There was considerable reader response to the question posed by Len Aquilino in the last column of why appliances contain fuses or thermal links which are impossible, or very difficult, to access for replacement. The consensus was that the purpose is to prevent the appliance from overheating and possibly causing a fire. They are not intended to protect components in the appliance. This practice goes against our thinking when we install fuses in antique radios to protect the power transformer.

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Lane Upton (Salt Lake City) sends this useful tip: As a collector of the old battery-operated Crosley radios using the composition "book" type tuning condenser, I have found that most of them are out of adjustment, i.e. - 180 degree travel of the tuning dial does not tune the condenser over its full range or its full range is obtained with less than 180 degrees of dial travel.

To check for proper adjustment, rotate the dial knob clockwise until the condenser is just closed with light pressure on the knob, observe the dial indication, and now rotate the dial knob counter-clockwise until the condenser is at its maximum opening. The rotation between these two points should be 180 degrees. If these two points are not 180 degrees apart, then use the following procedure to correct the adjustment.

There is a metal plate on the movable condenser plate that has the tuning cam resting against it. Locate the round head machine screw with the locking nut (has a spring loop under it) on one end of this plate. By adjusting this screw, the metal plate can be moved closer or further away from the condenser plate. Loosen the locking screw, and either: (1) decrease the angle by adjusting the plate away from the condenser movable plate, or (2) increase the angle by adjusting the plate toward the movable condenser plate. When the adjustment is correct, be sure to re-tighten the locking nut without disturbing it.

When the tuning condenser is adjusted properly, recheck the setting of the tuning knob. When the condenser is closed the knob should indicate 100, and when full open, it should be at zero.

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Lane also sends the following useful tips: The watch and clock makers have developed over the years some very convenient hand tools for working with small items. The tools described herein are primarily for either holding, cleaning, or oiling small parts. Some of these items are especially applicable to working with the old telegraph items such as keys and relays.

**Pegwood.** Pegwood is a very simple multi-use tool. It is nothing more than piece of round orange wood of specified diameter, cut to about 6” in length. It is typically available in 2, 3, 4, and 6 mm diameters, usually sold in bundles of 24 pieces, and is relatively inexpensive.

Some of its basic uses are scraping finished surfaces, cleaning small holes, polishing small areas, etc. If you are a bit careful in its use, it will not scratch either finishes or polished surfaces.

When the end is cut at an angle like a wood chisel, it makes a very nice small scraper. I have used it on radio cabinets for such things as popping off small pieces of paint, cleaning old polish and debris that has built up in the crevices, cleaning chassis surfaces in tight areas, etc.

The end can be filed to any shape required to maneuver a small piece of rag or steel wool for cleaning in corners. Also, a small piece of chamois can be used on the end for polishing. If the end is appropriately shaped, it can be used for cleaning the bearing holes in telegraph items.

**Pin Vises.** These are tools that look like a small drill chuck mounted on a hollow handle 3-1/2” to 4” long. They typically come in sets of four and will handle from the smallest part up to about 3/16” diameter. They are great for holding machine screws and other small items while cleaning and/or polishing them. With the hollow handle, they will hold a piece of round rod stock while a small part is being made--which then can be cut off from the rod stock.

**Oilers.** The oiling of watches and clocks is very critical work because it requires that a controlled amount of oil be precisely placed. This work is done with an “oiler.” This tool usually takes the form of a small rod with one end flattened to hold the oil and the other mounted in a handle.

I have made oilers by mounting various size sewing needles, from small embroidery to large darning types, with the eye out, into handles made from 1/4” diameter wood or phenolic. The size used depends on the amount of oil to be dispensed.

In use, the needle is dipped into some oil and the oil is transferred to where it is needed. The eye will help hold the oil until the needle is touched to the item to be oiled, when it will be immediately transferred. This technique assures that the oil is placed exactly where it is needed and in the proper amount.

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**Editor’s Note:** Another very useful tool is the jeweller’s saw. It looks like a coping saw and uses very fine, hardened blades which will cut most metals. The replaceable blades come in a variety of fineness. I find 8-0, the finest, to be the most useful. This saw is perfect for cutting excess length off of fine-thread screws because it does not damage the threads or leave a burr. Be sure to install the blade
so that it cuts on the pull - not the push like an ordinary hacksaw. - dko