

# OPERATION MANUAL

SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER

# WINTER GL 6000



## WARNING!

*The operator must thoroughly read this manual before operation.  
Keep this manual for future reference.*

**Henrik Winter Holztechnik GmbH**

Druckereistr. 8  
04159 Leipzig

Tel: +49 (0)341/ 4619021 Fax: +49 (0)341/4618358 Funk: +49 (0)171/2820443  
Em@il: [info@winter-holztechnik.de](mailto:info@winter-holztechnik.de) Internet: [www.winter-holztechnik.de](http://www.winter-holztechnik.de)

1.	WARRANTY .....	4
2.	SPECIFICATIONS .....	4
3.	MACHINE OUTFIT .....	5
4.	ACCESSORIES ON REQUEST .....	5
5.	"CE" TYPE EXAMINATION CERTIFICATE .....	5
6.	NOISE EMISSION .....	5
7.	DUST EMISSION .....	6
8.	INDIVIDUAL PROTECTION EQUIPMENT .....	6
9.	ENVISAGED USE OF THE MACHINE AND WARNINGS .....	6
9.1.	Envisaged use .....	6
9.2.	Warnings .....	6
10.	OPERATION AND CONSTRUCTION SAFETY MEASURES .....	7
10.1.	Composition of the machine .....	7
10.2.	Controls .....	7
10.2.1.	Starting .....	7
10.2.2.	Emergency stop .....	7
10.2.3.	Change-Over Switch .....	7
10.2.4.	Control and power circuit electric supply insufficient or lacking .....	8
10.3.	Protection against mechanical hazards .....	8
10.3.1.	Stability .....	8
10.3.2.	Risk of breakage during operation .....	8
10.3.3.	Tool shaft, flanges, locking the blade .....	8
10.3.4.	Devices to reduce the possibility and effects of ejection .....	8
10.3.5.	Risks due to rough surfaces and corners .....	8
10.4.	Prevention of risk of access to moving parts .....	8
10.5.	Protection against non-mechanical hazards .....	9
10.5.1.	Fires and explosions (WG4 - 5.4.1) .....	9
10.5.2.	Noise (WG4 - 5.4.2...5.4.2.3) .....	9
10.5.3.	Emission of chips and dust (1.5.13) .....	9
10.5.4.	Electricity .....	9
10.5.5.	Ergonomics and positioning .....	9
10.5.6.	Vibrations .....	9
10.5.7.	Laser (on request) .....	9
10.5.8.	Maintenance - Operating Information .....	9
11.	ADVICE ON USE IN FULL SAFETY - RECOMMENDATIONS .....	10
11.1.	Machine delivery procedure .....	10
11.2.	General recommendations .....	10
11.3.	At the work place .....	10
11.4.	On the machine before starting work .....	10
11.5.	During work .....	11
11.6.	During maintenance .....	11
12.	OVERALL DIMENSIONS .....	12
13.	POSITIONING THE MACHINE .....	13
14.	TRANSPORTATION .....	13
15.	INSTALLATION .....	13
15.1.	Lifting .....	13
15.2.	Installation and levelling .....	14
15.3.	Electrical connection .....	14
15.4.	Pneumatic connection .....	14
15.5.	Suction Connection .....	15
16.	STARTING .....	15
16.1.	Preparation .....	15
17.	CONTROL AND CHECK COMPONENTS .....	16
18.	USING THE MACHINE .....	18
18.1.	Checking the safety devices .....	18
18.1.2.	Emergency stop devices .....	18
18.1.3.	Strip bridge protection .....	18
18.2.	Adjustments .....	18
18.2.1.	Blade projection .....	18
18.2.2.	Blade forward speed .....	18
18.2.3.	Thrust guide feed speed .....	19
18.3.	Starting .....	19
18.4.	Emergency stop .....	19
18.5.	Trimming the workpiece guide supports .....	20
18.6.	Operation .....	20

18.7.	Alarm pilot lamp .....	21
19.	CHOOSING THE BLADE .....	21
20.	FITTING THE BLADE AND THE DIVISORY KNIFE .....	22
20.1.	Fitting the blade .....	22
20.2.	Divisory knife .....	22
21.	MAINTENANCE .....	23
21.1.	General maintenance .....	23
21.2.	Compressed air lubricator-filter unit .....	23
21.3.	Table insert .....	24
21.4.	Fence lubrication system oil sump .....	24
21.5.	Replacing the blade motor belts .....	24
21.6.	Lubrification of the screws and guides .....	25
22.	PRINCIPAL PROBLEMS AND RELATIVE REMEDIES .....	26
22.1.	The machine will not start .....	26
22.2.	The machine cuts with difficulty .....	26
22.3.	The blade fails to maintain the feed speed set by the pedal .....	26
22.4.	The blade slows down until it stops, while the motor keeps on turning .....	26
23.	TABLES OF SPARE PARTS .....	27

**NOTICE: Read the instructions booklet carefully and keep it for future reference.**

## 1. WARRANTY

Warranty consists of replacement free of charge of the defective mechanical parts which will be shipped ex works. It is valid for one year as of the date of our invoice and does not include the electric and electronic components. Moreover, it does not cover failures or defects due to external factors, maintenance mistakes, improper use of the machine, using the machine in a condition of overload, natural wear, fitting mistakes or other causes not ascribable to ourselves.

Any requests for after-sales servicing or spare parts will have to be made to our authorised area reseller.

## 2. SPECIFICATIONS

TECHNICAL PARTICULARS		SLG 2000	SLG 3000	SLG 4000	SLG 5000	SLG 6000	SLG700	SLG8000
Cutting length	mm	2500	3470	4350	5320	6200	7170	8050
Max cutting width	mm	610	610	610	610	610	610	610
Max cutting height	mm	160	160	160	160	160	160	160
Blade diameter min÷max	mm	450÷550	450÷550	450÷550	450÷550	450÷550	450÷550	450÷550
Blade hole diameter	mm	30	30	30	30	30	30	30
Blade speed	rpm	2600	2600	2600	2600	2600	2600	2600
Blade motor power	Hp	15	15	15	15	15	15	15
	Kw	11	11	11	11	11	11	11
Blade feed motor power	Hp	1,5	1,5	1,5	1,5	1,5	1,5	1,5
	Kw	1,1	1,1	1,1	1,1	1,1	1,1	1,1
Guide motor power	Hp	1	1	1	1	1	1	1
	Kw	0,75	0,75	0,75	0,75	0,75	0,75	0,75
Blade feed speed	m/min	0÷80	0÷80	0÷80	0÷80	0÷80	0÷80	0÷80
Installed power	Kw	12,85	12,85	12,85	12,85	12,85	12,85	12,85
Base suction inlet diameter	mm	2x130	2x130	2x130	2x130	2x130	2x130	2x130
Suction inlet and bridle diameter	mm	200	200	200	200	200	200	200
Total capacity required for suction system	m <sup>3</sup> /h	4800 (*)	4800 (*)	4800 (*)	4800 (*)	4800 (*)	4800 (*)	4800 (*)
Compressed air consumption	l/min	170	170	170	170	170	170	170
Operating pressure	bar	6	6	6	6	6	6	6
Worktop height	mm	870	870	870	870	870	870	870
Weight	Kg	1200	1500	1900	2100	2400	2700	3000
Plan dimensions		(see diagram on page 13)						

(\*) Air speed 20 m/sec.

### 3. MACHINE OUTFIT

The machine is equipped with the following accessories:

- . Blade Ø 450-500-550 mm
- . Buffer (\*) positioned on the table for supporting the workpiece during cutting
- . Jaw to hold back the bark
- . 50 and 17 mm spanners to change blades
- . Spanners: 10/13 - 17/19 - 22/24 - 7 - 8 mm
- . Hexagonal spanners: 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm
- . Two splitting knives
- . Instructions manual
- . Wiring diagram
- . Pneumatic diagram.

(\*) It is compulsory to use the buffer and for reasons of safety its is forbidden to make any modification to it.

### 4. ACCESSORIES ON REQUEST

- . Blade motor of 20 HP (15 kW)
- . Laser line projector, to display cutting lines
- . Electronic programmer, with keyboard and display to program the cutting length and the number of cuts made, the hours of work and machine alarm display
- . Device for the fine adjustment of blade projection on bench
- . Device for storing and repeating 5 cutting dimensions
- . Ball sliding plates for the workpieces
- . Flexible clamps for securing lightweight pieces
- . Maximum cutting width increased up to 1200 mm.

### 5. "CE" TYPE EXAMINATION CERTIFICATE

Certificate of the "CE" examination issued by:

I.C.E - Istituto Certificazione Europea - Via Bentini, 9 - CASTEL MAGGIORE (BOLOGNA) - ITALY

Notified body n. 0303

with the numbers: **989/96** compl. **03** for SL 4000 - 7000 - 8000 "Gold Line"

**1051/96** compl. **01** for SL 2000 - 3000 - 5000 - 6000 "Gold Line"

### 6. NOISE EMISSION

	Lm	Lw		Lop
	dB (A)	dB (A)	mW (A)	dB (A)
VSA	72.2	87.4	0.55	74.9
LAV	82.0	87.2	5.25	90.2

VSA = Loadless without extraction

LAV = Operating without extraction

$L_m$  = Mean level of surface pressure measured in open field conditions

$L_w$  = Level of sound power.

$L_{op}$  = Level of pressure on work place  
Declaration constant:  $k = 4$  dB

The values of noise level given are levels of emission and do not necessarily represent safe operating levels. Even though there is a relationship between emission and exposition levels, it cannot be used reliably to establish whether it is necessary to take additional precautions. The factors determining the level of exposition the workforce is subject to include the duration of exposition, the characteristics of the work place, other sources of dust and noise, etc., that is the number of machines and other adjacent activities. The levels of permitted exposition may vary from one country to another as well. This information will nonetheless allow the machine user to make a better evaluation of the danger and of the risk.

## 7. DUST EMISSION

The tests carried out by SUVA, the Swiss federal board of Lucerne, have given the following values:

1)	Front left-hand part	0.18 mg/m <sup>3</sup>
2)	Front right-hand part	0.18 mg/m <sup>3</sup>
3)	Rear left-hand part	0.18 mg/m <sup>3</sup>

## 8. INDIVIDUAL PROTECTION EQUIPMENT

- . Gloves for handling material and replacing the blade
- . Non-slip, crush-proof shoes
- . Protective glasses
- . Safety earmuffs or helmet to protect against noise
- . Leather apron (in case of manually handling the material).

## 9. ENVISAGED USE OF THE MACHINE AND WARNINGS

### 9.1. Envisaged use

The machine is designed to do the ripping, that is cutting in the direction of the grain, of massive wood in the form of boards with at least two parallel faces within the limits of measurement indicated in the specifications and in observance of the operating and servicing safety regulations contained in this manual. The machine should be used sensibly.

Before cutting, it is necessary to rest the workpiece correctly against the adjustable buffers of the table: it is therefore forbidden to cut pieces simply resting on the table.

The machine can be used alone (not in a line) by a single person handling the workpieces and standing in front of the control panel.

Not having a piece-pressing device, the machine is not designed to cut narrow pieces crossways. However, if the user occasionally cuts across pieces that are sufficiently wide and heavy (with the risk of rotation of the piece to be cut in contact with the blade) these pieces must be placed against the bumper and in addition supports must be applied to support the part of the piece sticking out from the front of the work table: the feed thrust guide must never be passed at the back.

The personnel assigned to the machine must have completed a sufficient training period for using and servicing the machine and must have the minimum age required by the law in force in the relative country.

It is necessary to use the individual means of protection (§4) and take the precautions indicated in the handbook: possibly use other means becoming necessary depending on the working environment and conditions.

All the safety measures have been taken in relation to the above, therefore it is forbidden to use the machine to do other work and/or make modifications without prior approval from the manufacturer.

### 9.2. Warnings

Cutting pieces simply resting on the table, without using the buffer, is forbidden since they could move under the force of the advancing blade.

It is not allowed to cut overlapping pieces. Likewise it is heartily recommended not to cut thin panels because, since the machine is not equipped with a workpiece-pressing device, there is the risk of uncontrolled movement that could put irregular stress on the blade.

It is normally not allowed to cut narrow pieces crossways since there is the risk of them rotating when they come into contact with the blade. However, in exceptional cases this can be done, meticulously observing the instructions given in the previous chapter.

It is expressly forbidden to cut workpieces going over the thrust guide since they would not have a regular support on the worktable, with the risk of the blade getting damaged or broken.

The safety devices have been designed for independent use of the machine and the CE type certification is valid only for this use. Therefore it cannot be inserted in a processing line. Should this be required, it is necessary to design the appropriate interlocking between the various machines and the emergency stop mechanism.

This machine, in its standard execution, cannot operate in an explosive environment.

## **10. OPERATION AND CONSTRUCTION SAFETY MEASURES**

### **10.1. Composition of the machine**

The machine is composed of:

- . Base with worktop
- . Retractable blade unit mounted on a sliding carriage
- . Strip protection on the bridge of the blade passage area
- . Motorized thrust guide to control movement of the piece and cutting measurement
- . Disc blade equipped with a dividing knife
- . Sliding control pulpit on work station and pedal to adjust the blade feed speed
- . Extraction pipe inside the base
- . 3 Nos. outlets to extract shavings and dust.

### **10.2. Controls**

The machine's electric system complies with the requirements of the EN 60204-1 standards. The machine is provided with protection against direct and indirect contact, overvoltage and overloading. A clamp in the cabinet and marked with the abbreviation PE allows earthing the equipotential circuit.

The control parts are clearly visible and identifiable, easily accessible for the operator and located far from hazardous areas. They can only be operated intentionally (1.2.1 and 1.2.2).

#### **10.2.1. Starting**

With the blade already started, the cutting cycle takes place as follows:

- . Operation of the self-maintenance pedal
- . The strip protection comes down
- . The blade goes up
- . Advancement until the end of operation of the bimanual control and pedal
- . The blade goes under the table
- . The strip protection goes up and the blade carriage returns to its starting position.

Starting the machine is only possible by the operator intentionally operating the controls (§ 16).

After a period of inactivity due to whatever reason, including the pneumatic or electric supply suddenly being cut off and the (micro) safety switches triggering, restarting is possible only after restoring the safety conditions (protection) and by the operator's intentional action (1.2.3).

#### **10.2.2. Emergency stop**

The machine is provided with an emergency stop with a push-button and hook-up device on the pulpit and a stop device with a cable in front of the strips for the entire length of the machine. Their operation causes the blade and feed to stop, the blade to go under the table and then the bridge strip protection to come up.

#### **10.2.3. Change-Over Switch**

A key switch (mode selector) is designed to be fitted to enable blade replacement (p. 16 - 19). After a timed break, the switch controls the ascent of the blade only in the area where it is designed to be changed (at the start of the cycle) and with the motor stationary: during this operation it is not possible to start the blade so any movement is impossible.

#### **10.2.4. Control and power circuit electric supply insufficient or lacking**

Breaking off, restoring after a break, or changing the electric power in any sense will not create hazardous situations, that is:

- . Untimely starting
- . Preventing stopping if the order has already been given
- . Preventing manual or automatic stopping of the moving parts
- . Inefficiency of the safety devices (p. 1.2.6/1.2.7).

The machine is provided with a pressure switch preventing motion in the event of a lack or insufficient pressure of pneumatic supply (< 4 bars).

#### **10.3. Protection against mechanical hazards**

##### **10.3.1. Stability**

The machine is provided with screws in the support feet for levelling (§15.2).

##### **10.3.2. Risk of breakage during operation**

A bridge protection has been devised on the table with polycarbonate strips to hold back any fragments of the tool. Under the table the blade is protected by fixed covers.

##### **10.3.3. Tool shaft, flanges, locking the blade**

The shaft has been sized to withstand stress during woodworking. It is made of UNI C40 steel with a standard diameter for this type of tool (30 mm).

There are service keys to lock the shaft when replacing the blade.

The flanges have a diameter > 25% of the maximum diameter of the blade; moreover, the rear flange is fixed on the shaft with a key and it is integral with the front flange by means of two pins: this is to prevent both excessive tightening in the event of strain during cutting and unscrewing in the event of repeated stopping and starting.

The blade locking nut is equipped with an anti-screw device.

For reasons of construction it is not possible to fit a blade with a diameter greater than 550 mm.

##### **10.3.4. Devices to reduce the possibility and effects of ejection**

The divisory knives are made in compliance with the requirements provided for by the standards. A set of divisory knives is supplied in relation to the diameter and thickness of the blades used (§ 20.2).

##### **10.3.5. Risks due to rough surfaces and corners**

Special precautions have been taken to prevent any risk of injury (1.3.4).

#### **10.4. Prevention of risk of access to moving parts**

In its rest position the blade is equipped with protection with interlocking. The fissure through which the blade passes during cutting is produced by the blade itself during the first cut and therefore has the same width as the blade (WG4 part 2 - 5.3.7.1).

In the blade passage area there is bridge protection with polycarbonate strips 50 mm wide.

The moving parts situated in the base are protected by fixed covers that need a special tool for opening: the covers do not stay in place unless they are fixed (1.4.2.1).



## **10.5. Protection against non-mechanical hazards**

### **10.5.1. Fires and explosions (WG4 - 5.4.1)**

To reduce the risk of fire and explosion the machine is provided with extraction mouths for the chips. Connecting instructions are given in order to obtain efficient extraction (§ 15.5).

### **10.5.2. Noise (WG4 - 5.4.2....5.4.2.3)**

Various measures have been adopted to reduce noise emission. This manual gives the measured values (§ 6).

### **10.5.3. Emission of chips and dust (1.5.13)**

The machine is provided with chip and dust extraction mouths situated above and below the worktop. The specifications (§ 2) give the volumetric capacity at a speed of 20 m/sec. The values measured are indicated in § 7.

### **10.5.4. Electricity**

The electric system is in compliance with EN 60204-1 standards. The minimum degree of protection is IP 54.

### **10.5.5. Ergonomics and positioning**

The machine has been designed taking into account ergonomic and anthropometric data. The controls are in full view from the working position where there is a sliding control panel (§ 16) provided with an emergency stop. Use of the machine requires no effort or tiring movements: any lifting or handling equipment will have to be installed by the user depending on the weight of the materials to be processed.

### **10.5.6. Vibrations**

The rotating masses are balanced, therefore they do not cause vibration. Moreover, it is recommended to mount the machine (§ 15.2) on vibration-damping supports at the time of installation (1.5.9).

### **10.5.7. Laser (on request)**

The laser device displaying the cutting line is protected and not turned towards the operator or to other exposed personnel. It has been installed in compliance with the directive (1.5.12).

### **10.5.8. Maintenance - Operating Information**

This manual gives machine operating and servicing indications. Indelible safety and identification cards and symbols have been installed on the machine (1.7.3).

## **11. ADVICE ON USE IN FULL SAFETY - RECOMMENDATIONS**

### **11.1. Machine delivery procedure**

For any work on the machine (servicing, repair, modification, etc.) use a shutdown procedure involving three operations:

- . Disconnecting the machine from the energy source (electric and pneumatic)
- . Locking disconnection
- . Checking there is no supply, residual, potential and kinetic energy.

A single person must be responsible for carrying out these three operations. If it is a simple maintenance job, it may be the same operator.

Locking consists of using a key to lock the master switch in the open position and of using a key to shut off the pneumatic supply after taking out the fast connector and getting the strip bridge on the table to go down.

In the event of failed operation for whatever reason, shut down the machine as described above and mark it with a special card.

### **11.2. General recommendations**

- . Never forget that wood processing machines, given the high speed of the tools and their fast execution, are considered the most dangerous, therefore never underestimate the risks and concentrate on the job.
- . This rip-saw must only be used by qualified personnel that has had a period of training on this very model, that has read and understood the operating procedures indicated in this manual and that has good general skills.
- . The machine will have to be used in observance of safety regulations and sensibly, taking the necessary precautions to prevent any accident or damage to things and persons.
- . Avoid using the machine if psycho-physical conditions are not good, that is if they may reduce the speed of reflex and quality of supervision. Never use the machine under the effects of alcohol or drugs.
- . All the safety devices of the machine, of its components and accessories must be kept in a perfect state of repair. The cards with the indications, suggestions and safety devices must be kept in a good state of repair and in their original position.
- . It is absolutely forbidden to carry out mechanical truing or servicing operations without having first carried out the above procedure, keeping the key with yourself.

### **11.3. At the work place**

- . Make sure lighting is sufficient and there is space to store the material and to pass by. Always keep the floor clean since dust and chips make it slippery and therefore dangerous.
- . If possible, equip the work place with a lifting device for heavy materials in order to eliminate physical strain.
- . Wear clothing that is not loose and is suited to working needs. Take off any bracelets, scarves or other items that could get caught up.
- . Get fitted out with the individual protection equipment (§ 8), if working conditions require it.

### **11.4. On the machine before starting work**

- . Make sure the table insert is in a good state of repair: if the fissure for the blade to pass through has widened or is chipped, replace it with hardwood (for sizes see § 21.3). The fissure is made directly with the blade.
- . Adjust the blade feed speed in relation to the type of material to be cut, its thickness and the type of blade. Always start with reduced speed and then increase it appropriately.
- . Never use a dull, chipped or deformed blade and make sure it is balanced. Check that the divisory knife is positioned correctly, locked and of a suitable size for the type of blade used (§ 20.2).
- . Check the position of the rear guide and of the bumper for proper support of the pieces to be cut.
- . Check proper operation of the strip protection.

### 11.5. During work

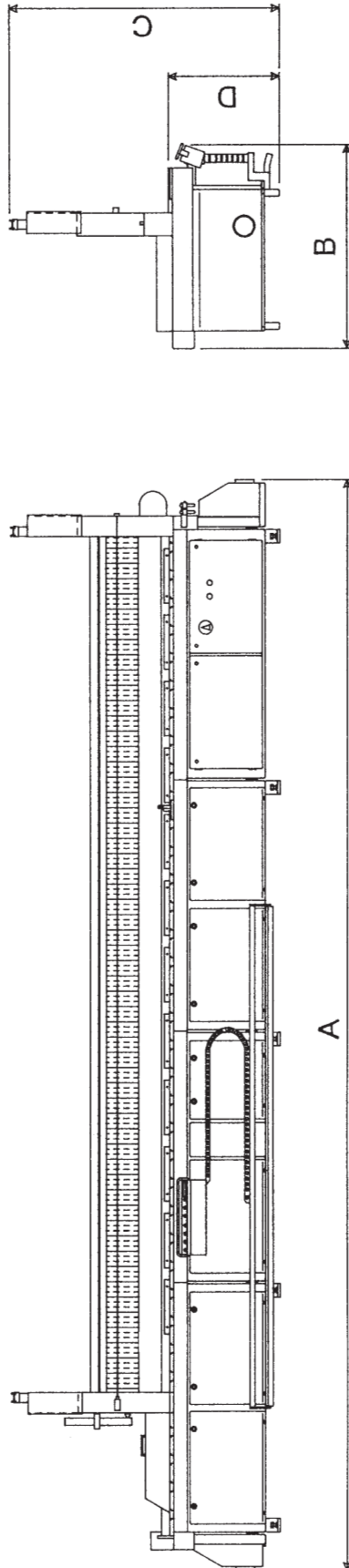
- . Run the first work cycle without a load to check machine operation.
- . Start extraction even if only one piece is being cut.
- . Never bring hands, arms or other parts of the body close up to the cutting area and to moving parts. Adopt devices of a sufficient length to withdraw thin pieces (clamp, push-rod, etc.). Use an appropriate device to remove the chips or waste (brushes, extraction, etc.): never use your hands!!
- . Systematically use the mobile bumper on the table to prevent moving the piece during cutting and consequently damaging the strips.
- . In the event of trouble or accidents, never act with the machine in operation: stop it with the appropriate organ and wait for the end of the cycle and complete stoppage of the blade before intervening.
- . During operation of the machine, of its components and accessories, it is absolutely prohibited to remove any protection, such as covers, base panels, barriers, or any other protection and safety element. Never operate the switches or the other safety and/or operating cycle control devices, since such action could cause considerable damage to the mechanical parts and/or to persons.
- . Never cut materials that could spark or overheat the chips and therefore cause fire or explosion on passing through the extraction pipes.
- . It is forbidden to climb or sit on the machine.

### 11.6. During maintenance

- . Regular servicing of the mechanical, electric and pneumatic parts extends the life of the machine, assures top performance and constitutes an important safety factor. Regularly check the efficiency of the earthing system in compliance with current standards.
- . Except in case of need, only intervene on the machine after carrying out the procedure described at the start of the chapter. In the event of problems of an electrical or mechanical nature, refer to specialized personnel. If the machine is out of order due to breakdown, servicing or repair, mark it with a special card.
- . At the end of every job involving opening the cover of the blade, of the base panels or other guards, proceed to fit them, checking they are positioned and operating properly. Before starting check that no tools or foreign bodies have been left in the machine or on the worktop.
- . The tools have to be sharpened correctly and frequently, respecting the angular features of the cutting parts. Arrange the tools in their cases or racks to prevent them getting knocked. Never put tools onto metal surfaces.
- . Wear protective gloves when replacing a blade.
- . Replacement of mechanical parts must be done exclusively with genuine parts. The electrical components must be the ones indicated in the list accompanying the wiring diagram, or with others having the same safety features. If in doubt, consult the manufacturer. **Non-observance of this point involves losing the manufacturer's liability on the safety of the machine.**

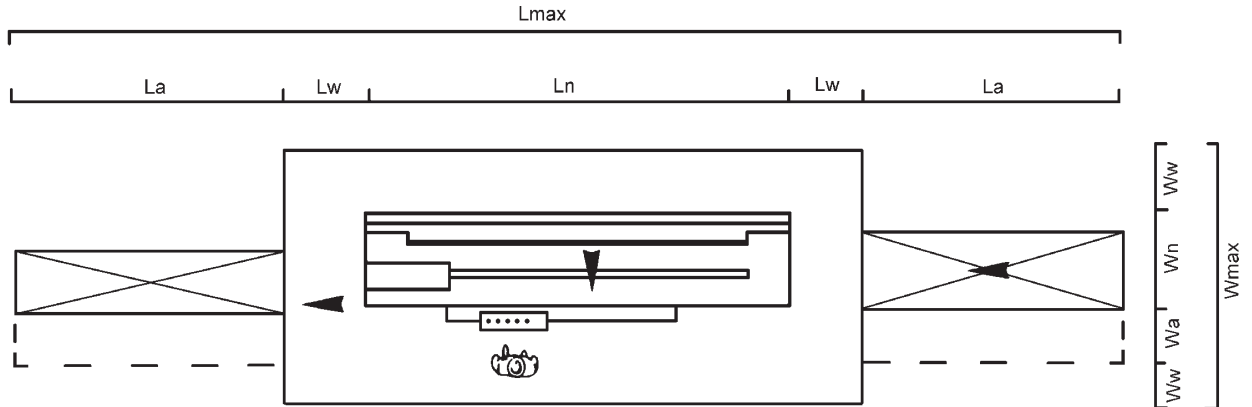
**Other safety regulations are given in the various chapters on machine adjustment and operation.**

12. OVERALL DIMENSIONS



	SL 2000	SL 3000	SL 4000	SL 5000	SL 6000	SL 7000	SL 8000
A	4315	5285	6165	7135	8015	8895	9865
B	1660	1660	1660	1660	1660	1660	1660
C	2125	2125	2125	2125	2125	2125	2125
D	870	870	870	870	870	870	870

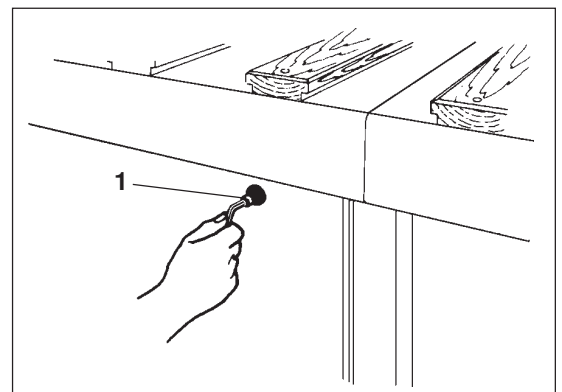
### 13. POSITIONING THE MACHINE



- $L_{max}$  Maximum length
- $L_n$  Length of the machine
- $L_w$  Length required for operation and maintenance
- $L_a$  Additional length required
  
- $W_{max}$  Maximum width
- $W_n$  Width of the machine
- $W_w$  Width required for operation and maintenance
- $W_a$  Additional width required

### 14. TRANSPORTATION

For transportation from the factory, the machine is set on the vehicle by the factory personnel. For any later transportation, bear in mind that when it is regularly supported it is sufficiently stable and must only be secured against longitudinal and transverse sliding by putting wooden blocks against the support feet, suitably nailed onto the floor of the vehicle.



### 15. INSTALLATION

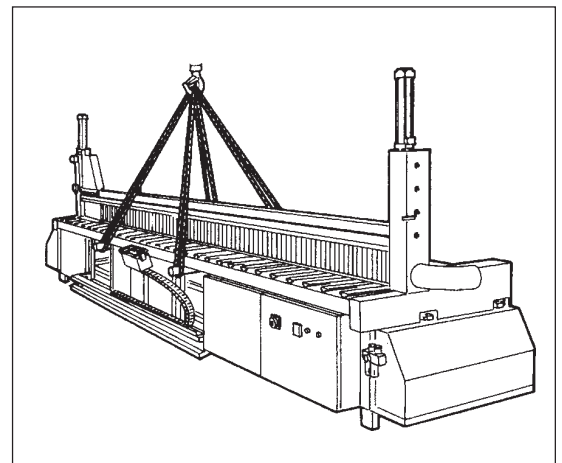
#### 15.1. Lifting

Take off the four side panels by undoing the screws **1** with a hexagonal spanner.  
Through the openings insert two steel bars (min. 50 mm) and sling as shown in the figure.

Weights to be lifted:

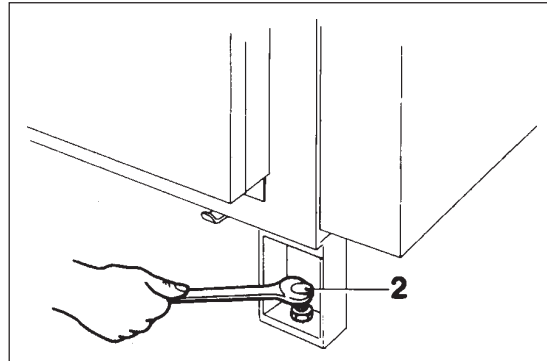
SL 2000	SL 3000	SL 4000	SL 5000	SL 6000	SL 7000	SL 8000
Kg 1200	Kg 1500	Kg 1900	Kg 2100	Kg 2400	Kg 2700	Kg 3000

Fit the panels back on.  
Alternatively, a fork-lift truck can be used, taking care to centre the grip so that lifting is balanced.



### 15.2. Installation and levelling

Adjust the screws **2** so they are fully resting on the floor. It is recommended to put vibration-damping plates between the floor and the support feet to cut down on noise emission.

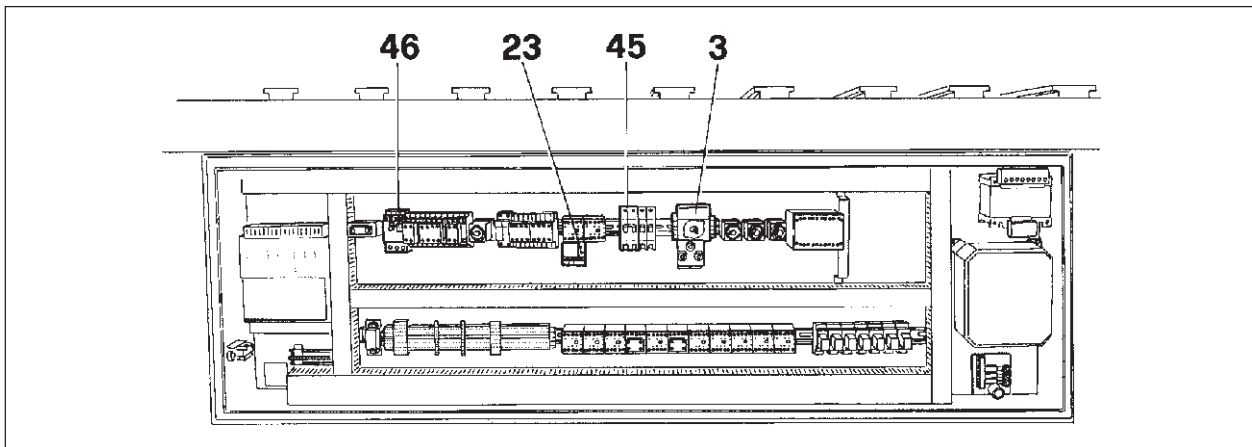


### 15.3. Electrical connection

Si consiglia di affidare l'esecuzione di questa operazione a personale specializzato. Collegare il cavo di alimentazione direttamente all'interruttore generale **3** e rimontare successivamente la protezione speciale dei morsetti. Il filo di messa a terra deve essere collegato al morsetto marcato PE. La sezione minima dei conduttori del cavo deve essere di 6 mm<sup>2</sup>.

Il cavo deve passare attraverso il relativo pressacavo, che dovrà essere ben serrato una volta eseguito il collegamento elettrico.

Before starting the blade motor it is necessary to make sure that the direction of rotation of the blade is correct. Use the wood feed guide positioning control: if positioning is correct with respect to the symbols, the motor can be started. If positioning of the guide is the opposite to the indications, invert two supply leads of the master switch.

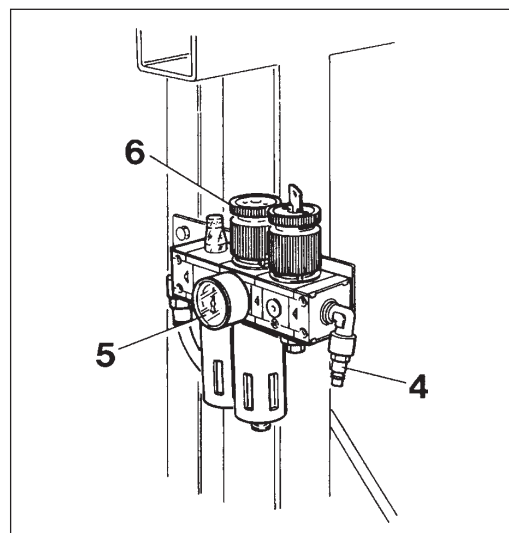


### 15.4. Pneumatic connection

Connect the compressed air supply pipe to the fast connector **4**. The supply unit is supplied with a separating spanner that must be used to lock the machine (§ 11.1).

Check the operating pressure on the pressure gauge **5** (6 bars): for adjustment, use the knob **6**. To open, pull along the axis.

The maximum rate of flow is to be 170 l/min. The machine is provided with a pressure switch that prevents operation if the pressure is < 4 bars.

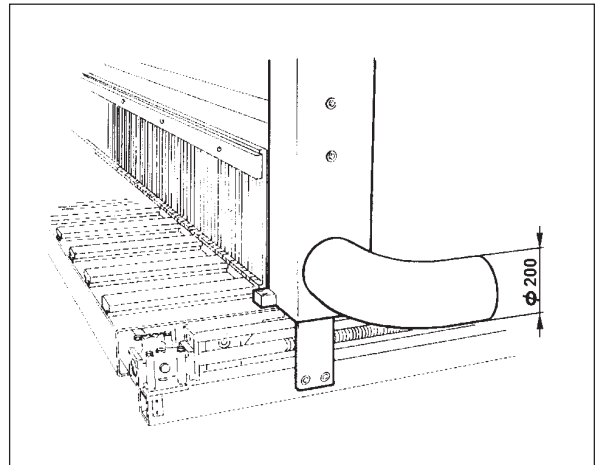
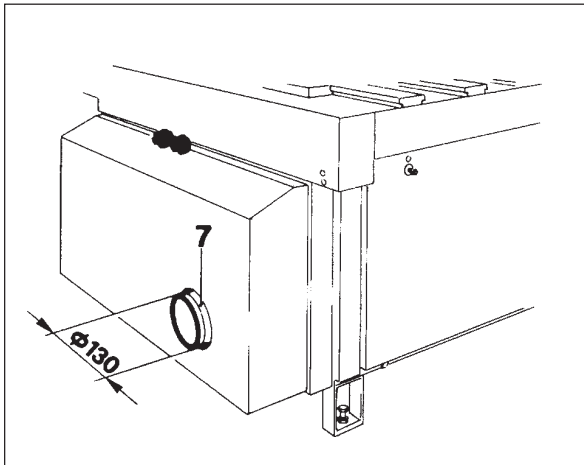


## 15.5. Suction Connection

It is compulsory to use suction.

There is a total of three inlets connected to the suction system: the two at the ends of the base (7) will have to be connected with a flexible hose  $\varnothing$  130 mm, whereas the bridge inlet requires a hose  $\varnothing$  200 mm.

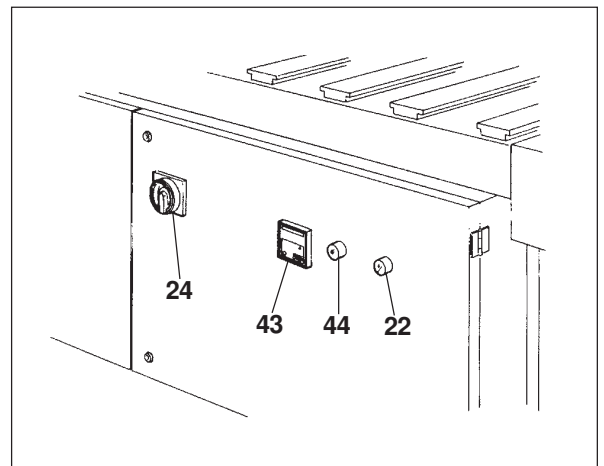
See the technical data chart on page 4 for the total air flow rate required and the relative speed.



## 16. STARTING

### 16.1. Preparation

Turn the master switch **24** onto position "1": indicator lights **22** and **44** will come on. Next, press button **6**. This will light up to indicate the machine is ready to operate.

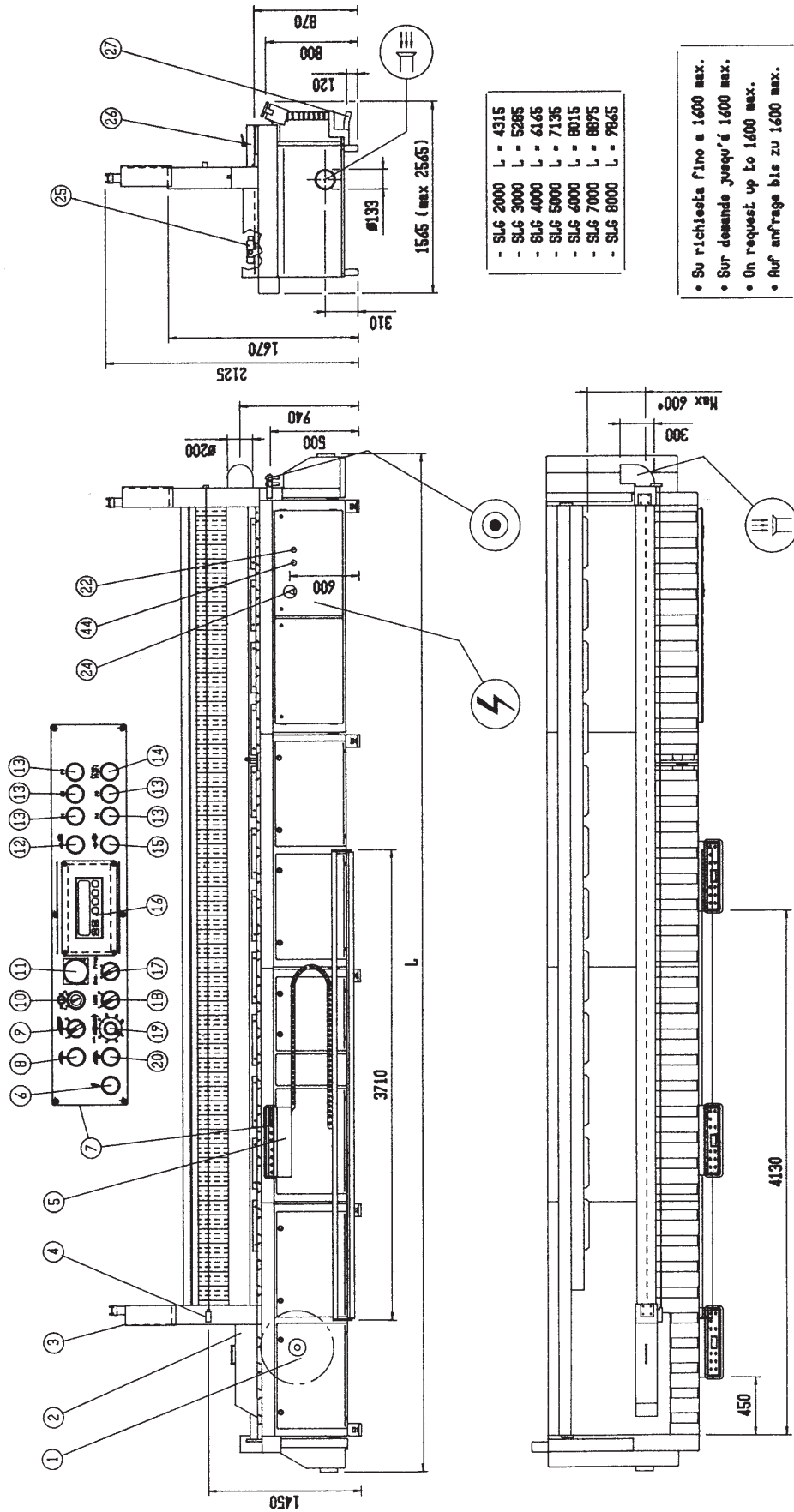


## 17. CONTROL AND CHECK COMPONENTS

Pos.	Name	Notes
1	Blade	
2	Blade protection	
3	Pneumatic jack guard	
4	Safety microswitch with cable	
5	Sliding control pulpit	
6	Machine-ready luminous button	
7	Control panel	
8	Blade start push-button	
9	Blade height selector	
10	Blade change-over switch	
11	Emergency stop push-button	
12	Fast/slow fence away-movement push-button	
13	Dimension memorizing push-button	On request
14	Programmed dimensions execution button	
15	Fast/slow fence approach push-button	
16	Digital display (programmer)	
17	Fence movement "man/prog" selector switch	
18	Laser switch	On request
19	Feed speed potentiometer	
20	Blade stop push-button	
22	Alarm indicator light	
24	Master switch	
25	Guide	
26	Wooden stop square	
27	Blade control pedal	
44	Line indicator light	



OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000



## 18. USING THE MACHINE

### 18.1. Checking the safety devices

#### Blade access door

The blade access door is provided with the following safety devices that prevent access to the blade when it is rotating:

- a) Key microswitch with positive opening preventing starting as long as the door is open.
- b) Delayed opening screw device prevents accessing the blade in motion.

#### 18.1.2. Emergency stop devices

The machine is provided with an emergency stop by means of a push-button with a hook-up device on the control panel and a stop device by means of a cable in front of the strips for the entire length of the machine. Their operation causes the blade and feed to stop, the blade to go under the table and then the bridge strip protection to come up. In the event of activating the emergency stop by means of a button, to restore the functions it is necessary to reset it by turning it, while the cable device is restarted by pulling the knob on the microswitch located on the far left.

#### 18.1.3. Strip bridge protection

The strips form a protection barrier for the cutting area. Their descent is an essential condition for the cutting cycle to start.

**Important:** The machine will not start in the following conditions:

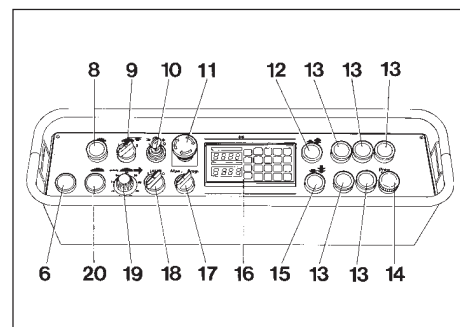
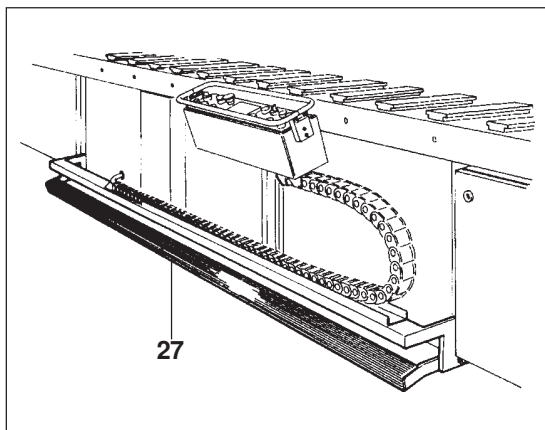
- . Emergency stop device activated
- . Key selector in the blade changing position
- . Blade access guard open
- . Pneumatic power insufficient or lacking

## 18.2. Adjustments

### 18.2.1. Blade projection

The three-position switch **9** corresponds to three pre-set blade projection values (60 - 120 - 160 mm approx.).

The electromagnetic stops on the lifting jack can be adjusted.



### 18.2.2. Blade forward speed

Adjust the top speed with knob **19** of the potentiometer in relation to the height of the piece and the type of wood to be cut. The speed may be modulated during the stroke with the pedal **27**.

An ammeter (**43**) fitted on the electrical cabinet door indicates electric input of the machine in operation. In the event of this setting causing danger of motor overheating, the machine automatically reduces blade feed speed by 50%.

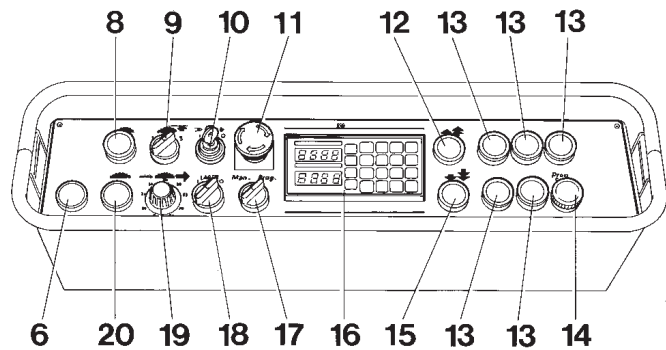
### 18.2.3. Thrust guide feed speed

Movement of the thrust guide is controlled by push-buttons 12 and 15 and will be made in the direction of the arrow placed next to each one of them.

Pressing the push-button for longer than 3 seconds automatically triggers fast feed of the thrust guide.

The movements are read on the digital display 16.

To regulate the accessory programmer read the instructions enclosed with the appliance.



### 18.3. Starting

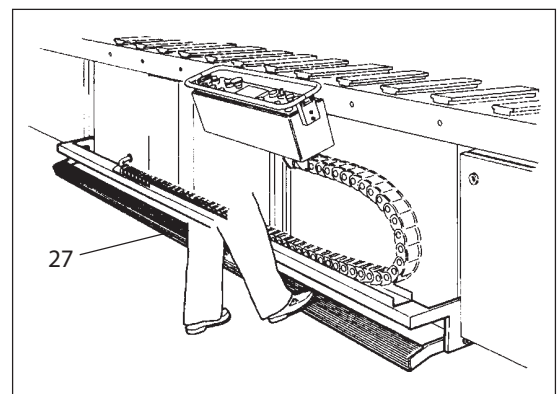
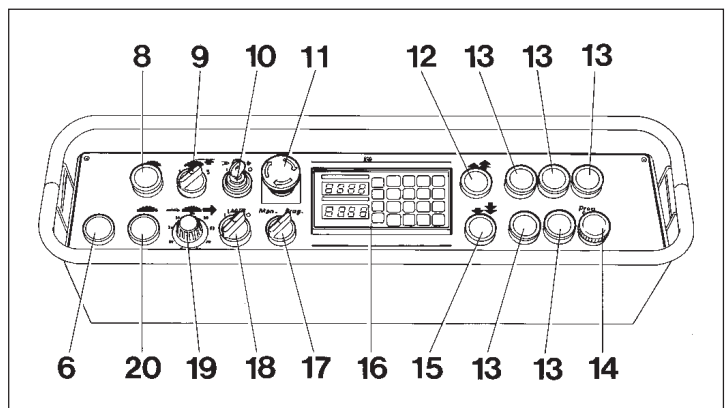
On making the electric and pneumatic connections of the machine, press push-button 8 to start the blade motor.

On pressing pedal 27 the work cycle starts up: the strip guard comes down and the blade comes out of the table and starts its cutting stroke. When the pedal is released, the blade stops, lowers under the table and returns to the start position; at the same time the strip guard goes back up to its rest position.

The white indicator light 14 on the keypad comes on to indicate that the following cutting cycle has been enabled.

If the pedal is not released, the blade will continue its stroke to the end of the table and then automatically go back in; however, it will only return to its starting position after the pedal has been released.

Changing the pressure on the pedal has a modulating action on the blade feed speed, which can therefore be reduced on starting cutting, especially with large thicknesses, or for instance when the blade comes up against a knot, thereby protecting it from excessive stress.



### 18.4. Emergency stop

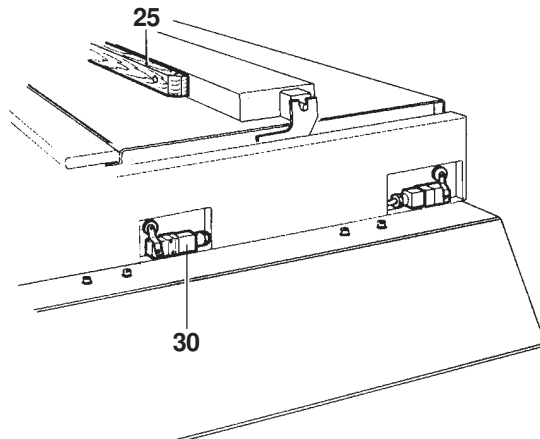
When the emergency stop control (red button 11, cable switch 5) is operated, this remains in emergency position, indicated by the lighting up of orange indicator light 22. To return to normal operating mode, this must be reset (see § 18.1).

Machining operations can be restarted by repeating the sequence described in the previous paragraph.

### 18.5. Trimming the workpiece guide supports

To obtain the best cutting precision, it is necessary, after installation, to move the microswitch **30** by about 2 mm, to zero the guide and with the blade trim the wooden supports **25**.

The same procedure must be carried out every time inserts **25** become worn or are replaced.



### 18.6. Operation

Position the bumper **26** on the table according to the length of the piece to be cut.

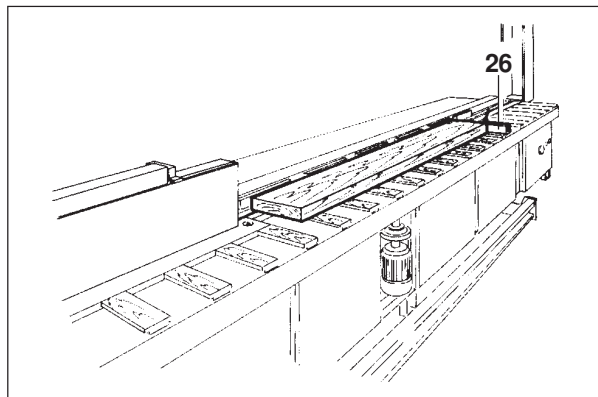
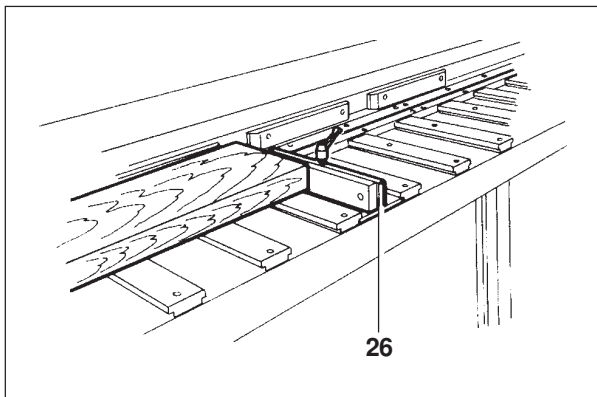
Put the piece to be cut on the worktop, properly resting against both the thrust guide and the bumper.

In the instructions for the dimension display and the optional programmer there are explanations for the calculation of the width of the sawing line in order to get the precise size of the pieces to be cut.

Perform the operations described at § 18.3

The machine features a centralised lubrication system for the blade carriage slideways. To load the manual pump on the left side, pull up and then release the small lever.

This job should be done more or less once every work shift, or every time a noise is heard produced by the scrapers rubbing on the slideways.

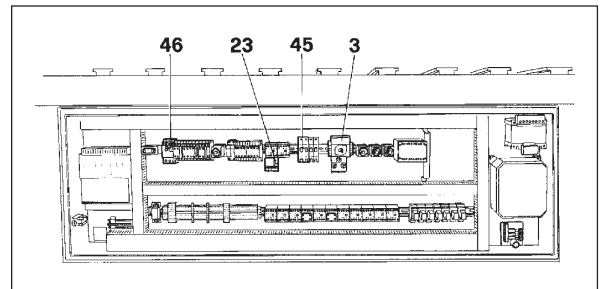
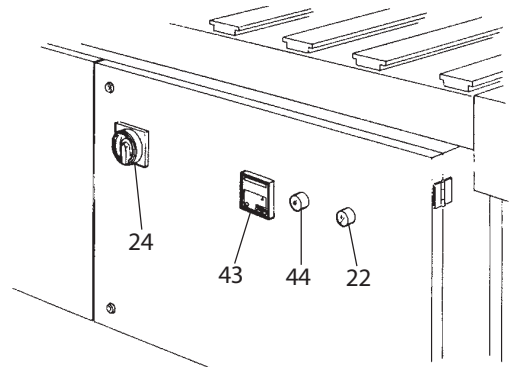


### 18.7. Alarm pilot lamp

The alarm pilot lamp 22 (orange) lights up, together with the white one 44, on turning the knob of the main switch 24 and must go out after pressing button 8. In case of machine operation failure, a flashing light indicates the type of fault:

- Fixed light = an emergency device has been engaged and the relevant control is still in emergency position (to reset see § 18.1).
- Two flashes = the fence motor overload cutout has tripped; (to reset press the blue key of the FR2 overload cutout).
- Three flashes = a blade motor overload cutout has tripped; (press the blue key of the FR1 overload cutout).
- Four flashes = the inverter UK1 is blocked; (to reset, by means of mains switch 24, turn the machine off, wait 10 sec and then turn on again).

All the electrical components inside the power box carry the same marks as are shown on the diagram.



### 19. CHOOSING THE BLADE

In consideration of the high performance of the machine, we recommend using blades with carbide cutting edges (TCT). The quality, conformation and number of the cutting edges will be chosen in relation to the type of wood to cut, the thickness of the piece and the degree of finishing required. We therefore recommend you refer to the catalogues supplied by the blade manufacturers.

Minimum/maximum diameter of the blade: 450/550 mm. Bore: 30 mm.

The blade has two holes with a diameter of 8 mm and centre distance 60 mm with the purpose of fixing the flange-blade unit with pins and avoid any risk of it getting detached, considering that the rear flange is fitted with a key. Some recommendations on operating and servicing the blades:

- Check that the machine is placed well in order to avoid any vibration
- If the cutting edges lose their edge, sharpen the blade immediately, observing its angular features
- Frequently clean the blade of encrustations with special trade products
- Keep the blades in their special containers, racks, etc. to prevent them from getting knocked.

## 20. FITTING THE BLADE AND THE DIVISORY KNIFE

### 20.1. Fitting the blade

With the machine stationary and the blade in its start position, turn the key switch 10 onto the blade changeover position, take the key out and keep it with you. A pneumatic cylinder controls blade lift in order to help in mounting it. Open the cover to access the blade.

Before fitting the blade, check that:

- The cutting edges and any scrapers are not damaged
- The body of the blade has the right tension and there are no cracks at the base of the cutting edges
- Sharpening is correct
- The blade has the right characteristics for the material to be cut.

To fit or change the blade, use **exclusively** the spanners supplied with the machine.

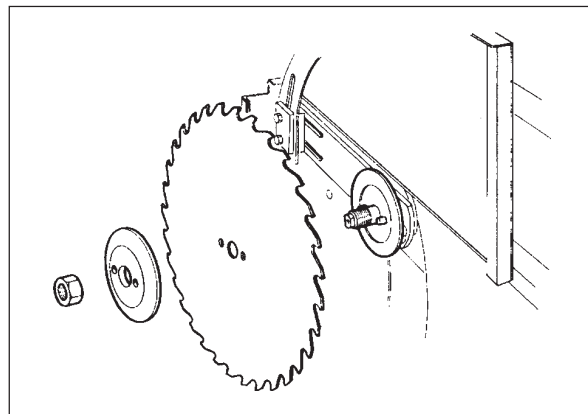
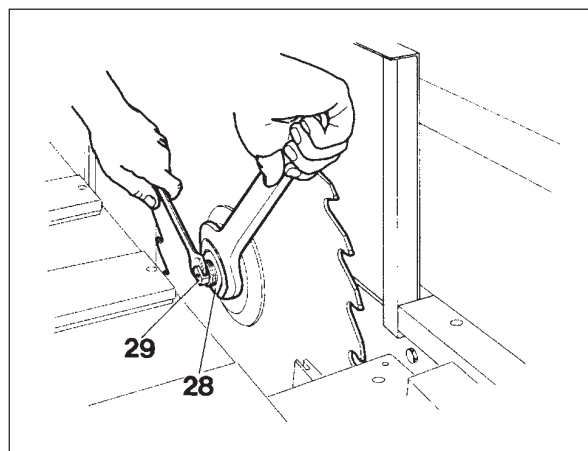
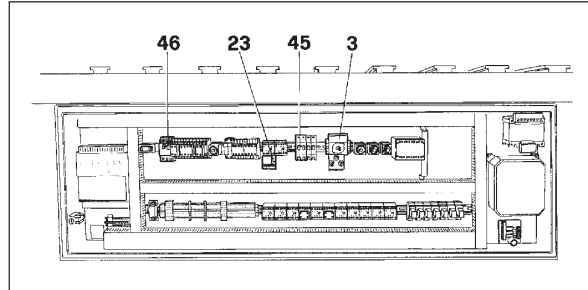
On nut **28** there is also a built-in screw (anti-unscrewing system) which should be unloosed beforehand.

Use the 50 mm spanner on nut **28** and the 19 mm spanner on the end of shaft **29**.

**Unscrew in a clockwise direction because it is a left-hand thread.**

Before fitting the new blade, carefully clean the surfaces of contact of the blade, flanges and shaft. Fit the blade in the direction indicated by the arrow on the cover. After fitting the blade and the flange, tighten the fixing nut tightly: it is forbidden to use extensions or mallets to force tightening. Tighten the anti-screw device again as well.

After replacement, close the blade access door properly, insert the key into the switch and turn it onto the working position.

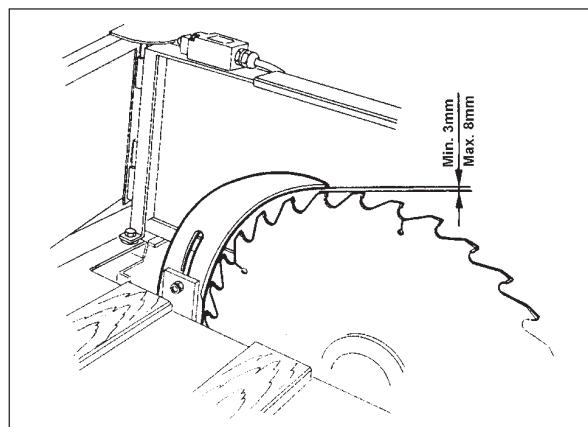


### 20.2. Divisory knife

The machine is supplied with a range of divisory knives that have stamped on them the diameter of the relative blade and the thickness of the knife itself.

Considering that blades can be fitted with a cutting width (sawing line) of 4,2 and 4,5 mm, it is necessary to take into account that the divisory knife that will be fitted must have a thickness between the cutting width and the thickness of the blade body.

The divisory knife will have to be set at a distance of 3 mm for the part closest to the blade and 8 mm at the most for the one farthest away. In addition, the divisory knife must be adjusted vertically so that the top reaches at least the level of the highest point of the blade circumference.



## 21. MAINTENANCE

The following maintenance operations are quite simple and can therefore be carried out by same machine operators.

### 21.1. General maintenance

At the end of the working day, clean the floor under the machine with a brush in order to remove any remaining sawdust or waste.

Every working week, take off the side panels of the base and remove any sawdust with an extraction device.

Afterwards, put the side panels back on.

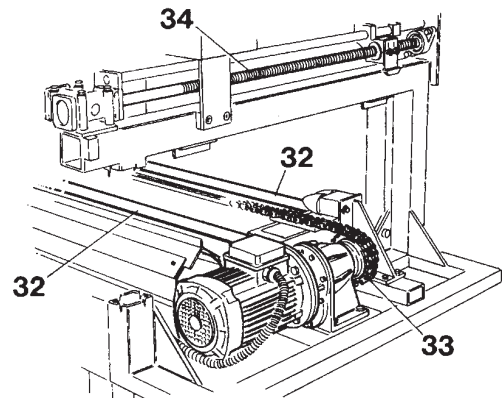
Every week, clean and lubricate:

- . The guide bars of the blade carriage 32
- . The feed chain 33
- . The screws 34 controlling the workpiece guide.

Given the practical nature of the application, it is recommended to use lubricants in aerosol sprays.

Check each month the rubber joints of the extraction pipe and replace them if necessary.

Before each start, check the working cycle without a load.



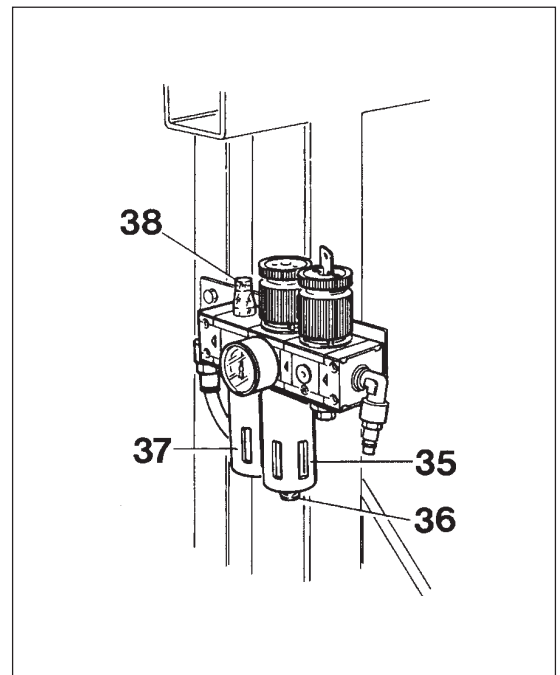
### 21.2. Compressed air lubricator-filter unit

Every week:

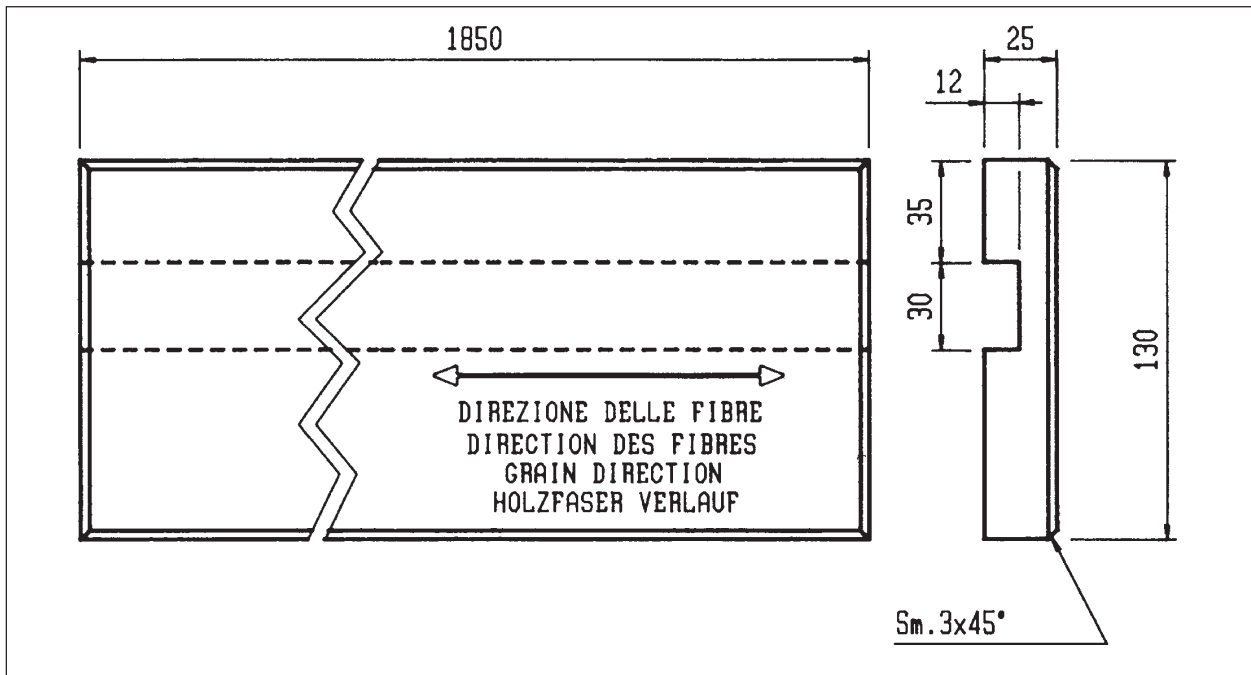
- . Drain off the condensation water from the container through the cock 36
- . Check the oil level in the tank 37
- . Use the proportioning cock 38 to regulate addition of oil into the installation in relation to the humidity in the air: on average one drop for 7-8 cutting cycles.

Use fluid for pneumatic circuits having specifications similar to that used originally:

- |                   |        |
|-------------------|--------|
| . 40°C viscosity  | cST 32 |
| . Pour point      | °C -32 |
| . Flash point     | °C 210 |
| . Viscosity index | 125    |







### 21.3. Table insert

Replace the wooden insert on the cutting line when it is damaged or when the fissure exceeds 10 mm in width. It is necessary to use hardwood with the dimensions given in the drawing shown here to the side. The fissure is made by the blade itself.

### 21.4. Fence lubrication system oil sump

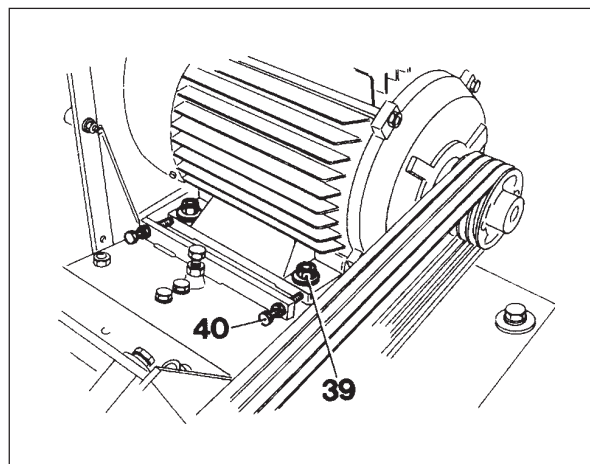
Visually check the oil level in the pump sump on the far left of the machine. If necessary, top up with SAE 50/60 grade oil.

### 21.5. Replacing the blade motor belts

To reach the saw-carriage unit, remove one or more side guards (see on page 13).

- Undo the screws **39** fixing the motor.
- Undo screws **40**.
- Replace the belts type 3VX 475.
- Tighten with screws **40** and check alignment of the pulleys.

Put the guards back on.

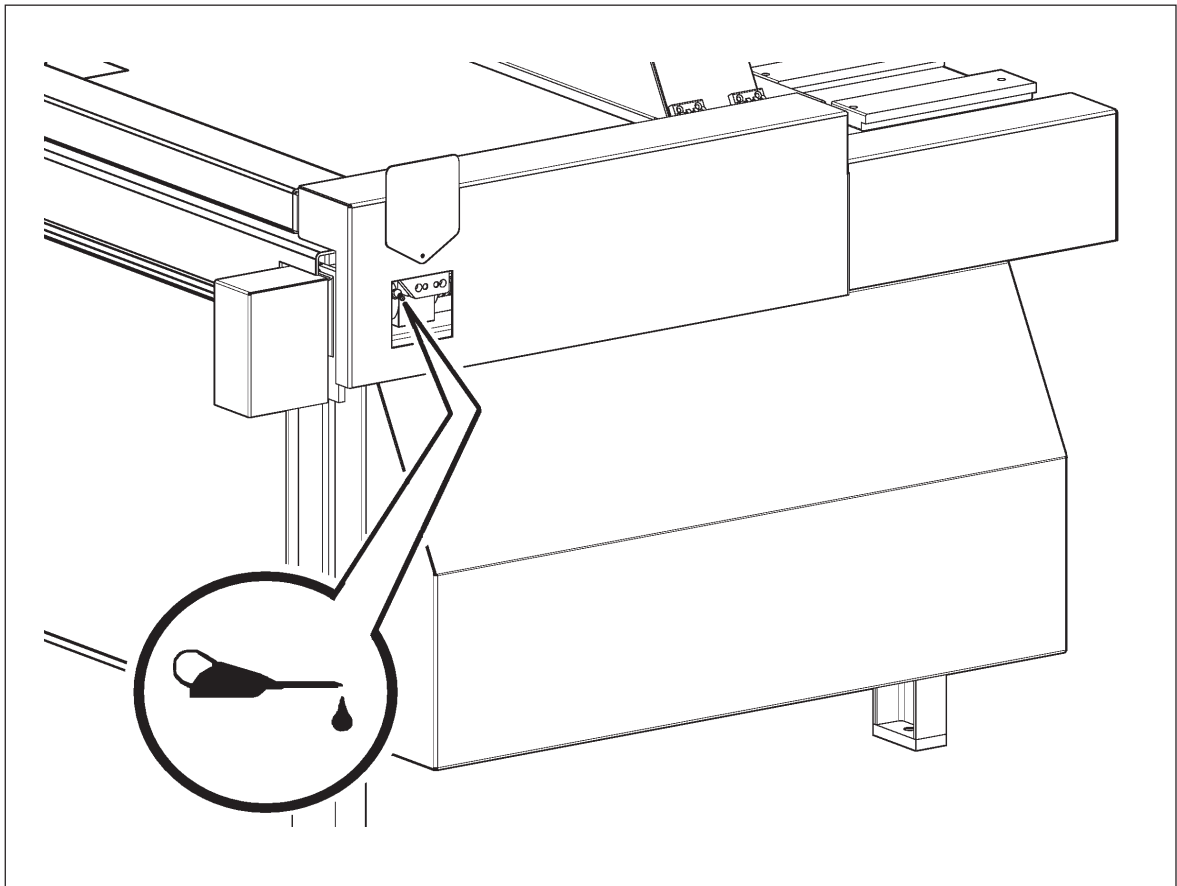




## 21.6. Lubrication of the screws and guides

Lubricate often the guide moving screws:

- set the guide on a maximum opening position.
- access to the screw nut greaser through the openings on the side carters of the machine, as shown on the picture.
- we would suggest to use the grease OLEOBLITZ-BLITZ PLV3 for the ball bearings.



- Refill pump lubrication of the guides with AGIP EXIDA HG68

## **22. PRINCIPAL PROBLEMS AND RELATIVE REMEDIES**

### **22.1. The machine will not start**

Possible causes:

- . Emergency stop on
- . Blade access cover open
- . Insufficient compressed air pressure
- . The fuses have blown
- . An overload cutout has tripped

Remedies:

See § "Emergency stop devices" on page 18 and § 18.7 on page 21.

These simple checks may be made directly by the operator. If the machine remains stationary, call an electrician or consult our after-sales service.

### **22.2. The machine cuts with difficulty**

Possible causes:

- . The blade has lost its optimum sharpening.

Remedies:

- . Resharpen the blade.

### **22.3. The blade fails to maintain the feed speed set by the pedal**

Possible causes:

- . The maximum current ammeter has tripped because the feed speed is excessive with respect to the height and type of workpiece to be cut.
- . The maximum current ammeter has tripped because blade sharpness is below standard.

Remedies:

- . Reduce feed speed.
- . Resharpen the blade.

### **22.4. The blade slows down until it stops, while the motor keeps on turning**

Possible causes:

- . The transmission belts are slipping.

Remedies:

- . Restore the proper belt tension or, if necessary, replace them

### 23. TABLES OF SPARE PARTS

For a fast supply of spare parts, it is recommended to:

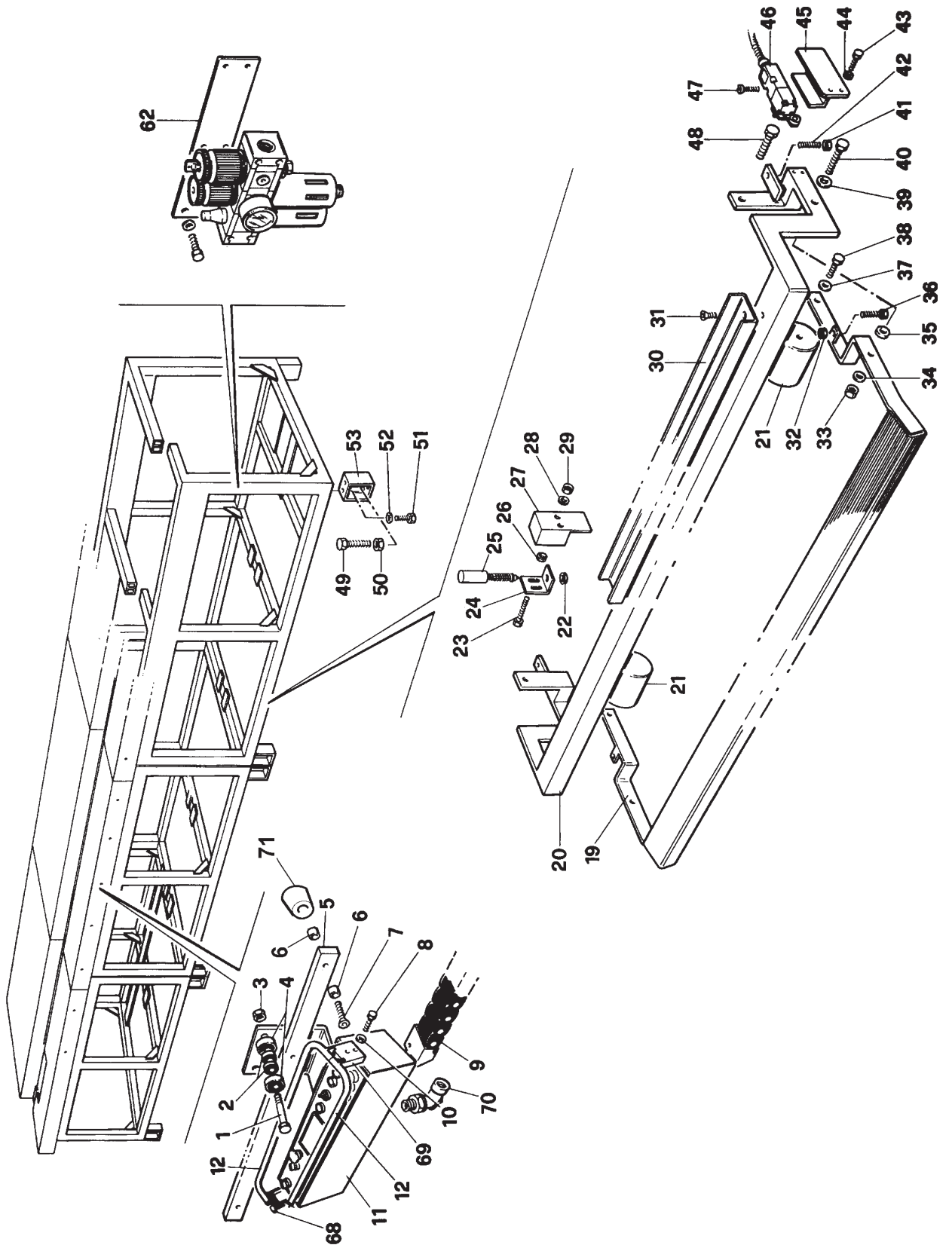
- 1) Indicate the model, serial number and year of manufacture of the machine.
- 2) Indicate the table number and the reference number of the pieces required.
- 3) Indicate the required quantity.

OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000

Tab. 1

Rif.Ref.No.	CODICE-CODE	Rif.Ref.No.	CODICE-CODE
1	43401486	58	-
2	01290102	59	-
3	-	60	-
4	01290103	61	-
5	43401455	62	43401488
6	43401456	63	-
7	-	64	-
8	-	65	-
9	27350004	66	-
10	-	67	-
11	43401509	68	43401535
12	43401534	69	43401533
13	-	70	08080000
14	-	71	10190000
15	-		
16	-		
17	-		
18	-		
19	43401430 Mod.5000-6000-7000-8000		
19	43402150 Mod.2000-3000		
20	43402149 Mod.2000-3000		
20	43401565 Mod.4000		
20	43401568 Mod.5000-7000		
20	43401429 Mod.6000-8000		
21	43401505		
22	-		
23	-		
24	43401449		
25	05170000		
26	-		
27	43401450		
28	-		
29	-		
30	43401483		
31	-		
32	-		
33	-		
34	-		
35	-		
36	-		
37	-		
38	-		
39	-		
40	-		
41	-		
42	-		
43	-		
44	-		
45	43401652		
46	05061800		
47	-		
48	-		
49	-		
50	-		
51	-		
52	-		
53	43401233		
54	-		
55	-		
56	-		
57	-		

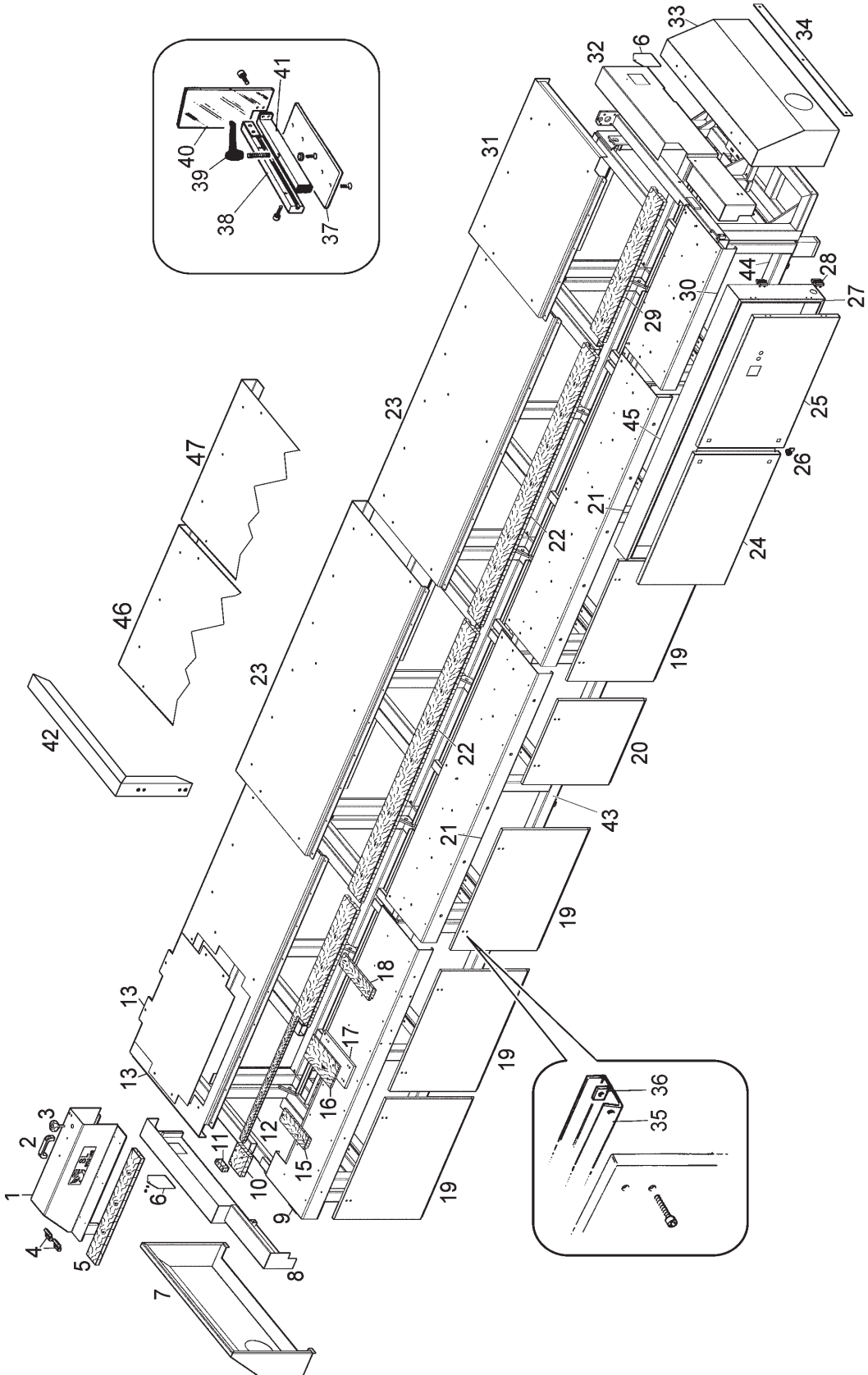
Tab. 1



Tab. 2

Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE
1	43402020		
2	10066300		
3	10140033		
4	27111715		
5	43402056		
6	43402247		
7	43401228		
8	43402242(600)		
	43402263(900)		
	38402090(1200)		
	43402275(1600)		
9	43402025		
10	43402028		
11	43402059		
12	-		
13	43402244(600)		
	43402265(900)		
	38402092(1200)		
	43402277(1600)		
14	-		
15	43402022		
16	43402060		
17	43402024		
18	43402023		
19	43401249		
20	43401345		
21	43402019		
22	43401327		
23	43402245		
24	43401608		
25	43401607		
26	27195000		
27	43401646		
28	27111702		
29	43401601		
30	43402082		
31	43402246(600)		
	43402267(900)		
	38402094(1200)		
	43402280(1600)		
32	43402243(600)		
	43402264(900)		
	38402091(1200)		
	43402276(1600)		
33	43401514		
34	43401681		
35	43401506		
36	43210409		
37	43402197		
38	43402061		
39	43401470		
40	43401642		
41	43402196		
42	43401717(1200)		
	43402274(1600)		
43	43402018		
44	43402080		
45	43401646		
46	43402278(1600)		
47	43402279(1600)		
48	-		

Tab. 2



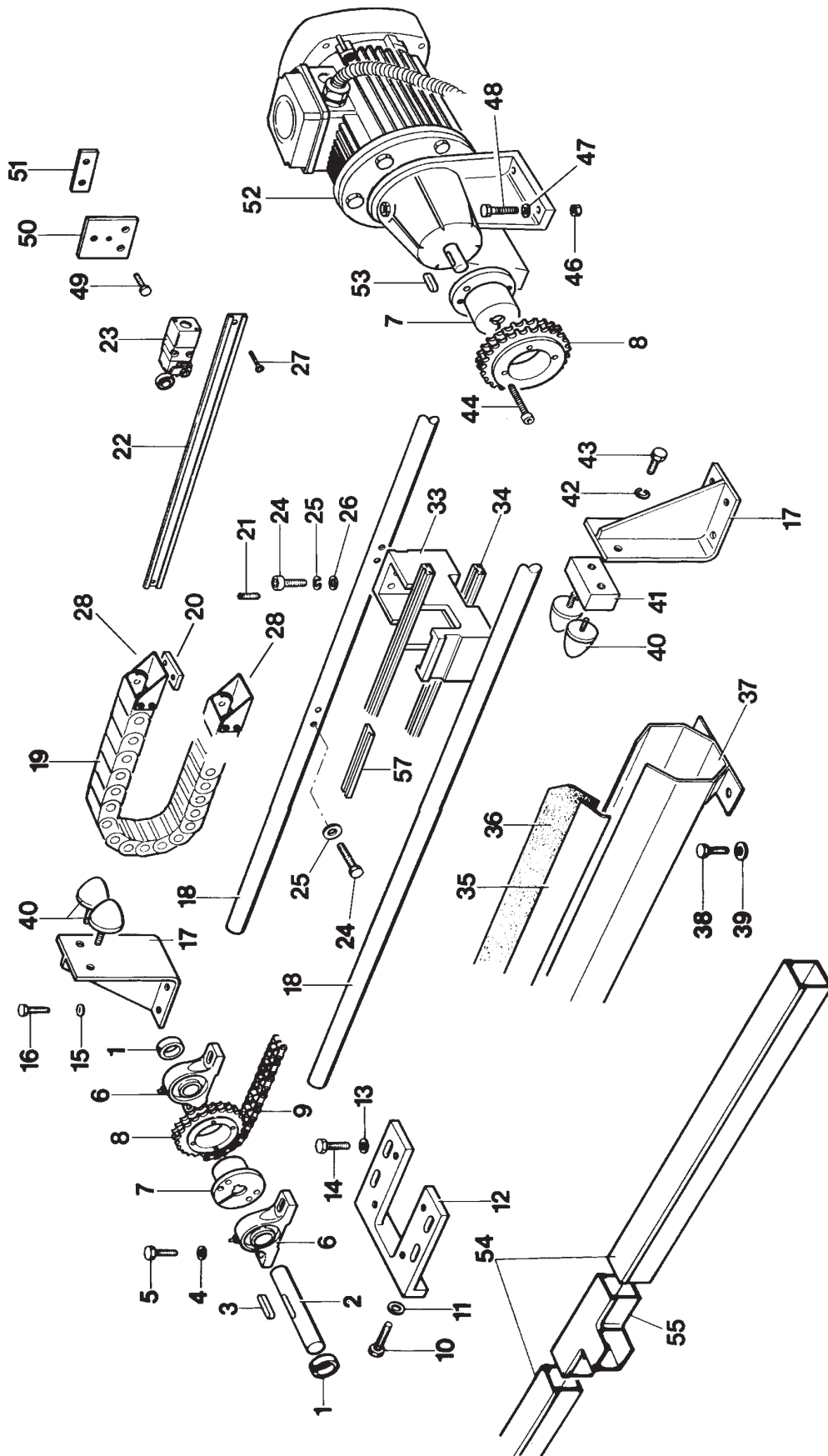
OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000

Tab. 3

Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE
1	01690000		
2	43401059		
3	-		
4	-		
5	-		
6	01690000		
7	24100000 ø28		
7	24100001 ø30		
8	24090000		
9	27041100		
10	-		
11	-		
12	43401060		
13	-		
14	-		
15	-		
16	-		
17	43401278		
18	43401125		
19	27350101		
20	43401319		
21	-		
22	43401325		
23	05061700		
24	-		
25	-		
26	-		
27	-		
28	43402170		
29	-		
30	-		
31	-		
32	-		
33	43402016		
34	27320002		
35	43401258		
36	28040501 low		
36	28040502 high		
37	43401271		
38	-		
39	-		
40	27330000		
41	43401329		
42	-		
43	-		
44	-		
45	-		
46	-		
47	-		
48	-		
49	-		
50	43401323		
51	43401324		
52	21081100		
53	-		
54	27430000-27430100		
55	27430304		
56	-		
57	43401585		



Tab. 3

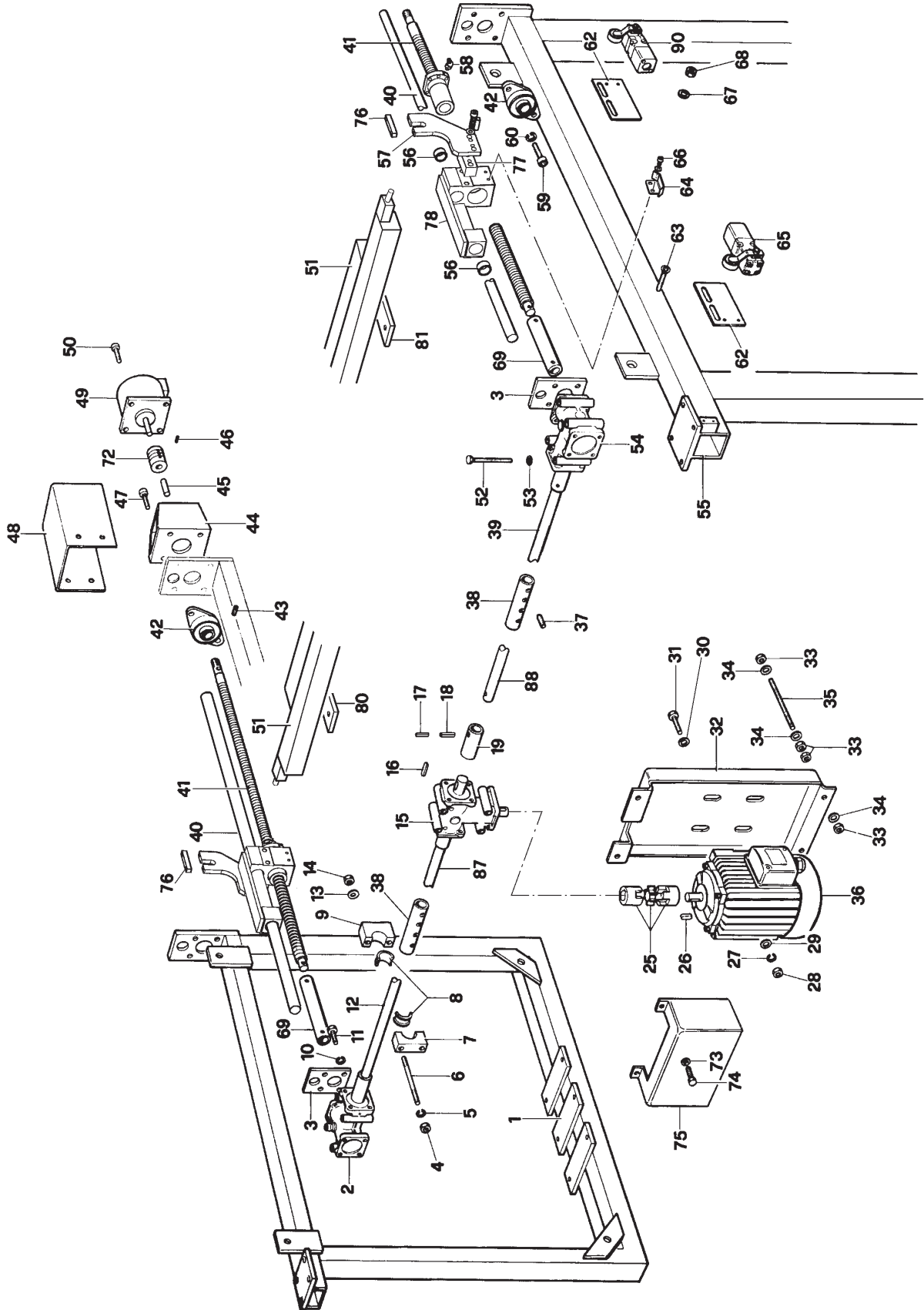


OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000

Tab. 4

Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE
1	43402239 mod.600	45	43401224
	43402261 mod.900	46	-
	38402088 mod.1200	47	-
	43402272 mod.1600	48	43401481
2	21100003	49	05130003
3	43402240	50	-
4	-	51	43402077 mod.2000
5	-		38402037 mod.3000
6	43401737		43402052 mod.4000
7	43401340		43402255 mod.5000
8	48344100		43402038 mod.6000
9	43401340		43401736 mod.8000
10	-	52	-
11	-	53	-
12	43401702 Mod.2000	54	21100004
	43401699 Mod.3000	55	43402241 mod.600
	43401267 Mod. 4000-5000-6000-7000-8000		43402262 mod.900
13	-		38402089 mod.1200
14	-		43402273 mod.1600
15	21100005	56	24030717
16	-	57	43402251
17	-	58	12320001
18	-	59	43401471
19	43401264	60	24020507
20	-	61	-
21	-	62	43401336
22	-	63	-
23	-	64	43402249
24	-	65	05061921
25	43402182	66	-
26	-	67	-
27	-	68	-
28	-	69	43402250
29	-	70	-
30	-	71	-
31	-	72	24170001
32	43402184	73	-
33	-	74	-
34	-	75	43402191
35	43401598-43401599	76	43401519
36	04072469	77	43402256
37	-	78	43402248
38	43401265	79	-
39	43401701 Mod.2000	80	43402058
	43401700 Mod.3000	81	43401135
	43401266 Mod.4000	82	-
	43401571 Mod.5000	83	43402035
	43401268 Mod.6000	84	43402036
	43401698 Mod.7000	85	-
	43401269 Mod.8000	86	-
40	43402254 mod.600	87	43401701 Mod.2000
	43402269 mod.900		43401699 Mod.3000
	38402095 mod.1200		43401267 Mod. 4000-5000-6000-7000-8000
	43402271 mod.1600	88	43401701 Mod.2000
41	43402253 mod.600		43401699 Mod.3000
	43402268 mod.900		43401267 Mod. 4000-5000-6000-7000-8000
	38402087 mod.1200	89	-
	43402270 mod.1600	90	05061800
42	01730000		
43	-		
44	43401223		

Tab. 4

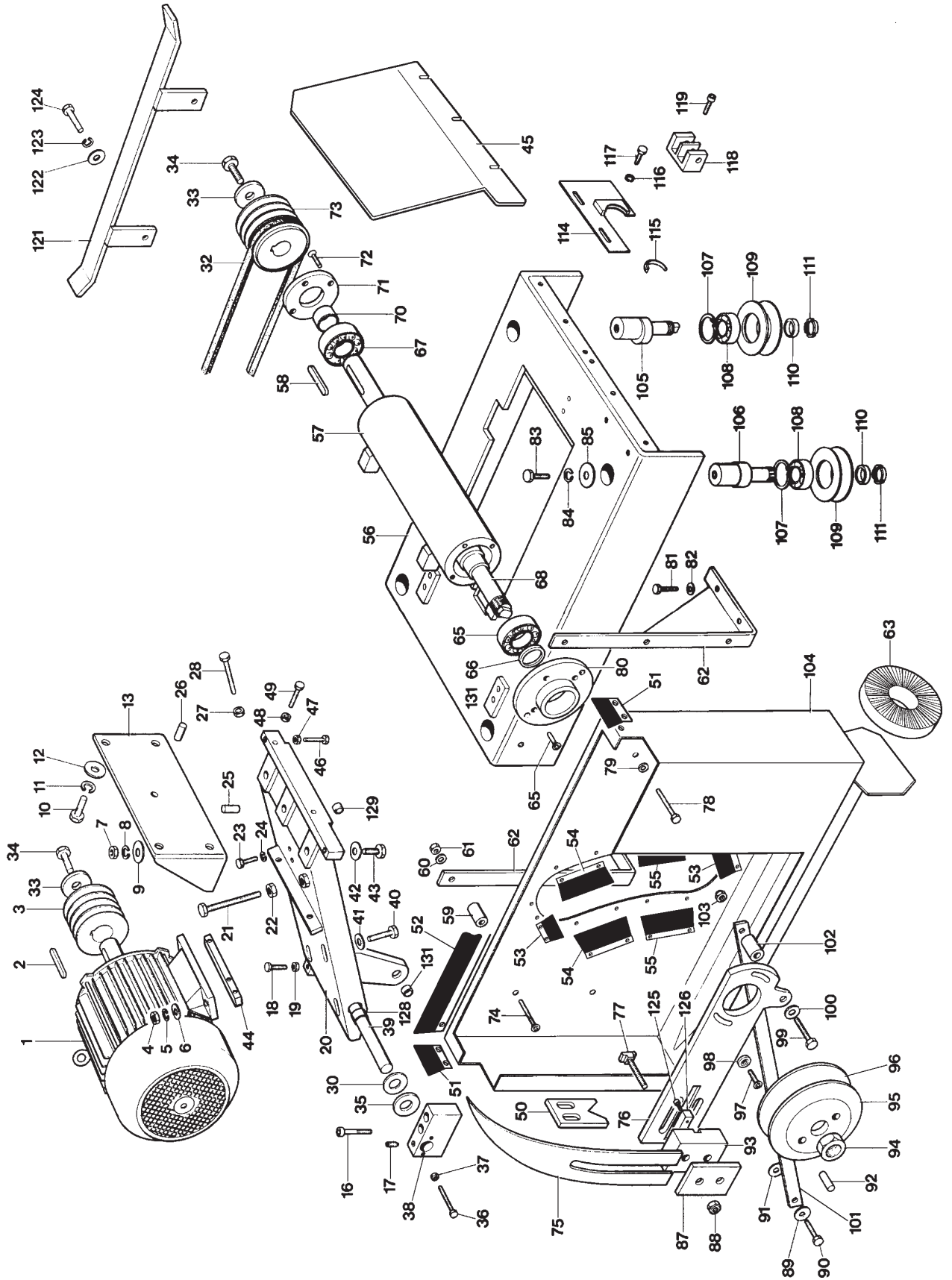


OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000

Tab. 5

Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE
1	-	61	-	119	-
2	-	62	43401312	120	-
3	43402008	63	27243406	121	43401342
4	-	64	-	122	-
5	-	65	01710101	123	-
6	-	66	43401296	124	-
7	-	67	01700101	125	-
8	-	68	43402001	126	43401628
9	-	68	43402006 20Hp	127	-
10	-	69	-	128	24030716
11	-	70	43402011	129	24031700
12	-	71	43401299	130	-
13	43401301	72	-	131	24031701
14	-	73	43402007		
15	-	74	-		
16	-	75	43401624		
17	-	75	43401625		
18	-	76	43401626		
19	-	77	13230170		
20	43402168	78	-		
21	-	79	-		
22	-	80	43401295		
23	-	81	-		
24	-	82	-		
25	-	83	-		
26	-	84	-		
27	-	85	-		
28	-	86	-		
29	-	87	43401629		
30	13340000	88	-		
31	-	89	-		
32	03190304	90	-		
33	48033700	91	-		
34	-	92	-		
35	43401283	93	43401627		
36	-	94	43401472		
37	-	95	43401318		
38	43401289	96	43401317		
39	43402169	97	-		
40	-	98	-		
41	-	99	-		
42	-	100	-		
43	-	101	43401292		
44	43402057	102	43401293		
45	43401680	103	-		
46	-	104	43401630		
47	-	105	43401280		
48	-	106	43401279		
49	-	107	12010103		
50	43401691	108	01720101		
51	43401687	109	43401043		
52	43401683	110	43401282		
53	43401686	111	-		
54	43401684	112	-		
55	43401685	113	-		
56	43402167	114	43401313 DX		
57	43401298	114	43401315 SX		
57	43402141 20Hp	115	24053601		
58	-	116	-		
59	43401332	117	-		
60	-	118	43401309		

Tab. 5

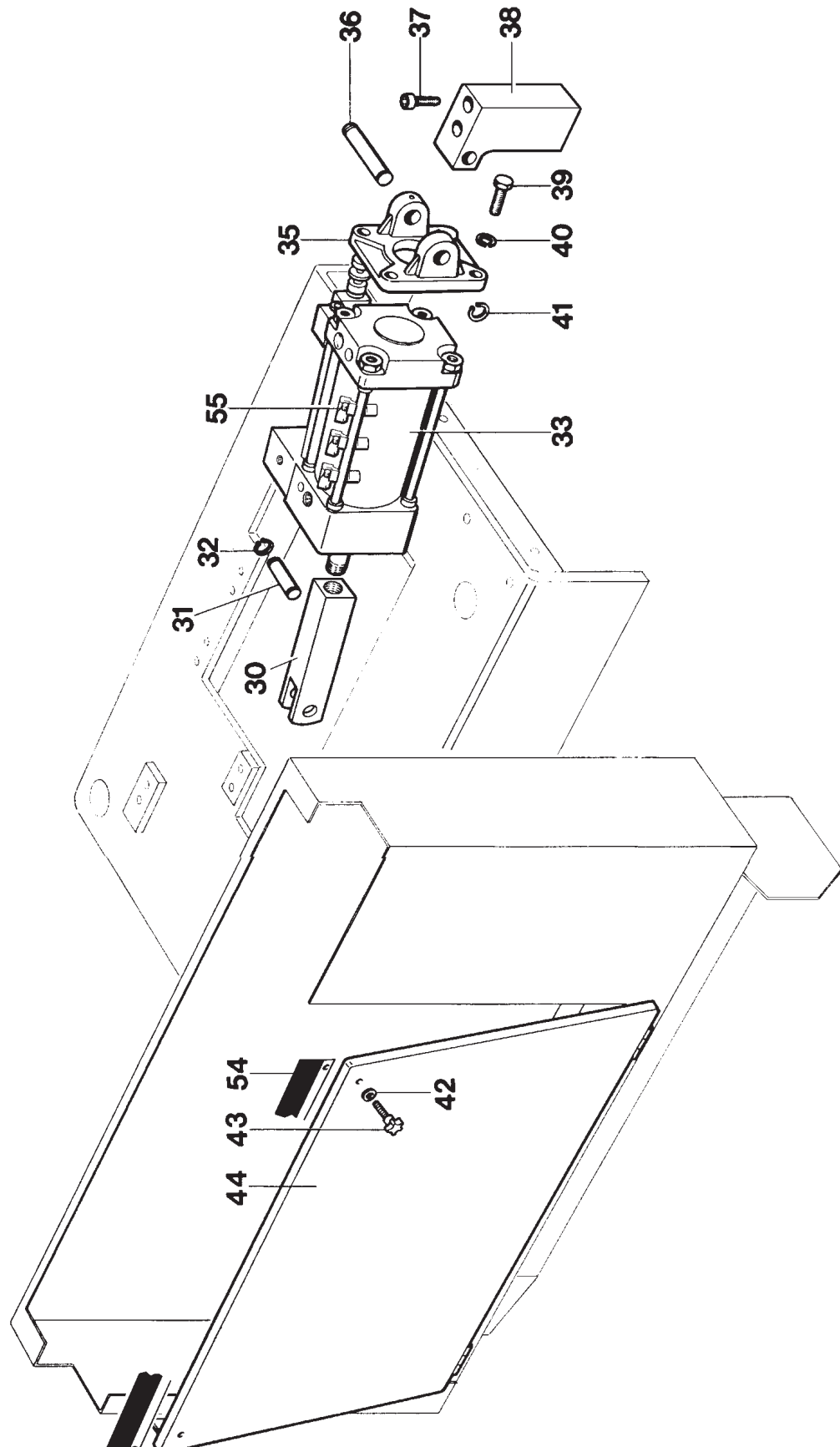


OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000

Tab. 6

Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE
1	-		
2	-		
3	-		
4	-		
5	-		
6	-		
7	-		
8	-		
9	-		
10	-		
11	-		
12	43401267		
13	-		
14	-		
15	-		
16	-		
17	-		
18	-		
19	-		
20	-		
21	-		
22	-		
23	-		
24	-		
25	-		
25	-		
26	-		
26	-		
26	-		
27	-		
28	-		
29	-		
30	43402013		
31	43401287		
32	-		
33	-		
34	-		
35	-		
36	-		
37	-		
38	43402098		
39	-		
40	-		
41	-		
42	-		
43	-		
44	43401631		
45	-		
46	-		
47	-		
48	-		
49	-		
50	-		
51	-		
52	-		
53	-		
54	43401688		
55	-		

Tab. 6



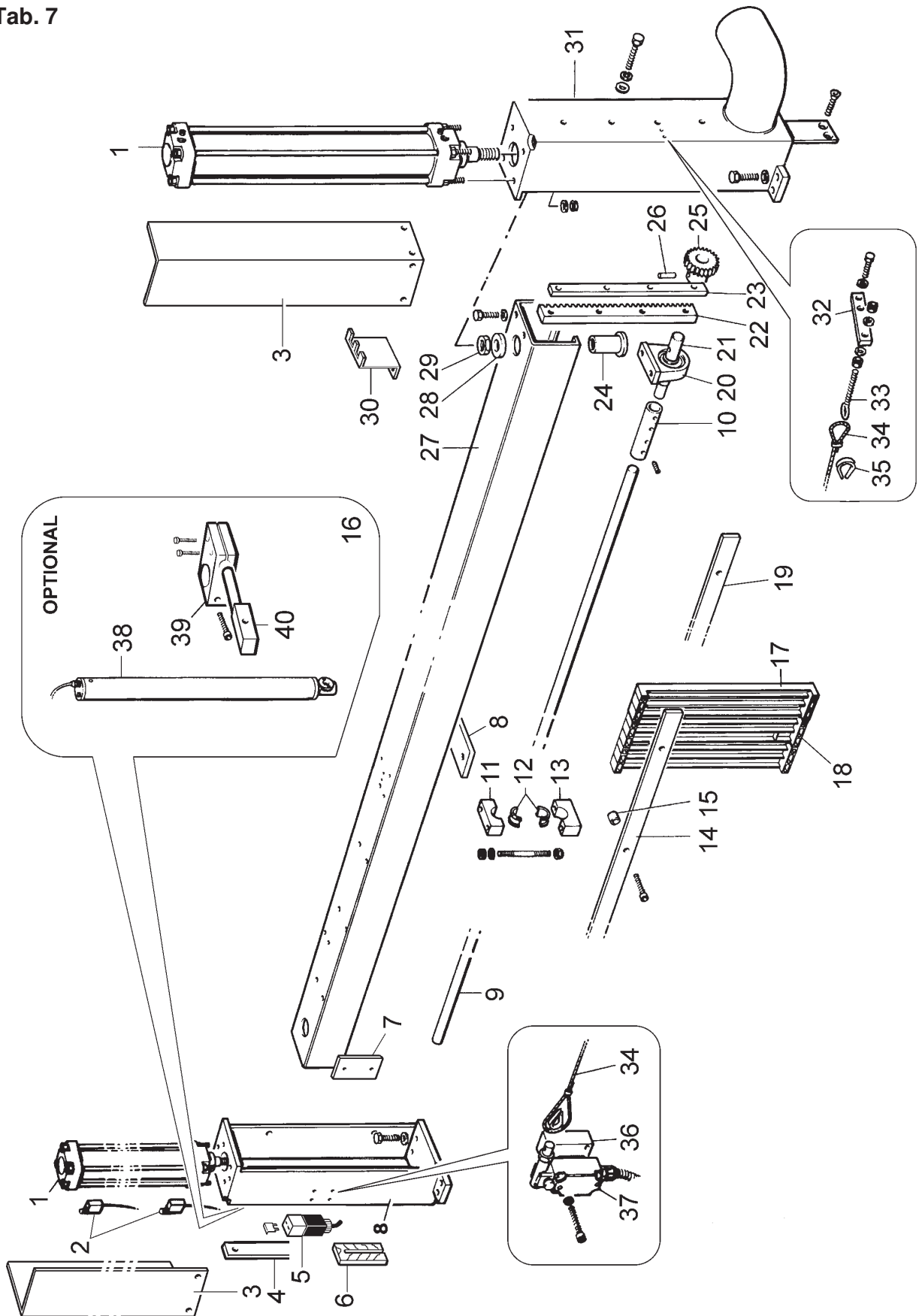
OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000

Tab. 7

Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE
1	-		
2	-		
3	43402066		
4	43402096		
5	05061927		
6	43402090		
7	43401135		
8	43402021		
9	43402115 Mod.2000		
	43402099 Mod.3000		
	43402101 Mod.4000		
	43402108 Mod.5000		
10	43401265		
11	43401340		
12	48344100		
13	43401340		
14	43402071 mod.2000		
	43402209 mod.3000		
	43402207 mod.4000-5000-6000		
15	43401403		
16	65040607		
17	43401400		
18	43401401		
19	43402259 mod.5000		
	43402213 mod.6000		
	43402131 mod.8000		
20	01740000		
21	43401409		
22	43401417		
23	43401418		
24	43402062		
25	43401408		
26	-		
27	43402074 mod.2000		
	43402208 mod.3000		
	43402206 mod.4000		
	43402258 mod.5000		
	43402212 mod.6000		
	43402114 mod.8000		
28	-		
29	-		
30	43402100		
31	43402257		
32	43401650		
33	-		
34	-		
35	-		
36	43401651		
37	05061913		
38	05160109		
39	05160109		
40	43402151		
41	-		
42	-		
43	-		
44	-		
45	-		
46	-		
47	-		
48	-		
49	-		
50	-		



Tab. 7



OPERATION MANUAL  
SINGLE-BLADE RIP-SAWS FOR MASSIVE TIMBER  
WINTER GL 6000

Tab. 8

Rif. Ref. No.	CODICE-CODE	Rif. Ref. No.	CODICE-CODE		
1	27112001	60	-	118	-
2	43402186	61	-	119	-
3	43120226	62	43402174	120	-
4	43120225	63	43402171	121	-
5	43402235	64	-	122	-
6	10250016	65	-	123	-
7	43330100	66	-	124	-
8	43402148	67	43402172	125	-
9	43402237	68	43402173	126	-
10	10066300	68	-	127	-
11	43402185	69	-	128	-
12	05540002	70	13220179	129	-
13	43402236	71	30270100	130	-
14	-	72	-	131	-
15	-	73	-		
16	-	74	-		
17	-	75	-		
18	43402155	75	-		
19	43402238	76	-		
20	43402234	77	43401729		
21	43402188	78	43401728		
22	-	79	-		
23	43402189(900)	80	43402136		
24	43402190(1200)	81	43402137		
	43402283(1600)	82	-		
25	01830100	83	-		
26	-	84	10012324		
27	43402107	85	-		
28	43401647	86	-		
29	-	87	-		
30	43402106	88	-		
31	-	89	43402139		
32	-	90	-		
33	-	91	43402138		
34	43402181	92	-		
35	-	93	05061911		
36	-	94	-		
37	43402180	95	-		
38	43401505	96	43401325		
39	-	97	-		
40	-	98	-		
41	43401675	99	-		
42	-	100	43401324		
43	-	101	43401323		
44	-	102	-		
45	27430002	103	-		
46	-	104	05061700		
47	-	105	43402156		
48	-	106	43402179		
49	-	107	-		
50	43402175	108	-		
51	-	109	-		
52	-	110	-		
53	-	111	-		
54	-	112	-		
55	-	113	-		
56	-	114	-		
57	-	114	-		
57	-	115	-		
58	-	116	-		
59	-	117	-		

Tab. 8

