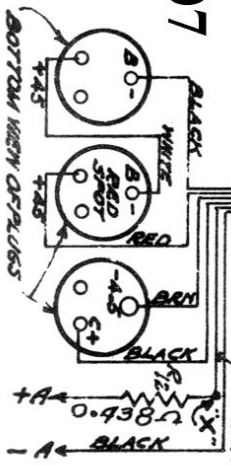


Marconi Models 106 & 107

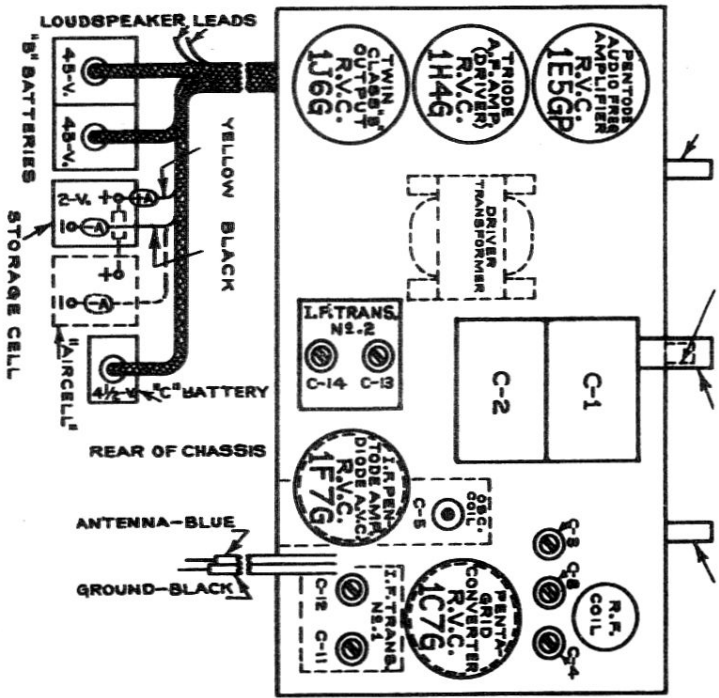
Battery Operated Radio



FOR STORAGE OPERATION, CONNECT "A" TO POINT "X".
 FOR AIR CELL OPERATION USE "A" & "A"

Marconi Models 106 & 107 Battery Operated Radio

TONE CONTROL SWITCH "ON" "OFF" SWITCH VOLUME CONTROL STATION SELECTOR WAVE-CHANGE SWITCH



RADIOTRON	CAP	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
R.V.C. 1C7G	**	-	2	90	45	*-3.75	62.5	0	-
R.V.C. 1F7G	**	-	2	90	-	0	45	0	-
R.V.C. 1E5G	**	-	2	*8.25	28.5	-	-	0	-
R.V.C. 1H4G	-	-	2	90	0	*-0.1	-	0	-
R.V.C. 1J6G	-	-	2	90	0	0	90	0	-

All readings taken with 20,000 ohm per volt-meter, receiver on B.C. Band, Volume Control at maximum, and Gang Capacitor at maximum.

** Control grid readings should not be taken except with a no-current volt-meter in order to avoid shorting bias cells.

* Taken on 10 volt range.

ALIGNMENT INSTRUCTIONS

In order to properly re-align this receiver the radio technician should have available an output meter and an accurate well attenuated test oscillator capable of supplying the following frequency fundamentals:-

- 462.5 K.C. for I.F. alignment.
- 1600 and 580 for B.C. Band alignment.
- 9600 K.C. for S.W. Band alignment.

The manual volume control should be kept at maximum, and the signal from the test oscillator should be kept at a sufficiently low level to prevent the A.V.C. coming into operation.

If a Cathode Ray Oscilloscope is used instead of an output meter the output should be measured across the volume control R6.

PROCEDURE FOR RE-ALIGNING I.F. TRANSFORMERS

- (1) Short oscillator section of tuning capacitor through a 0.1 mfd capacitor.
- (2) Supply a modulated 462.5 K.C. signal from a test oscillator to the control grid cap of the 1C7G converter tube leaving the grid connector in place.
- (3) Adjust in order C14, C13, C12 and C11 for maximum output.

PROCEDURE FOR RE-ALIGNING BROADCAST BAND

- (1) Check setting of pointer. First of all ascertain that the pointer shaft is located centrally in the hole provided in the dial plate.
- (2) With gang capacitor at maximum (i.e., plates meshed), the top of the pointer should be set to coincide with the lower edge of the last radial line on the right hand side of dial.
- (3) Rotate tuning control until pointer is at 1600 K.C.
- (4) Supply a 1600 K.C. signal from a test oscillator to the aerial and ground leads.
- (5) Adjust broadcast oscillator trimmer C4 to tune in the 1600 K.C. signal.
- (6) Adjust R.F. trimmer C3 for maximum output.
- (7) Shift test oscillator to 580 K.C.
- (8) Rotate tuning control until the 580 K.C. signal is received.
- (9) Adjust B.C. oscillator tracking capacitor C5 while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest output is obtained.

PROCEDURE FOR RE-ALIGNING SHORT-WAVE BAND

- (1) Turn wave change switch to short wave (i.e., to the left).
- (2) Set pointer to 40th division on S.W. band.
- (3) Set test oscillator to 9600 K.C.
- (4) Adjust S.W. Oscillator trimmer C8 to tune in the 9600 KC signal.

NOTE:- A variation in calibration of plus or minus 5 degrees is permissible, when making above S.W. adjustment. Also note that the S.W. Oscillator trimmer should be set on the low frequency side of the signal frequency (i.e., 9600 KC minus 462.5 KC).