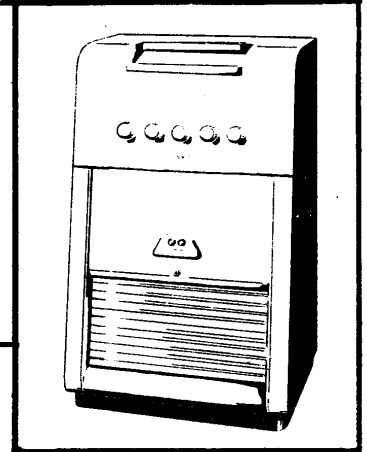


**MARCONIPHONE**  
**Model ARG 19A**

**5 - VALVE CONSOLE AUTO - RADIOGRAM  
FOR A.C. MAINS**



*Model ARG 19 A comprises the chassis of Model T19A, with slight modifications, together with the basic auto-mechanism using the hysteresis type motor.*

**SPECIFICATION**

**Physical.**

**Height.** 2 feet 10 inches.  
**Width.** 1 foot 10 inches. } Overall.  
**Depth.** 1 foot 7 inches. }  
**Weight.** 80 lb.

**Wave Ranges.**

**Manual.**  
"S" 16.5 - 52 metres (18.2 - 5.77 Mc/s).  
"M" 192 - 570 metres (1,563 - 526.3 kc/s).  
"L" 900 - 2,000 metres (333.3 - 150 kc/s).

**Mains Supply and Consumption.**

195-255 volts A.C. 50 cycles only.  
Consumption - 50 watts on Radio.  
62 watts on Gram.

**Pre-set.**

"1" 1,250 - 2,000 metres (240 - 150 kc/s).  
"2" 330 - 560 metres (909 - 535.7 kc/s).  
"3" 200 - 342 metres (1,500 - 877.2 kc/s).

**Rated Output.** 5 watts maximum.

**Intermediate Frequency.** 465 kc/s.

**Valves.**

Marconi.  
X143 V1 Frequency Changer.  
W143 V2 I.F. Amplifier.  
DN143 V3 Detector, A.G.C., and Output.  
W143 V4 L.F. Amplifier.  
U143 V5 H.T. Rectifier.

**Loudspeaker.**

The loudspeaker is a permanent magnet, 6½ inch cone, moving coil type. The speech coil has a D.C. resistance of 3.5 ohms and an impedance of 4 ohms at 1,000 cycles.

**Scale Lamps.** Two 6.5 volts, 0.3 amp.

**External Loudspeaker.**

A low resistance loudspeaker may be connected to the sockets provided at the rear of the cabinet and should have an impedance of as near as possible to 4 ohms.

**Pick-Up.** No. 13. D.C. resistance of coil 1.3 ohms.

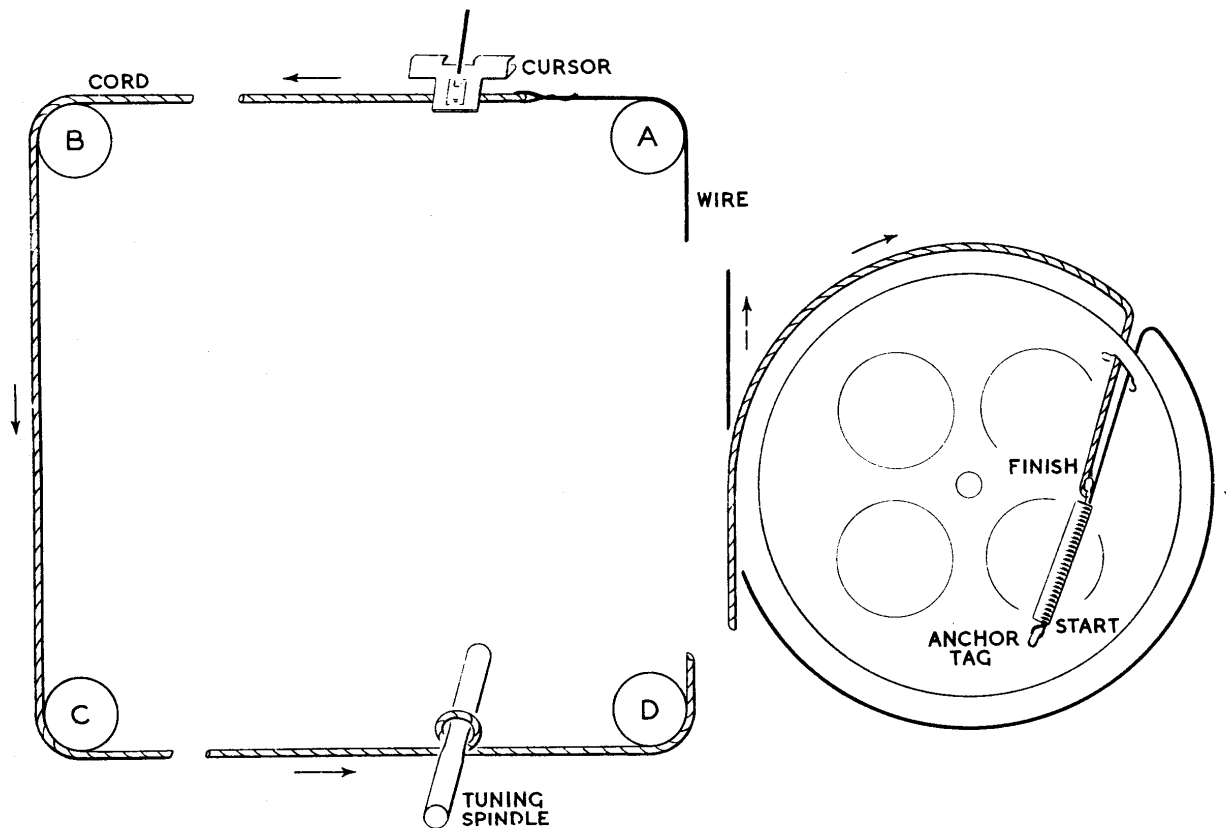
**Motor.** Hysteresis type.

An External Loudspeaker switch is provided.

**Auto-mechanism.** Type 35000 AE.

ISSUED BY:-

**E.M.I. SALES & SERVICE LTD., HAYES, MIDDLESEX.**  
*For further technical information, write to the Technical Information Division,  
Sheraton Works, Wadsworth Road, Greenford, Middlesex.*



## VALVE TABLE

Receiver connected to a 220v. 50 cycle mains supply, and operating with the Volume Control at maximum at a point of no reception on the M.W. band. Values stated were obtained using a meter with a resistance of 500 ohms per volt.

VALVE.	ANODE.				SCREEN.		CATHODE.	
	Volts to Chassis		Current mA.		Volts to Chassis	Current mA.	Volts to Chassis	Current mA.
	Mx.	Osc.	Mx.	Osc.				
V1 (X143)	230	100	2.2	4.0	90	3.4	-	9.6
V2 (W143)	230		4.7		90	1.3	-	6.0
V3 (DN143)	260		35		230	4.7	-	39.7
V4 (W143)	45		0.8		15	0.3	-	1.1
V5 (U143)	280A.C.		-		-	-	305	-

Total A.C. current, 220mA.

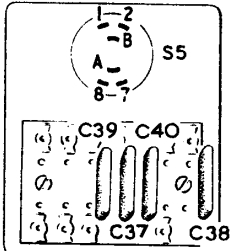
Smoothed H.T. 275 volts D.C.

Voltage drop across R16, 2.8 volts.

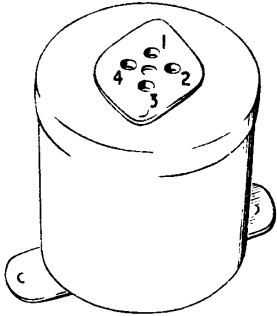
Total H.T. current, 60mA. D.C.

Voltage drop across R13, 30 volts.

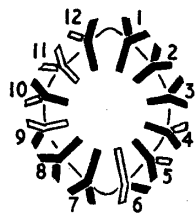
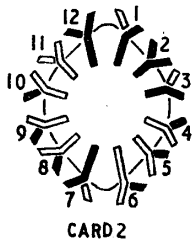
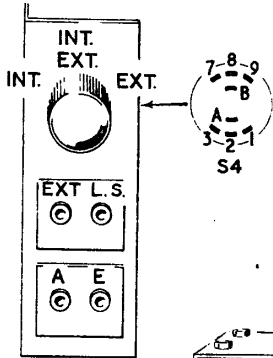
Voltage drop across R17, 1.9 volts.



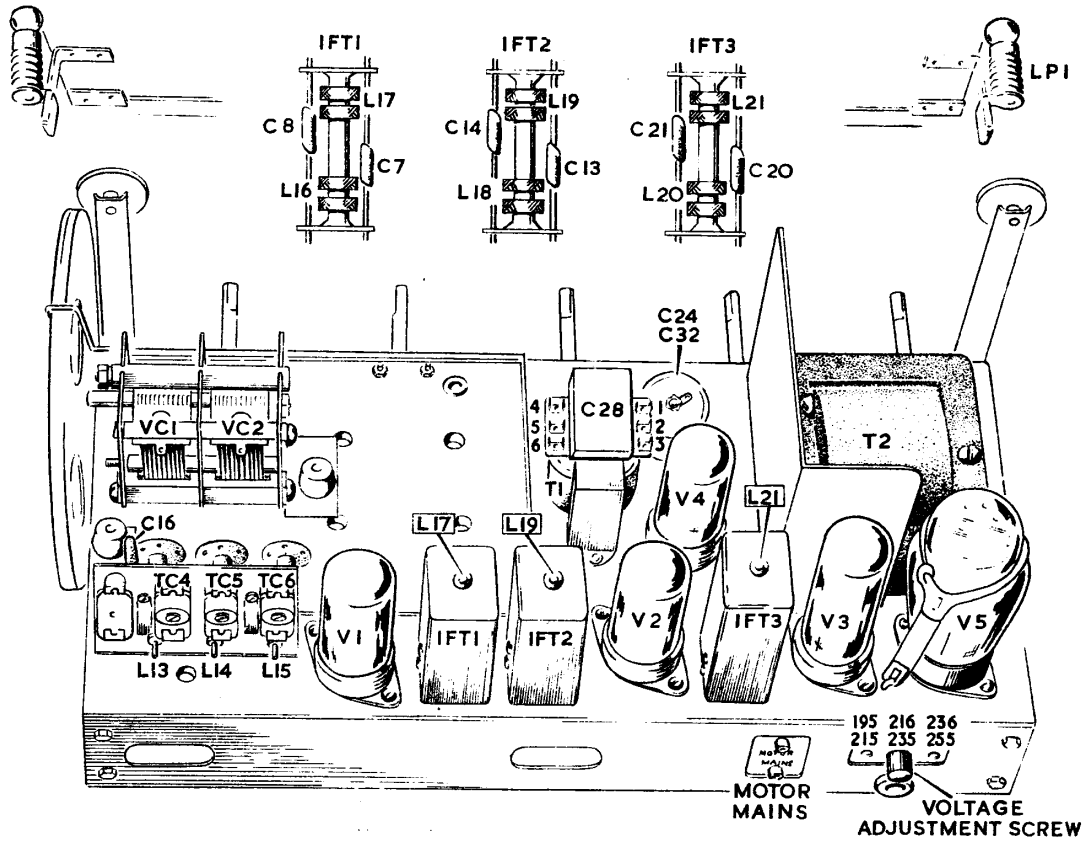
EXTENDED RANGE SWITCH UNIT MOUNTED ON MECH. PLATE



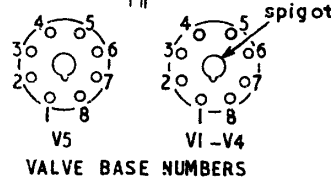
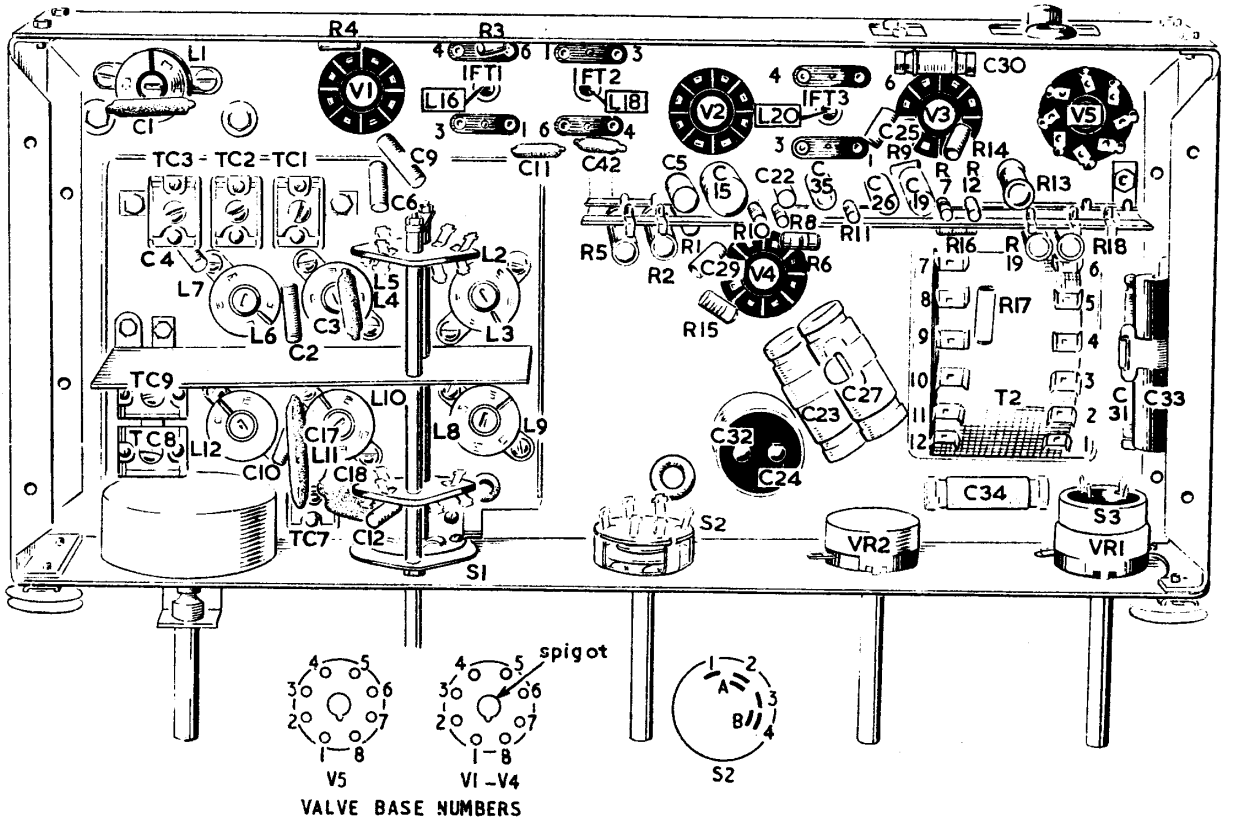
MATCHING UNIT MOUNTED ON L.S. BAFFLE



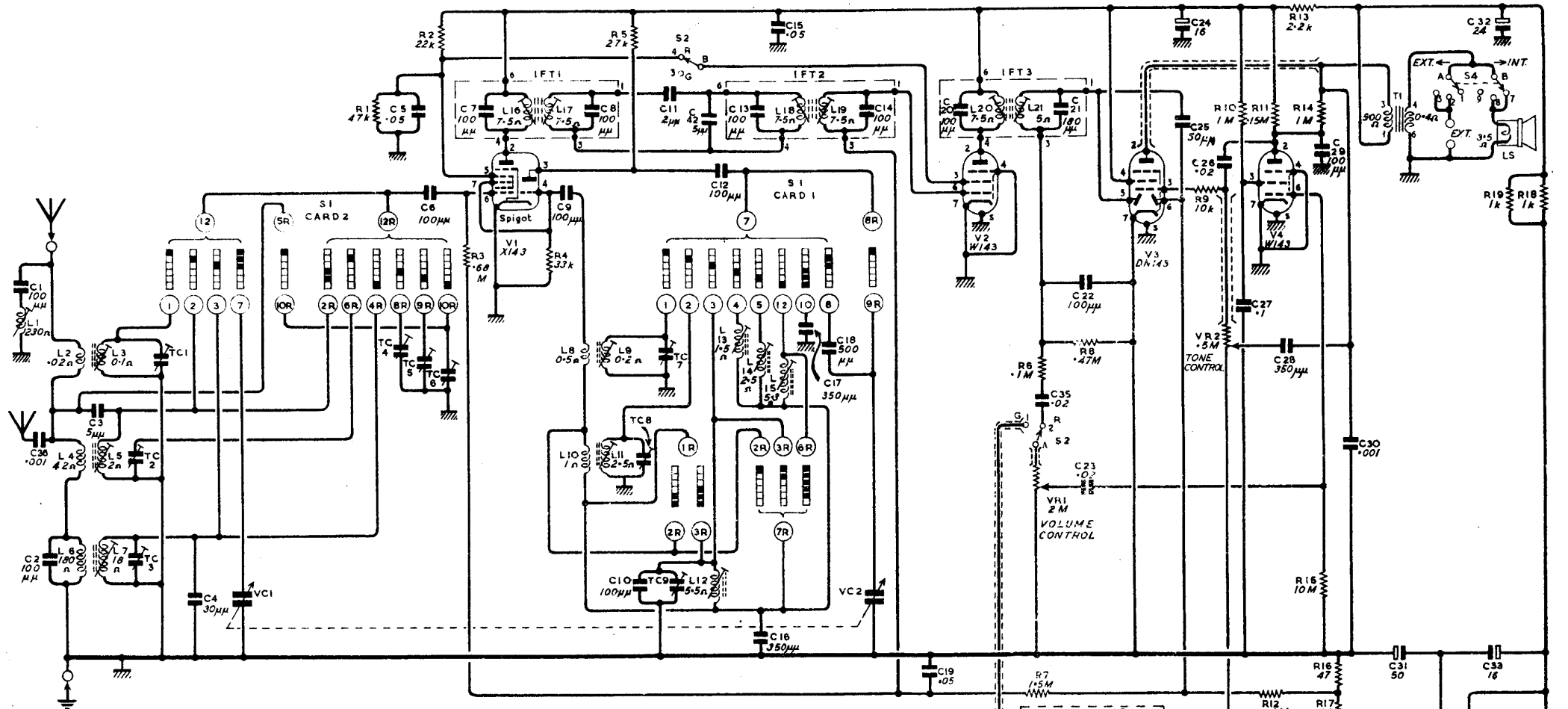
CARD I S1 CONTACTS VIEWED FROM FRONT (USED CONTACTS BLACKED IN)



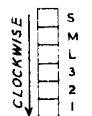
MOTOR MAINS VOLTAGE ADJUSTMENT SCREW



VALVE BASE NUMBERS



KEY TO S1



NOTE: A BLACK SQUARE INDICATES CONTACTS CLOSED.  
 A WHITE SQUARE CONTACTS OPEN.  
 POTENTIOMETERS SHOWN IN MAX. ANTI-CLOCKWISE POSITION.  
 METALLISED SCREENING CONNECTED TO CHASSIS.

