

General Description: A mains-operated two waveband A.M. radio with twin A.F. channels for stereo reproduction from records or tape recorder. A DIN socket is provided for the record and replay connections to a tape recorder.

Wavebands: Medium and Short.

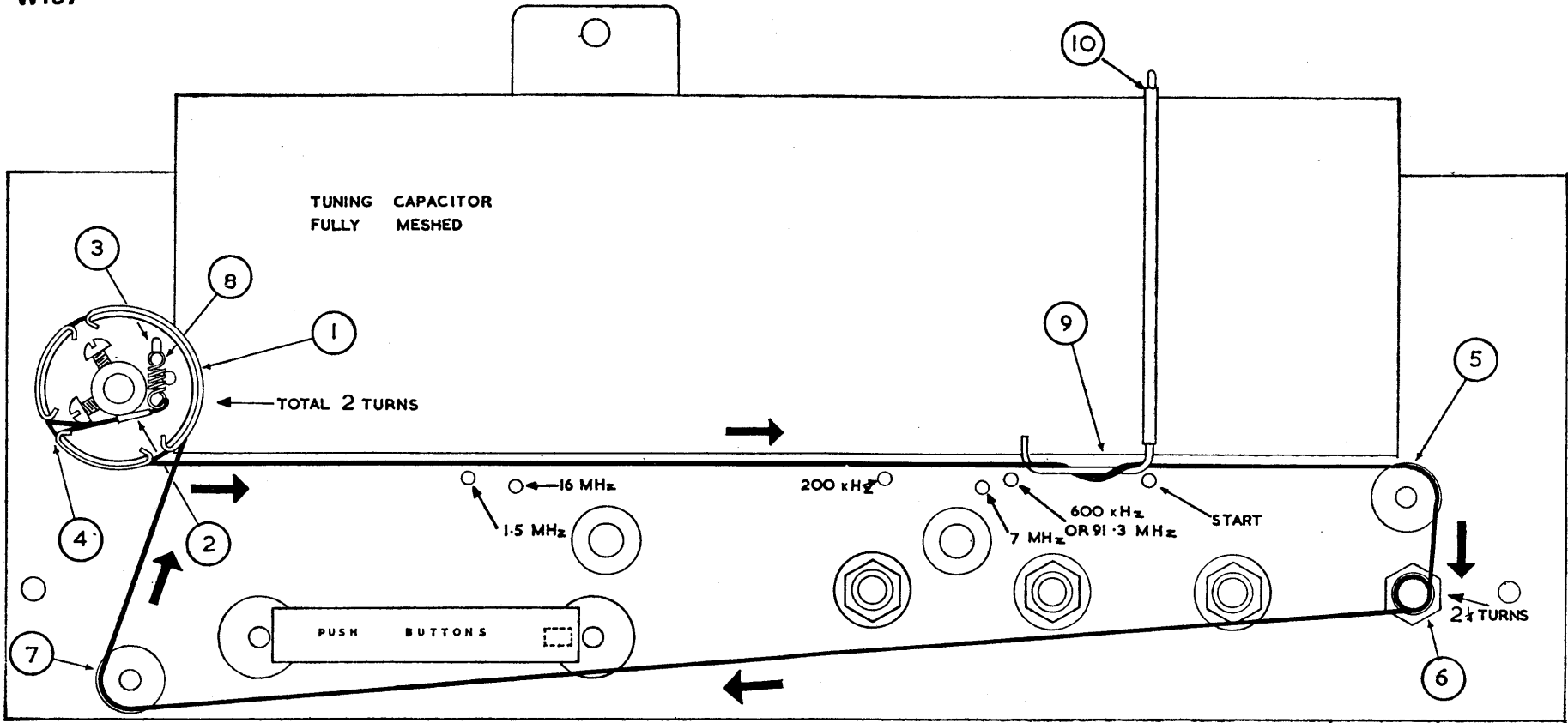
Mains Supply: 230–250 V, 50 Hz.

Loudspeaker: 15 Ω impedance.

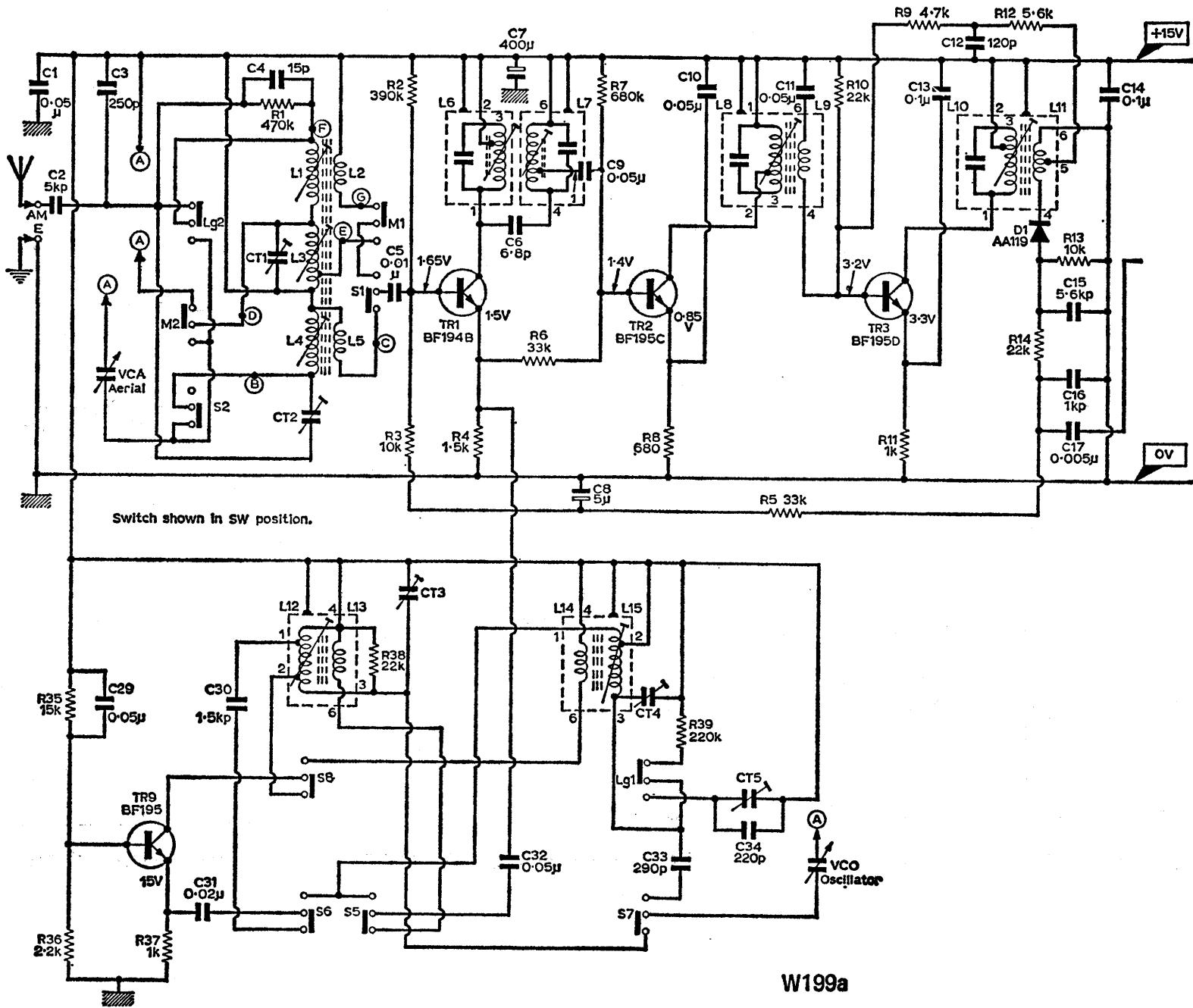
Dismantling: The chassis is fixed to the cabinet by three 4 B.A. nuts, one each side of the scale pan and one above it.

Drive Cord Replacement (see Fig. W197): With the tuning capacitor fully meshed, fasten the drive drum (1) in the position shown. Using cord clamps (2), form two loops (approximately $\frac{1}{8}$ in. diameter) at each end of the drive cord, giving a total length of $39\frac{1}{4}$ in. Hook one loop under tab (3) in drive drum. Take cord under drive drum centre bush; out through gap (4) and a $\frac{1}{4}$ turn round drum in an anticlockwise direction. Leaving the drum from the bottom, take the cord along to and over pulley (5); down and round tuning spindle (6) for $2\frac{1}{4}$ turns in a clockwise direction; back and under pulley (7); up to right hand side of drum, round it for $1\frac{3}{4}$ turns and in through gap (4). After passing this end of the cord under the bush, attach its loop to tab (3) by means of drive spring (8). Entwine one end of pointer with cord, as shown at (9), hooking other end over scale backing (10). Slide the pointer

W197



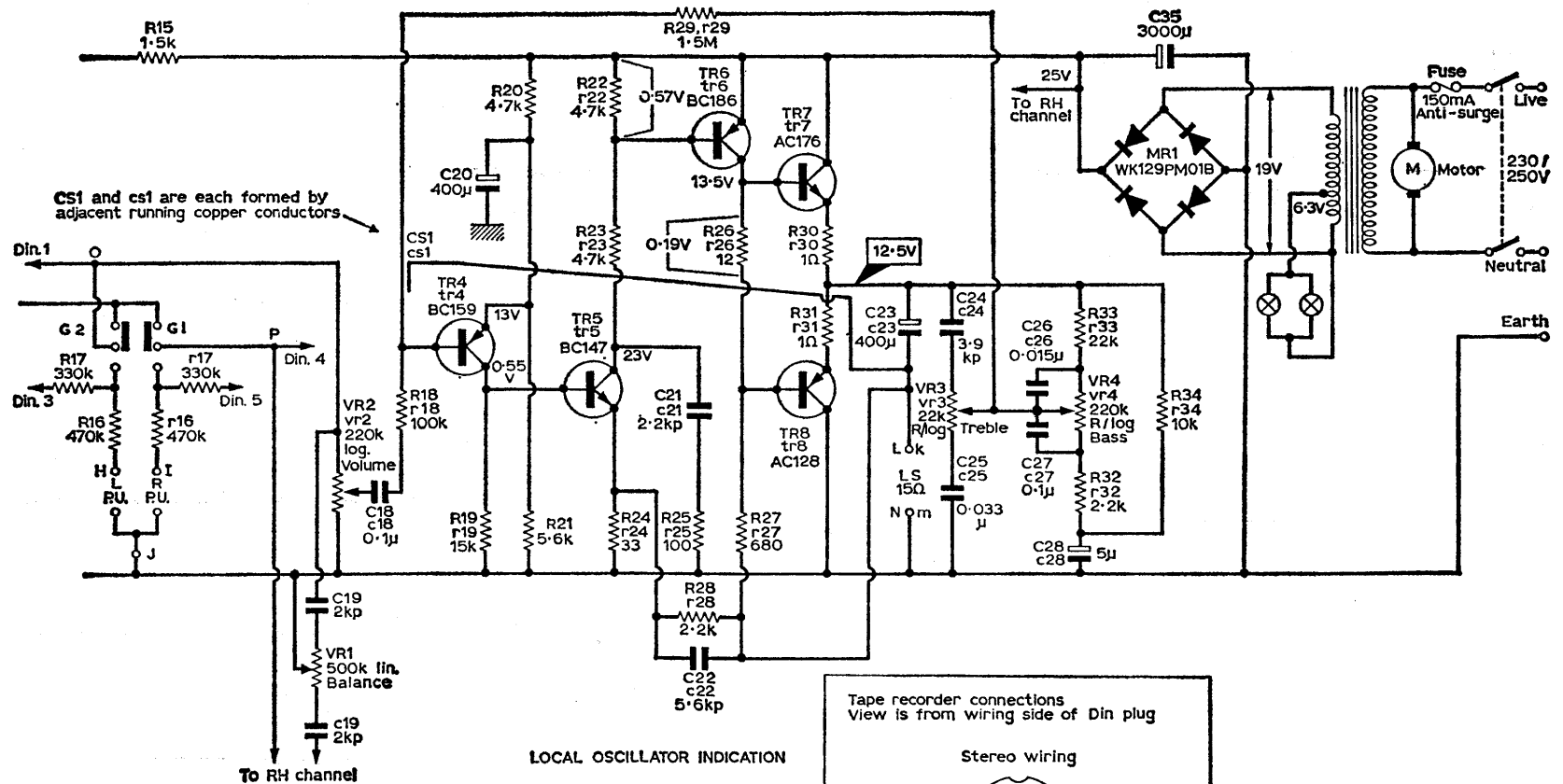
(W197) DRIVE CORD—MODEL 6004



(W199a) CIRCUIT DIAGRAM—MODEL 6004 (Part)

W199a

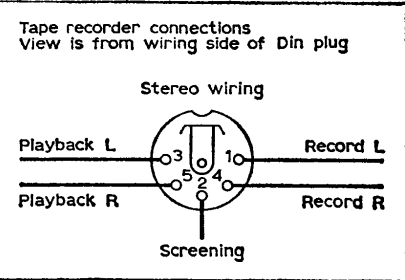
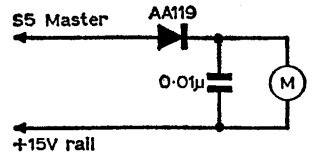
(W199b) CIRCUIT DIAGRAM—MODEL 6004 (Continued)



CS1 and cs1 are each formed by adjacent running copper conductors

To RH channel

LOCAL OSCILLATOR INDICATION



Band	Gang open	Gang shut
SW	25mV	5.6mV
MW	18mV	15mV
LW	12.5mV	7.5mV

Note: component reference numbers for RH channel are shown on LH channel with a lower case prefix (eg. r18 and c18)

RADIO SERVICING

along the cord until, with the tuning capacitor closed, it registers with the "START" calibration point.

Alignment

I.F. Circuits:

1. Switch to M.W. and close tuning capacitor.
2. Apply 470kHz signal (modulated 30 per cent at 400Hz) between base of TR₁ (via 0.1 microfarad capacitor and +15-V rail).
3. Adjust L₁₀, L₈, L₇, and L₆ for maximum output, attenuating the signal progressively to keep the receiver output below 50mW.
4. Repeat operation (3) till no improvement results.

R.F. and Oscillator:

5. Ensure that, with the tuning capacitor closed, the pointer registers with the "START" calibration point (see Fig. W197).
6. Switch to M.W. and set pointer to 600kHz calibration point.
7. Loosely couple (e.g. by radiating via a B.R.E.M.A. loop) to the ferrite aerial, a generator giving a 600kHz signal (modulated 30 per cent at 400Hz).
8. Adjust L₁₅ and L₃ (by sliding along rod) for maximum output.
9. Reset pointer to 1.5MHz calibration point and generator to 1,500kHz.
10. Adjust CT₁ and CT₄ for maximum output.
11. Repeat operations (6) to (10) till no improvement results.
12. Switch to S.W. and set pointer to 7MHz calibration point.
13. Radiate a 7MHz modulated signal and adjust L₁₂ and L₄ (by opening or closing coil on its former) for maximum output.
14. Reset pointer to 16MHz calibration point and generator 16MHz.
15. Adjust CT₃ and CT₂ for maximum output.
16. Repeat operations (12) to (15) till no improvement results.
17. Switch receiver to L.W. and set pointer to 200kHz calibration point.
18. Adjust CT₅ for maximum output of Radio 2 transmission.
19. Set generator to 213kHz and tune in this signal on receiver.
20. Adjust L₁ (by sliding along rod) for maximum output.
21. Repeat operations (17) to (20) till no improvements results.
22. As adjustment of the L.W. aerial coil may detune M.W.; re-peak L₃ and CT₄.