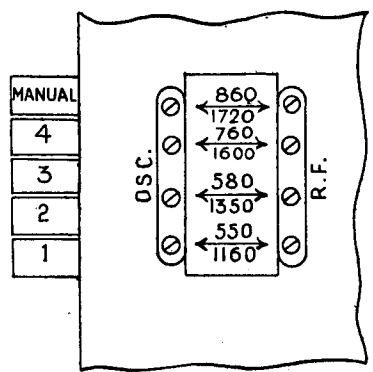


For more information remember www.savoy-hill.co.uk

GE Model L651—Continued



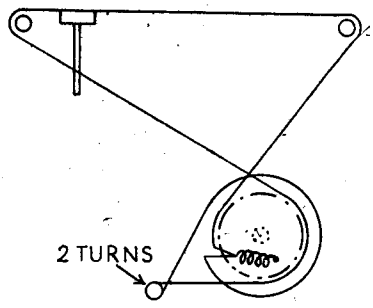
How the aerial and oscillator trimmers are situated in relation to the push-buttons. The coverage is given in kilocycles.

cover as indicated on the label. In changing a button for another station, the new station frequency must be within the range assigned to the trimmers.

(3) To set up, switch on the receiver and allow it to warm up for 15 minutes. Press the right hand (or manual) button until it clicks into a depressed position. Tune to the station in the conventional manner with the usual tuning control. Note the programme on this station.

Depress a button, the frequency range of which includes the frequency of the station. Using an insulated screwdriver and starting from a tightened position of the RF trimmer, loosen the adjustment about one turn. Now adjust the OSC trimmer until the station being set up is tuned in and peak the RF trimmer for maximum volume.

Referring back to the manual control will indicate whether the trimmers have been correctly tuned.



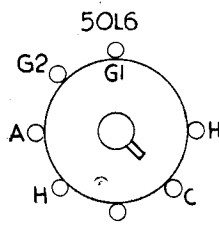
How the cord drive is arranged on the GE model L651.

**BoT Imported Set
GE
L541, L543, L570**

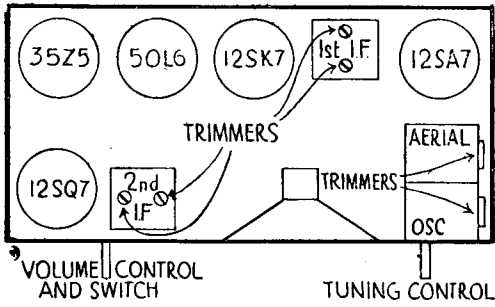
Four-valve, plus rectifier, superhet receiver, covering medium waves only (174-555 metres), for operation on 105-125 volts AC or DC mains and provided with a resistance line cord for use on 230 volt AC or DC mains.

THE set has its own self-contained aerial which is slightly directional, but where better reception of distant stations is required, an external aerial may be connected to the terminal inside the back cover of the receiver. No earth connection is necessary.

The aerial input is fed straight to the signal grid of the frequency-changer and is tuned by C6A (C5). The oscillator coil



Pin connections of the 50L6. See opposite page for other valve bases.



The positions of valves and trimmers are indicated in this layout diagram. There are only the four IF trimmers and two MW trimmers (situated on the gang) to be adjusted.

L4, connected between the oscillator grid and the cathode of the frequency changer is tuned by C6B (C7).

The IF transformers L1 and L2 are tuned by the trimmers C10, C11 and C12, C13 respectively, and are peaked at 455 kc. AVC is applied to the grids of the frequency-changer and IF amplifier and the double diode triode is resistance-capacity coupled by R6, C17, R7 to the beam power output valve.

The heaters of all the valves are in series, and the cathodes (except the rectifier) are returned to the HT negative line. The dial light is tapped across part of the heater of the rectifier. The set will work with the dial light removed, but the light will not glow if a valve burns out.

GANGING

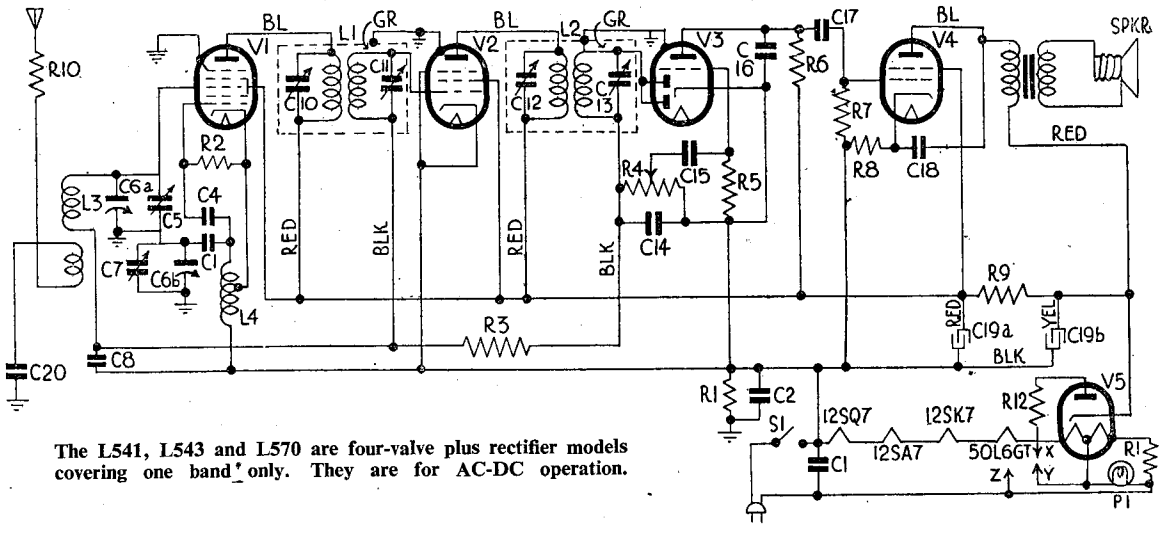
IF Circuits.—Connect an output meter across the speech coil and turn the volume

control to the maximum position. Feed 455 kc from a signal generator to the converter grid (pin 8) of the 12 SA7 valve through a .05 mfd fixed condenser and adjust the trimmers of the second and first IF transformers for maximum response.

HF Circuits.—Fully close the gang condenser by rotating the tuning control and, if necessary, slide the pointer along the cord until it lines up with the first dial marking on the left. Turn the tuning control until the pointer is over the 1,500 kc dial mark.

Set the signal generator to 1,500 kc and feed its output into a loop of wire about 12 in. in diameter. Hold this radiating loop about 12 in. from and parallel with the internal aerial and tune the oscillator trimmer C7 to the signal.

Peak the signal by adjusting the aerial trimmer C5 for maximum output.



The L541, L543 and L570 are four-valve plus rectifier models covering one band only. They are for AC-DC operation.

BoT IMPORTED RECEIVERS

WITH these two reviews we complete publication in Service Engineer of a series of reviews dealing with the most common types in the Board of Trade importations of USA receivers.

- Models and dates of reviews are :—
 Emerson, 301, 330; 331, 332, 336, 351, 353, 376, 400, 414, 415, 419, 421, 422, 425, 439, 441, 461, 463. February, 1944.
 Emerson, 413, 426, 433, 440, 465, 465A (BC), 467. March, 1944.
 Emerson, 424, 427, 428, April, 1944. GE, LB673.
 Our Service Bureau will endeavour to assist with technical inquiries regarding other models.

VOLTAGE ANALYSIS

Readings taken with a 1,000 ohms-per-volt meter. Voltages shown are from the point indicated to the HT negative line with volume control at full and no signal. The mains voltage, after the line cord, for these readings is 117 volts AC. Measurements on DC will be appreciably lower.

V	Type	Anode	Screen	Heater (across valve pins)
1	12SA7	82	82	12
2	12SK7	82	82	12
3	12SQ7	45	—	12
4	50L6	113	82	50
5	35Z5	—	—	35

CONDENSERS

- C1, C805 mfd tubular 200 volt.
- C22 mfd tubular 400 volt.
- C40001 mfd mica.
- C6A, C6B ... 2-gang variable.
- C5, C7 ... Trimmers mounted on gang.
- C10, C11, C12, C13 ... Trimmers on IF transformers.
- C14, C1600033 mfd mica.
- C15005 mfd tubular 600 volt.
- C17, C2001 mfd tubular 600 volt.
- C1802 mfd tubular 600 volt.
- C19A, C19B ... 20+30 mfd dry electrolytic 150 volt.
- C2105 mfd tubular 600 volt.

RESISTANCES

- R1 ... 330,000 ohms 1/2-watt carbon.
- R2 ... 22,000 ohms 1/2-watt carbon.
- R3 ... 2.2 megohms 1/2-watt carbon.
- R45 megohms volume control.
- R5 ... 4.7 megohms 1/2-watt carbon.
- R6 ... 270,000 ohms 1/2-watt carbon.
- R7 ... 470,000 ohms 1/2-watt carbon.
- R8 ... 150 ohms 1/2-watt carbon.
- R9 ... 1,500 ohms 1-watt carbon.
- R10 ... 680 ohms 1/2-watt carbon.
- R11 ... 13 ohms 1/2-watt carbon.
- R12 ... 15 ohms 1/2-watt carbon.