
COMBINED
16" PLANER & THICKNESSER

INSTRUCTION MANUAL

Carefully read this instruction manual before operating machine.

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GENERAL SAFETY RULES

NOTE: Read all these instructions before attempting to operate this product. Save these instructions for future reference.

1. Keep work areas clear. Cluttered areas and benches invite injuries.
2. Consider work area environment. Do not expose tools to rain. Do not use tools in damp or wet locations. Keep work areas well lit. Do not use tools in the presence of flammable liquids or greases.
3. Guard against electric shock. Avoid body contact with earthed or grounded surfaces.
4. Keep other people away. Do not let other persons, especially children, not involved in the work touch of the tool or the extension lead and keep them away from the work area.
5. Store idle tools. When not in use, tools should be stored in a dry locked-up place, out of reach of children.
6. Do not force the tool. It will do the job better and safer at the rate for which it was intended.
7. Use the right tool. Do not force small tools to do the job of a heavy-duty tool. Do not use tools for purposes not intended, for example, do not use circular saws to cut tree limbs or logs.
8. Dress properly. Do not wear loose clothing or jewelry; they can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
9. Use protective equipment. Use safety glasses. Use face or dust mask if cutting operations create dust.

10. Connect dust extraction equipment. If devices are provided for the connection of dust extraction and collection equipment, ensure these are connected and properly used.
11. Do not abuse the cable. Never pull the power cable to disconnect it from the socket. Keep the cable from the socket. Keep the cable away from heat, oil and sharp edge.
12. Secure work. If possible use clamps or a vice to hold the work. It is safer than using your hand.
13. Do not over reach. Keep proper footing and balance at all times.
14. Maintain tools with care. Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect power cables periodically and if damaged have them replaced by an authorized service facility. Inspect extension cables periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.
15. Disconnect tools. When not in use, before servicing and when changing accessories such as blades, bits, cutters, disconnect tools from the power supply.
16. Remove adjusting keys and wrenches. Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
17. Avoid unintentional starting. Ensure switch is in "OFF" position when plugging in.
18. Use outdoor extension leads intended for outdoor use and so marked.
19. Stay alert. Watch what you are doing, use common sense and do not operate the tool when you are tired.
20. Check damaged parts. Before further use of the tools, it should be carefully checked to determine that it operates properly and perform its intended functions. Check the alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual. Do not use the tool if the switch does not turn on and off.
21. Warning! The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.
Have your tool repaired by a qualified person. This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified technicians by using original spare parts, otherwise this may result in considerable danger to the user.
22. Have your tool repaired by a qualified person. This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified technicians using original spare parts, otherwise it may result in danger to the operator.
23. Never use the machine if the appropriate guard is not in place and correctly adjusted.
24. Do not use knives that are blunt as this increases the danger of kickback of workpieces.
25. Any portion of the cutterblock not being used for planing shall be guarded.
26. When planing narrow short workpieces, a push stick should be used.
27. When planing narrow workpieces, additional measures, such as the use of horizontal pressure devices and spring-loaded guards, may be necessary to ensure safe working.
28. Do not use the machine to cut rebate.
29. Before starting the machine carefully read the instruction manual to avoid any risks of personal injury.
30. The effectiveness of the device for the prevention of kickback and the feed roller should be regularly inspected to ensure safe operation.
31. Tool equipped with chip collection and extraction hoods shall be connected to the dust-and-collecting device.

RECOMMENDATIONS

No one must work on a wood machine without first receiving sufficient training concerning the type of work and without being informed of the risks, the precautions to observe and operating instructions for the guards and compulsory safety devices.

This machine is designed for wood derivatives. It should not be used for other materials.

- Before use we recommend that you carefully read through this manual and that you respect all instructions contained in it in order to achieve the best results from your machine and to work in complete safety.
- In order to ensure that all safety measures taken into consideration during the design of this machine are met any modification of the machine by the user is forbidden.
- Connection to a sawdust or chipping suction aspirator is obligatory to satisfy all the hygiene/safety conditions and to ensure the correct operation of this machine.
- You are strongly recommended to wear protective glasses while using this machine.
- Residual risk

As with all wood-working machines with manual adjusting, there is always a risk, even when guards are in place and correctly adjusted, of getting close to tools at a working height which corresponds to the thickness of the wood.

It is essential, therefore, that hands are kept well away from the dangerous areas and that the end of pass thruster is used.

RECEPTION HANDLING

The machine is delivered fully assembled. When handling with the machine use the certified lifting equipment and safe instruments. The best handling can be done with transport pallet and high lift truck. For lifting the operator can use steel wire rope seal with min diameter 5mm.

Before placing the machine on working place, the operator has to consider how large pieces of material, which can be cut in the given room.

Safe work with the machine requires enough space around the machine. When you are sure that the placing responds with your idea, flush the machine with max clearance 1mm/1000mm and screw it on the floor. In any cases the operator has to level (flush) the machine in the right way by help of four adjusting screws (placed in adjustable legs). Do not assemble parts (which were disassembled) before the operator has read the whole instruction manuals and has known the machine well.

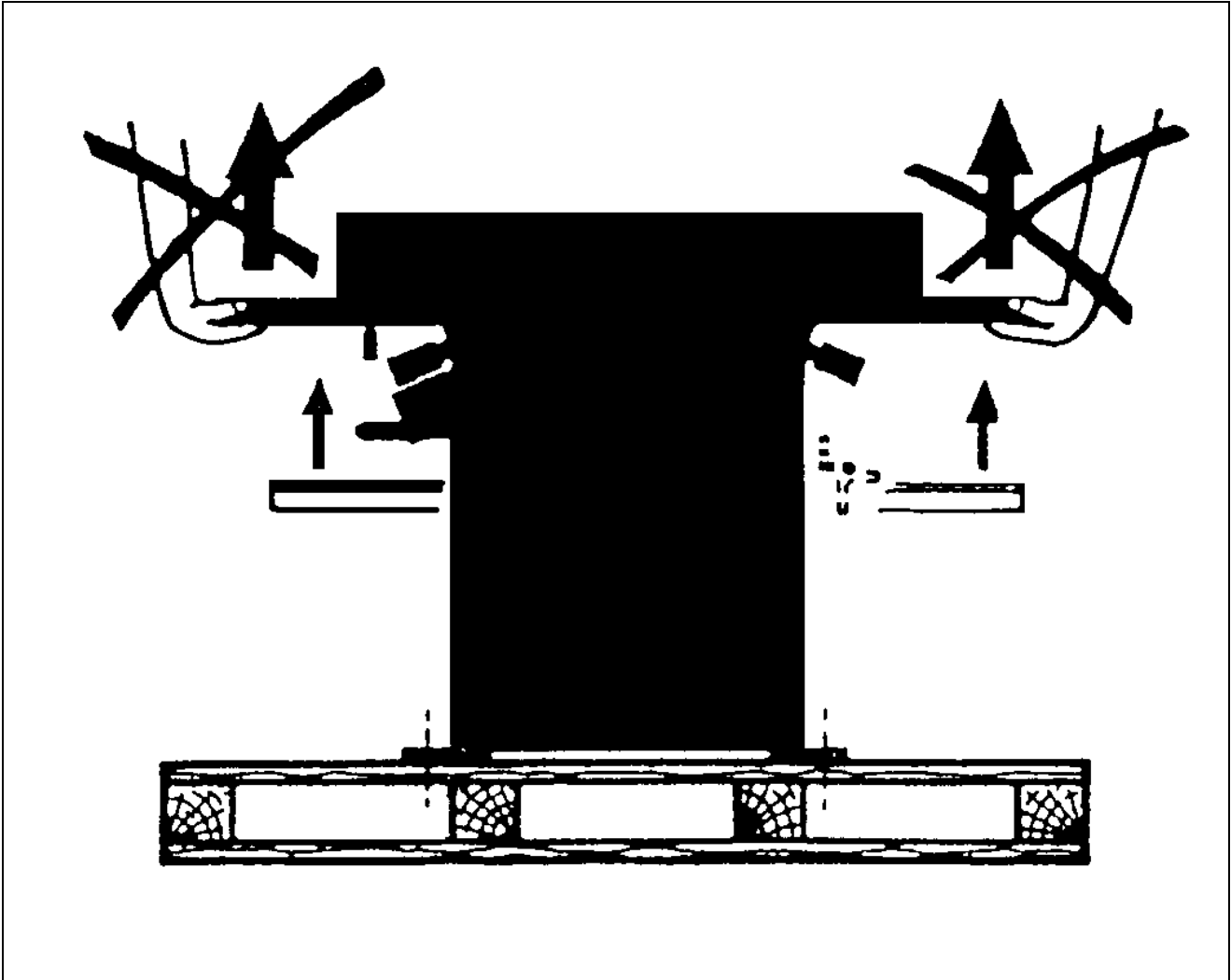
Put the lengthwise rule on the guide way and adjust the length stop and secure. Clamp the sliding table on the bars (guide way) or the support of the run-out arm and secure with the small hand crank. Put the angular rule on the sliding table and secure.

Enclosed the operator will find the instruction manual and wrenches necessary.

Check the condition of the machine and the number of packages mentioned on the delivery note. If necessary, make the usual reverse to the carrier.

WARNING! If reverse are made they must be made on receipt of the goods. Late claims will not be considered.

For delivery, the machine is mounted on the wooden crate with wood blocking on the bottom of the crate.



TRANSPORT AND STOCKING

During the transport and stocking it is necessary to protect the machine from excessive vibrations and excessive humidity. The machine can be stocked under the roof with air temperature from -25°C to 55°C .

PLACING THE MACHINE ON THE FLOOR

Remove the metal sheet clamping.

Remove the attachments fixing the machine to the crate (screws and bolts)

Clear a sufficient large area round the machine.

Raise the machine slightly and fit two planks under the feet. Use planks which are long enough to act as ramps down to the floor. Pull the machine making sure that it stays on the planks. Once the machine is clear of the crate it will tip.

INSTALLATION

To guarantee corrected alignment of the working surfaces and prepare a stable, level, concrete floor.

WARNING! When handling, take care to avoid shocks or large forces which could cause damage or put the machine out of adjustment.

PREPARATION OF THE MACHINE

The machine unpainted parts are protected with a factory-applied ultra-fine oily film. It is not necessary to remove it before using the machine. However, if you wish you can remove it, use a cloth soaked spirit. Wipe and clean and then apply a sliding agent (Sliber-gleit, Molycote, etc.).

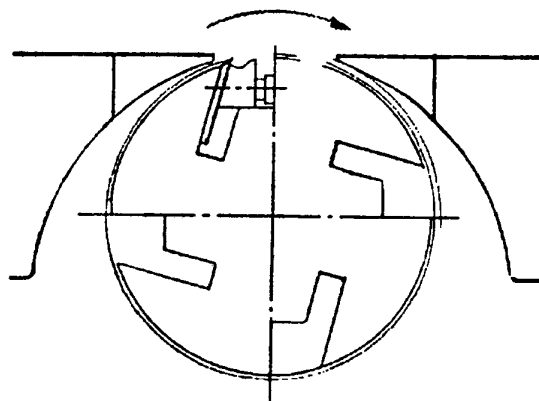
WORKING CONDITIONS

The machine is intended for work under the roof if the following conditions are fulfilled.

Air temperature: from 5⁰C to 40⁰C, relative humidity: from 30% to 95% non-condensing, altitude above sea level: max 1000m.

The machine must be used as a stationary tool.

ELECTRICAL CONNECTION



WARNING! Before connection to the mains, check that the mains voltage corresponds with the characteristics of the machine supplied.

Use a 1.5 mm² (min.) supply cable with strengthened insulation, (e.g.HO7). If the length of the cable from the meter to the machine exceeds 10 meters, use 2.5mm² (min) cable. The internal connections (motor, switch, coil, etc.) are factory wired.

SINGLE PHASE 230V CONNECTION: This connection should be made with a 3 core cable and a standard 16A two pole + earth plug. Two wires are provided for the supply (L1, L2) and the third (yellow/green) must be connected to the earth.

THREE PHASE 380V CONNECTION: This connection should be made with a 4 core cable and a standard 16A three pole + earth plug. Three wires are provided for the supply (L1, L2, L3) and the fourth (yellow/green) must be connected to the earth terminal.

IMPORTANT: Three phase connection necessaries checking the correct direction of rotation of the motor shaft to avoid any problems with the belt drives.

It is essential t start the motor for the first time without a drive belt. If necessary, reverse the position of 2 of the 3 supply wires from the mains to obtain the correct rotation for the normal cutting direction.

In the event of a change to the 3 phase supply (variety of supply points, more than one socket in a basement, etc.), it is essential t repeat this check on the direction of rotation as explained above.

NOTE: For a temperature below 10 °C we recommend warning up the motor by letting it run off-load on any function.

WARNING: Before adjusting or exchanging knives and any maintenance or repairs disconnect the machine from the mains. If the operator is standing at the side of the machine against the backstop, the main cutterblock has to be rotated clockwise (consequently to the right). It is possible to change the rotation direction by exchanging (switch-over) wires (black and/or brown) for three-phase motors.

ATTENTION: The machine is injury menaces with the contrary rotation of the cutter block. Switch on the machine only for a while to find out the right direction of rotating (if possible – without tool).

The machine is also equipped with brake motor, which is able to stop the machine within required time. However, this brake motor works only when the machine is switched off by pushing red button or emergency stop cover.

When the brake does not work properly, it is forbidden to work with the machine.

The switch cannot be turned on until the machine is connected to the mains. The switch is turned off automatically by way of neutral protection with outage, it means that it is necessary to switch on the machine again after restoring of the current. Should the machine is switched off frequently in sequence (twice of threefold), check up the machine (the motor functions, the blunt tool, etc.).

The machine can be secured with a padlock placed on the switch which protects the machine from unauthorized usage.

NOTE: If the protection system is not repositioned completely, feedback circuit will restrict the motor starting.

GENERAL INFORMATION

This combination-designed machine allows the operator to perform the following operations consecutively: surface planing, thicknessing.

Surface planing: Adjustable infeed table, max. cut depth 5mm.

Thicknessing: Table height adjustable by hand wheel and button position locking – Chip discharge case for correct chip discharge – Pass limiter – Extraction nozzle – Anti-throw-out pawl.

TECHNICAL DATA

Machine dimension	
Length	1600mm
Width	970mm
Height	1000mm
Planer tables	1600x410mm
Thicknesser tables	750x410mm
Cutterblock diameter	95mm
Number of knives	4pcs
Cutterblock speed(50Hz)	4000rpm
Max removal thickness	5mm(Planing) /2.5mm(Thicknessing)
Max workpiece width	410mm
Net weight	440kgs

NOISE LEVELS

The manufacturer must inform the user concerning:

- the equivalent continuous sound level (L_{aeq}), if the latter exceeds 70 dB(A) at the work station,
- the sound power level (L_{WA}), if the L_{aeq} exceeds 85dB(A) at the work station,
- the peak pressure level (L_{pc}), if it exceeds 135 dB(A) at the station,
- the measuring methods used.

REFERENCE STANDARDS: ISO 7960

- Operating conditions for noise measurements
Annex B one-face surface planers
Annex C one-face thicknessers
- NF S31-084 – methods for measuring sound levels in a working environment for

- purpose of evaluating workers' daily level of sound exposure,
- NF S31-069 – test procedure for measuring noise emitted by machine tools.

DEFINITIONS

-Equivalent continuous sound level (L_{Aeq}) in dB(A) – the most frequently given figure
 -Characterizes the receiver, gives the value received as a function of the environment, the distance from the source and/or on the basis of a test procedure for a daily exposure of 8 hours.

-sound power level (L_{WA}) in dB(A)

-characterizes the noise source, gives an intrinsic value defining the noise emitted by this source independently of the environment.

The table below gives the following data for each work station:

- the equivalent continuous sound level based on the standard test procedures,
- the sound power level
- without load and without dust extraction,
- under load with vacuuming but without taking into account the noise of the dust extraction itself.

The nature of the premise, the location of the machine within the premises and the presence of a vacuum cleaner nearby can greatly influence the noise level. For example, for a cutting speed of 20m/s of the thicknessing station and a dust extraction air velocity of 10 m/s instead of 20 m/s, the noise level will be reduced by about 9 dB(A).

An equivalent continuous sound level of 85 dB(A) is considered to be a danger threshold for a full-time daily exposure of 8 hours.

The threshold for 4 hours is 88 dB(A), for 2 hours 91 dB(A), for 1/2 hour 97 dB(A) and for 1/4 hour 100 dB(A). Every halving of the exposure time thus allows the danger threshold to be raised to be 3 dB(A).

Wearing noise protection headphones providing sound level attenuation of 15 dB(A) in all cases allows you to stay well below the danger threshold with no limit on exposure time.

Table of Noise Levels				
Work station	Work station sound pressure Laeq in dB(A)		Sound power LWA in dB(A)	
	no load	load	no load	load
SURFACE PLANER	85.5	92	89	98.5
THICKNESSER	94	94.5	107	108

EXHAUSTING SYSTEM

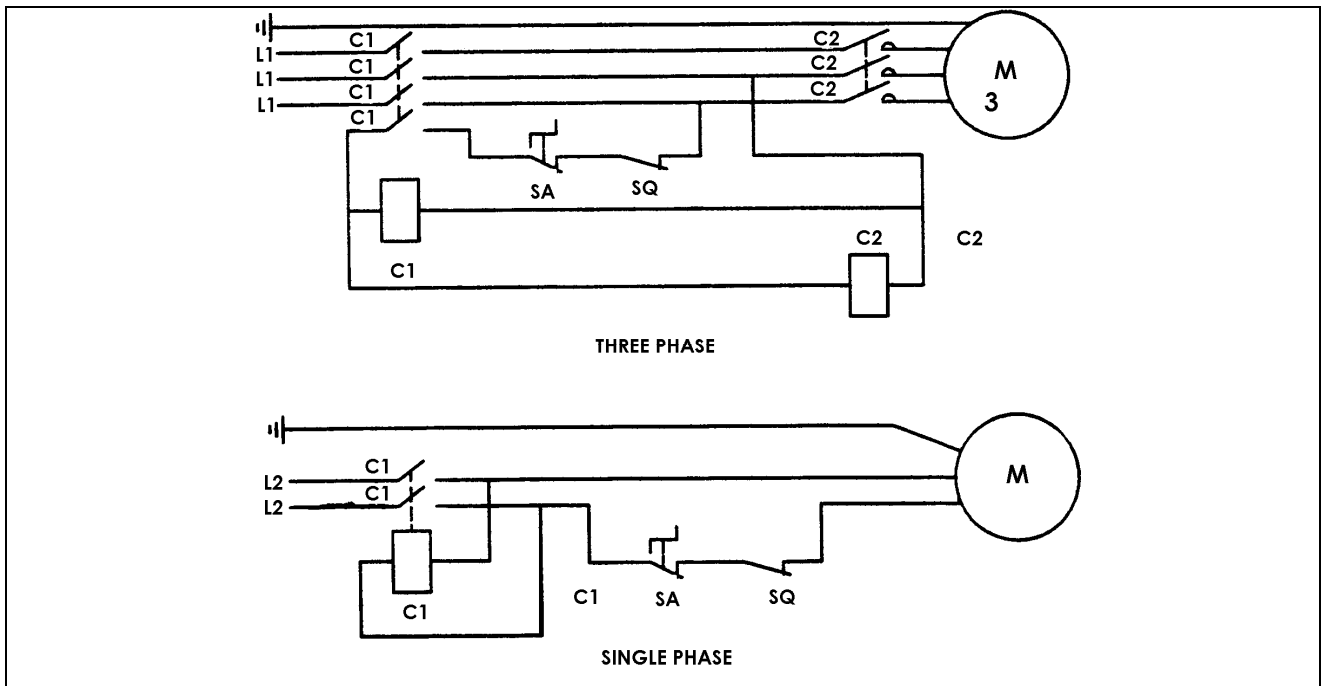
The machine has to be connected with exhausting appliance of sawdust during any operation. This exhausting appliance has to embody rapid current of air at least 20 meters per second. The flexible exhausting hose about the diameter of 10 millimeter will be used for connecting. The flexible exhausting hoses should be connected to the exhausting tubes, which placing is following.

Planer – the exhausting tube is placed in area of thickening table under the planing table – diameter 100mm.

Thickener – the same exhausting tube as for planing is used, but turned into upper position over the planing tables – diameter 100mm.

Liquidation of wooden waste has to be done ecologically, so that it would not worsen our environment.

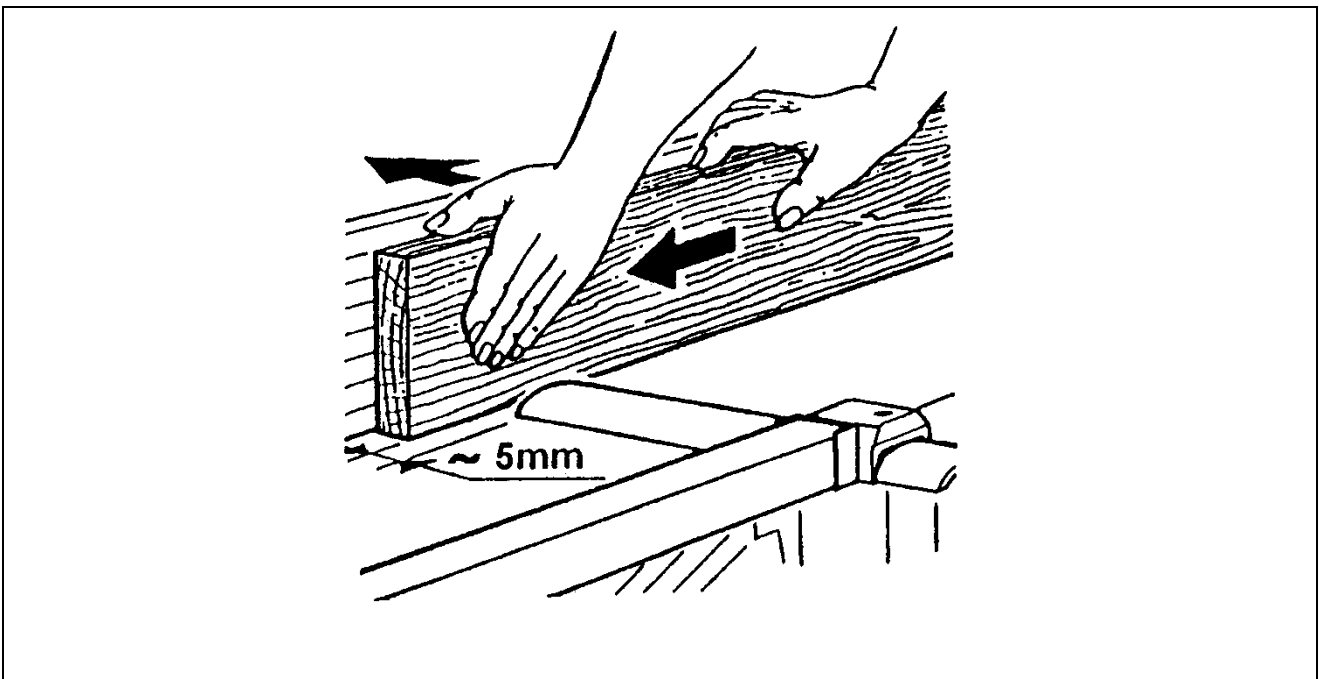
THE ELETRICAL DIAGRAM



WORKING OPERATIONS

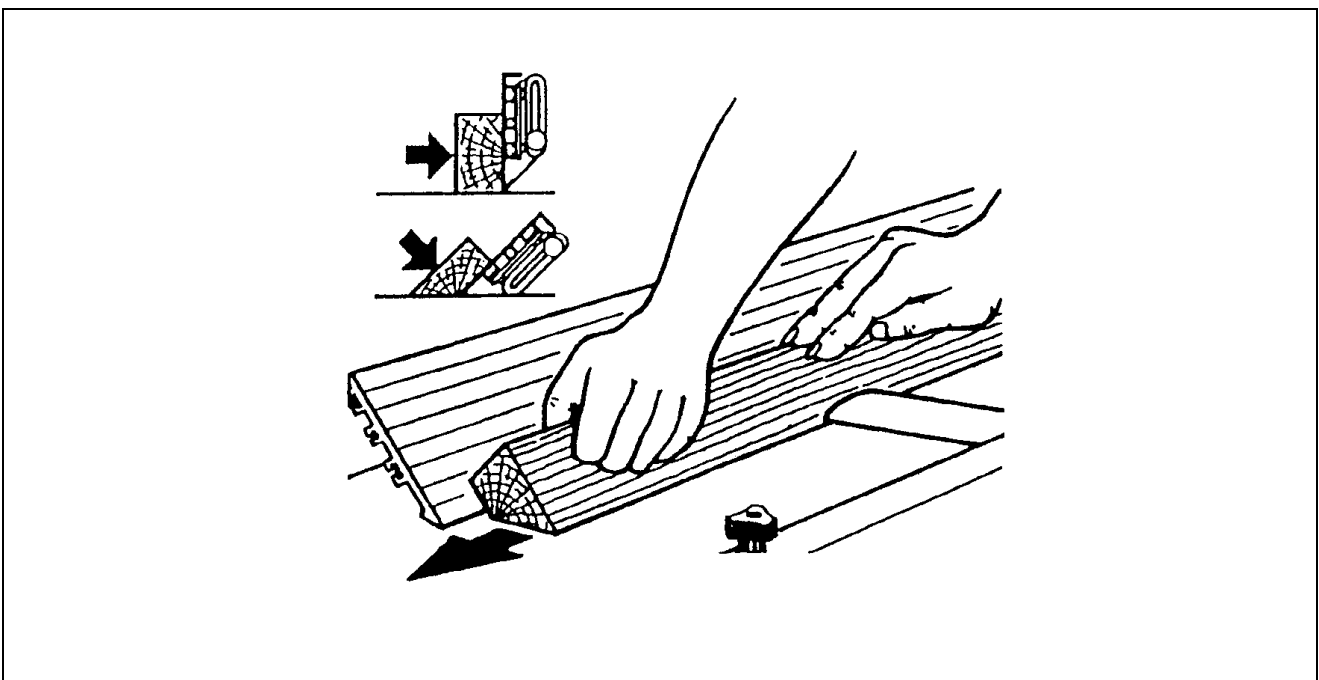
Planing of narrow workpieces

When planing narrow pieces, set the cover of the cutterblock in such a position so that the distance between the workpiece and the cutterblock cover is max 5mm. Then switch on the machine and push the material against the cutterblock (between the cutterblock cover and the rule).



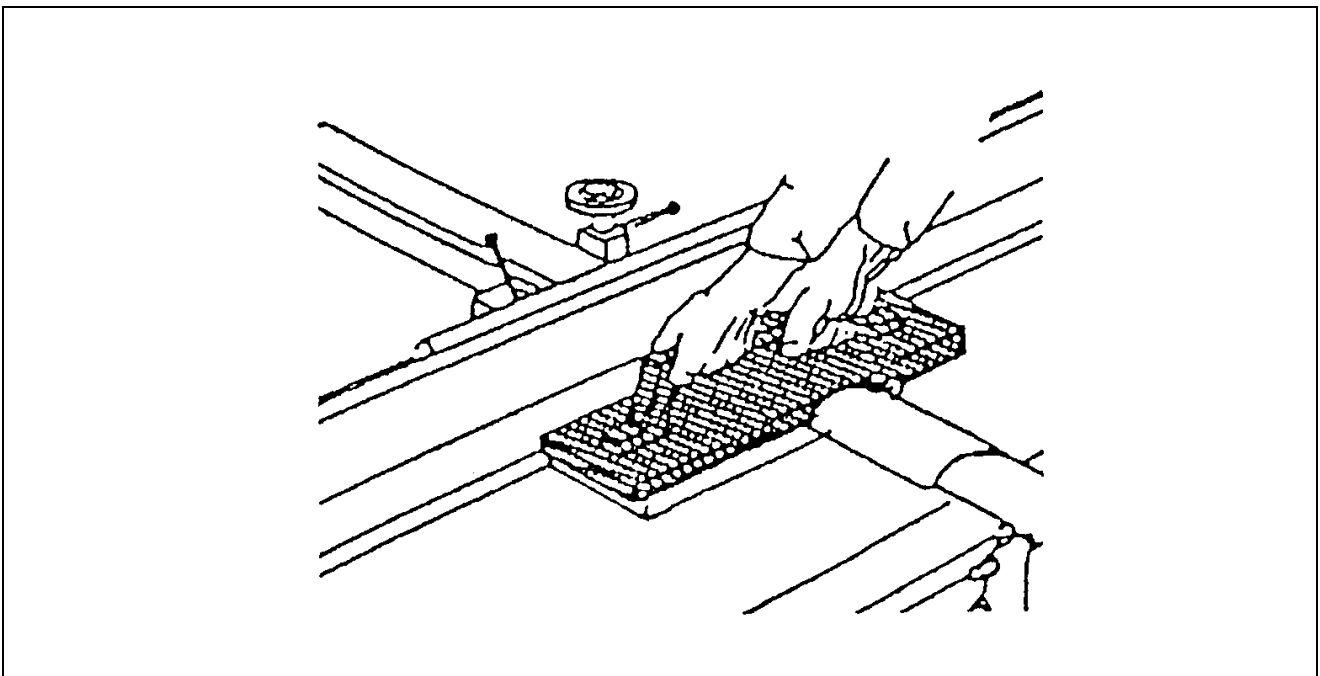
Planing with the inclined ruler

Check the angle of the longitudinal ruler when the small cranks are loosen (the position 90° is ensured), retighten the small cranks again and switch on the machine. Push the edge of the workpiece forward and against the rule.



Planing of short workpieces

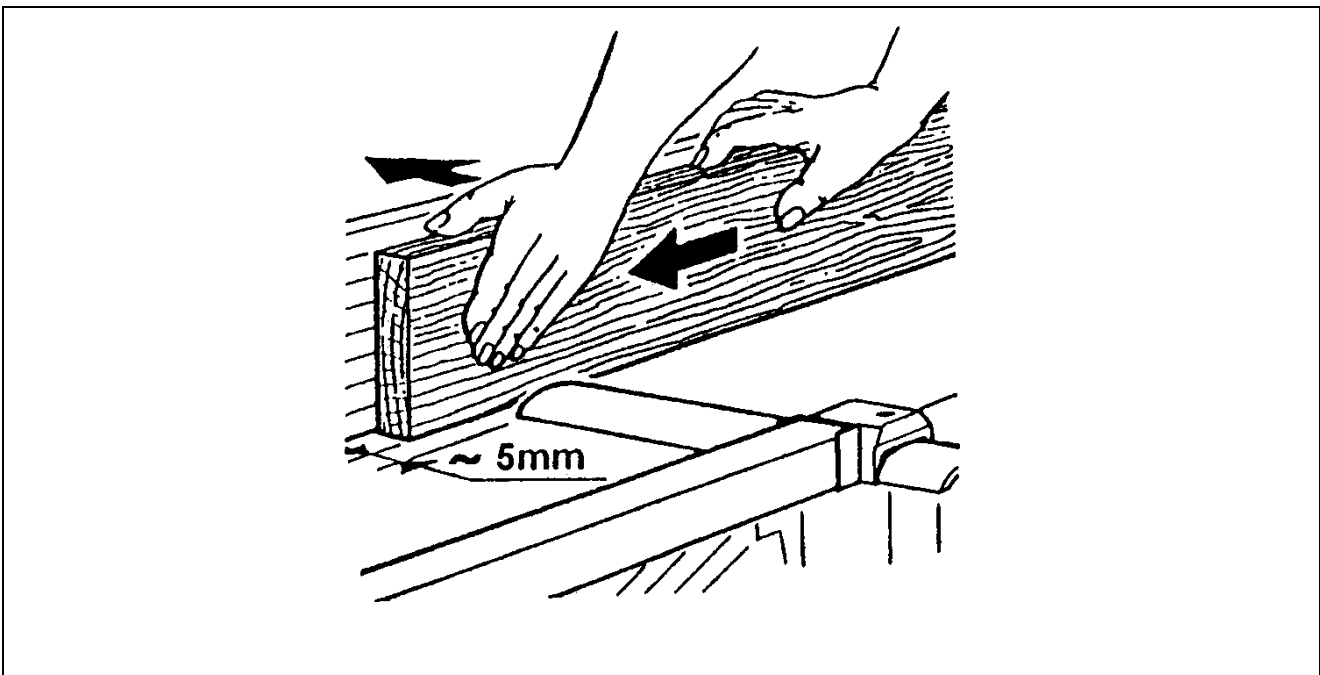
Use the special holder when planing short workpiece. The possible execution you can see on the picture.



Planing of workpieces with small cross section

WARNING! There exists danger of injury when leading the workpiece along the rule incorrectly.

Use a wooden angle rule made by yourself. Affix it to the metal rule (for example by two screw clamps).

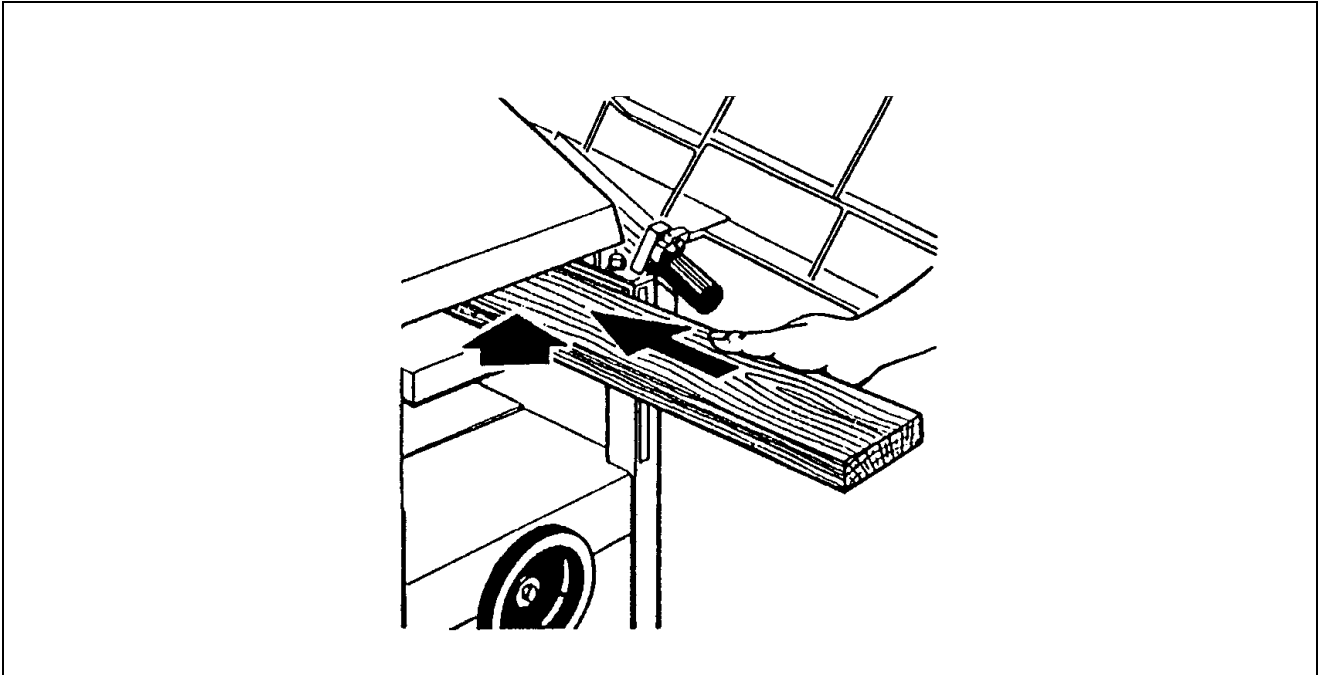


ADJUSTMENT OF THICKNESS

These are carried out in the factory, proceed with care, as they require a high level of competence.

Thickening

First adjust the Planer/Thicknesser to the function of thickening as follows.
Swing away the safety protection.
Move the rule to the utmost position off the planing table.
Release the planing tables and swing away.
Switch on the feeding equipment by hand lever
Adjust the thickness of chip and connect the exhausting equipment.



Adjustment of the table

Loosen the clamping lever of the table and adjust the thickening table to the required height by hand operated wheel. Put the working piece on the table, placing the un-machined side upwards. Lift the table into such a height until it stops at working piece. Using the hand-operated wheel set the stock removal (chip) at a max of 2.5mm. Then affix the table to the required position using the clamping lever. Switch on the machine and push the workpiece forwards. Workpieces with differently shaped ends have to be always inserted its wider end. When planing pitchy wood, it is recommended to coat slightly the thickening table with paraffin wax for easier moving.

Work area

While thickening stand in front of the planing table and on that side where is the hand-wheel (for lifting up the thickening table).

Safety instruments

When working with circular saw, spindle moulder, planer and thicknesser, the operator must wear short strengthened apron and safety goggles. It is suitable to use adequate protection of hearing and recommended working footwear. It is forbidden to use working mantle.

Workers qualification

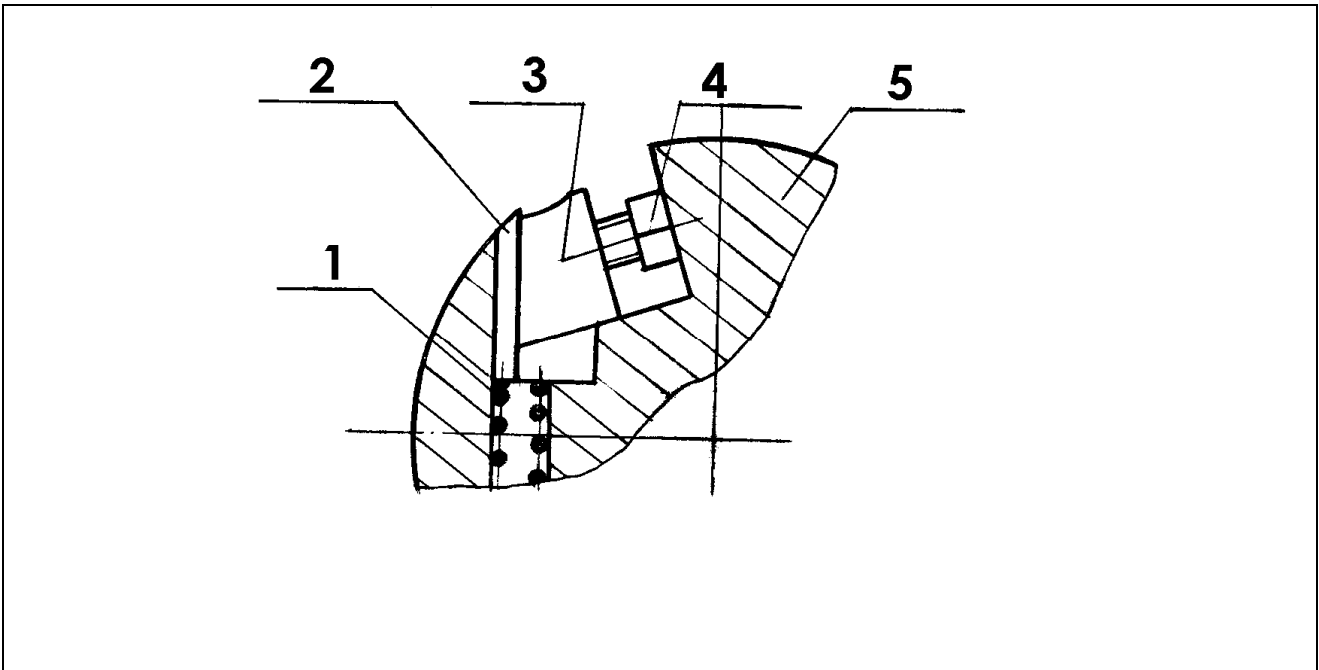
Only authorized worker specialized in woodworking branches (or worker instructed by this specialist) is allowed to work with the machine. Operators are liable to abide with all safety instruction and regulations, which are valid in his country.

TOOLS

Recommended tools

Cutterblocks have to be marked with manufactures name or logo (marking) and max allowed rotations. Suitable tools for this machine are knives system HSS 410X30X3mm and must meet the requirements of EN847-1.

Exchange and adjustment of knives



WARNING! Disconnect the machine from mains before any adjustment.

Swing away the planing tables before exchange of knives.

Release five screws (4) by spanner.

By the force of the spring (1), the knife (2) will be pushed out automatically.

Remove the knife and clean the bearing surface.

Clean the new knife carefully.

Insert the new knife by screwing five screws (4) so that its extension above the surface of cutterblock in max 1.1mm.

The manufacturer recommends the height of extension from 0.7 to 0.8mm.

Then tighten the pressing off wedge with five screws.

After all the above-mentioned steps are finished make sure to check whether all the five screws are in proper place and fix all protective covers and then try to start the machine by pushing the switch "ON" button.

WARNING! Do not use knives with width under 17mm.

Its fixing area is too small.

MAINTENANCE

WARNING! Disconnect the machine from the mains before any maintenance or repairs are carried out. Switch the machine off and lock up the main switch.

Lubrication

The machine is lubricated at the factory.

The electric motor is basically maintenance-free (sealed bearings).

The Planer/Thicknesser shafts are journalized in maintenance-free sealed bearings.

The machine should be cleaned once a week or after intensive use.

The wood feed rollers for thicknessing tend to become fouled when working with resinous woods or poplar. These and the bearing housings should be kept clean.

Table surface should be sprayed periodically with a slip enhancing or gliding product, such as Sliber-gleit or Molycote, to enhance sliding of workpieces.

The cylindrical thicknesser bed guide and the elevating rack should be cleaned and coated with a slip enhancing product.

We advise against using too greasy products which tend to amalgamate with wood dust and harden movements.

Surface planer tables

A 1 meter steel rule is required to adjust the tables.

Slightly loosen the fixing screws of the table which is out of adjustment. Tap slightly on the top or bottom of the table to obtain the correct transverse and longitudinal position, in relation to the shaft.

The possibility of adjustment is determined by the set of screw holes in the chassis (the table remains stable after each adjustment to check the geometric position in relation to the other table with the ruler.

Make sure that the gap between the tables and shaft is equal at both ends.

Tighten firmly after adjustment.

Thicknesser table

The necessary clearance between the stock and the quill (cylindrical rack system) is obtained by machining to ensure good overall rigidity and smooth handling.

Parallelism between the table work surface and the cutterblock shaft is factory-set.

REPAIRS

Any defect should not arise if you are operating the machine in the right way and making the suitable maintenance regularly. In case that the sawdust sticks on the cutterblock or the exhausting hose is filled up, switch off the electric motor before you start any repairs, otherwise it could be damaged. Also switch off the electric motor immediately, if the workpiece is getting jammed.

Exchange them immediately in such a case. If the machine embodies increase vibrations, check its placing, fixing or balance of tools.

The machine do not work.

Check the electrical installation and connection to the mains.

The thickening table moves only with difficulties.

Loosen the clamping lever of the table.

The output of the machine is insufficient.

Knives are blunt.

Too thick chip is adjusted and the operator has to adjust it according to the width and hardness of the wood.

The thickening table is not clean.

The V-belt of the cutterblock is not tightened well.

The electric motor has no sufficient output, it is necessary to call qualified electricians.

The machine vibrates

Knives are blunt or incorrectly adjusted.

Knives have no the same width.

The machine was installed on uneven surface.

Thickening is not possible on the machine

Too thick chip was adjusted.

The thickening table is not clean.

The working piece slaps against the back table.

Incorrectly adjustment of knives or back table.

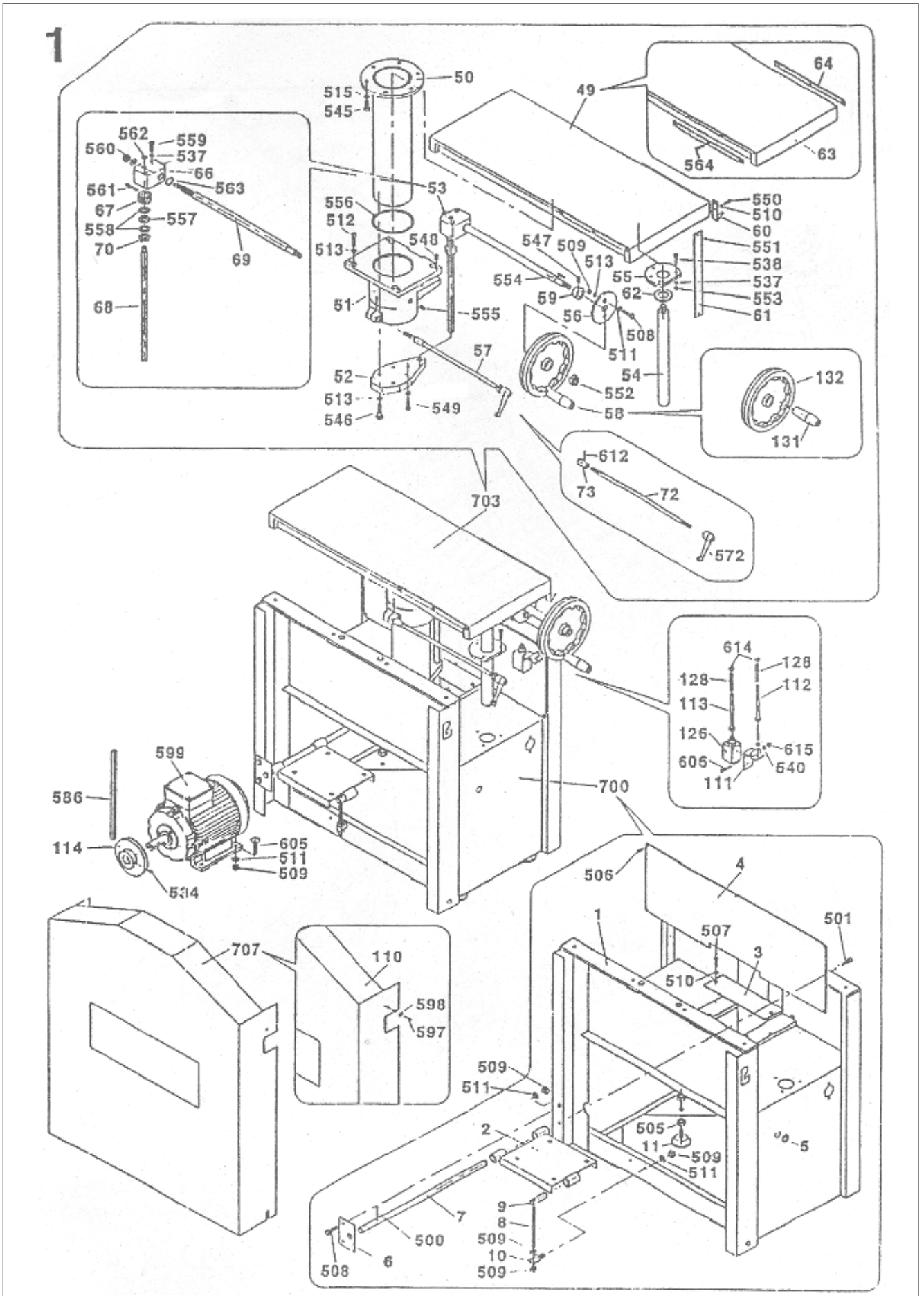
Projection at the end to the workpiece.

Uneven surface for planing.

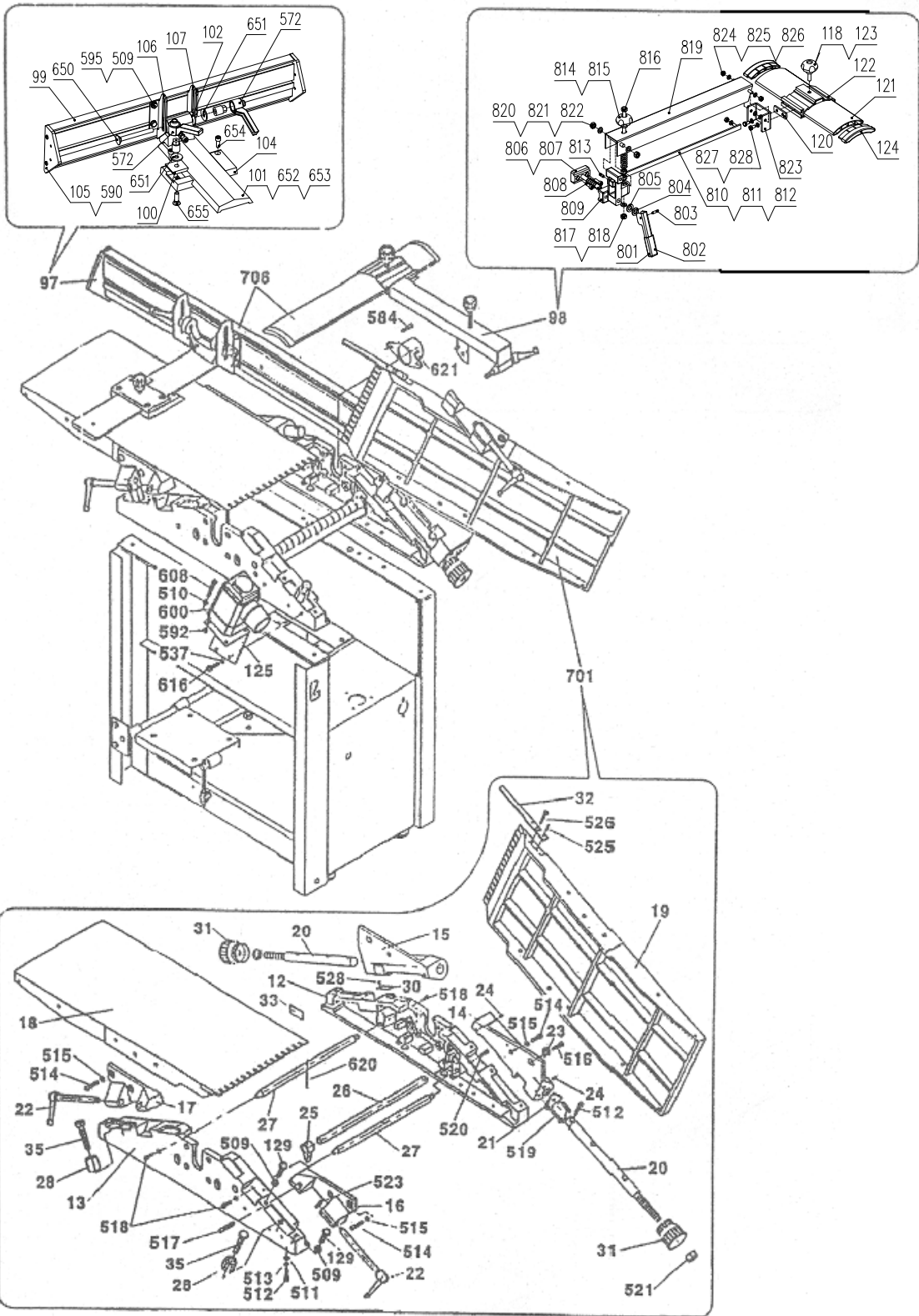
Incorrectly adjusted knives or tables.

Incorrect pushing or leading of the working piece while planing.

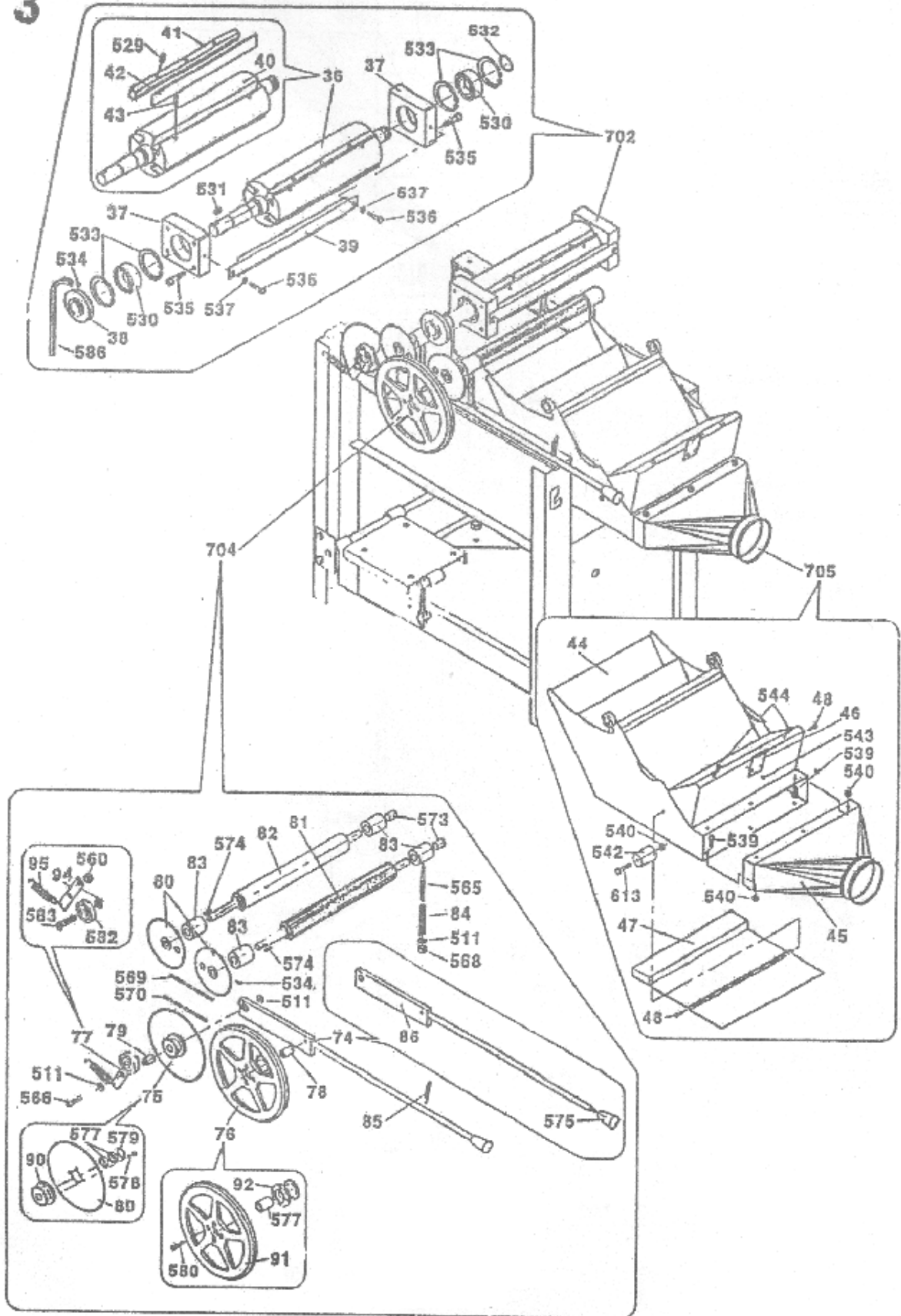
Part diagram

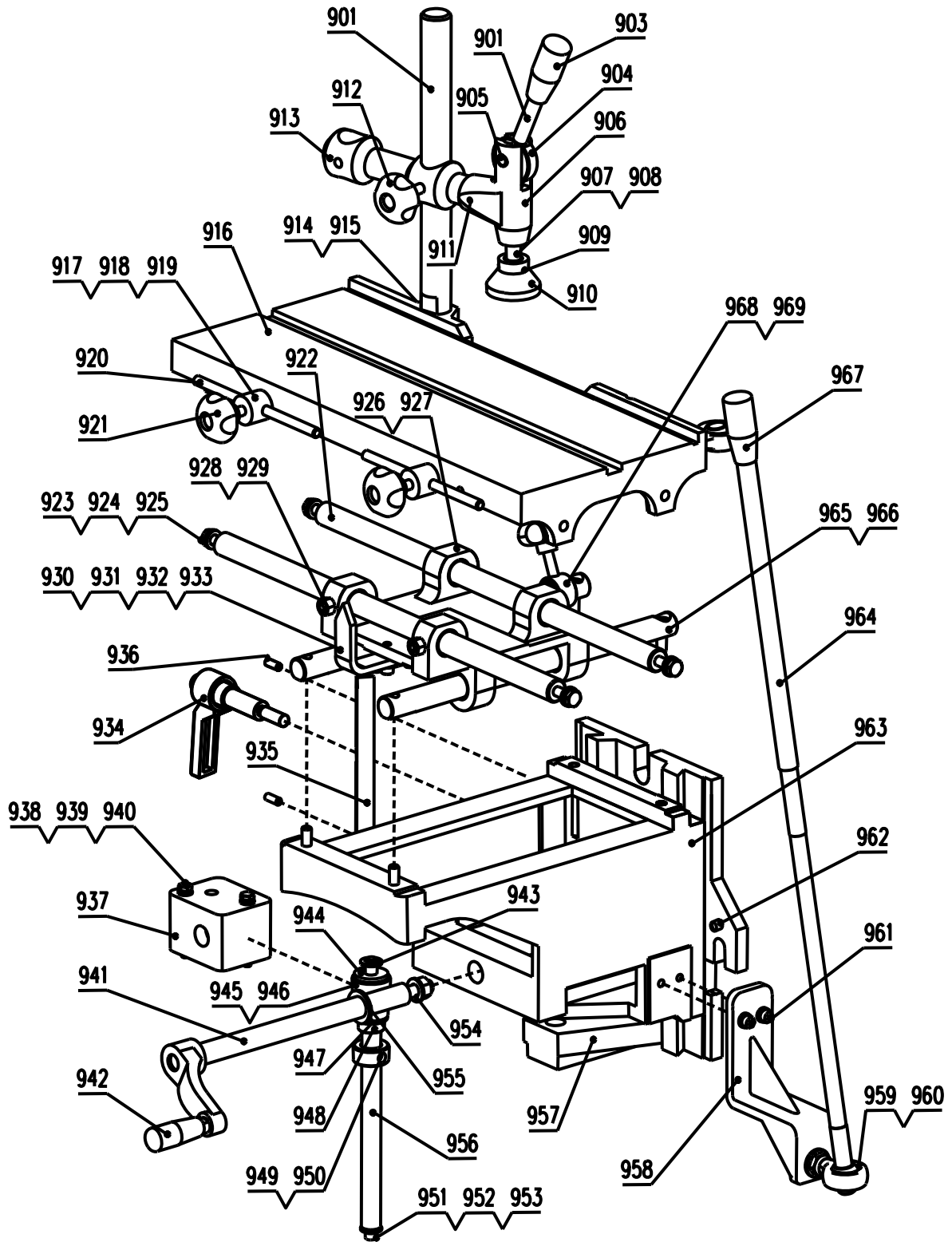


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3





SPARE PARTS LIST

No	Part Name	Q'ty	No	Part Name	Q'ty
1	Right and left support plate	1	43	Socket hex cap screw M6X16(SK)	8
2	Motor plate	1	44	Dust chute	1
3	Defend plate	2	45	Outlet	1
4	Side plate	1	46	Locking plate of dust chute	1
5	Nylon bush	1	47	Turning plate	1
6	Support plate	1	48	screw M5x6	2
7	Support axis	1	49	Thicknessing table assembly	1
8	Adjusting bolt	1	50	Lifting tube	1
9	AX	1	51	Lifting tube bracket	1
10	Adjusting bolt	1	52	Worm base	1
11	Rubber support	4	53	Gear assembly	1
12	Right cutter block support	1	54	Oriented bar	1
13	Left cutter block support	1	55	Locking block	1
14	Right adjusting bracket	1	56	Locking plate	1
15	Left adjusting bracket	1	57	Locking bar assembly	1
16	Right locking block	1	58	Hand wheel	1
17	Left locking block	1	59	"C" ring	1
18	Outfeed table	1	60	Pointer	1
19	Infeed table	1	61	Depth scale	1
20	Adjusting axle	2	62	Oriented bush	1
21	Metal plate	2	63	Thicknessing table	1
22	Locking handle assembly	2	64	Limiting plate	4
23	Eccentric bush	2	66	Limiting plate	1
24	Locking bolt M10X8	2	67	Gear	1
25	Kick block	15	68	Guide screw	1
26	Axis axle	1	69	Gear axle	1
27	Support axle	2	70	Bush	1
28	Nut M12	2	72	Double head screw	1
30	Scale	1	73	Locating block	1
31	Adjusting wheel	2	74	Control handle assembly	1
32	Locating plate	1	75	Chain wheel assembly	1
33	Scale	1	76	Chain wheel assembly	1
35	Hex bolt M12X55	2	77	Adjusting wheel assembly	1
36	Cutter block assembly	1	78	Bush	1
37	Ball bearing bush	2	79	Bush	1
38	Cutter block pulley	1	80	Sprocket IV	2
39	Protective plate	1	81	Driving roller	1
40	Special cutter block (SK)	1	82	Pressing roller	1
41	Blade locking block	4	83	Bush	4

42	Special blade (SK)	4	84	Double head screw	4
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No	Part Name	Q'ty	No	Part Name	Q'ty
85	Spring	1	500	Pin 3.2X30	1
86	Connecting plat	1	501	Socket cap screw M10x16	1
89	Sprocket III	1	505	Nut M10	8
90	Chain wheel II	1	506	Bolt M5x8	5
91	Cast iron friction wheel assembly	1	507	Bolt M5x8	4
92	China wheel	1	508	Hex bolt M8x16	4
94	Plate	1	509	Nut M8	15
95	Spring	1	510	Washer 5	12
97	Guiding fence assemble	1	511	Washer 8	26
98	Cutter block protective fence	1	512	Socket hex cap screw M8x25	4
99	Fence plate	1	513	Spring washer 8	19
100	Supporting bracket (SK)	1	514	Socket cap screw M10x30	4
101	Guiding plate (SK)	1	515	Spring washer 10	4
102	Right metal plate (SK)	1	516	Socket hex cap screw M10x40	2
104	Connecting plate(SK)	1	517	Pin A6X40	2
105	Protective plate	2	518	Socket hex cap bolt M6x16	4
106	Left sliding plate(SK)	1	519	Hex M8x16	2
107	Right sliding plate (SK)	1	520	Locating bolt M6X16	1
100	Supporting bracket (SK)	1	521	Nut M16	4
110	Protective cover	1	523	"C" ring 15	2
111	Switch fixing plate	1	525	Pin 6X16	1
112	Short locating bar	1	526	Socket cap screw M6x16	1
113	Long locating bar	1	528	Bolt M4x6	2
114	Motor pulley	1	529	Square head screw M6X10	20
118	Locking handle	1	530	Self -center bearing 2206	2
120	Support plate	1	531	Key 8X16	1
121	Protective plate	1	532	"C" ring 30	1
122	U-shaped bracket	1	533	"C" ring 62	4
123	Locking plate	1	534	Locking bolt M6X10	4
124	Plastic insert	2	535	Socket hex cap screw M8x30	8
125	Switch mounting plate	1	536	Hex screw M6x10	2
126	White microswitch	1	537	Washer 5	12
128	spring	3	538	Socket hex cap screw M6x25	3
129	Hex bolt M8x25	2	539	Hex screw M6x10	9
131	Bar sleeve	1	540	Nut M6	18
132	Hand wheel	1	542	Rubber cylinder	1
			544	Anti-vibration washer	2
			545	Socket cap screw M10x16	7
			546	Socket cap screw M8x30	8
			547	Locking bolt M8X8	1

No	Part Name	Q'ty	No	Part Name	Q'ty
548	Locking bolt M8X16	4	592	Nut M5	7
549	Socket cap screw M6x16	1	595	Hex bolt M8x16	4
550	Screw M5x8	2	596	Socket cap screw M6x12	2
551	Screw M4x6	2	597	Screw M5x8	2
552	Cap nut M12	1	598	Washer 5	2
553	Nut M6	4	599	Motor	1
554	Key 5X12	1	600	Electromagnetism switch	1
555	Lubricating injection hole M10	1	605	Hex cap screw M8x25	4
556	Seal	1	606	Socket cap screw M6x40	1
557	Ball bearing 51102	1	608	Screw M5x50	2
558	Washer 10	2	612	Elastic pin 4X14	1
559	Hex cap screw M6x65	2	613	Socket cap screw M6x16	2
560	Self-locking nut M10	2	614	"C" ring 6	2
561	Elastic pin 4X25	1	615	Cap nut M6	1
562	Elastic "C" ring 10	1	616	Socket cap screw M5x12	2
563	Elastic "C" ring 18	1	617	Nut M12	1
564	Screw M5x6	12	619	Handle assembly	1
565	Spring	4	621	Protective cover	1
566	Hex cap bolt M6x10	1			
568	Nut M8	4	650	Semicircle head screw M10X100	1
569	Chain 05B-1X106	1	651	Washer 10	2
570	Chain 05B-1X90	1	652	Socket cap screw M8X70	1
571	Locking handle	2	653	Nut M8	1
572	The handle assembly	1	654	Socket cap screw M8X20	2
573	Axle bush	8	655	Screw M10X30	1
574	Key 5X16	2			
575	Handle	1	700	Base assembly	1
577	Bearing 61901-2Z	4	701	Planning table assembly	1
578	Screw M6x10	4	702	Cutter block assembly	1
579	"C" ring 24	4	703	Thicknessing table assembly	1
580	Screw M6x16	4	704	Thicknessing clutch assembly	1
582	Ball bearing 6303-2Z	1	705	Extraction system assembly	1
583	Pin axis	1	706	Fence assembly	1
584	Bolt M6x16	2	707	Protective cover assembly	1
586	v-belt (L=1500)	1			
587	Washer 10	6			
588	Socket cap screw M6x12	6			
589	Hex bolt M5x50	1			
590	Screw ST5X40	4			
591	Nut M8	4			

No	Part Name	Q'ty	No	Part Name	Q'ty
801	Rubber sleeve	1	816	Hex cap screw M8x125	1
802	Locking handle	1	817	Nut M8	3
803	Elastic pin 5X16	1	818	washer 8	1
804	Spring washer	1	819	U-shaped metal tube	1
805	Washer 10	2	820	M8 bolt	1
806	Fixing block	1	821	Self-locking nut M8	2
807	Spring	1	822	Washer 8	2
808	Socket cap screw M6X20	2	823	Adjustable plate	1
809	Turing block	1	824	M6 bolt	1
810	Contacting bar	1	825	Self-locking nut M6	2
811	washer 6	1	826	Washer 6	4
812	Hex cap screw M6	1	827	Hex cap screw M6x10	2
813	Pin A6X20	1	828	washer 6	2
814	Star-type handle M8X32	1			
815	Spring	1			

No	Part Name	Q'ty	No	Part Name	Q'ty
901	Column	1	941	Gear shaft	1
902	Hand pole	1	942	Grank assemble	1
903	Sheath	1	943	"C" ring 10	1
904	Eccentricity ring	1	944	Washer 10	1
905	Pin	1	945	Gear shaft	1
906	Clamp base	1	946	Pin 4X25	1
907	Balling rod	1	947	Bearing 51102	1
908	Spring	1	948	Bush	1
909	Pin 4X20	1	949	Fixed ring	1
910	Press block	1	950	Set screw M8X10	2
911	Pin 4X30	1	951	Hex socket cap screw M6X12	1
912	Locking handle	1	952	Washer 6	1
913	Rocker	1	953	Spring washer 6	1
914	Hex slight-nut M12	1	954	Self-locking nut M10	1
915	Spring washer 12	1	955	Elastic "c" ring 18	1
916	Worktable	1	956	Screw shaft	1
917	Travel position pin	2	957	Base	1
918	Hex nut M8	2	958	Angle iron	1
919	Spring washer 8	2	959	Bearing SA14ES	2
920	Travel position axis	2	960	Nut M14	2
921	Locking bar	2	961	Socket cap screw M6X20	2
922	Sliding shaft	2	962	Screw M8X16	2
923	Hex bolt M8X30	4	963	Lift bracket	1
924	Washer 8	4	964	sheath	1
925	Spring washer 8	4	965	Fixing shaft	2
926	Sliding bracket	1	966	Hex socket cap screw M8X20	2
927	Limited plate (23X20X20)	8	967	Handle	1
928	Spline screw M8X16	4	968	Adjuster ring	1
929	Nut M8	4	969	Locking handle	1
930	Limited plate	1			
931	Socket cap screw M6X20	2		Accessories	
932	Washer 6	2		Protective cover	1
933	Spring washer 6	2		washer	3
934	Locking handle	1		Socket hex cap screwM12x35	3
935	Cuneiform iron	1		Cross-groove screw M6x16	2
936	Locking bolt M6X16	2			
937	Gear box	1			
938	Hex bolt M6X65	2			
939	washer 6	2			
940	Spring washer 6	2			

