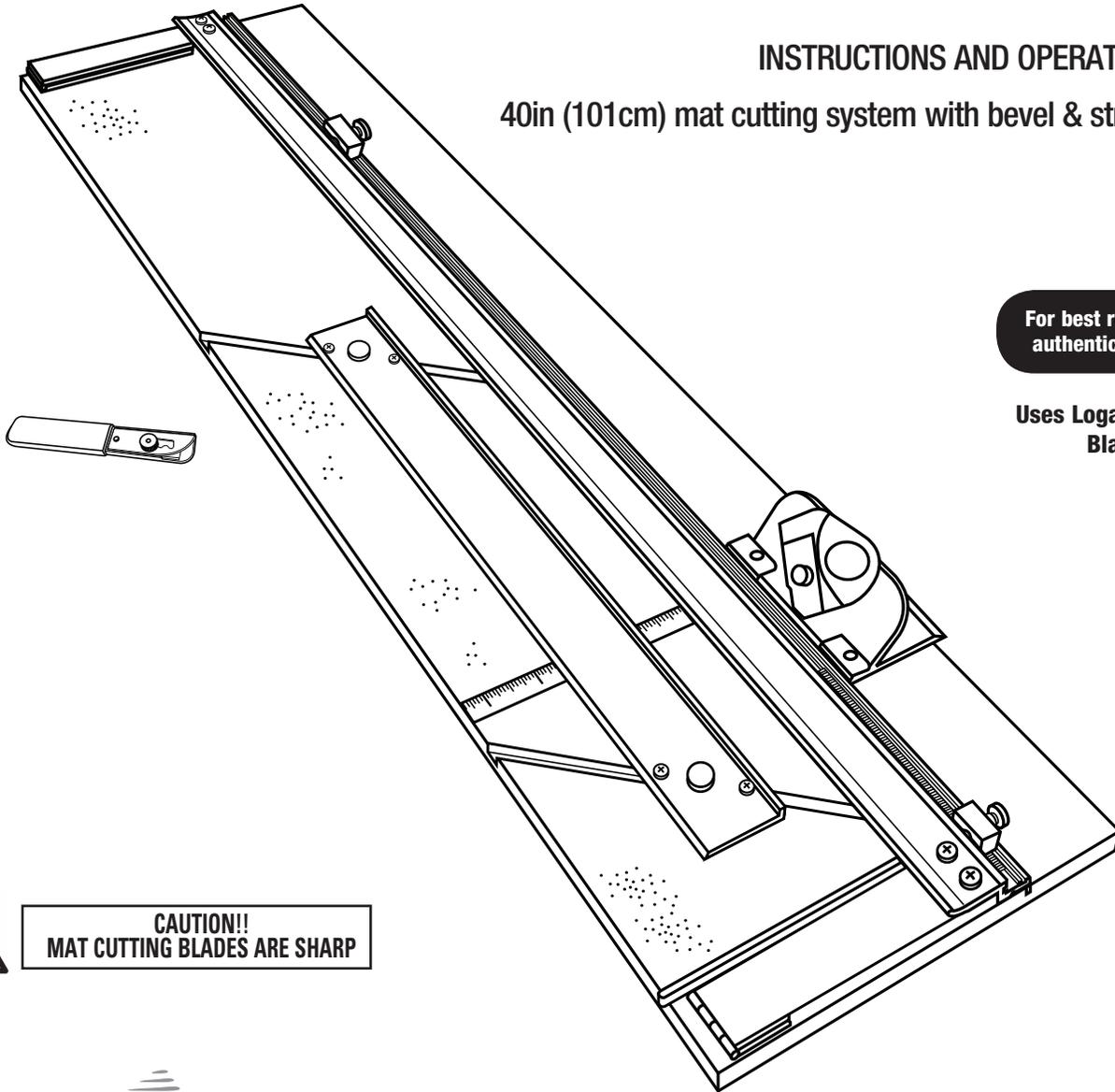


# ***COMPACT XL MAT CUTTER***



**INSTRUCTIONS AND OPERATION MANUAL**  
40in (101cm) mat cutting system with bevel & straight cutters

**For best results use only authentic Logan blades**

**Uses Logan Replacement Blade #270**



**CAUTION!!  
MAT CUTTING BLADES ARE SHARP**



Purchase Date

ID Number (on bottom of board)

Date (on bottom of board)

[www.logangraphic.com](http://www.logangraphic.com)

***Congratulations on your purchase of the Logan Compact XL Mat Cutter.***

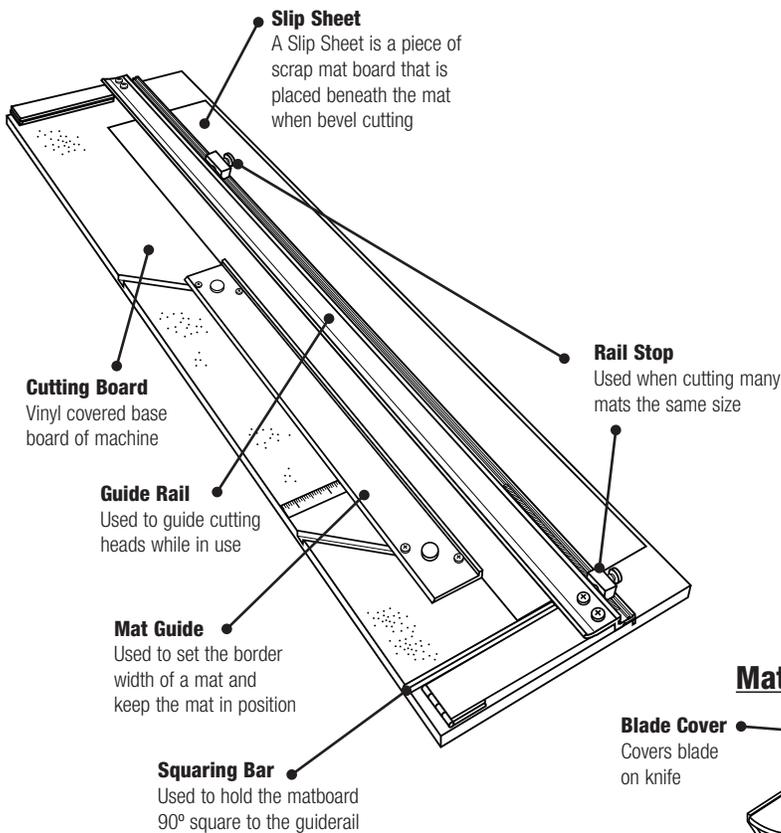
This versatile and dependable tool will prove to be a useful device for those seeking professional results from a low priced, easy to use mat cutter. This instruction manual is written to acquaint you thoroughly with this product. Please take some time to familiarize yourself with it before cutting. You will find that the time taken will be well worth it and you will be cutting quality mats in no time.

*CHECK OF CONTENTS:*

380-1 Compact XL - 40" base board with Mat Guide, 2 Guiderail Stops, Bevel Cutting Head, Straight Cutting Mat Knife, Slip Sheet, and 1 five pack of Logan #270 blades.

**IDENTIFICATION OF MACHINE COMPONENTS:**

**Cutting Board**

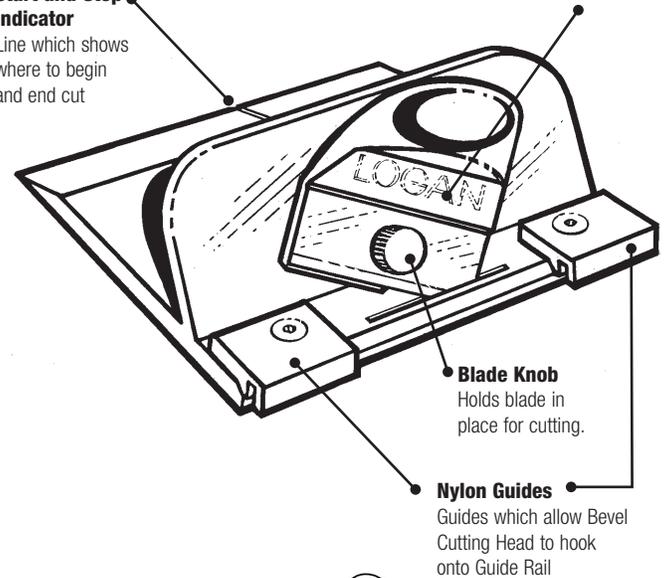


**Bevel Cutting Head**

**Start and Stop Indicator**  
Line which shows where to begin and end cut

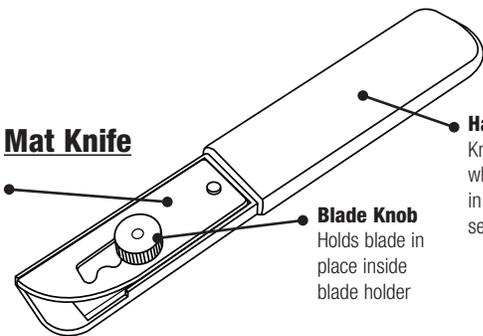
**Blade Holder**

Blade holding device which slides, allowing blade to cut into mat



**Mat Knife**

**Blade Cover**  
Covers blade on knife



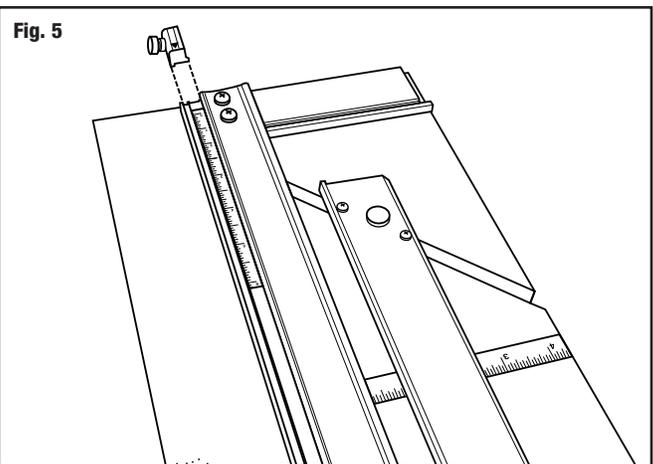
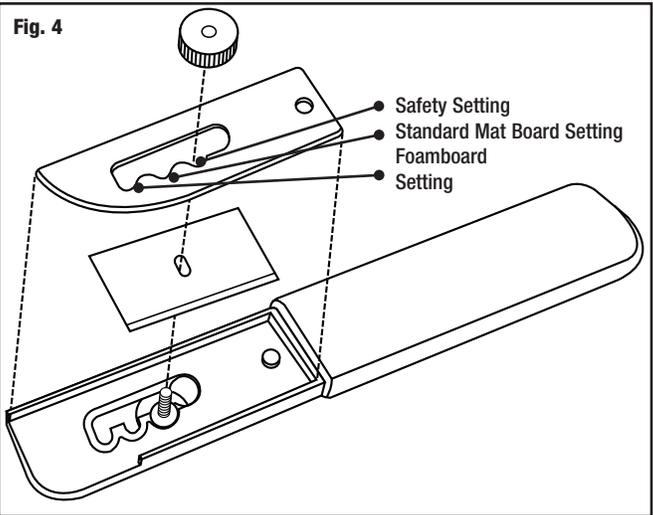
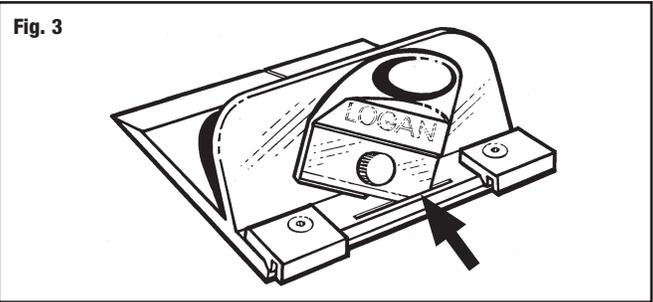
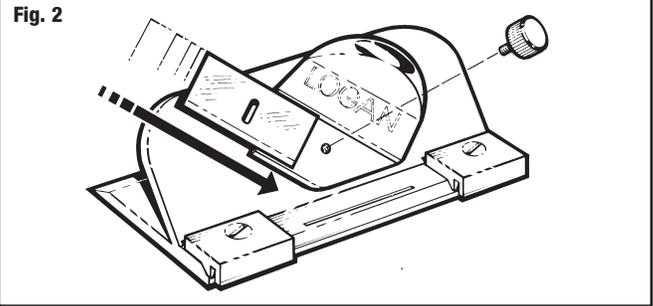
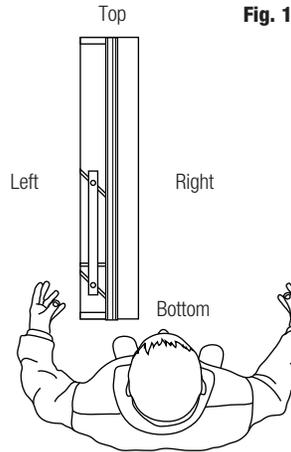
**Warranty**

Logan Graphic Products, Inc. ("Logan") warrants the 380-1 Compact XL to be free from defects in parts and workmanship for a period of two years from the date of original purchase. Logan warrants that it will either repair or replace, in its sole discretion, any necessary replacement parts found to be defective. Should the product need to be returned to Logan for repair or replacement parts, authorization for any return must come from Logan in writing. Costs of returning the product to Logan, including insurances, shall be borne by the purchaser. Logan shall not be liable for any damages or losses, incidental or consequential, direct or indirect, arising from the use of this product. This warranty extends only to the original purchaser and is not assignable or transferable. This warranty is in lieu of all other warranties, expressed or implied. Be advised that any Logan products purchased as "new" from an unauthorized dealer, such as an online auction site or similar, may be void of their warranty.

Logan Graphic Products, Inc.  
1100 Brown Street Wauconda, IL 60084  
800/331-6232 or 847/526-5515

**Orientation**

The procedures detailed in the following instructions refer to the right & left sides and top & bottom of the machine as shown **(Fig. 1)**.



**Blade Installation - Model 302-1 Bevel Cutter**

1. Remove blade knob.
2. Remove one blade from the package of five.
3. Place blade onto blade holder, sharp edge down and slide blade until corner of blade tip enters slot and hole in blade lines up with hole in blade holder **(Fig. 2)(Fig. 3)**.
4. Replace blade knob and tighten.

**NOTE:** Because the blades are packed with a small amount of oil, they may stick together. Be certain that only one blade is being inserted into the blade slot.

**NOTE:** Blade holder has a spring that is designed to keep blade safely withdrawn when not in use. It is not designed to pull blade out of mat after cutting.

**Blade Installation - Model 500 Mat Knife**

1. Remove blade knob and blade cover.
2. Align blade hole over thread. Be sure sharp edge of blade is facing down.
3. Reassemble blade cover and blade knob.

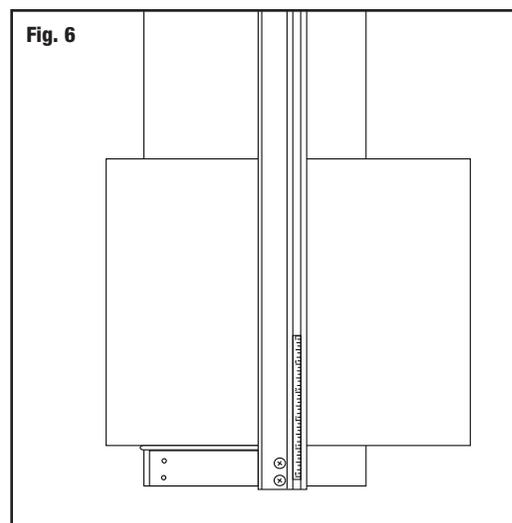
**NOTE:** Adjust blade to foamboard (fully extended), standard mat board (middle setting) or safety (fully retracted) **(Fig. 4)**.

**Stop Installation**

1. Slide stop onto Guiderail **(Fig. 5)**.

**Straight Cutting Board to Size**

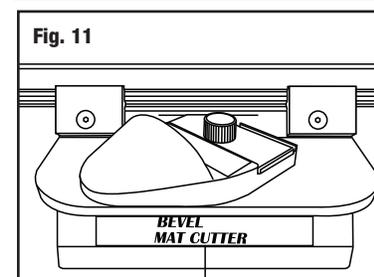
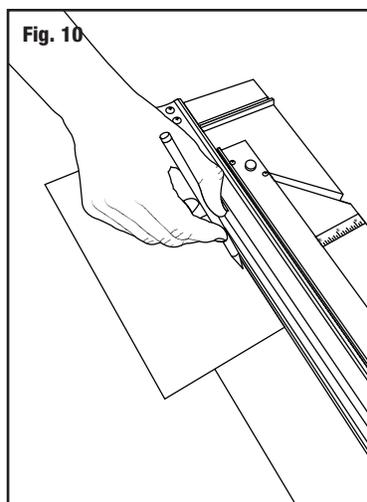
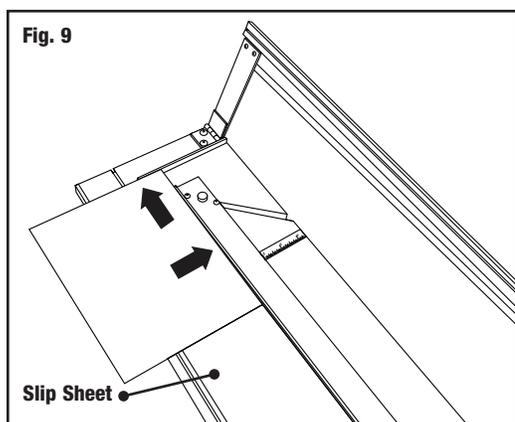
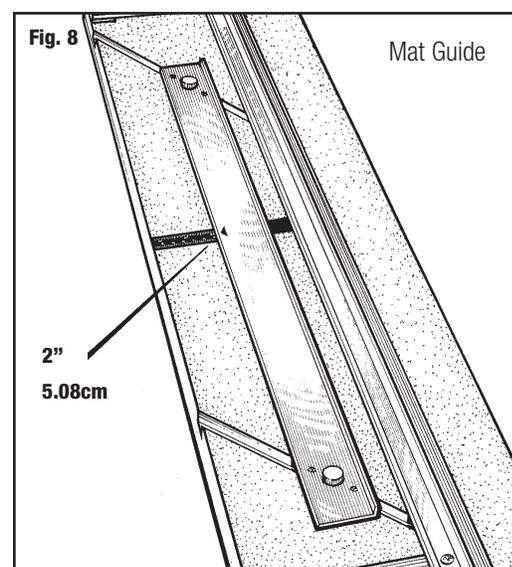
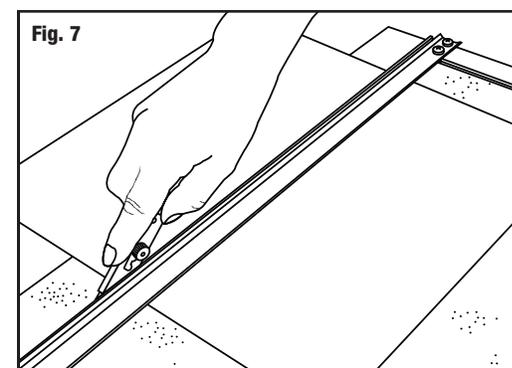
1. Remove mat guide and slip sheet.
2. Mark dimension of cut on back of matboard.
3. Place mat color side down under guide rail and against squaring bar stop (**Fig. 6**).
4. Set the proper depth setting on the Straight Cutting Mat Knife.
5. Hold the rail firmly with your left hand. With your right hand, hold the mat knife vertical so the handle is at a 45° angle (**Fig. 7**).
6. Draw the knife towards you along guide rail, keeping downward pressure on the mat knife.



**Bevel Cutting Mat Openings, Without Rail Stops**

**EXAMPLE: Cutting a mat with a 2" border.**

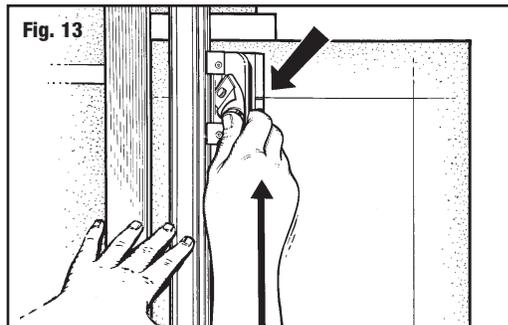
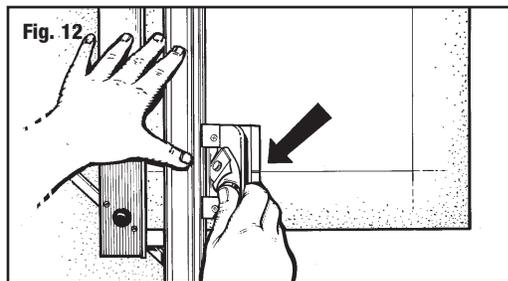
1. To re-install the Mat Guide, loosen the Black Knobs with the raised edge towards the Guide Rail, line up the Mat Guide with the parallel slots. Hold the Mat Guide at either end and evenly drop the Mat Guide into the slots and then tighten the black knobs.
2. Set the Mat Guide to the desired border width. For example, for a 2" border, align the back of the Mat Guide at the 2" mark and tighten the Black Knobs (**Fig. 8**).
3. Make sure the Slip Sheet is in place before bevel cutting. You must use a Slip Sheet. The straight cut slot underneath the Guide Rail is for straight cutting only.
4. Place the mat color side down under the Guide Rail and up against the squaring bar and mat guide (**Fig. 9**).
5. Using a pencil, draw a line down the full length of the back of the matboard. Turn the mat after each marking and repeat this for the remaining three sides (**Fig. 10**).
6. Attach the 302-1 Bevel Cutter to the Guide Rail by fitting the black nylon guides over the raised edge of the channel.
7. Position the cutter so the start & stop line lines up with the marked line closest to the bottom of the machine (**Fig. 11**).



8. Use your thumb to firmly depress the blade holder all the way down to insert the blade **(Fig. 12)**.
9. With your left hand putting pressure down on the guide rail, slide the bevel cutter forward until the Start and Stop indicator lines up with the top pencil line. **DO NOT GO PAST THE LINE! (Fig. 13)**

**NOTE:** It is essential to keep even downward pressure on the Blade Holder as you cut.

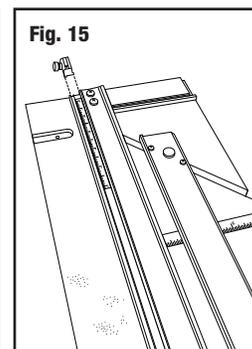
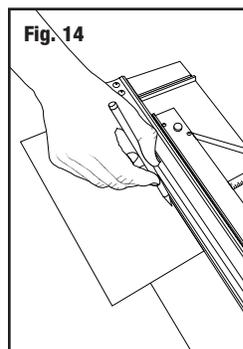
10. Use your thumb to pop the blade holder back out of the matboard, lift the guide rail slightly to turn the mat 1/4 turn and continue cutting the remaining three sides.



**Bevel Cutting Mat Openings Using Rail Stop**

**EXAMPLE: Cutting a mat with a 2” border.**

1. Set the Mat Guide to the desired border width. For example, for a 2” border, align the back of the Mat Guide at the 2” mark and tighten the Black Knobs **(Fig. 8)**.
2. Make sure the Slip Sheet is in place before bevel cutting. You must use a Slip Sheet. The straight cut slot underneath the Guide Rail is for straight cutting only.
3. Place the mat color side down under the Guide Rail and up against the squaring bar and mat guide **(Fig. 9)**.
4. Using a pencil, mark a line along the full length of mat board using guide rail as a guide. Turn mat 1/4 turn to right **(Fig. 14)**.
5. Slide rail stop on guide rail and set to desired border size **(Fig. 15)**.
6. Position the cutter so the start & stop line lines up with the marked line closest to the bottom of the machine **(Fig. 11)**.
7. Use your thumb to firmly depress the blade holder all the way down to insert the blade **(Fig. 12)**.
8. With your left hand putting pressure down on the guide rail, slide the bevel cutter forward until the Start & Stop indicator lines up with the top pencil line. **DO NOT GO PAST THE LINE! (Fig. 13)**



**NOTE:** It is essential to keep even downward pressure on the Blade Holder as you cut.

9. Use your thumb to pop the blade holder back out of the matboard, lift the guide rail slightly to turn the mat 1/4 turn and continue cutting the remaining three sides.

**Bevel Cutting Mat Openings Using Two Rail Stops (production cutting)**

**EXAMPLE: Cutting a mat with a 2” border.**

**NOTE:** This method should only be used when cutting multiple numbers of mats that have the same outside and inside dimensions.

1. Set the Mat Guide to the desired border width. For example, for a 2” border, align the front of the Mat Guide at the 2” mark and tighten the Black Knobs.
2. Place the mat to be cut into the machine colored side down with the Slip Sheet underneath and lower the Guide Rail.
3. Using a pencil, mark a line along the full length of the matboard using the Guide Rail as a guide. Turn the mat 1/4 turn to the right before cutting.
4. Install or slide the top Guide Rail Stop onto the Guide Rail and slide it past the far end of the matboard but do not tighten it.
5. Install or slide the bottom Guide Rail Stop onto the Guide Rail and tighten at the 2” mark on the Guide Rail scale.
6. Hook the bevel cutting head onto the Guide Rail and slide up until the Start & Stop indicator lines up with the marked line closest to the top of the machine.
7. Slide the top Guide Rail Stop towards you until it makes contact against the bevel cutting head and tighten.

Both Guide Rail Stops are now set to make repeated opposite side cuts on a multiple number of mats of the same size. To then cut the other side of the mats, reset the top stop as you did in step 6. and cut the remaining sides.

**Adjustments**

**Bevel blade depth adjustment**

- Increase depth to increase overcuts - Decrease depth to reduce overcuts
1. Hold the 302-1 Bevel Cutter upside down in your hand with the blade activated in the cutting position.
  2. Measure the exposed amount with a ruler at the same angle as the blade. For standard thickness mat board (4 ply/1.4mm) only 1/8" of blade should be seen (**Fig. 16**).
  3. Turn blade depth screw (clockwise) to decrease blade depth and (counterclockwise) to increase depth.

**NOTE:** Always have blade depth set so that Slip Sheet is only slightly scored.

**Re-parallel Mat Guide**

**Tools Needed: Phillips Screwdriver, Ruler**

To re-parallel the Mat Guide, first determine that the Mat Guide is out of parallel by doing a parallel test.

**Parallel Test:**

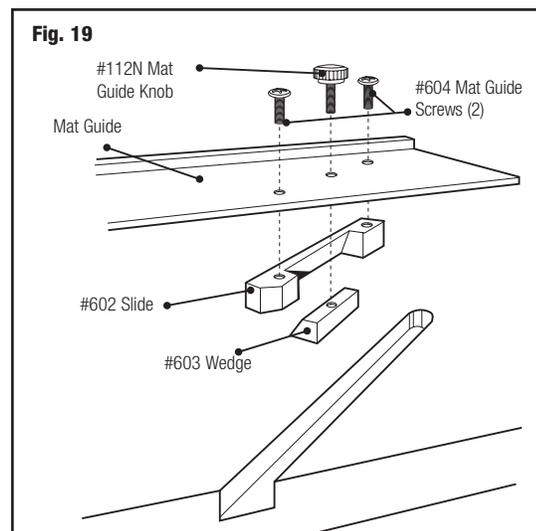
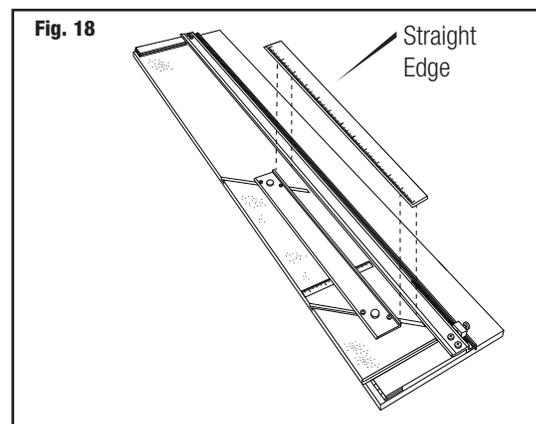
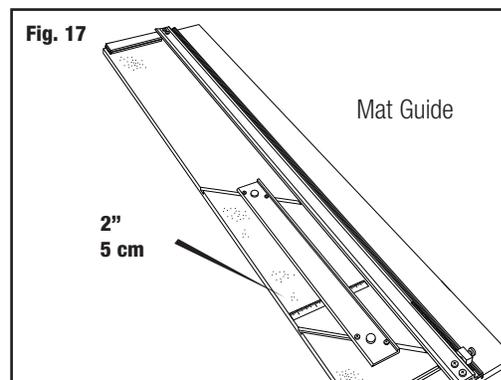
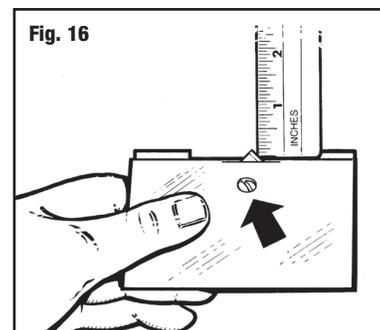
1. Lock the Mat Guide at the 2" mark on the scale (**Fig. 17**).
2. Place a scrap piece of matboard under the Guide Rail and up against the Mat Guide at the far end of the machine.
3. Using a pencil, mark a line across the matboard.
4. Slide the mat all the way down near where you are standing keeping under the Guide Rail.
5. Mark another line across the matboard.
6. The piece of matboard should now appear to only have one single line across it. If the two lines drawn do not line up with each other, the Mat Guide needs to be re-parallelled.

**To Re-parallel:**

1. Release the Mat Guide.
2. Use a Phillips head screwdriver to loosen the four screws on either side of the black knobs one turn.
3. Place a ruler or straight edge between the Mat Guide and the Guide Rail (**Fig. 18**).
4. Slide the Mat Guide against the straight edge and the Guide Rail. Make sure both the Mat Guide and the Guide Rail are making solid contact on both sides of the straight edge.
5. Re-tighten the Black Knobs first.
6. Then re-tighten the four screws. Do another parallel test to ensure that the Mat Guide is now parallel.

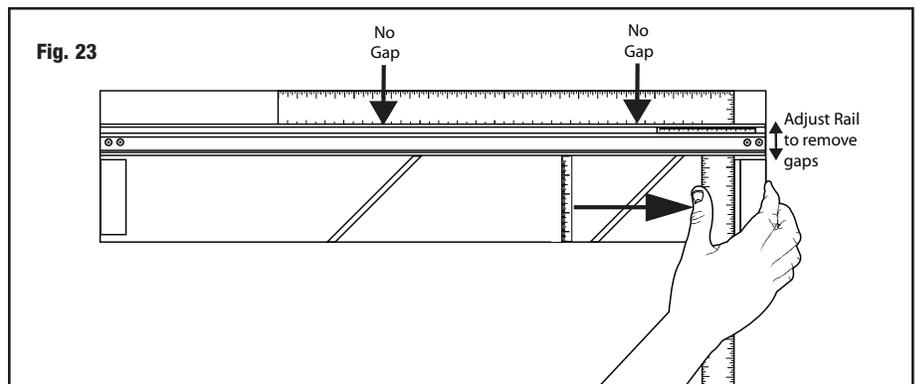
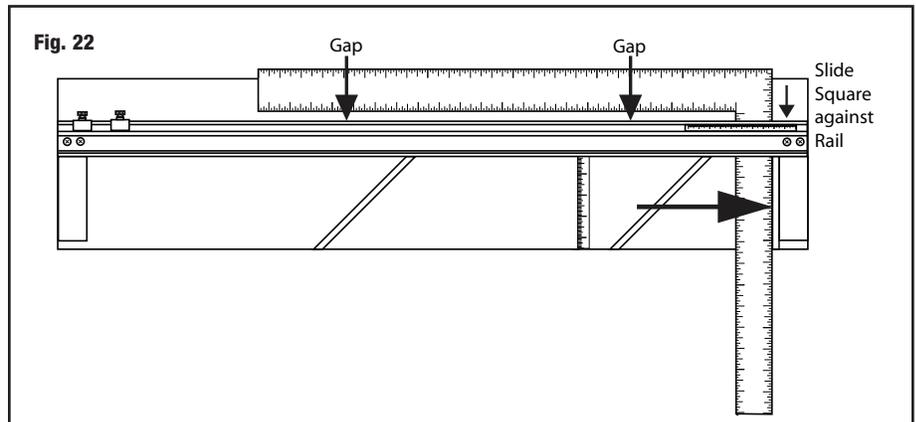
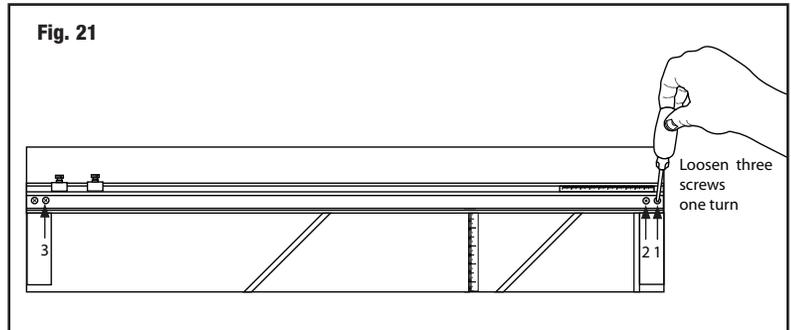
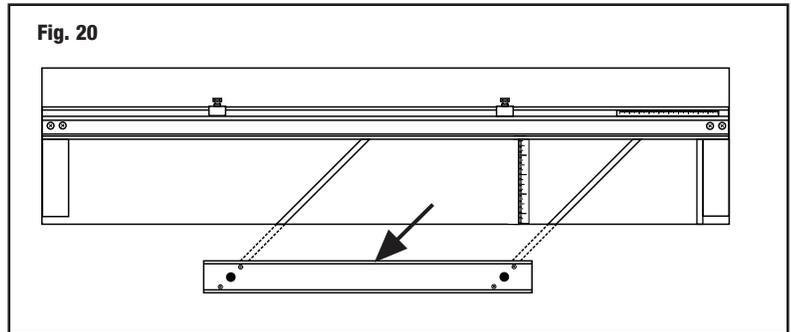
**Mat Guide Assembly**

If mat guide wedge becomes unscrewed from mat guide, reassemble making sure angle of wedge is aligned correctly (**Fig. 19**).



**Resquaring the Guiderail**

1. Remove mat guide (Fig. 20).
2. Loosen three (3) guiderail screws one full turn (Fig.21)
3. Position carpenter square up against squaring bar and under guiderail (Fig 22).
4. Hold carpenter square firmly against squaring bar & readjust guiderail, parallel to carpenter square edge (Fig. 23).
5. Retighten guiderail, making sure guiderail stays parallel to carpenter square edge.
6. Replace mat guide & reparallel mat guide.



**Helpful Hints**

**Avoid Board Warp** - Always store your Mat Cutter flat.

**Clean Guide Rail** - Only use evaporative solvents such as lighter fluid or alcohol. Do not lubricate the Guide Rail: lubricants will soften the nylon guides and cause them to bind on guide rail.

**Cutting a Border Less Than 3/4"** - Mark mat (back side) using a pencil and do not use Mat Guide.

**Blade Life** - Use only authentic Logan blades to ensure best results. No two blades last the same amount of time. Size of mats and differences in mat board effect blade life. It is best practice to use a new blade whenever starting a new project.

<b><i>Problem</i></b>	<b><i>Solution</i></b>
<b>Hooks or Curves</b>	Blade depth set too deep. Blade is dull. Blade is catching on previous cut in Slip Sheet. Uneven pressure being applied to Cutting Head during cut.
<b>Overcut on Top Cut</b>	Blade depth set too deep.
<b>Overcut on Bottom Cut</b>	If too small - align start and stop indicator slightly below pencil line and cut. If too big - align start and stop indicator slightly above pencil line and cut.
<b>Mat Borders Uneven</b>	Mat Guide not parallel
<b>Ragged Bevel Cut</b>	Cutting without a Slip Sheet. Slip Sheet is worn out. Not changing the blade often enough.
<b>Not Cutting Through</b>	Machine not on a level surface. Not using a Slip Sheet as least as long as the mat you are cutting. Blade depth set too shallow.