



1. Carif's famous patented hydraulic system. This lever sets the speed of the bow descent
2. Carif's famous patented hydraulic system. This knurled knob sets the pressure of the bow descent. If you wind this all the way out you can easily stall the bow descent with your hand. If you wind it all the way in, it will take much more effort. This excellent feature allows the saw to cut its way through the material; not forcing the bow down which puts unwanted stress on the band. You will see this working when you cut a solid round section. At the top of the cut there are fewer teeth in contact so the saw can cut this part fast. In the middle many more teeth are in contact so the saw will slow the descent to allow for the extra volume of material to be cut. Towards the bottom the bow will accelerate again as less material is being removed.
3. Hydraulic clamping of the vice. The vice will automatically close when the operator presses the green start button on the control box.
4. The bottom plate of the vice has been deliberately fabricated out of simple plate. This makes refurbishment of the vice a very simple task and does not require hugely expensive special purpose cast parts. This plate can be flipped over allowing many years of cutting before you even need to consider making new plates but certainly a very good feature for the unforeseen accidents.
5. The blade is held square by tungsten guides. Which are easily replaced and a standard stock line at Leabourn & Rose. These guides are the only wear points on the Carif machine. You will also note that the Carif design delivers coolant direct to these guides. This allows three benefits. i) The blade is cooled immediately before and immediately after the cut. ii) The coolant washes the swarf off the blade immediately after the cut and again immediately before the band enters the cut. iii) The coolant provides lubrication for the band passing through the tungsten guides.
6. The front wheel of the Carif sits in a dovetail guide. This allows the front pulley to move in or out to allow for the small variations in the band length as part of the joining process. Because the front guide can slide, the band, no matter what length, will always be put under the same tension.
7. Changing the band on a Carif is very simple. Simply loosen the nut on the end of this shaft to release the band from tension. When the new band is in place just retighten the nut until the black mark is in the centre of the green mark. Simple. This method means the band will never be over tightened or too loose.
8. The Carif bow is a one-piece cast aluminium body with numerous rib sections. This makes the bow extremely rigid, far stronger than a fabricated bow.
9. The addition of a coolant hose allows the operator to direct the coolant to the cut.
10. The Carif is a hydraulic downfeed machine. This cylinder is for the descent of the bow. Once the operator presses the green start button the work will be hydraulically clamped. Then the bow will descend through the Carif patented hydraulic system (Described in points 1 & 2) and the coolant will be turned on. Once the cut is finished the band will stop rotating and the coolant will stop. The saw will then return to its up position then the clamp will be released. Hydraulics are run off the main motor saving space and complication.
11. The vice can slide side to side on this rail allowing the vice to be positioned just beside the band for maximum rigidity. Without this feature the saw would not be able to mitre in both directions.
12. The Carif bandsaw can mitre cut in both directions. The saw can pivot to 60 degrees in the positive direction and 45 degrees negative. Clamped by a single nut and turning on a large bearing the bow is easy to adjust. Stops can be placed for quick set up of common angles. When mitre cutting the reference point of the bow does not change. This means if you have a measuring device set up the measurements will hold true no matter what angle the saw is cutting.
Note: Carif 450 saw shown in photograph, other models may vary slightly.