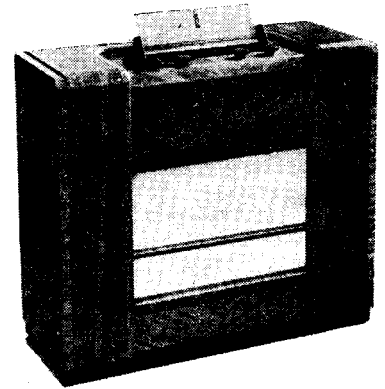




MULLARD MASTER RADIO

MODELS MAS1108 & MAS1108A



SPECIFICATIONS

Subject to alteration without notice.

Power Supply	220-260V 40-60c/s
Tuning Ranges	B/C Band 530-1620 Kc/s S/W Band 5.9-18.4 Mc/s
Intermediate Frequency	455 Kc/s
Cabinet	De-luxe Wooden Console

VALVE EQUIPMENT AND VOLTAGE ANALYSIS

Valve Function	Valve No.	Valve Type	Plate Volts	Screen Volts	Osc. P. Volts
Frequency Converter	V1	ECH35	238	67	100
I.F. Amplifier	V2	6SK7GT	246	88	—
Demodulator, A.V.C. and 1st Audio	V3	6SQ7GT	95	—	—
Power Amplifier	V4	EL33A	231	246	—
Rectifier	V5	6X5GT	V5 Cathode to L12 C.T.—276 volts		
Dial Lamps	6.3V 0.32A tubular screw				
Voltage across R12 -1.8V; across R11 and 12 -9.4V.					

NOTE: These voltages are measured with an "1,000 ohms per volt" meter and may vary \pm 10% from the quoted figures. They are measured from the socket points indicated or across the resistors listed. The receiver should be in a "no signal" condition.

REMOVAL OF CHASSIS FROM CABINET.

Remove the power plug from the mains outlet. Remove the four control knobs, the speaker and dial lamp plugs from their respective sockets, and release the dial cursor assembly from the dial cord. Lay the cabinet flat on some protective material and remove the four screws securing the chassis to its baseboard—do NOT remove the baseboard from the cabinet. The chassis may now be lifted from the cabinet.

The chassis may be replaced by a reversal of the above procedure.

DIAL GLASS REMOVAL.

Raise the dial glass to its maximum forward position. This allows access to the dial glass clamping screws in the dial assembly end housing. Loosen the clamping screws (it is not necessary that they be completely removed) and withdraw the dial glass from the assembly. When the dial glass is replaced make sure that it is securely clamped.

MAINS VOLTAGE ADJUSTMENT.

The power transformer is provided with two mains voltage tapplings, 220/240 volts and 250/260 volts. This receiver is adjusted at the factory to the 220/240 volts tapping.

ALIGNMENT.

The calibrated scale on the top edge of the chassis in conjunction with an auxiliary pointer, which can be made up from workshop materials, facilitates alignment. With the gang fully closed, set the auxiliary pointer to the letter "S" mark.

On the short wave band the receiver oscillator operates at a frequency above that of the incoming signal.

DIAL LAMP REPLACEMENT.

This operation is carried out from outside the cabinet. The lamps are located one at each end of the dial glass in the end housing. The covers are a clip fit and are easily removed.

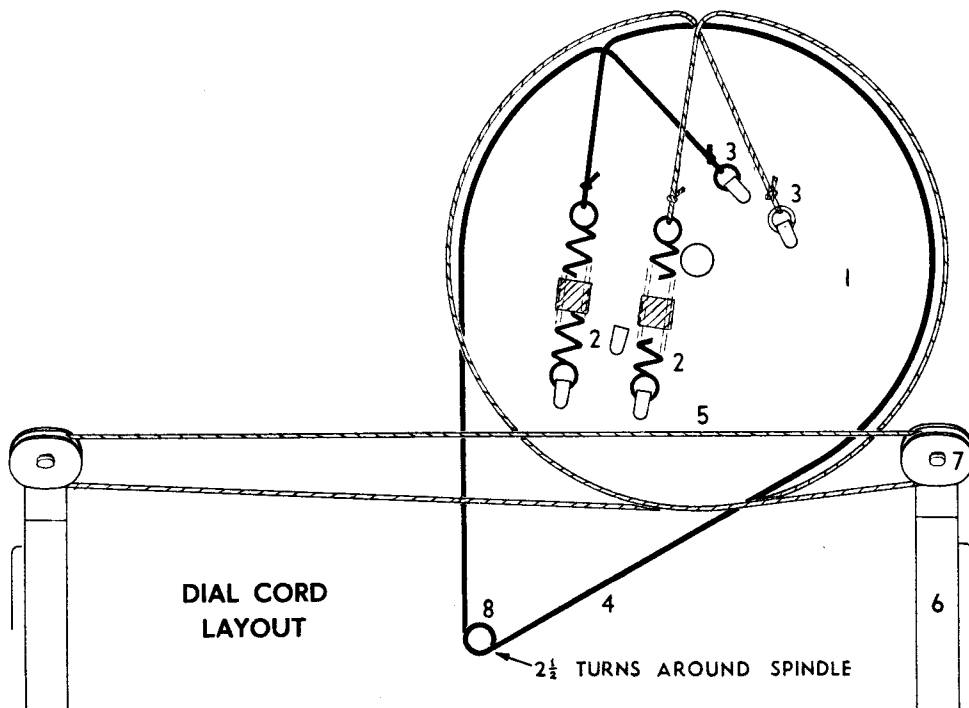
REMOVAL OF INCLINATOR DIAL ASSEMBLY.

After the chassis is removed from the cabinet—see "Removal of Chassis from Cabinet"—the inclinor dial assembly mounting brackets (one at each end of the assembly) are easily accessible. Removal of the mounting brackets permits the dial assembly to be lifted clear of the cabinet.

In order to prevent possible damage to the dial glass, it is well to remove it before commencing the removal of the dial assembly—see "Dial Glass Removal."

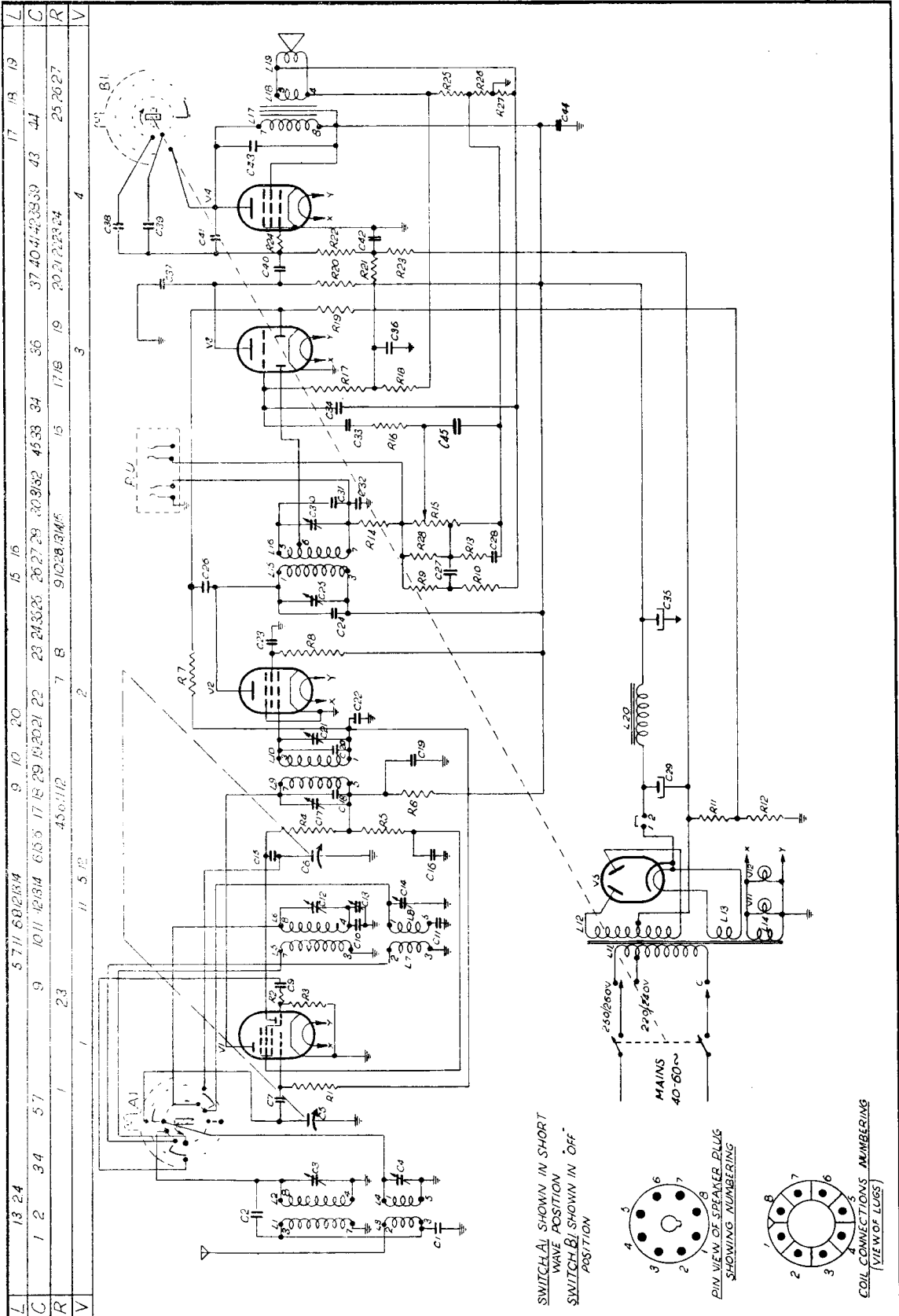
MISCELLANEOUS COMPONENTS

No. on Dial Parts Diagram	Description	Code No.	No. on Dial Parts Diagram	Description	Code No.
—	Arm, side (W/C switch)	CS.218.006	5	Cord, dial	CS.361.811
—	Assembly, cursor	CR.480.614	4	Cord, drum	CS.361.812
1	Assembly, dial drum	CR.382.804	—	Cover, front (Incl. Dial Assy.)	CS.430.828
—	Assembly, dial housing R.H. (Incl. Dial Assy.)	CR.272.604	—	Cover, rear (Incl. Dial Assy.)	CS.430.827
—	Assembly, dial housing L.H. (Incl. Dial Assy.)	CR.272.605	—	Glass, dial, printed— MAS 1108 MAS 1108A	CS.412.255 CS.412.291
—	Assembly, lamp cover R.H. (Incl. Dial Assy.)	CR.272.401	—	Grommet, chassis mounting	CS.422.421
—	Assembly, lamp cover L.H. (Incl. Dial Assy.)	CR.272.400	—	Grommet, power cord	CS.422.414
—	Assembly, lamp holder	CZ.367.906	—	Key, W/C clicker	CS.365.803
—	Assembly, pressure plate (Incl. Dial Assy.)	CR.391.207	—	Knob, tuning	CR.523.656
6	Assembly, pulley spindle	CR.436.201	—	Mount, bakelite (Incl. Dial to Cabinet)	CS.235.813
—	Assembly, slider hinge	CR.432.200	—	Nut, tee (chassis mounting)	CH.603.214
—	Assembly, T/C-on/off switch (complete)	CZ.200.218	—	Plate, clamping (Incl. Dial to Mount)	CS.235.200
—	Assembly, W/C switch (complete)	CZ.200.027	—	Plate, friction (Incl. Dial Assy.)	CS.366.200
—	Assembly T/C clicker	CR.450.025	—	Plug, 2-pin polarised	CR.102.200
—	Assembly, W/C clicker	CR.450.026	7	Pulley, wooden	CS.360.202
—	Assembly, terminal	CZ.376.201	3	Ring, dial cord	CS.281.807
—	Badge, Mullard	CR.531.409	—	Rod, dial slide	CS.382.202
—	Bank, T/C switch	CZ.200.204	—	Socket, octal wafer	CZ.369.507
—	Bank, W/C switch	CZ.200.026	—	Socket, 2-pin polarised	CR.102.401
—	Brace, end (W/C switch)	CS.219.000	—	Socket, pick-up	CZ.370.106
—	Bracket, cover attaching R.H. (Incl. Dial Assy.)	CS.229.803	8	Spindle, tuning	CS.351.410
—	Bracket, cover attaching L.H. (Incl. Dial Assy.)	CS.229.802	—	Spring, compression (Incl. Dial Assy.)	CS.281.806
—	Bracket, tuning spindle	CS.224.603	2	Spring, dial drum	CS.210.010
—	Clamp, speaker mounting	CS.234.813	—	Spring, return (Incl. Dial Assy.)	CS.212.201
—	Clamp, incl. dial mounting to cabinet	CS.235.205	—	Spring, tuning spindle	CS.212.001
—	Cloth, baffle	CE.081.14	—	Spring, W/C clicker key	CS.211.802
			—	Switch, mains on/off	CZ.220.001
			—	Washer, friction (Incl. Dial Assy.)	CS.366.201
			—	Washer, felt (knobs)	CS.424.018



MAS1108 MAS1108A

SERVICE DATA





SERVICE DATA

MAS1108
MAS1108A

PARTS LISTS

CAPACITORS

No.	Description	Code No.
C1-38	150 pF mica	
C2	5 pF glass	CZ.102.303
C3-4-12-14-17-21-25-30	30 pF air trimmer	CZ.113.700
C5-6	2 gang tuning— MAS 1108 2H MAS 1108A	CZ.107.720
C7	0.001 mF mica	
C9-15-32	100 pF mica	
C10	400 pF mica	
C11	0.0045 mF mica	
C13	125 pF ceramic trimmer	CZ.118.200
C16-19-23-40	0.01 mF paper 600V	
C18-20-24-31	80 pF mica	
C22-42	0.1 mF paper 200V	
C26-34-41-45	30 pF mica	
C27-43	0.006 mF paper 600V	
C28	0.05 mF paper 200V	
C29-35	16 mF 525V electrolytic	
C33	0.004 mF paper 600V	
C36	0.02 mF paper 400V	
C37	0.002 mF paper 600V	
C39	50 pF mica	
C44	0.1 mF paper 600V	

RESISTORS

No.	Description	Code No.
R1-7-19-21	1 megohm ½W carbon	
R2	150 ohms ½W carbon	
R3	25,000 ohms ½W carbon	
R4	30,000 ohms 1W carbon	
R5	100,000 ohms 1W carbon	
R6	1,000 ohms 1W carbon	
R8	50,000 ohms 1W carbon	
R9-22-28	0.5 megohm ½W carbon	
R10	20,000 ohms ½W carbon	
R11	150 ohms 1W W/W	
R12	35 ohms 1W W/W	
R13	10,000 ohms ½W carbon	
R14-16-24	50,000 ohms ½W carbon	
R15	0.5 megohm tapped potentiometer	
R17	2 megohms ½W carbon	
R18-23	250,000 ohms ½W carbon	
R20	250,000 ohms 1W carbon	
R25	200 ohms ½W W/W	
R26	75 ohms ½W W/W	
R27	100 ohms ½W W/W	

COILS

No.	Description	Ohms	Code No.
L1	Aerial Coil	21	CZ.320.021
L2		3.5	
L3		1.3	
L4		<0.5	
L5	Oscillator Coil	2.3	CZ.321.006
L6		5.0	
L7		<0.5	
L8		<0.5	
L9	1st I.F. Transformer	4.8	CZ.326.205
L10		4.8	
L11	Power Transformer	30	CZ.344.021
L12		500	
L13		<0.5	
L14		<0.5	
L15	2nd I.F. Transformer	4.8	CZ.326.204
L16		5.1	
L17	Speaker and Transformer, 7,000 ohms	600	CZ.161.303
L18		<0.5	
L19		1.8	
L20	Filter Choke	450	CZ.340.406

IMPORTANT! In ordering spare parts, quote CODE NUMBER of part and MODEL NUMBER of Receiver. In claiming free replacement under GUARANTEE, return defective part PROMPTLY and quote MODEL and SERIAL NUMBER of Receiver and DATE OF PURCHASE.