Telephony 101 – Mechanical Restoration

Hello All,

As always, please send any questions about the reading assignment directly to me at <u>oldtimetelephones@goeaston.net</u>. I will bundle questions if necessary, repeat the questions, and give answers in an e-mail to the TCI List Server before moving on to the next reading assignment. This way everyone will benefit from these questions and answers. By sending questions directly to me, we will avoid unnecessary clutter on the List Server. Previous reading assignments, notes, questions, and answers are available in the TCI Library at <u>http://www.telephonecollectors.info/index.php/telephony101</u> (this is a new URL, but the old one will eventually get you there).

Please read Chapter 20 on mechanical restoration, pages 185-192.

This chapter shows tricks you need to disassemble many phones and components. Some of these, such as removing the fingerwheel from a rotary dial, you would not be able to figure out without help. Some make-shift tools are mentioned in this chapter, and a really crappy crimping tool is shown in Fig. 20-6. After writing the book, I found a vastly better crimping tool sold by Mike Sandman (model AT682).

The only thing I want to elaborate on is the refinishing of wood surfaces on magneto phones and ringer boxes. You will probably get as many opinions on finishing wood as there members of TCI. But on page 191, there is a brief description of a modern equivalent of the original finishing procedure used by Western Electric. I used this procedure recently on three phones and the results were so spectacular that I wrote about it in detail to a friend. The text of that e-mail is copied below (I now call this the 0,1,2,3 method – zero old finish, 1 coat of stain, 2 coats of shellac, and 3 coats of lacquer), and of course you have to remove all the hardware before you start.

## Step Zero

Using Kutzit paint remover, remove the old finish. This is a nasty job, so wear gloves. Following directions, let the remover soak, then scrape off the goo with a soft scraper. I use a cut-off wooden paint stirring stick so that the "blade" is softer than the telephone wood and won't scratch it. Stripping usually takes more than one application of Kutzit. A stiff bristle brush is needed in tough places. The wood is finally cleaned with mineral spirits to remove residual paint remover. Let it dry for a couple of days.

## Step 1

Sand with 220-grit garnet paper. I always use a soft sanding block with the paper on flat surfaces so finger grooves don't occur. Apply 1 coat of Minwax jacobian stain with a brush and let stand for about 15 minutes. Jacobian is the darkest of the Minwax stains and seems to match some of the Western Electric original finishes, although I have seen variations. Wipe off excess stain with paper towels and let dry for a couple of days.

## Step 2

Rub the surface gently with a fresh pad of #0000 steel wool. This removes the powdery surface stain that has not soaked in and brings out highlights in the wood. This is a really satisfying step. Then apply 2 coats of Zinzer Bulls-Eye shellac from an aerosol can. Shellac deteriorates rather quickly, so do not use a can that is more than about 2-years old. Be careful to make only one spraying pass per coat because the shellac is a little thick and will run (orange peel) easily. You need to wait only about 10 minutes between coats. Let dry for a couple of days.

## Step 3

Rub vigorously with a relatively fine synthetic sanding pad. Again use the sanding block with this pad to ensure evenness. At this point the color and surface are sealed by the shellac and you won't hurt it by rubbing well. What you are doing is leveling the top surface of the shellac, which serves as a filler (remember it's kind of thick). With oak, the grain is so deep that you do not try to fill it up with shallac (unless you're crazy), but this leveling produces a really nice textured surface. Finish with 3 coats of Deft satin lacquer from an aerosol can. You still want to make essentially one spraying pass per coat, but the lacquer is more forgiving than the shellac and big overlapping strokes can be used. Takes a little more than half an aerosol can per phone. Let dry for a couple of days.

If there are any questions about the current reading assignment, we will deal with the questions before moving on to the next reading assignment.

Ralph