

1.0 GENERAL INFORMATION

The firm LGF will not be responsible for eventual damages caused by a wrong use of the machine deriving from:

- use for functions which are not described in this hand-book;
- working of material, different from aluminium;
- bad or wrong maintenance;
- repairs which are not described in this hand-book;
- use of the machine in explosive places.

This machine was designed and built exclusively for working aluminium; those who make a wrong use of it, working other materials, do it at their own risk. Therefore the firm LGF declines all civil and penal responsibility.

For any necessity or direction, apply to the nearest dealer or to the manufacturer:

Nearest Dealer:

Manufacturer:

LGF s.n.c.
Via Togliatti, 81
47827-VILLA VERUCCHIO - ITALY
Tel.0541/677315 - Fax.0541/678752
Int. web site: www.lgf.it
e-mail: info@lgf.it

MACHINE'S CONFORMITY

Conformity declaration

The firm L. G. F. s.n.c.
Via Togliatti, 81
47827 - VILLA VERUCCHIO - ITALY
Tel. 0541/677315 - Fax. 0541/678752

declares on its own responsibility that the XERON cutting off machine with matriculation number....., which this declaration refers to, is in conformity with the security requisites provided in the CEE directives 89/392, 91/368, 93/44, 73/23, 93/68-89/336, 93/68, and it was built respecting the following regulations: EN 292-1. EN 292-2, EN 60204-1, EN 294, EN 349, EN 418.

Date

L. G. F. s.n.c
Signature
Canuti Luciano

INDICE

1.0 GENERAL INFORMATION	Page. 1
CONFORMITY DECLARATION	Page. 2
1.1 INTRODUCTION	Page. 5
1.2 MACHINE'S IDENTIFICATION	Page. 5
1.3 SENDING OF CORRESPONDANCE	Page. 5
OVERALL DIMENSIONS	Page. 6
CONTROL BOARD	Page. 7
1.4 TECHNICAL DATA	Page. 8
1.5 CUTTING CAPACITY	Page. 9
1.6 NOISE LEVEL	Page. 9
SONOROUS EMISSION	Page. 10
1.7 SAFETY WARNINGS	Page. 11
PERSONAL SAFETY.....	Page. 11
MACHINE'S SAFETY.....	Page. 11
1.8 MAINTENANCE SECURITY	Page. 12
1.9 OTHER RISKS	Page. 12
2.0 MACHINE'S INSTALLATION	Page. 13
2.1 MACHINE'S UNLOADING	Page. 13
2.2 PLACEMENT	Page. 13
2.3 WHAT TO DO IF THE MACHINE IS DAMAGED?	Page. 13

INDICE

2.4	MACHINE'S LEVELLING	Page.14
2.5	ELECTRICAL AND GROUNDING CONNECTIONS	Page.15
2.6	PNEUMATIC CONNECTION.....	Page.17
3.0	USE AND ADJUSTMENTS	Page.18
3.1	MACHINE'S STARTING	Page.18
3.2	ADJUSTMENT OF CLAMPS.....	Page. 19
3.3	ADJUSTMENT OF THE CARRIAGE CLAMP	Page. 21
3.4	BLADE'S PROTECTION	Page. 22
3.5	CARRIAGE PROTECTION	Page. 22
3.6	PROTECTION GUARD	Page. 23
3.7	CARRIAGE STROKE ADJUSTMENT	Page. 24
3.8	BLADE WAY OUT ADJUSTMENT	Page. 25
3.9	EXECUTION OF THE CUTTING	Page. 26
3.10	ADJUSTMENT OF THE PIECES WAY OUT	Page. 28
3.11	PROTECTION GUARD	Page. 29
3.12	DESCRIPTION OF COOLING SYSTEM.....	Page. 30
3.13	ASSEMBLY OF THE BLADE	Page. 31
3.14	ADJUSTMENT OF BLADE'S SPEED EXIT	Page. 33
3.15	ADJUSTMENT OF THE CARRIAGE STROKE SPEED	Page. 34
3.16	MAINTENANCE	Page. 35
4.0	MAINTENANCE CARD	Page. 37
4.1	ELECTRICAL AND PNEUMATIC SCHEMES.....	Page. 37

1.1 INTRODUCTION

This operation and maintenance hand-book concerns the following model of machine: XERON cutting of machine.

1.2 MACHINE'S IDENTIFICATION

The machine is identified through the wording on the metal plate (Fig.1) set on the base of the machine.

1.3 SENDING OF CORRESPONDANCE

For any advice or explanation concerning the machine, please apply to LGF or to the nearest dealer, supplying with:

- model of the machine;
- matriculation number;
- voltage and frequency,
- purchasing date;
- name of the dealer where the machine has been purchased;
- information about the working to carry out;
- number of employment hours;
- number of duty hours.

For a correct identification of the information concerning the machine, please supply with the data reported on the plate (Fig.1) which is set on the clamps junction-box and describes the data of the electric installation.

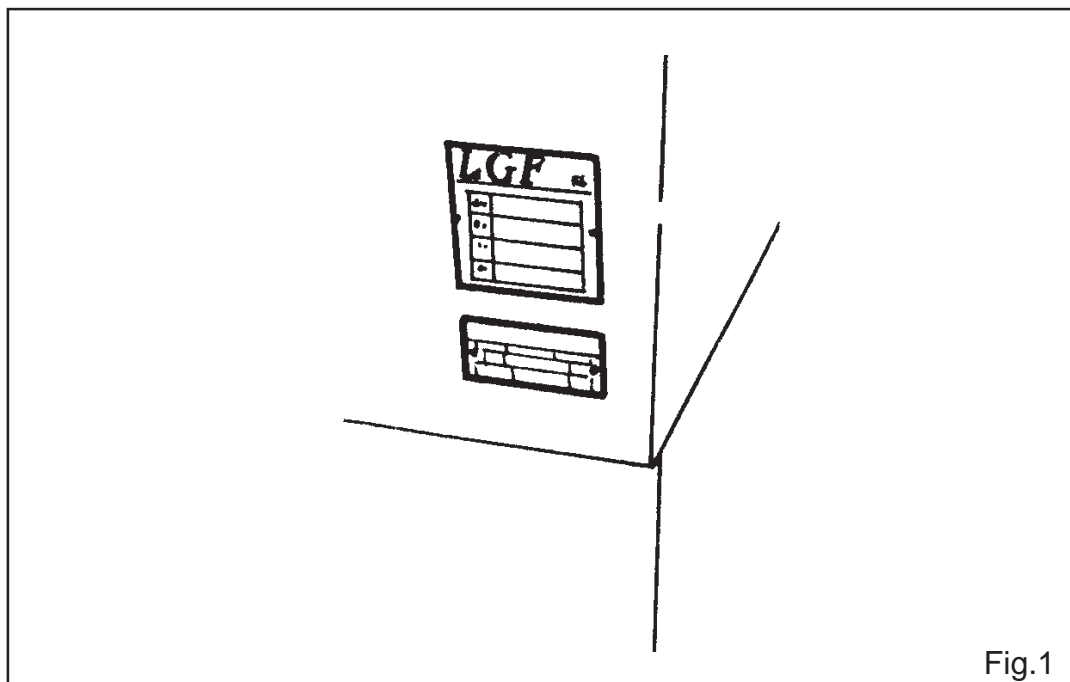
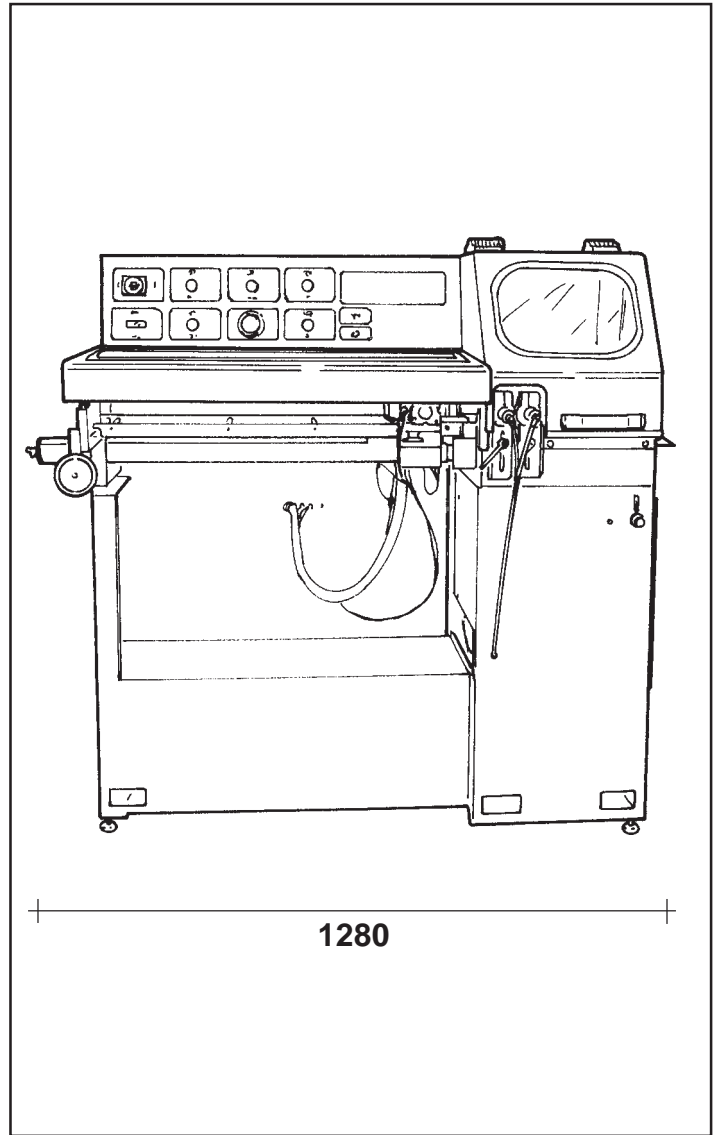
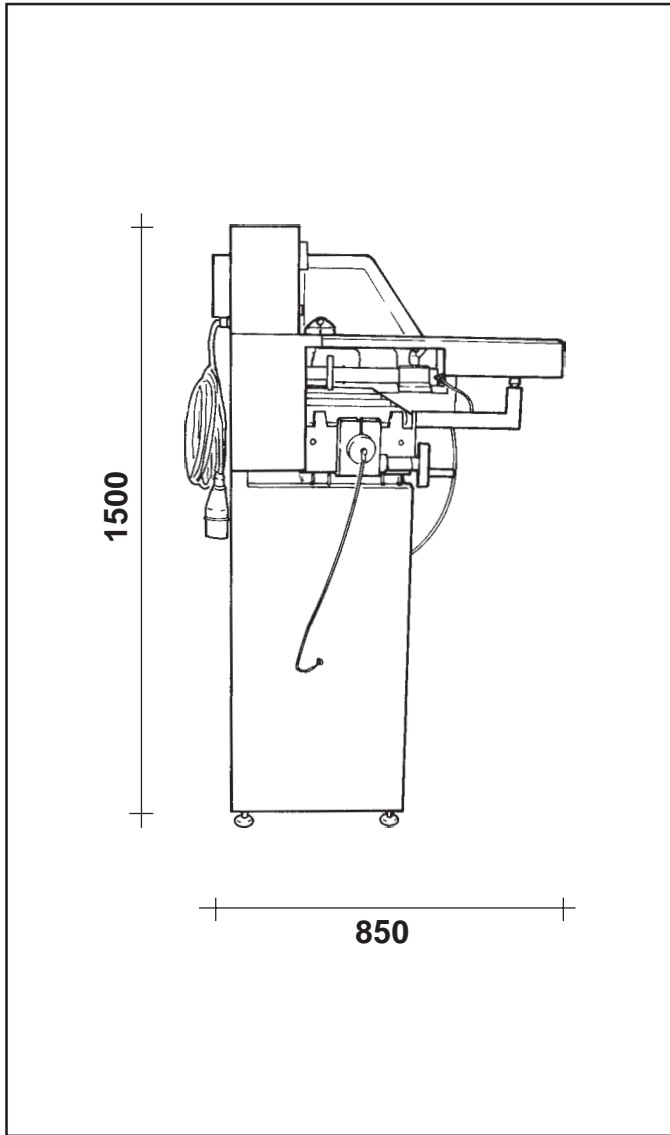
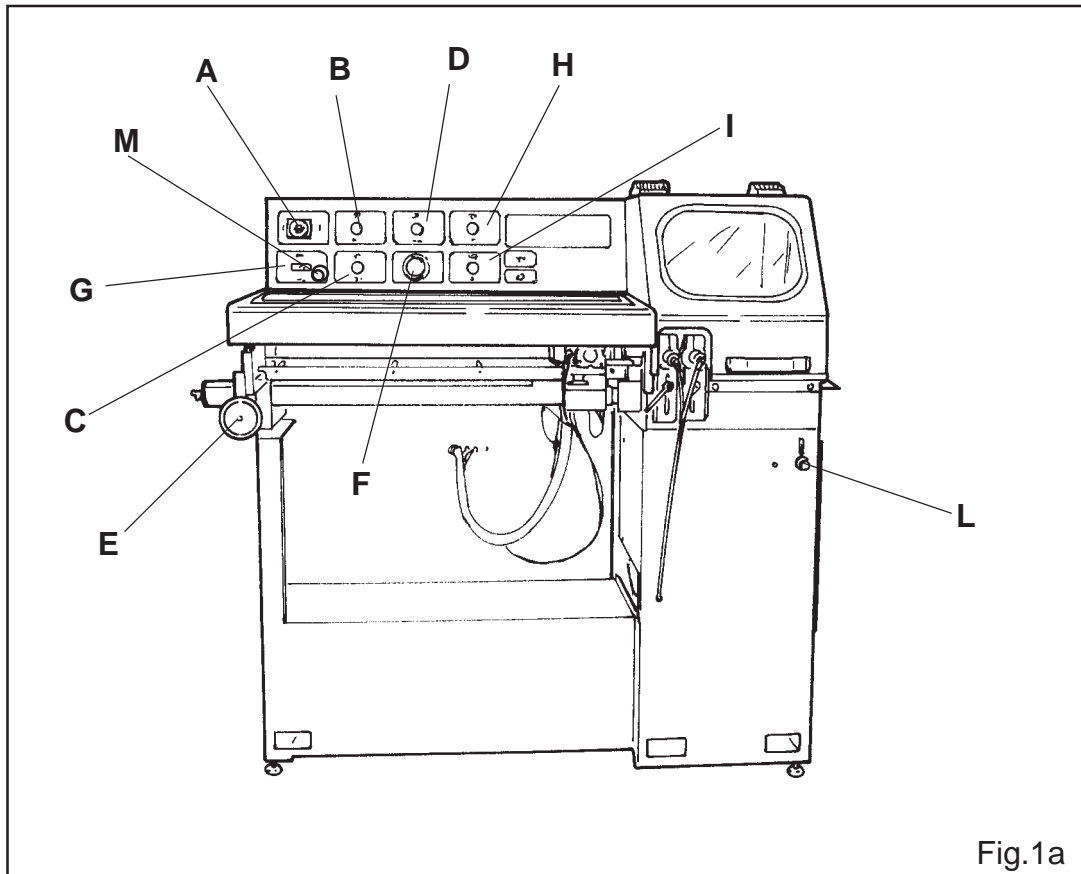


Fig.1

OVERALL DIMENSIONS



CONTROL BOARD:



- A (Fig. 1A) = Main Switch
- B (Fig. 1A) = Start Button
- C (Fig. 1A) = Motor's OFF Button
- D (Fig. 1A) = Double stroke selector (only for version with retake of the piece)
- E (Fig. 1A) = Wheel for the piece length adjustment
- F (Fig. 1A) = Emergency Button
- G (Fig. 1A) = Counterpieces
- H (Fig. 1A) = START Selector
- I (Fig. 1A) = RESET Button
- L (Fig. 1A) = Blade way out speed adjustment
- M (Fig. 1A) = Counter - pieces RESET button

1.4 TECHNICAL DATA

T.C.T saw blade	Ø 450 mm
Three-phase motor 3HP 2800 r.p.m.	
Blade shaft diameter	Ø 30 mm
Pendular sliding of the blade unit	
Min. working pressure	7 bar
Blade cut adjustment	
Overall dimensions:	850 x 1500 x 1450 mm
Weight	220 Kg

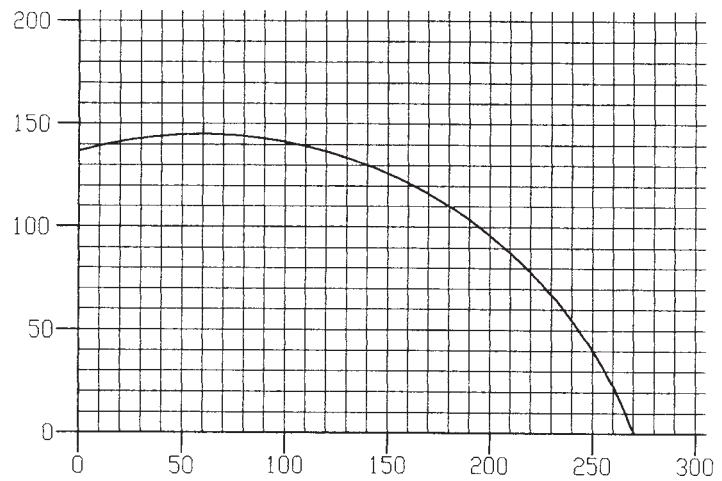
STANDARD EQUIPMENT

T.C.T saw blade Ø 450 mm
Pneumatic clamps
Pneumatic spray mist lubrication
Protection of the blade
Exhaust attachment
Automatic bar feeder adjustable from 0 up to 660 mm
Air filter
Air gun
Service spanners

OPTIONAL

Bar feeder with double stroke
Single phase motor
T.C.T. saw blade Ø 450 mm

1.5 CUTTING CAPACITY



1.6 NOISE LEVEL

ACOUSTIC EMISSION OF THE XERON CUTTING OFF MACHINE ACCORDING TO NORMS EN27560

(Lp) Level of the machine's medium sonorous pressure	(Ln) Level of the machine's normalized acoustic power	(Lpi) Sonorous level in the operator's normal position	(Lmax) Maximum sonorous working level on the prescribe	WORKING CONDITIONS
dB(A)	dB(A)	dB(A)	dB(A)	
78,7	94,5	76,6	81,7	IDLING
91,9	107,7	92,0	105,7	WORKING

L min.: Minimum sonorous working level: 67,7 dBA
 L.o: Noise level range: 34,0 dBA
 Lep.D: Daily personal exposure level: 86,0 dBA

SONOROUS EMISSION

Carrying out many activities together with the use of the machine can sometimes involve physical uneasiness and weariness . For example, being engaged with extra-working activities which require sonorous exposures involves higher risks and a lower health's defence.

Working conditions like, for example, the loudness of the working environment play an important role for the health and personal comfort.

Some factors which influence the real exposure level are:

- the period of exposure.
- the adjacent working machines
- the type and characteristics of the buildings.

Moreover, noise emission can be contained by:

- reducing the number of the machine's revolutions,
- a low advancing,
- a correct fastening of the piece,
- a good condition of the tools.
- and , above all, using the appropriate acoustic protections.

**A protracted exposure over 85 dB (A) could cause health troubles.
In any case, it is advisable to employ some appropriate protection systems (ex: casings, plugs)**

1.7 SAFETY WARNINGS

While drawing up this hand-book, we considered all the necessary functions for a correct maintenance of the machine, getting the best use of it. Therefore read carefully through these directions before starting up the machine. This machine was built to offer the highest possible safety together with the best performances.

The greatest security is in your hands. It must be kept in mind that the use of every kind of machine-tool involves some risks.

PERSONAL SAFETY

- 1) The operator must have reached the legal age, according to the law, and must not be lacking knowledge of manufactures of aluminium machines.
- 2) Experience teaches that there are several objects which could cause you accidents. Take off rings, watches and eventual bracelets; fasten the sleeves round your wrists, buttoning them accurately; take off neckties which, hanging down could get entangled in the most disparate places; put up your hair with proper accessories (caps, rubber bands).
Make use of suitable footwear which antiaccident regulations in all countries of the world prescribe and recommend.
- 3) Always make use of glasses or protective screens for your eyes.
- 4) Always make use of working gloves
- 5) Always make use of anti accident shoes

MACHINE'S SAFETY

- 1) Pay the utmost attention before starting any work.
- 2) Never start the machine without controlling that all the protection coverings of cutters, betts, ecc. are properly set up.
- 3) Work only with all appropriate protections at their place and in perfect efficiency.
- 4) Make sure that the tools are perfectly balanced, sharpened and accurately keyed and tight; never make use of bigger tools than the ones indicated in the technical data.
- 5) Never employ cracked, warped cutters.
- 6) The machine must be overhauled by specialized staff, acquainted with safety regulations.
- 7) The machine must not be left unguarded when working. Shutters and protections must be disassembled strictly when the machine is stalled and it is not working.
- 8) All shutters and protections provided with keys must be closed and the key is to be kept by responsible staff in suitable places.
- 9) Never employ benzine, solvents or other inflammables for the cleaning. Make use of commercial solvents which are not inflammable or toxic.
- 10) The manufacturing firm declines all responsibility for the inobservance of these regulations.

N.B. All disassembly and repairing operations must be carried out exclusively by authorized and qualified staff.

Moreover, it is to be recommended not to carry out reparations or others which are not written in this hand-book.

1.8 MAINTENANCE SECURITY

Maintenance must be carried out by qualified staff. The various operations for the ordinary and extra ordinary maintenance are indicated in the last pages of this hand-book.

It is compulsory to switch off the general electrical equipment, when it is necessary to adjust the machine or to disassemble any protection, by pointing out such operation through a clearly visible plaquard.

An important security factor is the cleaning of the machine, of the working tables, of the floor and the surrounding places.

It is very useful to read carefully through this hand-book before starting the machine: in this way you will realize that the machine has been concerned to offer the best performances together with the highest security.

Encumbering and mobile objects, which could come into contact with the moving organs, are very dangerous.

A certain risk factor, which is eliminable with a good technique and with a constant attention by your side, exists in every work.

Before starting the machine, make sure that there are no other people carrying at maintenance operations.

1.9 OTHER RISKS

In spite of the adopted security directions, some other risks could remain.

- Electrical cabinet. The grid-feeding voltage persists, so pay attention every time you enter it.
- Due to high R.P.M of the blade, although precautions (like the polycarbonate guard) are adopted, those could be rejected if wrongly fitted therefore pay attention while fitting the blade.

2.0 MACHINE'S INSTALLATION

Your cutting off machine mod. XERON, will be delivered by one of your authorized carriers or directly by the dealer. Verify the conformity of your goods and their good repair.

2.1 MACHINE'S UNLOADING

Before unloading the machine, free it from all those parts which, for transport or packing exigences are put on it.

Therefore the machine's unloading from the transporting vehicle can be effected in the following way:

- 1) The machine is equipped with a special frame, which raises it from the ground. Therefore it can be easily lifted by an elevator by inserting the forks under the pedestal and balancing the weight which is totally of 220 Kg. (Fig.2A)

2.2 PLACEMENT

Choose the most favourable position, according to the length of the pieces to work and to the connections of the electric and compressed air installations, for an easy maintenance.

Verify the solidity of the floor surface (preferably a material that cannot be deformed, like cement) so that the frame can find a solid support.

Insert the 4 antivibration feet (which are included with the machine) in the special holes on the frame of the machine.

For levelling, screw or unscrew the feet (Fig.2).

N.B. The machine is greased and oiled for transport. Therefore, take the grease off the working tables and the protections accurately.

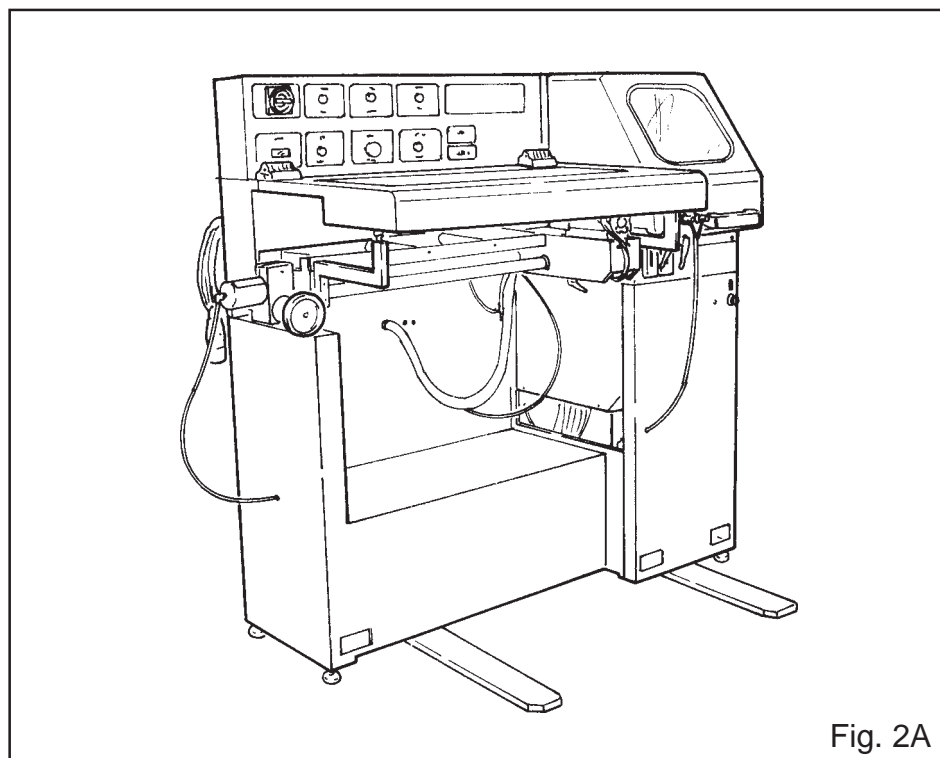
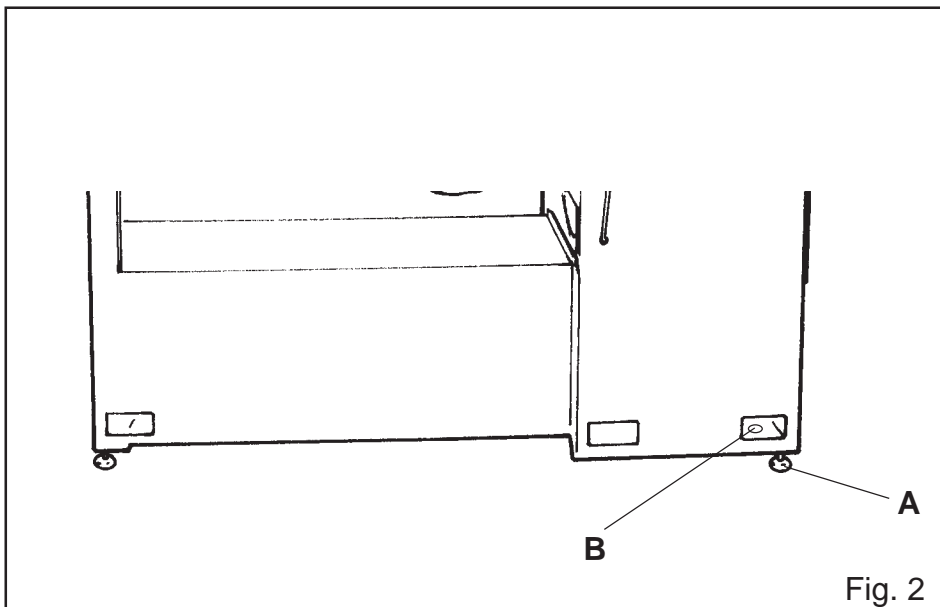
2.3 WHAT TO DO IF THE MACHINE IS DAMAGED?

- 1) Of course, the carrier is covered by an insurance, which will fairly refund you the damages.
- 2) After questioning the damages, you will have to communicate it within two days by registered letter to the carrier and the dealer.
- 3) Make to the manufacturer a request for eventual pieces to substitute as well. Those will be forwarded to you by cash on delivery. The invoice of such pieces, together with eventual assembly expenses, must be reimbursed by the insurance company.

Attention: the goods travel at the customer's exclusive risk.

2.4 MACHINE'S LEVELLING

Level the machine, controlling that it has been perfectly placed horizontally and transversally, using a spirit-level placed on the working table. Eventual level adjustments are carried out by operating on the adjusting screws A (Fig.2). Then fasten the machine at the floor by means of two expansion plugs inserted in the convenient B (Fig.2)holes which are on the pedestal back shutter (Fig.2).



2.5 ELECTRICAL AND GROUNDING CONNECTIONS

The electrical connection and the necessary inspections must always be carried out by a specialized electrician according to norms EN 60204-1. Make sure that the electrical installation in the factory is able to support the power of the machine and control that the main supply voltage corresponds to that of the machine.

Note: the best working condition for the machine is providing with the same voltage reported on the plate in Fig.1.

Yet it can also adopt itself to higher or lower working voltages in a range of endurance of +/- 5% (ex: a machine with working voltage $V=380$ has a range of endurance which runs from 360 to 400 volts).

Out of this range, provide for the adjustment of the feeding voltage.

Read the value of the total absorbed current (Amp) on the identification plate of the machine.

Consult the following table to use the right wire section and to install on the machine "DELAYED INTERVENTION FUSES".

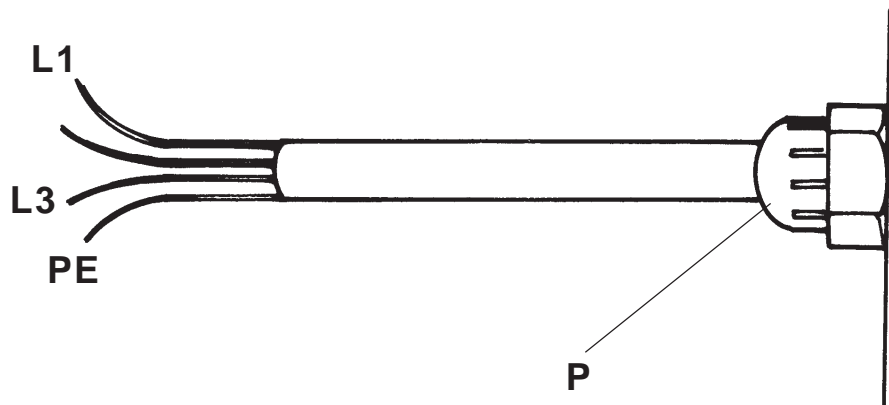
Absorbed Ampere	Wire Section	Delayed Fuses
from 3 to 6	2,5 mm	10A AM
from 6 to 10	2,5 mm	10A AM
from 10 to 14	4,0 mm	16A AM

Insulate electrically the machine and connect the 3 electric wires (phases) to terminals **L1, L2, L3** in illustration 3. Connect the yellow-green wire (earth) to terminal PE or marked by the symbol and the neutral wire, if required, to terminal N.

Fasten wire-press P accurately (Fig.3); check that the tools revolve in the right direction, starting the machine as described forward.

If the blade turns in the wrong direction, it is necessary to:

- take the voltage off the grid,
- Invert two phases,
- Check the revolving direction again.
(The blade must -turn anti clock - wise).



FORMIT.	<input type="text"/>	DATA	<input type="text"/>
COCCICE DIST.	<input type="text"/>	N.	<input type="text"/>
VOLT RETE	<input type="text"/>	VOLT AUX	<input type="text"/>
VOLT RETE	<input type="text"/>	VOLT FREMO	<input type="text"/>
NW	<input type="text"/>	Hz	<input type="text"/>
		MACCH	<input type="text"/>

Fig. 3

2.6 PNEUMATIC CONNECTION

(For machines equipped with pneumatic pressure)

The pneumatic connection is effected by engaging in connection A (Fig.4) a flexible pipe (\varnothing mm.8)

Pressure can be adjusted from 0 to 12 ATM, operating on grip B (Fig.4) and reading the value on pressure gauge C (Fig.4).

For a correct functioning of the pneumatic installation make sure periodically that inside tank D (fig.4) there is no excessive condense, to avoid that, discharge it daily by operating on part E (fig.4).

Make sure that the level of lubricating oil inside tank F (fig.4) is correct. (Best condition is that during two cycles one drop of oil falls down. You can verify that from part G (fig.4) adjustable through screw H (fig.4)).

N.B. The air pressure of the machine has to be 6/7 ATM.

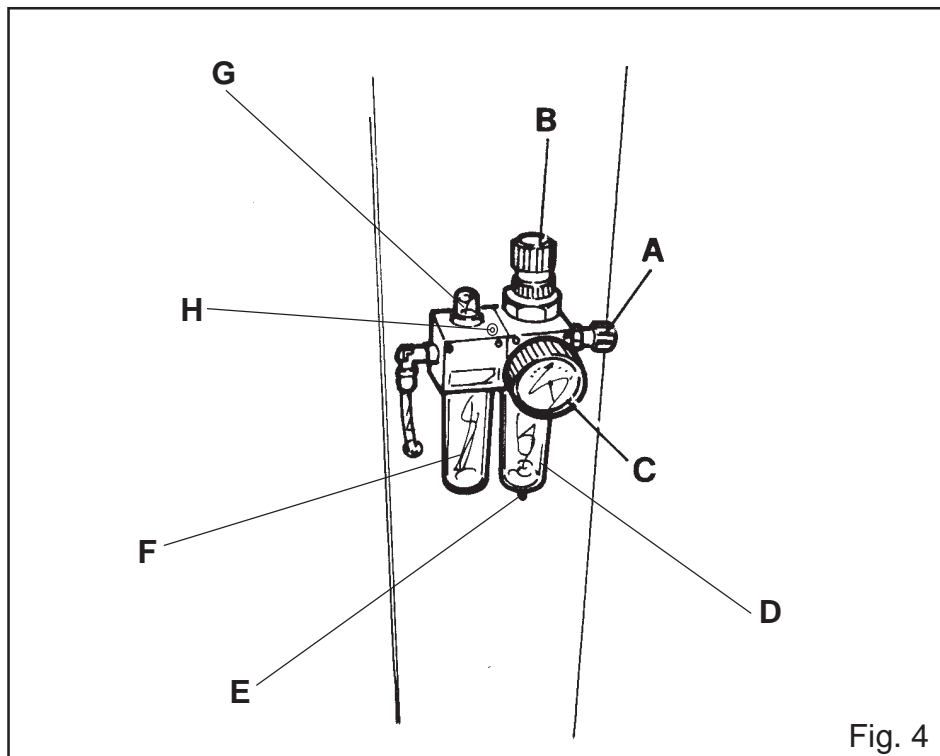


Fig. 4

3.0 USE AND ADJUSTMENTS

3.1 MACHINE'S STARTING

- Turn switch A (fig.5)
- Press button B (fig.6) to start the motor
- Press reset button C (fig.5)

After having checked the correct positioning of the bar to be cut, and the correct clamping, turn start selector D (fig.5).

E = Counter - pieces reset button

F = Counter - pieces

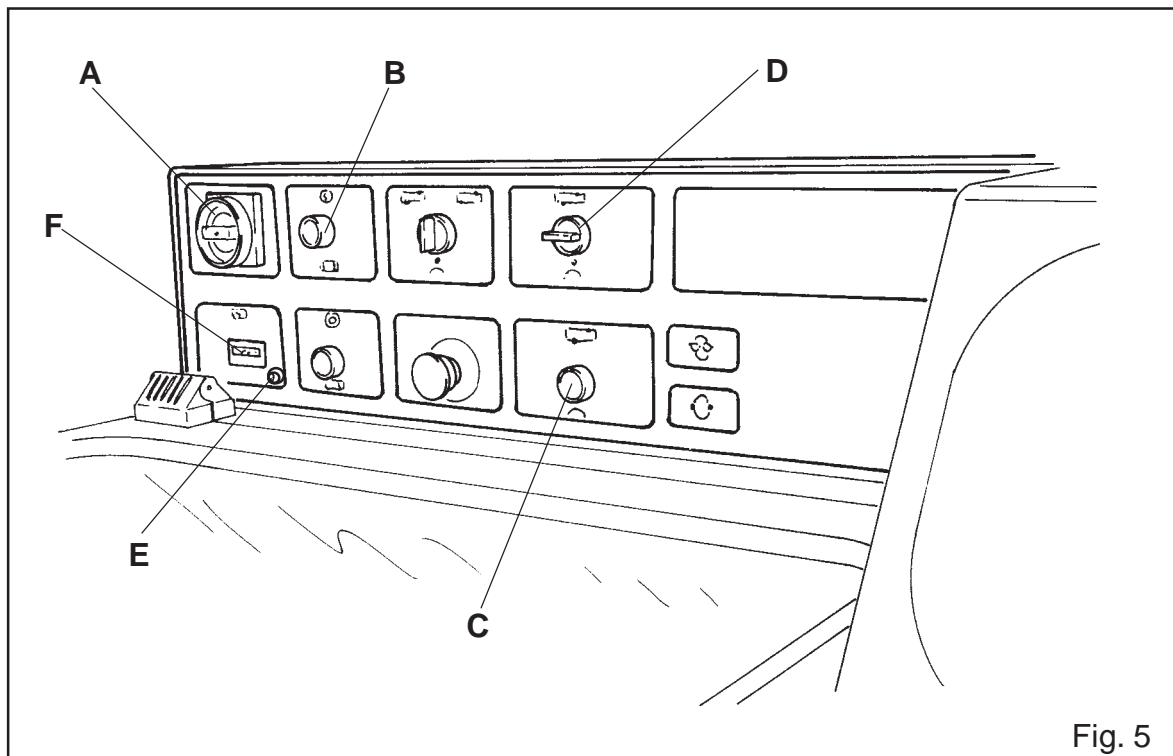


Fig. 5

3.2 ADJUSTMENT OF CLAMPS

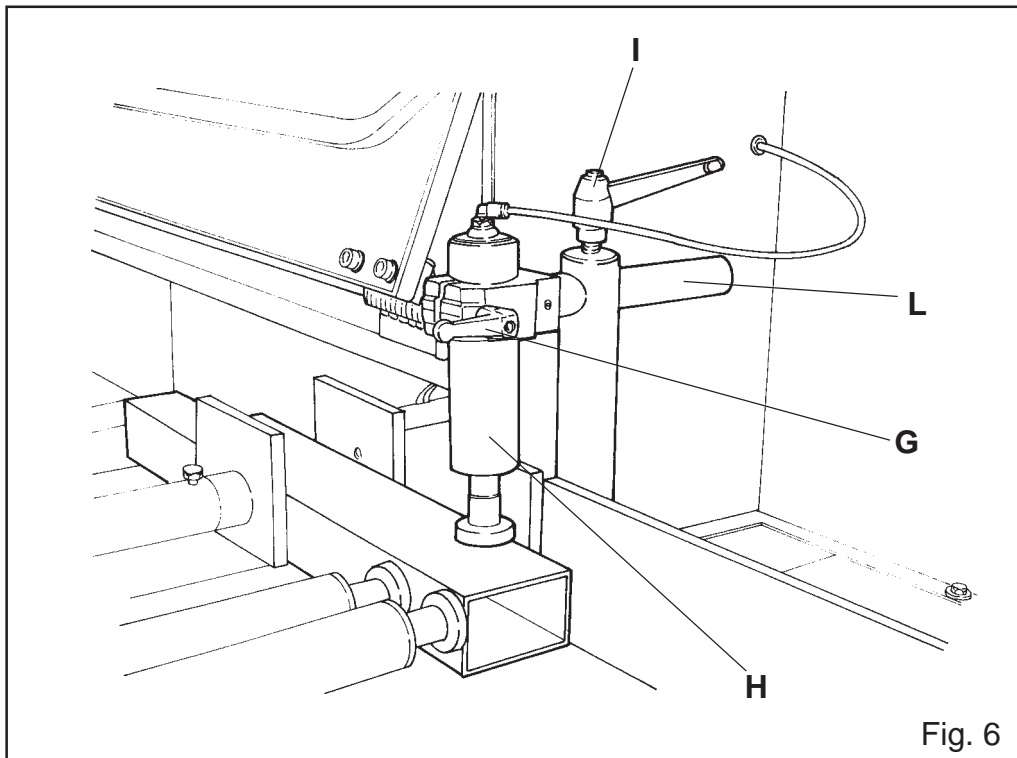
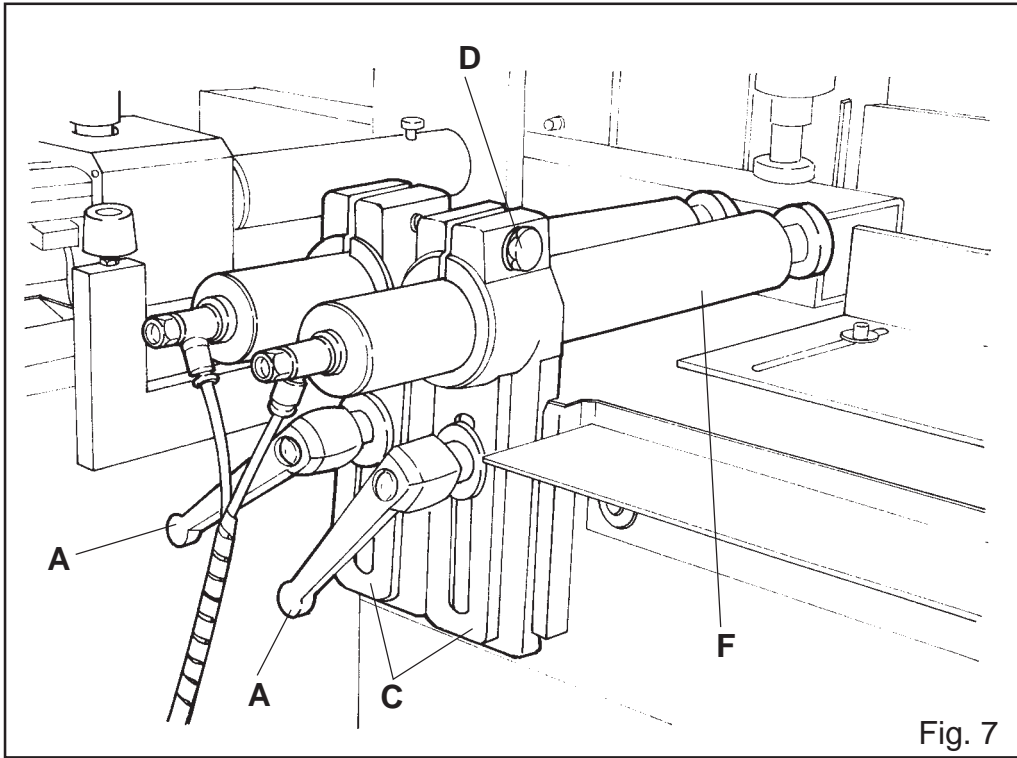
The clamps have to be adjusted in connection to the profile to be cut, operating as follows:

HORIZONTAL CLAMPS

- For the orizzontal adjustement loosen the handles A (fig.7) by means pushing up or pulling down support C (fig.7) of the clamp, till the expected position.
- In case of reduced section profile, loosen nuts D (fig. 7A) by means of the spanner and draw clamp F (fig.7) nearer to the profile.
- In case of a large section profile, loosen nuts D (fig.7) by means of the spanner and move the clamps F (fig.7) to the external part of the machine until the profile can be blocked, then fasten the nut D (fie.7) by means of the spanner.

VERTICAL CLAMP

- For the vertical adjustement loosen release lever G (fig.6) that keeps tight the clamp H (fig.6) pushing up or pulling down the clamp till expected position, then block release lever G (fig.6)
- To position yourselves horizontally with the vertical clamp,loosen handle I (fig.6) and make the support L (fig.6) slide untill you have reached a good position.



3.3 ADJUSTMENT OF THE CARRIAGE CLAMP

For a correct clamping of the bar, adjust clamp A (fig.8) at about 2 mm for the profile B (fig.8), by using lever C (fig.8) blocking the clamp support D (fig.8).

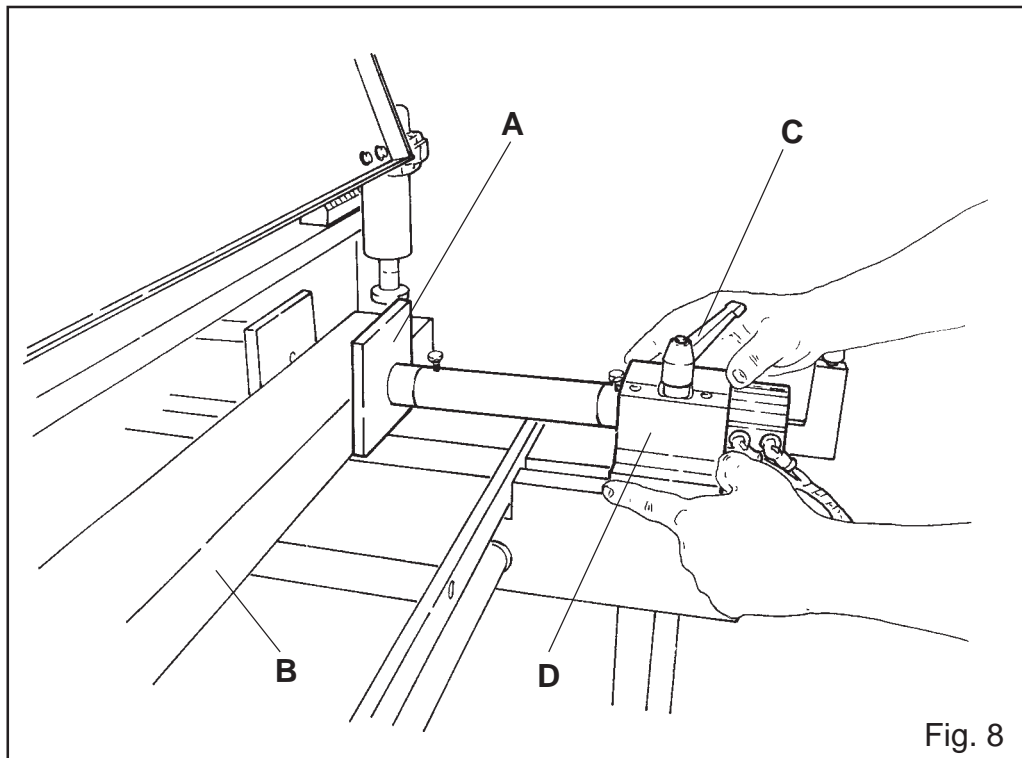


Fig. 8

3.4 BLADE'S PROTECTION

Only when protection A (fig.9) is closed you will be able to start working, because until micron B (fig.8) has not been pressed (carter is open) machine will not start.

N.B. Function of protection micron must never be modified.

3.5 CARRIAGE PROTECTION

Only with protection C (fig.9) closed you can start the machine, because micron D (fig.9) is not pressed therefore the cycle can start.

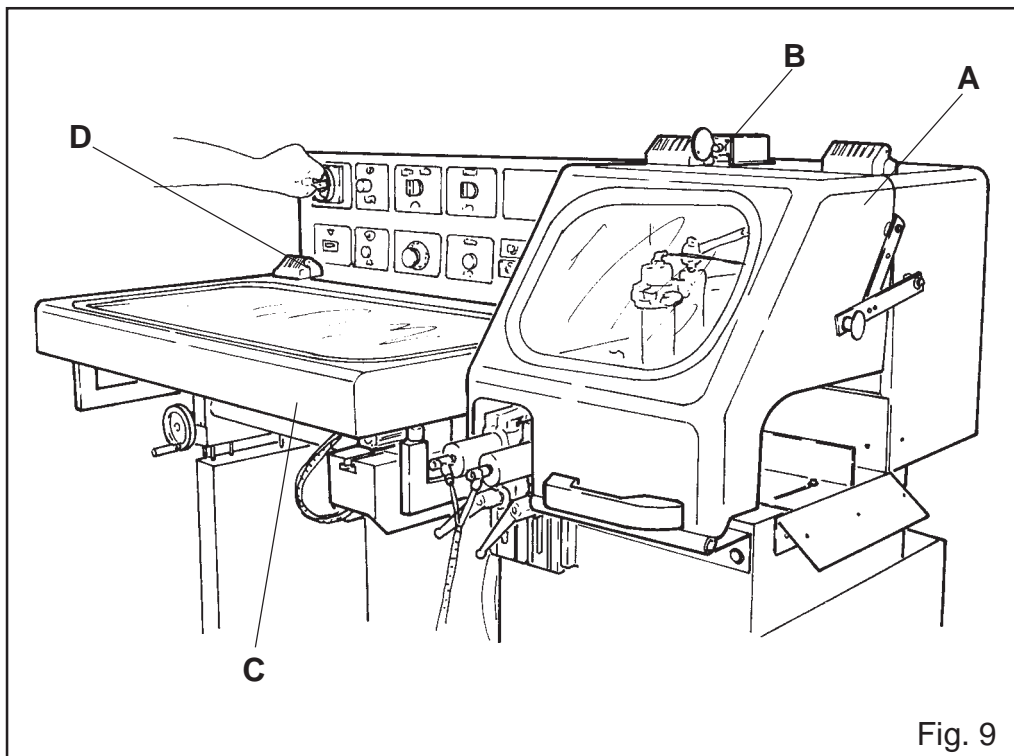


Fig. 9

3.6 PROTECTION GUARD

To close the protection guard, unhook the safety gudgeon pin (anti-fall), by drawing to the outside the tie-rod A (fig.10), accompanying with the hand the guard B (fig.10) way down.

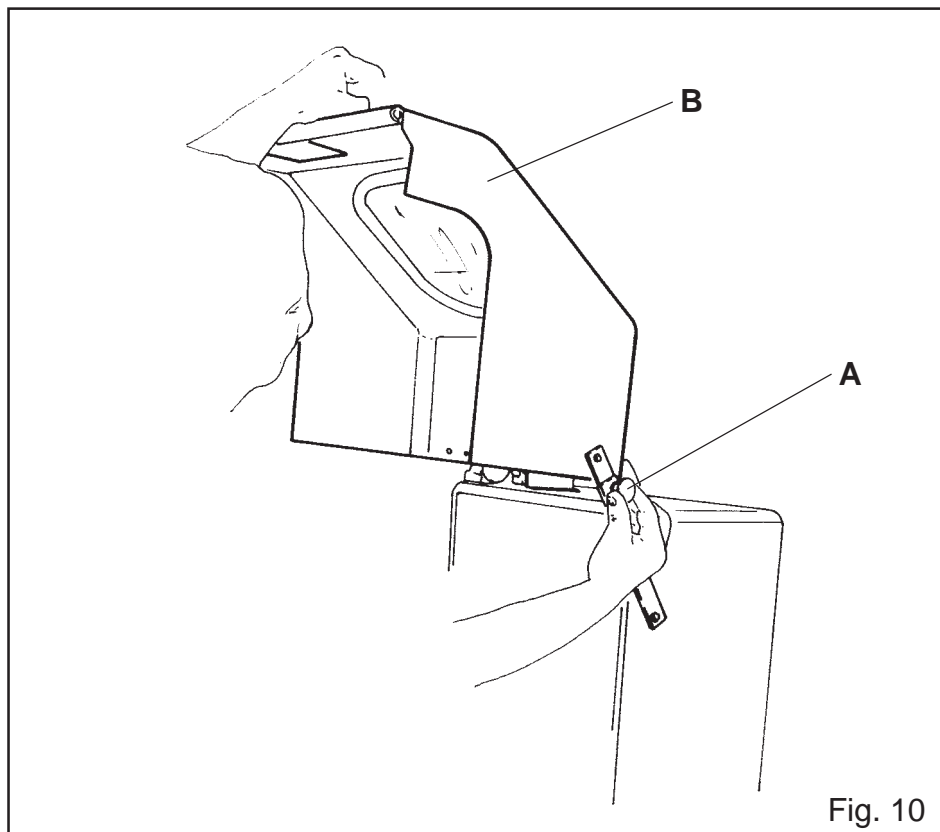


Fig. 10

3.7 CARRIAGE STROKE ADJUSTMENT

The machine has the possibility to cut from 0 to 650 mm. adjustment will be done by metrical scale D (fig.11) trough pointer E (fig.11).

To adjust the carriage stroke, turn wheel F (fig.11) (in a clockwise direction to decrease it, and in anticlockwise direction to increase it) untill you reach the desired measure that you can read on the metric ruler D (fig.11).

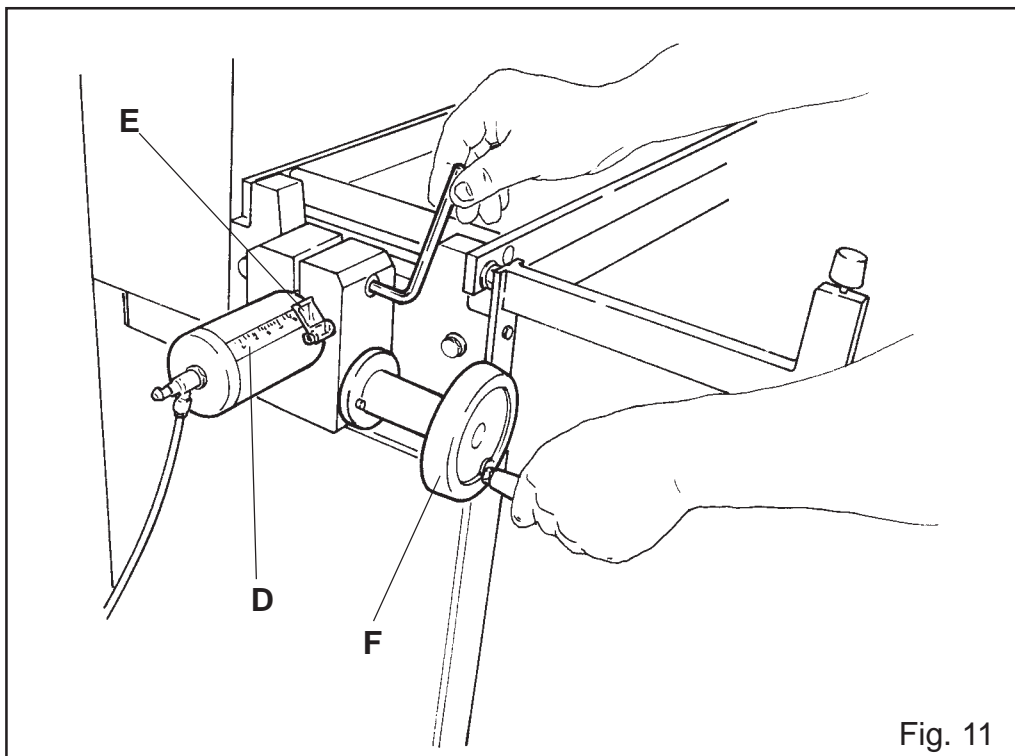


Fig. 11

3.8 BLADE WAY OUT ADJUSTMENT

To adjust the height of the blade way out:

- Position pointer A (fig.12) (to the right of the machine) in correspondence to the desired measure (which will correspond to the height of the profile to be cut) that you read on the metric ruler B (fig.12).
- To position pointer A (fig.12), release handle C (fig.12), position and then block it again.

N.B. The pointer, when turning, will run into micro D (fig.12) which once pressed, will make the blade return.

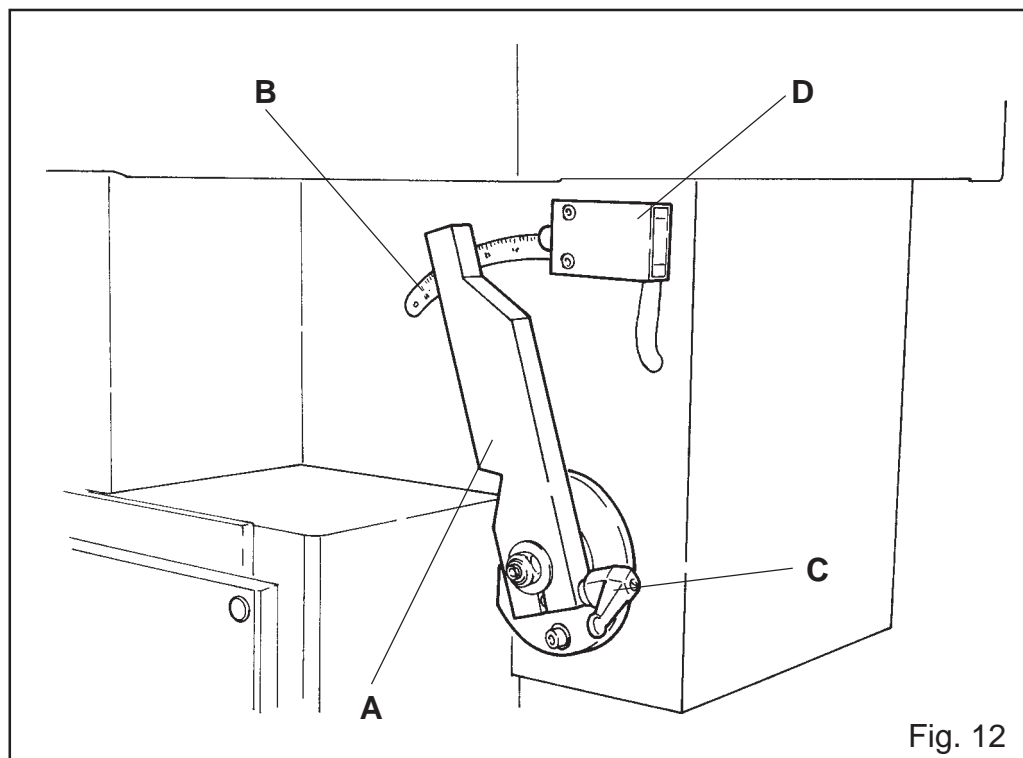


Fig. 12

3.9 EXECUTION OF THE CUTTING

After positioning the expected cutting length operate as follows:

- Position profile A (fig.13) on working table.
- Close carter.
- Press button H (fig.13a) for starting of the motor.

For normal cutting cycle operate as follows:

- Press button RESET M (fig.13a) repeatedly (until the clamps fully open)
- Turn selector I (fig.13a) to start working cycle: automatically clamps B-C-D and E (fig.13) will get in function
- Press button STOP N (fig.13) to stop cutting of the profile
- Turn selector I (fig.13a) to reset position

Press button RESET M (fig.13a) to unclamp the profile

- Take off the profile and clean working table.

To start working cycle with retake of the bar (optional) operate as follows:

- Press button STOP N (fig.13a)
- Press button RESET M (fig.13a) repeatedly (until the clamps fully open)
- Press button STOP N (Fig.13a)
- Turn selector L (fig.13a)press button RESET
- Turn selector I (fig.13) to start working cycle: automatically clamps B-C-D and E (fig.13) will get in function
- Press button STOP N (fig.13) to stop cutting of the profile
- Turn selector I (fig.13) to rest position
- Turn selector L (fig.13) to rest position
- Press RESET button M (fig.13) to unclamp the profile
- Take off profile and clean working table

ADJUSTMENT OF THE CLAMP F(fig.13)

- Pay attention and adjust the clamp so that the support B (fig.13) is 2 mm. far for the piece A (fig.13) when it is free.

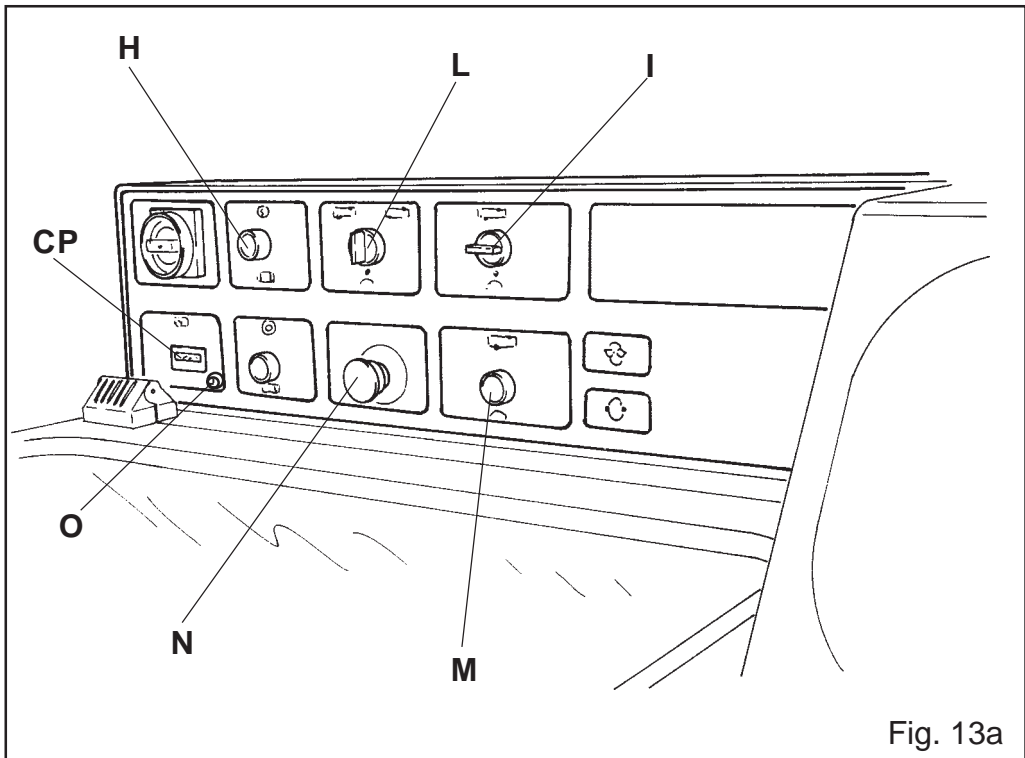
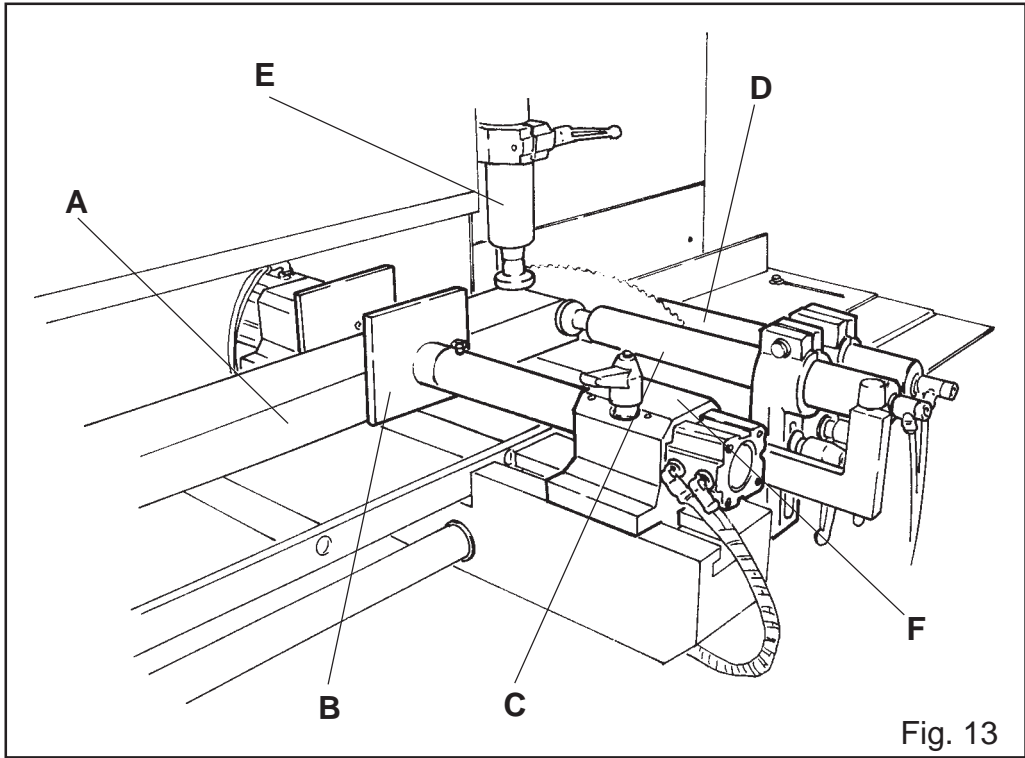
COUNTER - PIECES

In order to set to zero the counter-pieces CP(fig.13a):

- Press the button O (fig.13a).

In order to set the n° of pieces to cut:

- Press the little buttons situated under the counter-pieces.



3.10 ADJUSTMENT OF THE PIECES WAY OUT

To make easier the piece way uot draw up the guide A (fig.14) untill touching the piece, by operating on the screws B (fig.14) through spanner C (fig.14).

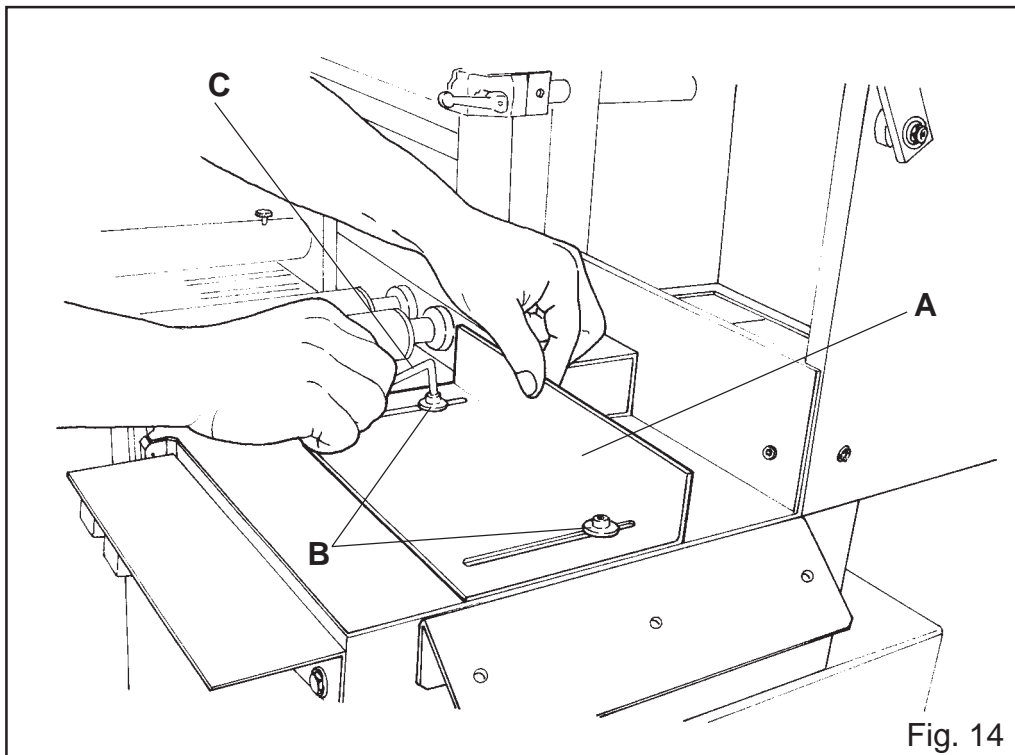
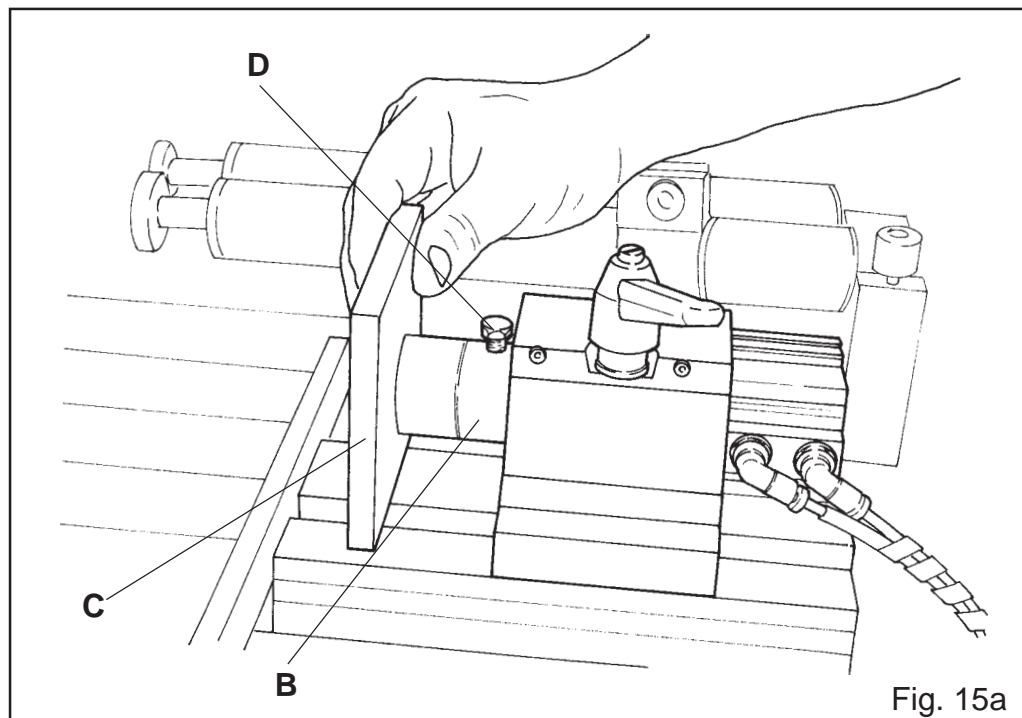
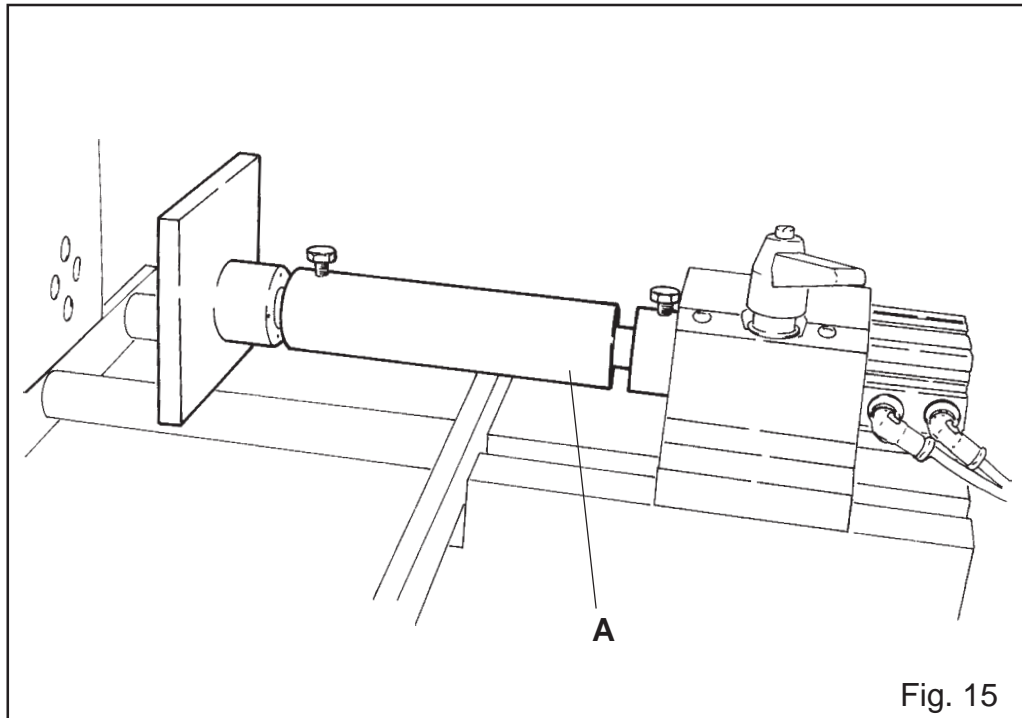


Fig. 14

3.11 PROTECTION GUARD

To close the protection guard, unhook the safety gudgeon pin (anti-fall), by drawing to the outside the tie-rod A (fig.15), accompanying with the hand the guard B (fig.15) way down.

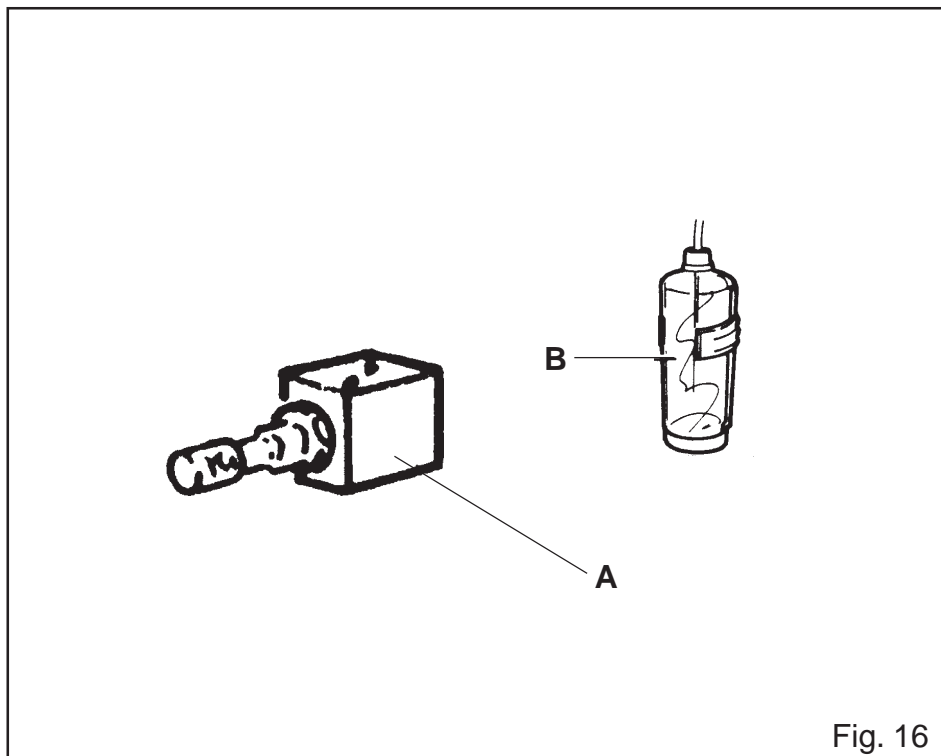


3.12 DESCRIPTION OF COOLING SYSTEM

While working the machine is equipped by a cooling system that works by means of a spray mist unit A (fig.16) which starts to work automatically as soon as machine starts cutting.

The lubricating liquid is situated in a tank B (fig.16).

Check regularly (every 24 working hours) that lubricating liquid is at the right level (use only cutting oil, possibly filtered, in order to avoid to stop up the spray mist unit).



3.13 ASSEMBLY OF THE BLADE

Take off carter F (fig.17)

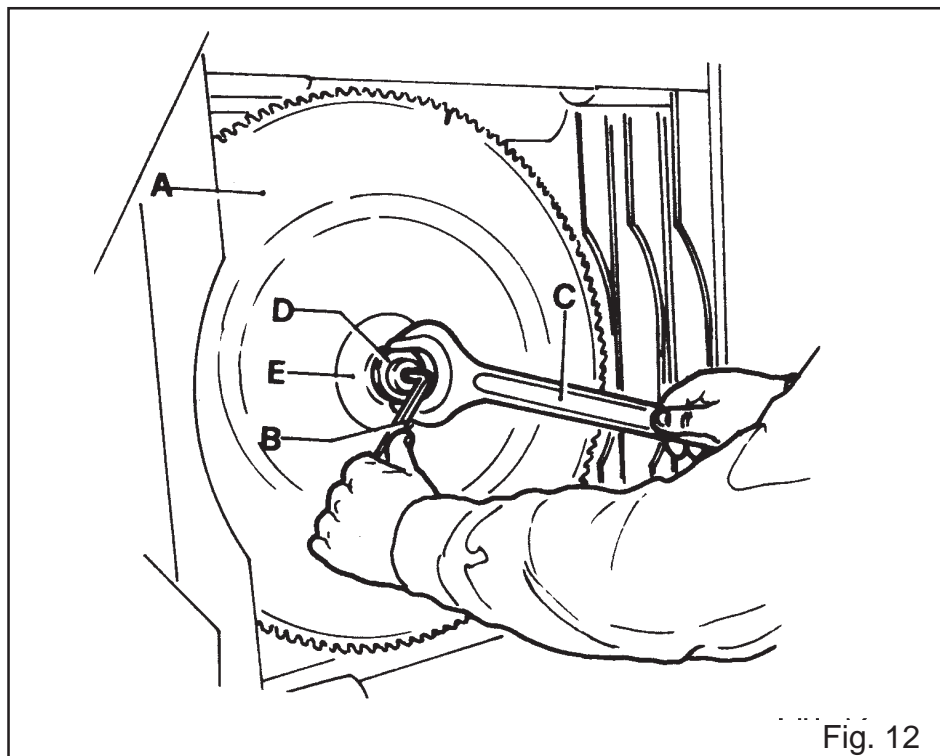
For the assembly of the blade A (fig.17a) operate by means of service spanner B and C (fig. 17a). Insert spanner B (fig.17a) in the special hole situated on the top of the motor spindle.

Insert spanner C (fig.17a) in the proper convenable key set of nut D (fig.17a) keep spanner B steady (fig.17a) loosen nut D (fig.17a) turning it in clockwise direction by means of spanner C (fig.17a).

Then take off nut D (fig.17a) and flange E (fig.17a) insert blade A (fig.17a) making sure that the parts in contact are perfectly clean in order to avoid harmful vibrations.

Assemble flange E (fig.17a) and nut D (fig.17a) blocking it by means of the special spanners B and C (fig.17a).

Make sure that blades are sharpened and in order.



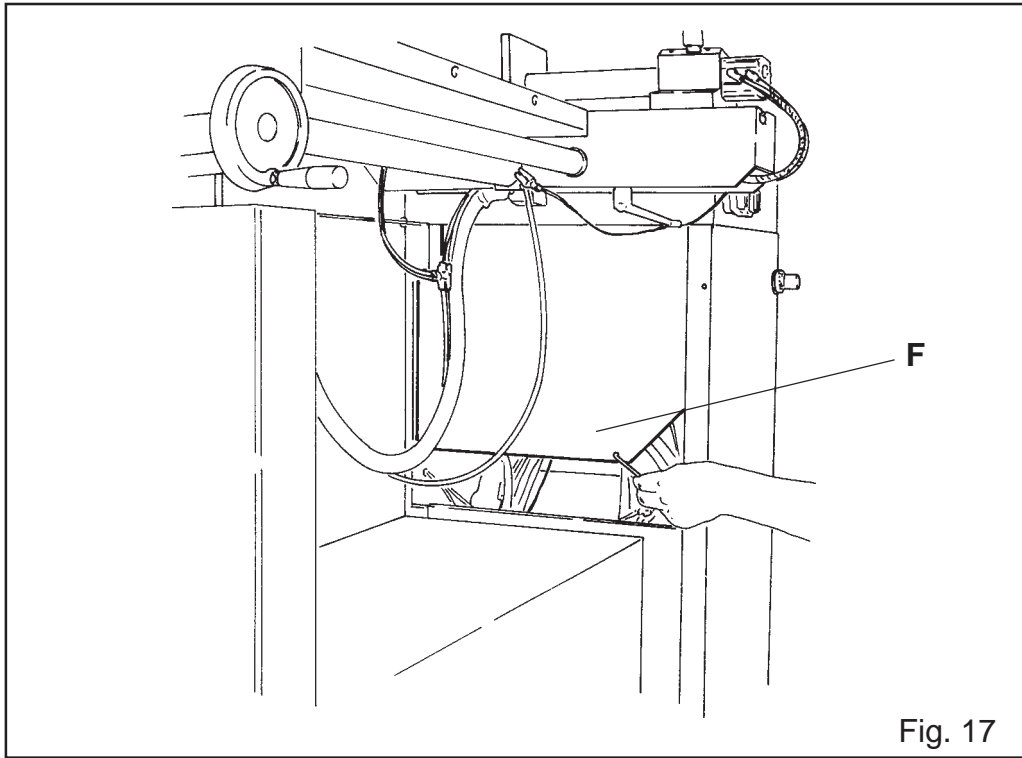


Fig. 17

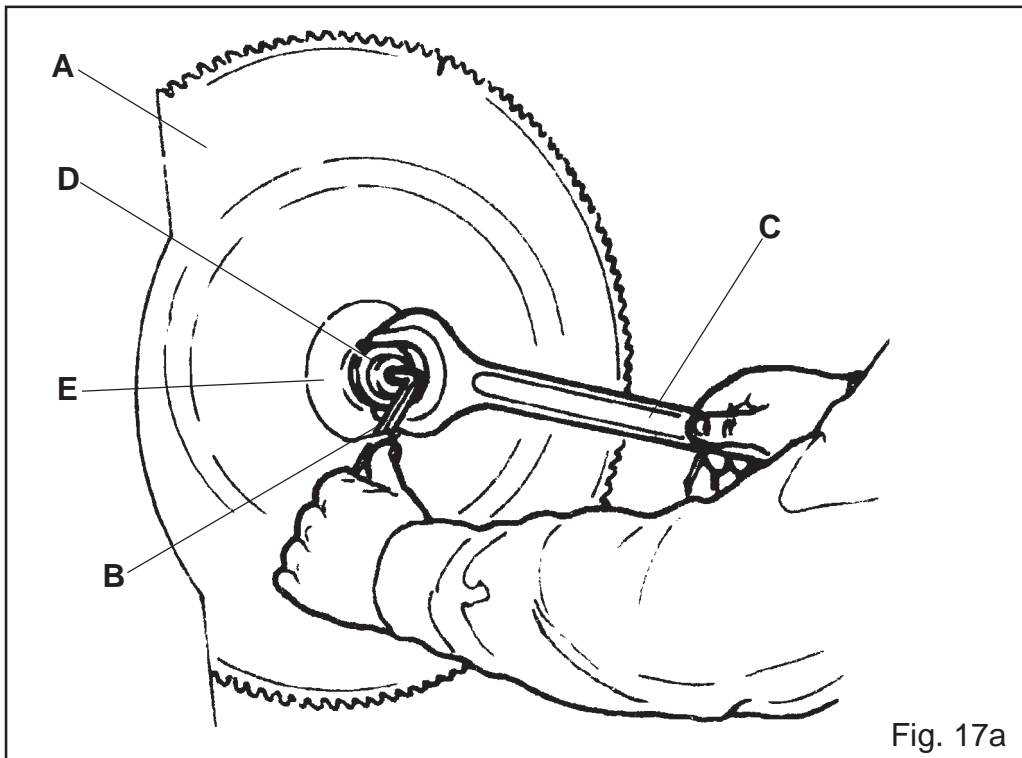
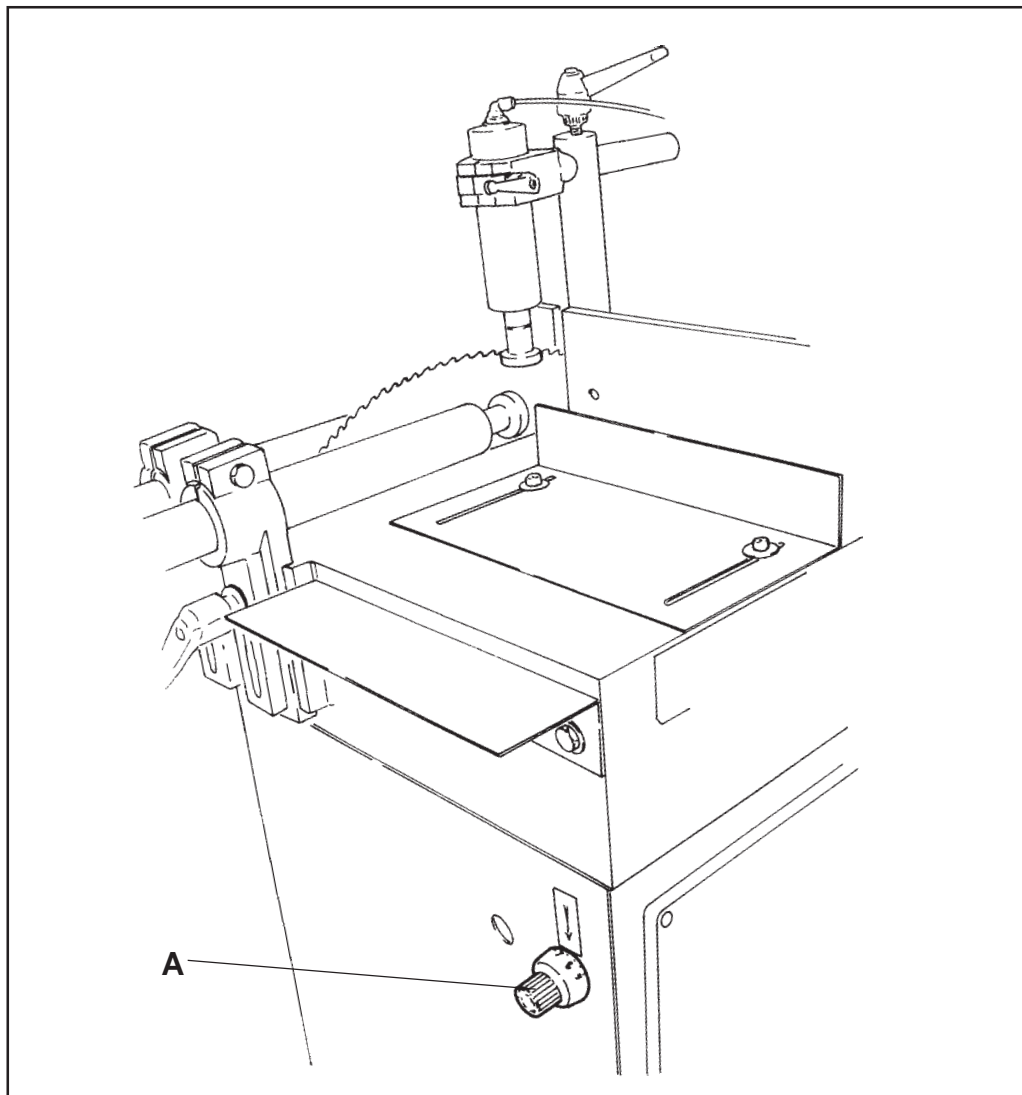


Fig. 17a

3.14 ADJUSTMENT OF BLADE'S SPEED EXIT

For the adjustment of blade's speed exit operate as follows:

- Turn knob A (fig.18) in clockwise direction to diminish speed or in anti clockwise direction to increase blade's speed exit.



3.15 ADJUSTMENT OF THE CARRIAGE STROKE SPEED

To adjust the carriage return speed operate as follows:

- Turn in clockwise direction knob B (fig.19) to decrease the speed or in anti clockwise direction to increase it.

To adjust the carriage forward stroke speed, operate as follows:

- Turn in clockwise direction knob C (fig.19) mounted on piston A (fig.19) to decrease the speed, or in anti clockwise direction to increase it.

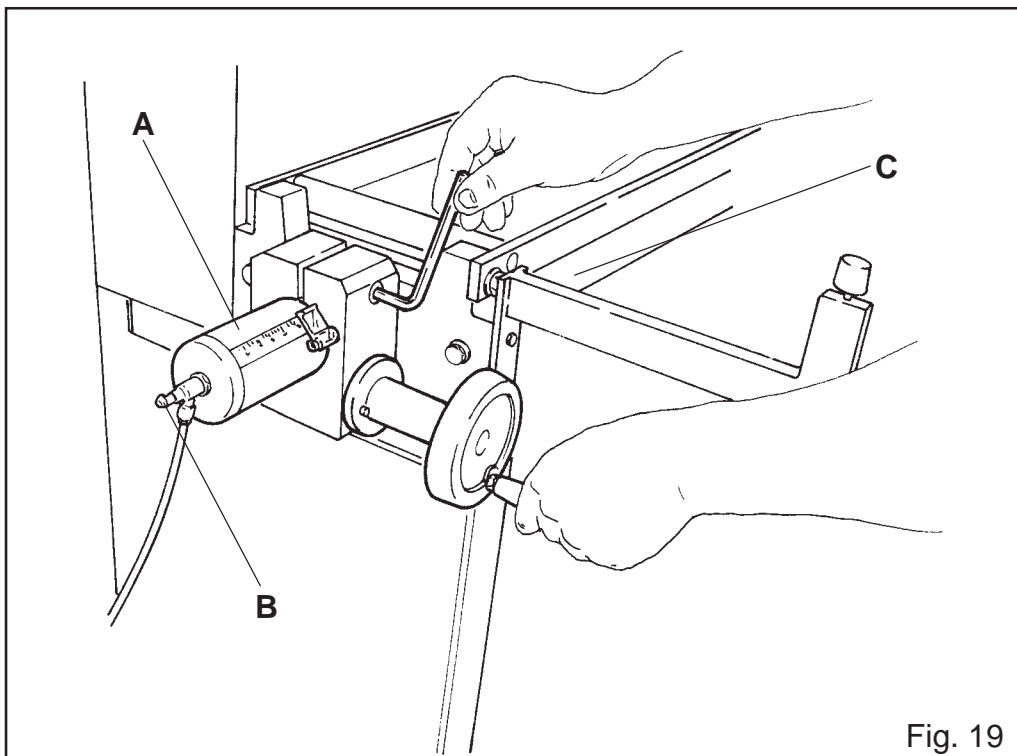


Fig. 19

3.16 MAINTENANCE

It could happen that after shocks you loose the alignment of the mobile jaw A (fig.20) with the fix jaw B (fig.20). Should this happen, the bar would badly slide.

In order to solve the defect, support a precision ruler on the working table and keeping it pressed against the mobile jaw with piston C (fig.20) all forward, in the fix jaw there must be one tenth of light.

To adjust the mobile jaw support D (fig.20), loosen screws E (fig.20) placed under the mobile carriage F (fig.20).

To keep the mobile jaw all forward, operate manually with a screw driver on the electrovalve G (fig.20) placed behind the control board.

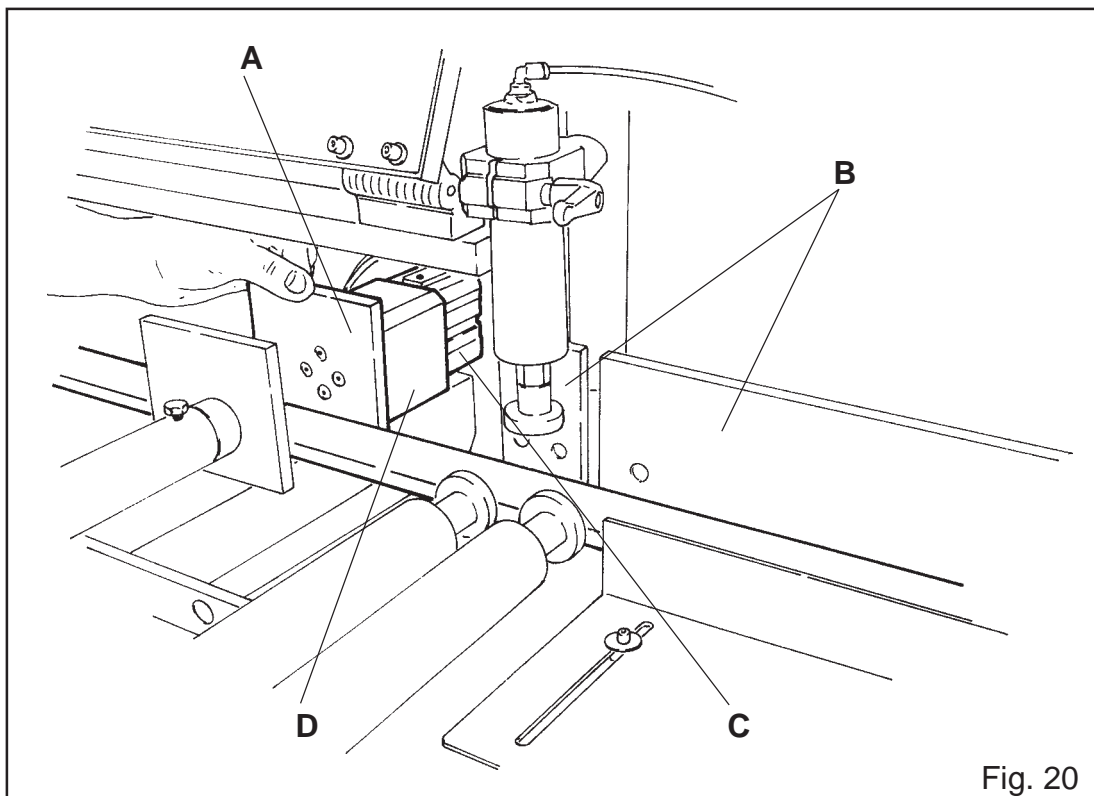


Fig. 20

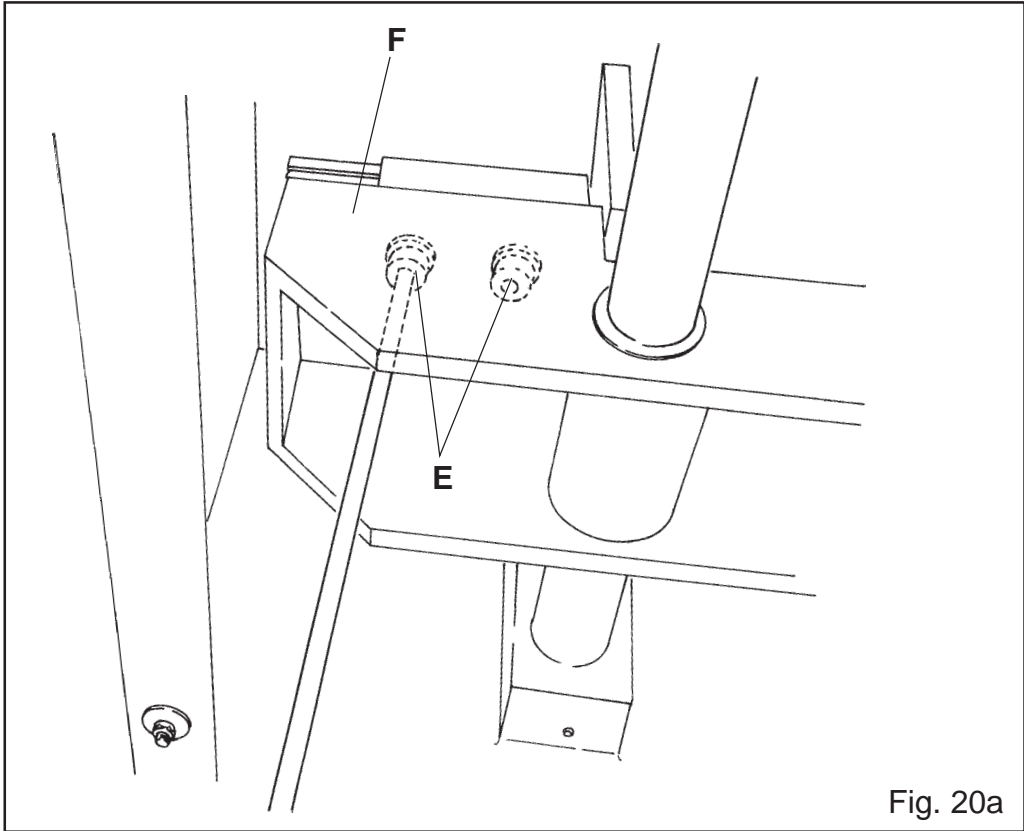


Fig. 20a

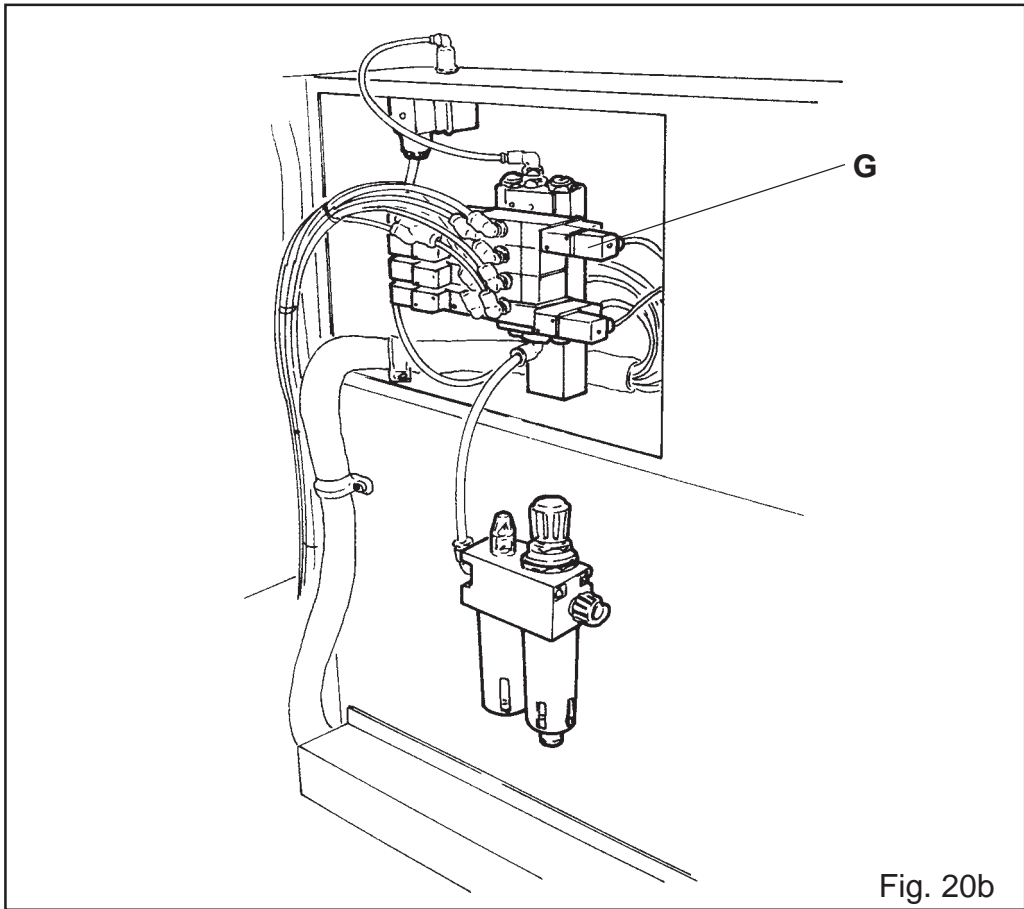


Fig. 20b

4.0 MAINTENANCE CARD

Check every morning the tank in case of condensate deposit D (fig.21) (to let the condensate out, press button located under the tank). Check regularly the oil level in tank E (fig.21).

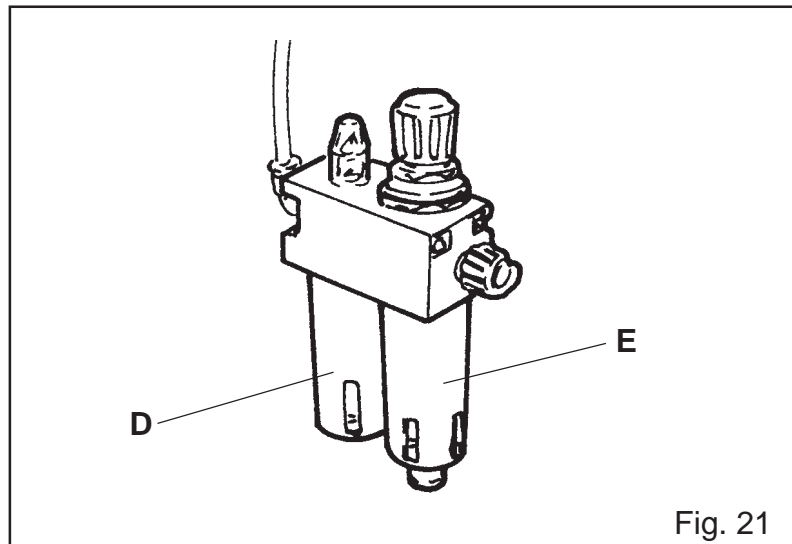


Fig. 21

Clean regularly (every 15/20 days) the sliding guides and keep them lubricated with grease or oil, in order to avoid that the guide scraping installed for the protection of the slide sleeve bearing runs out on zones of the guide that have not been lubricated or worse covered without with dried lubricant.

This would spoil the guide scraping and would allow the dirt to enter the sleeve bearing, compromising the sliding.

4.1 ELECTRICAL AND PNEUMATIC SCHEMES

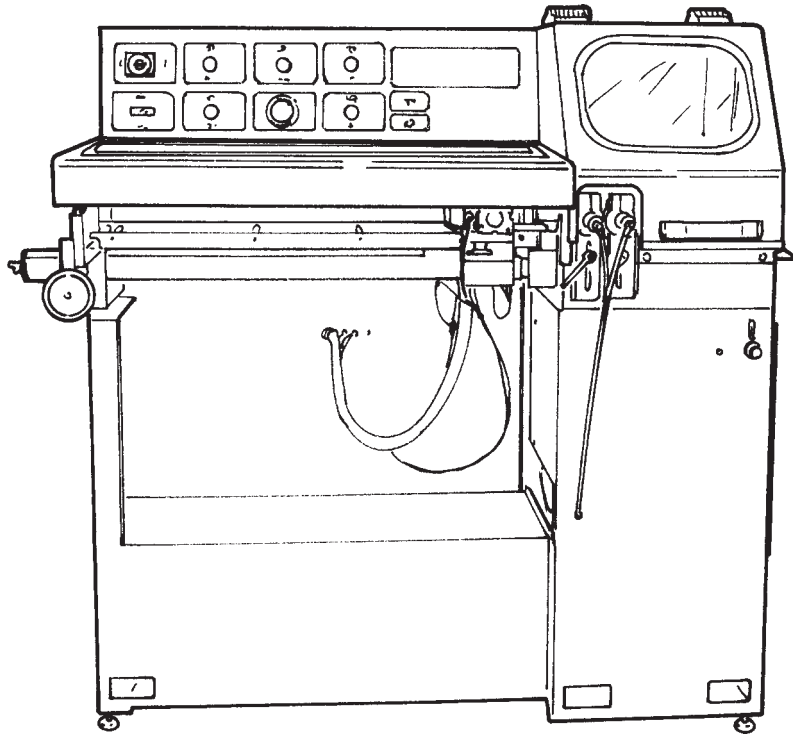
PNEUMATIC INSTALLATION:

Check the oil level and, if necessary, supply with the following oils:

AGIP, OSO15
ROL OIL, LR10
ESSO, NUTO H15
MOBIL, ALMO 525



ENGLISH



XERON

**INSTRUCTIONS FOR MAINTENANCE
AND USE**