Ö Sima

- (ES) MANUAL DE INSTRUCCIONES ORIGINAL
- (GB) ORIGINAL USER GUIDE
- (FR) MANUEL ORIGINAL D'UTILISATION

PERLANATO 200 PERLANATO 250



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1. GENERAL INFORMATION.

WARNING: Please read and understand perfectly the present instruction before using the machine.

SIMA S.A. thanks you for your trust in our products and for purchasing the TABLE SAW.

This manual provides you with the necessary instructions to start, use, maintain and in your case, repair of the present machine. All aspects as far as the safety and health of the users is concerned have been stated. Respecting all instructions and recommendations assures safety and low maintenance. As such, reading this manual carefully is compulsory for any person responsible for the use, maintenance or repair of this machine.

As such, reading this manual carefully is compulsory for any person responsible for the use, maintenance or repair of this machine.

It is recommended to have always this manual in an easily accessible place where the machine is being used.

2. GENERAL DESCRIPTION OF THE MACHINE.

Table saws are designed and manufactured to be used at masonry building sites to cut stones and other construction materials, mineral and compounds with at least one bearing side (tile, terrazzo, brick, marble, granite, concrete or ceramics shingle, stoneware... The cutting tool is a diamond disk powered by an electric motor and water cooled by a closed-circuit pump. The progress of the disk is done manually by moving the cutting head in the direction of the material to be cut. Table saws are manufactured of high quality materials.

Any use other than the machine has been designed for is considered inappropriate and can be dangerous; therefore, it is expressly prohibited.

- Table saws are designed for a tiller who needs a very light and easy to move machine.
- The cutting head inclinable up to 45 degrees can make mitering cutting.
- This machine has been designed and manufactured to cut with a water cooled diamond BLADE. The cooling is carried out by a closed-circuit electric pump with a constant water flow.
- The electric pump with a high impedance winding avoids its burning in normal conditions of use and certainly that it is always covered with water.
- As the motive group embodies an electric motor to move the cutting BLADE.
- The group engine or cutting head slides through bearings across the bridge, entirely manufactured from reinforced aluminium.
- The machine is protected with a screen that avoids the projection of water in the direction of the cut towards the back of the machine.
- The frame of the machine is painted with a highly resistant epoxy polyester paint that protects the frame from corrosion.
- Both models have foldable legs to facilitate their transport.
- The electrical components of this machine comply with EU normatives.
- All motor bearings are mounted with a degree of sealing to ensure long life to its elements
- This machine model is built according to EU directives.

2.1 PICTOGRAMS.

Pictograms included in the machine entail the following:



- USE SAFETY BOOTS
- USE HELMET AND EYE AND AUDITIVE PROTECTION
- READ INSTRUCTIONSMANUAL
- USE SAFETY GLOVES.
- SOUND POWER LEVEL ISSUED BY THE MACHINE.



Machine connected to 230V.

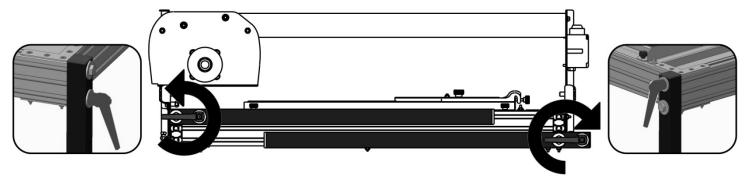


Cutting angle adjustment

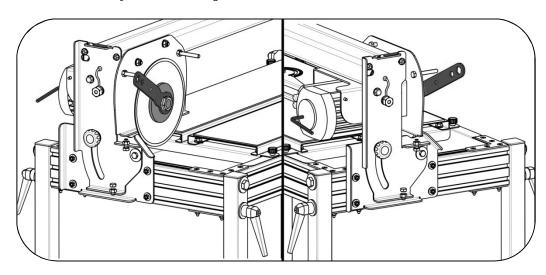
3. ASSEMBLY INSTRUCTIONS.

Once unpacked, the machine is delivered in individual packing, containing in its interior the necessary accessories for its correct mounting.

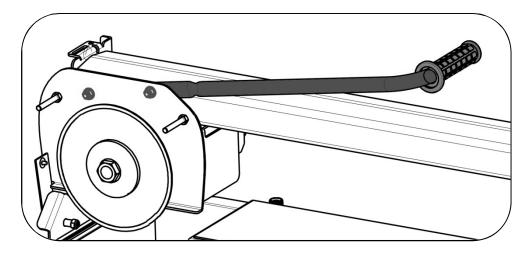
1. Lift the machine and fix its legs using the cranks threaded to the chassis.



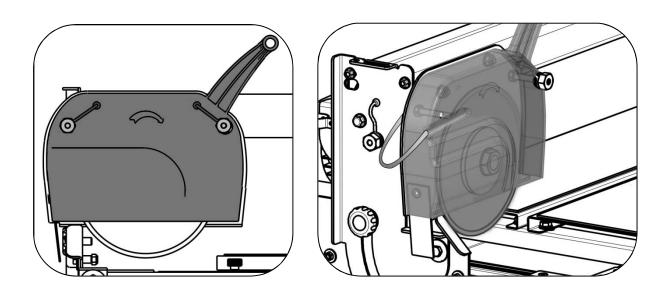
2. Mount the disk with the keys provided. Insert the hex wrench into the engine nut and block the rotation of the motor shaft by inserting the Allen key into its housing at the top of the fan. Make sure the flanges and disc are correctly mounted and tightened.



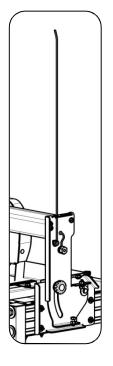
3. If your machine model has a handle extension, mount it with its screws.

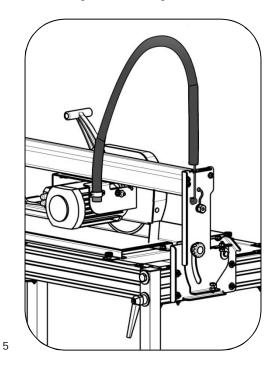


4. Place the blade guard and secure it with nuts. Insert the cooling tube at the rear input of the blade guard.

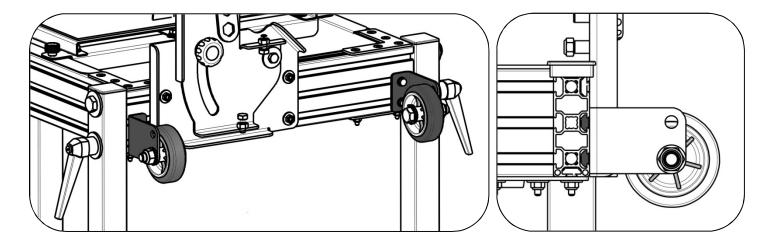


5. Mount the installation guide with its screw and insert the ringed tube through it.

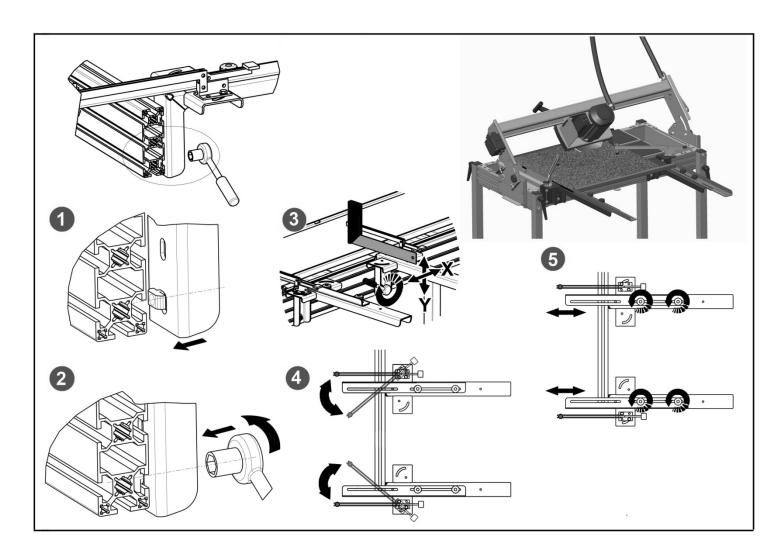




6. If your machine has transport wheels, mount them at the rear part of the machine.



7. The supplement brackets are designed to withstand materials protruding laterally. They have adjustable clamps in rotation and height for different thicknesses of materials, which function is the ensure a good hold of the material to be cut. The adjustable stop is used to prevent the piece to cut from moving laterally when cut at 45 °.

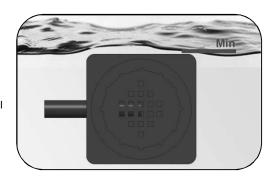


3.1 WATER LEVEL FOR THE PUMP

Fill the tray to the level sufficient to cover the pump completely.

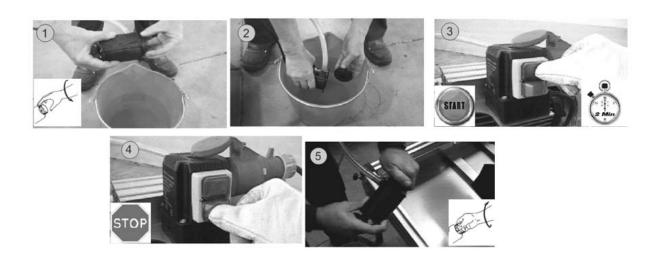


WARNING: If the water pump is not completely covered, it will get filled with air and be burnt within a short period of time.





WARNING: Do not forget to wash the pump at the end of each day. To do this, unscrew the circular battery, immerse the pump in a bucket of clean water, plug the machine and circulate the water until fork clean water for cooling, disconnect the machine and screw back the cap to the pump.

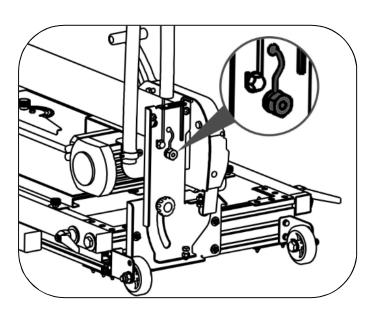


3.2 BLOCKING CUTTING HEAD

When it is necessary to move the machine within the workplace once it has been unpacked, it is recommended to empty the water from the tray before moving the machine to avoid possible splatter.



WARNING: It is also necessary to block the cutting head through its device to avoid any incidental gliding that may damage it or damage other elements.



4. ELECTRICAL PLUGGING AND ADJUSTING THE DISK ROTATION SENSE

Upon receipt of the machine, make sure the network electrical tension is adequate before plugging the machine. The electrical tension is to be found on the voltage indication next to the switch of the machine.



WARNING: Never plug the machine to electricity, in case the network power tension is not the adequate as the engine would undergo irreparable damages.







Once you have realized the previous steps it is necessary to check and adjust the rotation of the motor axis correctly, you have to plug the machine to the electricity and start it up, watching the rotation direction that must be clockwise.

If necessary, you can change the rotation direction swapping the two phase wires in the aerial or in the peg of the feeding extension cord. Please do it with the machine unplugged.



WARNING: Never manipulate power supply cables or any other electrical equipment on the machine before you unplug the machine from electricity.

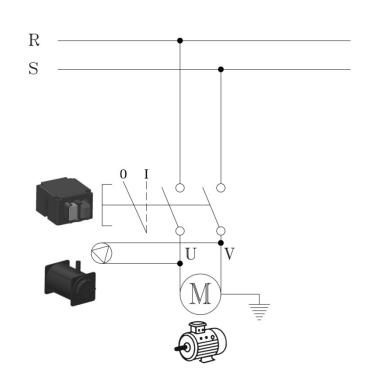


WARNING: Unplug the machine from the network before proceeding to change the position of the bridge plates on the engines. You should also proceed to change the stickers indicating the supply voltage, so there will always be indicated on the machine rated voltage.

The electrical equipment of the table saws has an IP54 protection degree.



4.1 ELECTRICAL SCHEME



5. SAFETY RECOMMENDATIONS

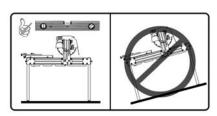


VERY IMPORTANT: Always use earth plug before starting-up the machine.

- Use normalized cables
- Make sure the feeding voltage is in accordance with the voltage indicated in the adhesive label on the machine.
- Make sure that the extension cords are not in contact with points of high temperature, oil, water, sharp edges.
- Do not use high pressure water to clean circuits or electrical elements.



- The damaged electrical cables should be urgently replaced.
- Start up the machine only when you have mounted the safety guards that come with the machine.
- Always use approved protective items (gloves, helmet, goggles, boots)
- Turn the machine on the network and do not handle or operate on the mechanical and electrical machine with the engine running.
- Cutting table machines should be used by people who are familiar with its operation.
- It's not allow to access and manipulation of the machine to people who are not familiar with the machine before.
- · Work clothes should not include loose clothing that could get caught in moving parts of the machine.
- Before starting the machine, read the instructions carefully and observe compliance with safety standards. Learn well how to stop the machine quickly and safely.
- Place the machine on a flat and well lit and you do not switch the machine on until it's got a balance position.



- Make sure the machine is in perfect technical condition and fully operational.
- Do not operate the machine if all the protections and safeguards are assembled which have been designed for that purpose.
- When moving the machine, always verify that engine and moving parts are blocked.
- Use only diamond blades specified in this manual.



This machine **MUST NOT BE USED IN THE RAIN**. Cover with waterproof materials. If the machine has been exposed in the rain check before connecting the electrical parts are not wet. **Always work with good lighting conditions**.

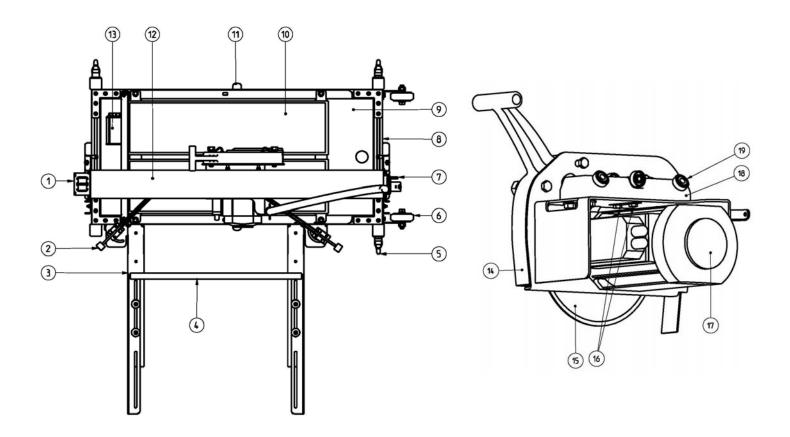




WARNING: You must follow all safety recommendations outlined in this manual and comply with regulations for the prevention of occupational hazards of each place

SIMA, S.A. is not responsible for the consequences possibly generated but the inadequate use of the table saws.

6. MACHINE DESCRIPTION



- Swith. 1.
- Fixing brackets . Endging profile. 2.
- 3.
- Adjustable stop. Fixing knob feet. Wheels. 4.
- 5.
- 6.
- 7. Tools.
- Framework. 8.
- Watertray. Bedplate. 9.
- 10.
- 11.
- Legs support.
 Aluminium guideway. 12.
- Water pump.
 Blade guard.
 Blade. 13.
- 14.
- 15.
- Cutting head adjustment. 16.
- 17. Engine.
- 18. Transport carriage.
- 19. Bearings.

7. MACHINE STARTING-UP AND USING INSTRUCTIONS.

7.1 POSITION OF THE MACHINE AND THE OPERATOR, CONNECTION AND DISCONNECTION

The machine needs to be installed in well illuminated, stable and plane surface, free from any obstacles.

Before starting-up the machine, we should have made all necessary safety measures (electrical connection, stability, protections, etc....) as mentioned in the previous chapters.

When installing the machine, make sure the table on which it will be placed should be a horizontal, non bland surface.

To start cutting, the operator should stand in from of the machine. In this position, the operator can easily manage the cutting head and the piece to be cut. He/she will also have easy access to the electrical plug.

Once the power supply cable is connected, the motor and the water puma start-up only by pressing the green switch button.

The machine can be stopped, simply by pressing the red switch button.

7.2 REALISING A STRAIGHT CUT.

1 Place the piece to be cut on the cutting table making sure it remains stable and laying against the front ruler of the cutting table.

3 Once the height of the cutting head has been adjusted and the piece placed on the cutting table, start-up the engine and make sure the cooling is adequate to the BLADE and material to cut. Using the handle that embodies the BLADE safety guard, drag the cutting head until the BLADE touches the piece to cut. You need to start cutting slowly and maintain a constant progress in function of the material to be cut.

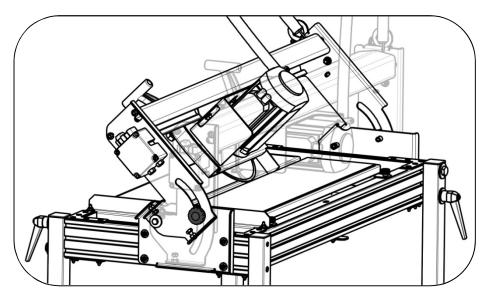


7.3 REALISING A 45° CUT.



WARNING: Always incline the cutting bridge with motor switched off.

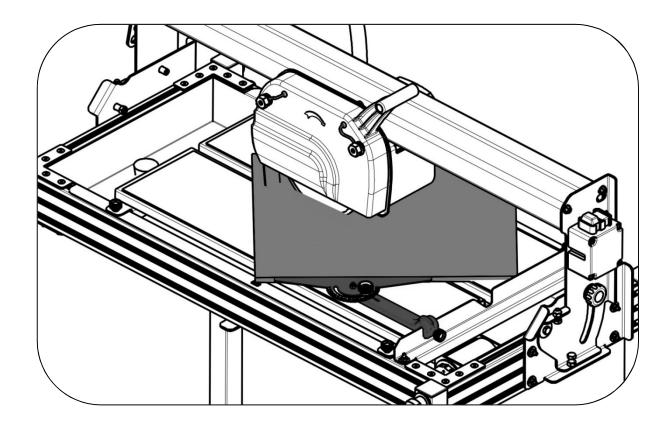
Loosen the blocking controls on both sides of the machine Incline the cutting bridge to select the desired angle. Fasten back the blocking controls



7.4 REALISING A DIAGONAL CUT

Diagonal cutting is effectuated in the same way as a right cutting.

For a diagonal cutting, you need to use the ruler with a graduated semicircle that is supplied with the machine. This ruler must rotate to look for required degrees to make the cutting. It has a blocking screw to fix the desired position. Once the degrees have been selected in the semicircle, you place the piece to cut on the cutting table marking the face of the graduated ruler as well as the front ruler upper face. To complete the cutting, proceed as per the straight cut instructions.



8. MAINTENANCE.

The table saws require a simple maintenance as per the following operations:

- Change the tray water and clean the machine as much as needed. The tray has a tap for this use. It is necessary to fill the tray with water until the pump is covered with water.
- Although the cooling pump has a filter cap, it may get in dirt and debris inside of the cut material to block the propeller. To prevent this, periodically run the pump in a container with clean water for several minutes. If necessary, unscrew the filter cap and clean the propeller until it turns freely.
- Remove all possible residuals of cut materials that can cling into the rolling tracks of the cutting bridge.
- Replace as soon as possible electrical cables that cause power cuts, breaking or any other disrepair.
- If the machine is not covered, wrap it with an impermeable cloth.
- At the end of each day, unplug the machine.

Maintenance operations should be performed by people who the machine and its functioning.

Before performing any maintenance or cleaning operations, the electricity cable should be unplugged.

In case you observe any anomalies or mal functioning, let a technician check the machine.

Take into account the safety recommendations mentioned in this manual.

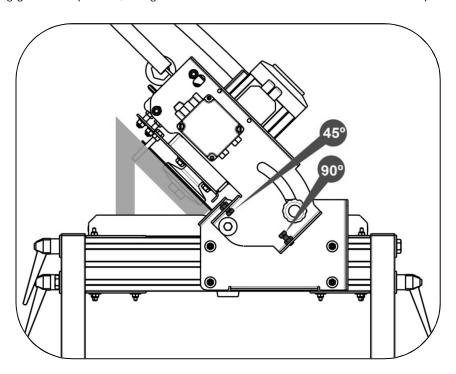


It is prohibited to independently make any change in some parts, components or characteristics of the machine. SIMA, S. A. shall in no case be responsible for the consequences that may derive from a breach of these recommendations.

8.1 SETTING BLADE INCLINATION TO 45 $^{\circ}$ AND 90 $^{\circ}$

The table saws are shipped well regulated so that when mounting the blade cut at an angle of either 90 $^{\circ}$ or 45 $^{\circ}$. If for some unforeseen blow or any other cause to be off, you can correct the position as per the following operations.

- 1. Disconnect the machine from the network and remove the blade safeguard.
- 2. Remove the blade safeguard. Using a square located on the main and reference in the face of the blade will observe the parallelism of the two.
- **3.** Adjust it with the screws at each end by loosening its screws to get the blade face is coincident with the vertical face of the square.
 - 4. Having gained the position, re-tighten the nuts on the throttles and ride the back up disk.



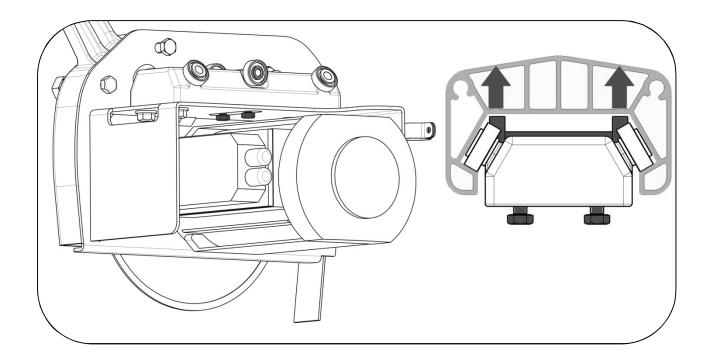
8.2 ADJUSTING THE CUTTING HEAD 'S BEARINGS

The cart is fitted with bearings placed in the form of V. This system offers a maximum stability to the cutting head. With the frequent use of the machine, it is possible to have to re-adjust this mechanism. You can proceed as follows:

• Under the motor cover, there are two screws that we need to manipulate and tighten gently, to make sure the cutting head is not moving without having to block the cart and at same the time to slide it easily. These screws push an axis that carries 2 bearings adjusting the cart with the rolling:



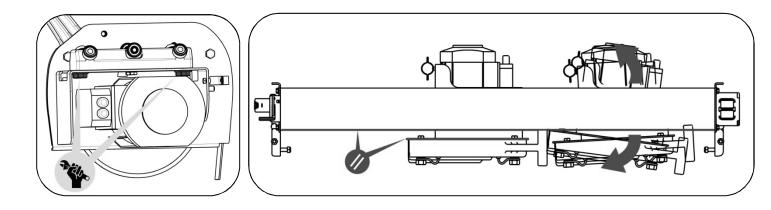
WARNING: if you tighten the screws too much, you risk damaging the aluminium bridge causing an incision where the bearings are supported. This mechanism usually needs to be adjusted with very short turns of the screw.



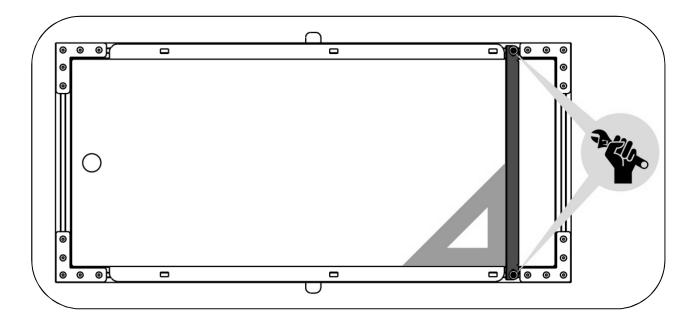
8.3 LONGITUDINAL ALIGNMENT

The table saws are shipped well regulated so that when mounting the blade cut at an angle of either 90°. If the BLADE is not aligned with the cutting bridge for any reason, you should anew align it.

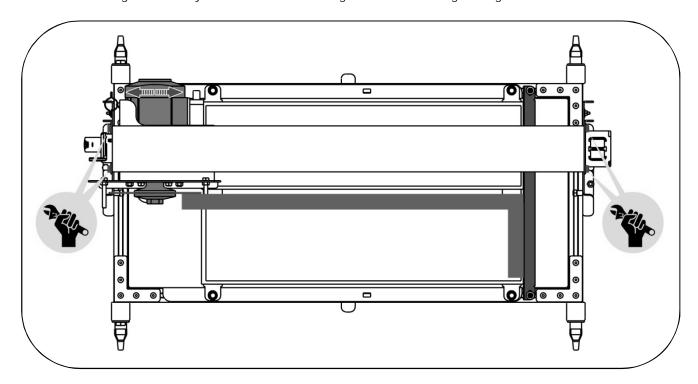
- Unplug the machine from electricity and remove the disk safeguard.
- Loosen the blocking controls from both ends and with the square located on the cutting table and facing the front side of the disk, you need observe the parallelism of both.



 \bullet Loosen the screws from the front square, place it on 90° position compared with the frame and tighten the screws again.

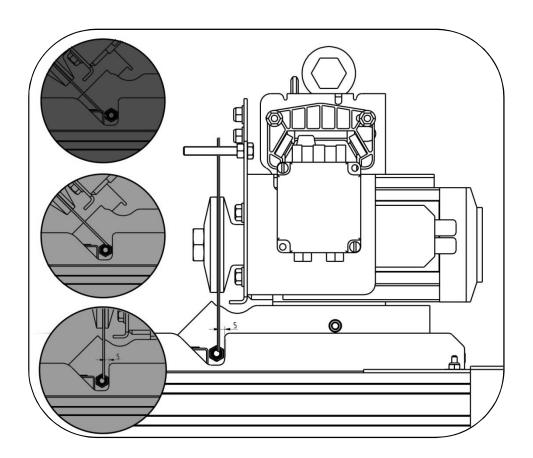


- Now place the rail onto 90° position compared with the front square.
 - Slightly loosen the 4 screws fixed to the rail.
 - Place a square onto the front square and put it towards the disk.
 - Move the sliding cart towards and backwards. Check that the disk moves the square.
 - Tighten carefully the 4 screws of the sliding cart without moving the alignment.

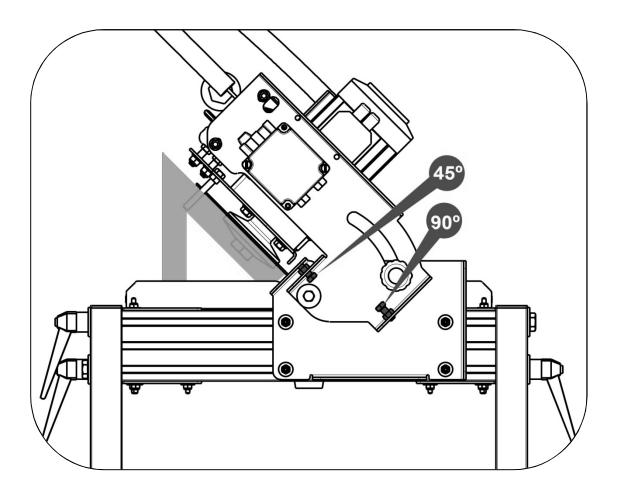




WARNING Once the alignment is done, the disk has to be separated from the right table 5 mm. It is necessary when you put the cutting head at 45° position the disk can´t touch the left table.



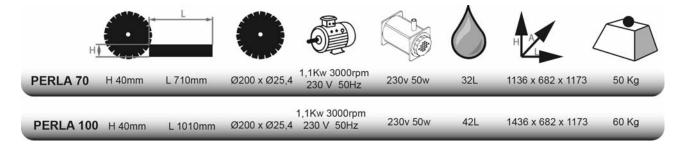
• Finally check that the disk is correctly placed at 90° and 45° degrees respect to the table. If necessary, adjust the screws as explained in this manual.



9. SOLUTIONS TO MOST FREQUENT ANOMALIES.

ANOMALY	POSSIBLE CAUSE	SOLUTION
Motor does not start up	Power supply fault	Check the power supply in the switch board. Check the position of the thermal magnet and the differential in the switch board. Make sure the extension cable is in a good state and well plugged in both ends.
	Damaged switch	Replace it
	Blocked disk	Remove obstacles preventing the disk from turning
Motor starts up very slowly and takes long to reach its revolutions	Damaged condenser. (Single phase motors)	replace it
Cutting power insufficient	Bluntness of the disk segments or diamond bands	Effectuate different cuts on an abrasive material (Sandstone, concrete, stone emery)
	Inappropriate disk	Use appropriate disk for material
	Low potency	Let the motor be checked by technical service
The cooling water does not reach the disk	Water level low in the tray	Fill in water to level
	Pump blocked	Dismount the tape filter and clean it
	Pump damaged	Replace the pump
	The pump water tape is closed	Open the water tape
	Insufficient cooling	Check the cooling
Disk premature damage	Excessive advance	Decrease the advance
	Inappropriate disk	Use appropriate disk for material
Defective cutting	The machine is not aligned	Align
	Disk deteriorated or worn-out	Change disk
	Inappropriate disk	Use appropriate disk for material
	Disk oscillation	Check the state of the disc and mount it correctly
Vibrations occurrence	Disk subjection deffect	Make sure the bridles and the motor axis are well adjusted. Tighten well the nut.
	Wrap the disk	Change disk

10. TECHNICAL CHARACTERISTICS.



11. WARRANTY.

SIMA, S.A. the manufacturer of light machinery for construction possesses a net of technical services "SERVI-SIMA".

Repairs under warranty made by SERVÍ-SIMA are subject to some strict condition to guaranty a high quality and service.

SIMA S. A. guarantees all its products against any manufacturing defect; to take into account the conditions stated in the attached document "WARRANTY CONDITIONS". The latter would cease in case of failure to comply with the established payment terms. SIMA S.A. reserves its right to bring modifications and changes to its products without prior notice.

12. SPARE PARTS

The spare parts for the table saws are to be found in the spare parts plan, attached to this manual and viewed throughout our B2B boutique.

To order any spare part, please contact our alter-sales service clearly indicating the serial number of the machine, model, manufacturing number and year of manufacturing that show on the characteristics plate.

13. ENVIRONMENT PROTECTION.



Raw materials have to be collected instead of throwing away residuals. Instruments, accessories, fluids and packages have to be sent into specific places for ecological reutilisation. Plastic components are marked for selective recycling.



R.A.E.E. Residuals arising of electrical and electronic instruments have to be stored into specific places for selective collection.

14. DECLARATION ON NOISES.

Weighted sound power level emitted by the machine.

PERLA MKNO 70 LWA (dBa) 101
PERLA MKNO 100 LWA (dBa) 101

15. DECLARATION ON MECHANICAL VIBRATIONS.

The level of vibrations transmitted to the hand-arm:

MODEL	LEFT HAND m/ s ²	RIGHT HAND m/ s²
PERLA MKNO 70	1,41945043462	1,04855226995
PERLA MKNO 100	1,41945043462	1,04855226995



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