

**General Description:** Four-transistor, manually-tuned, M.W./L.W. car radio receiver with push button wavechange and tone control. It is designed to operate from a 12-volt D.C. system with either battery pole connected to the car chassis, the necessary adjustment being provided by a rotary switch accessible through an aperture in the underside of the outer casing.

**Semi-conductors:** (T<sub>1</sub>, T<sub>2</sub>) AF117; (T<sub>3</sub>) AC128; (T<sub>4</sub>) AD149; (X<sub>1</sub>) OA79; (X<sub>2</sub>) OA70.

**Alignment:** I.F. 480 kc/s. (L<sub>13</sub>, L<sub>11</sub>, L<sub>9</sub>); M.W. 520 kc/s. (C<sub>8</sub>); 1605 kc/s. (C<sub>1</sub>); L.W. 148 kc/s. (L<sub>4</sub>); 190 kc/s. (L<sub>2</sub>).

*Note:* The tuner unit (L<sub>3</sub>, 6, 7, 8) is factory adjusted.

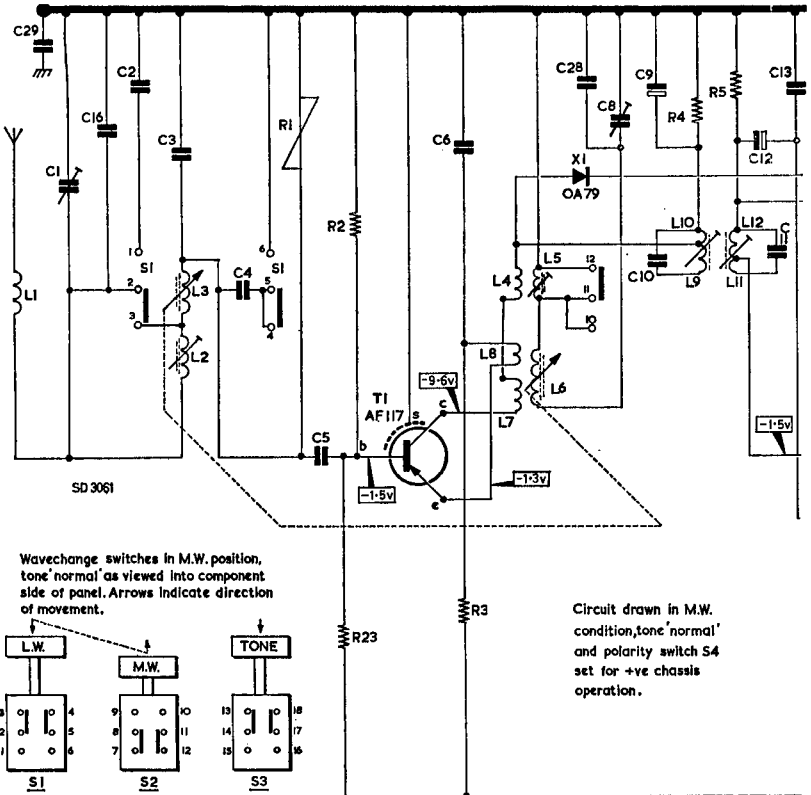
## RADIO SERVICING

**Polarity Adjustment:** To ascertain the polarity for which the receiver is adjusted, check setting of polarity switch (on underside of receiver casing) with polarity instruction label. To change the polarity, turn red set screw in the direction indicated.

**Consumption:** 610 mA. at 14.5 volts.

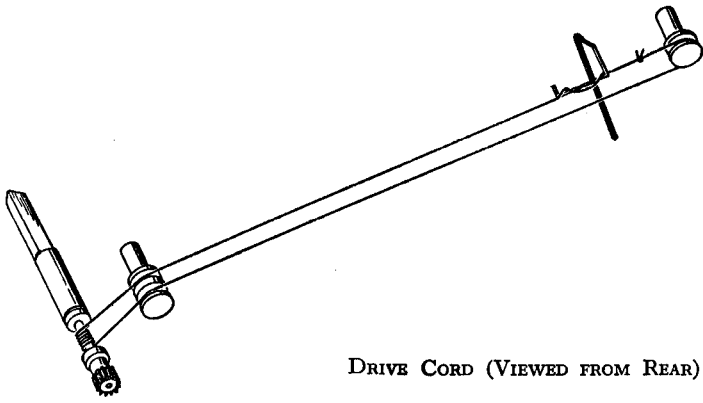
**R19 Adjustment:** Insert a 0-1-amp. meter between the collector of T4

<i>Capacitors.</i>		C15 125 $\mu$ F.	C30 1,800	R12 27,000
C1 80	C16 22	C17 200		R13 5,600
C2 2,200	C18 10,000	C19 10,000	<i>Resistors.</i>	R14 470
C3 2,200	C20 4 $\mu$ F.	C21 4 $\mu$ F.	R1 0.22M	R15 470
C4 1,800	C22 125 $\mu$ F.	C23 25 $\mu$ F.	R2 68,000	R16 2,200
C5 10,000	C24 1,000 $\mu$ F.	C25 0.1 $\mu$ F.	R3 1,200	R17 120
C6 0.1 $\mu$ F.	C26 0.22 $\mu$ F.	C27 50,000	R4 560	R18 120
C8 80		C28 22	R5 0.12M	R19 120
C9 10 $\mu$ F.		C29 50,000	R6 390	R20 12
C10 200			R7 390	R21 130
C11 200			R8 1,000	R22 0.51
C12 32 $\mu$ F.			R9 470	R23 12,000
C13 50,000			R10 5,000	R24 22,000
C14 32 $\mu$ F.			R11 10,000	R25 180
				R26 470

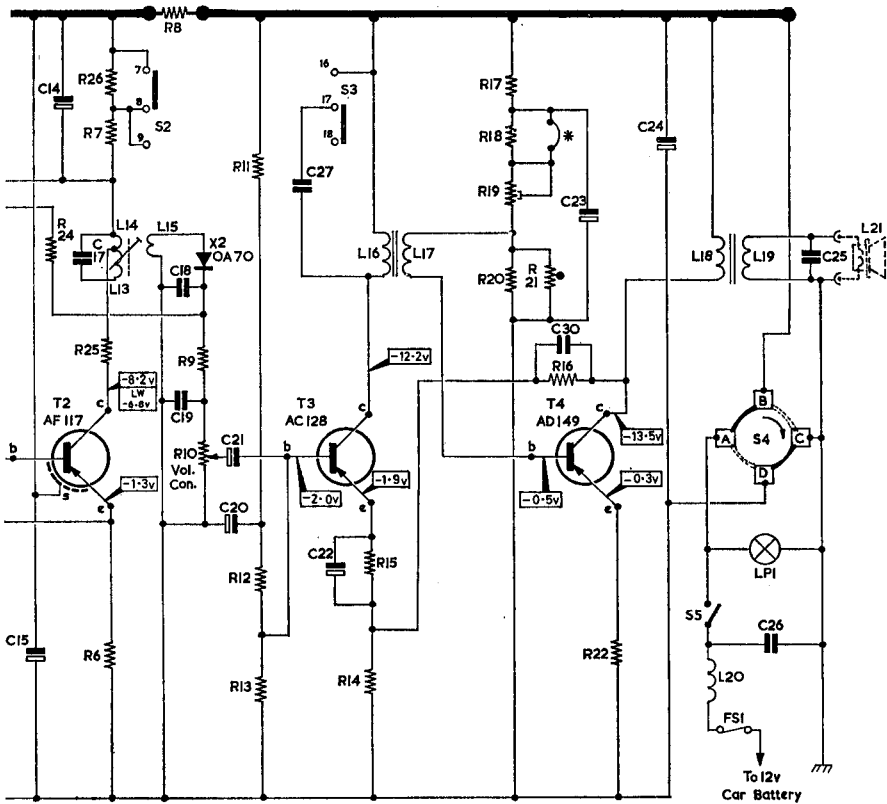


Voltages measured with respect to supply +ve using 100K $\Omega$  voltmeter. Receiver switched to M.W., volume control at minimum, no signal input, supply voltage 14.5 volts D.C.

CIRCUIT DIAGRAM—

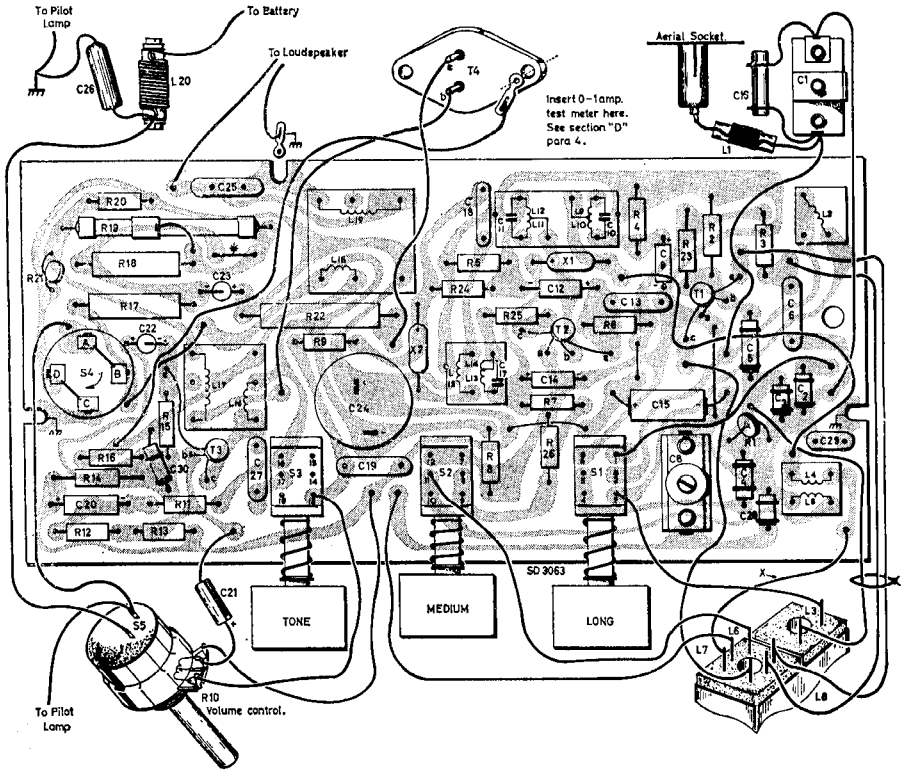


DRIVE CORD (VIEWED FROM REAR)



Polarity Switch S4: Solid lines AB-CD for +ve chassis operation.  
Dotted lines BC-DA for -ve chassis operation.

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PRINTED PANEL (COMPONENT SIDE)

and L18 then, with a supply voltage of 14.5 volts and no-signal input, adjust R19 for a reading of 0.480 amp.  $\pm 12$  mA. The range of adjustment may be increased or decreased by bringing into circuit or short circuiting R18 (as appropriate) by means of the link provided.

*D.C. Resistance of coils > 1Ω*

Coil no.	Ohms	Coil no.	Ohms
L1	1.1	L10	3.6
L2	6.2	L11	1.9
L3	5.5	L14	1.7
L4	1.1	L16	1.5
L5	8.5	L17	2.3
L6	6.5	L18	550
L9	1.7	L21	3.3