

SVP 133/S

SVP 145/S

MANUALE USO E MANUTENZIONE

BEDIENUNGSANLEITUNG

OPERATING MANUAL

INSTRUCTION DE SERVICE

MANUAL DE USO Y MANTENIMIENTO



Putsch[®] - Meniconi S.p.A.
PUTSCH - GROUP

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial statements. This includes not only sales and purchases but also expenses, transfers, and adjustments.

The second part of the document provides a detailed breakdown of the accounting cycle. It outlines the ten steps involved in the process, from identifying the accounting entity to preparing financial statements. Each step is explained in detail, with examples provided to illustrate the concepts.

The third part of the document focuses on the classification of accounts. It discusses the different types of accounts, such as assets, liabilities, equity, revenues, and expenses, and how they are recorded in the accounting system. It also explains the relationship between these accounts and the accounting equation.

The fourth part of the document covers the process of journalizing and posting. It describes how transactions are recorded in the journal and then posted to the ledger. It also discusses the importance of double-entry accounting and how it helps to ensure the accuracy of the records.

The fifth part of the document discusses the preparation of financial statements. It explains how the information from the ledger is used to prepare the balance sheet, income statement, and statement of owner's equity. It also discusses the importance of these statements for management and external stakeholders.

The sixth part of the document covers the process of adjusting entries. It explains why adjusting entries are necessary and how they are recorded. It also discusses the different types of adjusting entries, such as accruals, deferrals, and depreciation.

The seventh part of the document discusses the process of closing the books. It explains how the temporary accounts are closed to the permanent accounts and how the ending balances are determined. It also discusses the importance of closing the books at the end of each accounting period.

The eighth part of the document covers the process of reversing entries. It explains why reversing entries are necessary and how they are recorded. It also discusses the different types of reversing entries, such as accruals and deferrals.

The ninth part of the document discusses the process of correcting errors. It explains how errors are identified and corrected, and how they are recorded in the accounting system. It also discusses the importance of maintaining accurate records and the consequences of errors.

The tenth part of the document covers the process of preparing a trial balance. It explains how the trial balance is prepared and how it is used to check the accuracy of the records. It also discusses the importance of the trial balance in the accounting process.



Putsch - Meniconi S.p.A.
- Putsch - Group

**EEC Statement of conformity
in compliance with the Machinery Directive 98/37 EEC**

Hereby

PUTSCH-MENICONI s.p.a.
Via Irlanda, 1
I-53036 POGGIBONSI (SI)

declares that the product

**Vertical panel saw
SVP 133/S**

08130062

serial no. _____

Complies to the directives listed below :

MACHINERY DIRECTIVE 98/37 EEC

DIRECTIVE LOW TENSION 2006/95/EC

DIRECTIVE ELETTROMAGNETIC COMPATIBILITY (EMC) 89/336 EEC (2004/108/EC)

The following rules and rule project have been applied in the design and manufacturing of the machine :

Harmonized rules, rule projects and other specifications

- UNI EN ISO 12100-1:2005 - UNI EN ISO 12100-2:2005 - UNI EN ISO 13850:2007
- EN1037 - EN 294 - EN 349
- CEI EN 61000-6-4 - CEI EN 61000-6-2 - EN 60204- parte 1
- EN 1870-2 - UNI EN ISO 13849-1:2007 - EN 1088

**“Safety of woodworking machines - Circular sawing machines
Horizontal beam panel saws and vertical panel saws “**

Poggibonsi, **15/09/2008**

(Franco Renzi Legal Representative)



PUTSCH - MENICONI S.p.A. - socio unico

Capitale Sociale € 300.000 interamente versato - I
Tel. 0577 90311 Export M. 34.18.48
Fax 0577 979335
E-mail: info@putschmeniconi.com



I 53036 POGGIBONSI (Siena) - Via Irlanda, 1 - P.O. Box 300
Reg. Soc. Trib. Siena n. 8058/9985 P. Iva 00789800521
REA Siena n. 34948 Cod. Fisc. 00269750105
Internet: www.putschmeniconi.com


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



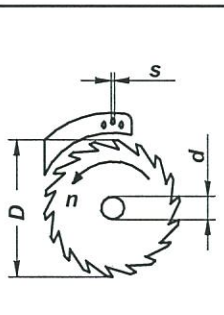
Putsch - Meniconi S.p.A.
Putsch - Group

Serie Targhette CE per SVP 145 / SVP 133

	Putsch - Meniconi S.p.a. PUTSCH - GROUP	
Via Irlanda, 1 - I - 53036 Poggibonsi (SI)		
TYPE	SVP 133/S	2008
N°	08130062	Kg. 560
		

	Putsch - Meniconi S.p.a. PUTSCH - GROUP
Via Irlanda, 1 - I - 53036 Poggibonsi (SI)	
MATRICOLA	08130062
NUMERO DI SCHEMA	021401
TENSIONE NOMINALE (V)	415
N° FASI	3
FREQUENZA (Hz)	50
CORRENTE A PIENO CARICO (A)	6,7
CORRENTE DEL CARICO MAGGIORE (A)	6,4
POTERE NOMINALE DI INTERRUZIONE (KA)	10

D (mm)	min. 240 max. 250
d (mm)	30
s (mm)	6
n (l/min)	5300



PUTSCH - MENICONI S.p.A. - socio unico

Capitale Sociale € 300.000 interamente versato - I 53036 POGGIBONSI (Siena) - Via Irlanda, 1 - P.O. Box 300

Tel. 0577 90311

Fax 0577 979335

E-mail: info@putschmeniconi.com

Export M. 34.18.48

Reg. Soc. Trib. Siena n. 8058/9985

REA Siena n. 34948

Internet: www.putschmeniconi.com

P. Iva 00789800521

Cod. Fisc. 00269750105





TABLE OF CONTENTS

1.	GENERAL CONDITIONS OF SALE AND GUARANTEE	4
2.	TECHNICAL DATA.....	5
2.1	Overall dimensions	5
2.2	Weight	5
2.3	Electrical equipment power	6
2.4	Electrical connection.....	7
2.4.1	Characteristics of the electric network connection cable.....	7
2.4.2	Characteristics of the electric protection system.....	8
2.5	Extractor system.....	9
2.5.1	Machine mod. SVP 145 – 133 S.....	9
3.	NOISE LEVELS.....	10
4.	DUST EMISSIONS.....	10
5.	DESCRIPTION OF MACHINE AND ACCESSORIES	11
5.1	Machine description.....	11
5.2	Optional equipment	12
6.	SAFETY DEVICES.....	14
6.1	Safety devices against damage and injury	14
7.	INTENDED USE.....	16
7.1	Materials.....	16
7.2	Cutting capacity.....	18
7.3	Tools (circular saw)	18
7.4	Area of installation	19
7.5	Incorrect use.....	19
7.6	Number and location of work positions.....	20
8.	TRANSPORT, HANDLING, STORAGE	21
9.	ADVICE FOR SAFE USE AND MAINTENANCE - RECOMMENDATIONS...23	
9.1	Procedure for isolating the machine	23
9.2	General safety recommendations.....	23
9.2.1	In the workplace.....	24
9.2.2	On the machine before work.....	24
9.2.3	During work.....	24
9.2.4	During maintenance.....	25
10.	ASSEMBLY AND COMMISSIONING.....	26
10.1	Location.....	26
10.2	Assembly.....	28
10.3	Sawdust disposal	28
10.4	Electrical connections, start-up and circuit diagrams.....	28
11.	FUNCTIONS AND ADJUSTMENTS OF THE MACHINE AND ACCESSORIES	30
11.1	Procedure for isolating the machine	30
11.2	Electrical controls	31
11.3	Moving the saw-head assy forwards and backwards	32
11.4	Flipping (rotating) the saw-head assy.....	32
11.5	Moving the cutting unit up-down/down-up	33
11.6	Moving the cross beam left-right/right-left.....	33



11.7	Emergency stop	33
11.8	Residual risks and means of individual protection.....	33
11.9	Fitting and replacing the blade	34
11.10	Adjusting the riving knife.....	36
11.11	Trimming of the base blocks' plastic slabs.....	37
11.12	Adjustment of measurement indexes for horizontal cuts.....	38
11.13	Adjustment of stop indexes for vertical cuts.....	40
11.14	Electric shifting frame.....	41
11.15	Index regulation of horizontal strip cutting device	42
12.	OPERATING THE MACHINE.....	44
12.1	How to operate the machine.....	44
12.2	Loading the panel.....	44
12.2.1	Loading the panel	45
12.3	Making cuts	46
12.3.1	Vertical cuts (from top to bottom).....	46
12.3.2	Horizontal cuts (from left to right).....	47
12.3.3	Cutting using the short piece device	49
12.3.4	Cutting openings/windows	49
13.	TROUBLESHOOTING	52
13.1	Vertical cutting.....	52
13.1.1	The blade will not start.....	52
13.1.2	The cutting unit does not slide up/down smoothly	52
13.2	Horizontal cutting.....	53
13.2.1	The blade will not start.....	53
13.2.2	The cross beam does not slide smoothly.....	53
13.3	Sliding.....	53
13.4	Faults during work	53
13.4.1	The blade leaves burn marks.....	53
13.4.2	The pieces cut are not squared correctly	54
13.4.3	The machine is totally out of alignment.....	54
13.4.4	Stiff movement of head and/or blade guard	54
13.5	Advice for the customer.....	54
14.	MAINTENANCE	55
14.1	Maintenance of the machine	55
14.1.1	Cleaning the machine (daily)	55
14.1.2	Cable and chain (weekly).....	55
14.1.3	Riving knife	55
14.1.4	Cleaning the slideways (daily)	55
14.1.5	Locking action of the saw-head assy (weekly).....	56
14.1.6	Electrical cables (weekly).....	56
14.1.7	Rotating action of the short piece device (weekly).....	56
14.1.8	Automatic carriage blocking for horizontal cuts.....	57
14.1.9	Trimming the plane of the short piece device (when necessary)	58
14.1.10	Blade holder head soundproofing units check (monthly).....	58
14.2	Brake.....	59
14.2.1	Blade motor brake (monthly).....	59
14.2.2	Adjusting the air-gap	59
14.2.3	Renewing the brake disc.....	59
14.2.4	Renewing the silicon rectifier	59



14.3	Automatic braking electric motors "LIGHT range"	60
14.3.1	Brake disc replacement	60
14.3.2	Shield support, electromagnetic brake side replacement.....	60
14.3.3	Silicon rectifier KBPC 608 replacement	61
14.3.4	Air-core adjustment.....	61
15.	DECOMMISSIONING, DISASSEMBLY, DEMOLITION	62
15.1	Decommissioning	62
15.2	Disassembly	62
15.3	Demolition	62
16.	EMERGENCY PROCEDURES	63



1. GENERAL CONDITIONS OF SALE AND GUARANTEE

The machine has been constructed in accordance with technological and safety criteria, and checked at our works before being dispatched.

On receipt of the machine, check that the packs containing it are not broken or damaged in any way. Unless agreed otherwise, the manufacturer accepts no responsibility for damage caused during transport. If there are signs of damage to the packing, you are advised to contact the haulier immediately. Our company will be available to provide the necessary support.

The conditions of the guarantee covering correct operation of the machine are subject to compliance with all the directions set out in this USE AND MAINTENANCE MANUAL.

Free replacement of faulty parts will be made only after verifying that the machine has been used correctly.



WARNING! WOOD-WORKING MACHINES ARE DANGEROUS. Careful and strict compliance with all the directions set out in this manual will result in safe and correct use of the machine.

The machine must be used only by adequately trained personnel aged over 18. It is recommended that the staff in charge of safety ensures that personnel expected to use the machine have read and fully understood every part of this manual.

Maintenance work must also be carried out by authorized and trained personnel over the age of 18.

2. TECHNICAL DATA

2.1 Overall dimensions

Length of machine:	SVP 145 S	5460
	SVP 133 S	4430 mm
Width of machine:	SVP 145 S	1700
	SVP 133 S	1700 mm
Height of machine:	SVP 145 S	2950 mm
	SVP 133 S	2600 mm

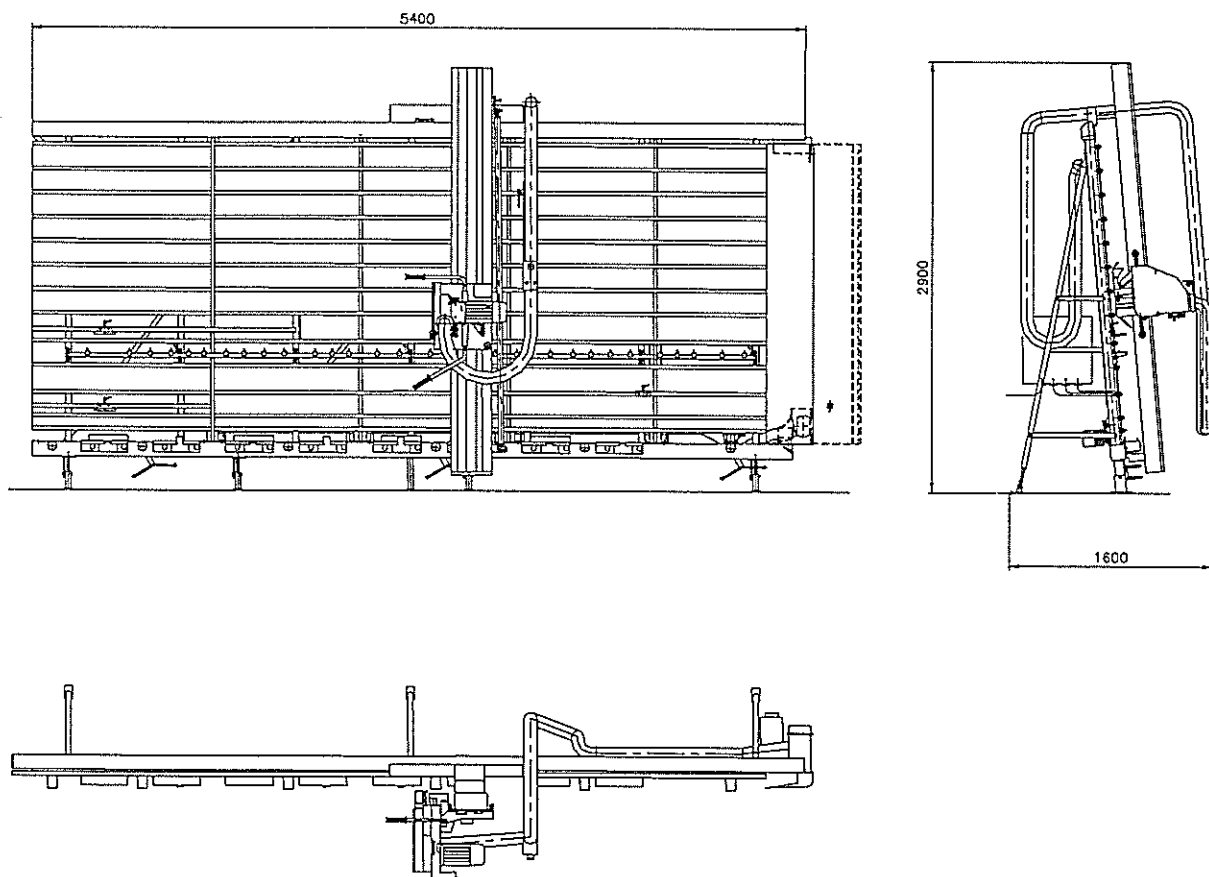


Fig. 1

2.2 Weight

The weight of the machine is: SVP 145: 780 kg
SVP 133: 660 kg.



2.3 Electrical equipment power

Tensione nominale		
Tension nominal		
Nominal Tension	415 V	
Tensión Nominal		
Nennspannung		
N° fasi		
Nombre de phases		
Phase number	3	
Número de fases		
Anzahl der Phasen		
Frequenza		
Fréquence		
Frequency	50 Hz	
Frecuencia		
Frequenz		
Corrente a pieno carico		
Courant en plein de charge		
Full load current	6,7 A	
Corriente en lleno de carga		
Strom bei voller Ladung		
Corrente del carico maggiore		
Courant de la charge majeure		
Major load current	6,4 A	
Corriente de la carga mayor		
Strom bei höchster Ladung		



Potere nominale di interruzione		
Puissance nominale d'interruption		
Nominal interruption power	10 KA	
Potencia nominal d'interrupción		
Nennausschaltvermögen		
Grado di protezione		
Classe de protection		
Protection level	IP 54	
Nivel de protección		
Schutzklasse		

2.4 Electrical connection

The connection of the machine may be carried out only by personnel specialized for this type of work.

The connection to the energy source must only be carried out after the complete assembly of the machine.

Before connecting the machine, check that the power grid voltage matches that indicated on the rating plate applied to the electric box.

2.4.1 Characteristics of the electric network connection cable

The following specifications are referred to an 8m-long connection cable between machine and network. For different lengths, check the specifications. Choose the section of the cables based on the data stated on the machine's rating plate, applied to the electric box.

- SVP 145 S – SVP 133 S

Full-load current	≤ 8 A	≤ 12 A	≤ 15 A	≤ 22 A	≤ 30 A	≤ 35 A
P. supply cable section	1.5 mm ²	2.5 mm ²	4 mm ²	6 mm ²	10 mm ²	16 mm ²
Grounded cable section	1.5 mm ²	2.5 mm ²	4 mm ²	6 mm ²	10 mm ²	16 mm ²

quality: H07RNF or equivalent
number of wires : 4 (3 + ground)

Putsch-Meniconi S.p.a.

Via Irlanda, 1 Loc. Bellavista - 53036 Poggibonsi (SI)
Tel. 0039-577-90311 - Fax. 0039-577-979335 E-Mail: info@putschmeniconi.com



2.4.2 Characteristics of the electric protection system

The electric utility system must be in conformity with the standards **CEI 64.8 (CENELEC HD 384, IEC 364-4-41)**.

The following must be foreseen:

- equipotential ground system
- automatic protection devices installed upstream of the machine, which are coordinated so as to guarantee automatic cut-off in conformity with that foreseen by the above-mentioned standards.

Choose the fuses based on the data stated on the machine's rating plate, applied to the electric cabinet.

In particular, pay attention to the various cases stated below:

- SVP 145 S – SVP 133 S

Full-load current	≤ 8 A	≤ 12 A	≤ 15 A	≤ 22 A	≤ 30 A	≤ 35 A
protection fuses	16 A (gG/gL) delayed	20 A (gG/gL) delayed	25 A (gG/gL) delayed	32 A (gG/gL) delayed	50 A (gG/gL) delayed	63 A (gG/gL) delayed

2.5 Extractor system

2.5.1 Machine mod. SVP 145 – 133 S

The values at the extractor nozzle from which the sawdust and waste (humidity <18%) from cutting are evacuated are as follows:

diameter of extractor nozzle	100 mm
minimum air speed	20 m/s
minimum air flow	570 m ³ /h
pressure drop	700 Pa approx.



3. NOISE LEVELS

Sound intensity level in the workplace conforms to prEN 1870-2:
levels in decibels(A) conform to EN ISO 3746/1996

Without load $L_{Wa} = 89,0$ dB(A)

With load $L_{Wa} = 93,0$ dB(A)

Sound pressure level in the workplace conforms to EN ISO 11202/1996

Without load $L_{Wa} = 81,5$ dB(A)

With load $L_{Wa} = 84,5$ dB(A)

The noise level values shown are emission levels and not necessarily safe work levels. While there is a correlation between emission levels and exposure levels, it cannot reliably be used to determine whether further precautions are required.

The factors affecting the actual level of exposure of workers include the duration of exposure, the characteristics of the room and other sources of noise, such as the number of machines and other machining with noise emissions in the vicinity for example. The admissible levels of exposure can also vary from country to country. This information does, however, enable the user of the machine to evaluate dangers and risks more effectively.

Declaration constant $k = 4$ dB.

4. DUST EMISSIONS

The values for dust emissions according to the "parameters for the control of dust emissions (concentration parameters) for woodworking machinery" by the committee of "wood" experts are kept under 2 mg/m³.



5. DESCRIPTION OF MACHINE AND ACCESSORIES

5.1 Machine description

The machine (fig. 2) is a vertical panel saw, model SVP 145 –133 S.
The machine consists of two main elements.

- A. frame
- B. cross beam

- A. The frame is a welded structure comprising the following elements:
 - 1A. Rear table(1) inclined 6° with respect to vertical and formed of aluminium strip (2).
 - 2A. Top rail (3) on which the cross beam (B) rests and slides lengthwise.
 - 3A. Bottom bar (4) on which the wheels (5) are fixed for easy shifting of panels, pedals (6) for operating the wheels and aluminium blocks(7), which form the bottom table.
 - 4A. Adjustable feet (8)
 - 5A. Struts (9) (or supporting rods)
 - 6A. Adjustable rear feet (10)
 - 7A. Long (11) and short (12) reinforcement cross members.
- B. The cross beam (B) is also a welded structure comprising a top carriage for horizontal sliding (13) and a bottom carriage (14).
The cutting unit (C) slides along the cross beam (B) and consists of:
 - 1B. Aluminium vertical carriage (15)
 - 2B. Saw-head assy (16)
 - 3B. Lever(handle)(17) for forward/backward shifting and flipping the saw-head assy
 - 4B. Hand-wheel (18) for locking the vertical carriage
 - 5B. Knob (19) for manual shifting of the saw-head assy
 - 6B. Blade motor (21)
 - 7B. Locking rod (24) with pedal (25).

Other main components of the machine are:

- D. Extractor and conveyor system for wood chips and sawdust.
 - 1D. Extractor hose (26)
 - 2D. Front extractor hose (27)
- E. Electricity
 - 1E. Electric cabinet (34)
 - 2E. Control panel (pushbutton panel) (35)
- Standard equipment
- F. Use and maintenance manual
- G. Spare parts handbook
- H. Circuit diagrams



- I. Service tool set comprising:
- 1 x special flat spanner for fitting/removing the blade
 - 1 x 10 mm Allen key for tightening/releasing the blade lock screw
 - 1 x 6-7 mm flat open-ended spanner
 - 1 x 8-9 mm flat open-ended spanner
 - 2 x 10-11 mm flat open-ended spanner
 - 1 x 13-17 mm flat open-ended spanner
 - 1 x 19-22 mm flat open-ended spanner
 - 1 x 24 mm flat open-ended spanner
 - 1 set of Allen keys, size:
2, 2.5, 3, 4, 5, 6, and 8 mm
 - 1 reversible screwdriver for slotted and cross-head screws.

Fig. 2

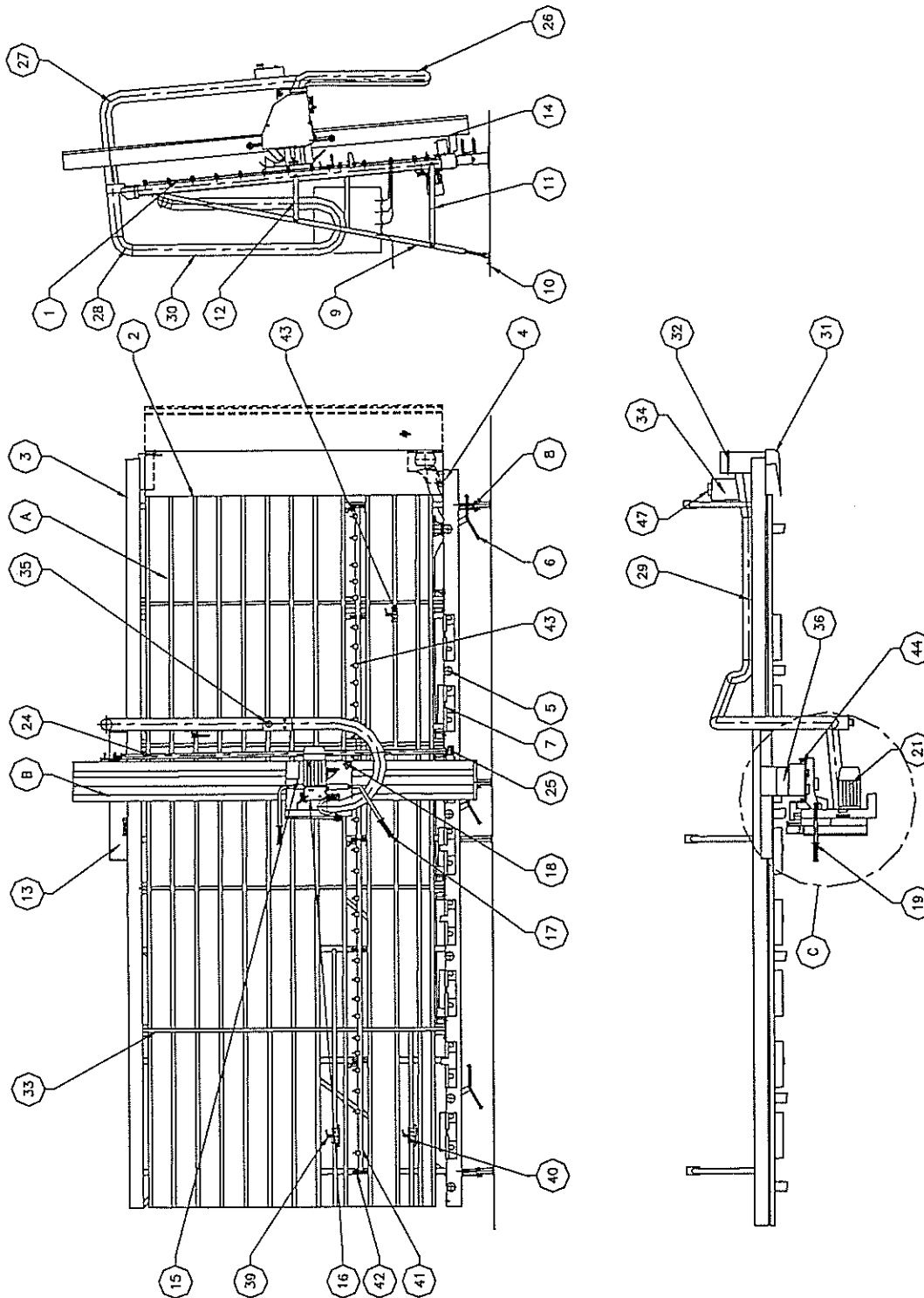
- J. Stop (39)
- K. Short piece device (41)
- L. Handle (42) for short piece device
- M. Jaw type stop (45)

5.2 Optional equipment

- A. Supplementary stop (40)
- B. RH short piece device (43)
- C. Device for repetitive strip cutting (44)
- D. Digital read-out for vertical cuts
- E. Digital read-out for horizontal cuts
- F. Scoring unit with knives
- G. Motor with different voltage and/or power



Fig.2





6. SAFETY DEVICES

The SVP 145 S – SVP 133 S vertical panel saw have been equipped with safety devices for reducing the risk of damage and injury and preventing improper machine use during cutting.

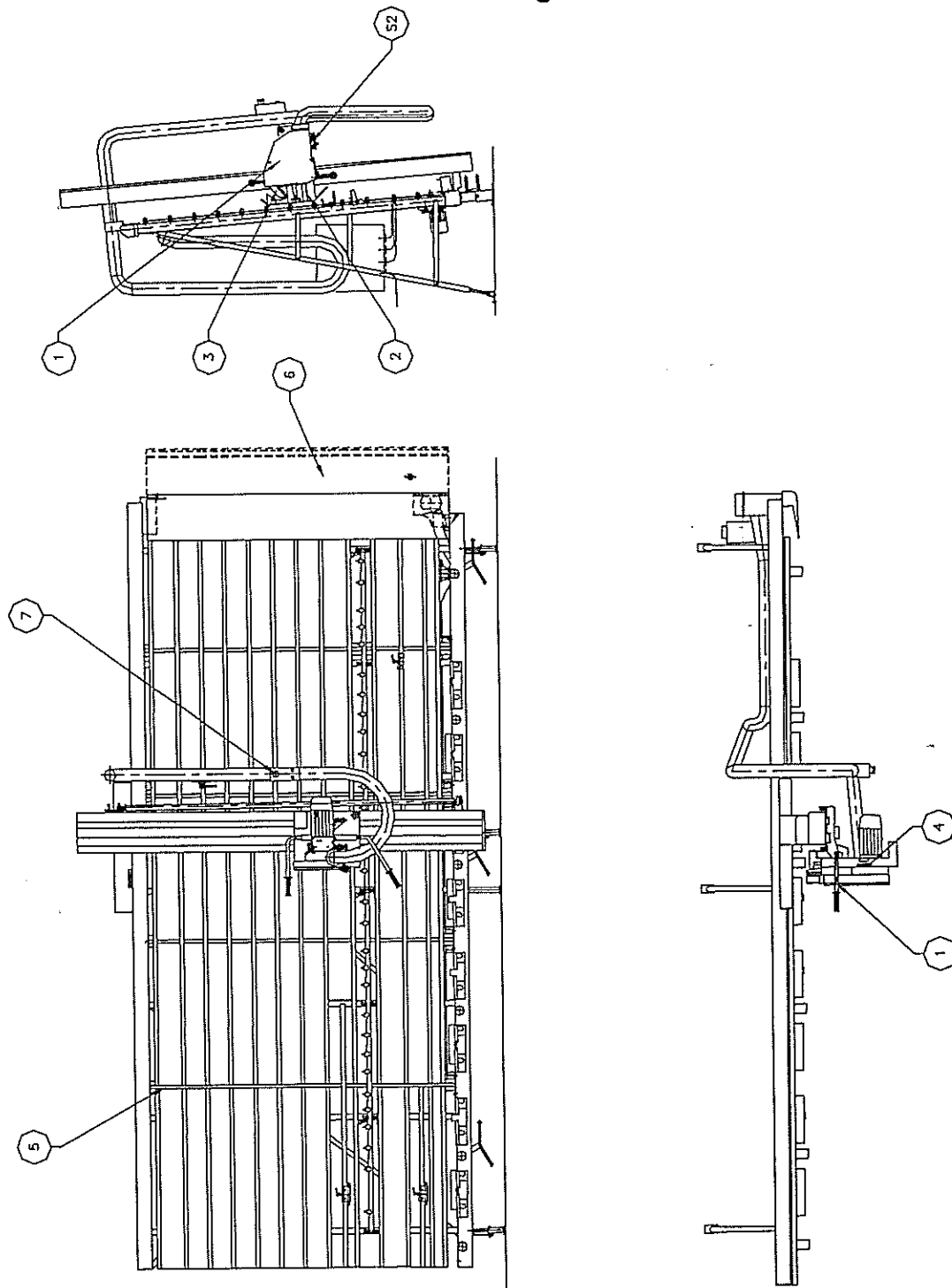
6.1 Safety devices against damage and injury

The main risks are presented by the presence and rotation of the blade. To reduce these risks to a minimum, the machine is equipped with the following (fig. 3):

1. Blade closure cover (1). Prevents accidental contact with the blade. It is hinged and secured with 2 screws. A safety switch is connected to the cover. On removal of the cover, the whole machine is switched off and the blade, if rotating, stops within 10 seconds.
2. Blade guard (2). This is a mobile cover that protects against accidental contact with the blade. When the saw-head assy is in the "BACK" position, a mechanical stop prevents the guard from moving back (except for a play of 1-2 mm set in the factory during assembly). As the saw-head assy is advanced towards the panel in the "FORWARD" position, the guard moves back if it finds the panel or can be moved back if for example it is held back with a hand.
3. Riving knife (3). This is a shaped piece of steel, which:
 - protects against the ejection of pieces of blade (in the event of breakage) towards the top of the saw-head assy
 - during the execution of horizontal cuts, prevents crushing of the body of the blade by the top of the panel being cut.The riving knife can be moved back from its normal position when executing apertures (e.g. windows). This reduces or eliminates its protective function.
4. Soundproofing (4). The saw-head assy is equipped with soundproofing materials glued on at various points so as to reduce noise levels.
5. EMERGENCY pushbutton. It is the start/stop pushbutton on the control panel (7) on the cross beam.



Fig.3





7. INTENDED USE

7.1 Materials

The SVP 145 S and SVP 133 S vertical panel saw has been designed and manufactured to cut panels with the dimensions specified in section 7.2 both in a vertical direction (perpendicularly to the ground) and in a horizontal direction (parallel to the ground).

The materials which can be cut are:

A. particleboard	max. thickness 60 mm
B. laminated particleboard	max. thickness 60 mm
C. layer-glued board	max. thickness 60 mm
D. MDF	max. thickness 60 mm
E. heartwood	max. thickness 60 mm

The above materials can also be cut if covered with decorative materials (laminated) and edged (max. edging thickness 5 mm).

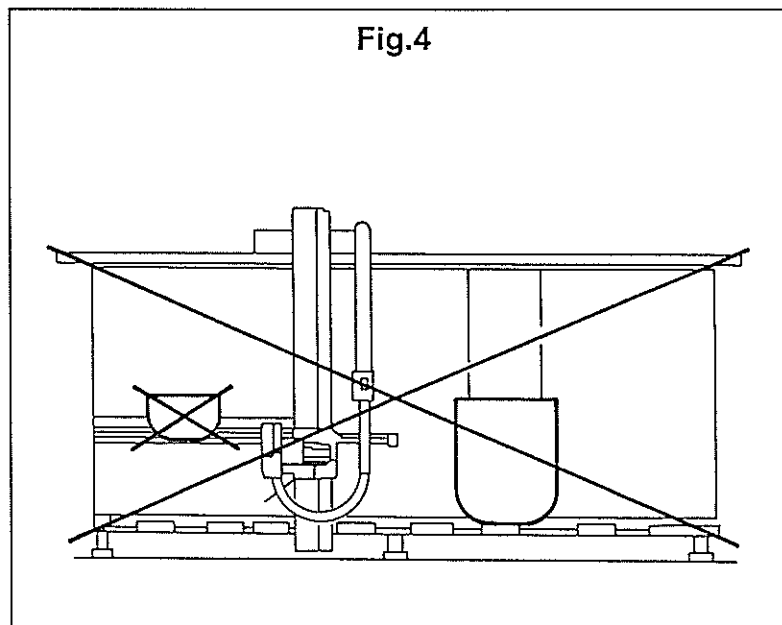


IMPORTANT NOTE: Plastics can also be cut subject to consultation with the manufacturer, and only after the manufacturer has given written approval.

Uses other than those specified above do not come within the machine's intended use. The manufacturer shall not be liable for any damage or injury to people, animals or things resulting from incorrect use of the machine as defined above.

The operator must take care to position the panels correctly on the table and make sure they are stable.

The bottom table (formed by blocks of aluminium and/or wheels) and/or the table formed by the short piece device, must not be used for supporting or cutting panels with a contoured or rounded edge or an edge which is in any way not straight (fig. 4).





Stacked panels may be cut.

This operation, however, can give rise to additional risks, especially when executing horizontal cuts.

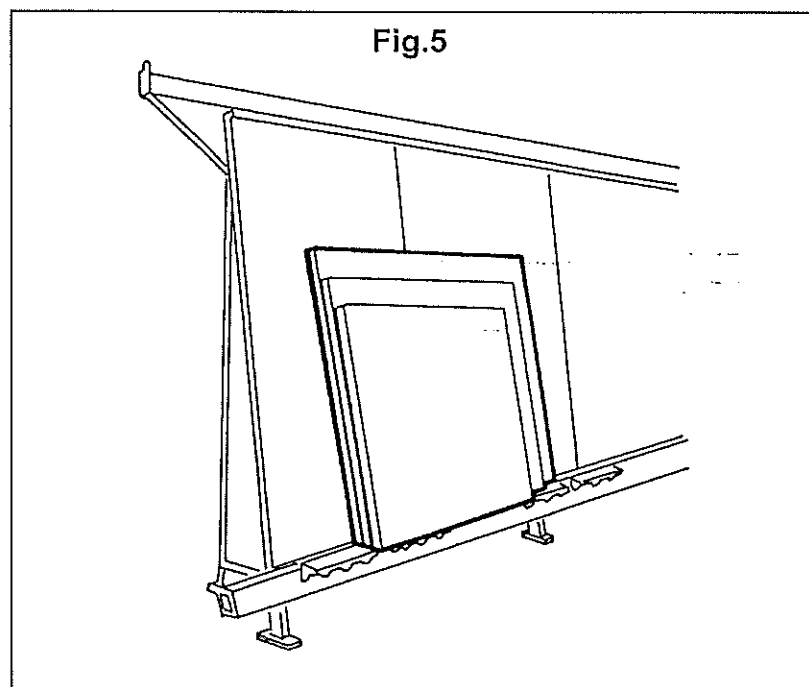
When cutting stacked panels, they must all be in the same material and the sum of their thickness must not exceed the maximum value specified in points "a" and "e" for the material concerned.

When stacking panels for simultaneous cutting, it is advisable to stack the panels so that the largest one is placed at the bottom first, adding the others in decreasing order of size (fig. 5).



WARNING!

When cutting stacked panels there is always a risk of one panel, or a part of it, moving in relation to another. It is therefore advisable to have this work carried out by thoroughly trained personnel who are aware of the additional risks involved.



Square or rectangular openings can be cut provided that the length of the side is no shorter than the minimum length of 800 mm. In this case one must cut only one panel at a time. Furthermore, the panel must be large enough to ensure it is stable during cutting.



WARNING! Failure to follow the above recommendations increases the danger and risk of accidents (injuries and falling pieces).

Further important information and advice can be found in **ADVICE FOR SAFE USE AND MAINTENANCE - RECOMMENDATIONS** (chapter 9), **FUNCTIONS AND ADJUSTMENTS OF THE MACHINE AND ACCESSORIES** (chapter 11) and **OPERATING THE MACHINE** (chapter 12).

Never use the machine to carry out cutting procedures and/or cut materials other than those specified in this manual.

Never make any modifications to the machine without the manufacturer prior written agreement.

Never tamper with the safety devices.

The various different safety systems adopted have been developed to suit the intended uses of the machine described in this manual.

Any use, which is not mentioned, is forbidden.

Putsch-Meniconi S.p.a.

Via Irlanda, 1 Loc. Bellavista - 53036 Poggibonsi (SI)

Tel. 0039-577-90311 - Fax. 0039-577-979335 E-Mail: info@putschmeniconi.com



7.2 Cutting capacity

The table of the SVP 145 S – SVP 133 S can accept panels with the following maximum dimensions:

length = 4200 mm
height = 2200 mm
thickness = 55 mm

The cutting capacity is for a cutting operation in which the machine is started up and cutting begins outside the perimeter of the panel itself. The maximum and minimum cut sizes, which can be made and obtained, are detailed below.

maximum height of vertical cut	2200/1900 mm
minimum height of vertical cut	100 mm
minimum length of vertical cut	250 mm
maximum height of horizontal cut	2080/1700 mm
minimum height of horizontal cut	100 mm
maximum length of horizontal cut	4200/3200 mm
minimum length of horizontal cut	500 mm
maximum thickness of cut	60 mm
minimum thickness of cut	8 mm
max. weight that can be supported by aluminium block table	180kg

See section 7.1 for further information on the thickness of the cut, since this varies in relation to the material of the panel being cut.

7.3 Tools (circular saw)

Use only blades of the dimensions recommended by the manufacturer.

The blades must be properly maintained and renewed when necessary.

When handling blades during maintenance or cleaning, use suitable equipment or blade holders to minimize the risk of injury.

Use only blades which have been manufactured in accordance with prEN 847-1 standards.

It is advisable always to choose blades of high and proven quality.



The SVP 145 S and SVP 133 S machine has been designed exclusively for use with compound (CIRCULAR SAW) blades that is to say blades with insert cutting edges (HM).

THE USE OF HSS BLADES, I.E. WITHOUT INSERT CUTTING TIPS IS FORBIDDEN (see prEN 847-1).

Blade size specifications are as follows:

maximum diameter	250 mm
minimum diameter	240 mm
hole diameter	30 mm
width of cut	3.2 mm

It is also advisable to use blades that reduce noise levels.

7.4 Area of installation

The machine must be installed, used and maintained in a covered area with an ambient temperature of between +5°C and +40°C with a humidity level of no more than 70%.

It must be installed, used and maintained in areas where there is no explosion hazard.

Since the machine is for use in areas where there is a fire hazard, it is advisable to follow the recommendations in this manual scrupulously and take every precaution possible to avoid this type of hazard.

The area must have adequate lighting for effecting cutting and maintenance operations.

7.5 Incorrect use

INCORRECT USE covers any use that goes against the above recommendations. INCORRECT USE includes the cutting of materials other than those specified in points "a" and "e" of section 7.1, such as, for example, materials containing noxious substances, liquids or fluids, foams, metals and non-metals. Cutting such materials could in fact generate substances that are noxious by inhalation or contact and are able to produce mechanical and/or electrical malfunctions, including serious faults, while also causing a fire and explosion hazard.

It is also INCORRECT to cut pieces which are so small that operators are obliged to steady them by moving their limbs up close to the machine's moving parts and the blade in particular.

It is INCORRECT to rest steps or other equipment on the machine during operation, installation or maintenance, for any reason whatsoever. USE FOLDING LADDERS ONLY.

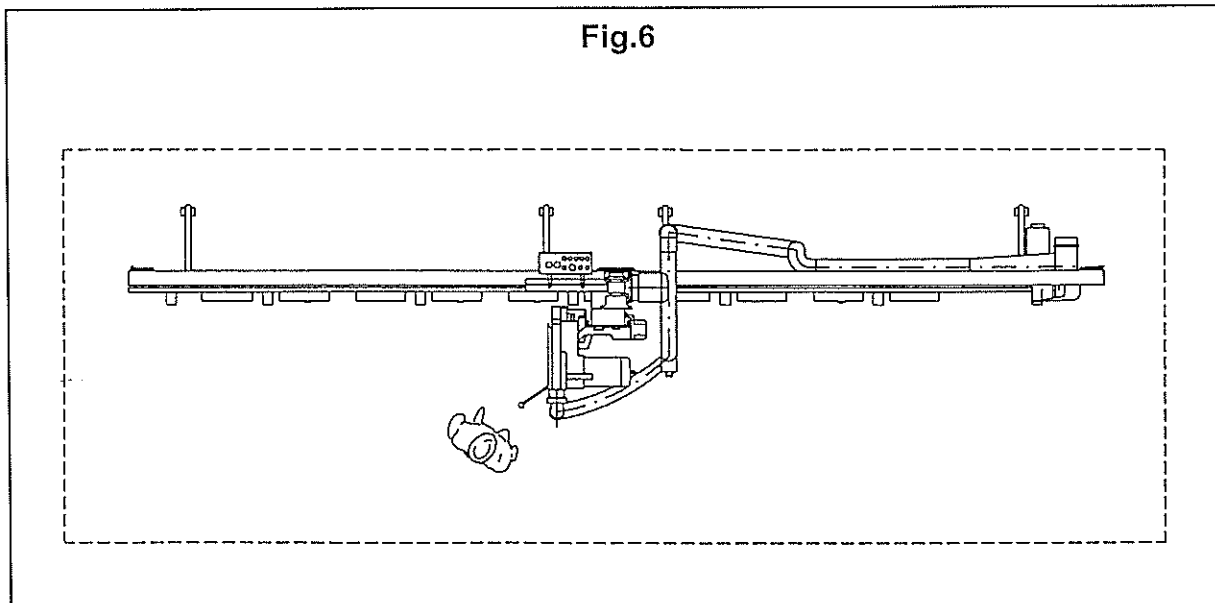
It is INCORRECT to climb and/or get on the machine or parts of it.



7.6 Number and location of work positions

The SVP 145 S – SVP 133 S vertical panel saw has been designed and constructed for use by a single (i.e. 1) operator (fig. 6).

During cutting, the main work position is the position opposite the cross beam. Loading and unloading of the panels is carried out as required along the full length of the machine.





8. TRANSPORT, HANDLING, STORAGE

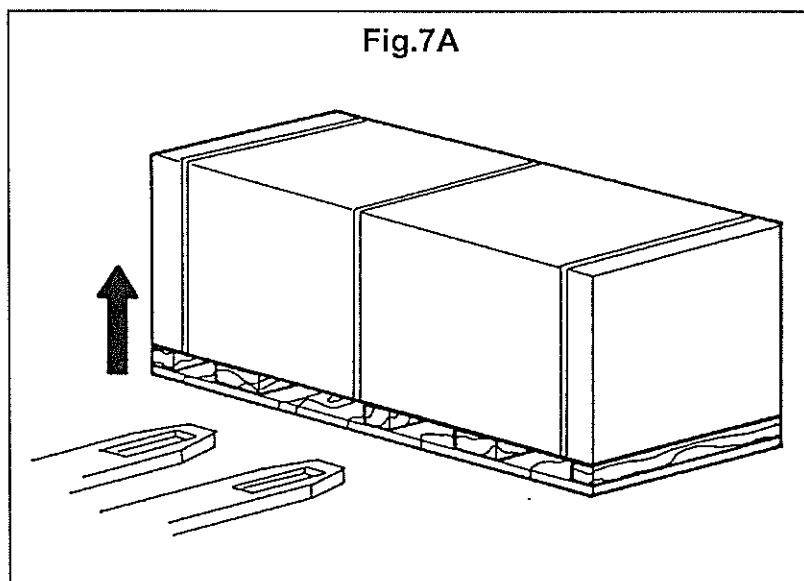
	Dimensions (mm)	Weights (kg)
Frame SVP 145 S	5540 x 250 x 2340	450
Frame SVP 133 S	4860 x 250 x 1820	495
Cross beam SVP 145 S	2900 x 1130 x 790	460
Cross beam SVP 133 S	2900 x 1130 x 790	500

The SVP 145 - 133 S panel saw is despatched fully packed in special packaging which enables it to be handled and hoisted by suitable equipment, including:

- fork lift trucks
- overhead travelling cranes
- cranes.

The weights and hooking/hoisting points are indicated on the packing itself. Each machine is split into two packages:

- A. A crate with wooden base and recyclable cardboard lid (fig. 7A), suitable for handling by fork lift truck. The forks should be slid into special spaces in the wooden base for that purpose.



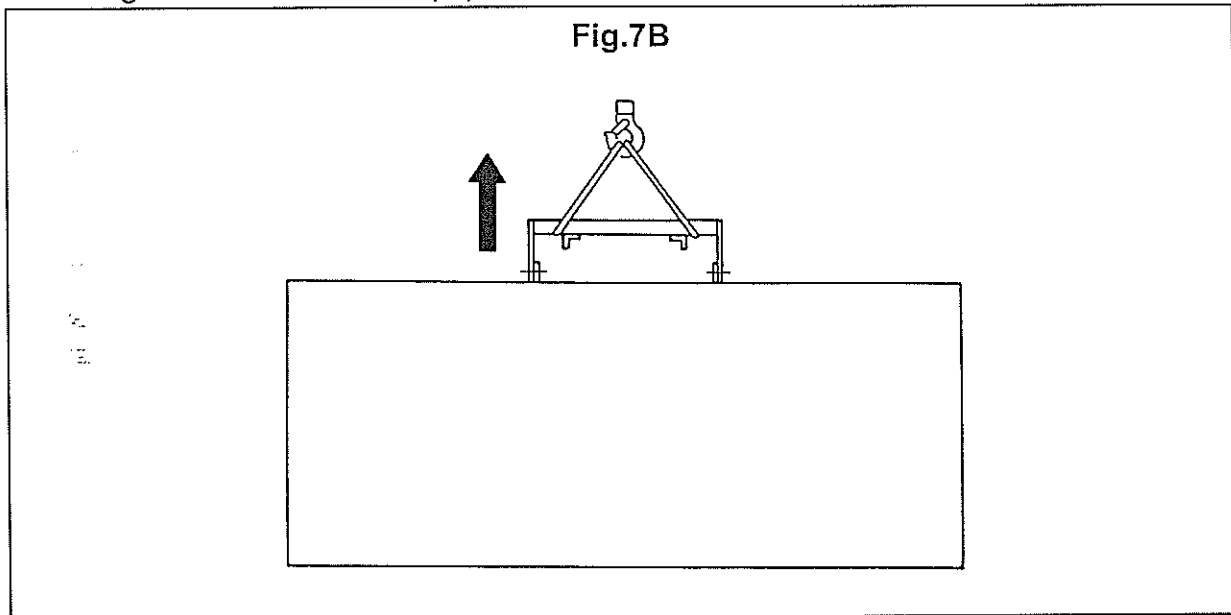
The crate must rest on a safe floor or surface that will remain stable when subjected to the weight shown on the crate.

The stability of the crate is ensured by its size.

These crates can be stacked up to three high but no higher.



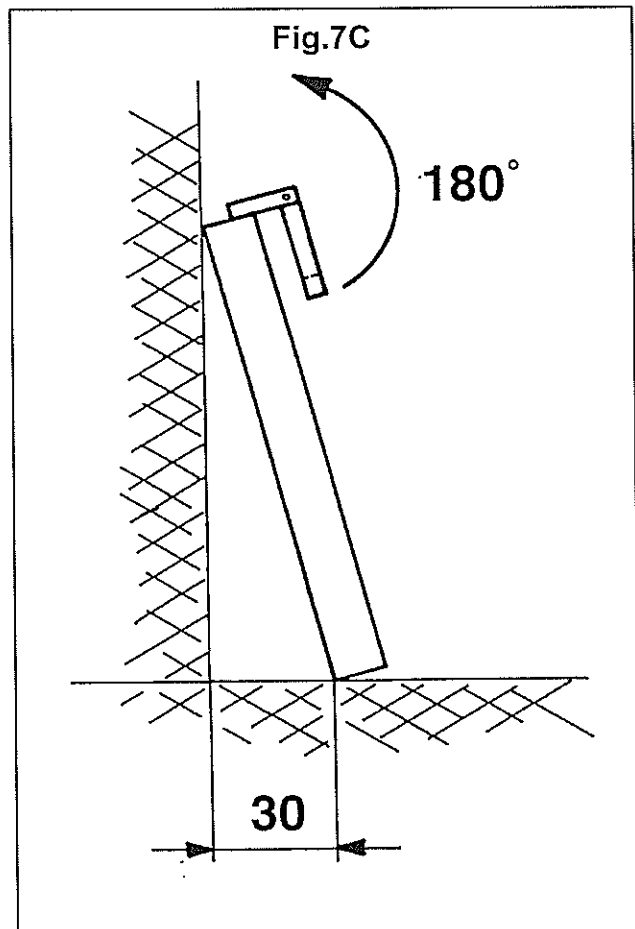
You are advised against placing other materials on the crates to avoid the possibility of damage to them and the equipment inside them.



B. A cardboard container (fig. 7B) with a handling rod in the centre of the top which can be lifted using forks or belts.

This container must always be kept in a vertical or angled position to safeguard the mechanical integrity of the frame inside it, with the red lifting rod always clearly visible and easily accessible for hooking using suitable lifting means.

This requirement makes the container unstable so that it must always be leant against a wall able to support its weight. The container must be leant with at least 30 cm of its rear part against the supporting wall so that it is leaning at an angle of approximately 8° (fig. 7C).



Make sure that the area is free of any obstacles when handling this container. Store the crate and container in a dry place, protected from rain, snow and damp.



Proceed with caution during all the handling phases to avoid causing damage or injury to people, things or the machine itself.

9. ADVICE FOR SAFE USE AND MAINTENANCE - RECOMMENDATIONS

9.1 Procedure for isolating the machine

The following procedure involving 3 separate operations must be carried out when any operations (installation, maintenance, repair, modification, etc.) are being performed on the machine:

- 1. Disconnect the machine from the power supply (electricity).**
- 2. Lock the switch in its OFF position.**
- 3. Make sure that the machine is no longer powered and that there is no residual power, potential or kinetic energy in the systems.**

A single person must be responsible for carrying out all 3 operations.

If a simple service operation is concerned, the person responsible for carrying out the isolation procedure may be the same person performing the operation.

If the machine is not operating for any reason whatsoever, always carry out the isolation procedure described above and warn of the situation with a clearly visible notice (sign).

9.2 General safety recommendations

- * Never forget that woodworking machines are considered amongst the most dangerous due to the high speed at which the cutting tools move and their high work rate: consequently never underestimate the risks involved and concentrate fully on the work.
- * The machine should only be used by suitably trained personnel, over 18 years of age, who have received instruction and a practical learning period on the specific model, have fully understood the operating procedures detailed in the manual and have good general skills.
- * The machine must be used in compliance with all relevant safety regulations in full awareness of the risks involved, adopting the precautions required to prevent accidents and damage or injury to things and people.
- * Operators should never use the machine when not in good physical condition, which is to say when this is likely to slow their reflexes and dull their attention. The machine should never be used under the influence of drugs or alcohol.
- * All the machine's guards, safety devices, components and accessories must be kept in perfect operating order. The identification plates, recommendations and safety instructions must be kept in good condition and in their original positions.
- * Under no circumstances ever carry out mechanical adjustments or maintenance operations without having first carried out the isolation procedure specified in section 9.1, removing the key from the padlock and keeping it on your person.



9.2.1 In the workplace

- * Make sure that lighting is adequate and that the places for storing material, carrying out the work, carrying out maintenance operations and for the movement of personnel and materials are all suitable. Always keep the floor clean, since dust, sawdust and wood chips could make it slippery and therefore dangerous.
- * If possible, equip the workplace with one or more lifting devices for feeding the machine with heavy material to eliminate or reduce the need for physical effort.
- * Wear clothing that is not a loose fit and suitable for the work involved. Remove any bracelets, neck chains etc. and any other object that could catch on or in the machine.
- * Put on personal protective equipment if the work conditions require it.

9.2.2 On the machine before work

- * Always carry out a dummy run cycle to make sure that everything is operating correctly. Check that the blade rotates in the correct direction.
- * Use only blades that are properly sharpened and unaffected by chips or deformation, and make sure that the blade is balanced. Check that the riving knife is positioned correctly, locked in place and is the correct size for the type of blade.
- * Make sure the panel table is in good order and clean of all sawdust, chips and pieces of wood. Make sure that all the safety and work devices are fitted, correctly positioned for the operations to be carried out and are in perfect working order.

9.2.3 During work

- * Carry out a dummy run first cycle to check that the machine is operating correctly.
- * Switch on the extraction system, even if you are only cutting a single piece.
- * Never place your hands, arms or any part of your body close to the cutting zone or moving parts. Use sufficiently long devices (clips, clamps) to support or remove narrow pieces. Use a suitable device to remove sawdust or wood chips (suction extractor, brush, end of piece of wood etc.): never use your hands!
- * Always use the supporting clamp (stop with jaws) on the work table to prevent the piece from moving during horizontal cutting.
- * In the event of unexpected behaviour of the machine, never carry out any operations on it while it is running: switch it off using the appropriate control and wait for the end of the cycle until the blade stops completely before taking any other action.
- * When the machine, its elements or accessories are in operation, under no circumstances remove any type of protective part, such as the guards, covers, frame panels and barriers or any other protective or safety device.
- * Never tamper with the switches or other safety devices and/or devices for controlling the operating cycle since this could cause severe damage to the machine's mechanical parts and/or injury to people in the vicinity.



- * The mobile blade protection (blade guard) covers the blade at all times and is locked when the saw-head assy is in the rest position. In the working position the safety lock is cancelled, **THEREFORE, NEVER PLACE YOUR HANDS OR OTHER PARTS OF THE BODY IN FRONT OF THE MOBILE PROTECTION.**
- * Never cut material that is likely to cause sparking or overheating of the sawdust and wood chips that could cause a fire or explosion as they pass through the extractor's suction pipe.
- * No one must under any circumstances ever be allowed to climb up on the machine or sit on it.

9.2.4 During maintenance

- * Work on the electrical installation must be carried out only by skilled and authorized personnel.
- * Regular maintenance of the machine's mechanical and electrical parts extends its life, ensures it will provide maximum performance and is an important safety factor. Check the effectiveness of the earth system at regular intervals in compliance with the regulations in force.
- * Except in cases of urgent need, only ever work on the machine after having completed the isolation procedure specified at the beginning of this chapter: Seek the help of specialist personnel in the event of mechanical or electrical problems. If the machine is out of order due to a fault, maintenance or repair work, this should be indicated with a sign.
- * Having completed any work that involved opening/removing the blade guards, frame panels and other protective parts, make sure they operate correctly after you have closed/fitted them again. Check that you have not forgotten any tools or foreign bodies inside the machine or on the work table before starting the machine.
- * The tools (blade) must be sharpened correctly at frequent intervals, respecting the angles of the cutting edges. Keep the tools in their containers or racks to prevent them from knocking against one another. Never place the tools on metal surfaces.
- * Always use protective gloves when changing blades.

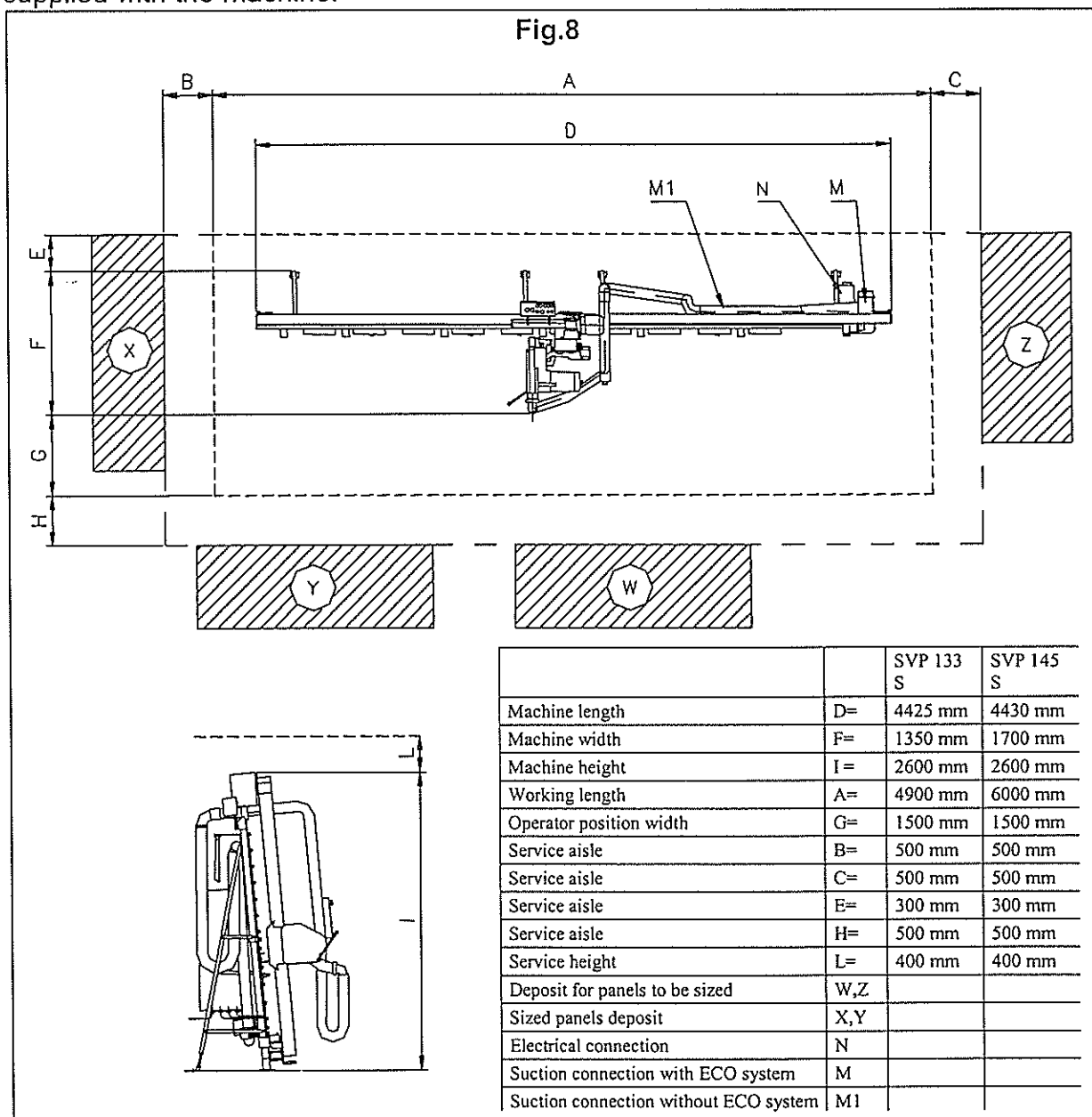
Other safety instructions are presented in the various different chapters on using and adjusting the machine.



10. ASSEMBLY AND COMMISSIONING

10.1 Location

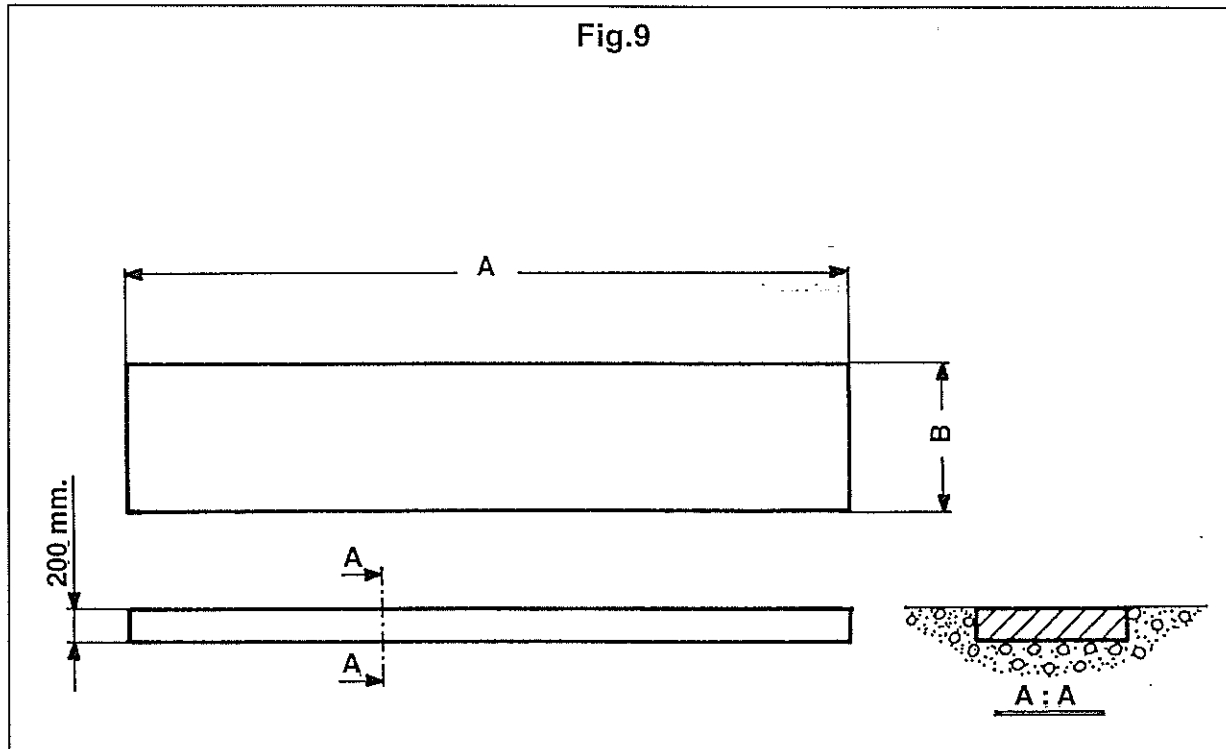
The surface area occupied by the machine is shown in fig. 8. The diagram also shows the areas required to work in safety and for maintenance operations. The frame of the machine must be fixed to the floor to ensure it is stable. The frame is therefore fitted with suitable fixing points. The fixing devices (expansion bolts) are supplied with the machine.





The machine must be installed on a well-levelled concrete floor to ensure maximum safety and efficiency.

If the floor does not meet these conditions it should be fitted with a cement slab as shown in fig. 9 in which:



A = 5000 mm

B = 1200 mm

Position the machine in an enclosed place that is suitable for the work to be carried out and that is also convenient for it to be connected up to:

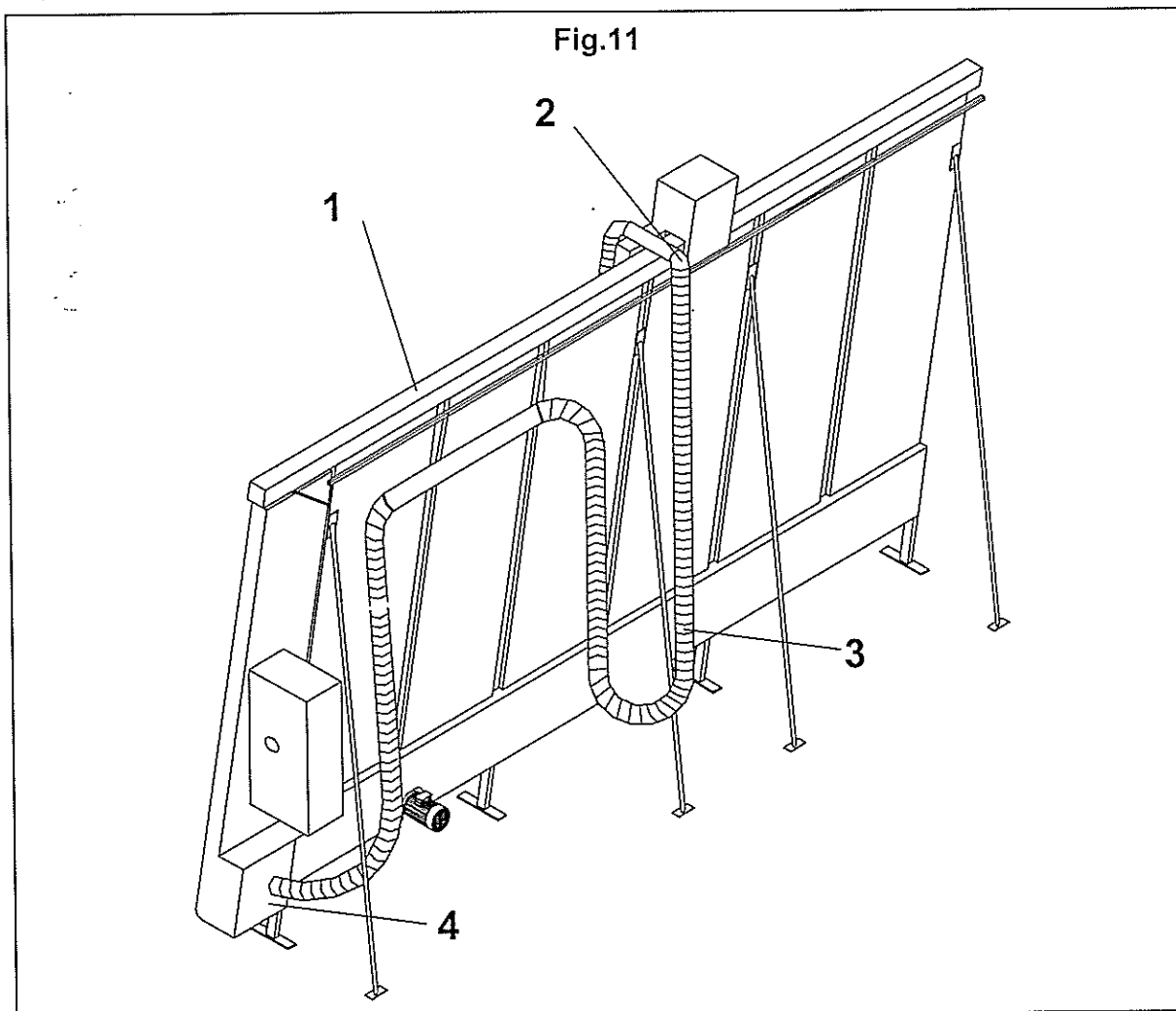
- the electricity supply
- the sawdust extraction system.

The area in which the machine is located must be sufficiently lit for the purposes of work and maintenance.



10.2 Assembly

ATTENTION! The machine must be assembled only by the manufacturer's personnel or personnel authorized by the manufacturer.



10.3 Sawdust disposal



The sawdust, wood chips and other waste produced during work must be disposed of in compliance with the relevant regulations in force.

We therefore advise you to contact your sector organization or the authorities concerned for detailed information.

10.4 Electrical connections, start-up and circuit diagrams

This operation must be carried out only by specialist personnel (electricians). Check the voltage and other specifications shown on the electrical cubicle's rating plate before connecting the machine up to the electrical power supply (also see sections 2.4.1 and 2.4.2).

Putsch-Meniconi S.p.a.

Via Irlanda, 1 Loc. Bellavista - 53036 Poggibonsi (SI)

Tel. 0039-577-90311 - Fax. 0039-577-979335 E-Mail: info@putschmeniconi.com



Do not connect the machine to the electrical power supply until it has been completely assembled.

The user's electrical system must comply with the C.E.I. 64.8 standards (CENELEC HD 384, IEC 364-4-41).

The electrical box is fitted with cable gland M25 for the power supply cable to the box.

1. Turn the main switch on the door of the cabinet to position "0" and then open the box using the related screwdriver.
2. Unscrew the nut on the above-mentioned cable glands.
3. Slide the cable through the nut removed from cable gland PG and then slide it through the rubber grommet in cable gland PG. Pass just enough cable through to reach terminals L1, L2, L3, of the switch and the ground terminal.
4. Tighten the nut fully home and make sure that the cable does not slide in the cable gland, pulling it firmly.
5. Connect the wires as described above and make sure they are clamped tightly in their related terminals.
6. Close the electrical box with the main switch still in position "0".
7. Connect the power supply cable to the mains.
8. Switch on the power to the cabinet and make sure that the motor turns in the direction shown by the arrow.

Refer to the circuit diagrams for any further information you require.



11. FUNCTIONS AND ADJUSTMENTS OF THE MACHINE AND ACCESSORIES

The machine must be isolated from all power supplies when operations are being carried out. Follow the isolation procedure described in section 11.1 and the recommendations in chapter 9.

11.1 Procedure for isolating the machine

The following procedure involving 3 separate operations must be carried out when any operations (installation, maintenance, repair, modification, etc.) are being performed on the machine:

1. Disconnect the machine from the power supply (electricity) by turning the main switch on the electrical cabinet to "0".
2. Lock the switch in its OFF position using a padlock. If the yellow door on the switch can not be closed, this means that the switch is not in "0" position.
3. Make sure that the machine is no longer electrically powered up and that there is no residual power, potential or kinetic energy.

Only one person must be responsible for carrying out all 3 operations. If a simple operation is concerned, the person responsible for carrying out the isolation procedure may be the same person performing the operation.

The securing of the isolation consists in locking the main switch in its contact-open position.

If the machine is not operating for any reason whatsoever, always carry out the isolation procedure described above and warn of the situation with a clearly visible notice or sign.



11.2 Electrical controls

The control panel (fig. 12), located on the extractor pipe connected to the cross beam, accommodates the following controls and warning lamps:

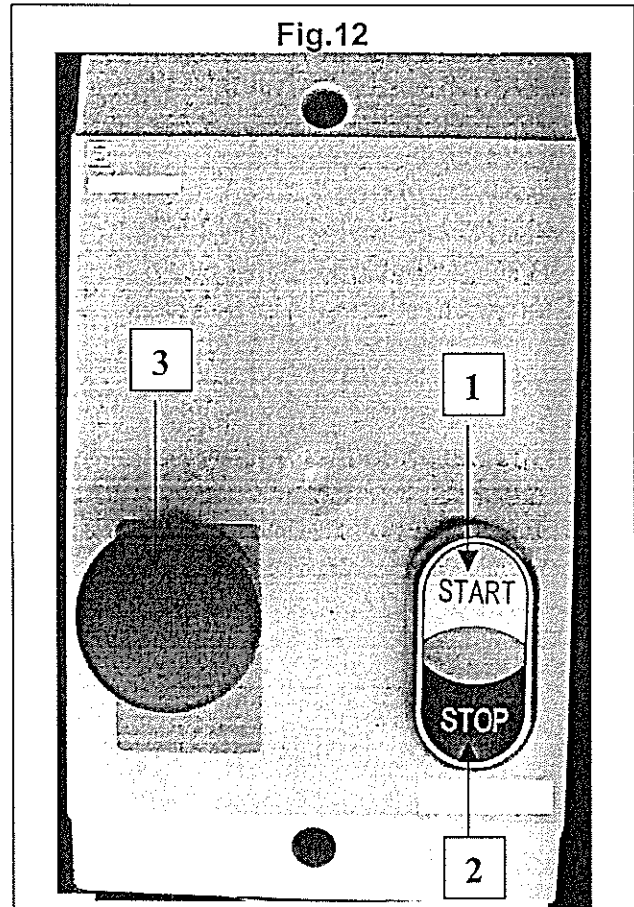
1) START BLADE PUSHBUTTON

Starts the blade motor.

2) STOP PUSHBUTTON

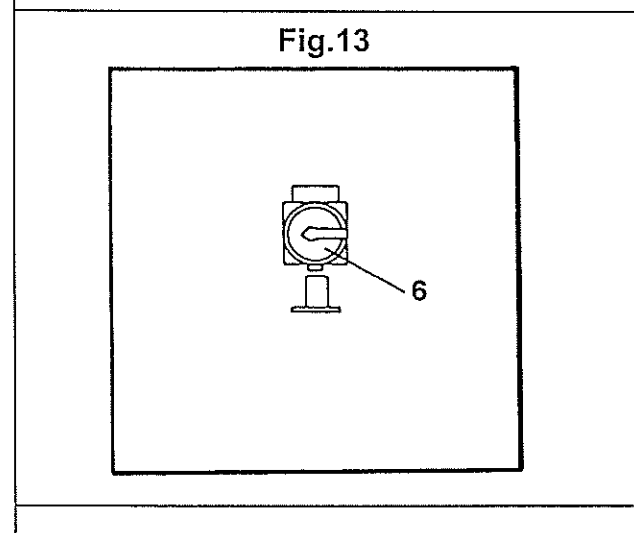
Simply pressing this pushbutton causes the blade motor to stop turning.

3) EMERGENCY STOP MUSHROOM-HEAD PUSHBUTTON.



The electrical cabinet (fig. 13) accommodates the following:

MAIN SWITCH (6). This lockable switch serves to power up and cut off power to the machine.





11.3 Moving the saw-head assy forwards and backwards

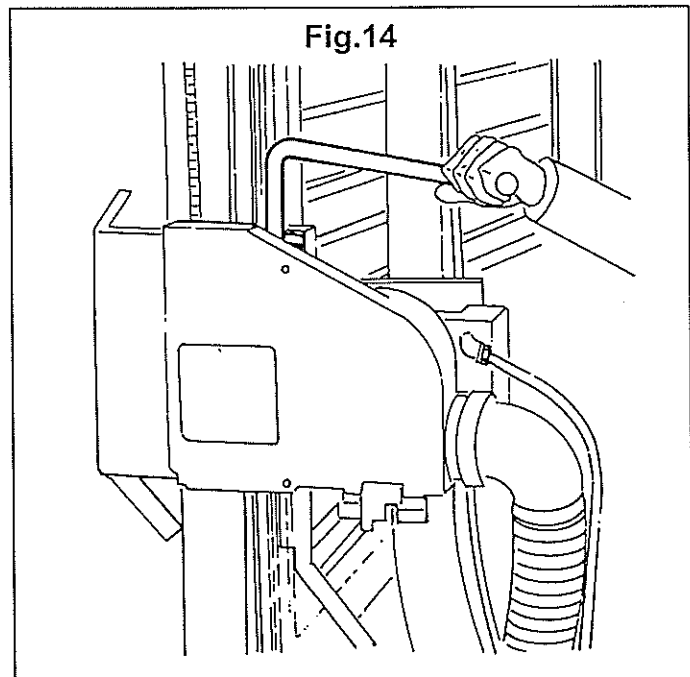
The saw-head assy features a twin grip handle (fig. 14) for moving the head forwards and backwards.

FORWARDS: push the handle towards the panel

BACKWARDS: pull the handle away from the panel

The head is held in its "FORWARD" and "BACK" positions using mechanical systems.

To facilitate insertion of the saw-head assy "FORWARD", the lower handle is fitted with a joint so that when the saw-head assy is at a certain height, the operation point of the handle can be lowered.



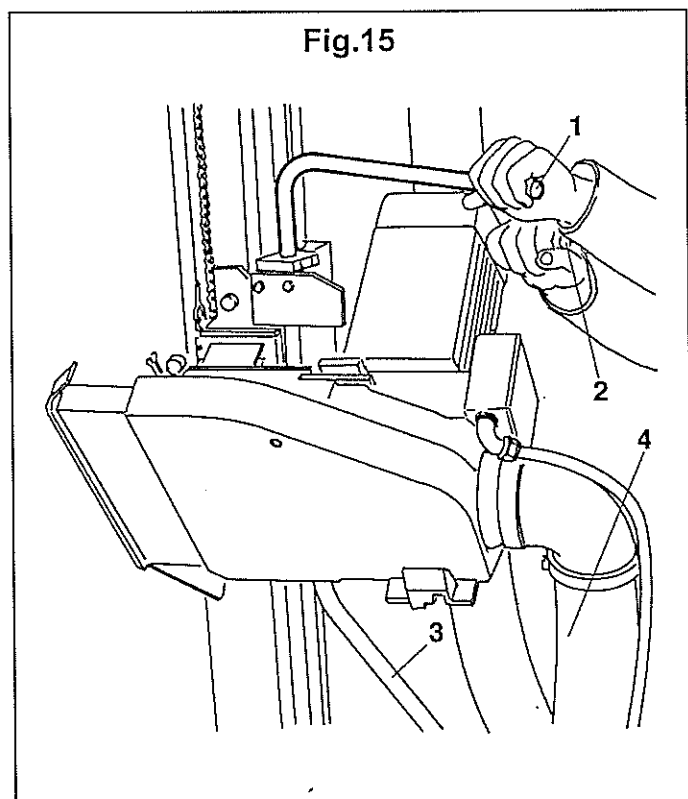
11.4 Flipping (rotating) the saw-head assy

The saw-head assy can be positioned to make horizontal and vertical cuts.

A mechanical system prevents the head from accidentally turning when it is in either of the two positions.

Proceed as follows (fig. 15) to turn the saw-head assy from one position to the other:

1. Position the cutting unit at about chest height.
2. Stand so that the cutting unit is precisely in front of you.
3. With the left hand, grip the upper handle, and with the right hand, grip the handle fixed to the motor.
4. Pull the handle lever towards you to the end of its travel.
5. Keeping the lever pulled out, turn the saw-head assy to the position desired.
6. Release the lever.





11.5 Moving the cutting unit up-down/down-up

The cutting unit is moved manually from up to down and down to up along the cross beam.

The cutting unit is balanced by a lead counter weight that slides in the cross beam cavity.

The cutting unit is moved using the knob (2) or the levers (1) and (3) of the handle, fig. 5, located on the saw-head assy or rubber suction system pipe (4), fig. 5.



WARNING! Never use the electrical cables to pull the cutting unit down!

11.6 Moving the cross beam left-right/right-left

The cross beam is moved using the knob (2), fig. 15, on the saw-head assy when the latter is positioned at a suitable height. When this is not the case, it is moved by pushing or pulling the cross beam itself at a height that is comfortable for the operator.

11.7 Emergency stop

On the control panel, at the operator position, placing the switch in "0" position will operate the emergency stopping.

Once operated, the emergency stop stops:

-the blade motor. The brake operates: the motor stops within 10 seconds

To restore normal operating conditions:

-rotate the switch.

The emergency stop devices must be used only in case of emergency or for the uses described in this manual. Do not use the emergency devices for normal stopping of the work functions.

11.8 Residual risks and means of individual protection

Despite all preventive measures, the following residual risks are present:

-Catching of clothing by moving parts and tools (blade)

-injuries caused by projection of tools caused as a result of breakage

-injuries from pieces being machined

-fire hazard

-danger of electric shock during work on the electrical installation

-dangerous noise levels

-dangerous emission of dust

-danger of injuries caused by contact with the tools (blade).

The means of personal protection to be used when positioning, installing, adjusting, using and maintaining (routine and extraordinary) the machine are as follows:

-gloves (e.g. when renewing the blade)

-goggles or visor to protect against the possible projection of chips or splinters

-anti-crush, anti-slip footwear

-ear defenders



- dust masks
- helmet

In addition to the above, clothing must be suitable for preventing the danger of:

- entrapment
- dragging
- crushing
- slipping

For further information see chapter 9.

11.9 Fitting and replacing the blade

WARNING! Danger of laceration !! Danger of injury !!

All the operations below should be carried out with the greatest care and attention.

The machine should only be fitted with blades complying with the prEN 847-1 standard and which have the following dimensions:

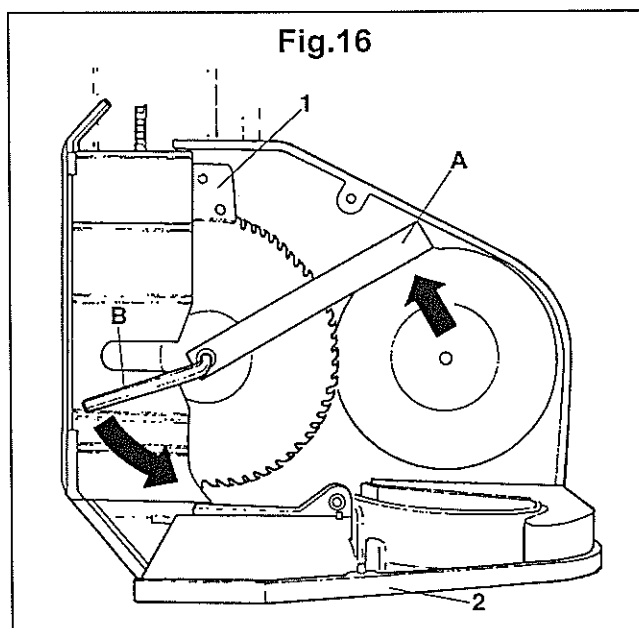
maximum diameter	250 mm
minimum diameter	240 mm
hole diameter	30 mm
tooth thickness	3.2 mm

Carefully inspect the blade to make sure it is in perfect condition and is not deformed, badly sharpened or chipped.

Always use blades that are in perfect condition !!

WARNING! It is absolutely essential to carry out the isolation procedure described in section 11.1 before carrying out any work involving the blade and requiring the removal or disabling of any safety devices.

1. Carry out the isolation procedure described in section 11.1.
2. Press the mushroom-shaped EMERGENCY pushbutton on the control panel mounted on the cross beam.
3. Make sure that the saw-head assy is positioned for vertical cuts, turning it using the related knobs (4) if it is not.
4. Make sure that the saw-head assy is in its idle or "BACK" position.
5. Make sure that the riving knife (1) is in its forward position.
6. Slacken the two fixed travel (loss-proof) Allen screws completely using the Allen key supplied in the tool kit with the machine. Open the guard fully, holding it until it is completely open.



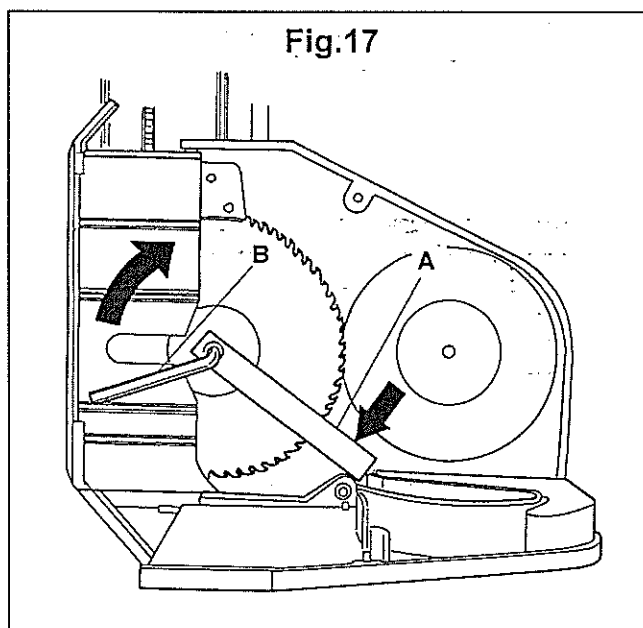


7. Wear protective gloves.
8. Position the flat spanner (A) supplied in the tool kit with the machine as shown in fig. 16, holding it so that the part which does not engage with the flange rests against the head, effectively preventing it from turning.
9. Keeping the spanner in the position described, slide the related Allen key (B) supplied in the tool kit with the machine into the Allen screw and turn it counter-clockwise to slacken the Allen screw.
10. Remove the Allen screw and flange and place them where they cannot be damaged.

WARNING! The blade is no longer locked in place and could fall.



11. Remove the blade and carefully place it in a suitable rack or container so that it cannot be damaged.
12. Carefully clean the mounting surfaces of the flange which forms an integral part of the shaft, the locking flange, the seating on the shaft and the clamping zone of the blade itself.
13. Fit the blade in the blade guard and then in the seating in the blade shaft. During this operation, take care:
 - not to damage the teeth
 - to make sure that the hole in the blade mates up correctly with the seating in the shaft



- to make sure that the blade has been fitted so that it turns in the direction of the arrow on the machine (blade guard).
14. Position the flange on the shaft again, taking care to ensure it is positioned correctly and that the shaft pins are fitted in their related holes in the flange.
15. Replace the flange, tightening the Allen screw again.
16. Position the flat spanner (A) so that the part which does not engage with the flange rests against the bottom part of the head (fig. 17), effectively preventing it from turning.
17. Keeping the spanner in position, fit the Allen key (B) in the Allen screw and tighten it by turning clockwise.
18. Close the guard (2) again and tighten all the Allen screws.
19. Reset the emergency pushbutton, pulling it outwards.
20. Switch the power to the electrical cabinet back on again.
21. Switch the blade on and check that everything is in order (balance, noise, etc.).



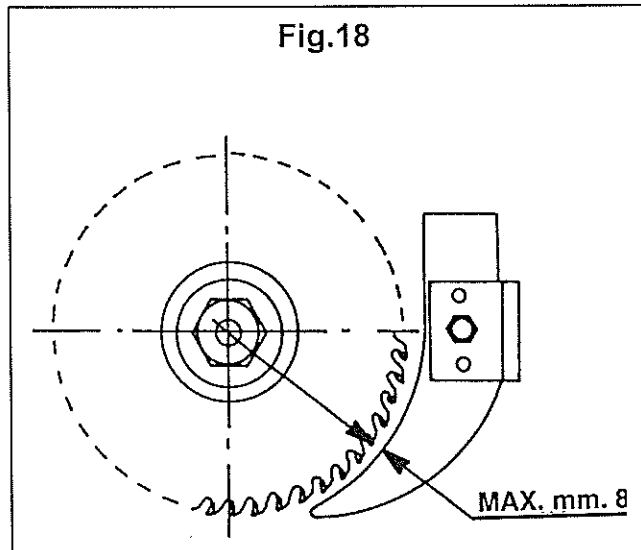
11.10 Adjusting the riving knife

The riving knives must be selected and fitted in accordance with the instructions set out in the instruction manual.

The machine has been designed for use with a blade having the sole maximum diameter of 250 mm, down to a minimum of 240 mm. As the blade gradually wears down due to use and sharpening, the distance between the riving knife and blade increases (fig.18).

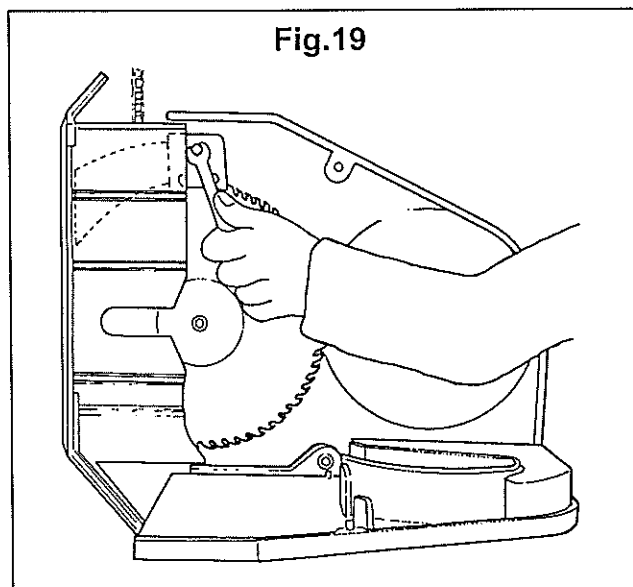
The riving knife has been fitted in the factory in such a way that it requires no adjustment for use within the permitted range of diameters, and in any event, so as to have a maximum distance of 8 mm from the blade.

To modify the factory setting, proceed as follows:



WARNING! It is absolutely essential to carry out the isolation procedure described in section 11.1 before carrying out any work involving the blade and requiring the removal or disabling of any safety devices.

1. Carry out the isolation procedure described in section 11.1.
2. Press the mushroom-shaped EMERGENCY pushbutton on the control panel mounted on the cross beam.
3. Make sure that the saw-head assy is positioned for vertical cuts, turning it using the related handles if it is not.
4. Make sure that the saw-head assy is in its idle or "BACK" position.
5. Open the guard using the related Allen key supplied in the tool kit with the machine.
6. Slightly slacken the riving knife lock screws (fig. 19).
7. Adjust the riving knife so that the distance between riving knife and blade does not exceed 8 mm.
8. Tighten the riving knife lock screws.
9. Close the guard, tightening all the Allen screws.
10. Reset the emergency pushbutton, pulling it outwards.

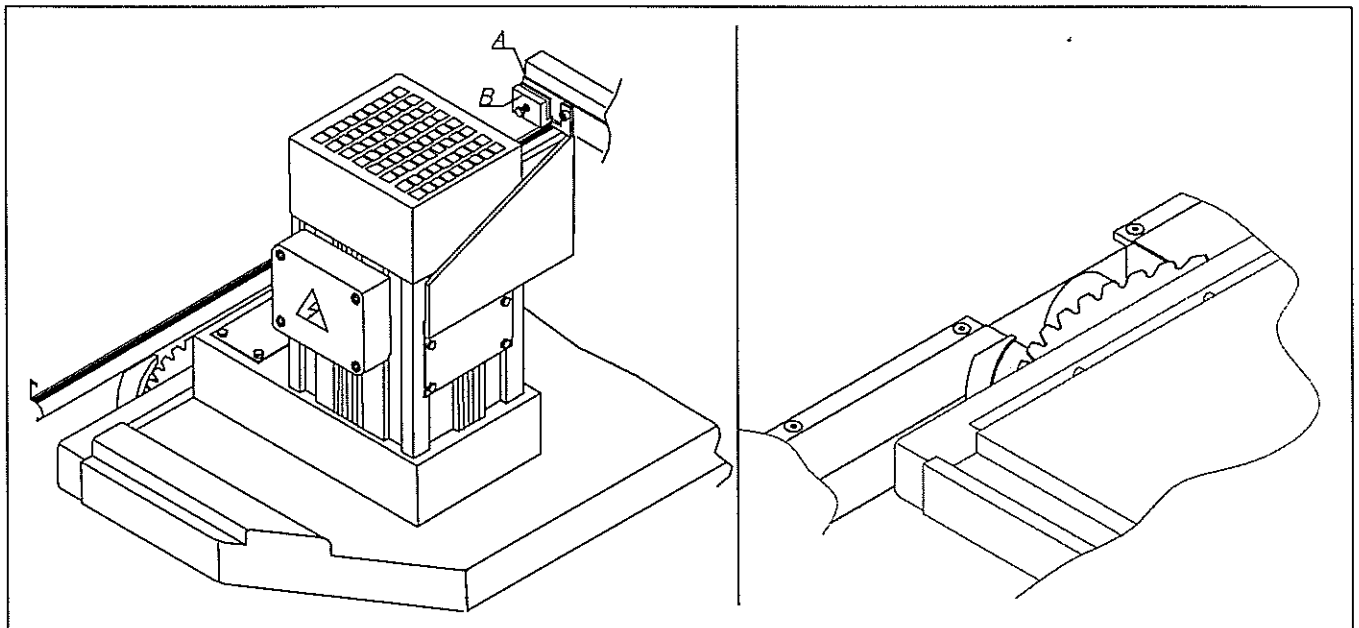




11. Switch the power to the electrical cabinet back on.

11.11 Trimming of the base blocks' plastic slabs

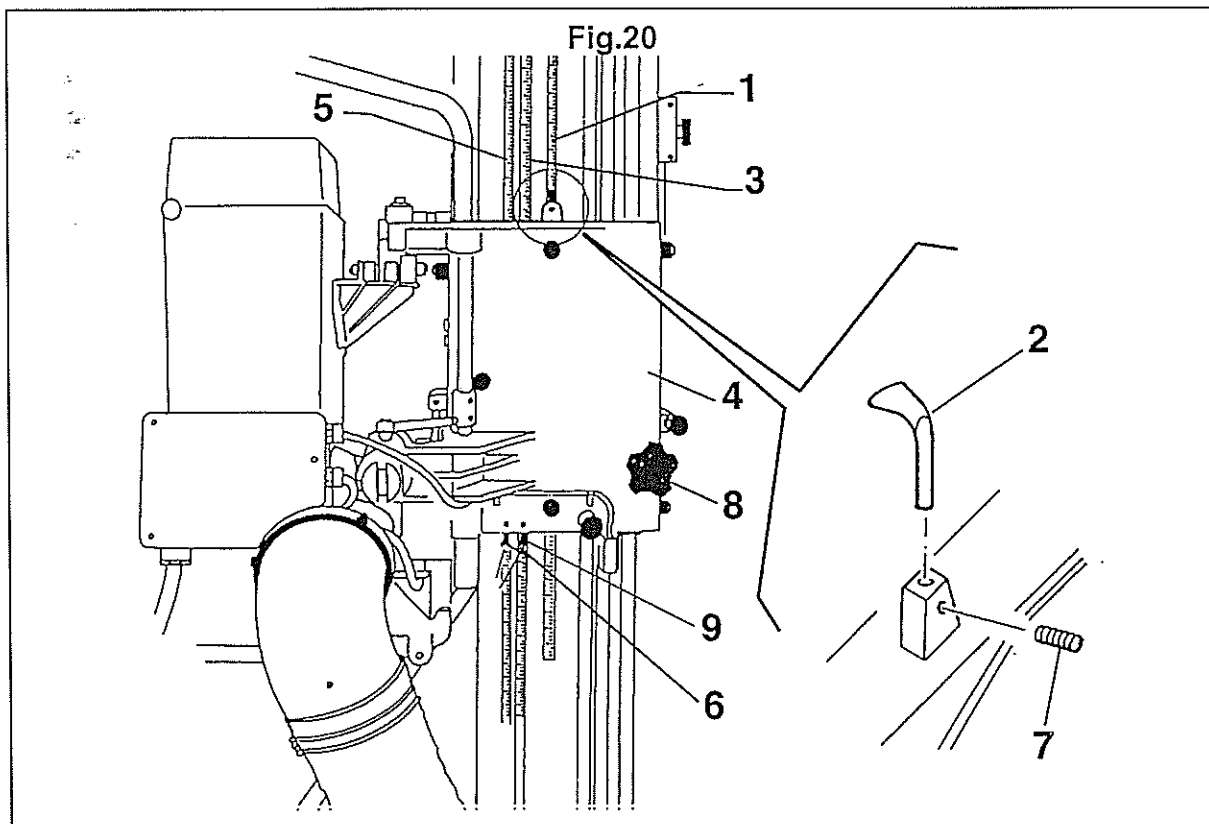
- * This operation should be undertaken after the complete assembling of the machine and its perfect level positioning.
- * Positioning of the machine for horizontal cutting.
- * Setting the blade to align with a band and skimming it with the tooth.
- * Setting clamp "B", which limits the cut, on the plate of guide "A" (see drawing below).
- * On machines of size 4200 or 5300, the clamp should be removed from the top guide on the frame. On other machines it is located in a box.
- * Setting the blade to skim the plastic on the block.
- * Withdrawing the blade.
- * Lowering the carriage by 1 or 2 millimetres (refer to the measurement on the metric ruler).
- * Trimming: how to make a cut.
- * If any block is not completely smooth after the first cut, lower the carriage by another millimetre and repeat the cut.
- * When all the blocks are smooth, repass more times at the same measurement to obtain an improved finish.
- * For trimming short pieces, follow the same procedures as for the base blocks.
- * Remove clamp "B" from plate "A".





11.12 Adjustment of measurement indexes for horizontal cuts

The machine is equipped with three metric rulers for the readings of horizontal cuts. All of these rulers are located on the front of the beam. Two rulers (3) and (5) are inserted in a special profile and the third (1) is stuck to the beam. An adjustable index corresponds to each of these rulers. The one on the right (attached to the beam) is used with the fixed index (2) on the upper part of the aluminium carriage (4), and is intended for the measurement of relative dimensions of cuts to take place near the resting plane of the aluminium blocks. The central ruler (3), to be read with the index (9) placed on the lower part of the of the aluminium carriage, is to be used to measure the dimensions of horizontal cuts to take place near the high part of the machine. The ruler (5) on the left is to be used for measuring horizontal cuts that begin from the resting plane formed by the SHORT PIECE DEVICE.



Adjust the indexes of the respective metric rulers. Proceed as follows:

1. Carry out the machine isolation procedure as described in section 11.1.
2. Turn over the head so that it is positioned to make horizontal cuts
3. Shift the cutting head down
4. Push the head forward using the handle
5. Holding the head forward, pull back the blade cover with your other hand until the blade is uncovered
6. If necessary, further lower the cutting head until the blade is resting on an aluminium block



7. Lock the head in this position using the grip (8) on the lower right side of the aluminium carriage
8. Check if both indexes, upper (2) and lower (9) corresponding with the two metric rulers (1) and (3), indicate "0" on each ruler

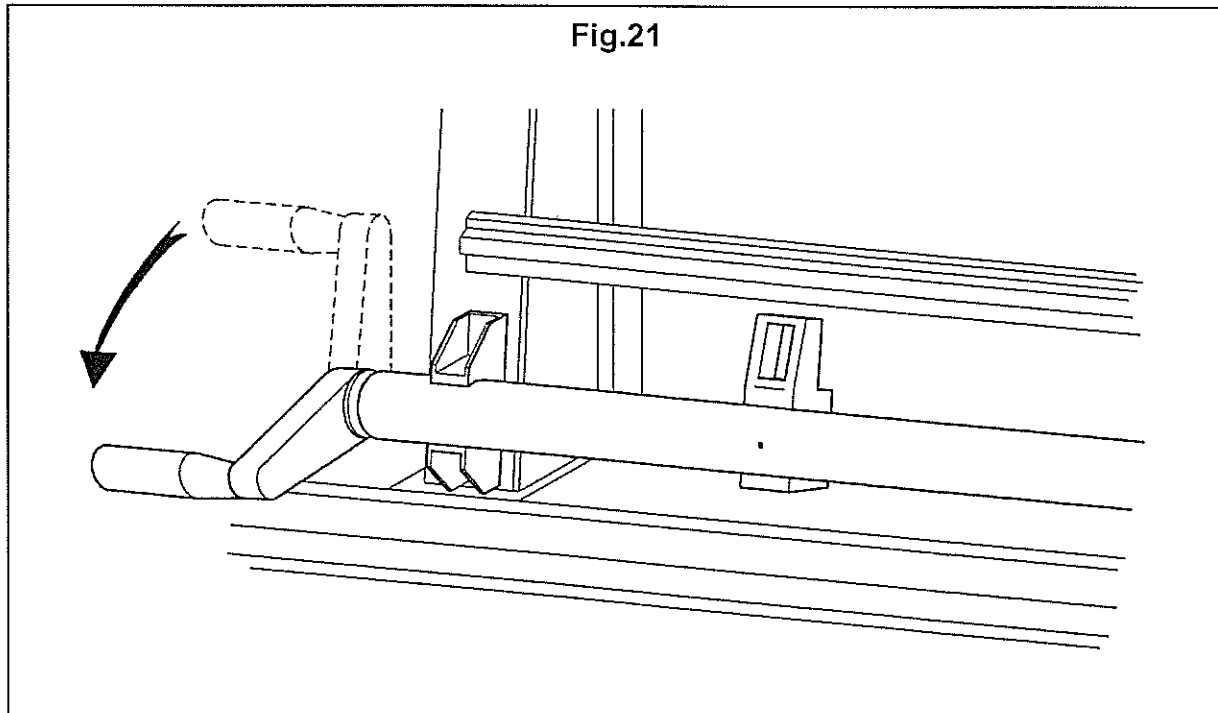
If not:

9. Loosen the dowel (7) that fastens the indexes, with a 2mm socket wrench
10. Shift the indexes so that each corresponds with "0" on the rulers
11. Re-tighten the index dowels
12. Pull back the handle to replace the cutting head in the resting position
13. Loosen the lock grip (8) of the carriage

The same adjustment must be made to the relative index of the short piece resting plane

14. Turn over the short piece device
15. Move the cutting head near to the resting plane of the short piece device and repeat the same steps as above.

After adjusting the index for the short piece plane, return the device to the rest position and turn the turn-over handle so that it is horizontal (fig. 21)) so that it does not protrude beyond the vertical support plate (the one made of plastic laths)



Not replacing either the plate or handle in the rest position risks incorrect placement of the panel and cutting the handle itself.

After use, the short piece device must always be returned to the rest position.



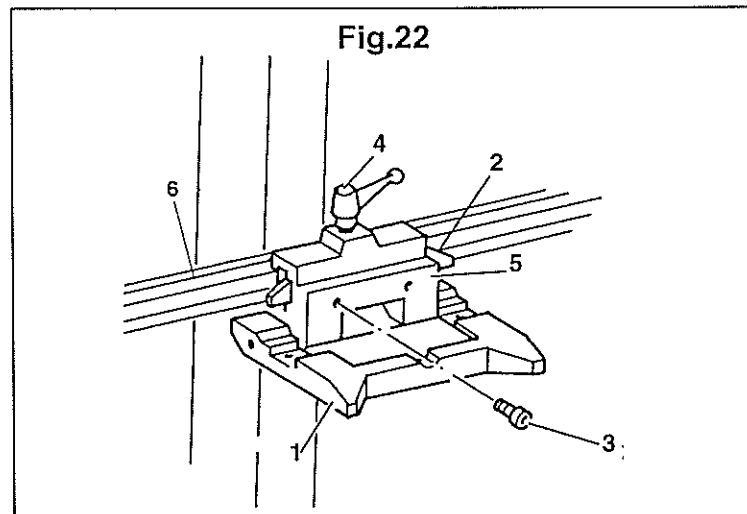
11.13 Adjustment of stop indexes for vertical cuts

WARNING! Before making these adjustments, it is necessary to have first read and understood the whole of chapter 12 "OPERATING THE MACHINE".

On the left side of the framework there is a rod (6), fig. 22, attached with a sliding head. A ruler is glued to the rod. In this case too, it is necessary to adjust the index to match the "0" point of the vertical cut.

The "0" point for the vertical cut corresponds with the blocking point of the beam and is indicated by 2 red stickers on the upper slide guide

1. Lock the beam at the "0" point of the vertical cut using the block pedal on the blocking bar (black).
2. Turn over the cutting head so that it is ready to make vertical cuts
3. Load a length of panelling of at least 120 x 120 cm, resting it on the aluminium blocks
4. Turn over the stop (1) of the stop unit and position it so that it indexes a number on the metric ruler, ie: 20 cm



5. Block the stop by acting on the locking lever (4) on the stop.
6. Bring the panel against the RH side of the stop (1)
7. Lift the cutting head until the blade is above the panel
8. Start the blade motor
9. Bring the saw-head assy into the work position
10. Make the cut by pushing the cutting head in a downward motion
11. Turn off the blade motor
12. Return the cutting head to the "BACK" position
13. Take the freshly cut panel and measure the width at the midpoint of the panel between the cut and the stop: if you correctly locked the stop at 20 cm the strip should be 20 cm wide. If your measurement is different than the imposed measurement, then you must adjust the index as follows:

Absolutely do not move the head from the position in which it had been locked in order to make the cut

14. Loosen the socket-head screws (3) on the slider (5) of the stop
15. Move the index (2) to the right or left, based on the difference shown between the imposed measurement and the actual cut measurement: the index should be registering the same measurement as that of the freshly cut panel that you just measured
16. Tighten the two socket-head screws.



If your machine is equipped with a SUPPLEMENTARY STOP, that is, another bar with a stop positioned slightly lower than the first bar you used, then it is necessary to prepare it in the same manner as the steps above.

11.14 Electric shifting frame

The shifting frame is a device that makes it possible to avoid cutting the supporting laths while making horizontal cuts. The unit is at rest when held in the UP position by the springs located at the rear of the frame.

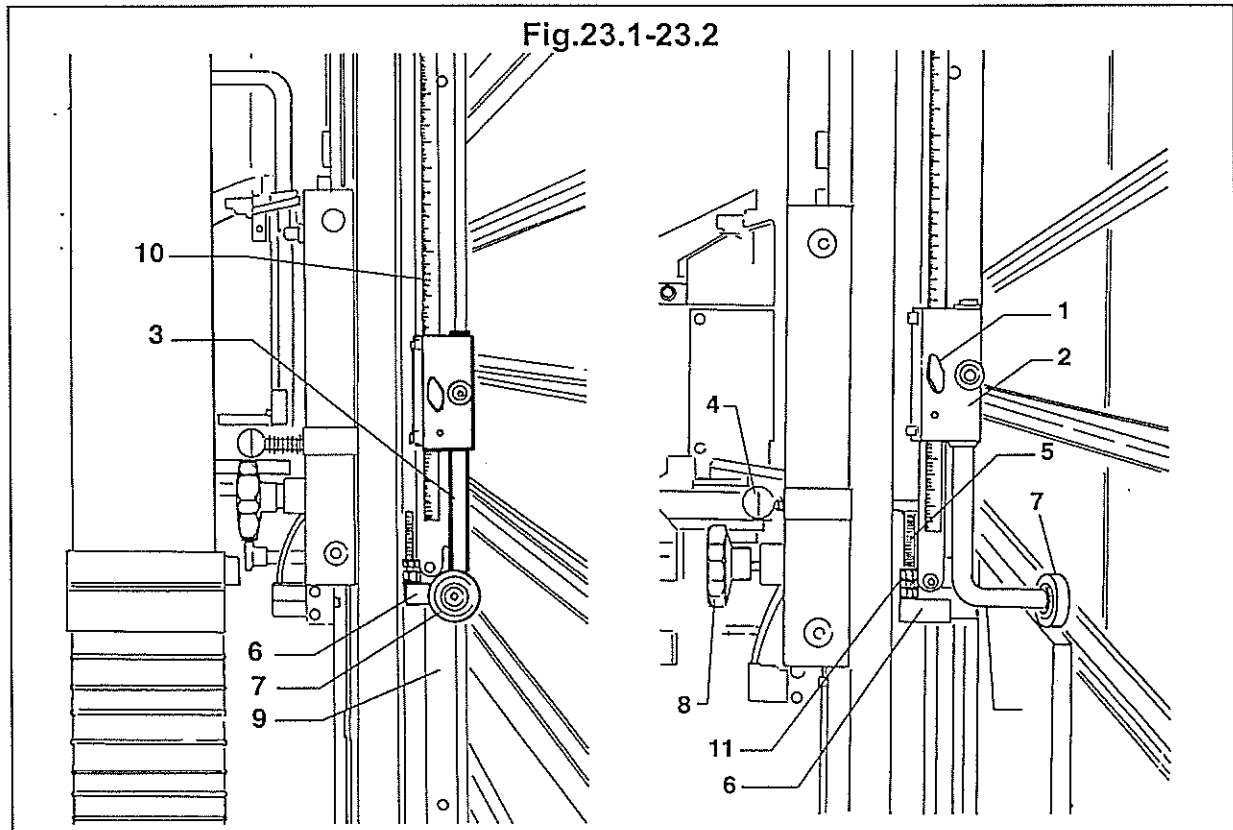
The electric shifting frame comes into operation automatically when the blade is started, and the proximity limit switch situated in the box at the top of the aluminium carriage of the cutting unit, is positioned on the protrusion of the cam shaft fixed on the front of the cross beam. The movement of the unit stops when the external limit switch on the cylindrical cam of the geared motor, fixed on the rear of the frame, is no longer pressed.

NB: Operation of the shifting frame is subject to start-up of the blade.

The rest state is restored when the proximity limit switch is no longer on the protrusion of the cam shaft and the blade is re-started.

The unit moves into the rest position automatically when the saw-head assy is brought from the horizontal cutting position to the vertical cutting position.

11.15 Index regulation of horizontal strip cutting device



This device is found on the right side of the beam, and consists of a zinc guide (5) mounted on the carriage, a sliding, rotating stop (2) bent at 90° with a bearing (3) (fig. 23.1).

To fix the height of the strips to be cut you must:

1. Perform the isolation procedure described in section 11.1
2. Load a panel of at least 120 x 120 cm, resting it on the support table formed by the aluminium blocks
3. Turn the head over in position for making horizontal cuts
4. Shift the cross beam towards the left until the saw-head assy is outside the profile of the panel
5. Loosen the grip (1) on the sliding stop (2) of the strip cutting device
6. Slide the stop (2) with the metric ruler until you can read the desired measurement
7. Block the grip (1)
8. Slide the head until it is located above the upper part of the panel to be cut
9. Rotate the rotating stop (2) until the bearing (3) is near the resting plane
10. Slowly keep moving the carriage downwards until the bearing comes to rest on the upper edge of the panel
11. Block the carriage with the hand-wheel (4)



12. Turn the bent rotating head until it returns to its original position (outside of the panel) (fig. 23.1)
13. Make a new cut to verify, following the directions set out above. Repeat these operations until reaching the desired degree of precision.

WARNING! Before making these adjustments, it is essential to read the instructions chapter 12 "OPERATING THE MACHINE".



12. OPERATING THE MACHINE



12.1 How to operate the machine

WARNING! Never forget that woodworking machines are dangerous due to the speed and shape of the cutting tools used. Consequently, never underestimate the danger of the risks connected with using them and always concentrate fully on your work!

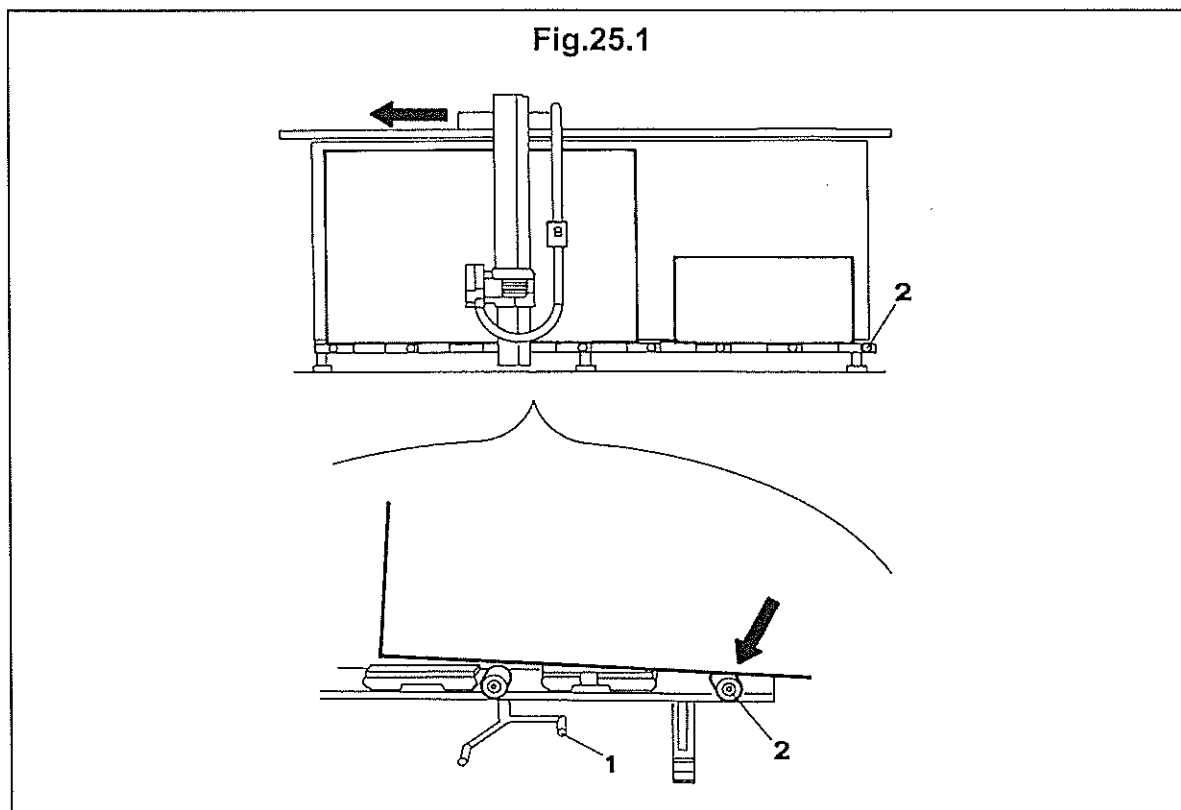
All persons directed to use and maintain the panel saw must first read the instruction handbook, especially the chapter containing the safety instructions (chapter 9. "ADVICE FOR SAFE USE AND MAINTENANCE - RECOMMENDATIONS", and section 11.8). It is recommended that the person in charge of safety at the company obtains written confirmation of the above from the persons in question.



WARNING! All movements of the mechanical parts involved in cutting operations must be made manually by the operator.

Positioning of the panel and the cutting unit in the desired cutting positions must be effected manually.

12.2 Loading the panel

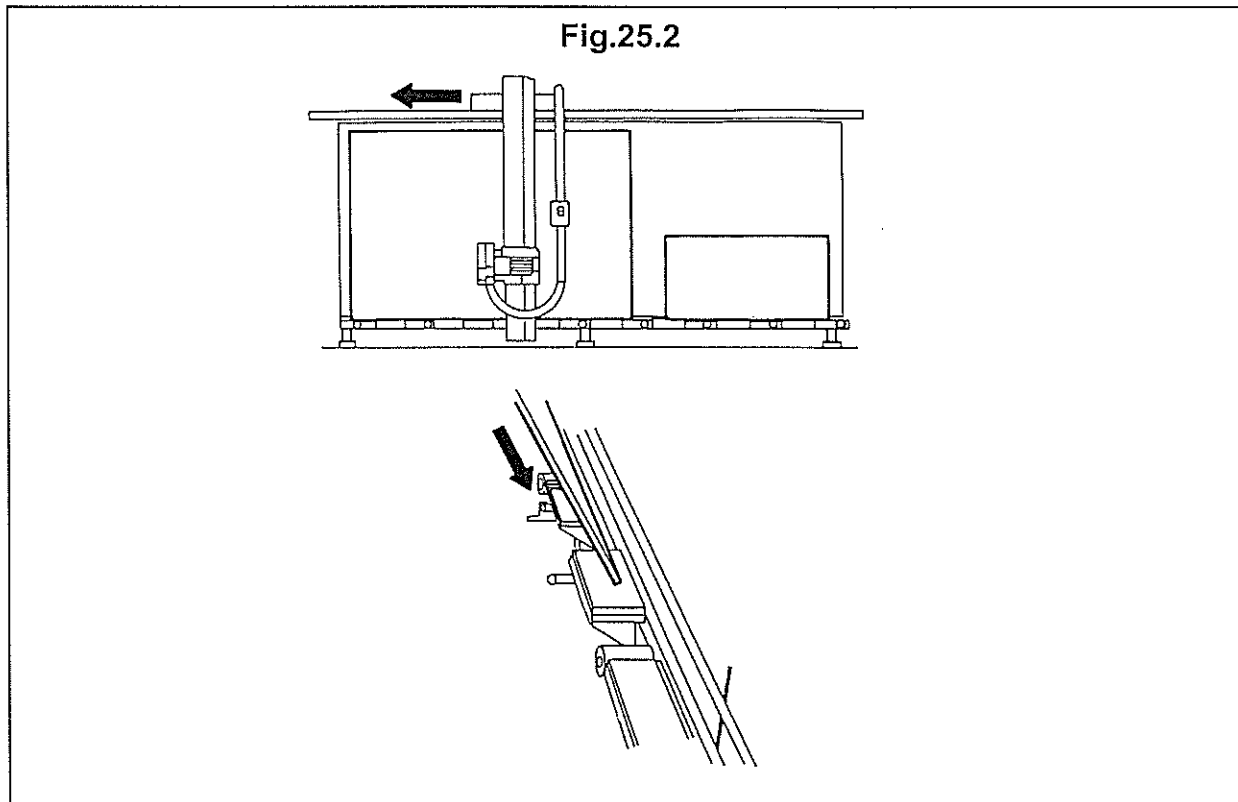




12.2.1 Loading the panel

Large panels are generally loaded from the right-hand end of the frame.

1. Make sure that the short piece device is in its idle position, and that the handle for turning it over is in the horizontal position (see fig.21).
2. Raise the wheels pushing your foot down on the left-hand part of one of the pedals (1) located on the bottom part of the frame.
3. Move the cross beam to the left-hand end of the frame.
4. Take a panel from the store or warehouse (using gripping or lifting means that reduce the effort required) and rest it vertically on the first wheel (2), fig. 25.1, at the right-hand end of the frame.
5. Push the panel along the frame, sliding it along the wheels and rest it against the table of the frame formed from plastic strips.
6. When the panel has reached the correct position, disable the wheels by raising the pedal, following the opposite procedure to that in point 2.
7. Make sure the panel is resting stably on the aluminium blocks and front frame.



The panel can also be loaded from the front (fig. 25.2). In this case carry out the operations described in points 1 to 4 above. After placing the panel on the bottom (aluminium blocks) and front frame (plastic strips), disable the wheels by proceeding as described in point 6, and make sure the panel is resting stably.



12.3 Making cuts

WARNING! Never place your hands, other parts of the body or objects near the saw-head assy during cutting.

Risk of being drawn into the machine!

Risk of injury!

DANGER! RISK OF INJURY!! The blade is protected by a mobile guard which prevents fingers or other parts of the body from coming into contact with the blade while the saw-head assy is in its "back" position.

As soon as the saw-head assy starts moving forwards, this guard moves as far back as the head moves forwards.

At this point there is nothing to stop parts of the body coming into contact with the blade.



Before carrying out any cutting operation, make sure that:

1. the blade motor is switched off;
2. the panel is resting firmly on the bottom table (aluminium blocks) and vertical table (wooden strips) or on the short piece device;
3. the sliding wheels are down;
4. the sawdust extraction system connected to the machine is operating;



WARNING! Before performing cutting operations, it is mandatory to have read all the preceding paragraphs in this chapter and chapter 11.

WARNING! Keep the hands and other parts of the body away from the saw-head assy, and do not cut pieces that are smaller than indicated in chapter 7.

12.3.1 Vertical cuts (from top to bottom)

To perform cuts the operator must:

A. Stand on the left of the cutting unit to begin cuts which start at about head height, so that you can use your right hand comfortably to operate the upper or lower lever (hinged) of the handle to bring the saw-head assy into the FORWARD position, and to push the cutting unit down.

B. Stand on the left of the cutting head to make cuts which start at points from which the handle for bringing the saw-head assy into the FORWARD position cannot be comfortably reached and operated. For cuts of this type, the first part of the cut is made by sliding the cutting unit downwards, by gripping and pulling the rubber suction hose downwards. Once a suitable height has been reached from which to operate the knob comfortably, complete the cut as described above.

1. position the saw-head assy so that the axis of the blade is parallel to the ground
2. make sure the saw-head assy is in the "back" position
3. set the size to be cut, in the following way:
 - 3.1 the machine can be used to make vertical cuts by locking the cross beam in fixed cutting points. The fixed cutting points are one meter apart. They are marked by red stickers affixed to the upper guide and/or at the point at which the stops on the lower





rail coincide. The "zero" point, i.e. the point from which the reference for the horizontal stop starts, is marked with two stickers.

3.2 The stop for horizontal cuts makes it possible to select measurements from 0 to 1000 mm. Locking the cross beam in the "zero" point, it is thus possible to make cuts in pieces with a length of up to 1000 mm.

3.3 If you have to make cuts with measurements exceeding 1000 mm, operate as follows:

3.3.1. use the stop to select a measurement of less than 1000 mm

3.3.2 shift the cross beam to the cutting point which enables the desired measurement to be obtained (The cutting points are marked by red stickers affixed to the upper guide and/or at the point at which the stops on the lower rail coincide.)

3.3.3 EXAMPLE: to cut a piece 1350 mm in width:

a. move the stop to the 350 mm measurement

b. move the cross beam to the first cutting point to the right of "zero": 1m will thus be added to the measurement set by the stop.

For a measurement of 2350 mm, it would be necessary to move the cross beam by two cutting points from "zero".

4. lock the cross beam in place using the pedal located at bottom right.

5. move the saw-head assy above the panel

6. start the blade

7. insert the saw-head in FORWARD position using the upper or the lower lever of the handle

8. pull the saw-head assy down using the handle on it or the rubber hose (if the cut started at the top)

9. continue pushing the head down until it reaches the end of its travel (the cutting unit strikes against the end stop)

10. pull the head back up, once again using the handle

11. Switch off the motor

12. Remove the piece cut.

WARNING! Never cut excessively thin pieces (long and narrow) since their stability at the end of the cut cannot be relied upon.

WARNING! Keep the hands and other parts of the body away from the saw-head assy, and do not cut pieces that are smaller than indicated in chapter 7.

When cutting pieces the dimensions of which are close to the permissible minimum, proceed as follows:

- start the cut in the usual way;
- when the blade has reached head height, grip the handle and push the head down;
- when the cut reaches leg height, support the piece being cut by holding it with your left hand at chest height;
- complete the cut in this position.

12.3.2 Horizontal cuts (from left to right)

WARNING! When cutting thin strips, the strips may be dragged by the cutting unit and/or may fall.

Putsch-Meniconi S.p.a.

Via Irlanda, 1 Loc. Bellavista - 53036 Poggibonsi (SI)

Tel. 0039-577-90311 - Fax. 0039-577-979335 E-Mail: info@putschmeniconi.com



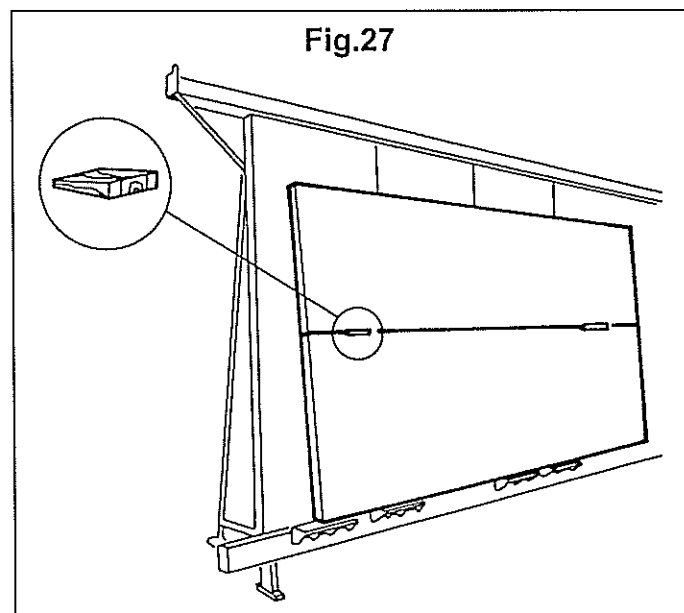
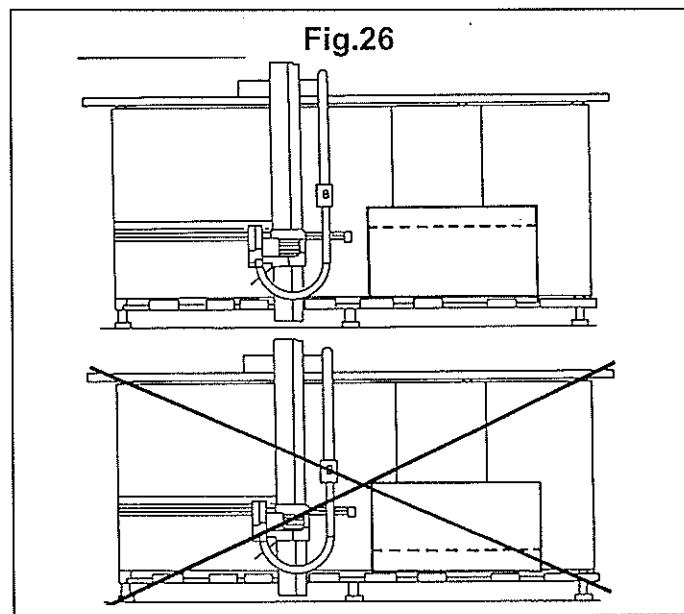
As a general rule, horizontal cuts should be made so that the smaller part of the panel left after the cut is on the top (fig. 26).

This is even more important when you have to cut thin strips that are only a few centimetres thick.

The machine is fitted with a riving knife that prevents the panel from coming into contact with the body (that is to say the non-cutting part) of the blade. This may not, however, be sufficient when cutting very thick panels with a large surface area. In these cases it is advisable to fit a number of spacers (fig. 27) with the same thickness as the blade teeth to prevent the aforementioned phenomenon.



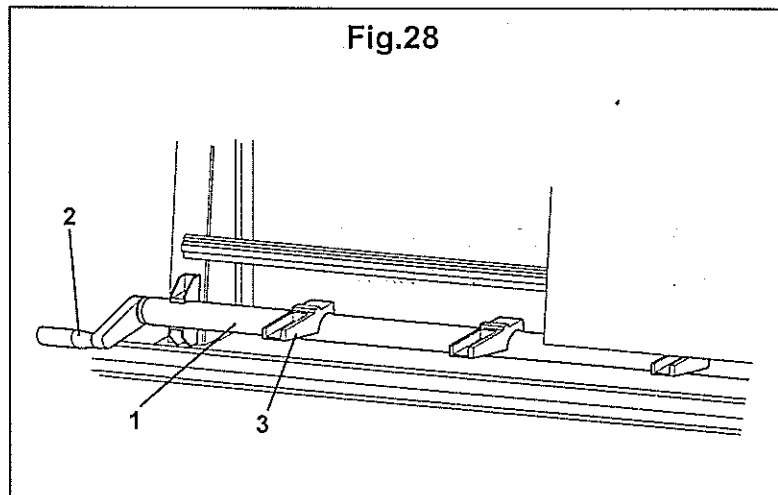
WARNING! Keep the hands and other parts of the body away from the saw-head assy, and do not cut pieces that are smaller than indicated in chapter 7.





12.3.3 Cutting using the short piece device

The rail on the short piece device (1) fig. 28 can bear a maximum load of 6 kg/m. Take care not to place pieces forcefully on the rail to avoid knocking it out of alignment. The left-hand part of the rail can be flipped by gripping one of the plastic support brackets (1) and turning it downwards. The cutting procedures that should be followed are the same as those described in sections 12.3.1 and 12.3.2.



WARNING! Since small pieces are being cut, take care never to place your hands close to the blade to support the pieces being cut. Use equipment such as clamps to do this.

WARNING! Keep the hands and other parts of the body away from the saw-head assy, and do not cut pieces that are smaller than indicated in chapter 7.

IMPORTANT! After using the short piece device, always turn it to the rest position and be sure to restore the handle to the horizontal position, or a position parallel with the pipe on which the short piece device supports are fixed (fig. 21).

WARNING! If the handle is not restored to the rest position it will project beyond the support table formed by the wooden strips. If the handle is left sticking out in this way, there is the risk that the panel will not be correctly supported on the table and the handle could be cut, with the consequent danger of breakage or splintering of the blade and handle, and projection of fragments.

12.3.4 Cutting openings/windows

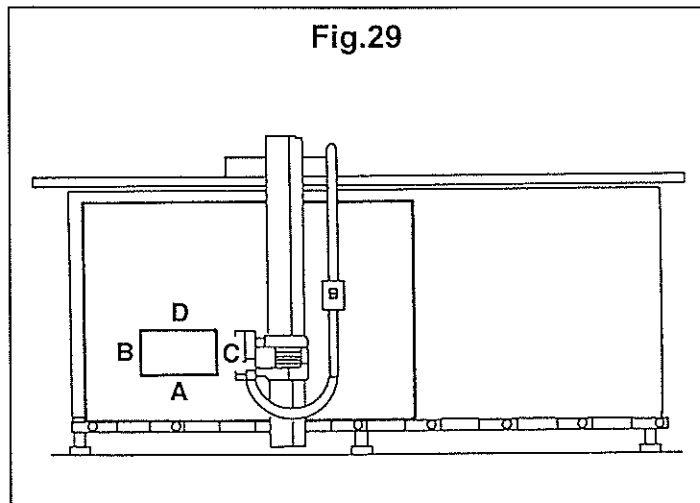
The SVP 133 can also be used to cut rectangular or square openings in a panel.

WARNING! A safety device needs to be disabled to carry out this operation: the riving knife! It is therefore necessary to pay the maximum possible attention to the operations being carried out, which should only be entrusted to trained and experienced personnel.

Follow the procedures for horizontal and vertical cuts detailed in sections 12.3.1 - 12.3.2 - 12.3.3 while however taking careful note of the following point.



WARNING! Unlike normal cuts, in this case the cut is not started from outside the panel. One should therefore be careful of the fact that once the cutting unit has been positioned and locked in the point required, moving the saw-head assy forwards will immediately bring the blade into contact with the panel to be cut. The danger implicit in this situation must be taken into due consideration.



It is advisable to carry out the cuts in the following order (fig. 29) :

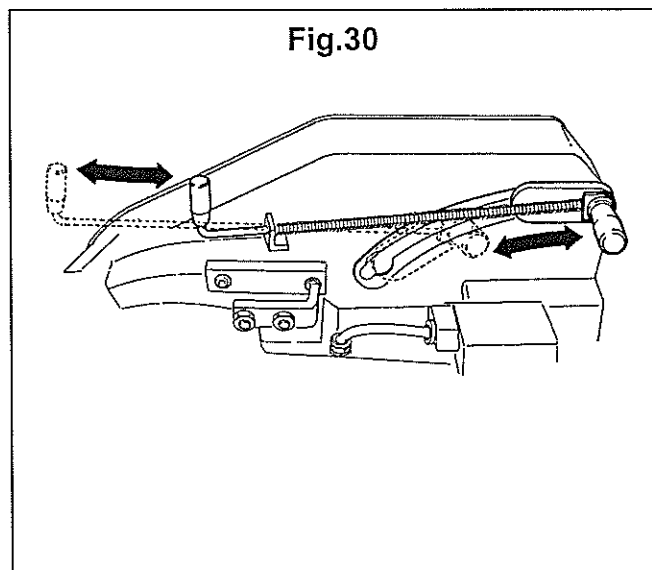
- 1st - side A
- 2nd - side B or C
- 3rd - side B or C
- 4th - side D

It is also advisable to fit spacers in each cut immediately after it has been made to increase the stability of the window to be removed.

When performing cut D, make sure that the window cut does not fall at the end of the cut.

Cutting procedure:

1. Position the cutting unit as described in sections 12.3.1 - 12.3.2 - 12.3.3.
2. Start the blade.
3. Move the riving knife back (fig.30) holding the knob (1) and pulling towards you. In this way the support (2) connected to the knob slides back, as does the riving knife. To keep the riving knife in the back position it is necessary to keep hold of the knob.



WARNING! At this point, the riving knife can no longer fully perform its safety functions, i.e. protecting against projection and against crushing of the blade against the top and bottom of the panel to be cut (horizontal cuts).

4. Insert the saw-head assy by means of the handle. When the saw-head assy has reached the "FORWARD" position, you can release the knob for moving the riving knife back. A spring-loaded device will return the riving knife forwards.



WARNING! The riving knife will rest on the panel. If you do not want the riving knife to rest on the panel, the knob must be held back until a sufficiently long cut has been made to cause the riving knife to enter the slit produced by the cutting action of the blade.

5. Make the cut.
6. Repeat the same procedure for all the other cuts that are necessary to cut the desired aperture in the panel.

After performing the desired cuts:

7. Make sure that the riving knife is in its forward position: To do this, simply make sure that the support on which the release knob is mounted is in its forward position. For increased safety, try pushing the knob forwards to make sure it is in its end-of-travel position.



13. TROUBLESHOOTING

During the use and maintenance of the machine problems can occur, which can sometimes be solved by the operator or specialized personnel.

A basic list of these problems and how to solve them is provided below.

If you have any doubts, do not operate or carry out any work on the machine and contact your retailer or the manufacturer.



WARNING! Follow the safety instructions in chapter 9 before carrying out any work on the machine.

13.1 Vertical cutting

13.1.1 The blade will not start

Problem/cause	Corrective action
a-the saw-head assy is not in the correct position	-move it to the correct position
b-the cross beam lock device is not in the correct position	-engage the lock device, positioning it in one of the fixed cutting points
c-the motor will not turn	-the main switch is in position "I" -see "a" and "b"
d-the motor is burnt out	-change it (technical assistance service)
e-the motor turns but the blade does not	-belts broken: renew (authorized personnel)
f-the limit switches are not operating	-check the operation of the limit switches (authorized, skilled personnel)

If in doubt call the assistance service

13.1.2 The cutting unit does not slide up/down smoothly

Problem/cause	Corrective action
a-the carriage is locked	-turn the lock knob
b-one or more bearings are damaged	-change the bearings (technical assistance service)
c-dirt has entered the cross beam where the counter weight slides	-clean out using compressed air or specially shaped brushes



13.2 Horizontal cutting

13.2.1 The blade will not start

Problem/cause	Corrective action
See points a, c, d, e and f, section 13.1.1	
a-the cross beam lock device is engaged	-release it

13.2.2 The cross beam does not slide smoothly

Problem/cause	Corrective action
a-one or more bearings in the top horizontal carriage are damaged	-change the bearings (technical assistance service)

13.3 Sliding

The sliding action of the saw-head assy is stiff	
Problem/cause	Corrective action
a-the bushes are dirty or damaged	-clean or change (technical assistance service if they need changing)
The sliding action of the blade guard is stiff or it does not return to its forward position	
a-the bushes are dirty or damaged	-clean or change (technical assistance service if they need changing)
b-the spring is dirty or damaged	-clean or change (technical assistance service if they need changing)

13.4 Faults during work

13.4.1 The blade leaves burn marks

This fault can be caused by two problems: inaccurate squaring of the blade or excessive blade wear.

Proceed as follows to solve these problems:

- a) Move the adjustment stops on the motor and head (this adjustment should be made by skilled personnel or the assistance service);
- b) change or sharpen the blade.



13.4.2 The pieces cut are not squared correctly

This fault can be caused by the fact that the cross beam guides are not perfectly perpendicular to the frame slideways.

The fault can be corrected by adjusting the bearings on the horizontal carriage of the cross beam using the eccentric pin (skilled personnel or assistance service).

13.4.3 The machine is totally out of alignment

After a certain period of time the machine can lose its initial alignment. There are a number of possible causes of this problem:

- A. The floor (on which the machine has been installed) is not in excellent condition.
- B. The machine was installed too soon for the floor to stabilize (when a new floor was laid for the machine immediately prior to installation).
- C. The anchor bolts in the feet of the machine have slackened off.

In the latter case simply tighten them again.

Whatever the case, always make sure the machine is once again level and aligned correctly as described earlier in this manual (assistance service).

13.4.4 Stiff movement of head and/or blade guard

If the (forward and backward) movement of the head and blade guard is stiff or even jammed, check that the ball bushings on the related hardened guides are not damaged and also check their related dust scrapers.

It is, however, advisable to contact the Technical Assistance Service or your Retailer to solve the problems listed above.

13.5 Advice for the customer

Remember to carefully brake the vertical carriage, using the hand-wheel, during horizontal cuts

-It is advised not to use the short piece device for overweight panels and, also, never let such overweight panels fall too forcefully: they could shear or bend the supports. The machine is ready to be put to use on a second, lower positioned support, when you use small panels that are too heavy for the short piece device.

-The machine should be kept constantly clean, paying particular attention to the sliding tracks, which must never be oiled.



14. MAINTENANCE

14.1 Maintenance of the machine

The machine comprises fixed and moving mechanical parts and electrical parts. The machine's envisaged service life is 10 years. You are advised to follow the maintenance and checking operations described below to ensure the efficiency and safety of the machine as well as that of the people and objects in its vicinity.
The operations need to be carried out at different intervals.

14.1.1 Cleaning the machine (daily)

The machine and work place must be kept clean of sawdust, shavings, pieces and anything else, which may obstruct work. It is advisable to remove sawdust deposits with brushes or similar or with vacuum cleaners, so as to reduce the dust content of the work environment to a minimum.

14.1.2 Cable and chain (weekly)

The saw-head assy is counterbalanced by a loading system comprising a multiple strand steel cable and roller chain.

Check that the cable is not frayed along its length or at either end.

Check that there are no stiff points in the chain, no encrustations and that no dust or sawdust has collected on it.

The cable must not be taut, but slack compared to the chain.

Should the cable or chain break, stop work immediately, isolate the machine as described in section 11.1 and call the assistance service. Do not use the machine again until the cable has been repaired.

14.1.3 Riving knife

The distance between the riving knife and the blade must be checked, as described in section 11.9, whenever the blade is changed or sharpened.

14.1.4 Cleaning the slideways (daily)

Keep the top slideways (top part of frame) and cutting unit slideways (on the cross beam) clean and free of any dust, sawdust etc.

Use stiff or soft brushes or dry rags.

NEVER USE DETERGENTS OR HEAVY (GREASY) LUBRICANTS.

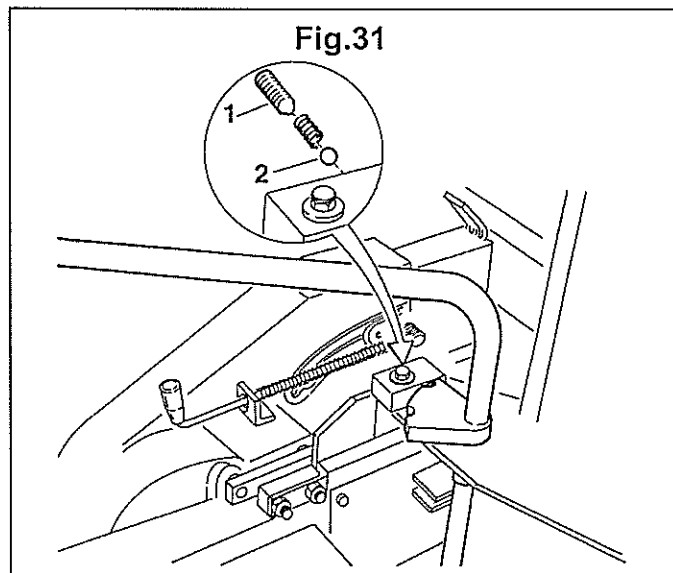


14.1.5 Locking action of the saw-head assy (weekly)

Check that the saw-head assy does not release when in its "BACK" position either under its own weight or as the result of a simple tap on the head itself or on the handle.

If the locking action is not effective

- 1- Tighten the grub screw (1) fig.31
- 2- Check that the ball (2) springs and that the operation of the handle does not require too much effort.



14.1.6 Electrical cables (weekly)

Check that all the machine's cables are in perfect condition and unaffected by cuts, stripped insulation or other signs indicating potential faults or loss of insulation.

14.1.7 Rotating action of the short piece device (weekly)

Check that the short piece device turns smoothly and effortlessly, above all when turning it back to its idle position.

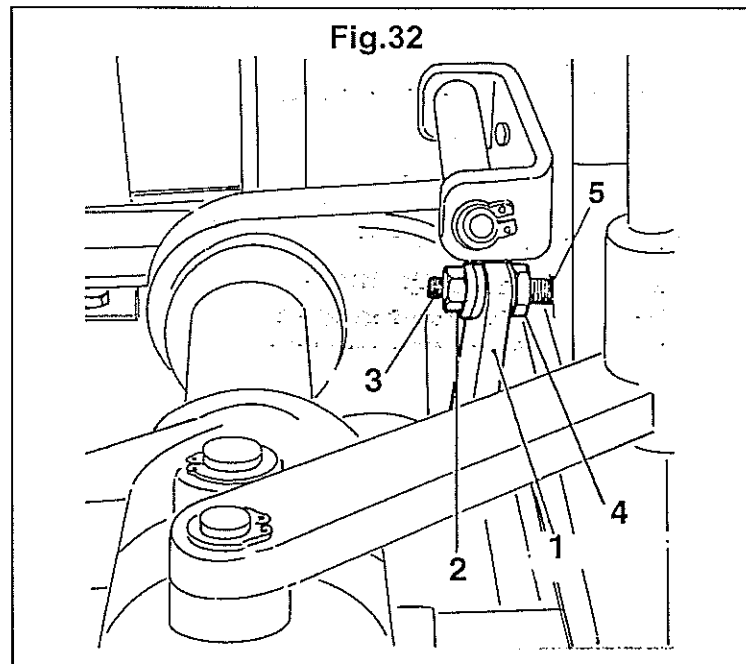
Keep the pipe zone clean around the plastic brackets in which the pipe turns.

Use silicone-based lubricants to keep it turning smoothly. **NEVER GREASE THIS AREA !!!**



14.1.8 Automatic carriage blocking for horizontal cuts

This device (fig. 32) is prepared for use only when the cutting head is turned over in the horizontal cut position. It is located on the left side of the aluminium carriage. It starts to work when, using the handle, the cutting head is pushed forward toward the panel. It is possible to adjust the blocking intensity when it seems too strong or too weak.



To adjust, proceed as follows:

1. Locate the M6 dowel (2) on the device (1)
2. Using two open-ended spanners, hold the hex screw (4) still and slacken the nut (3) by 1/2-1 turn
3. Using an Allen key:
 - tighten the dowel (2) by 1/4-1/2 turn to increase the locking power
 - slacken the dowel (2) by 1/4-1/2 turn to decrease the locking power
4. Tighten the nut again taking care not to alter the new position of the dowel.

Checking correct adjustment:

5. set the head in position for horizontal cuts
6. push the head forward by means of the handle
7. using moderate force, try to pull the cutting unit downwards:
 - the unit slides: carry out adjustment again from point 1.
 - the unit does not slide: check that the pack of cup type springs (5) is not fully compressed. If it is, reduce the compression by adjusting again.



WARNING! If excessive force is required to bring the saw-head assy into the "FORWARD" position, this means that there is excessive locking pressure on the system. In turn, this causes excessive stress on the bearing which may break as a result.



14.1.9 Trimming the plane of the short piece device (when necessary)



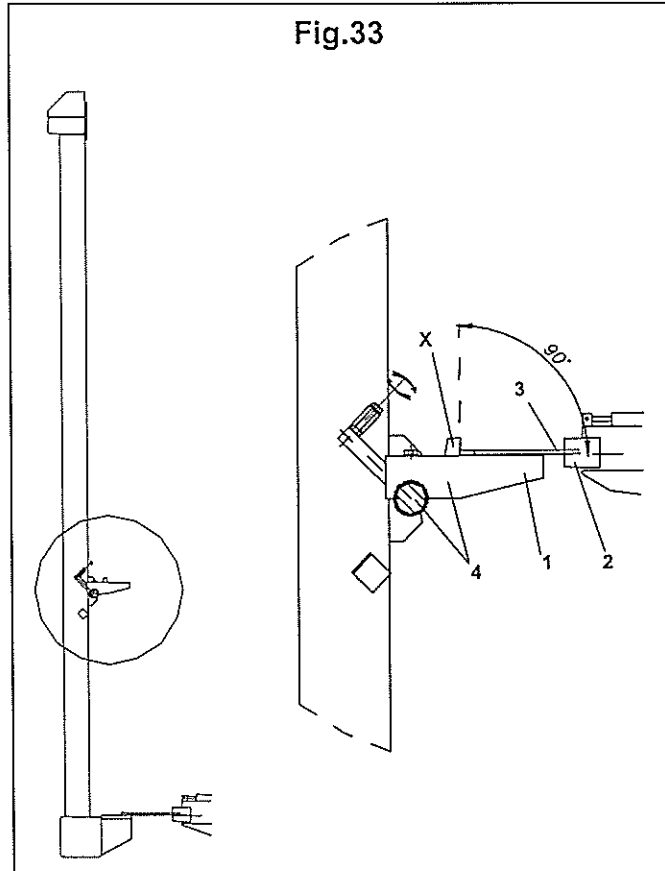
WARNING! Ensure that this operation is carried out by skilled and adequately instructed personnel.

It may occur after a certain time that cuts made are no longer perfectly square.

In this case it is advisable to trim the plastic supports that form this mechanism and the base blocks.

Do as follows (fig. 33):

1. Isolate the machine as described in section 11.1
2. Turn the short piece device to the work position
3. Move the beam to the far left of framework
4. Bring the saw-head assy to the horizontal cut position
5. Move the cutting unit so that the bottom of the blade (3) rests on the top of the plastic supports
6. Lock the cutting unit by turning the knob
7. Bring the saw-head assy into the BACK position
8. Release the carriage and lower the cutting head about 1 mm;
9. Push the cutting head forwards making sure that the blade does not touch the vertical part (X) of the support (1)
10. Start the motor of the blade and carry out trimming from left to right, pushing the cross beam very slowly
11. Make sure that all supports have been trimmed
12. If they have not, lower the saw unit again about 1 mm and repeat the operation by trimming from left to right;
13. Without releasing the carriage, adjust the lower left index which gives the reference sizes regarding the plane of the short piece device. The index must coincide with the "0" of the ruler (see also 11).



14.1.10 Blade holder head soundproofing units check (monthly)

Check that the sound-proofing panels are in good condition to avoid an increase in machine noise.



14.2 Brake

14.2.1 Blade motor brake (monthly)

The blade motor brake serves to reduce the stopping time of the blade. This time must be less than 10 seconds.

Check the time periodically. If the effective stopping time exceeds 10 seconds, the brake must be re-adjusted. To adjust, see the instructions supplied by the manufacturer.

14.2.2 Adjusting the air-gap

The air-gap must be adjusted when the braking time exceeds 10 seconds. To adjust, see the instructions supplied by the manufacturer.

14.2.3 Renewing the brake disc

When the friction disc of the brake is worn, contact the assistance service.

14.2.4 Renewing the silicon rectifier

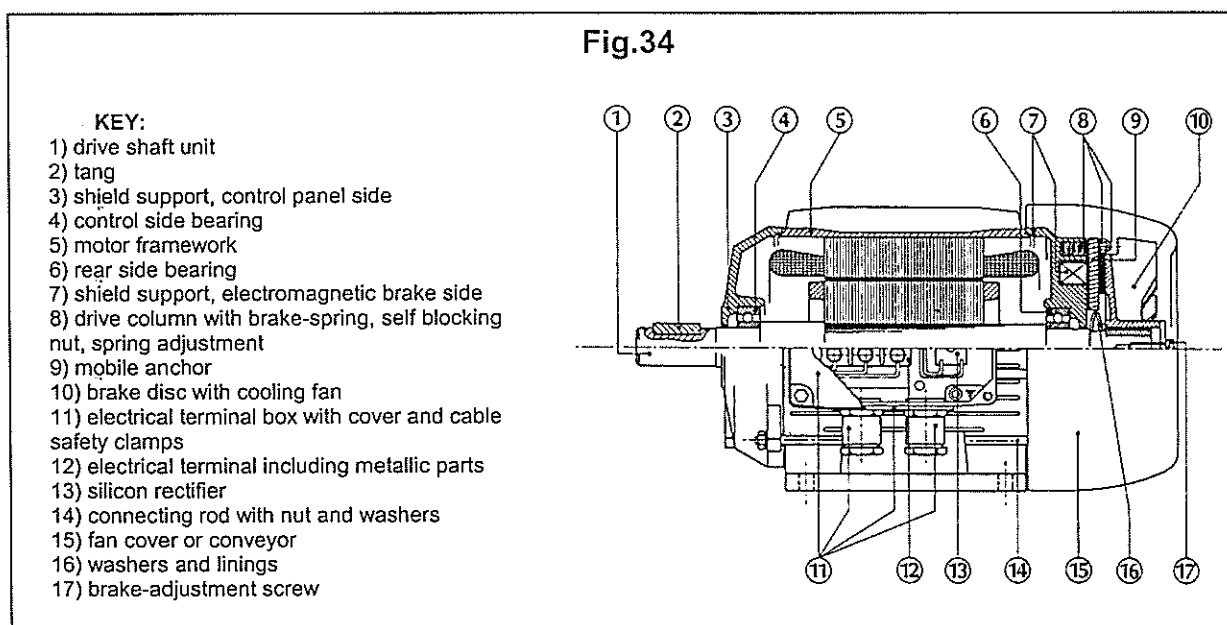


Have this operation carried out by skilled personnel!
DANGER OF ELECTROCUTION!

14.3 Automatic braking electric motors "LIGHT range"

The AUTOMATIC BRAKING electric motors in the Light range have been tested in adherence to work safety standards issued recently in some European countries. Their chief characteristic is their ability to stop the machine in less than 10 seconds with voluntarily or not voluntarily switching off the electrical supply.

The mechanical type brake has an electro-magnetic coil for direct current, the electrical supply is an alternating current from the main passing through a rectifier. Another important characteristic is that the machine's size is no greater than that of non-automatic braking motors.



ATTENTION! The motor has a braking system approved after numerous tests. Never adjust screw 17 since this resets the original value of the air-gap but does not modify the braking torque of the motor itself.

For special requirements, contact our technical department.

14.3.1 Brake disc replacement

1. Remove the fan cover (15) and unscrew the brake adjustment screw (17).
2. Take off brake disc with the fan (10).
3. With clean hands fit the new disc and screw the brake adjustment screw (17).

14.3.2 Shield support, electromagnetic brake side replacement

1. Remove the fan cover (15) and unscrew the brake adjustment screw (17).
2. Draw out brake disc (10) and washers and linings (16), unscrew spring adjustment automatic blocking nuts (8) and draw the mobile anchor (9) out of the columns.

Putsch-Meniconi S.p.a.

Via Irlanda, 1 Loc. Bellavista - 53036 Poggibonsi (SI)
Tel. 0039-577-90311 - Fax. 0039-577-979335 E-Mail: info@putschmeniconi.com



3. Unscrew connecting rods nuts and washers (14) and draw out the shield support, electromagnetic brake side.

14.3.3 Silicon rectifier KBPC 608 replacement

The silicon rectifier (13) must be replaced when the mobile anchor (9) is not attracted with a firm stroke by the shield support, electromagnetic brake side (7).

1. Before replacing the rectifier (13) check that the air-core between 7 and 9 is as shown below.
2. When connecting the new rectifier refer to the previous connection.

14.3.4 Air-core adjustment

The air-core (that is the distance between shield support, electromagnetic brake side 7 and mobile anchor 9) must be $0,4 \pm 0,5$ mm.

It is not advised to exceed the above values in order to avoid vibrations of the mobile anchor and possible burning of the coil.

It is advisable to check the air-core at regular intervals since it tends to increase, due to wear of the brake disc.

In order to bring the air-core back to the required value, bring the brake disc closer to the mobile anchor (9) then act on the brake adjustment screw (17).

Should the brake disc lining be considerably worn, in order to bring the air-gap back to the original value, it would be necessary to eliminate the linings between the two washers and the brake disc with cooling fan.



15. DECOMMISSIONING, DISASSEMBLY, DEMOLITION

15.1 Decommissioning

If the machine is to be left unused for a long period of time (e.g. holidays), it is advisable to take the following steps.

1. Remove the blade and store it in a safe place.
2. Clean the entire machine thoroughly, removing sawdust, chips and any other dirt.
3. Lightly oil the top guide and the bottom guide of the cross beam.
4. Lightly oil the chain.
5. Isolate the machine from the mains electricity supply (see section 11.1) by setting the main switch on the machine's electrical cabinet to "0" and padlocking it. The key must be removed and given to a responsible person for safe keeping.

15.2 Disassembly

The machine must be disassembled by skilled personnel (manufacturer or dealer).

15.3 Demolition

The machine is made of the following materials:

- painted, burnished or galvanized steel
- wood and wood derivatives
- plastic
- painted and unpainted aluminium
- cables, motors and electrical components
- lead (constitutes a counter weight and is located inside the cross beam).

It is recommended that you contact the relevant authorities for information on disposal and demolition procedures.



16. EMERGENCY PROCEDURES

In case of fire, normal extinguishers can be used:

- water
- powder extinguishers

As described in chapter 7, the cutting of materials which may release harmful substances is not permitted.

