



**AMERI-CAN**  
**MACHINERY LTD.**

# ATS 500



## USER 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 to 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. HANDLING



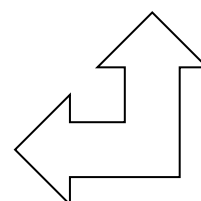
Machines are delivered in a protective plastic covering or packed on pallets with crates - wooden crates cardboard coverings, according to the requirement stated at the time of order.

### **WARNING!!**

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

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



## 4. OPERATION NECESSARY FOR THE INSTALLATION



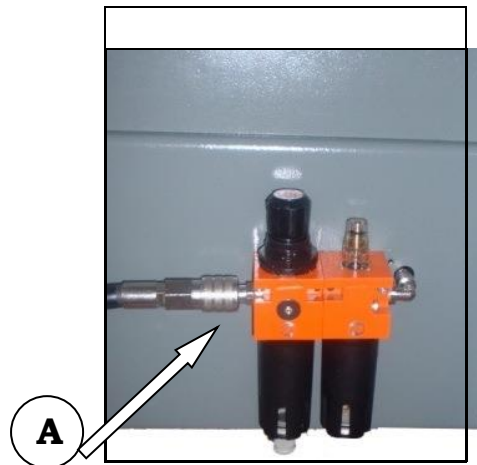
All stages of installation must be carried out by qualified personnel

### 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 mm<sup>2</sup> 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.

<b>Technical data</b>	
Requested power	3.0 kW
Short circuit Current	10 kA
Load current	4.7 A
Peak starting current	15.8 A

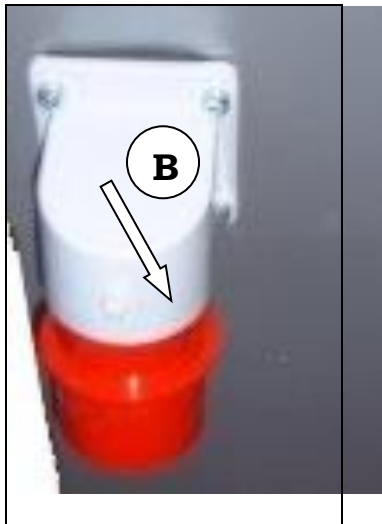
In case of voltage drops the behavior of the machine is:

Voltage drop duration t	Machine status
$t \leq 0.7$ seconds	Normal operations
$t > 0.7$ seconds	Emergency activated, safety conditions for the operator preserved

**Overcurrent protective devices are requested on the power supply, for example:**

**-Motor-protective circuit breaker Telemecanique GV2ME16;**

**-Fuses NH16AgG.**



**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. AMERI-CAN MACHINERY 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 AMERI-CAN MACHINERY LTD.

### 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

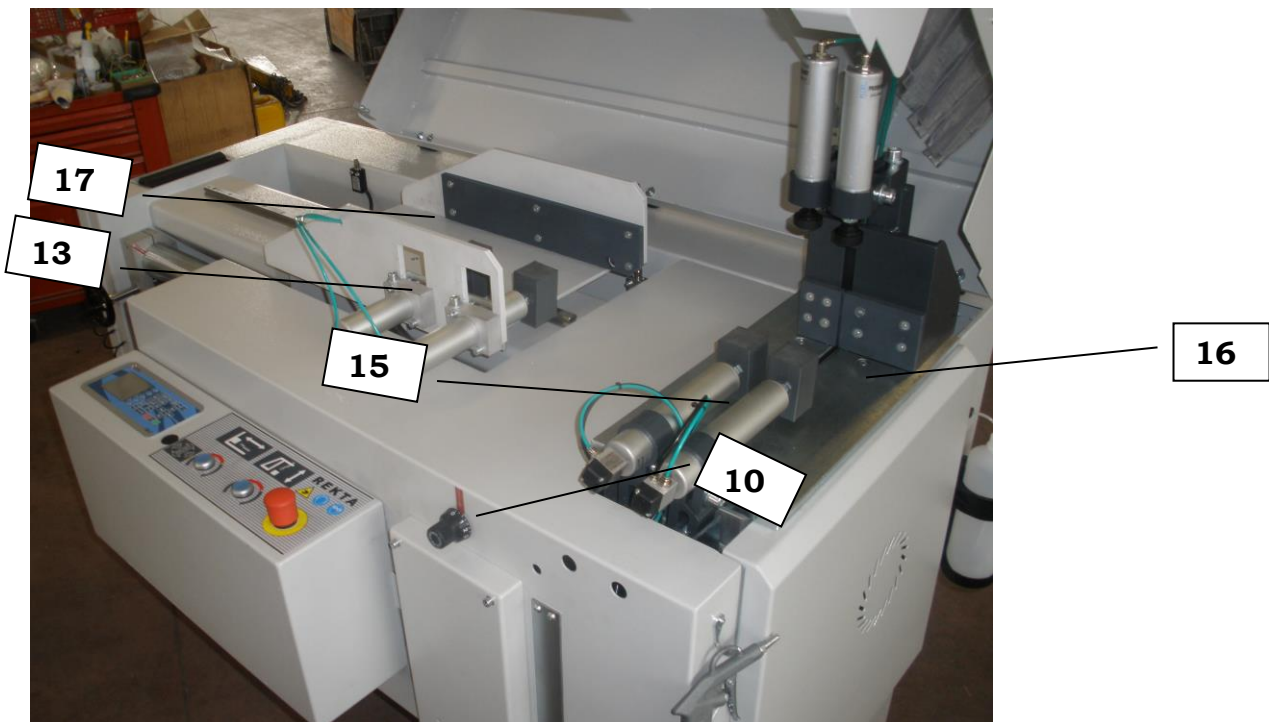
Several labels have been applied to the router to draw the operator's attention to the care to be taken when using the machine.







# 6. MACHINE COMPONENTS LIST





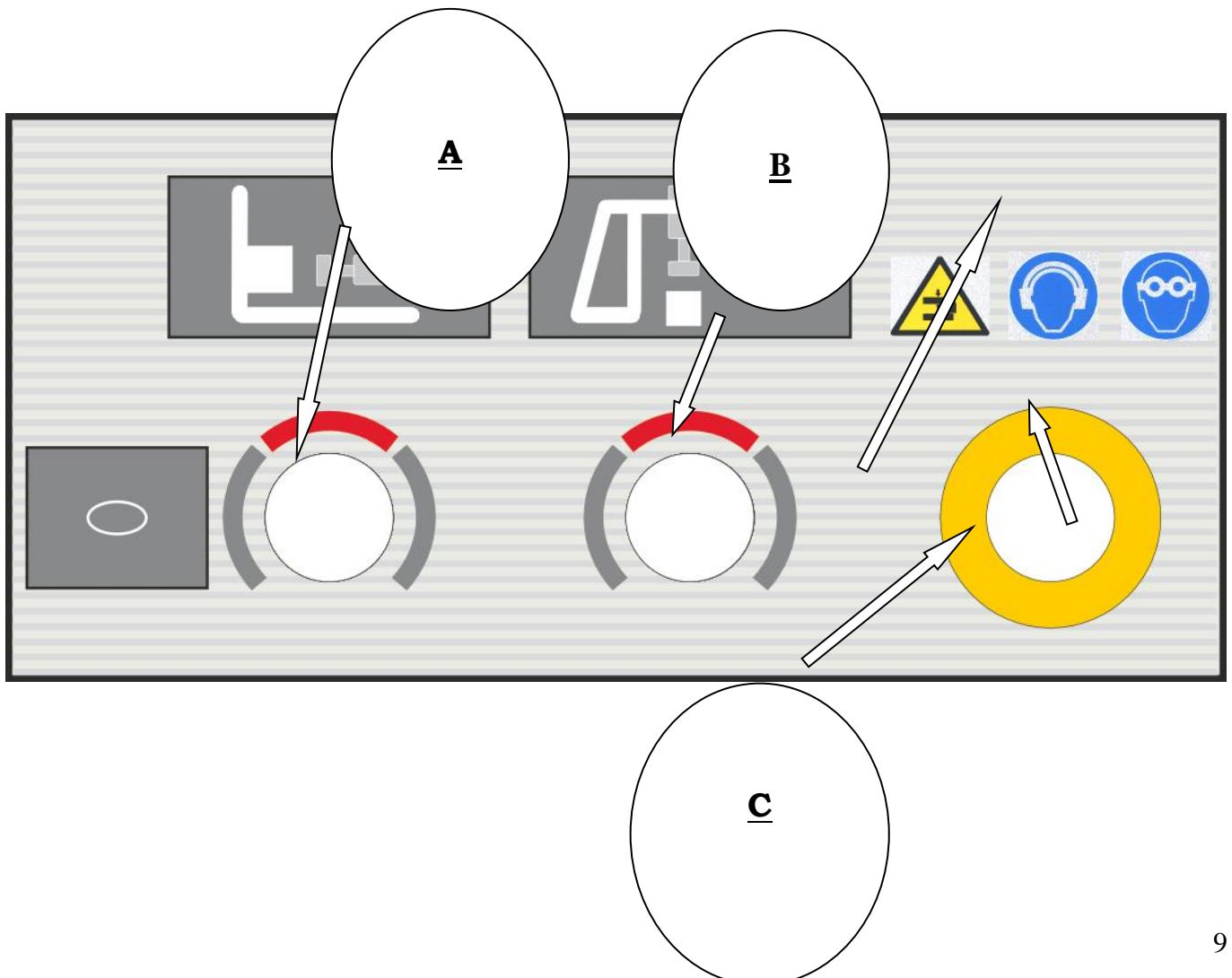


### 6.1 CONTROL PANEL

#### RISING UP CUTTING MACHINE

1	PROTECTION COVER
2	PLC DISPLAY INTERFACE
3	PROFILE SUPPORT ROLLER
4	ADJUSTABLE DOUBLE EFFECT CYLINDER
5	ELECTRIC SWITCH
6	CONTROL PANEL
7	MACHINE FEET
8	BASAMENT
9	ELECTRIC PLUG

10	BLADE RISING SPEED REGULATION
11	MOTOR COVER
12	ELECTRIC PANEL COVER
13	CARRIAGE CLAMPS
14	UNLOCKING NUT FOR CYLINDER
15	BLADE CLAMPS
16	WORKING TABLE
17	MOVING CARRIAGE

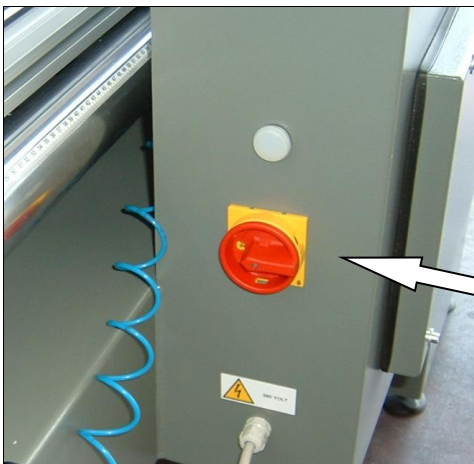


<b><u>A</u></b>	<b>HORIZONTAL CLAMPS BUTTON</b>
<b><u>B</u></b>	<b>VERTICAL CLAMPS BUTTON</b>
<b><u>C</u></b>	<b>EMERGENCY BUTTON</b>

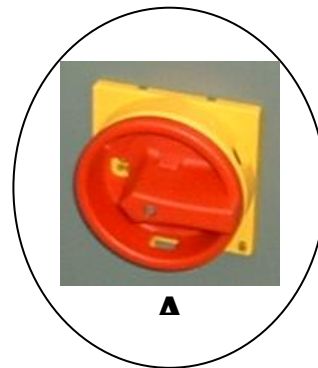


## **7. HOW TO USE**

### **7.1 PRELIMINARY WORK SEQUENCE**



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



## 8. CLAMPS



**IMP  
ORI**

### **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.***

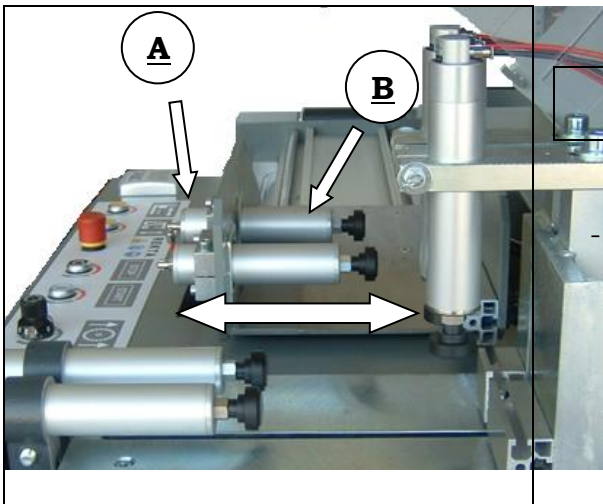


***As previously said, for security reasons, it is not possible to start the machine if the clamps are not closed.***

### **WARNING!!!**

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

# 9. CLAMPS REGULATIONS

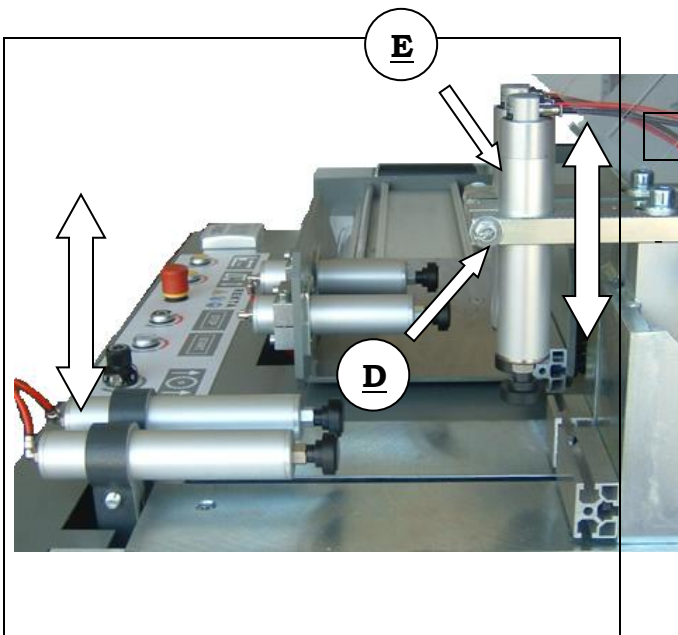
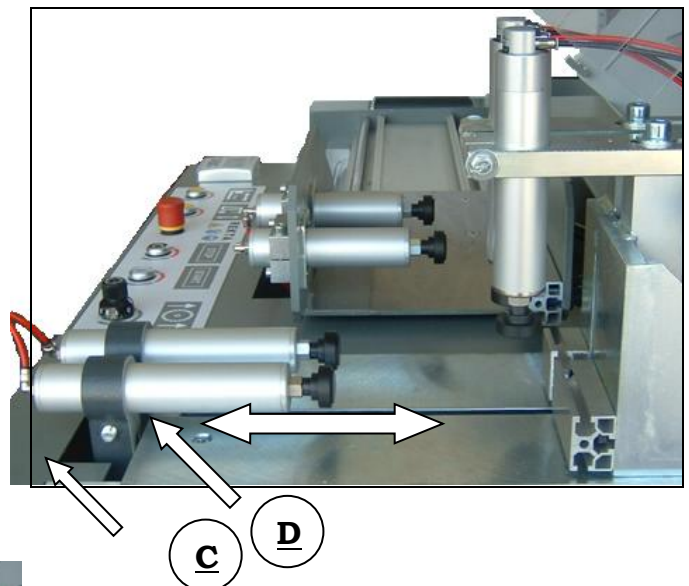


## 9.1 CARRIAGE CLAMPS REGULATION:

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

## 9.2 TRANSVERSAL CLAMPS REGULATION:

To regulate the transversal clamp movement :  
Unscrew the jackart **(A)**  
Move the clamp support **(C)** right or left till the desired position is reached then lock the jackart **(A)**.



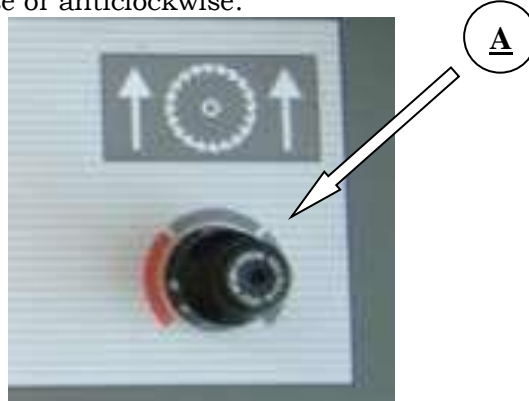
## 9.3 VERTICAL CLAMPS REGULATION

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

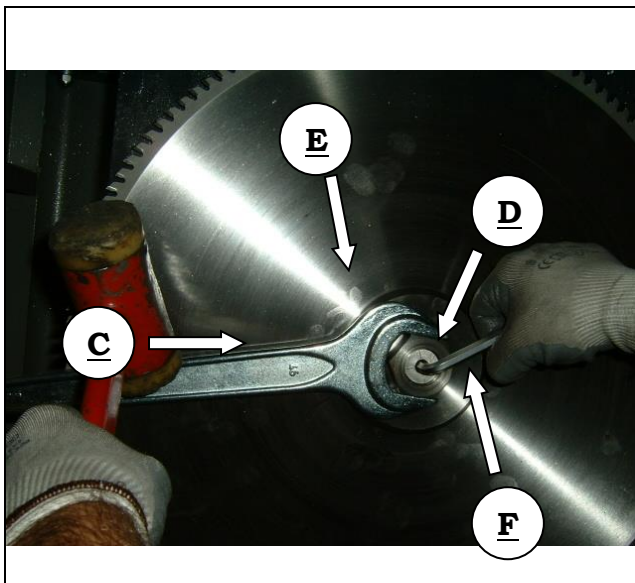
# 10. RISING BLADE SPEED REGULATION



It is possible to adjust the rising speed of the blade according to the profiles to cut. To increase or decrease the speed turn the knob **(A)** clockwise or anticlockwise.



# 11. REPLACING THE BLADE



To replace the blade follow these instructions:

- Remove the protection cover unscrewing the **(A)** and **(B)** bolts.
- Put the open wrench **(C)** on the nut **(D)** locking the flange **(E)**.
- Put the allen wrench **(F)** in the motor shaft rotating it clockwise to unscrew the nut **(D)**.
- Remove the nut **(D)** and the flange **(E)**.
- Insert the new blade in the motor shaft.
- Place the flange **(E)** and the nut **(D)** in the original position locking them with the wrenches.

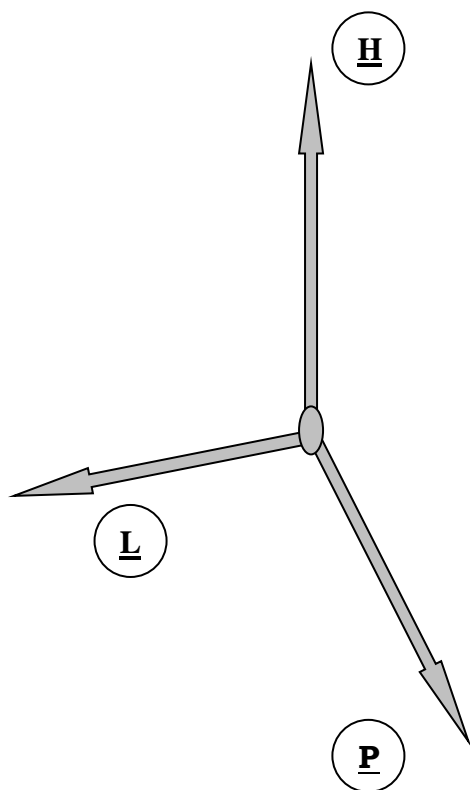
# 12. TECHNICAL DATA



## ATS 500

HEIGHT	H	mm	1410
WIDTH	L	mm	1690
DEPTH	P	mm	876
WEIGHT		kg	350
WORKING TABLE HEIGHT		mm	969
WORKING PRESSURE		bar	7
MIN PRESSURE		bar	2.5

MAX PRESSURE		bar	9
BLADE MOTOR RPM		rpm	2800
MOTOR POWER		Hp	3
BLADE Ø		mm	450
BLADE SHAFT		mm	30





# 13. 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.**

### 13.1 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).

### 13.2 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).

### 13.3 SPECIAL MAINTENANCE

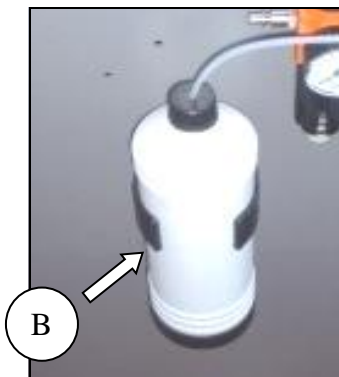
Contact the Assistance Service directly (section 14,2)

### 13.4 ROUTINE MAINTENANCE

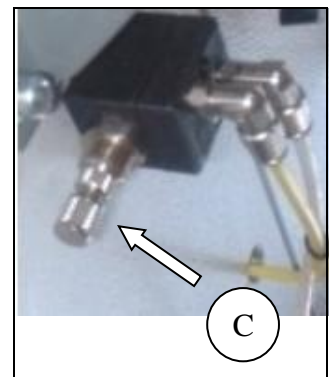
The routine maintenance that are usually requested on this machine are:



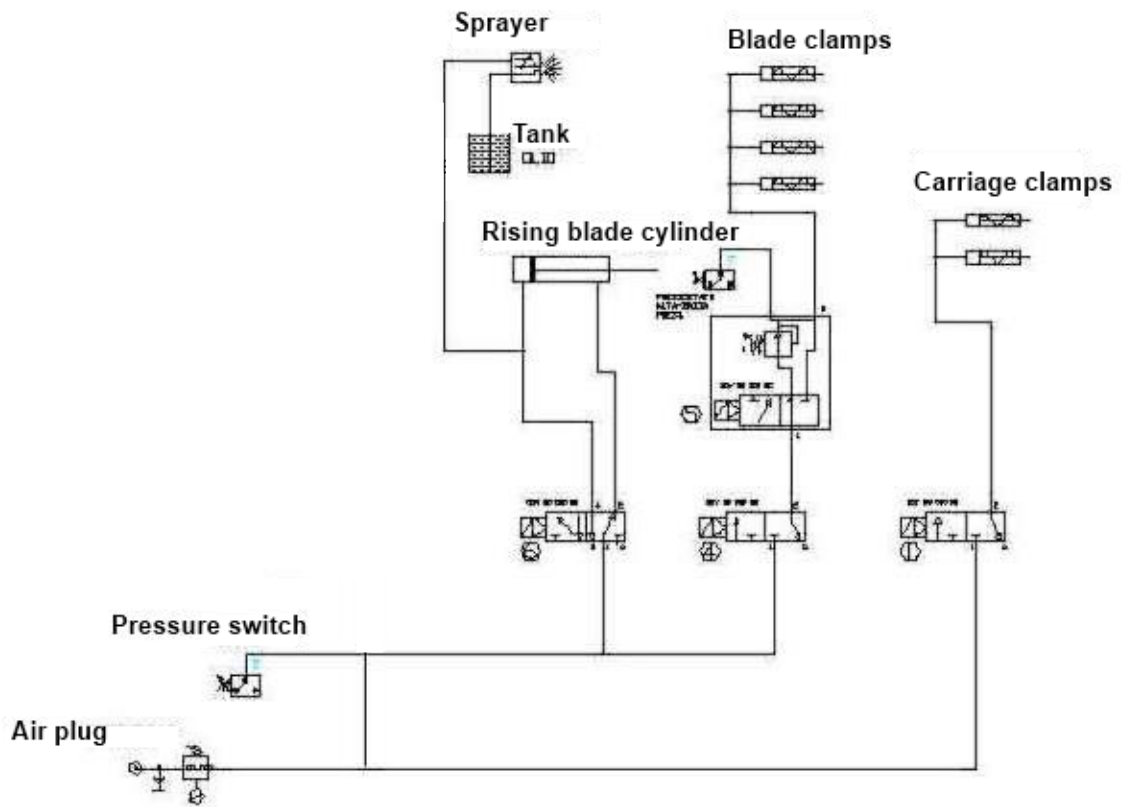
**To replace the blade see section 12.**

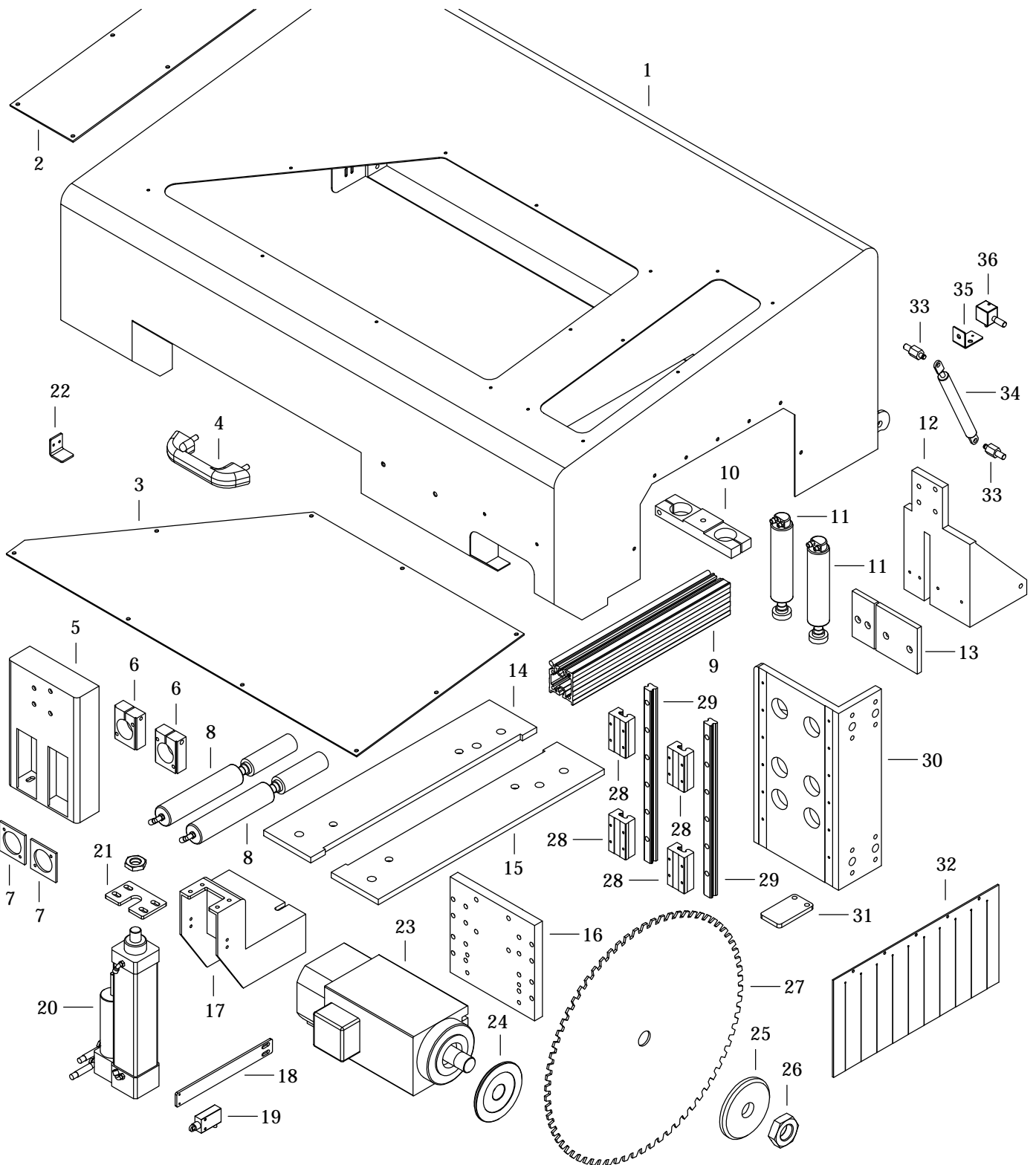


**Periodically replace the cooling lubricant that is contained in the relevant tank (B). failure to observe this rule will invariably cause machining to be rougher and the mills to wear out more rapidly In the event that increased tool lubrication is required, use the regulator (C) of the exit of the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

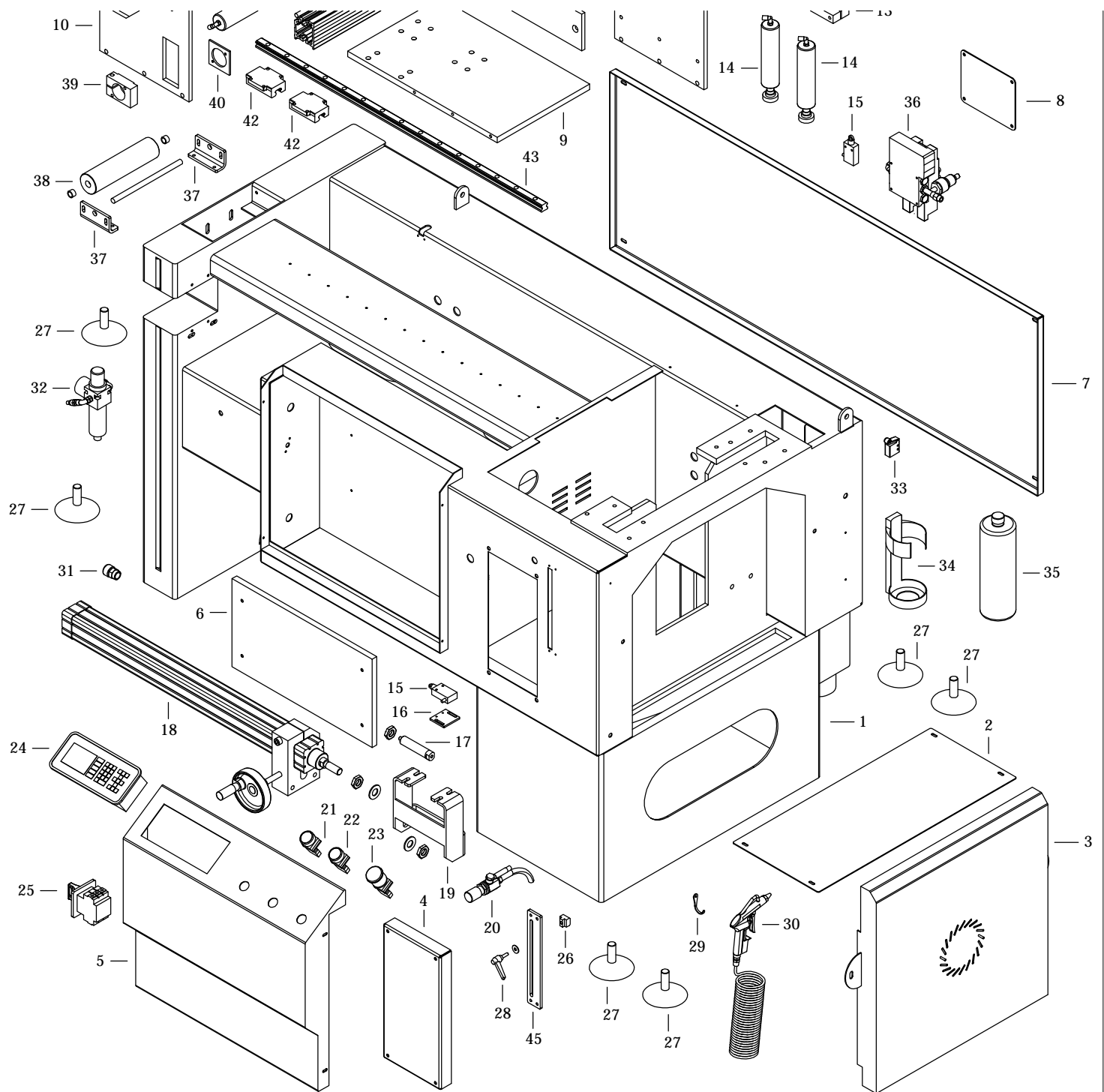


# 16. PNEUMATIC DIAGRAM





1	Carter superiore Rekta _ IR-33872	13	Pianetto PVC castello Rekta _ GG-33923	25	Flangia anteriore lama Ø500 _ LE-30855
2	Plexiglass 1 Rekta _ GG-31015	14	Piana sx Rekta _ LE-33886	26	Dado M30x1,5 h.24mm sx _ EC-71086
3	Plexiglass 2 Rekta _ GG-31016	15	Piana dx Rekta _ LE-33887	27	Lama HM Ø500 F30 Z120 B4 _ GP-70532
4	Maniglia frontale _ FS-70335	16	Carro motore Rekta _ LE-33896	28	Pattino guida 20x20 _ DD-70567
5	Sostegno morse frontali Rekta _ IR-33873	17	Staffa motore Rekta _ IR-33876	29	Guida uscita lama Rekta _ KL-33911
6	Supporto per cilindri morse _ LE-30547	18	Staffa micro lama Rekta _ LE-33880	30	Trave motore Rekta _ IR-33877
7	Staffa cilindri morse _ LE-30505	19	Interruttore con rotella FR515-1 _ AA-71018	31	Battuta carrello _ LE-32137
8	Cilindro 35/115 _ CN-70110	20	Cil. oleop. Ø50x195 tubi L= 600 _ CN-71619	32	Fascia cappotta Rekta
9	Estruso piano morsa MY07 / L= 400mm	21	Piastra stelo cil. lama Rekta _ LE-33924	33	Perno carter Rekta _ LA-32634
10	Blocco morse verticali Rekta _ LE-33899	22	Staffa micro cappotta Rekta _ LE-33889	34	Molla a gas 550N x c.150 _ ED-70212
11	Cilindro 35/75 + servo valvola _ CN-70235	23	Motore 2,2 Kw _ BK-70571	35	Staffa nebulizzatore Rekta _ LE-33890
12	Castello Rekta _ IR-33875	24	Flangia posteriore lama Ø500 _ LE-31976	36	Nebulizzatore _ CH-70032



1	Basamento Rekta _ IR-33878	16	Staffa micro molla Rekta _ LE-32749	31	Skintop PG11 grigio _ BC-70089
2	Coperchio superiore Rekta _ LE-33881	17	Deceleratore M20x1,5 + dado ACA2020-1 _ ED-70281	32	Gruppo filtro aria 1/4 _ CA-70042
3	Coperchio lama Rekta _ IR-33874	18	Cilindro Ø63/640 Avanz. Autom. _ CN-70216	33	Microvalvola leva rullo VME1-05 NO _ BT-70554
4	Chiusura avanti dx Rekta _ LE-33888	19	Staffa carro mobile Rekta _ IR-32626	34	Supporto borraccia 1Lt _ CY-70160
5	Pulsantiera Rekta _ IR-33879	20	Regolatore flusso cilindro salita lama	35	Borraccia 1Lt _ CY-70021
6	Pannello impianto elettrico Rekta _ IS-31158	21	Pulsante morse carro mobile	36	Pacco valvole Rekta
7	Pannello posteriore Rekta _ IS-31017	22	Pulsante morse uscita lama	37	Registro rullo Rekta _ LE-31094
8	Coperchio attacco matricole _ LE-31183	23	Fungo di emergenza _ AA-70674	38	Rullo orizzontale _ LE-31612
9	Piastra carro Rekta _ LE-33884	24	Controllo elettrico VK3 _ AA-70740	39	Supporto per cilindri morse _ LE-30547
10	Sponda anteriore carro Rekta _ LE-33882	25	Interruttore di accensione Rekta	40	Staffa cilindri morse _ LE-30505
11	Sponda posteriore carro Rekta _ LE-33883	26	Blocchetto di arresto uscita lama	41	Cilindro 35/110 _ CN-70670
12	Estruso piano morsa MY07 / L= 290mm	27	Piedino M16 L60 _ EC-70000	42	Pattino flangiato per guida 20x20 _ DD-70551
13	Blocco morse verticali Rekta _ LE-33899	28	Maniglia a ripresa M6x30 R43 _ FS-70013	43	Guida carro mobile Rekta _ KL-33912
14	Cilindro 35/75 _ CN-70138	29	Gancio pistola aria _ LE-32251	44	Pianetto pvc carro Rekta _ GG-33922
15	Interruttore con rotella FR515-1 _ AA-71018	30	Pistola aria _ CA-70052	45	Piastra salita lama Rekta _ LE-33885

# 14. HOW TO SOLVE ORDINARY PROBLEMS

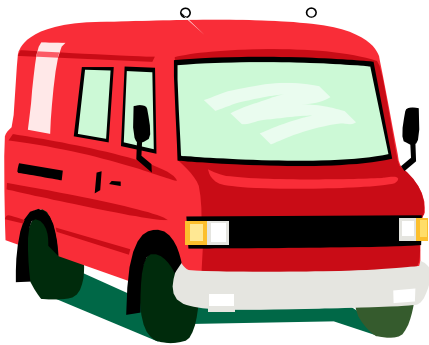


## 14.1 COMMON PROBLEM LIST

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°	Mechanical stop on the cylinder moved	

## 14.2 CUSTOMER CARE

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



TEL.: 905-542-2055



FAX: 905-542-2261



### 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.**

## **15. WARRANTY**

**The MEPAL ITALIA ensures that the machine purchased, before being delivered to the customer, has been tested with positive result. Warranty is of 12 months and refers to the quality of the material and the lack of manufacturing defects. In case of replacement of defective parts, the customer is required to pay the shipping and packaging. Damages for alterations, drop and non correct use of the machine are excluded from the warranty. The warranty is not valid in case of non compliance with the conditions of pay-ment established at the time of acquisition of the machine.**

**In assistance cases, expenses related to spare parts, which are not included in the warranty, and other costs incurred, must be paid directly to the technician who will take care of the technical support. For these costs you will receive an invoice.**