



Required Personal Protective Equipment and Devices

- Regular shop space PPE
- Long or loose hair must be tied back or contained
- No loose fitting clothing

Potential Hazard

- Cut or puncture risk when placing hands too close to blade carriage
- Entanglement risk - moving parts

Damage Concerns

- Cut force too high (cutting through backing paper) will damage cutting mat strip
- Cutting alternative materials (paper, fabric, etc.) will dull blade

Prohibited Activities

- Do not leave this equipment running unattended

Safe Work Procedure

Preparing the file

- Create or load vector graphic into CorelDraw
- Remove fill from the image
- Set all cut lines to hairline thickness

Check over machine

- clean rail (manually move cutting head to access)
- Turn on the cutting plotter (power switch is on left side of machine_)
- Allow the cutting plotter to calibrate

Loading Vinyl

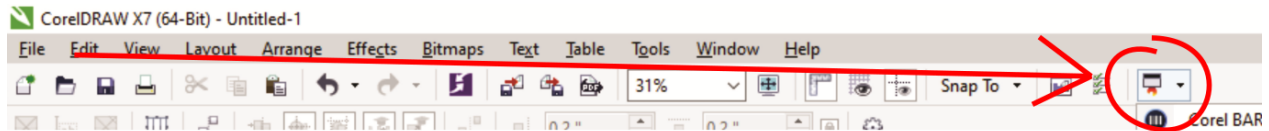
- push back material release lever on right back of machine
- if you are using a roll of material, place the roll on the rollers in the back of the machine
- align material so that
 - the material is square to the machine (use the alignment slots on the front and back of the cutter to align the media)
 - the left edge of the material lines up with a grit roller and its corresponding markings on the cross bar
 - the right side is on the wide roller
- slide the hold-down rollers to line up inside the material edge (don't switch the lever, just slide them)
 - use 2 feet for narrower material and 3 for wider, see mark on machine
- for large cuts leave at least 3/4" of material over the edge so that the rollers don't roll off the material at the long end
- pull forward material release lever to lower feet and secure vinyl
- on the control panel on the right of the machine choose [1]Roll-1 Rear Set [2]Roll-2 Rear Set [3]Sheet. Selecting option 2 allows further freedom when establishing job
- the origin point will be set to the bottom right hand corner
- to manually align the cutter head, use the guide arrows on the control panel. To reset the origin manually, set the position and push [origin]

Prepare the drawing in Corel

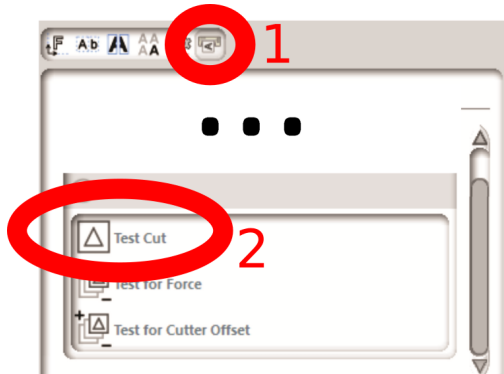
- Open Corel Draw X7; as of 2021-11 there are newer versions of Corel installed on the craft room PC but they don't work as well with the vinyl cutter
- Load or create a vector drawing
- Select the vectors and make sure they are all hairline thickness, set the fill to none so you can see if anything strange is going on with the vectors
- Check for open vectors - if they are not closed they will not be cut loose

Send Job

- Click the following button to launch Cutting Master 3 with the vector file



- Do test cut to confirm the blade settings and pressure



- Peel of the piece between the square and the triangle
 - if it doesn't peel cleanly, increase the pressure
 - If it cuts into the backing paper, decrease the pressure
- Click the **Send** button at the bottom of the adjustments screen to send your design to the cutter

Shut-down

- If using a roll, use the crosscut function on the vinyl cutter panel to cut the roll off square
- Open the rollers with the lever and leave it open
- Remove the vinyl; if it's shop supplied, **write the quantity you used and your name on the billing sheet on the vinyl shelf**
- Power off the vinyl cutter

Applying the vinyl

- "weed" the parts of the vinyl outside your graphic
- apply transfer sheet (we have rollers on the shelf to help)
- if your decal is large, check out a few youtube videos about how to apply it without bubbles etc

Maintenance Procedures

- Never lubricate the mechanisms of the plotter.

- Never use thinner, benzene, alcohol, or similar solvents to clean any part of the cutter (except below)
- Clean the plotter's casing, roller rail that the cutting head slides back and forth on and paper sensors using a cloth moistened in a neutral detergent diluted with water.
- Clean the cutting mat strip using a dry cloth. In case of stubborn stains, use a cloth that has been moistened in alcohol or in a neutral detergent diluted with water.

Housekeeping

- Switch off the machine and reset all guards to a fully closed position.
- Leave the machine in a safe, clean and tidy state.
- When servicing equipment, power must be disconnected.

If an emergency situation occurs while conducting this task, or there is an equipment malfunction, shut the equipment off immediately and follow the lock out procedure.

REPORT ANY HAZARDOUS SITUATION TO THE MAINTENANCE MANAGER OR VICE PRESIDENT AT THE FABRICATION LAB, ON THE BROKEN CHANNEL OR SAFETY CHANNEL ON SLACK.