

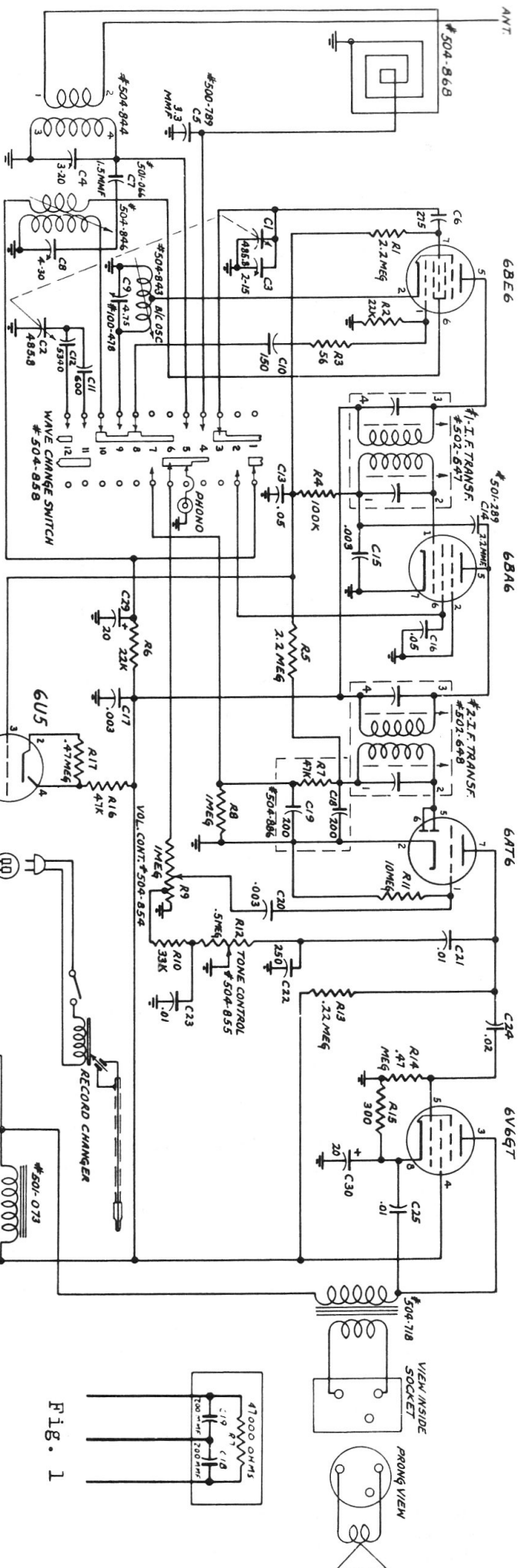
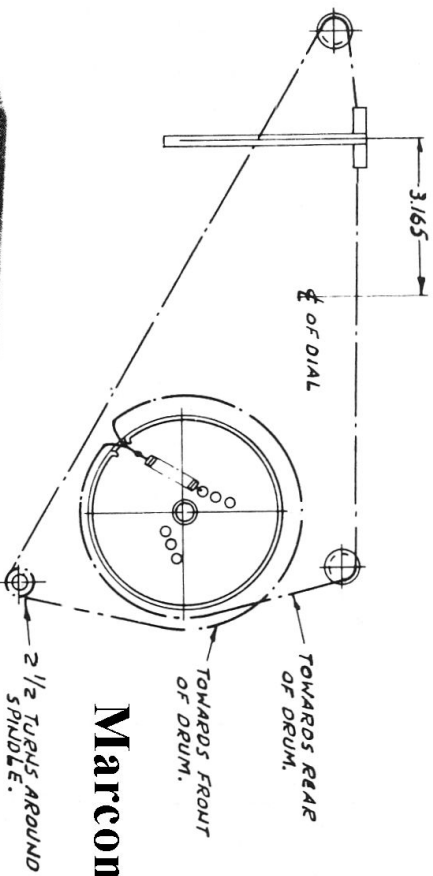


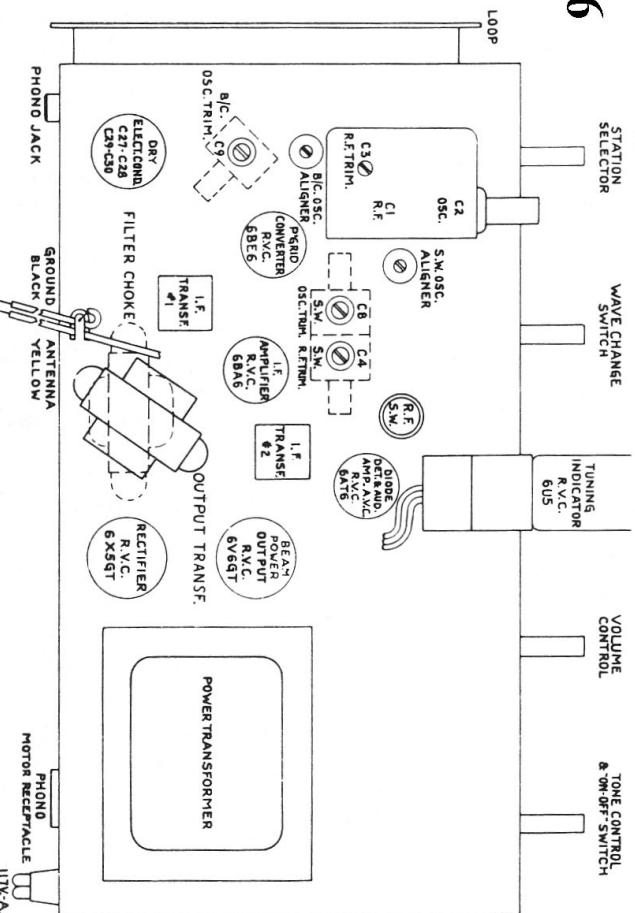
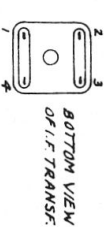
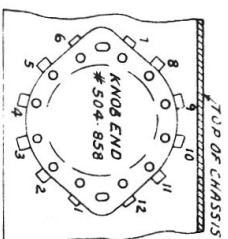
Fig. 1



Marconi Model 306

DRIVE CORD ARRANGEMENT

ARRANGEMENT OF DRIVE CORD WITH CONDENSER PLATES FULL IN & CURSOR AT FULL COUNTER CLOCKWISE POSITION OF ITS TRAVEL, ON HOLE AT EXTREME LEFT OF DIAL BACK PLATE.



CIRCUIT DESCRIPTION

Six-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, two stages of audio amplification with beam power output driving a permanent magnet dynamic speaker.

FREQUENCY COVERAGE

Broadcast Band.....540-1720 Kc.
Short Wave Band..... 6-18 Mc.

POWER OUTPUT (U.P.O.).....2.5 watts

POWER RATING	PHONO	RADIO
115 Volts, 60 cycles	0.90 Amps.	0.70 Amps.
115 Volts, 25 cycles	1.15 Amps.	0.95 Amps.

CABINET

Wood, Console 32 Inches Wide; 16 Inches Deep; 31 Inches High.

RADIOTRON

FUNCTION

RVC6BE6.....Detector-Oscillator
RVC6BA6.....I.F. Amplifier
RVC6AT6.....Diode Det., AVC, 1st Audio Amp.
RVC6U5.....Electron-Ray Tuning Indicator
RVC6V6GT.....Beam Power Output
RVC6X5GT.....Rectifier

LOUDSPEAKER DATA

Cone.....10-Inch
Field.....Permanent Magnet Alnico V 2.40 oz.
Voice Coil Impedance at 400 C.P.S.....3.2 Ohms
Output Transformer Primary Resistance.....750 Ohms

ALIGNMENT PROCEDURE

Maximum performance depends on accurate alignment of the R.F. and I.F. circuits of the receiver, therefore, follow the instructions below 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: 1st hole-gang fully meshed; top row - 580, 1000 and 1500 K.C.; bottom row - 6.0, 11.0 and 15.3 Mc.

VOLTAGE AND CURRENT

PHONO RADIO

Rectifier Voltage		272V.
Choke Output Voltage	270V.	256V.
Output Plate Voltage		237V.
Screen Voltage (Osc.).....	102V.	81V.
Output Bias Voltage		12.5V.
Total Output Current	60 M.A.	66 M.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.

Marconi Model 306 Alignment Procedure

CONNECT S.G. OUTPUT TO	INPUT FREQUENCY	DIAL SETTING	ADJUST	CIRCUIT RESONATED	REMARKS
* C.G. 6BE6	455 K.C.	GANG AT MINIMUM	TOP & BOTTOM ALIGNERS	2nd I.F. 1st I.F.	ADJUST FOR MAXIMUM OUTPUT
** A & G LEADS	1720 K.C.	1720 K.C.	C9	B.C. OSCILLATOR	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	1500 K.C.	1500 K.C.	C3	B.C. - R.F.	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	580 K.C.	580 K.C.	B.C. OSC. CORE	B.C. OSC. PADDER	ROCK GANG FOR MAXIMUM OUTPUT
A & G LEADS	18.2 M.C.	18.2 M.C.	C8	S.W. OSCILLATOR	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	15.3 M.C.	15.3 M.C.	C4	S.W. - R.F.	ADJUST FOR MAXIMUM OUTPUT
A & G LEADS	6.0 M.C.	6.0 M.C.	S.W. OSC. CORE	S.W. 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.