## **GLASS ENGRAVING TIPS**

Glass is probably the most difficult material on which to engrave a photo so be patient and practice (cheap window glass is a good & inexpensive practice material).

First, use the named parameter set for glass (glass.prm) which is on the PhotoGraV Install CD in the folder "New Parameter Sets". This parameter set uses "Black Acrylic" as the background material but has all the parameters set for glass, except recommended speed and power which I will discuss later.

Generally, for engraving on glass ornaments, I make the photo rather contrasty and try to not have any very bright areas. I usually set the max gray shade (using Corel PhotoPaint or Adobe Photoshop) to about 192 instead of 255.

In general, if you use the named parameter set (glass.prm) for processing the image in PhotoGraV, you will have to go into "Interactive Process" (after opening the image and the appropriate named parameter set (via the "Load Params" button)), left click the green "Adjust Gray" box, and then in the lower center of the screen, move the white triangle all the way to the right (this prevents PhotoGraV from spreading all the gray shades over the entire range - in this case it prevents it from resetting all the lighter gray shades to whites). Then click "Proceed" to process the image.

Two other points: (1) if you remove background from the photo for engraving on glass then make the background all black (before processing in PhotoGraV). This causes PhotoGraV to NOT engrave that black area which generally looks better than an engraved white background and (2) When you go into "Interactive Process", you might want to click the green "Screen" box and in the resulting parameter area in the lower center of the window, make the "Noise Gain" parameter about 10-15%. This has the effect of introducing some texture in the whiter grayshade areas, and that, after engraving, makes them appear a little frostier and not so "shattered" looking.

For my 50 watt machine, I do photos on glass at Speed (S) = 80%, Power (P) = 80%, and engrave at 300 dpi. Scale these values appropriately for your machine. However, since lasers vary a lot from their rated power, you will have to experiment to get the best S&P settings for your machine.