

**GB**

**Operator use and maintenance**

*"Contains CE conformity declaration"*  
*Original instructions – April 2012*

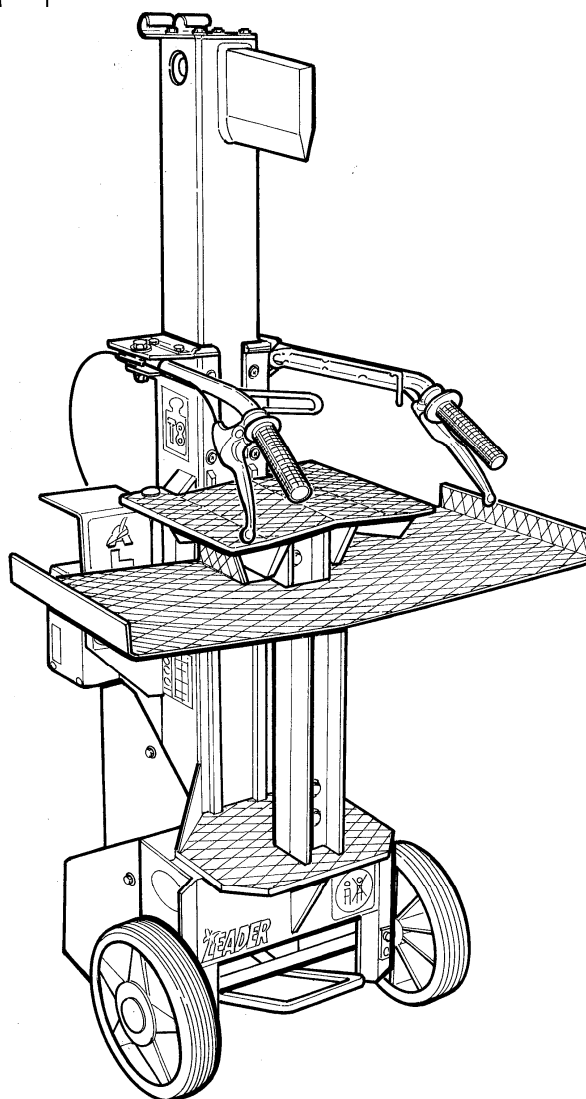


**OPZ-PA**

100.094

**Mod. EL - VS:**

**6,5 – 7 – 8,5 Ton**



**Read this manual carefully before using the machine**

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**T**his manual provides you with all the necessary information for the use and maintenance of your machine. It will work well and last for a long time if it is maintained well and used carefully.

Before leaving the production plant, this specific model was subjected to rigorous testing so as to guarantee maximum reliability. However, it is necessary to check that the machine has not suffered any structural damage during transport that could jeopardize its functioning and safety.

This manual is to be considered an integral part of the machine and must accompany it until it is broken up.

If it is lost or damaged, ask **Ricca Andrea & Co.** for a replacement copy.

This manual was written in accordance with European Directive 2006/42/CE, a directive concerning machine safety, which substituted Machines Directive 98/37/CE and came into force in December 2009. These guidelines stipulate that the machine be equipped with all the necessary safety systems even in the planning phase, in order to avoid risky and dangerous situations for the users' health.

The technical information contained in this manual is the property of **Ricca Andrea & Co.** and must be considered confidential.

Reproduction of the graphics, text and diagrams, even in part, is forbidden by law.

Certain details shown in the diagrams in this manual could be different from those on your machine.

Certain components might have been removed in order to make the diagrams clearer.

To make this manual easy to consult, it is divided into different sections, each one with a different symbol.

The topics discussed in this manual are those expressly required by the "EU Machine Directive 2006/42/CE" and subsequent modifications and the technical data given is that supplied by the manufacturer at the moment of writing.

This manual must be kept in a place which is accessible to all the staff in charge of operating and maintaining the machine.

In case of any dispute, the Cuneo Law Court in Italy will have jurisdiction.



**In case of any problems, our technicians are at your complete disposal.**

**Tel. 0171.946709 - Fax 0171.946719**



**If the machine is sold to another party, this manual must be given with it !**

## CONDITIONS AND LIMITATIONS

**A**ll our machines have been subjected to careful testing and are covered by a 24-month warranty for private and DIY use and a 12-month warranty for industrial use or for hiring from the date of production against manufacturing defects.

The warranty starts from the purchase date indicated on the warranty card enclosed with the manual. When the card has been duly and completely filled in, it must be sent to the manufacturer within 10 days of the first use of the machine.

The warranty is not valid if the machine is repaired by unauthorized third parties or if equipment or accessories are used which have not been supplied by **“Ricca Andrea & Co.”**, or which have not been recommended or approved by the above, or if the serial number has been removed or altered during the warranty period.

**“Ricca Andrea & Co.”** undertakes to repay or replace free of charge any parts which, within the warranty period, prove to have manufacturing defects.

Repairs are carried out exclusively in our factory or in a Technical Service Centre that we indicate and must arrive free port (with transport costs paid by the user unless agreed otherwise).

The warranty does not provide for any cleaning of working parts.

Defects which are not clearly attributable to the material or manufacture will be examined in our factory or in a Technical Service Centre that we indicate.

If the claim should prove to be unjustified, all repair and/or replacement costs of parts will be charged to the purchaser.

The fiscal purchase document must be shown to the technical personnel carrying out the repairs or must accompany the machine if sent for repair.

The following are excluded from the warranty: accidental damage caused by transport, by negligence or inadequate treatment, by improper use not corresponding to the directions given in the instruction book and any phenomenon nondependent on the normal operation or use of the machine.

**“Ricca Andrea & Co.”** declines all responsibility for any damage to persons or things caused by wrong or improper use of the machine.

For any dispute, the Cuneo Law Court in Italy will have jurisdiction.



**Failure to send the card nullifies the warranty !!**

## DUPLICATION OF THE GUARANTEE CARD PROVIDED WITH THE MANUAL

### PART (A)

#### GUARANTEE CERTIFIED TO BE KEPT AND SHOWN TO THE AUTHORIZED TECHNICAL CENTRE

This certificate, together with the sales receipt, must be shown to the technicians carrying out the repair or must accompany the machine when it is sent for repair.

The certificate must carry the dealer's stamp and the date of purchase.

N.B.: The guarantee is valid only if this card has been filled in completely.

MODEL: <input style="width: 330px; height: 20px;" type="text"/>	<b>DEALER or FINAL USER</b> <hr/> Name <hr/>
NUMBER: <input style="width: 330px; height: 20px;" type="text"/>	Address <span style="float: right;">Nr.</span> <hr/>
1 <sup>st</sup> DATE OF SALE (24 months) <input style="width: 330px; height: 20px;" type="text"/>	Post code <span style="float: right;">Town</span> <hr/>
2 <sup>nd</sup> DATE OF SALE: <input style="width: 330px; height: 20px;" type="text"/>	Country <hr/>
	Tel. <hr/>
	Fax <hr/>
	e-mail <hr/>

### PART (B)

#### GUARANTEE CERTIFICATE

All our machines have been subject to careful testing and are covered by a 24-month guarantee against manufacturing defects.

The guarantee starts from the Ricca Snc sales date after the card has been duly and completely filled in.

The sales date is that indicated on the back of this card.

"Ricca Andrea & Co." undertakes to repair and replace free of charge any parts which, within the guarantee period, prove to have manufacturing defects. Defect which are not clearly attributable to the material or to the manufacture, will be examined in our factory or in a Technical Service Centre that we indicate and charged according to the nature of the problem.

The following, however, are excluded from the warranty: accidental damage, damage caused by transport, carelessness or unsuitable treatment, improper use not complying with the warnings indicated in the manual and by phenomena not dependent on normal machine use and operation.

The warranty is void if the machine has been repaired or tampered with by unauthorized third parties. Repairs are to be carried out by one of our authorized Technical Assistance Centres, or in our production centre. Machines must be forwarded free port (the freight costs are to be paid by the user (unless agreed otherwise).

This warranty certificate **and the purchase receipt** must be exhibited to the technician who performs the repair, or must accompany the machine when it is sent for repair.

The warranty does not include the cleaning machine parts.

"Ricca Snc" declines any responsibility for any damage to objects or harm to people, caused by wrong or improper machine use and maintenance.

For any dispute, the Cuneo Law Court in Italy will have jurisdiction.

**1.1 Machine description**

This series of models, which could be described as semi-professional, is ideal for those who use wood for heating (fireplaces, stoves, wood-fired boilers).

Thanks to their rear wheels, they are easy to transport and have a simple and functional use.

Our firm has designed these models to guarantee maximum safety.

The **Alpino** models, 6.5 – 8.5 tons, are described in this manual.

The various log-splitter models differ due to their power and feed-type which can be electrical (EL 230 V or 400 V) or with a piston motor (VS).

Every model is supplied strictly following the regulations in force in the various international markets.

**1.2 Manufacturer's identification data**

Ricca Andrea & C. Snc

Via Vecchia di Cuneo, 57

12022 BUSCA (CN) - ITALY

Tel. 0171.946709 - Fax 0171.946719

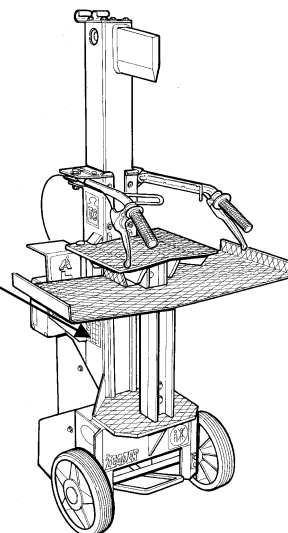
**1.3 Machine identification plates**

For any contact with the manufacturer it is always necessary to quote the data given on the machine identification plate.

COSTRUTTORE <b>RICCA ANDREA &amp; C. Snc</b> 12022 Busca (CN) Italy		
Modello : Serie : Matricola :		
Pressione bar :	P.s.i. :	
P.t.za n.le assorbita :		
Corrente n.le :	50 Hz	
Tensione n.le :	<input type="checkbox"/> 230	<input type="checkbox"/> 400
Grado di protezione : IP	<input type="checkbox"/> 54	<input type="checkbox"/> 44
P.t.o. max G/M :	<input type="checkbox"/> 540	<input type="checkbox"/> 1000
Massa : Kg.		
2001		Codice 100.029

Model:  
Serie:  
Serial number:  
Pressure bar: P.s.i.  
Absorbed nominal power:  
Nominal electric current: 50 Hz  
Nominal voltage: ☐ 230 ☐ 400  
Protection degree: IP ☐ 54 ☐ 44  
PTO max. rpm.: ☐ 540 ☐ 1000  
Weight: kg

Code 100.029

**1.4 Designed use**

These specific wood-splitter machine models have been designed, built and protected only for cutting fire-wood logs of various sizes depending on the model. (See technical data table page 21).

Furthermore the log splitter has been built only for breaking logs longitudinally with respect to the wood fibres.

Use of the machine other than that specified by the purchaser's order and/or by the manufacturer's technical specifications is considered to be IMPROPER.

"Ricca Andrea Snc" has 30 years' experience of the normal use of its machines. With this experience we have been able to identify certain common features of the wrong use of its machines.

In particular, improper use generally belongs to one of three different categories:

- The pieces of wood are cut crosswise and not parallel to the wood filaments.
- Misuse of the cutting boards, in particular cutting short wood logs (50/60 cm) using the support base designed for long logs (100 cm).
- Wrong cutter use, compared with the dimension of the log to be split.

The above represents a range of mistakes that could lead to serious hazards.

### 1.5 Permitted environmental conditions

So as to guarantee correct operation, the machine must be sheltered from atmospheric elements (rain, hail, snow, fog, suspended particles of dust, etc.) with a working environmental temperature between -15° and 45° and relative humidity no greater than 70%.

The working environment must be clean, sufficiently bright and in the absence of an explosive atmosphere.

### 1.6 Noise level

Noise meter trials carried out on these models show a continuous acoustic pressure of less than:

$L_{pa} < 80 \text{ dB}$ .



**WARNING:** For the VS models (with piston motor), however, it is advisable to use protective earplugs or headphones.

### 1.7 Qualitative characteristics

Approval by the most important European certification authorities.

Adjustable hydraulic cylinder stroke.

Double-acting hydraulic cylinder with quick return.

Electrical system with IP54 protection.

Long-lasting epoxy paint.

Interchangeable self-lubricating slide guides.

Back anti-overturn pedestal.

Very high quality materials and components.

Strict component and final quality testing.

### 1.8 Storage

Before storing the machine in the warehouse, remove all foreign parts from the machine and clean the surfaces.

Using a brush, coat all the mechanical parts, including the fastening devices, with a protective lubricant to be removed in case of reinstallation with alkaline degreaser.

Lubricate the mechanical parts and coat the surfaces with a protective lubricant.

To move the machine follow the instructions written on page 16.

Choose a flat and horizontal surface to store the machine, preferably near a sheltered wall or a corner and protected from weather conditions in order to guarantee a temperature between 0° and 40° C.

Protect the parts from the build-up of dust by covering them with a sheet.

### 1.9 Scrapping

If the machine is to be scrapped, it must be disposed of in appropriate dumps, respecting the regulations in force.

Collect any used oil and dispose of it in the special oil collection centre. Do not dispose of the oil in the environment as, according to the laws in force, it is classified as dangerous refuse.

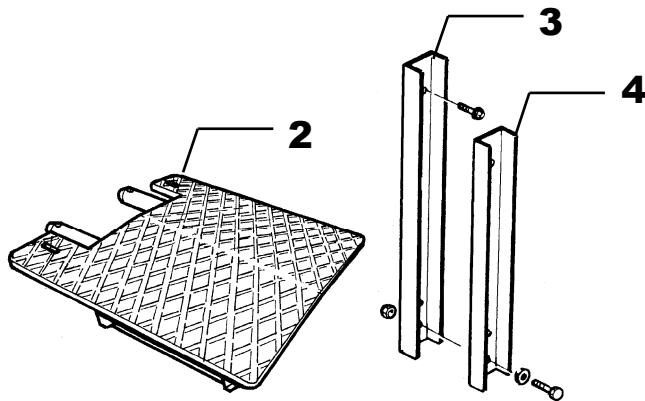
Before scrapping the machine, it is necessary to separate the plastic or rubber parts and the electric material.

Those parts made solely of plastic, aluminium and steel can be recycled if taken to special collection centres.

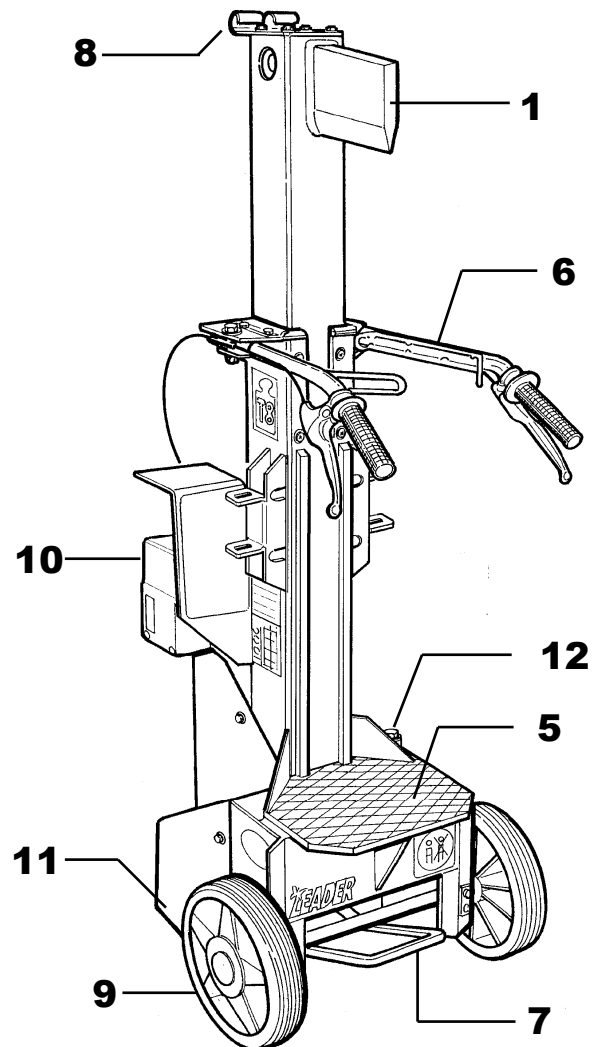
### 1.10 Overall dimensions / Technical data

Refer to the technical table enclosed for the overall dimensions and technical data (see page 21).

### 1.11 Identification of the main components

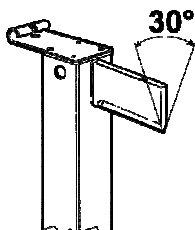


- 1) CUTTER
- 2) LOG SUPPORT BASE (cm 50 and cm 60)
- 3) BOARD'S SUPPORT LEG FOR 50 cm CUTTING
- 4) BOARD'S SUPPORT LEG FOR 60 cm CUTTING
- 5) LOWER LOG SUPPORT BASE cm 100
- 6) LEVER CONTROLS FOR THE CUTTING PHASE
- 7) PEDAL CONTROLS FOR THE APPROACHING PHASE
- 8) TRANSPORT HANDLE FOR SHORT MOVEMENTS
- 9) TRANSPORT WHEELS
- 10) ELECTRIC MOTOR AND STARTER COMMANDS
- 11) BACK ANTI-OVERTURN PEDESTAL
- 12) AIR PLUG AND LEVEL ROD FOR THE HYDRAULIC SYSTEM

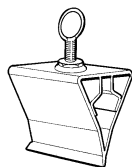


*NB: this diagram represents the EL model*

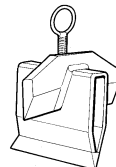
### 1.12 OPTIONAL ACCESSORIES



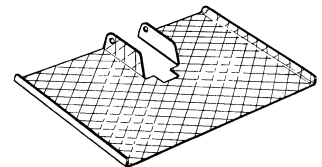
30° standard cutter



60° cutter  
Code 800.087.K



Cross cutter  
Code 835.027.K



Lateral side extensions  
Code 800.109.K



## 2. SAFETY PLATES and SYMBOLS

Self-sticking labels with safety symbols and/or messages are applied to the machine. The nature of the danger and the position of the labels on the machine are indicated in this chapter.



**ATTENTION:** Ensure that all safety messages are legible. Clean them using a cloth, soap and water. Do not use solvents, naphtha or petrol. Ask Ricca Andrea & C. Snc. for replacement labels if necessary and replace any damaged labels. If there is a label on a part which is to be replaced, ensure that a new label is affixed onto the new part.

*NB: for reasons of space, the warning and attention pictograms have been grouped into one single self-sticking label positioned in point (A).*

Plate (A)



Read the manual carefully before using the machine or before carrying out a maintenance operation.



Read the use and maintenance manual carefully before carrying out any operations on the hydraulic system.



Disconnect the power supply before carrying out any maintenance operation.



Electrocution hazard. Operate in dry places.



Shearing hazard. Do not approach the wedge when in motion.



Crushing hazard. Stand at safe distance.



Crushing hazard. Keep arms away.



Beware of hot surfaces (oil tank, engine, oil pump). Stand at safe distance.



Flying object hazard. Stand at a safe distance.



Power down the tractor before carrying out any maintenance operation.



Do not stand between the tractor and the machine.



Use safety gloves.



Use ear muffs.



Use safety glasses.



Use overalls.



Use safety shoes.



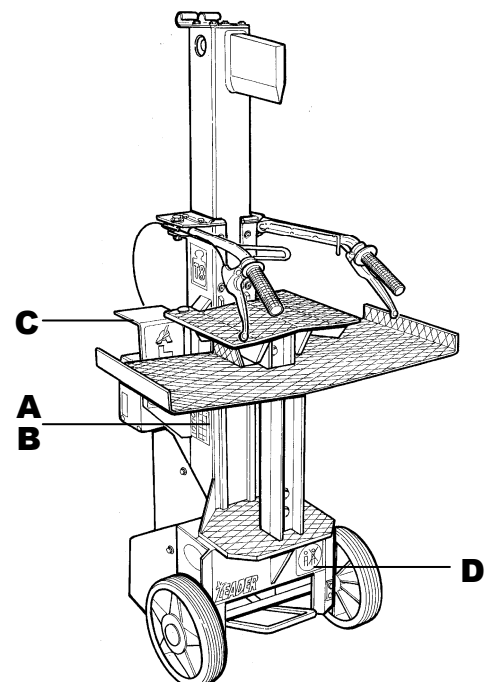
Plate (B)  
CE-label.



Plate (C)  
Rotating sense for EL-models.



Plate (D)  
Two persons must not work on this machine together.



### 3. SAFETY INFORMATION

According to the Safety-at-Work Unified Code 81/2008 (which replaced Law 626/94), the company safety manager is obliged to inform workers about the risks connected with the use of the machine. Furthermore, he/she is obliged to provide workers' training so that they are able to guarantee their own safety and that of others.

Failure to observe the basic safety standards or precautions could lead to accidents during machine operation, maintenance and repair. An accident can often be avoided by recognizing potentially dangerous situations before they occur. The operator must be careful about the potential dangers and must have the training, expertise and instruments necessary to carry out these duties correctly.

**Ricca Andrea & Co.** cannot in any case be held responsible for accidents or damage resulting from machine use by personnel not suitably trained or personnel that used the machine in an inappropriate way. Nor can it be held responsible for the failure, even partially, to observe the safety standards and intervention procedures in this manual.

If attention is not given to these danger warnings and information, the operator may incur accidents with serious consequences for himself and other people.

The safety messages are indicated with the following symbols:



**ATTENTION:**

**If these messages are not observed, they could be harmful to the operator.**



**WARNING:**

**If these messages are not observed, they could cause damage to the machine.**

The warnings in this manual and on the products regard dangerous situations which are reasonably predictable and do not take into account any deliberate modifications or alterations to the safety devices and the correct working procedures.

If equipment, procedures, work methods or working techniques not expressly recommended by **Ricca Andrea & Co.** are used, it is necessary to ascertain that there is no danger for the operator and for others.

**Use original spare parts only**

**Ricca Andrea & C. declines every responsibility for the use of non-original spare parts.**

#### Safety rules



**ATTENZIONE:**

**The following indications cannot protect the operator from every danger that he can meet operating the machine. They must be supplemented by the operator's common sense and experience, the only indispensable measures for accident prevention.**

**Further safety rules specific to the various operations are listed in every section.**

Read this manual carefully before operating the machine.

If any instruction should not be clear, contact the dealer or the manufacturer immediately.

If this manual is damaged or lost, ask the dealer for a replacement copy.

The log-splitter is designed only for normal use in agricultural (see par. 1.4), domestic or forestry work. Any other use of the machine is to be considered unsuitable.

The manufacturer will not answer for damage resulting from improper use.

**Structural damage, modifications, alterations or improper repairs can alter the machine's protection capability thus annulling this certification.**

Any modification operations must be carried out exclusively by technicians authorized by **Ricca Andrea & Co.**

Check that the machine is not damaged in any way.

Always keep the machine clean, and in particular the working board must always be clean and free from external materials, such as deposits from previous cutting operations.

Always stop the machine when cleaning, maintenance and transport operations are to be carried out. For electrical models, disconnect from the mains.

**The log-splitter must not be left unattended whilst it is running.**

The log-splitter must be used exclusively by expert operators who are aware of any possible dangers.

Strictly prevent under-age persons from using the machine.

**Two persons must never carry out cutting operations simultaneously.**

**Sudden distractions could cause physical harm to the person helping.**

Do not allow unauthorized personnel near the machine when it is being used.

Ensure that the operating area is well lit.

Do not use the machine in damp places or in adverse weather conditions (snow, rain, etc.).

Always use the log-splitter in places which are as level as possible and which are provided with appropriate safety footwear, working gloves and protective eye screens.

Do not wear loose-fitting clothing or protruding articles which might become entangled in the controls or moving parts of the machine.

#### **For EL-Models**

The EL 230-volt models are supplied with a condenser. Any operation on the machine can be carried out by a specialized technician only approximately 1 minute after disconnecting the plug from the mains supply, in order to give the condenser enough time to discharge the residual current.

**Never open the electrical panel without first disconnecting the plug from the mains supply.**

Check the electrical wires and the flexible pipes of the machine periodically and, if they are damaged, have them replaced by a specialized technician.

Check your extension cables periodically and, if they are damaged, replace them.

Ensure that the switch is off when the plug is inserted into the socket.

Always observe the safety rules in order to avoid fire hazards, electric shocks and personal injury.

#### **For models powered by combustion motors**

Read the enclosed motor-related manual carefully, following all the instructions indicated in it.

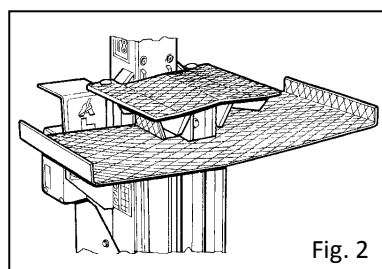
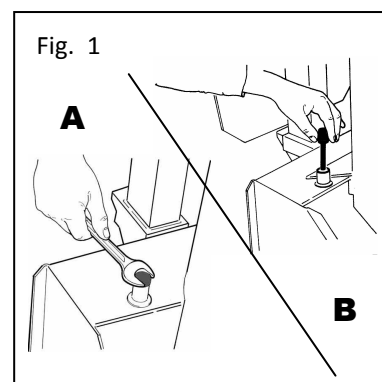
Remember:

- Not to leave inflammable materials such as petrol, oils, etc. near the motor when it is running.
- **If any petrol spills out, clean the area completely and ensure that the fumes have completely dissipated before starting the motor.**
- **To fill the tank in well-ventilated areas and when the motor is off and cold.**
- Never use the machine in closed or badly ventilated rooms as the exhaust gases of the engine emit carbon monoxide, a gas which has no smell, no colour and is poisonous.

### 4.1 LUBRICANT OIL

The oil tank is pre-filled by the manufacturer with Sae 46 hydraulic oil in the quantities shown in the technical data.

Unscrew and remove the cap on the tank (A) using a spanner and replace it with the bleed cap (B) supplied by the manufacturer, which is equipped with an oil level stick. (Fig. 1)



### 4.2 Side panel assembly (optional)

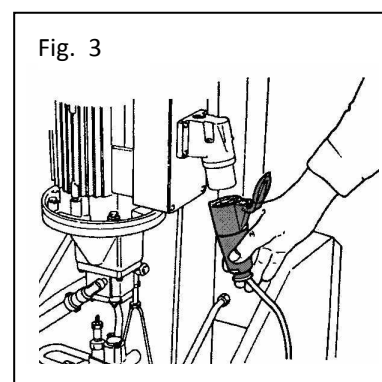
The log-splitter is pre-set for the assembly of log support side panels. Position the side panels as shown in fig. 2 and fix them using the bolts provided.

### 4.3 Electrical connections

Before making any electrical connection, make sure that the master switch is OFF.

First of all, ensure that the mains voltage corresponds to that indicated on the identification plate of the electric motor and the machine. Check that your electric system is fitted with an isolator (safety switch) and that the earth cable is functional.

The manufacturer supplies the machines already equipped with male connection plugs. It is necessary to connect an extension cable with a socket and then insert the plug into the socket. (Fig. 3)

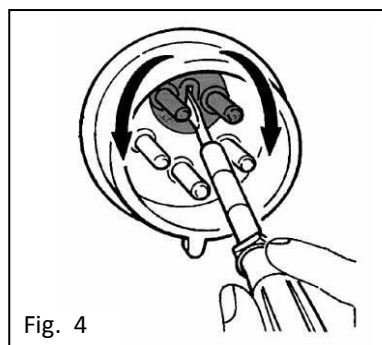


The EL 230-volt models are supplied with a condenser. Any operation on the machine can be carried out by a specialized technician approximately 1 minute after disconnecting the plug from the mains supply, so as to give enough time to the condenser to get discharged.



#### ATTENTION:

**All operations must strictly be carried out by an electrician.**



For three-phase power supply (400 v), it is necessary to verify the exact rotation sense of the electric motor (see arrow on the motor) immediately.

If it rotates in the opposite sense to the sense indicated, it is necessary **(after disconnecting the power supply)** to invert the two power-supply phases using a screwdriver.

Push the housing inwards and rotate the poles. (Fig. 4)



#### WARNING:

The tests of motor rotation sense must be of short duration, otherwise the oil pump could get damaged.

## 5. BEFORE THE WORKING CYCLE

Before starting work, check every time that the flexible hydraulic pipes, the electrical wires and the extension cables are in a good state. If you are not sure about them, have them replaced by a specialized technician.

Besides before starting the working cycle, check the oil level using the special stick.

For the model powered by a piston motor, check that there is some petrol. Carry out the periodical checks given in the motor manufacturer's manual also.

After carrying out the operations described in the "Installation" section, proceed as follows in order to start the log-splitter:

- For all models place the chain in the highest position possible. (Fig. 5)
- In the case of the piston motor, follow the ignition instructions given in the motor manual.
- For electrical versions it is sufficient to press the ON button on the magnetothermal switch, keeping one control lever pressed down (see working cycle).

**Now, by operating the 2 handles + the pedal, the log-splitter will begin working, (release the two levers + the pedal and the cutter will rise again to the pre-set position).**



**ATTENTION:** Before carrying out cutting operations, it is necessary to perform a few cycles without any log.

The machine is equipped with a device which stops the cutting blade during the upward phase in the desired position (stroke adjustment).

This operation is carried out when small logs that are all of about the same height are cut.

To make this adjustment:

- Start the machine.
- Place the log on the support base.
- Press the pedal and lower the blade to approximately 2 - 3 cm from the log.
- Release the pedal halfway so as to stop the cutting blade stroke.
- **Adjust the chain for the desired stroke** (fig. 5).
- Release the pedal completely.
- Position the log and cut it. During the upward movement the cutting blade will stop at the height you have set.

- **Note:** The machine must never be used without the upper stop!

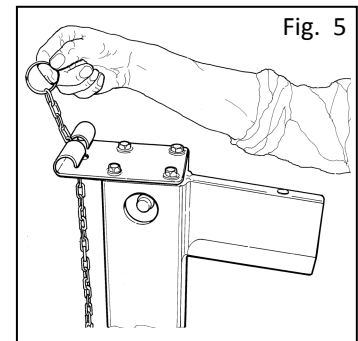


Fig. 5

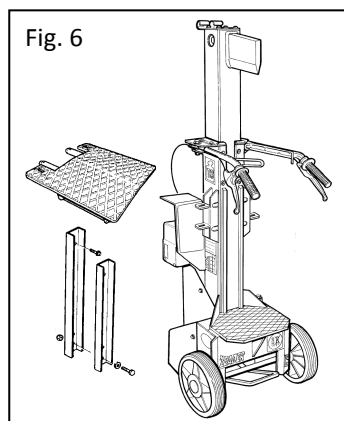


Fig. 6

To cut pieces of wood with a max length of **50 cm**, use the upper board with the longest support leg.

To cut pieces of wood with a max length of **60 cm**, use the upper board with the shortest support leg.

**Note:** for these two operations it is sufficient to fix the required support piece with the two bolts supplied (the standard board is fitted for the 50 cm cut).

To cut pieces of wood with a max length of **100 cm**, withdraw the upper board and position the log on the fixed lower board.



**VERY IMPORTANT!**

**Never** work on the upper board without the support leg.

**Note:** if the 100 cm long wood is not completely opened, it is necessary to raise the cutter with the wood caught inside to the top, then insert the upper board with the support leg for the 60 cm cut and lock it with the special pins. Then carry out the cutting operation a second time by operating the command levers.

## 6. WORKING CYCLE

### 6.1 Cutting cycle

Before starting any work operation, check carefully that the control devices work correctly.

**The machine is equipped with a patented and unique control device (*System-LEADER* control).**

This device allows the operator to position the piece of wood to be split under the cutter with his hands in complete safety.

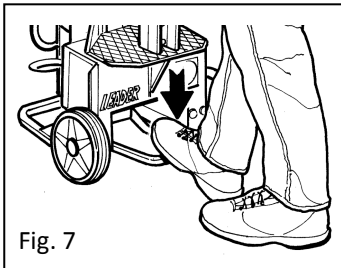


Fig. 7

The machine is designed to be used by a single operator who must be positioned in front of the log splitter control levers. (Fig. 9)

To make it easier to start the electric (EL) and petrol (VS) models, the manufacturer recommends starting the machine by keeping one control lever pressed down or the pedal pressed halfway. (Fig. 7)

1. **operation:** position the log vertically on the board and try to take advantage of the direction of the filaments and the knots of the wood to make it easier to break.
2. **operation:** press the pedal placed below with foot (see fig. 8). It is advisable to make a quick and strong movement.

The cutter will now begin its downward and approach phase without any breaking force until it stops when it comes into contact with the wood.

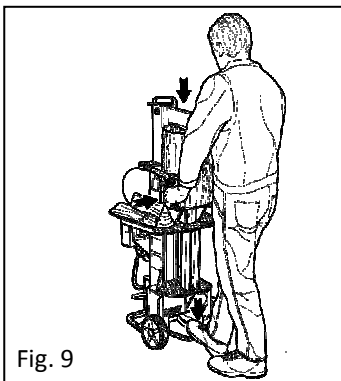


Fig. 9

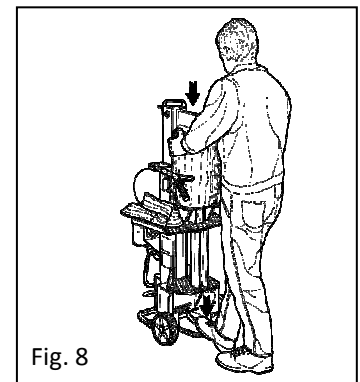


Fig. 8

3. **operation:** keep the pedal pressed down, take hands off the wooden log (which now is kept centred by the cutter), place hands on the lever controls (see fig. 9) and operate both of them together.



**VERY IMPORTANT!**

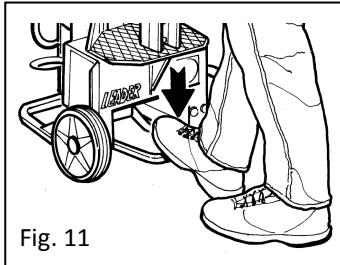
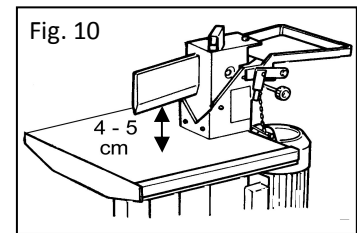
To carry out the breaking cycle, the manual lever controls must both be held (operated).

Releasing either leads to the blocking of the cutter blade in the position in which finds itself.

Therefore, keep both controls held until the log breaking operation is finished or the blade reaches the bottom end-of-stroke.

The blade is pre-set to stop at approximately 4 - 5 cm from the log support base (see fig. 10).

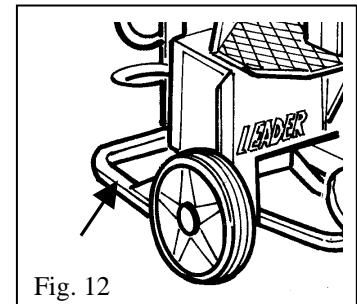
The operator does not run any risk of injury.



### VERY IMPORTANT!

**Keep the pedal pressed down (see fig. 11) until you have removed the broken pieces of wood or those caught in the cutter from the board. This operation will make your work easier and safer.**

All the log-splitters are equipped with a back anti-overturn pedestal. (Fig. 12)



### ATTENTION:

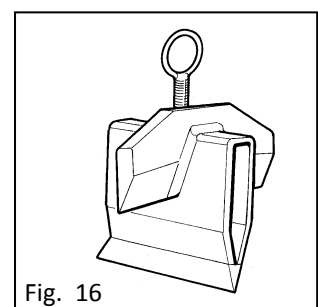
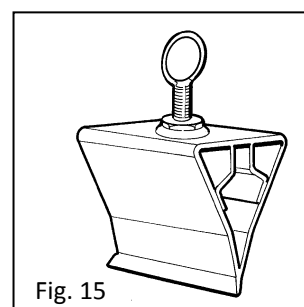
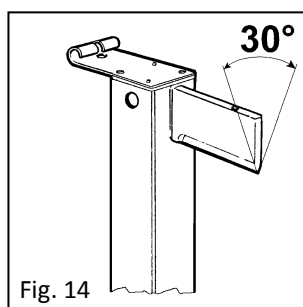
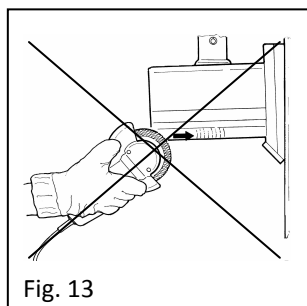
- In case of any emergency, release any one of the controls immediately and the blade will be blocked in the position it is in.
- Before positioning a new log to be cut, ensure the support base is clean.
- Never stop the motors when they are under maximum force.
- Always use the appropriate safety footwear, work gloves and protective glasses. With the VS models with piston motor, use protective earplugs or earphones.



### ATTENTION:

**Do NOT modify the edge and the outside spokes of the 30° fixed cutter (see Fig. 14) with any kind of tool (such as a flexible pipe, see Fig. 13).**

**The same applies for any optional cutters that may be supplied upon request, such as the 60° cutter (see Fig. 15) or the cross cutter (see Fig. 16).**



The use of optional cutters (see page 7) must occur exclusively in situations of extreme necessity and they must be used by skilled and expert operators.

The 60° cutter is of use exclusively for easily-opening and medium-sized wood.

The cross cutter is used exclusively for small-sized straight-filament wood.

## 6.2 Return Cycle

Once the breaking phase is finished and the broken pieces have been removed from the board, release all three controls. The cutter will then rise again automatically to the high position ready for a new working cycle.

*Note:*

If any of the three controls remains held down, the cutter cannot rise again and therefore remains blocked in its present position.

## 6.3 Block situation

*Note:*

The hydraulic system is equipped with a safety valve which controls all the pressure up to a MAX limit pre-set in the testing stage.

This device was designed for those cases in which the cutter strength is not sufficient to break pieces of wood that are too hard or positioned badly.

When situations like this occur, there is no cause for alarm as nothing can happen (and therefore no breakdown can occur). Release the controls without persevering too much, turn off the motor and release the wood caught in the cutter using a hammer or similar, hitting it downwards on both sides.

## 7. TRANSPORT

The log-splitter is equipped with wheels to make it easier to transport over short distances. When the machine is moved, do not incline it excessively so as to avoid liquid spillage.

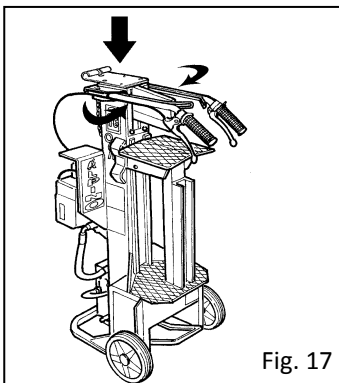


Fig. 17

During transport, place the cutter in the lowest position. (Fig. 17)

Place one foot on one wheel and grip the two handles (A). Incline the machine slightly and push it to transport it (B). (Fig. 18)

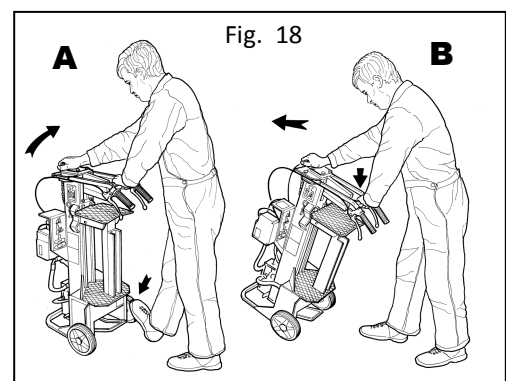


Fig. 18



## 8. MAINTENANCE



### ATTENTION:

All maintenance operations must be carried out when the machine is off.

With the electrical model, disconnect from the mains supply also. Furthermore, for the 230-volt model wait approximately 1 minute for the residual current in the condenser to be discharged.



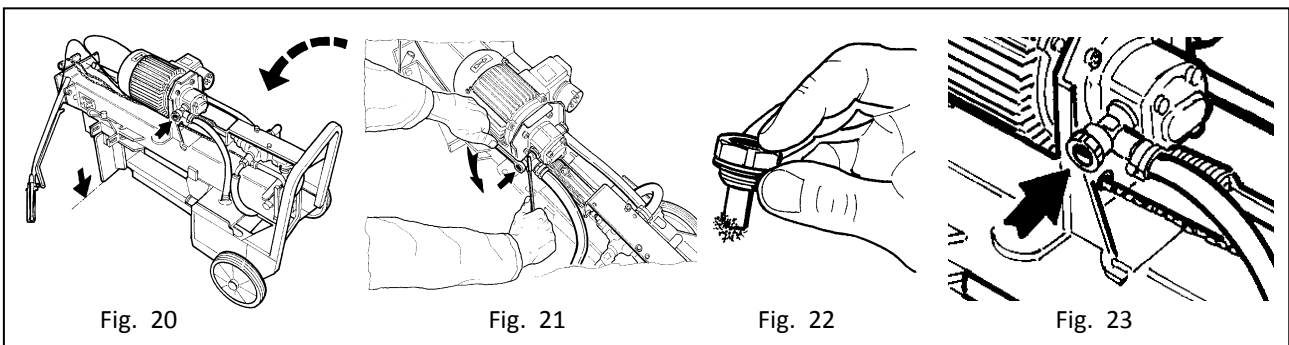
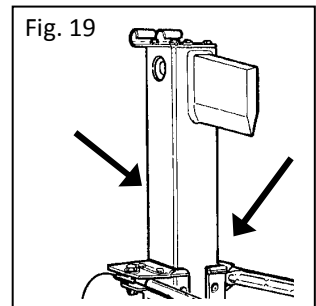
### WARNING:

For models with a piston motor, follow the instructions given in the manufacturer's manual also (supplied with the machine).

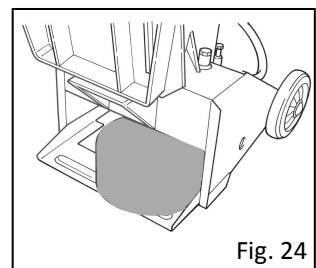
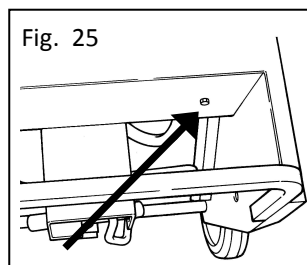
Due to its simplicity, the machine does not require special maintenance operations.

It is necessary periodically to:

- Lubricate the square tubular sliding surfaces indicated in fig. 19.
  - Check that the electrical power supply extensions are in a good state.
  - Check the flexible pipes of the hydraulic system periodically and replace them every 5 years.
  - Clean the filter the first time after 2 – 3 hours of work. After this clean it approximately every 50 hours of work.
- In order to clean the filters carry out the following operations:
1. lay the machine down flat with the board facing the ground; (fig. 20)
  2. unscrew the magnetic filter with a 22 spanner; (fig. 21)
  3. clean all the impurities on the central magnet with a cloth; (fig. 22)
  4. put the filter back in its original position without ruining the gasket. (fig. 23)



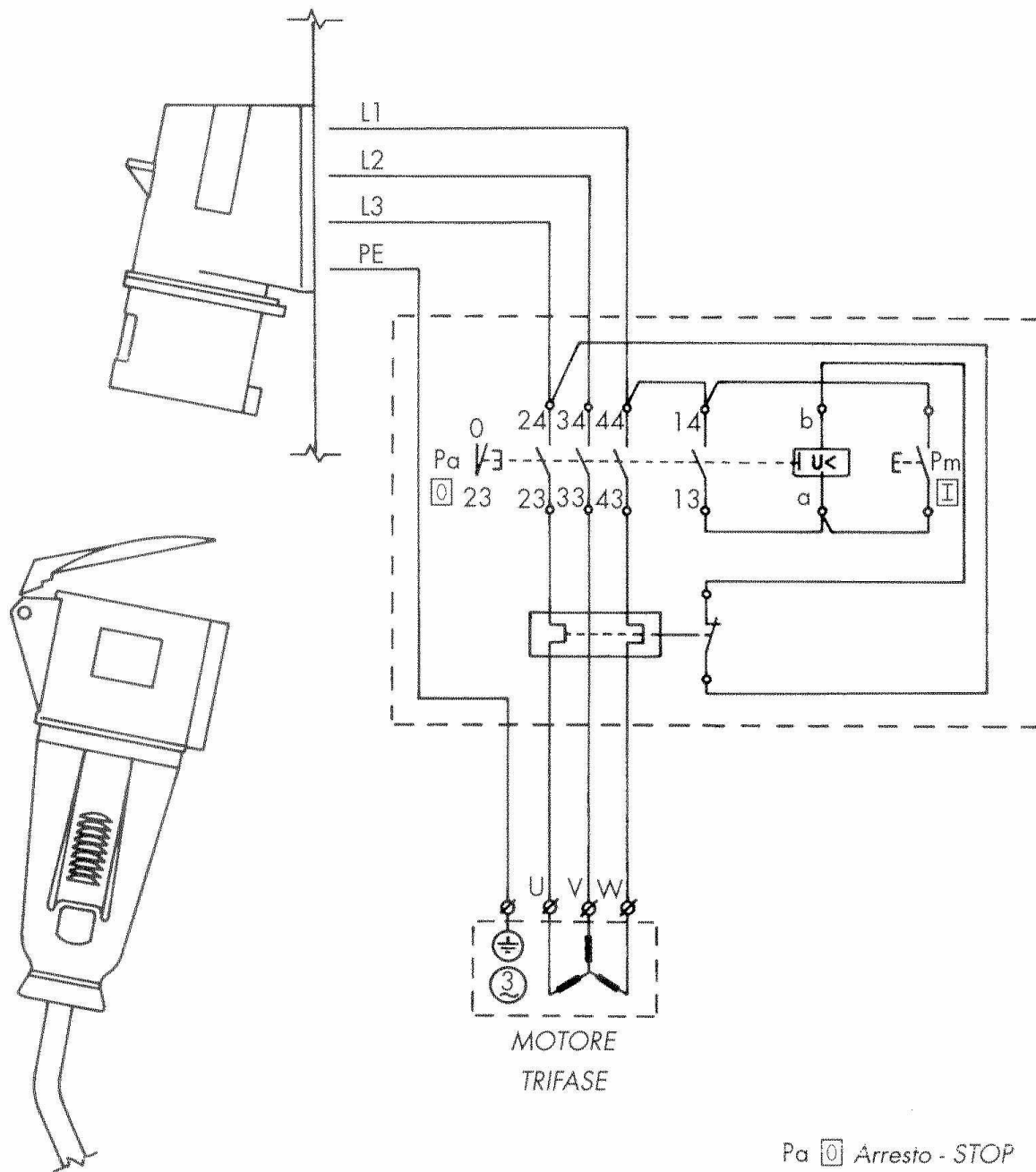
- Check the hydraulic oil level periodically using the special stick.  
**Note:** this operation must always be carried out when the blade (cutter) is at the lowest position. It is advisable to change the oil after the first 100 working hours. Subsequently, change the oil every 300 working hours.
- **Note:** In order to drain the oil, place a suitable container (approx. 10 litres) under the machine. (fig. 24)  
Dispose of used oil in special oil collection centres.



- Some models are fitted with a plug placed under the tank (as indicated in fig. 25) for draining used oil.

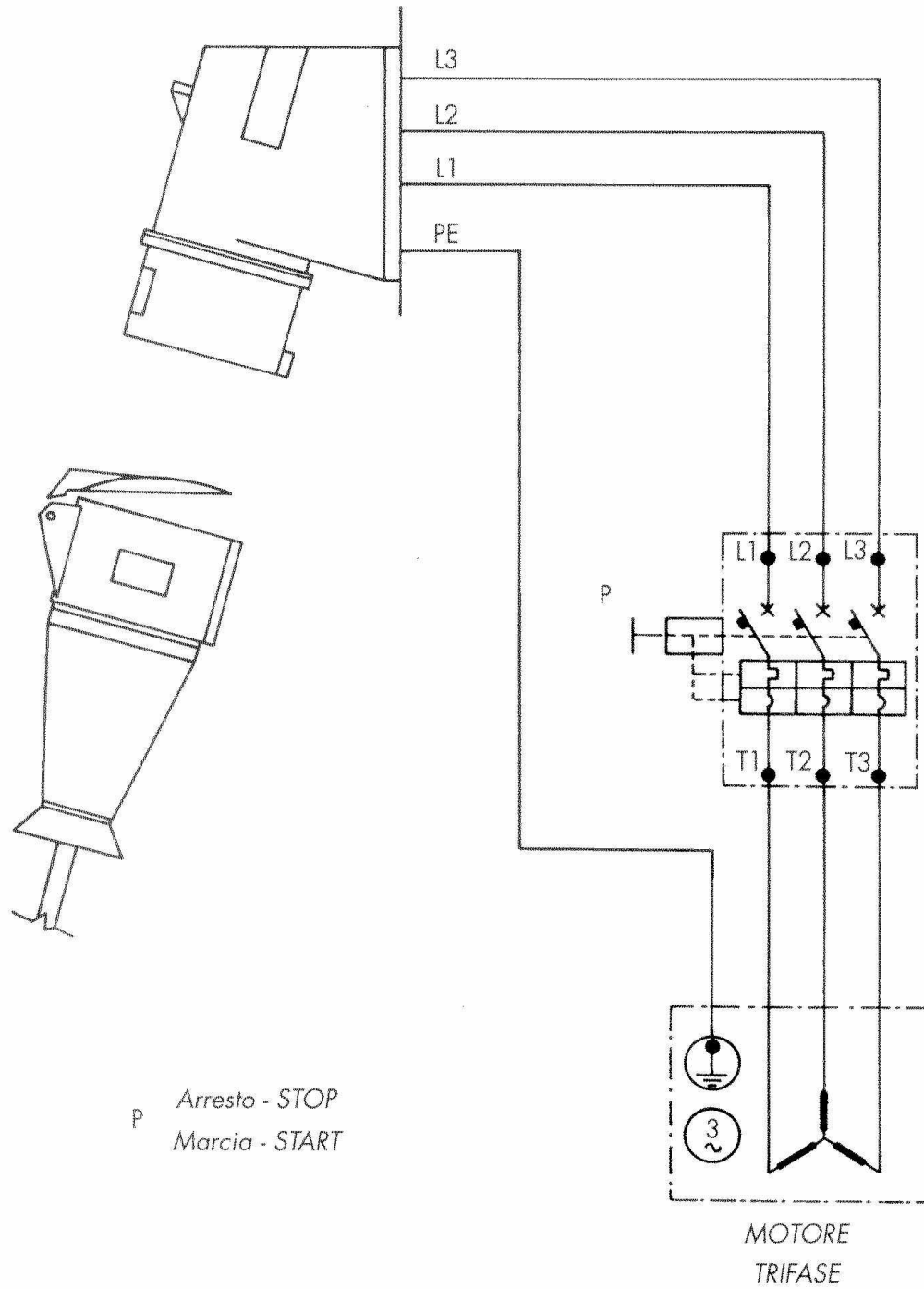
## CONNECTION DIAGRAM FOR THREE-PHASE MOTOR

Diagram 1

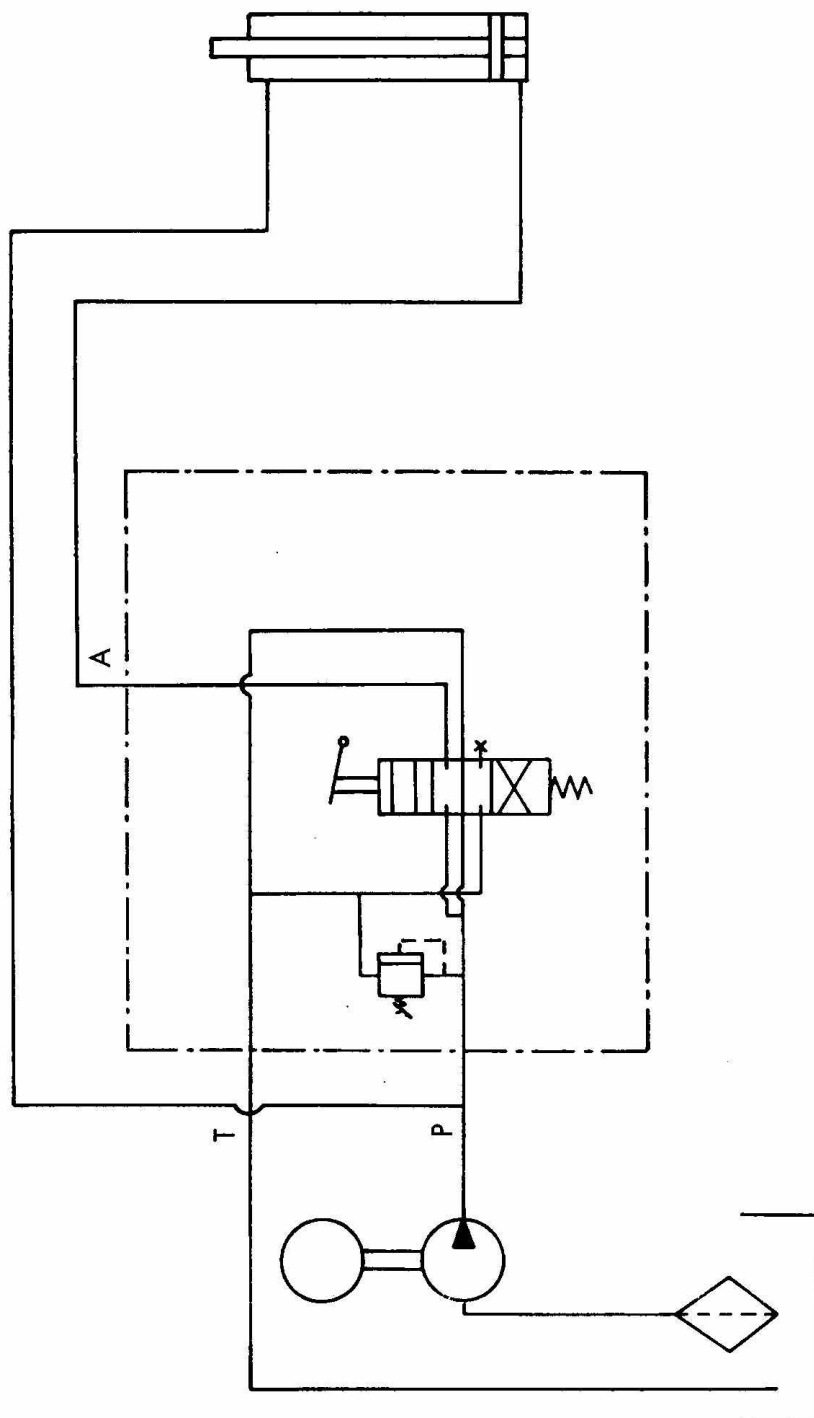












**CONNECTION DIAGRAM FOR THREE-PHASE MOTOR**

Diagram 2



Mod. EL, VS



Series <b>ALPINO</b> Art. Nr.	 EL	 Ps (HP)		BAR	 cm. MAX	 cm. MIN		 cm/sec.	 lt.	 cm. A			 KG.
		EL	Ps (HP)							cm. A	cm. B	cm. H	
AL.225.80.TF	230 V	2,5	1,85	230	54	---	40	3,2	6	48	58	105/155	98
AL.223.TF	230 V	3	2,2	190	54	---	40	2,2	6	48	58	105/155	100
AS.225.80.PD.TF	230 V	2,5	1,85	250	54	---	60	10	6	48	58	105/155	110
AL.225.80	230 V	2,5	1,85	230	54/67/105	---	40	3,2	6	48	58	105/155	108
AL.325.80	400 V	2,5	1,85	235	54/67/105	---	40	3,2	6	48	58	105/155	108
AS.225.80.PD	230 V	2,5	1,85	250	54/67/105	---	60	10	6	48	58	105/155	118
AS.384.90	400 V	4	3	250	54/67/105	---	60	5,3	6	48	58	105/155	118
<div>  = Dimensioni max in lunghezza / max length dimensions;   = Dimensioni max diametro / max diameter dimensions; </div> <div>Dimensioni lavorabili / working dimensions;</div>													