

FIDELITY PORTABLES

FLORET (continued)

Output. 200mW.
Diode. OA70.
Speaker. 25ohm.
IF. 470kc/s.
Wavebands. 190-570, 1100-2000m.

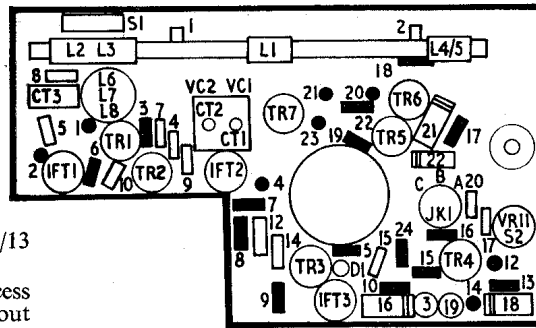
Manufacturer. Fidelity Radio, Ltd., 11/13 Blechynden St., London W11.

Dismantling. Removal of back gives access to drive system. To remove chassis, take out battery, unsolder speaker leads and remove two hexagon pillars and hexagon screw next to battery compartment. Ease chassis out, battery end first.

Voltages taken with 20,000ohms/voltmeter and in base, emitter, collector order are: TR1 0.85, 0.75, 7-8V; TR2 0.9, 0.65, 7-8V; TR3 1.18, 0.9, 7-8V; TR4 1, 0.9, 5.4V; TR5 0.4, 0.2, 4.65V.

Alignment. Connect output meter and check calibration with gang fully open or closed.

IF. Inject 470kc/s modulated via 0.01mF

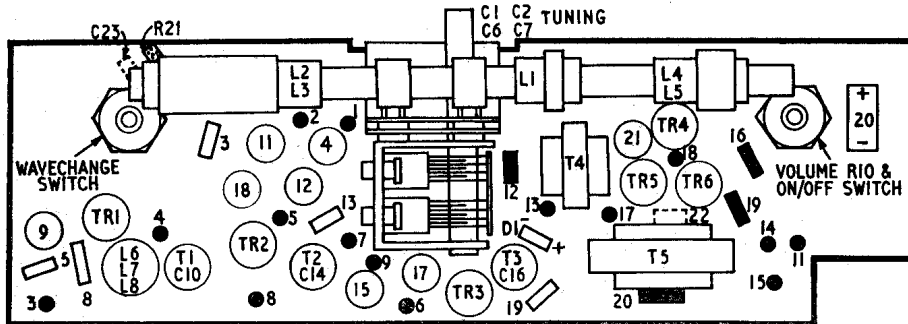


to aerial section of gang and adjust IFT3, IFT2 and IFT1 for maximum, reducing input to maintain low output.

Couple generator to ferrite rod by wire loop, tune to "on" in Athlone (500m), inject 600kc/s and adjust L7 and, if necessary, L2/3 (by sliding on rod) for maximum.

Tune to "m" of Luxembourg (208m), inject 1440kc/s and adjust CT2, CT1 for max.

Tune to LW Light Programme, inject 1500m (or use broadcast signal) and adjust CT3 for max. If L4/5 needs adjustment, repeat MW alignment.



FLORIDA (continued)

Transistors. OC44, OC45 (2), OC81D, OC81 (2). Diode. OA70. IF. 470kc/s.
Wavebands. 190-570, 1100-2000m.

Dismantling. Alignment can be carried out on removing back of set. To remove circuit board, pull off tuning knob and unclip pointer. Unsolder speaker and aerial leads, undo 6BA nut retaining bracket to cabinet and remove panel.

Voltages. With new battery, no signal and 20,000ohms/volt meter and in base, emitter and collector sequence: TR1 1, 0.9, 7V; TR2 0.75, 0.7, 7V; TR3 1.1, 1, 7V; TR4 1.3, 1.2, 9V; TR5, TR6 0.2, —, 9V.

Alignment. Using meter across internal

speaker, keep output at low level. See that pointer is at end of scale with gang closed.

With gang at maximum, waveband switch to MW, volume control at maximum, inject modulated 470kc/s signal via 0.01mF to aerial section of gang capacitor. Adjust cores of T3, T2 and T1 for maximum output. Repeat, reducing signal input as necessary.

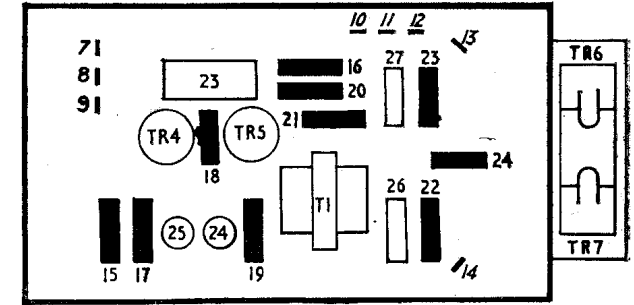
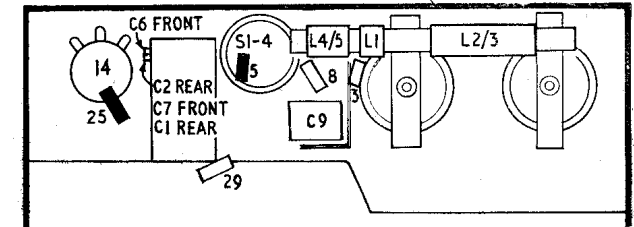
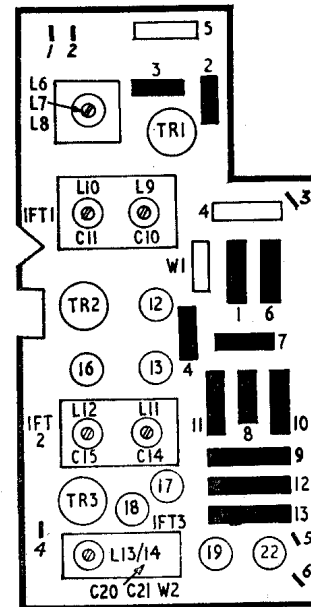
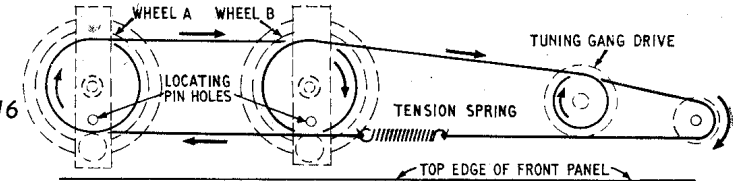
Loosely couple generator to ferrite rod by wire loop, inject modulated 600kc/s signal, tune set to 500m and adjust L8 (also L2/L3 by sliding along rod if absolutely necessary).

Inject 1500kc/s, tune set to 200m. and adjust C6 and C1 for maximum. Repeat.

Inject 1500m, tune to LW Light Programme and trim C9. Tune and inject 1819m (Paris) if necessary and adjust L4/L5 on ferrite rod.

FERGUSON 3100

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Tr2 is controlled by the AGC system, but on an extra heavy signal W1 conducts and damps the first two IF stages, thereby helping the normal AGC circuit.

Printed Board Tag Connections. 1 to control panel earth tag, gang earth, S1 tag 3 and ferrite rod aerial earth. 2 to C7 on tuning gang and S3 tag 9. 3 to S2 tag 8. 4 to tag 7 on audio board (earth). 5 to bottom R14 (v/c) and Tape output socket SO2. 6 to top of R14 (v/c) and tag 9 (7V) on audio board. 7 to tag 4 IF board. 8 to R25 control panel. 9 to tag 6 IF board. 10 to battery negative and speaker. 11 to battery positive and S4 tag 16. 12 to S4 tags 13 and 15. 13 to speaker. 14 to output transformer T2.

ALIGNMENT

Equipment required. Signal generator covering 183-2040 metres, with 30 per cent. AM. Avo Model 8 or output meter 30-40ohms impedance. 0.1mF capacitor. Coupling loop.

Setting up. Connect output meter (or Avo 8 set to 2.5V AC range) in parallel with speaker. Connect signal generator via 0.1mF capacitor

across aerial section of tuning gang. Through-out alignment input signal must be adjusted to keep the audio at about 50mW (no more) or 1V AC on Avo 8 with volume control at maximum. This will prevent error due to AGC action.

IF. Switch to MW, turn gang to minimum capacitance and apply 475kc/s signal. Adjust L13/14, L12 and L11, L10 and L9 in that order for maximum output. Repeat in the same order until no further improvement can be obtained.

RF. Inject signal via loop closely coupled to ferrite rod, switch to MW and tune generator to 1500kc/s and set to centre of 200 metre calibration. Adjust C6 and C1 for maximum output. Change to 600kc/s generator and 500 metres and adjust L7 and L2 by sliding along rod for maximum output. Position receiver for minimum pickup from the Light Programme transmission. Change generator to 200kc/s, tune to Light Programme (LW) calibration and adjust C9 and L4 by sliding coil along rod aerial for maximum output.

DEVIATIONS

C8 is 320pF on some models.