

ALBA**Model 44**

General Description: Six-transistor (plus two crystal diodes), two-waveband portable receiver with provision for external aerial and using three alloy-diffusion transistors.

Power Supply: 9-volt, centre-tapped, battery. No-signal consumption under 12 mA.

Transistors: (T₁) AF117 (OC170); (T₂) AF117 (OC170); (T₃) AF117 (OC170); (T₄) OC81D; (T_{5, 6}) OC81. Diodes (D₁) OA79 (A.G.C. clamp); (D₂) OA70.

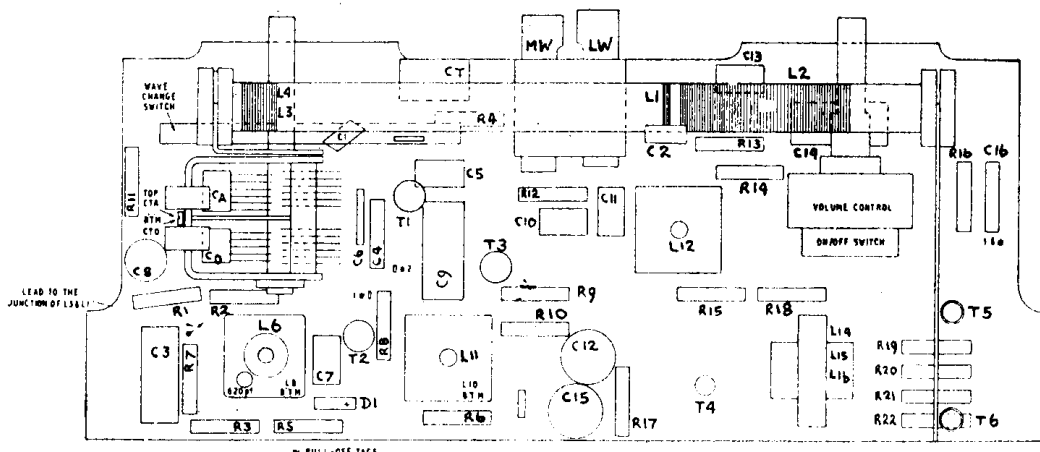
Modifications: On later models R₁₉, R₂₁ have been changed from 2.7k to 2.2k.

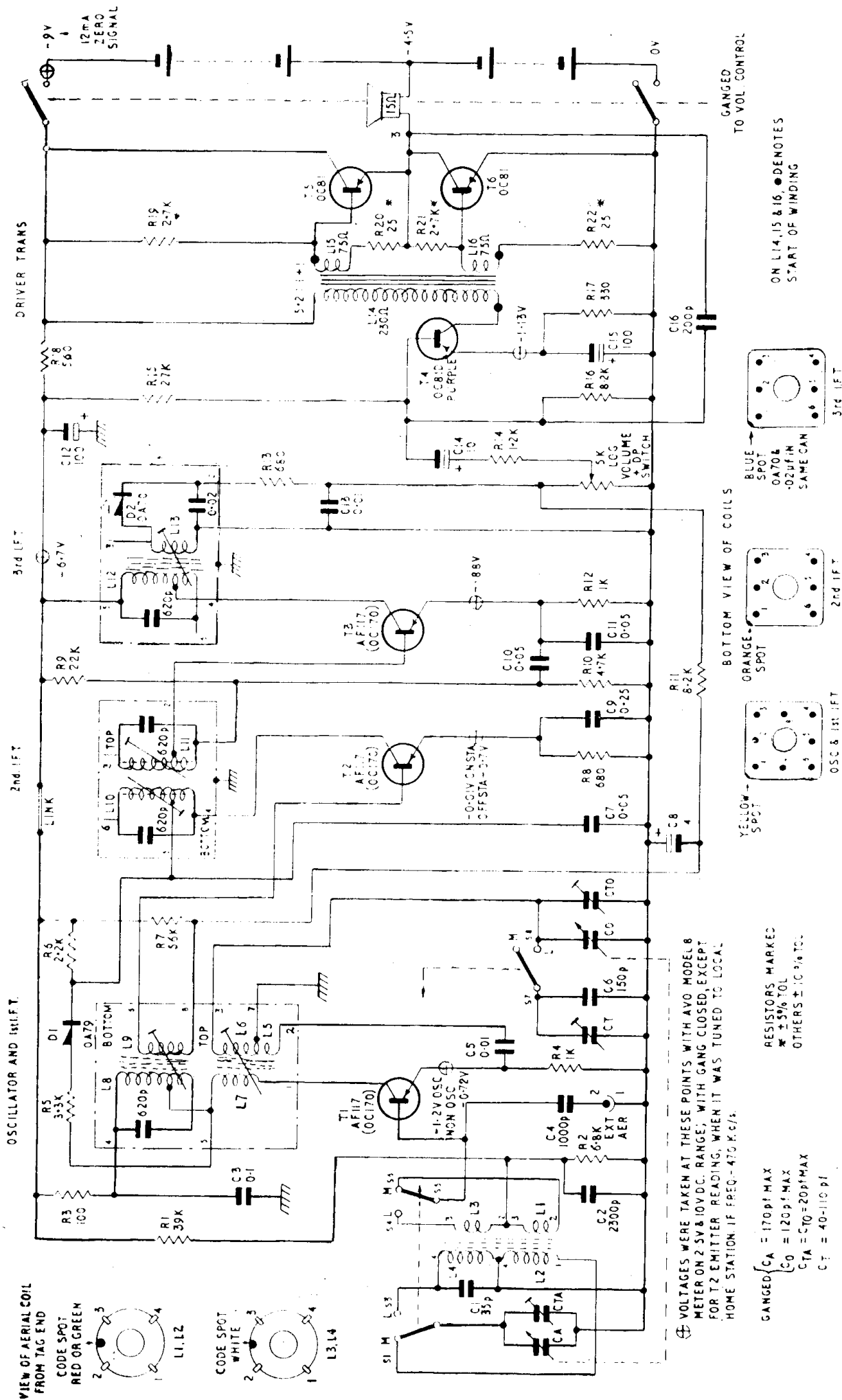
Alignment Procedure: Chassis panel must be removed from cabinet: gently pull off both knobs and tuning pointer. Lay set face downwards, and remove back. Withdraw battery and stand it beside cabinet; remove two screws from lower corners of chassis panel and gently withdraw panel. This may now be inverted and laid across cabinet. Disconnect loudspeaker by means of pull-off tag. This will leave "spill" on panel to which the output meter can be connected; other side of meter to one end of lead between loudspeaker and battery plug. Output meter impedance 15 ohms.

I.F.: Inject a 470-kc/s. signal via 0.1 μ F. to base of T₁ (pink lead from rod aerial to wave-change switch). Close gang, switch on and depress M.W. button. Adjust L₁₂ (3rd I.F.T.); L₁₀₋₁₁ (top and bottom 2nd I.F.T.); L₈ (bottom 1st I.F.T.) in that order. Repeat until no further improvement possible.

R.F.: Prepare calibration scale for tuning gang. Connect generator via a 10k resistor to aerial socket. Adjust L₆ (top) and L₂ at 600 kc/s. Adjust C₀ and C_{1a} at 1300 kc/s. Repeat sequence until no further improvement possible. Set to 200 kc/s. and adjust C_t for maximum output of B.B.C. "Light" programme. Inject 213 kc/s., tune to signal and adjust L₄.

Note that adjustment to L₂ or L₄ should not be necessary unless aerial coil assembly has been changed or normal sensitivity cannot be achieved. If original seal is broken reseal with coil varnish.





CIRCUIT DIAGRAM—ALBA MODEL 44

VOLTAGES WERE TAKEN AT THESE POINTS WITH AVO MODEL 8 METER ON 2.5V/10V D.C. RANGE, WITH GANG CLOSED, EXCEPT FOR T2 EMITTER READING, WHEN IT WAS TUNED TO LOCAL HOME STATION IF FREQ. 470 K.C/S.

GANGED: CA = 170PF MAX
 C0 = 120PF MAX
 CTA = C70 = 20PF MAX
 CT = 40-110 PF

RESISTORS MARKED * ± 5% TOL
 OTHERS ± 10% TOL

VIEW OF AERIAL COIL FROM TAG END
 CODE SPOT RED OR GREEN
 L1, L2
 CODE SPOT WHITE
 L3, L4

OSC & 1ST I.F. BOTTOM VIEW OF COILS
 YELLOW SPOT
 ORANGE SPOT
 2nd I.F.

TO VOL. CONTROL
 GANGED TO VOL. CONTROL
 BLUE SPOT
 0A70L -02UF 1M SAME CAN
 3rd I.F.