

G.E.C. - G822

Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 AF117	1-1	1-2	6-8
TR2 AF117	0-6	0-9	6-8
TR3 AF117	0-9	1-2	6-8
TR4 AC127	3-9	3-6	0-6
TR5 OC81D	0-4	0-6	4-4
TR6 OC81	4-6	4-7	9-0
TR7 AC127	4-5	4-4	—

Resistors

R1	33kΩ	C2
R2	6.8kΩ	C2
R3	1kΩ	B2
R4	68kΩ	B3
R5	680Ω	B3
R6	22kΩ	B3
R7	4.7kΩ	B3
R8	10kΩ	B3
R9	680Ω	C3
R10	1kΩ	C3
R11	2.2kΩ	D2
R12	18kΩ	D2
R13	22kΩ	D2
R14	4.7Ω	C2
R15	1kΩ	C1
R16	1kΩ	C1
R17	560Ω	C2
R18	1.5kΩ	C3
R19	56Ω	C2

R20	150Ω	C2
R21	3.3Ω	C2
R22	3.3Ω	C2
R23	330Ω	D3
R24*	1kΩ	C3
VR1	5kΩ	D1

Capacitors

C1	12pF	B1
C2	33pF	C1
C3	0.01μF	C1
C4	170pF	B1
C5	6.8pF	B1
C6	0.05μF	B3
C7	560pF	B3
C8	120pF	C2
C9	0.02μF	B2
C10	10μF	B3
C11	0.05μF	B3
C12	250pF	B3

C13	300pF	B3
C14	0.02μF	B3
C15	250pF	C3
C16	0.02μF	C3
C17*	0.01μF	D3
C18	0.01μF	C3
C19	10μF	C2
C20	100μF	C2
C21*	1,800pF	C2
C22	160μF	D3
C23	20μF	C2
C24	300μF	C3
C25	160μF	D3
TC1	15pF	C2
TC2	15pF	B1
TC3	15pF	B2
TC4	15pF	C2
TC5	25pF	C1
VC1	118pF	B2
VC2	118pF	B2

Coils

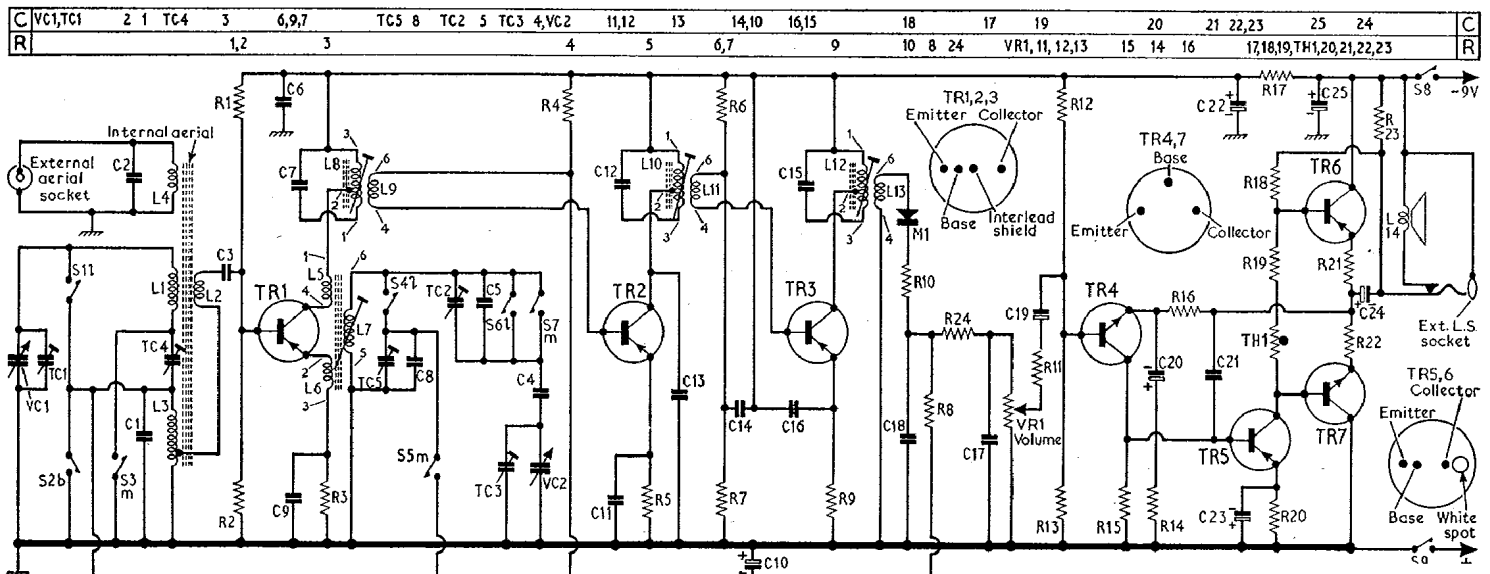
L1	—	B1
L2	—	B1
L3	—	C1
L4	—	C1
L5	—	B2
L6	—	B2
L7	—	B2
L8	—	B2
L9	—	B3
L10	—	B3
L11	—	B3

L12	—	C3
L13	—	C3
L14	25Ω	D2

Miscellaneous

M1	OA70	C3
S1-S7	—	A1
S8, S9	—	D2
TH1	VA1034	C2

* See "General Notes".



CIRCUIT ALIGNMENT

Equipment Required.—An a.m. signal generator with a low impedance output, modulated 30 per cent; a 0-100mW output meter with an impedance of 25Ω; a 0.01μF capacitor; a length of insulated wire for use as a coupling loop and suitable insulated trimming tools.

During alignment the output should be limited to 50mW by adjustment of the input signal level. All cores should be tuned to the outer peak.

- 1.—Connect the signal generator via the 0.01μF capacitor to the base of TR1. Connect the audio output meter in place of the loudspeaker and turn the volume control to maximum.
- 2.—Switch receiver to m.w. Feed in a 470kc/s signal and adjust the cores of L12, L10 and L8 in that order for maximum output. Repeat until there is no further improvement.
- 3.—Disconnect the signal generator from TR1 base and connect it to the r.f. coupling loop. Loosely couple the loop to the ferrite rod aerial. Tune receiver to 500m (dot on scale), feed in a 600kc/s signal and adjust L7 and L1 for maximum output.
- 4.—Tune receiver to 208m (dot on scale), feed in a 1,440kc/s signal and adjust TC3 and TC1 for maximum output.

- 5.—Repeat operations 3 and 4 until there is no further improvement.
- 6.—Switch receiver to l.w. and tune to 1,765m. Feed in a 170kc/s signal and adjust TC5 and L3 for maximum output.
- 7.—Switch receiver to bandspread and tune to 208m (dot on scale). Feed in a 1,440kc/s signal and adjust TC2 and TC4 for maximum output. Check that TC4 adjustment holds good when the trimming tool is withdrawn.

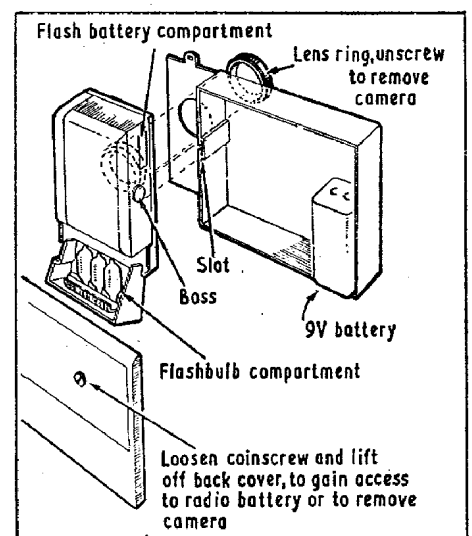


Illustration showing details for the removal of the receiver back cover and camera unit