



AUTOMATIC RADIO MANUFACTURING, CO.  
MODEL 613X

This was one of several radios donated to CHRS recently. Although most collectors would pass on this radio, I believe Steve Kushman has a mission in life to save *all* radios and asked me to see what could be done. It was evidently dropped at some time and a hasty repair made to the cabinet (see figure 1). Actually I enjoy working on “basket case” cabinets - there is nothing to lose - if I screw up I haven’t destroyed what was a valuable piece of history.



Figure 1

This radio is a model 613X made by Automatic Radio Manufacturing Co. of Boston, Mass. in 1946. The company begun in 1920 and is still in business today. It is most famous for producing the Tom Thumb radios in the late thirties. The deco model of the Tom Thumb is one of the rarest and most sought after Catalin radios. Automatic Radio is also well known for producing after market car radios.

The first thing done to the cabinet was to remove the original finish using a cabinet scrapper.



Figure 2



Figure 3

Now the repair to the cabinet was addressed. The previous repair was carelessly done resulting in an offset to the break. It was impossible to break the glue so pieces of veneer were glued to even the surface.



Figure 4



Figure 5

Once this was sanded, a piece of veneer was applied over the entire repair area (figure 7). The way I do a veneer repair is to glue a piece larger than the area being repaired and clamp tightly. Once dry, the patch is sanded with fine (400) sand paper (figure 6). If done slowly and carefully, the joint can be made to blend perfectly.



Figure 6



Figure 7

There were numerous other places on the cabinet requiring veneer patches. Also, at the upper left corner, wood filler was used to fill in missing wood (figure 8). I have never had a success making a wood filler stain to match the cabinet, however in this area, I could use a dark toner to hide the filler.

The next step was to refinish the cabinet. To me, a dead give-away that radio has been restored is grain. I don't believe I have ever seen a radio by a major manufacturer that wasn't grain filled. I applied two coats of grain filler to the cabinet (figure 9). There are many good Internet sites that describe the application, so I won't elaborate.



figure 8



figure 9

After grain filling, there were still many areas that needed to be filled. I have found that this can be done with shellac using a variation of the French Polishing method (figure 11). Before applying the shellac, the cabinet was "colored". This is done using lacquer toners as originally done - radios were not stained. This radio has a mahogany veneer, thus a medium red mahogany toner was used.



figure 10



figure 11

Once all surface imperfections had been filled and an even gloss of shellac applied, the radio was hand rubbed with ultra fine steel wool and Rottenstone (figure 12). Finally a coat of wax was applied. I have found Howards Wax and Feed to give good results with little effort.



figure 12



figure 13

I am very pleased with how this radio turned out – considering.

OK Steve, another radio saved. Now what do we do with it?