



Circuit diagram of the common chassis employed in the above range of G.E.C., Sobell and McMichael radio receivers. In G.E.C. G825 and Sobell S325 versions, the tone circuit, C31 and S11 is omitted.

Resistors			Capacitors		
R1	33kΩ	A2	C1	90pF	A1
R2	6.8kΩ	A2	C2	8pF	C2
R3	1kΩ	A2	C3	14pF	C2
R4	47Ω	B1	C4	20pF	B1
R5	68kΩ	A2	C5	690pF	C2
R6	680Ω	A2			
R7	22kΩ	B2			
R8	4.7kΩ	B2			
R9	10kΩ	A2			
R10	680Ω	B2			
R11	1kΩ	B2			
R12	2.2kΩ	B1			
R13	12kΩ	B1			
R14	22kΩ	B1			
R15	1kΩ	B1			
R16	4.7Ω	B1			
R17	1kΩ	B1			
R18	560Ω	B1			
R19	1.2kΩ	C2			
R20	56Ω	B2			
R21†	3.3Ω	B2			
R22†	3.3Ω	B2			
R23	330Ω	C1			
VR1	5kΩ	C1			
Coils			Miscellaneous		
L1	—	A1	M1	OA90	B2
L2	—	A1	S1-S10	—	C2
L3	—	B1	S11*	—	—
L4	—	C1	S12	—	C1
L5	—	B1	TH1	VA1034	C1
L6	—	B1			
L7	—	A2			
L8	—	A2			
L9	—	A1			
L10	—	A1			
L11	—	A1			
L12	—	A2			
L13	—	A2			
L14	—	B2			
L15	—	B2			
L16†	25Ω	B2			
Capacitors			Tone circuit		
C6	0.01μF	A1			
C7	0.02μF	A1			
C8	6,000pF	A2			
C9	560pF	A2			
C10	0.05μF	A2			
C11	270pF	C2			
C12	300pF	C2			
C13	250pF	A2			
C14	0.05pF	A2			
C15	10μF	A2			
C16	300pF	A2			
C17	2,200pF	B2			
C18	0.02μF	B2			
C19	0.02μF	B2			
C20	250pF	B2			
C21	0.01μF	B2			
C22	0.01μF	B2			
C23	10μF	B1			
C24	100μF	B1			
C25	160μF	B2			
C26	3,300pF	B1			
C27	160μF	B1			
C28	300μF	B2			
C29	10pF	A2			
C30	0.01μF	B1			
C31*	6,800pF	—			
C32	0.05μF	B2			
TC1	15pF	B1			
TC2	25pF	B1			
TC3	—	A2			
TC4	15pF	A1			
TC5	25pF	A1			
VC1	275pF	A2			
VC2	275pF	A2			

Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 AF115	1.1	1.2	6.5
TR2 AF117	0.6	0.9	6.6
TR3 AF117	0.9	1.2	6.6
TR4 AC127	4.35	4.15	0.17
TR5 OC81D	—	0.17	4.4
TR6 OC81	4.6	4.7	9.0
TR7 AC127	4.5	4.4	—

McMICHAEL - M126

\* Tone circuit S11 and C31 is omitted in models G825 and S325.

† R21 and R22 are 2.2Ω, and L16 is 10Ω in models M126, G826 and G828.

## CIRCUIT ALIGNMENT

R.F. alignment markers are marked on the tuning scale as shown in the sketch on the chassis illustration.

The receiver uses a restricted s.w. section which covers the 31, 41 and 49 meter bands only. No s.w. oscillator adjustment is provided and in operations 10 and 11 the appropriate signal frequency should be fed in and the receiver accurately tuned to this signal before the aerial adjustments are made.

**Equipment Required.**—A 0-100mW audio output meter with an impedance to match 25Ω (G825, S325), or 10Ω (M126, G826, G828); a signal generator with a low impedance output, modulated 30 per cent a.m.; an r.f. coupling coil, made by winding 14 turns of 18 s.w.g. enamelled copper wire on a one inch diameter former and spaced to a length of 1-1½ in; one 0.01μF capacitor and suitable insulated trimming tools.

During alignment the receiver output should not be allowed to exceed 50mW with the volume control at maximum. All cores should be tuned to the outer position.

1.—Connect the signal generator via a 0.1μF capacitor to TR1 base. Switch receiver to m.w. and fully close the tuning gang. Connect the audio output meter across the loudspeaker.

2.—Feed in a 470kc/s modulated signal and adjust the cores of L14, L12 and L7 for maximum output. Repeat these adjustments.

3.—Connect the signal generator output to the r.f. coupling coil and loosely couple to the receiver by placing the coil about six inches from the ferrite rod aerial.

4.—Switch receiver to l.w. and set the pointer to calibration mark 5. Feed in a 220kc/s signal and adjust L11 for maximum output.

5.—Switch receiver to m.w. and set the pointer to calibration mark 4. Feed in a 600kc/s signal and adjust L4 for maximum output.

6.—Set pointer to calibration mark 1. Feed in 1,440kc/s signal and adjust TC3 and TC5 for maximum output.

7.—Repeat operations 4, 5 and 6.

8.—Switch receiver to l.w. and set the pointer to calibration mark 5. Feed in a 220kc/s signal and adjust L2 for maximum output.

9.—Switch receiver to bandsread and set the pointer to calibration mark 2. Feed in a 1,500kc/s signal and adjust TC4 and TC1 for maximum output.

10.—Switch receiver to s.w. and feed in a 6Mc/s signal. Tune receiver to this signal (49m. band), then adjust L6 for maximum output.

11.—Feed in a 9.5Mc/s signal (31m. band) and tune receiver to this signal. Adjust TC2 for maximum output.

12.—Repeat operations 10 and 11.

## GENERAL NOTES

**Switches.**—S1 to S10 are two-way waveband switches combined in a press-button unit shown in location reference C2. The "pressed" position of each switch is indicated on the circuit diagram with a key letter s, m, l or b meaning short, medium, long or bandsread respectively. The press-buttons are interlocked so that the released position is taken up when any other button is depressed.

S11 is a tone switch which is fitted to models M126, G826 and G828 only. On/off switch S12 is ganged with the volume control.

**Battery.**—9V Ever Ready PP6 (G825, S325) or PP7 (M126, G826, G828).