PHILIPS Model L3G13T

General Description: Six-transistor (plus crystal diode), two-waveband portable receiver with sockets for car radio aerial, headphones and tape recorder. A transistor detector (T3) is used with a crystal diode (X1) A.G.C. rectifier.

Power Supply: Two 9-volt batteries (type PP9, T6009 or equivalents). With " on load " supply voltage of 18 volts and no signal input consumption should be 15 mA. average.

Wavebands: M.W. 189–555 m.; L.W. 1215–2000 m.

Transistors: (T1) AF117; (T2) AF117; (T3) OC71; (T4) OC81D; (T5, T6) matched OC81. Diode: (X1) OA70.

Alignment Frequencies: I.F. 470 kc/s. (L13, L10/11, L8/9). M.W. 537 kc/s. (L6); 1610 kc/s. (C10); 632 kc/s. (L3/4); 1450 kc/s. (C11). L.W. 180 kc/s. (C8, L1/2).

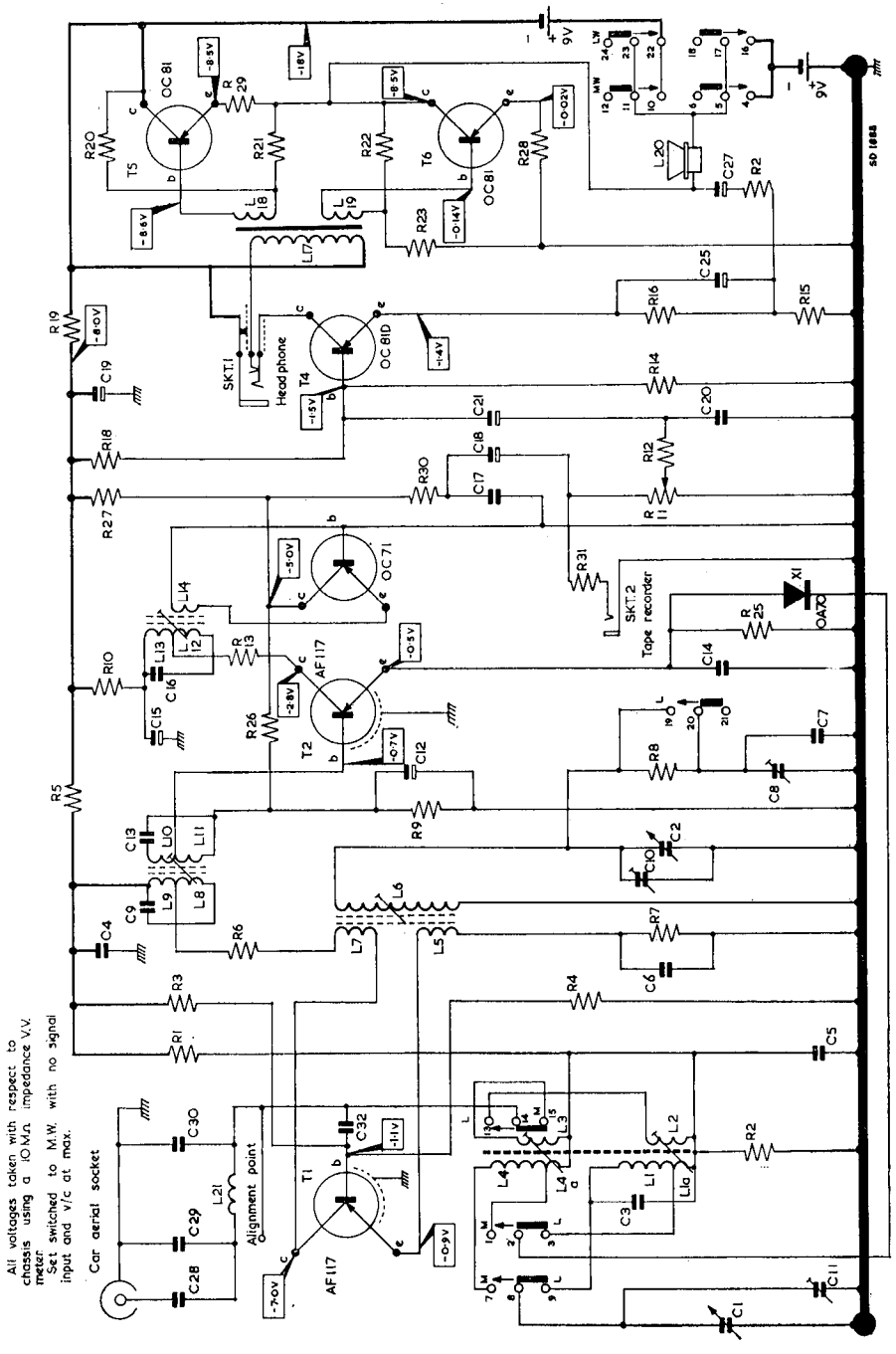
Dismantling: Place receiver face downwards on soft cloth, release two captive retaining screws and lift off cabinet back. When replacing, it is important to ensure that locating lugs and sockets on their respective mouldings interlock correctly. To detach receiver from front moulding, unsolder earth wire from speaker frame, extract four large fixing screws and ease chassis out of moulding. Withdraw audio panel from slot housing and then prise off four speaker clips. Receiver may now be lifted from front moulding. When assembling, longest of four fixing screws fits hole adjacent to headphone socket. I.F. panel. To gain access to underside of I.F. panel, release bracket attaching panel to main chassis (nearest volume control). Remove this bracket and then pull panel from second bracket. To enable I.F. panel to be turned over audio panel must be withdrawn from its housing.

Capacitors.

C3	68 pF. (1%)
C4	0·15
C5	0·1
C6	18,000 pF.
C7	180 pF.
C8	100 pF.
C10	2–30 pF.
C11	2–30 pF.
C12	10
C14	0·15
C15	100
C17	3,900 pF.
C18	50
C19	100
C20	4,700 pF.
C21	1
C25	100
C27	1
C28	10,000 pF. (5%)
C29	15 pF. (5%)
C30	15 pF. (5%)
C32	8,200 pF.

Resistors.

R1	8·2k
R2	390
R3	33k
R4	6·8k
R5	100
R6	390
R7	1k
R8	68k
R9	10k
R10	2·2k
R11	50k (log.)
R12	470
R13	180
R14	18k
R15	15
R16	1k
R17	2·2k
R18	56k
R19	2·2k
R20	2·7k (5%)
R21	56 (5%)
R22	2·7k (5%)
R23	56 (5%)
R25	270
R26	47k
R27	27k
R28	5·1 (5%, W.W.)
R29	5·1 (5%, W.W.)
R30	4·7k
R31	47k


All voltages taken with respect to chassis using a 10 MΩ impedance V.V. meter
Set switched to M.W. with no signal input and v/c at max.
Car aerial socket
Alignment point
Head phone
Tape recorder
OC 81
OC 81D
OC 71
AF 117
OA70
9V
SO 1648