



**Wizard™ CMC Model 9000  
Getting Started Guide**

The following product names are used in this document. Abbreviations are included for reference:

Integrated Framer® Retail Management (IFRM)

Integrated Framer® Content Management (CM)

Integrated Framer® Visualization (IFV)

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Wizard at 1-888-855-3335 or visit us at [www.wizardint.com](http://www.wizardint.com)

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# Wizard CMC Model 9000 Getting Started Guide

## Contents

Check Contents .....	5
Equipment Required .....	5
Where to Find More Information .....	5
Documentation .....	5
Designing Multiple Mats .....	5
Website .....	5
Help - Context Sensitive Help .....	6
Help Screen .....	6
CMC Parts .....	9
Head Labeled .....	9
Cartridges .....	9
ECU and Air Regulator .....	9
CMC Parts Labeled .....	10
Setting up the CMC .....	11
Setting up the Stand or Wall Mount .....	11
Taking the CMC out of the Box .....	11
Remove Gantry Cover .....	12
Removing the Shipping Blocks .....	12
Unlock the Gantry Wheels .....	13
Check Squareness .....	14
Head Installation .....	14
Install the Head onto the Gantry .....	14
Hooking up the Gantry and Air Lines .....	15
Connecting the Board Cable .....	15
Attaching Air Lines .....	16
Install Gantry Cover .....	16
Hook up Computer .....	17

Hook up Computer Peripherals .....	17
Connect the ECU.....	18
Turn on the System .....	18
Turn on ECU .....	18
Boot up the Computer .....	19
Configuration Disk .....	19
Design the First Mat .....	19
Edit New Mat.....	19
Go to Cut Preview to Cut the First Mat.....	22
Align the Head When Motors are Disengaged.....	24
Align the Head .....	24
Insert Blade Cartridge and Adjust Blade Depth .....	25
Design a Different Mat.....	26
Select a Different Template .....	26
Variable Pressure Optimization (VPO) Feature.....	28
Adjusting the Air Pressure for Dense Matboard .....	28
Adjusting the Air Pressure for Typical Matboard.....	29
Cutting an Extra Dense Layer with the 90° Cartridge .....	30
Changing the Blade.....	32
Using the 45° Cartridge .....	32
Using the Pen Cartridge .....	33
Blades and Cartridges .....	33
Aborting a Cut.....	34
Troubleshooting .....	34
Frequently Asked Questions .....	34
Hardware Maintenance .....	36
Maintenance Schedule .....	36
Offload Air Regulator .....	37
Disclaimers .....	37

# Wizard CMC Model 9000 Hardware and Software Getting Started Guide

## Check Contents

Review equipment upon arrival for shipping damage. Contact Wizard if any damage is noticed. Verify that contents shown in the packing slip are received. **Read this Manual before installing and operating the equipment.** Save packaging.

## Equipment Required

Stand or wall mount - **must be assembled first** before unpacking the Wizard™ CMC (Computerized Mat Cutter)  
1/4" female fitting on main air line, or quick disconnect attachment  
Electrical outlet  
Air source - You will need an air compressor that supplies between 100psi and 120psi.  
Surge protector  
Table for the computer/monitor if not using the stand

## Where to Find More Information

### Documentation

Other MatDesigner manuals are located on the installation CD and the MatDesigner computer. They can be used digitally or printed on any printer. To locate the manuals, click on the Help menu in the MatDesigner software, or, for most computers, click on start, then programs, then the Wizard directory, and Help. Double-click on the desired manual to open and print.

### Designing Multiple Mats

For information on designing multiple mats, see the *User Guide: Editor* and the *Editor Tutorial*. See "Documentation" above.

### Website

Check out Wizard University on our website at [www.wizardint.com](http://www.wizardint.com) for step-by-step articles, instruction manuals, and a schedule of online webinars.

To access the Customer Center, you must first register an account. Have the Customer ID and System ID handy, which can be found on the License screen. The License screen can be opened from the Cut Preview screen by clicking on the License button.

1. Go to [www.wizardint.com](http://www.wizardint.com) and click on "Register an Account" at the bottom right corner of the home page.
2. Fill in the contact information and create a username and password.
3. Click the "Register My Account" button.
4. A welcome message confirming the account will display at the very top of the web page.

## Help - Context Sensitive Help

There are several ways to open the help screen.

### Help Button on Menu Bar

Click the [?] on the menu bar (Fig A) to access context sensitive help.

Cursor changes to a question mark (Fig B).

Click on desired item, such as the cut button.

Context sensitive help screen opens to the subject desired.



Fig A.



Fig B.

### F1 for Help

When an item is in focus, it is highlighted in yellow.

Hit F1 to open context sensitive help topic about the item in focus.

### Help Menu

Click on *Help* from the editor and select *Context Sensitive Help* (Fig C).

Context sensitive help opens.

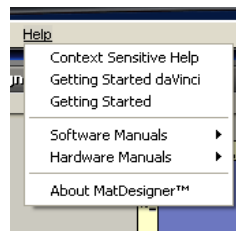


Fig C.

## Help Screen

Context sensitive help screen opens to the subject desired (Fig D).

Current topic is highlighted on the topics list on the left.

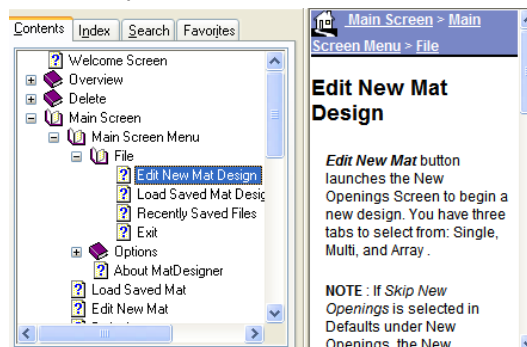


Fig D.

## Contents

Click on a topic in the contents tab to display help information (Fig E).

Click + to expand a topic.

Click - to collapse a topic.

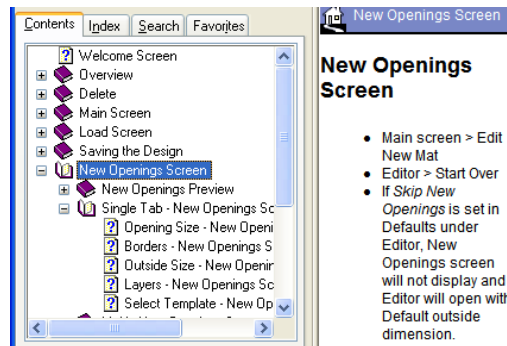


Fig E.

## Index

Double-click a topic in the index tab (Fig F) to display help information.

OR

Type a keyword to search and click **Display** at the bottom of the screen.

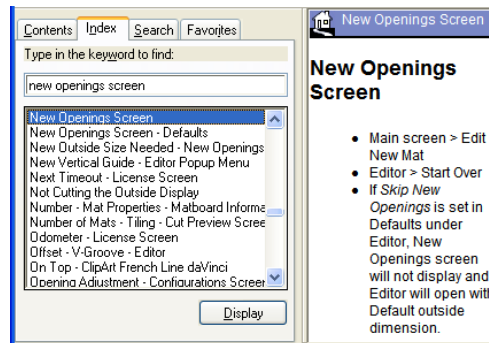


Fig F.

## Search

Type a keyword to search (Fig G) and click **List Topics**.

Select a topic listed and click **Display** to view help information.

Optionally, select search the parameters from the bottom of the screen:

**Search previous results**

**Match similar words**

**Search titles only**

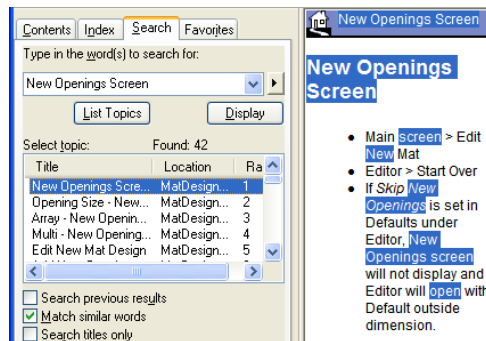


Fig G.

## Favorites

Save topics in the favorites tab (Fig H) for future reference.

With desired topic displayed, click **Add** at the bottom of the favorites tab.

New topic is added to favorites.

Select topic on favorites tab and click **Display** to view the topic.

Remove topic from favorites tab by selecting it and clicking **Remove**.

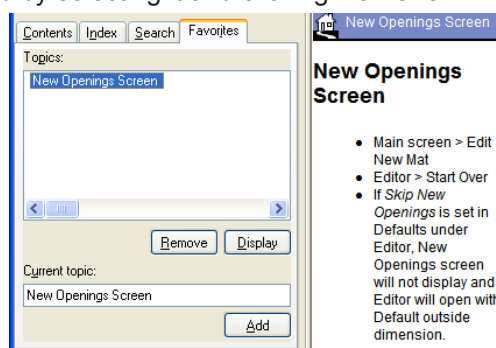


Fig H.

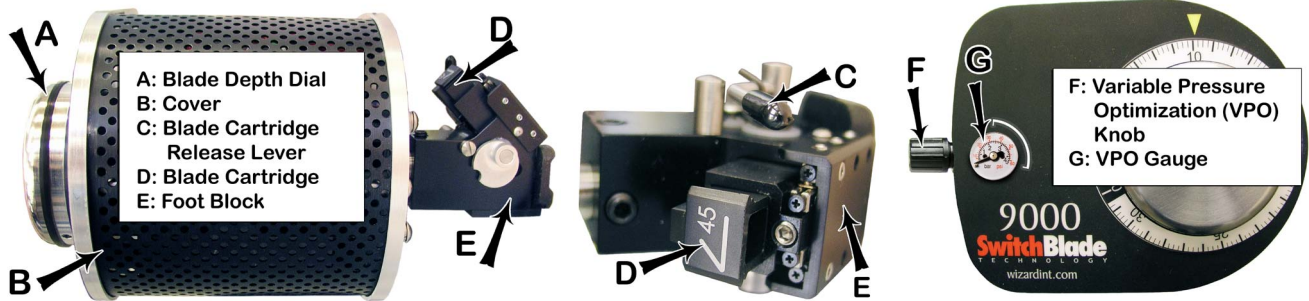
## Print

Click **Print** icon at the top of the help screen to print current topic.



## CMC Parts

### Head Labeled



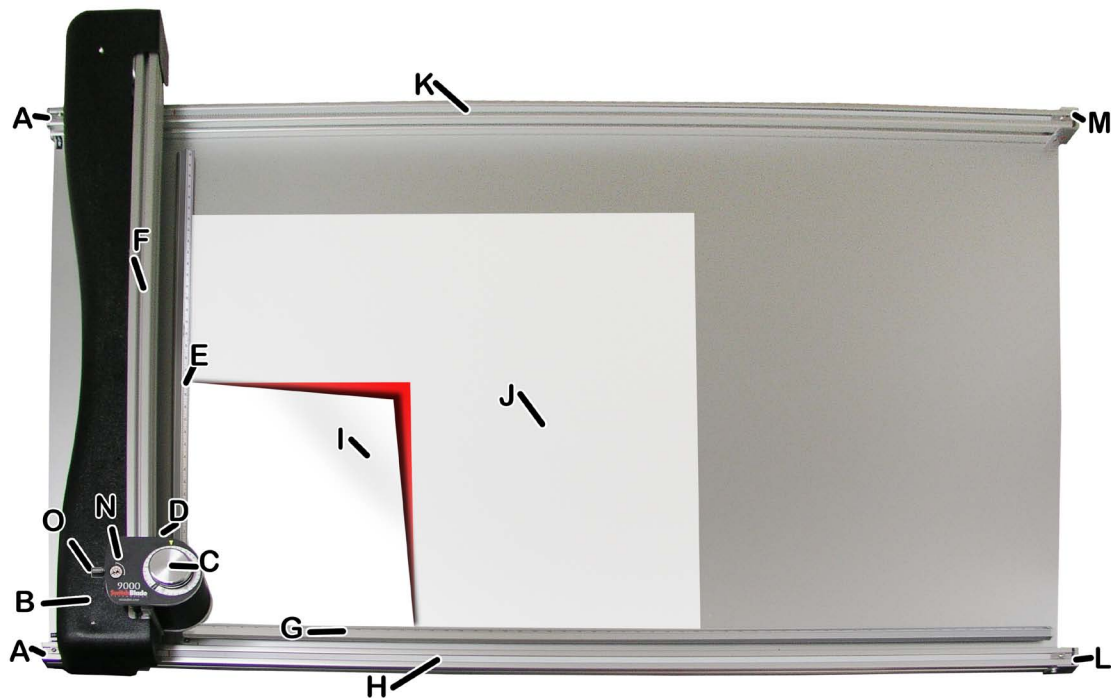
### Cartridges



### ECU and Air Regulator



## CMC Parts Labeled



- A: Belt anchor
- B: Gantry cover with storage for shipping screws and vertical belt tension adjustment
- C: Head and blade depth knob
- D: Head grabber arm
- E: Vertical clamp
- F: Gantry
- G: Horizontal clamp
- H: Lower rail, containing toothed belt
- I: Mat to be cut
- J: Backing mats (1-2 sheets of 4-ply)
- K: Upper rail, containing toothed belt
- L: Horizontal tension adjustment (lower rail)
- M: Horizontal tension adjustment (upper rail)
- N: Variable Pressure Optimization (VPO) gauge
- O: Variable Pressure Optimization (VPO) knob

## Setting up the CMC

Congratulations on acquiring the **Wizard™** computerized mat cutter (CMC). The following instructions will walk you through unpacking and setting up the CMC.

Begin by clearing an area for the CMC. The CMC requires a space at least **80" wide by 65" high (203 x 165 cm)**. The *minimum* space required for the computer, monitor, mouse and keyboard is **26" x 30" (66 x 76 cm)**.

## Setting up the Stand or Wall Mount

**\*⚠CAUTION: The stand or wall mount MUST be assembled before unpacking the CMC so it can be immediately installed in the operating position.\***

### Assembling the Wall Mount or Stand Assembly

Refer to the wall mount or stand assembly instructions located in the box. If the instructions or any parts are missing, call the Help Desk at (888) 855-3335.

**NOTE:** The Keyboard-Video-Mouse (KVM) stand arm for the consolidated stand is located on the back of the CMC board in the board box (see Step 5 below).

## Taking the CMC out of the Box

1. With the help of a second person, place the box on a flat surface, cut the strapping tape and lift the cover of the box away (Fig A). Take care to save the packaging.
2. Working together, carefully lift the CMC straight up out of the box (Fig B).
3. Set the CMC gently on end.
4. While holding the CMC, remove the KVM stand arm from the back of the CMC by removing the fasteners. Attach the KVM stand arm to the consolidated stand (if one is ordered) as per the consolidated stand assembly instructions.
5. Position the CMC onto the wall mount or stand, making sure that none of the air lines are crimped, and that the grounding strap on the right rear side of the board is not crimped between the board and stand arm.
6. Remove the foam corners and move the box out of the way (Fig C).
7. Follow the instructions that came with the stand to secure the CMC into place and attach the grounding strap.
8. Place the foam corners back into the box. Save packaging, foam corners and shipping blocks (removal instructions below) for future use. See Contract Section 1 "Shipping Charges."



Fig A.

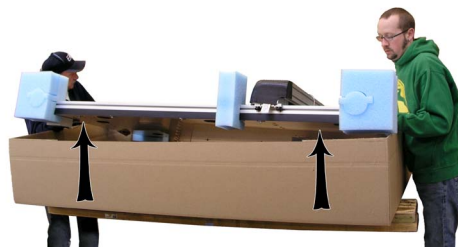


Fig B.



Fig C.

## Remove Gantry Cover

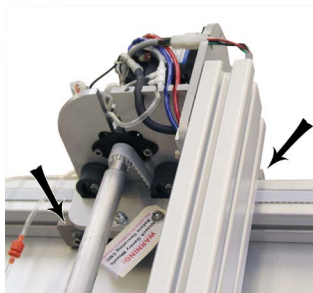
1. Remove the two screws holding the gantry cover in place (Fig A), and set the cover and screws aside.



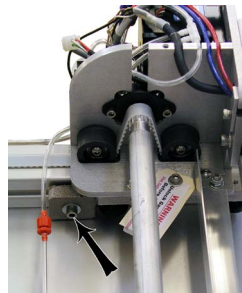
**Fig A.**

## Removing the Shipping Blocks

1. Locate the four shipping blocks holding the gantry in place. There are two on the upper gantry (Fig A); one to the left of the gantry on the underside of the top rail (Fig B) and the other to the right of the gantry on the top of the rail (Fig C).



**Fig A.**

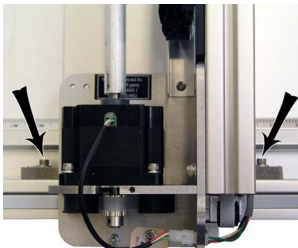


**Fig B.**

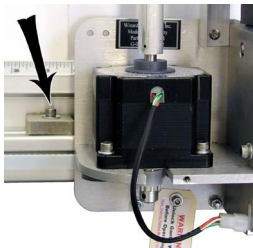


**Fig C.**

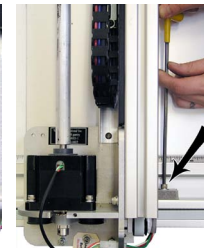
There are two shipping blocks on the lower gantry (Fig D); one on each side of the gantry on top of the rail (E-F).



**Fig D.**

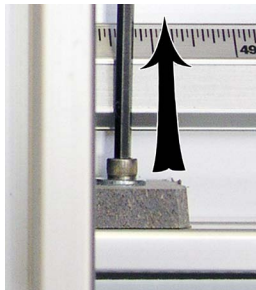


**Fig E.**



**Fig F.**

2. Remove the shipping blocks by loosening the 3/16" Allen screw from the T-Nut (Fig G-H). Slide the T-Nuts to the nearest end of the rail; a pencil eraser helps (Fig I). Reattach the T-Nuts to the shipping blocks and place in the shipping box for storage.



**Fig G.**



**Fig H.**



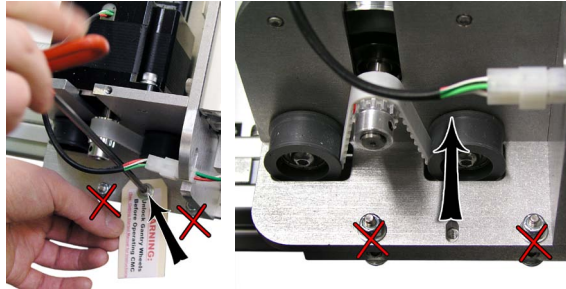
**Fig I.**



## Unlock the Gantry Wheels

**\*IMPORTANT: DO NOT operate the CMC without first unlocking the gantry wheels!\***

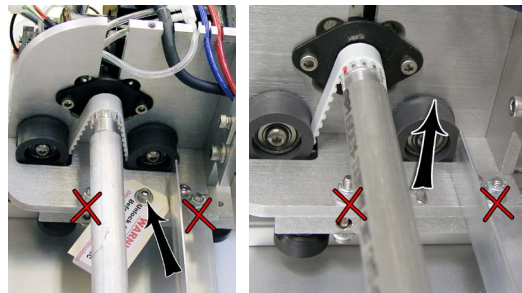
1. The gantry wheels are locked into place for shipping purposes with an Allen screw and washer and marked with a large tag (Fig A). The two screws on either side are not to be disturbed.
2. Remove the bottom gantry wheel locking Allen screw, washer and gantry tag (Fig B). **DO NOT REMOVE THE NEIGHBORING SCREWS.** You may hear/feel the gantry wheels snap into place.



**Fig A.**

**Fig B.**

3. Remove the top gantry wheel locking Allen screw, washer and gantry tag (Fig C-D). **DO NOT REMOVE THE NEIGHBORING SCREWS.** You may hear/feel the gantry wheels snap into place.



**Fig C.**

**Fig D.**

4. Place the two Allen screws and washers into the holes provided on the lower gantry plate (Fig E). It is not necessary to keep the tag. The Allen screws will be used during the lifetime of the CMC, so it is important to place them here. Place them so that the screw protrudes only slightly from the back of the plate.



**Fig E.**

## Check Squareness

### Check the Alignment Arrows

Check the alignment arrows located on the left end of both the upper (Fig A) and lower (Fig B) rails. Make sure they line up with the alignment arrows on the CMC base. If they do not, call the Help Desk at 888/855-3335.

### Check the Toothed Belt Lines

Move the gantry all the way to the left. Move the gantry slowly toward the right until a red mark is visible on the toothed belt of the upper gantry. Confirm that the red mark lines up with the red mark on the toothed pulley (Fig C).

Without moving the gantry, look at the lower toothed belt of the gantry and make sure the red mark lines up on the lower toothed belt and the toothed pulley (Fig D). If they do not, call the Help Desk.

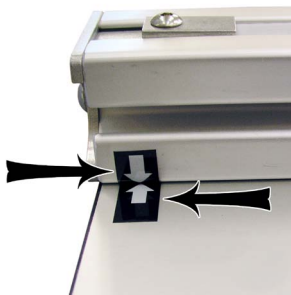


Fig A.

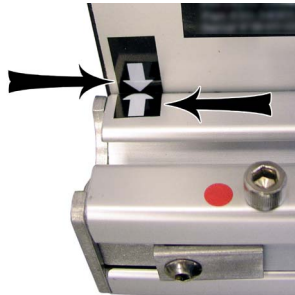


Fig B.

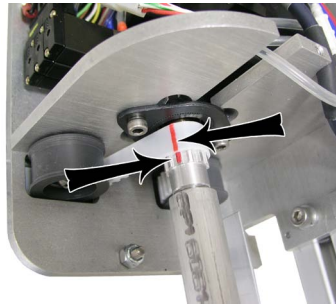


Fig C.

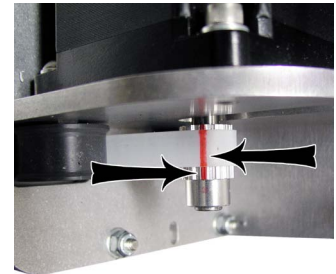


Fig D.

## Head Installation

### Install the Head onto the Gantry

1. Remove the two 5/32" screws from the head and set aside (Fig A).
2. Move the gantry to the right edge of the CMC.
3. Point the head so that the foot block faces toward the CMC and the wheels are close to the bottom of the gantry (Fig B).
4. Line up the wheels on the head to the center channels of the gantry arm and ease the head onto the gantry (Fig C).
5. Roll the head up the gantry until it lines up to the head grabber arm on the right side of the gantry (Fig D).

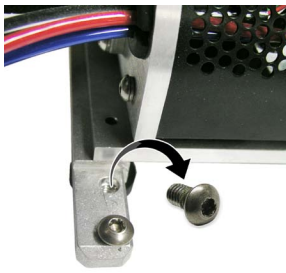


Fig A.

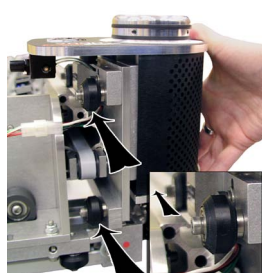


Fig B.



Fig C.

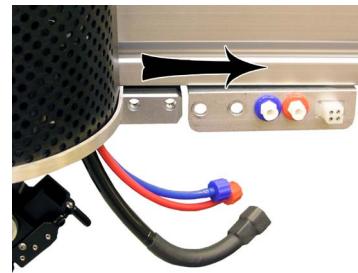


Fig D.

6. Holding the head in position so that the head lines up neatly to the head grabber arm, replace the two 5/32" screws, making sure they go into the head grabber arm and into the head (Fig E) and tighten firmly.
7. Connect the air to the head by twisting the two air fittings together, **matching** colors (Fig F).
8. Connect the head power plug (square connection) to the head grabber arm (Fig G).



Fig E.

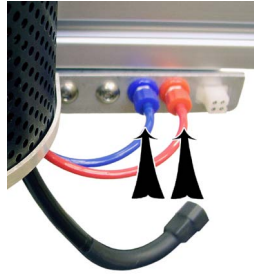


Fig F.

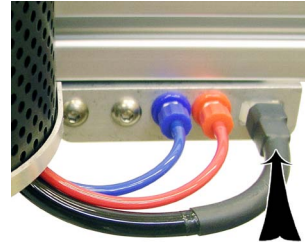


Fig G.

## Hooking up the Gantry and Air Lines

### Connecting the Board Cable

**\*Carefully align the pins of the board cable before applying pressure to plug it in. If forced in incorrectly, the CMC will malfunction.\***

1. The board cable connects the gantry on the CMC to the ECU, which is a shoebox-sized peripheral. Connect the male end of the board cable (Fig A) to the back of the ECU (Fig B) by aligning the pins and turning the locking ring until it seats itself and locks into place.
2. Connect the female end of the board cable to the back of the gantry in the same manner (Fig C).
3. Move the gantry to the far right of the CMC and back to the left to make sure the board cable does not get caught on anything. If the board cable is obstructed, this will affect the cuts.



Fig A.



Fig B.

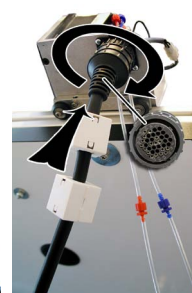
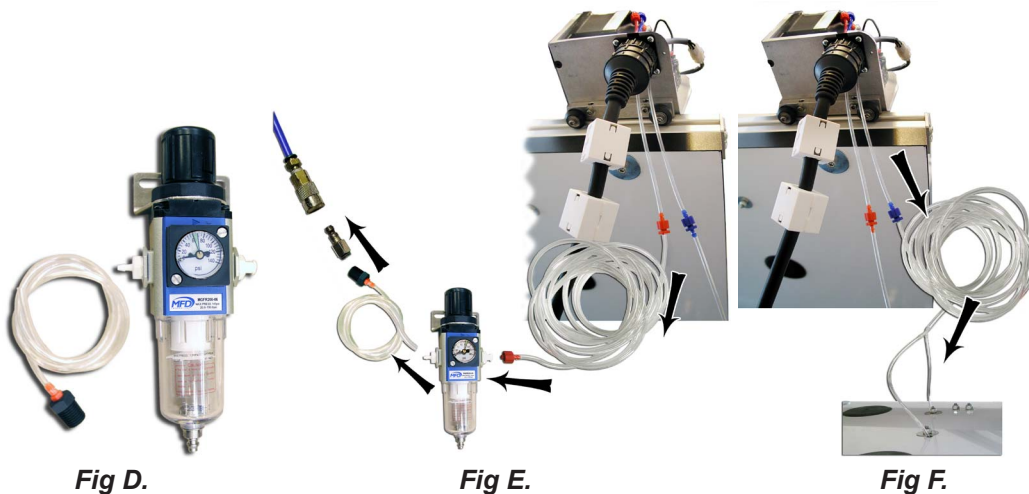


Fig C.

## Attaching Air Lines

1. Follow the air line with the red connector from the top of the gantry and connect it to the right side of the air regulator (Fig D) by inserting the red connector on the end and twisting it into place (Fig E).
2. If not already connected, insert the air regulator line (short air line with reducer) onto the left connector of the air regulator.
3. Plug the reducer located on the short air line from the left side of the air regulator into the main air supply via 1/4" NPT female connector or quick disconnect, whichever type was purchased (shown is the 1/4" NPT female adaptor). Teflon tape can be used on the thread to reduce possible air leakage.
4. The air compressor should have at least 100 - 120 PSI.
5. Strap the air regulator with the glass bowl down to the left large wall bracket or side of stand, making sure not to crimp any air lines. The hardware to connect the air regulator to the stand is included in the stand hardware kit.
6. Follow the air line with the blue connector from the top of the gantry and make sure that it is connected to the back of the board, and that none of the air lines are crimped (Fig F).
7. Turn on the air.



**\*⚠ CAUTION: The air regulator is factory-set. Do not make adjustments to it.\***

## Install Gantry Cover

1. Replace the gantry cover and attach using the two screws removed earlier (Fig A).





## Hook up Computer

### Hook up Computer Peripherals

1. Place the computer onto the computer brackets and place on the stand shelf (Fig A). Make sure that the computer is secure on the computer brackets to keep the computer from vibrating off of the shelf during use of the CMC.

**It is important to use the computer brackets to keep the CMC from shaking the computer off of the stand.**

2. If using the stand, thread the keyboard, mouse, monitor cable, and monitor cord through the access hole in the back of the stand arm and out the bottom hole.
3. Attach the rubber feet to the bottom of the ECU (Fig B) in each corner. The words on the back of the ECU face upright, and will help determine which side is the bottom. Place the ECU on top of the computer.
4. Hook up the monitor, keyboard and mouse by plugging the color-coded plugs into the matching ports on the back of the computer (Fig C). If the peripherals are USB instead, insert the USB plugs into the USB ports on the computer.
5. Plug in the computer power cord into the matching port on the computer, then plug the power cords from the computer and monitor into a surge protector (Fig D).

**NOTE:** Monitor settings may need to be adjusted for optimum display quality.



Fig A.



Fig B.

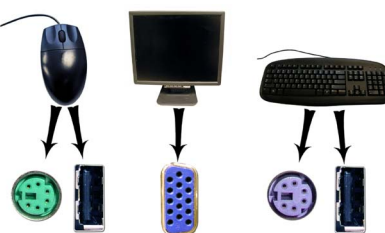


Fig C.



Fig D.

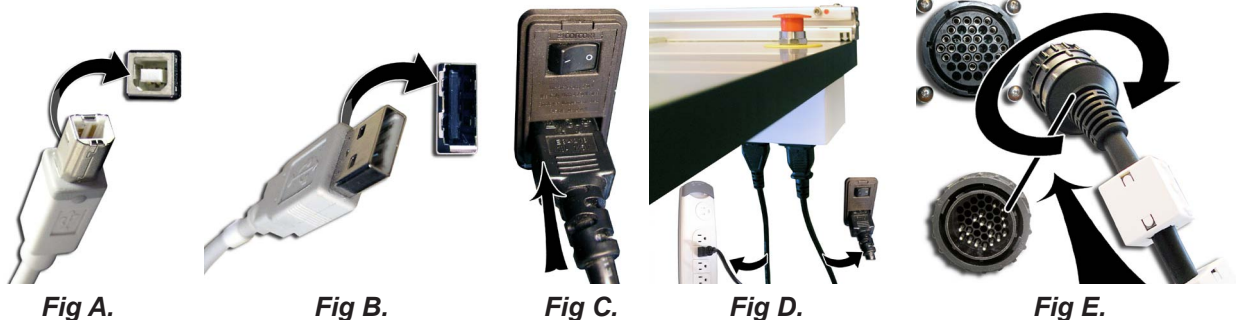
## Connect the ECU

---

**\*⚠ WARNING: High voltage. No user serviceable parts inside the ECU.\***

---

1. Connect ECU USB cable to the matching port on the back of the ECU (Fig A).
2. Plug the other end of the USB cable into the USB port on the computer (Fig B).
3. Plug the ECU power cord into the back of the ECU (Fig C).
4. Plug the other end of the ECU power plug into the right port of the emergency stop (if facing the back of the CMC), located directly behind the emergency stop on the back of the board. Make sure the plug is firmly inserted to ensure the grounding wire makes contact (Fig D).
5. Plug the emergency stop power cord into the left port of the emergency stop button on the back of the board.
6. Plug the other end of the emergency stop power cord into a surge protector.
7. The board cable was plugged into the back of the ECU when we hooked up the gantry previously (Fig E). See ["Connecting the Board Cable" on page 15](#) for more information.



## Turn on the System

---

### Turn on ECU

---

Press the 1 on the rocker switch on the back of the ECU to turn on the ECU (Fig A).

Press 0 on the rocker switch to turn off the ECU.

**\*The ECU must be on for the CMC to cut. Press 1 on the rocker switch to turn it on.\***

---

## Boot up the Computer

Turn on the computer (Fig B) and the monitor, allowing a minute or so for them to power up. Double-click on the MatDesigner logo (Fig C) to start the software.



Fig. A.



Fig B.



Fig C.

## Configuration Disk

If the CMC arrived with a configuration disk, place the disk in the drive and follow the instructions on the label.

## Design the First Mat

### Edit New Mat

1. Click **Mat Design** (Fig A) on the main screen to create a new design.
2. Stay on the Single tab (Fig B). There are three tabs to select from: *Single*, *Multi*, and *Array*.

NOTE: If **Skip New Openings** is selected in defaults under *New Openings*, the new openings screen does not display and the Editor opens using the default outside dimension.

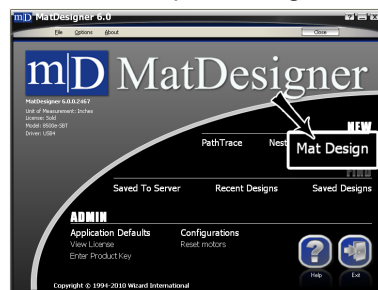


Fig A.

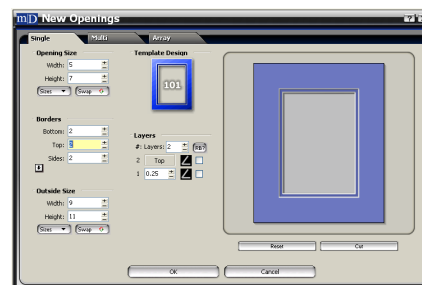


Fig B.

## Opening Size

3. Enter 5x7 (13x18 cm) for width and height of the opening (Fig C).

**NOTE:** Outside size field displays on top if *Opening Size First* is unchecked in the defaults under editor.

Optionally, enter the outside dimensions first.



Fig C.

## Borders

4. Enter 2 (5 cm) for the *bottom*, *top* and *side* mat border widths (Fig D).

Set the borders order in defaults under new openings screen.

Arrow indicator displays whether borders are applied top layer down or bottom layer up as set in defaults.



Fig D.

## Outside Size

5. Make sure outside size is 9x11 (23x28 cm) (Fig E). Don't Click OK yet.

If opening size and borders are entered first, the program automatically calculates the outside size when tabbing out of the borders field.

**NOTE:** If *Opening Size First* is checked in defaults under editor, the opening size field displays on top.



Fig E.

## Select Template

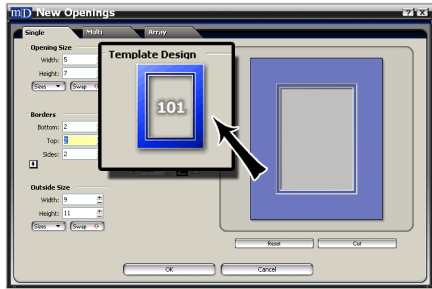
6. Click on the template thumbnail (Fig F) under template design.

7. Template library opens (Fig G).

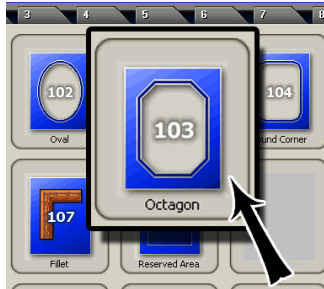
Note there are several pages of templates. Click on one of the numbered tabs to see a new page.

8. Click on new template thumbnail to select it.

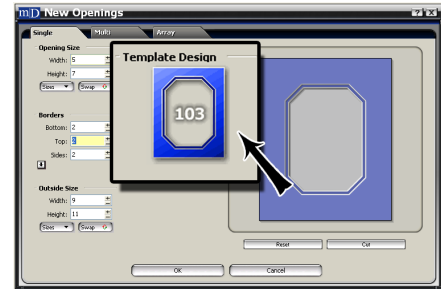
9. New template is displayed (Fig H).



**Fig F.**



**Fig G.**



**Fig H.**

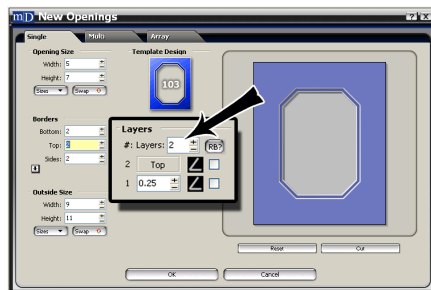
## Layers

10. Select the number of layers desired for this project. Leave it at the default of 2 layers (Fig I).

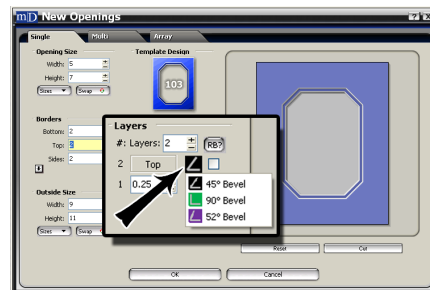
## Cartridge Selection

11. Click on the cartridge icon and select the desired cartridge for this layer (Fig J). For this project, leave it at the default cartridge, which is the 45° cartridge.

NOTE: Cartridges not currently available will be greyed out.



**Fig I.**



**Fig J.**

## Go to Cut Preview to Cut the First Mat

1. Click **Cut** (Fig A) on new openings screen to take design to Cut Preview (Fig B).

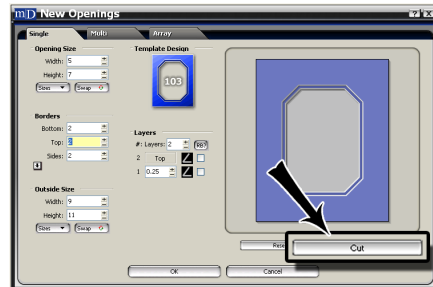


Fig A.

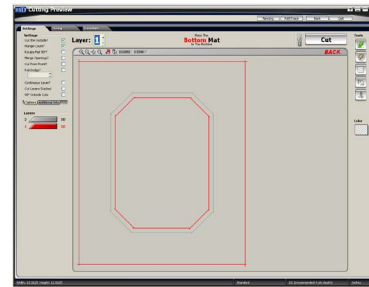


Fig B.

### Blade Depth Settings

1. Select the desired layer on the Cut Preview Screen (Fig A).
2. Click on the Blade Depth button (Fig B).
3. On the Blade Depth screen (Fig C), select the new blade depth number under opening.

For this first mat, leave it at the default setting of 10.

4. If this is dense matboard, check the checkbox for Dense (Fig C), and confirm that the Blade Depth is the appropriate setting for this matboard.

For this first mat, leave Dense unchecked.

4. Click **Ok**.
5. If we had changed the Blade Depth, the new blade depth number would listed next to the current layer (Fig D). If we had selected Dense, there would be an asterisk next to the current layer with a footnote designating that this layer is set to Dense.

NOTE: Returning to Editor then back to Cut Preview reloads the default blade depth and dense settings.

For information on selecting blade depth by matboard sku, see the **User Guide Editor: Properties Tab: Layers: Mat Number**.

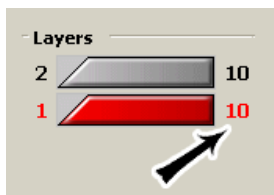


Fig A.

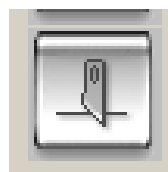


Fig B.

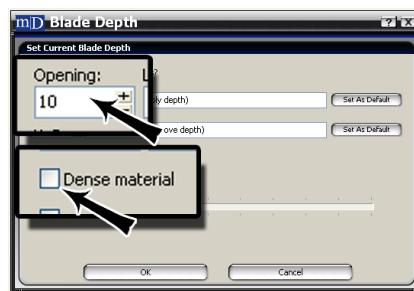


Fig C.

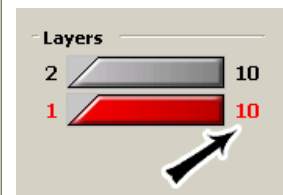


Fig D.

## Install a Blade

The 45° cartridge is labeled 45° on the end and is black (Fig A).

1. Push blade cartridge release down to eject the blade cartridge (Fig B).
2. The blade cartridge displays a diagram of the blade orientation (shown in contrast) (Fig C). Place new blade into cartridge with the longest straight side to the right and the bevel face down. Place the hole in the blade over the pin on the cartridge and the blade in the slot provided for it.
3. Turn cartridge over and reinsert into the head (Fig D) with the blade facing the CMC board and the arrow on the back of the cartridge facing the head, until it clicks into place. It can only be inserted one way.



**WARNING: Do not run the CMC without the blade cartridge in place or damage to the blade cartridge release lever could occur.**

## Put Matboard onto CMC

**\*Make sure there are two layers of disposable backing matboard of adequate size underneath the matboard to be cut.\***

1. The cut preview displays whether the current layer is to be cut from the front or from the back of the matboard (Fig D). This determines how to place the matboard into the CMC.
2. When cutting from the back, place the matboard face down onto the CMC (facing away from the operator) (Fig E). Make sure the matboard nestles tightly under the horizontal clamp and vertical clamp of the CMC.





## Click Cut

1. Click *Cut* to cut the design (Fig F).
2. If the motors are disengaged, MatDesigner will prompt to Align the Head (Fig G). When the motors are disengaged, the gantry can be moved easily back and forth and the head moves easily up and down on the gantry. See [“Align the Head” on page 24](#) for instructions on how to Align the Head.
3. If the head is aligned but a different cartridge or blade depth is needed, user will be prompted to change the blade cartridge and/or the blade depth. See [“Insert Blade Cartridge and Adjust Blade Depth” on page 25](#) for more information.



Fig F.

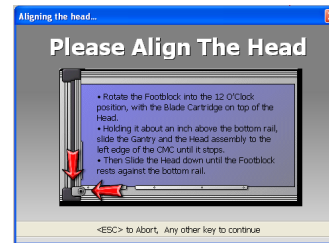


Fig G.

## Align the Head When Motors are Disengaged

### Align the Head

1. Rotate the foot block into the 12 O'Clock position, with the blade cartridge on top of the head (Fig A).
2. Holding it about an inch above the bottom rail, slide the gantry and the head assembly to the left edge of the CMC until it stops.
3. Then slide the head down until the foot block rests against the head alignment stop (Fig B).
4. Click on the align screen (Fig C) and the head will align to the home position (Fig D).

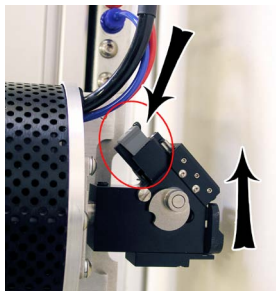


Fig A.

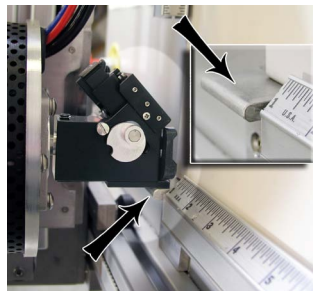


Fig B.

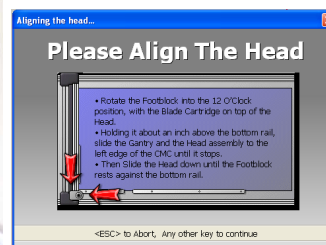


Fig C.

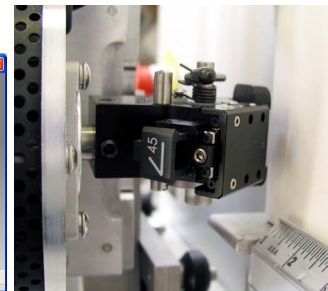


Fig D.



## Adjusting the Air Pressure for Denser Matboard

See [“Variable Pressure Optimization \(VPO\) Feature” on page 28](#) for more information.

## Insert Blade Cartridge and Adjust Blade Depth

If the current layer uses a different blade cartridge or is a different thickness than the last layer cut, the user is prompted to change the blade cartridge and/or the blade depth (Fig A).

If the current layer uses the same blade cartridge and the same thickness as the last layer cut, the CMC will begin to cut without further prompt.

The 45° blade cartridge and blade have already been inserted, so change the blade depth by turning the blade depth dial to the requested depth (Fig B) and click **Ok** on the prompt.

2. The CMC will begin to cut.



Fig A.



Fig B.

## After the CMC Has Cut the Mat

1. After the cut has finished, the head will return to the home position, and the foot block will rotate to the aligned position for access to the blade cartridge. Unless the screen prompts to align the head, do **NOT** turn the foot block.
2. Remove the matboard from the CMC. The first mat has been cut.
3. Click *Back* to return to the New Openings screen.

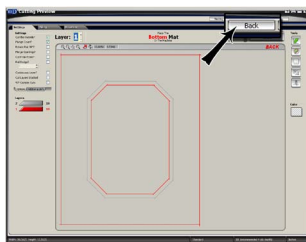
## If The Cut Doesn't Look Right

See [“Troubleshooting” on page 34](#) .

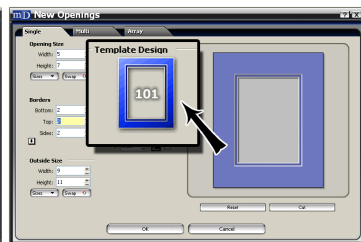
## Design a Different Mat

### Select a Different Template

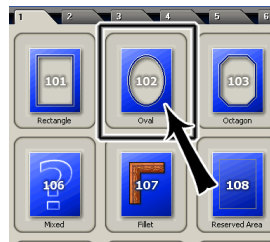
1. Click *Back* on the Cut Preview screen to return to the New Openings Screen (Fig A), if not already done so.  
The current design can be easily altered for the next project by changing the size and other parameters.  
This next project is an oval instead of a rectangle.
2. Click on the template thumbnail under template design (Fig B).
3. Template Library opens.
4. Click on new template thumbnail to select it (Fig C).
5. New template is displayed (Fig D).



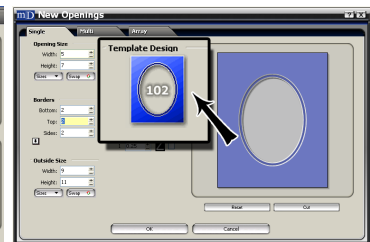
**Fig A.**



**Fig B.**



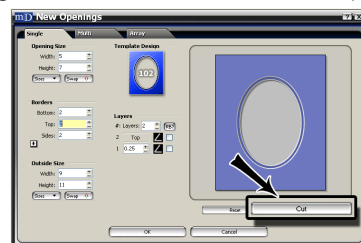
**Fig C.**



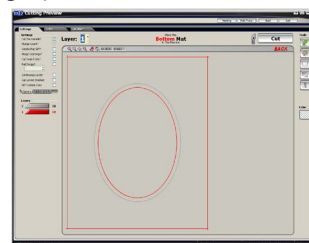
**Fig D.**

### Go to Cut Preview

6. Click *Cut* (Fig E) to go to the Cut Preview screen (Fig F).



**Fig E.**



**Fig F.**

### Put Matboard on the CMC

7. Make sure there is one layer of disposable backing matboard of adequate size underneath the matboard to be cut.
8. This design is cut from the back (Fig G). Place the matboard face down onto the CMC (facing away from the operator) (Fig H). Make sure the matboard nestles tightly under the horizontal clamp and vertical clamp of the CMC.

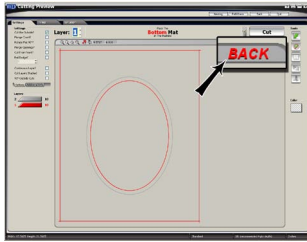


Fig G.



Fig H.

### Click Cut

9. Click *Cut* to cut the mat (Fig I).
10. Because the motors are still engaged, the CMC will automatically begin to cut.

Note that because we made no changes to the blade depth nor the dense setting, the CMC did not prompt for a change before cutting.

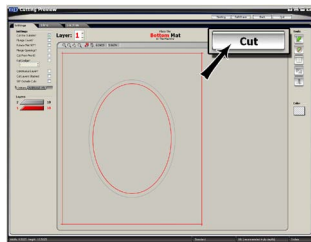


Fig I.



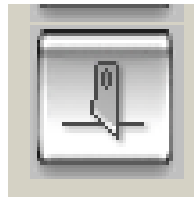
11. After it has finished cutting, remove the matboard from the CMC. The second mat has been cut.
12. Click *Back* to return to the New Openings screen or *Quit* to return to the Main Screen.

## Variable Pressure Optimization (VPO) Feature

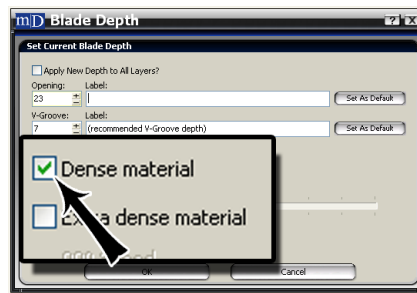
### Adjusting the Air Pressure for Dense Matboard

Note: Increasing the air pressure will increase the blade depth.

1. Select the desired layer on the Cut Preview.
2. Click the Blade Depth button (Fig A) to open the Blade Depth Screen.
3. Click the checkbox for Dense (Fig B) and change the Blade Depth to the appropriate setting for this matboard.

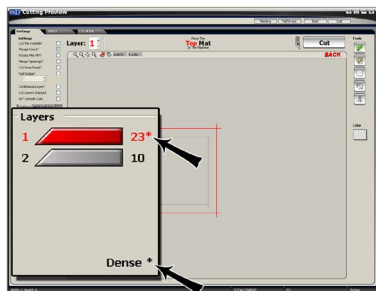


**Fig A.**



**Fig B.**

4. Click Ok. The Cut Preview displays the dense layer with an asterisk and indicates that this layer is dense (Fig C).
5. Click Cut to cut the mat and Align the Head if requested.
6. The Head plunges at the home position and applies the current pressure and displays a prompt to adjust the head pressure to the high setting (Fig D).



**Fig C.**



**Fig D.**

7. Pull out the air regulator pressure knob by pulling it to the left (Fig E).
8. Turn the air regulator pressure knob clockwise (Fig F) until the marker on the gauge is at the high setting. Make sure the gauge does not go above 60 psi (Fig G).
9. Push the air regulator pressure knob back in by pushing it to the right (Fig E).
10. Click OK to cut the mat with this setting.



## Adjusting the Air Pressure for Typical Matboard

Note: Decreasing the air pressure will decrease the blade depth.

The head air regulator is located on the left side of the head, and controls the air pressure of the head as it is cutting. The air pressure is applied when the head is cutting.

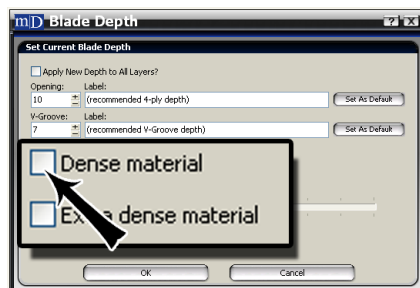
The minimum air pressure should be 35 psi, otherwise the blade may not cut through the matboard.

The maximum air pressure should be around 60 psi to avoid crushing the matboard.

The MatDesigner software will prompt for a head pressure change **only** if the current mat is a different setting than the previously cut mat. If the settings are the same as the previously cut mat, the CMC will skip the following instructions and proceed to [“Insert Blade Cartridge and Adjust Blade Depth” on page 25](#).

All designs come to the Cut Preview with Dense unchecked on the Blade Depth Screen (Fig A). Returning to the editor and going to the Cut Preview resets the layers to typical matboard with Dense unchecked.

1. Click Cut and Align the Head if requested.
2. The Head plunges at the home position and applies the current pressure and displays a prompt to adjust the head pressure to the low setting (Fig B).



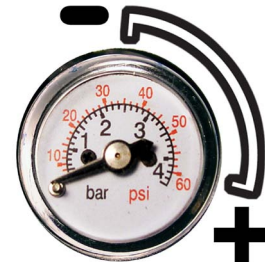
3. Pull out the air regulator pressure knob by pulling it to the left (Fig C).
4. Turn the air regulator pressure knob counter-clockwise (Fig D) until the marker on the gauge is at the low setting. Make sure the gauge does not go below 35 psi (Fig E).
5. Push the air regulator pressure knob back in by pushing it to the right (Fig C).
6. Click OK to cut the mat with this setting.



**Fig C.**



**Fig D.**

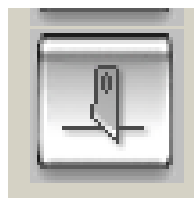


**Fig E.**

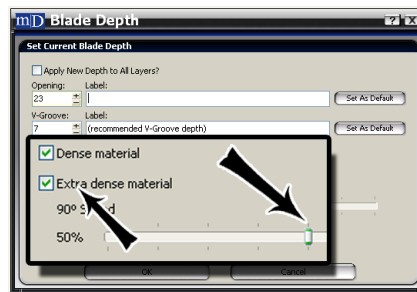
## Cutting an Extra Dense Layer with the 90° Cartridge

This setting is only for the 90° Cartridge and will not take affect if another cartridge is selected. This setting will allow the 90° Cartridge to cut at a slower pace.

1. Select the desired layer on the Cut Preview.
2. Click the Blade Depth button (Fig A) to open the Blade Depth Screen.
3. Click the checkbox for Dense (Fig B) and change the Blade Depth to the appropriate setting for this matboard.
4. Click the checkbox for Extra Dense Material.
5. Adjust the sliderbar to the percentage of cutting speed. For instance, 50% is 50% of the standard cutting speed.

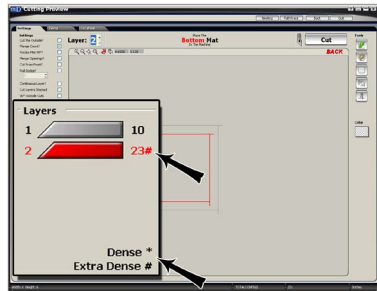


**Fig A.**



**Fig B.**

6. Click Ok. The Cut Preview displays the dense layer with an asterisk with pound sign and indicates that this layer is extra dense (Fig C).
7. Click Cut the cut the mat and Align the Head if requested.
8. A prompt to adjust the head pressure to the high setting displays (Fig D).



**Fig C.**



**Fig D.**

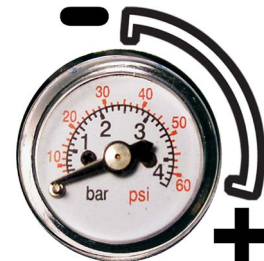
9. Pull out the air regulator pressure knob by pulling it to the left (Fig E).
10. Turn the air regulator pressure knob clockwise (Fig F) until the marker on the gauge is at the high setting. Make sure the gauge does not go above 60 psi (Fig G).
11. Push the air regulator pressure knob back in by pushing it to the right (Fig E).
12. Click OK to cut the mat with this setting.



**Fig E.**



**Fig F.**



**Fig G.**

## 90° Cartridge

See the 9000 Hardware Guide and the Getting Started Accessories Manual for information on the 90° cartridge and changing the blades.



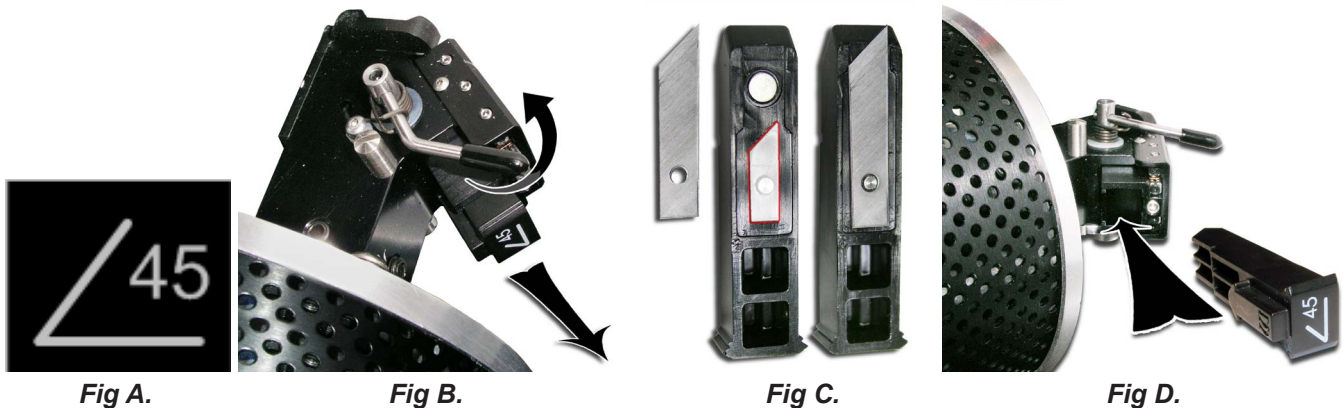
## Changing the Blade

### Using the 45° Cartridge

#### Changing the Blade

The 45° cartridge is labeled 45° on the end and is black (Fig A).

1. Push blade cartridge release down to eject the blade cartridge (Fig B).
2. Remove the blade from blade cartridge; careful of sharp edge.
3. The blade cartridge displays a diagram of the blade orientation (shown in contrast) (Fig C). Place new blade into cartridge with the longest straight side to the right and the bevel face down. Place the hole in the blade over the pin on the cartridge and the blade in the slot provided for it.
4. Turn cartridge over and reinsert into the head (Fig D) with the blade facing the CMC board and the arrow on the back of the cartridge facing the head, until it clicks into place. It can only be inserted one way.





## Using the Pen Cartridge

### Changing the Pen in the Pen Cartridge

The pen cartridge is unlabeled and is black with a metal pen holder column attached to the base. The pen icon within the software is a small stylus symbol (Fig A).

1. Push blade cartridge release down to eject the pen cartridge (Fig B).
2. Turn the pen locking screw counter-clockwise to loosen it and slide the pen locking bolt away from the cartridge base.
3. Remove the existing pen by extracting it from the pen holder.
4. Replace with a new pen by placing the tip in first and inserting the pen into the pen holder (Fig C).
5. Slide the pen locking bolt back into place and tighten the pen locking screw clockwise to lock it into place.
6. Place the pen cartridge into the head (Fig D). The pen holder should be to the right, with the pen tip facing toward the CMC, with the pen locking screw to the left, until it clicks into place. It can only be inserted one way.
7. User will need to calibrate the pen depth every time the pen is changed. Continue to the *Install Pen* utility on the pen configurations tab.
8. If the pen is not going to be used for a while, please remove it from the pen holder and replace the pen cap to keep the pen from drying out.



**Fig A.**



**Fig B.**



**Fig C.**



**Fig D.**

## Blades and Cartridges

See the 9000 Hardware Guide and the Getting Started Accessories Manual for information on the other cartridges and changing the blades.

## Aborting a Cut

Hit any key on the keyboard to abort the cut.

Alternatively, hitting the spacebar pauses the cut and gives option to abort (Fig A).

Select abort to cancel the rest of the cut.

A prompt to click OK to release the motors will display (Fig B).

Grasp the head and click ok, then manually bring the head back to the home position (Fig C).



Fig A.

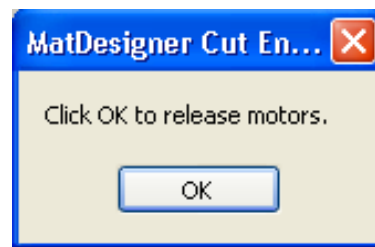


Fig B.

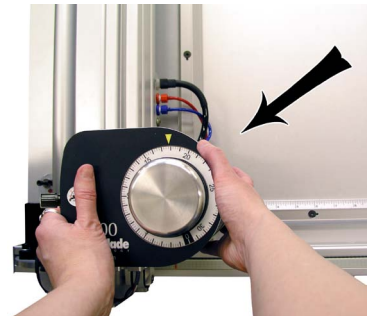


Fig C.

## Troubleshooting

### Cuts Look Wavy

Make sure to remove the shipping blocks. See [“Removing the Shipping Blocks” on page 12.](#)

Make sure the gantry wheels have been unlocked. See [“Unlock the Gantry Wheels” on page 13.](#)

Check for squareness. See [“Check Squareness” on page 14.](#)

Make sure the board cable is unobstructed. See [“Connecting the Board Cable” on page 15.](#)

Check the head wheels. See CMC 9000 Hardware Guide - *The Head: Head Wheel Adjustment.*

Check blade depth - See CMC 9000 Hardware Guide - *The Head: Blade Depth Adjustment*, or *User Guide: Cut Preview - Cut Preview Tools: Blade Depth Button/Adjustment.*

### Blade Keeps Breaking

Check how the blade is installed. See [“Install a Blade” on page 23](#) and [“Adjusting the Air Pressure for Dense Matboard” on page 28.](#)

Check to make sure the head is properly aligned. See [“Align the Head” on page 24.](#)

Check the Blade Depth. See [“Blade Depth Settings” on page 22](#) and *User Guide: Cut Preview: Blade - Measuring Blade Depth.*

## Frequently Asked Questions

Q: When I click cut, it makes a lot of noise and breaks the blade. What do I do?

A: If the motors have been idle (i.e., you can move the head because there is no power to the motors), or if a cut has been aborted, the head will have to be aligned before cutting. Otherwise, the head is rotated into the incorrect position and will break the blade. See [“Align the Head” on page 24](#) in this document for more information.

Q: I click cut and the matboard moves around and does not cut correctly. How do I fix this?

A: Make sure that the air compressor is turned on, and that the air lines are not pinched. The CMC requires air pressure to engage the clamps and cutting head.

Q: My opening is cut in the wrong place, what should I check?

A: Make sure you are placing the matboard correctly into the CMC. See [“Go to Cut Preview to Cut the First Mat” on page 22](#) in this document for further instructions. If the CMC is not cutting the outside of the mat, re-measure the mat again and make sure that it was trimmed down to the correct size. If the CMC is cutting the outside of the mat, see the configurations section of the manual to determine if the opening adjustment needs to be adjusted.

Q: What process does the computer use to download corners?

A: Click check for corners on the license screen. MatDesigner will use the internet connection to download corners. If not connected to the internet, MatDesigner can connect to Wizard via a modem.

Q: My MatDesigner keeps opening in demo mode and will not cut. What should I check?

A: Make sure that the ECU is properly hooked up, plugged in and turned on. See [“Connect the ECU” on page 18](#) in this document for more information.

Q: Does Wizard offer training?

A: Refer to our website at [www.wizardint.com](http://www.wizardint.com) and our newsletters for online Webinar information.

Q: How do I order Blades?

A: You can access our Web Store at [www.wizardint.com](http://www.wizardint.com) or by calling order processing at 888/855-3335.

Q: Do I need to save the packaging the CMC came in?

A: YES – for warranty purposes, if you ever need to return a part, these boxes will be needed. Rental customers are required to keep all packaging to return the machine at the end of the rental period.

Q: Why is air leaking from the air regulator when I turn on the air compressor? Is this an issue?

A: This is normal. One of the purposes of the air regulator is to collect moisture that may be trapped within the air line. The air regulator is self releasing when the air compressor is turned off. When the air regulator has built up enough pressure after turning on the air compressor, the air leaking will stop. If the air compressor is not building enough pressure, the user may install a shut off valve to allow the compressor to build up enough air pressure.

Q: Where can I get more information on specific questions?

A: See [“Troubleshooting” on page 34](#) in this document for more information. You can also call the Help Desk at 888/855-3335 or send an e-mail to [SupportAdmin@wizardint.com](mailto:SupportAdmin@wizardint.com).

## Hardware Maintenance

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Paper dust is very abrasive. The CMC is a precision piece of equipment that requires periodic tuning for accurate mat cutting. Damage caused by improper maintenance is not covered by warranty and will necessitate return of the CMC to the factory for rebuilding or repair. Follow this maintenance schedule to ensure a smooth-running machine.

### Maintenance Schedule

---

Do not spray *anything* directly on the CMC; spray onto a cloth and then wipe.

#### Daily:

1. With compressed air or soft brush, clean lower rail, horizontal/vertical clamps and head of any matboard debris.
2. Check backing mat for excessive wear, and change if necessary.
3. Check blade depth and blade installation.
4. Properly shut down computer and ECU at night.

#### Weekly:

1. Clean CMC rails with a soft cloth and general purpose cleaner, especially the lower rail where wheels have the most contact with the machine.
2. Offload the air regulator (instructions following).

#### Monthly:

1. Clean and drain the air compressor to ensure that the air line is free of moisture and oil. Moisture is very detrimental to hardware and can cause a variety of problems. Check your air compressor documentation for instructions.
2. Wipe down foot block on head with a soft cloth and mild cleaner.
3. Remove and clean blade cartridges with adhesive release.
4. Check the blade cartridges for wear and tear. There should not be excessive side-to-side movement of the blade within the cartridge.
5. Make sure that the CMC is still secure in the brackets/stand to avoid any tip-over hazard.
6. Readjust the head wheels after 250-500 mats. See the 9000 Hardware Guide - Head Wheel Adjustment for instructions.

## Offload Air Regulator

One of the purposes of the air regulator is to collect moisture that may be trapped within the air line. The air regulator is self releasing when the air compressor is turned off.

Check the air regulator (Fig A) at least once a week for any buildup of moisture or oil. If there is any oil visible in the air regulator, the air compressor needs to be cleaned and drained to remove the oil in the air line. Refer to the compressor's documentation for instructions.

The dial on the air regular should read 60psi when the air source is on and at full pressure. If it does not read 60psi on the gauge, call help desk.



**Fig A**

## Disclaimers

**⚠ Caution:** The CMC is designed to be used as directed. Any use other than that described within the documentation is not supported and potentially harmful to the operator.


**⚠ Caution:** The CMC should not be operated when operator is fatigued, under the influence of alcohol or narcotics, or other medication where operating heavy machinery warnings are provided.

**⚠ Caution:** Due to the size and weight of the CMC, two people must perform identified installation operations. Noted operations performed by a single person may result in injury.

**⚠ Caution:** The CMC contains moving parts that may cause injury if not operated in accordance with the instructions. Only trained operators should operate machinery. Operators should not touch the CMC while it is cutting a mat.

**⚠ Warning:** Blades used within the CMC are sharp and will cause injury if not disposed of properly. Blades must be disposed of in an appropriate sharps disposal container.

**⚠ Warning:** Hazardous voltages exist within the ECU. No user serviceable parts are located inside the ECU. Opening of the ECU is prohibited.

 **Warning:** Do not turn on ECU if board cable is disconnected on either end. Risk of electrical shock is present through the ECU plug or non-terminated board cable.

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