

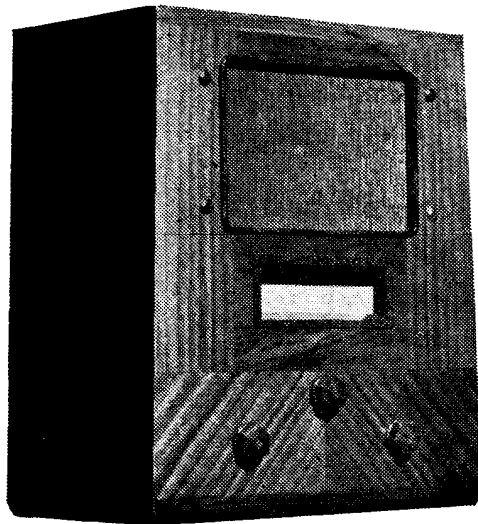
# TRADE SERVICE SHEET

for the

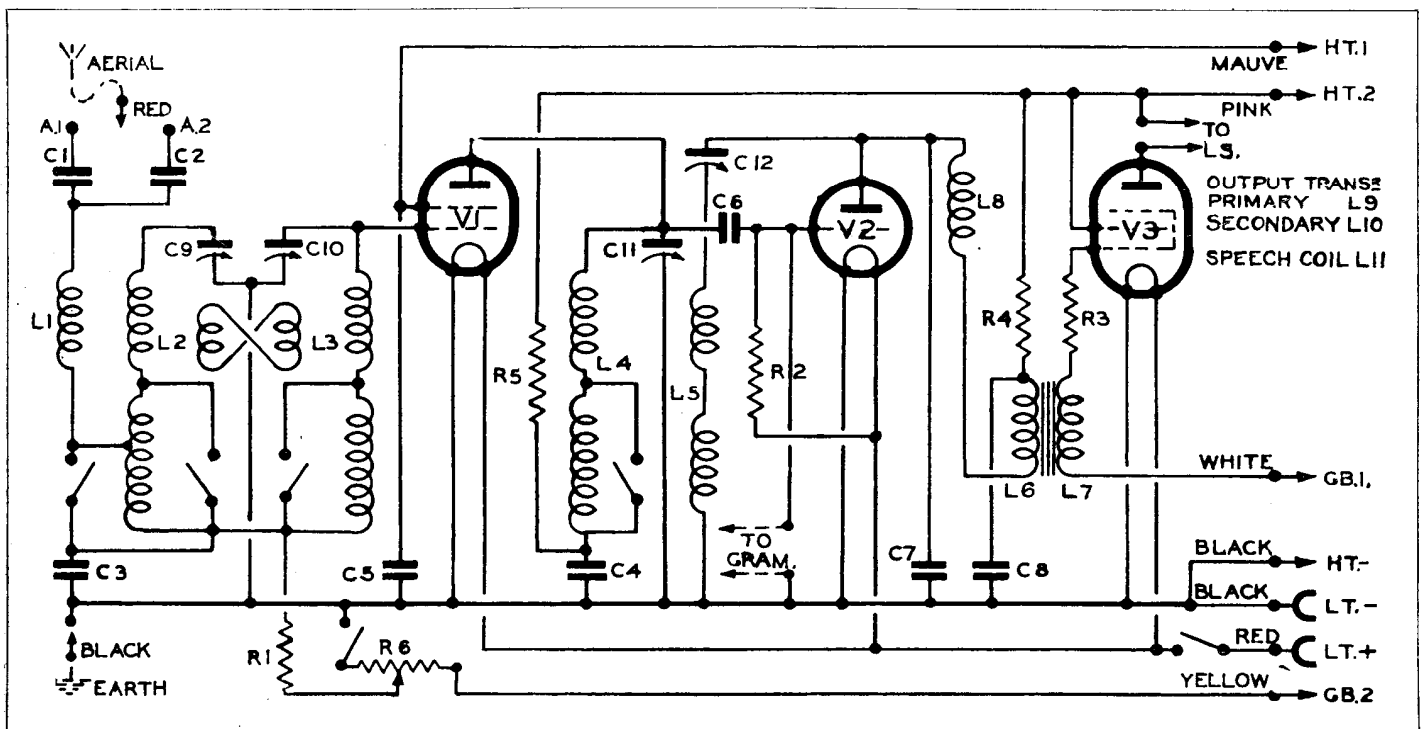
# LISSEN

## THREE VALVE BAND PASS BATTERY RECEIVER

MODEL



8073



# SPECIFICATION OF MODEL 8073

Lissen Model 8073 is a 3 Valve Battery Receiver for operation with external aerial and earth.

Selectivity of a high degree is obtained by the arrangement of a loose coupled aerial circuit in conjunction with a Band Pass Filter, employing Iron Cored Coils.

The H.F. circuit employs a Variable Mu Screened Grid Valve (V1), which is coupled to a Detector Valve (V2), followed by an economy Pentode Valve (V3) in the output stage driving a Permanent Magnet Moving Coil Loudspeaker.

Volume is regulated by a Combined Variable Resistance and Condenser. The Resistance provides for a variation of the Grid Bias on the Screened Grid Valve (V1), while the Condenser operates in the Reaction circuit of the Detector Valve (V2).

## SERVICING MODEL 8073

Test H.T., L.T., and Grid Bias Batteries. (These should be substituted in case of any doubt).

Valve Emissions should be tested under normal working conditions (as specified in the Operating Instruction Leaflet issued with the Receiver).

Valve Emissions should be compared with the readings given in Table 1, and in the event of their not corresponding to within 10% of these readings, an examination should be made of the wiring of the particular circuit where any discrepancy is observed (see particulars for removing chassis from cabinet).

Having examined and found the wiring correct, the component parts should then be tested for internal disconnection.

Particulars of components in the various Mu circuits are given in Table 2.

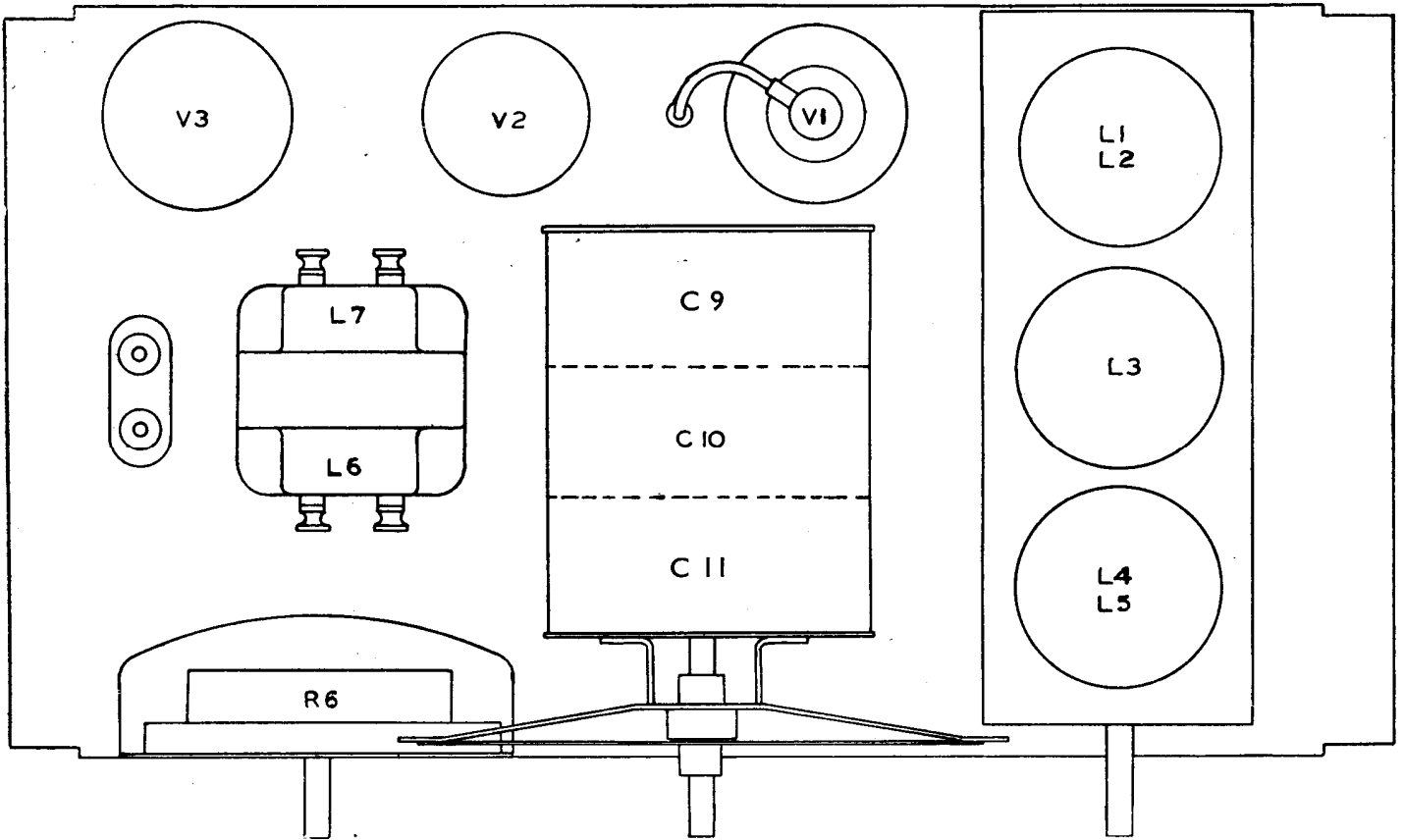
TABLE 1

Valve	Circuit	Readings taken on load with new Lissen 120 volt H.T. Battery	Readings taken on load with partially discharged (87 volts) H.T. Battery
V1. (SG2V.)	Screen Voltage	64 volts	45 volts
	,, Current	.5 m/a.	.45 m/a.
	Anode Voltage	89 volts	65 volts
	,, Current	3.5 m/a.	1.8 m/a.
V2. (L2.)	Anode Voltage	40 volts	28 volts
	,, Current	2 m/a.	1.3 m/a.
V3. (PT225.)	Aux. Grid Voltage	113 volts	81 volts
	,, Current	1 m/a.	.6 m/a.
	Anode Voltage	110 volts	77 volts
	,, Current	6 m/a.	3.6 m/a.

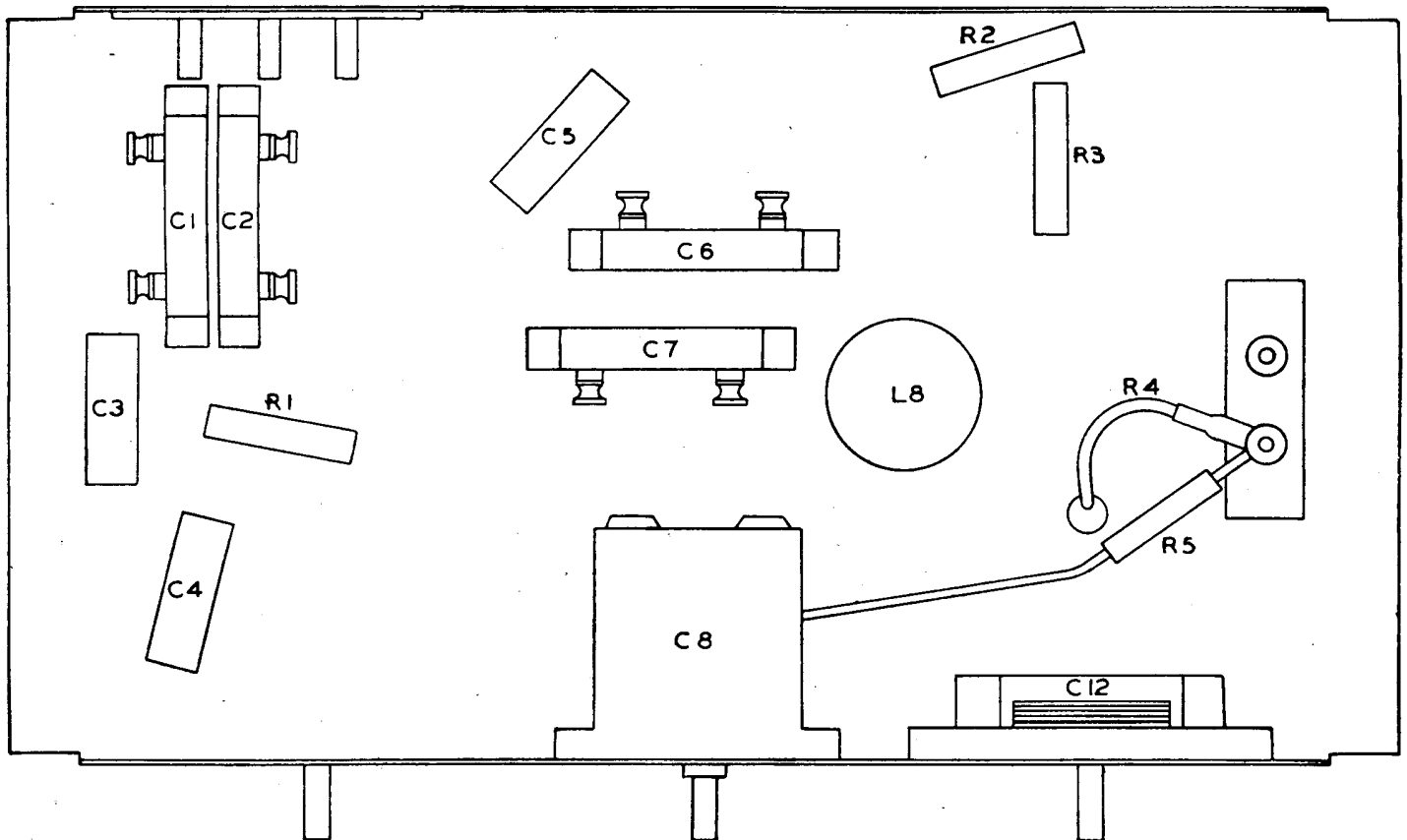
TABLE 2

Valve	Associated Components
V1. SG2V. H.F. Circuit.	Coils and Chokes ... .. L1, L2, L3, L4 Condensers ... .. C1, C2, C3, C4, C5, C9, C10, C11 Resistances ... .. R1, R5, R6
V2. L2. Detector Circuit.	Coils, Transformers and Chokes ... .. L5, L6, L8 Condensers ... .. C6, C7, C8, C12 Resistances ... .. R2, R4
V3. PT225. Output Circuit.	Coils, Transformers and Chokes ... L7, L9, L10, L11 (Speech Coil) Condenser ... .. Resistance ... .. R3

ABOVE CHASSIS



BELOW CHASSIS



## D.C. RESISTANCE OF COILS, CHOKES AND TRANSFORMERS

Circuit Indication	Description	D.C. Resistance
L 1	Aerial Coupling Coil	2.5 ohms
L 2	1st Band Pass Coil } Medium Wave	1.3 to 1.4 ohms
L 3		
L 4	Det. Grid Coil	19 ohms
L 5	Reaction Coil	3.2 ohms
L 6	L.F. Transformer, Primary	1,100 ohms
L 7		
L 8	H.F. Choke	15,000 ohms
L 9	Output Transformer, Primary	450 ohms
L 10		
L 11	Speaker Speech Coil	700 ohms
L 12		.35 ohms
L 13		3.5 ohms

## CONDENSERS

Circuit Indication	Description
C 1	.0003 mfd. Mica
C 2	.00005 " "
C 3	.1 " Tubular
C 4	.1 " "
C 5	.1 " "
C 6	.00005 " Mica.
C 7	.0004 " "
C 8	1.0 " Mansbridge
C 9	.0005 " Variable
C 10	.0005 " " } Ganged
C 11	.0005 " " }
C 12	Variable Reaction (Coupled to Bias Resistance R6).

## RESISTANCES

Circuit Indication	Description
R 1	100,000 ohms Grid Leak Type
R 2	1 meg ohm " " "
R 3	80,000 ohms " " "
R 4	30,000 ohms Flexible " "
R 5	5,000 ohms Composition Type
R 6	5,000 ohms Variable Type (Coupled to Reaction Condenser C12).

## REMOVING CHASSIS FROM CABINET

Should it be found necessary to take the chassis out of the cabinet, remove the control knobs by slackening grub screws in the knobs. The chassis may then be withdrawn after releasing the four wood screws the heads of which will be found at the corners on the upper side of the chassis. The loudspeaker leads are long enough to allow the speaker to remain in position.

The cabinet is designed with an inspection board at the bottom; the removal of which gives free access to the wiring and components whilst the chassis remains in position. In turning the cabinet upside down take care that the valves do not fall out of their holders.

Issued by

# LISSEN LIMITED

## SERVICE DEPARTMENT

ANGEL ROAD, EDMONTON, N. 18

