**DESCRIPTION**

GENERAL. The K-B Model LG 30 is a 4-valve plus rectifier, three waveband superheterodyne Radiogramophone for operation on AC mains supply of 200-250 volts at 50 cycles only, and is designed for use with record speeds of 78, 45 and $33\frac{1}{3}$ r.p.m.

PICK-UP. An Acos turnover pick-up is supplied fitted with two sapphire needles suitable for 78, 45 and $33\frac{1}{3}$ r.p.m. records respectively.

The colour codes of this pick-up are Red for Long Playing and Green for Standard.

Any reference to Acos pick-ups should be made direct with the manufacturers, Messrs. Cosmocord Ltd.

Sapphire needles may be replaced as shown in diagram.

MOTOR UNIT. This model is fitted with a Garrard unit. As separate service instructions are issued by the manufacturers all service queries should be made to them direct.

WAVE RANGE.

Long Wave - 142-340 kc/s (2,100 - 880 metres.)	Medium Wave - 525 - 1,610 kc/s (570 - 187 metres).
Short Wave - 5.8 - 18.4 mc/s (51 - 16.3 metres).	

VALVES.

V1. Frequency Changer - - - - - BRIMAR 6BE6	V4. Output - - - - - BRIMAR 6AQ5
V2. I.F. Amplifier - - - - - BRIMAR 6BA6	V5. Rectifier - - - - - BRIMAR 6X5GT
V3. I.F. Amplifier, AVC and L.F. Amplifier - BRIMAR 6AT6	

OUTPUT 4 watts.

CONSUMPTION. Radio 50 watts. Gram. 65 watts

SPEAKER. 10" High Flux permanent magnet.

CABINET. Bureau style. Dimensions : Height 32", width $29\frac{1}{2}$ ", depth $14\frac{1}{4}$ ".

REMOVAL OF CHASSIS FROM CABINET

Disconnect from mains. Remove knobs. Unscrew aerial/earth/extension speaker panel and disconnect loudspeaker and p/u leads. Disconnect motor mains lead and unclip indicator lamp. The chassis may now be completely removed by unscrewing the three chassis fixing screws.

CIRCUIT DIAGRAM LG 30



MODEL
LG 30

V1
6BE6

V2
6BA6

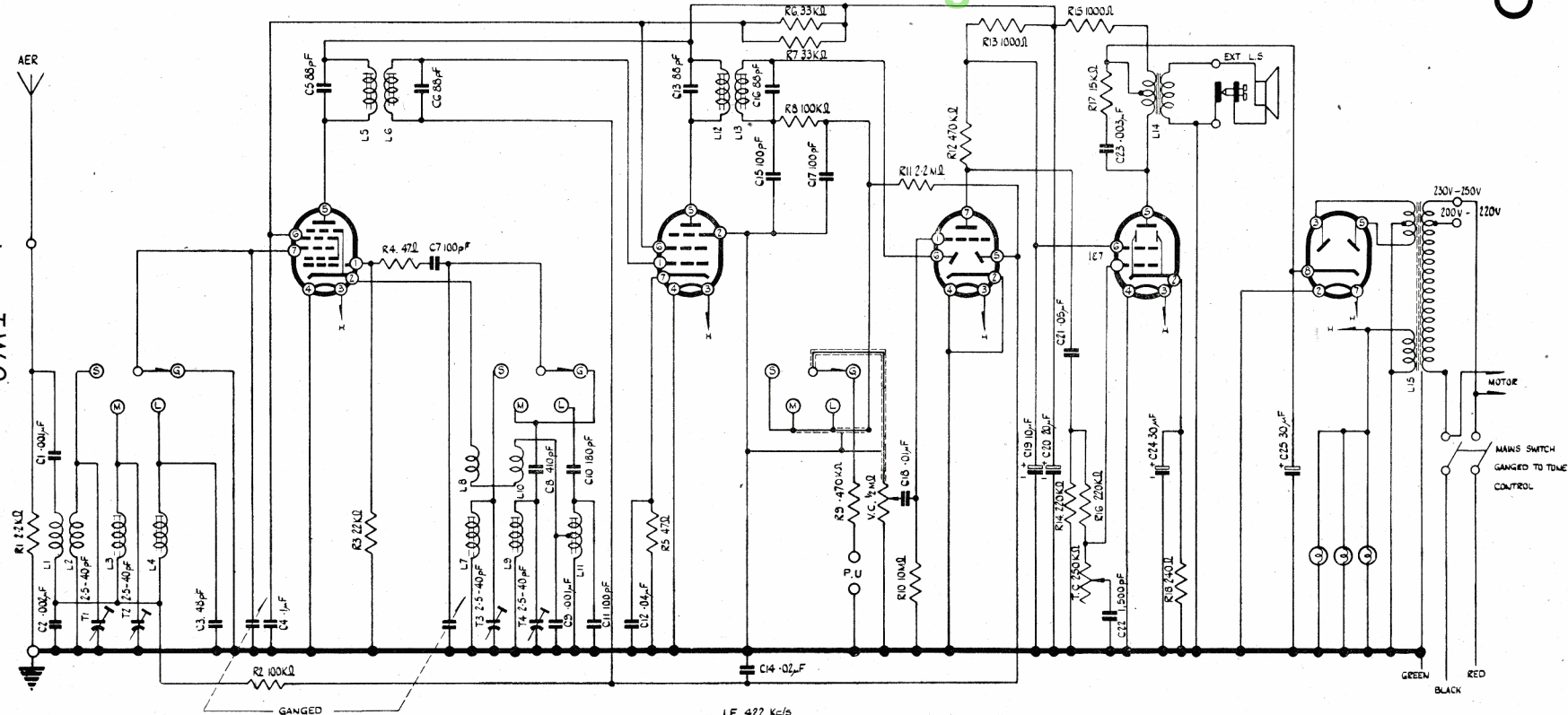
V3
6AT6

V4
6AQ5

V5
6X5GT

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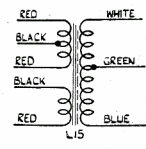
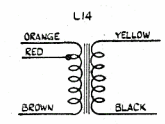


- L1, L2, SW AER 58 Mc/s - 18 Mc/s.
- L3, MW AER 515 Kc/s - 460 Kc/s.
- L4, LW AER 142 Kc/s - 340 Kc/s.

ORDER OF SWITCHING TURNING
CLOCKWISE. GRAM, LONG, MEDIUM, SHORT
SWITCHING SHOWN IN GRAM POSITION,
VIEWED FROM KNOB

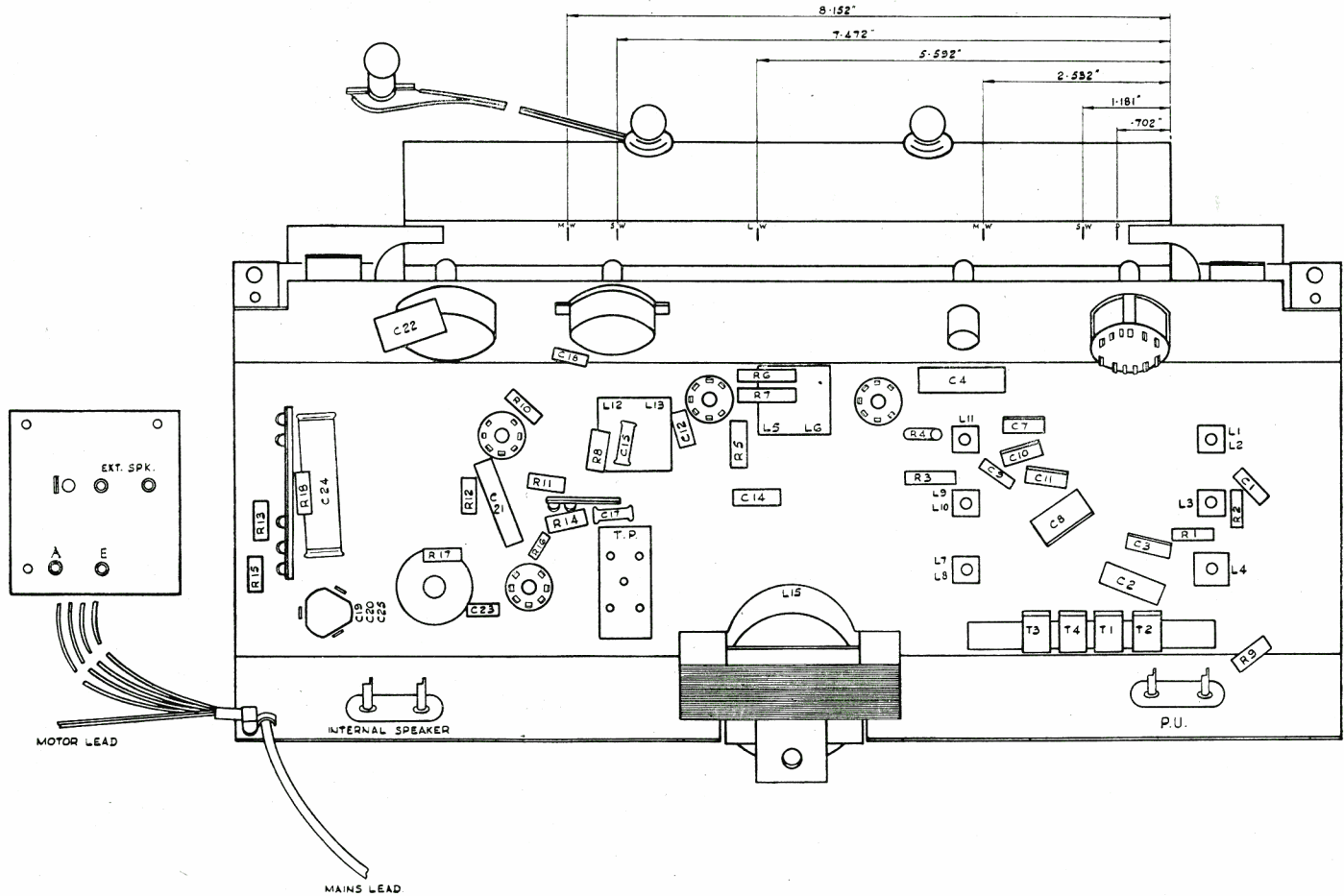
- L7, L8, SW OSC.
- L9, L10, MW OSC.
- L11, LW OSC.

L.F. 422 Kc/s



MOTOR
MAINS SWITCH
GANGED TO TUNE
CONTROL

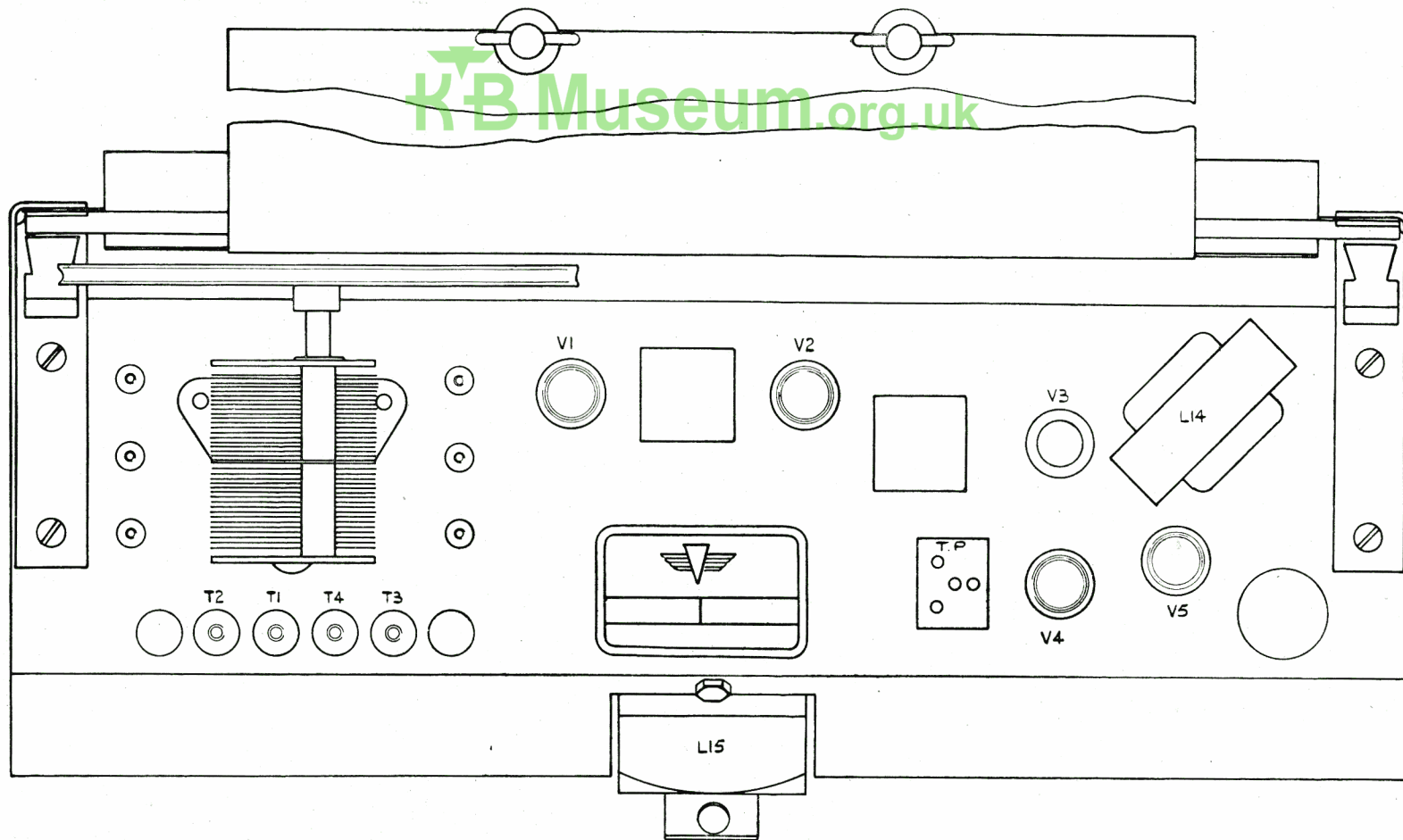
RESISTORS	R13 R16 R15	R17 R12	R10 R16 R18 R14	R8	R5 R6 R7	R4 R3	R1 R2 R9
CONDENSERS	C24 C19. C20. C25	C22 C23. C21	C18. C17. C15. C12	C14	C4 C9 C7 C8	C10 C11 C2	C3 C1
INDUCTANCE			L12. L13	L15. L5 L6		L11. L9. L10. L7. L8	L1 L2. L3. L4
MISCELLANEOUS	EXT. SPEAKER PANEL	DIAL LAMP	ON-OFF TONE CONTROL	VOLUME CONTROL TAPPING PANEL	MAINS TRANSFORMER	TUNING CONTROL	WAVE CHANGE SWITCH



TOP VIEW OF CHASSIS

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INDUCTANCE		L15			L14
VALVES		V1 6BE6	V2 6BA6	V3 6AT6	V4 6AQ5 V5 6X4(H630) V5 6X5GT(LG30)
MISCELLANEOUS	TRIMMERS T2 T1 T4 T3		IDENTITY LABEL	TAPPING PANEL	

ALIGNMENT CHART FOR LG 30

* Operations **MUST** be carried out in the order indicated.

* Operation	Alignment of	Connect Signal Generator to	Inject Signal via	Adjust Input Signal to	Set Wave Band Switch to	Set Tuning Pointer to	To be adjusted for maximum output
1	I.F.	Grid of Freq. Changer	·1 mfd.	422 kc/s	M.W.	Datum	L13, 12, 5 & 6 I.F. Trans. Cores
2	M.W.	Aer. Socket	Standard Dummy Aerial	600 kc/s	..	500 M	L10, L9 Osc. Cores
3	"	"	"	1,400 kc/s	"	214 M	T4, T2, Osc. & Aer. Trimmers
4	L.W.	"	"	225 kc/s	L.W.	1,333 M	L11, L4 Cores
5	S.W.	"	"	6 mc/s	S.W.	50 M	L8, L7 Cores
6	"	"	"	15 mc/s	"	20 M	T3, T1 Osc. & Aer. Trimmers

NOTES

The oscillator operates at a higher frequency than the input signal on all bands.

The tuning pointer should be set to the datum mark with the gang condenser at maximum capacity.

The input signal should be progressively reduced as the sensitivity increases with alignment and kept as low as is reasonable.

The tuning condenser should be rocked slightly for maximum gain whilst finally adjusting the aerial trimmers.

The operations for each wave band should be successively repeated until scale accuracy and maximum sensitivity have been attained.

VOLTAGE CHART LG 30

Mains Input—240v. in 240v. tap
Aerial and Earth Disconnected

Band Switch - MW
SN - Slightly Negative

Volume Control at Minimum
Readings Approximate

Valve	Function	Volts measured between SOCKET and CHASSIS								TOP CAP
		1	2	3	4	5	6	7	8	
V1 6BE6	Oscillator Mixer	SN	—	6·3	—	240	87	SN	—	—
V2 6BA6	I.F. Amplifier	SN	—	6·3	—	240	87	0·5	—	—
V3 6AT6	L.F. Amp., Det. & AVC	SN	—	6·3	—	SN	SN	50	—	—
V4 6AQ5	Output	—	12	6·3	—	250	240	—	—	—
V5 6X5GT	Rectifier	260	6·3	250AC	—	250AC	—	—	275	—
Volts across 1st Electrolytic									275	
" " 2nd "									256	
" " 3rd "									240	
" " Smoothing Resistor									35	
Total Mains Current									200 ma	
Total H.T. Current									62 ma	

IMPORTANT

This Receiver uses **BRIMAR** Valves and was specifically designed around them.

Its performance may be impaired unless **BRIMAR** Valves of the correct types are used when replacements are needed.



**MODEL
LG30**

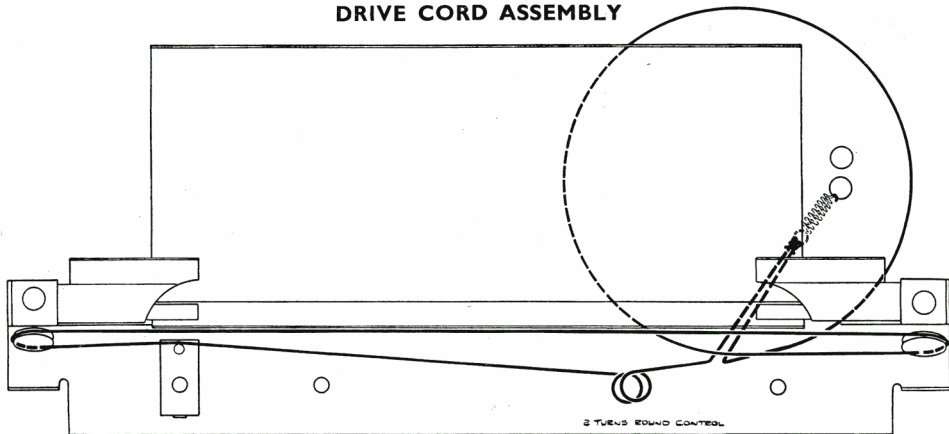
SPARES LIST LG 30

ALWAYS QUOTE PART No. WHEN ORDERING SPARES

Component	Colour Code	Circuit Ref.	Part No.	List Price	Component	Colour Code	Circuit Ref.	Part No.	List Price
Cabinet ... ..	...	...	293/220	£36	Gang Condenser ... ..	...	...	290/210	13/6
Cabinet Back ... ..	...	...	293/222	7/3	Indicator Lampholder ... ..	...	...	181/206	1/-
COILS:—					Knobs ... ..	...	...	290/260/3	9d.
L.W. Aerial	Red, Yellow	L4	196/24	3/-	Knob, Wavechange ... ..	...	...	290/260/2	9d.
M.W. Aerial	Red, Orange Red	L3	291/21	3/-	Loudspeaker ... ..	...	...	185/250/1	45/-
S.W. Aerial	Red, Yellow, Yellow	L1, 2	297/15	3/-	Pick-up Head HGP37-1C ... ..	...	...	429/214	30/-
L.W. Oscillator	Brown, Red, Blue	L11	176/26	3/-	Pointer Assembly ... ..	...	...	293/123	9d.
M.W. Oscillator	Brown, Red, Violet	L9, 10	176/23	3/-	Scale ... ..	...	...	293/200	4/9
S.W. Oscillator	Violet, White	L7, 8	202/17	3/-	Tone Control ... ..	...	...	80670/1	9/6
Drive Cord Assembly ... ..	...	...	290/174/1	1/-	Trimmer Strip ... ..	...	...	297/189	3/9
Dial Lamps ... ..	...	...	176/232	1/6	TRANSFORMERS:—				
Dial Lampholder ... ..	...	...	83056	1/3	1st, 2nd I.F.	Red, Violet	L5, 6, 12 & 13	201/50	10/-
Electrolytic Condensers					Mains	Brown, Red, Orange,	L15	293/85	30/-
30 +20 +10 mfd. ... ..	...	C26, 27 & 32	KEM68	9/-	Output	Brown, Red, Green	L14	293/95	10/-
30 mfd. ... ..	...	C31	KEM24	2/3	Volume Control ... ..	...	...	80674	6/-
					Wavechange Switch ... ..	...	...	196/203/5	6/-

Prices are subject to alteration without notice.

DRIVE CORD ASSEMBLY



COIL & TRANSFORMER DATA				LG 30		
CIRCUIT REF No.	FUNCTION	RESISTANCE OHMS	CIRCUIT REF. No.	FUNCTION	RESISTANCE OHMS	
L1	S.W. AERIAL PRIMARY	LESS THAN 1	L10	M.W. OSCILLATOR SECONDARY	4.4	
L2	S.W. AERIAL SECONDARY	LESS THAN 1	L11	L.W. OSCILLATOR	8	
L3	M.W. AERIAL	3-4	L12	2nd I.F. PRIMARY	20	
L4	L.W. AERIAL	18	L13	2nd I.F. SECONDARY	20	
L5	1st I.F. PRIMARY	20	L14	OUTPUT TRANSFORMER PRIMARY	510	
L6	1st I.F. SECONDARY	20	L14	OUTPUT TRANS. PRIM. TAP TO FINISH	1.5	
L7	S.W. OSCILLATOR PRIMARY	LESS THAN 1	L15	MAINS TRANSFORMER HEATER WINDING	LESS THAN 1	
L8	S.W. OSCILLATOR SECONDARY	LESS THAN 1	L15	MAINS TRANSFORMER SECONDARY H.T.	578	
L9	M.W. OSCILLATOR PRIMARY	LESS THAN 1	L15	MAINS TRANSFORMER PRIMARY	49	