

GH ADVANTAGE™ PRO
Straight Line Model Series

PRO

**Operating Manual
and Parts List**

Straight Line Model Nos.
M40PRO
M48PRO
M60PRO

NIELSEN & BAINBRIDGE

Cutter Specifications

	LENGTH	WIDTH	CAPACITY
M40PRO	46.5"	15.5"	41.5"
M48PRO	54.5"	15.5"	49.5"
M60PRO	66.5"	15.5"	61.5"

Accessories Available

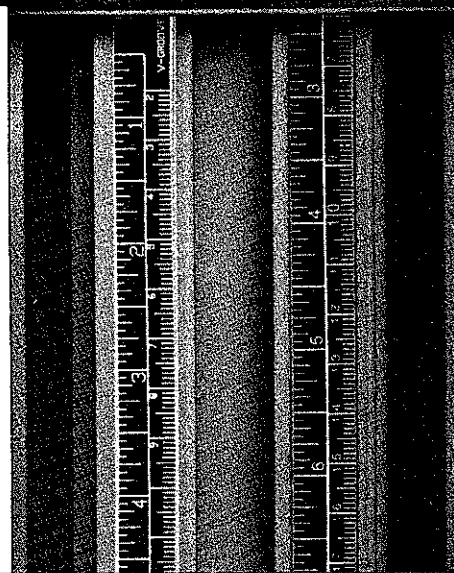
Description

Squaring Arm Kits	36" Model 48" Model	SA36PRO SA48PRO
Production Stops		CH60A
Blades	For Beveled Edge	BLD1200SE BLD1200 BLD1500 BLD1991
	For Straight Edge	



Contents

Description of Cutter Parts	4
Unpacking and Table Surface	5
Set-Up	5
Cleaning	6
Blades and Blade Adjustments	6
Adjusting the Slide Block	7
Basic Bevel Cutting Techniques	7
Cutting a Single Opening	7
Cutting a Double Mat	8
How to Set-Up for a V-Groove	8
How to Cut V-Groove Mats	9
How to Cut Inlay Mats	9
How to Cut Fabric Covered Board and Wrap Edges	10
Troubleshooting	11
Parts List – Mat Cutter	12
Parts List – Cutting Head	13
Warranty Information	14



Contents

Cutter Specifications and Accessories

Cutter Components

Your C&H/Advantage Mat Cutter is a precision instrument and is constructed of durable, high quality components. With the proper care and maintenance, it will provide you with years of satisfactory performance. Familiarize yourself with the function and the features of the following list of cutter parts called out in Figure 1.

1. Bar and Rod Assembly – These two components are comprised of a hard coated aluminum extruded bar which is fastened to a precision ground, nickel plated steel rod. The bar and rod are attached with a deliberate bow to allow for uniform pressure along the mats when pressure is applied to the handle. The bar and rod also provide a long-life, wear-resistant tracking surface for the cutting head.

2. Baseboard – 1" (25.4mm) thick, resin-impregnated fiberboard provides a sturdy, warp-resistant base for cutting.

3. Bar/Rod Block – Precision machined steel blocks which securely fasten the Bar/Rod to the hinges.

4. Bevel Blade Holder – An adjustable assembly which is mounted and pivots on the left side of the sliding block. Designed for C&H No. 1200, 1500 and C&H Advantage Mat Blades, #1200SE.

5. Handle – Fastened at each end to the hinges. Pressure on this handle provides the clamping force on the bar and rod assembly to keep the board being cut from slipping.

6. Hinges – Support the bar and rod assembly. Spring action allows clamping pressure on mat being cut.

7. Mat Guide – Controls the width of the mat being cut. Locks down at one central point for quick and easy adjustment.

8. Mat Guide Slide Plate – Recessed track for the Mat Guide to slide on.

9. Slide Block – A highly precision-machined, adjustable block which rides on the bar and rod assembly. Both blade holders are fastened to this block.

10. Squaring Arm – (Optional Accessory) This adjustable aluminum arm is used for positioning boards when cutting to size with the straight blade holder.

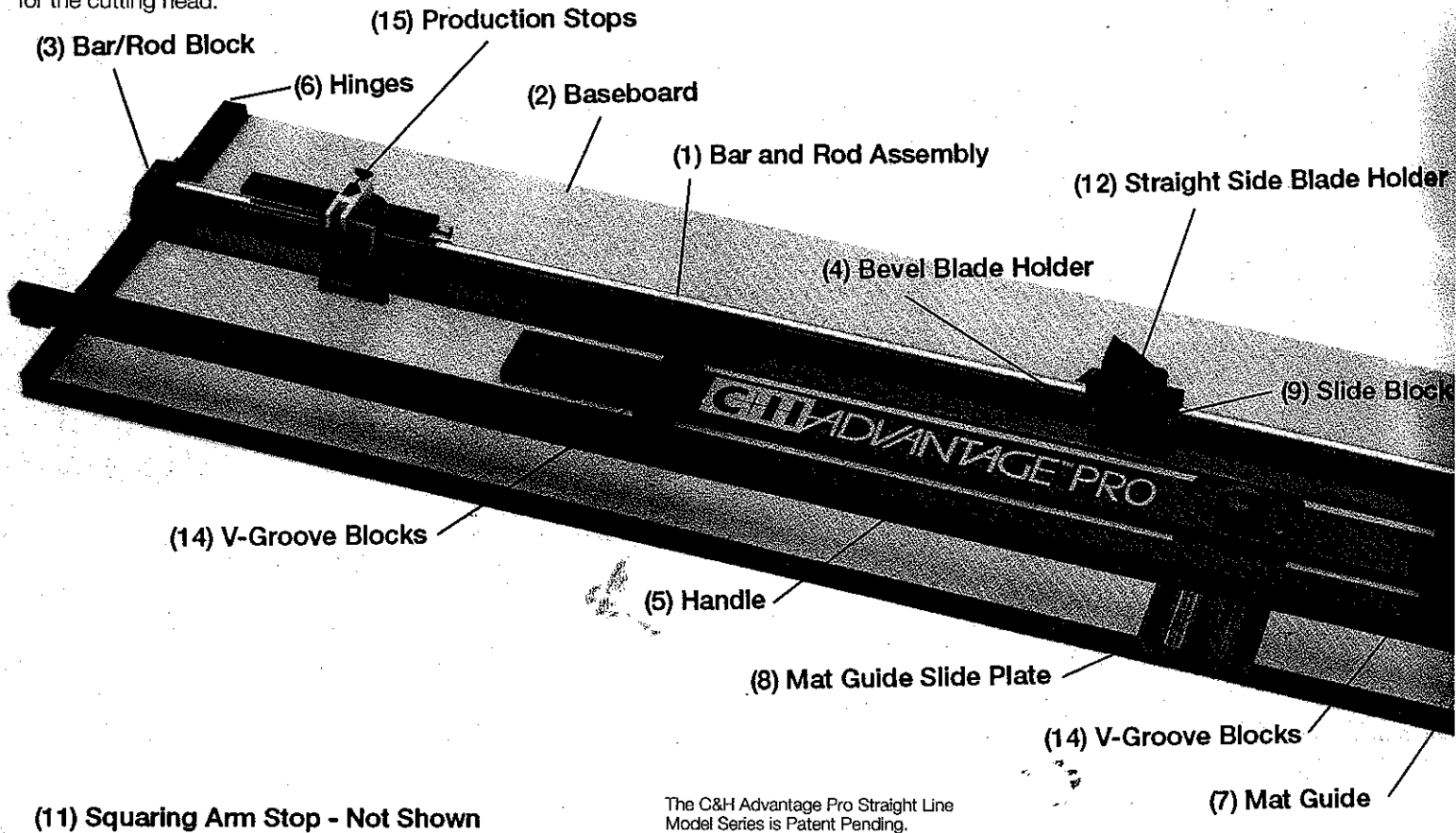
11. Squaring Arm Stop – (Optional Accessory) An adjustable stop for repetitive sizing of boards.

12. Straight Side Blade Holder – An assembly which is mounted and pivots on the right side of the block. Designed for #1991 Utility Blade or equivalent. Used for squaring and cutting boards to size.

13. Material Stop – Place matboard against this stop when cutting to prevent matboard slippage.

14. V-Groove Blocks – Precision machined extruded aluminum blocks for exact mat to mat duplication of pre-fixed wide or narrow V-grooves. Also used to adjust matguide.

15. Production Stops – (Optional Accessory) For cutting multiple mats.



The C&H Advantage Pro Straight Line Model Series is Patent Pending.

Description of Cutter Parts

Unpacking Instructions

Check your mat cutter for any visible signs of damage. If the package is damaged, examine the adjacent portion of the mat cutter with special care.

Report any damage to the shipper immediately.

Carton Contents:

Besides the mat cutter, the carton should contain the following items.

- Attached Mat Guide
- V-Groove/Set-Up Blocks
- Manual
- Allen Wrenches (1/8", 9/64", 5/32")
- BLD1200(5)
- BLD1200SE(5)
- BLD1500(5)
- BLD1991 (5)

Safety Precautions: This machine is equipped with two sharp blades which are not fully exposed, but which do require some caution. Keep hands away from the protruding blade tips and from under the bar and rod assembly, especially if the straight side cutting blade is in the locked-down position.

Table Surface

Before you begin to set-up and use your cutter, it is imperative that the cutter is placed on a flat surface. The cutter must not hang over the edge, as this can cause curved cuts. Never lean the cutter against a wall when not in use. Always keep it flat and covered.

If you are custom building a table for your mat cutting area, it may be beneficial to recess the mat cutter into the table so that the baseboard is flush with the table top. It can also be secured to the table with screws to prevent slippage.

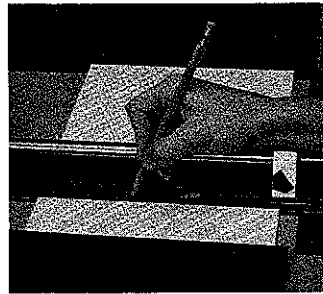
Set Up

The ADVANTAGE PRO has been pre-set at the factory. However, for best results, we suggest that you check the cutter before beginning to cut.

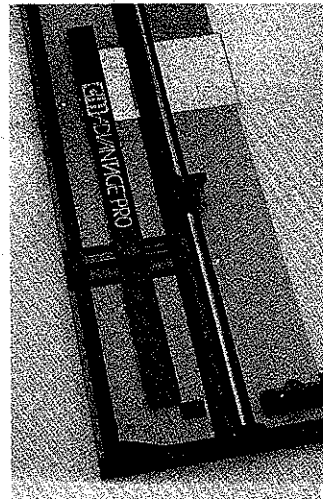
It is necessary to make adjustments in the exact order that has been outlined.

Checking the Matguide

The matguide must be parallel to the bar/rod assembly in order to achieve accurate and square window openings. To check the matguide, place an 8"x10" piece of matboard under the bar/rod assembly and against the bottom edge of the matguide. Now draw a line along the edge of the bar/rod assembly on the piece of matboard. Slide the mat up to the top edge of the matguide and repeat the drawing process. If the two lines are superimposed, then the matguide is parallel to the bar/rod.



If they are offset from each other, then the matguide must be adjusted.

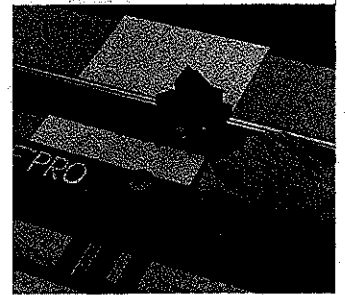


Matguide Adjustment – Method 1

To adjust the matguide, loosen the four allen screws (with the 5/32" allen wrench that has been provided) on top of the matguide. Place one set-up block on the bottom of the matguide and one on the top. You must make sure that the blocks are placed on there so that the "1" is on the left and the "2" is on the right. Now slide the matguide towards the bar/rod until the blocks hit the rod. Force the entire matguide assembly against the inside edge of the set-up blocks and then tighten the four allen screws. Check the matguide again before continuing and re-adjust if necessary.

Matguide Adjustment – Method 2

An alternative method to adjusting your matguide is to follow the instructions and instead of using the blocks, loosen the four allen screws on top of the matguide and pivot the matguide to the right or left using the board with the pencil lines as your guide. When the matguide is parallel, tighten the allen screws.



(10) Squaring Arm

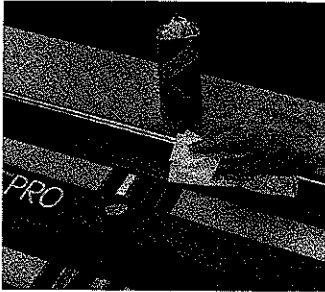
(15) Production Stops

(13) Material Stop

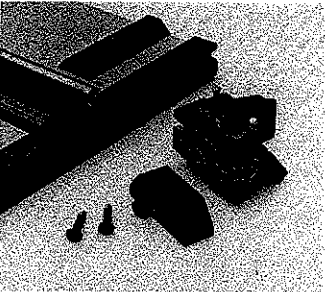
Assembly and Set-Up

Cleaning

Your C&H ADVANTAGE PRO Cutter requires regular cleaning for ultimate performance and long life. The bar and rod assembly should be cleaned with solvent regularly. Lighter fluid is recommended for this.



Pull the bar/rod block off the rod and then slide the block off. Clean the bottom surface and rod cavity with solvent.



Blades and Blade Adjustments

A sharp blade and proper adjustments will produce the highest quality mats.

Bevel Blade Holder Blades

BLD1200SE:

This blade is ground and honed on one side only, making it more rigid than the traditional mat cutting blades. This gives a straighter cut and makes it possible to cut through the thicker boards that are becoming more common.

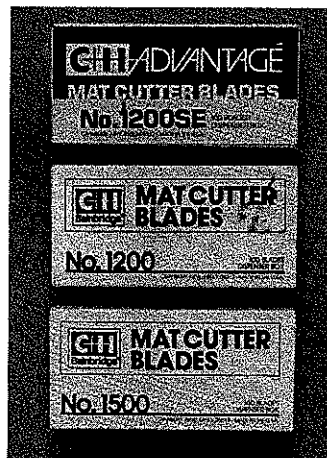
These blades must be inserted with the honed edge facing out; for this reason, these blades cannot be turned around and used on both sides as is the case with the other types. However, due to the quality of the cut, many framers are using this blade exclusively.

BLD1200:

This blade is 1200th's of an inch thick. It is recommended for use with Paper Matboard. This blade can be used on both sides.

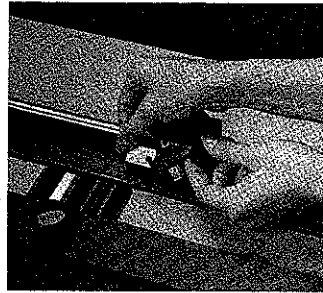
BLD1500:

This blade is 1500th's of an inch thick, which makes it more rigid than the BLD1200 blade. It is, therefore, recommended that this blade be used on the denser boards; such as Black Core, Alphamat® and Rag Matboard.



Changing the Bevel Blades

To change the bevel blade, simply loosen the knurled knob and remove the old blade and replace it.



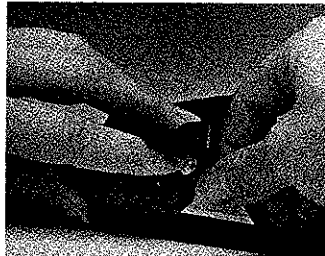
Straight Blade Holder Blades

Utility Blades #1991:

The blade you will need for making straight cuts is the #1991 Utility Blade. These are available from most framing product suppliers.

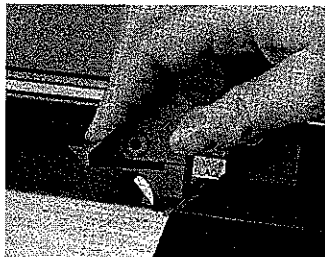
Changing the Utility Blade

Loosen the large knurled knob, push in the spring loaded pin and pull the blade out. Depress the spring loaded pin and insert the new blade as far as possible; only 1/2" of the blade should be exposed. Retighten the knurled knob.



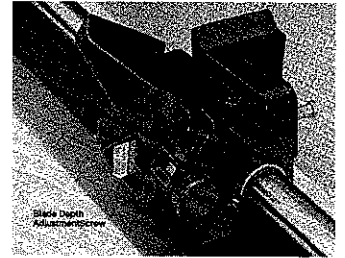
Setting Blade Depth (Bevel Cutter)

The blade should project from the blade holder so that it cuts through the board being cut and slightly scores the slip sheet underneath.



Test this out with two scrap pieces of matboard. A blade protruding too far will not have enough support, will flex and cause hooked corners.

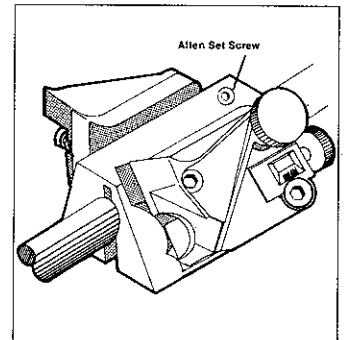
To adjust the blade depth, loosen the large knurled screw.



While holding the blade in from the front, adjust the blade depth with the blade adjustment thumb screw on the back of the holder. Retighten the knurled screw.

Straight-Side Blade Holder Locking Pin adjustment Set Screw

An adjusting set screw is located in the top of the slide block. It acts as an adjustable stop for the locking pin on the straight-side blade holder and controls the depth of cut. It is factory-set to accommodate most board thicknesses that you would cut with the blade locked down.



If an adjustment is necessary, use the 1/8" allen wrench included with the cutter. Simply turn the screw in to reduce the cutting depth of the blade when it is in the locked position. Turn the screw out to increase the blade depth.

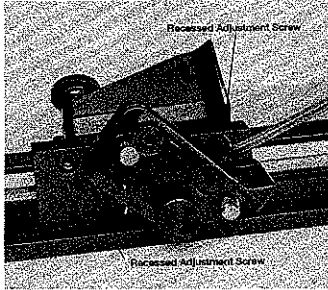
Cleaning

Blades and Blade Adjustments

Adjusting the Slide Block

NOTE: The block on your new cutter has been adjusted at the factory and should not require further calibration before use.

1. If adjustments are necessary, use the two recessed allen screws on the straight cutter side of the block.



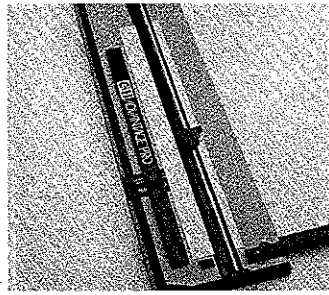
Before adjusting, remove the block from the bar/rod and clean and lubricate inside the block cavity and the bar/rod (see Cleaning section).

2. Adjust Oilite® bearings so the openings align with the opening in the block.

3. Reinstall block and slide back and forth to find tightest spot on bar/rod. Adjust the block in this area.

4. Adjust one screw at a time. Screw it in until the block won't move. Then back the screw out slightly, until the block slides smoothly the whole length of the bar/rod. Repeat procedure on the other screw.

Basic Bevel Cutting Technique



It is recommended that you use a piece of matboard (not mount board) 6" wide x the capacity of the cutter as a slip sheet under the mat being cut. It will compress the board and produce a clean cut. Move the board slightly for each cut and switch ends and/or replace it if it becomes ragged.

Holding the Cutter

Stand at the end of the cutter and lift the handle. Insert the matboard under the bar. The most comfortable position will be to rest the index and middle fingers on the bevel cutter comfort grip.

Place the thumb loosely under the large knurled screw as shown. Insert the blade smoothly rather than jabbing it



into the board by pushing down with two fingers on the comfort grip. Push the blade down all the way and then, using the two finger pressure only, pull back on the slide block until you reach the desired distance and then release the cutter. It is important to keep the blade fully depressed while pulling it. Do not apply upward pressure with the thumb as you are pulling. This is a pivot point only and applying pressure here may bind the cutter and/or tilt the cutting block enough to produce hooked corners.

Handle Pressure

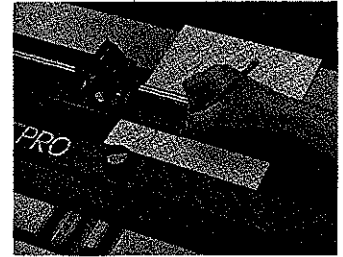
The handle should be held at the end nearest you. Apply pressure so that the bar flattens out.

Cutting a Single-Opening Mat Without Stops

Set the mat guide for the desired mat width. Pencil mark the back of a mat board which has been cut to size to produce overlapping corner lines. (Hold pencil at same angle as bevel blade.)



Raise the handle and place the board, colored side down, in the corner formed by the mat guide and material stop.



Slide the block up and depress the blade fully so it enters the board approximately 3/16" (5mm) above the top intersecting horizontal guide line.



Pull the slide block until the back cutting edge of the blade is approximately 3/16" (5mm) below the bottom intersecting horizontal guide line.



Release the blade holder. Repeat on the other three sides.

Adjusting the Slide Block

Basic Bevel Cutting Techniques

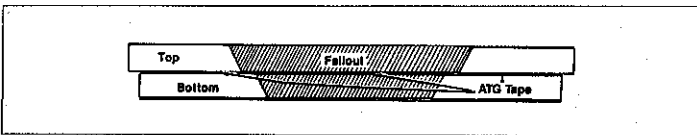
Cutting a Single-Opening Mat Without Stops

How to Cut Double Mats

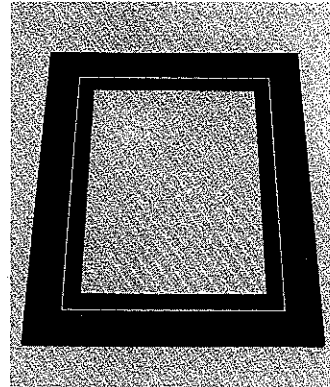
1. Determine outside measurement of the mat and width of border needed.
2. Trim 1/4" off the short and long sides of the back mat.
3. Set guide and cut top mat (color side down) and save the fallout inside section.
4. Apply ATG tape to all four sides on the back of the top mat.
5. Adhere the mats together with front of back mat against back of front mat. Back mat should not protrude over the edge of front mat.
6. Place small ATG tape strip on back side of top mat fallout.

7. Place mat fallout back into position.
8. Apply pressure by rolling across surface.
9. Now add the width of the back mat desired to the current setting on your mat guide. For example, if your top mat had a setting of 2: and you want a 1/4" of the back mat to show, set the mat guide at 2 1/4". Cut all four sides. The fallout will drop with mats adhered together and you will be left with a double mat having equal borders all around.

NOTE: For triple or additional multiples, repeat steps 4 through 9 for each mat.



How to Set Mat Guide for Cutting V-Grooves

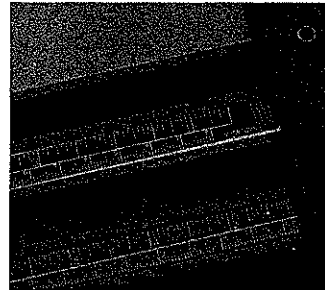


Using V-Groove Ruler

Located on the mat guide slide plate are two rulers. The far ruler has "v-groove calibrations".

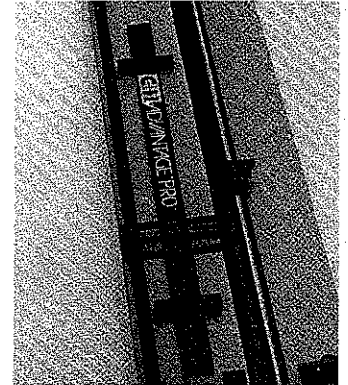
When you have located the optimum setting for cutting v-grooves, simply highlight the corresponding v-groove increment to the left of the mat guide.

You can now refer to this point every time you want to cut a v-groove.

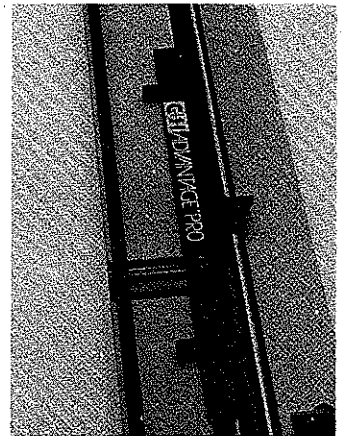


Procedure for Using the V-Groove Adjustment Guide Blocks

Place one v-groove guide block near each end of the mat guide (be certain that both guide blocks are facing in the same direction for a "wide" or "narrow" v-groove). Stops are marked "1" for narrow and "2" for wide.



Move the mat guide toward the bar/rod until the v-groove blocks are seated on the steel rod of the bar/rod. Tighten both ends of the mat guide and remove the v-groove guide blocks.



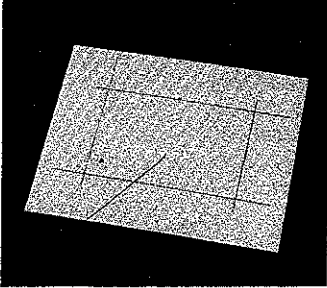
NOTE: Trimming too much off the bevel will not allow the mat pieces to fit precisely together. Also, mat guide must be parallel with bar/rod to trim off equal edges.

Cutting a Double Mat Without Stops

How to Set-Up for a V-Groove

How to Cut V-Groove Mats

1. Determine where you want to place the v-groove on the mat. If you have a 3" border and want a v-groove placed 1" away from the window opening, then set the mat guide at 2". Make a reference mark on the back of the mat so that you can put the pieces back together the same way they came out.



2. Cut an opening at the 2" setting as if you were cutting a single mat opening.

3. Set the mat guide at the v-groove setting using one of the methods described in the previous section.

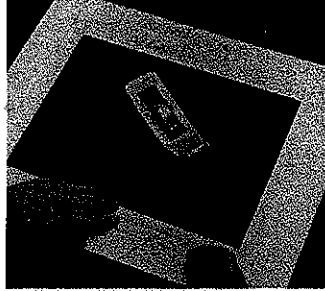
4. Place the fallout face up underneath the bar/rod and against the mat guide. Make sure there is a slip sheet underneath the board you are trimming off.



5. Trim off all four sides of the mat board. All four strips should be even from top to bottom and should be about 1/16" in width.

6. Place the fallout that you have just trimmed, face down on a flat surface. Take the piece with the window and place it face down around the fallout, matching up the reference lines.

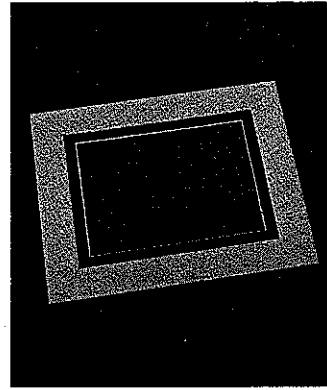
7. Tape the two pieces together with transparent tape going around all four sides.



8. Set the mat guide at 3" and proceed to cut the opening. You should now have a mat board with a 3" opening and a v-groove at 2".

The quality of the v-groove is determined by the quality of the initial cut. Proper blade depth and mat cutter adjustments are essential in obtaining exceptional creative matting designs.

How to Cut Inlay Mats



Inlaid mats fit together like a puzzle. Two or more rectangles fit inside one another, like a double or triple outline around the art. The surface is flat and the whole creation is just the thickness of one mat board.

Contrasting colors and contrasting widths add to the interest.

You can use as many colors as you wish in inlays and thereby stimulate the depth of multiple mats. However, since the whole inlay creation is only a single thickness, it will not cause the same fuzziness under nonglare glass as a true multiple mat. You may use several colors and have the results of a French Mat without the time and skill of the real thing.

1. Select two mat boards.
2. Cut 1/4" (6mm) from 2 opposing edges of the inlay board.

3. Apply ATG Tape in 1" (25mm) long strips to four outside edges.

4. Adhere mats together with front of inlay mat against back of outside mat. Make sure inlay mat board does not protrude beyond edge of outside mat.

5. Set mat guide and cut desired opening in inlay mat [example: 2" (50mm)]. Mat will not fall apart yet.

6. Reset mat guide for outside of inlay [example: 1 3/4" (44mm)]. Cut all four sides from top to bottom. Make sure blade is not set too deep.

7. Twist and remove outside pieces. Rub off ATG Tape from back of mat.

8. Mark inlay piece and outside mat before separating inlay piece.

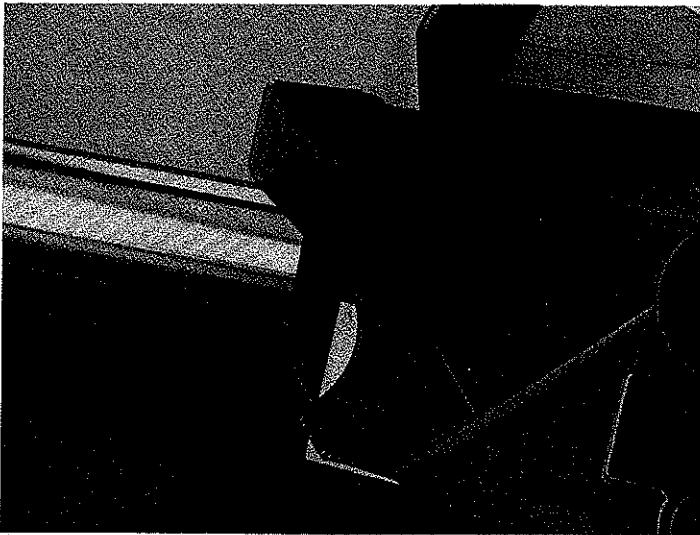
9. Without changing mat guide setting, cut opening for inlay in outside mat.

10. Lay inlay piece face down and position outside mat over it, matching up pencil marks. Tape together clear tape and roll down.

How to Cut V-Groove Mats

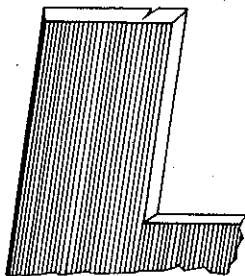
How to Cut Inlay Mats

How to Cut Fabric-Covered Board and Wrap Edges



Cutting fabric-covered mats can be done with a normal bevel or you can wrap the fabric around the bevel. The latter is accomplished by cutting the mat twice, once to cut part way through and once to remove the center. After the mat board middle is removed, it leaves enough fabric to wrap around. The result— a clean, professional mat with a fresh look. The method shown below works with all pre-covered fabric mat boards (i.e. linens, silks, suede and New Threads).

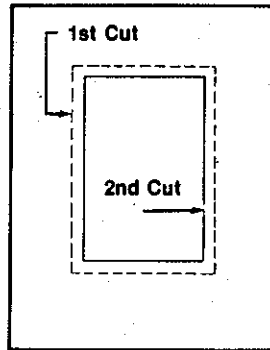
1. With some scraps of the same fabric you will use for framing, preset the blade so it cuts through the board but does not cut the fabric. Turn the depth screw to the left and push the blade farther back into the head. Check the cut until the proper depth is found.



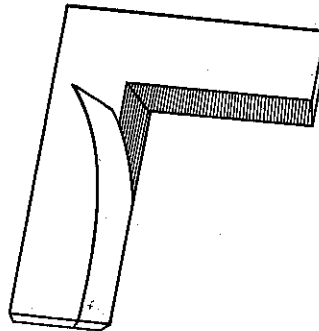
Place the fabric face down in the cutter. Make a series of cuts and be sure to press hard on the handle. Tighten the knurl screw well.

2. Cut and size one 8" x 10" (203 x 254mm) mat. Set guide at 2" (50mm). Cut mat. Check to make sure blade is not cutting through fabric. This cut is the opening and final mat size.

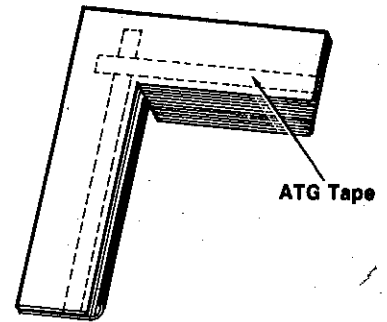
3. Set the guide at 3" (76mm). Extend blade depth to cut all the way through.



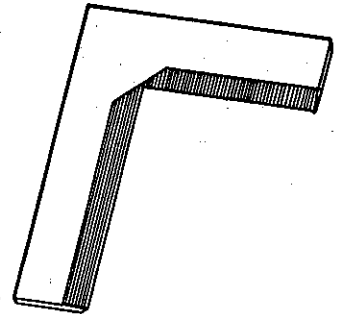
4. Carefully peel the mat board edge from the fabric, then, in each corner, cut the fabric diagonally starting about 1/8" (3mm) from the corner.



5. Fold fabric around the edge of the board and adhere it to the back with glue or ATG tape



6. The diagram shows the reverse side with the fabric wrapped and fastened in position. The edge is straight and smooth, just right for a professional job.

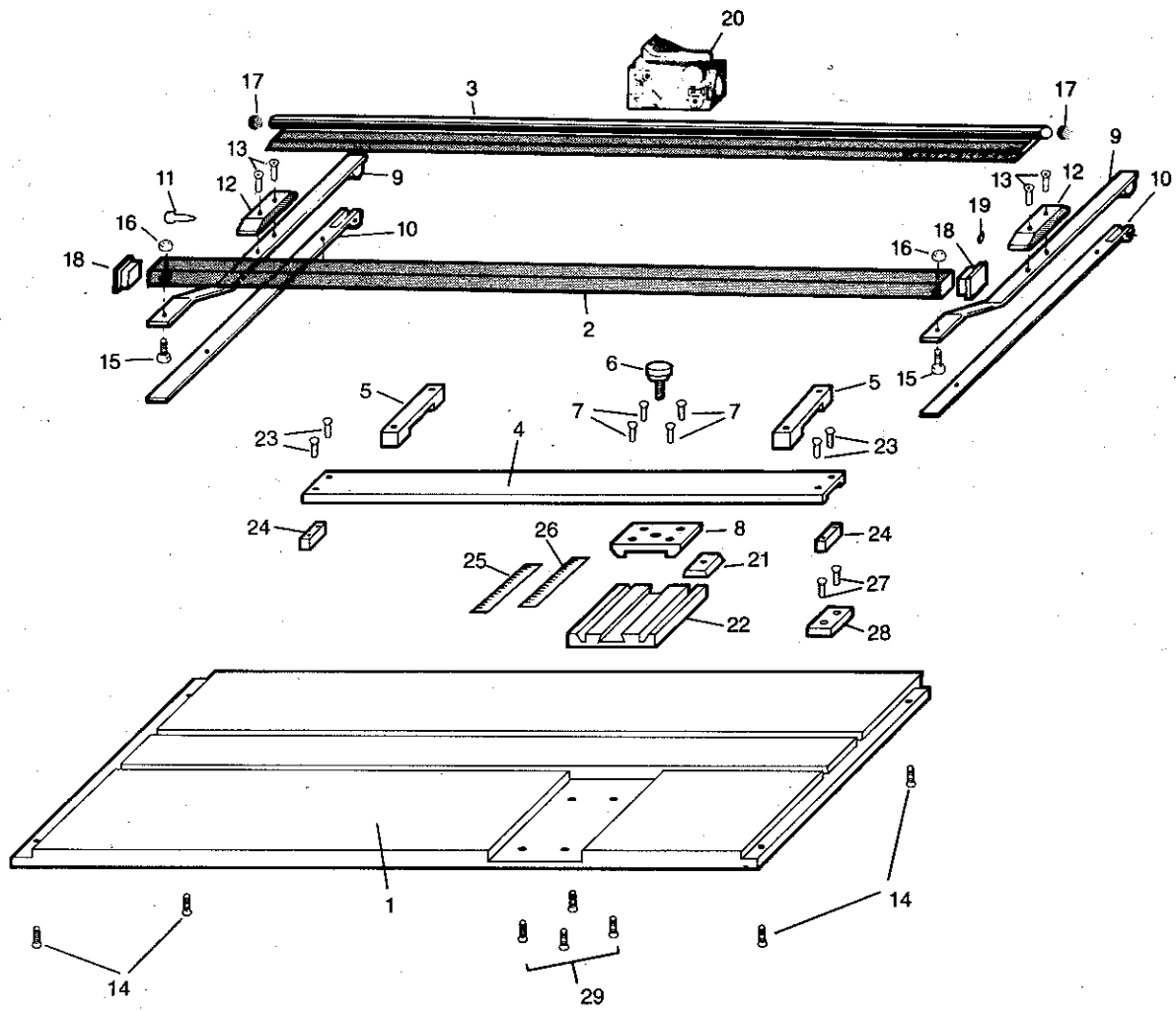


How to Cut Fabric-Covered Board and Wrap Edges

Trouble Shooting

Problem	Possible Causes	Solutions
"Hooked" bevel cuts (hook at beginning and/or end of cut).	<ul style="list-style-type: none"> • Slide block has excess wobble. • Blade protruding out too far from holder. • Dull or damaged blade. • "Jabbing" blade into mat board. 	<ul style="list-style-type: none"> • Adjust block to reduce play. • Adjust blade to proper depth. • Replace. • Insert blade into board smoothly.
Curved bevel cuts or depth of cut varies.	<ul style="list-style-type: none"> • Insufficient handle pressure. • Blade protruding out too far from holder. • Baseboard is bowing due to warped table. • Blade not being fully depressed. • Slip sheet is too narrow and/or too short or may be "ragged" from multiple cuts. 	<ul style="list-style-type: none"> • Apply only enough handle pressure to flatten bar/rod against mat. • Adjust blade to proper depth. • Make sure table surface is flat and extends the full length of the cutter. • Depress blade fully at beginning of cut and keep depressed during length of stroke cutting. • Use mat board slip sheet 6" wide x cutter capacity. Shift slip sheet on each cut and replace as it becomes ragged.
Ragged bevel cuts.	<ul style="list-style-type: none"> • Dull or damaged blade. • No slip sheet. • Over used slip sheet. • Wrong blade. 	<ul style="list-style-type: none"> • Replace blade. See blade replacement section for proper technique to prevent damage. • Use mat board slip sheet 6" (152mm) x capacity of cutter. • Replace with fresh slip sheet. • Use C&H or C&H Advantage Blades only.
Bevel blade cannot be secured tight. Slide block does not slide easily.	<ul style="list-style-type: none"> • Allen screws of blade holder plate too tight. • Dirty block and/or bar/rod. • Technique. • Block needs adjustment. • Blades out too far. 	<ul style="list-style-type: none"> • Loosen slightly. • Remove and clean. • Pull block straight back with finger pressure. Do not pull up with thumb under knurl screw. • Adjust block using technique described in block adjustment section. • Adjust blade depth.
Mat width borders not equal.	<ul style="list-style-type: none"> • Mat guide improperly adjusted. • Squaring arm on cutter. 	<ul style="list-style-type: none"> • Re-adjust. • Remove when using bevel cutter. • Tighten screw down on large mats.
V-groove cuts not even or ragged.	<ul style="list-style-type: none"> • Mat guide improperly adjusted. • No slip sheet. • Dull blade. 	<ul style="list-style-type: none"> • Re-adjust. • Use slip sheet and shift to new area on each cut. • Replace.
Mat board slipping under bar.	<ul style="list-style-type: none"> • Slip sheet too narrow. • Warped table. 	<ul style="list-style-type: none"> • Use 6" (152.4mm) wide slip sheet. • Get cutter on to flat surface.
Bar and rod slides back and forth on bar/rod blocks.	<ul style="list-style-type: none"> • Missing rubber space inside bar/rod blocks. 	<ul style="list-style-type: none"> • Replace.
Boards no cutting square with straight side cutter.	<ul style="list-style-type: none"> • Squaring arm out of adjustment. • Wobble in head. 	<ul style="list-style-type: none"> • Re-adjust. • Adjust.
Difficult to cut board with straight side cutter locked down.	<ul style="list-style-type: none"> • Lock-down feature not designed for cutting all board thicknesses. 	<ul style="list-style-type: none"> • Use lock-down feature for cutting regular thickness board. Do not lock down and use several cutting passes on thicker boards.
1991 Utility blade falls out of straight blade holder.	<ul style="list-style-type: none"> • Allen screws too loose. 	<ul style="list-style-type: none"> • Tighten allen screws.

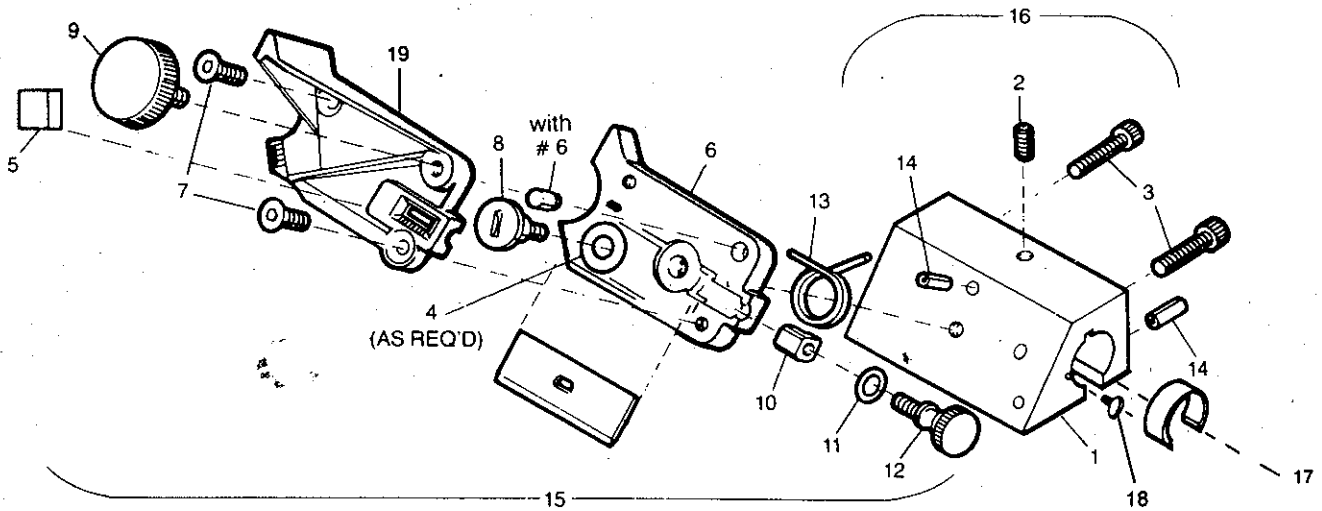
Trouble Shooting Guide



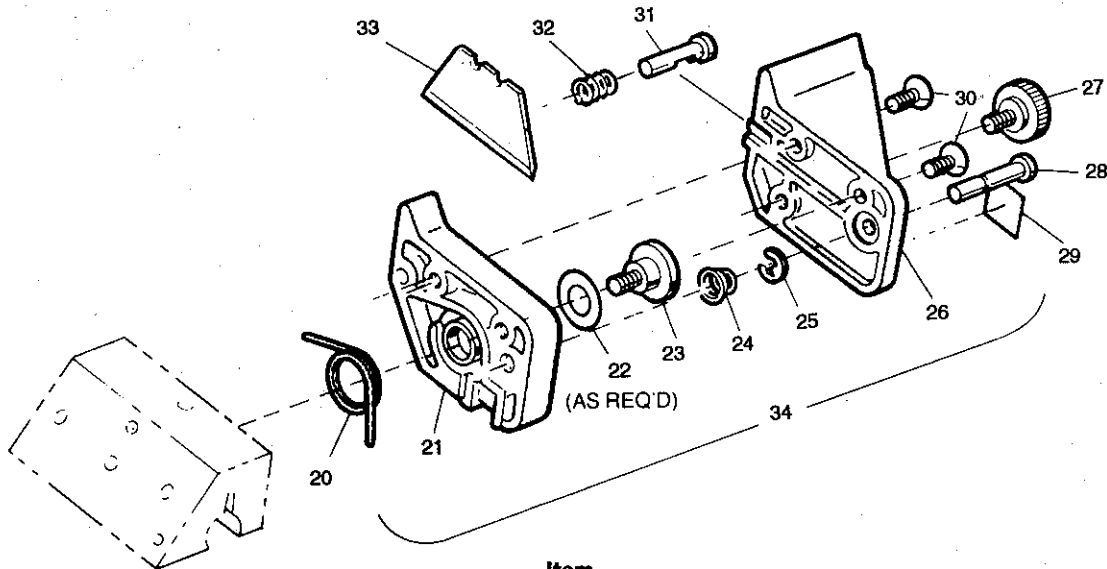
Item No.	Description	Part Number
1.	Baseboard - M40	M0441
	Baseboard - M48	M0437
	Baseboard - M60	M0467
2.	Handle - M40	4207
	Handle - M48	4208
	Handle - M60	4209
3.	Bar & Rod Assembly - M40	M0322
	Bar & Rod Assembly - M48	M0300
	Bar & Rod Assembly - M60	M0323
4.	Mat Guide Assembly - M40	M0442
	Mat Guide Assembly - M48	M0442
	Mat Guide Assembly - M60	M0468
5.	V-Groove Blocks	M0438
6.	Knob Assembly	M0447
7.	Screw But. Hd. Soc. 1/4-20 x 3/8" Lg.	5815
8.	Matguide Plate Insert	M0430
9.	Hinge Rail - Top	M0307
10.	Hinge Rail - Bottom	M0306
11.	Hinge Rail - Bolt	M0327
12.	Bar & Rod Block	M0308

Item No.	Description	Part Number
13.	Screw - Flt. Hd. Phillips 1/4-20 x 1/1/4" Lg.	5307
14.	Screw - Flt. Hd. Phillips 1/4-20 x 5/8" Lg.	5306
15.	Screw - Hex Head 1/4-20 x 5/8" Lg.	4055
16.	Nut - Self-Locking Hex 1/4-20	9568
17.	Rubber Bushing	M0310
18.	End Cap	9744
19.	Bumper Assembly	M0348
20.	Head Assembler (Block & Blade Holders) (See Blade Holder & Slide Block Components under Head Assembly Illustration)	M0340
21.	Matguide Lug	M0431
22.	Matguide Slide Plate	M0429
23.	Screw Phillips Hd. 1/4-20 x 1"	5306
24.	End Plate - Matguide	M0439
25.	Ruler with V-Groove Lines	M0471
26.	Ruler, 7 1/2"	M0324
27.	Screw, Fl. Hd. Ph. #8 x 5/8"	4951
28.	Material Stop	367
29.	Screw, Fl. Hd. 4-40 x 1/2"	M0451

C&H Mat Cutter Parts Lists



Item No.	Description	Part Number	Item No.	Description	Part Number
1.	Slide Block	N/A	11.	O-Ring 1/4" I.D.	5848
2.	Set Screw 1/4-20 x 1/4" Lg.	5016	12.	Thumb Screw + Blade Adjust	8875
3.	Screw #8-32 x 1/2" Lg., S. H. C., Black	M0318	13.	Torsion Spring	8879
4.	Shim Kit	4240	14.	Spring Pin - 5/32 Dia. x 7/16" Lg.	2720
5.	Caution Decal	4519	15.	Bevel Blade Holder Assembly (Includes: #4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15)	M0356
6.	Bevel Holder Bottom Plate Assembly (with pin)	M0349	16.	Slide Block Assembly	M0357
7.	Screw - Ft. Hd. Hex Soc. #10-24 x 1/2" Lg.	6777	17.	Self Lubricating Bearing (2 Required)	M0369
8.	Shoulder Screw	4158	18.	Bearing Retaining Screw	M0380
9.	Knob Assembly	8789	19.	Bevel Holder Top Plate	8861
10.	Nut - Blade Adjust	8874			



Item No.	Description	Part Number	Item No.	Description	Part Number
20.	Torsion Spring	8880	28.	Lock Pin	8873
21.	Bottom Plate	8867	29.	Caution Decal	4519
22.	Shim Kit	4240	30.	Screw - Ft. Hd. Hex Soc. #10-24 x 1/2" Lg.	6777
23.	Shoulder Screw	M0316	31.	Safety Button	4000
24.	Conical Spring	8894	32.	Compression Spring	7897
25.	Retaining Ring .145 I.D.	4001	33.	Blade (Stanley #1991 Type)	BLD1991
26.	Top Plate	8868	34.	Straight Blade Holder Assembly (Includes: 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32)	M0358
27.	Knob Assembly -- 3/8" Lg.	0589			

C&H Head Assembly Parts Lists

92.40
MO 369

GH ADVANTAGE™ PRO

East Coast
17 S. Middlesex Avenue
Cranbury, NJ 08512
(609) 395-5550
(800) 631-5414

West Coast
2210 E. Artesia Blvd.
Long Beach, CA 90805
(310) 422-2628
(800) 321-2934

C&H Technical Support
(800) 537-9311

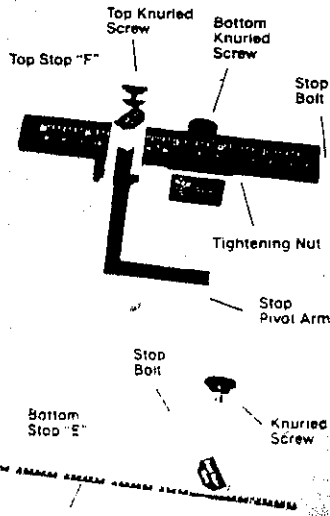
© 1993 Nielsen & Bainbridge, a division
of Esselte Letraset

The C&H Advantage Pro Straight Line
Model Series is Patent Pending.

CHOPSC

SUPPLEMENTAL OPERATING INSTRUCTIONS (CH60 & CH60A STOPS)

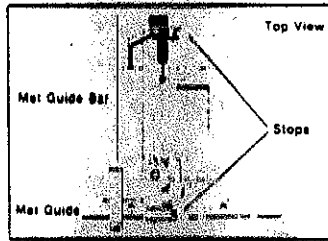
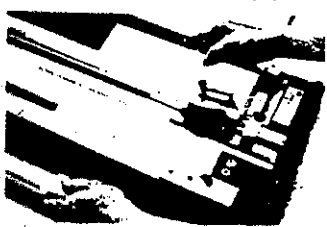
Cutting a Single-Opening Mat using the C&H CH60 Detachable Measuring Stops (Optional)



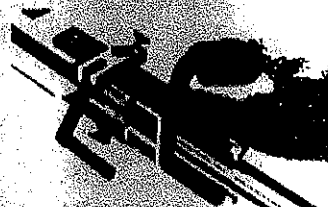
When adjusted properly the CH60 stops allow the user to cut mats without pencil marks and visually observing the start and stop of each cut. They eliminate overcuts and undercuts, producing precision cut mats whether cutting individual mats or production volume. (Example) Set the mat guide for 2" (50mm).



Lift handle and place a piece of squared mat board, colored side down, in the cutter in the corner formed by the mat guide and mat guide top plate.



Place the stops on the rod and set the top stop at 2" (50mm) by loosening the top knurled screw



(read all stops on the side with the arrow that says "read ruler here"). Position the top stop so that the arm rests against the top edge of the board.



Tighten in place with large knurled screw. Set the bottom stop at 2" (50mm) and tighten down hard with the knurled screw.



Slide the cutting block up until it touches the stop bolt.



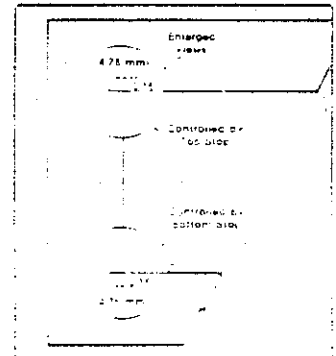
Depress the blade all the way into the mat board. Pull the slide block down until it hits the bottom stop.



(Don't hit the stops too hard as they may move.) Release blade holder. Repeat on opposite side and then reposition top stop only for other dimension of board and cut both sides.

Adjusting CH60 Stops

Besides these adjustments, it should be noted that unsquare boards, improper blade depth and inconsistent techniques can also cause cutting variables. To adjust and correct overcuts or undercuts, check each cut on the back of the board. The beginning of the cut (top stop) should start 3/16" (5mm) above the top intersecting horizontal cut. Likewise, the end of the cut (bottom stop) should stop 3/16" (5mm) below the bottom intersecting cut.



If not, adjustments are required. To correct overcuts on the top stop, loosen the nut on the stop bolt



and screw the bolt out (toward the mat). To correct undercuts screw the bolt in (away from the mat). The bottom stop can be adjusted the same way.



Tighten nuts after adjustment.

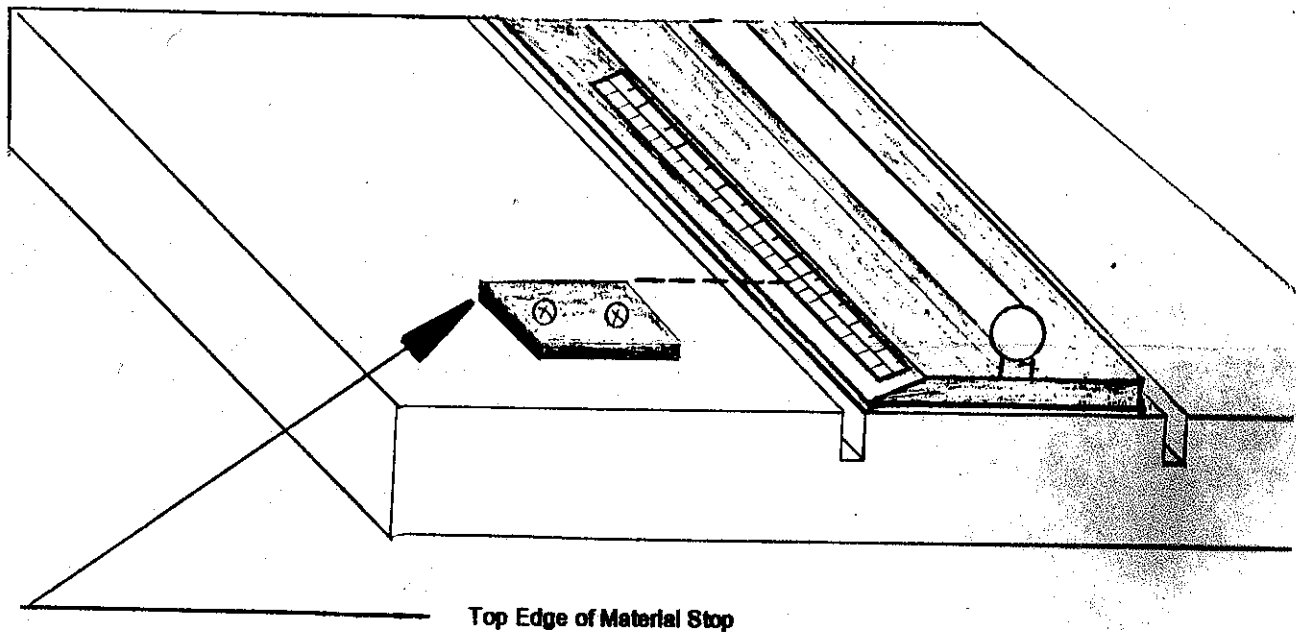
Cutting a Single-Opening Mat with CH60 Stops

Adjusting CH60 Stops

**C & H ADVANTAGE PRODUCTION STOPS
MODELS CH60 & CH60A
INSTRUCTION ADDENDUM**

RULER PLACEMENT:

Before using your Production Stops you will find it necessary to place the ruler in the appropriate position on the bar/rod assembly. Please refer to the procedure below to insure that proper positioning is achieved.



Take the ruler that came with the production stops and apply it on the beveled edge of the bar/rod assembly so that the top edge of the material stop is in line with the ruler at the 2 5/8" (6.7cm) increment. Make sure that the ruler is placed on the highest portion of the beveled edge of the bar so as not to interfere with the blade holder while cutting a mat (refer to diagram).

If you have any questions regarding the use and set-up of your C&H Equipment please contact a Service Representative at 800-537-9311.