Artwork Tips & Help

Always take photos of the machine both inside and outside the cabinet before the restoration, you may need them later. EM pinball machine cabinets I work on are now 30-40 years old and have taken a beating in their commercial life. The cabinet timber exterior and back boxes in most cases will be dented, chipped, or the ply laminate peeling away. I have built new cabinets and back boxes (earlier wedge head versions) for machines where the cabinet is beyond repair. The cabinet graphics in most cases will be scratched or faded and have been touched up or altered. Back glasses may also be faded, flaking and in need of repair. Below is the process I use to create new artwork for a machine.

1. **Important:** Take accurate measurements of all existing artwork as to where it is positioned on the cabinet and back/light box. The more measurements the better, and keep in a safe place.
2. Next take a clear picture of all artwork using a 5 mega pixel digital camera, ensuring the camera lens is parallel to the subject. (Taking the picture on an angle will distort the correct scale of image). The cabinet and back box can then be stripped of the old paint, taking care if sanding as the paint may contain lead. The timber may need to be filled to remove imperfections and finally sanded for re painting using a primer first and finally oil based semi-gloss enamel which I prefer, ready for the completed artwork.
3. **Tip:** Match the original cabinet paint colour from the area behind the coin slot or door strike plate when removed.
4. Cabinet dimensions (outer dimensions to scale) are taken and drawn in a CAD software package (e.g. Corel Draw) and a file created.
5. The pictures taken are imported into the cabinet file created, then layered in behind the cabinet outer dimensions. The picture is then resized to fit inside the cabinet dimensions.
6. The original graphics are then traced over. Machine cut coloured adhesive vinyl can be cut to scale by your local print/sign shop.
   (Check the file format that your local print/sign shop uses is compatible with your software extensions / formats)
7. Cut vinyl is then adhered onto the machine, using the original measurements taken at the start.

I have been using Corel Draw for over 12 years and recommend if you want to restore or create pinball machine graphics for yourself it will be worth purchasing CAD software. It does take some time to learn the operation and features, but in the end it is well worth it if you intend to restore a number of machines.

Other restorers have simply and successfully traced the original cabinet graphics on card board and cut stencils by hand. This method can work very well if carried out properly and should also be considered if wanting to spray paint.

Some collectors of these machines prefer to leave the cabinet graphics in an untouched, original condition. This preference is up to the individual, however many machines of this era will need cabinet work to bring them back to their former glory and restoring will also add considerable value.
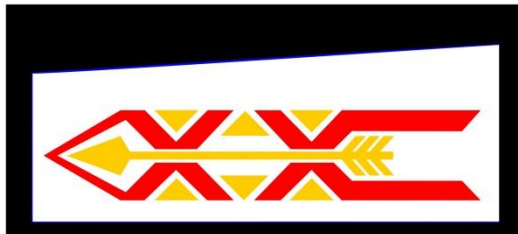
The artwork design process

Photo's are taken of cabinet side and front art. Some dimensions and positioning of artwork are recorded for future reference. The photo then imported into CAD software,

Cabinet outer dimensions are first drawn (blue outline) and photo is layered behind. Photo is zoomed in or out to fit cabinet inside the cabinet dimensions.

Artwork is then traced over using dimensions taken earlier to double check correct scale. All drawn objects are vectored to enable stencil or vinyl cutting.

Artwork is finally exported into vinyl machine cutting software.