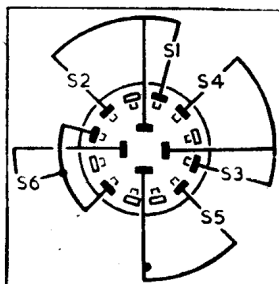


Right: Diagram of the on/off and waveband switch unit drawn as seen from the point of view indicated by the arrow in our front view illustration.



Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 OC44 ..	1.5	1.43	7.5
TR2 OC45 ..	0.52	0.64	7.5
TR3 OC45 ..	0.9	1.08	7.5
TR4 OC78D ..	1.08	1.21	8.7
TR5 OC78† ..	0.022	0.18	9.0
TR6 OC78† ..	0.022	0.18	9.0

† Matched pair.

Resistors

R1	33kΩ	C2
R2	8.2kΩ	B2
R3	3.9kΩ	B2
R4	82kΩ	C1
R5	8.2kΩ	B2
R6	560Ω	B2
R7	1kΩ	B2
R8	5kΩ	F3
R9	4.7kΩ	B1
R10	33kΩ	C1
R11	8.2kΩ	C1
R12	560Ω	C1
R13	560Ω	C1
R14	3.9kΩ	C2
R15	82Ω	C2
R16	5.6Ω	C2
R17	100Ω	D4
R18	220kΩ	C1

Capacitors

C1	196pF	E3
C2	30pF	B1
C3	40pF	F4
C4	0.04μF	B2

C5	0.01μF	B2
C6	250pF	B2
C7	160pF	B1
C8	110pF	C1
C9	30pF	A1
C10	110pF	E3
C11	10μF	D4
C12	58pF	B2
C13	0.1μF	E1
C14	250pF	B1
C15	18pF	B1
C16	0.04μF	B2
C17	250pF	B1
C18	0.02μF	B1
C19	0.02μF	E3
C20	100μF	C2
C21	2μF	B1
C22	100μF	C1
C23	0.1μF	C2
C24	50μF	D4

Coils*

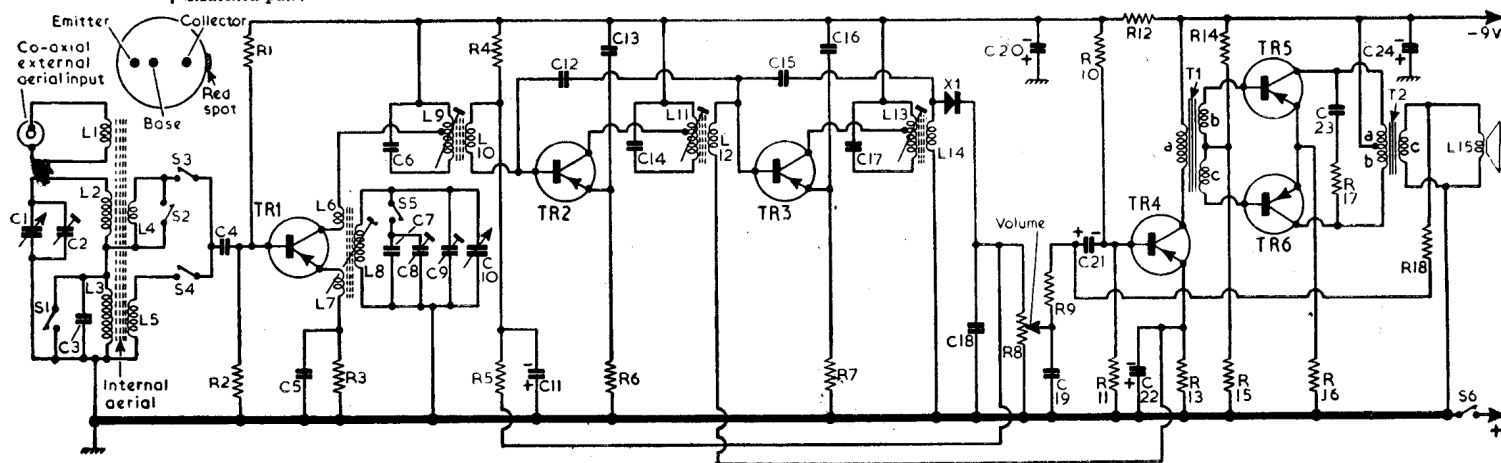
L1	2.3	E4
L2	1.6	D4
L3	7.0	F4
L4	—	E4

L5	—	F4
L6	—	C2
L7	—	C2
L8	2.1	C2
L9	4.0	B2
L10	—	B2
L11	4.0	B1
L12	—	B1
L13	4.0	B1
L14	—	B1
L15	3.0	—

Miscellaneous*

T1	$\left\{ \begin{array}{l} \text{a} \\ \text{b} \\ \text{c} \end{array} \right\}$	$\left\{ \begin{array}{l} 135.0 \\ 78.0 \\ \text{total} \end{array} \right\}$	} C1	
T2	$\left\{ \begin{array}{l} \text{a} \\ \text{b} \\ \text{c} \end{array} \right\}$	$\left\{ \begin{array}{l} 4.1 \\ 4.1 \\ 0.27 \end{array} \right\}$		} C2
X1				
S1-S6	OA70	B1		
	—	D3		

* Approximate D.C. resistance in ohms.



CIRCUIT ALIGNMENT

- 1.—Connect an output meter of 3Ω impedance in place of the speaker, or an A.C. voltmeter across the speaker. Connect a signal generator between chassis and the junction of S3, S4 and C4. The generator output should be maintained as low as possible at all times during the alignment operations to prevent A.G.C. action from masking the adjustment peaks.
- 2.—Switch the receiver to M.W., turn the tuning gang to minimum capacitance and the volume control fully clockwise. Feed in a modulated 470kc/s signal and adjust the cores of L13 (B1), L11, (B1) and L9 (B2) for maximum output. Repeat these adjustments until no further improvement can be obtained.

- 3.—Turn the tuning gang to maximum capacitance and check that the pointer coincides with the high wavelength ends of the tuning scales.
- 4.—Loosely couple the signal generator output to the ferrite rod aerial coils L1-L5. Tune the receiver to 500m. Feed in a 600kc/s signal and adjust the core of L8 (C2) for maximum output. Then slide the former of L2 (D4) along the ferrite rod for maximum output.
- 5.—Tune the receiver to 214m. Feed in a 1,400kc/s signal and adjust C9 (A1) and C2 (B1) for maximum output.
- 6.—Repeat operations 4 and 5.
- 7.—Switch the receiver to L.W. and tune it to 425m. Feed in a 185kc/s signal and adjust C8 (C1) for maximum output. Then slide the former of L3, L5 (F4) along the ferrite rod for maximum output.

Switches.—S1-S6 are the on/off and waveband switches, garfed in a rotary unit on the printed side of the panel. The unit is indicated in our front view illustration of the chassis (location reference D3) and a detailed sketch is shown below, where the contacts are drawn

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