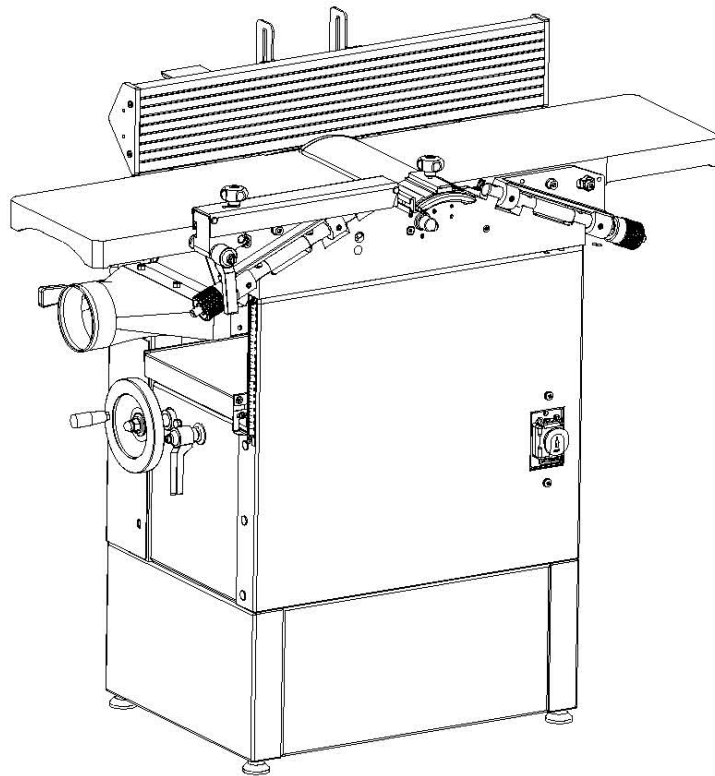


Combined Planing Thicknessing Machine



OWNER'S OPERATING MANUAL & SERVICE INSTRUCTIONS

CAUTION: Read the instruction manual before using the appliance

Foreword

These instructions have been created by the device manufacturer and are an integral part of the machine delivery. They contain basic information for qualified operating staff and describe the environment and manners of the machine use for which it has been designed, and also contain any information necessary for the correct and safe operation.

The machine is equipped with various safety devices protecting both the operator and the machine for its common technological use. Nevertheless these measures cannot cover all safety aspects and therefore it is necessary that the operator should read and understand these instructions before starting to use the machine. Errors made in the course of installation as well as during operation itself will thus be avoided.

Do not try therefore to put the machine into operation before you have read all instructions for use supplied together with the machine and before you have understood all its functions and working procedures.

Certain information or drawings may not be intended directly for the machine purchased by you as these instructions contain any information for various variants of this type made by our company. By comparing the respective part of the instructions with a particular machine you will find out whether or not they correspond to each other.

The manufacturer reserves the right to make partial alterations within continuous technical machine development.

Use of machine

The machine is designed as a combined planer and thicknesser or a one-side thicknessing machine for use in joiners shops(plants) at lengthwise (related to wood fibres) processing of wood and materials on its base within workpiece width of 250 mm.

Machine is intended for being operated by one person.

Any manipulation with the machine is forbidden for children and youth.

Qualification of workers

Only a man or woman trained in woodworking branche or instructed and schooled by such a specialist can operate the machine. Machine operator is obliged to learn this manual and abide with all safety regulations, rules and appointments, valid in country in question.

Working surroundings

The machine must operate in workshop surroundings of temperature range +5°C - +40°C, relative air humidity 30% - 95% non condensing and altitude 1000 m above the sea in surrounding classified fire danger of combustive dusts .

Technical data

Cutter block Ø	75 mm
Cutter block knives number	3 pcs
Cutter block revolutions	4000 rpm
Feeding rollers Ø	32 mm
Planing width max.	250 mm
Chip max.	5 mm
Guiding ruler angle optional	45°
Thickening width max.	248 mm
Height max.	190 mm
Chip removal max.	2.5 mm
Feeding speed	8 m/min
Motor power output	1.5 kW

Specifications concerning noise of the device

Level of noise A in the place of operation (LpAeq)	without technology	LpAeq = 81.4 dB(A)
	with technology	LpAeq = 87.3 dB(A)
Level of acoustic output A (LWA)	without technology	LWA = 89.3 dB(A)
	with technology	LWA = 93.0 dB(A)

The values given are those of emissions and do not necessarily mean any safe working values. Although there is a correlation between the value of emissions and the levels of exposure, these values cannot be used for

reliable determination whether or not additional measures are necessary. The factors influencing actual levels of workers' exposure include the properties of the working area, other sources of noise etc., e.g. the number of machines and the other neighbouring procedures. Also the highest permissible levels of exposure may vary in different countries. This information should help the machine user to evaluate the risk and the risk rate in a better manner.

Safety instructions

General

This machine is equipped with various safety devices protecting both the operator and the machine. Nevertheless, this cannot cover all safety aspects and therefore the operator, before putting the machine into operation, must read this chapter and understand it fully. Furthermore the operator must also take into account other aspects of danger relating to the surrounding conditions and material.

Basic safety requirements

- Before connecting the machine to the mains make sure that all safety items are in their active positions and check their functioning. If it is necessary to remove the doors or protective covers, switch off the main switch and lock it.
- Kick-back catchers must be freely movable and their functioning

must be checked regularly, maybe several time a day.

- Do not connect the machine to the mains while the door or protective cover is removed.
- In order to avoid improper operation get acquainted with the location of switches before switching the machine on.
- Remember the position (location) of the emergency stop switch so that you can use it promptly at any time.
- Be careful and do not touch any switches incidentally while the machine is being operated.
- Do not touch any rotating tool with naked hands or with any other object under any circumstances.
- In the case that you are not going to work on the machine, turn off the machine by the switch on the control panel and disconnect the power supply from the machine.
- Before cleaning the machine, switch off and lock the main switch.
- Before doing any maintenance work inside the machine switch off and lock the main switch.
- If the machine is used by more workers, do not proceed to other work without informing the other worker about what procedure you want to use.
- Do not alter the machine in any manner which might cause any risk to its safe operation.

- If you have any doubts on correctness of your procedure, contact a responsible person.
- Do not neglect performance of regular inspections in accordance with the instructions for use.
- Check and make sure that no disturbances occur on the machine caused by the user.
- After the work is finished, adjust the machine so that it is ready for another series of operations.
- Should a failure in power supply occur, switch off the main switch immediately.
- Do not paint, make dirty, cause any damage to, alter or remove safety plates. If they become illegible or lost, contact the manufacturing plant and renew the plates.

Clothes and personal safety

- Experience shows that injuries are caused by various personal articles, e.g. rings, watches, bracelets etc. Therefore take them off before starting the work, button the sleeves, take off a tie, which may be caught with various parts of the working machine. Pin your hair together so that it does not flutter freely and wear suitable , shoes recommended or prescribed by labour-safety regulations of all countries.
- Wear safety outfit (goggles, apron, safety shoes etc.).
- In the case of any obstacles above your head – in the working area -

wear a helmet.

- Always wear a protective mask while machining any material that produces dust while being machined.
- Never wear any loose working clothes.
- Do not work on the machine under influence of drugs or alcohol.
- If suffering from dizziness, weakness or faintness, do not work on the machine.

Safety regulations for operators

Do not put the machine into operation before you get acquainted with the contents of the instructions for use.

- Make sure that electric cables are not damaged so that injuries caused by electric current leaking (electric shocks) are avoided.
- Check regularly that safety covers are mounted properly and that they are not damaged. Repair damaged covers immediately or replace with other ones.
- Do not put the machine with the cover removed into operation.
- Never use any tools that are distorted or broken.
- Always use the tool suitable for the work given, which corresponds to the machine specifications.
- Replace blunt tools as soon as possible as blunt tools are often a cause of injuries or damage.
- Never use the tools at speeds higher than those recommended by the

respective manufacturer.

- Stop all functions of the machines before replacing knives.
- Do not remove or interfere otherwise in safety devices such as covers, limit switches, and do not block them mutually.
- While handling parts above your possibilities, ask for assistance.
- It is recommended not to work on the machine during a storm.

Safety regulations for maintenance

Do not do maintenance work before you get acquainted with the instructions for maintenance thoroughly.

- Before you start to perform any maintenance work, always turn off the main switch and lock it. A possibility of accidental putting the machine into operation by another person is thus avoided.
- Any maintenance work on electric parts of the equipment may be done by a qualified person only.
- Even if the machine is stopped, the power supply is not disconnected. Always switch off the main switch and lock it.
- Do not clean the machine or its peripheral devices even if the machine is completely out of operation, unless the main switch is switched off and locked.
- Keep your fingers in a distance from belts and belt pulleys.
- While replacing electrical parts of the equipment, switch off the main switch and lock it. Faulty parts should be replaced only with products

having the same specifications as the original ones.

- Do not remove or alter blocking of limit switches or any other safety devices.
- Do not switch the machine on before all covers removed for the purposes of maintenance are put in their places again.
- Always keep the maintenance area including the working place clean.
- Any maintenance work must be done by a qualified staff in accordance with the instructions issued by the machine manufacturer.
- Read the instruction manual for maintenance men carefully and completely.
- For replacement of parts and necessary things, get in advance those being identical with the original type and complying with standards.
- Use only specified kinds or lubricating oils and grease or those equivalent to them.
- If any belt in the set of belts used gets longer than the limit prescribed, replace the whole set completely.
- Do not use compressed air to clean the machine or to remove chips.
- Always check the results while a responsible person is present.

Safety regulations for place of work

- Always ensure a sufficient working area and free access to the machine and peripheral devices.
- Put tools and any other obstacles in the place designed for this

purpose, in a distance from the machine.

- Ensure sufficient lighting in the working area which will not create shadows or cause the stroboscopic effect. For safe and quality work the hygienic standards specify the minimum intensity 500 lx.
- Never put any tools or any other objects on working tables or covers.

Transport and storage

Transport and storage

Be especially careful during transport and manipulation and commit it to qualified personnel especially trained for this kind of action.

You must secure that no person nor subject could be folded by the machine during loading and unloading it! Never enter the space under machine lifted up by crane or high-lift !

The machine must be protected against excessive vibrations and moisture during transport. It must be stored indoor in temperature range (minus) – 25°C to + 55°C. On customer's wish the machine can be packed in a cartoon or resistant wooden box.

Machine lifting

The machine or its separate parts can be lifted only with an approved lifting appliance of certified carrying capacity. We recommend to use :

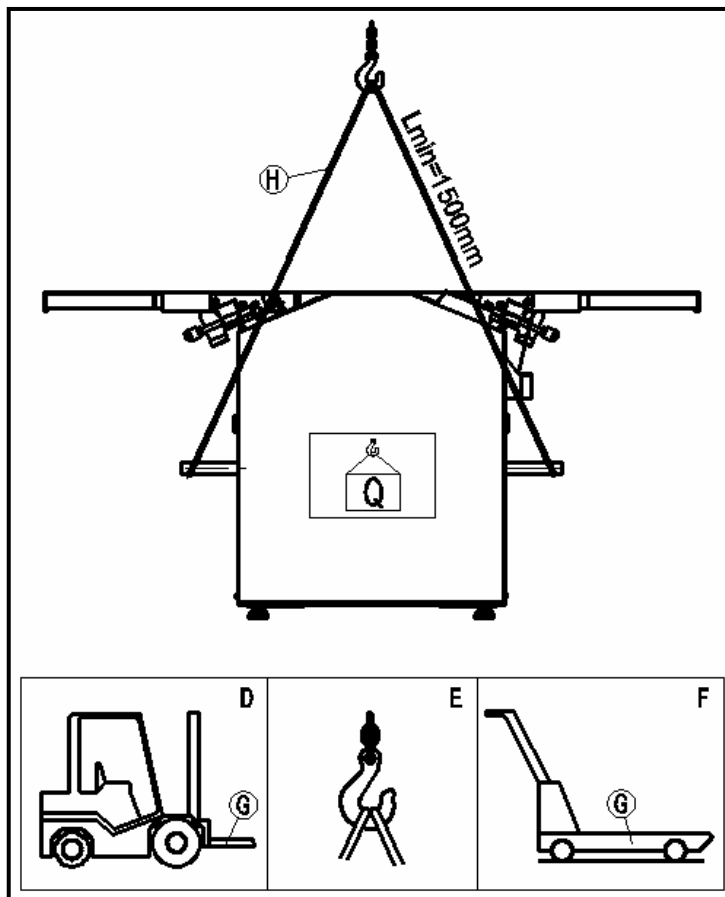
D – high-lift

E – crane or other lifting appliance

F – manual fork lift

Use a high-lift of sufficient fork length !

Prepare a high-lift (D) or manual lifting carriage (F) of sufficient forks carrying capacity



- shift the fork (G) under the machine.
- When using a crane(E) or similar lifting mechanism- proceed followingly:
 - prepare 4 lifting ropes (H) of minimal length 2 m
 - bend ropes onto the

crane hook of demanded carrying capacity

- place the second end of ropes under machine frame
- check up the stability of machine hang at a moderate lifting up
- lift the machine carefully and slowly and then relocate it without sudden changings of moving onto chosen place.

Machine positioning

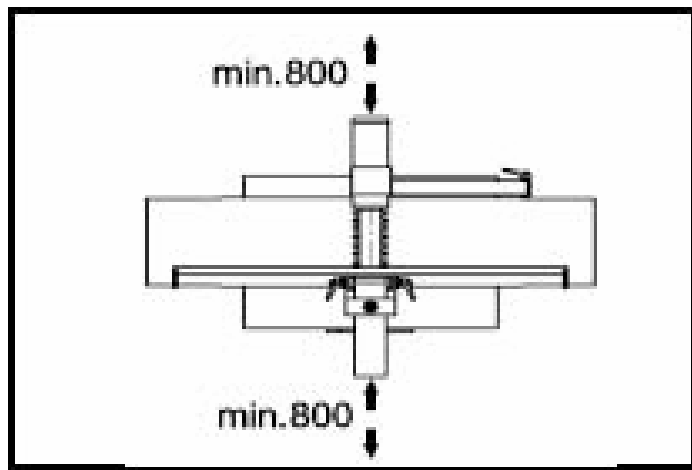
Remove protecting coat from table and other machine parts with a

solvent. Do not use petrol or kindred solvents for this action. They can cut down resistance against corrosion of some machine parts.

The working space extent depends on machine dimensions, intended working operations and dimensions of processed material.

Do not forget to let free a big enough space for installment of a sufficiently effective exhausting unit or hoses connecting with the central exhausting system.

Working space



It is important to keep a free space of at least 0,8 m, requested as working space surrounding the machine. If a long piece is planed, it is necessary to have a sufficient

space in front of and behind the machine in places of material in - and output.

Machine levelling and fixing

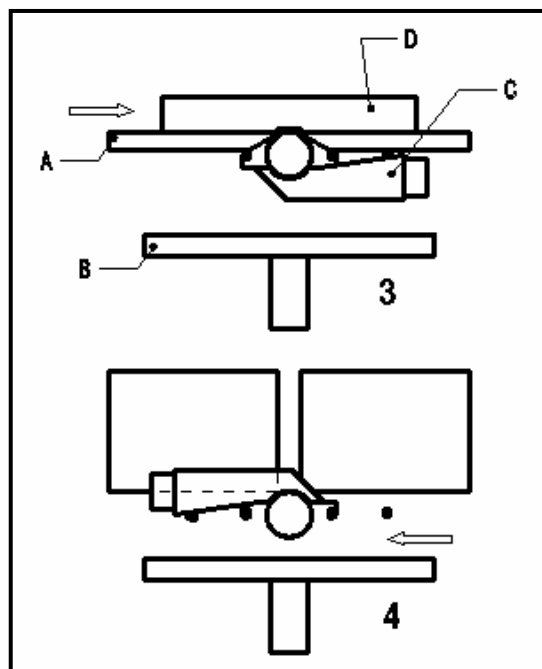
The machine (in lower part of stand) has feet with levelling screws and bores for anchoring bolts. Balance the machine in plane with the clearance limit 1mm/1metre.

Exhausting connection

An exhausting unit of minimal volumetric capacity $570 \text{ m}^3 \text{ h}^{-1}$ and minimal air stream speed in the hose 20 ms^{-1} for dry particals, and $790 \text{ m}^3 \text{ h}^{-1}$ at minimal air stream speed in hose of 28 ms^{-1} for wet particals, is necessary for proper functioning of the machine.

Always operate machine only with running exhausting !Start the machine and the exhausting unit all at once !

Use a flexible exhausting hose of diameter 100 mm for connecting. Connect the exhausting hose to nozzle, located as follows :



Exhausting nozzle(C) of planer (3) is oriented to the space of thicknesser under planing table (A). Thicknesser (4) is exhausted by the same nozzle (C) as planer. The nozzle is oriented over (above) the cutterblock after tilting up of planing tables.

Connecting to mains

Damaged power supply cables must be replaced by the competent specialist immediately. Operation with damaged cables is dangerous to life and is therefore forbidden!

Before putting the machine into operation make sure that the voltage and frequency specified on the machine type plate comply with the values of the

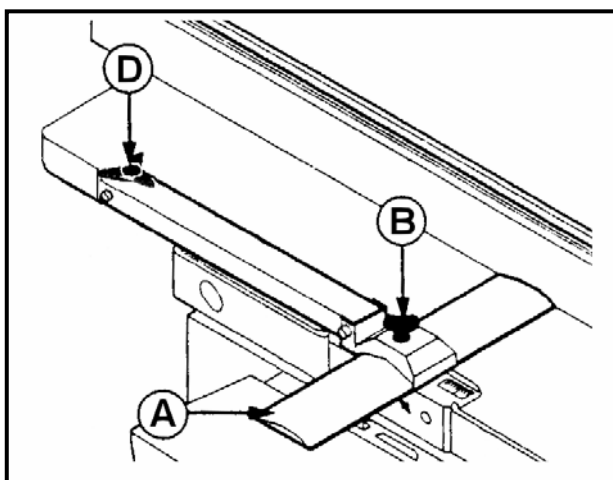
values of the mains to which it is connected.

Before adjustment and replacement of tools and before any adjustment work, alterations and maintenance work, always turn off the main switch and lock it.

Machine operating and adjusting

Adjusting of planer

Adjusting and operating of protecting device



Height of cutterblock covering (A) is adjustable with a star-head screw (D). left hand rotating – increasing height right hand rotating – height is falling off. Covering is

lengthwise-adjustable by releasing the second star-head screw (B).

Tighten slightly star-head screw after adjusting. When planing – set the

cutterblock covering to be max. 5 mm above input workpiece.

Planing

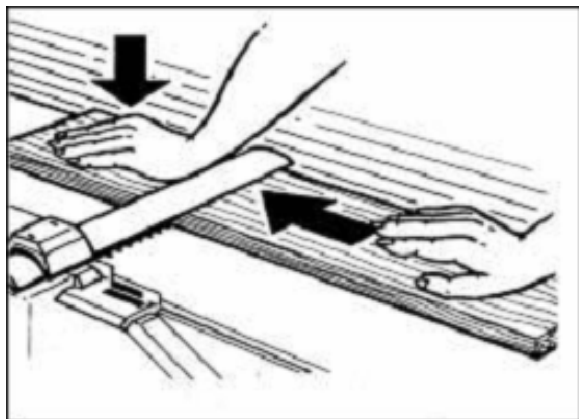
- adjusting of movable table – setting of removal thickness
- release the table with right side tightening lever
- set required thickness (removal) with left side hand star
- fix the table with tightening lever
- quantity of removal thickness can be read at the measure.

Adjusting of tiltable ruler :

- release star screw of ruler leading
- adjust the ruler according to workpiece width
- draw up the star screw of ruler leading tight again.

Planing of flat workpieces

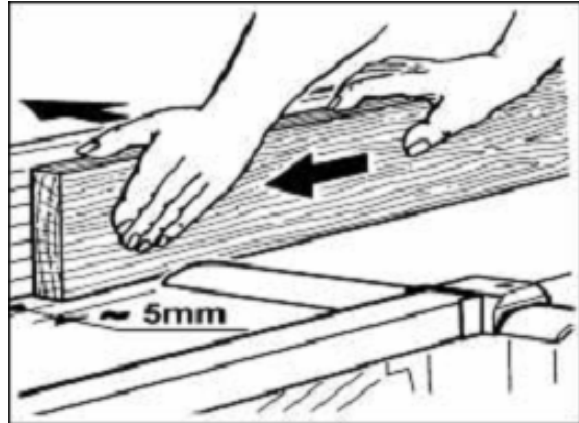
Put the flat piece on the planing table, take up the roller cover by left hand, adjust it to required height about 5 mm over input workpiece and switch on the



machine. Push the workpiece towards the cutterblock, your hand is moving over the cutterblock cover, the workpiece is being shifted by hands - not by your entire body! Do not push the workpiece back-wards over the cutterblock !

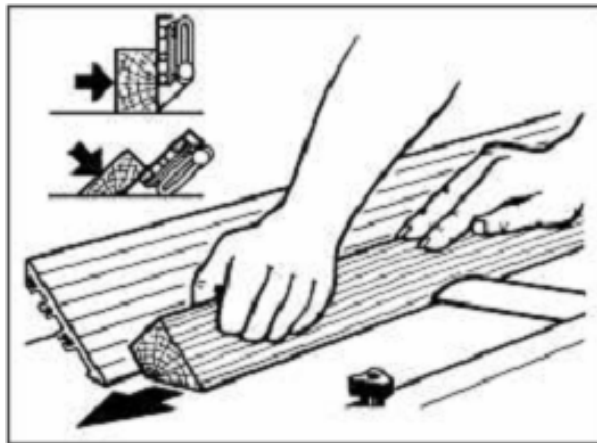
Planing of narrow pieces

When planing narrow pieces set the cover of the cutterblock in such a position, so that the distance between the workpiece and cutterblock cover is max. 5



mm. Then switch on the machine and push and shift machined workpiece against cutterblock (between the cutterblock cover and ruler).

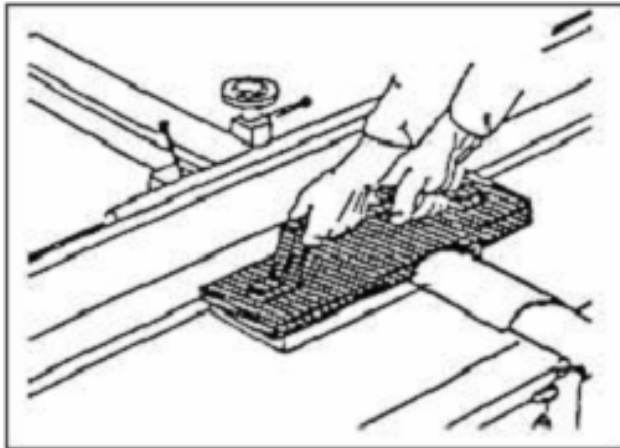
Planing with inclined ruler



Check the angle of the longitudinal ruler at loose tightening levers (the position 90° is fixed), tighten levers again and switch on the machine. Push chamfered

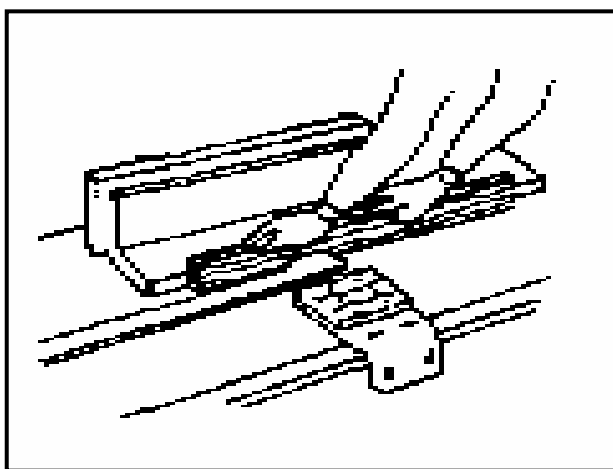
workpiece forwards and against the ruler.

Planing short workpieces



Use a special holder when planing short workpieces. You can see a possible execution on the picture. You can offer the holder as a special accessories of the machine.

Small cross-section pieces



High risk of injury if guided along the ruler improperly!

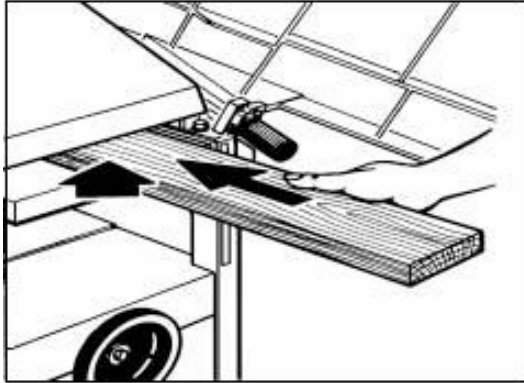
While thin materials are being machined, the ruler should be completed with an auxiliary ruler. Its height must not exceed 20 mm and exceed 25 mm, its width must be larger than 60

mm. The auxiliary ruler may be

ordered as a special accessory to the machine.

Adjusting of thicknessing machine

Thicknessing



- First the planing machine is converted to the thicknessing one:
- tilt the cover of the cutter block backwards
 - shift the guide ruler to the extreme

position and remove it from the machine

- release the planing tables and tilt them upwards
- move the exhaustion socket above the shaft and secure it
- connect the drive of feeding rollers by means of hand lever or by means of a switch for machines with a separate feed driving motor
- adjust the chip thickness by setting the thicknessing table to the required size of the workpiece
- connect the exhaustion.

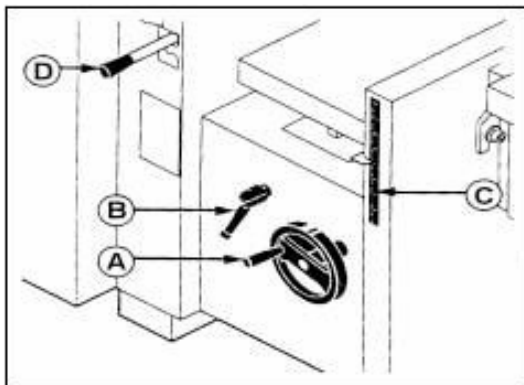


Table adjusting

- Release the table fixing lever (B) and set the thicknessing table to the required height by means of hand wheel (A). Put the machined

workpiece on the thickening table by the side not machined upwards. Shift the table by turning hand wheel (A) up until the machined piece touches the limiting bar of the maximum chip. By moving the hand wheel in the opposite direction the table moves downwards to the required size (chip). The maximum size of the chip is 2.5mm.

The thickness of the machined workpiece ay be read on the scale of the table position (C). After adjustment fix the table with respective lever (B). Switch on the machine and move the machined piece slowly to the engagement. Insert pieces with uneven thickness always with a thicker end entering the machine first. In the case of resinous wood it is recommended to apply the thickening table slightly with wax (candle) in order to improve the shift of the machined material.

Working positions of operator

Picture dislocates operator's working positions around the machine.

Place A – planing:

operator stands by flank to the front planing table.

Place B – thickening: when putting the workpiece in – operator stands in front of thickening table on side of hand wheel for adjusting of this

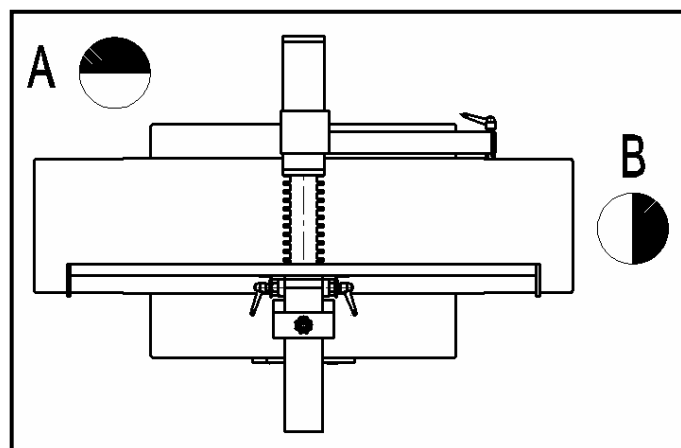
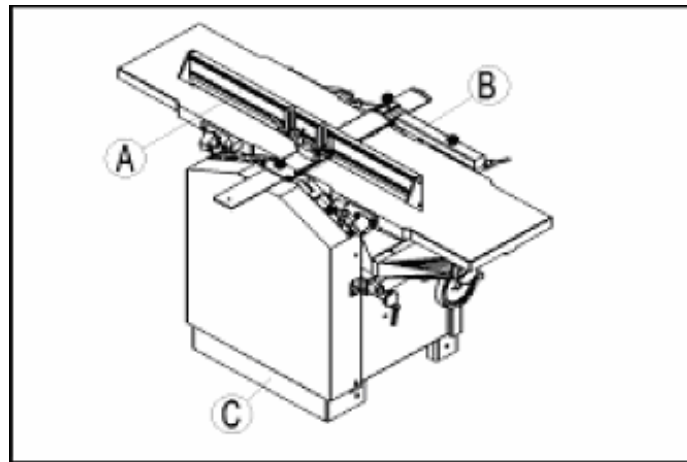


table.

Installation of demountable parts

Do not mount demounted parts from the machine before having thoroughly read and learned all service instructions manual and without particular identification with the machine. Put the ruler (A) onto the leading, eventually adjust the back



stop and fix it. Mount the covering of the cutterblock (B). Mount the good-looking coverings of machine feet.

Forbidden manipulations

-touch or interfere with the cutterblock or its near surroundings and other moving parts

-plane other material than wood or those on its base

-process workpieces in cross-direction. Machine is intended only for planing in lengthwise

direction of wood fibres- overload the machine by processing of too big workpieces

-remove shavings from cutterblock surroundings by hand or anything on running machine

-use other knives in cutterblock than recommended by machine producer

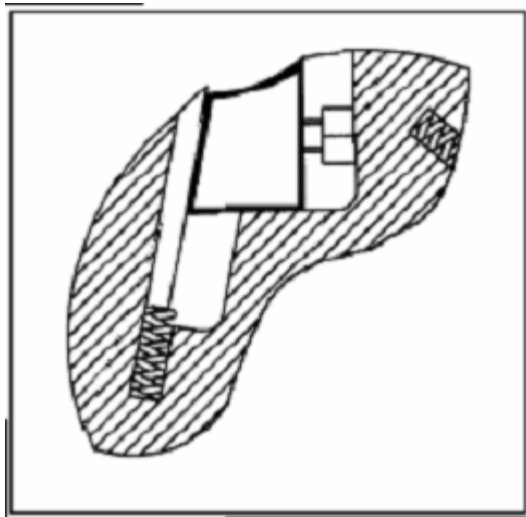
-use knives wide less than 20 mm.

Tools

Do not use other cutterblock knives than delivered or recommended by machine producer. Do not use knives wide less than 20 mm.

Proper tools for using in this machine cutterblock are planing knives 250 x 30 x 3 mm (length x width x thickness) from steel HSS or HSS 18.

Replacement and adjustment of planing knives



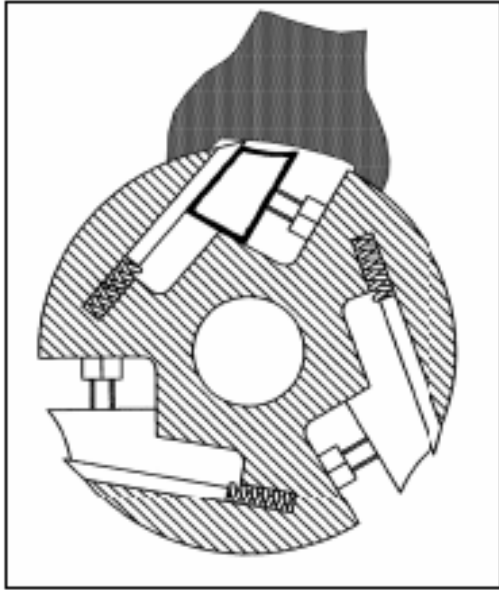
The planer blades are mounted into 3 slot housings machined in the cutter block. The slot housing comprises of a slot cut on a radial axis with a reverse tapered slot alongside it. The depth of the first slot governs the seating of the

chipbreaker/wedge, the second slot allows the blade to be set to its correct depth in the block.

The chipbreaker/wedge is machined with a tapered face set at the same angle as the slot. This allows the blade to be clamped between parallel faces. The block will accept blades 250mm x 3mm x 30mm. After sharpening, the blades will reduce over their height dimension, but the blades can be safely used until their overall height dimension is 20mm, then the blades must be discarded as they can no longer be securely clamped in the housing. The reverse taper slot has a series of blind holes bored in the bottom surface into which springs are fitted. These springs act against the bottom of the planer blade, to push it into contact with the setting tool, when the blades are being positioned after changing.

The manufacturer recommends the height of the knife protrusion from

0.7 to 0.8 mm.



Changing the blades

Locate the 5.5mm x 7mm A/F spanner in the tool kit. Turn the cutter block until one of the slots is uppermost, (between the tables). Using the spanner drive the 5 No. bolts into the chipbreaker/wedge, thus removing the clamping effect. This should allow the blade to 'spring' up (not like a jack in a box!) to protrude clear of the edge of the cutter block. Carefully remove the blade, lay aside. Remove the chipbreaker/wedge, lay aside, finally remove the springs from the slot and lay them aside. Repeat the process for the

other two blades. If the block becomes difficult to hold located, being out of balance with the blade/s removed; use a thin wedge of material to jam the cutter block in position. Now is a very good time to clean the slot housings thoroughly, remove the resin build-up, sawdust, chips and any old joiners/carpenters etc., that have recently disappeared without trace. Ensure the circumference of the cutter block is likewise cleaned thoroughly. Remove the clamping bolts from the chipbreaker/wedges, clean the bolts and the threaded holes, clean the springs and the chipbreaker/wedges thoroughly. Apply a little light oil to the springs. Remove the new/sharpened blades from their 'keeper'; set carefully to hand and put the 'old' blades away in the 'keeper' to be sent for sharpening. Locate the blade setting tool and put it to hand. Screw the bolts into the chipbreaker/wedges. Select one of the slot housings and wedge the cutter block to maintain it in position. Set the springs into the holes in the bottom of the slot, introduce the chipbreaker/wedge, position it against the 'back' of the slot, introduce a blade in front of it. Using the spanner start to unscrew the bolts, take care at this time as the blade could be protruding well above the block. Unscrew the bolts until the wedge just starts a 'nip' on the blade, then screw them back in half a turn. At this point all the components should be loose in the slot (not slack), carefully position the blade and the wedge to line up with the edge of the cutter block. Press the blade setting tool gently down onto the blade, ensure that the locating feet are firmly in contact with the cutter block, and the blade is against the setting recess. Holding the blade and the setting tool in this position, tighten at least two of the clamping bolts to provide a firm clamp of the blade, with the setting tool held firmly in place. Tighten the remaining bolts. Tighten hard, but do not overtighten, remember, these are M4 bolts. Repeat this procedure for the remaining blades. When all the blades are

fitted, carry out a quick check of the set of the blades, by hand rotating the cutter block in reverse and visually inspecting the edge of the blades against a fixed point . If this appears satisfactory, carry out a final 'tightness' check on the clamping bolts; remove all the tools and stow away

Maintenance and repairs

Before starting maintenance or repair work always disconnect the machine from the mains! Switch off and lock the main switch!

Always keep tightened of the V-belts of the machine is necessary.

The machine should be cleaned and the rods, pins, threads and other parts liable to corrosion should be lubricated with a suitable oil. The interval for such activities will depend on the manner of work but it should be performed at least once a month.

The bearings of the electric motors, moulding spindle and circular saw shafts have permanentgrease filling, are closed on both sides and do not require any lubrication.. Clean the tables from resin with a suitable solvent.

Avoid contamination of belts with oil or grease. If this occurs, clean the belt with paper only or dry it.

Removing the dust is best to be done with a vacuum cleaner. Perform this activity regularly, at east once a week.

troubleshootin

No faults should occur while the machine is used correctly and maintained duly. If any saw dust becomes stuck on the saw disc, or if the

exhausting hose is blocked with chips, the machine should be switched off before remedy. If a workpiece becomes jammed, turn off the machine immediately!

A blunt saw disc or tool often causes that the electric motor becomes heated excessively. If the machine vibrates excessively, check its setting and anchoring, possibly also clamping and balancing of the tools used.

The machine does not work:

It will be necessary to check the electrical wiring and connection of the machine to the mains.

The thicknessing table moves with difficulties:

The table fixing lever should be released or the column should be lubricated.

The machine output is low:

Tools are not sharp.

The chip with too large thickness is chosen – the width and hardness the wood should be taken into account.

The V-belt is not tightened enough.

The motor does not work with the full power output – an expert should be called.

The machine vibrates:

Tools not sharpened or adjusted properly.

The knives are of different width.

Unbalanced tools.

The machine is not standing on a flat ground, is not anchored properly.

Thicknessing cannot be performed on the machine:

Chips too thick.

The thicknessing table is not clean.

Material is hitting the rear table:

The knives or the rear table incorrectly adjusted.

Recess on the rear part of the machined workpiece:

Uneven surface during thicknessing operation.

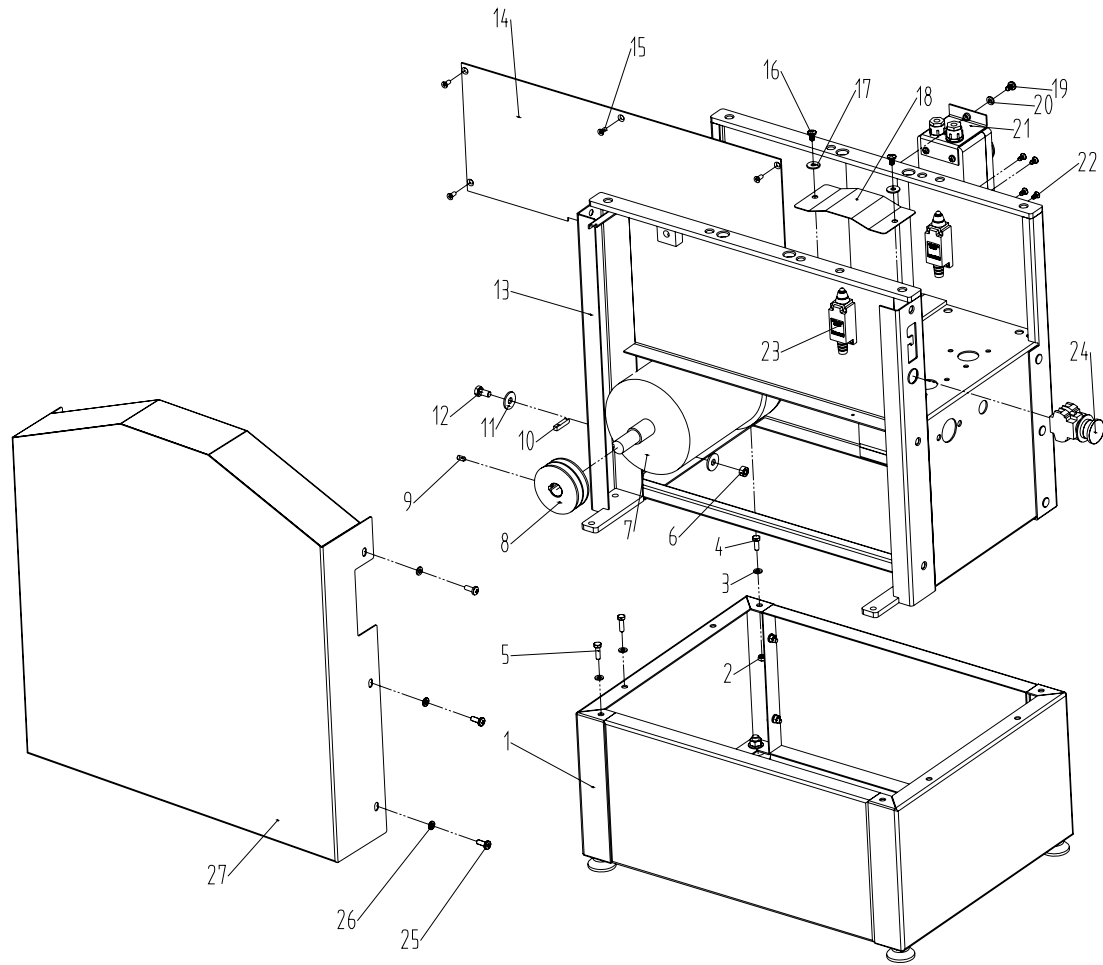
The knives or the tables incorrectly adjusted.

Incorrectly pressed or guided material during the planing operation.

Spare parts

While ordering spare it is advisable to specify numbers and names of the required spare parts according to this appendix.

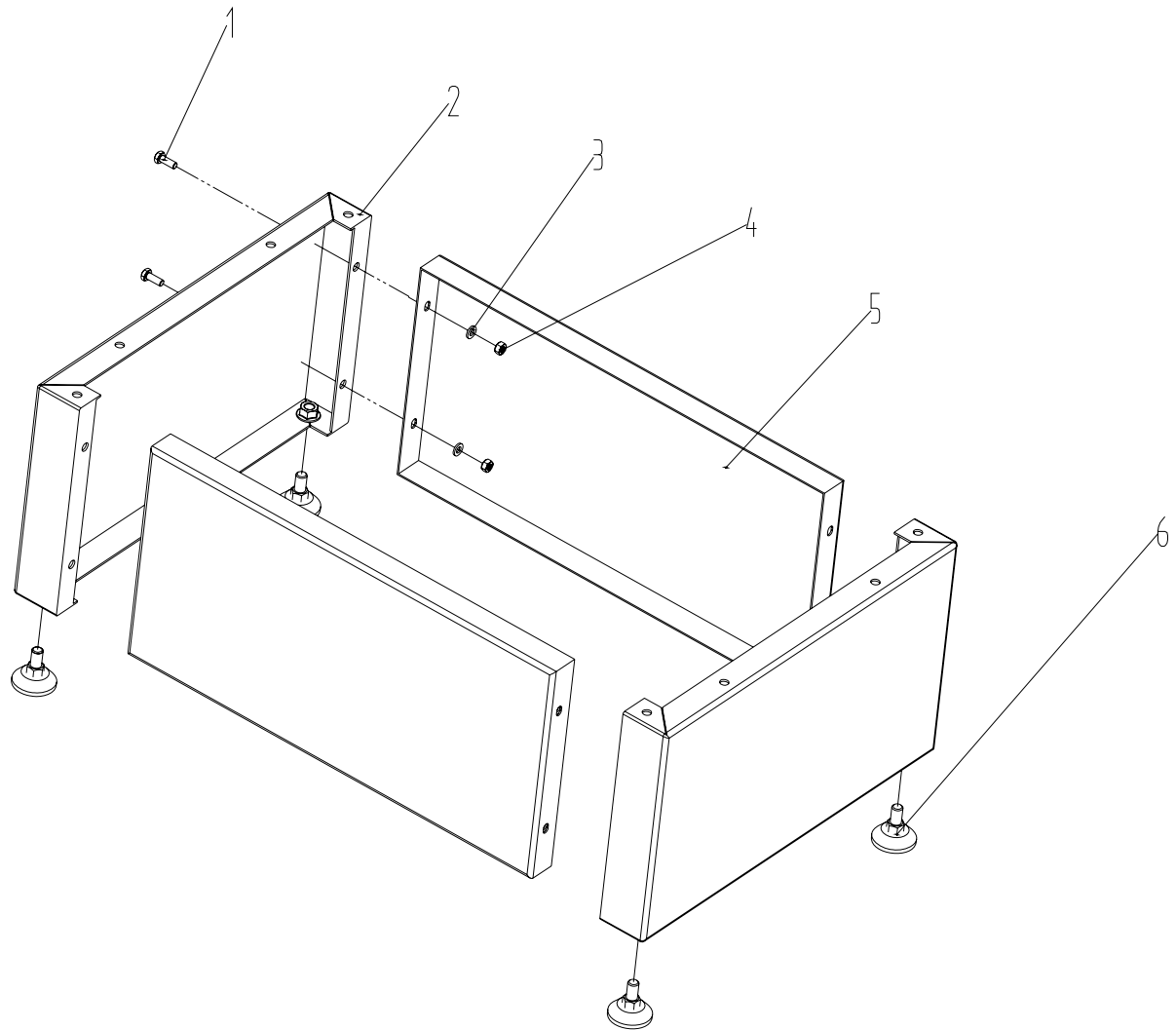
PLANER & THICKNESSER STAND ASSEMBLY



PARTS LIST FOR PLANER & THICKNESSER STAND ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	M06-2	Lower stand	1	2	GB6170-86	Hex nut M6	6
3	GB97.1-85	Washer ϕ 6	6	4	GB5783-86	Hex bolt M6X16	2
5	GB5783-86	Hex bolt M6X20	4	6	GB6170-86	Hex nut M8	4
7	M0607	Motor	1	8	M0606	Motor pulley	1
9	GB80-85	Setscrew M6X12	1	10	GB1096-79	Key 6X25	1
11	GB97.1-85	Washer ϕ 8	8	12	GB5783-86	Hex bolt M8X16	4
13	M0603	Stand assembly	1	14	M0609	Right plate	1
15	GB819-85	Screw M5X10	5	16	GB818-85	Screw M6X10	4
17	GB97.1-85	Washer ϕ 6	4	18	M0602	Cover board	2
19	GB818-85	Screw M6X10	2	20	GB97.1-85	Washer ϕ 6	2
21	KJD12	Switch	1	22	GB819-85	Screw M5X10	8
23	WDKG	Inching switch	1	24	JTKG	Emergency switch	1
25	GB818-85	Screw M6X16	6	26	GB97.1-85	Washer ϕ 6	6
27	M0601	Protective cover	1				

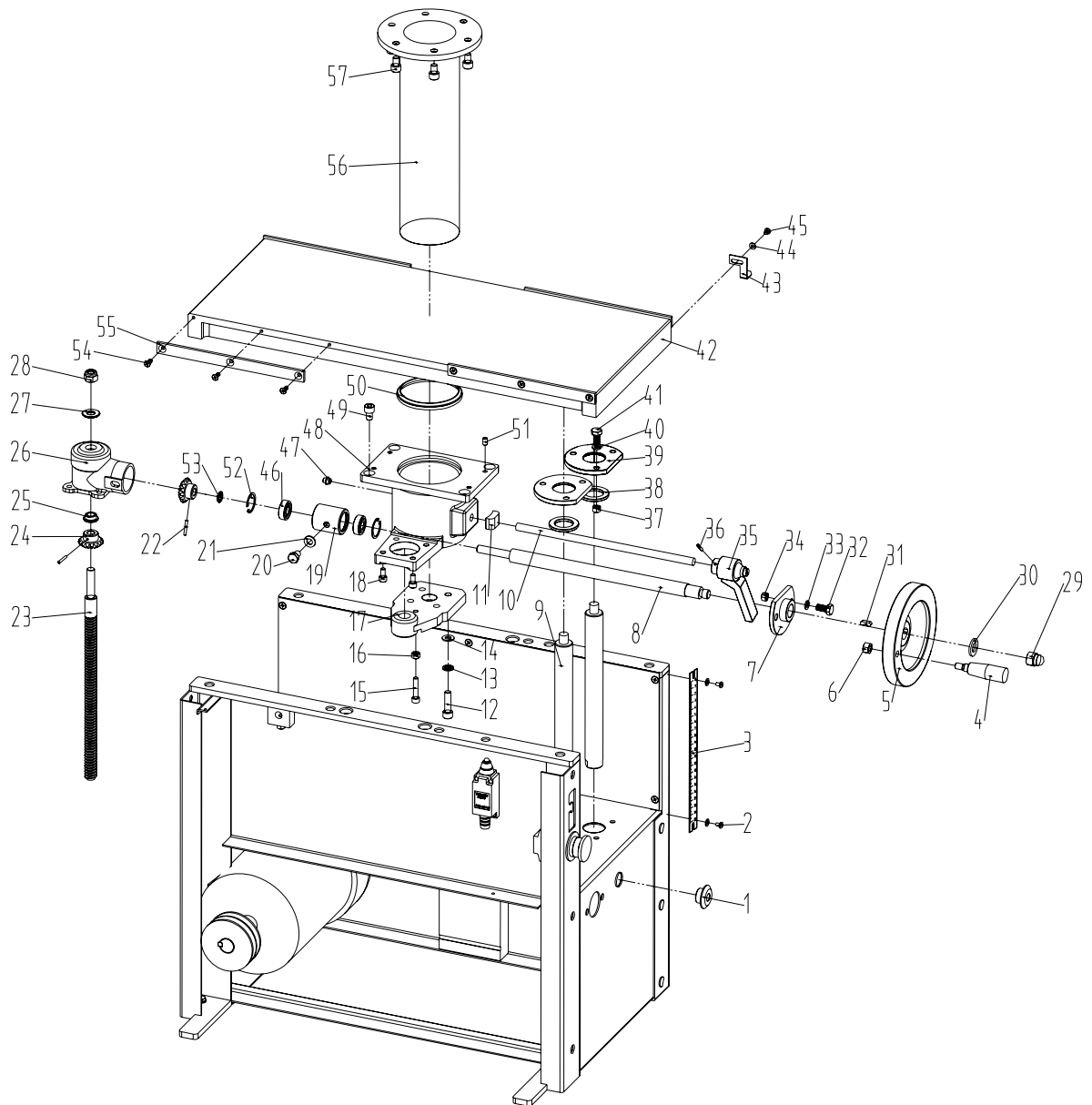
PLANER & THICKNESSER LOWER STAND ASSEMBLY



PARTS LIST FOR PLANER & THICKNESSER LOWER STAND

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	GB5783-86	Hex bolt M6X16	8	2	M0610	Lower leg	2
3	GB97.1-85	Washer ϕ 6	8	4	GB6170-86	Hex nut M6	8
5	M0611	Cover board	2	6	M0613	Underprop	4

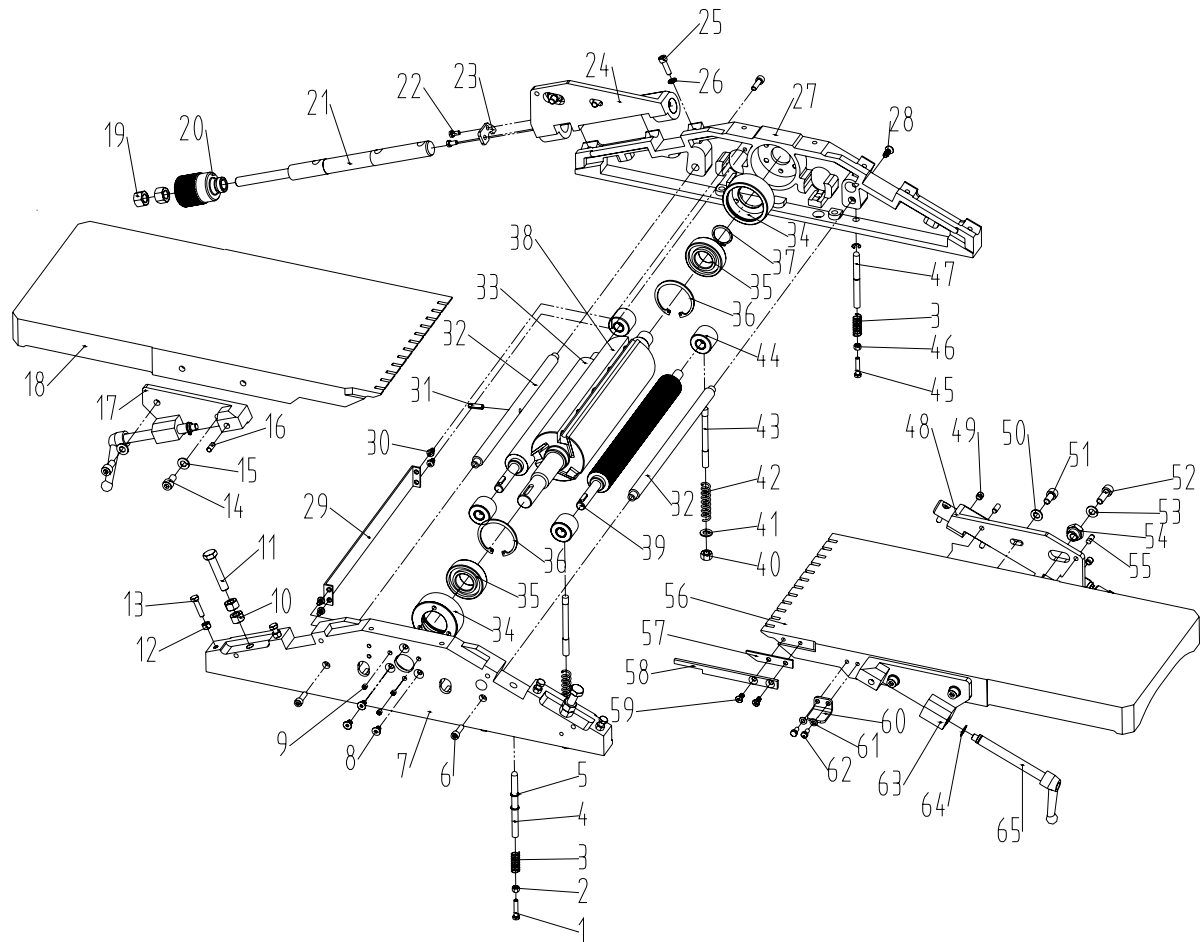
PLANER & THICKNESSER THICKENING TABLE ASSEMBLY



PARTS LIST FOR PLANER&THICKNESSER THICKNESSING TALBLE ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	M0716	Nylon bush	1	2	GB818-85	Screw M4X6	2
3	M12	Depth scale	1	4	M0715-1	Handle	1
5	M0715-2	Hand wheel	1	6	GB6170-86	Hex nut M8	1
7	M0710	Plate	1	8	M0713	Shaft	1
9	M0703	Adjusting bar	2	10	M0711.1	Locking bar	1
11	M0718	Locking block	1	12	GB70-85	Socket cap screw M8X30	4
13	GB93-87	Spring washer φ 8	4	14	GB97.1-85	Washer φ 8	4
15	GB70-85	Socket cap screw M6X30	1	16	GB6170-86	Hex nut M6	1
17	M0712	Plate	1	18	GB70-85	Socket cap screw M6X12	4
19	M0719	Bearing bush	1	20	GB5783-86	Hex bolt M8X12	1
21	GB97.1-85	Washer φ 8	1	22	GB879-86	Spring pin 3X20	2
23	M0714	Guide screw	1	24	K1008	Cone gear	2
25	M0720	Bush	1	26	M0717	Gear box	1
27	GZZC	Flat bearing	1	28	ZSM10	Locknut M10	1
29	GB923-88	Domed cap nut M12	1	30	GB97.1-85	Washer φ 12	1
31	GB1096-79	Key 5X15	1	32	GB5783-86	Hex bolt M6X16	2
33	GB97.1-85	Washer φ 6	2	34	GB6170-86	Hex nut M6	2
35	M0711	Locking handle	1	36	GB879-86	Spring pin 3X20	1
37	GB6170-86	Hex nut M6	6	38	M0701	Washer	2
39	M0702	Plate	2	40	GB97.1-85	Washer φ 6	6
41	GB5783-86	Hex bolt M6X16	6	42	M0705	Thickneser table	1
43	M0706	Lifting pointer	1	44	GB97.1-85	Washer φ 4	3
45	GB818-85	Screw M4X6	3	46	GB/T276-94	Bearing 6000	2
47	YZYB	Grease cup M8X1	1	48	M0709	Lifting tube bracket	1
49	GB70-85	Socket cap screw M8X12	4	50	M0708	Seal	1
51	GB77-85	Set screw M6X10	4	52	GB893.1-86	“C”ring φ 26	4
53	M0721	Space bush	1	54	GB819-85	Screw M4X12	12
55	M0707	Limited bar	4	56	GB70-85	Socket cap screw M8X12	6
57	M0704	Lifting tube	1				

PLANER&THICKNESSER PLANER TABLE ASSEMBLY

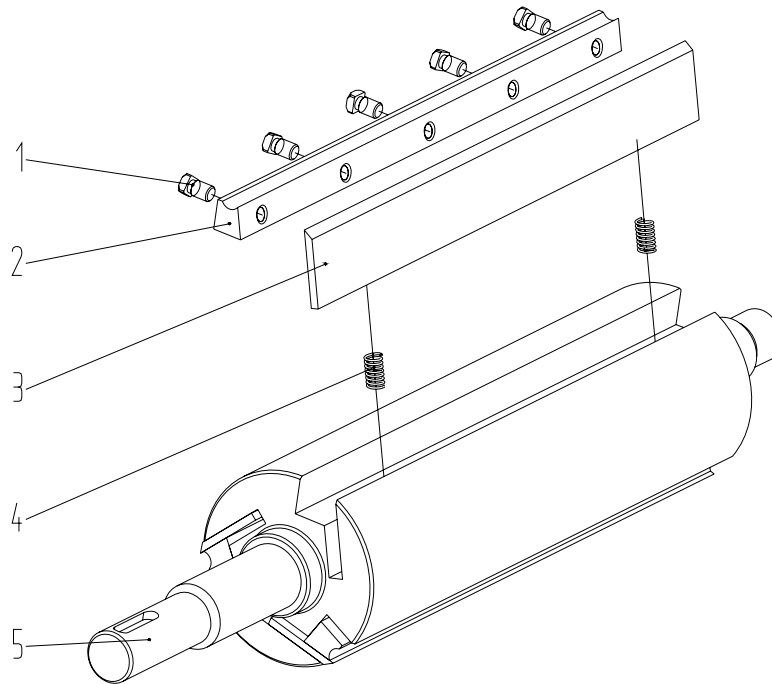


PARTS LIST FOR PLANER&THICKNESSER PLANER TABLE ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	GB5783-86	Hex bolt M5X25	1	2	GB6170-86	Hex nut M5	1
3	M081213	Spring	2	4	M081205-1	Limited pole	1
5	GB896-86	"E" ring ϕ 6	3	6	GB70-85	Socket cap screw M6X20	3
7	M081202	Left bracket	1	8	NCM	Socket countersunk screw M6X10	6
9	GB77-85	Set screw M6X5	6	10	GB6170-86	Hex nut M10	4
11	GB5783-86	Hex bolt M10X50	2	12	GB6170-86	Hex nut M6	4
13	GB5783-86	Hex bolt M6X25	4	14	GB70-85	Socket cap screw M8X16	4
15	GB97.1-85	Washer ϕ 8	4	16	GB119-86	Pin 6X16	2
17	M1102	Locking block	1	18	M1101	Outfeed table	1
19	GB6170-86	Hex nut M12	4	20	M1011	Adjusting wheel	2

21	M1006	Adjusting axle	2	22	GB5783-86	Hex bolt M5X10	4
23	M1007	Metal plate	2	24	M1103	Adjusting wing	1
25	GB70-85	Socket cap screw M6X20	6	26	GB93-87	Springwasher ϕ 6	6
27	M081201	Right bracket	1	28	NCM	Socket countersunk screw M6X16	1
29	M081208	Protective plate	1	30	GB818-85	Screw M5X8	4
31	GB879-86	Spring pin 6X20	1	32	M0904	Support axle	2
33	M081209	Driven roller	1	34	M081204	Bearing bush	2
35	GB/T276-94	Bearing 6205	2	36	GB893.1-86	"C" ring ϕ 52	2
37	GB894.1-86	"C" ring ϕ 25	1	38	M081207	Cutter block	1
39	M081206	Driving roller	1	40	GB6170-86	Hex nut M8	4
41	GB/T848-85	Small washer ϕ 8	4	42	M081211	Spring	4
43	M081212	double-edged bolt	4	44	M081203	Bush	4
45	GB5783-86	Hex bolt M5X25	1	46	GB6170-86	Hex nut M5	1
47	M081205-2	Limited bar	1	48	M1005	Adjusting wing	1
49	GB77-85	Set screw M8X8	4	50	GB97.1-85	Washer ϕ 8	2
51	GB70-85	Socket cap screw M8X16	2	52	GB70-85	Socket cap screw M8X25	2
53	GB97.1-85	Washer ϕ 8	2	54	M1004	Eccentric bush	2
55	GB119-86	Pin 6X16	4	56	M1001	Infeed table	1
57	M1010	Space plate	1	58	M1009	Locking plate	1
59	GB819-85	Screw M5X12	2	60	M1013	Press plate	1
61	GB97.1-85	Washer ϕ 5	2	62	GB5783-86	Hex bolt M5X10	2
63	M1002	Locking block	1	64	GB894.1-86	"C" ring ϕ 12	2
65	M1003	Locking handle	2				

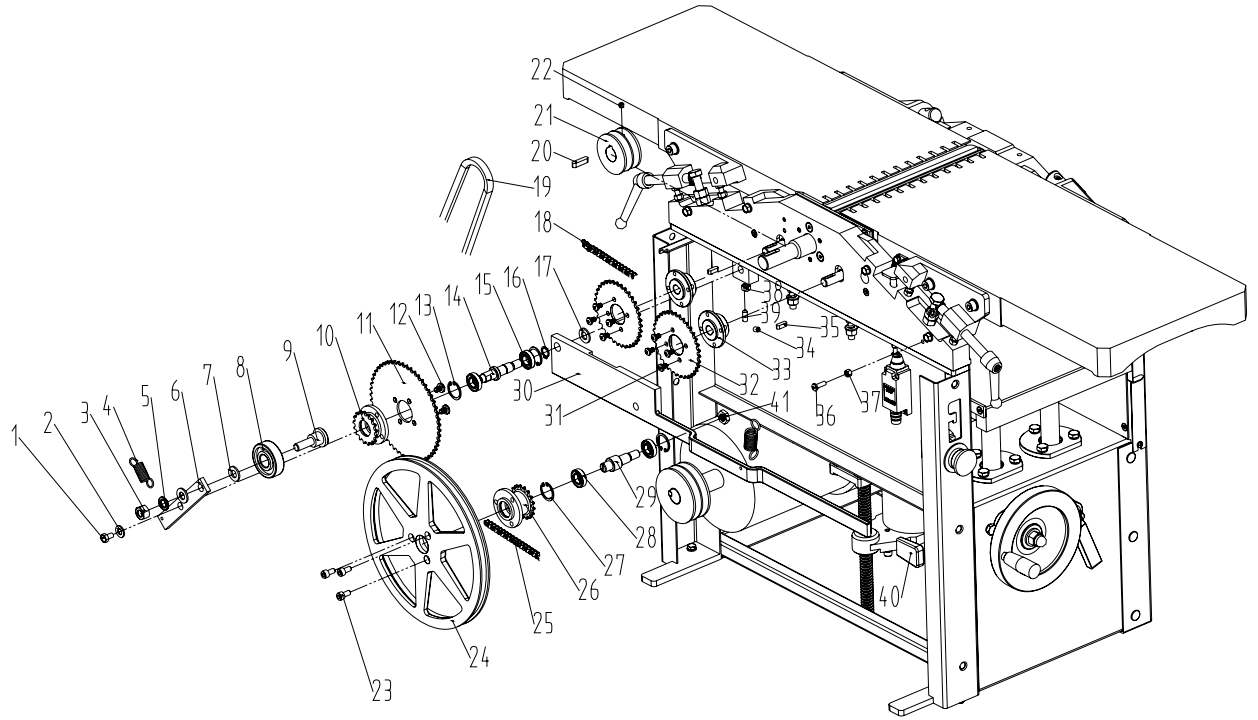
PLANER&THICKNESSER CUTTER BLOCK ASSEMBLE



PARTS LIST FOR PLANER&THICKNESSER CUTTER BLOCK ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	M081207.3	Square toes bolt	15	2	M081207.2	Blade locking block	3
3	M081207.5	Blade	3	4	M081207.4	Spring	6
5	M081207.1	Cutter block	1				

PLANER&THICKNESSER THICKNESSER CLUTCH ASSEMBLY

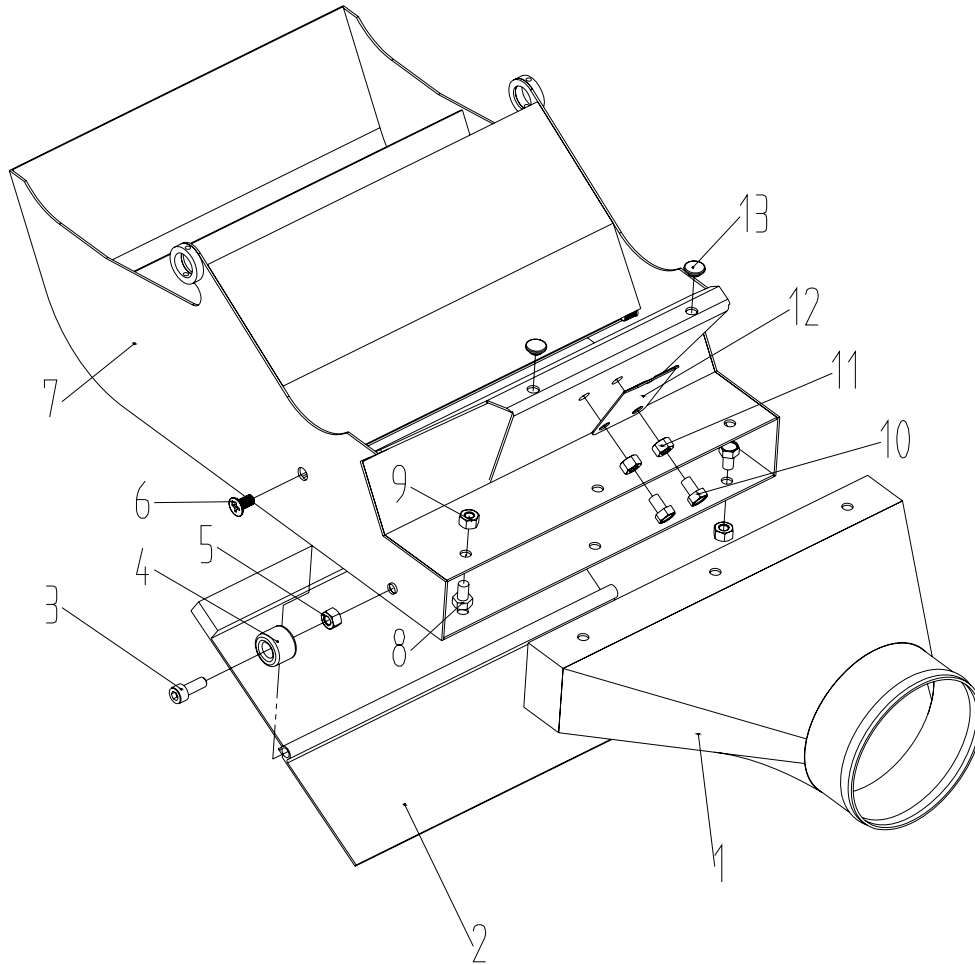


PARTS LIST FOR PLANER&THICKNESSER THICKNESSER CLUTCH ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	GB5783-86	Hex bolt M6X10	1	2	GB97.1-85	Washer ϕ 6	1
3	GB6170-86	Hex nut M10	1	4	M082218	Pull spring	2
5	GB93-87	Spring washer ϕ 10	1	6	M082202	plate	1
7	GB97.1-85	washer ϕ 10	2	8	GB/T276-94	Bearing 80303	1
9	M082217	Pin axle	1	10	M082205	Sprocket	1
11	M082201	Sprocket	1	12	GB818-85	Screw M6X8	4
13	GB893.1-86	"C" ring ϕ 24	2	14	M082215	Long pin	1
15	GB/T276-94	Bearing 61901	2	16	GB894.1-86	"C" ring ϕ 12	1
17	GB97.1-85	Washer ϕ 10	1	18		Chain	1
19	SJD	V-belt	2	20	GB1096-79	Pin 6X25	1
21	M082208	Cutter block pulley	1	22	GB77-85	Screw M6X5	1
23	GB70-85	Socket cap screw M6X14	3	24	M082213	Wheel	1
25		Chain	1	26	M082207	Sprocket	1
27	GB893.1-86	"C" ring ϕ 24	2	28	GB/T276-94	Bearing 61901	2
29	M082216	Short pin	1	30	M082206	Control handle	1
31	GB818-85	Screw M5X8	8	32	M082210	Sprocket	2
33	M082210.1	Sprocket plate	2	34	GB77-85	Set screw M6X8	2

35	GB1096-79	Key 5X16	2	36	GB818-85	Screw M5X16	1
37	GB6170-86	Hex nut M5	1	38	GB6170-86	Hex nut M6	1
39	GB80-85	Set screw M6X20	1	40	M082219	Handle	1
41	GB6173-86	Hex thin nut M10	1				

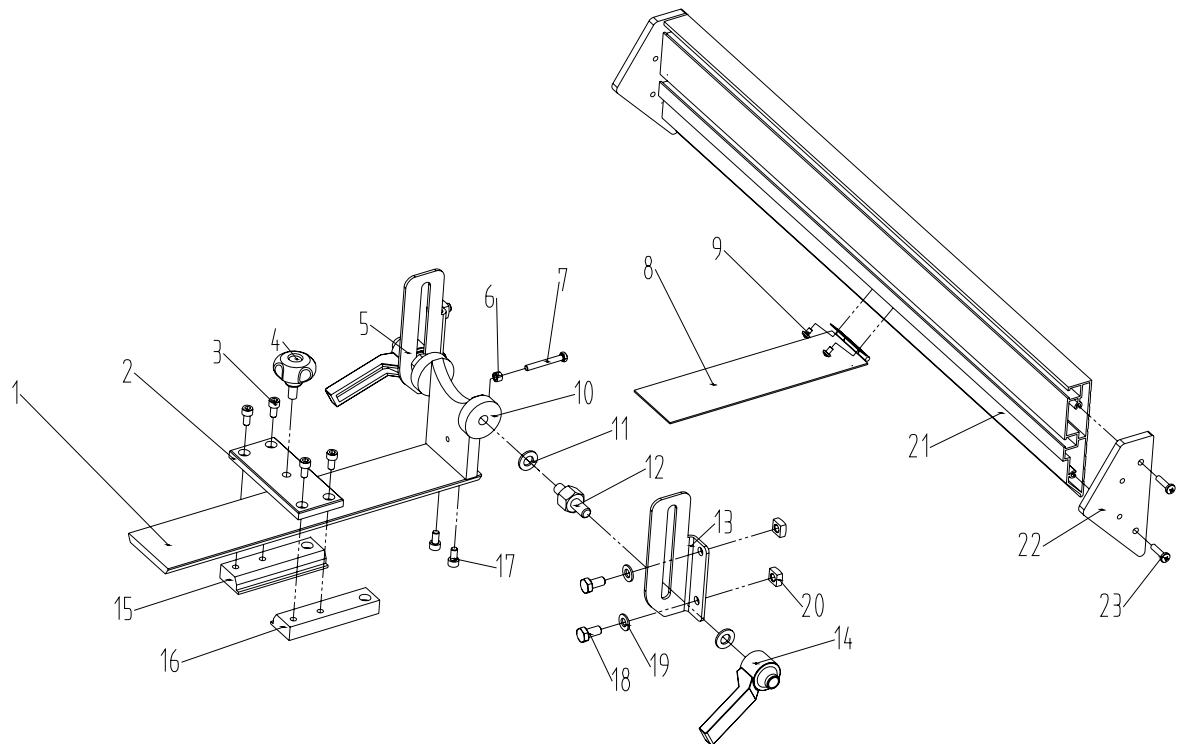
PLANER&THICKNESSER EXTRACTION DUST ASSEMBLY



PARTS LIST FOR PLANER&THICKNESSER EXTRACTION DUST ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	M0901.1	Dust extraction hood	1	2	M0901.7	Turning plate	1
3	GB70-85	Socket cap screw M6X16	1	4	M0906	Rubber tray	1
5	GB6170-86	Hex nut M6	1	6	GB819-85	Screw M6X12	2
7	M0901	Dust chute	1	8	GB5783-86	Hex bolt M6X10	6
9	GB6170-86	Hex nut M6	6	10	GB5783-86	Hex bolt M6X10	2
11	GB6170-86	Hex nut M6	2	12	M0907	Locking plate	1
13	M0905	Damping tray	2				

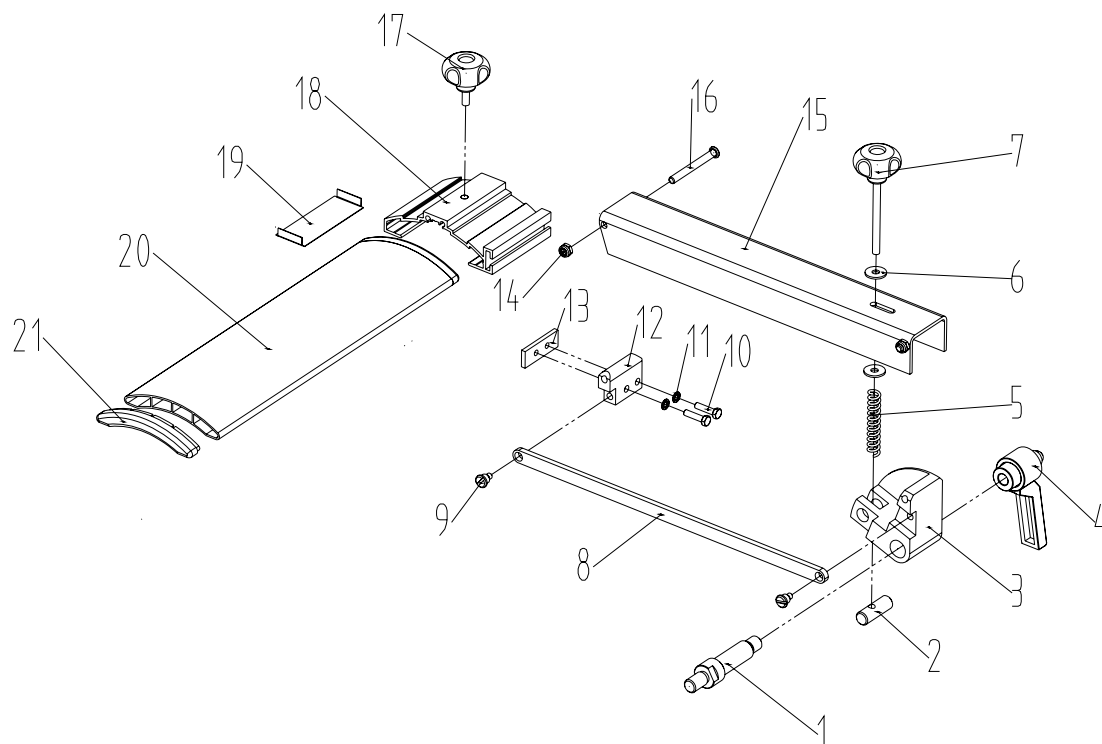
PANER&THICKNESSER FENCE ASSEMBLY



PARTS LIST FOR PANER&THICKNESSER FENCE ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	M1409	Guide rail	1	2	M1411	Connecting plate	1
3	GB70-85	Socket cap screw M6X12	4	4	M1414	Locking handle	1
5	M1401	Left metal plate	1	6	GB6170-86	Hex nut M5	1
7	GB5783-86	Hex bolt M5X40	1	8	M1407	Sliding plate	1
9	GB867-86	Rivet 4X6	2	10	M1404	Bracket	1
11	GB97.1-85	Washer ϕ 10	4	12	M1403	double-edged bolt	2
13	M1405	Right sliding block	1	14	M1413	Locking handle	2
15	M1408	Left metal plate	1	16	M1410	Right metal plate	1
17	GB70-85	Socket cap screw M6X12	2	18	GB5783-86	Hex bolt M8X16	4
19	GB97.1-85	Washer ϕ 8	4	20	M1412	Square toes nut	4
21	M1402	Fence	1	22	M1406	Angle plate	2
23	ZGM	Screw M5X20	4				

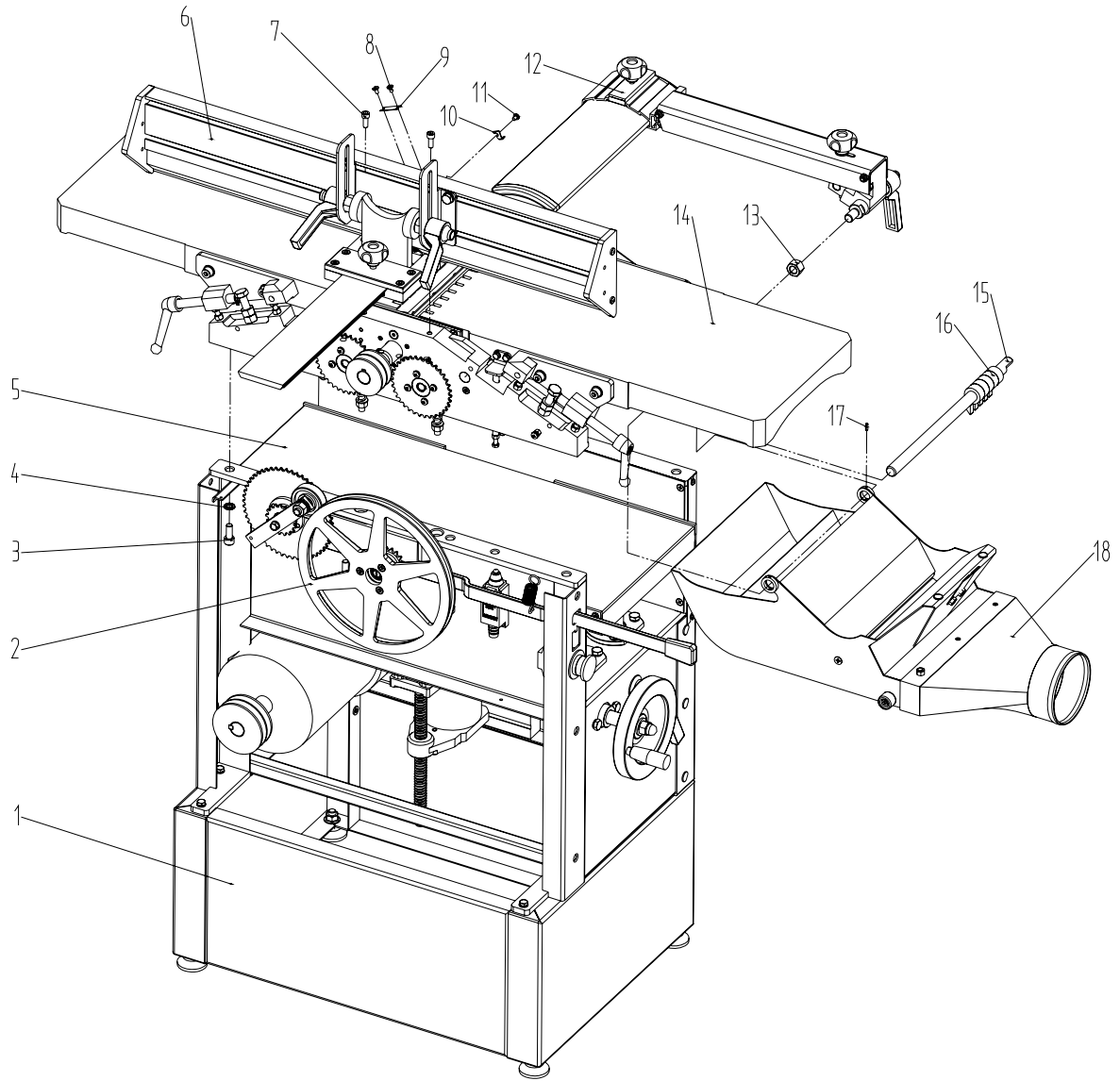
PLANER&THICKNESSER PROTECTIVE COVER ASSEMBLY



PARTS LIST FOR PLANER&THICKNESSER PROTECTIVE COVER ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	M1012.1	Locking pole	1	2	M1602	Rotor	1
3	M1610	Sector plate	1	4	M1012	Locking handle	1
5	M1603	Spring	1	6	GB96-85	Large washer ϕ 6	2
7	M1605	Adjusting handle	1	8	M1609	Connecting pole	2
9	M1611	Pin bolt	2	10	GB5783-86	Hex bolt M5X20	2
11	GB93-87	Spring washer ϕ 5	2	12	M1612	Rock block	1
13	M1606	Fixing plate	1	14	ZSM	Locking nut M6	2
15	M1601	U-shaped arm	1	16	M1613	Long pin	1
17	M1614	Locking handle	1	18	M1608	Crust	1
19	M1604	Saucer	1	20	M1607	Protective plate	1
21	M1615	Plastic insert	2				

PLANER & THICKNESSER ASSEMBLY



PARTS LIST FOR PLANER&THICKNESSER ASSEMBLY

NO.	CODE	DESCRIPTION	QTY	NO.	CODE	DESCRIPTION	QTY
1	M06	Stand assembly	1	2	M0822	Thicknesser clutch assembly	1
3	GB70-85	Socket cap screw M8X20	8	4	GB93-87	Spring washer ϕ 8	8
5	M07	Thicknessing table assembly	1	6	M14	Fence assembly	1
7	GB70-85	Socket cap screw M6X16	2	8	GB818-85	Screw M4X6	2
9	M18	Infeed scale	1	10	M20	Infeed pointer	1
11	GB818-85	Screw M4X6	2	12	M16	Protective cover assembly	1
13	GB6170-86	Hex nut M12	1	14	M10	Planer table assembly	1
15	M0902	Rotor	1	16	M0903	Kick block	20
17	GB879-86	Spring pin 3X10	1	18	M09	Extraction dust assembly	1