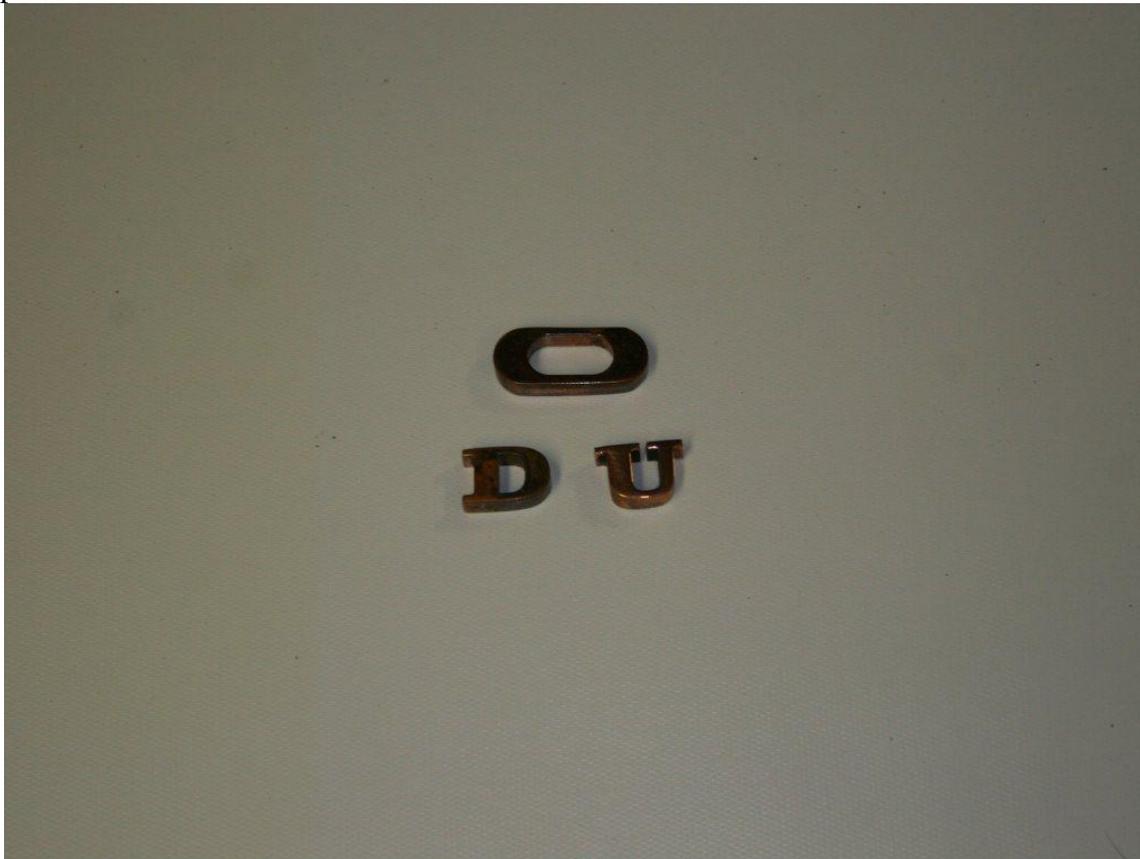


2009

One of the harder parts to do was the grills, emblems, and trunk grills that were either destroyed or damaged beyond any use. I used Solid Works, the cad program to design the emblems and the quarter and hood grills. This program makes solid models and these can be used to do 3d printing. A company called Solid Concepts did the 3d printing. This makes a solid part exactly as designed. These can be scaled to take into account shrinkage of metal used for casting. These pieces were then used to make molds for bronze castings. A firm in Tucson called Beyond Bronze did the castings. All of these were designed using the photos of the car at GM. The X-400 letters were a problem to do. They could not be cast since the casters could not do anything that small and keep the sides straight. I found a company called 3d Systems, that could do the letters by 3d printing in metal, rapid prototyping in zinc. This was a one step process that gave me a finished piece ready for plating. This process was so accurate that I designed the tap drill holes in the solid models and they only needed tapping to finish.

This is a photo of the letters that were made using 3d printing in metal. These were chrome plated for use.



Below is one of the side emblems. These emblems are very close to the ones used on the Grand Prix for 1963 except these say Grand Prix X400. I modeled these in SolidWorks using the 63 emblem and the photos from GM . It took a number of tries to get these correct.



The final parts to get done are the trunk trim. These were the hardest to do since all I had was the photos and they were not very clear.