



Leather Splitting Machine Model C 420

Instruction Manual

Serial No.42L0609.....



0

Important Warnings

Basic Rules

The machine is provided with guards and safety devices to prevent accidents.

In any case, due to the presence of moving components and of a very sharp knife, pay utmost attention while using and servicing the machine.

- KEEP TO THE INSTRUCTIONS FOR INSTALLATION AND USE
- DO NOT REMOVE THE GUARDS
- THE MAINTENANCE MUST BE CARRIED OUT BY SPECIALISTS WITH MAXIMUM CAUTION
- DO NOT CLEAN OR LUBRICATE MOVING COMPONENTS WITH THE MACHINE ON
- KEEP TO THE SAFETY REGULATIONS WHEN CHECKING AND/OR REPAIRING ELECTRICAL PARTS
- CARRY OUT SETTING, SERVICING AND REPAIR WORK WITH SWITCH SQ1 IN OFF POSITION
- FOR SERVICING AND SETTING DISABLE THE SAFETY MICROSWITCHES BY MEANS OF KEY SWITCH SA1 AND START THE MACHINE TO HAVE THE KNIFE, THE GRINDING STONES AND THE EMERY DUST EXHAUSTOR. OPERATING.

DURING THIS OPERATION, TO BE CARRIED OUT BY AN AUTHORIZED SPECIALIST, RED LAMP HL1 (FIG. 1 E 2) LIGHTS.

If You Have Problems

You do not manage to solve with the help of this instruction manual apply to our authorized dealer or directly to CAMOGA S.p.A., phone 0039-2-6454000, fax 0039-2-6454007.

To avail yourself of Camoga's after sales service fill in and mail the registration card included in this manual.

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Scope of the Manual

This manual permits both to new and to expert users to save time, to improve their experience and to take maximum advantage of the machine features.

The manual is conceived for a rapid retrieval of the required information.

The manual contains

- Lists with an initial point containing information without specific sequence
- Lists with progressive numbers containing the instructions for a given procedure.

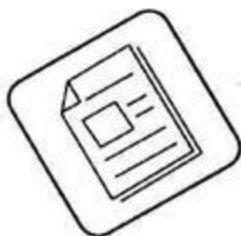
Advices

Attentively read at least the fundamental chapters of the instruction manual. Even if you are expert in the use of splitting machines, you will thus know all the features of the C 420 splitter and achieve its best performance..

- Make sure that the service personnel is perfectly trained on model C 420.
- Program in time the persons and material for routine and emergency maintenance. You will avoid loss of time and delays.
- Use only original Camoga spare parts.
- Very often a non-ideal performance is due to inadequate or poor quality material.
- Fill in and mail the enclosed registration card. You will then avail yourself of the 3 years warranty and of Camoga's after sales service..

Warranty

To benefit from the warranty and from the after sales service fill in and mail the registration card included in the instruction manual.

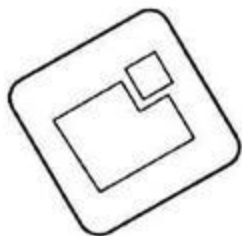


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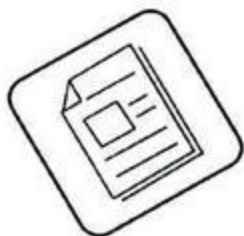
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C 420 Instruction Manual

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Description

Welcome

Before using the C 420 splitter attentively read this chapter.

It specifies the contents of the supply, describes the use of the machine and gives many other useful information.

• Welcome to C 420

Congratulations! You have purchased the Camoga C 420 splitter, a technologically advanced machine that permits an easy, accurate and economic work.

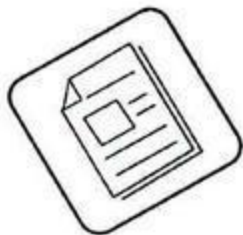
If this is your first splitter, you have made an excellent choice.

The machine is very simple in use and does not need complex servicing and maintenance.

To an experienced user the technical features of the machine assure an optimum and multipurpose use and a new quality standard.

The C 420 splitter is provided with an endless band knife running on two wheels, a grinding unit (par. 6-5) which continuously sharpens the knife, a scrap exhaustor (par. 7-5), a scrap dust filter (par. 7-5), an emery dust filter (par. 7-6) and a stock feed roll (par. 6-8).

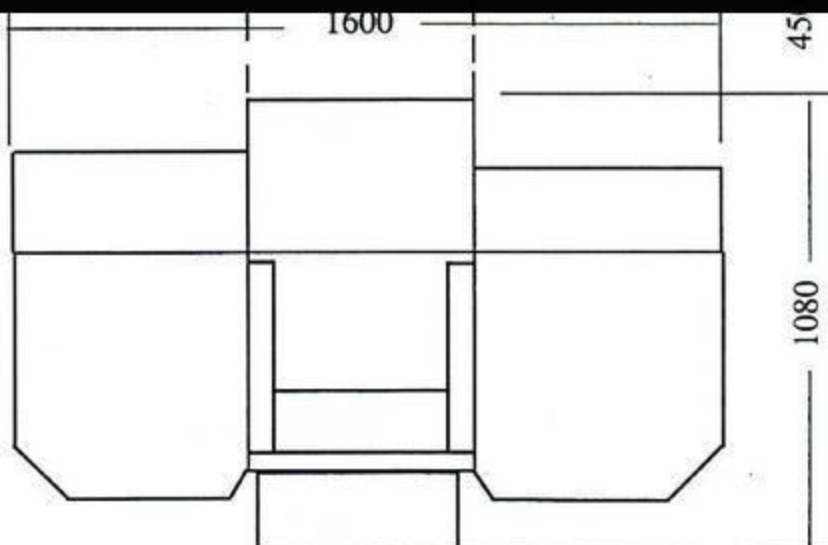
THE C 420 SPLITTER CONFORMS TO THE DIRECTIVES
89/392/CEE AND ITS AMENDMENTS.



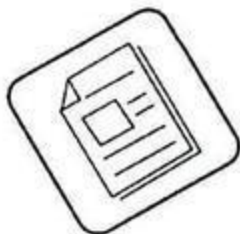
Specification

Working width	420 mm
Working height	1010 mm
Knife dimensions	0.7x50x3500 mm
Splitting thickness with driven top roll	from 0.5 to 8.0 mm
Splitting thickness with steady guide bar	from 0.2 to 8.0 mm
Minimum thickness increments	0.10 mm
Power installed	3,5 kW max
Connecting to compressed air	6-8 bar
Weight	680 Kg

Dimensions Демо-файл.
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Standards

The acoustic tests have been carried out in conformity with DLgs 277 and ISO 230-5 to measure the data required by the EEC directive 89/392 CEE.

Operative Conditions

For lack of specifications covering the machine operative conditions the tests have been carried out according to the average values of normally applied standards.

Noise level dB(A) measured at 1,55 m from the machine in operation:

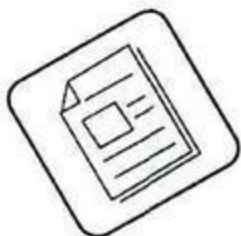
-In front of the machine	Leq dB(A) 67,7
-Behind the machine	Leq dB(A) 67,8
-On the operator	Leq dB(A) 66,8

Noise Level

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OPERATOR

1,55



Versions

C 420 H

- Electrical version
- Automatic knife shifting and positioning
- 2 feed rates (manual change by belt shift) 6 / 15 m/min.
- Mechanical splitting thickness readout
- Bottom steel feed roll
- Steady guide bar
- Optional: emery dust exhaustor
- Driven top feed roll (Option)
- Bottom feed roll pressure mechanical setting

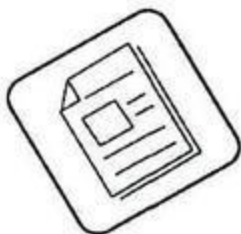
C 420 R

- Electrical version
- Automatic knife shifting and positioning
- 4 feed rates (2 manual + 2 electrical) 6, 10, 15, 22 m/min.
- Digital splitting thickness readout

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- Automatic knife shifting and positioning
- Feed rate infinitely variable from 5 to 24 m/min.
- Digital splitting thickness readout
- Driven top feed roll (accessory)
- Automatic incision device
- Bottom steel feed roll
- Steady guide bar
- Bottom feed roll pressure compressed air setting

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Accessories and Attachments Outfit

Accessories

- Top feed roll
- Loose top feed roll (C 420 H only)
- Rubber-coated bottom feed roll
- Work lamp (except C 420 H)
- Mechanical thickness gauge
- External electronic thickness gauge Thick-O-Mat

Attachments

- Tooling for equalizing and skiving belts
- Tooling for equalizing and skiving parts for wallets, bags, etc.
- Special feed table
- Split-piece remover

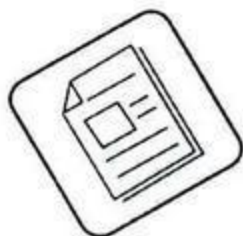
Outfit

The supply includes

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- Set of spare parts
 - #1 Dresser stick for diamond wheels
 - #2 Upper knife back guide
 - #1 Lower knife back guide
 - #2 Knife felts (sets)
- #3 Main fuse 16A
- #1 Fuse 5x20F 2A
- #2 Fuse 5x20F 0.5A **ONLY C 420 H
- 1 Instruction manual with electrical and/or electronic diagrams
- 1 Test certificate
- 1 Warranty and registration card
- 1 EEC conformity declaration

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Machine Purpose

The C 420 splitter has been designed for the purpose of equalizing and reducing the stock thickness. It is mainly used in the footwear, leather good and belt production.

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Machine Handling and Transportation

Transportation

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Warnings

- Do not leave the machine outdoors.
- Handle with caution.
- The hoist the machine remove upper cover plates C1 (fig. 1) and use the holes provided (figure beside); machine weight approx. 700 kg.
- Also a fook lift can be used
 - 1 Remove upper cover plates C1 (fig. 1)
 - 2 disconnect the safety microswitches on lateral cover plates C2 (fig. 1)
 - 3 remove lateral cover plates C2 and central cover plate C3 (fig. 1).
- Remove the protective paper and packing only at the moment of installation.

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Installation

Machine Installation

- Keep to the safety regulations.
- Do not remove or tamper the guards and safety devices.
 - Finger guard PPD on feed table PEM (fig. 1)

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Electrical Connection

ATTENTION

Execute the hereafter listed operations before connecting the machine to the power supply.

Preliminary Checks.

Make sure that the mains voltage copes with the voltage quoted on the data plate located near the cable entry in the back of the machine.

The permissible tolerance on rating is $\pm 5\%$.

Out of this tolerance the proper operation of the functions is no longer guaranteed.

If the voltage does not cope see par. Changing the voltage.

Make sure that there is no moisture in the switch cabinet.

Make sure that no component inside the switch cabinet has loosened during transportation.

Connecting to the Mains

- Connect the machine by means of its own power supply cable (4 x 2,5 mm²) with plug to the EEC prescription.

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Connecting to
compressed
air

Connecting to compressed air

Connect to the compressed air system filter ATA (fig. 1). Pressure 6-8 bar.
This connection must be effected on C 420 X (optional on C 420 L).

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Preparation for Start-up



Рис. 3а2ч.

P6

Preliminary Operations and Cleaning

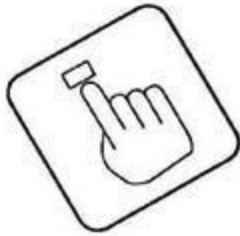
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8 Release lower counterweight D by loosening knob P6 (fig. beside)

Carefully clean the knife surfaces and the knife wheel contact surface; remove the protective lubricant.

Mount feed table PEM (fig. 1) and fasten with knobs P3.

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Preliminary Checks

Operation

C 420 R - C 420 L - C 420 X

Emergency switch SB1 (fig.1 and 2), is provided with mechanical lock.

Release by depressing the blue push-button provided in the centre.

C 420 H

Emergency switch SB1, is provided with mechanical lock.

Release by turning clockwise.

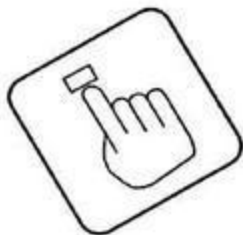
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C 420 L - C 420 X

Digital thickness readout PN1 shall be on.

The alphanumeric display shall be on (on C 420 X only).

Depress white push-button SB3 (par. 6-2) and check the knife for correct direction of rotation (clockwise). If wrong interchange the leads in the plug.

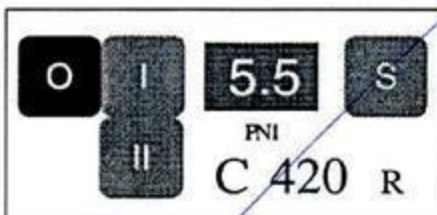


Push-Button Functions



C 420 H

0	SB2	Stop
I	SB3	Start. Feed rate as selected by belt shift
S	SA1	Key switch. Disables safety microswitch for maintenance

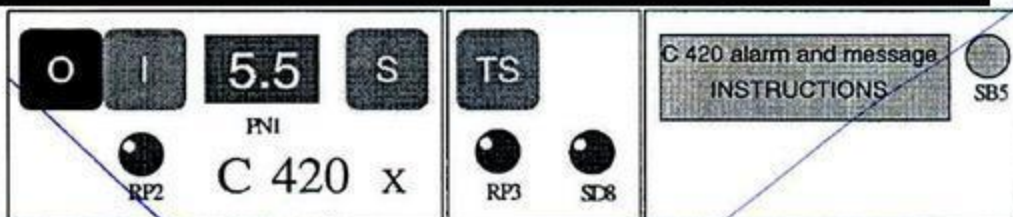


0	SB2	Stop
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I SB3

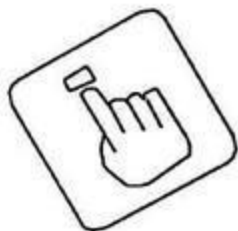
Start. Feed rate as selected by belt shift

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0	SB2	Stop
I	SB3	Start
RP2		Feed rate variation
TS	SB4	Automatic incision
RP3		Incision length variation
S	SA1	Key switch. Disables safety microswitch for maintenance
PN1		Digital thickness readout
SB5		Alarm and message display
SD8		Bottom roll pressure-selector switch

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Alarm and Message Display

C 420 L - C 420 X Alarm and Message Display

The machine stops instantaneously in the case of emergency or opening of cover plate during operation or overheating of a motor or scrap wound on the feed roll. The machine does not stop if knife used up, scrap pan full, scrap pan filter clogged is signalled.

C 420 L

Display PH1 (par. 6-2) shows a point on bottom at right as long as everything is OK, an alarm number when a trouble or anomaly occurs. The number identify:

C 420 L

- 1 - Emergency
- 2 - Cover plate open
- 3 - Scrap on feed roll
- 4 - Overload on knife motor M1
- 5 - Overload on grinding stone motor M2

These alarms cause the machine to

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- Thermal cut-out QM2
- Thermal cut-out QM3
- Thermal cut-out QM4
- Inverter inhibited

machine to stop.

- Minimum splitting thickness achieved
- Scrap pan full
- Scrap pan filter clogged
- Knife used up

When these messages appear the machine does not stop.

The message disappears as soon as the cause of trouble is eliminated.

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Starting

EMERGENCY Switch

Switch SB1 (fig. 1 and 2) is provided with mechanical lock.

On version C 420 R , C 420 L and C 420 X release by depressing the blue push-button in the centre. On version C 420 H release by turning the button clockwise.

You can now start the machine and use all the commands and devices provided.

C 420 H

Use push-button **I** (par. 6-2). to start the machine. Two feed rates (6 and 15 m/min.) are available

Use push-button **O** (par. 6-2) to stop the machine. Withdraw the grinding stones before stopping.

C 420 R

Use push-button **I** (par. 6-2) or **II** (par. 6-2) to start the machine with low or high

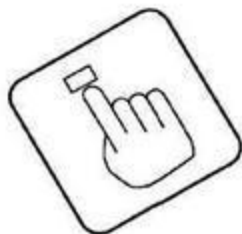
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FOR SERVICING AND SETTING DISABLE THE SAFETY MICROSWITCHES BY MEANS OF KEY SWITCH SA1 AND START THE MACHINE TO HAVE THE KNIFE, THE GRINDING STONES AND THE EMERY DUST EXHAUSTOR.

OPERATING.

DURING THIS OPERATION, TO BE CARRIED OUT BY AN AUTHORIZED SPECIALIST, RED LAMP HL1 (FIG. 1 E 2) LIGHTS.

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Sharpening

The grinding unit is laid out for the use of either corundum or BORAZON diamond wheels.

The type of stones should be specified in the machine order sheet. However, it can be changed later on by purchasing the alternative kit.

Sharpening with Corundum Stones

Proceed as follow:

- Dress the stones
- Sharpen the knife
- Set the bevel
- Check the bevel symmetry

Dressing

This operation is necessary when the cutting surface of the stones is no longer efficient. Such a surface is grey and glossy.

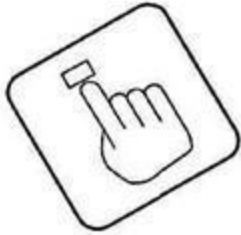
- 1 Open black door C6 on central cover plate C3 (fig. 1)

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Bevel Symmetry

Check the bevel symmetry through the electro-optical viewer OT (fig.1).

If symmetry is poor, sharpen only with the stone on the narrower side of the bevel.



Sharpening

B

Sharpening with Diamond Stones

The grinding unit can be set by means of the external micrometric control A to increase or decrease the sharpening effect.

Setting requires utmost attention as the life of the knife and the stones depend on it. Turn control knob A (fig. beside) counterclockwise until the stones, when in contact with the knife, cause poor sparking which ceases after 5 - 8 cm.

ABSOLUTELY PREVENT SPARKING AROUND THE STONES.

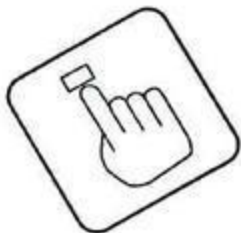
This would cause a rapid stone wear.

The position of the two stones is set by CAMOGA so that sharpening generates a symmetric bevel. This position shall not be altered.

NOTE : USE SETTING KNOB B ONLY IN THE CASE OF POOR BEVEL SYMMETRY OR FOR SETTING WHEN THE STONES ARE REPLACED

Dressing

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Settings

Setting the Splitting Thickness

The model C 420 splitters can be set for splitting stock from 0.2 to 8 mm in thickness.

The thickness can be read on the digital display PN1 (par. 6-2) - versions C 420 R, C 420 L, C 420 X - or on a mechanical readout - version C 420 H.

For setting use knob E located on the LH arm.

The display automatically rectifies the thickness by + 0.2 mm when the top feed roll is mounted (C 420 R, C 420 L, C 420 X).

The displayed thickness is approximate as it depends on various factors such as hardness and structure of the stock, pressure on the feed roll, size of the part.

Setting the Bottom Feed Roll

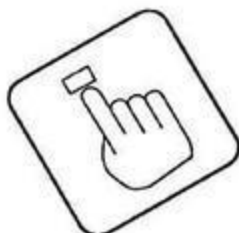
In normal working position there should be a minimum gap of 0.1 mm between the bottom roll and the knife

This gap set by CAMOGA by means of screws in the lower arm shall not be altered.

Depending on the splitting thickness the roll can be lowered by means of handwheel M (fig. 1) located beneath the feed table.

In any case the gap between roll and knife shall be smaller than the scrap thickness.

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Devices



Top Feed Roll

Required for hardly sliding stock above 0.5 mm thick or for pattern splitting.

Steady Guide Bar

Required for high precision splitting and/or close splitting tolerances.

Interchanging Top Feed Roll/Steady Guide Bar

Depress the EMERGENCY switch.

Increase the splitting thickness by 4 mm to facilitate interchanging. Loosen the two screws V.

Remove the mounted feed roll or steady guide bar and mount the required one. If you mount the feed roll make sure that the left end correctly engages the toothing. Tighten screws V (fig. beside).

Release the EMERGENCY switch, reset the required splitting thickness and restart splitting.

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Cleaning

Cleaning

For a troubleless operation of the splitter over a long period keep to the following instruction:

- Daily
 - Clean the machine
 - Empty scrap pan CS (fig. 1)
 - Clean scrap dust drawer filter FC (fig. 1)
 - Clean scrap dust bag filter SPS (fig. 1)(if necessary)
- Weekly
 - Clean knife wheel scrapers R00704 (see spare part drwg. 2)
 - Clean RH upper felt assembly R01704 (see spare part drwg. 13)
 - Clean the grinding unit
 - Clean emery dust bag filter SPA (fig. 1)
 - Clean the emery dust chambers (front chamber CAP, rear chamber CPP) fig. 1)
 - Lubricate LH upper felts FSS (fig. 1). with vaseline oil ARIAN 26F by FINA SPA.

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Maintenance And Repair

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- USE ONLY ORIGINAL CAMOGA
SPARE PARTS

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Basic Rules

ATTENTION

The machine is provided with guards and safety devices to prevent accidents.

In any case, due to the presence of moving components and of a very sharp knife, pay utmost attention while using and servicing the machine.

- KEEP TO THE INSTRUCTIONS FOR INSTALLATION AND USE
- DO NOT REMOVE THE GUARDS
- THE MAINTENANCE MUST BE CARRIED OUT BY SPECIALISTS WITH MAXIMUM CAUTION

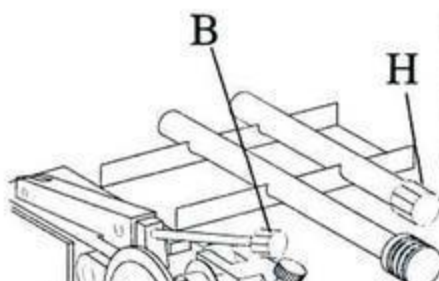
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LIGHTS.

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Maintenance



Replacing the Knife (only by authorized personnel)

- 1 Withdraw the grinding unit by turning knob A clockwise
- 2 Remove feed table PEM (fig. 1)
- 3 Open upper cover plates C1 and front cover plates C2, remove central cover plate C3 and guide plate guard LCP (fig. 1)
- 4 Disable the safety microswitches by means of key switch SA1 (par. 6-2). Turn the key. Start the machine.

PAY UTMOST ATTENTION TO THE MOVING COMPONENTS

- 5 Make the knife dull by repeatedly pushing device TF1 (fig.1) against the cutting edge. Stop the machine.

- 6 Set approx. 6 mm splitting thickness

ENABLE THE SAFETY MICROSWITCHES BY MEANS OF KEY SWITCH (TURN AND REMOVE THE KEY) AND CUT THE POWER SUPPLY (MAIN SWITCH QS1 (FIG. 2) IN "OFF" POSITION)

- 7 Move back wedge CUS of the upper knife back guides and lock them in position by means of knobs P4 (fig.1)
- 8 Release locks AG of the upper guide plate and turn them down through 90°
- 9 Raise upper guide plate PAS (fig.1)

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REMOVE THE KEY FROM SWITCH SA1 (par.6-2)

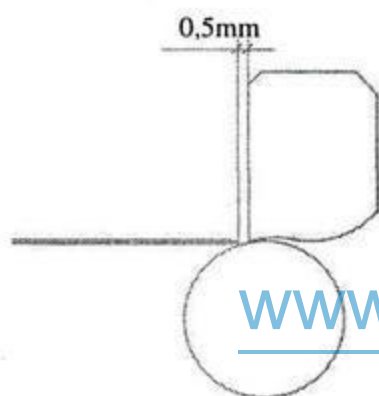
It shall not remain in the switch during normal work

- 26 Close main switch QS1 (position ON) and start the machine

The knife automatically positions against the guide rollers and is ready for sharpening (see par. 3-5).

SHARPENING NEEDS ABOUT 30 MINUTES.

After sharpening check the knife for correct position and parallelism as follow : set 0,2 mm splitting thickness, mount the steady guide bar, depress foot pedal P (fig.1) and with a thickness gauge check the gap (0,5 mm) between the knife and the back edge of the steady bar (see fig. beside)



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Maintenance

Replacing the Stones

Machine is provided with long life CBN grinding stones. Their life depends, of course, on a correct use.

The grinding stones shall be replaced when the periphery is worn-out.

- 1 Cut power supply (main switch QS1 on OFF)
- 2 Remove upper cover plates C1, front cover plates C2 and remove central cover plate C3 (fig. 1)
- 3 Space the stones by turning knob A (fig. beside) clockwise
- 4 Open stone belt guard PCM by unscrewing knob P2 (fig. 1)
- 5 Open grinding stone guard PM (fig. 1)
- 6 Remove the belt
- 7 Space the dressers by means of knob C (fig. beside)
- 8 While retaining the pulley with a wrench, unscrew the stone lock nut (counterclockwise for the lower stone, clockwise for the upper stone)
- 9 Carefully clean the seats
- 10 Mount and lock the new stones
- 11 Approach the stones to each other by means of knob A (fig. beside)

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Replacing the Upper Knife Back Guide

- 1 Move back wedges CUS of the upper knife back guides and lock them in position with knob P4 (fig. 1)
- 2 Release locks AG (fig. beside) of the upper guide plate and turn them down through 90°
- 3 Remove upper guide plate PAS (fig. 1)
- 4 Replace the two knife back guides GD (fig. 1) and remount the upper guide plate proceeding in reverse order

Replacing the Lower Knife Back Guide

This requires the removal of the knife. It is, therefore, advisable to replace this guide when knife replacement becomes necessary (See par. 7-3).

- 1 Remove part S3 (fig. 1)
- 2 Clean the seat and mount the new guide

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Maintenance

Tensioning the Belts

- Knife drive belt

An eccentric idler fastened by a screw is provided for tensioning. To tension cut the power supply (main switch QS1 on OFF) and remove RH cover plate C4 (fig. 1)

- Feed drive belt

Tensioning is possible by means of the motor fixing slots. To tension cut the power supply (main switch QS1 on OFF) and remove LH cover plate C5 (fig.1).

- Grinding unit drive belt

It is automatically tensioned by the motor weight.

When mounting the belt pay attention to the arrow showing the direction of rotation.

Setting the Thickness Readout

With the steady guide bar mounted, set the splitting thickness to the minimum value (0.2 mm) .

If the value is not achieved, proceed as follow :

1 Remove guide plate guard LCP (fig.1)

2 Loosen screw VP (fig.1) fixing the potentiometer support

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On versions C420 L e C420 X the scrap level in the pan is monitored by an electronic switch with an alarm or message on the display when the pan is full.

- Scrap dust drawer filter FC (fig.1)

It is a drawer with a filtering panel to be cleaned periodically by shaking or sucking; when equalizing, which produces much dust, daily cleaning could be necessary (See par. 6-9).

DO NOT USE THE MACHINE WITHOUT THIS FILTER

The non-observance of this rule causes irregular operation of the exhaustor. It could become damaged after a short period.

- Scrap dust bag filter SPS (fig.1)

The bag filter receives the pre-filtered air from the exhaustor. On each knife replacement clean the bag with a vacuum cleaner or a brush.



Maintenance

NOTE

Emery Dust Exhaustor

The emery dust settles partly in chamber CAP (fig.1) beneath the grinding unit, partly in chamber CPP behind scrap pan CS (fig. 1) and finally it is retained by bag filter SPA at the exhaustor outlet.

On each knife replacement clean the chambers and the bag filter (see par. 7-3).

Routine Maintenance

For the correct use of the machine over a long period carry out the following operations:

DO NOT USE COMPRESSED AIR (the warranty would be void)

- Daily
Clean the machine

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Lower knife back guide R04501 (see tav. 12)



Troubles: Causes and Remedies

Troubles Shooting

DEFECTIVE SPLITTING

- Thickness variation : on a piece
 - Knife guide gibbs worn out
 - Bottom knife back guide inefficient
- on different pieces
 - Replace top feed roll with steady guide bar
 - Decrease feed rate

- Split surface rough
 - Decrease feed rate
 - Cutting edge damaged
 - Knife guide rollers dirty or damaged; check and clean
 - Bottom feed roll too low

STOCK FEED

- Feed irregular

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- Scrap dust filter clogged
- Emery dust filter clogged



Electrical Troubles C 420 H

POWER SUPPLY

- When closing main switch QS1 the control panel remains OFF
- Input voltage L1-L2- L3 on terminal board
- Main fuses FU1
- Fuse FU2 - FU3
- 24 Vdc on bridge rectifier VC1

ALARMS

- Machine does not start or stop
- Emergency switch SB1 (rotary push-button)
- Safety microswitches SQ1-SQ2-SQ3 on
- Scrap on roll microswitch SQ4

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Electrical Troubles C 420 R

POWER SUPPLY

- When closing main switch QS1 the control panel remains OFF

- Input voltage L1-L2- L3 on terminal board
- Main fuses FU1
- Auxiliary thermal cutouts QF1 - QF2
- 24 Vdc on bridge rectifier VC1

ALARMS

- Machine does not start or stop

- Emergency switch SB1 (blue push-button)
- Safety microswitches SQ1-SQ2-SQ3 on
- Scrap on roll microswitch SQ4
- Motor thermal cutouts QM1-QM2-QM3-QM4-QM5

DIGITAL THICKNESS READOUT

- Readout off

- Check as per par. POWER SUPPLY
- Fuse FU2 on DC power unit

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Electrical Troubles C 420 L C 420 X

POWER SUPPLY

- When closing main switch QS1 the control panel remains OFF

- Input voltage L1-L2- L3 on terminal board
- Main fuses FU1
- Auxiliary thermal cutouts QF1 - QF2
- 24 Vdc on bridge rectifier VC1
- Check as per par. POWER SUPPLY
- Fuse FU2 on DC power unit 5 Vdc
- 5 Vdc between terminals of potentiometer RP1
- Potentiometer RP1
- Check for variable 5 Vdc between points 3 -7 on display VIS1
- Set minimum value on readout

DIGITAL THICKNESS READOUT

- Readout off
- Value steady
- Thickness not true

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Electrical Troubles C 420 L C 420 X

Alarm Diagnosis on Inverter Display

To resume the operation reset the inverter (cut the power supply by turning main switch QS1 to OFF), wait 20 sec., and restore the power

- OC1 •** The protective circuit functions during acceleration (OC1), deceleration (OC3) or constant speed (OC2) when the motor output current exceeds by approximately 200% the rated current, and the inverter output stops.
- OVT •** The protective circuit functions when the DC voltage in the main circuit of the inverter exceeds the rated value due to the regenerative energy during deceleration; the inverter output stops.
- THM •** The electronic thermal relay in the inverter detects overheating of the motor and stops the inverter output.

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Condenser	C1
Optical viewer bulb	EL1
Work lamp	EL2
Mains fuses	FU1
DC power unit	GS1
Safety microswitch signal lamp	HL1
Power contactor	KM1
Power contactor	KM2
Emergency circuit contactor	KM3
Automatic incision timer	KT1
Knife motor	M1
Grinding unit motor	M2
Emery dust exhaustor motor	M3
Scrap exhaustor motor	M4
Top feed roll motor	M5
Alarm display	PH1
Splitting thickness readout	PN1

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4209.

Stop push-button	SB2
Start push-button	SB3
Automatic incision push button P/P	SB5
Scrap dust chamber vacuum switch	SP1
Cover plate microswitch	SQ1
Cover plate microswitch	SQ2
Cover plate microswitch	SQ3
Scrap on roll microswitch	SQ4
LH/LR proximity microswitch	SQ5
LH/LR proximity microswitch	SQ6
Scrap pan proximity switch	SQ7
Knife used up microswitch	SQ8
Thickness correction microswitch	SQ9

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Single-phase auxiliary circuit transformer
Inverter transformer
Inverter
Bridge rectifier

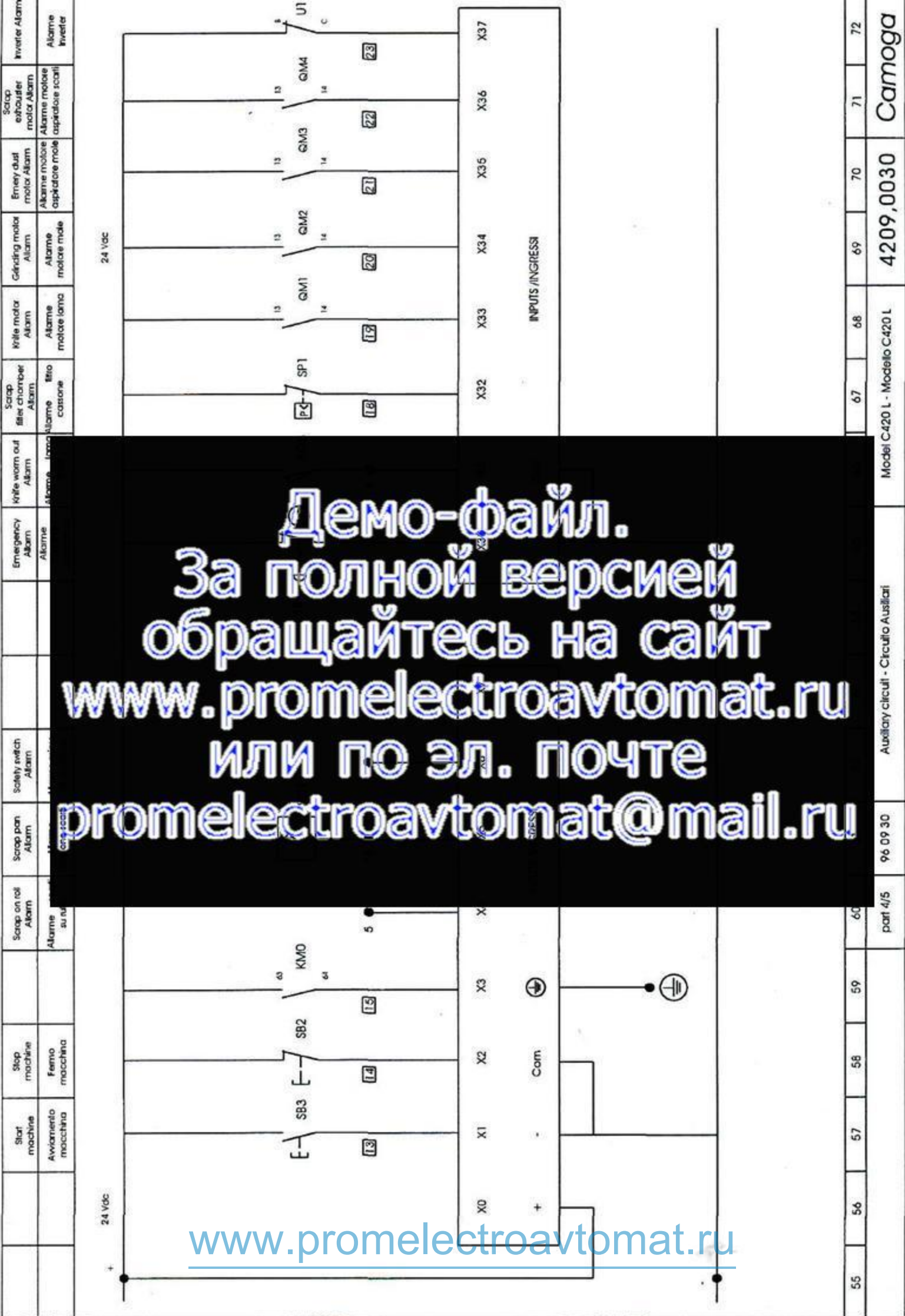
TC1
TM1
UI
VCI

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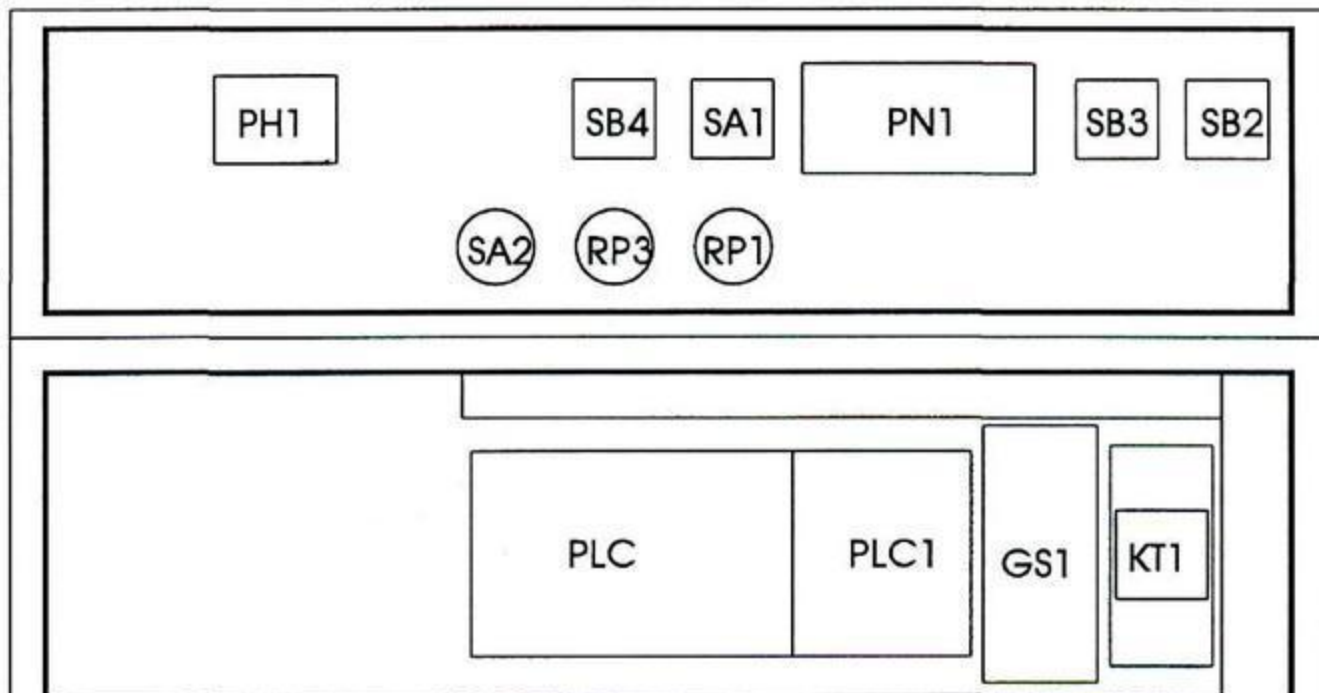
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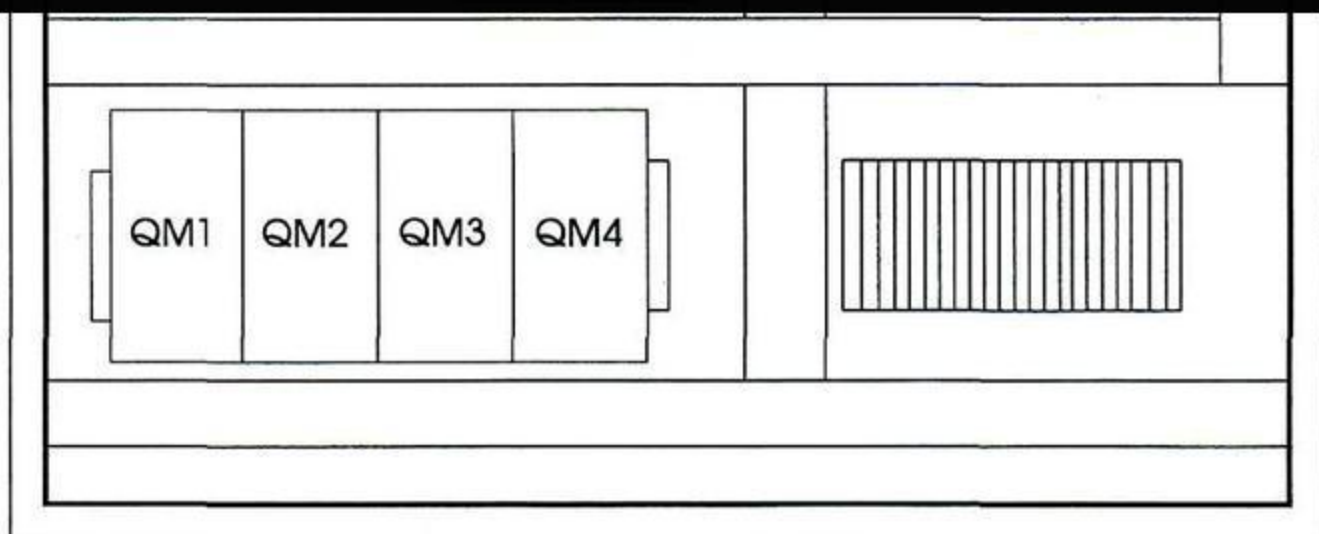


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Glossary

BACKLASH	Relative motion of mechanical parts caused by looseness
BELT	A flexible band used to connect pulleys
BEVEL	An angle between two parallel surfaces forming the cutting edge

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INPUT	In electronics synonymous with input signal
INVERTER	A device for the electronic speed regulation of asynchronous three-phase motors by means of a potentiometer acting on voltage and frequency
KEY	A tool used to loosen and tighten screws, nuts, etc.
LED	Light-emitting diode: a luminous signal
MICRO	Synonymous with microswitch, a low voltage and amperage switch in which contact is made or broken by a slight motion
MICROMETER	An instrument used for 0.01 mm setting

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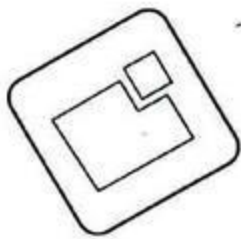
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MICROPROCESSOR	A central processing unit manufactured on a single integrated circuit chip
MODULE	An assembly of wired components of an electronic device (i.e.. input module, analogic module, etc.)
OUTPUT	In electronics synonymous with output signal
PALLET	A wooden platform used in conjunction with a fork lift for lifting and moving materials

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THICKNESS GAUGE	A small instrument used to measure the thickness of a material before and/or after splitting
TRANSFORMER	An electrical component that transforms the alternate current by decreasing or increasing the voltage
VOLTAGE	Potential difference between two points of a conductor or circuit

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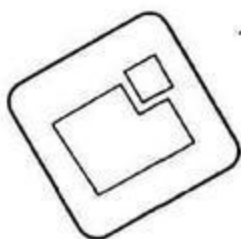
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Part List

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NOTE PACKINGS, BEARINGS, KNIFE BACK GUIDE, FELTS, WHEEL SCRAPERS,
GUIDE ROLLERS, GUIDE PLATES, STONES, DRESSERS, GUIDE GIBS ARE
SUPPLIED ONLY IN SETS

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TAV. 1

R02001	Feed table steel rope
R02102	Emergency (only model C420 H)
R02104	Emergency (only model C420 R)
R02105	Emergency (only models C420 L-X)
R02201	Central cover plate microswitch
R02501	Upper cover plate microswitch
R02601	Feed table rope hook
R02602	Feed table securing knob (2 pcs)

TAV. 2

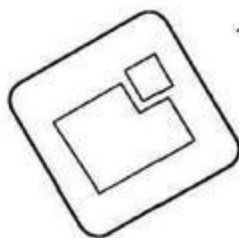
R00501	Knife wheel bearing (2 pcs)
R00701	Knife 50x0.7x3500 mm
R00702	Idler bearing (2 pcs)
R00703	Knife drive belt
R00704	Knife wheel scraper (2 pcs)

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TAV. 6 - 7

R00201	Bottom roll pressure setting chain
R00202	Bottom roll pressure spring
R00203	Bottom roll pressure steel rope
R00204	Roll pressure cylinder
R00901	Scrap on roll microswitch
R01201	Bottom roll coupling
R01202	Knurled steel feed roll
R01203	Bottom roll bearing (2 pcs)
R01204	Washer (2 pcs)
R02601	Feed table rope hook
R05602	Proximity switch
R06601	Rubber coated feed roll

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TAV. 8 - 9

R01204	Washer (2 pcs)
R04101	Gear box bearing (6 pcs)
R04102	Gear box packing (3 pcs)
R04103	Coupling
R04104	Belt
R04201	Gear box bearing, version H (4 pcs)
R04202	Gear box packing version H (2 pcs)

TAV. 10

R01301	Belt
R01302	Motor pulley
R01303	Grinding unit pulley (3 pcs)
R01304	Grinding unit bearing (4 pcs)
R01305	Idler bearing (2 pcs)
R01307	Flange (2 pcs)

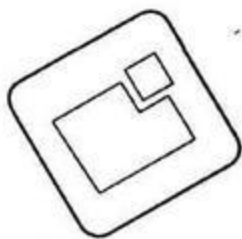
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R01401	LH lower guide plate (6 pcs)
R01602	Optical viewer lamp
R01702	Felt plate spring
R01704	Felt plate (8 pcs)
R01801	Knife dulling stick
R04701	Guide roller (2 pcs)

TAV. 15

R02301	Scrap dust bag
R05002	Scrap dust filter sensor
R05401	Emery dust bag
R05603	Scrap pan proximity switch

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ACCESSORIES

AC-18-01	Upper roll
AC-18-02	Lower rubber coated feed roll
AC-18-03	Work lamp
AC-18-04	Upper roll (C 420 H)
AC-18-05	Special feed table
AC-18-06	Thickness gauge
AC-18-07	Special feed table

OPTIONS

OP-18-01	Diamond wheels kit
OP-18-02	Corundum stones kit
OP-18-03	Emery dust exhaustor (C 420 H)
OP-18-04	Upper feeding (C 420 H)