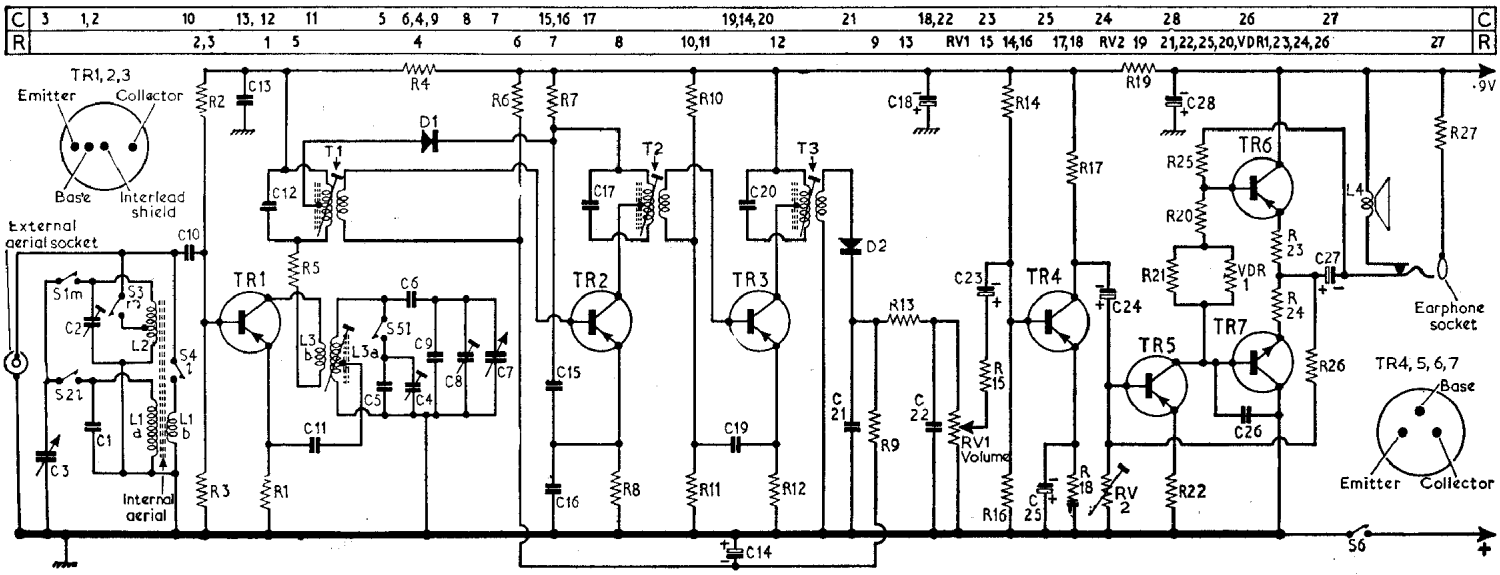
PAM - 5215

Transistor Table

Transistor		Emitter (V)	Base (V)	Collector (V)
TR1	AF117	1·1	1·2	7·8
TR2	AF117	0·87	0·97	6·5
TR3	AF117	0·95	1·1	8·4
TR4	NKT255*	1·4	1·5	4·2
TR5	NKT258*	0·25	0·43	4·75
TR6	NKT251*	4·85	4·95	9·0
TR7	NKT753	4·85	4·75	—

**In some receivers TR4 may be NKT257J, TR5 may be NKT278 and TR6 may be NKT271.*

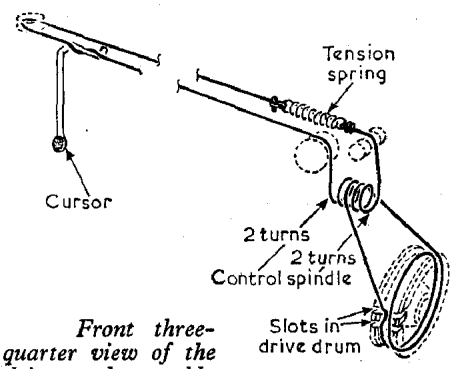
Resistors		
R1	1·2kΩ	B3
R2	12kΩ	B2
R3	2·2kΩ	B2
R4	100Ω	C2
R5	330Ω	B2
R6	56kΩ	C2
R7	2·2kΩ	B3
R8	1kΩ	C2
R9	8·2kΩ	E4
R10	22kΩ	C3
R11	3·9kΩ	B3
R12	1kΩ	C3
R13	1kΩ	C3
R14	33kΩ	C2
R15	1·2kΩ	D3
R16	8·2kΩ	D3
R17	3·3kΩ	C2
R18	1·2kΩ	C1
R19	150Ω	C2
R20	47Ω	C2
R21	100Ω	C2
R22	47Ω	C1
R23	2Ω	C2
R24	2Ω	C1
R25	1·2kΩ	C2
R26	33kΩ	C1
R27	22Ω	C1
RV1	5kΩ	A1
RV2	5kΩ	C1
VDR1	—	B2
Capacitors		
C1	150pF	A2
C2	25pF	A3
C3	326pF	A2
C4	80pF	A3
C5	270pF	A3
C6	390pF	B3
C7	326pF	B2
C8	25pF	B3
C9	10pF	B3
C10	0·04μF	F4
C11	0·01μF	F4
C12	510pF	B2
C13	0·01μF	B2
C14	2μF	B2
C15	0·1μF	C3
C16	0·1μF	C3
C17	510pF	B3
C18	100μF	C3
C19	0·1μF	C3
C20	390pF	C3
C21	0·025μF	C3
C22	0·022μF	C3
C23	1μF	C2
C24	1μF	C2
C25	100μF	C1
C26	2,000pF	E4
C27	100μF	C2
C28	100μF	B1
Coils		
L1a	—	D1
L1b	—	D1
L2	—	B1
L3a	—	B3
L3b	—	B3
L4	25Ω	—
Transformers		
T1	—	B2
T2	—	B3
T3	—	C3
Miscellaneous		
D1	0A70	E4
D2	OA90	C3
S1-S5	—	A3
S6	—	D1



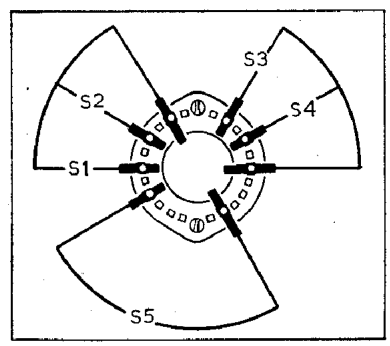
CIRCUIT ALIGNMENT

Equipment Required.—An a.m. signal generator; an audio output meter with an impedance of 25Ω; an r.f. coupling loop and a narrow-bladed type trimming tool.

1.—Disconnect the lead from **L2** tap and connect the signal generator between the lead and chassis. Connect the audio output meter in place of the loudspeaker. Turn the volume control to maximum output.
2.—Switch receiver to m.w. and tune to the l.f. end of the band. Feed in a 470 kc/s modulated signal and adjust the cores of **T1, T2** and **T3** for maximum output.
3.—Connect the signal generator to the r.f. coupling loop and place the loop so that it is loosely coupled to the ferrite rod aerial at the **L2** (m.w. winding) end. Reconnect the lead to **L2** tap.
4.—Tune receiver to 500m, feed in a 600 kc/s signal and adjust the core of **L3** and the position of **L2** for maximum output.
5.—Tune receiver to 200m, feed in a 1,500 kc/s signal and adjust **C8** and **C2** for maximum output.
6.—Repeat operations 4 and 5 for correct tracking and calibration.
7.—Switch receiver to l.w. and tune to 1,400 m. Feed in a 214kc/s signal and adjust **C4** and the position of **L1** for maximum output.



Front three-quarter view of the drive cord assembly with the tuning gang fully open



Switches.—S1-S5 are the waveband switches which are mounted in a rotary unit shown in location reference **A3.** On the circuit diagram these switches are coded with the letter *m* (m.w.) or *l* (l.w.) indicating the position in which they close. The on/off switch **S6** is ganged with the volume control.

Battery.—9V Ever Ready PP7 or equivalent.

Output Balance Adjustment.—In the event of **TR5, TR6** or **TR7** being replaced, it will be necessary to re-adjust **RV2.** Turn the volume control to minimum and adjust **RV2** to provide an emitter voltage of 4.85V measured at the junction of **R23** and **R24.**