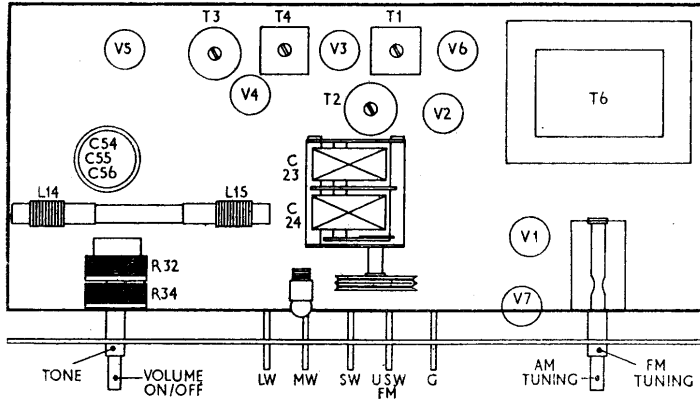


'ERT' SERVICE CHART

REGENTONE ARG79, ARG89, A155, 173



Under-chassis layout is with other diagrams overleaf, together with the circuit of the power supply section

SIX-VALVE, plus tuning indicator, four-waveband AM/FM chassis incorporated in four receivers as listed. AC mains voltage coverage is 200-225, 226-250 at 50-100c/s.

Radiogram models—ARG79 was released in May, 1955, at 59gns. inclusive of tax, the ARG89 appeared in July, 1955, at 78gns. inclusive of tax, while table receiver A155 made its debut in July, 1955, at 32gns. inclusive.

Television model 173, incorporating the same chassis, came out in June, 1955, and cost 175gns. inclusive of tax.

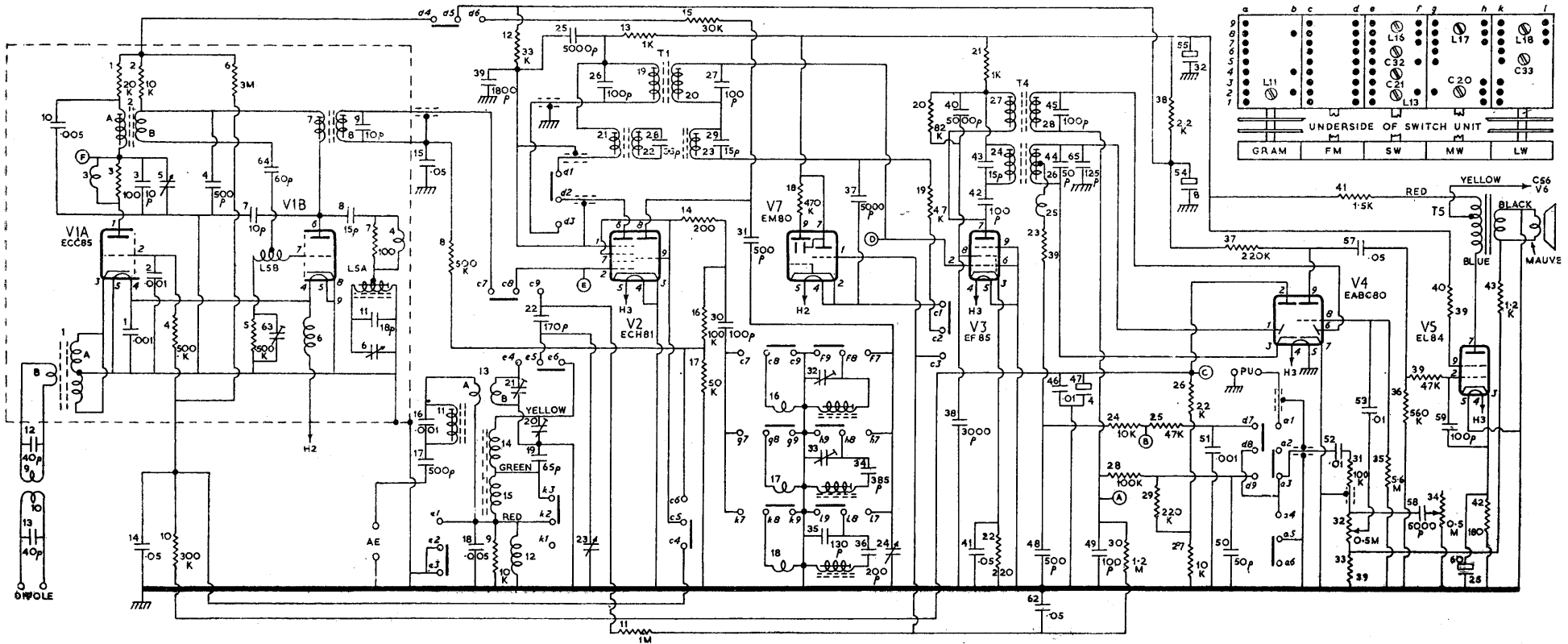
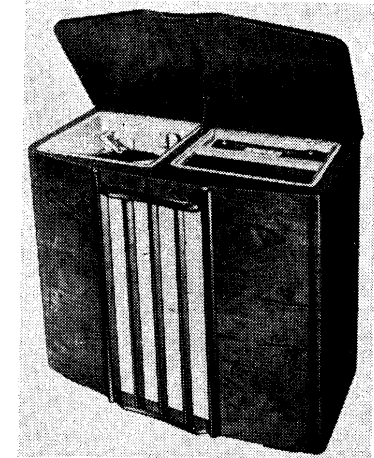
Maker is Regentone Radio and Television, Ltd., Eastern Avenue, Romford, Essex.

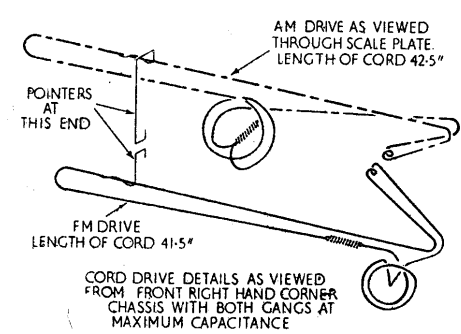
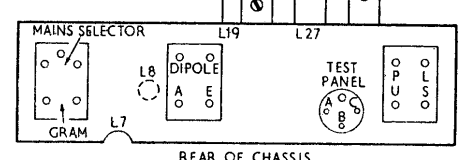
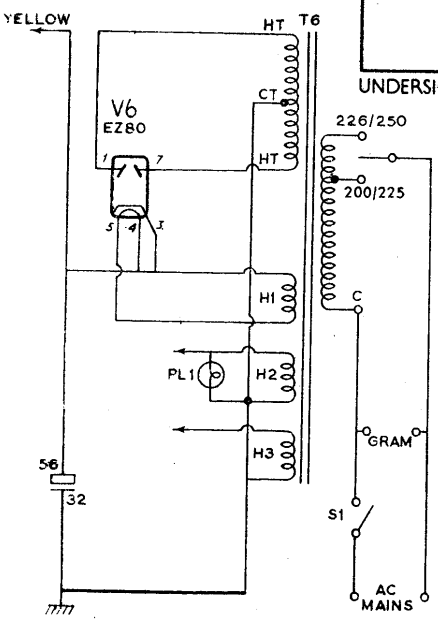
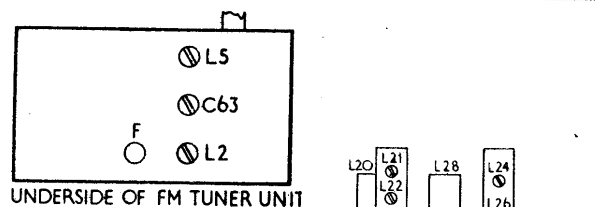
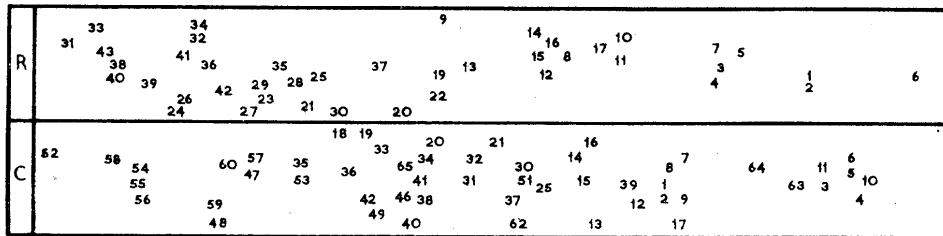
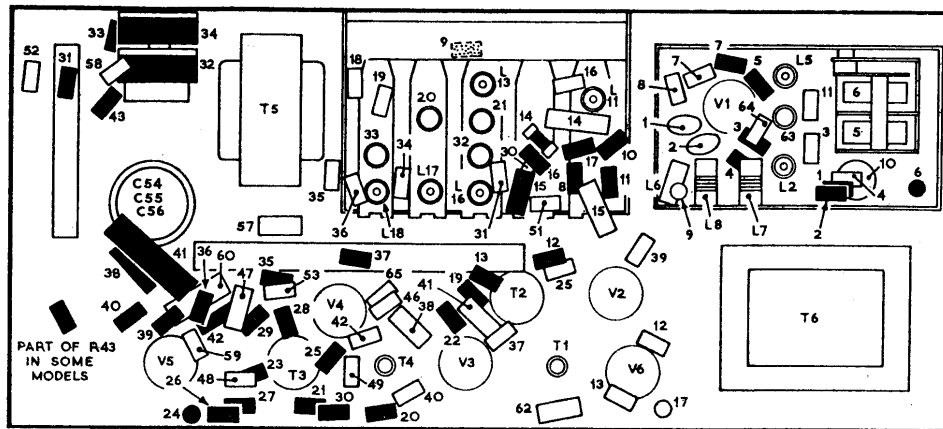
Service department. Church Road, Harold Wood, Essex.

Valves. V1, FM RF amplifier and oscillator-mixer, is type ECC85, while an ECH81 functions as AM frequency changer and FM IF amplifier in V2 position. V3, IF amplifier, uses an EF85, while V4, EABC80, is an FM discriminator, AM detector and AF amplifier. Output pentode EL84 comes next as V5, being followed by full-wave rectifier EZ80, V6. V7 is a tuning indicator, type EM80.

Scale lamp. 6.5V 0.3A MES fitting.

Waveband coverage. LW 2000-1,000m. (150-300kc/s), MW 550-187m (545-1,600kc/s), SW 50-17m (6-17.5mc/s), FM 3.45-3m (87-100mc/s).





COMPONENT RATINGS

Capacitors
 Ceramic 750V: C42 49 59.
 Ceramic 500V: C3 7-13 17 29-31 43 64.
 Ceramic 350V: C25 37 40 48 53 58.
 Ceramic 125V: C19 28 44 125.
 Styrofoil 500V: C1-4 38 39.
 Styrofoil 125V: C16 18 22 51.
 Paper tubular 350V: C41 46 52 57 62.
 Paper tubular 125V: C14 15.
 Electrolytic 350V: C54-56.
 Electrolytic 100V: C47.
 Electrolytic 12V: C60.

Resistors
 2 watt: R41.
 1 watt: R1 2 15.
 1/2 watt: R12 38 42.
 All others 1/4 watt.

Potentiometer
 R32 is log law type, with on-off switch and R34

Inductors
 Inductors not listed are less than 1ohm

L	Ohms
11	1.5
13A	1.5
15	6.5
17 total	4.5
18 total	9

5 Pri. 560, tapped at 26 Sec. 1
 6 HT+360 total
 19, 20 each 18
 27, 28 each 18
 Pri. 33 total

VOLTAGE AND CURRENT CHECKS

Readings were taken with Avo model 8 230V input, volume control at minimum, aerial short-circuited.

	ANODE		SCREEN		CATHODE	
	V	mA	V	mA	V	mA
V1 Osc.	150					
V1 Amp.	90					
V2 P	230	2.3	65	4		
V2 T	105	4				
V3	220	7.5	95	1.5	1.9	9
V4	70	0.6				
V5	260	36	235	4.5	7.5	40.5
V6	255	46			280	75
V7	AC				DC	
	(1) 235					
	(2) 40					

ALIGNMENT

470kc/s. With wobulator at 470kc/s connect signal input between point E on circuit (pin 2 V2) and chassis (via 0.1mF capacitor) with set on MW and tuned to 1,600kc/s.

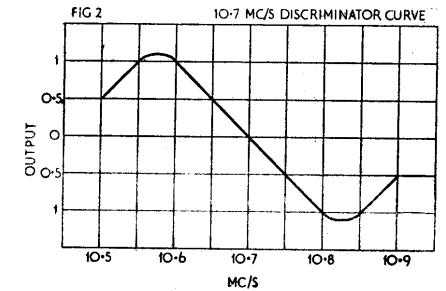
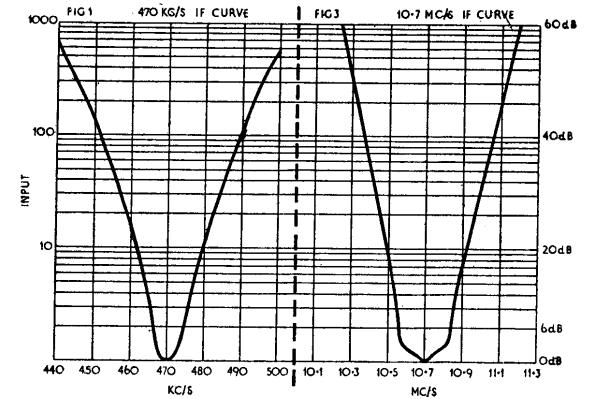
Connect oscilloscope input lead between point A (junction of R28 R30 C49)—via test panel at receiver rear—and chassis. Trim L28 L27 L20 L19 for maximum signal, and symmetry as shown in Fig. 1. Repeat.

10.7mc/s. Switch receiver to FM band, and tune to 92mc/s; set wobulator at 10.7mc/s, connect HF input at point E.

Connect oscilloscope input lead between point B (junction of R24 R25) and chassis.

Tune IF transformer cores L26 L24 L23 L21 L22, in that order. Core L26 should be tuned for centre frequency of curve (Fig. 2) and L24 for maximum amplitude. Cores of L23 L21 L22 should be tuned for symmetry.

Disconnect C47 and connect oscilloscope input lead between point C and chassis via test panel at rear of receiver chassis. Switch wobulator to CW signal. Check that curve is as Fig. 3.



Change HF input lead to point F on underside of FM tuner unit, adjust L8 L7 to give curve similar to Fig. 3 with max. gain. Reconnect C47.

MW. Connect appropriate RF supply via standard dummy aerial to receiver. Switch to MW, tune receiver to 575kc/s, adjust L17 for maximum output.

Inject 1,500kc/s, tune receiver to 1,500kc/s, adjust C33 for maximum output.

Inject 470kc/s, adjust L11 for minimum. Repeat.

Set receiver to 575kc/s, adjust position of L14 on Ferrite rod for maximum output. With receiver tuned to 1,500kc/s, adjust C20 for maximum output. Repeat.

Check alignment; then seal L14.

LW. Tune receiver and signal generator to 225kc/s, adjust L18 for maximum output. Adjust position of L15 on rod for maximum.

SW. Tune receiver and signal generator to 6 mc/s, adjust L16 for maximum output; then proceed to 15mc/s and adjust C32 for maximum output. Repeat. Tune to 6mc/s and adjust L13 for maximum.

At 15mc/s, adjust C21 for maximum output, whilst rocking the gang. Repeat. Check alignment.

FM. Couple signal generator to receiver with 300ohm matching pad. Set receiver and generator at 94mc/s. Adjust L5 for maximum (centre peak).

Disconnect signal generator, connect diode voltmeter to point F on tuner unit by means of probe, adjust C63 for minimum reading.

Reconnect generator and repeat adjustment of L5 at 94mc/s. Adjust L2 for maximum output.