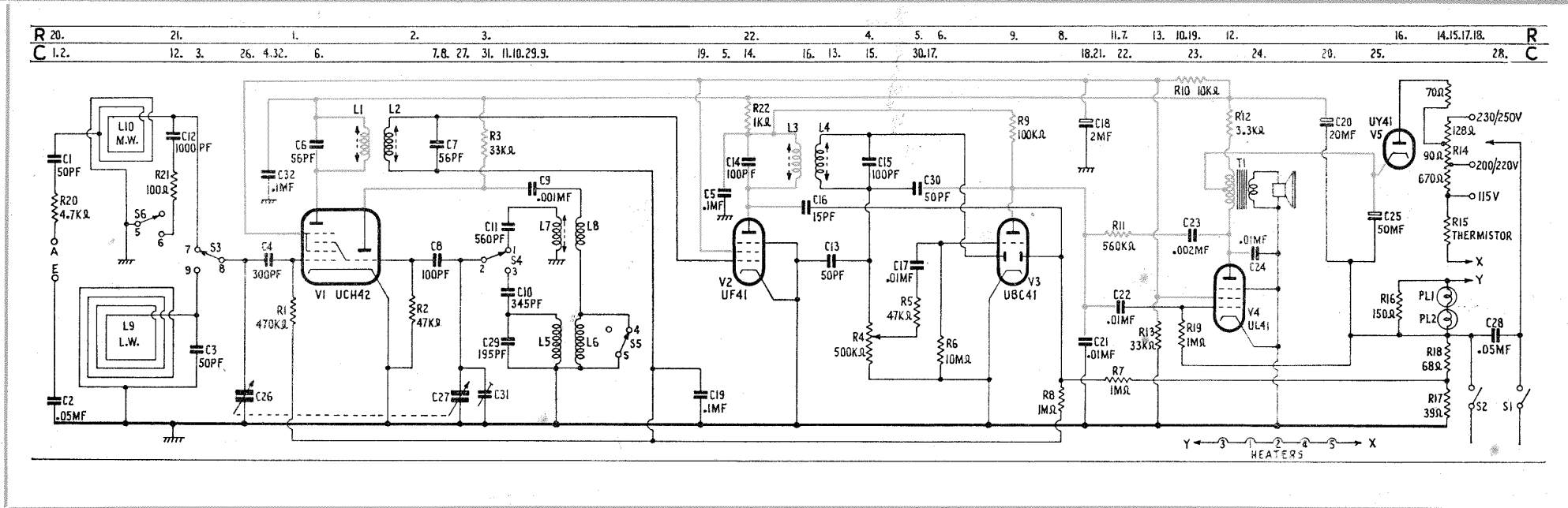


EKCO SERVICE DATA

MODEL UI22



MODEL UI22 is a five-valve, including rectifier, transportable superheterodyne receiver covering the Medium and Long Wavebands. It is contained in a thermo-plastics cabinet with built-in frame aerials, provision being made for the use of an external aerial in areas of low field strength.

MAINS SUPPLY: 200/250 volts D.C. or A.C., 25/100 cps.

Note.—An additional mains tapping screw can be provided to enable the receiver to operate from 115 volts mains. An additional screw is inserted in the 115v. tapping (covered by plastic tape) of the mains adjustment panel, leaving the existing screw in the 200/220v tapping.

CONSUMPTION: 153.5 m.a. with 240 volts A.C. input, 37 watts. 143.5 m.a. with 222.5 volts D.C. input, 32 watts.

VALVES:
 V1—UCH42 Frequency changer.
 V2—UF41—I.F. amplifier.
 V3—UBC41—Demodulator, A.V.C., L.F. amplifier.
 V4—UL41—L.F. amplifier.
 V5—UY41—Halfwave Rectifier.

All valves are Mullard and have B8A bases.

PILOT LAMPS: 6 volts 60 m.a. M.E.S.

LOUDSPEAKER IMPEDANCE: 3 ohms at 400 c.p.s.

INTERMEDIATE FREQUENCY: 470 Kc/s.

DRIVE CORD: Length 37.5 ins. Diagram of drive cord fitting is given overleaf.

FREQUENCY COVERAGE: M.W. 1560 to 532 Kc/s.
 L.W. 311 to 142 Kc/s.

ALIGNMENT: Connect output meter across the loudspeaker tags. I.F.: Switch to M.W. Turn tuning control fully clockwise to close the gang.

Inject 470 Kc/s. via 0.1 mfd. condenser to the control grid (pin 6), of V1 and adjust the 2nd I.F.T. upper and lower cores, then 1st I.F.T. upper and lower cores in that order for maximum output.

POINTER SETTING: Before re-calibration, the pointer must be adjusted to datum. With the gang fully closed, the pointer should coincide with the white mark above the "M" in 550M. Any error can be corrected by sliding the cursor, as necessary, along the drive cord.

M.W. CALIBRATION: Tune to and inject (via A. and E.) 1200 Kc/s. and adjust C31 for maximum output. Check that the Third Programme is received at 1546 Kc/s.

Tune to and inject 850 Kc/s. and adjust L7 core for maximum output, choosing the peak where most core stem is exposed.

L.W. CALIBRATION should be satisfactory if M.W. adjustments are correct.

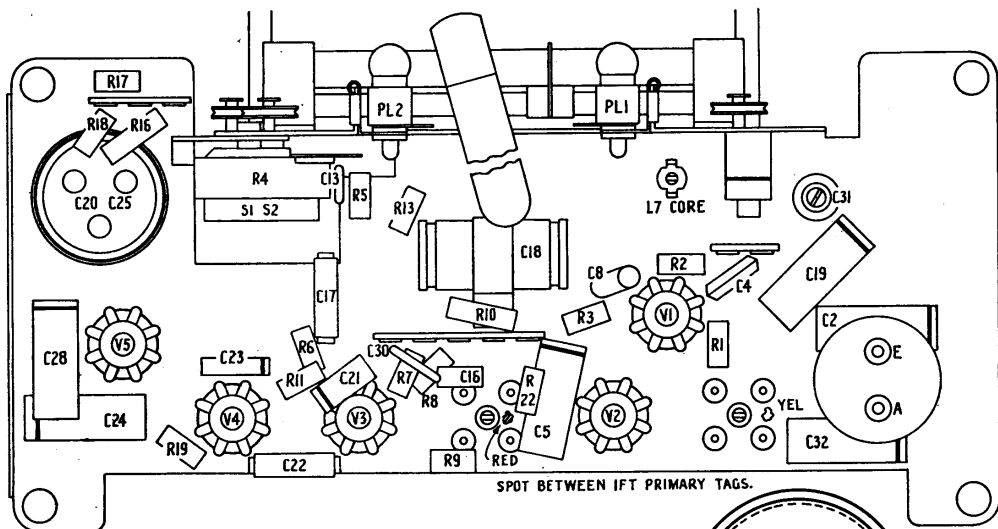
CHASSIS REMOVAL: Lay receiver flat, knobs uppermost, then remove the four rubber feet and slide base cover along the mains cord. Remove the four corner hexagonal pillars and the chassis is then free to be withdrawn from the cabinet.

Note.—In early models, a soft plastic compound was used to prevent possible vibration of the grille against the escutcheon, and in a few cases the compound has prevented the free movement of the released chassis.

In such cases, carefully run a thin bladed knife between the grille and escutcheon to open the bond.

To remove the escutcheon, pull off the two knobs and the plastic washers beneath them. Unscrew the two screws now exposed. With the chassis and escutcheon removed, care must be taken to prevent undue pressure on the wavechange lever which will snap if grossly mishandled.

DANGER FROM SHOCK: As is usual with AC/DC receivers, the chassis is connected to the mains, and care must be taken when handling a "live" chassis. Ensure that chassis is connected to the earthed side of A.C. mains.



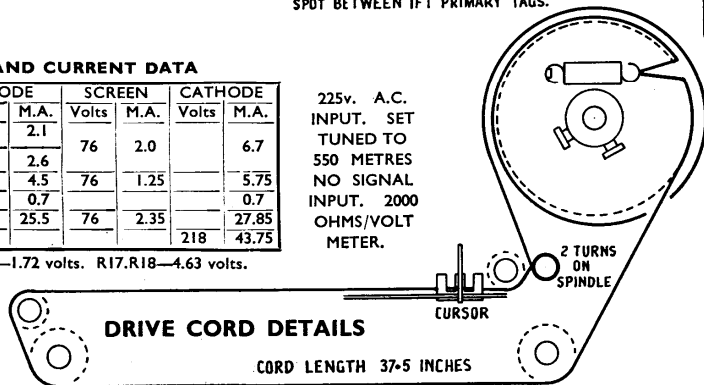
SPOT BETWEEN IFT PRIMARY TAGS.

VOLTAGE AND CURRENT DATA

VALVE	ANODE		SCREEN		CATHODE	
	Volts	M.A.	Volts	M.A.	Volts	M.A.
UCH42 MIXER	158	2.1	76	2.0		6.7
UCH42 OSC	73	2.6				
UF41	155	4.5	76	1.25		5.75
UBC41	76	0.7				0.7
UL41	213	25.5	76	2.35		27.85
UY41	215AC				218	43.75

225v. A.C. INPUT. SET TUNED TO 550 METRES NO SIGNAL INPUT. 2000 OHMS/VOLT METER.

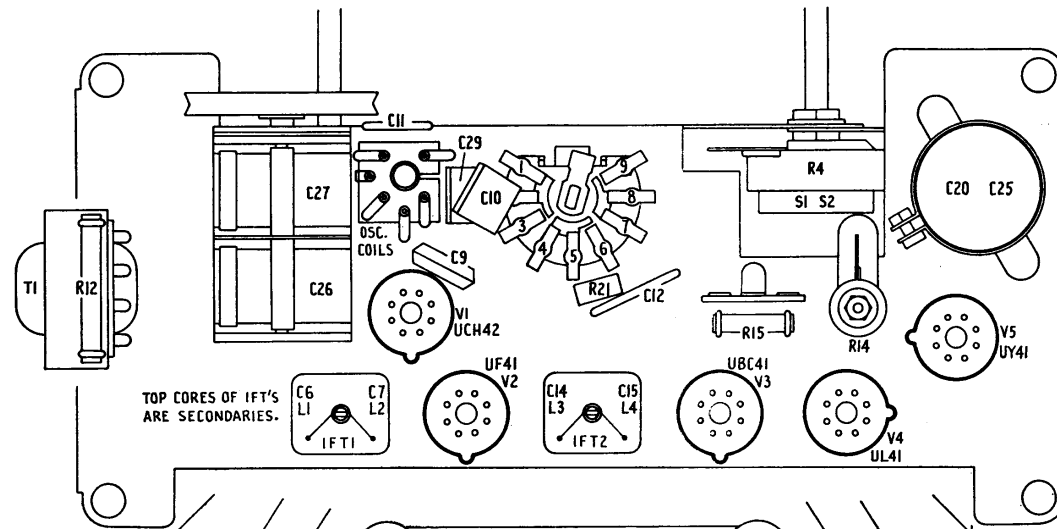
BIAS VOLTS : R7—1.72 volts. R17,R18—4.63 volts.



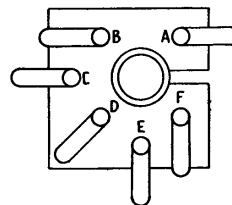
CORD LENGTH 37.5 INCHES

RESISTANCE OF WINDINGS

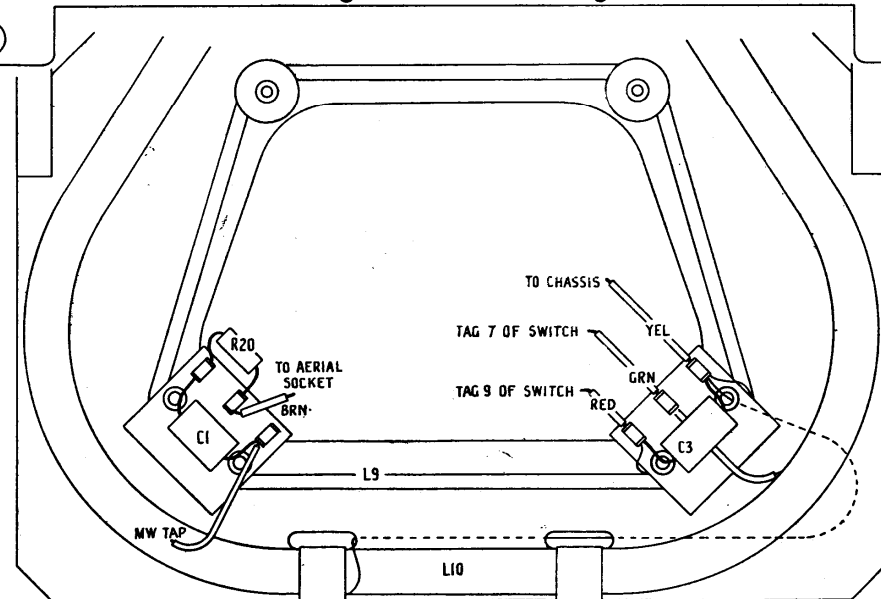
COIL	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	TI.PRI	TI.SEC.
OHMS	30	30	15	15	6.5	3	2.5	1.5	11.5	2	170+200	less than 1.



TOP CORES OF IFT'S ARE SECONDARIES.



L5 TAGS A & B
L6 " F & B
L7 " C & E
L8 " D & F
OSC. COIL DETAILS



SERVICE DEPT., E. K. COLE Ltd.,
Somerton Works, Arterial Road,
Southend-on-Sea
'Phone: Southend 2296
Head Office: Ekco Works, Southend-on-Sea

SCOTTISH SERVICE DEPOT:
26, India Street,
Glasgow, C.2
'Phone: Central 2012

NORTHERN SERVICE DEPOT:
55, Whitworth Street,
Manchester, 1
'Phone: Central 6711/2

MIDLAND SERVICE DEPOT:
11, Brook Street,
Birmingham, 3
'Phone: Central 2505/6

R 20.	21.	1.	2.	3.	22.	4.	5.	6.	9.	8.	11.7.	13.	10.19.	12.	16.	14.15.17.18.	R
C 1.2.	12. 3.	26. 4.32.	6.	7.8. 27. 31.	11.10.29.9.	19. 5. 14.	16. 13.	15.	30.17.		18.21. 22.	23.	24.	20.	25.	28.	C

