

CONDENSERS	Values (μF)
C1	Aerial isolating condenser
C2	Earth isolating condenser
C3	Aerial MW "top" coupling
C4	1st IF transformer tuning
C5	condensers
C6	V1 cathode by-pass
C7	Gram pick-up shunt
C8	Gram pick-up isolating
C9	condensers
C10	V1 osc. CG condenser
C11	AVC line decoupling
C12	Osc. circ. MW fixed trimmer
C13	Osc. circ. LW fixed trimmer
C14	Osc. circ. SW1 tracker
C15	Osc. circ. SW2 tracker
C16	Osc. circ. MW and LW tracker
C17	V1 osc. anode coupling
C18	V1, V2 SG's decoupling
C19	V2 cathode by-pass
C20	2nd IF transformer tuning
C21	condensers
C22	IF by-pass condensers
C23	Part of tone compensator
C24	AF coupling to V3 pentode
C25	Coupling to V3 AVC diode
C26	V3 cathode by-pass
C27	Part of tone control
C28	HT smoothing condensers
C29	Mains RF by-pass
C30	Aerial circuit SW1 trimmer
C31	Aerial circuit MW trimmer
C32	Aerial circuit tuning
C33	Osc. circuit MW trimmer
C34	Osc. circuit LW trimmer
C35	Osc. circ. SW1 trimmer
C36	Oscillator circuit tuning

OTHER COMPONENTS	Approx. Values (ohms)
L1	Aerial SW1 coupling coil
L2	Aerial SW2 coupling coil
L3	Aerial MW and LW coupling coil
L4	Aerial SW1 tuning coil
L5	Aerial SW2 tuning coil
L6	Aerial MW tuning coil
L7	Aerial LW tuning coil
L8	Oscillator SW1 reaction
L9	Oscillator SW2 reaction
L10	Oscillator MW reaction
L11	Oscillator LW reaction
L12	Osc. circ. SW1 tuning coil
L13	Osc. circ. SW2 tuning coil
L14	Osc. circ. MW tuning coil
L15	Osc. circ. LW tuning coil
L16	1st IF trans. { Pri. ... }
L17	1st IF trans. { Sec. ... }
L18	2nd IF trans. { Pri. ... }
L19	2nd IF trans. { Sec. ... }
L20	Speaker speech coil
L21	HT smoothing choke
T1	Output trans. { Pri. ... }
S1-S12	Waveband switches
S13-S26	Gram pick-up switches
S27, S28	Tone control switches
S29	Mains switch, ganged
F1, F2	Mains circuit fuses

\* Electrolytic. † Variable. ‡ Pre-set. § 8μF and 16μF in parallel.

RESISTANCES	Values (ohms)
R1	V1 fixed GB resistance
R2	V1 osc. gram CG resistance
R3	V1 osc. radio CG resistance
R4	Osc. SW1 reaction damping
R5	V1 osc. anode HT feed
R6	V1, V2 SG's HT feed
R7	V2 fixed GB resistance
R8	IF stopper
R9	Part of tone compensator
R10	Manual volume control
R11	V3 pentode grid stopper
R12	V3 signal diode load
R13	V3 pentode GB and AVC delay resistances
R14	AVC line decoupling
R15	V3 AVC diode load
R16	Parts of tone control
R17	Heater circuit ballast

\* Centre-tapped.  
† Tapped at 615 Ω + 100 Ω + 100 Ω from V4 heater end.

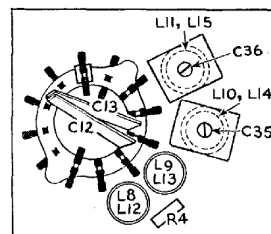
## CIRCUIT ALIGNMENT

**IF Stages.**—Connect signal generator via a 0.1 μF non-inductive condenser to control grid (top cap) of V1 and chassis. Connect a 100,000 Ω resistance between the control grid and chassis. Switch set to LW, turn gang and volume control to maximum. Feed in a 465 KC/S signal, and adjust the cores of L17 and L16 for maximum output. Remove condenser and resistance.

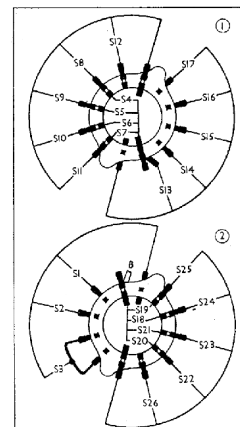
The second IF transformer L18, L19 is permanently adjusted at the works, and should not be interfered with.

**RF and Oscillator Stages.**—See that the scale is properly fitted, and that the bottom edge is horizontal. With the gang at maximum, the pointer should cover the right-hand ends of the clear sections of the scales. Connect signal generator, via a suitable dummy aerial, to A and E sockets.

**MW.**—Switch set to MW, tune to 200 m on scale, feed in a 200 m (1,500 KC/S) signal, and adjust C35, then C33, for maximum output. There are no variable tracking condensers, but the calibration should be checked at 550 m (546 KC/S).



Sketch showing the details of the oscillator coil assembly, which is grouped round the waveband switch units beneath the chassis. Its position is indicated in the under-chassis view, where an arrow indicates the direction in which it is seen in the sketch.



Diagrams of the two waveband switch units as seen when viewed in the direction of the numbered arrows in the under-chassis view. A table giving the switch positions appears in col. 4.

**LW.**—Switch set to LW, tune to 1,200 m on scale, feed in a 1,200 m (250 KC/S) signal, and adjust C36 for maximum output. Check at 2,000 m (150 KC/S).

**SW2.**—There are no adjustments on this band, the circuits being aligned permanently at the works.

**SW1.**—Switch set to SW1, feed in a 14 m (21.4 MC/S) signal, and tune it in accurately. Adjust C37, then C32, for maximum output, while rocking the gang very slightly for optimum results. Check calibration at 50 m (6 MC/S).