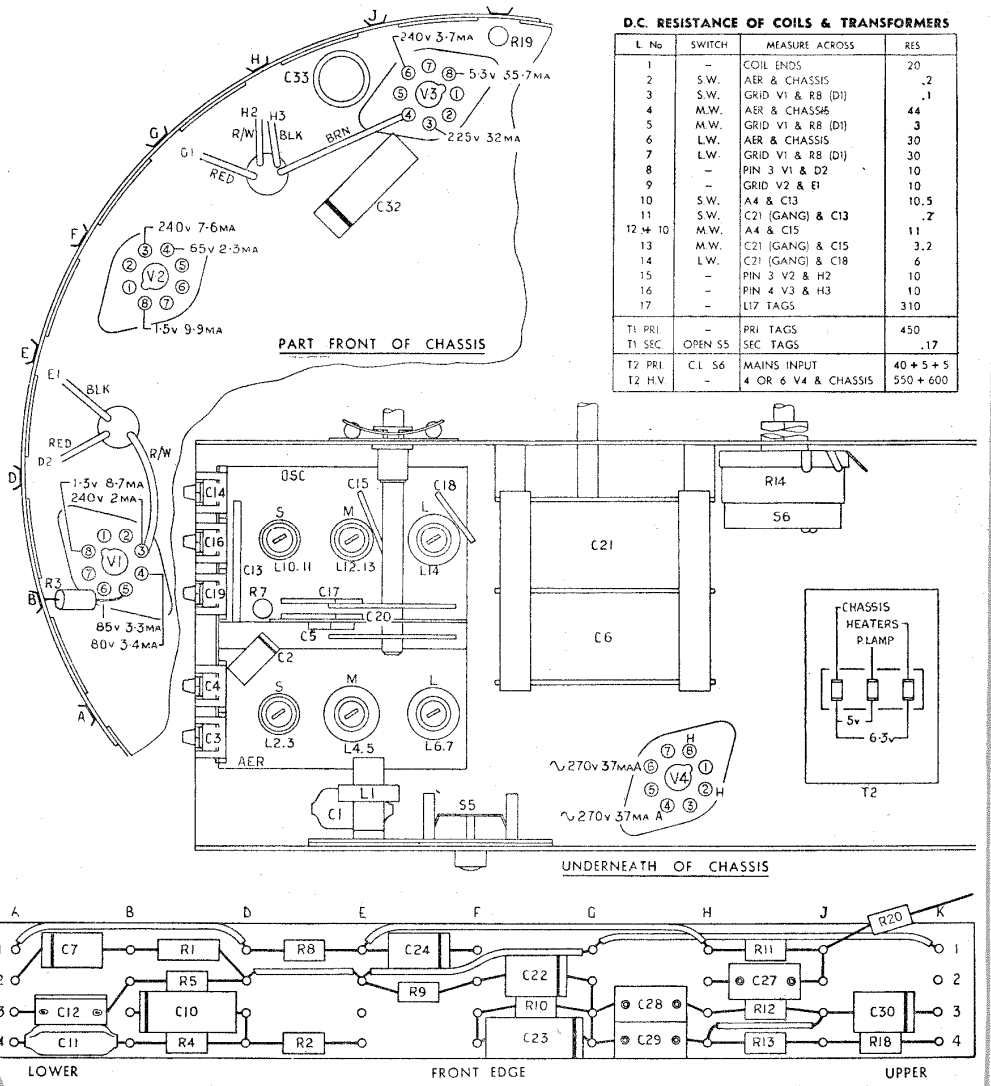
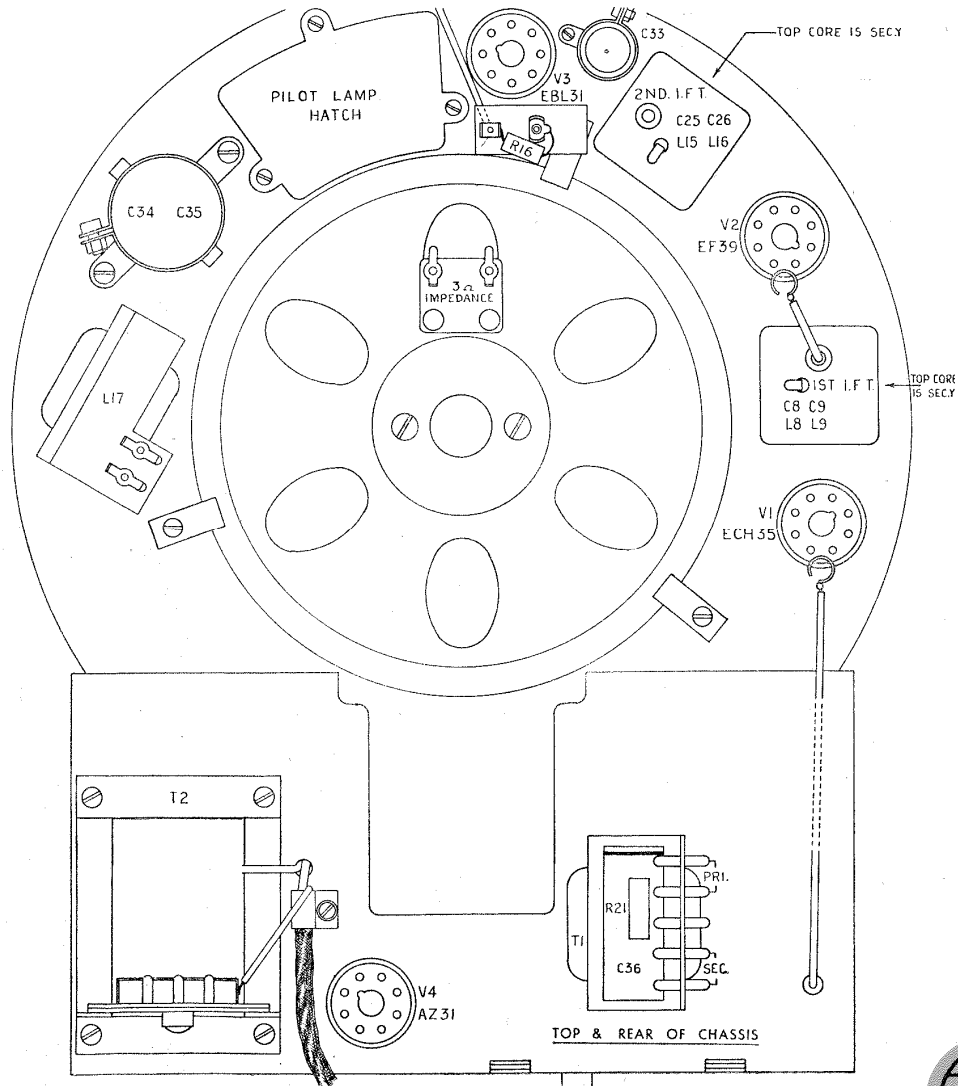


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# EKCO SERVICE DATA



**D.C. RESISTANCE OF COILS & TRANSFORMERS**

L No	SWITCH	MEASURE ACROSS	RES
1	-	COIL ENDS	20
2	S.W.	AER & CHASSIS	.2
3	S.W.	GRID V1 & RB (D1)	.1
4	M.W.	AER & CHASSIS	.44
5	M.W.	GRID V1 & RB (D1)	.3
6	L.W.	AER & CHASSIS	.30
7	L.W.	GRID V1 & RB (D1)	.30
8	-	PIN 3 V1 & D2	.10
9	-	GRID V2 & E1	.10
10	S.W.	A4 & C13	10.5
11	S.W.	C21 (GANG) & C13	.7
12 + 10	M.W.	A4 & C15	.11
13	M.W.	C21 (GANG) & C15	3.2
14	L.W.	C21 (GANG) & C18	.6
15	-	PIN 3 V2 & H2	.10
16	-	PIN 4 V3 & H3	.10
17	-	L17 TAGS	310
T1 PRI	-	PRI TAGS	450
T1 SEC	OPEN S5	SEC TAGS	.17
T2 PRI	CL S6	MAINS INPUT	40 + 5 + 5
T2 HV	-	4 OR 6 V4 & CHASSIS	550 + 600



MODEL A22 is a 4-valve superheterodyne receiver of circular construction with three control knobs and circular scale.

**MAINS SUPPLY:** 200/250v. 40/80 cycles.

**CONSUMPTION:** Approximately 40 watts.

**WAVE RANGES:** S.W. 16 metres— 53 metres.  
M.W. 200 metres— 550 metres.  
L.W. 1,000 metres—2,000 metres.

**VALVES:** V1.ECH35 Frequency changer. V2.EF39 I.F. Amplifier. V3.EBL31 Demodulator, AVC, Power Amplifier, V4.AZ31 Directly heated Rectifier. All are Mullard with International Octal bases.

**PILOT LAMP:** 6.3v. .3a. Approximately 5v. R.M.S. is tapped off the 6.3v. heater winding for lamp supply.

**INTERMEDIATE FREQUENCY:** 465 K/cs.

**SPEECH COIL IMPEDANCE:** 3 ohms at 400 c.p.s.

**I.F. ALIGNMENT:** (1) Switch to M.W. and fully mesh the gang.  
(2) Inject modulated signal 465 K/cs. via a .1 mfd. condenser to the grid of V1. Connect sig/gen earth to E Socket. (3) Connect output meter to EXT.LS sockets then adjust all four I.F. cores—working backwards from second I.F.—for maximum output.

**FILTER ADJUSTMENT:** Inject 465 K/cs via dummy aerial to A. and E. then adjust L1 core for lowest meter reading.

**CALIBRATION:** (1) Fully mesh the gang, and if indicator shadow does not cover the calibration spot (just under "L") loosen the two screws on small drive wheel, and adjust arm as necessary. (2) Trimming and tracking points are as follows:

Switch to S.W.

Adjust—  
Osc. Trimmer (C14) at 16M., then adjust Osc. Core (L10,11) at 40M.  
Aer. Trimmer (C3) 18M., Aer. Core (L2,3) 48M.  
Switch to M.W.

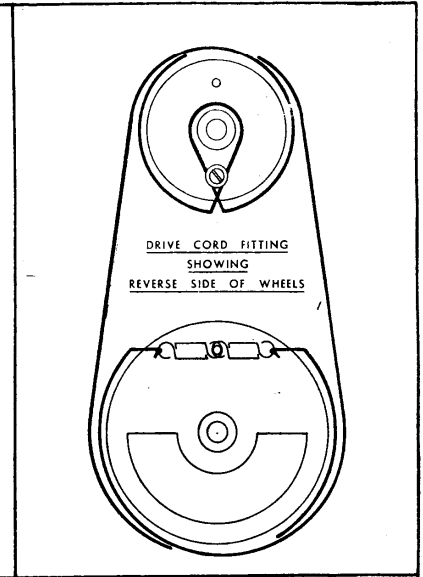
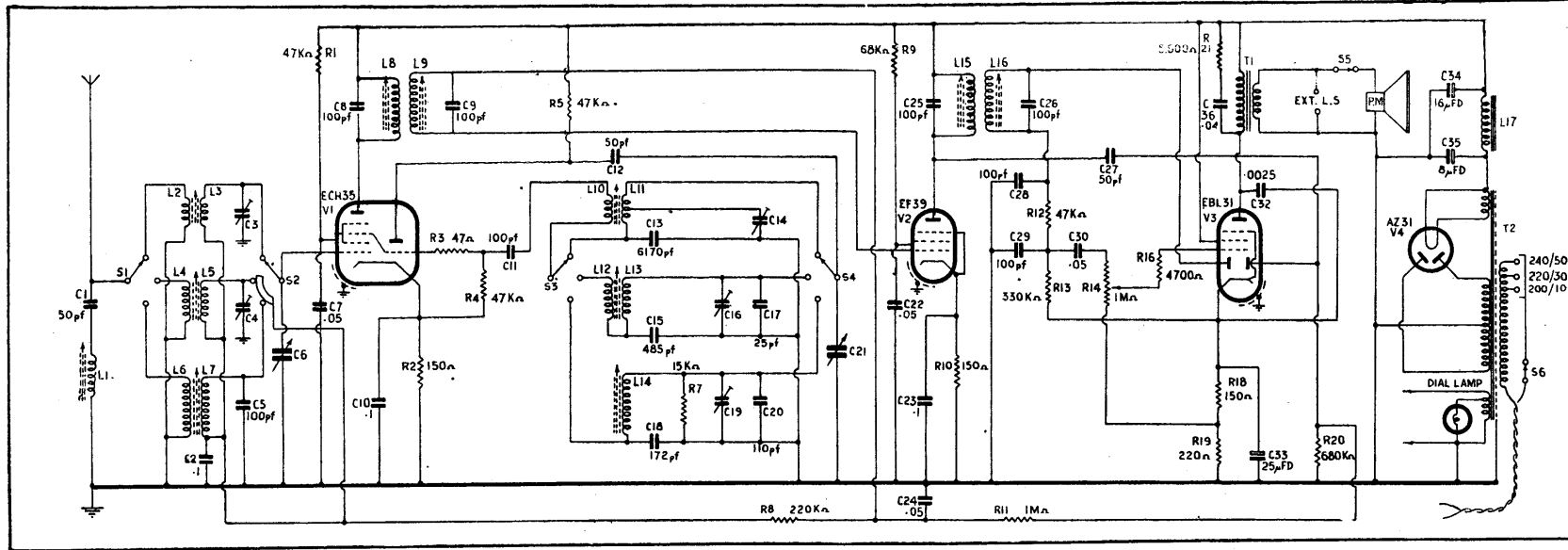
Adjust—  
Osc. Trimmer (C16) at 200M. then adjust Osc. Core (L12,13) at 400M.  
Aer. Trimmer (C4) 220M. Aer. Core (L4,5) 520M.  
Switch to L.W.

Adjust—  
Osc. Trimmer (C19) at 1,000M, then adjust Osc. Core (L14) at 1500M.  
Aer. Core (L6,7) 2000M.

**CHASSIS REMOVAL:** Remove the three control knobs. Unscrew four screws at back (on circumference) and one under trademark symbol and slide back cover along mains cord. Turn receiver

face down on suitable cushion and remove four 2BA perimeter screws, taking care not to disturb the components or wiring. Draw chassis clear. (A touch of beeswax in the slots of these 2BA screws will simplify their replacement.) To remove scale, lay the chassis on its back on a suitable support. At 2 o'clock on the rim, a half-inch slot is located. Insert a LONG screwdriver in this hole and loosen the 2BA screw on central stem. Lift off scale complete. The locating flat on the central stem ensures correct replacement.

**DRIVE CORD:** Knot one end of the cord to one spring then fix the other end to the second spring so that the total length (including springs) is 30½ ins. Trim off surplus cord. Set the gang condenser at midway, then remove both drive wheels by loosening the set-screws, and the two 4BA screws under the lower wheel centrally above the spindle bush. Lay both wheels down, backs uppermost, to correspond with their normal positions. Fold the new prepared cord exactly in half and thread the centre loop through the lower hole in the small wheel rim. Open the loop to fall over the centre boss and clamp under the screw and washer. Follow the given diagram, terminating the two springs on the central lug. Hold both wheels so that cord is taut, reverse them, and slip both on their respective spindles, then allow springs to take up slack cord. Replace screws and tighten grub screws.



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