

GENERAL NOTES

Dismantling.—Remove three screws, from the cabinet, two at the rear and one beneath.

Remove two screws from top escutcheon plate, one at either end. The receiver is now freed from the cabinet and by carefully pulling the waveband press-buttons forward, the baffle and scale panel may be lowered flat on to the bench, and withdrawn as far as the leads to the car aerial socket and audio output socket will allow.

Switches.—S1-S5 are waveband switches, S6 and S7 are battery on/off switches. They are mounted in a press-button unit shown in location reference (C1). S6 is closed on M.W. and S7 is closed on L.W. When the off button is pressed, the depressed waveband button is released.

Suffix letter "m" or "l" following the switch number indicates that the switch closes on M.W. or L.W. respectively.

Resistors

R1	33K Ω	A2
R2	6.8K Ω	A2
R3	1K Ω	A2
R4	680 Ω	A2
R5	150K Ω	B1
R6	56K Ω	B2
R7	680 Ω	A3
R8	2.2K Ω	A3
R9	4.7K Ω	A3
R10	8.2K Ω	B3
R11	22K Ω	A3
R12	1K Ω	A3
R13	470 Ω	A3
R14	5K Ω	B1
R15	330 Ω	B3
R16	6.8K Ω	B3
R17	270 Ω	B3
R18	18K Ω	B3
R19	820 Ω	B3
R20	150K Ω	C3
R21	47 Ω	C3
R22	8.2K Ω	C3
R23	8.2K Ω	C3
R24	4.7 Ω	C3
R25	8.2K Ω	B1

Capacitors

C1	40pF	A1
C2	420pF	A1
C3	100pF	B1
C4	5,000pF	A2
C5	0.02 μ F	A2

C6	40pF	B1
C7	149pF	A1
C8	300pF	B1
C9	40pF	B1
C10	500pF	A2
C11	500pF	A2
C12	8 μ F	A2
C13	0.04 μ F	A2
C14	500pF	A2
C15	500pF	A3
C16	2 μ F	A2
C17	0.02 μ F	A3
C18	0.02 μ F	A3
C19	350 μ F	A3
C20	250pF	A3
C21	0.01 μ F	A3
C22	0.04 μ F	A3
C23	0.25 μ F	B3
C24	100 μ F	B3
C25	100 μ F	B3
C26	0.01 μ F	C3
C27	0.01 μ F	C3
C28	—	†
C29	10pF	A1

Coils*

L1	—	C1
L2	—	A1
L3	—	C1
L4	—	C1
L5	—	B1
L6	—	A2
L7	—	A2

L8	—	A2
L9	—	A2
L10	—	A2
L11	3.0	A3
L12	3.0	A3
L13	3.0	A3
L14	3.5	A3
L15	35.0	A3

Transistors

TR1	AF117	A2
TR2	AF117	A2
TR3	AF117	A3
TR4	OC71	B3
TR5	OC81D	B3
TR6†	OC81	C3
TR7†	OC81	C3

Transformers*

T1	{ a 260.0 b 55.0 c 55.0 }	B3
T2	—	C2

Miscellaneous

X1	OA79	A2
X2	OA90	A3
S1-S7	—	C1

*Approximate D.C. resistance in ohms.

†Matched pair.

‡No component.

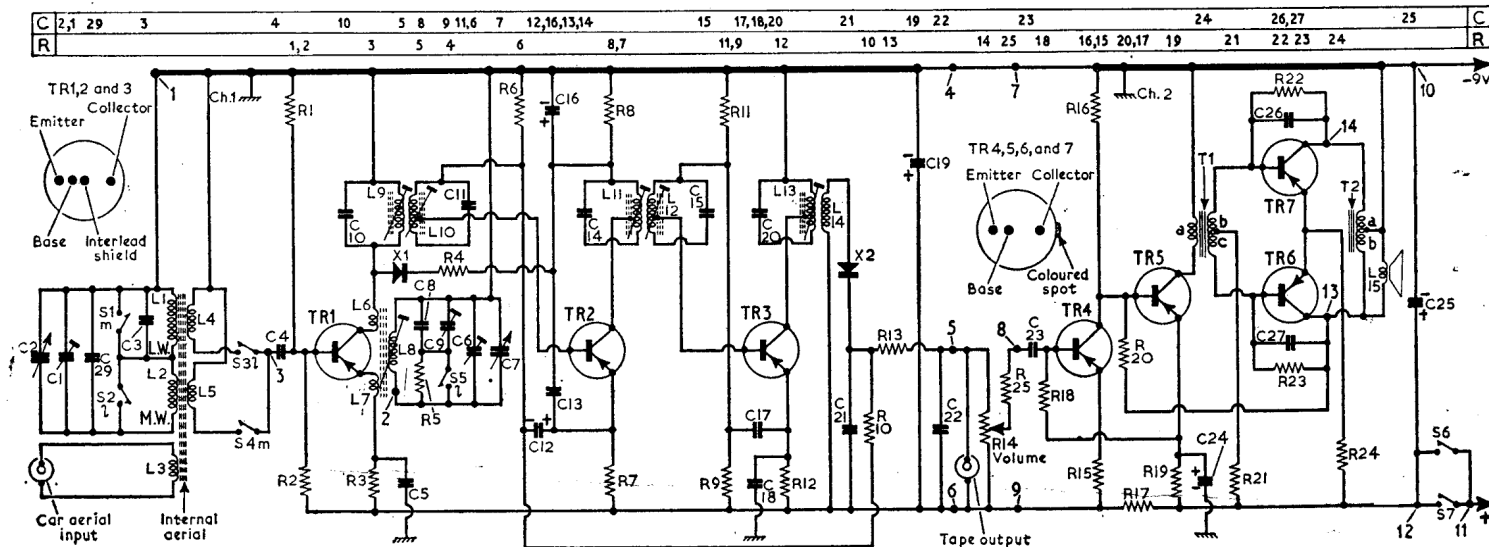
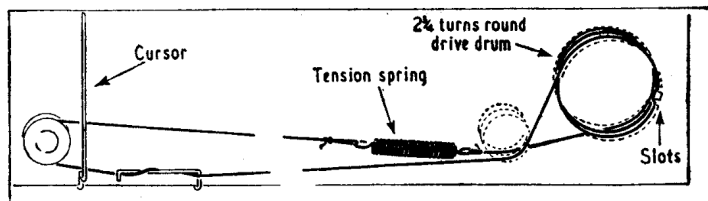


Diagram of the completed scale drive assembly.



CIRCUIT ALIGNMENT

Equipment Required.—An A.M. signal generator, 30 per cent modulated; an output meter with an impedance of 30-40 Ω or an A.C. voltmeter with a suitable impedance (a model 8 Avometer would be suitable); an aerial coupling loop; a 0.1 μ F capacitor and a screwdriver trimming tool.

Alignment Notes.—If a 30-40 Ω output meter is used it should be connected in place of the speaker speech coil L15 but if an A.C. voltmeter is used as an output indicator, the speech coil should remain in circuit with the voltmeter connected across it.

The signal generator output should be adjusted throughout alignment so as to maintain the receiver output at approximately 50mW (1V A.C.) to prevent A.G.C. action. The R.F. tuned circuits are interdependent and M.W. adjustments should be made first.

1.—Switch receiver to M.W. and rotate tuning gang to minimum capacitance. Turn volume control to maximum. Connect the signal generator via the 0.1 μ F capacitor across C2 (location reference A1).

2.—Feed in a modulated 475kc/s signal and adjust L13 (A3), L12, L11 (A3), L10 and L9 (A2) in that order for maximum output. Repeat until no further improvement can be obtained.

3.—Disconnect the signal generator from the receiver and connect its output leads directly across the coupling coil. Place the coil so that it is loosely coupled to the ferrite rod aerial.

4.—Tune receiver to 214m (calibration mark on scale). Feed in a 1,400kc/s signal and adjust C6 (B1) and C1 (A1) for maximum output.

5.—Tune receiver to 500m (mark on scale). Feed in a 600kc/s signal and adjust L8 (A2). Then adjust L2 by sliding adjusting ring (A1) along the ferrite rod for maximum output.

6.—Switch to L.W. and tune receiver to 1,364m (mark on scale). Feed in a 220kc/s signal and adjust C9 (B1) and L1 (C1) for maximum output. L1 is adjusted by sliding it along the ferrite rod.

Drive Cord Replacement.—Approximately 20 inches of nylon braided glass yarn is required for a replacement drive cord. The completed assembly will appear as illustrated in our diagram below when the new cord is fitted as follows:

Turn the tuning gang to maximum (fully meshed). Pull off volume and tuning knobs and remove scale by gently easing it forward. Remove scale backing plate by taking out two screws in the rear of the control panel. Tie one end of the cord to the tension spring and anchor the spring temporarily in the position shown in the illustration.

Guiding the cord round the underside of the inner one of the two adjacent small pulleys, make two and a half turns anti-clockwise round the drive drum, starting from the rear. On the final half-turn thread the cord inside the stud which is formed by two slots in the moulding. Continue out of the drive drum, round the underside of the outer small pulley and across to the left-hand small pulley. Pass the cord clockwise round the left-hand small pulley and return it to the tension spring. Tie the free end of the cord to the free end of the tension spring. Attach the cursor so that when the scale is replaced, it is in line with the calibration mark about 600m.

Modifications.—In some earlier receivers the following differences may be found: C3 is 110pF not 100pF, C8 is 320pF not 300pF, C19 is 100 μ F not 350 μ F. Also a 470pF capacitor may be shunted across M.W. coupling coil L5.