CONFIDENTIAL
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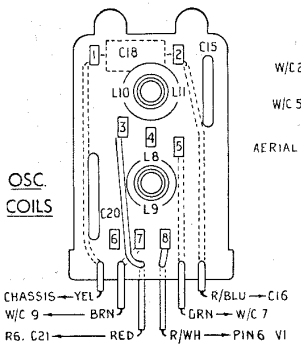
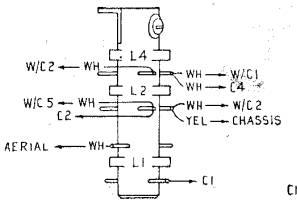
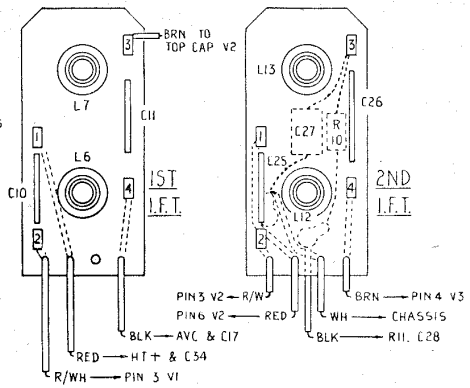
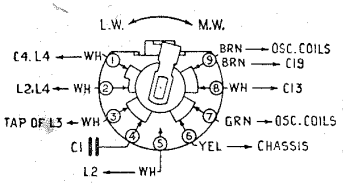
EKCO SERVICE DATA



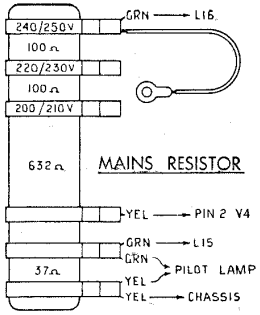


AER. COILS

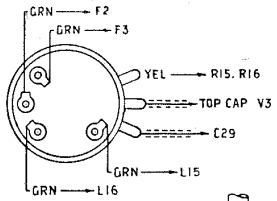




W/C SWITCH



MAINS RESISTOR



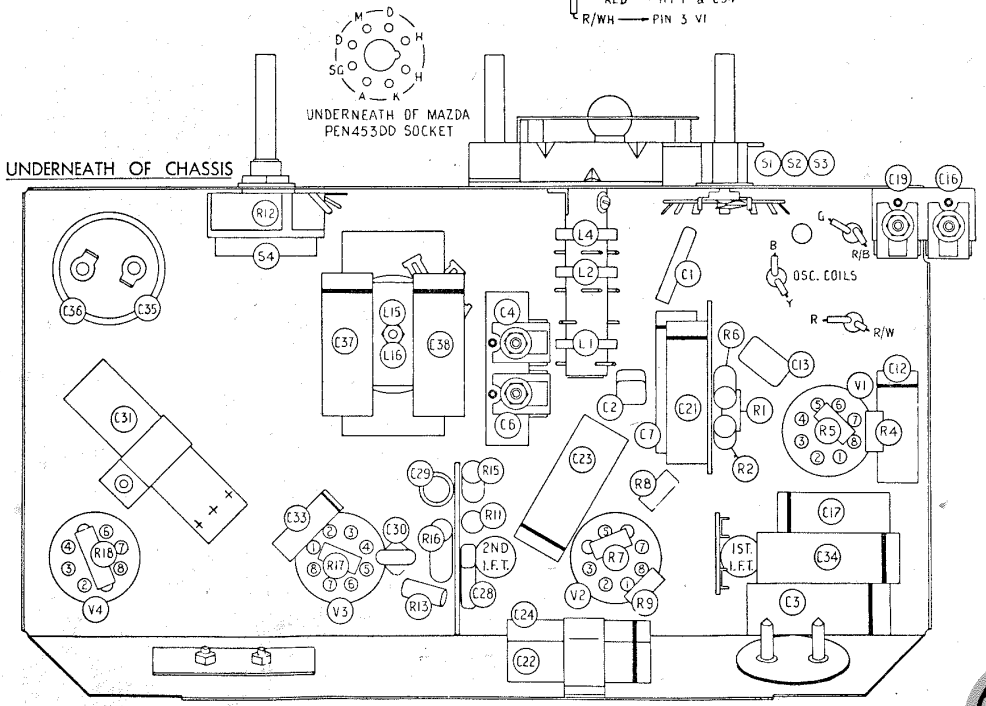
VOLUME CONTROL

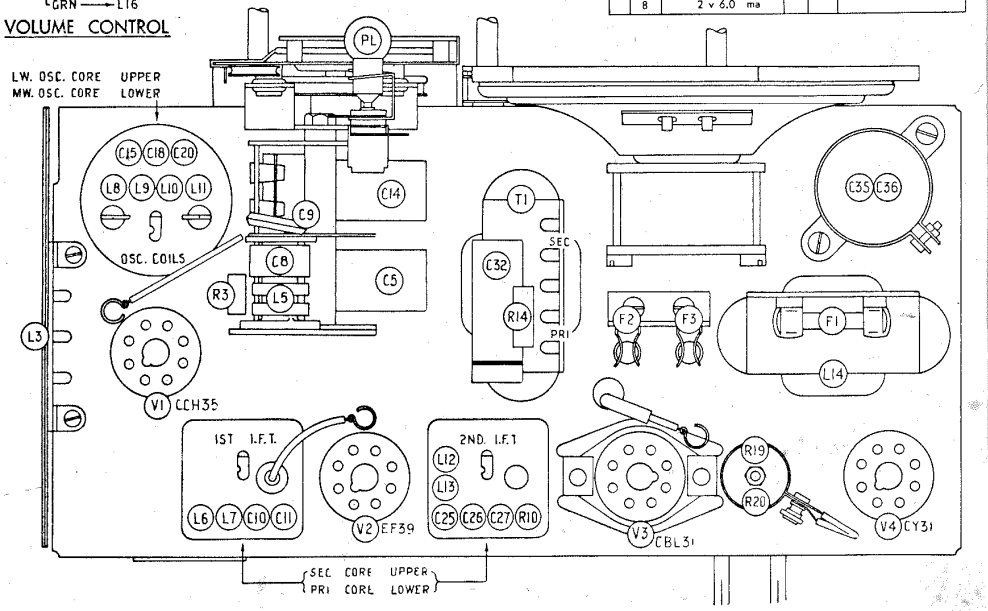
AVERAGE D.C. RESISTANCE OF WINDINGS

L No.	SWITCH	TEST POINTS	OHMS
1	–	COIL ENDS	14
2	–	ACROSS C2	28
3	–	COIL ENDS	0.8
4	LW	ACROSS C4	28
5	–	COIL ENDS	10
6	–	1st IFT RED & R/W LEADS	10
7	–	1st IFT BRN & BLK LEADS	10
8	–	TAGS 6 & 7 IN OSC. CAN	2.3
9 & 11	–	OSC COIL RED & R/W LEADS	1.7
10	–	ACROSS C16	4.6
12	–	2nd IFT RED & R/W LEADS	10
13	–	TAGS 3 & 4 IN 2nd IFT	6
14	–	COIL ENDS	360
15	–	COIL ENDS	1.6
16	–	COIL ENDS	1.6
T1 PRI.	–	COIL ENDS	350
T1 SEC.	–	COIL ENDS	0.5

VOLTAGE & CURRENT DATA

V	PIN		V	PIN	
1	3	230 v 1.4 ma	3	3	212 v 20 ma
	4	60 v 2.5 ma		6	230 v 7 ma
	6	80 v 2.9 ma		8	13 v 27 ma
	8	1.4 v 6.8 ma			
2	3	210 v 4.65 ma	4	5	230 v 65 ma (AC)
	6	70 v 1.35 ma		8	245 v 45 ma
	8	2 v 6.0 ma			





TOP OF CHASSIS

MODEL U29 is a 4-valve superheterodyne receiver covering the Medium and Long wavebands, for use on D.C. or A.C. mains. It has a plastic cabinet, vertical scale and three controls : Volume On/Off, Tuning, Wavechange.

MAINS SUPPLY: 200/250 D.C. or A.C. 50/100 c.p.s.

CONSUMPTION: D.C. 57.5 watts, A.C. 63 watts.

WAVE RANGES: M.W. 200-550 metres.
L.W. 900-2,000 metres.

VALVES: V1. CCH35 Frequency Changer. V2. EF39 I.F. Amplifier. V3. CBL31 2nd Det., AVC. L.F. Amplifier. V4. CY31 Half-wave Rectifier. All are Mullard with International Octal bases.

PILOT LAMP: 6.3v. 300 ma.

INTERMEDIATE FREQUENCY: 470 K/cs.

I.F. ALIGNMENT: (1) Switch to M.W. and fully mesh the gang. (2) Inject a 470 K/cs signal via a 0.1 mfd. condenser to the top cap of V1. (3) Connect output meter to the loudspeaker speech coil tags. (4) Adjust the four cores in the I.F.T.'s as follows : 2nd IFT upper and lower, then the 1st IFT upper and lower, all for maximum output. Reduce the signal input as necessary. NOTE : When using A.C. mains, check that the chassis is connected to the earthed side of the mains.

I.F. FILTER ADJUSTMENT: Remove the 0.1 mfd. condenser and inject the 470 K/cs. signal into the A and E sockets, then adjust the core of L5 for lowest meter reading.

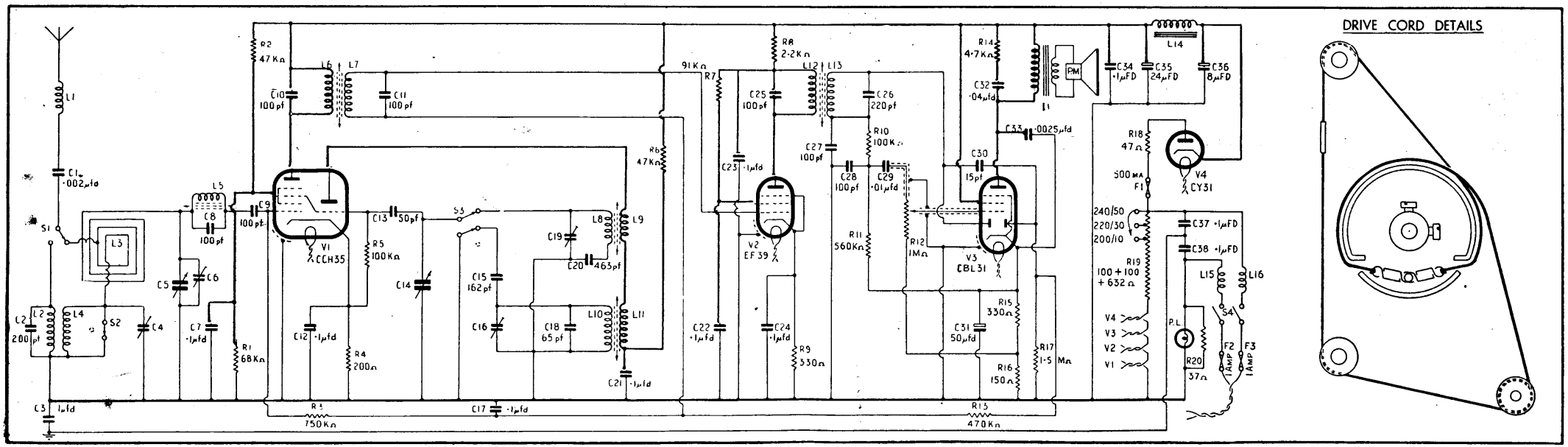
POINTER SETTING: Fully mesh the gang then, if necessary, slide the pointer along the cord until it coincides with the datum lines beneath LONG and MEDIUM on the station scale.

CALIBRATION:
Switch to M.W.
Adjust—
M.W. Osc. Trimmer (C19) at 200, then the M.W. Osc. core at 500M.
M.W. Aer. Trimmer (C6) at 250M.
Repeat these adjustments until there is no further improvement.
Switch to L.W.
Adjust—
L.W. Osc. Trimmer (C16) at 1,000M, then the L.W. Osc. Core at 2,000M.
L.W. Aer. Trimmer (C4) at 1,300M.
Repeat until there is no further improvement.

CHASSIS REMOVAL: Remove the back cover and knobs. Remove the two screws securing the tops of the scale plate and baffle, then the four base screws. Chassis can now be drawn clear.

DRIVE CORD RENEWAL: Take approx. 24 inches of new cord and tie off one end to one of the springs. Next, slip on to the cord half an inch of 1 mm. sleeving, then tie off the remaining cord end to the second spring, at the same time adjusting the total length of cord plus springs to 22 inches. Trim off surplus cord. (A complete cord assembly as above can be supplied under Part Number DP. 10565). Remove the drive unit assembly by loosening the drive drum set screws, and then removing the two 2BA nuts holding the gang front. Next remove the two 4BA screws and nuts on the lower part of the unit. Draw unit clear. Lay in the new assembled drive cord as shown in the diagram, giving one complete turn round the small drive wheel. Keep the sleeving between the two loose pulleys. Refit the unit to the chassis and gang. To position the drive drum, fully mesh the gang and turn the drum until the two springs are vertical and to the left centre. Tighten the grub screws. Refit the pointer over the sleeving and slide into correct position. See pointer setting.

VARIATIONS: Some models are fitted with Mazda PEN 453 DD and Mazda valve holder in V3 position. In such cases, the lead from the volume control is disconnected from the junction of R15, R16 and connected to chassis, giving increased bias to the grid.



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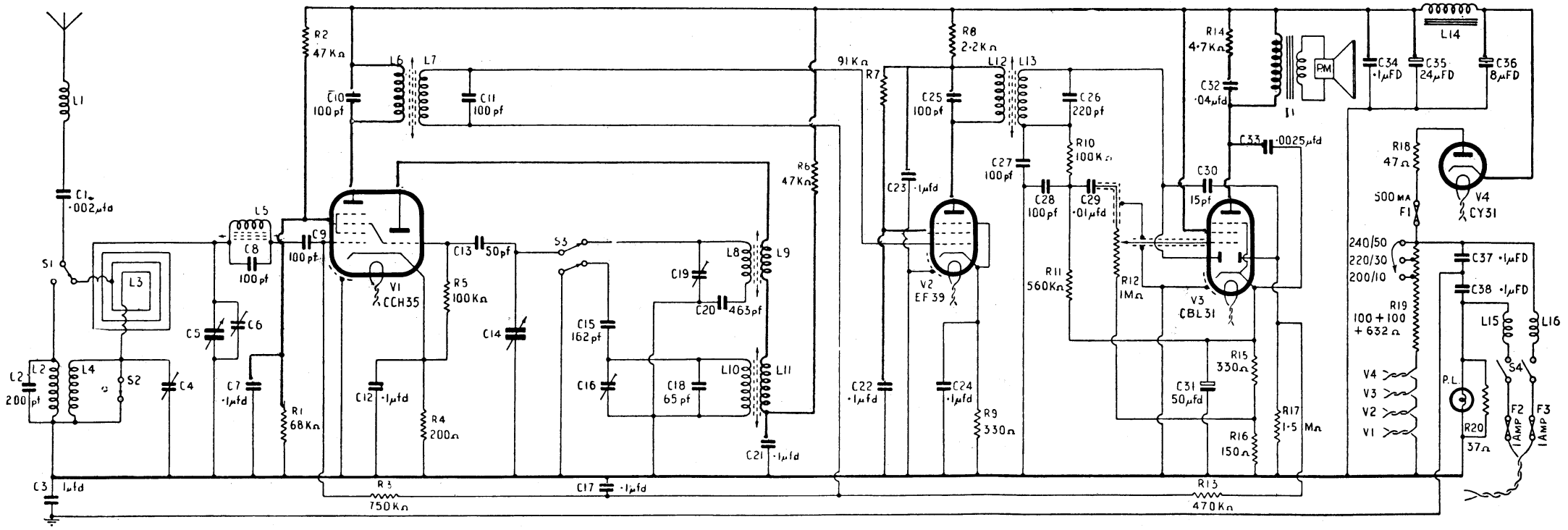
L1
C1 ·002μfd
S1
L3
L2
200pf
L4
S2
C4
C5
C6
C7 ·1μfd
L5
C8 100pf
R1 68Kn
R2 47Kn
C10 100pf
L6
L7
C11 100pf
C9 100pf
V1 CCH35
R5 100Kn
C12 ·1μfd
R4 200n
C13 50pf
C14
S3
C15 162pf
C16
C19
C20 465pf
L8
L9
C18 65pf
L10
L11
C21 ·1μfd
R6 47Kn
C3 1μfd
R3 750Kn
C17 ·1μfd
91Kn
R7
R8 2·2Kn
C25 100pf
C23 ·1μfd
V2 EF39
L12
L13
C26 220pf
C27 100pf
C28 100pf
C29 ·01μfd
R10 100Kn
R11 560Kn
R12 1Mn
C22 ·1μfd
C24 ·1μfd
R9 330n
R13 470Kn
R14 4·7Kn
C32 ·04μfd
C33 ·0025μfd
C30 15pf
V3 CBL31
R15 330n
C31 50μfd
R16 150n
R17 1·5 Mn
PM
T1
C34 ·1μFD
C35 24μFD
C36 8μFD
L14
R18 47n
500 MA F1
V4 CY31
240/50
220/30
200/10
R19 100+100+632n
V4
V3
V2
V1
C37 ·1μFD
C38 ·1μFD
L15
L16
S4
P.L.
R20 37n
F2 1 AMP
F3 1 AMP