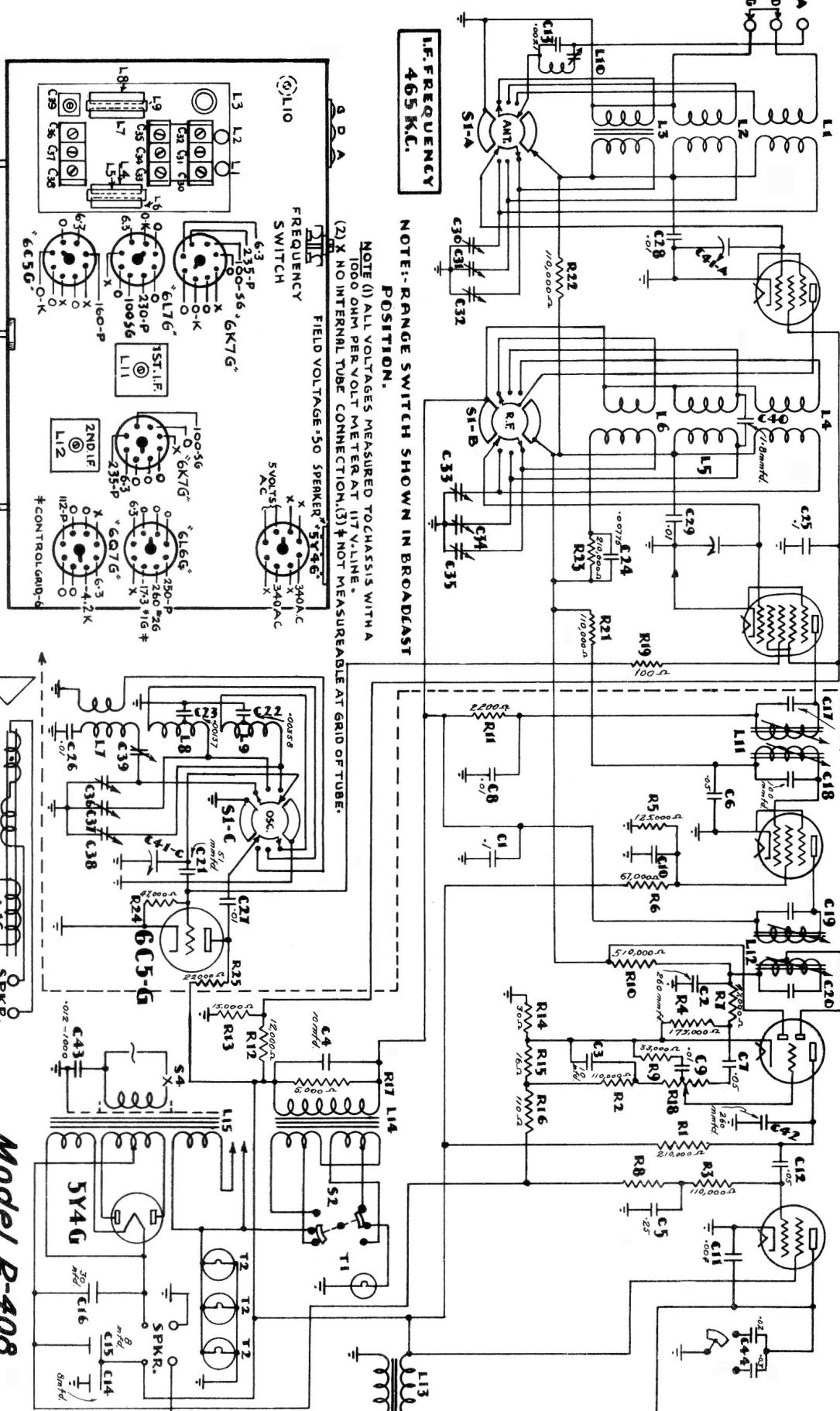


R.F. TUNING UNIT
6K7G

6L7G
6K7G

6Q7G
6L6G



RANGE
TONE
VOLUME

"The Southern Cross"
1937-38

With gang condenser in full mesh set the pointer to the last division on the dial scale at the low frequency end.

A high grade modulated oscillator covering the frequencies 465 K.C. to 16 M.C. and an output meter are required. Connect the ground lead of the oscillator to the receiver chassis.

(1) Connect the hot lead of the oscillator through a .05 M.K.F.D. condenser to the 6L7G control grid cap and apply a 465 K.C. signal. Set the range switch in the broadcast band. Tune the gang condenser so that it does not interfere with the signal and retard the volume control as far as possible and yet retain a readable indication on the output meter. This volume control adjustment must be made throughout the whole align-

ment procedure. Adjust the iron cores at top and bottom of the I.F. transformers L12 and L11 in this order for maximum output. If an appreciable adjustment was necessary repeat the whole procedure.

(2) Connect a 200 MMFD dummy antenna in the oscillator lead and transfer it to the antenna binding post. Still with the 465 K.C. signal input adjust wave trap L10 for minimum output. As the adjustment approaches its proper setting a very strong input signal

in signal and then after tuning set slightly to give maximum output align the R.F. and antenna shunt trimmers C35 and C32 for maximum output.

(4) Then apply a 600 K.C. signal to the antenna post and tune it for maximum and adjust series pad C39 for maximum output while rocking the gang carefully back and forth. If an appreciable adjustment of C39 was necessary operation 3 should be repeated.

(5) Turn the range switch to the Police position and change the dummy antenna to a 400 ohm carbon resistor. Set the dial pointer at 5 M.C. and apply a 5 M.C. signal. Then adjust oscillator shunt trimmer C37 and C30 for maximum output while rocking the gang

slightly.

(6) Turn the range switch to the short wave position (clockwise) and set the dial pointer at 16 M.C. Apply a 16 M.C. signal through the 400 ohm dummy and adjust oscillator shunt trimmer C38 to bring in the signal, choosing the peak truthtime C38 to bring in the signal. Then tune the signal to maximum with the gang and adjust R.F. and antenna shunt trimmers C33 and C30 for maximum output while rocking the gang