

# Member Accreditation

## Picture Framing

G4

The Shed has all the necessary equipment and a large range of materials to suit almost any picture framing project.





The Shed provides items such as welding masks and gloves.

Members are required to provide their own footwear, eyewear, hearing protection and masks.

## Safety

This is a very high priority for our Shed members. There are some aspects that are mandatory under our insurance policies and some which the The Shed requires members to adhere to for everyone's benefit.

### The Shed Safety Induction

It is a requirement of attendance at The Shed that members have reviewed the Safety Induction Presentation

### Personal Protective Equipment

This is required in various forms depending upon the equipment being used or the activity being undertaken.

Protective eyewear is always mandatory when using machinery.

The Shed schedules a Coordinator and a First Aid Safety Officer for each day of attendance and their safety directions are final and must be adhered to.

## Framing

### FRAME

White or neutral colour

### GLASS

Conservation glass, clear, 99% UV protection

### MAT BOARD

100% cotton, ligning-free and acid free

### ARTWORK

### MOUNTING BOARD

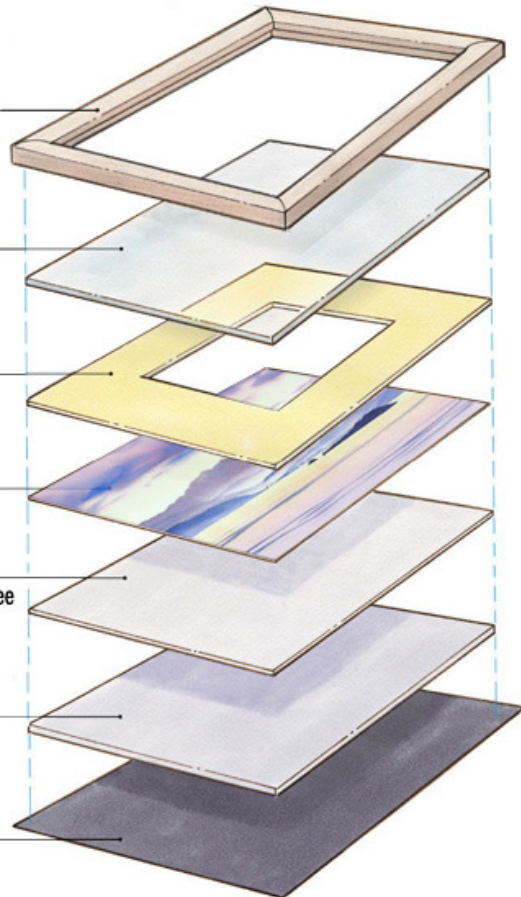
Conservation mat, 100% cotton, ligning-free and acid free

### BACKER BOARD

Archival foam core, ligning-free and acid free

### DUST COVER

Acid-free frame-backing paper



The key features of the Framing Equipment must be understood and be capably demonstrated during competency assessment. Competency will be assessed on both knowledge of key features and demonstrated safe operation of the Framing Equipment. This procedure must be read in conjunction with related equipment manuals and Framers must also have been accredited with the Shed's Induction Package.

Knowledge of Key features of all Picture Framing Equipment and associated Manuals must be understood and clearly evident during competency assessment. Safe operation of the Picture Framing Equipment must also be demonstrated.

This document applies to

- Mitre Cutter or Guillotine (Frame Molding Cutter - Chopper)
- Underpinner/V-nailer – Cassese CS299
- Mat/Mount (Backing board) Cutter – Logan 350-1 Compact Elite
- Glass cutting





## Key Features of the Mitre Cutter (Guillotine – Frame Molding Cutter)

The mitre cutter has two extremely sharp cutting blades positioned at 45 degrees to the right and left of the moulding longitudinal support-fence.

- The blades require regular checks and replacement when not sharp enough for cutting.
- Instructions as to how to replace the blades are contained in the operating manual located at the framing corner's work bench.
- The rabbet of the moulding being cut is supported by two adjustable rests. These must be set to the correct height when the back of the moulding is resting firmly on the worktable of the device.
- An adjustable foot pedal has been set at the appropriate height and is used to activate the cutting action of the blades. Small "bites" are taken to work the cut surface back to the required position. The machine is only suited to cutting picture framing moulding.



## Safety First

- Any small pieces of framing material near the blades should be removed using a push stick.
- Outmost care should be taken when replacing the cutting blades. This is only to be done by the Maintenance Coordinator.
- For guidelines on how to use the mitre cutter refer to the operating manual.

## Critical Safety Issues and Procedures for Mitre Cutter (Guillotine – Frame Mould Cutter)

The work area should be clean of dust and other obstacles, and should be left that way after use.

Light should be adequate to ensure clear vision of cutting measurements and workpiece.

Fingers should be kept away from the cutting blades at all times when cutting. These blades are very sharp.

The Perspex guards must be in place to help prevent finger exposure to the blades.

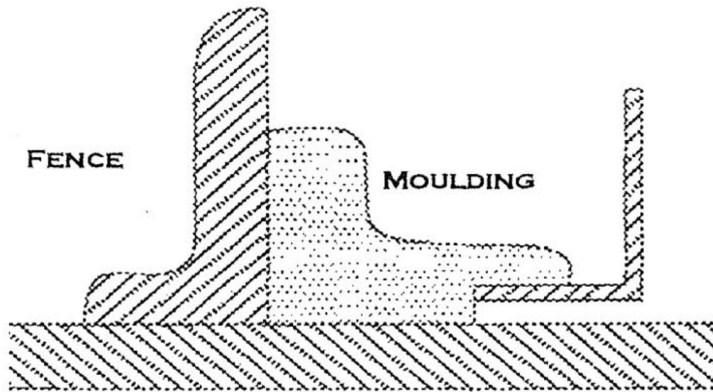
A height adjustable support stand is available for long lengths of moulding.

Care should be taken to keep the floor-positioned foot clear from under the pedal when it is activated.

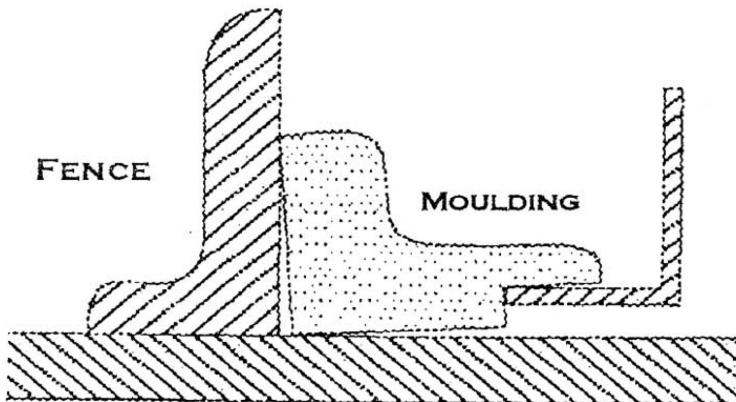
Only softer moulding timbers are to be cut on the machine.

## Using the Mitre Cutter

- Insert the moulding to be cut from the left-hand side of the machine so that the rabbet (if any), faces the support L-pieces. Keep the rear edge of the molding tight to the fences.
- Slide the support L-pieces under the rabbet and adjust the screws until the molding is correctly supported.
- Trim the righthand end of the molding.
- Insert the required length of the molding using the measuring scale.
- Run the sliding stop along until it meets the molding and tighten it there.
- Cut the molding and remove the cut end
- Slide the molding to the right again until it meets the stop and cut the second length. It is vital that both sides are the same length.



Correct support

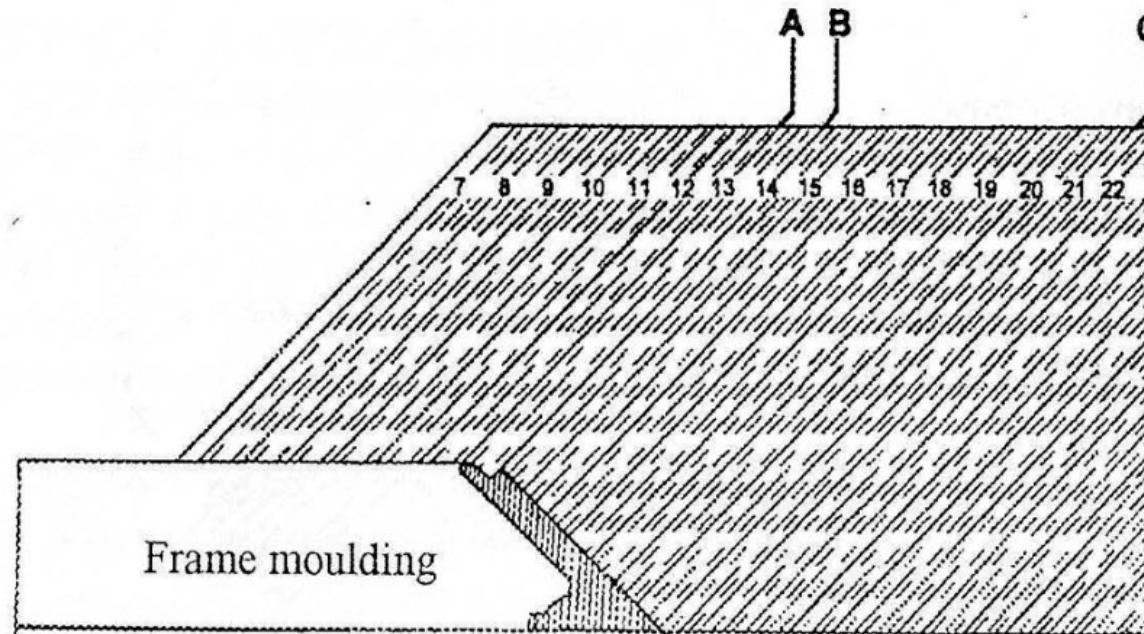


Incorrect support

## Using the Scale

A= Inner Measurement      B= Rabbet Measurement  
C= Outer Measurement

Typically, you will want to cut the frame according to the rabbet measurement as this is the size of the mat and the glass allowing several mm extra for expansion fit.



The bed of the cutter has markings that can be used to set up using the required inner measurement, rabbet measurement or the outer measurement





**Cassese 299 Underpinner**

2/6/2023

## **Key Features of Underpinner/V-nailer – Cassese 299**

The Cassese 299 is an air operated underpinner (v-nailer) that is really easy to use. Its various patented technical features makes it one of the best underpinners on the market.

The CS 299 can join high and wide mouldings while ensuring a perfect joining quality thanks to the Ultratm clamps system.

The CS299 uses Cassese cartridge wedges allowing you to load the machine faster. The Underpinner/V-nailer can insert into the backs of frame corners, a variety of shapes and sizes of V-nails (wedges). The V-nails used depends on the height and shape of the mouldings. These V nails secure frame moulding corners.

It is usual to insert at least two V nails in each corner joint however very small frame mouldings may only accommodate one nail.





Typical V Nail

## Critical Safety Issues for Underpinner/V-nailer

- The work area should be clean of dust and other obstacles, and be left that way after work has been completed.
- Light should be adequate to ensure clear vision of the alignment and mating of corners of the moulding held in the machine.
- Fingers should be kept away from the V-nail (wedge) area at all times when underpinning.

## TECHNICAL SPECIFICATIONS OF CS 299

Minimum moulding width : 5mm (3/16") - maximum width : 130 mm (5 1/4")

Minimum moulding height : 7 mm (1/4")- maximum height : 90 mm (3 3/4")

Minimum dimensions of a frame : 85 mm x 85 mm visibly (3 1/2" x 3 1/2").

Wedge sizes in cartridges of 275 pieces : 5, 7, 10, 12 and 15 mm.

Two wedge types : for soft and for hardwoods.

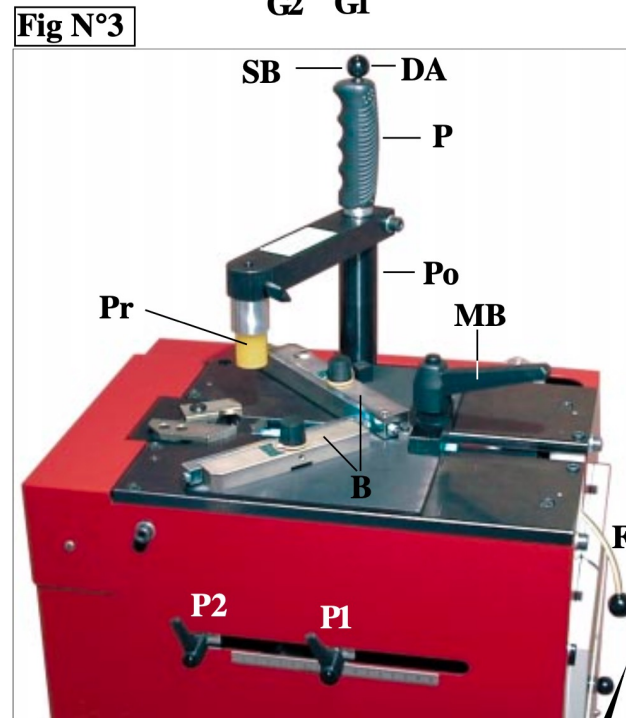
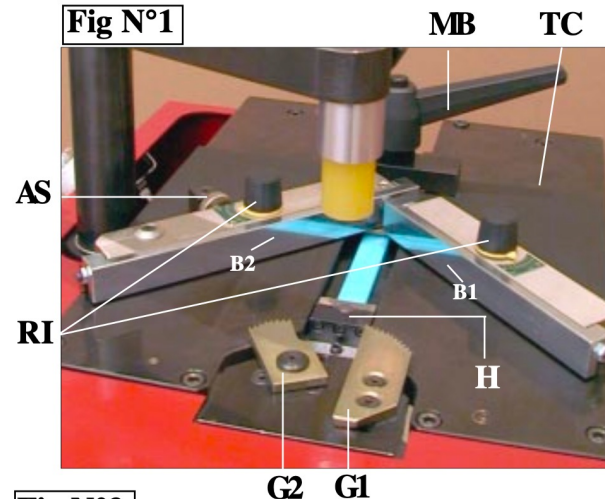
Machine weight : 70 kg (155 lbs)

Dimensions : W 850 mm x L 490 mm (without optional rotating table)x H 1130 mm

Pneumatic supply : compressed air 7 bar (100 psi),

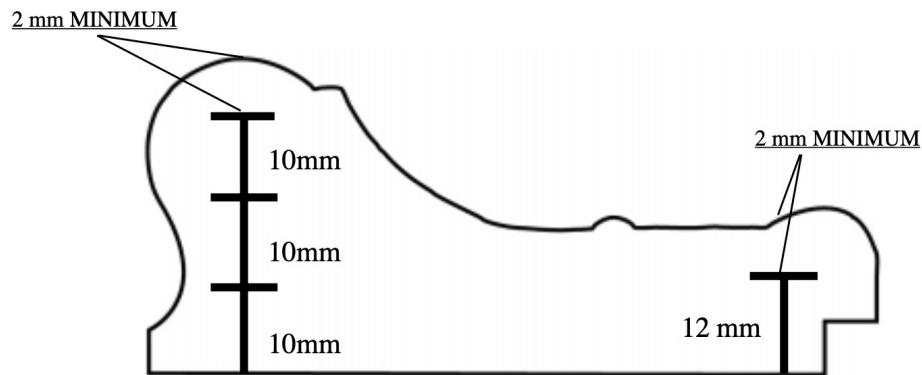
Average consumption : 5 litres per cycle.

Air supply : air pressure reducing valve + manometer, connecting pipe, inside diameter 8mm..



ANGLE ADJUSTMENT SCREW	AS
BACKFENCE	B1
BACKFENCE	B2
STAPLING BUTTON	SB
LOCK BUTTON FOR STAPLING POSITION	DA
WIRE FOR WEDGE PUSHING SPRING	F
CLAMPS	G1 G2
WEDGE DISTRIBUTOR	H
SLIDING TABLE	TC
BLOCKING LEVER	MB
BLOCKING LEVER FOR STAPLING POSITION	P1
BLOCKING LEVER FOR 2 <sup>nd</sup> STAPLING POSITION	P2
STAPLING BUTTON HANDLE	P
CLAMP POSITION BUTTON	PG
TOP PRESSER BRACKET	Po
TOP PRESSER	Pr
FENCES INCLINATION	
ANGLE ADJUSTMENT	RI
SLIDING TABLE	TC

**CS 299 & M Ultra**  
PNEUMATIC FRAME  
ASSEMBLING MACHINES



## Wedge Selection

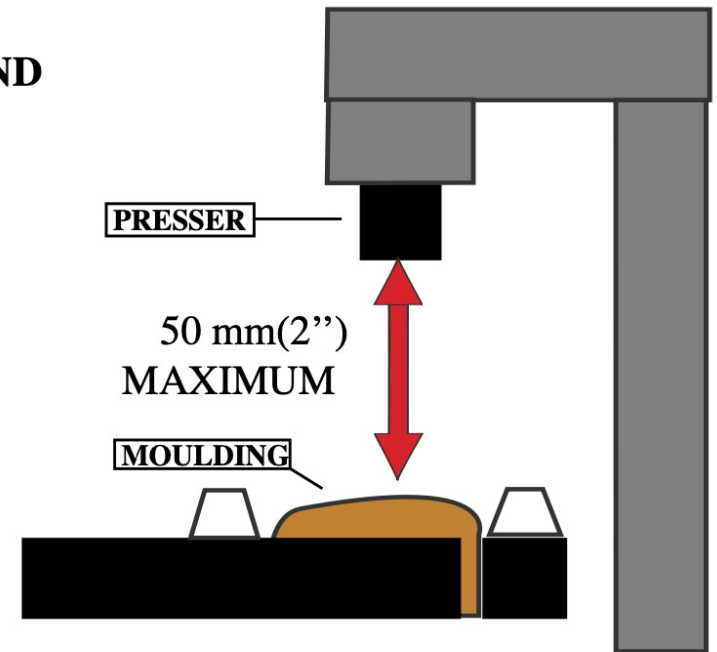
The CS 299 is designed to join mouldings in one or two places (positions) without limitation of the number of wedges in any of those places. The selection depends on the width and thickness of the moulding to join. If needed, additional positions can be inserted between these two positions .

**As a general rule a MINIMUM 2 mm clearance (less than 1/8") above the wedges shall be respected.**

**Same sized wedges can be stacked** in order to avoid to have to change the cartridge size when joining frames with different thickness.

## SELECTION OF A TOP PRESSER END

Check that the run between the top of the moulding and the bottom of the presser is not more than **50 mm (2")**. If the distance is bigger than 50mm, use a longer rubber endpiece.

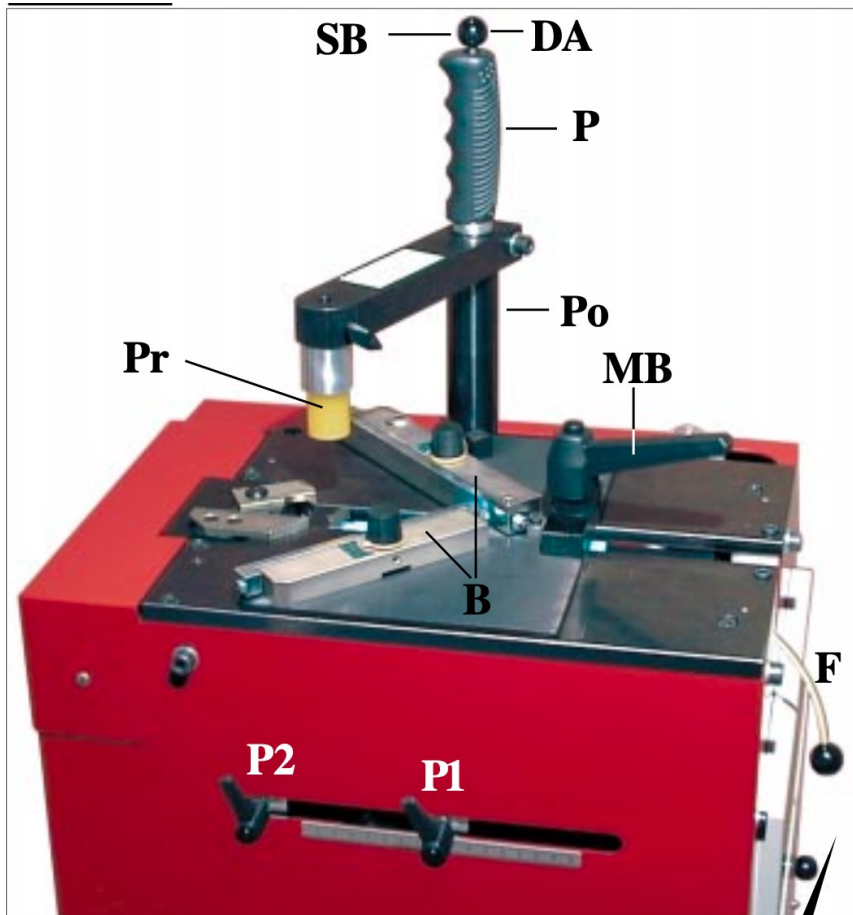


If the distance is bigger, use a longer top presser end. For very tall mouldings the round rubber tips can be also inserted into the top presser bracket without their support to gain capacity in height.

<b>BLACK TRIANGLE PRESSER</b>	<b>HARD WOOD</b>	Fixing in holder with a 2.5 mm Allen key
<b>WHITE TRIANGLE PRESSER</b>	<b>SOFT WOOD</b>	
<b>GREEN RUBBER TIPS</b>	<b>HARD WOOD</b>	<b>30 and 45 mm</b>
<b>YELLOW RUBBER TIPS</b>	<b>SOFT WOOD</b>	<b>30 and 45 mm</b>

Triangle top pressers are good for flat mouldings or for mouldings presenting a flat or horizontal area to come down on. The round rubber ends are good for complicated forms (uphill, downhill or reverse mouldings).





**WORK POSITION**

## SETTING AND STORING THE STAPLING POSITIONS

Unlock the stapling position lock handles P1, P2

**For the stapling position close to the outside of the frame :**

Press the button DA to unlock and slide the top presser bracket Po with your right hand as far as the stapling position selected has been reached.

The wedge distributor H (fig1) moves at the same time underneath of the moulding and its wedge exit slot shows you exactly the position reached.

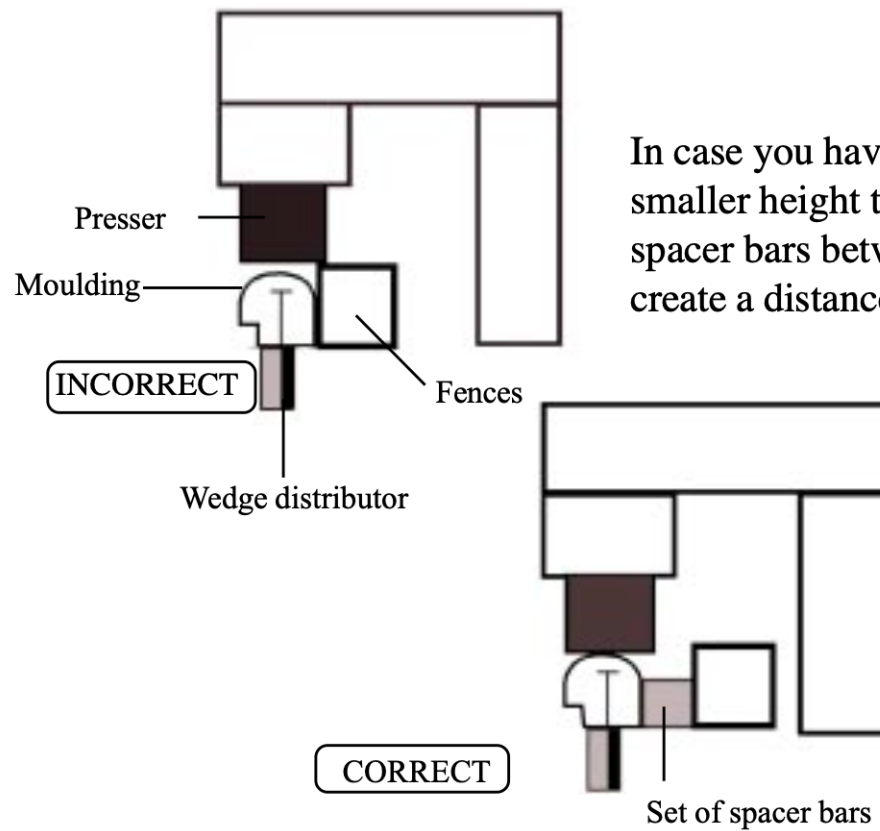
Holding the bracket in position with your right hand, slide with your left hand the handle P1 forward in stop position and tighten it.

**For the stapling position close to the inside of the frame :**

Press the button DA again and slide the top presser bracket Po forward until it reaches the position chosen for the insertion of the wedge(s) inner frame side.

Release now the button DA to lock the position and slide the handle P2 (fig3, p1) towards yourself until it reaches the stapling position chosen and tighten it.

## USING THE SET OF SPACER BARS

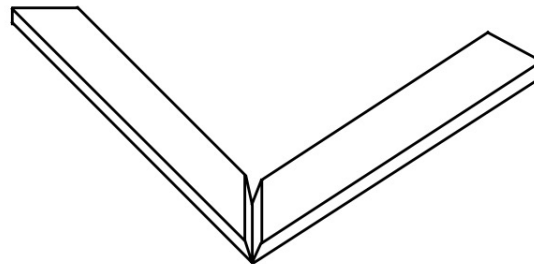
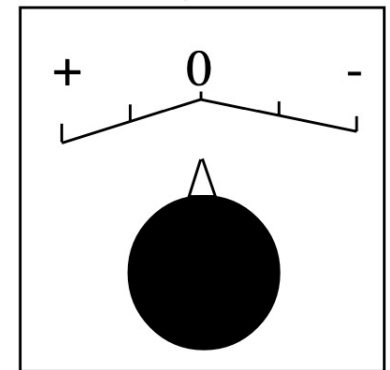


In case you have to join small mouldings with a smaller height than the fences, you must put the spacer bars between the mouldings and the fences to create a distance.

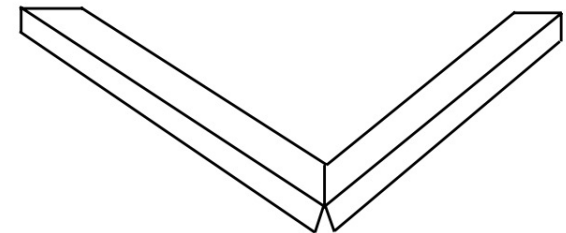
## ADJUSTMENT OF THE INCLINATION OF THE FENCES

SETTING SCREW FOR THE  
ASSEMBLY ANGLE

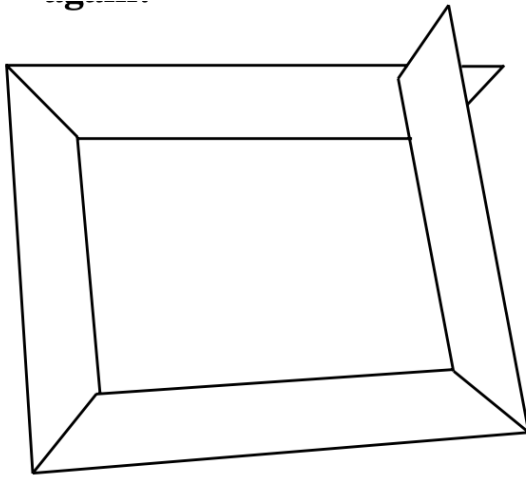
ADJUSTMENT BUTTON FOR  
THE INCLINATION OF THE FENCES



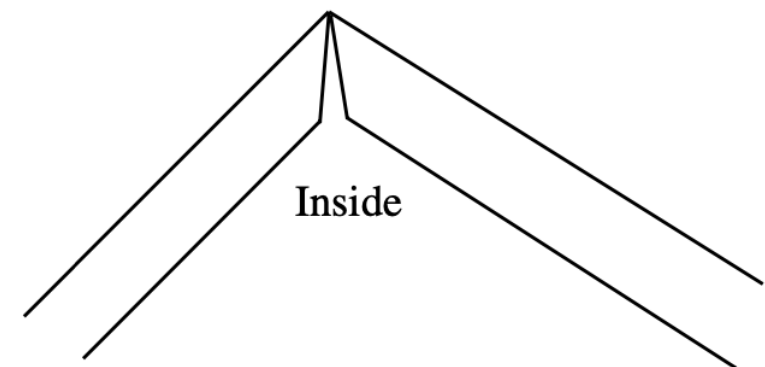
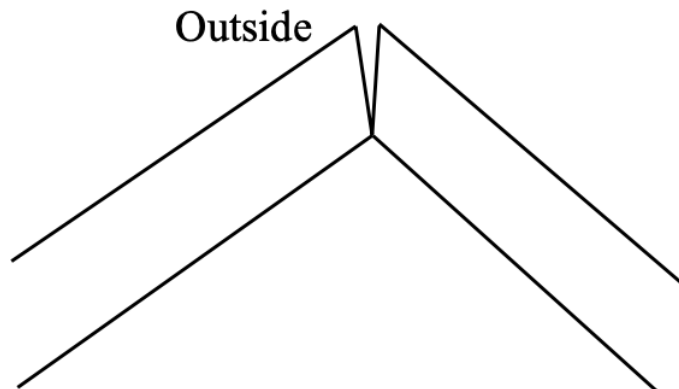
If the corner has an opening on top, turn the two adjustment buttons (RI) an identical value to the MINUS (-) (fig 1 p1) until the opening disappears when mouldings are clamped.



If the corner has an opening underneath, turn the same two adjustment buttons (RI) an identical value to the PLUS (+) (fig 1 p1) until the opening disappears when mouldings are clamped.



Less than 45 never going to work



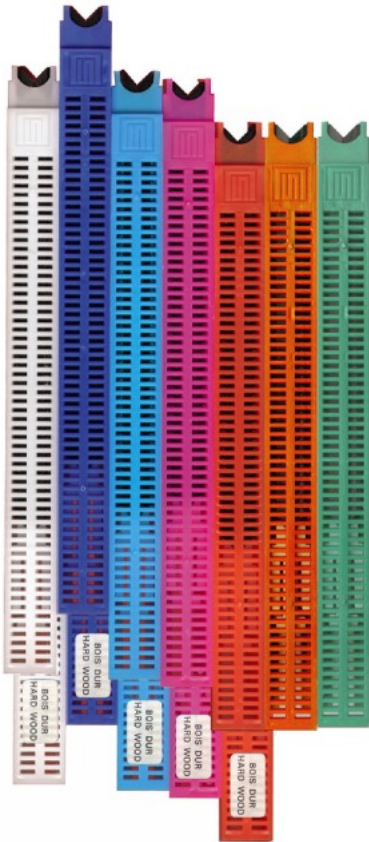
## ADJUSTMENT OF THE ASSEMBLY ANGLE

If several cutting machines are being used in your production or if you receive your mouldings already cut by your suppliers (chop service), the angles of the mouldings will be slightly different from one cutting machine to the other.

The joining angle of your CS 299 can be adapted to find precisely the cutting angle of your cutting machine.

If the corner is open towards outside, screw in the adjustment screw for the assembly angle AS (fig 1) to correct the fault and check the quality of the angle by clamping the corner again.





Cassese colour coded wedges

## ASSEMBLY OF YOUR FRAME

The joining is performed by using metal wedges, a Cassese invention, designed to ensure very tight corners.

Five sizes are available : 5, 7, 10, 12 and 15 mm. They come in throw-away cartridges that are colour-coded per size for easy identification.

Cartridge wedges exist in two versions : **NORMAL** for soft and normal timbers and **HW** for very hard timbers. These hardwood wedges are to be used only on hardwoods. Your CS 299 machine is designed to use all sizes of Cassese cartridges without having to change any parts on the machine or having to adjust anything.

## LOADING AND CHANGING THE WEDGE CARTRIDGE ON MACHINE

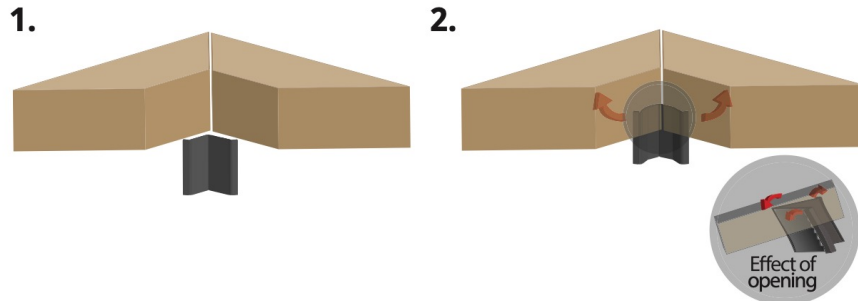
Pull the wire with ball of the wedge pusher spring **F** (fig.3) fully out. If there is already a cartridge in the machine, holding the wire pulled out, remove it by simply sliding out the cartridge. Holding the wire pulled out, put a new cartridge on machine and pay attention that it is fully inserted in the wedge distributor's window. Release gently the wire with ball of the wedge pusher spring **F**.

*WHEN INSERTING A WEDGE WHILE PRESSING THE FOOT PEDAL FULLY DOWN, IT IS IMPORTANT NOT TO RELEASE THE FOOT PEDAL TOO QUICKLY.*

*HOLD FOR A COUPLE OF SECONDS, LEAVING TO THE MACHINE THE TIME MECHANICALLY NEEDED TO INSERT THE WEDGE FULLY IN AND TO FINISH THE CYCLE*

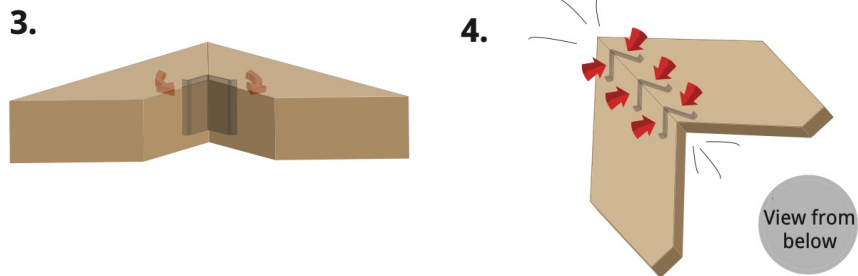
## **JOINING THE FRAME**

- 1- After adjusting the sliding table, selecting and setting the stapling positions, selecting the best suited top presser end, (see chapters)
- 2- Put the first moulding in front of the fence B1 and push it so that its mitre end reaches the other fence B2. Holding it so, put the second moulding chop against fence B2 and slide it until it reaches the first moulding.
- 3- Holding the mouldings in place, press on the foot pedal to clamp the mouldings and to check visually the quality of your corner. (If needed, carry out the adjustment of the assembly angle and the inclination angle of the fences (see those chapters) to reach the best quality corner, before inserting wedges.)



Insertion of the  
wedges

Opening of the  
wedges



Action of the  
shape memory

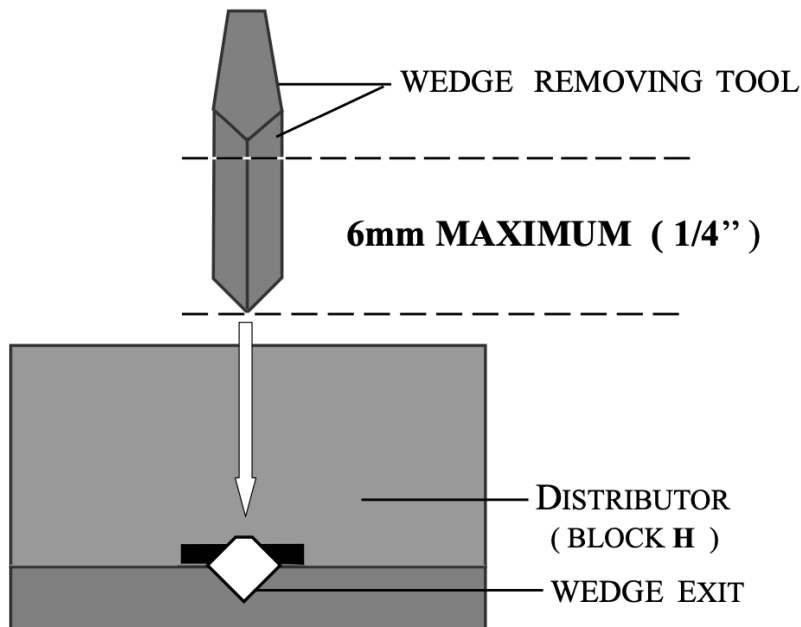
Effect of  
tightening

4- If the corner is satisfactory, maintain the foot pedal pressed fully down.

5- Slide the top presser bracket to one of the stapling positions chosen and press the stapling button DA to insert the first wedge. **Keep the stapling button pushed until the end of the cycle.**

6- If a second wedge must be inserted and stacked in the same position, holding the bracket firmly in position by its handle, release the stapling button and push it once again. Keep the button pressed every time until the end of the cycle.

7- Slide the top presser bracket to the next stapling position and repeat point 5 above.



If the hammer and wedge both jam call a coordinator. This requires disassembly

## **BEFORE ANY MAINTENANCE INTERVENTION, CLOSE THE AIR VALVE OF THE MACHINE**

### **1) LUBRICATION**

Periodically, remove the wedge distributor (block H) and clean it (by air gun) without dismounting it. It is recommended to lubricate the hammer (driver blade) periodically. To do so, remove the wedge distributor (block **H**) and put a small quantity of grease (a tube of grease is with accessories of the machine) in the bottom hole of the wedge distributor. The hammer will be lubricated every time it crosses the wedge distributor.

### **2) CLEARING OF A WEDGE STUCK IN THE WEDGE DISTRIBUTOR**

If you release the stapling button during the cycle or if you lift the top presser bracket accidentally, a wedge may be half engaged in the wedge distributor. In this case,

- Close the air valve.
- Try to remove the cartridge that is in position. If it resists, use the wedge removal tool to push down the wedge back in the cartridge.
- Pay attention not to penetrate the tool more than 6mm (1/4") into the wedge distributor.
- In case of the hammer (driver blade) jamming with a wedge in the wedge distributor, see the following section (3).





# Mat Cutting

Acute vision is needed when making accurate measurements and cuts, hence persons who have had a driver's licence renewal declined because of vision failure or others with poor eyesight, should not operate the Framing Equipment.

## **Key Features of Mat/Mount (Backing board) Cutter – Logan 350-1**

The mount/mat cutter has two cutters

- a vertical mat cutter, and
- a bevel (45 Degrees) cutter.

Both incorporate a very sharp blade which requires regular checks and replacement if not sharp enough for cutting.

Various 'stops' are used to accurately gauge cut lengths.

'Outside' mat dimensions are vertically cut first then, after removal of the vertical blade, the inside bevelled cuts are made to enable removal of the inner section.



## **Critical Safety Issues and Procedures for Mat/Mount (Backing board) Cutting**

- The work area should be clean of dust and other obstacles and should be left that way at completion of work.
- Framers should have clean hands prior to handling mat or backing board.
- Light should be adequate to ensure clear vision of markings and measurements.
- Fingers should be kept away from the cutting blades as they are extremely sharp.
- Utmost care should be taken when replacing the cutting blade.
- For guidelines on how to use the mount/mat cutter refer to the operating manual or the video link below.
- Replace all items in their designated storage
- Mats are cut with the colour side down

<https://www.logangraphic.com/learning-center/video-tutorials/index.php>



# Glass Cutting

## Key Features of Glass cutting

- When cutting glass, never go over a score twice. Deeper Is Not Better!
- Practice cutting on scrap glass first before cutting important glass to the exact size.
- Take the cutter, dip it into a cap of oil, if not using a self-lubricating cutter (ours is), and grip it as if it was a pencil before scoring by drawing a line across your glass from the top edge. Glass is cut in a top to bottom direction. Wipe away the oil smear to see the score line. If you cannot see it, you need to apply more pressure, but a new cutting location is first required.
- Keep the same pressure on the cutter throughout scoring.
- Make sure your glass cutter firmly drops off the edge and onto the cover of your glass cutting table.
- Assuming you can now see an unbroken line, you can break the glass by placing a thin timber packing strip under the last centimetre of the cut before pressing down on the waste side.



Wearing gloves is highly recommended

## **Critical Safety Issues of Handling Glass and Glass Cutting .**

- The work area must be clean with a surface that will not scratch the glass.
- Handling and transport of glass to the work area should be done in a vertical position, and it is advisable to have two people in attendance. These conditions especially apply for larger panes.
- Wearing of gloves, as well as safety or solid shoes, is highly recommended when handling and cutting glass.

### **Wearing of safety glasses is mandatory.**

- Beware of all surfaces in the glass cutting area which are likely to be covered with tiny glass fragments.
- Handle all glass edges with extreme care. They are extremely sharp before grinding and/or polishing.
- Make sure all glass fragments etc are completely cleaned up and safely disposed of when finished.



## On Completion

- Ensure that on completion of your framing activity the area is thoroughly cleaned, especially of glass and glass fragments.
- Off-cuts of glass, frame, mat and backing board must be appropriately disposed of.



You now understand the process of framing an image using our facilities. Take the time to also look at the Picture Framing- Design tutorial to assist you in achieving the look that you are seeking.