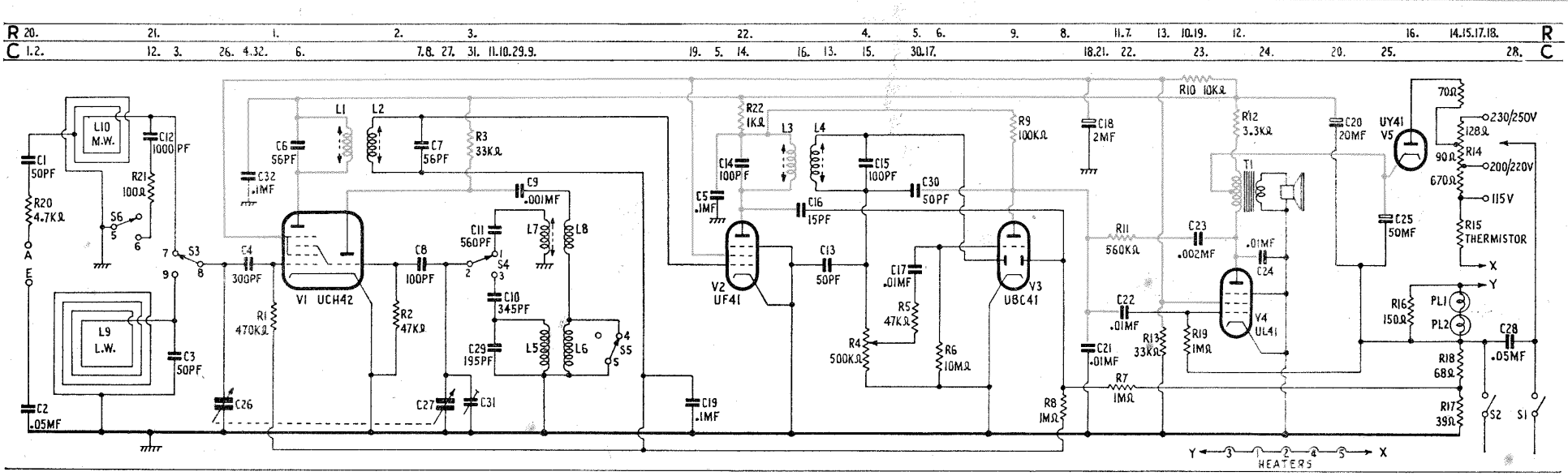
EKCO SERVICE DATA
MODEL U122



MODEL U122 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.

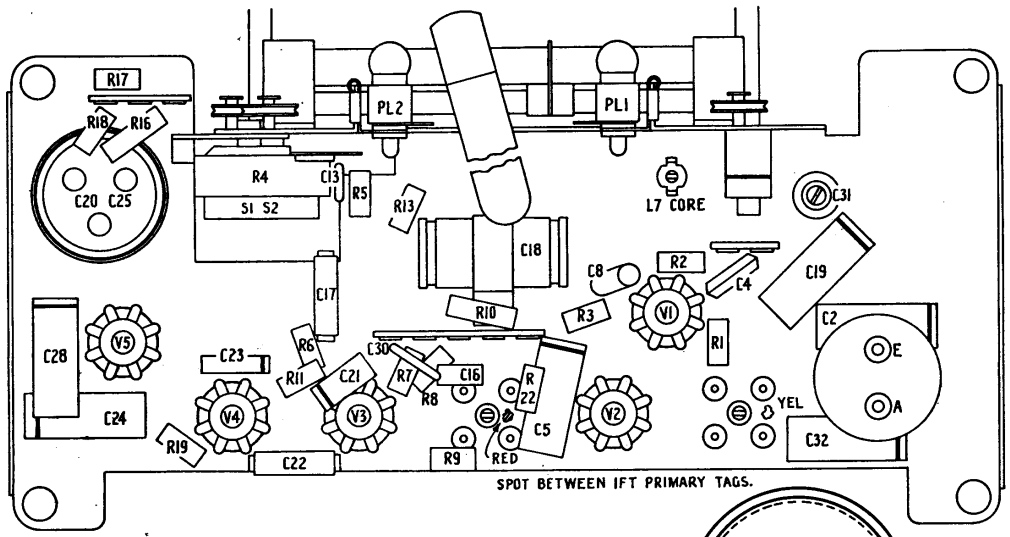
CHASSIS REMOVAL: Lay receiver flat, knobs uppermost, then remove the four rubber feet and slide base cover along the mains cord. Remove the four corner hexagonal pillars and the chassis is then free to be withdrawn from the cabinet.

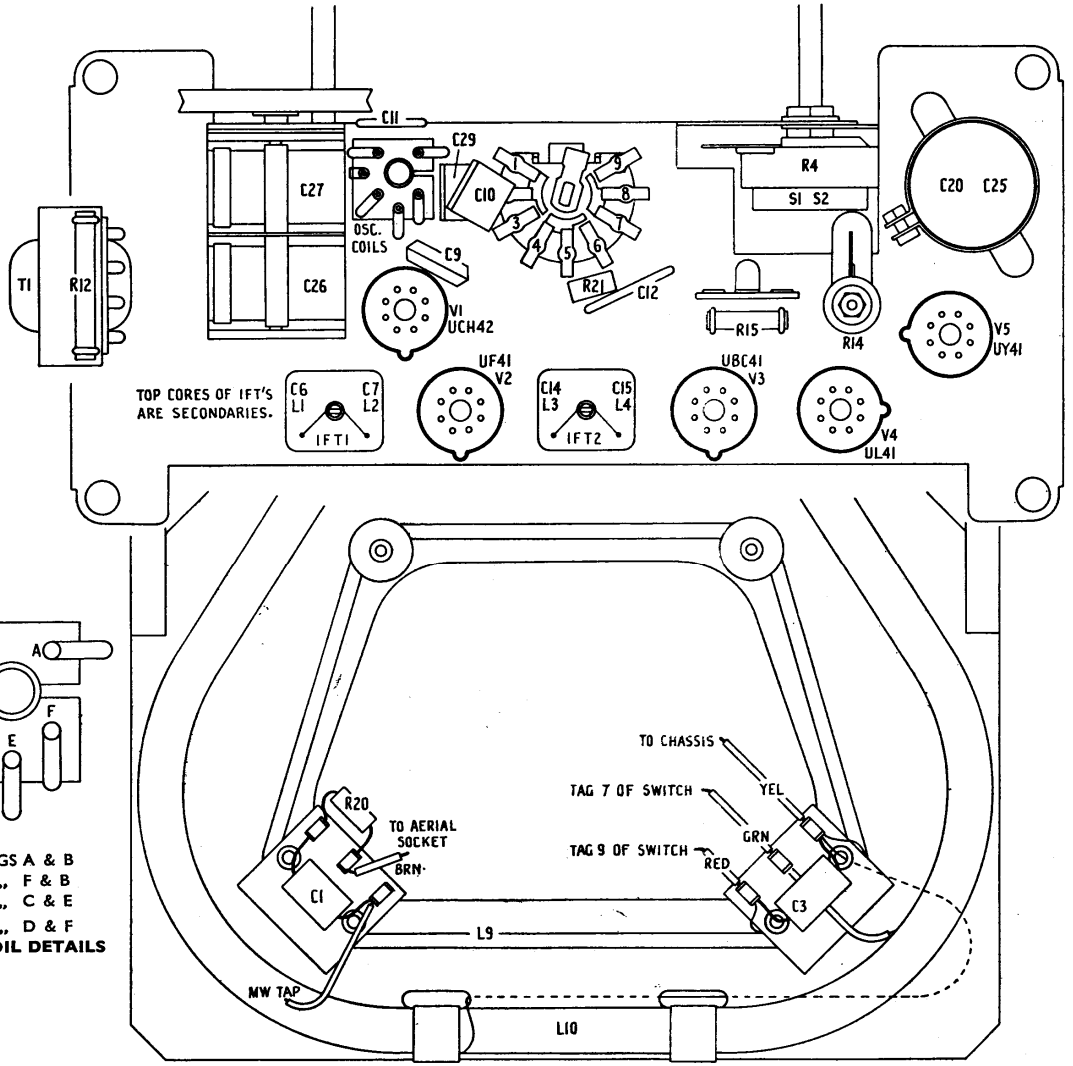
Note.—In early models, a soft plastic compound was used to prevent possible vibration of the grille against the escutcheon, and in a few cases the compound has prevented the free movement of the released chassis.

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.



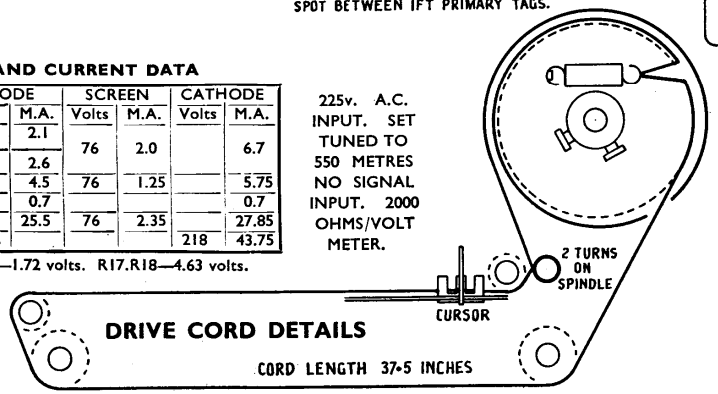


VOLTAGE AND CURRENT DATA

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

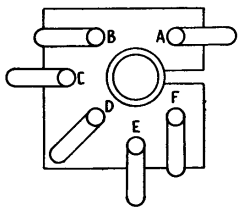
BIAS VOLTS : R7—1.72 volts. R17.R18—4.63 volts.

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



DRIVE CORD DETAILS

CORD LENGTH 37·5 INCHES



L5 TAGS A & B
L6 „ F & B
L7 „ C & E
L8 „ D & F

OSC. COIL DETAILS

RESISTANCE OF WINDINGS

COIL	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	T1.PRI	T1.SEC.
OHMS	30	30	15	15	6.5	3	2.5	1.5	11.5	2	170+200	less than 1.

SERVICE DEPT., E. K. COLE Ltd.,
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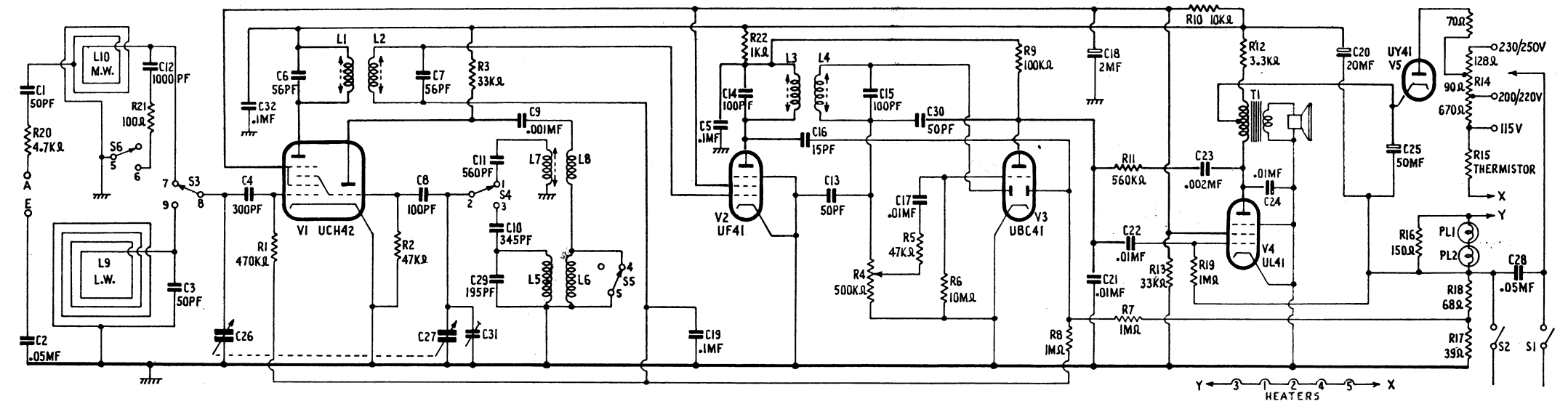
R 20. 21. 1. 2. 3. 22. 4. 5. 6. 9. 8. 11.7. 13. 10.19. 12. 16. 14.15.17.18. R
C 1.2. 12. 3. 26. 4.32. 6. 7.8. 27. 31. 11.10.29.9. 19. 5. 14. 16. 13. 15. 30.17. 18.21. 22. 23. 24. 20. 25. 28. C
L10 M.W.
L9 L.W.
C1 50PF
C2 .05MF
C3 50PF
C12 1000PF
R20 4.7KΩ
R21 100Ω
S6
S3
C32 .1MF
C6 56PF
C7 56PF
L1
L2
R3 33KΩ
C9 .001MF
C11 560PF
L7
L8
S4
C10 345PF
C29 195PF
L5
L6
S5
C4 300PF
C8 100PF
R1 470KΩ
R2 47KΩ
C26
C27
C31
V1 UCH42
R22 1KΩ
C14 100PF
C5 .1MF
L3
L4
C15 100PF
C30 50PF
C16 15PF
C13 50PF
C19 .1MF
V2 UF41
R9 100KΩ
C17 .01MF
R5 47KΩ
R4 500KΩ
R6 10MΩ
V3 UBC41
R8 1MΩ
C18 2MF
R11 560KΩ
C22 .01MF
C21 .01MF
R7 1MΩ
R10 10KΩ
R12 3.3KΩ
C23 .002MF
.01MF
C24
R13 33KΩ
R19 1MΩ
V4 UL41
T1
C20 20MF
C25 50MF
UY41 V5
70Ω
230/250V
128Ω
R14
90Ω
200/220V
670Ω
115V
R15 THERMISTOR
R16 150Ω
PL1
PL2
C28 .05MF
R18 68Ω
R17 39Ω
S2
S1
HEATERS