



AMERI-CAN

MACHINERY LTD.

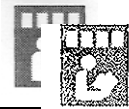
CS400A/CS400
Chop Saw



INSTALLATION, USE AND MAINTENANCE MANUAL

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1. MANUAL USE AND CONSERVATION



WHO IS IT FOR

This manual is intended for the machine user and for the persons in charge of moving, installation, using, surveillance, maintenance and final dismantling of the machine.

AIMS OF THE MANUAL

The manual explains the correct use of the equipment, as foreseen at the design stage and in the technical data. It includes instructions for moving the machine as well as for its correct and safe installation, assembly, adjustment and use, as well as supplying information concerning maintenance interventions and how to order replacement parts.

LIMITS OF USE

This manual is valid only for the machine with the code number it expressly mentions. No information contained in this manual may be applied of other machine models from different ranges. All of the necessary indications shall be taken from this manual and not from any similar manuals, similar equipment or from other manufacturers.

SYMBOLS

In order to draw greater attention to certain points, this manual contains the following symbols that are divided as follows:



RESPECT OF LEGISLATION

As well as the regulations specified in this manual, the Customer shall respect the relevant legislative dispositions concerning accident prevention in the workplace.

CONSERVATION OF THIS MANUAL

This manual is considered to be an integral part of the machine and as such, must be kept in good condition until the machine is disposed of. This manual must be kept in a safe, dry place, away from direct sunlight and it must always be easily available for consultation in the workplace.

HOW TO REQUEST A FURTHER COPY OF THE MANUAL

In the event that the original copy of the manual is damaged in any way, Customers may, at their own expense, request an additional copy from the Manufacturer.

INFORMATION FOR THE USER

- a) This manual refers to technical conditions at the time of the sale of the machine.
 - The Manufacturer reserves the right to modify products and manuals without the obligation to upgrade previous products or manual.
- b) The characteristics of this manual may be modified at any time in accordance with technical developments and with no prior notification.
- c) In the event that the equipment is sold on, the Manufacturer should be informed of the address of the

new owner in order to facilitate the sending of any additional parts to be integrated into the manual.

- d) For further information or clarifications, it is possible to contact the Assistance Service (see section 13.2)

The Manufacturer declines all responsibility in the event of the following:

- Incorrect use of the machine
- » Use of the machine by untrained personnel
- » Any use of the machine that contravenes that which is stated in this manual
- Any use of the machine that contravenes the laws and standards in force
- » Any use with defect of primary alimentation
- Exceeded of limits service
- Excessive mechanicals stress

The user is required to guarantee that:

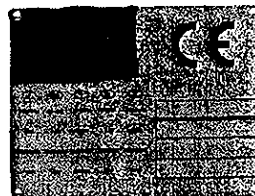
- All operations for transport, connection, use, maintenance and repair will be carried out by qualified personnel
 - Qualified personnel are understood to be (as per IEC 364) persons who, in terms of their training, experience, knowledge of standards, prescriptions, accident prevention provisions and conditions of use and service, are able to carry out all necessary interventions and to recognise and avoid all possible danger and/or damage.
- " These persons will avail of all of the relevant information and training required, including any local prescriptions, to which they will adhere when carrying out any operations,
- Unqualified personnel will be prohibited from carrying out any operation even directly on the machine or equipment.
 - During the stages of installation, any local or special prescriptions and/or in any case, all prevention conditions that have not been discharged will be met using additional safeguards.

2. MARKING DATA AND DELIVERY CHECKS

Ensure that the equipment shows no signs of damage and that no parts are missing. In the event of damage, contact the relevant insurance company or the Manufacturer. In the event that the supplied goods are incomplete, contact the Manufacturer directly. Each machine has an identification plate.

2.1 MACHINE IDENTIFICATION PLATE

This plate contains information about the Manufacturer as well as the model and progressive serial number of the machine. For any communication regarding the machine (problems, interventions under guarantee, replacement parts, etc.) always refer to this plate and to the information it contains.



2.2 CE MARKING

The CE marking on the machine means that it conforms to the European Community Directives with regard to Health and Safety in the workplace.



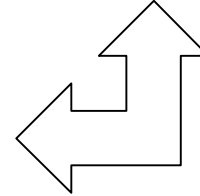
3.1 HANDLING



Machines are delivered in a protective plastic covering or packed on pallets with crates - wooden crates cardboard coverings, according to the requirement stated at the time of order.

WARNING!!

Once the packing has been removed, the machine may only be moved using a suitable truck.



4. OPERATION NECESSARY FOR THE INSTALLATION



All stages of installation must be carried out by qualified personnel

4.1 POSITIONING

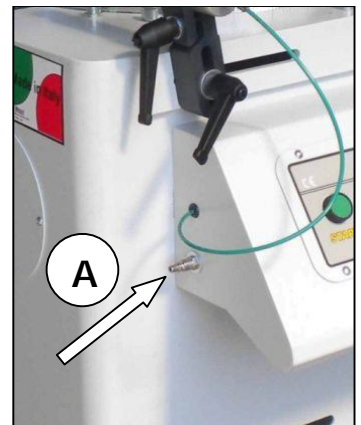
It is necessary to make sure that the machine is correctly positioned in order to guarantee its stability and to ensure the correctness of the operator's working position. The machine must be placed in a sufficiently large area to permit the handling of the material to be machined. The machine must be placed on a flat, horizontal and stable surface that is able to support the weight of the machine adequately. Furthermore, the machine must be situated in a place that allows its entire structure to be lit evenly.

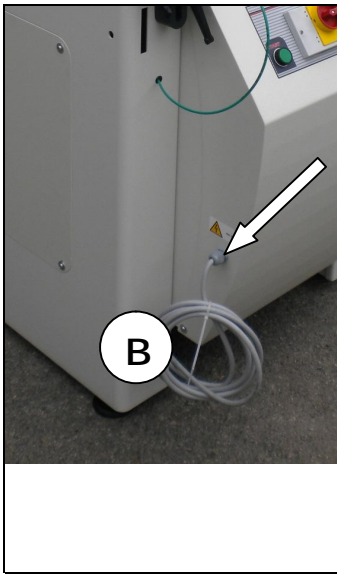
4.2 CONNECTIONS

The sawing machine must be supplied from two sources: electric and pneumatic.

The pneumatic inlet (**FIG.A**) must be connected to a supply of compressed air using a pipe that withstand a minimum working pressure of 7 bar. A filter with an automatic condensation discharge outlet must be installed between pipe and the compressor, as must a tap to intercept the pneumatic supply. The entire supply system must guarantee a minimum internal passage with a diameter of 6mm. The machine is supplied pre-calibrated and if necessary, use the pressure reducing valve (**FIG.C**) to adjust the pressure from a minimum of 6 bar to a maximum of 7 bar.

The electrical connections (**FIG.B**) must be carried out by specialist personnel. The connection requirements are as follows: double insulation cable of type N1WK-3P+T with a section of 2,5 mm² and a 16 3P+T socket compliant with EC standards with a thermo magnetic cut-out switch 16A and ICC short circuit current that is equal to or more than 10 kA. The electrical connection must be made to a three-phase alternate current, line 50Hz with a voltage of 380.





WARNING! BEFORE SUPPLYING POWER TO THE MACHINE, MAKE SURE THAT THE CONNECTIONS HAVE BEEN MADE CORRECTLY IN ORDER TO PREVENT THE OCCURRENCE OF SITUATIONS THAT MAY ENDANGER THE OPERATOR.



WARNING! CHECK THE ROTATION OF THE BALDE.VERIFICARE IL SENSO DI ROTAZIONE DELLA LAMA. IN CASE THE ROTATION WOULD RESULT ON THE CONTRARY DIRECTION THEN INVERT TWO OF THE THREE CABLES L1/L2/L3

5. MACHINE SAFETY AND INTENDED USE

5. MACHINE SAFETY



WARNING!

Sawing machines, like all other equipment with moving parts, can be sources of serious danger if not correctly used, protected and maintained.

Safeguards may not be removed under any circumstances

- a) The machine has not been designed, built or tested to operate in damp or wet environments, environments with a high degree of pollution from gaseous chemical substances such as chlorine, ammonia or similar, or in areas at risk from fire or explosion.
- b) The machine has been designed for the use by a single operator.
- c) Simultaneous use of the same machine by more than one operator is not permitted.
- d) During operation people other than the operator are not allowed to remain in the vicinity of the machine.

5.1 INTENDED USE

These CUTTING OFF MACHINES are intended for professional use only, they are specially designed and built to machine light-alloy profiles. Any other type of material is not compatible with the specifications of the machine.

5.2 WORK PLACE

No particular precautions with regard to the physical or chemical safety of the operator are required for the workplace. However, the use of suitable gloves to protect against the burrs of the profiles and the shards that are produced during machining, as well as of safety glasses and head-cuffs, is recommended.

5.3 FORBIDDEN USE

The machine has not been designed and built to carry out any machining other than that described in this manual. The operator must avoid carrying out any unsafe operations or operations that are not foreseen as part of machine use and which could compromise personal safety.

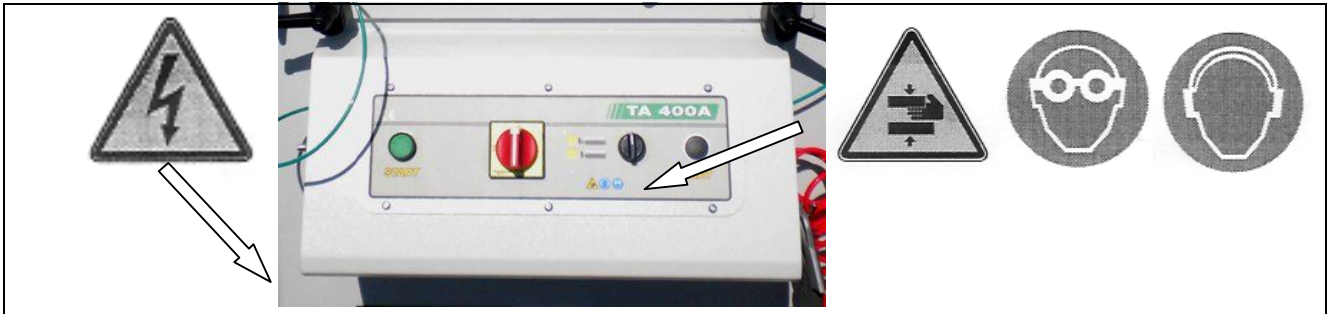
Under any circumstances may any machine part (attachments, boring, finishing) be modified or adapted for use with other devices. MEPAL ITALIA S.R.L. declines all liability in the event of any malfunction caused by failure to respect the above. Any modifications must be directly requested to and expressly authorized by MEPAL ITALIA SRL

5.4 SWITCHING OFF AND PUTTING OUT OF SERVICE

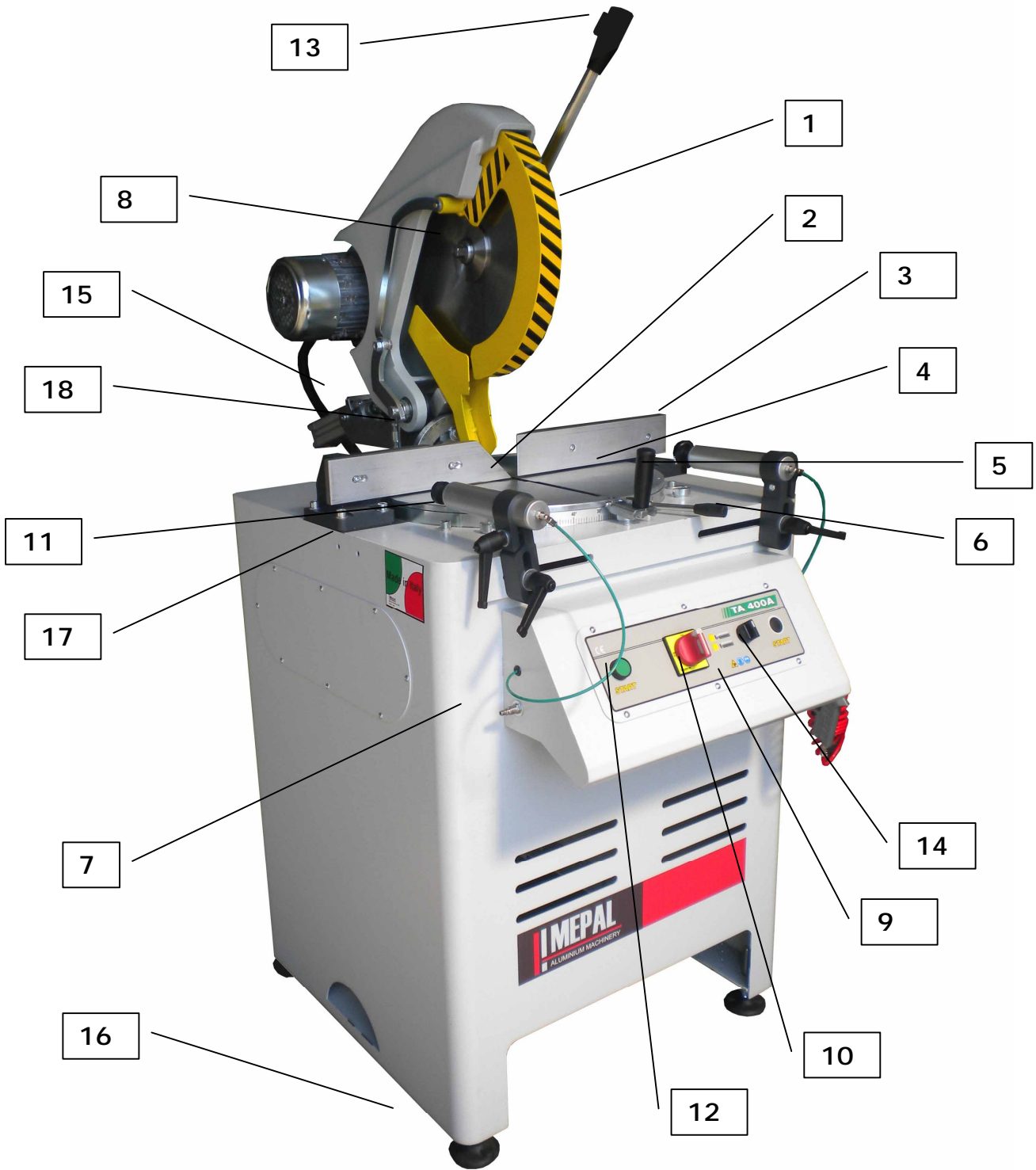
The equipment is switched off by cutting off the pneumatic and electric power supplies. The machine is put out of service by removing the air supply pipe and protecting the inlet against dust, shavings, etc... Furthermore, the power cable must also be removed from the mains electricity.

5.5 MACHINE BOARD SAFETY LABELLING

Several labels have been applied to the router to draw the operator's attention to the care to be taken when using the machine



6. MACHINE COMPONENTS LIST

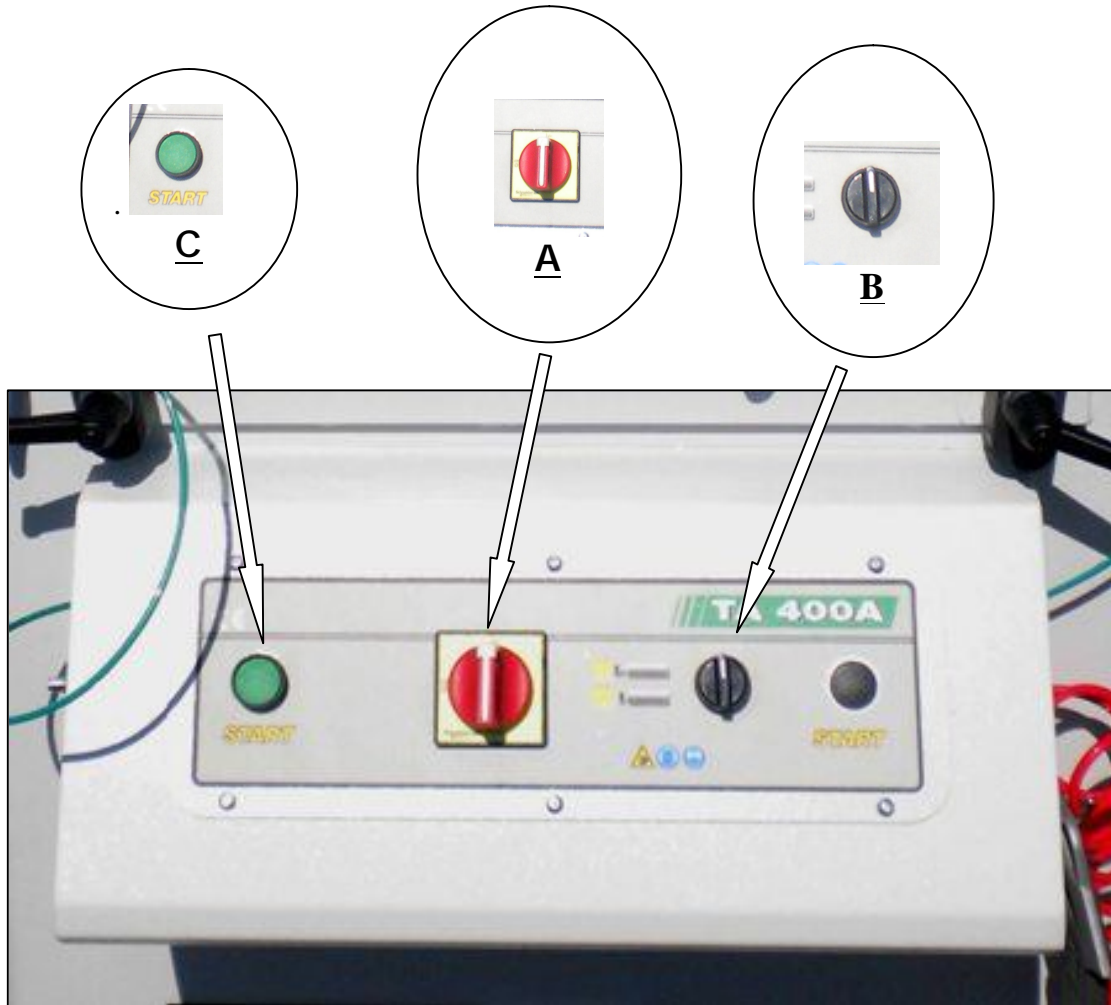


**DESCENDING
CUTTING OFF
MACHINE**

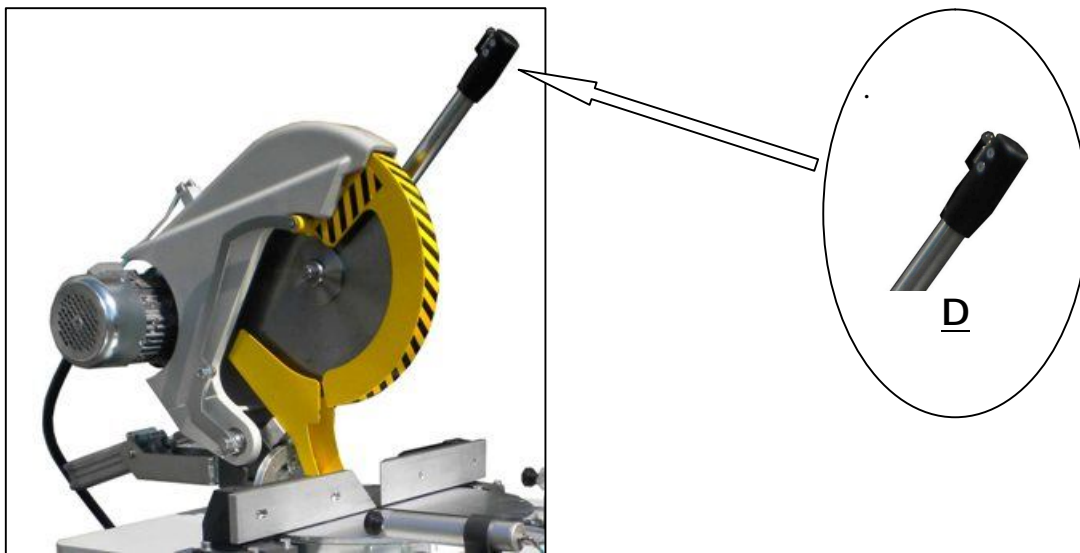
1	PROTECTION COVER
2	HORIZONTAL CLAMPS
3	VERTICAL SQUARE
4	ROTATING WORKING TABLE
5	ROTATION HANDLE
6	TABLE ROTATION LOCKING
7	AIR PLUG
8	BLADE LOCKING NUT
9	CONTROL PANEL

10	GENERAL ELECTRIC SWITCH
11	HORIZONTAL GONIOMETER
12	START BUTTON A
13	START BUTTON B
14	OPEN/ CLOSE CLAMPS BUTTON
15	RETURN CYLINDER
16	LEGS
17	ROLLING TABLE PREDISPOSITION
18	VERTICAL GONIOMETER

6.1 CONTROL PANEL



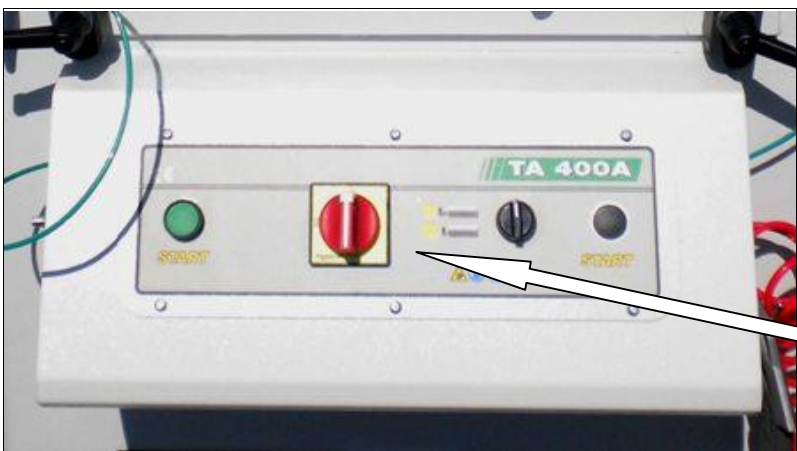
<u>A</u>	MAIN SWITCH
<u>B</u>	OPEN/ CLOSE CLAMPS BUTTON
<u>C</u>	START BUTTON A



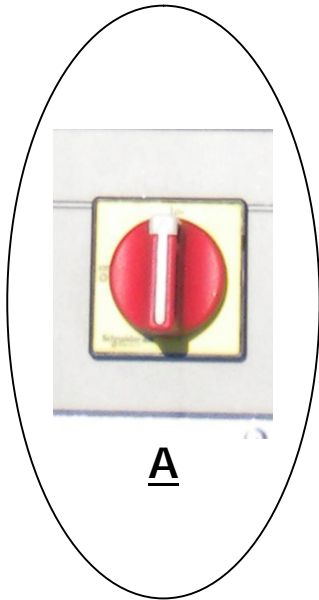
D START BUTTON B

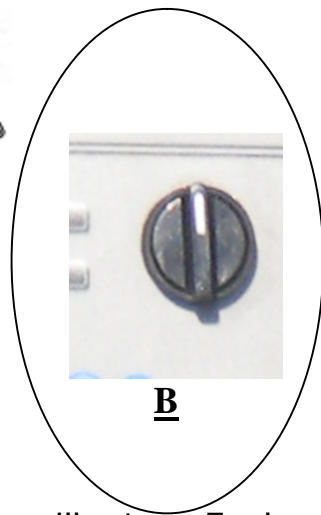
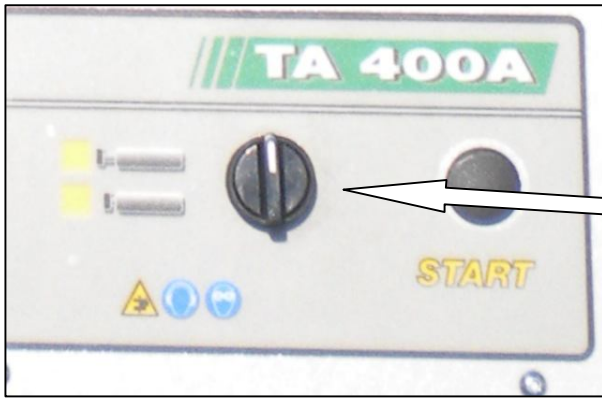
7. HOW TO USE

7.1 PRELIMINARY WORK SEQUENCE



To turn on the cutting off machine the switch must be activated (A)



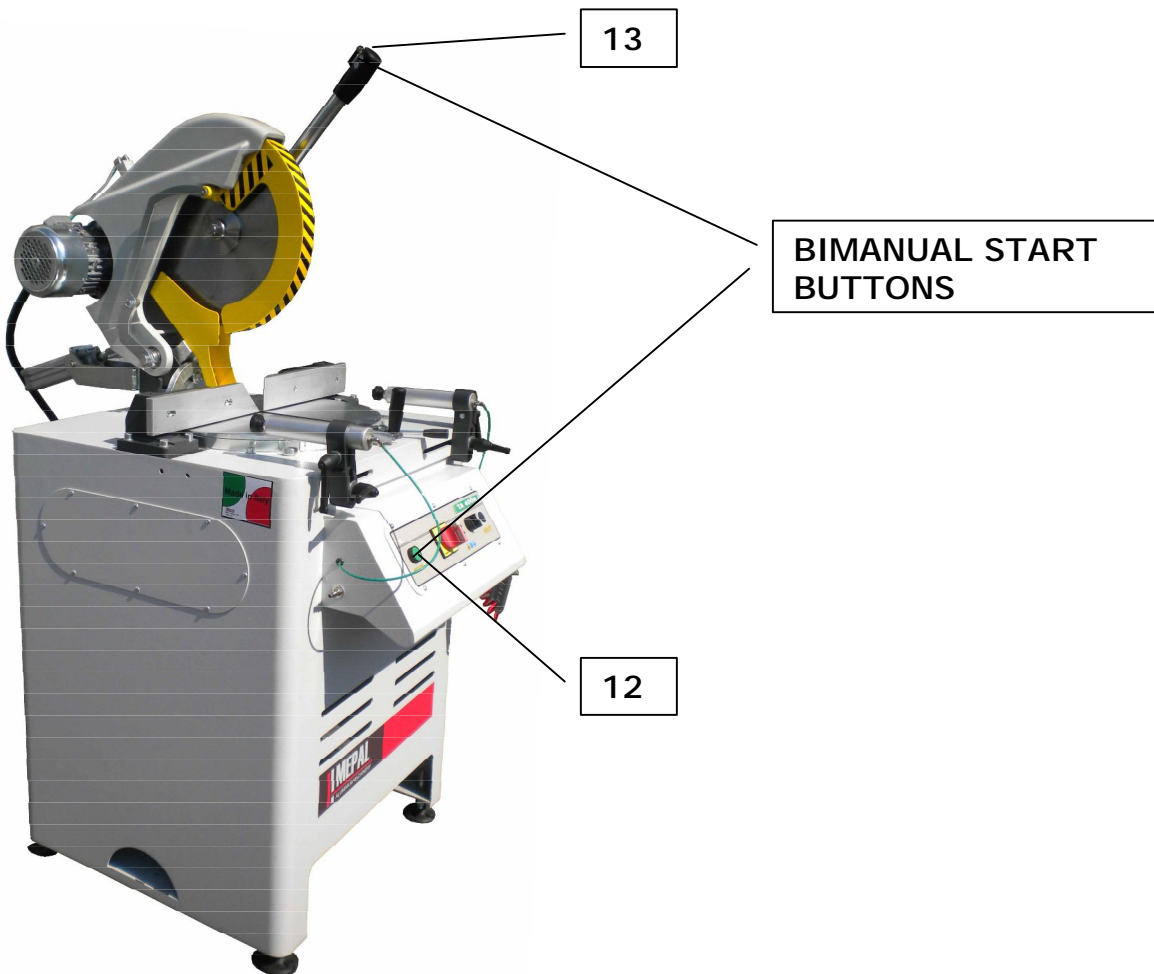


Then it is necessary to close the clamps otherwise the blade motor will not run. To close the clamps the CLAMPS CLOSING BUTTON (B) must be pressed.

IMPORTANT!!!

Start the work sequences below only after a complete reading of this manual and the consciousness that you understand the correct use of the machine. If the above mentioned conditions are not respected, serious damage can be caused to persons and property.

7.2 WORKING COMMANDS ACTIVATION



8. CLAMPS



After the clamps are closed and the switch is activated, it will be possible to start the blade motor. Press both the (13) and (12) buttons to start working. If one of the two buttons is released the blade will stop and return to the original position. This is necessary because the machine must stop if both the hands are not used.

7.3 WORKING PHASE

Press both the (12) and (13) start buttons, the blade protection cover will open while the blade descends. When the cutting is completed release the (13) start button following the blade rising without releasing the lever.

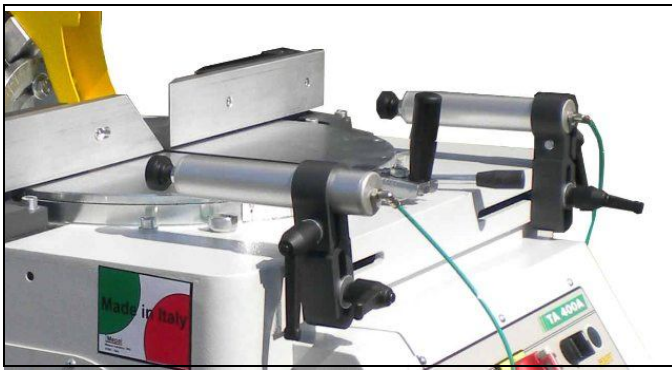
When the head will be in the original position and protection blade cover will be closed, the clamps can be opened and the piece removed.



Move the angle of the rotating table and leave it in the desired cutting position. Lock the profile with the clamps.

When the working is completed, leave the head in the original position and unlock the clamps to remove the profile.





As previously said, for security reasons, it is not possible to start the machine if the clamps are not closed.

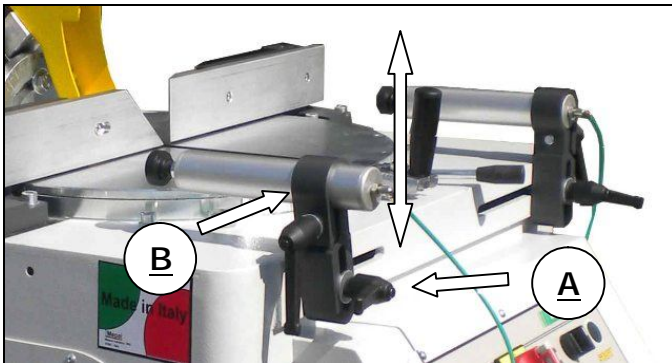
WARNING!!!

BE SURE IN EVERY WAY OF THE CORRECT POSITIONING OF THE PROFILE BETWEEN WORKING TABLE AND CLAMPS.

9.

CLAMPS

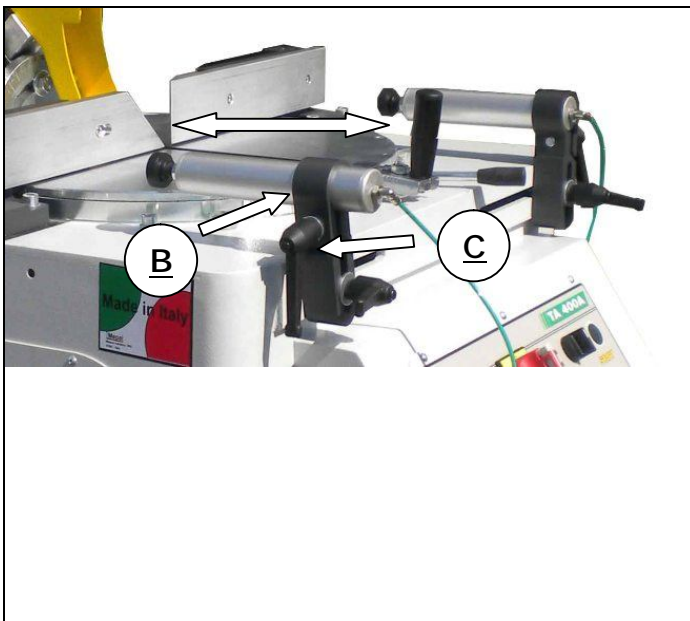
REGULATIONS



9.1 VERTICAL CLAMPS

REGULATION::

To regulate the vertical clamp movement :
 Unscrew the jackart (A)
 Move the clamp support (B) up or down till the desired position is reached then lock the jackart (A).



9.2 HORIZONTAL CLAMPS

REGULATION:

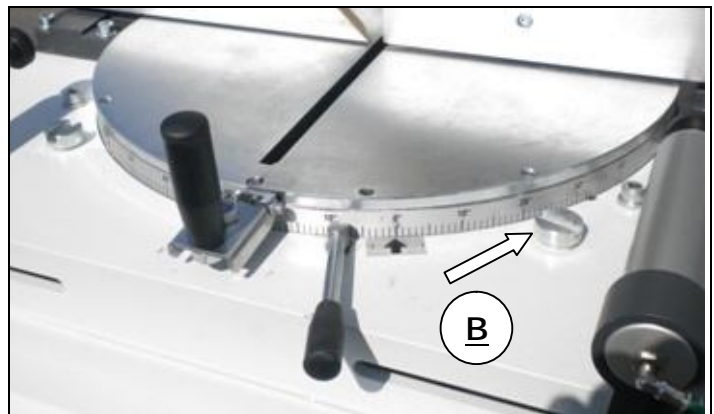
To regulate the horizontal clamp movement:
 Unscrew the jackart (A)
 Move the piston (B) forward or bakward till the desired position is reached then lock the jackart (A).



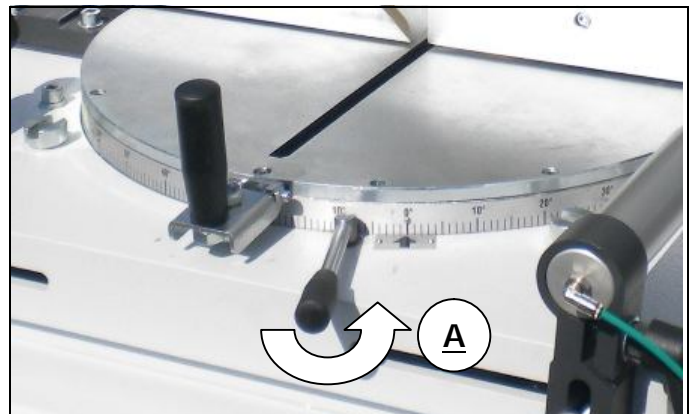
10. WORKING TABLE REGULATION



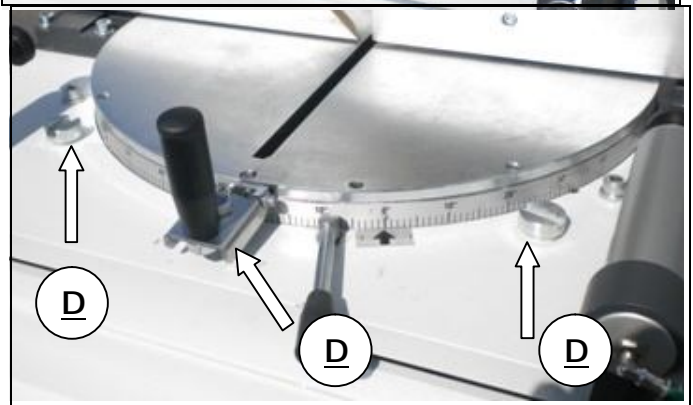
Example. Rotate the table till it is positioned to the 45° reference (B) if you need a 45° cutting.



To cut at intermediate angles just leave the table in the intermediate position then turn the lever (A) in the arrow direction.



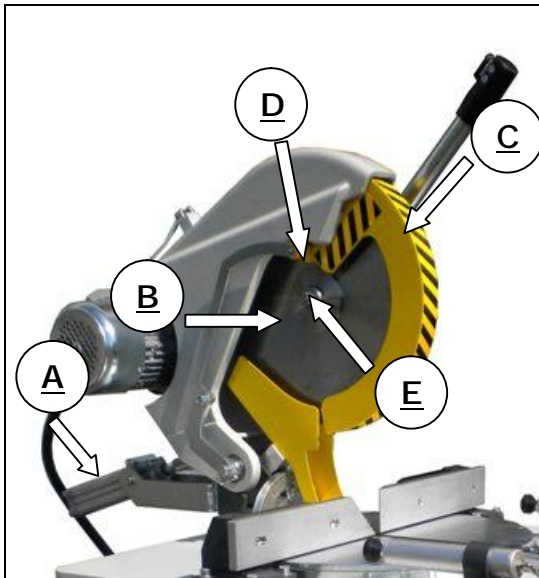
If the machine does not cut properly in one of the imposed angles ($0^\circ/45^\circ/-45^\circ$), regulate with a key the locking eccentric pin (D) till the cut will be the most accurate.



11. REPLACING

THE

BLADE



To replace the blade follow these instructions:
Be sure that the head is in the original position (the (A) cylinder must be closed) and the main switch must be turned off.

- Remove the locking sieger (D) of the lever so the blade protection cover (C) will be free to enter inside the head and a passage will opened for the blade.
- Remove the belt cover on the other side.
- Lock the blade with the allen wrench and remove the nut (E) with a 19 mm open wrench.
- Remove the blade flange (B), remove the blade and replace it.
- Follow the same operations in the opposite order to lock the blade.

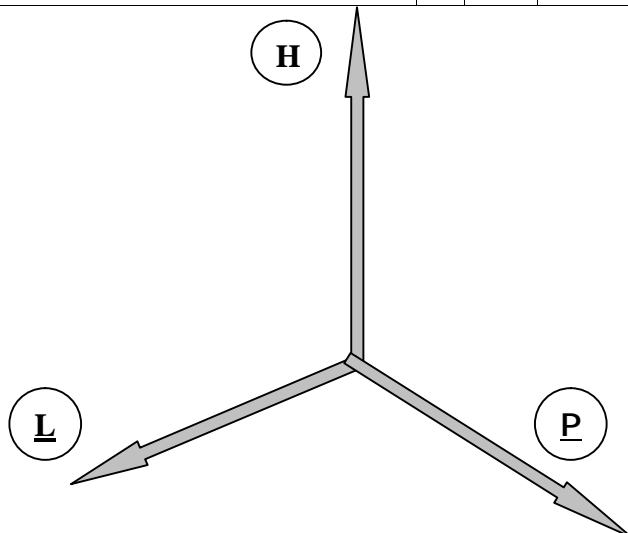
12. TECHNICAL DATA



DESCENDING CUTTING OFF MACHINE

HEICHT	H	mm	1720
WIDTH	L	mm	730
DEPTH	P	mm	1100
WEICHT		kg	140
WORKING TABLE HEIGHT		mm	970
WORKING PRESSURE		bar	7
MIN PRESSURE		bar	7

MAX PRESSURE		bar	10
BLADE MOTOR		rpm	2800
MOTOR POWER		Hp	2
AUTOMATIC MOTOR MOVING			
BLADE SHAFT		mm	30



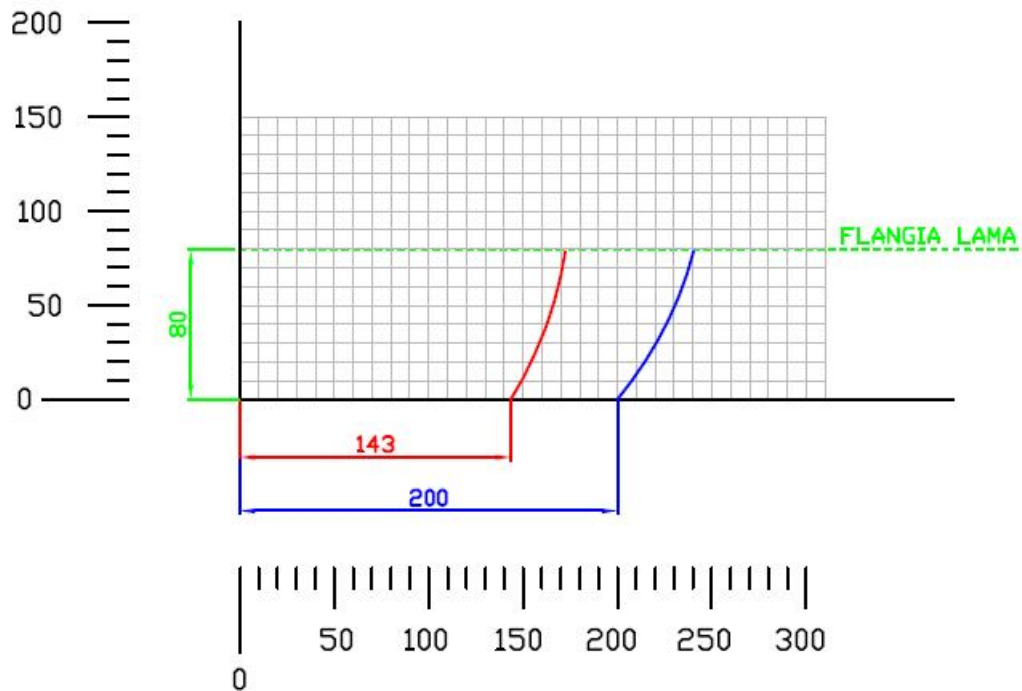
13. CUTTING DIAGRAMS



DIAGRAMMA DI TAGLIO TRONCATRICE MONOTESTA DISCENDENTE VENUS400

angolazione testa 90° —

angolazione testa 45° —



14.

INSTRUCTIONS FOR MAINTENANCE



WARNING!!

It is important that qualified personnel carry out periodical maintenance, inspections and servicing of the unit used in order to avoid those breakdowns that may, directly or indirectly, cause damage to people, animals or property.

14.1 SETTING UP FOR MAINTENANCE

Before proceeding to carry out any maintenance, it is necessary to cut off the electrical and pneumatic supplies to the machine (remove the plug from the mains electricity and remove the pneumatic supply pipe).

14.2 MAINTENANCE PROGRAM

It is important to carry out the following maintenance operations on a regular basis:

- Clean the machine regularly in order to guarantee good working order and paying particular attention to the organs in movement,

WARNING!!! DO NOT USE JETS OF WATER TO CLEAN THE MACHINE AND ESPECCIALY ON ELECTRICAL PARTS.

Lubricate the machine tools with coolant cutting fluid so that these will never operate when dry. In this way the machining finishes are improved and the useful life of the tools is greatly increased.

Variations in normal working conditions (noise, vibration, etc.) are indicative of incorrect machine operation, In the event of problems or the need for repair interventions, contact our assistance service or that of our dealer, In any case, follow the instructions contained in this manual for any type of maintenance and/or repair intervention,

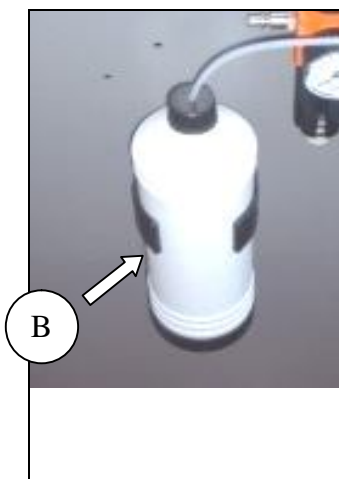
For anything not expressly contained in this manual it is necessary to contact the local Assistance Service (section 14.2).

14.3 SPECIAL MAINTENANCE

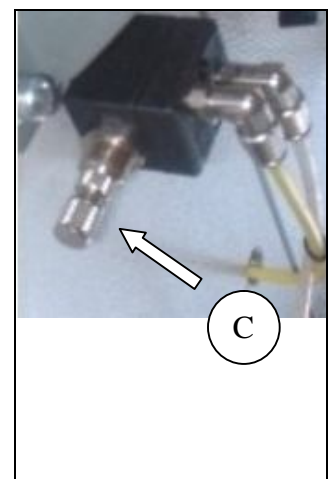
Contact the Assistance Service directly (section 14,2)

14.4 ROUTINE MAINTENANCE

The routine maintenance that are usually requested on this machine are:



Periodically replace the cooling lubricant that is contained in the relevant tank (B). failure to observe this rule will invariably cause machining to be rougher and the mills to wear out more rapidly In the event that increased tool lubrication is required, use the regulator (C) of the exit of the cooling soupape which is placed inside of the machine near the blade.



15. HOW TO SOLVE ORDINARY PROBLEMS



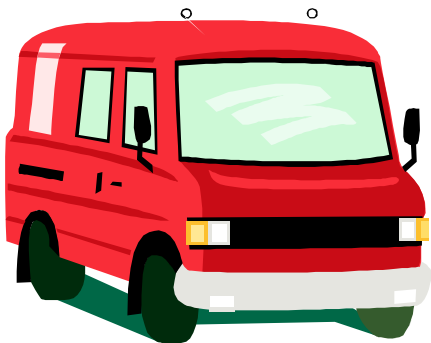
15.1 COMMON PROBLEM LIST



PROBLEMS	CAUSE	SOLUTION
THE MACHINE DOES NOT START	Main switch not enabled	Enable switch
THE MACHINE STOPS DURING OPERATIONS	Missing phase	Enable phase
	Thermal overload	Find the cause and eliminate it
BAD CUTTING	Worn blade	Replace blade
	Insufficient lubricant	Add lubricant
THE LUBRICANT DOES NOT ARRIVE	Lubricant finished	Replace lubricant
	Lubricant circuit blocked	Check oil cleanness or blow compressed air through the atomiser connection
ANOMALOUS WEAR OF PNEUMATIC PARTS	Lack of lubricant in the pneumatic system	Add lubricant
	Compressed air not purified	Replace filter
	Water in the pneumatic system	Check and clean outlets
THE MACHINE DOES NOT CUT PROPERLY AT 90°	Eccentric pin moved	Section 11
THE MACHINE DOES NOT CUT PROPERLY AT 45°	Eccentric pin moved	Section 11

15.2 CUSTOMER CARE

The Assistance Service network is available both nationally and internationally. For specific problems, please contact THESE NUMBERS:



TEL.:

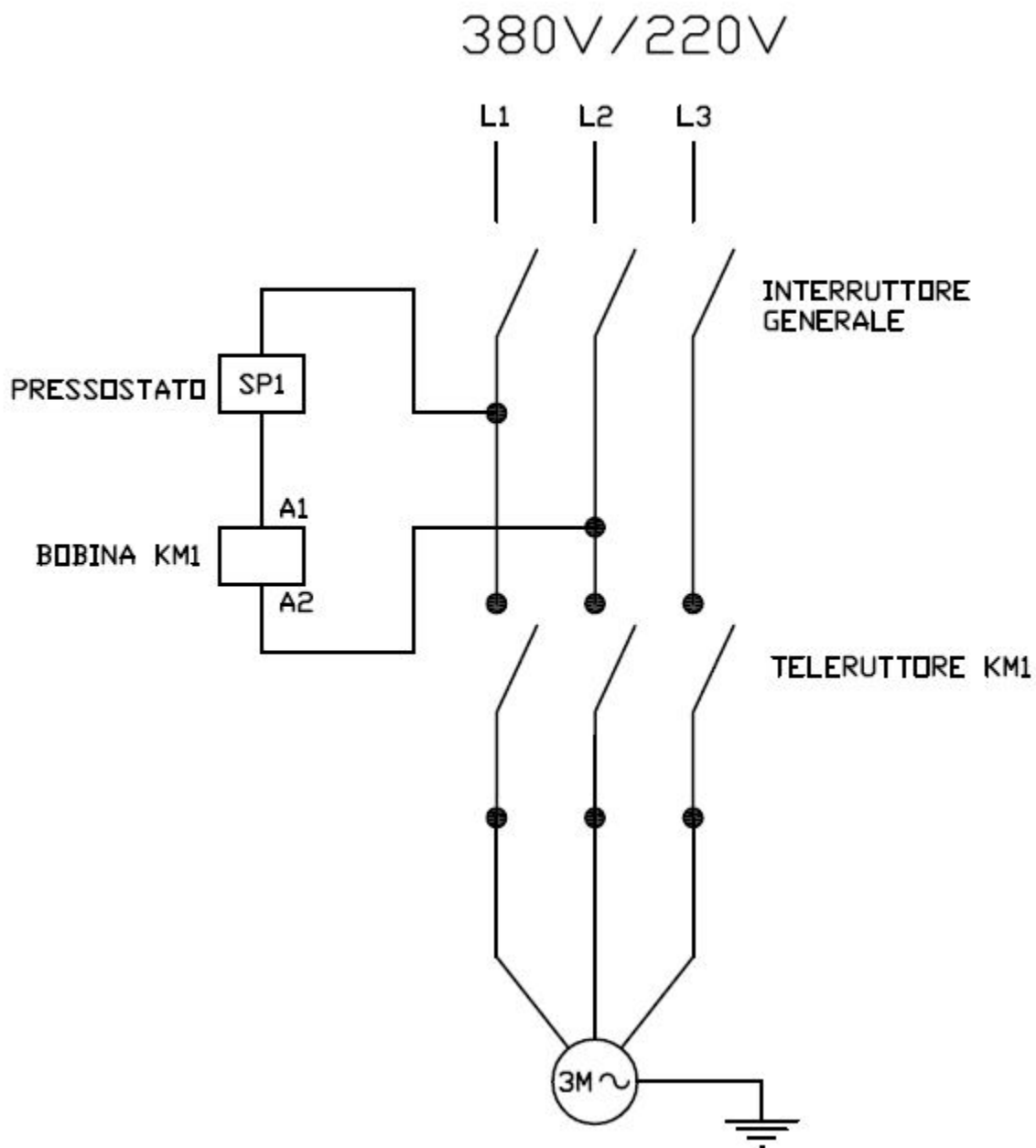


FAX:



WARNING!!
WHEN THE MACHINE IS TO BE DECOMMISSIONED BECAUSE IT HAS BECOME OBSOLETE OR IT HAS IRREDEMIABLY BROKEN DOWN, IT MUST FIRST OF ALL BE PUT OUT OF SERVICE BY BEING RENDERED INOPERATIVE AND ANY DANGERS REMOVED. DISCONNECT THE MACHINE FROM THE MAINS ELECTRICITY, DISCONNECT THE AIR PIPES AND REMOVE ALL TOOLS AND ADDITIONAL PARTS. COVER THESE ELEMENTS WITH PROPERLY SEALED WRAPPING. SEAL THE MACHINE INSIDE STURDY PACKAGING AND PROCEED TO ITS DISPOSAL IN CONFORMITY WITH THAT SPECIFIED IN THE STANDARDS AND REGULATIONS IN FORCE. CONTACT THE RELEVANT LOCAL BODIES FOR THIS OPERATION.

ELECTRIC DIAGRAM



PNEUMATIC DIAGRAM

