CANADIAN MARCONI COMPANY

SERVICE INFORMATION FOR MODELS 149 and 150

CIRCUIT DESCRIPTION

Five-tube battery operated superheterodyne with extended Broadcast Band, four Short-Wave entertainment bands spread over full scale, automatic "C" bias and full automatic volume control.

FREQUENCY COVERAGE

Broadcast Band.....535 - 1725 K.C.
49 Metre Band.....5955 - 6250 K.C.
31 Metre Band.....9450 - 9750 K.C.
25 Metre Band.....11660 -11940 K.C.
19 Metre Band.....15025 -15420 K.C.

POWER OUTPUT

Undistorted.....140 M.W.
Maximum.....400 M.W.

BATTERY COMPLEMENT

"A" Supply.....One 1.5 v. Cell
"B" Supply.....Two 45 v.Cells

BATTERY CONSUMPTION

"A" Current.....0.25 Amp.
"B" Current.....11 M.A.

LOUDSPEAKER DATA

M. 149 Cone.....8"
M. 149 Field.....Permanent Magnet
M. 149 Voice Coil Impedance.....2.5 Ohms

M. 150 Cone.....12"
M. 150 Field.....Permanent Magnet
M. 150 Voice Coil Impedance.....3 Ohms

VOLTAGE READINGS

SOCKET PINS TO CHASSIS

TUBE	CAP	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
1A7G	0	+	1.4	90	45	0	87.5	0	-
1N5G	0	-	1.4	90	90	+	-	0	-
1H5G	0	-	1.4	60	+	0	0	0	+
1A5G	-	-	1.4	87	90	-0.3	-	0	-
1A5G	-	-	1.4	87	90	-0.3	-	0	-

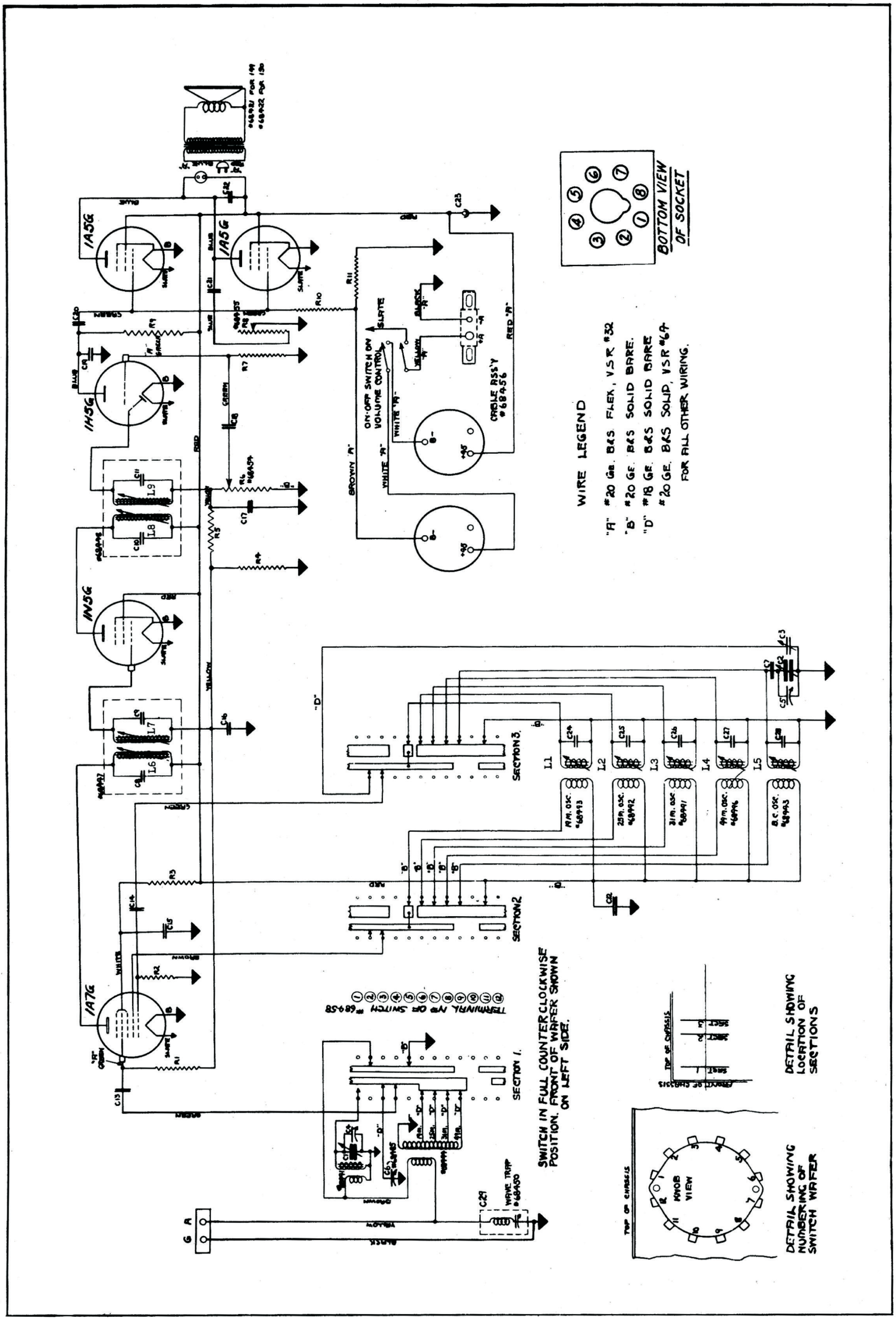
+ Used as anchoring lug.
Above readings are approximate and will vary depending on the resistance of the voltmeter used.
Readings are taken on lowest scale that will accommodate the voltage under test, with receiver on broadcast band, vol. control at maximum and gang capacitor at maximum.

RADIOTRON	FUNCTION
RVC 1A7G	Mixer Oscillator
RVC 1N5G	I.F. Amplifier
RVC 1H5G	Diode Det., A.V.C.& 1st AF Amp.
RVC 1A5G	Pentode Output
RVC 1A5G	Pentode Output

ALIGNMENT PROCEDURE

BAND SW SETTING	CONNECT S.G. OUTPUT TO	INPUT FREQUENCY	DIAL SETTING	ADJUST	CIRCUIT RESONATED	REMARKS
+BC	C.G. 1A7G	462.5 KC		L9,L8,L7, L6	IF Input & Output	Max. Output
++ BC	A & G	1600 KC	1600 KC	C5	BC Osc.	Adjust for Resonance.
BC	A & G	1600 KC	1600 KC	C4	BC Osc.	Max. Output.
BC	A & G	580	580 KC	L5	BC Osc.	(Osc.Padder) Rock Gang.
+++31 M.	A & G	9.6 M.C.	9.6 M.C.	L3	31 M. Osc.	Adjust for Resonance.
31 M.	A & G	9.6 M.C.	9.6 M.C.	C6	S.W. R.F.	Adjust for Max. Output
49 M.	A & G	6 M.C.	6 M.C.	L4	49 M. Osc.	Adjust for Resonance.
25 M.	A & G	11.7 M.C.	11.7 M.C.	L2	25 M. Osc.	Adjust for Resonance.
19 M.	A & G	15.2 M.C.	15.2 M.C.	L1	19 M. Osc.	Adjust for Resonance.

+ I.F. ALIGNMENT: Short osc. section of gang capacitor through 0.1 Mfd. For oscillograph alignment, connect oscillograph input across R.6. Adjust for overlapping double image of maximum amplitude.
++Before proceeding with R.F. Alignment, see that dial pointer is set over last graduation mark at low frequency and (Gang to be at maximum capacity).
+++Note 31 Metre Band must be aligned before any of the other short-wave bands.


1A5G
1A5G
1H5G
1N5G
1A7G
WIRE LEGEND
BOTTOM VIEW OF SOCKET
SWITCH IN FULL COUNTERCLOCKWISE POSITION. FRONT OF WAFER SHOWN ON LEFT SIDE.
SECTION 1.
SECTION 2
SECTION 3.
DETAIL SHOWING LOCATION OF SECTIONS
DETAIL SHOWING NUMBERING OF SWITCH WAFER