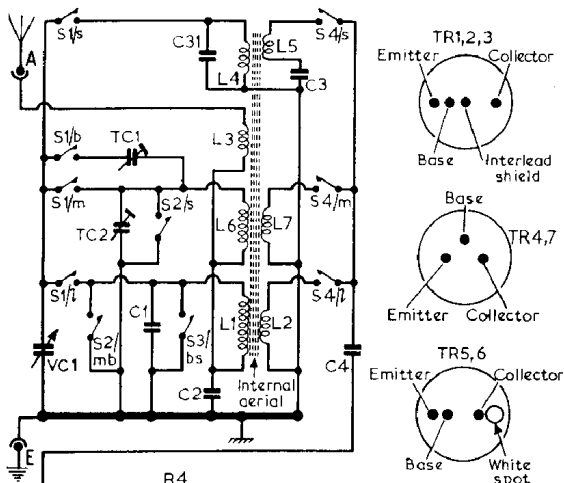


# G.E.C. - G824



## Resistors

R1	33kΩ	B2
R2	6.8kΩ	B2
R3	1kΩ	B2
R4	100Ω	B2
R5	680Ω	B2
R6	82kΩ	B2
R7	1.8kΩ	B2
R8	680Ω	B2
R9	22kΩ	B2
R10	12kΩ	B2
R11	4.7kΩ	B2
R12	680Ω	B2
R13	1kΩ	C2
R14	560Ω	C2
R15	22kΩ	C2
R16	12kΩ	C1
R17	10Ω	C2
R18	470Ω	C2
R19	1kΩ	C2
R20	68Ω	C2
R21	560Ω	C2
R22	2.2Ω	C2
R23	2.2Ω	C2
R24	100kΩ	C1
VR1	4.7kΩ	D1
VR2	22kΩ	D1

## Capacitors

C1	56pF	B2
C2	2,200pF	C1
C3	1,000pF	B1
C4	0.01μF	B2

C5	0.02μF	B2
C6	2,200pF	B2
C7	210pF	A2
C8	210pF	A2
C9	15pF	B2
C10	2,200pF	A2
C11	0.05μF	B2
C12	0.05μF	B2
C13	0.05μF	B2
C14	10μF	B2
C15	10μF	B2
C16	0.05μF	B2
C17	0.05μF	B2
C18	560pF	B2
C19	560pF	B2
C20	250pF	B2
C21	250pF	C2
C22	0.01μF	C2
C23	0.01μF	C2
C24	100μF	C2
C25	10μF	C2
C26	0.033μF	C2
C27	250pF	B2
C28	300pF	C2
C29	300μF	C2
C30	300μF	C2
C31	3.3pF	B1
C32	2,200pF	C2
TC1	40pF	B1
TC2	5pF	C1
TC3	15pF	B2
TC4	15pF	B2

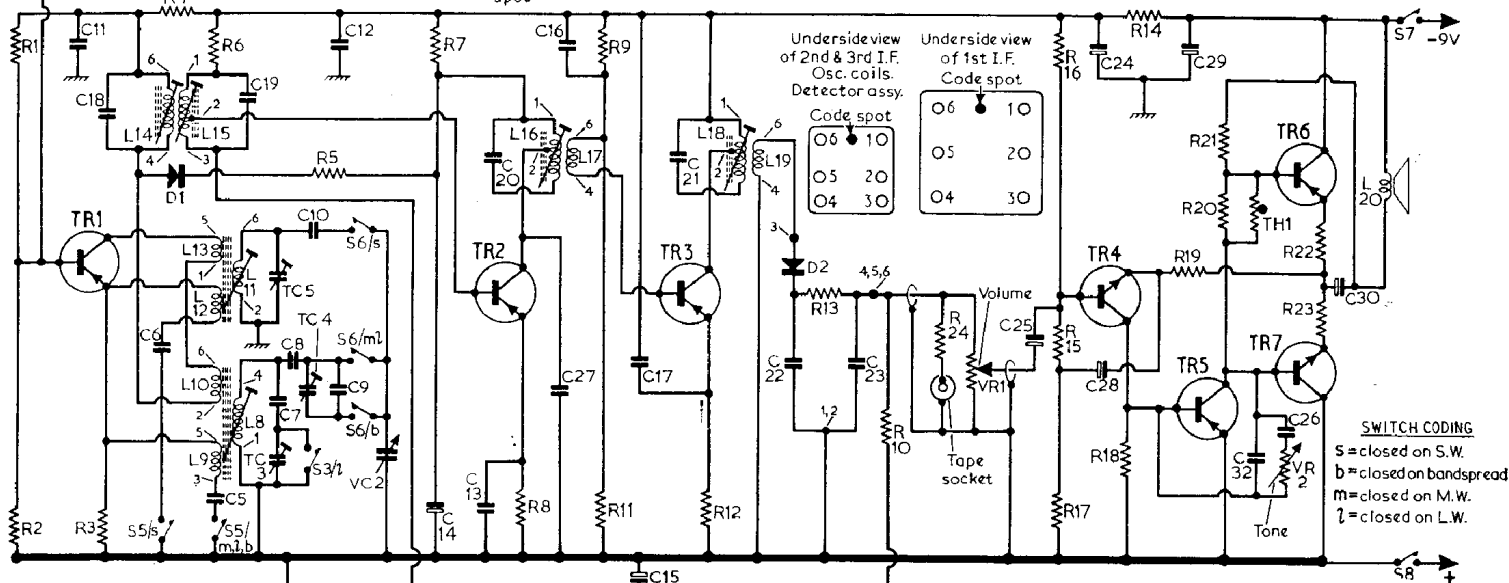
TC5	5pF	B2
VC1	196pF	B1
VC2	196pF	B1

## Coils

L1	—	B1
L2	—	B1
L3	—	C1
L4	—	B1
L5	—	B1
L6	—	C1
L7	—	C1
L8	—	B2
L9	—	B2
L10	—	B2
L11	—	B2
L12	—	B2
L13	—	B2
L14	—	B2
L15	—	B2
L16	—	B2
L17	—	B2
L18	—	C2
L19	—	C2
L20	8Ω	C2

## Miscellaneous

D1	OA79	B2
D2	OA90	C2
S1-S6	—	A1
S7, S8	—	D1
TH1	VA1040	C2



Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1	AF115 ..	1.1	1.12
TR2	AF117 ..	0.63	0.86
TR3	AF117 ..	0.95	1.15
TR4	AC127 ..	4.5	4.3
TR5	OC81D ..	—	0.18
TR6	OC81 ..	4.9*	5.1
TR7	AC127 ..	4.9*	4.8

\* Measured at the junction R22, R23.

## CIRCUIT ALIGNMENT

**Equipment Required.**—A 0-100mW audio output meter with an impedance to match 8Ω; an a.m. signal generator with a low impedance output modulated 30 per cent; an r.f. coupling coil formed by winding approximately 14 turns of 18 s.w.g. enamelled copper on a lin diameter former to a length of 1-1½in; a 0.01μF isolating capacitor and insulated trimming tools.

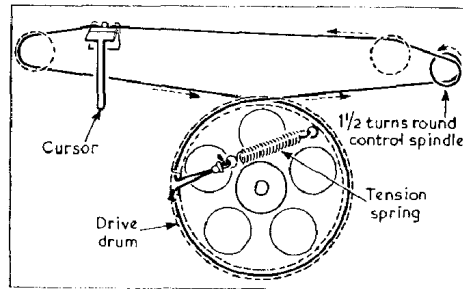
**Note:** Alignment points 1-6 quoted in the instructions which follow, refer to calibration points which are provided on the bracket beneath the cursor back.

During the alignment the input signal level should be regulated so that the receiver output does not exceed 50mW with the volume control at maximum.

All cores should be adjusted to the outer peak.

- 1.—Connect the audio output meter in place of the loudspeaker. Connect the signal generator via the 0.01μF capacitor to TR1 base. Switch receiver to m.w. and set the tuning gang to its mid-position.
- 2.—Feed in a 470kc/s modulated signal and adjust L18 (upper), L16 (upper), L15 (upper) and L14 (lower) for maximum output. Repeat as necessary.
- 3.—Check that the datum on the cursor carriage coincides with calibration mark 1 when viewed from the rear with the tuning gang fully closed. Switch receiver to l.w. and set the cursor on calibration mark 4. Connect the signal generator to the r.f. coupling coil and place the coil about 6in from the ferrite rod aerial.
- 4.—Feed in 220kc/s signal and adjust L8 and L1 for maximum output.
- 5.—Switch receiver to m.w. and set the cursor to mark 6. Feed in a 1,440kc/s signal and adjust TC3 and TC2 for maximum output.
- 6.—Tune receiver to 600kc/s (calibration mark 2). Feed in a 600kc/s signal and adjust L6 for maximum output.
- 7.—Repeat adjustments to TC2 and L6.
- 8.—Switch receiver to bandspread and set the cursor to calibration mark 3. Feed in a 1,440kc/s signal and adjust TC4 and TC1 for maximum output.

- 9.—Switch receiver to s.w. with the cursor at calibration mark 3, feed in a 6.85Mc/s signal and adjust L11 for maximum output.
- 10.—Set the cursor at calibration mark 5. Feed in a 15Mc/s signal and adjust TC5 for maximum output.
- 11.—Repeat operations 9 and 10.
- 12.—Set the cursor to calibration mark 3. Feed in a 6.85Mc/s signal and adjust L4 for maximum output.



Scale drive assembly drawn with the tuning gang fully closed

**SWITCH CODING**  
S = closed on S.W.  
b = closed on bandspread  
m = closed on M.W.  
l = closed on L.W.