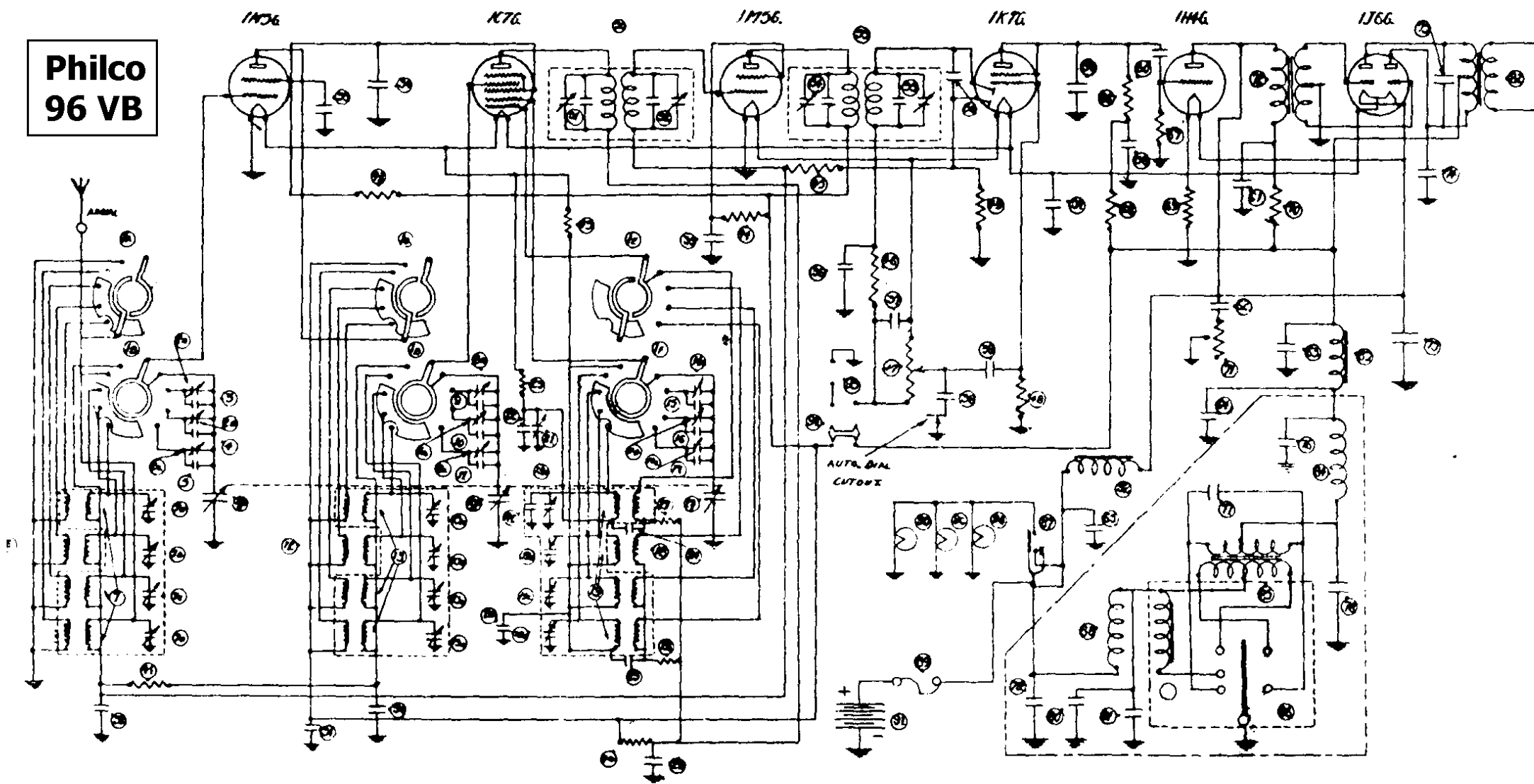


**Philco
96 VB**



TYPE CIRCUIT: 6 Valve Vibrator powered Spread
Band Superhet. with delayed A.V.C.
POWER SUPPLY: 6 Volt Battery.
VOLUME CONTROL: 500T ohm. graphite type.
INTERMEDIATE FREQUENCY: 262.5 K.C.
POWER CONSUMPTION: 1.2 without Pilot lamps.
1.5 with Pilot lamps.
SPEAKER: 10 inch Philco type 380M.
ALIGNMENT FREQUENCIES: B'cast 1,500 and 550
Kcs. S.W. (see note below)

VALVES USED: 1 type 1M5G Amp; 1 type 1C7G
converter; 1 type 1M5G Inter. Freq. amp;
1 type 1K7G Second detc. 1st Audio and
A.V.C. 1 type 1H4G driver; 1 type 1J6G
B. Class push-pull output.
Mechanical Automatic tuning is incorpor-
ated in this receiver. 19 buttons are
provided making it possible to set up for
practically any reasonable combination of
stations.

SHORT WAVE ADJUSTMENT.

The short wave adjustment of this receiver is entirely different to the adjustment of convention-
al circuits as the low frequency oscillator beat is employed.

The following instructions should therefore be very closely followed. It is most important that
both oscillator trimmers and padders on all three bands be adjusted to the correct peak.

Proceed as follows:-

1. Set dial of receiver to 7.6 megacycles and turn wavechange switch to
5. 6-7.5 megacycle band.
2. Set generator to give a signal of 7.5 M.C. frequency.
3. Screw 7.5 megacycle osc. trimmer down to maximum, now withdraw the screw until the signal is
again heard. The first peak is the correct one. Return to the first peak and carefully adjust
for maximum output.
5. Owing to a certain amount of interlocking between the tuned circuits due to internal coupl-
ing in the 1C7G valve the R.F. trimmer cannot be accurately adjusted on the signal generator. This
adjustment should be made as follows. Connect aerial to receiver and turn R.F. trimmer screw
right in. Now slowly withdraw the trimmer. The noise level will increase to a maximum then
very quickly fade out and a dead point will be reached. Continue to withdraw the trimmer. The
noise will again reappear and increase very rapidly to maximum. This maximum is the correct
point but owing to the possibility of slight drift in the adjustments carrying the setting into
this dead area, it is advisable to carry on a little further and sacrifice a small amount of
sensitivity to ensure that this will not happen. (in A.C. Models read 6A8G for 1C7G.)

1. Wave change switch
- 1A & B. Aer. sections
- 1C & D. R.F. Sections
- 1E & F. Osc. sections
2. 3 Bank padder.
- 2A 5.6 M.C. Aer. pad.
- 2B 9.3 M.C. Aer. pad.
- 2C 14.0 M.C. Aer. pad.
3. 50 mmf. Ceramic cond.

4. 50 mmf. Ceramic condenser
5. 50 mmf. Ceramic condenser
6. 5.6-7 M.C. Aerial coil
7. Aer. (A) coil assembly
- 7A B'cast aer. trimmer
- 7B 7.5 M.C. aer. trimmer
- 7C 12.0 M.C. aer. trimmer
- 7D 18.0 M.C. aer. trimmer
8. 3 Bank padder

Philco 96 VB

- 8A 5.6 M.C. R.F. pad.
- 8B 9.3 M.C. R.F. pad.
- 8C 14.0 M.C. R.F. pad.
9. 50 mmf. Ceramic cond.
10. 50 mmf. Ceramic cond.
11. 50 mmf. Ceramic cond.
12. 5.6-7.5 M.C. R.F. coil
13. R.F. (B) coil assembly
13A B/cast R.F. trim.
13B 7.5 M.C. R.F. trim.
13C 12.0 M.C. R.F. trim.
13D 18.0 M.C. R.F. trim.
14. 3 Bark padlder
14A 5.6 M.C. Osc. pad.
14B 9.3 M.C. Osc. pad.
14C 14.0 M.C. Osc. pad.
15. 50 mmf. Ceramic cond.
16. 50 mmf. Ceramic cond.
17. 50 mmf. Ceramic cond.
18. 5.6-7.5 M.F. Osc. coil
19. Osc. coil assembly
19A B/cast Osc. trim.
19B 7.5 M.C. Osc. trim.
19C 12.0 M.C. Osc. trim.
19D 18.0 M.C. Osc. trim.
20. .006 mf. Ceramic cond.
21. B/cast padding cond.
22. 730 mmf. mica cond.
23. 50,000 ohm $\frac{1}{2}$ W. Resistor
24. 400 mmf. mica cond.
25. .001 mf. Simplex mica con.
26. 10T $\frac{1}{2}$ W. Resistor
27. 25T $\frac{1}{2}$ W. Resistor
28. 3 Gang condenser
29. 8 mfd. 500V Elec. cond.
30. .05 mfd. 400V condenser
31. .1 mfd. 400V condenser
32. .05 mfd. 400V cond.
33. .1 mfd. 400V cond.
34. 8 mfd. 350V Elec. cond.
35. .1 mfd 400V. cond.
36. .00025 mfd. mica cond.
37. .00015 mfd. mica cond.
38. .05 mfd. 200V cond.
39. .01 mfd. 400V cond.
40. 10T $\frac{1}{2}$ W. resistor
41. 1 meg $\frac{1}{2}$ W. resistor
42. 50T ohm. $\frac{1}{2}$ W. resistor
43. 50T ohm. $\frac{1}{2}$ W. resistor
44. 100T ohm. $\frac{1}{2}$ W. resis.
45. 1 meg ohm. $\frac{1}{2}$ W. resistor
46. 100T ohm. $\frac{1}{2}$ W. resistor
47. 500T ohm. Volume control
48. 1 meg ohm $\frac{1}{2}$ W. resistor
49. 1 meg ohm. $\frac{1}{2}$ W. resistor
50. 1st Intermed. assembly
51. 1st Intermed. plate trim.
52. 1st Inter. grid trimmer
53. 2nd Inter. Assembly
54. 2nd Inter. Plate trim.
55. 2nd Inter. grid trim.
56. .00045 mfd. cond.
57. .5 mfd. 200V cond.
58. .25 mfd. 300V cond.
59. .00025 mfd. cond.
60. Condenser .01 mfd 400V
61. Cond. .25 mfd. 300V
62. Cond. .05 mfd. 200V
63. 8 x 4 mfd. Elec. con. 400V
64. 8 x 4 mfd. Elec. cond. 400V
65. .1 mfd 400V cond.
66. 250T ohm $\frac{1}{2}$ W. resistor
67. 1 meg ohm $\frac{1}{2}$ W. resis.
68. 50T ohm $\frac{1}{2}$ W resistor
69. 66 ohm 70 M.A.W.W. res.
70. 15T ohm 1 W resistor
71. 10,000T ohm Tone con.
72. Push-pull input trans.
73. .0009 mfd. mica cond.
74. .00045 mica cond.
75. 500 mfd. 12V cond.
76. .0006 mfd. mica cond.
77. .005 mfd. mica cond.
78. .25 mfd. 300V cond.
79. .005 mfd. cond.
80. .00045 mfd. cond.
81. .5 mfd. 200V cond.
82. Speaker trans.
83. .005 mfd spkr. trans.
84. R.F. choke (H.T.)
85. Vibrator Trans
86. Vibrator
87. 2 way batt. switch
88. R.F. Choke
89. Fuse
90. Pilot lamps 6.3V .1A
91. 6V Battery
92. Choke
93. Pick-up jacks
97. Pick-up switch