QUESTIONS AND ANSWERS

A. E.U. (Hastings): Sorry, but we cannot undertake to supply specifications of superhet coils, particularly with the odd size of condenser gang you are planning to use. We strongly advise you to give up the idea of making your own coils, as you would have very little hope of matching them accurately without proper equipment. However, if you would still like to persevere, you will find full details of winding data for an escillator coil to suit the 2A7 in the R C.A. Radio Tube Manual.

"C" (Winton): I have built up the Lekmek shortwave converter, and find it works well. In conjunction with a five-valve commercial set, it brings in the Empire stations at good volume. However, I find that the 20,000 ohm resistor becomes very hot. I have tested and changed the .5 mfd. condenser bypressing it to earth. The 58 also works at a high temperature, the shield being ancomfortably hot to touch. Is this in order?

A .: From the symptoms it is apparent that the screen current flowing is excessive. Have you measured the bias of the valve to see if it is correct? It should be -3 volts. The 20,000 resistor is dissipating just under one watt, so it should not become very hot. Should you intend replacing it then do so with a two watt resistor, to give a greater safety margin. An alternative cure would be to interchange the 20,000 ohm resistor with the 35,000 ohm resistor in series with it, This will lower the screen voltage, but not to the extent of making an appreciable difference to the gain of this valve.

DX32T. (New Plymouth): I have built up the "Simplex Superhet" and as an experiment would like to add an r.f. stage, separately tuned. Could a coil and condenser from an old set be used?

A: Yes, this would be quite in order.

2. Would the primary of the present aerial coil take the plate current of the 34, or could some form of resistance capacity coupling be used?

A: Choke capacity and the statement of the st

A.: Choke capacity coupling would be better, i.e., replace the resistor shown in your sketch with an r.f. choke. There is no reason, however, why you should not apply the plate voltage of the 34 through the primary of the present coil, though for greatest gain you would need to wind on a few more turns.

"RADIO" (Tokomaru Bay): I have a four-valve battery set, which does not seem to have the "punch" it should. I have tried all ways of lining up the condensers, and have failed to get the set to oscillate above 75 on the dial.

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A.: If the set was correctly lined up in the first place, then no amount of experimenting with the trimmers will improve the oscillation. Other remedies must be found.

2. How should the set be trimmed?

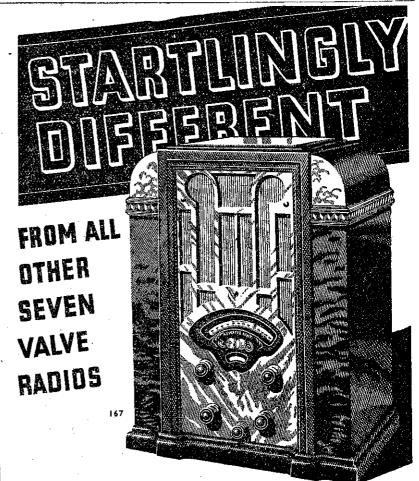
A.: Tune in to a station somewhere the centre of the broadcast band and adjust the trimmer on the aerial section of the gang to give greatest response. Then do likewise with the remaining trimmers. If it is found that one of the trimmers

screws either right in or right out without a peak being obtained, then screw the other two a turn or two in the opposite direction and repeat the aligning process.

2. I am using an H210 as detector and a P2 power valve. Could I improve on either? They are about thirteen months old.

A.: Replacing the power valve with a small pentode such as the type PT2 would give you greater volume. If you

order this valve, be sure to specify an English base. Also, you would find that you would have no difficulty in obtaining oscillation at the top of the dial if you used an L210 as detector. It has an appreciably lower impedance than the H210. However, before making the change it would be a good plan to have your present detector valve tested. If it is faulty, then replacing it with a new one would probably correct the fault.



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