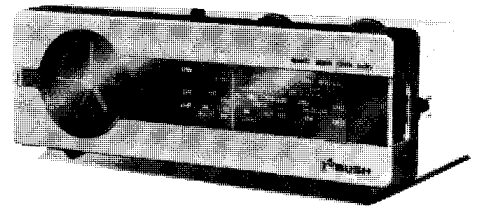


BUSH BA5506

a.m.-f.m. clock radio



This is a 3-band a.m.-f.m. radio, covering the LW, MW and VHF bands and incorporating a quartz analogue clock movement with alarm facilities (buzzer or radio). The unit is operated by internal batteries (1.5V for the clock and 4.5V for the radio). An earphone socket is provided for private listening.

ALIGNMENT

A.M. Circuits (IF)

Connect sweep generator to a coupling loop placed near the ferrite rod aerial. Connect an oscilloscope to TP4. Switch radio to MW and tune to low frequency end of the scale.

Inject a signal of 470kHz and adjust the cores of i.f. transformers IFT6, IFT7 and IFT8 to obtain the best i.f. waveform.

A.M. Circuits (RF)

Replace sweep generator with signal

generator and connect output meter across speaker terminals. With the receiver tuned to the low frequency end of the band, inject a signal of 525kHz, 1kHz 30% a.m., adjust oscillator coil L7 for maximum output. Retune radio to high frequency end of the band, inject a signal of 1650kHz and adjust oscillator trimmer CT4 for maximum output.

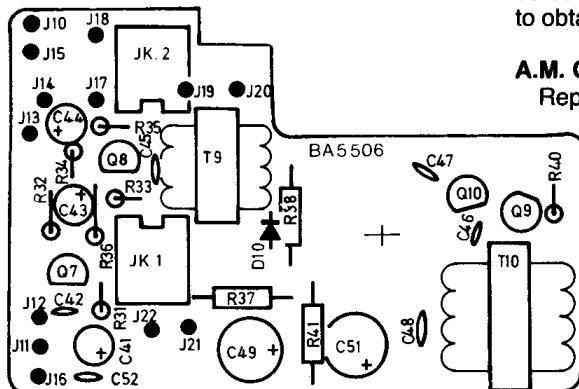
Repeat the L7 and CT4 steps.

Retune radio to 600kHz, inject a signal of 600kHz and adjust L5 on ferrite rod for maximum output. Retune radio and signal generator to 1400kHz and adjust trimmer CT3 for maximum output.

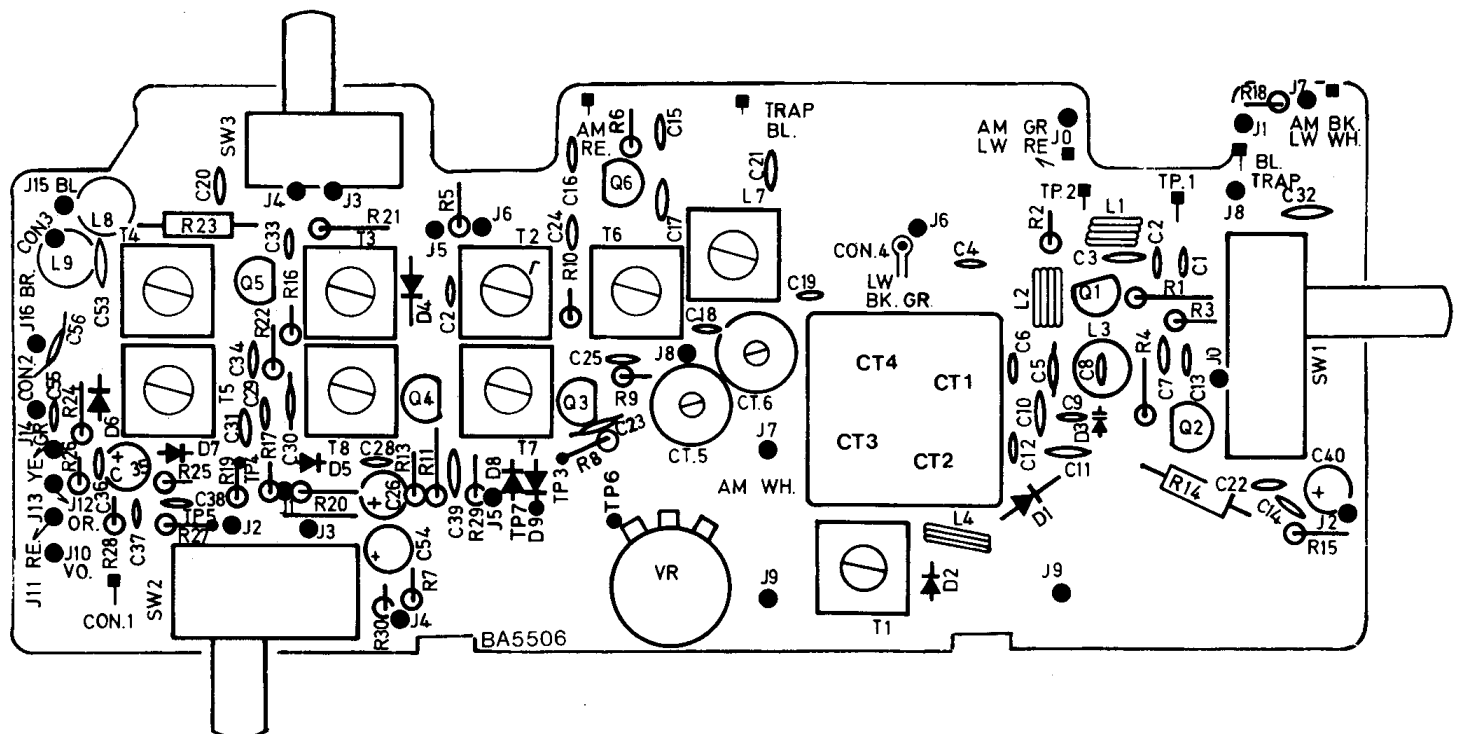
Repeat the L5 and CT3 steps.

Switch radio to LW band and tune to high frequency end of scale. Inject a signal of 265kHz and adjust oscillator trimmer CT6 for maximum output. Tune the radio and signal generator to 160kHz and adjust position of L6 on ferrite rod for maximum output. Retune radio and signal generator to 250kHz and adjust trimmer CT5 for maximum output.

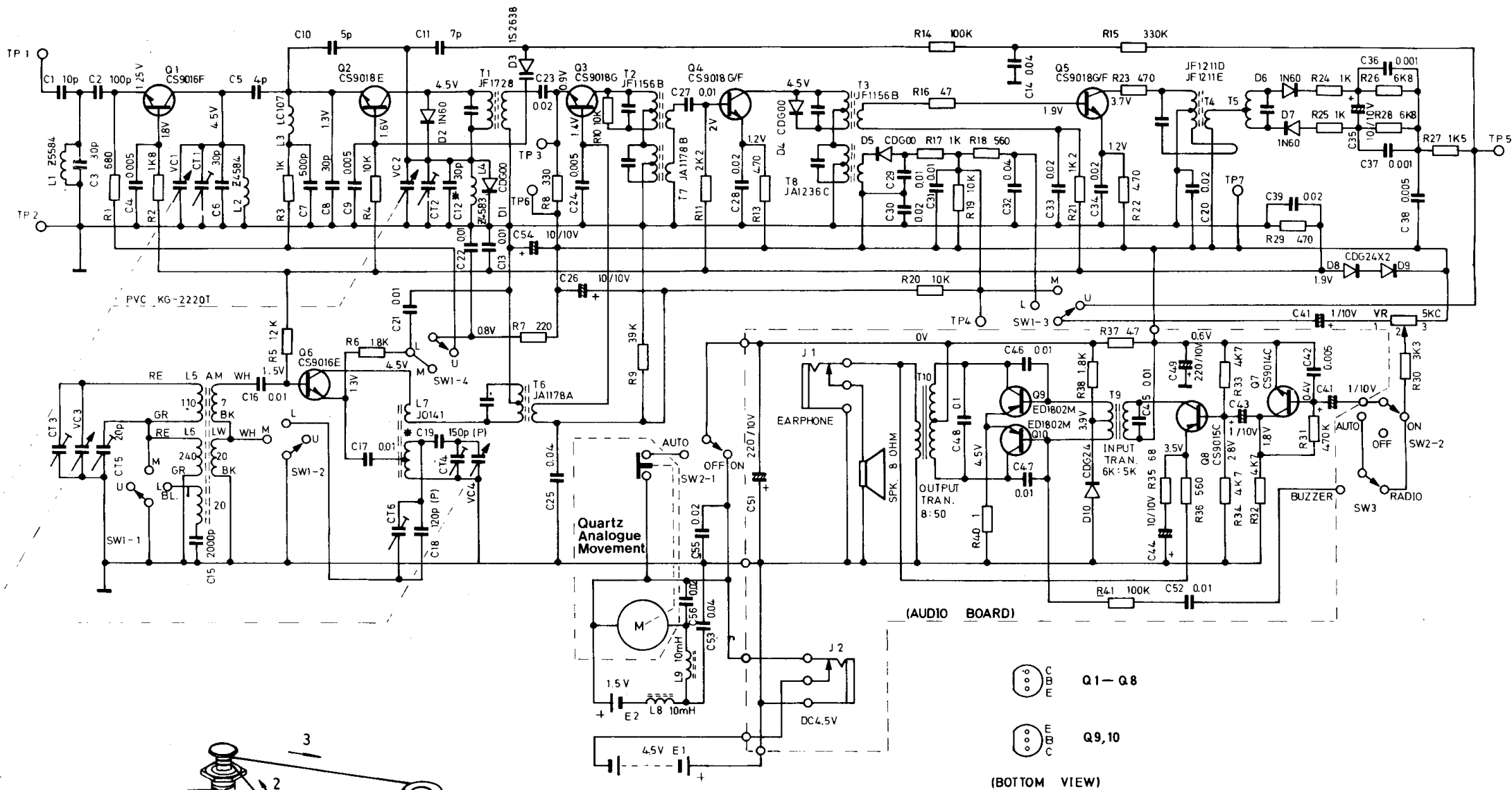
Repeat the L6 and CT5 steps.



Left: audio output circuit board viewed from component side.
Below: main circuit board viewed from component side.



—continued overleaf



ALIGNMENT

—continued

IFT4 and IFT5 for maximum output and best i.f. S-curve.

F.M. Circuits (RF)

Replace sweep generator with f.m. signal generator connected to aerial test points TP1 and TP2. Replace oscilloscope with output meter connected across speaker terminals. Tune radio to low frequency end of band.

Inject a signal of 87MHz FM, deviation 22.5kHz, and adjust oscillator coil L4 by carefully opening or closing coil turns for

maximum output. Retune radio to high frequency end of band, inject a signal of 105MHz, 22.5kHz deviation, and adjust trimmer CT2 for maximum output.

Repeat the L4 and CT2 steps.

Tune radio and signal generator to 90MHz and adjust r.f., coil L2, by carefully opening or closing coil turns, for maximum output. Retune radio and signal generator to 102MHz and adjust trimmer CT1 for maximum output.

Repeat the L2 and CT1 steps, then disconnect all test equipment.