

Laser Cutter Instructions

1. Plug in the exhaust line – never use laser without a working exhaust.
Don't forget to unplug in the end when you are done.

Make sure to secure
connector properly:

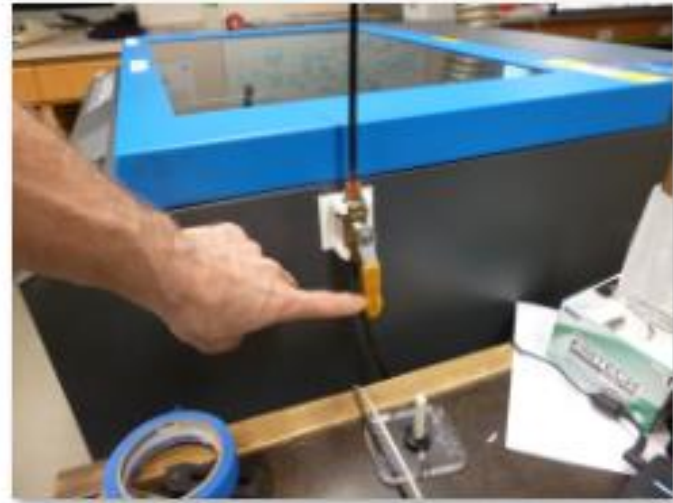
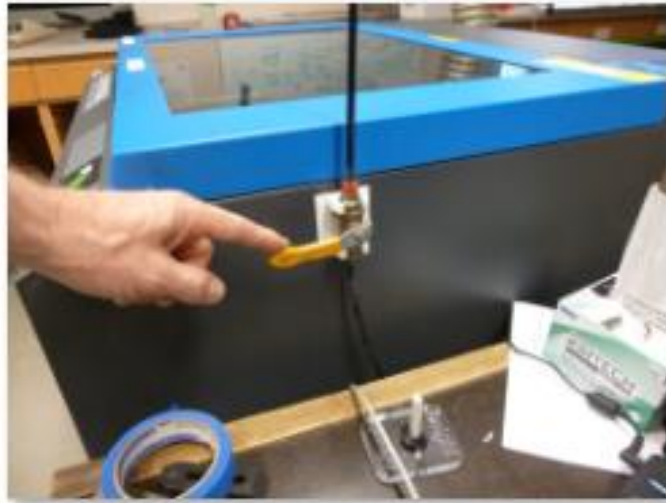


After You Are Done



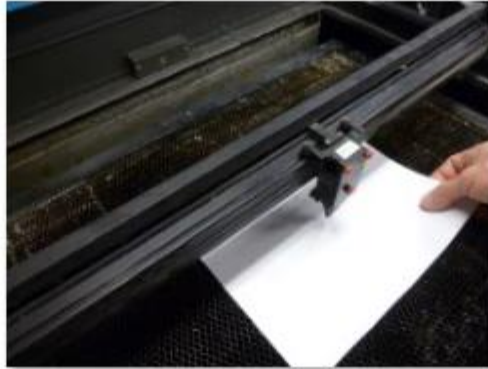
Unplug the exhaust line and put it ON THE COMPUTER TABLE AS SHOWN to make sure incoming users do not forget to plug it in.

2. Turn on compressed air – never use laser if there is no compressed air.

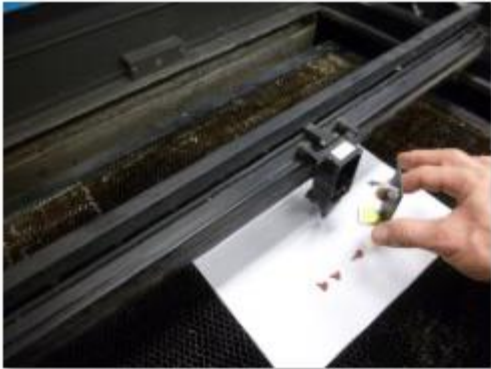


Don't forget to close the valve in the end when you are done.

3. Before powering on, move head to center and un-do screws

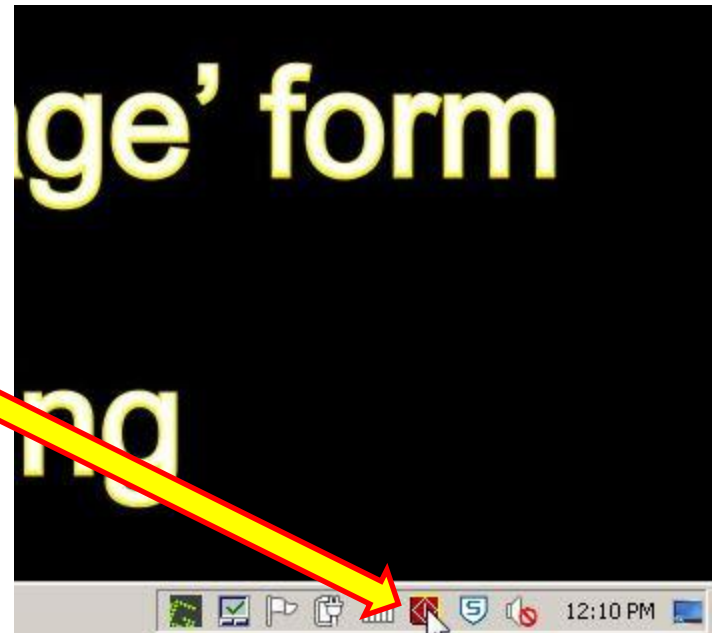


4. Inspect lens and mirror, clean if there is any residue

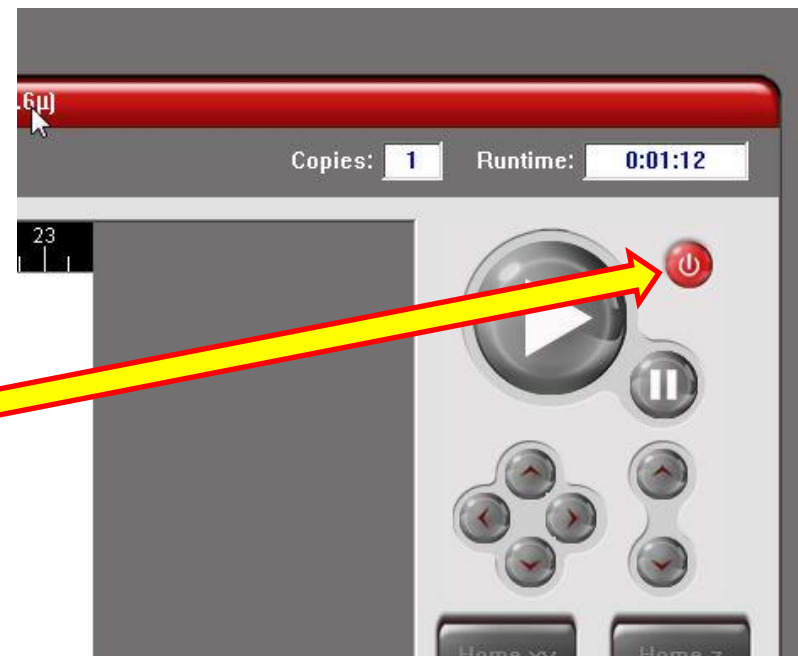


Put things back together when done.

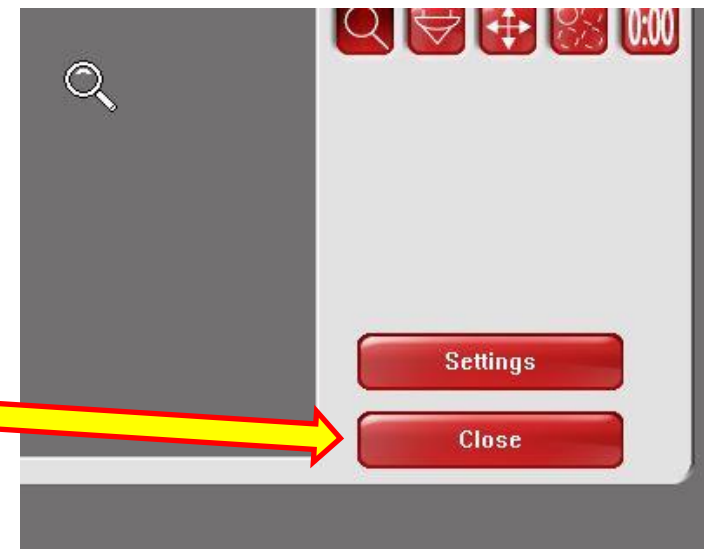
5. Turn on: click the laser cutter icon



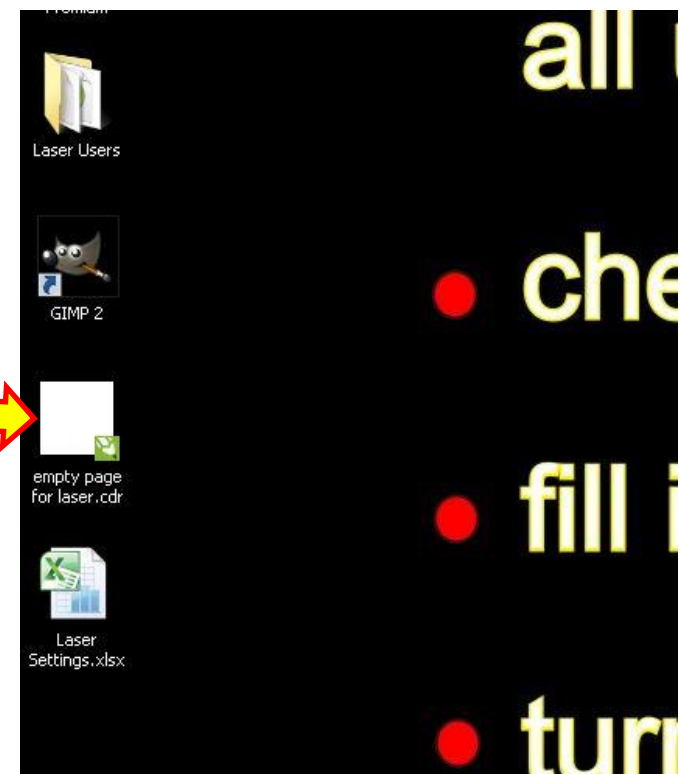
6. Click



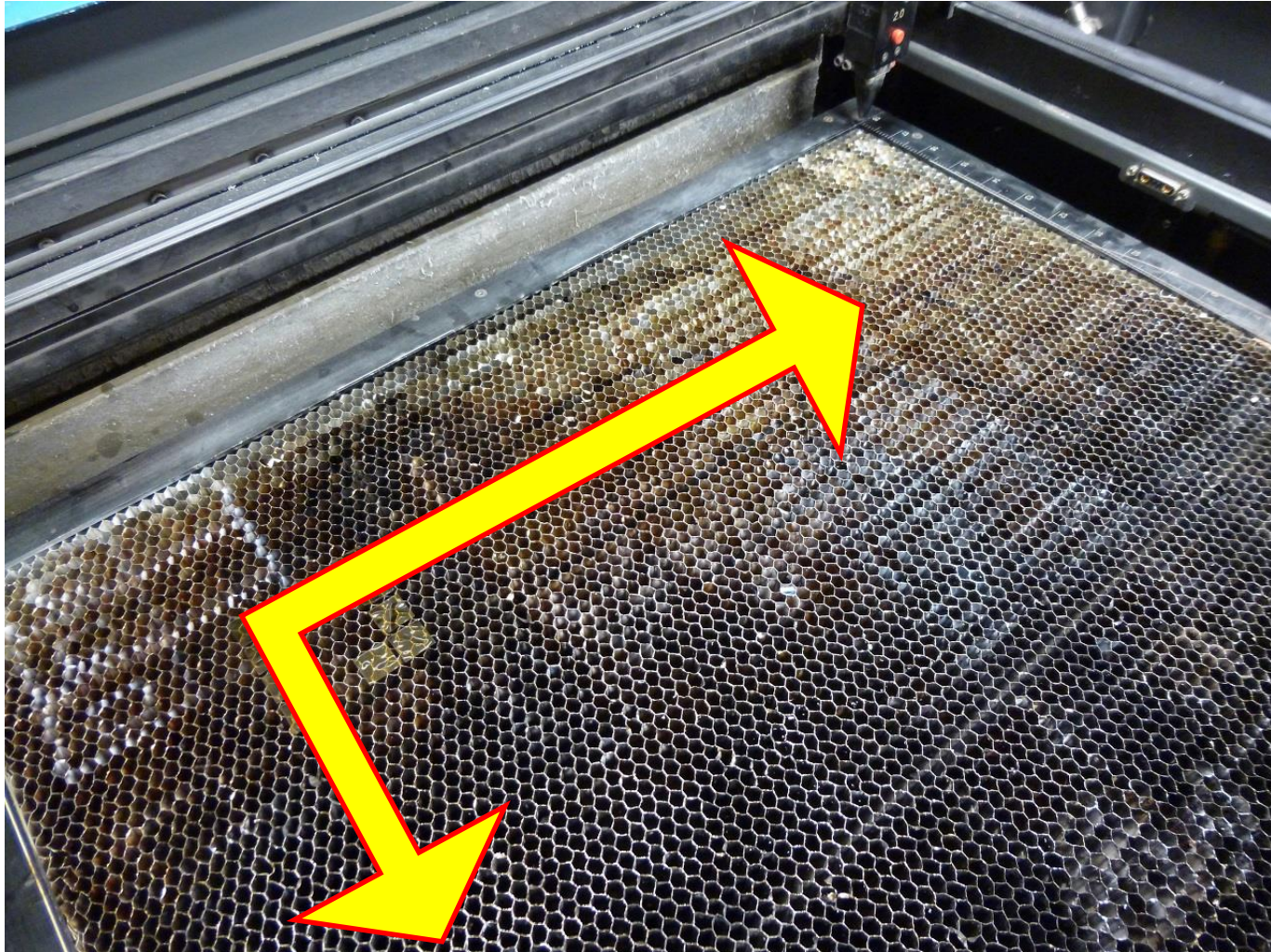
7. Exit the laser cutter utility



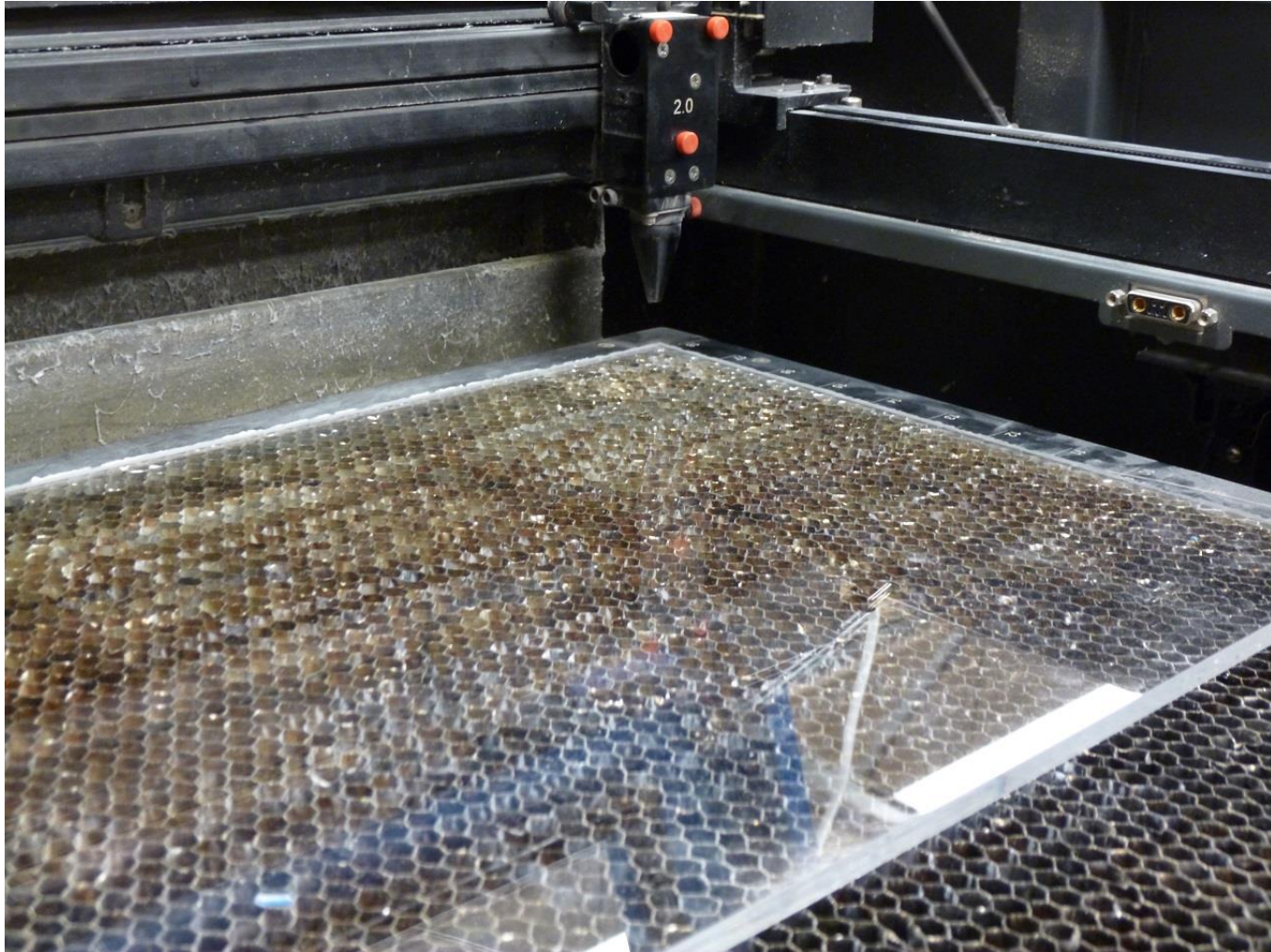
8. Start CorelDraw: double-click



“Empty page” is the exact size of the laser
cutter bed: 609mm wide by 457mm high
(24” by 18”)



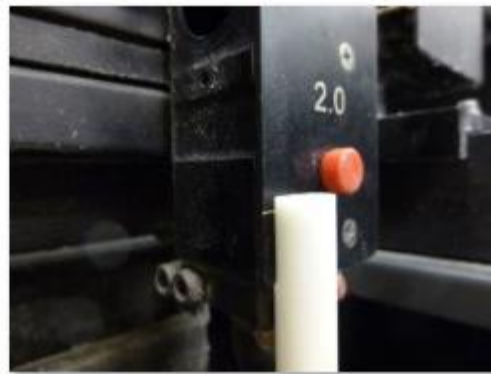
9. Put material down. Can not be larger than bed. Make sure there is no debris below.



10. Adjust cutting head distance (focus) by raising or lowering machine bed.



too low

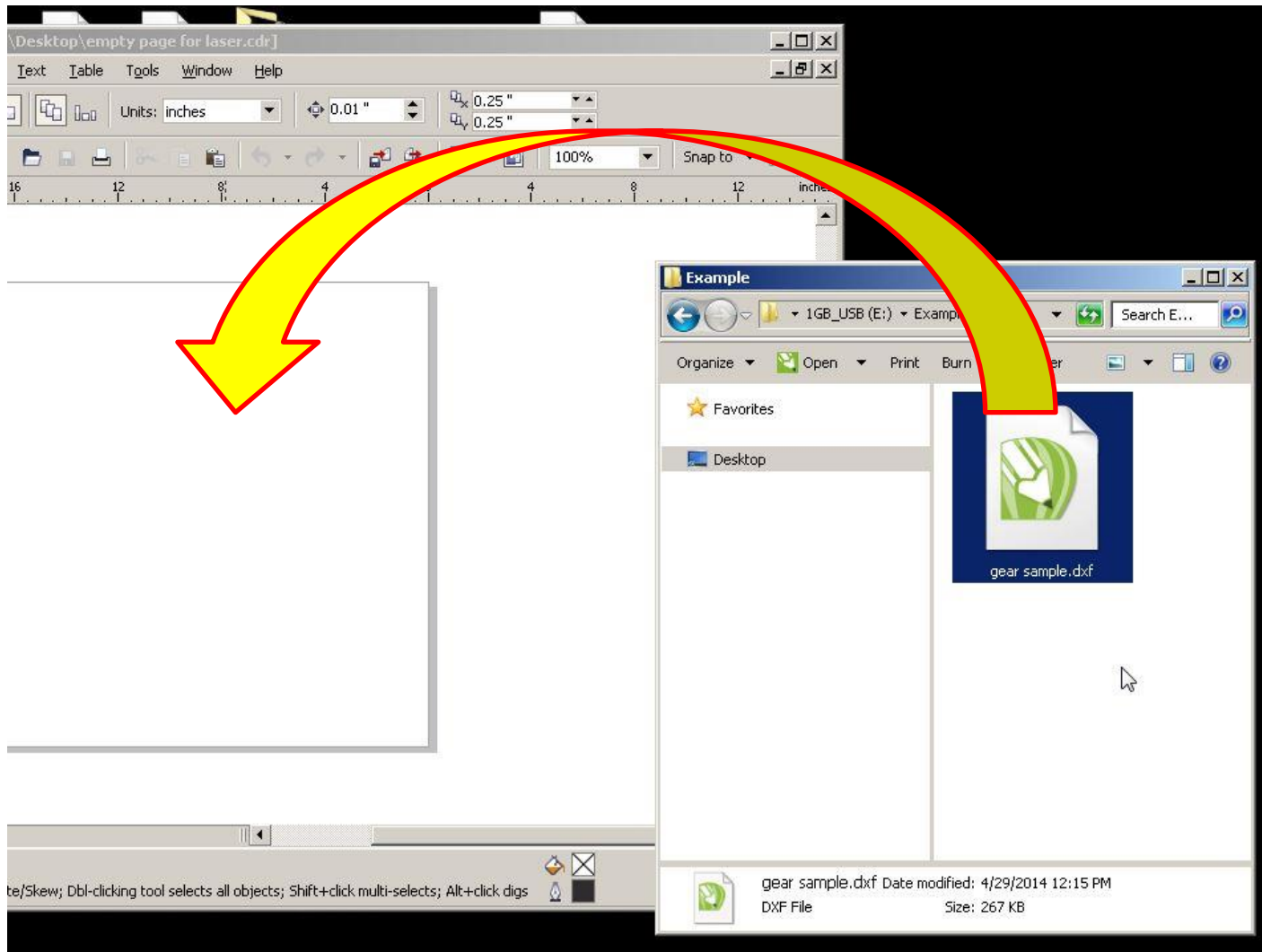


too high

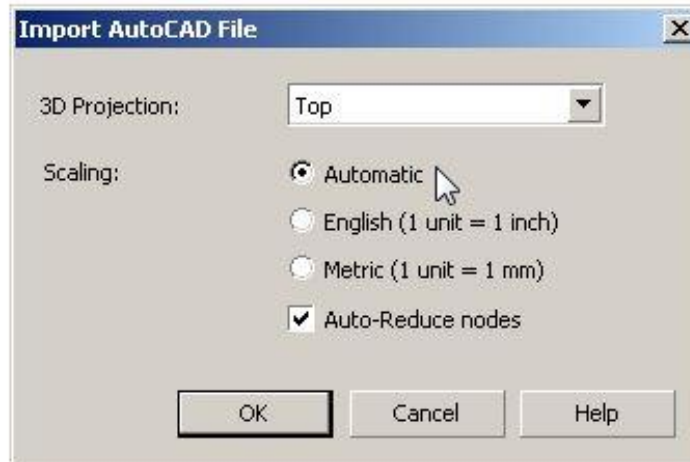
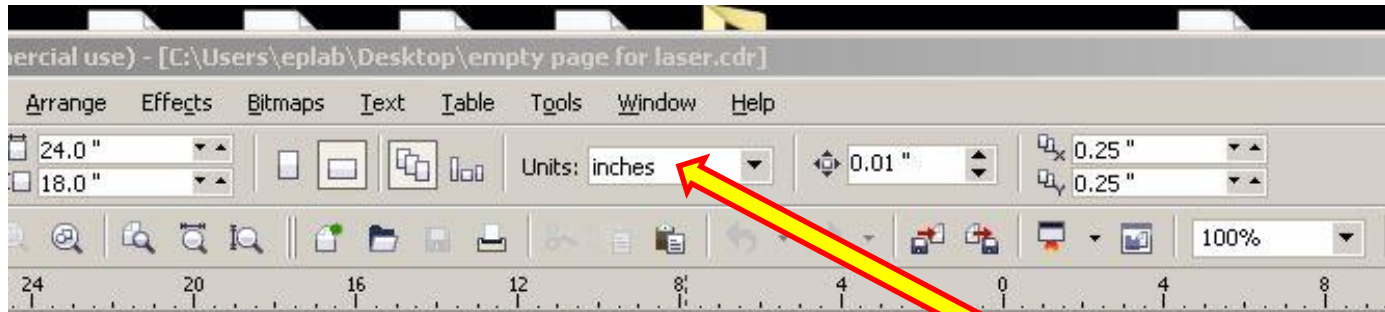


correct

11. Drag and drop your DXF file into CorelDraw

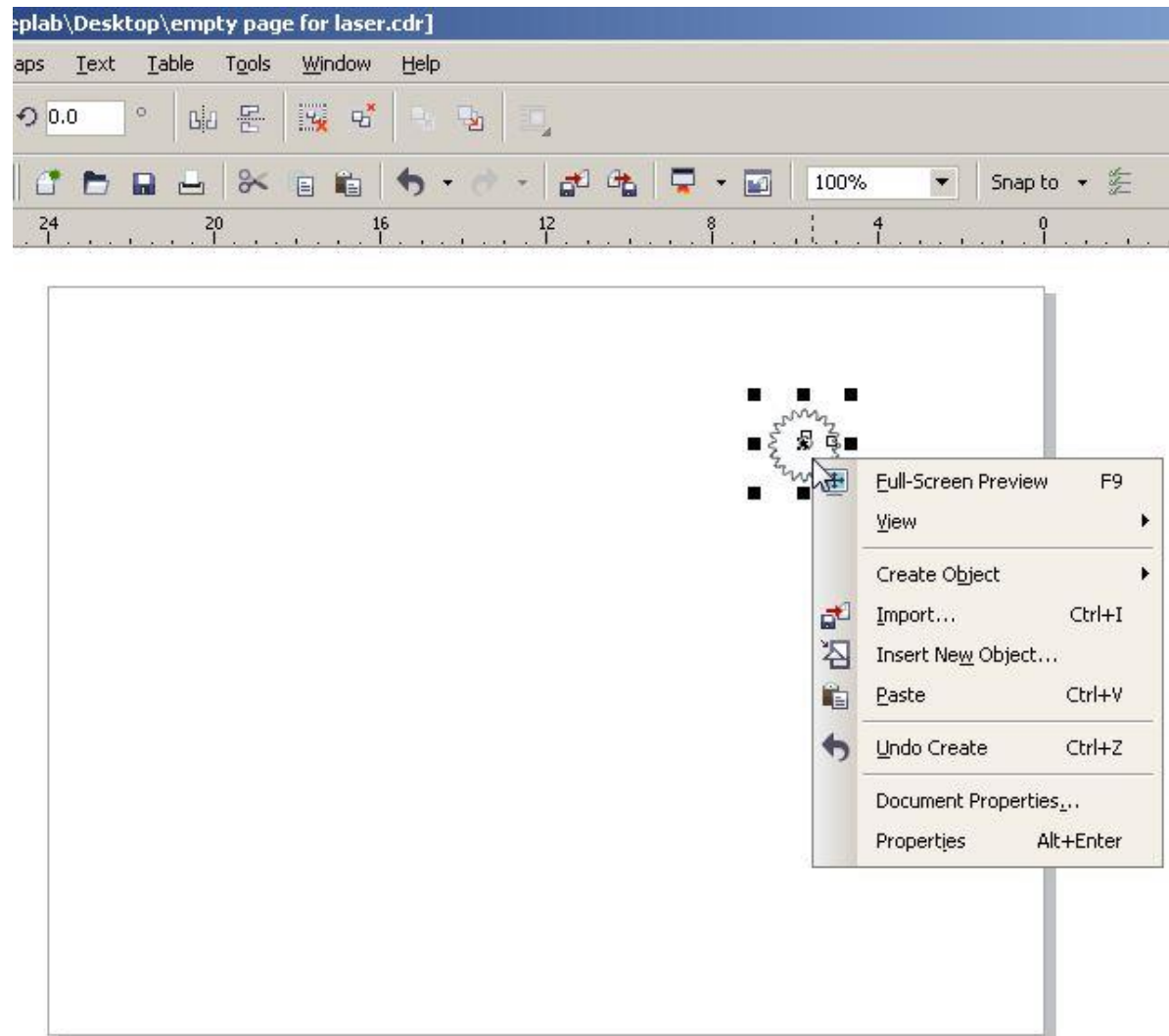


12. Import filter setting must be according to page settings to ensure correct scaling.

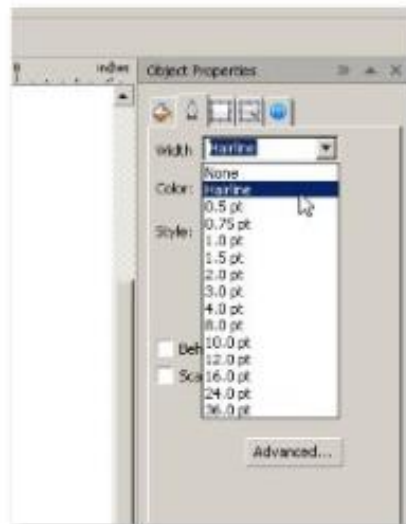
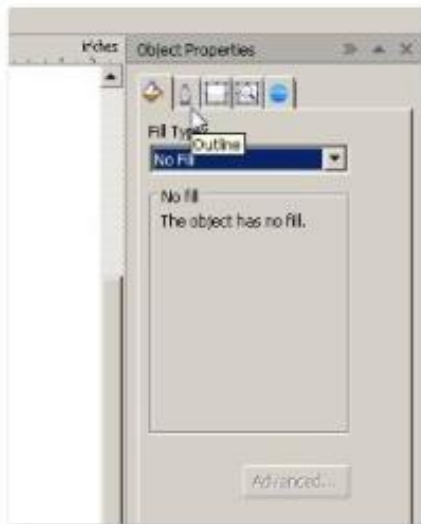


Units can be set here.
(Set before drag-and-drop)

13. Right-click your part, click on “properties”

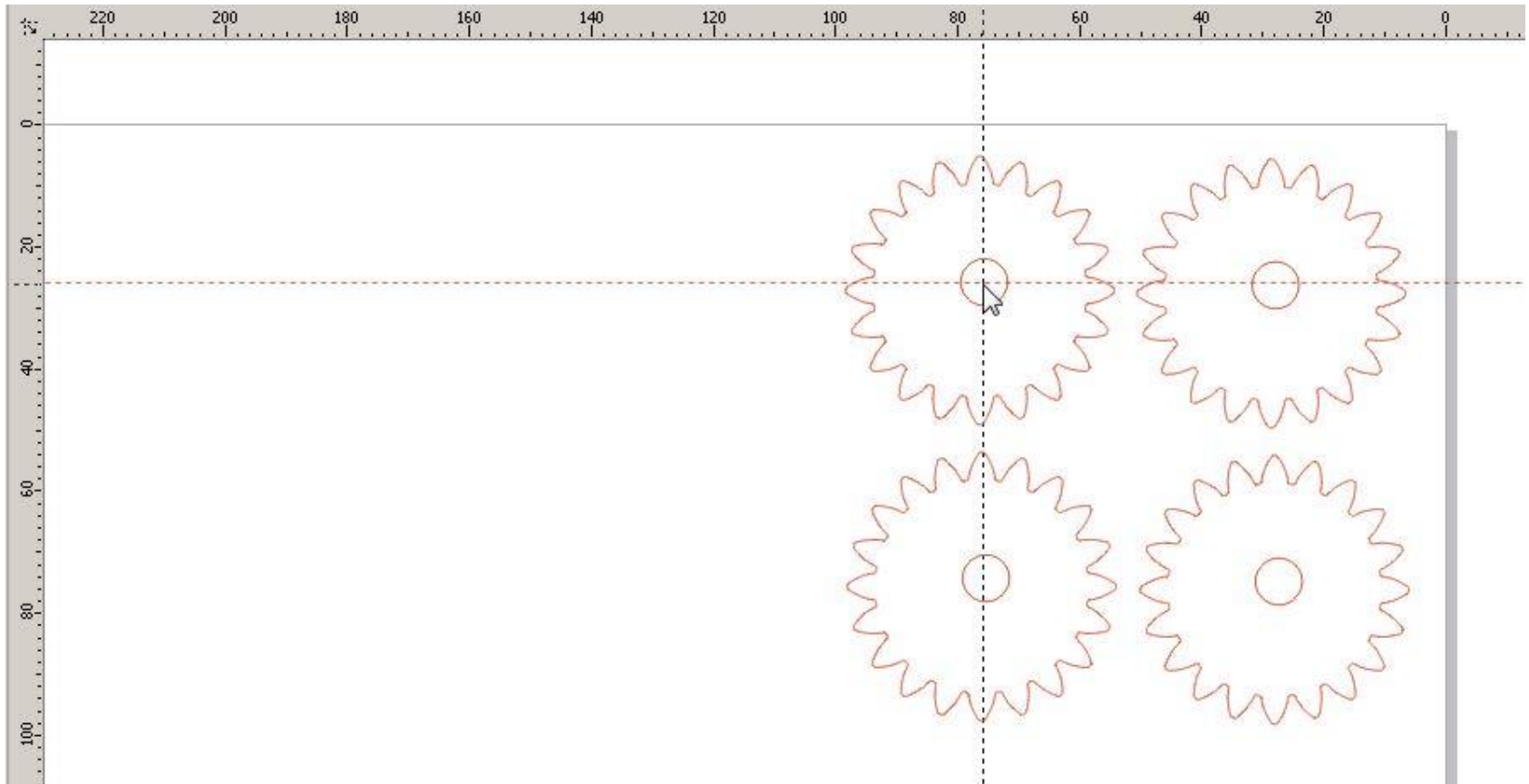


14. Set the outline to “hairline” and the color to “red”

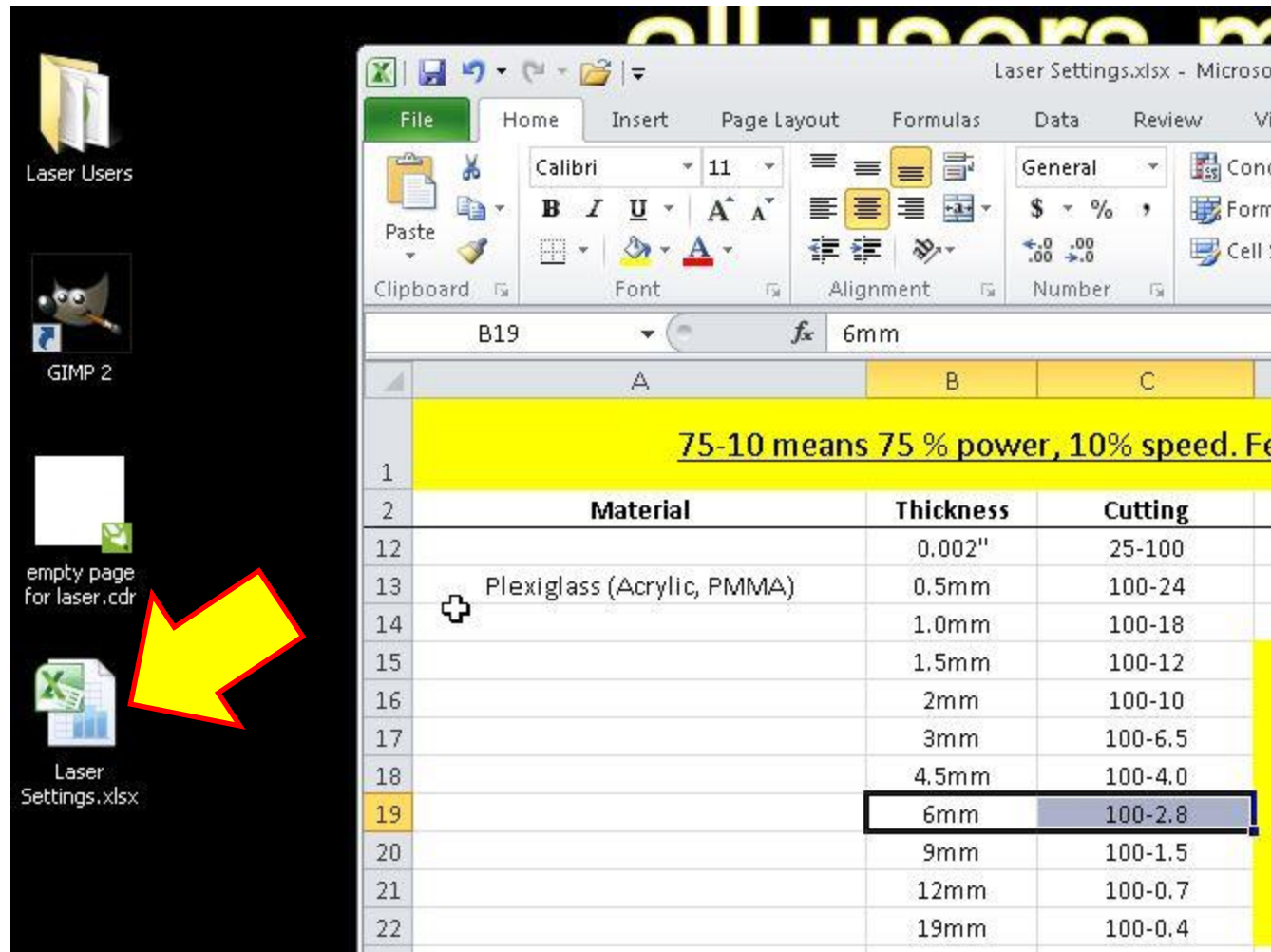


15. Use copy and paste if more of the same are needed

16. Position your part(s) according to what location in your material you want to cut from.



17. Look up settings for laser cutter in the ["laser settings" Google Doc](#).

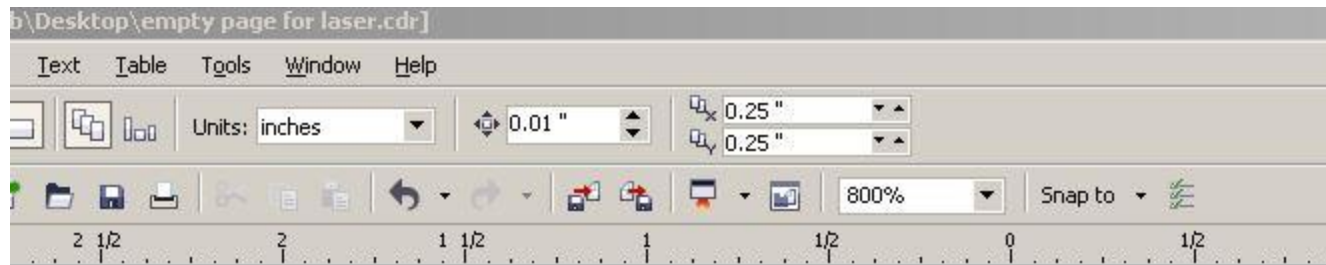


The screenshot shows a Windows desktop with several icons: 'Laser Users', 'GIMP 2', 'empty page for laser.cdr', and 'Laser Settings.xlsx'. A large yellow arrow points from the 'Laser Settings.xlsx' icon to the Excel window. The Excel window displays a spreadsheet titled 'Laser Settings.xlsx - Microsoft Excel'. The spreadsheet has a yellow header row with the text '75-10 means 75 % power, 10% speed. Fe'. Below this is a table with three columns: 'Material', 'Thickness', and 'Cutting'. The table lists settings for Plexiglass (Acrylic, PMMA) at various thicknesses. The row for 6mm thickness is highlighted, showing 100% power and 2.8% speed.

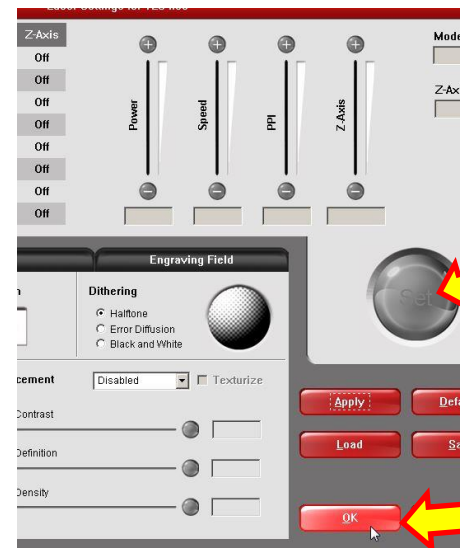
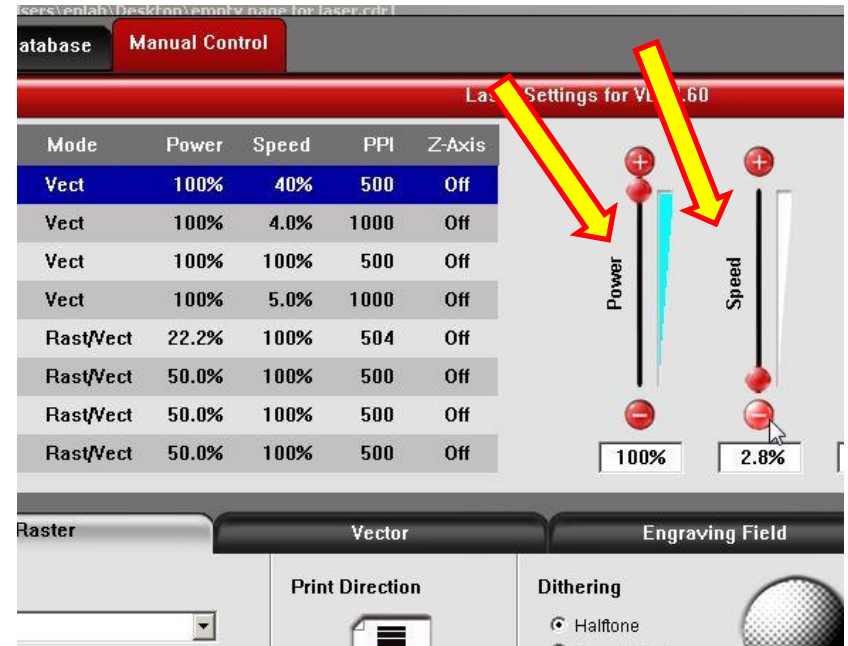
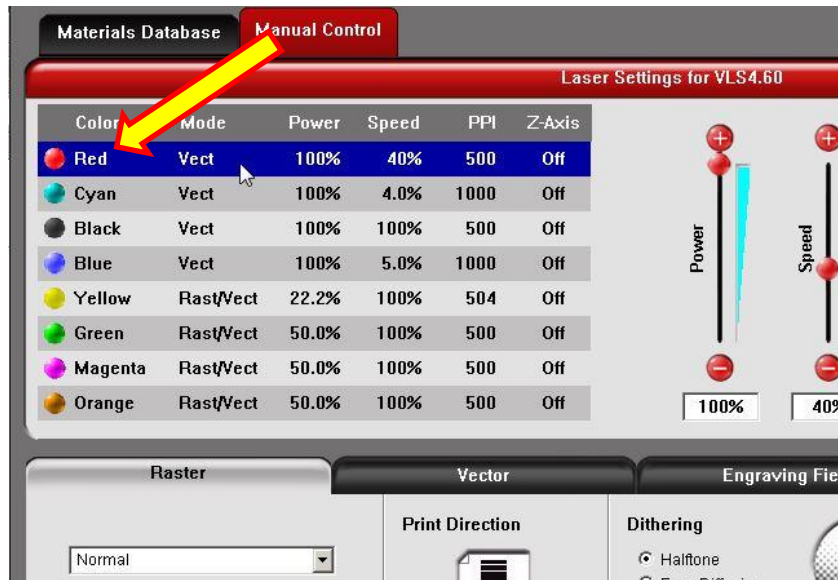
	Material	Thickness	Cutting
12		0.002"	25-100
13	+	0.5mm	100-24
14		1.0mm	100-18
15		1.5mm	100-12
16		2mm	100-10
17		3mm	100-6.5
18		4.5mm	100-4.0
19		6mm	100-2.8
20		9mm	100-1.5
21		12mm	100-0.7
22		19mm	100-0.4

For example, 6mm acrylic cuts with 100 % power and 2.8% speed.

18. In CorelDraw, click “file”, then “print”, then “properties”



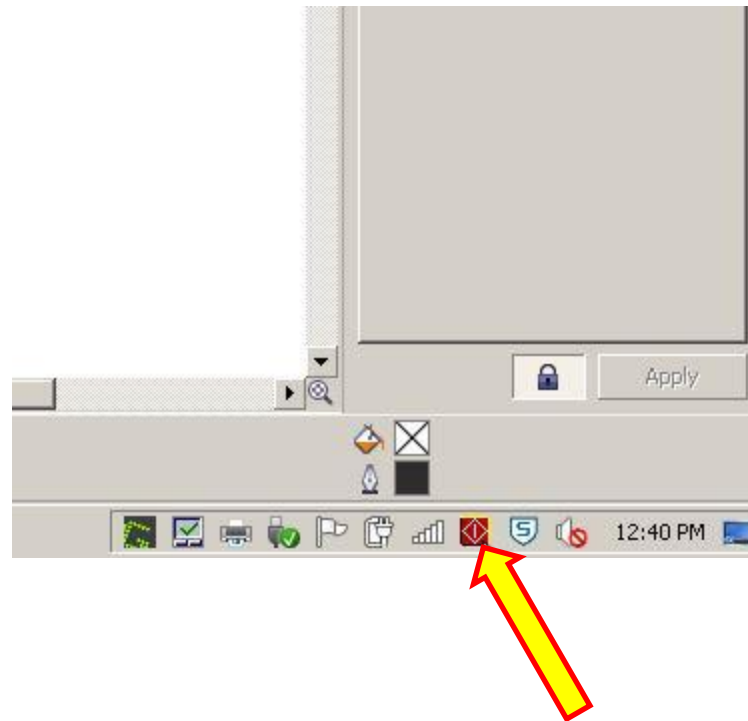
19. Click on “red”, adjust power and speed, then click “set” and “OK”



20. When back in CorelDraw, wait for two seconds (refresh blip), then hit “print”



21. Click to open the laser cutter utility once more



22. Double-check the compressed air is turned on.

23. Double-check building exhaust is still working.

24. Click “start”.



25. Done? Please clean up. Take out your materials. Clean the bed of any debris. Stow materials away. Turn the laser cutter off. Close the air supply valve. Do not leave tools, paper, broken bits or anything else behind.

26. Record your machine use on the list.