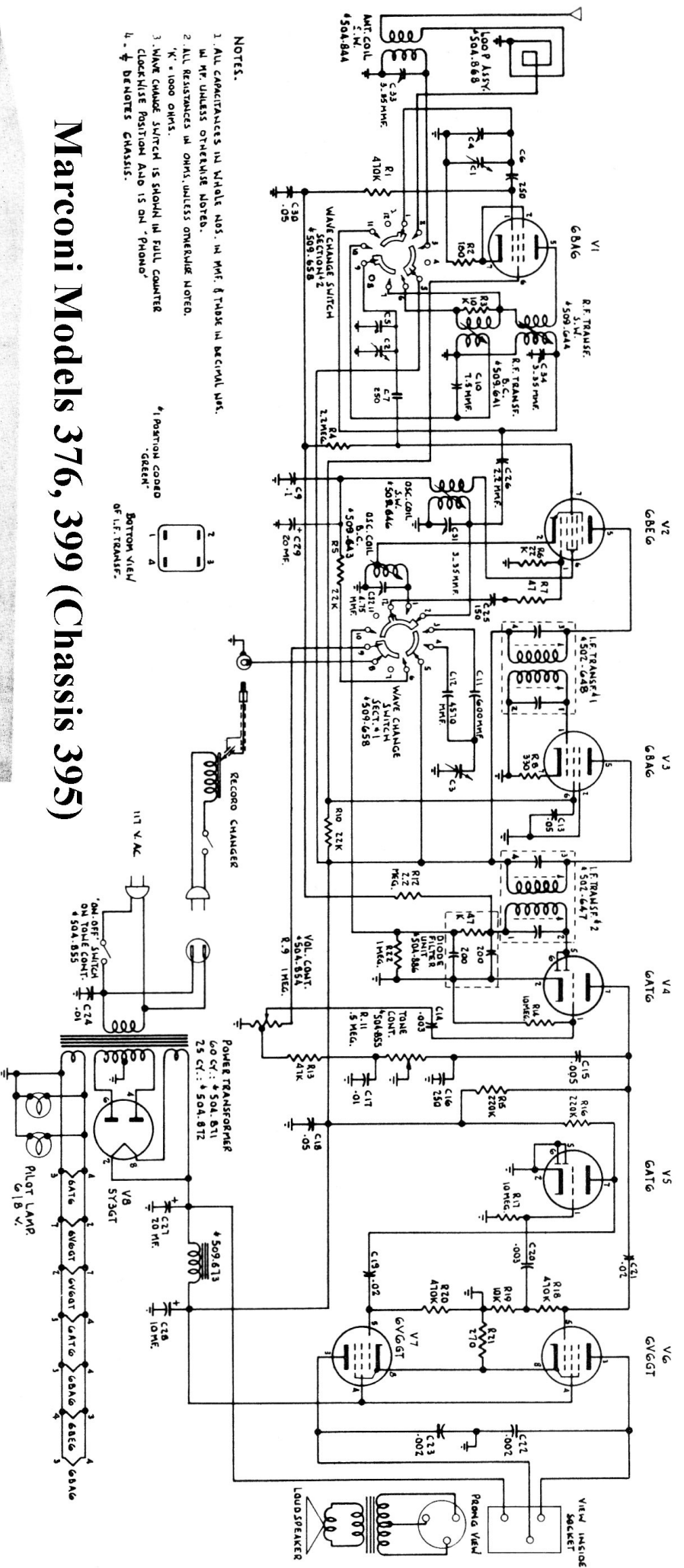
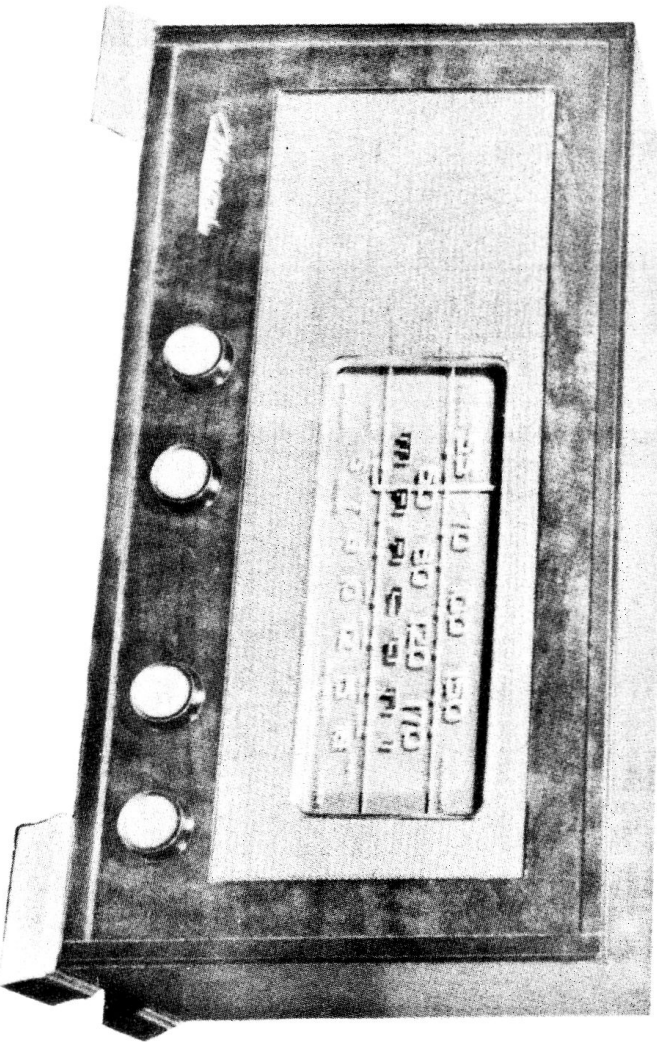


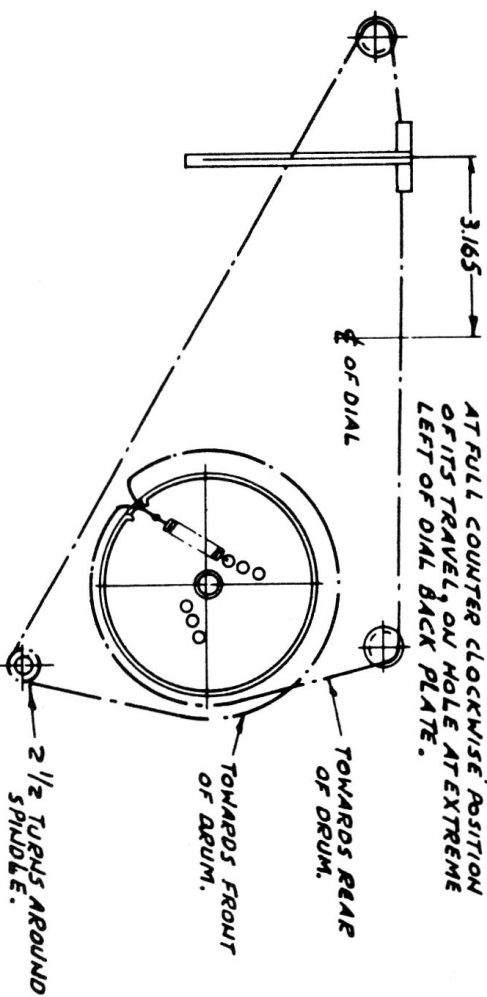


## Marconi Models 376, 399 (Chassis 395)



### 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.

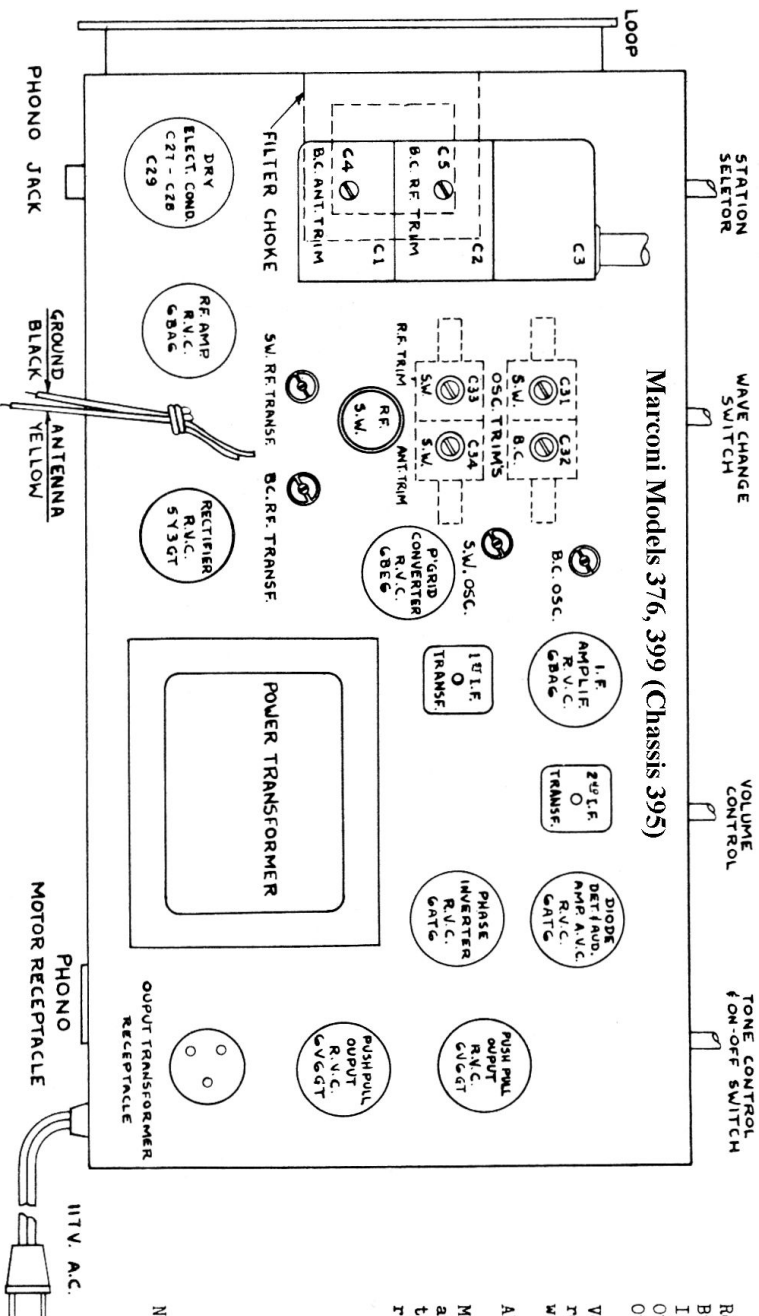


# Marconi Models 376, 399 Alignment Procedure

| STEP | CONNECT S.G. OUTPUT TO    | INPUT FREQUENCY | DIAL SETTING    | ADJUST                | CIRCUIT RESONATED | REMARKS                      |
|------|---------------------------|-----------------|-----------------|-----------------------|-------------------|------------------------------|
| 1    | <del>#</del> C.G. 6BE6    | 455 KC.         | GANG AT MINIMUM | TOP & BOTTOM ALIGNERS | NO. 2 I.F.        | ADJUST FOR MAXIMUM OUTPUT    |
| 2    | C.G. 6BE6                 | 455 KC.         | GANG AT MINIMUM | TOP & BOTTOM ALIGNERS | NO. 1 I.F.        | ADJUST FOR MAXIMUM OUTPUT    |
| 3    | <del>##</del> A & G LEADS | 1720 KC.        | 1720 KC.        | C-32                  | BCST. OSC.        | ADJUST FOR MAXIMUM OUTPUT    |
| 4    | A & G LEADS               | 1500 KC.        | 1500 KC.        | C-4 & C-5             | BCST. R.F. & DET. | ADJUST FOR MAXIMUM OUTPUT    |
| 5    | A & G LEADS               | 580 KC.         | 580 KC.         | BCST. OSC. CORE       | BCST. OSC. PADDER | ROCK GANG FOR MAXIMUM OUTPUT |
| 6    | A & G LEADS               | 18.2 MC.        | 18.2 MC.        | C-31                  | SW. OSC.          | ADJUST FOR MAXIMUM OUTPUT    |
| 7    | A & G LEADS               | 14.0 MC.        | 14.0 MC.        | C-33 & C-34           | SW. R.F. & DET.   | ADJUST FOR MAXIMUM OUTPUT    |
| 8    | A & G LEADS               | 7.0 MC.         | 7.0 MC.         | SW. OSC. CORE         | SW. OSC. PADDER   | ROCK GANG FOR MAXIMUM OUTPUT |

# Lug on detector section (Centre) of gang forms a suitable point of connection. Apply signal through a 0.1 mfd., capacitor.

## Before proceeding with R.F. alignment, see that dial cursor is set on index mark at extreme left of dial backplate with gang at maximum capacity. Apply signal through a 400 ohms dummy antenna.



## CIRCUIT DESCRIPTION

Eight-tube, A.C. operated, long and short-wave superheterodyne receiver, consisting of an R.F. input circuit, pentagrid converter, one stage of intermediate frequency amplification, diode detector with AVC, two stages of audio amplification with push-pull beam power output driving a permanent magnet speaker.

## FREQUENCY COVERAGE

Broadcast ..... 540 - 1720 Kc.  
Short wave ..... 5.8 - 18.3 Kc.

POWER OUTPUT (U.P.O.) ..... 6 watts

POWER RATING ..... 115 v. 25/60 cycles - 0.77 amps.

## LOUDSPEAKER DATA

Cone - Model 376 ..... Elliptical 5 x 7 - inch  
Cone - Model 399 ..... 10 - inch  
Field - Model 376 ..... Permanent Magnet Alnico V 1.3 oz.  
Field - Model 399 ..... Permanent Magnet Alnico V 3.2 oz.  
Voice Coil Impedance at 400 C.P.S. .... 3.2 ohms  
Output Transformer Primary Resistance ..... 600 ohms  
Output Transformer Primary Impedance ..... 14,000 ohms

## TUBE COMPLEMENT

6BA6 ..... R.F. Amplifier  
6BE6 ..... Pentagrid Converter  
6BA6 ..... I.F. Amplifier  
6AT6 (2) ..... Diode Det., AVC, 1st Audio Amp., & Phase Inverter  
6V6GT (2) ..... Push Pull Beam Power Amplifier  
5Y3GT ..... Full Wave Rectifier

## VOLTAGE DATA

Rectifier ..... 270 v. Radio  
B+ ..... 245 v. Phone  
I.F. Screen ..... 110 v. 260 v.  
Output Plate ..... 260 v. 265 v.  
Output Bias ..... 13.6 v. 14.2 v.

Voltage readings are approximate and will vary depending on the resistance of the voltmeter used. Readings are taken on the lowest scale that will accommodate the voltage under test.

## 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 adjustments 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 the calibration points shown in the "ALIGNMENT CHART". These marks are respectively starting from the extreme left: 1st hole - gang fully meshed; top row - 500, 1000 and 1500 Kc.; bottom row - 6.0, 10.0 and 15.3 Kc.