

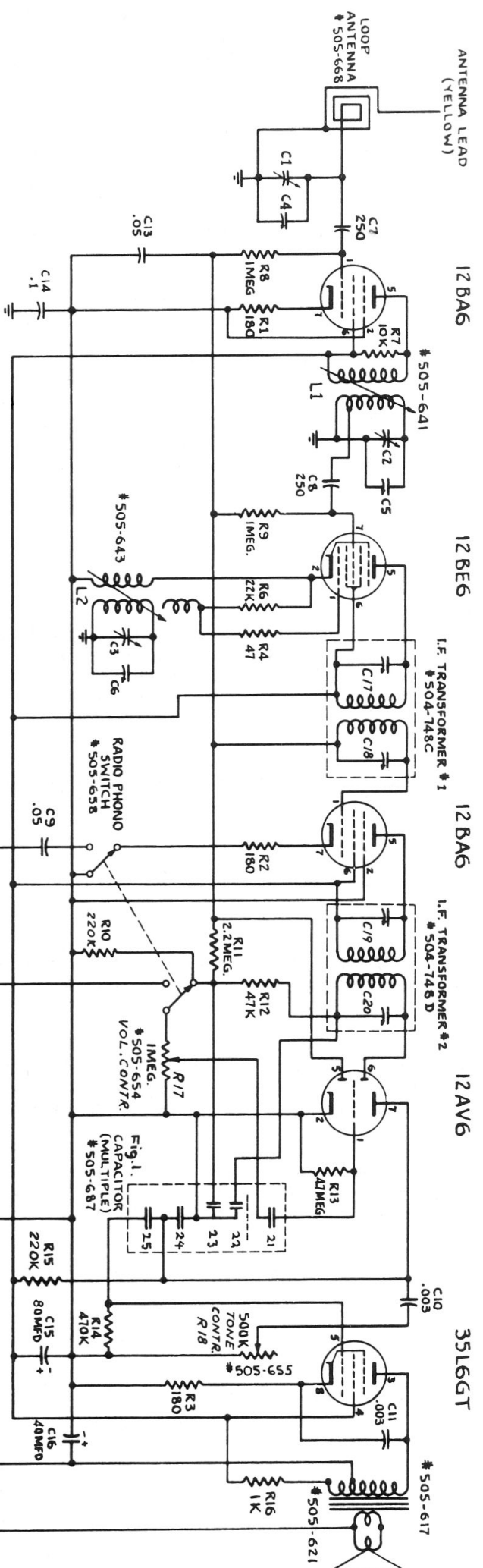
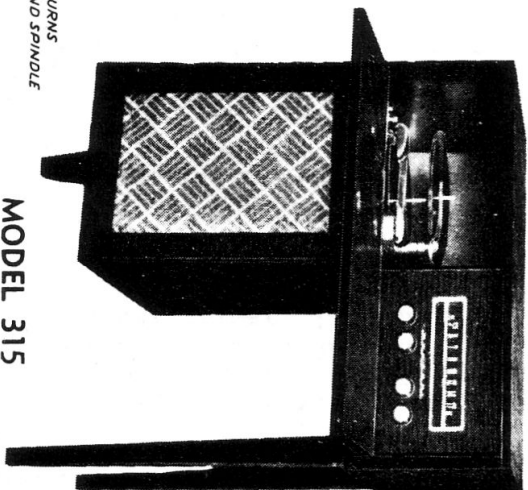
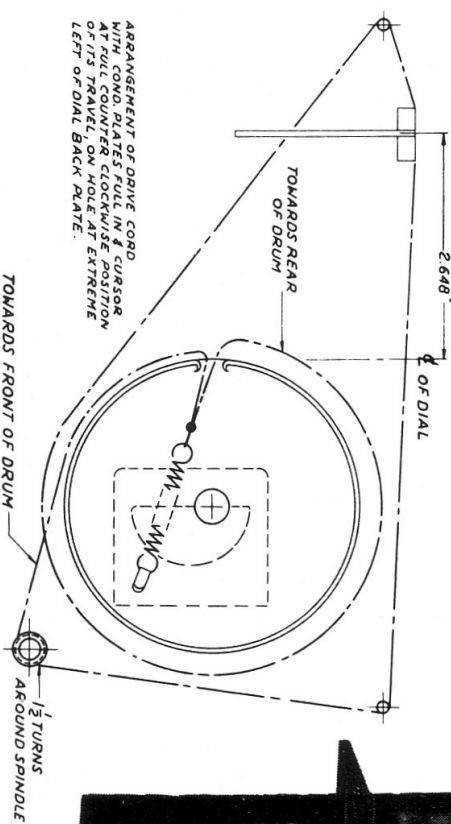


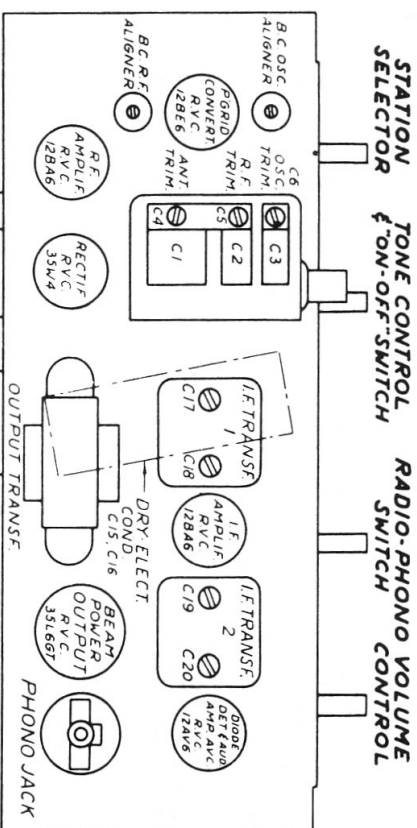
FIG. 1

Marconi Models 307, 310, 315

DRIVE CORD ARRANGEMENT



MODEL 315



CIRCUIT DESCRIPTION

Six-tube A.C. operated, combination radio-phonograph standard broadcast superheterodyne receiver, consisting of an R.F. input circuit, detector oscillator, one stage of intermediate frequency amplification, diode detector with A.V.C., two stages of audio amplification with beam power output driving a permanent magnet dynamic speaker.

FREQUENCY COVERAGE

Broadcast.....535-1720 KC.

POWER OUTPUT (U.P.O.)0.8 watt

POWER RATING.....0.5 Amps

CABINET	Deep	Wide	High
Model 307 - Wood, Console	16"	26"	31"
Model 310 - Wood, Console	16"	32"	31"
Model 315 - Wood, Console	16"	29"	34"

LOUDSPEAKER DATA

Cone.....8-Inch
Field.....Permanent Magnet Alnico V 6.8 Oz.
Voice Coil Impedance at 400 C.P.S.....3.2 Ohms
Output Transformer Primary Resistance.....330 Ohms
Output Transformer Primary Impedance.....2500 Ohms

RADIOTRON

FUNCTION

RVC 12BA6.....R.F. Amplifier
RVC 12BE6.....Detector-Oscillator
RVC 12BA6.....I.F. Amplifier
RVC 12AV6.....Diode Detector, AVC, 1st Audio Amp.
RVC 35L5GT.....Beam Power Output
RVC 35W4.....Half Wave Rectifier

VOLTAGE DATA

RADIO

PHONO

Rectifier Cathode	115V	115V
B+	86V	93V
Output Plate	105V	105V
Output Cathode	5.5V	5.5V

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.

ALIGNMENT PROCEDURE

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

CAUTION: To prevent the possibility of damaging valuable test instruments, an isolating transformer should be used between the line and the receiver.

A. Make all alignment adjustments to the receiver with the volume and tone controls set at maximum.

B. Connect the output meter across the voice coil terminals.

C. Keep the output of the signal generator as low as is consistent with serviceable meter readings.

NOTE: Before proceeding with R.F. alignment, check the position of the dial pointer by completely meshing the gang condenser and setting the pointer to the index mark at the left hand end of the dial back plate.

Marconi Models 307, 310, 315 Alignment Procedure

STEP	CONNECT S.G. OUTPUT TO	FREQUENCY	SETTING	ADJUST	CIRCUITS RESONATED	REMARKS
1	#C.G. 12BE6	455 K.C.	GANG AT MAXIMUM	C20 - C19 C18 - C17	No. 2 I.F. No. 1 I.F.	
2	ANTENNA LEAD AND CHASSIS	580 K.C.	580 K.C.	L1	DETECTOR	ADJUST FOR MAXIMUM OUTPUT
3				L2	OSCILLATOR	
4				INSIDE TURN OF LOOP	R.F. LOOP	
5		1500 K.C.	1500 K.C.	C6 C5 C4	OSCILLATOR DETECTOR R.F. LOOP	

#Lug on Det. Section (Centre) of Gang forms suitable point of connection.
Apply signal through a 400 Ohm Resistor.