

## PERDIO - PR5

Transistor	Emitter (V)	Base (V)	Collector (V)
<b>6-transistor model</b>			
TR1 OC44	1.1	1.1	7.0
TR2 OC45	0.45	0.6	7.0
TR3 OC45	1.0	1.15	7.0
TR4 OC71	1.2	1.35	8.1
TR5 OC72	4.5	4.68	9.0
TR6 OC72	*	0.18 <sup>1</sup>	4.5
<b>5-transistor model</b>			
TR1 OC44	1.3	1.2	8.1
TR2 OC45	0.5	0.6	8.1
TR3 OC45	1.0	1.15	8.2
TR5 OC72	4.0	4.1	9.0 <sup>2</sup>
TR6 OC72	*	0.17 <sup>1</sup>	4.0

\*Very low reading.

<sup>1</sup>Measured on 2.5V range.

<sup>2</sup>Quiescent collector current adjusted to 1.6mA by means of pre-set bias control R106 (see "General Notes").

Intermediate frequency 470 kc/s.

### Resistors

R1	56kΩ	C2
R2	10kΩ	C2
R3	3.9kΩ	C2
R4	68kΩ	B1
R5	8.2kΩ	B1
R6	680Ω	B1
R7	1.2kΩ <sup>1</sup>	B1
R8	22kΩ	B2
R9	4.7kΩ	B2
R10	1kΩ	B2
R11	3.9kΩ	B2
R12	5kΩ	B2
R13	5.6kΩ	B2
R14	33kΩ	B2
R15	10kΩ	B2
R16	680Ω	B2
R17	470Ω	B2
R18	2.7kΩ <sup>1</sup>	A1
R19	100Ω <sup>1</sup>	A2
R20	2.7kΩ <sup>1</sup>	E4
R21	100Ω <sup>1</sup>	E4
R22	5Ω	A1
R23	5Ω	B2
R24	1kΩ	B1
R25	15Ω	B2
R101	3.3kΩ	—
R102	470Ω	—
R103	100Ω	—
R104	5kΩ	—
R105	2.2kΩ	—
R106	1kΩ	—

### Capacitors

C1	—	C1
C2	—	C1
C3	0.04μF	C2
C4	0.04μF	C2
C5	0.01μF	C2
C6	1188pF <sup>2</sup>	C2
C7	250pF <sup>2</sup>	C2
C8	—	C1
C9	—	C1
C10	250pF	C2
C11	10μF	C1
C12	0.04μF	B1
C13	56pF <sup>2</sup>	B1
C14	0.04μF	B2
C15	250pF	B2
C16	0.04μF	B2
C17	18pF <sup>2</sup>	B2
C18	0.04μF	B2
C19	250pF	B2
C20	50μF	B2
C21	0.04μF	B2
C22	10μF	B2
C23	32μF	B2
C24	100μF	A1
C101	10μF	—
C10 <sup>2</sup>	32μF	—
C10 <sup>3</sup>	0.01μF	—

### Coils\*

L1	0.4	C1
L2	0.4	B1

L3	12.3	A1
L4	0.1	B1
L5	0.4	A1
L6	0.4	C2
L7	0.1	C2
L8	2.8	C2
L9	4.0	C2
L10	0.2	C2
L11	4.0	B2
L12	0.2	B2
L13	3.4	B2
L14	0.4	B2
L15	30.0	—

### Other Components\*

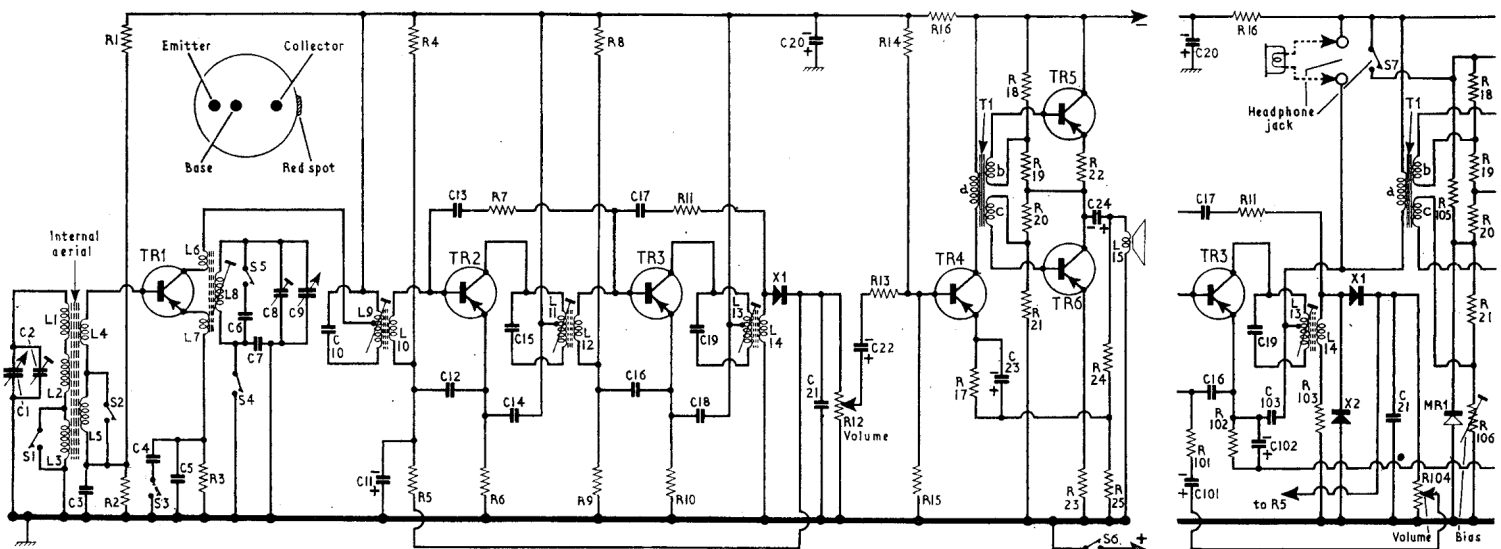
T1	375	A2
	43	
	60	
X1	OA70	B2
X2	OA70	—
MR1	C2HMB1 <sup>3</sup>	—
S1-S6	—	C2

\*Approximate D.C. resistance in ohms. Read "Resistance measurements" under "General Notes" before making measurements.

<sup>1</sup>±5 per cent.

<sup>2</sup>±2 per cent.

<sup>3</sup>Westinghouse.

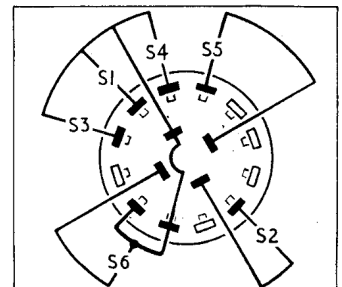


## CIRCUIT ALIGNMENT

**Equipment Required.**—An accurately calibrated signal generator with an output impedance of 37Ω, modulated 30 per cent at 400c/s; a 0.50mA or 0.100mA meter; a 12-inch length of insulated wire to form a coupling loop; a 0.05μF capacitor; a non-metallic trimming tool.

- 1.—Remove chassis from cabinet. Employing the 12-inch length of insulated wire, wind a single turn over L4 (B1), and connect signal generator, via the 0.05μF capacitor in its earthy lead, to the ends of the coupling loop. Connect milliammeter in series with the battery supply. Switch receiver to M.W., turn gang to minimum and volume control to maximum.
- 2.—Feed in a 470kc/s signal, and adjust the cores of L9 (C2), L11 (B2), L13 (B2), and again L11 and L9, in that order for maximum output as indicated by maximum reading on the milliammeter.

- 3.—Turn gang to maximum capacitance. Feed in a 525kc/s signal, and adjust the core of L8 (C2) for maximum output.
- 4.—Turn gang to minimum capacitance. Feed in a 1,570kc/s signal, and adjust C8 (C1) for maximum output.
- 5.—Repeat operation 3.
- 6.—Feed in a 540kc/s signal, tune it in on the receiver, and then slide the former of L1 (C1) along the ferrite rod for maximum output.
- 7.—Feed in a 1,450kc/s signal, tune it in on the receiver, then adjust C2 (C1) for maximum output.
- 8.—Switch receiver to L.W. Feed in a 215kc/s signal, tune it in on receiver, then slide the former of L3, L5 (A1) along the ferrite rod for maximum output.
- 9.—Switch receiver to M.W. Repeat operation 6.



Above: Diagram of the switch unit as seen from rear.