SCHEMATIC OF THE HEATHKIT®
SINGLE SIDEBAND TRANSCEIVER
MODEL SB-104A

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NOTES:

1. ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED. VALUES ARE IN OHMS: K=1,000; M=1,000,000.
2. CAPACITOR VALUES LESS THAN 1 ARE IN µF. VALUES OF 1 AND HIGHER ARE IN pF UNLESS OTHERWISE SPECIFIED.
3. THE BANDSWITCH IS SHOWN AT THE 3.5 MHz POSITION AND THE MODE SWITCH AT LSB.
4. REFER TO THE PIN-OUT DIAGRAMS AND IDENTIFICATION CHARTS FOR INFORMATION CONCERNING TRANSISTORS, DIODES, AND INTEGRATED CIRCUITS (ICs).
5. REFER TO THE APPROPRIATE PARTS LIST FOR CROSS-REFERENCE BETWEEN SCHEMATIC COMPONENT DESIGNATIONS AND PART NUMBERS.
6. SOME RF MEASUREMENTS ARE SHOWN USING THE BUILT-IN RF PROBE. TO USE THIS PROBE, CONNECT THE END OF THE BLUE TEST LEAD (SEE FIGURE 1-5 IN THE ILLUSTRATION BOOKLET) TO THE INDICATED CHASSIS TERMINAL PIN. BE SURE ALL METER BUTTONS ON THE FRONT OF THE TRANSCEIVER ARE IN THE OUT POSITION.
7. SYMBOLS:
   - ⟩— = A PLUG-IN CONNECTION.
   - ▽ = CIRCUIT BOARD GROUND.
   - ⏚ = CHASSIS GROUND.
   - ○ = IDENTIFIED CIRCUIT BOARD HOLES.
   - ⊓ = CIRCUIT BOARD EDGE CONNECTOR.
   - ⊂⊃ = FERRITE BEAD.
   - ◎ = PHONO SOCKET.

This point should give a reading of S9 using the built-in RF probe (transmit mode).

The following measurements were taken using the built-in RF probe (transmit mode only) with a 100 Ω resistor connected in series with the probe:

BAND	READING
3.5	50
7.0	10
14.0	20
21.0	2
WWV	0
28.0	50
28.5	50
29.0	50
29.5	50

The following measurements were taken at this point using the built-in RF probe (in either transmit or receive modes):

BAND	READING
3.5	60
7.0	60
14.0	50
21.0	20
WWV	10
28.0	6
28.5	5
29.0	4
29.5	3

The following measurements were taken at this point using the built-in RF probe (in either transmit or receive modes):

BAND	READING
3.5	5
7.0	5
14.0	4
21.0	3
WWV	4
28.0	3
28.5	3
29.0	3
29.5	2

This point should give a reading of S1 using the built-in RF probe (tune mode).

This point should give a reading of S9 using the built-in RF probe (receive mode).

This point should give a reading of S1 using the built-in RF probe (receive mode).

RF Test Probe blue lead