SwitchBlade
TECHNOLOGY

CMC Model 8500e Rev 2 MatDesigner™ Software Getting Started Manual

8500e with SwitchBlade Technology

Revision E
MatDesigner™

NOTES:

MatDesigner™ 8500e - Getting Started Manual

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NOTES:

MatDesigner™ 8500e Getting Started Manual

8500e with SwitchBlade Technology

Packing List

If Shipped without a Computer:

Box 1:	Mat Cutter (1)	Wall Mount (If ordered; box is secured to the Mat Cutter box)	
Box 2:	Air Regulator/Fitting Hoses (1)	Box of Blades (1)	Configuration Diskette
	ECU (1)	ECU to Board Cable (1)	ECU USB Cable (1)
	Gantry Covers (2)	Getting Started Manual (1)	Head Assembly (1)
	Power Cable (1)	Software (1)	Debossing Kit
	Tool Kit	Allen Wrenches (3/32, 7/64, 1/8, 3/16, 5/32")	Blade Cartridge (1)

If Shipped with a Computer:

Box 1:	Mat Cutter (1)	Wall Mount (If ordered; box is secured to the Mat Cutter box)	
Box 2:	Air Regulator/Fitting Hoses (1)	Box of Blades (1)	Computer (1)
	ECU (1)	ECU to Board Cable (1)	ECU USB Cable (1)
	Gantry Covers (2)	Getting Started Manual (1)	Head Assembly (1)
	Keyboard (1)	Monitor (1)	Mouse (1)
	Power Cord (3)	Debossing Kit	
	Tool Kit	Allen Wrenches (3/32, 7/64, 1/8, 3/16, 5/32")	Blade Cartridge (1)

If Shipped with a Stand:

Box 3&4: Stand

If Shipped with a Computer Stand:

Box 5: Computer Stand

If Shipped with the ST 500 Straight Line Trimmer:

Box 6: ST 500 Straight Line Trimmer

Check Contents

Upon receipt of equipment, review for shipping damage and advise if any. Verify that contents shown above are received. Note that only the items ordered will be shipped, therefore the number of boxes may be different. **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
1/4" female fitting on main airline, or quick disconnect attachment
110 volt electrical outlet
Air Source - You will also need an air compressor that puts out between 100psi and 120psi.
Phone line, preferably a dedicated line
Surge Protector
Table for the Computer/Monitor

WARNING: The Wizard™ 8500e cannot be laid flat. It MUST be set on a Stand or a Wall Mount to avoid damage to the Air Cylinders.

Setting up the 8500e Board

Congratulations on the acquisition of your new ***Wizard™*** - welcome aboard! The first step toward using your new Wizard Mat Cutter is to set up your Stand or Wall Mount, then unpack the Wizard and install it. The following instructions will show you how to set up your Wizard.

Begin by clearing an area for the Wizard. The board requires 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

The Stand or Wall Mount MUST be assembled before unpacking the Wizard CMC, as you will be placing the Board immediately onto the Stand/Wall Mount.

Assembling the Wall Mount

If you purchased a Wall Mount, refer to the "Wizard CMC Wall Mount Assembly Instructions" in the box for assembly instructions. If the instructions are missing or any parts are missing, call Help Desk at 888/855-3335.

Assembling the Stand

If you purchased a Stand, refer to the "Wizard CMC Convertible Stand Assembly Instructions" in the box for assembly instructions. If the instructions are missing or any parts are missing, call Help Desk at 888/855-3335.

Taking the Board out of the Box

1. With the help of a second person, place the box carefully on a flat surface. Cut the strapping tape. Carefully lift the cover of the box away. With the help of a second person, carefully lift the Board straight up out of the box.

2. Have a third person remove the foam corners and move the box out of the way.

3. Position the Board onto the Wall Mount or Stand. Follow the instructions that came with the Wall Mount/Stand, and secure the Board into place.

Warning: Do not tilt the CMC against a wall, or place on a flat surface. Damage to the Air Cylinders could occur.

4. Unscrew the two Air Lines on the bottom back of the Board, and make sure that the Air Lines on the back of the Board are not pinched as you place the Board on the Stand. Reattach the Air Lines on the inside of the Stand Arms to ensure maximum air flow.

Fig A.

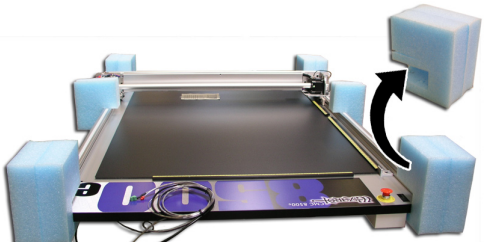


Fig B.

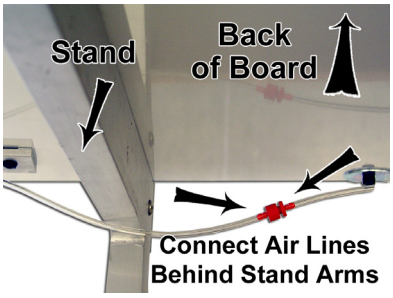


Fig C.

Fig A: Board in the Box. Fig B: Carefully lift the Board straight up from the box and remove foam corners. Fig C: Make sure the Air Lines are not pinched between the Board and the stand.

5. 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".

NEVER SKIP AHEAD ON ANY STEP! Never pull/push on the Drive Shaft to move the Gantry. Use the Gantry Arm.

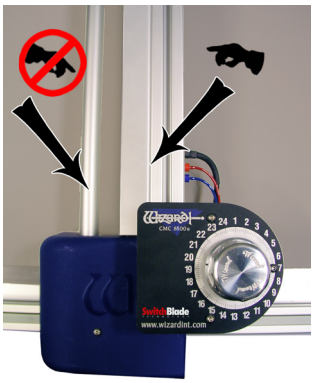


Fig D.

Fig D: Use the Gantry Arm to move the Gantry, not the Drive Shaft. The Drive Shaft is the thin cylindrical bar located on the left side of the Gantry. The Gantry Arm is the rectangular housing on the right side of the Gantry.

Black Protective Covering Sheet

The face of the CMC is covered by a black Sintra protective sheet. This is used to protect your CMC. ***Do not remove the Sintra.*** You will add one disposable slip sheet of matboard between the Sintra and the mat you are cutting, to prevent damage to the CMC.

Fig A.

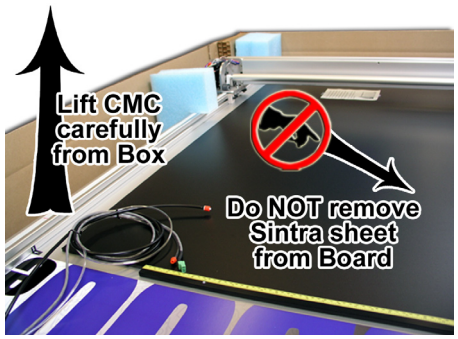


Fig B.

Fig A: Close up of the corner of the black Sintra. Fig B: Do not remove the black Sintra protective covering.

Unlocking the Shipping Blocks

1. Locate the four Shipping Blocks holding the Gantry in place. There are two on the upper Gantry (Fig A). One is to the left of the Gantry on the underside of the top rail (Fig B) the other is to the right of the Gantry on top of the Rail (Fig C).

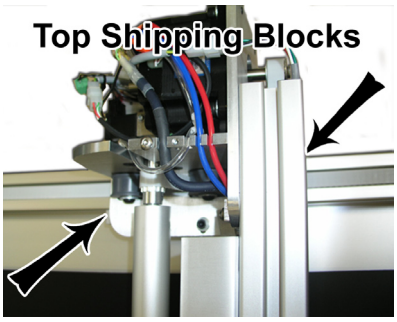


Fig A.

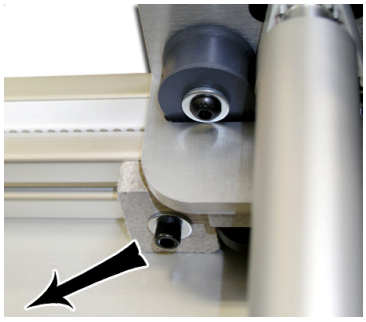


Fig B.

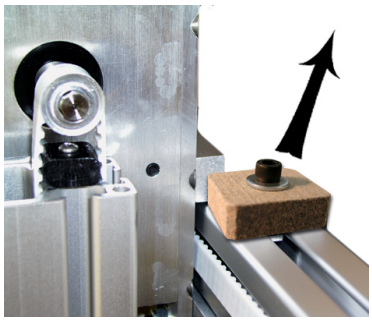


Fig C.

Fig A: Top shipping blocks. Fig B: Left top shipping block under top rail. Fig C: Right top shipping block above top rail.

The bottom shipping blocks are located on the top of the lower Rail on either side of the Gantry (Fig D-F).

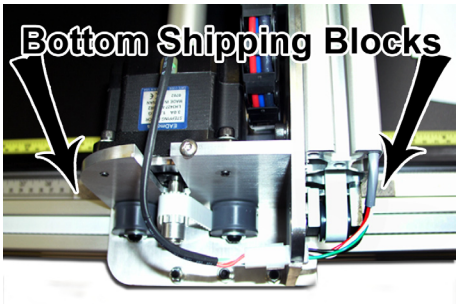


Fig D.

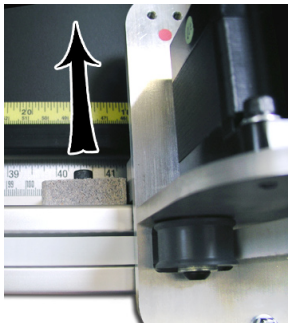


Fig E.

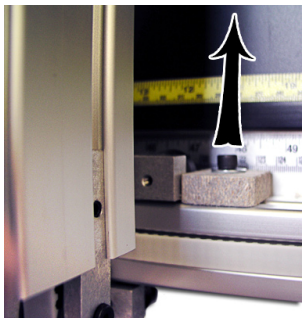


Fig F.

Fig D: The lower shipping blocks. Fig E: Left lower shipping block. Fig F: Right lower shipping block.

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

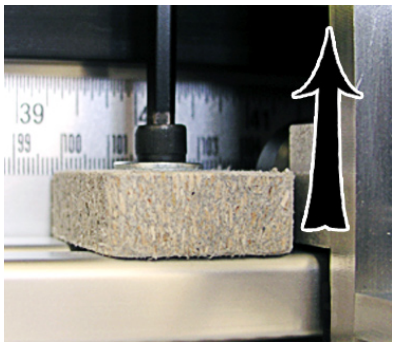
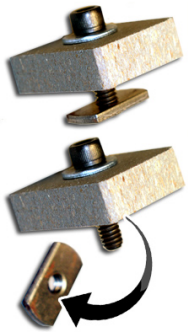



Fig G. Fig H. Fig I.

Fig G: Complete Shipping Block. Fig H: Remove 3/16" Allen screw from T-Nut. Fig I. A pencil eraser can be useful to remove T-Nut from channel.

Unlock the Gantry Wheels

IMPORTANT: DO NOT Operate the Wizard without first unlocking the Gantry Wheels!

1. The wheels on the Gantry are attached to a bar which is locked into place for shipping purposes. Locate the center Allen Screw located at the bottom of the Gantry (Fig A); it is located between two other screws that will not be touched. Remove the Allen Screw and the washer completely. **DO NOT REMOVE THE OTHER SCREWS.** You may hear/feel the Gantry Wheels snap into place.

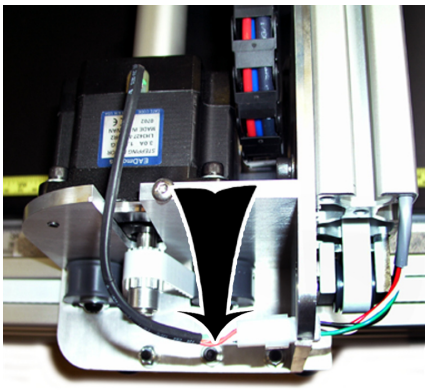
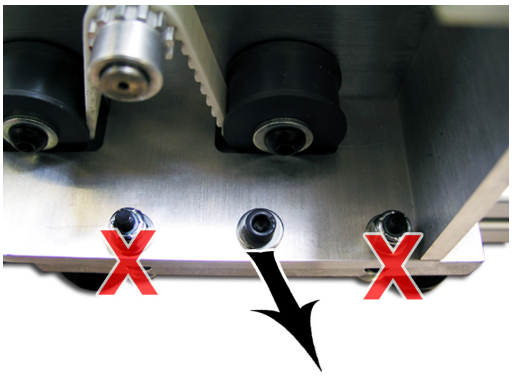



Fig A. Fig B.

Fig A: Locate Allen Screw at the bottom of the Gantry. Fig B: Do not touch the other screws.

2. Now locate the center Allen Screw located on the top of the Gantry (Fig C); it is located between it is located between two other screws. Note that the left screw is located behind the Drive Shaft, shown as a cut-away below. Remove the center Allen Screw and the washer completely. **DO NOT REMOVE THE OTHER SCREWS.** You may hear/feel the Gantry Wheels snap into place.

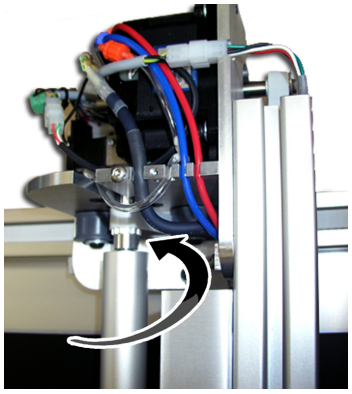


Fig C.

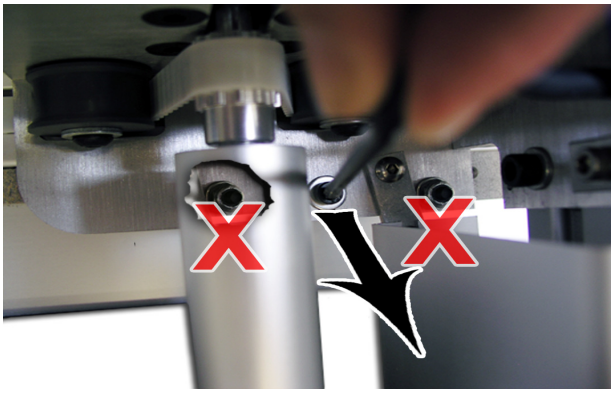


Fig D.

Fig C: Locate Allen Screw at the top of the Gantry. Fig D: Remove Allen screw and washer.

3. Place the two Allen Screws and the washers you removed into the holes provided on the lower Gantry Plate (Fig E). These multipurpose Allen Screws WILL BE USED during the lifetime of your Wizard, so it is important to place them here. Only screw them in enough until the screw slightly protrudes from the back of the Plate.

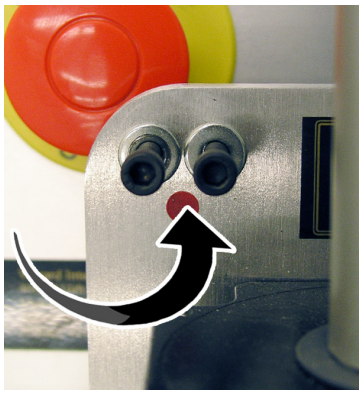


Fig E.

Fig E: Place Allen Screws and washers into holes provided on the lower Gantry Plate.

Check Squareness

Check the Alignment Arrows

Check the small Alignment Arrows on left end of both the upper and lower Rails. Make sure they line up with the Alignment Arrows on the Board itself (Fig A). If they do not, call Help Desk at 888/855-3335.

Check the Toothed Belt Lines

Move the Gantry to the right and back. Looking at the upper Toothed Belt, slowly move the Gantry toward the right again until you see a red line on the Toothed Belt. Confirm that the red line lines up with the red line on the Toothed Pulley (Fig C). If they don't, call Help Desk. Without moving the Gantry, look at the lower Toothed Belt and make sure the red lines line up on the Toothed Belt and the Toothed Pulley (Fig D). If not, call Help Desk.

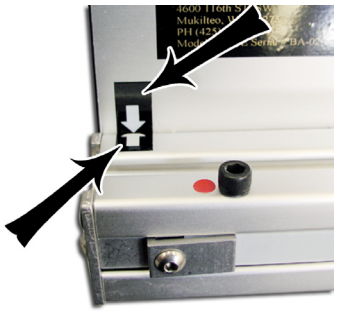


Fig A.

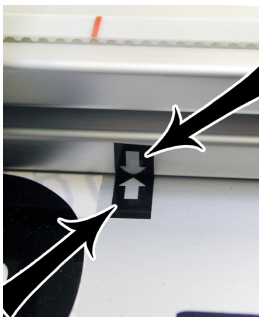


Fig B.

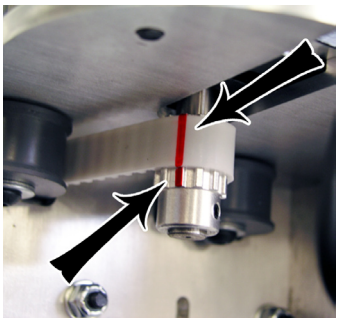


Fig C.

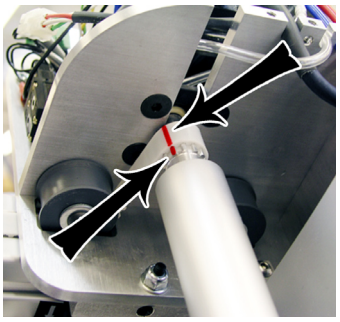


Fig D.

Fig A: Alignment Arrows on the bottom Rail. Fig B: Alignment Arrows on the top Rail. Fig C-D: Make sure the red lines line up at the top and the bottom of the Gantry.

Head Installation

Install the Head onto the Gantry

The Head is shipped with a Blade installed. Take care when handling the Head so as to avoid injury.

1. Remove the two 5/32" screws from the Head and set aside (Fig A). Move the Gantry to the right edge of the Board (Fig B).

2. Point the Head so that the Foot Block faces toward the Board and the wheels are close to the bottom of the Gantry (Fig C). Line up the wheels on the Head to the center channels of the Gantry arm. Ease the Head onto the Gantry (Fig D).

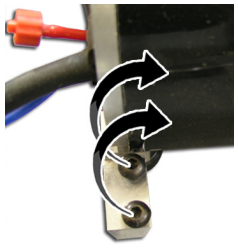


Fig A.

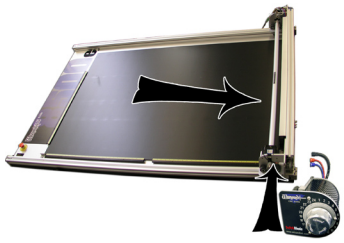


Fig B.

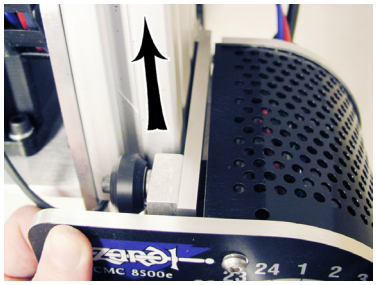


Fig C.

Fig D.

Fig A: Remove screws from Head. Fig B: Move the Gantry to the right edge of the Board. Fig C: Line up Head wheels to bottom of Gantry. Fig D: Ease Head wheels onto Gantry channels.

3. Roll the Head up on the Gantry until it lines up to the Head Grabber Arm on the right side of the Gantry. (Fig E-F).

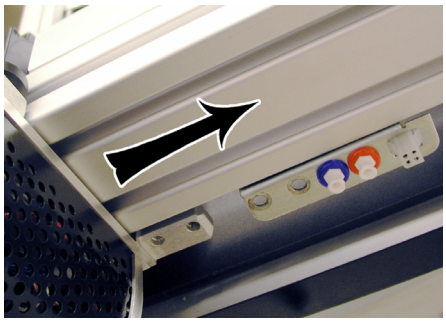


Fig E.

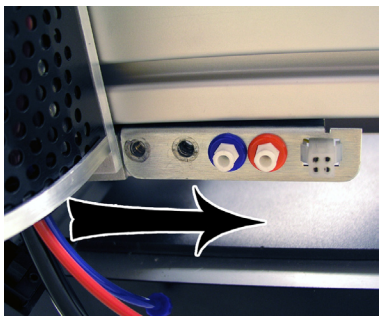


Fig F.

Fig E: Head Grabber Arm. Fig F: Holes in Head and Head Grabber Arm lined up.

4. Hold the Head in position, and replace the two 5/32" screws, making sure they go into the Head Grabber Arm and into the Head (Fig G) then tighten firmly. Make sure that the Head and the Head Grabber Arm line up together neatly to ensure correct fitting

5. Connect the Air to the Head by twisting the two Air Fittings together, **matching** colors (Fig H). Connect the Head Power Plug (square connection) to the Head Grabber Arm (Fig I).

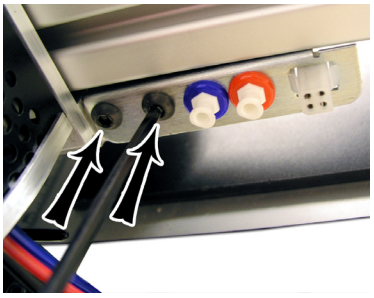


Fig G.

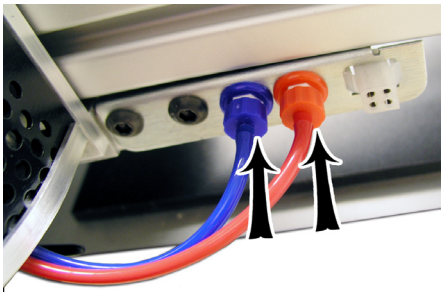


Fig H.

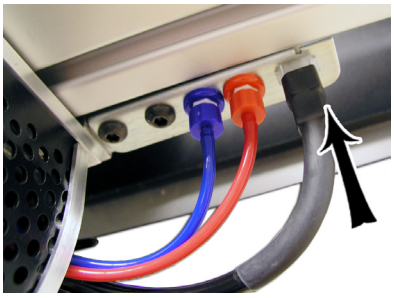


Fig I.

Fig G: Screw in the two 5/32" screws, making sure they go into the Head Grabber Arm and into the Head. Fig H: Connect the Air Lines, matching colors. Fig I: Connect the Head Power Plug.

Expose the Blade

The Head is shipped with a Blade installed. Take care when handling the Head so as to avoid injury.

1. Locate the yellow protective tape on the Foot Block covering the Blade (Fig A). Remove the tape from the Foot Block (Fig B). **The installed Blade is sharp**.

2. Lift the Head up carefully from the Board as you roll the Gantry to the left so that the Foot Block does not strike the side of the Board (Fig C).

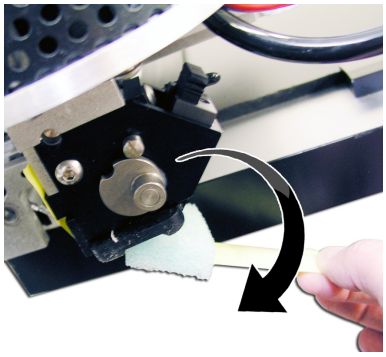


Fig A.

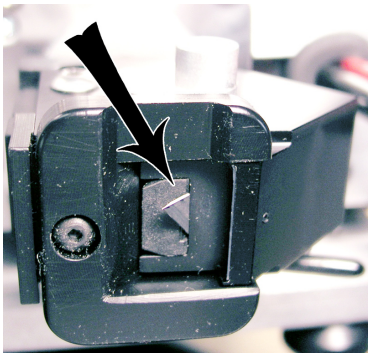


Fig B.

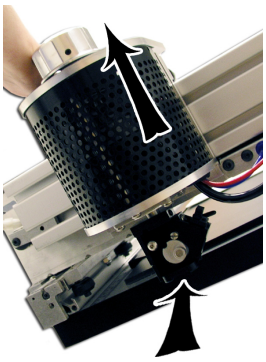


Fig C.

Fig A: Locate yellow protective tape on the Foot Block and carefully remove the tape. Fig B: Close-up of the Blade. Fig C: Lift the Head up carefully away from the Board as you roll the Gantry to the left to avoid striking the Foot Block against the edge of the Board.

***WARNING: Do not run the Wizard without the Blade Cartridge in place as the Blade Cartridge Release Lever could be damaged. ***

Installing the ST 500 Straight Line Trimmer

Slide on the Straight Line Trimmer

NOTE: A Blade has been installed, so take care when handling the Straight Line Trimmer.

1. Look at the backside of the Trimmer and locate the T-Nut on the glides (Fig A). Make sure that the T-Nut lines up with the glide on both the upper and lower sections of the Trimmer.

2. Holding the Straight Line Trimmer steady (a second person helps here), carefully slide the Trimmer onto the channels on the right side of the Board, making sure that the T-Nuts slide into the channel of both the upper and lower rails (Fig B). Move the Straight Line Trimmer to the left until it stops (Fig C).

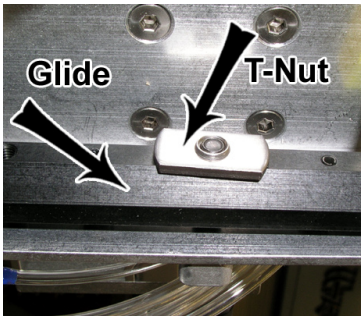


Fig A.

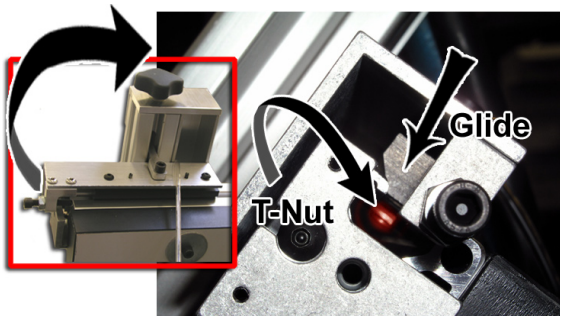


Fig B.

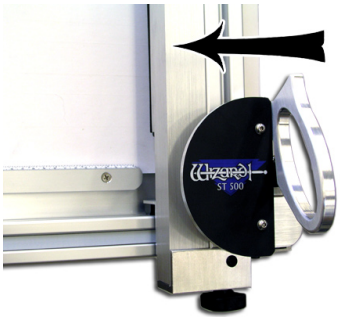


Fig C.

Fig A: Make sure the T-Nut lines up to the glide. Fig B: Carefully slide Trimmer onto the channels on the right side of the Board. Fig C: Slide Trimmer until it stops.

Lock the Straight Line Trimmer in Place

1. Slowly tighten the bottom locking knob COUNTER-CLOCKWISE until it is snug (Fig A).

2. Slowly tighten the top locking knob CLOCKWISE until it is snug. You will calibrate it after the air lines are hooked up (Fig B).

Fig A.

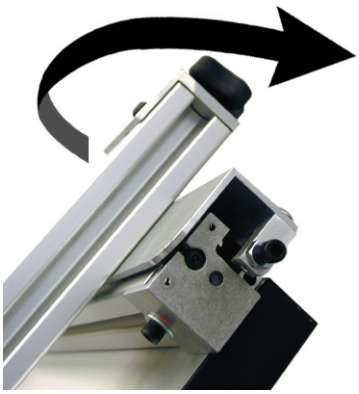


Fig B.

Fig A: Turn bottom knob Counter-Clockwise. Fig B: Turn top knob Clockwise.

Hooking up the Gantry and ST 500 Air Lines

Connecting the Board Cable

Be VERY CAREFUL when connecting the large Board Cable. Align the four in-line pins carefully before applying pressure to plug them in. If forced in incorrectly, they WILL cause malfunction of the Wizard Mat Cutting system.

1. The Board Cable connects between the ECU (Electrical Control Unit) and the Gantry. The ECU is the black shoebox-sized peripheral with a row of LEDs. Connect the large Board Cable (Fig A) to back of the ECU (Fig B) by aligning the four in-line pins and turning the locking ring until it "seats itself" and locks into place.

2. Connect the other 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 Board and back to make sure the Board Cable does NOT get caught on anything. If the Board Cable is obstructed, this WILL affect your cuts.

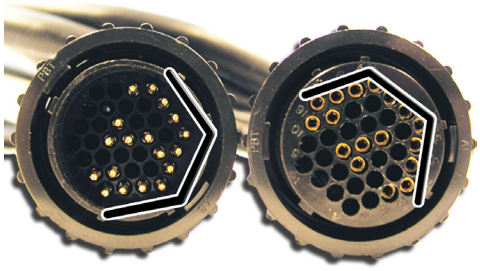


Fig A.

Fig B.

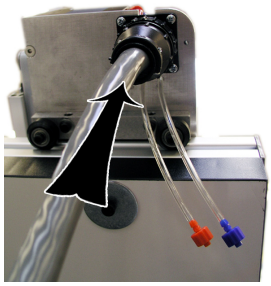


Fig C.

Fig A: Look for the 4 in-line pins on Board Cable. Fig B: Plug one end into back of the ECU. Fig C: The other end is plugged into the back of the Gantry.

Attaching Air Lines and Air Regulator

1. Go back and make sure that the Air Lines on the back of the Board are not pinched between the Board and the Stand. If you have not already done so, reattach the Air Lines on the inside of the Stand Arms to ensure maximum air flow (Fig A).

2. Connect the Blue Connector from the top of the ST 500 to the Blue Connector/Shut Off Valve of the "Y" Connector (Fig B).

3. Connect Red Connector from the top of the Gantry to the Red Connector of "Y" Connector; only one side will fit.

NOTE: If you did not install the SL 500, this Red Air Line Connector from the Gantry would plug into the right side of the Air Regulator.

4. Plug in the Red Air Line Connector from the bottom of the "Y" into the right side of the Air Regulator.

5. Plug the Air Line coming off the left side of the Air Regulator into your main air supply via 1/4" NPT female connector, or the quick disconnect, whichever type you purchased (shown is the black threaded fitting connected to a 1/4" NPT female adaptor). Your air compressor should have at least 100 - 120 PSI. It is suggested that Teflon tape be used on the threads of the black fitting to reduce possible air leakage.

6. Strap your Air Regulator, glass bowl down to the left large wall bracket or left stand side with cable ties provided in your Tool Kit, making sure not to crimp any of the Air Lines.

7. Connect Blue Connector from the top of the Gantry to the Blue Connector on the back of the Board.
8. Turn on the Air.

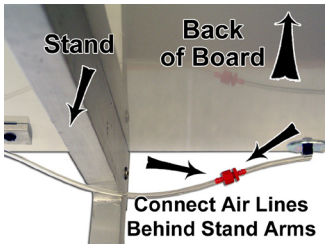


Fig A.

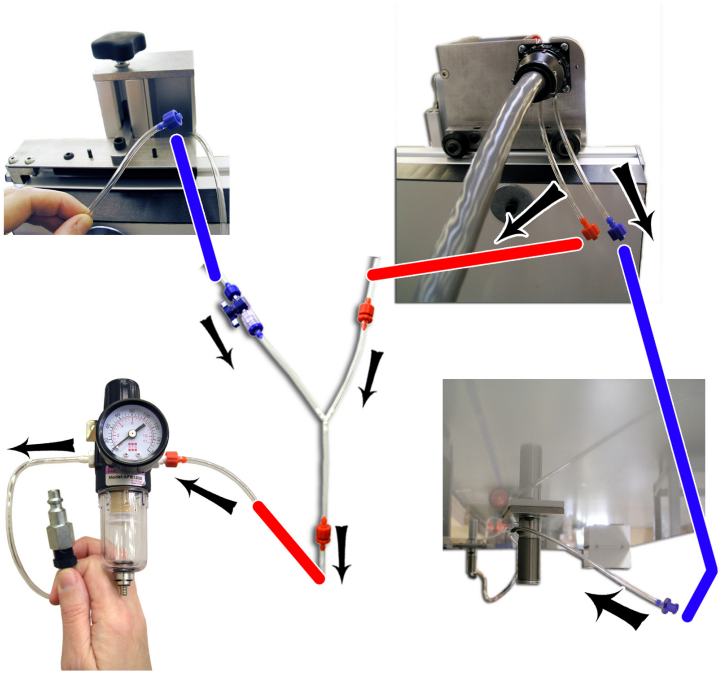


Fig B.

Fig A: Connect bottom Air Lines to the interior of the Stand Arms. Fig B: Connect Blue Connector on the ST 500 to Blue Air Connector of the "Y" Connector. Connect Red Connector of Gantry to top Red Connector of "Y" Connector. Connect bottom Red Connector of "Y" Connector to right side of Air Regulator. Attach left side of Air Regulator to air source. Connect Blue Connector from the Gantry to the Blue Connector on the back of the Board.

WARNING: The Air Regulator comes factory-set. Do not make any adjustments to it.

Calibration and Alignment of the Straight Line Trimmer

Using the Straight Line Trimmer

Do not press down on the Trimmer Handle while moving in an upwards direction, or you will break the Blade.

1. Place at least one piece of matboard larger than the mat being trimmed behind the Straight Line Trimmer to avoid cutting into the Board.
2. Place the matboard to be cut underneath the Straight Line Trimmer; use the handy ruler for placement.
3. Flip the clamp switch upwards to lock the matboard down (Fig A).
4. Raise the handle and pull upwards to bring the cutting assembly to a position above the mat to be cut (Fig B).
5. Press down on the handle and pull downwards (Fig C).
6. Flip the clamp switch downwards to unlock the matboard, and remove the matboard.

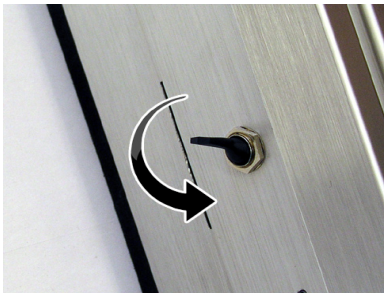


Fig A.

Fig B.

Fig C.

Fig A: Flip the clamp switch upwards to lock the matboard. Fig B: Lift handle and raise above mat to trim. Fig C: Press down on handle and pull downwards

Calibration and Alignment of the Straight Line Trimmer

Trim a Mat

Place a piece of matboard at the 10” mark, and using the Trimmer, trim it (Fig A). Measure the width of the matboard. If it does not measure 10” across the top and across the bottom, the Trimmer needs to be calibrated.

Calibrate the Bottom of the Straight Line Trimmer

1. Start with the *bottom*. Loosen the bottom Locking Knob by turning it Clockwise (Fig B).
2. Using a 7/16” Open-Ended Wrench, loosen the Locking Nut (see Arrow in Fig C).
3. Using a 3/16” Allen Wrench, turn the Alignment Adjustment Screw Clockwise to move the Trimmer to the Right; turn it Counter-Clockwise to move the Trimmer to the left (Fig C). When moving to the Left, you will need to push the Trimmer to the Left so that the Alignment Adjustment Screw stays on contact with the rail.
4. Tighten the bottom Locking Knob by turning it Counter-Clockwise.

5. Cut the mat again... remember we are looking at the bottom of the mat. When the bottom of the matboard cuts the correct width, retighten the Locking Nut (Arrow in Fig C) to keep the Alignment Adjustment Screw from moving.

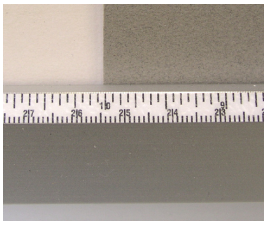


Fig A.

Fig B.

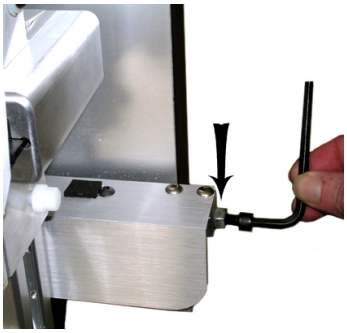


Fig C.

Fig D.

Fig A: Trim a piece of matboard and measure. Fig B: Turn bottom lock knob Clockwise. Fig C: Locking Nut, and adjusting Alignment Adjustment Screw. Fig D: Turn bottom lock knob Counter-Clockwise.

Calibrate the Top of the Straight Line Trimmer

1. Trim a tall piece of matboard at 10” and measure across the top and across the bottom. If it does not measure 10” across the top and across the bottom, continue.

2. Loosen the top locking knob by turning it Counter-Clockwise.

3. Using a 7/16” Open-Ended Wrench, loosen the Locking Nut (see Arrow in Fig B).

4. Turn the Alignment Adjustment Screw Clockwise to move the Trimmer to the Right; turn it Counter-Clockwise to move the Trimmer to the Left (Fig B). When moving to the Left, you will need to push the Trimmer to the Left so that the Alignment Adjustment Screw stays on contact with the rail.

5. Tighten the top locking knob by turning it Clockwise (Fig C).

6. Cut the mat again, and readjust if necessary. When the top of the matboard cuts the correct width, retighten the Locking Nut (Arrow in Fig B) to keep the Alignment Adjustment Screw from moving.

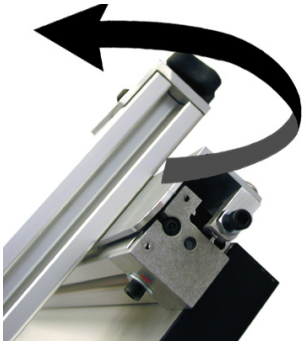


Fig A.

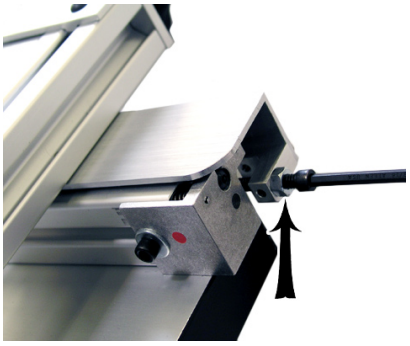


Fig B.

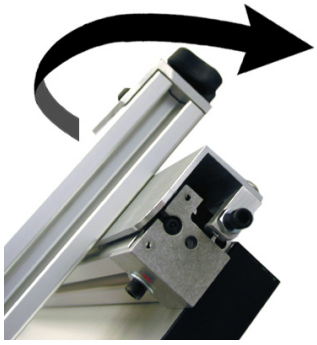


Fig C.

Fig A: Turn top lock knob Counter-Clockwise. Fig C: Locking Nut, and adjusting Alignment Adjustment Screw. Fig D: Turn top lock knob Clockwise.

Do not use the Wizard to cut anything wider than 53” from the left edge of the matboard... this INCLUDES the outside cut... without first removing the Straight Line Trimmer.

Install Hoods

Install the upper and lower Hoods using the screws included (Fig A and B); each Hood has one screw.

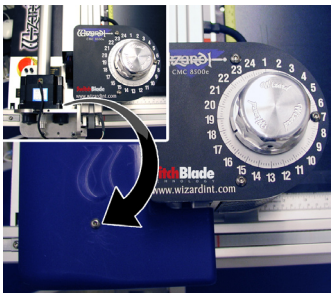


Fig A.

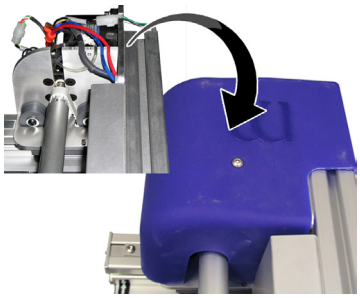


Fig B.

Fig A: Install bottom hood. Fig B: Install upper hood.

Hook up Computer

Hook up Computer Peripherals

Hook up the Computer, monitor, keyboard, and mouse by plugging in the color-coded plugs into the matching ports on the back of the computer. Plug the Power Cords from the computer, monitor, and Emergency Stop into a surge protector.

NOTE: You may have to adjust your monitor settings for optimum display.

Fig A.

Fig A: General connections on back of CPU. Systems may vary on the location of plugs.

Connect the ECU

WARNING: HIGH VOLTAGE! No user serviceable parts inside the ECU.

1. Connect USB Cable (Fig B) (USB-B end) to back of the ECU (Fig A).

2. The other end of the USB Cable (USB-A end) should be plugged into the USB Port on the back of the Computer (Fig B).

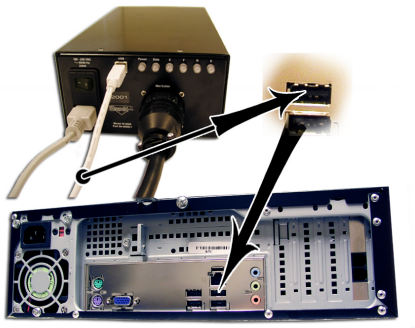


Fig A. Fig B.

Fig A: Plug the USB Cable into ECU. Fig B: Plug the other end of the USB Cable into the computer.

3. Plug the Power Cable into the back of the ECU (Fig C).

4. The other end of the Power Cord of the ECU plugs into the back of the Emergency Stop Button, in the right-hand outlet as viewed from the back (Fig D-E). Make sure that this plug is firmly inserted all of the way. Some of these plugs are rather stiff, preventing them from being easily fully inserted, and keeping the grounding wire from connecting.

5. The Power Cord of the Emergency Stop Button is plugged into the left-hand outlet (as viewed from the back) and then plugged into your surge protector (Fig D-E).

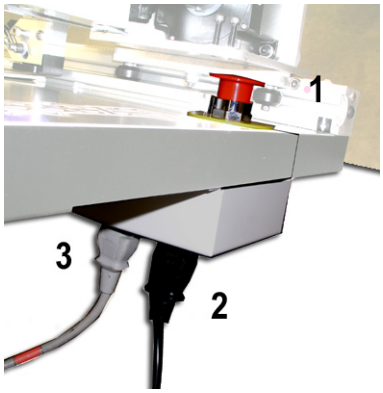


Fig C. Fig D. Fig E.

Fig C: Plug in the Power Cord into the ECU. Fig D-E: Viewed from the back and down: 1: Emergency Stop Button. 2: Power Cord from the ECU into the Emergency Stop Button. 3: Power Cord from the Emergency Stop Button into a surge protector.

The ECU Power Cord must plug into the back of the Emergency Stop Button, and the Emergency Stop Button Power Plug must plug into a surge protector, otherwise the Emergency Stop Button will be non-functional.

6. The Board Cable was plugged into the back of the ECU when we hooked up the Gantry (Fig F-G).

Fig. F.

Fig G.

F-G: Large Board Cable was plugged in when we plugged in the Gantry.

Turn on the System

Turn on ECU

There is a toggle switch on the back of the ECU. 0 is off, and 1 is on. To turn on ECU by pressing in 1 on the toggle.

NOTE: Red Power light should come on.

Boot up the CPU

You should be able to turn on (boot) the computer and monitor, allowing a minute or so to power up. The MatDesigner software will automatically start up.

Fig. A.

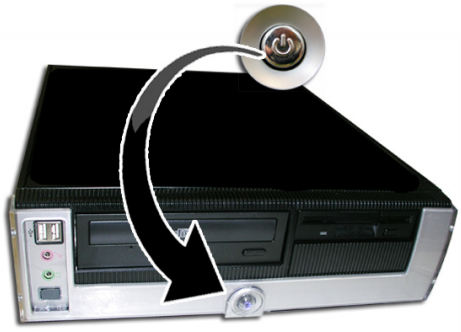


Fig B.

Fig A: Turn on the ECU by pressing 1 on the toggle on the back. Fig B: Turn on the computer.

Your Wizard will NOT cut until you turn ECU ON by pressing in the 1 (may look like a sideways dash) on the toggle switch.

Configuration Diskette

If your Wizard arrived with a Configuration Diskette, place the diskette in the A:\ drive and follow the instructions on the label.

Design Your First Mat

Edit New Mat

Click Edit New Mat (Fig A) from the Main Screen. Stay on the Single Tab (Fig B).

Note that you have three tabs to select from: Single, Multi, Array.

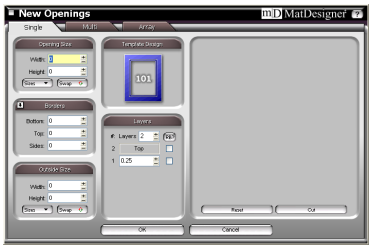


Fig A. Fig B.

Fig A: Edit New Mat. Fig B: Single Tab.

Opening Size

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

NOTE: If "Opening Size First" is unchecked in Defaults under Editor, the Outside Size field will be displayed on top. You can start by entering dimensions in Outside Size field first if you prefer.

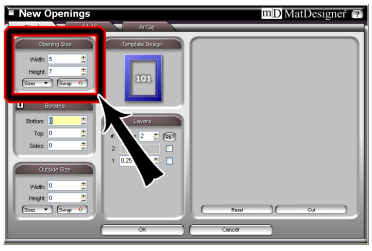


Fig C.

Fig C: Enter opening size.

Borders

Enter 2 (5 cm) for the Bottom, Top and Side mat border widths (Fig D). The Arrow indicator shows whether the borders are applied to the top layer down or the bottom layer up, as set in Defaults under Borders.

NOTE: You can select the Borders Order in the Defaults under New Openings Screen.

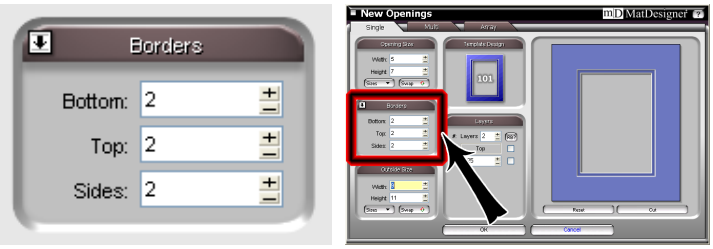


Fig D.

Fig D: Enter Border size.

Outside Size

If you had entered your Opening Size and Borders first, the program automatically calculates the Outside Size when you tab out of the Borders field (Fig E) (do not use the Enter key). If you change the Outside Size, then the borders are recalculated.

Make sure Outside Size is 9x11 (23x28 cm), or enter if not. Don't Click OK yet.

NOTE: If "Opening Size First" is checked in Defaults under Editor, the Opening Size field will be displayed on top.

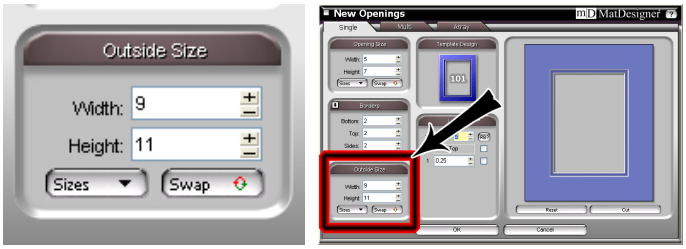


Fig E.

Fig E: Enter outside size.

Layers

Enter 2 for the number of Layers (Fig F).

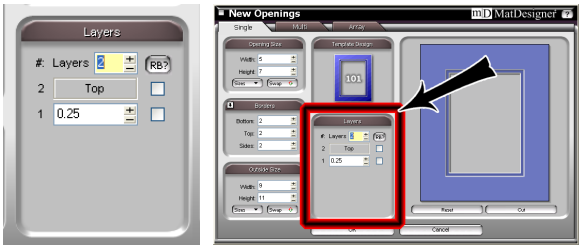


Fig F.

Fig F: Enter outside size.

Select Template

For our first mat, we're going to leave the Template as a rectangle.

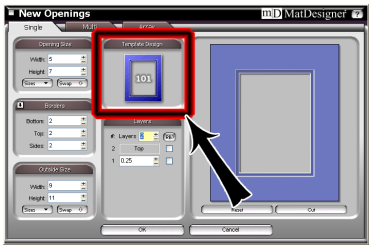
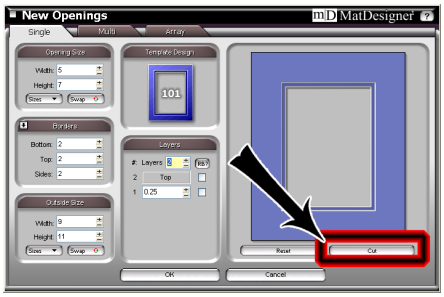


Fig G.

Fig G. Leave the Template as a Rectangle.

Go to Cut Preview to Cut Your First Mat

Click Cut (Fig A) to go to the Cut Preview (Fig B). Clicking Back on the Cut Preview will return you to the New Openings Screen where you can change the dimensions for the next mat. Click Reset on the New Openings Screen to clear the current numbers if desired.



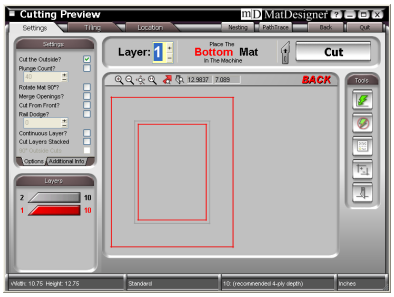


Fig A. Fig B.

Fig A. Click Cut to go to Cut Preview. Fig B: The Cut Preview screen.

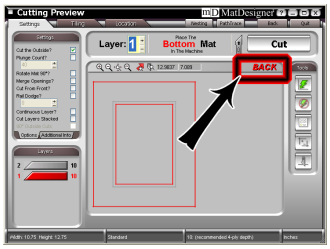
Put Matboard on the CMC

***Make sure that you have one layer of disposable matboard of adequate size underneath the mat to be cut. The CMC has a black Sintra protective covering, but this is not considered a slip sheet. ***

Make sure that you have one layer of disposable matboard of adequate size underneath the mat to be cut.

The Cut Preview will indicate if the current layer to be cut will cut from the front or from the back of the mat (Fig C). This is important in order to determine how to place the matboard into the CMC. Most mats are cut from the back.

When cutting from the back, place the matboard face down on the CMC (facing away from you) (Fig D). Make sure the matboard nestles tightly under the Horizontal Clamp and the Vertical Clamp of the CMC.



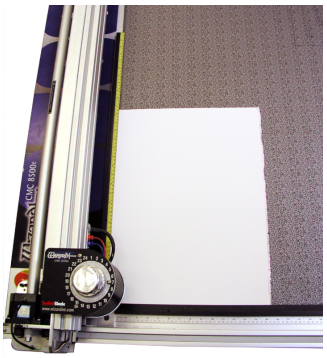
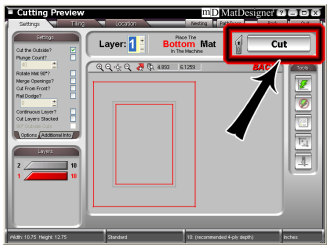


Fig C. Fig D.

Fig C: Cut from Front/Back Indicator. Fig D: Place matboard into the CMC.

Click Cut

Click Cut to cut the mat (Fig E). Because this is the first mat of the day and the motors have been idle, it will ask you to Align the Head (Fig F). You can tell the motors are disengaged if you are able to easily move the Gantry back and forth, or move the Head up and down on the Gantry.



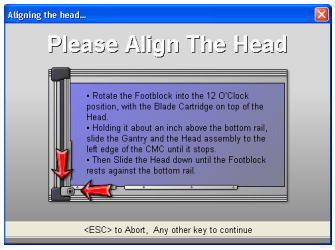


Fig E. Fig F.

Fig E: Click Cut to cut the mat. Fig F: If the motors have been idle it will ask you to Align the Head.

Align the Head When Motors are Disengaged

Align the Head

Never pull/push on the Drive Shaft to move the Gantry. Use the Gantry Arm.

Rotate the Foot Block into the 12 O'Clock position, with the Blade Cartridge on top of the Head (Fig A). 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. Then Slide the Head down until the Foot Block rests against the Head Alignment Stop.

Click on the Align Screen (Fig B) and the Head will align to the home position (Fig C) and then **begin to cut**.

You can also Align the Head without cutting by clicking on the Power button on the Cut Preview.

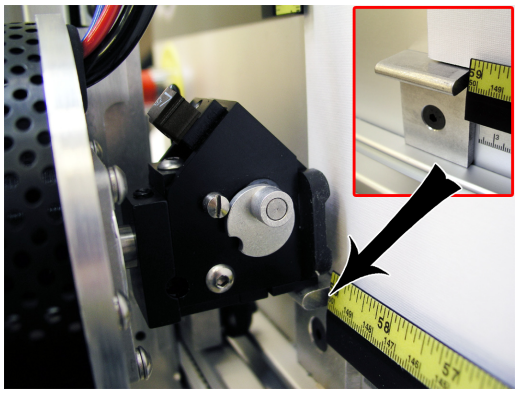


Fig A.

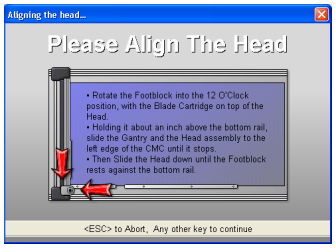


Fig B.

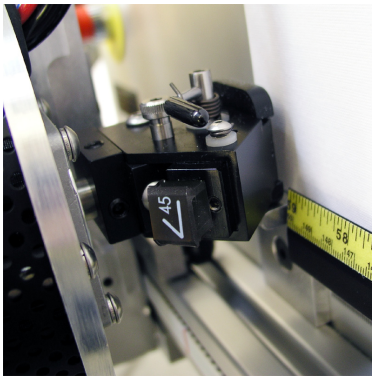


Fig C.

Fig A: Rotate Foot Block into start position against the Head Alignment Stop. Fig B: Click on Align the Head Screen. Fig C: Head will be Aligned.

After the CMC Has Cut the Mat

After the cut has finished, the Head will return to the home position, and the Foot Block will rotate to the Aligned position so that you may access the Blade Cartridge. Unless the CMC asks you to Align the Head, do **NOT** turn the Foot Block.

Remove the matboard from the CMC. You have cut your first mat! Click Back to return to the New Openings Screen.

If The Cut Doesn't Look Right

See the Troubleshooting section near the end of this document.

Changing the Blade

Plunge Count

You can change the Blade at any time before the next cut, or select Plunge Count under Settings on the Cut Preview (Fig A), so that the CMC will stop after it has reached the number of plunges entered to allow you to change the Blade. Change the Blade and hit CTRL+S or Click on the screen to continue cutting Fig B).

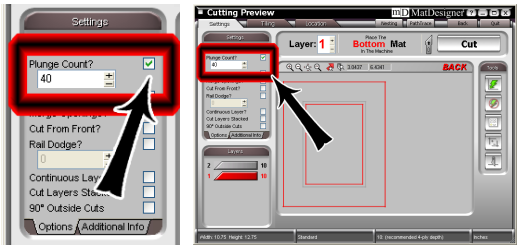


Fig A.

Fig B.

Fig A: Enter the number of plunges of the Blade the CMC will make before stopping for a Blade change. Fig B: Hit CTRL+S to restart cutting.

Using the 45° Cartridge

Changing the Blade

To change the Blade, push the Blade Cartridge Release down (Fig A). The Blade Cartridge will pop out.

Carefully pull the Blade out of the Blade Cartridge, taking care of the sharp edge (Fig B). Place the fresh Blade into the Blade Cartridge with the longest straight side to the right and the bevel face down. Place the base of the Blade into the Cartridge and let the magnet grab the Blade as you lower it. Make sure that the base of the Blade is even with the back of the Blade Cartridge and that the length of the Blade is flush with the cartridge.

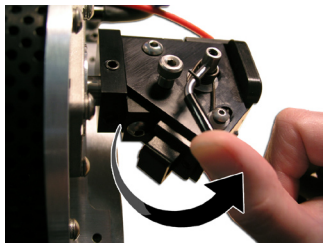


Fig A.

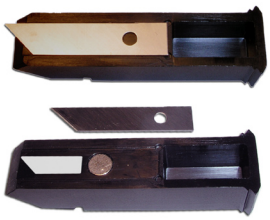


Fig B.

Fig A: Press Blade Cartridge Release. Fig B: Replace Blade.

Turn the Blade Cartridge over and reinsert into the Head: Arrow on the back of the Cartridge faces away from the Board, and the Blade faces foward the Board (Fig C-D). Press the Blade Cartridge until it clicks into place; it can only be inserted one way (Fig E). Arrow and Blade outline on Blade Cartridge is displayed in contrast for ease of identification.

Fig C.

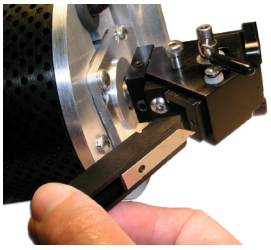


Fig D.

Fig E.

Fig C: Arrow on back of Cartridge faces away from Board. Fig D: Insert Cartridge into Head with Blade facing the Board. Fig E: Snap into Place.

Using the 90° Cartridge

Changing the Blade

The biggest visual difference between the 45° Cartridge and the 90° Cartridge is that the 90° Cartridge is green and has a cover over the Blade.

To change the Blade, push the Blade Cartridge Release down (Fig A). The Blade Cartridge will pop out.

Rotate the Blade Cover open (Fig B). Replace the Blade, making sure that the holes in the Blade line up with the holes in the Cartridge, letting the magnet grab the Blade as you lower it. Make sure the back of the Blade lines up with the back of the Cartridge (the side that the cover rotates away from). Rotate the Blade Cover closed (Fig C-D).

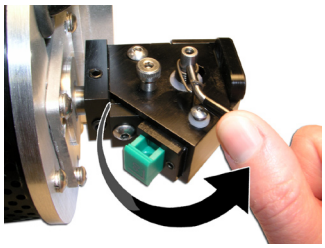


Fig A.

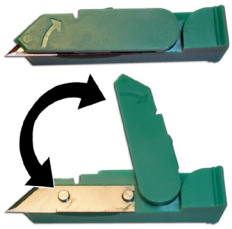


Fig B.

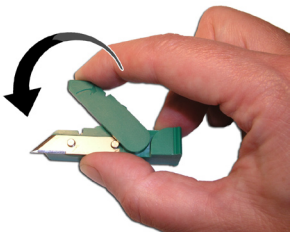


Fig C.

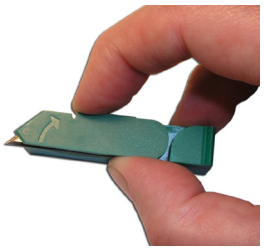


Fig D.

Fig A: Press Blade Cartridge Release. Fig B: Rotate the Blade Cover open. Fig C: Insert Blade into Cartridge and close Cover. Fig D: Cartridge is ready to be inserted into the Head.

Turn the Blade Cartridge over and reinsert into the Head; the arrow formed by the Cartridge and the Cover should be facing away from the Board with the arrow pointing downward, and the Cover side of the Cartridge should be facing toward the right. (Fig E). Press the Blade Cartridge until it clicks into place; it can only be inserted one way (Fig F). Arrow on Blade Cartridge is displayed in contrast for ease of identification.

Fig E.

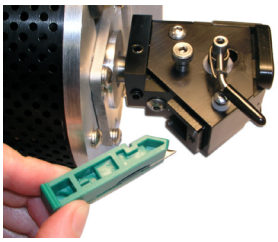


Fig F.

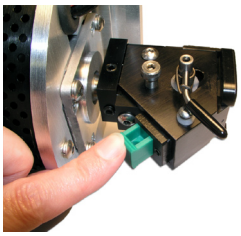


Fig G.

Fig E: Arrow on back of Cartridge faces away from Board. Fig F: Insert Cartridge into Head with Blade Cover facing to the right. Fig G: Snap into Place.

Aborting a Cut

If for any reason you need to Abort a cut, hit the Emergency Stop Button located in the lower left portion of the Board (Fig A). The CMC will immediately stop cutting.

Restarting after an Abort

Wait for the Cut Preview Screen to stop displaying the "Press Spacebar to PAUSE" and the "Press Any Other Key to ABORT" screens before pulling out the Emergency Stop Button.

Pull out the Emergency Stop Button.

You will now need to Close the MatDesigner software and restart it. If you want to save the current mat first, see User Guide: Editor: Editor Menu Bar for more information. After MatDesigner has been closed, restart it by Clicking on the MatDesigner logo on the bottom Task bar.

Fig A.

Fig A: Push in the Emergency Stop Button to abort a cut.

The ECU Power Cord must plug into the back of the Emergency Stop Button, and the Emergency Stop Button Power Plug must plug into a surge protector, otherwise the Emergency Stop Button will be non-functional.

Design a Different Mat

Select a Different Template

Now that you have Clicked Back from the Cut Preview to return to the New Openings Screen, you can easily change the size for the next mat by entering different numbers in the fields. But, let's say that this time we want to make an Oval opening instead of a Rectangle.

Click on the Template itself under Template Design (Fig A). The Template Library will appear (Fig B). Select #102 Oval from the Template Library by clicking on it. New Template is displayed (Fig C).

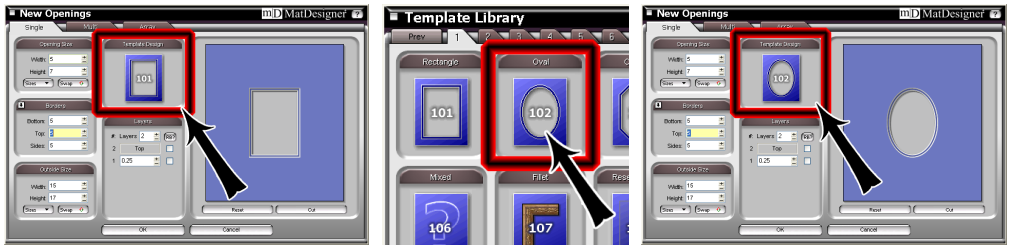


Fig A. Fig B. Fig C.

Fig A: Click on Template. Fig B: Select new Template from Template Library. Fig C: New Template replaces old.

Go to Cut Preview

Click Cut (Fig A) to go to the Cut Preview (Fig B).

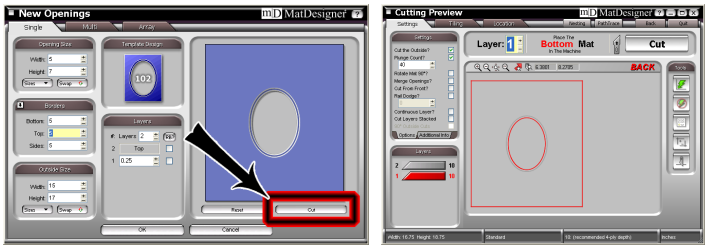


Fig A. Fig B.

Fig A: Click Cut to go to Cut Preview. Fig B: The Cut Preview Screen.

Put Matboard on the CMC

Make sure that you have 2 layers of disposable matboard of adequate size underneath the mat to be cut.

Since this mat will be cut from the back (Fig C), place the matboard face down on the CMC (facing away from you) (Fig D). Make sure the matboard nestles tightly under the Horizontal Clamp and the Vertical Clamp of the CMC.

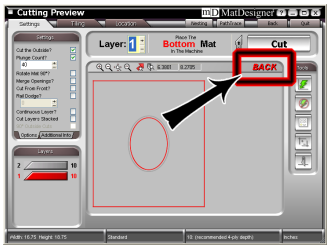


Fig C. Fig D.

Fig C: Cut from Front/Back Indicator. Fig D: Place matboard into the CMC.

Click Cut

Click Cut to cut the mat (Fig E).

Because the motors are still engaged, the Wizard will automatically begin to cut. You will not need to Align the Head again until the software requests you to (i.e., after motors idle for a long period or after an Abort).

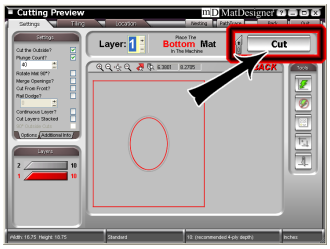


Fig E.

Fig E: Click Cut to cut the mat.

Remove the matboard from the CMC. You have cut your second mat! Click Back to return to the New Openings Screen or Quit to return to the Main Screen.

Where to Find More Information

More information on the Straight Line Trimmer

More information on the Straight Line Trimmer can be found in the 8500 Hardware Guide: Straight Line Trimmer.

Documentation

Other MatDesigner manuals are located both on the installation CD and on the MatDesigner computer, and can be reprinted on any printer. Click on Help from the Editor, or, for most computers, Click on Start, then Programs, then the Wizard directory, then Help. Within this directory should be a listing of the different manuals which you can double-click on to open and then print.

Designing Multi Mats

For information on designing Multi mats, see the User Guide: Editor and the Editor Tutorial for information on creating Multi mats. See "Documentation" above.

Website

Check out our website at www.wizardint.com. There you can find useful articles, manuals, and even a Webstore.

Help - Context Sensitive Help

There are several methods to get to the Help Screen.

Help Button on Menu Bar

For context sensitive help, Click on the [?] on the Menu Bar. The cursor will change to a question mark. Click on the item you want more information on, such as the Cut Button on the Editor. This will open the Help Screen.

Fig A. Fig B.

Fig A: Click on the [?]. Fig B: Cursor changes to a question mark.

F1 for Help

When an item is in focus, it is highlighted in yellow. Hit F1 to get information about the current item in focus. This will open the Help Screen.

Help Menu

Click on Help from the Menu Bar on the Editor and select Context Help. This will open the Help Screen. You can also select one of the many MatDesigner manuals on this menu.

Fig C.

Fig C: Click Context Help from the Help Menu.

Help Screen

The Help screen will appear and display information about the current item. The current topic will be highlighted on the topics list on the left.

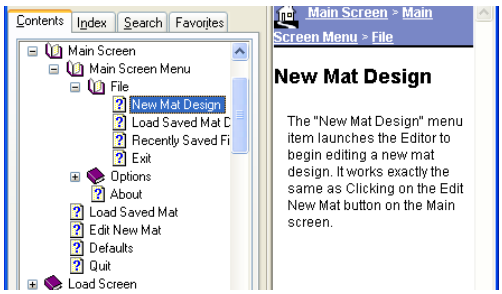


Fig D.

Fig D: The Help screen.

Contents

You can navigate through the help topics manually through the Contents Tab. Click on a topic to display the Help information. Click + to expand a topic; Click - to collapse it.

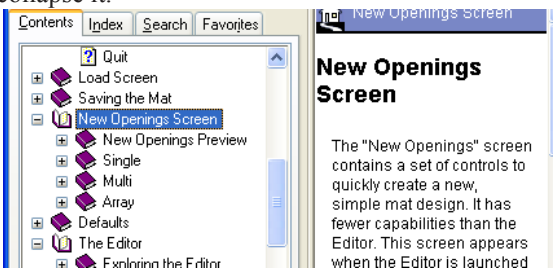


Fig E.

Fig E: The Contents Tab on the Help screen.

Index

You can navigate through the help topics manually through the Index Tab. Double-Click on a topic to display the Help information.

OR

Type in a keyword to search for and Click Display at the bottom of the screen.

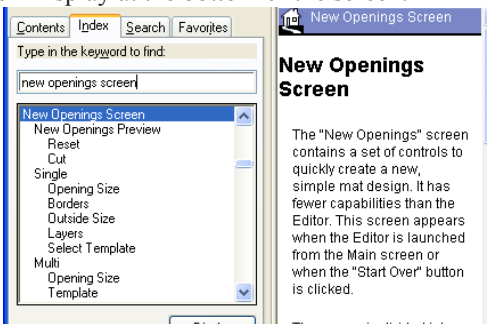


Fig F.

Fig F: The Index Tab on the Help screen.

Search

Type in a keyword to search for and Click List Topics.

Select one of the Topics listed and Click Display to display the Help information.

You can also select the following search parameters at the bottom of the screen:

Search Previous Results
Match Similar Words
Search Titles Only

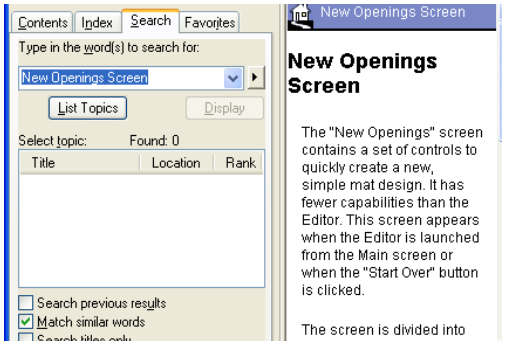


Fig G.

Fig G: The Search Tab on the Help screen.

Favorites

You can save Topics in the Favorites Tab for future reference. With the desired topic displayed, select Add at the bottom of the screen in the Favorites Tab. The new topic will be added to Favorites.

Display the topics by Clicking on it and selecting Display.

Remove the topics from the Favorites tab by selecting it and selecting Remove (this does not remove it permanently, only from the Favorites list).

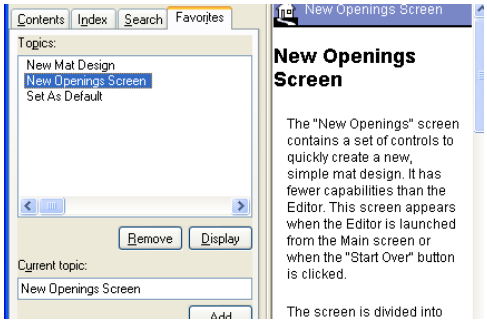


Fig H.

Fig H: The Favorites Tab on the Help screen.

Print

Click the Print Icon at the top of the Help Screen to print the current topic.

Troubleshooting

Cuts Look Wavy

Make sure the Shipping Blocks have been removed and the Gantry Wheels have been unlocked (instructions in this document).

Check for Squareness (instructions in this document).

Make sure that the Board Cable is not obstructed (see Connecting the Board Cable in this document).

Check the Head Wheels. See 8500e Hardware Guide - The Head: Head Wheel Adjustment.

Check Blade Depth - See 8500e 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 (instructions in this document).

Check to make sure the Head is properly Aligned (instructions in this document).

Check the Blade Depth. See User Guide: Cut Preview: Blade - 8500e Board, 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 when Motors are Disengaged" 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 your air compressor is turned on, and that the airlines are not pinched. The Wizard CMC requires air to engage the Clamps that hold the Matboard in place when cutting.

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 Your First Mat > Put Matboard in the CMC" in this document for further instructions. If the Wizard 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 Wizard 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: When you Click Check for Corners, MatDesigner will check to see if you are connected to the Internet. If you are connected to the Internet, MatDesigner will use that connection to download your corners. If you are not connected to the Internet, MatDesigner will manually dial out to get your corners.

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 "Hook up Computer > Connect the USB ECU" in this document for more information.

Q: Does Wizard offer training?

A: Refer to our website at www.wizardint.com and our newsletters for locations and dates.

Q: How do I order Blades?

A: You can access our Web Store on our website at www.wizardint.com or by calling Order Processing at 888/855-3335.

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

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

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

A: See "Where to Find More Information" in this documentation for more information. Or you can call Help Desk at 888/855-3335 or e-mail to SupportAdmin@wizardint.com.

Q: I hit the Emergency Stop Button. How can I get the Wizard to cut again?

A: See "Aborting a Cut: Restarting after an Abort" in this document for more information.