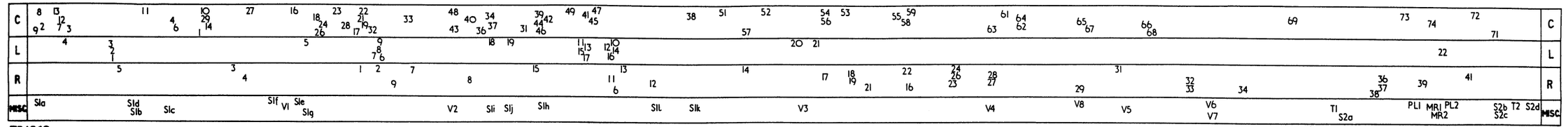

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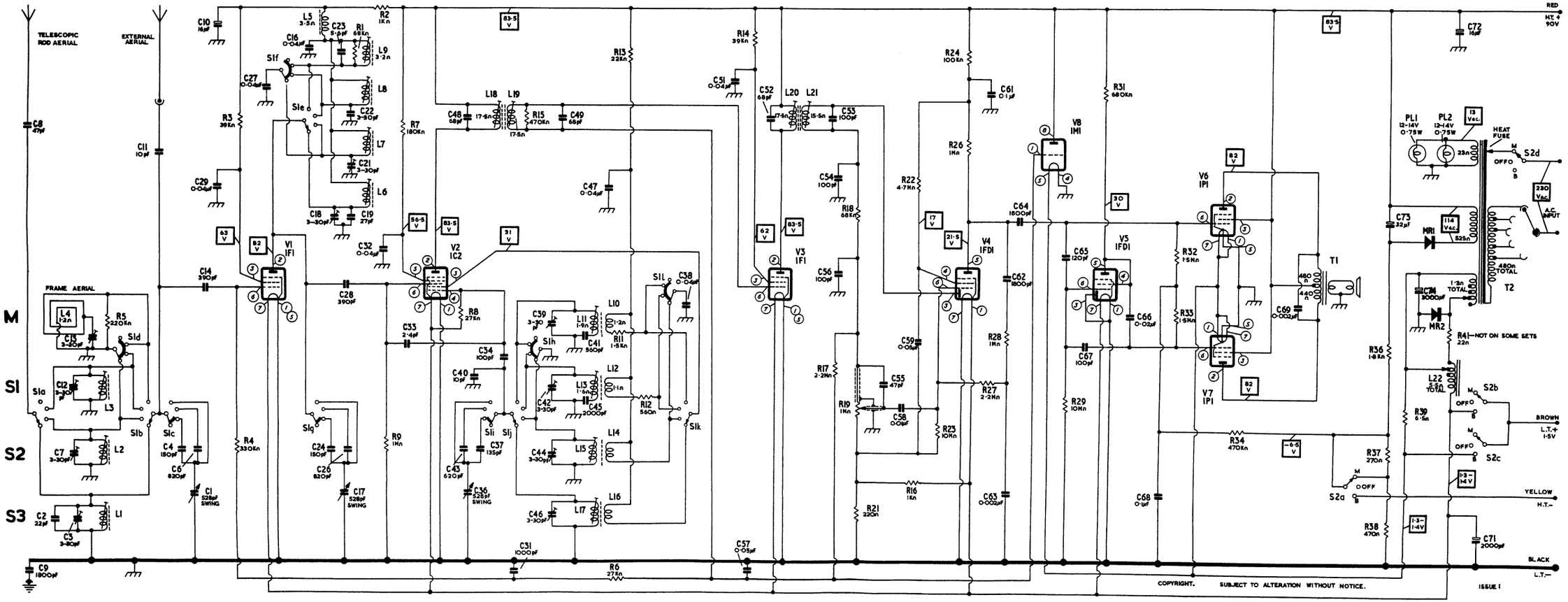

TBA268 RECEIVER

MURPHY RADIO LTD, WELWYN GARDEN CITY, HERTS.

PRELIMINARY SERVICE INFORMATION

Cord drive. Thread the drive cord as shown on Page 3 of the TBA228 Service Instructions Manual.

Voltage readings and coil resistances. The voltages given in the squares on the circuit diagram were taken under no signal conditions, with the receiver switched to the M range, and using a 20KΩ/V meter. The d.c. resistance of the coils is omitted where the value is less than one ohm.

Filament voltage. When any valves or components associated with the mains filament supply are changed, both the filament line voltages must be checked and, if necessary, adjusted so that they are within the limits of 1.3 to 1.4 volts. Use a high resistance d.c. voltmeter (300Ω/V or more) and disconnect the receiver from the mains supply when making adjustments. Adjust V6, V7 and V8 filament line voltage by altering T2 filament winding tap (tags on T2 top panel; avoid touching the heat fuse). Adjust the other filament line voltage by altering L22 tap (lead from C74, see diagram of chassis underside); if the voltage is less than 1.3 with the tap at its maximum setting, remove R41.

Modification. Some early receivers had a 0.04μF capacitor (Part No.49454) connected in parallel with the lamps within the tuning scale flap.

CIRCUIT ALIGNMENT

Receiver oscillator frequency. This is above the signal frequency in all ranges.

Pointer setting. When the ganged capacitor is at maximum capacitance, the wide part of the eyelet on the tuning drive cord must register with 0 on the centimetre scale fixed to the front of the chassis or, with the chassis in the cabinet, the middle of the pointers must register with the right-hand edges of the tuning scale apertures. The alignment frequencies are indicated by small dots in the centre of the tuning scale apertures.

I.f. alignment. Set the ganged capacitor to maximum, set the wave-range switch to M, remove the cardboard chassis cover and unscrew all the i.f.t. cores. Set the signal generator to 470 Kc/s, connect its output via a 0.01μF capacitor to the wire spill on pin 6 of V3, and tune the 2nd i.f.t. sec. and pri. (in that order). Transfer the signal generator output to V2 pin 6, and tune the 1st i.f.t. sec. and pri. (in that order). With the signal generator still connected to V2 pin 6, recheck the tuning of the 2nd i.f.t. pri. Do not readjust any other i.f.t. cores.

R.f. alignment. This is normally carried out while the chassis is inside the cabinet. When aligning the S1, S2, and S3 ranges, the rod aerial must be fully extended.

When the chassis is outside the cabinet, or if the trimmers are badly out of alignment, all of the osc. and r.f. circuits (but not the ae. circuits) can be aligned with the signal generator connected to the external aerial and earth sockets. The S1, S2, and S3 ae. circuits can be **roughly** aligned, while the chassis is outside the cabinet, by removing the rod aerial connecting lead from the switch and then temporarily connecting a 12.5pF capacitor between this tag on the switch and the chassis tag near V2; the signal generator is connected between this switch tag and the chassis. Final alignment of all the ae. circuits must be carried out while the chassis is in the cabinet.

RANGE	REMARKS	SIG.GEN. CONNECTION	FREQUENCY	ADJUSTMENTS
M	Repeat these adjustments until there is no further improvement	Via an insulated lead laid across cabinet	600 Kc/s (1.7 cm.) 1364 Kc/s (8.06 cm.) 1500 Kc/s	L11 (osc.), L9 (r.f.) C39 (osc.) C13 (ae.)
S1	As above, also rock tuning control for maximum output while adjusting r.f. and ae. circuits	Via a clip on **insulation** of rod aerial lead	2.5 Mc/s (1.95 cm.) 6.1 Mc/s (9.3 cm.)	L13 (osc.), L8 (r.f.), L3 (ae.) C42 (osc.), C22 (r.f.), C12 (ae.)
S2			7.2 Mc/s (2.87 cm.) 11.8 Mc/s (7.43 cm.)	L15 (osc.), L7 (r.f.), L2 (ae.) C44 (osc.), C21 (r.f.), C7 (ae.)
S3			15.2 Mc/s (2.52 cm.) 21.6 Mc/s (9 cm.)	L17 (osc.), L6 (r.f.), L1 (ae.) C46 (osc.), C18 (r.f.), C3 (ae.)