



RADIO SERVICE BULLETIN

Issue: No. 63

Date of Issue:

Subject: Model 315

SPECIFICATION OF S.T.C. MODEL 315 (PORTABLE)

CIRCUIT:...Five valve battery operated, superheterodyne, using R.F. Amplifier, converter, I.F. amplifier, detector-audio stage, and power output stage A.V.C. high impedance loop aerial, combined volume control and battery switch.

TUNING RANGE:

530-1620 Kc/s.

INTERMEDIATE FREQUENCY:

455 Kc/s.

VALVE COMPLEMENT:

V1 R.F. Amplifier 1T4.
V2 Frequency Changer 1R5.
V3 I.F. Amplifier 1T4.
V4 Detector-Audio 1S5.
V5 Power Output 1Q5GT.

POWER SUPPLY:

"A" Battery 1.5 Volts 300 Milliamps.
"B" Battery 90 Volts 14 Milliamps.

LOUD SPEAKER:

Permag. 7 inch cone, 12,500 Ohm Transformer.

CIRCUIT VOLTAGES:

	Plate	Screen	Osc. Plate	Grid	Filament
V1	84	65	—	—	1.4
V2	63	63	*63	—	1.4
V3	84	65	—	—	1.4
V4	84 volts thru 500000 Ohms	—	—	—	1.4
V5	82	84	—	-6	1.4

*NOTE: Screen of V2 is used as oscillator plate.

These voltages must be measured to receiver earth with voltmeter having a resistance of at least 1000 ohms per volt (Tolerance 5%). Volume control must be turned to maximum.

MEASUREMENT SPECIFICATION:

R.F. Sensitivity—V1 grid—20 Microvolts average.

I.F. and Signal Sensitivity—V2 grid—500 Microvolts.

†Broadcast Sensitivity—6 Microvolts average.

These figures are related to an audio frequency output of 25 volts measured between plate of V5 and Chassis through a series condenser of .1 MFD capacity.

When measuring sensitivity a .1 MFD condenser should be used between the "Hot" signal generator lead, and the grid of the valve (stage) being checked. Do not disconnect any wiring.

ALIGNMENT FREQUENCIES:

1400 Kc/s and 600 Kc/s.

CHECK POINTS:

1000 Kc/s.

† Connect signal generator through dummy aerial to one turn coupling on loop aerial.



MODEL 315

