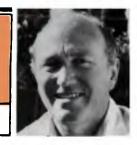
# **VINTAGE RADIO**



**By JOHN HILL** 

## **Restoring vintage radio cabinets**

No matter how well an old valve radio is restored in the electronics department, the effort is wasted if a similar effort isn't put into the cabinet. The overall appearance of a set will depend on what the cabinet looks like and every attempt should be made to restore this to its former glory.

Vintage radio cabinets fit into two categories: (1) those made of natural materials such as wood; and (2) those made of synthetic materials like Bakelite and plastic. The restoration procedure is quite different for these two categories so they will be dealt with separately. In this month's column, I will discuss the treatment for synthetic cabinets and leave the timber cabinets for next month. As far as I'm concerned, Bakelite and the so-called plastic (thermoplastic) cabinets can be lumped together under the one heading of "plastics". But the difference between the two regarding serviceability is considerable to say the least.

Bakelite has been around since the early days of radio and first came into service around 1920. Bakelite is a strong, durable and relatively stable material that has many excellent properties including that of being a good insulator of electricity.

Used for relatively small jobs initially, Bakelite was used for radio cabinets from the early 1930s to about the mid-1950s. It wasn't until the late 1940s that cheaper plastic cabinets began to take the place of Bakelite.

The passing of time is a good test for the durability of materials and time has proven that Bakelite will endure, whereas plastic generally does not. Most plastic cabinets from the post war period have virtually disintegrated with age. They frequently crack and distort and in some cases, totally self-destruct.

On the other hand, many Bakelite cabinets from the 1930s era are still in quite good condition. Only a



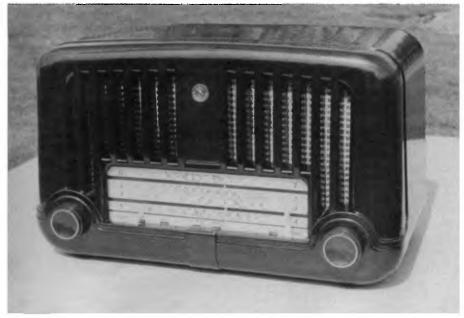
Plastic radio cabinets, as used with this Radiola, are often badly scratched but can usually be successfully restored by sanding and polishing. The acrylic dial can be polished to look like new with a fine abrasive paste.



You can use "Brasso" to polish Bakelite or plastic radio cabinets but, for this work, car polish is even more effective. Clean the cabinet thoroughly before polishing and remove scratches using wet and dry abrasive paper.



This stylish old receiver was made by Mullard. Its Bakelite cabinet was in excellent condition and has been restored so that it now looks brand new.



This neat little Stromberg Carlson is another receiver that used a strong, yet attractive Bakelite cabinet. A toothbrush is useful for cleaning those hard-to-get-at nooks and crannies.

drop or some other similar shock treatment is likely to damage a Bakelite cabinet.

#### Restoration

Despite the obvious differences between plastic and Bakelite, the restoration procedure is the same for both types. Let's go through the procedure step by step.

The first step in restoring a cabinet is to remove all detachable

fittings; eg, dials, dial mechanisms, brackets etc. Nothing is more annoying than to skin a knuckle on some sharp protruding object that could have been easily removed.

Next is a thorough clean-up and the best way to do this is to scrub the whole cabinet in a tub of hot soapy water. A nail brush and a toothbrush are handy tools for this job as they can reach into obscure corners and grooves where dirt and



The cabinet of this 1937 model Airzone was cracked in three places due to rough treatment but was repaired satisfactorily using super glue. These receivers used a rather complicated dial mechanism.



This old Radiolette receiver was made in 1937. Its cabinet is made of Bakelite and is in excellent condition despite its age. Bakelite is a very durable material and lasts much longer than plastic which was introduced in the late 1940s.

grime have collected over the years.

After cleaning and drying, inspect the cabinet for cracks. Whether plastic or Bakelite, many old cabinets will have cracks in them which should be repaired if the spread of the crack is to be checked.

Super glue is a good remedy for cracks and a bead of glue run along the inside of the cabinet will usually give a satisfactory repair. Make sure that the crack has dried out and is not full of water before applying any glue, though.

The next job is to remove any deep scratches from the outside surface. This is best done using medium grade wet and dry abrasive paper, followed by a finer grade to smooth things over. Wetting the paper gives the best results.

Although sanding will remove the scratches and produce a smooth finish, these smoothed areas can contrast quite noticeably with the rest of the cabinet. This can be particularly apparent with some Bakelite cabinets, especially those that have a slightly rippled surface texture.

The simple remedy for this problem is to sand the whole cabinet. It may make the job more time consuming but the overall result will be better.

### Polishing

At this stage of the proceedings, the cabinet is ready for polishing.

In previous columns I have suggested that "Brasso" metal polish is highly suitable for this job and so it is. However, I have since found that automotive cutting and polishing compounds are even more effective. These special abrasive pastes have a little more bite in them than "Brasso" and they not only cut well but also have a built-in polish.

But regardless of the polishing agent used, there is no escaping the

hard work required to complete the job. A good surface finish can only result from a considerable amount of rubbing.

In particular, special attention must be given to all those awkward nooks and crannies such as grooves decorative scrolls and the like. Once again, an old toothbrush does an excellent job of these otherwise inaccessible tricky bits.

Those with good workshop facilities at their disposal may prefer to use a fabric buff on their cabinets which could save a bit of time and effort. But be careful. Some plastics, particularly acrylics, have relatively low melting points and the heat generated by too much pressure on the buff can quickly gouge a deep hole into the surface of the cabinet.

Don't forget to also clean and polish any parts that go with the cabinet such as control knobs, detachable speaker grills and dial escutcheons.

Control knobs in particular can be difficult to clean thoroughly, as dirt and grime can clog up their fluted edges. A scriber point run through each groove will quickly remove the accumulation of 40-50 years of dirt and rubbish.

Once again, Bakelite knobs are usually reusable and polish up like new. Plastic knobs, on the other hand, are not so durable and like plastic cabinets, tend to selfdestruct.

One common trouble with pushon plastic knobs is that when they are pulled off the pot shaft, they often come apart, leaving the inner section of the knob still attached. I recall one set that had all four knobs snap off when I tried to remove them.

A squirt of WD40 or the like will help with knob removal but if those knobs have been made of cheap plastic, there is still a good chance of them ending up in two pieces.

#### Speaker cloth

While that just about covers most aspects of cabinet restoration, this story would not be complete without some comment on speaker fabrics. No matter how well the cabinet is restored, the job will look pretty poor if the dirty, torn, motheaten speaker fabric is not replaced.

Unfortunately, suitable speaker fabrics are now quite difficult to obtain for vintage radio restoration. No fabric made today has any resemblance to that used in radios 40-50 years ago. Hardly anything comes even close to the original materials.

Instead, one has to make do with curtain materials and old evening dresses from the opportunity shop and even then they are not what is really required.

If a new modern fabric is used on an old radio it either looks out of place or is too clean and new looking for the age of the receiver. Believe me, choosing a suitable speaker fabric is one of the most difficult aspects of vintage radio restoration.

In many cases it is better to use a serviceable piece of material from another old radio. For example, the torn fabric from a large console set may have a usable corner that could fit a smaller mantle model. If the cloth is a bit grubby or faded, it can often be reversed and it will look OK in many instances. No matter what, re-using old speaker fabrics frequently produces a far more realistic restoration than would a piece of new and unsuitable material.

When all is said and done, no-one really expects to see a 50-year old radio in as-new condition. Most people would expect a restored radio to be clean, tidy and well preserved — but not necessarily looking brand new.

If the set is really old (50 years or more), a good piece of second hand material will look far better than something new and spotlessly clean.

Incidentally, if any reader knows of a supplier who has some old speaker fabric, I would greatly appreciate hearing from him.

In conclusion, restoring a radio cabinet is not a difficult task but it can be time-consuming if the job is to be done properly. However, this time is well spent since the appeal of an old radio will very much depend on its final appearance.