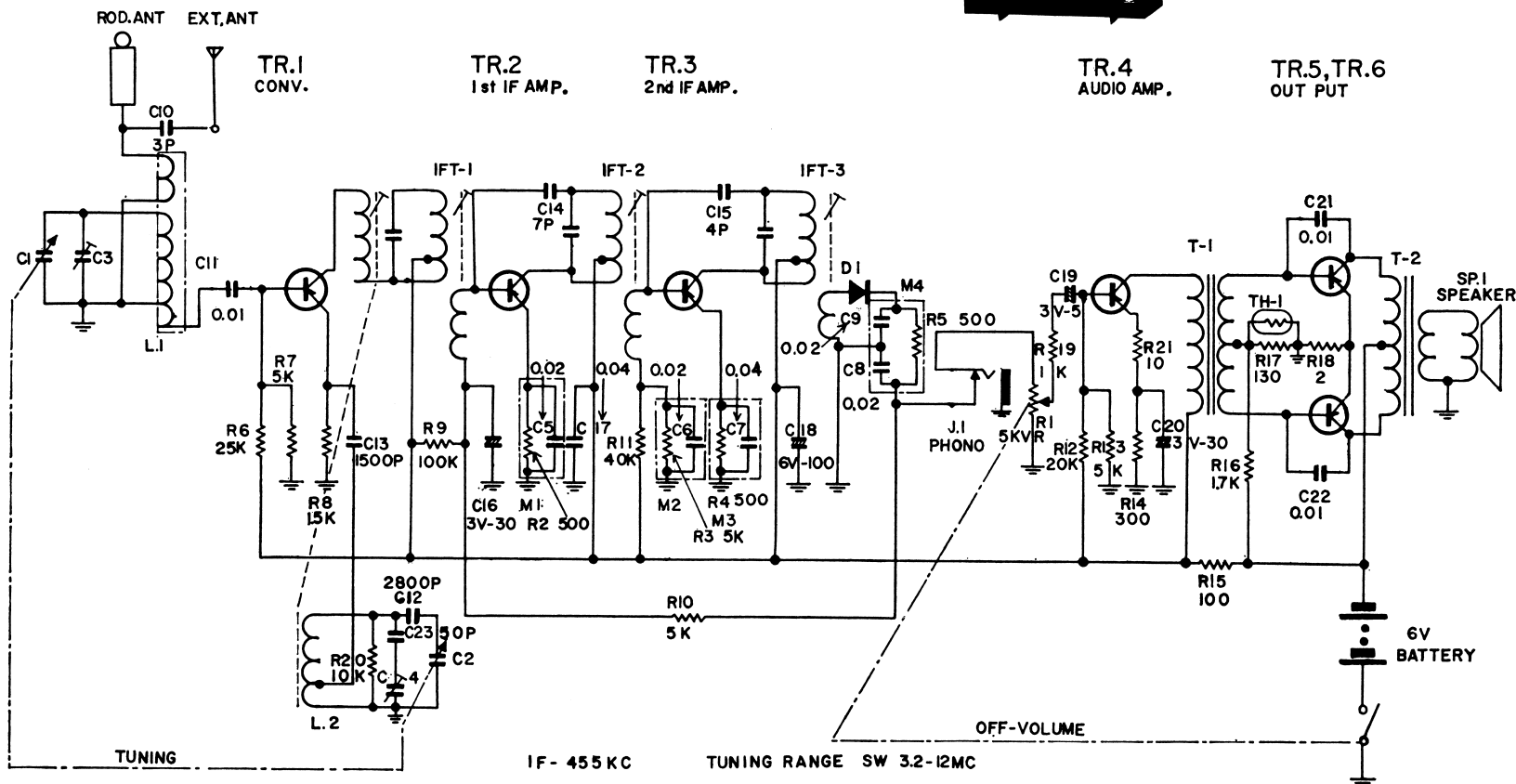
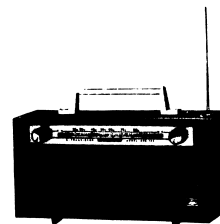


SHARP 6HS-103



CAPACITANCE: P-PF or  $\mu\mu\text{F}$   
RESISTANCE: OHMS

TRANSISTORS, DIODES & THERMISTOR

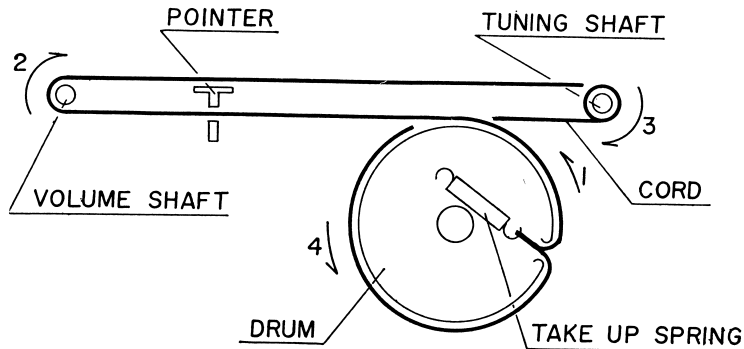
TR <sub>1</sub>	2SA-350	Conv.
TR <sub>2</sub>	2SA-12C	IF Amp.
TR <sub>3</sub>	2SA-12C	IF Amp.
TR <sub>4</sub>	2SB-75	AF Amp.
TR <sub>5</sub>	2SB-156	Output
TR <sub>6</sub>	2SB-156	Output
D <sub>1</sub>	1N-34A	Det.
TH <sub>1</sub>	D-1E	Thermistor

VOLTAGE SHOWN

TR. NO.	STAGE	E <sub>c</sub> (V)	E <sub>b</sub> (V)	E <sub>e</sub> (V)
TR. 1	CONV.	5.5	0.86	0.82
TR. 2	IF 1	5.5	0.35	0.23
TR. 3	IF 2	5.5	0.6	0.45
TR. 4	A F	5.0	0.95	0.91
TR. 5	PP 1	6.0	0.2	—
TR. 6	PP 2	6.0	0.2	—

## SPECIFICATIONS

Circuit :	6-transistor, 1-band superheterodyne system with A.G.C.
Frequency Range :	3.2-12 MC
Intermediate Frequency :	455 KC
Power Output :	maximum 600mW, no distortion 400mW
Power Supply :	6 V
Speaker :	5 $\frac{3}{8}$ " $\times$ 3 $\frac{3}{8}$ " oval type permanent dynamic speaker
Dimensions :	3 $\frac{3}{8}$ " $\times$ 10" $\times$ 5 $\frac{1}{8}$ "
Weight :	2.4 lbs.



## 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 at 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 adjustment to insure good result.

## ALIGNMENT CHART

Step	Band	Signal generator		Receiver		Adjust
		Connection to receiver	Input signal frequency	Dial setting	Remarks	
1	S.W.	Connect signal generator through a 10K $\Omega$ dummy to the external antenna coil lug. Ground lead to the receiver chassis.	Exactly 3.05MC (400%, 30%, AM modulated)	Tuning gang fully closed. (maximum capacity)	Adjust at maximum output on speaker voice coil lugs.	SW Oscillator core. (L2)
2	S.W.	Same as step 1.	Exactly 12.5MC (400%, 30%, AM modulated)	Tuning gang fully open. (minimum capacity)	Same as step 1.	SW Oscillator trimmer (C4).
3	S.W.	Same as step 1.	Exactly 3.5MC (400%, 30%, AM modulated)	4.5MC	See NOTE.	SW Antenna coil. (L1)
4	S.W.	Same as step 1.	Exactly 10MC (400%, 30%, AM modulated)	10MC	See NOTE.	SW Antenna trimmer (C3).
5	S.W.	Repeat steps 1,2,3 and 4 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.

## BOTTOM VIEW OF PRINTED CIRCUIT BOARD

