

OPERATION AND MAINTENANCE MANUAL



Mitre saw with table stand
Art. 0275



ORIGINAL INSTRUCTIONS

PREFACE



Please ensure you have read this manual before operation

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

Reading this instruction manual is required before operating any of the machinery. The guarantee that the machine will function and perform properly is strictly dependent upon the application of all the instructions contained in this manual.



Operator Qualifications

The workers responsible for the use of this machine must have all the necessary information and instruction and should be given adequate training in relation to safety regarding:

- a) Conditions of use for the equipment;
- b) Foreseeable abnormal situations, pursuant to Article 73 of Legislative Decree 81/08.

We guarantee the Machine complies with the specifications and technical instructions described in the Manual on the date of issuance and listed herein; On the other hand, the machine may also be subject to important technical changes in the future, without the manual being updated.

Therefore, contact FERV I for information about modifications that may have been implemented.



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1 INTRODUCTION

The purpose of this manual is to provide the knowledge necessary for the use and maintenance of the **Mitre saw with table stand Art. 0275** and create a sense of responsibility and knowledge of the capabilities and limitations of the device entrusted to the operator.

As the machine is entrusted to experienced and skilled operators, the following machine must be perfectly known by the operator if you want it to be used safely and effectively.

Operators must be properly trained and prepared, so make sure that this manual is read and consulted by the staff responsible for commissioning, operation and maintenance of the Mitre saw with table stand. This is to make all operations the safest and most effective possible for those who carry out these tasks.

Therefore, it is imperative to strictly comply with the requirements in this manual, a necessary condition for safe and satisfactory operation of the machine.

Before starting operation, installation and use of the Mitre saw with table stand, authorized staff must therefore:

- read this technical document carefully;
- know which protections and safety devices are available on the machines, their location and how they work.

It is the responsibility of the buyer to ensure that users are properly trained, that they are aware of all the information and instructions in this document and that they are aware of the potential risks that exist while working with the **Mitre saw with table stand**.

The manufacturer waives any and all responsibility for damage to people and/or things caused by non-observance of the instructions in this manual.

The **Mitre saw with table stand** was designed and built with mechanical guards and safety devices designed to protect the operator/user from possible injury. It is strictly forbidden to modify or remove guards, safety devices and caution labels. If you do so temporarily (for example, for the purposes of cleaning or repair), make sure that no one can use the machine.

Modifications to the machines carried out by the user must be considered their sole responsibility, therefore the manufacturer declines all responsibility for any damage caused to persons and/or property resulting from maintenance performed by unqualified personnel and in a manner different from the operating procedures shown below.

Graphic representation of safety, operational and risk warnings

The following boxes are designed to attract the attention of the reader / user for the **proper** and **safe** use of the machine:



Attention

This highlights behavioural rules to prevent damage to the machine and/or the occurrence of dangerous situations.



Residual Risks

This highlights the presence of dangers that cause residual risks to which the operator must pay attention in order to avoid injury or damage to property.

1.1 Preface

For safe and easy operation of the **Mitre saw with table stand**, this manual must be read carefully in order to acquire the necessary knowledge. In other words, durability and performance are strictly dependent on how it is used.

Follow the instructions contained herein, in addition to the general precautions to be observed while working. Even if the operator is already familiar with the use of lifting equipment, it is necessary to:

- Acquire full knowledge of the lifting platform.
- Read this manual carefully to understand: operation, safety devices and all necessary precautions. All this is to allow safe use of the machine.
- Wear appropriate clothing for the job.
- The operator must wear appropriate clothing to prevent the occurrence of unforeseen accidents.
- Take proper care of the lifting platform.



Machine operation

The machine must only be used by qualified personnel trained to use the machine by authorized personnel.



2 SAFETY WARNINGS

2.1 General safety regulations



Accident

- There is always a risk of injury during cutting operations due to accidental contact of body parts with the moving tool, flying debris from the workpiece, tool breakage or ejection of a badly blocked workpiece.
- There is no "intrinsic" means of safety, just as there is no worker who, while careful, can "always" avoid an accident. Therefore, DO NOT underestimate the risks associated with using the machine and concentrate on the work in progress.



Risks related to Using the Machine

Despite the implementation of all safety devices for safe use of the machine, it is necessary take note of all the requirements for the prevention of the accidents reported in various parts of this manual.



Risks related to Using the Machine

Every person who is responsible for the use and maintenance of the machine should have first read the instruction manual, particularly the chapter on safety information.

It is recommended that the plant safety manager get written confirmation of the above.



Risks associated with using the Machine

- During all work phases with the machine, you should proceed with great caution in order to avoid damage to persons, to the property or to the machine itself.
- Please use the machine only for its expected uses.
- Don't tamper with the safety devices equipping the machine.



Operator Protection

Before starting any work on the machine, the operator must wear the appropriate personal protective equipment (PPE) such as gloves and eye protection (see section 6.3 of this manual).

1. Always check the efficiency and integrity of the machine.
2. Before connecting the machine to the mains, make sure that the blade is not damaged or badly worn. Make sure that the switch is in the neutral position.
3. Do not start the machine in an enclosed or poorly ventilated area, or in the presence of a flammable and/or explosive atmosphere. Do not use the machine in damp and/or wet locations, or those exposed to rain or humidity.

It is prohibited to install and use the machine outdoors.

4. User advance, check that the bearing surface of the machinery results flat, of suitable strength and of sufficient ergonomics: for this purpose made with the aid of a workbench.
5. Secure the workpiece. Use the vice on the machine to keep the workpiece stable.
6. Avoid starting accidentally.
7. Before starting the machine, get used to ensuring that no remaining maintenance and service keys are inserted.
8. Connect dust extraction equipment. Make sure a vacuum is connected to the machine, for the suction of dust and chips produced.
9. Keep the workplace tidy and free from obstruction; disorder causes accidents.
10. Make sure that your work environment is forbidden to children, strangers and animals.
11. Do not perform tasks on the machine other than those for which it was designed. Only use the machine in the manner in which it was intended, as described in this instruction manual.

In particular, do not use the mitre saw to cut material other than wood!

12. Before starting work, inspect the piece and remove any foreign material.
13. Remain balanced whilst working.
14. Work areas must be well lit.
15. Always wear eye protection and protective gloves while working. If dust is produced, use the appropriate masks.
16. Wear appropriate clothing. Loose clothing, dangling jewellery, long hair, etc., can get caught in the moving parts or the disc, causing irreparable injury.
17. Do not leave the machine until the disc has completely stopped. For this purpose, only use the stop controls to stop the machine.
18. Do not slow down or stop the disc with your hands or other objects.

Allow the disc to stop on its own!

19. Take proper care of the cutting tools. Cutting tools must be kept intact and clean to ensure the best possible performance.
20. Never use blades that are less than 2.7 mm thick.
21. Never use the blades for materials other than wood.
22. Replace worn and/or damaged parts, check that the repairs and protections work properly before operating. If necessary, have the machine checked by the service support personnel. Use only original spare parts.
23. **Unplug the power cord of the machine from the power outlet when:**
 - the machine is not being operated;
 - it is left unattended;
 - performing maintenance or registration, because the machine does not work properly;
 - the power cable is damaged;



- replacing the disc;
- it is being moved or transported;
- during cleaning operations.

24. Do not use the machine in areas with a risk of fire and/or explosion.

25. It is recommended that users of this publication, for maintenance and repair, have a basic knowledge of the mechanical principles and procedures inherent in repair technique.

26. The company safety officer is required to make sure that machine operators have read and understood this manual in its entirety.

27. The company safety manager is responsible for monitoring the company's risk status according to Legislative Decree no. 81/08 and subsequent modifications and amendments.

2.2 2.1 General Electric Power Tool Safety Standards



Risks related to Using the Machine

1. Do not modify the electrical system in any way. Any attempt in this regard may jeopardize the operation of electrical devices, causing malfunction or accident.
2. Work carried out in the electrical system of the machine must, therefore, be carried out only by qualified and authorized personnel.
3. If one hears unusual noises, or feels something strange, immediately stop the machine. Then carry out an inspection and, if necessary, perform any repairs as required.

1. Ensure supply voltage complies with the label and technical specifications (230 V / 50 Hz).

Never use any other type of power supply!

2. It is necessary to use a device for the automatic interruption of the electric power supply, which is to be coordinated with the machine's electrical system. (double isolation ☐). For more detailed information, contact a trusted electrician.
3. The mains power outlet should be bipolar grounded 10/16 A, 250 V), extension cables must have sections that are the same or greater than the sections of the power cable of the machine.
4. Make sure that the power cord does not come into contact with hot objects, wet or oiled surfaces, and/or sharp edges.
5. The power cord should be checked regularly and before each use to check for signs of damage or wear. If these are not in good condition, replace the cable.
6. Do not use the power cord to lift the machine or to remove the plug from the socket.

2.3 Technical Support

For any problems or concerns, please contact, without hesitation, the dealer from whom you purchased the machine, who has competent and specialized staff, specific equipment and spare parts.

2.4 Other provisions

It is forbidden to tamper with safety devices

The first thing to do when starting work is to check the presence and integrity of the protections and the operation of the safety devices.

If any defect is encountered do not use the Mitre saw with table!!

Even more so, it is strictly forbidden to modify or remove guards, safety devices, labels and indication signs.

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3 TECHNICAL SPECIFICATIONS

Model	Art. 0275
Rated voltage (V)	230
Power (W)	1800
Frequency (80 - 16000 Hz)	50
Disc dimensions (mm)	Ø 315 x 30 x 3.0 Z40
Motor speed (r/min)	4000
Peripheral speed of the disc (m/s)	56
Cutting capacity 0° ÷ 90° (mm) HxL	100 x 170
Cutting capacity 45° ÷ 90° (mm) HxL	100 x 118
Cutting capacity 0° ÷ 45° (mm) HxL	67 x 170
Cutting capacity 45° ÷ 45° (mm) HxL	62 x 118
Upper cutting capacity (mm)	57
Dimensions in open position (mm)	575 x 700 x 730
Weight (kg)	26
Acoustic power level L_{WA} (dB (A))	105
Acoustic pressure level at operator's workstation L_{pA} (dB(A))	94
Vibration transmitted to the hand-arm system (m/s^2)	< 2.5

4 INTENDED USE AND DESCRIPTION OF THE MACHINE

The Mitre saw with table stand (**Art. 0275**) is only used for dry cutting of wooden planks and/or boards, within the limits recommended by the Manufacturer and the safety and health norms.

Other types of use, or the extension of use beyond that envisaged, does not correspond to the designation attributed by the manufacturer, and therefore the latter cannot accept any responsibility for any damage resulting therefrom.



Improper machine operation

- The machine was designed and manufactured for a specific use, different uses and non-compliance with technical parameters established by the Manufacturer may be hazardous to the operator.
- In particular, it is absolutely forbidden to cut non-wood materials.

The Mitre saw with table stand (**Art. 0275**) can perform vertical cuts with disc inclination $\pm 45^\circ$, also the support table can be rotated right or left up to 45° .

Refer to chapter 10 of this manual to view the operating modes of the machine in detail.

It mainly consists of the following parts:

- the fixed base, with clamp for locking the workpiece;
- the electric motor and the circular blade (disc) mounted on the cutting unit of the machine;
- the handle for manual operation;
- the support table for using the circular bench saw.

For a detailed view of the various parts of the machine, refer to paragraph 4.1 and 4.2 of this manual.

The motor rotates at a constant speed.

The mitre saw must be installed and used on flat supporting surfaces, with adequate ergonomic and resistance features, such as a workbench or a base.

The mitre saw can only operate in indoor workplaces (production halls, warehouses, woodworking areas, etc.) and in any case away from moisture and the weather.

The operating temperature range is $-5 / +50^\circ\text{C}$.

The environment must also be sufficiently illuminated so as to ensure operation in maximum safety (at least 200 lux is recommended).



Prohibited workplaces

- Do NOT use the machine in areas with are humid, wet and exposed to rain, snow or hail.
- Do NOT use the machine in areas with a high risk of fire and/or explosion !



4.1 Main machine parts

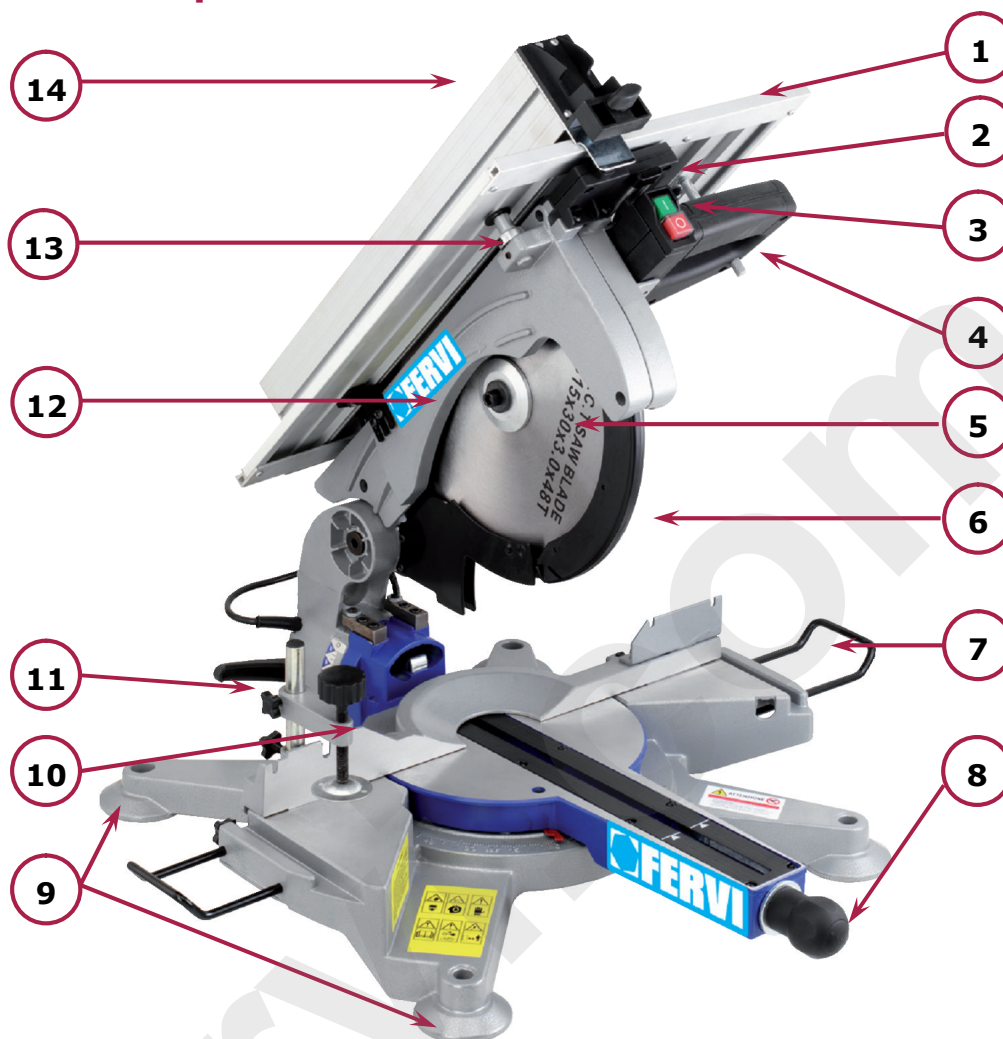


Figure 1 – Main parts of the mitre saw Art. 0275.

1	Work table	8	Head rotation lever / knob
2	Closure unhooking lever	9	Supports
3	Buttons for bench saw	10	Workpiece clamping adjustment device
4	Mitre saw operating lever	11	Head inclination locking lever
5	Disc saw	12	Fixed guard on the blade
6	Automatic adjustable guard	13	Table adjustment device
7	Stabilizers	14	Upper fixed guard

4.2 Plates and pictograms

The identification plate shown below is attached to the machine.

Fabbricante	FERVI s.r.l. Via del Commercio 81, 41058 Vignola (MO)		 	
Marca			 	
Articolo	0275	Potenza	1800	W
Lotto n°		Tensione	230	V
Anno	2013	Frequenza	50	Hz
Dimensione lama	315 x 30 x 3.0			mm
Velocità lama	4000	giri/min		

Figure 2 – Identification Plate.

The machine has the following warning and attention pictograms:





PLATE IN ITALIAN



ATTENZIONE

È VIETATO ESEGUIRE LAVORI SU APPARECCHIATURE ELETTRICHE SOTTO TENSIONE

- EVENTUALI DEROGHE DEVONO ESSERE AUTORIZZATE DAL CAPO RESPONSABILE
- IN CONDIZIONI DI PARTICOLARE PERICOLO DEVE ESSERE PRESENTE UN'ALTRA PERSONA OLTRE A CHI ESEGUE IL LAVORO

INIZIARE I LAVORI SOLO AD AVVENUTA ATTUAZIONE DELLE MISURE DI SICUREZZA
In ottemperanza al Dgs.81/08 relativo alla prevenzioni infortuni

ATTENZIONE!!

- LEGGERE LE ISTRUZIONI PRIMA DI UTILIZZARE LA MACCHINA
- NON AVVICINARE LE MANI ALL'UTENSILE IN MOVIMENTO
- NON AFFERRARE L'UTENSILE CON LE MANI PER ARRESTARLO
- NON REGOLARE LA MACCHINA MENTRE È IN FUNZIONE
- INDOSSARE SEMPRE IDONEE PROTEZIONI QUALI OCCHIALI E MASCHERINE QUALORA VENGA PRODOTTA POLVERE
- SCOLLEGARE LA MACCHINA DALL'ALIMENTAZIONE ELETTRICA IN CASO DI RIPARAZIONI O REGOLAZIONI
- NON INDOSSARE INDUMENTI SVOLAZZANTI, GIOIELLI, MACCHINA, E CAUSARE DANNI IRREPARABILI
- SCOLLEGARE LA MACCHINA DALL'ALIMENTAZIONE ELETTRICA PRIMA DI ESEGUIRE MANUTENZIONE, REGOLAZIONI E RIPARAZIONI

PLATE IN ENGLISH



ATTENTION

IT IS PROHIBITED TO WORK ON LIVE ELECTRICAL EQUIPMENT

- ANY EXCEPTIONS MUST BE APPROVED BY THE HEAD MANAGER
- UNDER PARTICULARLY DANGEROUS CONDITIONS, ANOTHER PERSON MUST BE PRESENT WHO IS NOT PERFORMING THE WORK

ONLY BEGIN WORKING WHEN SAFETY MEASURES HAVE BEEN IMPLEMENTED
In accordance with Legislative Decree 81/08 on accident prevention

ATTENTION!!

- READ THE INSTRUCTIONS BEFORE USING THE MACHINE
- KEEP HANDS AWAY FROM THE TOOLS IN MOVEMENT
- DO NOT GRAB THE TOOL WITH YOUR HANDS TO STOP IT
- DO NOT ADJUST THE MACHINE WHILE IT IS IN OPERATION
- ALWAYS WEAR SUITABLE PROTECTIVE EQUIPMENT SUCH AS GOGGLES AND MASKS IF POWDER IS PRODUCED
- DISCONNECT THE MACHINE FROM THE POWER SUPPLY IN THE EVENT OF REPAIRS OR ADJUSTMENTS BEING MADE
- DO NOT WEAR LOOSE CLOTHING, JEWELLERY, MACHINE, AS IT CAN CAUSE IRREVERSIBLE DAMAGE
- DISCONNECT THE MACHINE FROM THE POWER SUPPLY BEFORE PERFORMING MAINTENANCE, REPAIRS AND ADJUSTMENTS

5 DESCRIPTION OF CONTROLS

5.1 Control Buttons for bench saw

At the front of the machine, when it is closed in "Bench Saw" mode, the active commands are two electromagnetic buttons - Start (GREEN) and Stop (RED) located near the handle.

- 15** Start button
- 16** Stop button
- 17** Button for unhooking the head

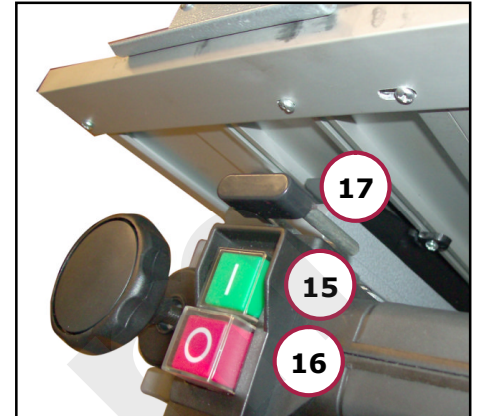


Figure 3 – Buttons for start/stop and unhooking the head

5.2 Mitre saw control button

The switch for starting the mitre saw, or activating the disc is positioned on the control handle.

- 18** sustained action switch located inside the handle



Figure 4 - Start button.



Cutting hazard

It is absolutely forbidden to by-pass the safety feature constituted by the sustained action command by locking the button in the "ON" position.

NOTE: Given the operator's workstation and the reduced overall size of the machine, the sustained action start button is also an emergency stop switch.



Emergency

In emergency situations, immediately release the start button (18) and the handle and move away from the machine.

Even during normal operation, to stop the rotation of the blade, release the start button (18), it automatically returns to the raised position ("OFF").



Cutting hazard

- After releasing the start button (18), the blade continues to rotate by inertia.
- Do not put body parts like hands and/or fingers near the moving blade!

5.3 Locking the head

The machine is supplied closed, i.e. with the head attached and in "bench saw" mode. To be able to raise the head and use the machine in mitre saw mode it is necessary to push the bracket (19) inwards and at the same time the hook (20) backwards. After unlocking and raising the head it is necessary to remove the black protection device on which the blade is resting, extracting it backwards.

Note: When the hook is fully open and the head is free it pops up due to the spring on its underside. Do NOT operate with your hands or head in the trajectory of the released head, but stand to the side!

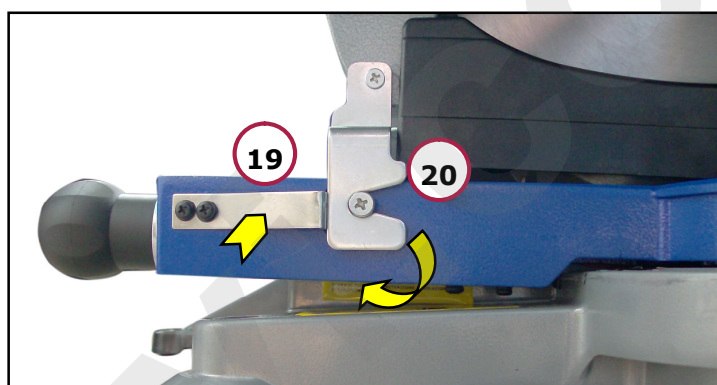


Figure 5 - Opening the head locking hook.



Removal of parts and components

All parts removed from the machine should ALWAYS be stored in a safe place to prevent them from breaking and/or getting lost.

When the head is completely open it locks in the open position. In this position the adjustable blade guard closes preventing access.

In order to use the machine in mitre saw mode it is necessary to release the head and grasp the handle (see chap. 10 - Operation). To release the head there is a button (17 in Figure 3) near the handle.

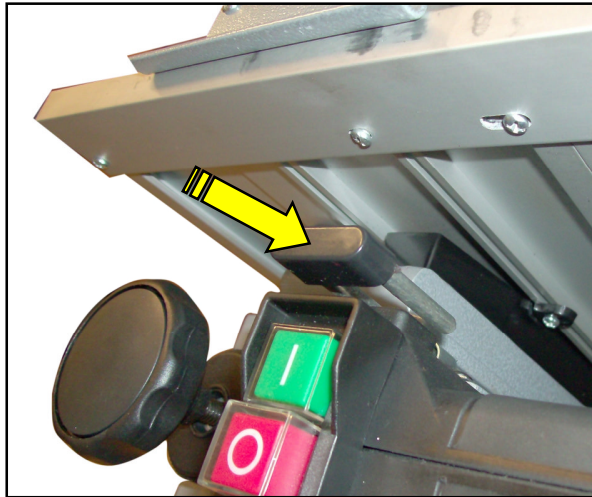


Figure 6 – Releasing the head from the open position

To use the machine in "bench saw" mode it is necessary to lock the head in the closed position.

To do this it is necessary to install the fixed protection device under the blade which also has the function of pushing the safety pin and allowing the closure of the hook (20) of the head itself.

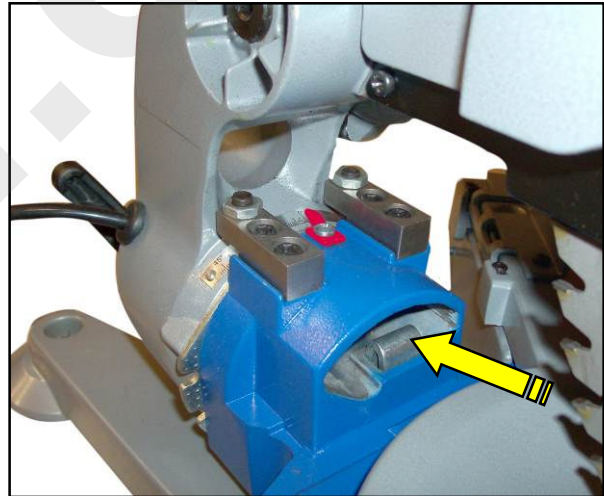
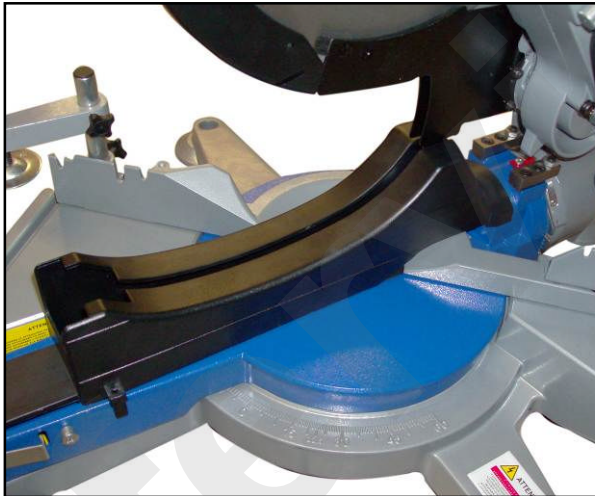


Figure 7 – Lower protection device in position.



5.4 Adjustment knobs

At the front part of the machine there is a knob (8 in [Figure 1](#)) for locking the head in an angled position relative to the base. The angle can be discovered by referring to the graduated scale (21) positioned below the base and which is revealed by the rotation itself.

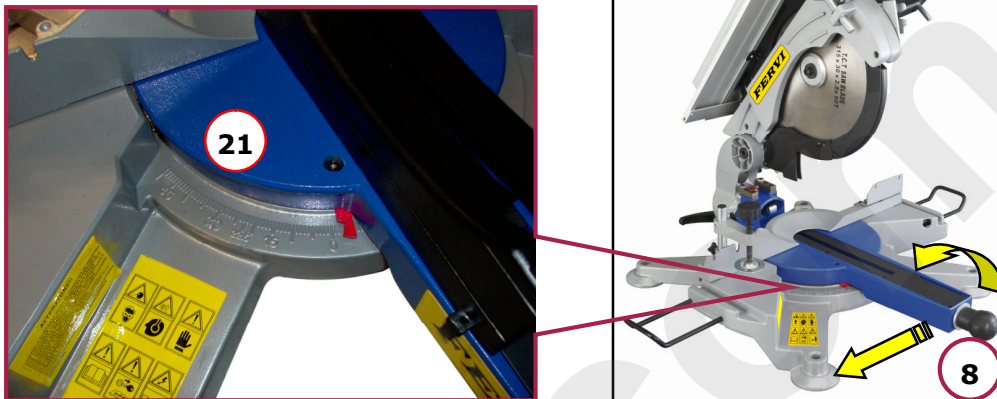


Figure 8 – Rotation of the head.

For the inclination of the head it is necessary to rotate the lever (22) located behind the machine anticlockwise and then grasp the work table with both hands and tilt the head by reading the angle on the graduated scale located under the support.

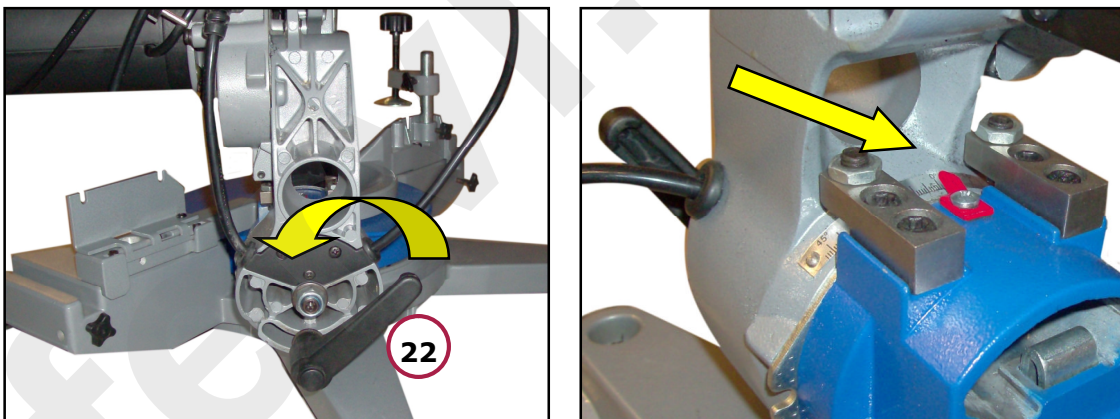


Figure 9 – Inclination of the head.

In "bench saw" mode it is possible to adjust the depth of the cut by raising or lowering the worktable. To do this it is necessary to loosen the screws (23) located to the right of the handle, under the table, and the ring nut (24) on the left side of the blade, again under the table.

Then rotate the knob (25) clockwise to lift the table and reduce the depth of the cut, anticlockwise to lower the table and increase the cutting capacity.

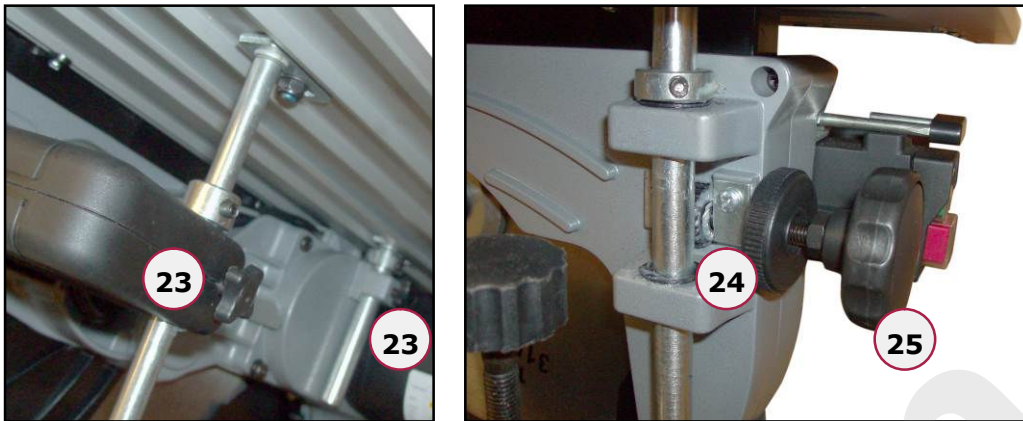


Figure 10 – Adjusting the table height.

On the right and the left part of the support guide square (mitre saw mode) there is a slot for the workpiece clamp. This clamp has a screw (26) for locking onto the guide and a screw (27) to tighten the pieces in position during cutting.

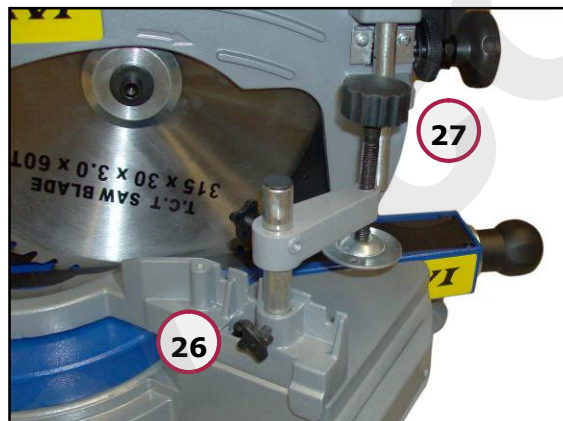


Figure 11 – Workpiece clamp.



6 MACHINE SAFETY DEVICES

6.1 Electrical safety devices

In the event of malfunction or breakdown, the **Mitre saw with table stand** is equipped with power cable and plug without grounding conductor, as it is equipped with double isolation.

The plug must be plugged into an appropriate outlet, the metal frame of the machine non-grounded. Extension cables must be of a section equal to or greater than the power cable of the machine.

The line must be equipped with an automatic electric power disconnection system coordinated with the electrical system of the machine.



Electric shock

Improper connection of the machine's grounding conductor can result in the risk of electric shock.

Check with a qualified electrician if you don't understand the grounding instructions or if you have any doubts about grounding the machine.

6.2 Mechanical risk safety devices

PROTECTIVE DISC CASING

The safety guards on the cutting disc are constituted by fixed casing and movable casing, as shown in Figure 12 in "mitre saw" mode.

They have the task of preventing parts of the operator's body, particularly hands and/or fingers, from coming into direct contact with the disc.

Furthermore, this prevents the splinters, dust or blade fragments that eventually get separated from being thrown towards the operator's face.

The movable casing on the disc is articulated to the saw body, after being unlocked by using the locking lever (ref. 1), it opens progressively as the blade is lowered to allow the cutting of the workpiece.

Conversely, the blade is completely protected when it is in the resting position, i.e. when fully raised.



Figure 12 – Disc protective casing.

In this configuration, the upper part of the blade is not used, and is protected by the upper casing that is locked in the closed position by a screw (28) and is integral to the table.



Figure 13 – Fixed casing above the table.

When the machine is used in "bench saw" mode it is necessary to position the fixed guard below the blade before lowering it so as to push the safety pin and close the hook (see p. 5.3 and Figure 7).

In this position, with the table horizontal, it is possible to remove the fixed protection (Figure 13) but the movable guard remains and in a position which is adjusted automatically during cutting.



Figure 14 – Upper movable guard.

Safety accessory

When using the machine in "bench saw" mode it may be necessary to use the workpiece pusher accessory supplied, especially when small pieces are being machined.



Figure 15 – Workpiece pusher accessory.



The machine is equipped with two lateral stabilizers (ref. 7 in **Figure 1**) to be inserted into the specially drilled holes on the base of the machine.

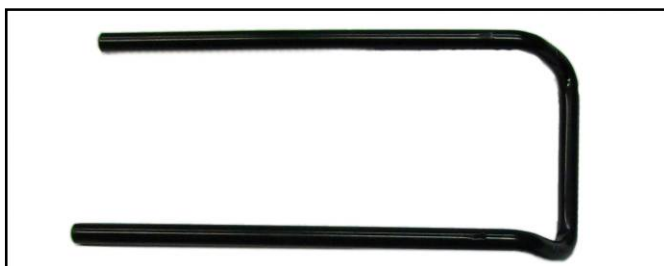


Figure 16 – Workpiece pusher accessory.

6.3 Personal Protective Equipment (PPE)



Use of PPE

ALWAYS use appropriate personal protective equipment (PPE), such as:

- Gloves,
- Goggles or face shields;
- Overalls or aprons;
- Safety shoes;

Ear protection devices (ear muffs, ear plugs, etc.).



PROTECTIVE GLOVES - PROTECT YOUR EYES - PROTECTIVE SCREEN - PROTECTIVE CLOTHING - PROTECTIVE SHOES - PROTECT YOUR HEARING

Figure 17 - Personal Protective Equipment.

7 IMPROPER USE AND HAZARDS

The following actions described, which obviously can not cover the entire range of potential possibilities of "misuse" of the saw, are to be considered **strictly prohibited**.



THE FOLLOWING IS STRICTLY PROHIBITED!

- Holding the piece to be cut with your hand;
 - Using the machine without efficient safety guards;
 - Using the machine for purposes other than those for which it is designed, in particular, for cutting materials other than wood;
 - Exceeding the cutting capacity stated by the manufacturer;
 - Using the machine without connecting dust/chip vacuum extraction equipment;
 - Trying to stop the blade with a piece of wood or another object;
 - Using cutting discs of a thickness of less than 3.2 mm or with adapters for the central hole;
 - Leaving the machine unattended with the plug inserted;
 - Allowing untrained staff to use the machine;
 - Operating this machine if you are not psychophysically fit;
 - Using the machine without due care;
 - Using the machine without the use of appropriate personal protective equipment, such as: shoes and safety gloves, goggles or shields, earmuffs etc.;
 - Using the machine outdoors and in adverse weather conditions;
 - Using the machine in explosive atmospheres;
 - Using the machine in inadequate light;
 - Letting the machine come into contact with foodstuffs;
 - Tampering with the equipment and/or safety devices;
- Lubricating the blade before, during and after processing.

8 TRANSPORT AND LIFTING

The **Mitre saw with table stand (Art. 0275)** weighs 26 kg, so it can be lifted and moved by hand by a single operator. To do so, follow the instructions below:

- disconnect the power plug from the outlet and collect the cord;
- hold the base with both hands;
- lift the machine and move it to the desired point.



Machine transport

- All transport operations are ALWAYS performed with the machine stopped with the head closed and locked, and without pieces of wood on the work surface of the machine.
- ALWAYS disconnect the power plug.



9 ASSEMBLY AND COMMISSIONING

9.1 Unpacking instructions

The **Mitre saw with table stand (ART. 0275)** is supplied ready for use, with a steel disc $\varnothing$ 315 x 30 x 3.0 mm and packed in a cardboard box.

Inside the package, in addition to the machine, there is a hex key, the workpiece pusher accessory, this manual, the EC declaration of conformity.

Before disposing of packing, check no parts of the machine, including the user manual or other documentation, are thrown away.

Also, make sure that at the time of unpacking, the machine is in perfect condition.

The manufacturer is not liable for any defects or missing parts five days after delivery.



Standard packaging

- The packing materials (plastic bags, polystyrene, cardboard, etc.) must not be left within reach of children as a source of potential danger.
- Respect the environment! Dispose of the packaging in accordance with current legislation.



9.2 Positioning and fixing on the bench



Loss of Stability

FIX THE MITRE SAW WITH TABLE STAND ON A SURFACE THAT IS SOLID AND STRONG, USING SUITABLE BOLTS, TO PREVENT IT FROM FALLING OVER AND SO IT DOES NOT CAUSE VIBRATIONS.



Cleaning the work bench

Before fixing the machine in place, clean the workbench of any materials and dirt that may be present.

Fix the machine on a work bench (or another support surface) which is flat, solid and strong, using special bolts, so as to prevent accidental movement or overturning during operation, and excessive vibration transmitted to the operator.



Figure 18 – Fastening holes on the machine.

The machine is equipped with rubber support pads capable of reducing noise and vibration.

9.3 Anti-overturn stabilizers

At the sides of the machine there are anti-overturn stabilizers, these are attached to the machine by means of screws placed at the rear of the machine.

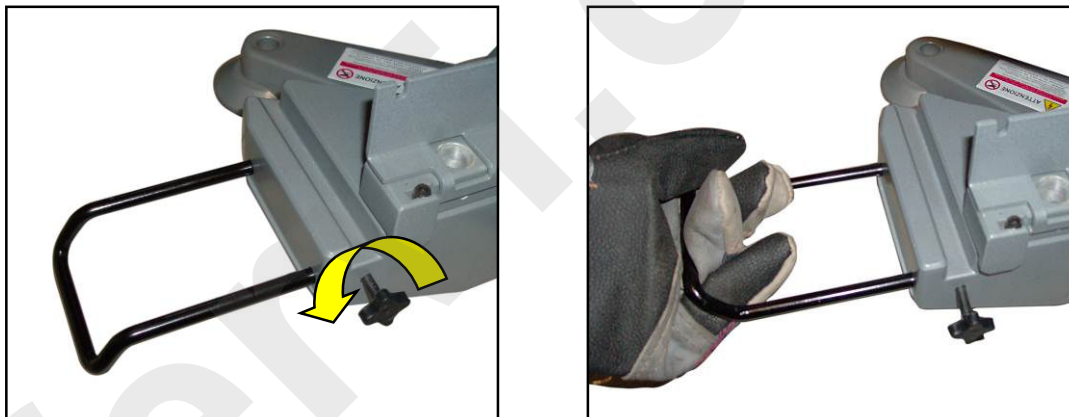


Figure 19 – Extension of the stabilizers.

9.4 Connecting the suction system

The machine can be connected to a dust suction device. The suction device must be pull a current of air with a minimum speed of 20 m/s for dry dust and 28 m/s for damp dust.

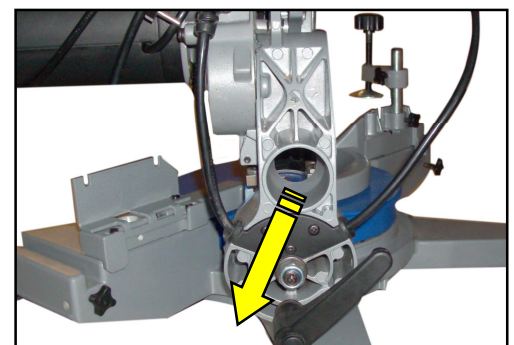


Figure 20 - Discharge duct.

It is important to respect the environment: to dispose of the shavings in compliance with current legislation.



9.5 Connecting the power plug

1. Insert the power supply plug into a double pole socket without grounding (10/16 A, 250 V).
2. Start the machine by pressing the start button and make sure that the direction of rotation of the blade is as indicated by the arrow on the protective casing.
3. Before starting the cutting operation, check the saw as follows:
 - let it spin freely for at least 1 minute;
 - with the protections in place;
 - without the presence of staff.

During the test run, no operator and no other person should be within range of the machine.

10 OPERATION

10.1 Instructions for Use



Machine operation

- The **mitre saw with table stand (Art. 0275)** should only be used for cutting wood.
- Do not cut metal parts, make sure there are no nails or other metal parts in the wood being machined.
- Do not cut beams of dimensions exceeding the maximum permissible cutting capacity (see Technical Specifications).



Risk of abrasion and/or cutting

- Before using the machine, make sure that it is rigidly fixed to the workbench to prevent unwanted movement or loss of stability.
- Wear appropriate personal protective equipment (PPE).

As anticipated, the **Mitre saw with table stand (Art. 0275)** can perform vertical cuts, inclined at $\pm 45^\circ$ to the vertical and angled between -45° and $+45^\circ$ by rotating the support base.

10.2 Use of the mitre saw - Cutting from the top



Cutting hazard

- Make sure the machine is in the correct configuration before starting operation.
- Check that all guards are in place and that the safety systems are operational
- Always use the grip to hold the workpiece in place.



Cutting capacity

The maximum cutting thickness is 100 x 170 mm.

To operate correctly, proceed as follows:



10.2.1 Making straight cuts

1. Unlock the cutting disc so that it is possible to lift the mitre saw, moving the hook backwards.

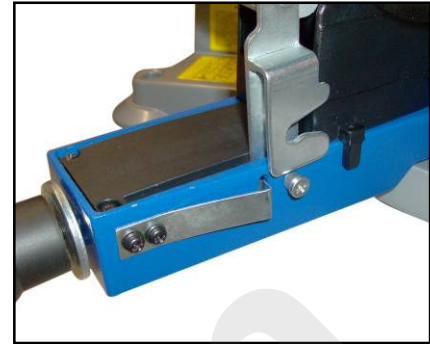


Figure 21 – Open hook.

Pay attention to the upward displacement of the work table when the hook leaves its housing.

2. Position the piece to be cut by placing it against the squares, adjust the supports for locking the workpiece, then tighten the clamp screws.



Figure 22 – Closing the clamps.

3. Grasp the handle, push the lock button (ref. 17 in Figure 3) and press the start switch and wait until the disc has reached its nominal speed of rotation.
4. Lower the disc towards the workpiece, in this way, the lower casing opens automatically with the pushing of the hand.
5. Cut as required without slowing down the motor. At the end of the cut, lift the disc, the protection device will cover it automatically.
6. At the end of the work, release the start button and wait for the blade to stop.



Cutting hazard

- After releasing the switch, the disc will continue to rotate by inertia.
- Do not put body parts like hands and/or fingers near the moving blade!

10.2.2 Making angled cuts



Cutting capacity

The maximum cutting thickness is 100 x 170 mm.

1. Loosen the knob at the front of the work area.
2. Grasp the handle with one hand and the knob with the other, then rotate the base to the left or right at the desired angle, checking the value on the graduated scale.
3. Repeat the steps from 1 to 6, as described in paragraph 10.2.1.

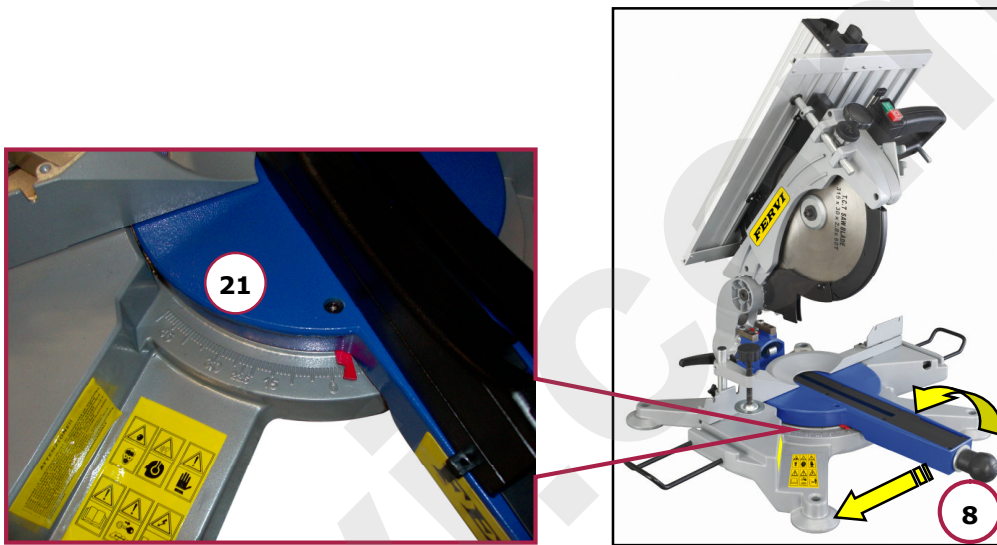


Figure 23 - Adjusting the cutting angle.

10.2.3 Making inclined cuts



Cutting capacity

The maximum cutting thickness is 67 x 170 mm.

1. Rotate the lever positioned at the back of the machine (**22**).
2. Grasp the motor-blade unit with both hands and tilt it in the desired direction.
This will make it possible to tilt the saw to the pre-marked position on the graduated scale where the corresponding angle is shown (see the
3. **Figure 24**).

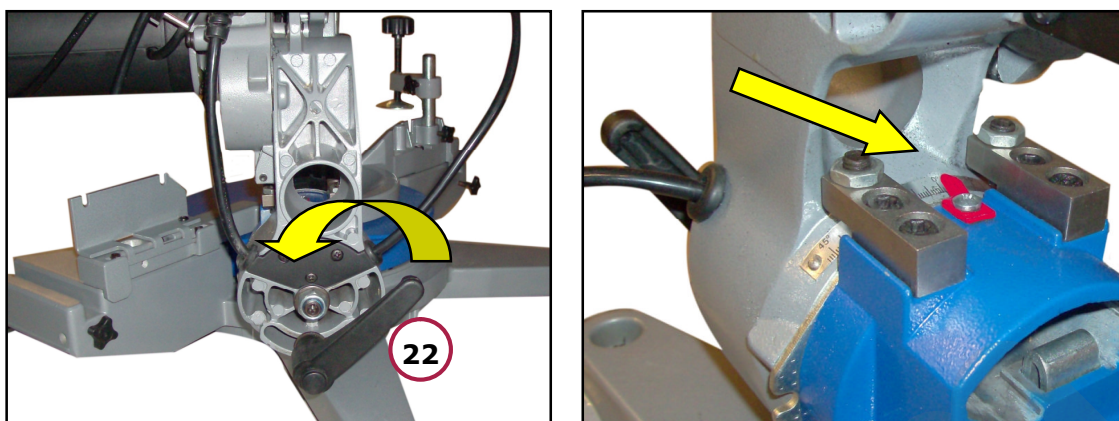


Figure 24 – Adjusting the inclination to fixed positions.

4. Repeat the steps from 1 to 6, as described in paragraph 10.2.1.

10.2.4 Inclined and angled cuts



Cutting capacity

The maximum cutting thickness is 62 x 118 mm.

The machine can be used with the dual inclination of the rotated turntable and with the inclined blade.

To do this, follow the instructions given in paragraphs 10.2.2 and 10.2.3.

10.3 Use in Bench saw mode



Changing the cutting mode

- Carefully follow the instructions on how to switch from one cutting mode to another.
- Make sure that the saw is perfectly vertical before closing it.
- Make sure the machine is not connected to the power supply, i.e. that the power plug is disconnected from the mains before changing the operation mode.

To use the upper cutting mode it is necessary to close the saw, that is, move it all the way down and lock it in the closed position. To do this, it is necessary to position the movable guard under the blade, lower the head, and then press the safety bracket and move the hook forward, as described on page 17 and in Figure 7.

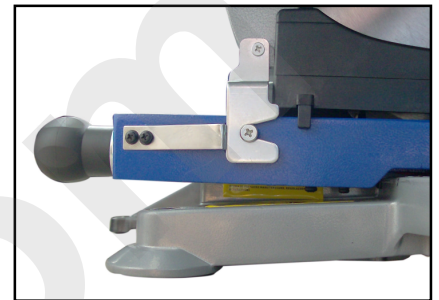


Figure 25 - Close-up of the hook

At this point the **Mitre saw with table stand** is in "Bench saw" mode.



Figure 26 – Closed Machine.



Cutting hazard

- Make sure the machine is in the correct configuration before starting operation.
- Check that all guards are in place and that the safety systems are operational
- Always use the piece guide lever for pushing the workpiece towards the blade. In any event, keep your fingers away from the blade.



Cutting capacity

The maximum cutting thickness, in bench saw mode is 57 mm.

To reduce the cutting thickness it is possible to raise the table as described on page 17 and in Figure 10.

When the machine is closed to start the rotation of the saw it is necessary to press the green start button located at the front of the machine.

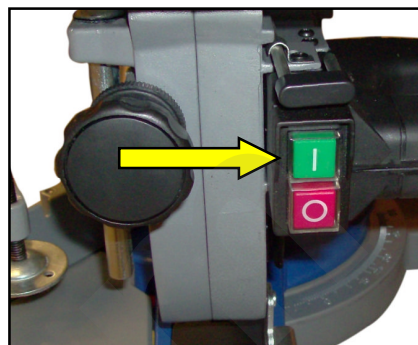


Figure 27 - Saw start-up.

On the upper part of the table, on both edges, there is a graduated scale, which allows the distance from the blade to be checked and to adjust the distance of the guide.

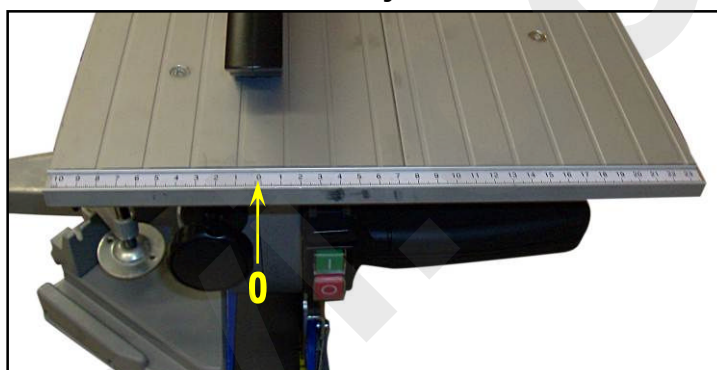


Figure 28 - The 0 position on the graduated scale.

1. Wait until the blade reaches its maximum speed before starting the cut.
2. Feed the saw, pushing the piece slowly in the direction of the blade and being very careful. Use the adjustable square as a lateral guide.

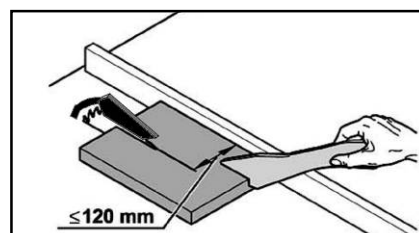


Figure 29 - Use of saw.

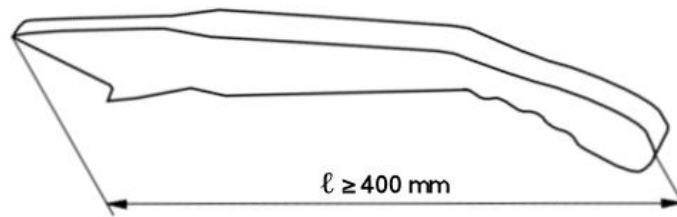
The upper guard opens automatically under the pushing of the workpiece.



Figure 30 - Movable guard.

3. Cut as required without slowing down the motor. When approaching the end of the workpiece use the special push-piece device, placed under the table, to complete

the cut. At the end of the cut, the protective guard will automatically cover the blade.



4. At the end of the work, turn off the saw, pressing the red button on the right side of the machine.

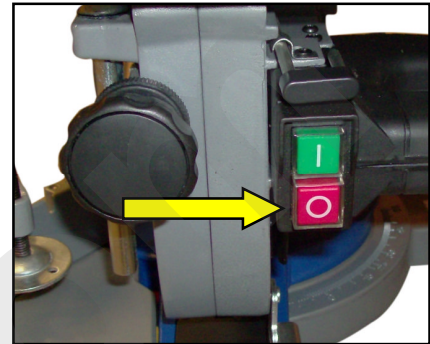


Figure 31 - Stopping the saw.



Cutting hazard

- After releasing the switch, the disc will continue to rotate by inertia.
- Do not put body parts like hands and/or fingers near the moving blade!



11 MAINTENANCE

Any maintenance, except for that specifically listed in this manual should be performed by qualified staff authorized by the manufacturer.

This manual does not elaborate information on disassembly and maintenance, as these operations should always be carried out exclusively by Technical Assistance staff.



Electric shock

Before maintenance or checks, turn off the machine and ALWAYS unplug the plug from the power outlet. This is so that there is no risk of electric shock.

11.1 Accessories

For routine maintenance, adjustment operations and safe use several accessories are supplied such as:

- 1 a hex key for the blade fastening screw,
- 2 a workpiece pusher bar,
- 3 stabilizing brackets.

11.2 Ordinary maintenance

ROUTINE AT THE END OF EACH PROCESSING

Regularly clean and take care of the machine to guarantee proper efficiency and a long working life.

Use a compressor to blow off chips, sawdust and dust that has accumulated on the floor of the machine and on the workbench at the end of each machining operation.



Working with the Air Compressor

ALWAYS wear the protective goggles when using compressed air.

Check the state of the Saw and the plates at the same time; if these are no longer legible request replacements.

Use only a dry cloth to clean the outside of the machine.



Cleaning the Machine

DO NOT use detergents or any solvents; the plastic parts are easily damaged by chemical agents.

11.3 Replacing the blade



Wear PPE

ALWAYS wear suitable protective gloves (to reduce the risk of cut) when replacing the blade.

1. Remove the upper blade guards: both the fixed and the moveable guards, sliding it off the dividing cutter.

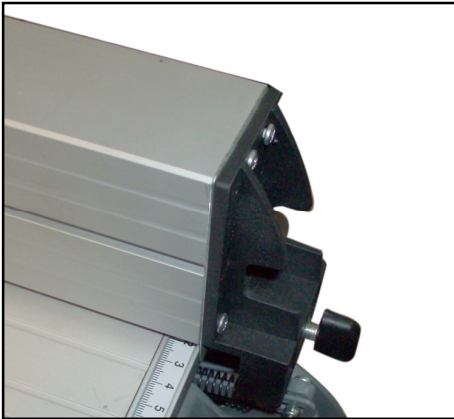


Figure 32 – Fixed and moveable guards.

2. Loosen the screws (23) and the ring nut (24) that hold the table in place and remove them from the machine.

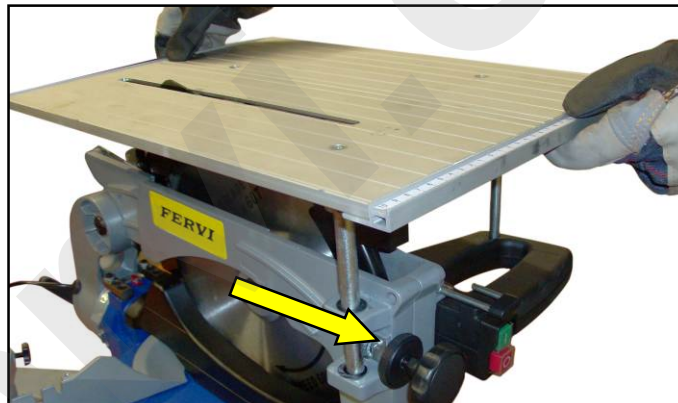


Figure 33 – Removing the table.

3. Unhook the blade opening the lock (20) and move it into a vertical position.
4. Lock the shaft movement of the blade using the lever to the right of the machine: pull the lever and at the same time turn the blade by hand until the lever has been inserted into the hole in the shaft.



Figure 34 – Locked blade movement.

5. Hold down the locking lever and unscrew the bolt clockwise using the hex key provided. The left-nut is loosened by turning it clockwise.
6. Hold the washer and then the flange and remove them from the shaft.

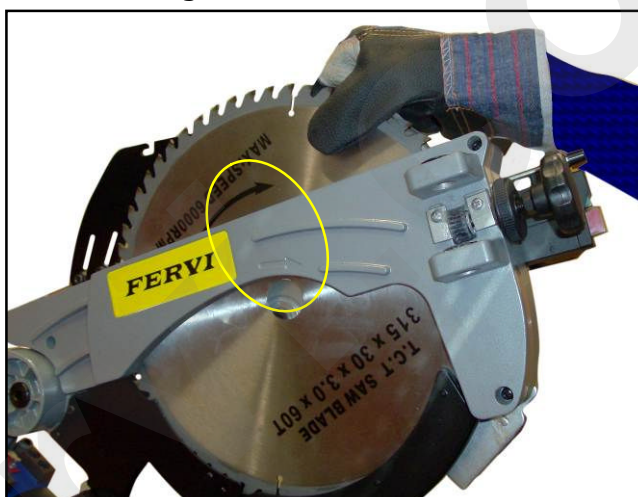


Figure 35 – Removing the external flange.

7. Hold the disc with both hands to remove it from the shaft.
8. Clean the inner and outer flanges.
9. Insert the new disc, taking care to verify the direction of rotation as indicated by the arrow on the fixed casing and on the blade.
10. To close the machine, follow the instructions in reverse.



Replacing the blade

When replacing the disc, fit one with the same dimensions. Do not use reducers/adapters on the shaft

Do not disassemble the inner flange.



Accident

NEVER use the Mitre saw with table stand with the guards removed or partly assembled.

12 WAREHOUSE STORAGE

In the event that the machine should be stored and unused for some time, it must be kept in a closed environment free of moisture to avoid damage and/or deterioration.

13 DISPOSAL OF PARTS AND MATERIALS

If the machine is to be scrapped, its parts must be disposed of differently.



Respect the Environment!

Contact a specialist centre for the collection of metallic materials.

The structure of the **Mitre saw with table stand** is made from steel, while some parts such as the handle, the casing of the electric motor, etc. are made from polymeric material.

In this regard, divide the materials according to their nature, employing specialist companies which are authorised for their disposal, in accordance with the requirements of law.



Respect the Environment!

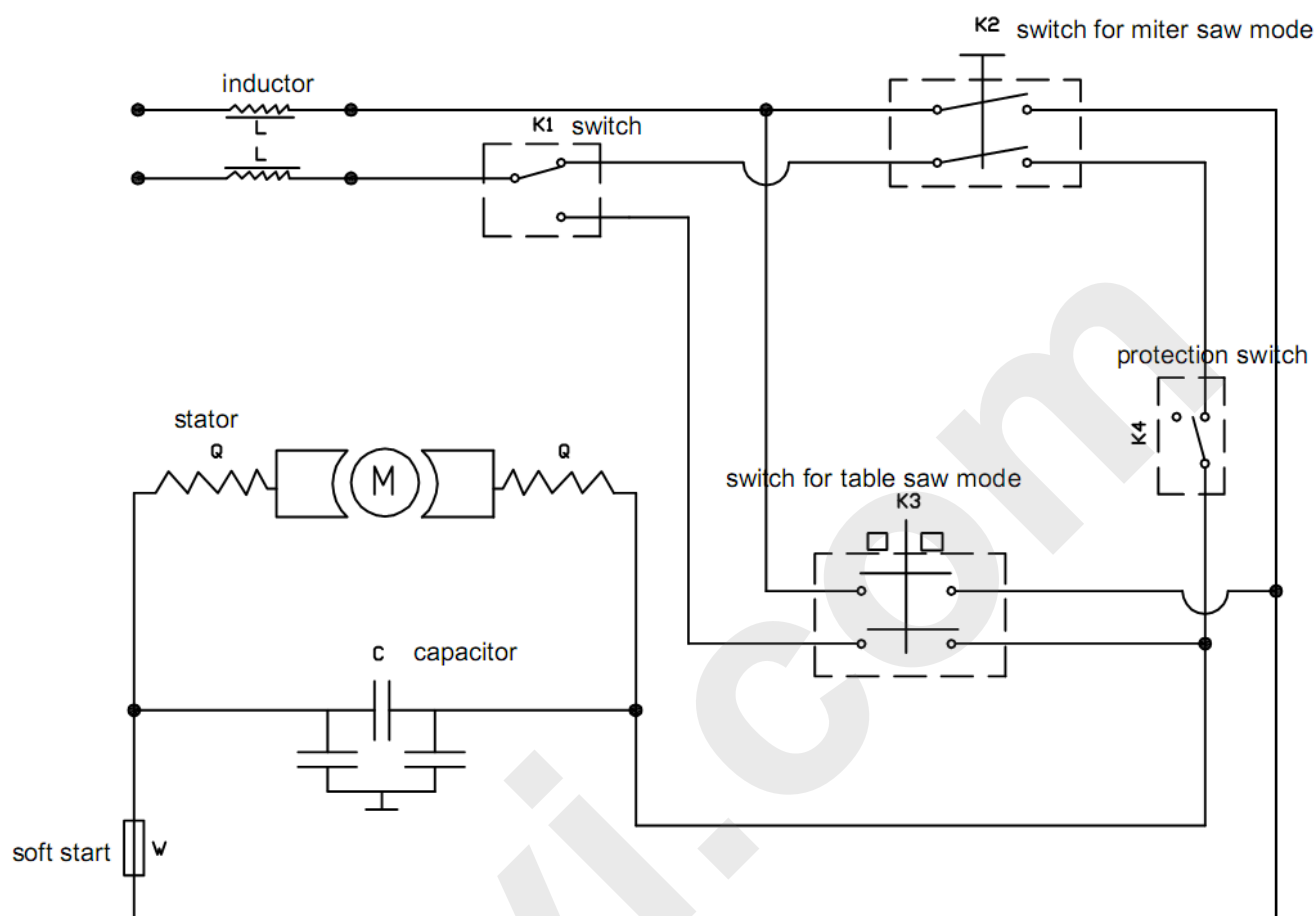
Dispose of tailings (shavings, sawdust, etc.) in compliance with current legislation.

14 FAULT FINDING

PROBLEM	PROBABLE CAUSE	SOLUTION
Noisy operation	A) Damaged bearings. B) Bearings not lubricated. C) Disc friction	A) Contact Customer Service. B) Lubricate. C) Remove / replace the disc and check sliding.
The motor will not start.	A) Electrical power supply. B) Wiring connections C) Burnt motor windings. D) Broken switch.	A) Check the mains power supply. B) Check the wiring connections. C) Contact Customer Service. D) Contact the service department.
Poor cutting efficiency or excessive overheating of the disc.	A) Excessive pressure on the workpiece. B) Worn disc or unsuitable material. C) Material too hard.	A) Apply less pressure. B) Check the degree of wear of the disc C) Use a disc of different material.



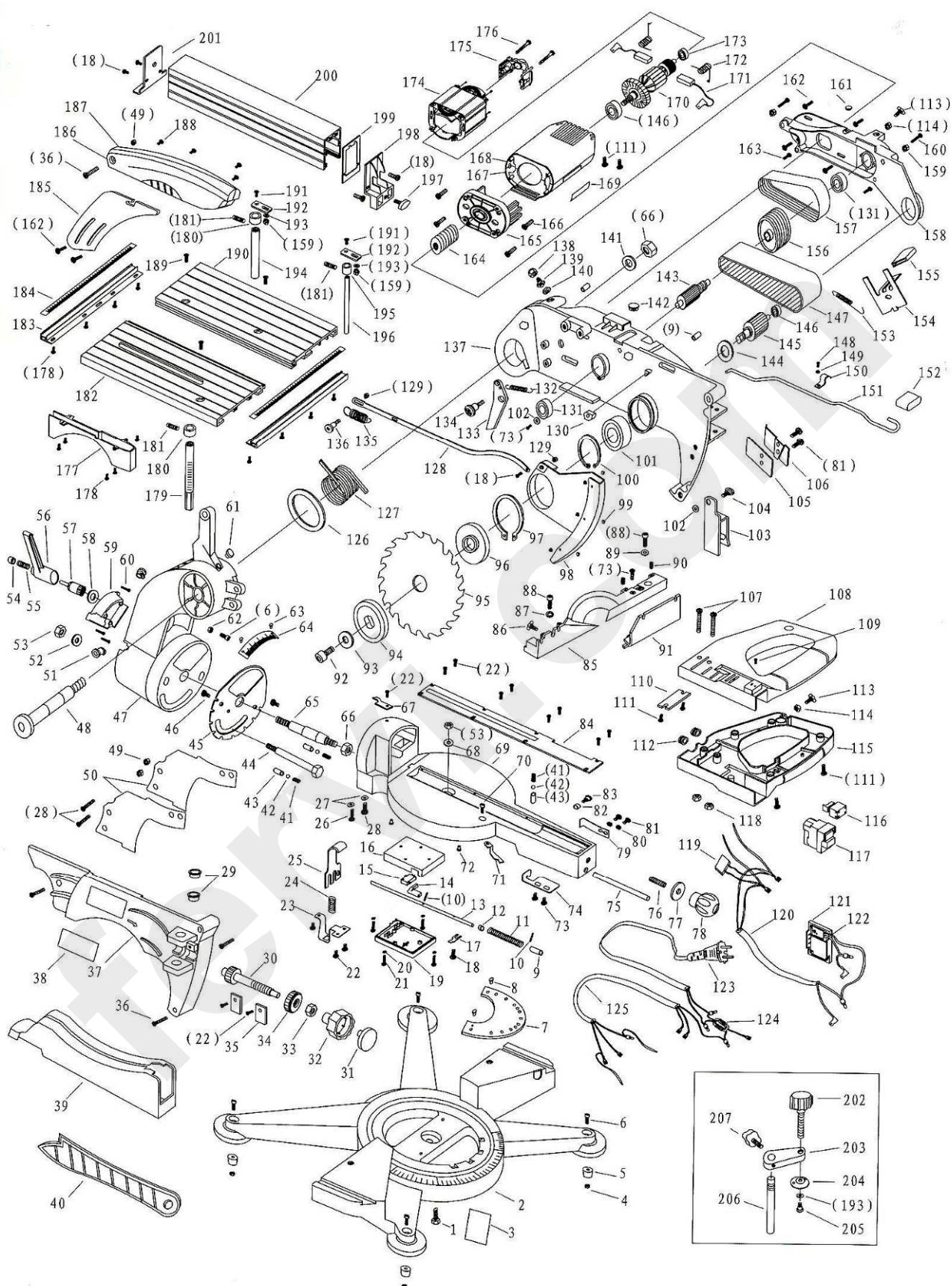
15 WIRING PLAN



16 EXPLODED VIEW AND SPARE PARTS

Always clearly indicate:

- the symbol and the serial number of the machine;
- the code number of the parts;
- number of parts;
- exact address of your company.





Part No.	Description	Part No.	Description
0275/001	M8x30 Hex head screw	0275/034	Gear
0275/002	Base	0275/035	Washer
0275/003	Label	0275/036	Screw M5x30
0275/004	M6 hex nut	0275/037	Fixed guard on the blade
0275/005	Rubber feet	0275/038	Label
0275/006	M6x20 Hex head screw	0275/039	Lower guard
0275/007	Graduated scale (angle)	0275/040	Workpiece pusher
0275/008	Rivet Ø 5	0275/041	Spring
0275/009	Positioning pin	0275/042	Steel ball Ø 8
0275/010	Confirmation pin	0275/043	Plug
0275/011	Spring	0275/044	M5x85 Bolt
0275/012	Pin	0275/045	Inclination locking plate
0275/013	Guide bar	0275/046	Screw M5x12
0275/014	Lever	0275/047	Plate
0275/015	Switch	0275/048	Pin
0275/016	Switch box cover	0275/049	Nut M5
0275/017	Fork	0275/050	Blade guard
0275/018	Screw M4x10	0275/051	Cable bushing
0275/019	Switch box support	0275/052	Washer Ø 8
0275/020	Washer	0275/053	Nut M8
0275/021	Screw M4x25	0275/054	Lever
0275/022	Screw M4x8	0275/055	Spring
0275/023	Fastening bracket	0275/056	Lever
0275/024	Spring	0275/057	Head locking screw
0275/025	Block bracket	0275/058	Washer Ø 12
0275/026	Screw M4x16	0275/059	Cable cover
0275/027	Washer	0275/060	Screw M5x25
0275/028	Screw M5x16	0275/061	Rubber washer
0275/029	Plain bearing	0275/062	Nut M6
0275/030	Gear	0275/063	Rivet
0275/031	Locking knob	0275/064	Graduated scale
0275/032	Knob	0275/065	Positioning bar

Part No.	Description	Part No.	Description
0275/033	Nut M8	0275/066	Nut M12
0275/067	Inclination indicator	0275/100	Seeger
0275/068	Washer	0275/101	Bearing
0275/069	Rotating base	0275/102	Washer Ø 5
0275/070	Screw M6x16	0275/103	Locking the head
0275/071	Angle indicator	0275/104	Screw M5
0275/072	Washer	0275/105	Metal plate
0275/073	Screw M5x10	0275/106	Steel plate
0275/074	Indicator support	0275/107	Screw M5x40
0275/075	Fastening bar	0275/108	Handle
0275/076	Screw M8x25	0275/109	Screw ST3x14
0275/077	Washer	0275/110	Wiring support bracket
0275/078	Locking handle	0275/111	Screw ST3.9x16
0275/079	Steel bracket	0275/112	Cable bushing
0275/080	Washer Ø 5	0275/113	Screw M6x12
0275/081	Screw M5x8	0275/114	Nut M6
0275/082	Plain bearing	0275/115	Handle
0275/083	Screw M6x10	0275/116	Switch
0275/084	Grooved plate	0275/117	Switch
0275/085	Rail	0275/118	Nut M5
0275/086	Screw M6x16	0275/119	Condenser
0275/087	Washer Ø 8	0275/120	Motor cable
0275/088	Screw M8x25	0275/121	Buttons box
0275/089	Washer Ø 8	0275/122	Buttons
0275/090	Screw M8x8	0275/123	Cable
0275/091	Guide extension	0275/124	Winding
0275/092	Screw M10x20	0275/125	Transfer command cable
0275/093	Washer	0275/126	Washer
0275/094	Outer flange	0275/127	Spring
0275/095	Blade	0275/128	Connection bar
0275/096	Inner flange	0275/129	Nut M4
0275/097	Seeger	0275/130	Rubber localizer
0275/098	Transparent guard	0275/131	Bearing
0275/099	Washer	0275/132	Spring



Part No.	Description	Part No.	Description
0275/133	Auto locking device	0275/166	Screw ST4.8x20
0275/134	Screw M6	0275/167	Upper housing
0275/135	Spring	0275/168	Lower housing
0275/136	Screw M4	0275/169	Label
0275/137	Head	0275/170	Rotor
0275/138	Cable bushing	0275/171	Graphite brush
0275/139	Nut	0275/172	Spring
0275/140	Nut	0275/173	Bearing
0275/141	Washer	0275/174	Stator
0275/142	Insert	0275/175	Brush holder
0275/143	Shaft	0275/176	Screw ST4.8x72
0275/144	Washer	0275/177	Lower guard
0275/145	Output shaft	0275/178	Screw ST3.9x10
0275/146	Bearing	0275/179	Table height adjustment bar;
0275/147	Belt	0275/180	Block ring nut
0275/148	Screw ST3.9x12	0275/181	Screw M6x10
0275/149	Washer Ø 4	0275/182	Table
0275/150	Pressure bracket	0275/183	Ruler
0275/151	Hook	0275/184	Graduated scale
0275/152	Button	0275/185	Dividing cutter
0275/153	Spring	0275/186	Left upper guard
0275/154	Motor block	0275/187	Right upper guard
0275/155	Washer	0275/188	Screw ST3x10
0275/156	Pulley	0275/189	Screw M6x20
0275/157	Belt	0275/190	Table
0275/158	Motor support	0275/191	Screw M6x12
0275/159	Nut M6	0275/192	Metal plate
0275/160	Screw M6x30	0275/193	Washer Ø 6
0275/161	Insert	0275/194	Guide bar
0275/162	Screw M6x12	0275/195	Locking screw
0275/163	Screw M6x30	0275/196	Guide bar
0275/164	Small pulley	0275/197	Handle
0275/165	Central closure	0275/198	Guide cover

Part No.	Description	Part No.	Description
0275/199	Front cover	0275/204	Piece press plate
0275/200	Piece guide	0275/205	Screw M5
0275/201	Closing cover	0275/206	Adjustment bar
0275/202	Clamp knob	0275/207	Screw M6x16
0275/203	Clamp bracket		

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