



6.0 - LEGEND PLATE ON GRAVOLASE MATERIAL WITH LOGO AND TEXT

Material: Gravalase 4" x 6"

Difficulty Level: Easy

You'll often be asked to engrave a legend plate containing a logo and some text. For this example, we'll use a logo for Jaguar and add text. The on-screen graphic for the finished plate is shown in Figure 6-1.



Figure 6-1 Finished Job

6.1 Planning the Job

Here's how we'll design this plate:

- First, we'll specify a six inch wide by four inch high plate with a ¼ inch border.
- Next, we'll import the logo into GravoStyle5 and do what's required to make sure that the raster fill is what we want and resize it so that it's four inches wide.
- We'll type our text into a text rectangle, using a single stroke, thin-lined font and give the text some extra width. It will be sized so that it fits margin to margin and is 1/2 inch above the bottom of the plate.

6.2 Importing the Logo

The logo that we'll be using is a vector graphic; that is, it's made up solely of very thin lines. First, define the plate size and borders. Next, get into **Select** mode. Click on GravoStyle5's "**File**" menu and select the "**Import**" command. Locate our logo

TIP

It's almost always preferable to fill in a vector logo (or any other artwork suitable for conversion to a vector graphic) instead of using an as-scanned bitmap graphic. This is because the vector outlines are smooth. The raster fills within them have smooth edges and the result is a high quality appearance.



Jaguar Logo.EPS, highlight the file name and click “**Open**” to bring into our design window.

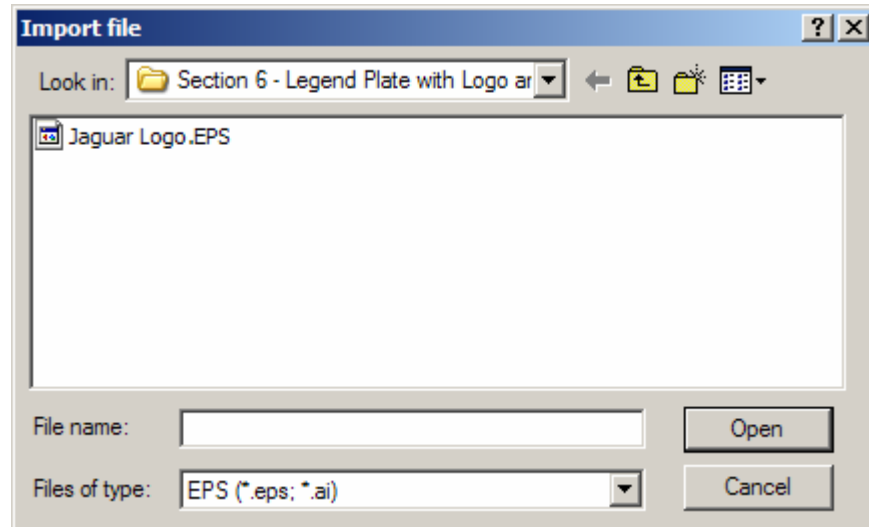


Figure 6-2 Import Logo File

Note that when we import the logo, GravoStyle5 places the logo in the same position it had been saved in previously.

6.3 Filling the Logo

When we look at the imported logo in GravoStyle5’s “wire color” mode (Figure 6-3), we see that it is indeed drawn with very thin lines. When we view it in “graphic mode”, however (Figure 6-4), we see that it’s totally filled in and therefore unusable.



Figure 6-3 Wire Color View



Figure 6-4 Graphic View Mode



The problem is that in this raw state, graphic programs sometimes don't know which outlines to fill and which ones to keep empty. Fixing this in GravoStyle5 is simple. There are three easy steps.

1. First, drag the cursor around *all* of the logo.

When you let go of the mouse button, the selection will be surrounded by eight red selection boxes plus a ninth one in the selection area's center (Figure 6-5)




Figure 6-5 Selected Logo

Look Further

The boxes surrounding the selection do more than just mark the selection boundaries. If you click and drag, the boxes at the corners let you resize the selection proportionally in width and height. The other surrounding boxes let you resize either horizontally or vertically independent of each other. The center box lets you move your selection without changing size.

Remember; you can use the F2 key for precision in resizing or moving.

2. Next, find the tool labeled "Split"  on the left toolbar and click on it. Nothing visible will occur, but, internally, GravoStyle5 will ungroup all of the selected parts of the logo (it will still remain selected)


3. Finally, find the tool labeled "Link" . It's immediately to the left of the "Split" tool. Click on it and all selected parts of the logo will be grouped and correctly filled in (Figure 6-6)



Figure 6-6 "Link" Tool



6.4 Resizing the Logo

We want the logo to be four inches wide, but it's much smaller. Click and drag one of the corner selection bounding boxes (it doesn't matter which one) and move it just a little. Press the **F2** key while the mouse button is still pressed and a dialog window labeled "Scaling" will pop up.

Enter our desired dimension of 4 inches in the "Width" entry window, making sure that the box labeled "keep ratio" is checked and then click "OK" (Figure 6-7).

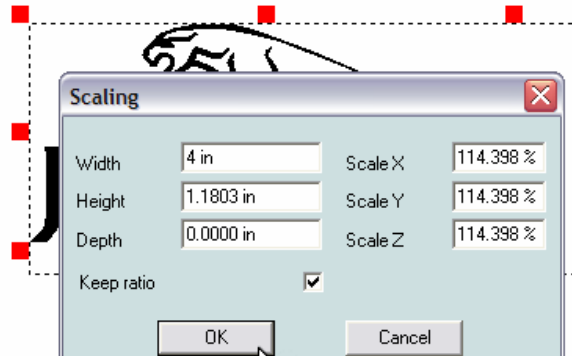



Figure 6-7 Resizing Window

6.5 Positioning the Logo



We'll want to position the logo so that it's just touching the upper margin of the material and that it's centered side-to-side on the material.

Grab the center selection bounding rectangle and drag the logo upward until it just touches the margin. We don't have to concern ourselves with side-to-side centering while we do this.

With the logo still selected, we'll then click on the "Alignment Tools"  icon on the left tool bar. When the fly-out tool pallet opens, click on the "Horizontal

Center" tool  and the logo will be in its final position.

6.6 Text Entry

Select the "Text into Rectangle" tool  from the "Text Tools" fly-out tool  pallet. Drag a text entry box from margin to margin. Don't try to be precise about the height of this box – just make it plenty high so that we can take advantage of the property of this mode of text entry to compress the text as we type so it fits within the sides of the box. If it does compress noticeably, we can



select the text after we've typed it and change its height to restore its appearance.

Now we'll select the font that we want. For this job we'll choose a Gravograph US BLOCK 1L font. It is a single-stroke font originally designed for use with a rotary cutter mechanical engraving machine. It may be useful to use such a font with the laser either because it is unique (not available as a True Type outline font or the job may require an exact match to a rotary font. A unique feature of GravoStyle5 is that we can define this stroked font to engrave as a thin vector line or we can give it thickness to be raster engraved as discussed below.

GravoStyle5's current default font name is displayed in a box in the font toolbar. Click on the arrow on the right side of this box. A drop down list of fonts will open, and we'll select the Gravograph family of fonts (Figure 6-8).

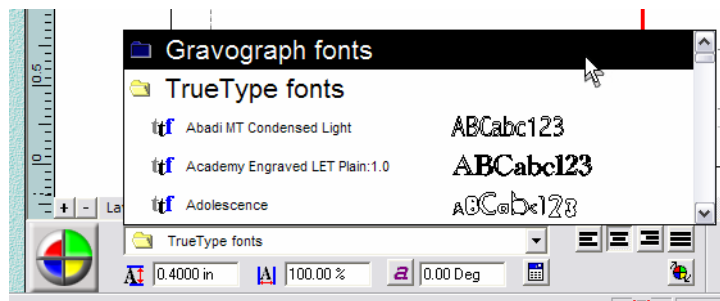


Figure 6-8 Font Selection

A list of Gravograph fonts will open. We'll scroll down it to find the US BLOCK 1L font and select it (Figure 6-9). Press the letter 'U' as a shortcut to jump to the

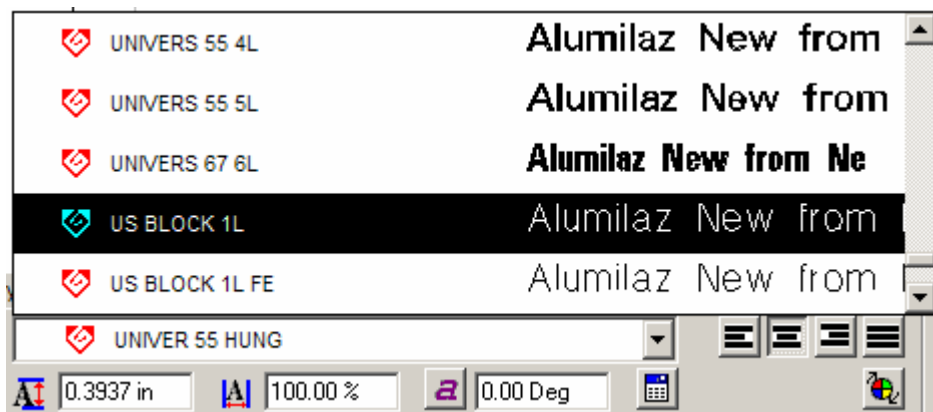


Figure 6-9 Choosing US BLOCK 1L Font



first font beginning with this letter.

Enter the text “FINE MOTOR CARS” and when we’re finished it will be seem to be made up of single dashed lines. Why? Remember that this is a single line font, and as such it theoretically can’t be rastered (they’re too thin).

GravoStyle5, however, has a way of letting you thicken any rastered element and we’ll apply this feature here.

Get into Select mode. Then click on the bottom tool on the leftmost tool bar labeled “**Laser Colors**” to open the Laser Color Control Window. This allows us to apply any of its eight colors to any part of our job and to set the type of laser engraving independently for each color. This box is shown in Figure 6-10.

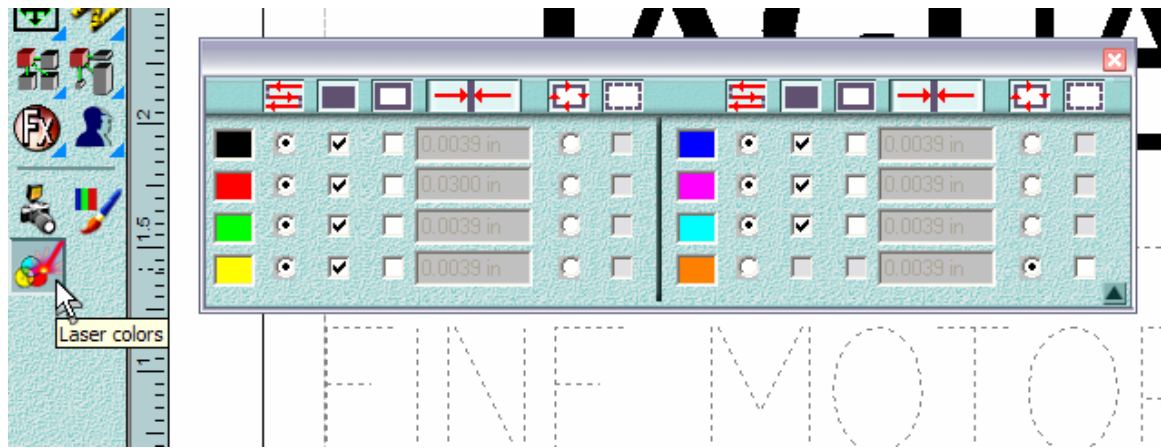









Figure 6-10 Laser Colors

There are six columns of items we can select and enter for each color. The description of each column will show as a tool tip if we hold the mouse cursor over the icon at the top of the column.

Starting from the left:

- “**Raster Mode**”  is the first function. You click the radio button  to select raster engraving for all items of each color to be rastered.
- “**Filled Object**”  is the second column. It’s a check box for having that color’s elements raster filled.



- **“Add a Contour”**  is the third (and this is one we’ll want for our text). It adds thickness to each rastered element.
- **“Contour Thickness”**  is the fourth. This is where we enter the numerical value of the thickness we want added for the “Add a Contour” selection
- **“Vector Mode”**  is the fifth column. It applies vector engraving instead of raster. Note that this mode is mutually exclusive with Raster mode for any color.
- **“Dotted Lines”**  is the last choice. Selecting this engraves lines as dotted lines instead of continuous lines. This is useful for rubber stamps to facilitate separating the stamp(s) from the rubber sheet after engraving.

The default color for graphic elements is black, and we can see that our logo and text, light as it is, is also black.

Our plan is to leave the logo black – we want it rastered – and change the text’s color to red (any other color except black would also do) so that we can select a thickened rastered engraving.

So, select the text. It will appear highlighted in red. Next, with the text selected, double click on the red color block (the second one down on the left) with the left mouse button. This will change the text’s color to red. (This may not be immediately apparent since it was already temporarily red, as selected).

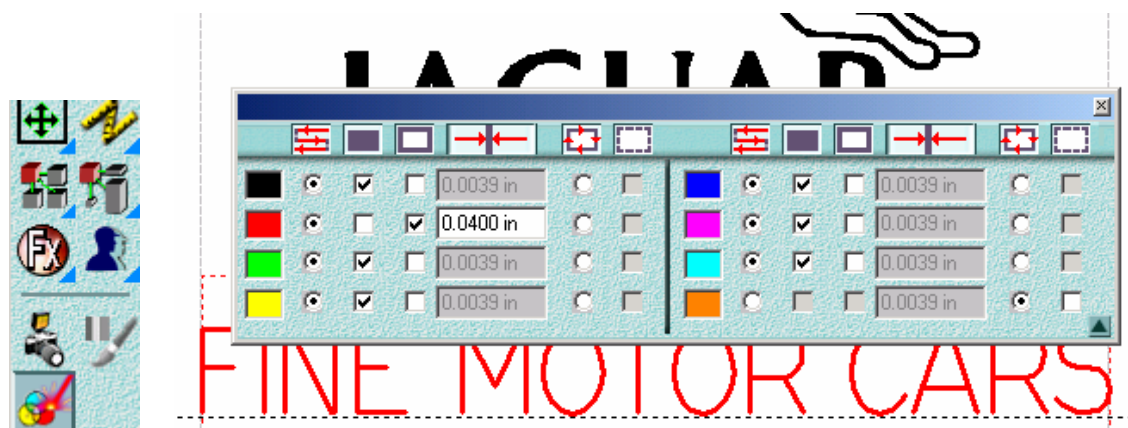


Figure 6-11 Thickened Text



“Raster Mode” is already selected for red. “Filled Object” can be selected (or not) since it only applies to closed contours. Click in the “Add a Contour” box and enter, .04 inches in the small window (fourth column) that’s become enabled. Press **Enter** to apply the change.

We immediately see that our text is now a thick red color (Figure 6-11).

6.7 Positioning the Text

Close the “Laser Color” window and leave the text selected. Position a guideline $\frac{1}{2}$ inch above the bottom edge of the plate. Next, grab the selection bounding box at the center of the text and drag until the text is in position on the guideline and centered between the side margins. While dragging, press **F4** to see the text instead of the bounding box. Function key F4 toggles this Preview mode ON and OFF.

We’re now done composing our job.

6.8 Sending the job to the table

Click on the “Lasering” icon on the top tool bar to open the driver dialog window,

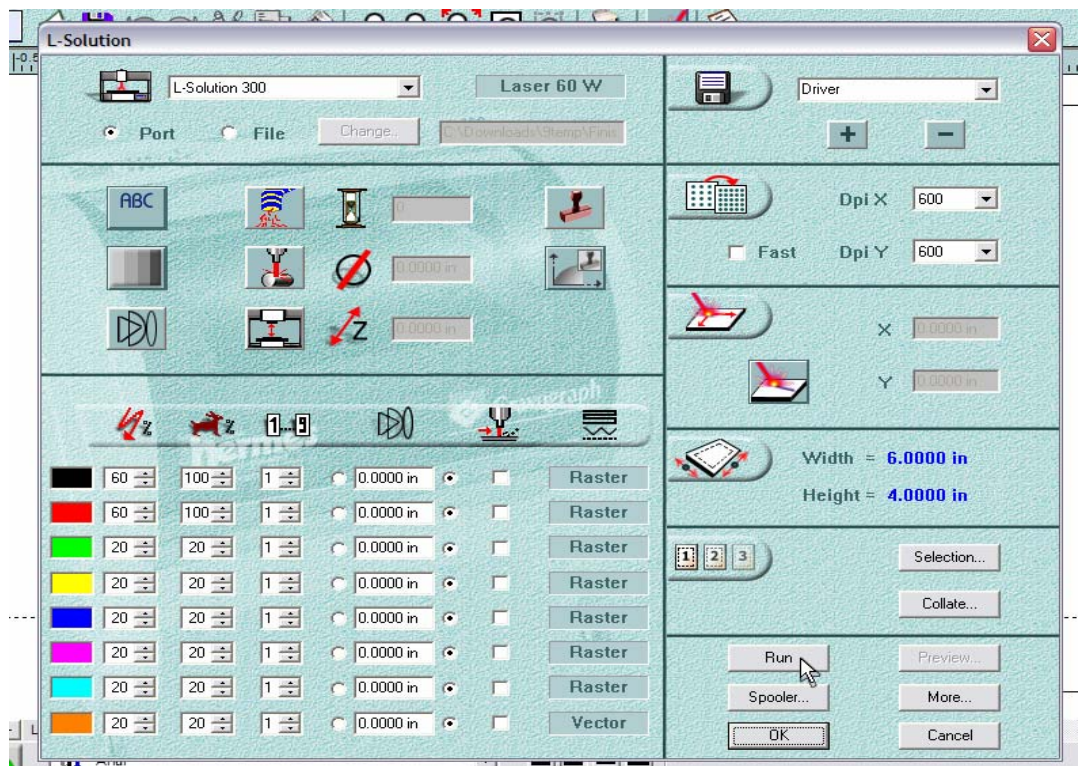


Figure 6-12 GravoStyle 5 Laser’s Internal Driver Dialog Window



and enter our values for both the black and red colors. The values for the other colors are of no concern for this job since there are no objects assigned to these other colors. For a 60W laser, use a power setting of 60 and speed setting of 100 for each color (black and red), and set the resolution to 600 dpi (Figure 6-12). Click on **“Run”**, and wait for the job to be sent to the engraver. Click on **“Cancel”** to close the **“Lasering”** window. The job has already been sent to the Windows print spooler. Save the file if you want to keep it.

6.9 What We've Learned

This job has taught us:

- How to import a logo.
- How to properly raster fill a vector logo.
- How to make use of the bounding boxes around a selection.
- How to select fonts.
- How to change the color of a graphic element.
- How to set optional engraving methods by means of color settings