

Marconi Model 295 Emerson Model EM-100

VOLTAGE AND CURRENT DATA	RADIO	PHONO
Rectifier Voltage	249V.	255V.
Choke Output Voltage	231V.	243V.
Output Plate Voltage	237V.	243V.
Screen Voltage	77V.	102V.
Output Bias Voltage	13.6V.	14.2V.
Total Output Current	87 M.A.	82 M.A.
Choke Output Current	25 M.A.	19.4M.A.

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.

RADIOTRON

6BE6.....	Detector-Oscillator
6BA6.....	I.F. Amplifier
6AT6.....	Diode Det., AVC, 1st Audio Amp.
6AT6.....	Phase Inverter
6U5.....	Electron Ray Tuning Indicator
6V6GT.....	Beam Power Amplifier
6V6GT.....	Beam Power Amplifier
5Y3GT.....	Full Wave Rectifier

ALIGNMENT PROCEDURE

Maximum performance depends on accurate alignment of the R.F. and I.F. circuits of the receiver; therefore, follow these instructions and the method outlined in the alignment chart carefully.

- Make all alignment adjustment to the receiver with the volume control set at maximum, and the tone control in the treble position.
- Connect the output meter across the voice coil terminals.
- Keep the output of the signal generator as low as is consistent with serviceable meter reading.

NOTE: Seven index marks are provided on the upper edge of dial backplate to indicate respectively, starting from left end: first hole-gang fully meshed; top row - 580, 1000 and 1500 K.C.; bottom row - 6.0, 11.0 and 15.3 MC.

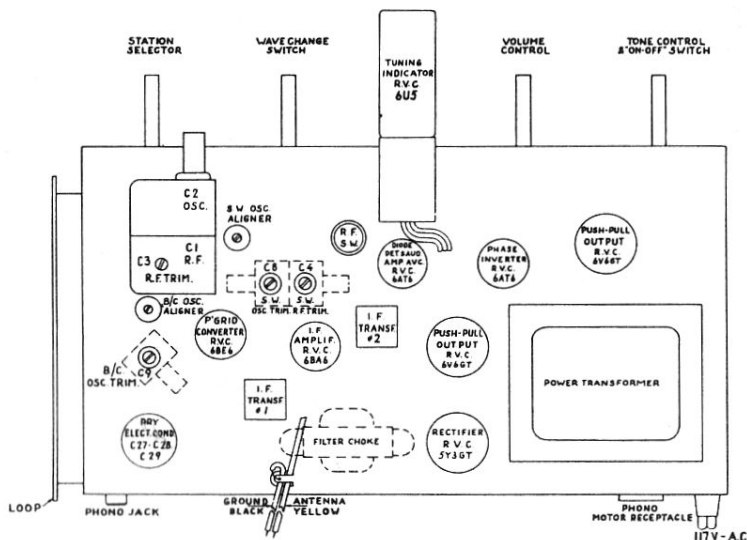
CIRCUIT DESCRIPTION

Eight-tube A.C. operated, combination radio-phonograph, long and short wave superheterodyne receiver, consisting of a detector-oscillator input circuit, one stage of intermediate frequency amplification, diode detector with AVC, electron-ray tuning indicator, phase inverter, two stages of audio amplification, including push-pull beam power output driving an electro dynamic speaker.

Marconi Model 295 & Emerson Model EM-100 Alignment Information

CONNECT S.G. OUTPUT TO	INPUT FREQUENCY	DIAL SETTING	ADJUST	CIRCUIT RESONATED	REMARKS
# C.G. 6BE6	455 K.C.	GANG AT MIN.	TOP & BOTTOM ALIGNERS	No.2 I.F. No.1 I.F.	ADJUST FOR MAXIMUM OUTPUT
## A & G LEADS	1720 K.C.	1720 K.C.	C9	OSCILLATOR	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	1500 K.C.	1500 K.C.	C3	R.F.	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	580 K.C.	OSC. CORE	OSC. CORE	OSC. PADDER	ROCK GANG FOR MAXIMUM OUTPUT
A & G LEADS	18.2 M.C.	18.2 M.C.	C8	OSCILLATOR	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	15.3 M.C.	15.3 M.C.	C4	R.F.	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	6.0 M.C.	6.0 M.C.	OSC. CORE	OSC. PADDER	ROCK GANG FOR MAXIMUM OUTPUT

LUG ON R.F. SECTION OF GANG FORMS SUITABLE POINT OF CONNECTION
BEFORE PROCEEDING WITH R.F. ALIGNMENT, SEE THAT DIAL CURSOR IS SET ON HOLE AT EXTREME LEFT OF DIAL BACKPLATE WITH GANG AT MAXIMUM CAPACITY.



FREQUENCY COVERAGE

Broadcast Band.....540 - 1720 K.C.

Short Wave Band.....5.8 - 18.2 M.C.

POWER OUTPUT (U.P.O.)6.5 watts

POWER RATING	PHONO	RADIO
115 Volts - 25 cycles	1.10 Amps.	0.90 Amps.
115 Volts - 60 cycles	1.05 Amps.	0.85 Amps.

CABINET

Wood, Console, 35" Wide; 16" Deep; 32" High.

LOUDSPEAKER DATA

Cone.....12-Inch
Field.....Permanent Magnet Alnico V 2.4 oz.
Voice Coil Impedance at 400 C.P.S.....3.2 Ohms
Output Transformer Primary Resistance.....600 Ohms