

"CONSTANT READER" (Gisborne): I have a home-made Tungar bulb battery charger which smokes slightly and becomes very hot while operating.

A.: The number of turns you are using are approximately correct. It is possible, however, that the insulation separating the winding has broken down or a short-circuit has occurred. It will probably be necessary to dismantle the transformer and re-wind it. Carefully insulate it with Empire cloth.

"605" (Southland).—What would be the best combination of Philips' valves for my five-valve neutrodyne.

A.: Four 609 type and one B605.

2. Can I utilise three 201A's, one A615, and one PM6?

A.: Yes; but a PM256 would be better in the last stage.

3. What is the correct grid-leak?—2 megs.

4. Where can I obtain a diagram of this set?

A.: We do not know.

"BLACK CAT" (Blenheim).—I have a .001 variable condenser with 22 plates. How many will I have to remove to make a .0003?

A.: The condenser is certainly not .001. It is approximately correct as it is, though the removal of three plates would give you the required capacity.

"ETHER" (Westport).—I am using 221 valves in my set. What type of power valve do you advise?

A.: A171 or a B603, or PM256.

Is extra "B" and "C" voltage necessary?

A.: Yes, you should use at least 135 volts on the plate and approximately 15 volts grid bias.

2. My speaker is of the old-fashioned horn type, but a very good reproducer. Would it be necessary to substitute a cone type if I insert a power valve?

A.: No; if you have any fear of the speaker windings burning out insert an output filter.

3. What should be the life of an "A" battery?

A.: Using 221's and a power valve, about three months. They would last longer, however, if you connect them in series-parallel.

F.C. (Auckland).—Having studied the coil data in this week's issue, I fail to find an answer to my question of two weeks ago. It appears to me that you try to dodge giving a clear answer to some of your readers. Perhaps you give your direct subscribers the preference. My set requires one coil for the r.f. stage and one for the detector stage, but the coils in your table appear to be wound on one former. Would the same number of turns do for the coil in the detector stage?

A.: Yes. Our table was designed and as our queries are numerous and our time limited, we certainly cannot undertake to design repeatedly coils for individual requirements. As for your remarks that direct subscribers receive preference, do you imagine that upon receiving a query we hunt through files just to see if the inquirer is a yearly subscriber? If you do, you are mistaken.

"OWL" (Greymouth): I have both a 3-1 and 5-1 audio transformer. Which would you suggest would be the better for use in the "Night Hawk" Two?

A.: The 5-1.

2. You suggest using a 5meg. grid-leak, and I notice that the 2meg. is advertised for this particular set. Which is correct?

A.: The value is not very critical, and depends to a large extent upon the valve you are using as detector. A 5meg. would be more sensitive, but a 2 or 3meg. would give a better tone.

3. Would it be of advantage to have a pig-tail on my variable condenser? If so, to where is it soldered?

A.: Either to one of the moving plates or to the shaft which rotates them and to the framework to which the terminal connected with the moving vanes is attached.

4. Will the set operate a loudspeaker?

A.: In a poor reception locality in Wellington we have received all the YA stations at good loudspeaker volume, and 2FC and 2BL at fair speaker volume, besides a number of others.

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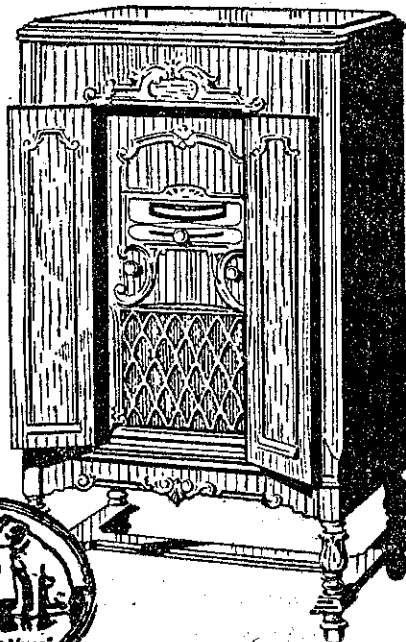
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