

## Machine Preparation

1. Before starting, inspect work area for any hazards
2. Turn ventilation system on
3. Turn computer and laser cutting machine on
4. Check lens and clean if necessary
  - a. Place make-shift paper tray under laser component
  - b. Remove screws (3) and then remove lens
  - c. Use cotton swabs with cleaning solutions to clean lens (Do not apply solution directly to lens. Apply to swab)
  - d. Apply swab in a circular motion

## File Setup / Machine Calibration

5. Prepare software settings in illustrator for digital print file
  - Assign proper colour coded layers to digital print file
6. Prepare Illustrator settings for digital print file
  - Illustrator settings:
    - Stroke: 0.01
    - Color: Black, Cyan, Orange ([put RGB value here]), Magenta
    - No Fill
    - Color Mode: RGB
7. Using the Z button on the machine calibrate the 'z axis' with the focusing stick stored on the left hand side, inside the bed. Replace focus stick after focusing.
8. Make sure bed is properly positioned: pushed tight to top left corner
9. Calibrate '0,0' position (top right corner) for laser cutter using X,Y buttons on the machine. The laser should be directed on the corner where the inner metal edges of the bed meet
10. Check to see that material is sitting flat on cutting bed. Use weights if necessary. Make sure these are not in the path of the laser
11. Make sure all doors are closer (top lid and front panel)

12. Send file to print (VLS-6-60 = Yellow Laser Cutter).
13. Select printer properties to launch [Laser cutter software name] and adjust laser cutter settings:
  - a. laser cutter settings according to cut/score type given material properties (ie. type, thickness, etc). \*This can be found in the Laser Cutter Binder
  - b. \*There are also preset settings in the interface
  - c. 'Focus' will move the laser-head to the start of the cutting job.

\*=Forthcoming

## **Machine Maintenance**

14. You are ready to cut. Press 'Play' on the machine.
15. Check for high flame or large smoke volume. If too much flame or smoke you may need to lower the power and cut in more passes.
16. After cutting, check lens and clean if necessary. This is especially necessary for large jobs generating a lot of smoke
17. After cutting, clean cutting bed. This is especially necessary for jobs with a lot of small cuts and pieces.
  - Take bed pan out and place on table
  - Remove end cap and empty any debris onto table. Sweep into dustpan and dump in proper material waste bin
  - Replace end cap and place bed pan back in laser cutter machine. Make sure it pushed tight to the upper left corner

**You are finished!**