ceramic, Feedthru, 1000, GMV	C592-187
C106	Ceramic, 68, N2200, 1000V	C50070-12
C107	Mylar, .1uf, 125V	C50435-7

### RESISTORS AND POTENTIOMETERS

In ohms, 5% tolerance, 1/8 Watt unless otherwise noted. K = Kilohm, M = Megohm.

Symbol	Description	Part No.
R1	Composition, 270, 10%, 1/2 W	RC20BF271K
R2	Composition, 100K, 10%, 1/2 W	RC20BF104K
R3	Dep. Carbon, 220K	R12DC224J
R4	Dep. Carbon, 150K	R12DC154JD
R5	Dep. Carbon, 68K	R12DC683J
R6	Dep. Carbon, 150K	R12DC154J
R7	Dep. Carbon, 68K	R12DC683J
R8	Dep. Carbon, 220K	R12DC224J
R10	Dep. Carbon, 10K	R12DC103J
R11	Dep. Carbon, 100K	R12DC104J
R12	Glass, 2.7K, 1/2 W	R20G272J
R13	Dep. Carbon, 10	R12DC100J
R14	Dep. Carbon, 10K	R12DC103J
R15	Dep. Carbon, 100K	R12DC104J
R16	Glass, 2.7K, 1/2 W	R20G272J
R17	Dep. Carbon, 10	R12DC100J
R18, 19	Glass, 330K, 1W	R30G334J
R20	Dep. Carbon, 220K	R33DC224J
R21	Dep. Carbon, 4.7M, 1/2 W	R33DC475J
R22	Dep. Carbon, 220K, 1/2 W	R33DC224J
R23	Dep. Carbon, 4.7M, 1/2 W	R33DC475J
R24	Dep. Carbon, 220K, 1/2 W	R33DC224J
R25, 26	Dep. Carbon, 330K	R12DC334J
R27	Dep. Carbon, 390	R12DC391J
R28	Dep. Carbon, 220K	R12DC224J
R29, 30	Dep. Carbon, 82K	R12DC823J
R31	Dep. Carbon, 1.2K	R12DC122J
R32	Dep. Carbon, 1K	R12DC102J
R33, 34	Dep. Carbon, 330K	R12DC334J
R35	Dep. Carbon, 56K	R12DC563J
R36	Glass, 4.7K, 10%, 3W	RP03W472K
R37	Composition, 3.3K, 10%, 1W	RC30BF332
R38, 39	Dep. Carbon, 470K	R12DC474J
R40	Dep. Carbon, 2.7M, 1/2 W	R33DC275J

## PARTS DESCRIPTION LIST

<p><b>R41, 42</b> Dep. Carbon, 1.5M, 1/2 W  <b>R43</b> Composition, 180, 10%, 1/2 W  <b>R44</b> Dep. Carbon, 120K, 1/2 W  <b>R45</b> Dep. Carbon, 1K, 1/2 W  <b>R46</b> Dep. Carbon, 120K, 1/2 W  <b>R47</b> Dep. Carbon, 2.7M, 1/2 W  <b>R48</b> Dep. Carbon, 1K, 1/2 W  <b>R49</b> Dep. Carbon, 39K  <b>R50</b> Composition, 27K, 10%, 1/2 W  <b>R51</b> Composition, 1K, 10%, 1/2 W  <b>R52</b> Dep. Carbon, 680K  <b>R53</b> Potentiometer, 500K, Dual Treble  <b>R54</b> Potentiometer, 500K, Dual Bass  <b>R55</b> Dep. Carbon, 680K  <b>R58</b> Dep. Carbon, 1K  <b>R59</b> Composition, 150, 10%, 1/2 W  <b>R60</b> Composition, 10K, 10%, 1/2 W  <b>R61</b> Composition, 100, 10%, 1/2 W  <b>R62</b> Composition, 47K, 10%, 1/2 W  <b>R63</b> Composition, 1K, 10%, 1/2 W  <b>R64</b> Dep. Carbon, 680K  <b>R66</b> Dep. Carbon, 120K, 1/2 W  <b>R67</b> Dep. Carbon, 1K, 1/2 W  <b>R68</b> Dep. Carbon, 120K, 1/2 W  <b>R69</b> Dep. Carbon, 1K, 1/2 W  <b>R70</b> Dep. Carbon, 2.2M, 1/2 W  <b>R71</b> Dep. Carbon, 820K  <b>R72, 73</b> Dep. Carbon, 220K  <b>R74</b> Dep. Carbon, 68K  <b>R75</b> Dep. Carbon, 270K  <b>R76</b> Dep. Carbon, 56K  <b>R77</b> Dep. Carbon, 150K  <b>R78, 79</b> Dep. Carbon, 2.7M, 1/2 W  <b>R80</b> Composition, 100, 10%, 1/2 W  <b>R81</b> Dep. Carbon, 22K  <b>R82</b> Composition, 82K, 10%, 1/2 W  <b>R83</b> Dep. Carbon, 470K, 1/2 W  <b>R84</b> Potentiometer, 300K, Dual Balance  <b>R85</b> Composition, 220, 10%, 1/2 W  <b>R86</b> Composition, 1K, 10%, 1/2 W  <b>R87</b> Dep. Carbon, 180  <b>R88, 89</b> Dep. Carbon, 820K  <b>R90</b> Dep. Carbon, 47K  <b>R91, 92</b> Dep. Carbon, 22K  <b>R93, 94</b> Dep. Carbon, 820K  <b>R95</b> Potentiometer, 500K, Dual Volume  <b>R96</b> Wirewound, 25, 10%, 5W  <b>R97</b> Composition, 68K, 10%, 1/2 W  <b>R98, 99,</b>  <b>100</b> Dep. Carbon, 47K  <b>R101</b> Dep. Carbon, 470K, 1/2 W  <b>R103</b> Dep. Carbon, 220, 1/2 W  <b>R104</b> Dep. Carbon, 470K, 1/2 W  <b>R105</b> Dep. Carbon, 2.2K, 1/2 W  <b>R106</b> Dep. Carbon, 220, 1/2 W  <b>R107</b> Composition, 1K, 10%, 1/2 W  <b>R108, 109</b> Potentiometer, 25K  <b>R110</b> Composition, 270, 1/2 W  <b>R111, 112</b> Dep. Carbon, 33K, 1/2 W  <b>R113</b> Dep. Carbon, 180K, 1/2 W  <b>R114</b> Dep. Carbon, 68K, 1/2 W  <b>R115</b> Dep. Carbon, 180K, 1/2 W  <b>R116</b> Dep. Carbon, 68K, 1/2 W  <b>R117</b> Dep. Carbon, 2.2K, 1/2 W  <b>R118</b> Composition, 1.5K, 1/2 W  <b>R119</b> Composition, 1K, 1/2 W  <b>R120</b> Composition, 220, 10%, 1/2 W  <b>R121, 122,</b>  <b>123</b> Dep. Carbon, 330K  <b>R125</b> Dep. Carbon, 15K  <b>R126, 127</b> Dep. Carbon, 1K, 1/2 W</p>	<p><b>R33DC155J</b>  <b>RC20BF181K</b>  <b>R33DC124J</b>  <b>R33DC102J</b>  <b>R33DC124J</b>  <b>R33DC275J</b>  <b>R33DC102J</b>  <b>R12DC393J</b>  <b>RC20BF273K</b>  <b>RC20BF102K</b>  <b>R12DC684J</b>  <b>R50150-101-2</b>  <b>R50160-101-2</b>  <b>R12DC684J</b>  <b>R12DC102J</b>  <b>RC20BF151K</b>  <b>RC20BF103K</b>  <b>RC20BF101K</b>  <b>RC20BF473K</b>  <b>RC20BF102K</b>  <b>R12DC684J</b>  <b>R33DC124J</b>  <b>R33DC102J</b>  <b>R33DC124J</b>  <b>R33DC102J</b>  <b>R33DC225J</b>  <b>R12DC824J</b>  <b>R12DC224J</b>  <b>R12DC683J</b>  <b>R12DC274J</b>  <b>R12DC563J</b>  <b>R12DC154J</b>  <b>R33DC275J</b>  <b>RC20BF101K</b>  <b>R12DC223J</b>  <b>RC20BF823K</b>  <b>R12DC474J</b>  <b>R50160-130</b>  <b>RC20BF221K</b>  <b>RC20BF102K</b>  <b>R12DC181J</b>  <b>R12DC824J</b>  <b>R12DC473J</b>  <b>R12DC223J</b>  <b>R12DC824J</b>  <b>R50160-104</b>  <b>R688-117</b>  <b>RC20BF683K</b>  <b>R12DC473J</b>  <b>R33DC474J</b>  <b>R33DC221J</b>  <b>R33DC474J</b>  <b>R33DC222J</b>  <b>R33DC221J</b>  <b>RC20BF102K</b>  <b>R50103-2</b>  <b>RC20BF271J</b>  <b>R33DC333J</b>  <b>R33DC184J</b>  <b>R33DC683J</b>  <b>R33DC184J</b>  <b>R33DC683J</b>  <b>R33DC222J</b>  <b>RC20BF152J</b>  <b>RC20BF102J</b>  <b>RC20BF221K</b>  <b>R12DC334J</b>  <b>R12DC153J</b>  <b>R33DC102J</b></p>	<p><b>R128</b> Dep. Carbon, 2.2K, 1/2 W  <b>R129, 130</b> Dep. Carbon, 1K, 1/2 W  <b>R131</b> Dep. Carbon, 15K, 1/2 W  <b>R132</b> Dep. Carbon, 5.6K, 1/2 W  <b>R133</b> Composition, 82K, 10%, 1/2 W  <b>R135</b> Composition, 2.7K, 10%, 1W  <b>R136</b> Glass, 470, 10%, 3W  <b>R139</b> Composition, 1.2K, 10%, 1W  <b>R140</b> Wirewound, 25, 10%, 5W  <b>R142</b> Wirewound, 15, 10%, 5W  <b>R143</b> Glass, 1.2K, 10%, 7W  <b>R144</b> Glass, 470, 10%, 3W  <b>R145, 146</b> Composition, 330, 10%, 1W  <b>R149</b> Composition, 820K, 10%, 1/2 W</p>	<p><b>R33DC222J</b>  <b>R33DC102J</b>  <b>R33DC153J</b>  <b>R33DC562J</b>  <b>RC20BF823K</b>  <b>RC30BF272K</b>  <b>RPG3W471K</b>  <b>RC30BF122K</b>  <b>R688-117</b>  <b>R719-106</b>  <b>RPG7W122K</b>  <b>RPG3W471K</b>  <b>RC30BF331K</b>  <b>RC20BF824K</b></p>
<b>COILS, CHOKES &amp; TRANSFORMERS</b>			
<b>Symbol</b>	<b>Description</b>	<b>Part No.</b>	
L1	FM Antenna Coil	L96-113	
L2	FM RF Coil	L1034-113	
L3	FM Mixer Coil	L96-115	
L4	FM Oscillator Coil Assembly	A5966-107	
L5	Choke, .68 Microhenry	L50066-1	
L6, 7	Choke, 1.2 Microhenry	L50066-3	
L9	Choke, 3.3 Microhenry	L50066-8	
T1	Transformer Output	T991-116-1	
T2	Transformer Output	T991-116-2	
T3	Transformer, Power	T991-115	
Z1	Transformer, FM IF	ZZ50210-42	
Z2	Transformer, FM IF	ZZ50210-39	
Z3	Transformer, FM IF	ZZ50210-2	
Z4	FM Limiter Coil	ZZ50210-6	
Z5	FM Ratio Detector	ZZ50210-9	
<b>MISCELLANEOUS</b>			
<b>Symbol</b>	<b>Description</b>	<b>Part No.</b>	
CR1, 2, 3, 4	Diode, Silicon	V50260-10	
CR5	Diode, Silicon	SR50411-1	
CR6	Selenium Rectifier, Bridge	SR50253-1	
CR7	Diode, Silicon	SR50411-1	
F1	Fuse, 3.2 Amp, Slo-Blo	F3319	
I1, 2	Lamp, #47 OF	I50009-4	
I3, 4	Lamp, Dial	I50441-4	
J17	Jack, Headphone	J846-120-1	
M1	Meter, Tuning	M990-124	
PC1, 2	Printed Circuit, Equalization	PC50187-3	
PC3, 4	Printed Circuit, Tone Control	PC50187-9	
PC5, 6	Printed Circuit, High Filter	PC50187-2	
RL1	Relay	K50314	
S1	Switch, Selector	S991-112	
S2	Switch, Slide, FM Filter	S50200-5	
S3	Switch, Speaker Selector	S990-130	
S4	Switch, Loudness Contour	S990-129	
S5, 6, 7	Switch, Slide	S50200-5	
S8	Switch, Power	Part of R95	
—	FM Dipole	A550227-1	
—	Dress Panel	A5991-108	
—	Knob, Dummy Dual	E50324	
—	Knob, Dual Rear	E50321	
—	Knob, Dual Front	E50321	
—	Knob, Speaker Selector	E50325-1	
—	Knob, Tuning	E50325-2	
—	Dial Glass	N991-107	
—	Fuse Holder	X563-151	

# ALIGNMENT INSTRUCTIONS

## Read These Instructions With Extreme Care Before Attempting Alignment.

**CHASSIS:** Turn the station selector completely counterclockwise, without forcing. Dial pointer should be at zero index mark on logging scale. If not, reset the dial pointer. Disconnect the external antenna. When using an oscilloscope for alignment, set the output level controls for no overload, as shown by the proper waveform shape. Connect leads to main output and turn volume control to minimum.

**SIGNAL GENERATORS:** The signal generator equipment must be able to supply the following:  
 FM RF modulated 30% ( $\pm 22.5$  KC deviation) at 400 cps.

**INDICATOR:** DC VTVM, AC VTVM, and scope for alignment.

**ALIGNMENT:** Allow the chassis and test instruments to warm up for at least fifteen minutes. Adjust the line voltage for 117 volts AC, 50-60 cycles. Use fully insulated tools: a small screwdriver for all trimming capacitors; a K-Tran tool for Z1, Z2, and Z3; a hex tool for L1, L2, L3, L4, Z4, and Z5.

**NOTE: For calibrating use as low an output voltage as possible from your signal generator.**

STEPS	CHASSIS		SIGNAL GENERATOR			INDICATOR		ALIGNMENT	
	SELECTOR	STATION SELECTOR	COUPLING	FREQ.	MOD.	TYPE	CONNECTION	ADJUST	INDICATION
1	FM	Point of no signal and no interference	FM Gen. connected to ungrounded tube shield of V2	10.7 MC	None	DC VTVM	to test point 3	Z1, Z2, Z3, Z4, Z5 top and bottom	Maximum negative voltage
2	FM	Point of no signal and no interference	FM Gen. connected to ungrounded tube shield of V2	10.7 MC	None	DC VTVM to AUX output	Connect the lead of ground to junction of resistor in series from IS93 to GND.	Z5, top	Zero reading on zero center scale
3	FM	90 MC	FM Gen. connected thru two 120-ohm carbon resistors in series with antenna terminals Normal.	90 MC	30% FM (22.5 KC deviation) at 400 cps	DC VTVM to IS93 and Rec. output	to test point 4	L4, L3, L2 and L1	Check for fine waveform and adjust for maximum negative voltage
4	FM	100 MC	FM Gen. connected thru two 120-ohm carbon resistors in series with lead to antenna terminals Normal.	100 MC	30% FM (22.5 KC deviation) at 400 cps	DC VTVM to IS93 and Rec. output	to test point 4	C19, C12 and C5	Check for fine waveform and adjust for maximum negative voltage
5	Repeat steps 3 and 4 for proper dial calibration and maximum output.								

## FM ALIGNMENT

## ALIGNMENT INSTRUCTIONS • MULTIPLEX SECTION

STEPS	GENERATOR			INDICATOR	ALIGNMENT		
	CONNECTION	AUDIO FREQUENCY	RF MODULATION	TYPE & CONNECTION	ADJUST	INDICATION	NOTES
1	Audio oscillator connected to lug 1	80 KC—1 volt	None	AC VTVM to junction of C210 and R228	L100 (Use hex alignment tool)	Minimum voltage	
2	Multiplex generator audio output to lug 1 (See Note 1)	19 KC ( $\pm 5$ cps) pilot tone, 100 mv	None	DC VTVM to T.S.P. 101	Z100 top and bottom (Use hex alignment tool)	Maximum voltage	1
3	Same as Step 2	19 KC pilot tone, 50 mv	None	Scope horiz. input to 19 KC output of gen.; vert. input to junction of C216 and R209. External sweep	Z101 (Use K-iron alignment tool)	Stable 2:1 Lissajous pattern. Disregard phase of pattern	1
4	Same as Step 2	19 KC	None	Same as Step 3	Very generator 19 KC output from 50 to 200 mv	Lissajous pattern should remain stationary over the entire 150 mv range	1, 2
5	Same as Step 2	1000 cps on left (A) channel only, 1 volt rms (2.8 P-P)	None	AC VTVM and scope vert. input to channel A output lug. Internal sweep. DC VTVM to T.S.P. 101	Z100 top (Use hex tool)	Maximum indication on AC VTVM. Clean 1000 cps waveform on scope	1, 3
6	Same as Step 2	1000 cps on right (B) channel only, 1 volt rms (2.8 P-P)	None	Same as Step 5	MPX separation R215	Minimum reading on AC VTVM should be at least 33 db below reading obtained in Step 5	1
7	Same as Step 2	Same as Step 6	None	Move scope input and AC VTVM to channel B output lug	-----	Note and record voltage reading on AC VTVM	1
8	Same as Step 2	1000 cps on left (A) channel only, 1 volt rms (2.8 P-P)	None	Same as Step 7	-----	AC VTVM reading should be at least 33 db below reading observed in Step 7	1
9	Same as Step 2	8000 cps on right (B) channel only, 1 volt rms (2.8 P-P)	None	Same as Step 7	-----	AC VTVM reading should be the same as observed in Step 7	1
10	Same as Step 2	8000 cps on left (A) channel only, 1 volt rms (2.8 P-P)	None	Same as Step 7	-----	AC VTVM reading should be at least 18 db below reading observed in Step 9	1
11	Repeat Steps 9 and 10 with scope and AC VTVM connected to channel A output lug, but start with 8000 cps applied to left channel for first reading, then switch to right channel for second reading.						
12	Multiplex generator RF output to 300-ohm antenna terminals	1000 cps on left (A) channel only	100% (75 KC Dev.) No pre-emphasis	Move scope input and AC VTVM to channel A output lug	-----	Note and record voltage reading on AC VTVM	4
13	Same as Step 12	1000 cps on right (B) channel only	Same as Step 12	Same as Step 12	R215	Minimum reading on AC VTVM should be at least 33 db below reading observed in Step 12	4
14	Same as Step 12	8000 cps on left (A) channel only	Same as Step 12	Same as Step 12	-----	AC VTVM reading should be 10 db below reading observed in Step 12	4
15	Same as Step 12	8000 cps on right (B) channel only	Same as Step 12	Same as Step 12	-----	AC VTVM reading should be 28 db below reading observed in Step 12	4

**NOTE:** The above procedure is based on the use of the FISHER Model 300 Multiplex Generator.

1 — In steps 2 through 11, the audio output of the Multiplex Generator should be connected to lug 1 of the multiplex sub-chassis through a 12,000 ohm, ½-watt, carbon resistor, and a 180 uuf capacitor should be connected between lug 1 and ground. The wiring from the MPX TEST jack on the main chassis to lug 1 must be disconnected during Steps 2 through 11.

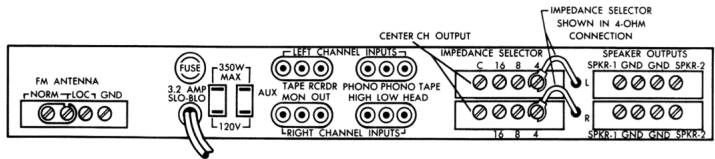
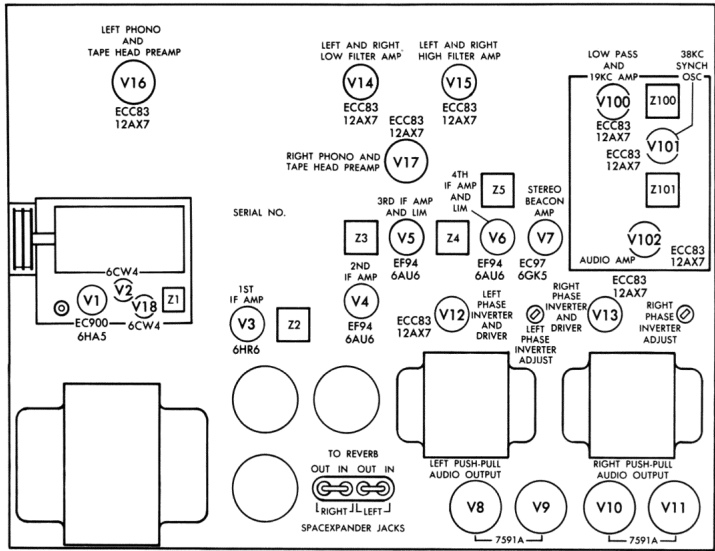
2 — The vertical amplitude of the Lissajous pattern will increase slightly

as the generator output is increased. This is a normal occurrence.

3 — If DC VTVM reading falls below —9 volts when maximum reading is obtained on the AC VTVM, readjust bottom of Z100, then repeat Step 5. Repeat this procedure until maximum AC VTVM reading is obtained with DC VTVM reading greater than —9 volts.

4 — Tune the FISHER to the RF output frequency of the Multiplex Generator.

# TUBE LAYOUT



SERVICE NOTES



FISHER RADIO CORPORATION · NEW YORK

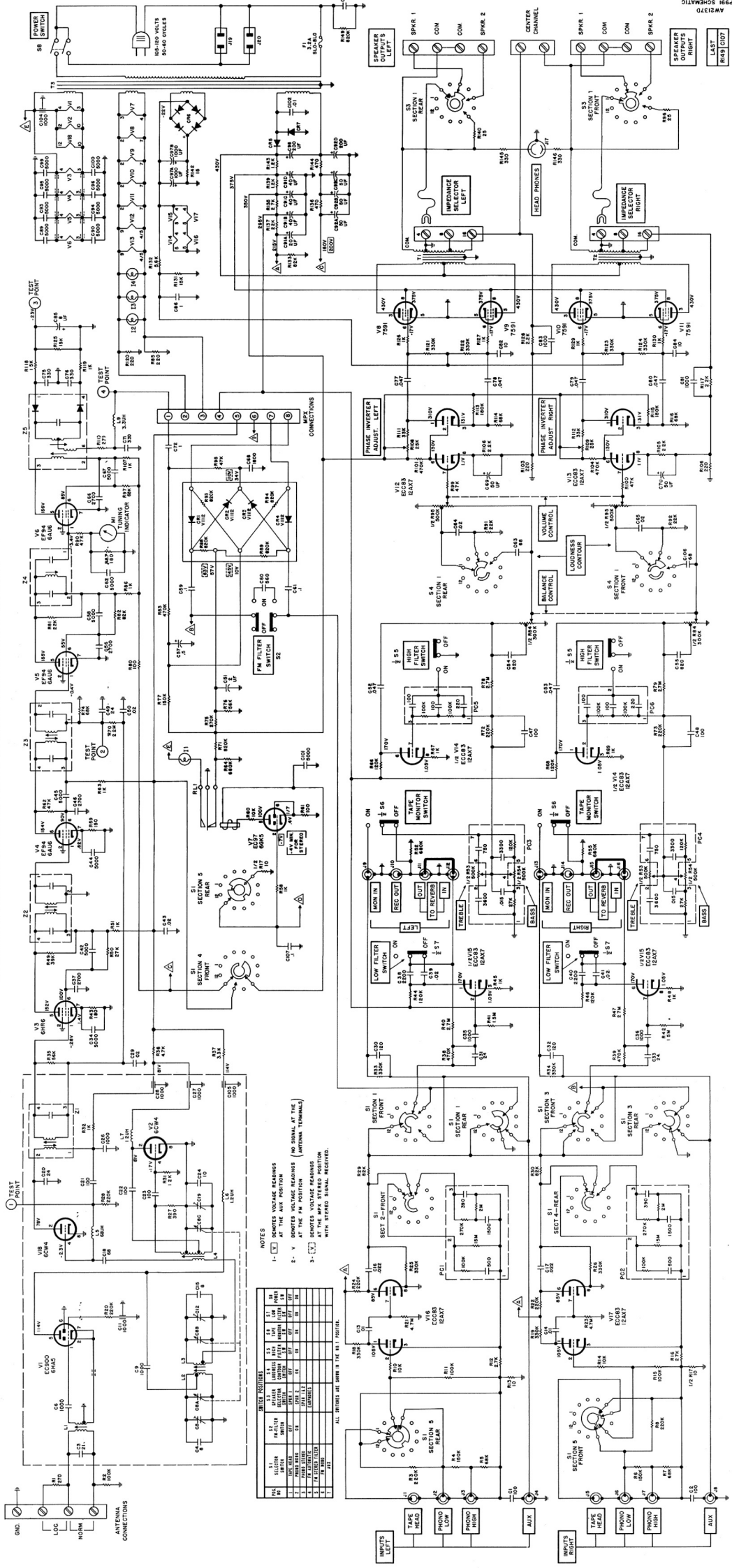
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# SCHEMATIC DIAGRAM • TUNER AND PREAMPLIFIER



- NOTES**
- 1- [Symbol] AT THE AUX POSITION
  - 2 - V [Symbol] SHOWS VOLTAGE READINGS AT THE FM POSITION (ANTENNA TERMINAL)
  - 3- [Symbol] [Symbol] DENOTES VOLTAGE READINGS AT THE MPX STEREO POSITION WITH STEREO SIGNAL RECEIVED.

TUBE NUMBER		TYPE		MFG.		EQUIV.	
V1	SECTION 1	6X4	5Y4	1A	1A	6X4	5Y4
V2	SECTION 2	6X4	5Y4	1A	1A	6X4	5Y4
V3	SECTION 3	6AR5	6AR5	1A	1A	6AR5	6AR5
V4	SECTION 4	6AR5	6AR5	1A	1A	6AR5	6AR5
V5	SECTION 5	6AR5	6AR5	1A	1A	6AR5	6AR5
V6	SECTION 6	6AR5	6AR5	1A	1A	6AR5	6AR5
V7	SECTION 7	6AR5	6AR5	1A	1A	6AR5	6AR5
V8	SECTION 8	6AR5	6AR5	1A	1A	6AR5	6AR5
V9	SECTION 9	6AR5	6AR5	1A	1A	6AR5	6AR5
V10	SECTION 10	6AR5	6AR5	1A	1A	6AR5	6AR5

ALL DIMENSIONS ARE GIVEN IN IN. & F. MILLIMETERS.



