PERDIO - PR51

Transistor Table

Transistor		Emitter (V)	Base (V)	Collector (V)
TR1	AF117 ..	0·6	0·65	4·4*
TR2	AF117 ..	0·4	0·6	3·0
TR3	AF117 ..	0·5	0·7	4·5
TR4	OC71 ..	0·6	0·7	1·1
TR5	OC81D ..	1·0	1·1	5·4
TR6	OC81 ..	—	0·16	6·0
TR7	OC81 ..	—	0·16	6·0

Measured at the junction* **R4, C2.

Capacitors		
C1	40pF	A1
C2	0·1μF	B2
C3	0·01μF	B1
C4	250pF	B1
C5	0·01μF	A1
C6	155pF	A1
C7	250pF	B2
C8	10μF	B2
C9	0·1μF	B2
C10	2μF	B2
C11	0·047μF	B3
C12	0·047μF	B3
C13	250pF	B3
C14	160μF	B3
C15	0·047μF	B3
C16	0·047μF	B3
C17	0·022μF	A3
C18	125μF	A3
C19	0·01μF	A3
C20	0·047μF	A2
C21	160μF	A3
C22	3,900pF	B2
CT1	40pF	A2
CT2	—	A2
CT3	—	A1
CT4	25pF	A1
CV1	—	A1
CV2	—	A1

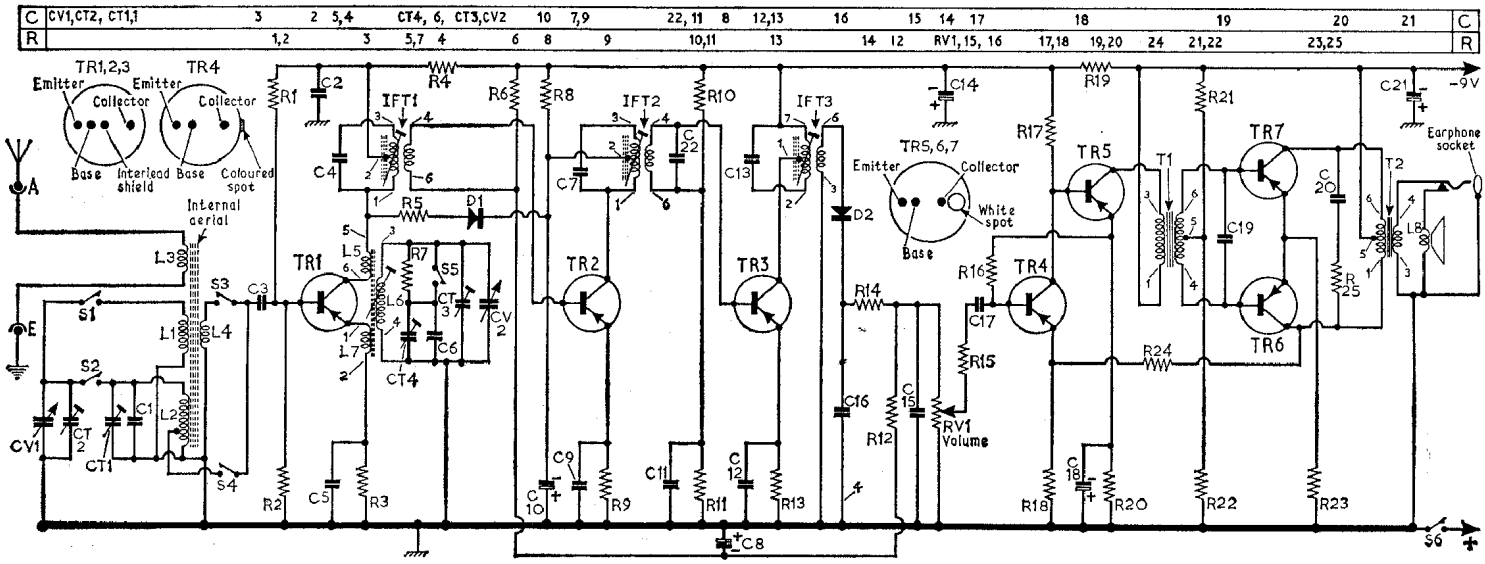
Resistors		
R1	33kΩ	B1
R2	6·8kΩ	B1
R3	560Ω	B1
R4	100Ω	B2
R5	1kΩ	B2
R6	33kΩ	B2
R7	150kΩ	B2
R8	1kΩ	B2
R9	470Ω	B2
R10	18kΩ	B2
R11	3·3kΩ	B3
R12	8·2kΩ	B2
R13	470Ω	B3
R14	330Ω	B3
R15	2·7kΩ	A3
R16	8·2kΩ	A2
R17	4·7kΩ	B3
R18	1kΩ	B2
R19	470Ω	B3
R20	680Ω	B3
R21	2·7kΩ	A3
R22	68Ω	A2
R23	4·7Ω	A2
R24	560kΩ	B2
R25	150Ω	B2
RV1	—	A2

**Approximate d.c. resistance in ohms.*

Coils*		
L1	5·0	C1
L2	14·0	A1
L3	3·7	B1
L4	—	C1
L5	—	A2
L6	8·0	A2
L7	—	A2
L8	3·0	—

Transformers*			
IFT1	pri	8·5	B1
	sec	—	
IFT2	pri	8·5	B2
	sec	—	
IFT3	pri	7·0	B2
	sec	—	
T1	pri	310·0	A3
	sec	55·0	
	sec	55·0	
T2	pri	4·0	A2
	pri	4·0	
	sec	—	

Miscellaneous		
D1	OA79	B2
D2	OA91	B3
S1-S6	—	—

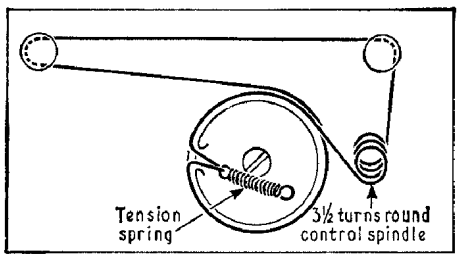


CIRCUIT ALIGNMENT

Equipment Required.—An a.m. signal generator; an audio output meter with an impedance of 3ohms or a 0-1V a.c. voltmeter; a 0.1μF capacitor, a length of insulated wire formed into a coupling loop and a non-metallic trimming tool.

During alignment use the lowest input-signal consistent with a suitable change in output to prevent a.g.c. action (50mW or 0.4V a.c. according to which output indicator is used).

1.—Switch receiver to m.w. and rotate the tuning gang to the fully open position. Set the volume control at maximum output. Connect the audio output meter in place of the loudspeaker or connect the 0-1V a.c. voltmeter across the loudspeaker speech coil. Connect the signal generator via the 0.1μF capacitor to **TR1** base.



2.—Feed in a 470kc/s modulated signal and adjust the cores of **1FT3, 1FT2** and **1FT1** for maximum output.

3.—Transfer the signal generator output leads to the r.f. coupling loop and place the loop adjacent to the receiver. Maximum pickup is obtained when the loop is at right-angles to the ferrite rod. Switch to m.w. and fully close the tuning gang. Feed in a 525kc/s signal and adjust **L6** for maximum output.

4.—Fully open the tuning gang, feed in a 1,600kc/s signal and adjust **CT3** for maximum output.

5.—Repeat operations 3 and 4.

6.—Tune receiver to 500m, feed in a 600kc/s signal and adjust **L1** for maximum output.

7.—Tune receiver to 212m, feed in a 1,420kc/s signal and adjust **CT2** for maximum output.

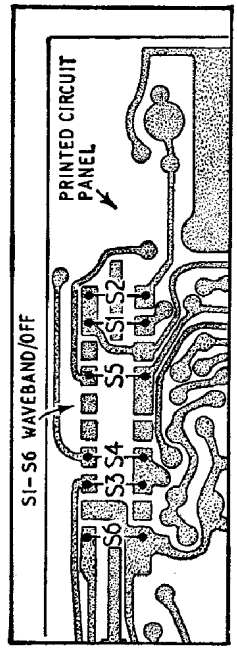
8.—Repeat operations 6 and 7.

9.—Switch receiver to l.w. and fully close the tuning gang. Feed in a 155kc/s signal and adjust **CT4** for maximum output.

10.—Tune receiver to 1,710m, feed in a 175kc/s signal and adjust **L2** for maximum output.

11.—Tune receiver to 1,130m, feed in a 265kc/s signal and adjust **CT1** for maximum output.

12.—Repeat operations 10 and 11.



Waveband switch contacts **S1-S6** *as seen on the printed circuit panel when it is standing on its normal base edge.*