

MODEL

BP - 101

SPECIFICATIONS

Frequency Range	
MW.....	530~1650KC
Intermediate Frequency	455KC
Power Supply	3V
Power Output	
Undistorted	90mW
Maximum	140mW
Speaker	23.8" P.D.S.
Transistor Complement	
TR.1 2SA354B	Converter
TR.2 2SA12C	1st IF Amp.
TR.3 2SA12C	2nd IF Amp.
TR.4 2SB75B	Audio Amp.
TR.5 2SB77C	Output
TR.6 2SB77C	Output

GENERAL DESCRIPTION

The circuitry used in this portable radio incorporates 6 transistors, 1 diode and 1 thermistor.

A bar antenna feeds the MW broadcast signal to the converter.

After going through 2 IF amplifiers and 1 diode detector, the signal passes through a 3 transistor audio amplifier.

CHASSIS REMOVAL

1. Remove the back cover.
2. Remove 3 screws located on the printed circuit board.
3. Pull the printed circuit board out of the cabinet.

ALIGNMENT INSTRUCTION

Should it become necessary at any time to check the alignment of this receiver, proceed as follows;

- 1) Connect an output meter across the speaker voice coil lugs.
- 2) Set volume control for maximum.
- 3) Use the lowest setting of signal generator capable of producing adequate indication on the lowest scale of output meter.
- 4) Use a non-metallic alignment tool.
- 5) Repeat adjustments to insure good results.

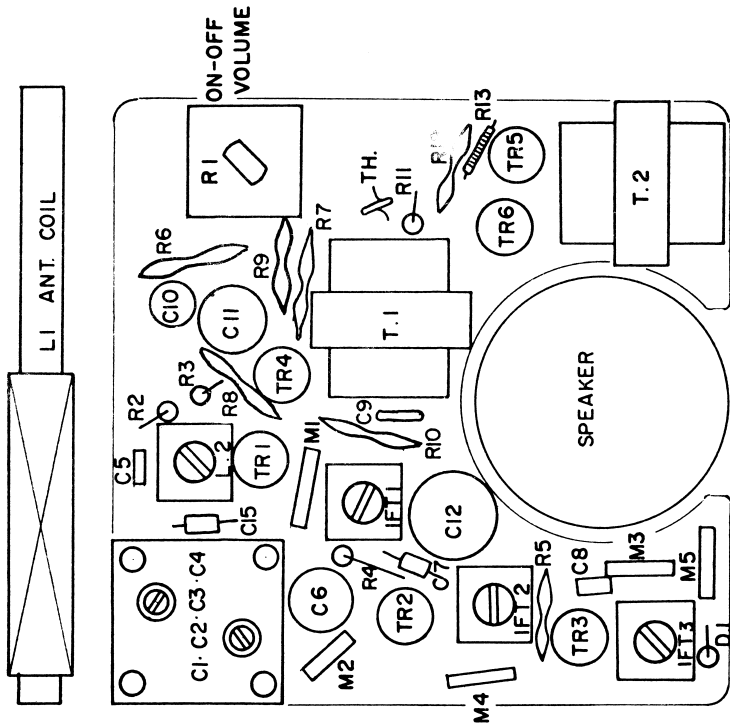
ALIGNMENT CHART

SIGNAL GENERATOR				RECEIVER		ADJUST
Step	Band	Connection to receiver	Input signal frequency	Dial setting	Remarks	
1	M.W.	Connect signal generator through a 10K Ω dummy to the antenna tuning condenser. Ground lead to the receiver chassis.	Exactly 455KC. (400%, 30% AM modulated.)	Tuning gang fully open. (minimum capacity)	Adjust for maximum output on speaker voice coil lugs.	3rd-IF Trans. core 2nd-IF Trans. core 1st-IF Trans. core
2	M.W.	Use radiating loop. Loop of several turns of wire, or place generator lead close to receiver for adequate signal pick-up. Connect generator output to one end of this wire.	Exactly 520KC. (400%, 30% AM modulated.)	Tuning gang fully closed. (maximum capacity)	Same as step 1.	MW Oscillator core L2
3	M.W.	Same as step 2.	Exactly 1680KC. (400%, 30% AM modulated.)	Tuning gang fully open. (minimum capacity)	Same as step 1.	MW Oscillator trimmer C2
4	M.W.	Same as step 2.	Exactly 600KC. (400%, 30% AM modulated.)	600 KC	See NOTE	MW Antenna coil L1
5	M.W.	Same as step 2.	Exactly 1400KC. (400%, 30% AM modulated.)	1400 KC	Same as step 4.	MW Antenna trimmer C1
6	M.W.	Repeat steps 2, 3, 4 and 5 until no further improvement is obtained.				

NOTE

Check alignment of receiver antenna coil by bringing a piece of powdered iron (such as a coil slug) near the antenna loop stick, then a piece of brass. If powdered iron increases output, loop requires more inductance. If brass increases output, loop requires less inductance. Change loop inductance by sliding the bobbin toward the center of ferrite core to increase inductance, or away to decrease inductance.

P.C.B. TOP



SHARP BP-101

P.C.B. BOTTOM

