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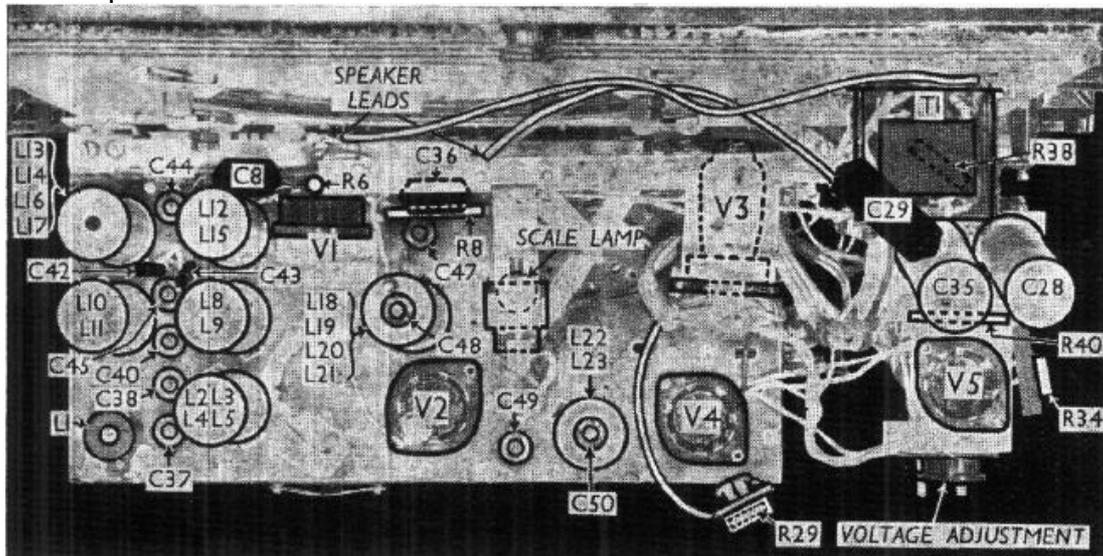
REKTRA RA97 (very similar to Philips 735A, which refers the text below)

### Circuit alignment

**"IF Stages.** – Press MW key, tune to 180m on scale, turn volume control to maximum, and switch set to minimum band-width (maximum selectivity).



Connect signal generator to control grid (top cap) of V1 (i.e. ECH3), and chassis. Connect an 80 $\mu\mu$ F (i.e. 80 pF) condenser across C49, feed in a 128 KC/S signal, and adjust C50 for maximum output. Now connect the 80  $\mu\mu$ F condenser across the larger portion of L23 (or from V4 – i.e. EBL1 - signal diode to chassis), and adjust C49 for maximum output. Remove the 80 $\mu\mu$ F condenser, and adjust C48, then C47, for maximum output. Seal all the IF trimmers.



Plan view of the whole assembly, with the speaker removed. C42, C43 are wire-wound condensers.

**RF and Oscillator Stages.** – Connect signal generator to A and E sockets, via a suitable dummy aerial. Turn volume control to maximum. For setting the gang accurately at the lower wavelength end of each band a special trimming jig will be necessary (Part No. 2V.351.063). For certain adjustments an auxiliary receiver will be required.

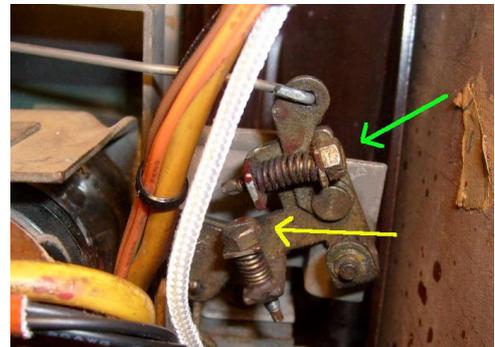
**MW.**– Press MW key and tune 180m on scale. Fit trimming jig to the rear of the gang spindle, so that it acts as a distance piece between the large washer secured to the end of the spindle and the rear-end plate of the gang assembly. Turn back the gang until it rests on the jig. Feed in a 1,600 KC/S (187.5m) signal, and adjust C44, C40 and C38 in turn for maximum output. Repeat these adjustments.

Remove trimming jig and feed in a 546 KC/S (550m) signal. Connect aerial socket of an auxiliary receiver, via a 25 $\mu\mu$ F condenser, to hexode anode (contact 8) of V1, and connect output meter to the output of auxiliary receiver. Tune both receivers to about 550m, then accurately adjust the tuning of the 735A receiver for maximum output on the output meter of the auxiliary receiver. *Without disturbing the tuning of the 735A receiver*, disconnect auxiliary receiver, and connect output meter to the 735A. Adjust C42 (by altering the length of its wire winding) for maximum output. Finally, readjust C44 as described above, using the trimming jig.

**LW.** – Press LW key. Connect aerial socket of auxiliary receiver via a  $25\mu\mu\text{F}$  condenser to hexode anode of **V1**, and connect output meter to auxiliary receiver. Feed a 400 KC/S (750m) signal into **A** and **E** sockets of the 735A receiver, tune both receivers to about 750m, then tune the 735A accurately for maximum output from the auxiliary receiver. *Without disturbing the tuning of the 735A receiver*, disconnect auxiliary receiver, and connect output meter to the 735A. Adjust **C45** for maximum output. Re-connect auxiliary receiver as described earlier, with an output meter, and feed a 160 KC/S (1,875m) signal to the 735A. Tune both sets to about 1,875m, then adjust the 735A accurately for maximum output from the auxiliary receiver. *Without disturbing the tuning of the 735A receiver*, disconnect auxiliary receiver, and connect output meter to the 735A. Adjust **C43** (by altering the length of its wire winding) for maximum output. Finally, re-adjust **C45** as described above.

**IF Filter.** – Feed a 128 KC/S signal into **A** and **E** sockets of the 735A, and adjust **C37** for *minimum* output.

**Calibration.** – Feed in a 566 KC/S (530m) signal, and tune it in accurately. Pointer should read 530m on scale. If not, adjust **horizontal castellated-head screw** at end of wire link to pointer arm until it does. Feed in a 1,250 KC/S (240m) signal and tune it in. Pointer should read 240m on scale. If not, adjust **vertical castellated-head screw** at end of wire link to pointer arm until it does. Repeat these adjustments until pointer registers accurately at 530m and 240m.”



NOTE 1: the “special trimming jig (Part No. 2V.351.063)” is unknown to me... I have done without (Anton Limena).

NOTE 2: screws position (incidentally, the Linodyne Philips system is really stunning...):

