

G.E.C. - G818

Switch Table

Switch	L.W.	M.W.	Bandspread
S1	C	C	C
S2	C	C	C
S3	C	C	C
S4	C	C	C
S5	C	C	C
S6	C	C	C
S7	C	C	C
S8	C	C	C
S9	C	C	C
S10	C	C	C

Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 AF117 ..	1.0	1.1	6.8
TR2 AF117 ..	0.8	1.0	4.5
TR3 AF117 ..	0.8	1.1	6.9
TR4 AC127 ..	3.6	3.4	0.15
TR5 OC81D ..	—	0.15	3.9
TR6 OC81 ..	4.1	4.2	9.0
TR7 AC127 ..	4.0	3.9	—

Resistors

R1	33kΩ	B1
R2	6.8kΩ	B1
R3	1kΩ	A2
R4	100Ω	B2
R5	680Ω	B2
R6	82kΩ	A3
R8	2.2kΩ	C2
R9	680Ω	B3
R10	22kΩ	C2
R11	4.7kΩ	C2
R12	12kΩ	A3
R13	680Ω	C2
R14	560Ω	C2
R15	1kΩ	C2
R16	8.2kΩ	D1
R17	10kΩ	D1
R18	1kΩ	D2
R19	10Ω	D1
R20	470Ω	D1
R21	39Ω	D2
R22	390Ω	D2
R23	2.2Ω	D3
R24	2.2Ω	D2
R25	330Ω	D3
VR1	5kΩ	A3

Capacitors

C1	36pF	C1
C2	33pF	B1
C3	0.01μF	A1
C4	560pF	A2
C5	560pF	A2
C6	0.02μF	A2
C7	0.05μF	A2
C8	230pF	A1
C9	1.6μF	B3
C10	27pF	A2
C11	0.05μF	B3
C12	10μF	B3
C13	250pF	B3
C14	250pF	C3
C15	0.02μF	C2
C16	0.02μF	C2
C17	100μF	C2
C18	0.01μF	C2
C19	0.01μF	C2
C20	10μF	C2
C21	160μF	C2
C22	6,800pF*	D2
C23	160μF	D2
C24	300μF	D3
TC1	25pF	B2
TC2	25pF	B2
TC3	80pF	B1
TC4	25pF	B2

TC5	25pF	A1
VC1	171pF	B2
VC2	110pF	B2

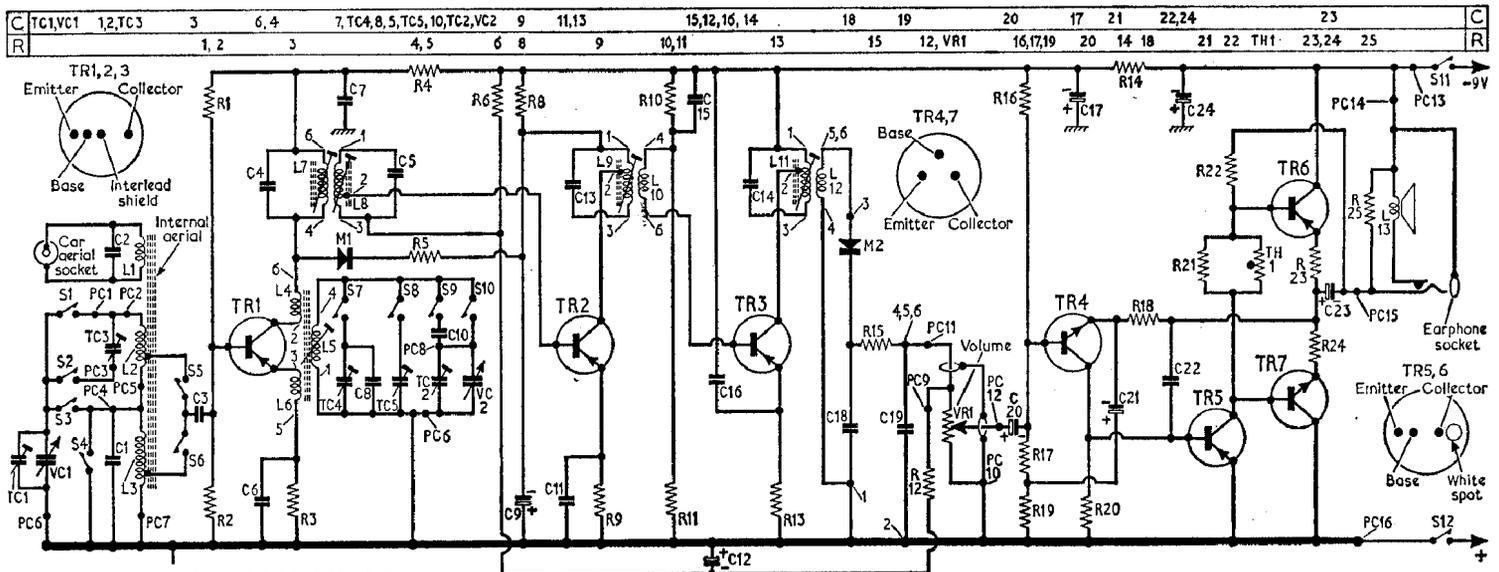
Coils

L1	—	B1
L2	—	D1
L3	—	A1
L4	—	A2
L5	—	A2
L6	—	A2
L7	—	A2
L8	—	A2
L9	—	B3
L10	—	B3
L11	—	C3
L12	—	C3
L13	11Ω	—

Miscellaneous

M1	OA79	B2
M2	OA90	C2
TH1	VA1040	D2
S1-S10	—	C4
S11-S12	—	A3

*3,900pF in later receivers.



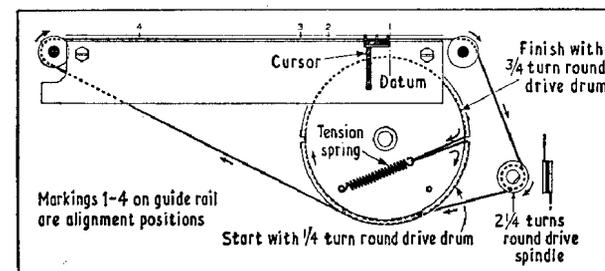
CIRCUIT ALIGNMENT

Equipment Required.—An audio output meter with an impedance of 11Ω; an a.m. signal generator modulated 30 per cent; an r.f. coupling coil, constructed by winding approximately 14 turns of 18 s.w.g. enamelled copper wire on a one inch former to a length of approximately one inch; a 0.01μF capacitor and an insulated trimming tool.

Alignment points 1-4 mentioned in the procedure refer to marks on the cursor guide rail (see drive cord assembly drawing). During alignment the output should not be allowed to exceed 50mW.

1.—Switch receiver to m.w. and set the tuning gang to the midway position. Turn the volume control to maximum. Connect the audio output meter in place of the loudspeaker (via the earphone socket using a suitable plug). Connect the signal generator via a 0.01μF capacitor to TR1 base.

2.—Feed in a 470kc/s signal, 30 per cent modulated, and adjust the cores of L11



(upper), L9 (upper), L8 (upper) and L7 (lower) for maximum output.

3.—Repeat operation 2.
4.—Connect the signal generator output across the r.f. coupling coil and place the coil about six inches from the ferrite rod. Turn the tuning gang to maximum and check that the right-hand edge of the cursor carriage coincides with alignment mark 1 when viewed from the front.
5.—Set the cursor to mark 2. Feed in a 600kc/s signal and adjust L5 and L2 for maximum output.

6.—Set the cursor to mark 4. Feed in a 1,440kc/s signal and adjust TC2 and TC1 for maximum output.
7.—Repeat operations 5 and 6.
8.—Switch to l.w. and set the cursor to mark 3. Feed in 170kc/s signal and adjust TC4 and L3 for maximum output.
9.—Switch receiver to bandspread and set the cursor to mark 3. Feed in a 1,440kc/s signal and adjust TC5 and TC3 for maximum output.

Scale drive assembly seen from the front of the receiver with the tuning gang fully meshed.