# MP250QM Combined Woodworking Planer-Thicknesser

# **Instruction Manual**

Note: please read the instruction manual before using this device.

### Foreword

These instructions are written by the equipment manufacturer and are a part of the machine tool. They include the basic information of the qualified operator and the use of the environment and the way of the machine tool, but also contain the information required for correct and safe operation of the machine tool.

The machine is equipped with a variety of safety device, which both protect the operator and the machine tools during the normal use of the machine. However, these measures do not cover all aspects of safety, so the operator must read and understand the instructions before starting to use the machine to avoid errors in the installation and operation.

### Do not try to put the machine into operation until you read all the random instructions and you understand all the features and work procedures.

Some materials and drawings may not be directly used for the machine you purchase this time, because these instructions contain information of various types of machine tools made by our company. By comparing a specific machine tool and a description of the various parts, you will find that they are corresponding.

Manufacturers have the right to retain part of the continuous technological development of the machine tools.

### 1 Use of the machine

#### 1.1 Machine tool use

Multifunctional woodworking planer-thicknesser can do operation on wood or semi-finished products of wooden materials such as planer, thicknesser and mortiser.

The machine is designed to be operated only by one worker.

Children and teen-agers can not operate the machine in any case.

### **1.2 Conditions of workers**

Only skilled experts in the field of wood processing or workers guided and trained by such an expert can operate the machine, regardless of gender. Operators must be familiar with these instructions and comply with any safety rules and regulations of their respective countries.

### 1.3 Working environment

This machine must be operated in a workshop environment, with the highest temperature no more than  $+40^{\circ}$ , and no less than  $+5^{\circ}$ , air relative humidity from 30% to 95%, non condensing, the altitude of 1000 meters above sea level.

### **2** Technical parameters

Table size ·····1085×256mm
Width of planer ·····248×590mm
Blade shaft speed and blade number
Blade shaft size ····································
Blade size $\cdots 250$ (length) $\times 30$ (width) $\times 3$ (thickness) mm
Drive roller diameter ···································
Guide plate tilt $\cdots$ 0-45 °
Dust outlet diameter ···································
Max. removal of planer ······5mm
Max. removal of thicknesser2.5mm
Max. thickness of thicknesser ·····195mm
Feeding speed of thicknesser ··································
Drilling worktable size ······368×150mm
Drill bit size available ······0-16mm
Max. drilling depth95mm
Motor

### 2.1 Noise specifications for the equipment

Noise level in the operation place A	w/o load	LpAep=81.4dB(A)
(LpAep)	w/ load	LpAep=87.3dB(A)
Noise output level A	w/o load	LWA=89.3 dB(A)
(LWA)	w/ load	LWA=93.0 dB(A)

The numerical value given does not necessarily mean that it is safe to work. Although there is a correlation between the emission values and the standard values of the World Expo, these values can not guarantee that additional measures are necessary. The workers point out that the factors affect the actual level include the characteristics of the working area, other sources of noise, such as the number of machine tools and other factors around. And the highest levels allowed in different countries may be different. This information can help users to evaluate the risk and risk rate in a better way.

### **3 Safety instructions**

#### 3.1 Outline

The machine is equipped with a variety of safety devices to protect the operator and the machine tool. However, this does no cover all aspects of security, and therefore the operator must read this chapter and fully understand this chapter before the machine is put into use. In addition, the operators must consider other aspects of risk related to the surrounding environment and materials.

#### 3.2 Basic safety requirements

— Before connecting the machine to the main power supply, make sure all the safety items are in the working position and check their working conditions, if necessary, to remove the door or protective cover, cut off the main switch and lock it and cut off the power supply.

— The holding back claw shall be free of movement, and its operation must be checked regularly, perhaps several times a day.

- If the door and the protective cover are removed, the power must be cut off.

— In order to avoid improper operation, you must be familiar with the location of every switch before starting the machine.

- Remember the location of the emergency stop switch, so you can use it at any time.

- During the machine operation process should pay attention not to touch any switch.

— Do not touch any rotating object with a bare hand or any other objects in any case.

— When work without using the machine, turn off the switch on the machine control panel and cut off the power supply.

— Before cleaning the machine, turn off the switch and lock the main switch and cut off the power.

— Before carrying out maintenance work inner the machine, turn off the switch and lock the main switch and cut off the power.

— In the case of a number of people using the machine, do not have any work without notice other people which function you want to use.

— Do not transform the machine in any way that may cause risk to the safe operation of the machine.

— If you have any doubts about the validity of your program, contact the person in charge.

— Do not ignore to do regular checks regarding to the use instructions.

- Check and make sure that the machine does not occur any damage caused by the user.

- After the work is finished, adjust the machine tool to make it ready for use in a series

of other operations.

— When power failure occurs, should turn off the main switch immediately and cut off the power supply.

 Do not paint, pollute, damage, modify or remove the safety signs, if they become vague or missing, contact the manufacturer and update.

#### 3.3 Clothes and personal safety

- Experience shows that damage is caused by different personal items, such as rings, watches and bracelets. So you have to remove them before you begin to work, fasten the cuff-link and take off the tie, which may be entangled by each part of the running machine. Hair should be put together and wear appropriate shoes provided or recommended by all national labor safety regulations.
- Wear safety equipment (goggles, apron, safety shoes, etc.)
- In order to prevent dangerous overhead, in the working area, wear a helmet.

— When process the material that will produce dust, must wear a protective mask in the process.

- Do not wear any loose work clothes.
- Do not operate the machine under the action of drugs and alcohol.
- If you are affected by the dust, weak or dizzy, do not operate the machine.

#### **3.4 Operator safety rules**

Do not start the machine before you are familiar with the use instructions.

— Make sure that the wire is not damaged, so that the damage caused by the leakage (electric shock) can be avoided.

— Regularly check the protective cover to install correctly and without damage. Repair damaged protective cover or replace a new one.

- Do not operate the machine tools in case of removal of the machine cover.

— Do not use any tools damaged.

- Always use the right tools, corresponding to the machine standard.

— Replace the damaged tools as soon as possible, because the damaged tools will often cause hurt or damage.

— Before changing the blade, stop all functions of the machine, turn off the main switch and cut off the power supply.

— Do not remove or disturb other safety devices such as protective cover, limit switches, and do not allow them to interfere with each other.

- Ask for help when dealing with the problems outside of your ability.

— Do not use the machine in the storm.

#### 3.5 Maintenance safety rules

- Do not do maintenance work until you are fully familiar with the maintenance manual.
- Always turn off the main switch and lock it before you start performing any maintenance work. So as to avoid other people accidentally put the machine into use.
- Any maintenance of the electrical part of the equipment can be performed only by a qualified person.

— Even if the machine is stopped, if the power supply is not disconnected, the main switch must be turned off and locked.

- Do not clean the machine or its peripheral devices, even if the machine is completely stopped, unless the main switch is closed and locked.
- Keep your fingers away from the belt and the belt pulley.
- Turn off the main switch and lock it when the electrical part of the device is replaced.
  Failure parts can only be replaced by the products with the same specifications of the original parts.
- Do not remove or replace the limit switch or other safety device.
- Do not start the machine before repair all remove shield, because the purpose is to repair them to where they are installed.
- Always keep the maintenance area and work area clean.
- Any maintenance work must be performed by qualified person according to the instructions of the manufacturer.
- Maintenance person should read the instructions manual carefully and completely.
- When replace the spare parts, must use the same parts as the standard.
- Use only the specified type of lubricating oil and grease.

— If any belt in the set of belts becomes longer than the specified limit, the whole set of belts should be replaced.

- Do not clean the machine with compressed air.
- Responsible person should often check on the spot.

### 3.6 Workplace safety rules

— Always make sure that there are enough working area to operate the machine and peripheral equipment.

— In the work area the tools and other obstacles should be put far away from the machine.

— To ensure that the working area have sufficient lighting, no shadow or cause the stroboscopic effect. Hygienic standard for safety and quality work are 500 times the lowest strength. — Do not put any tools or other objects on the workbench or on the cover.

### 4 Transportation and storage

#### 4.1 Transportation and storage

When transport or process the machine, to be very careful, complete by a qualified person special trained for this.

When the machine loading or unloading, to ensure that no person or thing under the machine.

#### When the machine is lifting by a crane or hoist, do not enter this area!

The transportation and storage of the machine must be protected from excessive vibration and moisture.

The machine should be stored in a place with the temperature range from -25  $^\circ\!\! C$  to 55  $^\circ\!\! C$  .

According to the standard, the machine should be installed in the metal box and transported by this way.

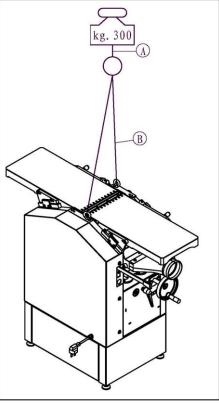
According to the requirements the machine can also be installed in a sturdy wooden box.

#### 4.2 The lifting of the machine

This machine and its each part can only be lifted by qualified lifting device which have the function of lifting.

Prepare a crane or similar equipment, do as the next steps:

- Prepare two ring bolts and wire rope long enough (the ring bolts are part of the delivery).
- Fix the ring bolts to the right bearing seat of the planer-thicknesser.
- Fix the rope B to the crane hook A which have the required strength.
- Check the stability of the machine hanging on the rope B after lifting the machine slowly.
- Lift the machine slowly and carefully, and then



move it to the selected location, and do not have fast motion change on the way.

#### 4.3 Installation of the machine

Remove the protective coating of the machine and other parts of the machine with a neutral machine tool or any similar solvent, do not use gasoline or similar solvents for this operation, they may reduce the corrosion resistance of some parts of the machine.

The size of the working area depends on the type of the machine, the process to be carried out and the size of the materials to be processed.

Do not forget to put the effective dust removal system and the space of the central row of the dust connecting hose.

#### 4.4 Working area

It is important to maintain a 0.8m free area around the machine, which is the requirement of the workplace.

When process a long material, it is necessary to have enough space to be left before and after the feeding and outlet place of the machine.

#### 4.5 Fix and level of the machine

Foot adjustment is arranged at the bottom of the machine. The machine's horizontal position tolerance is 1/1000mm.

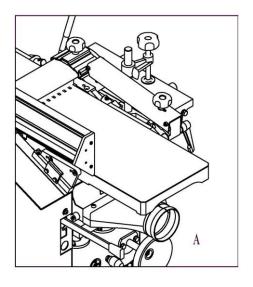
### **5** Connection of the dust removal

#### system

Operate the machine only in case of the dust removal system running.

Open the switch of the machine and the dust removal system at the same time.

The used exhaust hose diameter equals 100mm. The position of the dust discharge hose connected to the row dust is as follows:



#### 5.1 Planer

The exhaust mouth of the planer of the machine is in the space under the planer

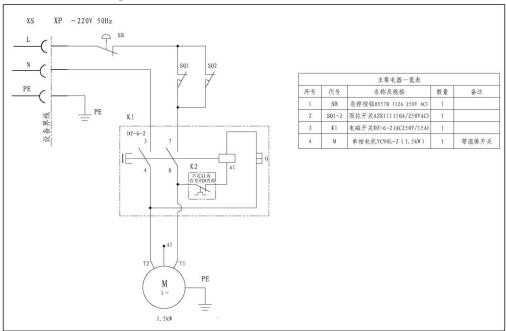
worktable of the machine.

#### 5.2 Thicknesser

Thicknesser and planer use the same exhaust mouth, but it has to turn to the top position, the diameter of the dust discharge hose (A) connected to the exhaust mouth is 100mm.

### **6** Power supply connection

Damaged power cable must be replaced by professional person immediately. Damaged cable is danger to life, so it is forbidden to use. Before the machine is put into use, it must be ensured that the voltage frequency value specified on the machine board is in conformity with the value of the main power supply. Always turn off the main switch and lock it before adjustment and replacement of the tools and also before any adjustment and maintenance work.



### 6.1 Electrical diagram is as follows:

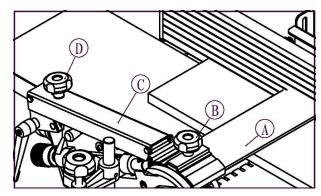
## 7 Operation and

### adjustment of the

### machine

7.1 Adjustment of planer

# 7.1.1 Operation and adjustment of the protective device



The height of the knife shaft cover (A) is carried out through the star screw (D).

Turning to the right—the height of the cover plate is reduced.

Turning to the left—the height of the cover plate increases.

When you release the other star screw (B), you can easily move the shaft cove plate in the longitudinal direction. After setting up, loosen the star screw (B). When the star screw (B) is released, the cover plate may be removed from the working position. When planning a high workpiece, the cover plate (A) is provided to make the maximum distance between the end of it and the machine tool 5mm.

### 7.1.2 Planer

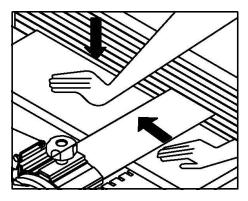
Setting of the removal adjustment of the activity table:

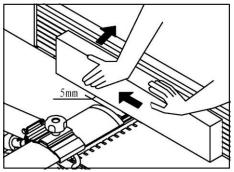
- Release the table with a fixed lever on the right.

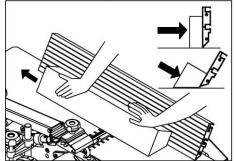
- Use the star type handle on the left side to set the required planer removal (the amount of wood cut).
- Fix the table with the fixed lever.

— The size of the removal amount can be read on the scale.

### 7.1.3 Adjustment of the tilting guiding plate





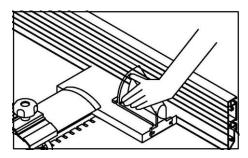


- Loosen the star shaped screw on the guiding plate.
- Adjust the guiding plate to the numerical value of the machine workpiece width.
- Retighten the star screw tightly.

Press the operating lever to close the drive of the thicknesser feed roller, push the operating lever downwards to ensure that it is in the separation position.

#### 7.1.4 Planning flat workpiece

Place the flat workpiece on the planer table, raise the shaft cover plate to the appropriate height and start the machine. Press and move the workpiece over the cutter body, hands move above the cover plate, the material is moved by the arm instead of the body! You must not move the machine workpiece over the cutter body in the opposite direction.

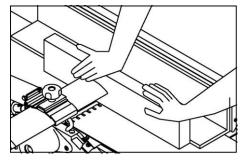


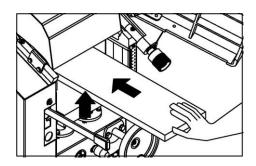
#### 7.1.5 Planning high workpiece

When processing the high workpiece, adjust the cutter cover plate to make the gap between the workpiece and the machine is 5mm at most. Start the machine and press the workpiece move between the guide plate and the cover plate over the cutter body.

# 7.1.6 Planning the workpiece with tilting angle

Try to adjust the tilting angle (ensure the 90 position) of the guide plate by loosening the fixed lever, tighten the handle and start the machine. Press the slope processing workpiece onto the guide plate and push forward.





#### 7.1.7 Planning short worpiece

When planning a short workpiece, you need to use a push plate.

#### 7.1.8 Planning workpiece of small cross section

You will have a risk of injury if the guide plate is not used properly.

When planning the workpiece of small cross section, the guide plate need to increase a sub rule, its thickness is 20-25mm, the width is no more than 60mm. This sub rule can be purchased as a special attachment of the machine.

#### 7.2 Adjustment of thicknesser

#### 7.2.1 Thicknesser

—First planer mode should converted to thicknesser.

—Tilt the knife shaft cover backward.

 Move the guide plate to the limit position and remove it from the machine.

— Release the planer worktable and lift them up.

— Move the dust cover on top of the cutter shaft and ensure the safety.

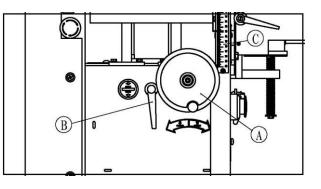
— Use a manual lever to connect the feeding roller drive.

— Adjust the thicknesser removal amount by setting the thicknesser table to the required workpiece size.

- Connect the dust discharge device.

#### 7.2.2 Adjustment of worktable

Release the lock lever (B) and adjust the thicknesser worktable to the required height by hand wheel (A). Put the workpiece to be machined on the worktable and make a non machined side up. Move the worktable upward by turning the hand wheel (A) until the workpiece to be machined reach the limit lever of maximum removal. Make the worktable downward by turning the hand wheel to reach the desired removal. The maximum removal is 2.5mm. The thickness value of the workpiece processed can be read on the scale at the position (C) of the worktable. After adjusting use the corresponding locking lever (B) to fix the worktable. Start the machine and move the workpiece slowly. When insert workpiece with uneven thickness, always making the thicker end enter the machine first. It is recommended to use thicknesser worktable with wax when processing



resin type of wood to improve the movement of the material to be machined.

#### 7.3 Drilling (Milling)

Check whether the cutter tools are installed firmly.

Put the bridge guard board E down completely and make it stick on the surface of the worktable.

If you do not use the drilling device, you must remove the drilling bit. This is because the drilling bit and the cutter shaft of the planer worktable rotate at the same time, thus the drilling bit can not be protected.

Check whether the workpiece is firmly fixed on the workbench at any time.

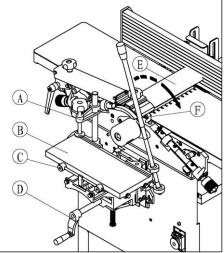
When processing long workpiece, use an adjustable bracket, if necessary, clamp can be used on the workbench.

The use of drilling device can drill holes or open slot, both through holes and blind holes, groove slot and blind slot.

When drilling blind holes, you have to adjust the travel distance of the assistant worktable:

Put the workpiece on the worktable and rely on the positioning table, squeeze the workpiece and fix it with clamp A.

Adjust the height of the worktable by hand wheel D.



Control the feeding speed by control rod F and adjust the depth by the handle under the worktable.

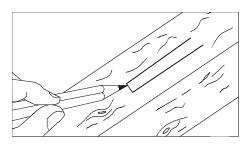
As a result of the blind groove can not pass through the workpiece, you have to adjust the vertical and horizontal stroke.

Make a mark at the place where the workpiece is to be slotted.

Put the workpiece on the worktable, and fix it with clamp A.

Adjust the height of the worktable by hand wheel D.

Control the horizontal stroke by control rod F, and adjust the limit by the locking screw C in front of the worktable.



#### Information

When slotting, it is necessary to drill a row of holes first, and then move the worktable by control rod F, so the groove is completely cleared.

#### 7.4 Protective auxiliary measures

When operating the planer and thicknesser, it is provided to wear apron and eye protection. It is recommended to use appropriate ear protection and wear appropriate shoes.

#### 7.5 Operating prohibition

When operating the machine, the following circumstances are prohibited:

— Do any modification to the safety items of the machine without permission of the manufacturer.

#### - Perform any operation that is inconsistent with this manual security instruction.

— Touch the cutter body or its surrounding area and other running parts.

- Processing any material other than wood or wood based products.

—Use planer to machine the workpiece horizontally. The machine is designed for the longitudinal direction of the wood fiber.

-When processing large semi-finished products, the power overload.

— Use hand or other object to remove the wood chips around the cutter while the machine is working.

— Use tools that the machine manual instruction not provided or recommended.

# 7.6 The installation and adjustment of the blade

The blade size the cutter body accepts is 250mm×3mm×30mm. After sharpening, the height size of the blade will reduce, but until the blade height size to 20mm, the blades can be used safely, then we must replace the blade, because they cannot grip in the groove safely anymore.

— As shown in the figure, install the cutter adjuster in place.

- Use the special wrench C to loosen the lock screw, the compression spring in the

groove will push the blade out.

- According to the rotating direction of the cutter shaft E, insert the blade into the special slot D, pay attention to the blade angle direction should be corresponding with the rotating direction of the cutter shaft.
- Make sure that the spring keep good working condition, press the blade lightly, let the spring deep into the bottom of the spring hole, then rebound to the starting position.
- Make sure the blade on the cutter shaft E is relative.

— Use the special wrench C to tighten the locking bolt, and increase pressure to the cutter adjuster.

# Check whether the knife press bar in the cutter adjuster is fixed on the cutter shaft stably.

# It is recommended that the blade run out of the cutter body extends 0.7 to 0.8mm.

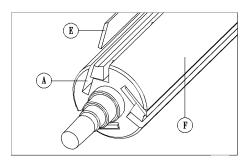
Use the same method to install other blades. After finishing the blades installation operation, assemble the machine.

#### 7.6.1 Cutter shaft with three straight blades

— Insert the blade E into the special hole A on the cutter shaft F.

— Check whether the blade E is symmetrical on the cutter shaft F.

- Lock the blade, and start the planer operation device.
- Take a piece of hard wood, plane a few minutes from beginning to the end, in order to lock the knife press bar better.



— To remove the blade, first loosen the knife press screw, then hit the knife press bar, and then extract the blade out.

#### The manufacturer recommends that the blade extends from 0.7 to 0.8mm

### 8 Maintain

Always cut off the main power supply of the machine before starting the maintenance and repair work. Turn off switch and lock the main switch!

It is necessary to always keep the V type belt of the machine in a tight state.

The machine should be cleaned on time and the handle, pin, shaft and other parts easy to be corroded shall be properly lubricated. The time interval of these activities depends on the work style but at lease once a month.

Motor bearings have a permanent lubrication filling, closed on both sides, so do not need to add any lubrication.

Clean the oil on the table with appropriate solvent.

Avoid polluting the belt with oil or grease. If this condition appears, you can only use the paper to clean the belt or dry it.

Best use vacuum cleaners for dust elimination, do this activity frequently, at least once a week.

#### 8.1 Trouble shooting

If the machine is used correctly and maintained appropriately, no trouble should appear. If the workpiece is stuck, shut down the machine immediately! Blunt blades or tools often cause motor overheating. If the machine shaking excessively, check the installation and setting, it may also because the tools used clamped and unbalance.

#### 8.1.1 Machine not working:

 It is necessary to check the electric wire and the connection between the machine and the main power supply.

#### 8.1.2 Thicknesser worktable moves difficultly:

— The locking lever of the table should be loosened or the guide screw should be lubricated.

#### 8.1.3 Machine output low:

- The cutter tool is not sharp.
- Use too large timber-the width and hardness of the wood should be considered.
- V belt is not tight enough.
- Motor work is not full power output-should consult the experts.

#### 8.1.4 Machine vibration:

- The cutter tool is not sharp or not adjusted properly.
- The blades width is different.
- The cutter tool is unbalance.
- The machine is not put on the flat ground, and is not set correctly.

#### 8.1.5 Machine thicknesser does not work:

- The wood is too thick.
- The thicknesser table is not clean

#### 8.1.6 Wood impact the back table:

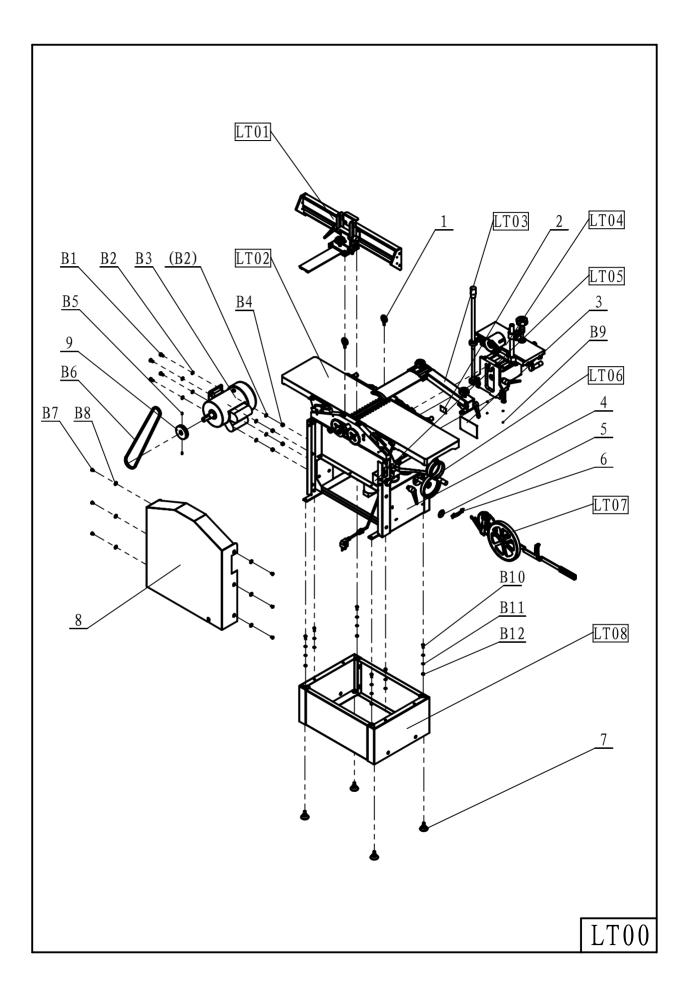
— The blade or the back table is not adjusted correctly.

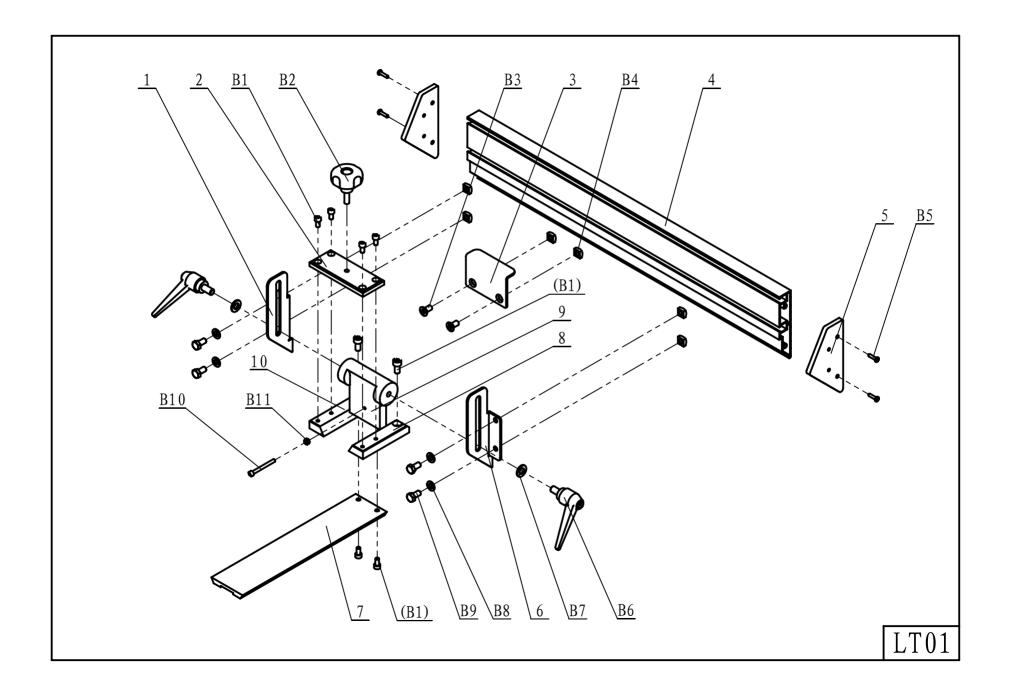
#### 8.1.7 The back of the workpiece machined depressed:

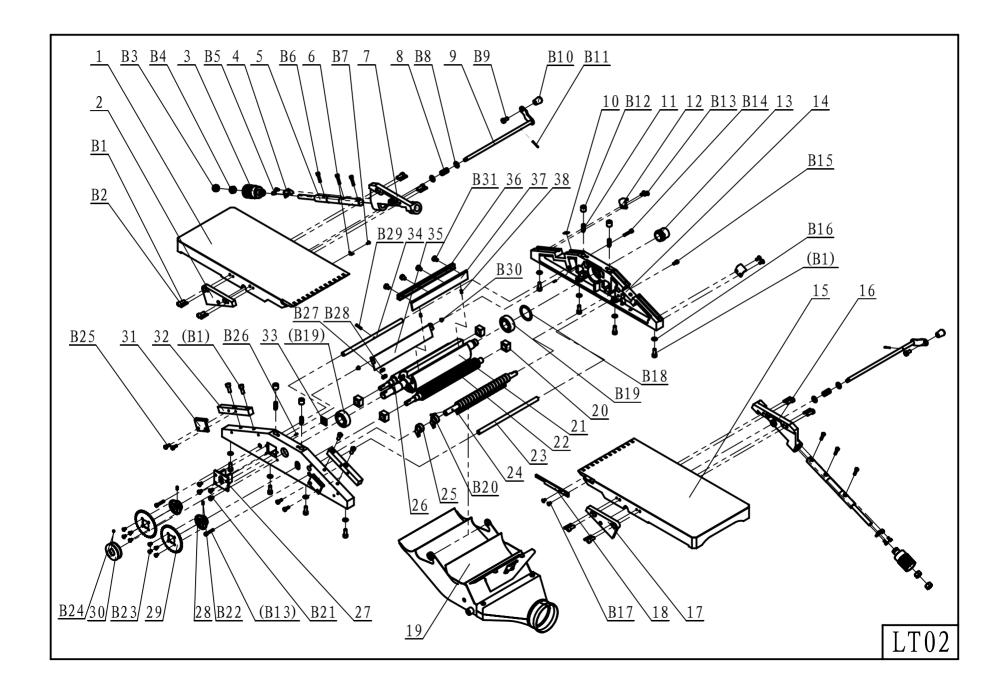
- The surface is not flat when doing thicknesser.
- The blade or the table is not adjusted correctly.
- The wood is not pressed or guided properly during planning operation.

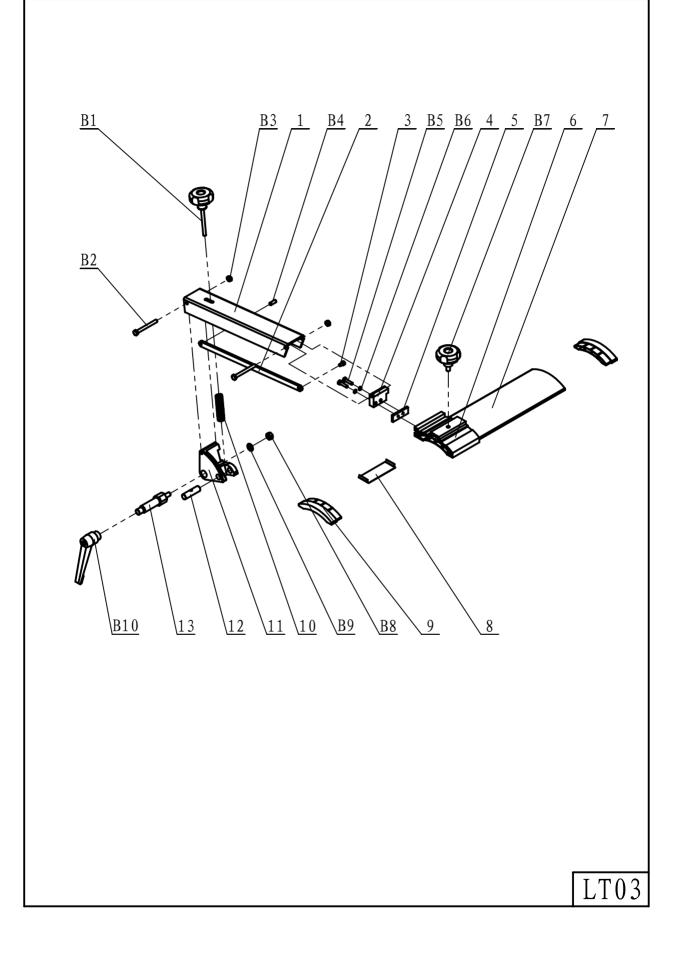
### 9 Accessories

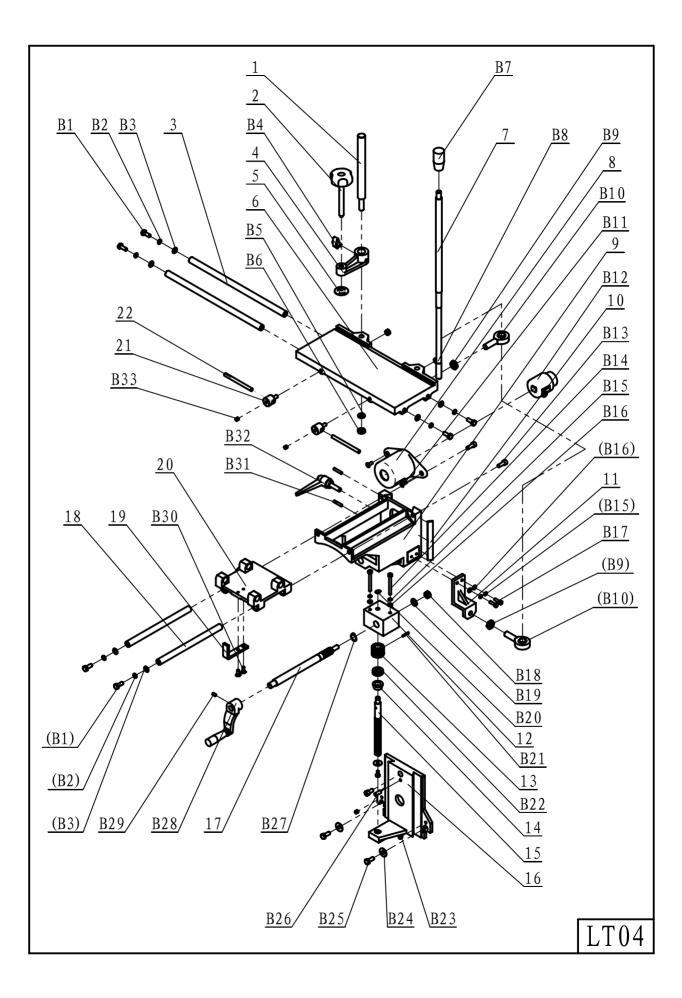
When ordering, we suggest to indicating the number and the name of the accessories required according to the appendix.

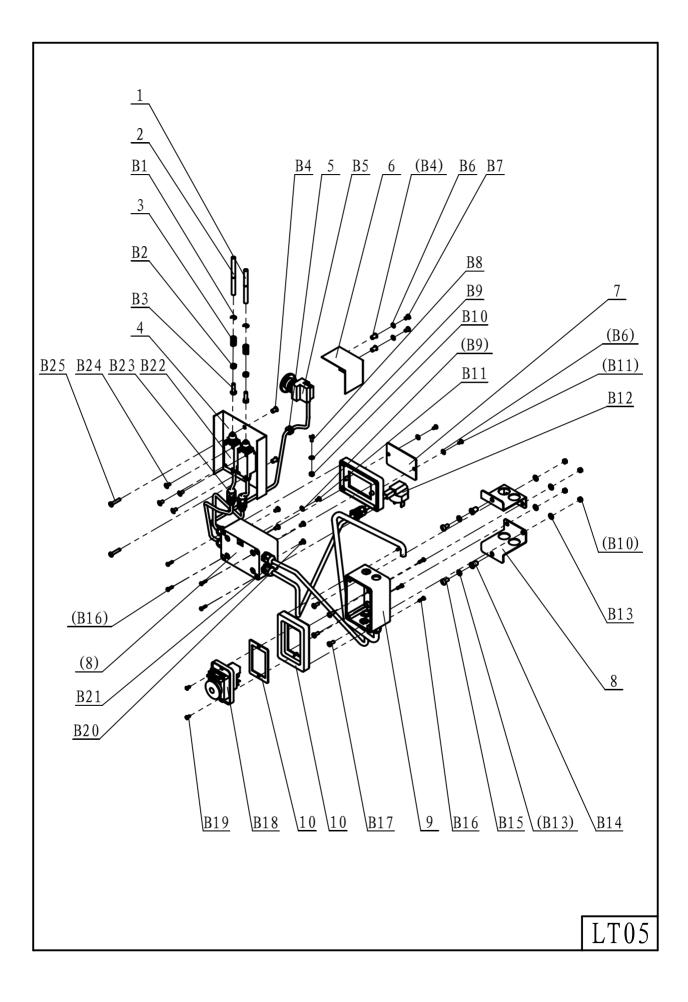


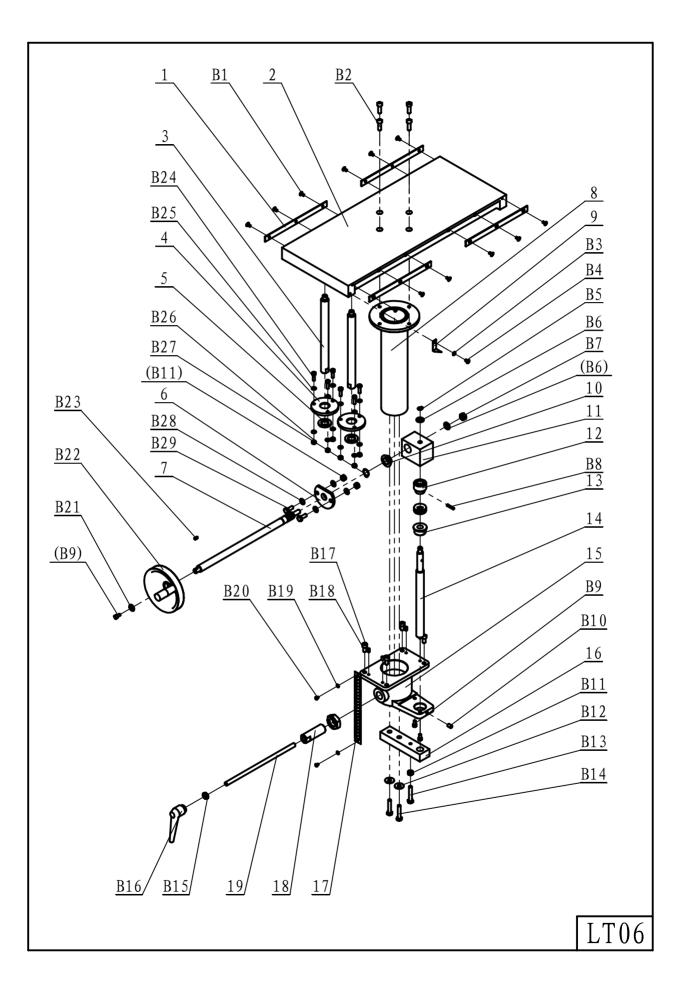


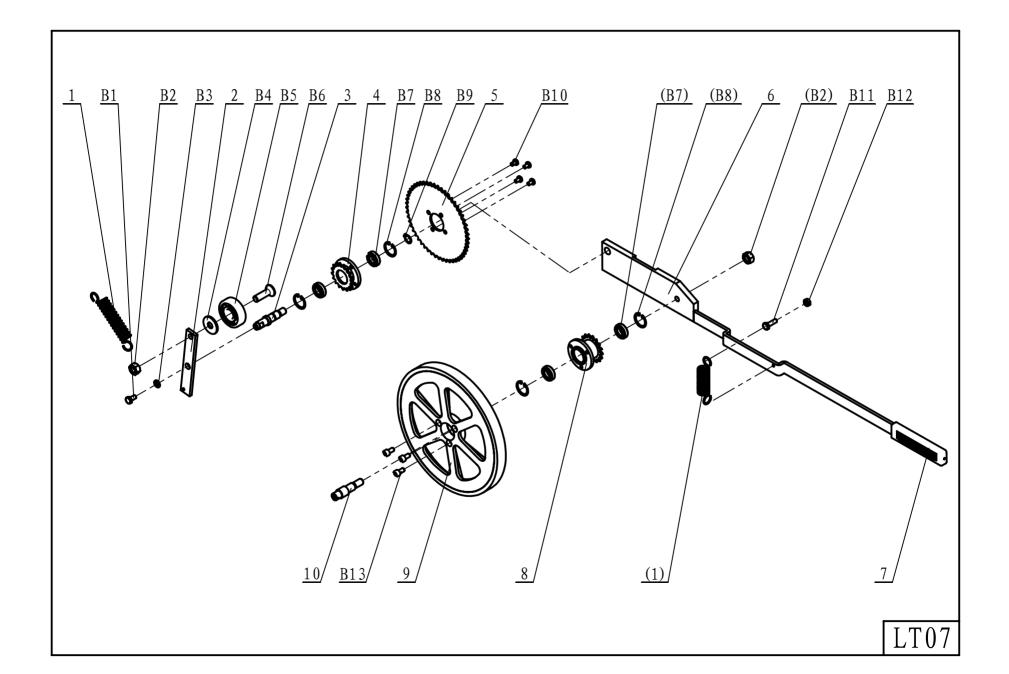


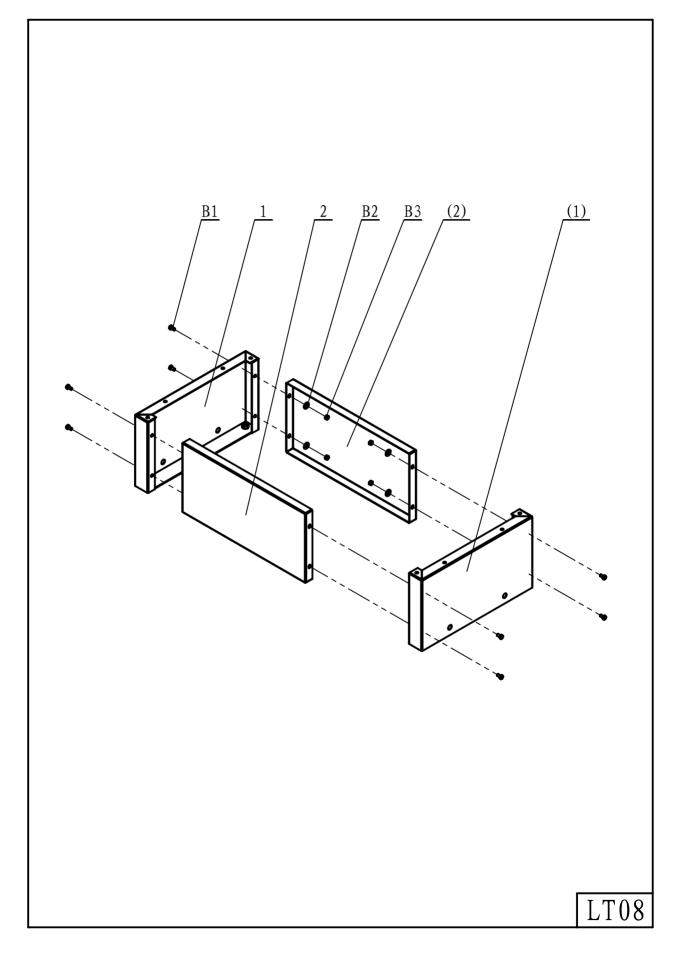












# MP250QM Woodworking Planer-Thicknesser

Spare parts list

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
1	ML392F1-3	Lift hook	2	<b>B</b> 1	GB5783-86	Bolt M8×16	4
2	MP250QM. 0-5	Planer operation symbol	1	B2	GB97.1-85	Flat pad 8-140HV	8
3	MP250QM. 0-6	Nameplate	1	B3	YLG90S-2 m	otor	1
4	MP250QM.2	Planer body	1	B4	GB6170-86	Nut M8	4
5	MP250QM.0-1	press planer lock symbol	1	B5	GB77-85	Screw M5×10	2
6	MP250QM. 0-2	Pressure plane lifting symbol	1	B6	V-belt Z11	20	1
7	MP250QM. 0. 2	Adjustable foot	4	B7	GB818-85	Screw M6×10	6
8	MP250QM.0.1	Big hood	1	B8	GB96-85	big spacer 6-140HV	6
9	MP250QM. 0-3	Motor pulley	1	B9	GB827-86	Rivet of label $2 \times 4$	4
10				B10	GB5783-86	Bolt $M6 \times 16$	6
11				B11	GB97.1-85	Flat pad 6-140HV	12
12				B12	GB6170-86	Nut M6	6
13							
14							
15							
16							
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No.	Fig.No.	Name	Qty	No.
1	MP310A.5-8	Right support	1	B1
2	MP310A.5-3	Fixing board	1	B2
3	MP310A. 5-9	board	1	B3
4	MP310A.5-6	Guiding board	1	B4
5	MP310A.5-5	end cap of guiding board	2	B5
6	MP310A.5-4	Left supporter	1	B6
7	MP250QM. 5-1	Sliding plate	1	B7
8	MP250QM. 5-2	Right positioning block	1	B8
9	MP310A.5-7	Support base	1	B9
10	MP250QM. 5-3	Left position block	1	B10
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No.	standard	Name and specification	Qty		
B1	GB70-85	Screw M6×12	8		
B2	Four- star hand	Four- star handle $M8 \times 50 \times 25$			
B3	GB819-85	ScrewM8×16	2		
B4	GB39-88	Square nut M8	6		
B5	GB845-85	Screw ST4.2 $\times$ 19	4		
B6	HuQ/JB3717.4-85	handleBM10 $ imes$ 80 $ imes$	2		
B7	GB97.1-85	Flat pad 10-140HV	2		
B8	GB97.1-85	Flat pad 10-140HV	4		
B9	GB5783-86	Bolt M8 $\times$ 16	4		
B10	GB70-85	Screw M5 $ imes$ 50	1		
B11	GB6170-86	Nut M5	1		
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No.	Fig.No.	Name	Qty
1	MP250QM. 4-10	Front table	1
2	MP250QM. 4-9	Left front sliding base	1
3	MP250QM.4.5	Knob case	2
4	MP250QM. 4-23	retaining plate	2
5	MP250QM. 4-25	Round trail	2
6	MP250QM. 4-26	Staff pointer	1
7	MP250QM. 4-24	Right front sliding base	1
8	ML392F.3-31	Spring	2
9	MP250QM. 4.3	Locking lever	2
10	MP250QM. 4-27	Staff	1
11	ML392E. 4-24	Spring	4
12	MP250QM. 4-11	Table turning plate	2
13	MP250QM. 4-5	Hood for spindle	1
14	MP250QM. 4-6	Right bearing	1
15	MP250QM. 4-7	Back table	1
16	MP250QM. 4-28	Right back sliding case	1
17	MP250QM. 4-8	Right back sliding case	1
18	MP250QM. 4-3	Limiting board	1
19	MP250QM. 4.4	Hood of planing	1
20	ML392E. 4-72	Bearing block	4
21	MP250QM.4-4	Planer tool	1
22	MP250QM. 4-18	Feed roller	1

No.	standard	Name and specification	Qty
D 1	CD70 05		
B1	GB70-85	Screw M8×20	20
B2	GB117-86	Round pin A5 $ imes$ 30	8
B3	GB6170-86	Nut M12	2
B4	GB889-86	Fixed nut M12	2
B5	GB5783-86	Bolt $M5 \times 10$	4
B6	GB70-85	Screw M6 $ imes$ 25	6
B7	GB818-85	Screw zinc M4×8	1
B8	GB97.1-85	Flat washer 10-140HV	4
B9	GB5783-86	Bolt $M8 \times 16$	2
B10	GB4141.12-84	Knob case M8 $ imes$ 25	2
B11	GB91-86	Cotter pin 2.5 $ imes$ 20	2
B12	GB77-85	Screw M6×16	4
B13	GB818-85	Screw M6×12	4
B14	GB70-85	Screw M6×30	3
B15	GB70-85	Screw M6×12	1
B16	GB97.1-85	Flat washer 8-140HV	8
B17	GB819-85	Screw M5×10	2
B18	GB/T7590-2005	steel waveform spring steelD52	1
B19	GB276-82	Bearing 6205-2RS	2
B20	GB879-86	Round pin 3×24	1
B21	GB818-85	Screw M6×10	4
B22	GB77-85	Screw M5×10	2

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
23	MP250QM. 4-15	enhance shaft	1	B23	GB818-85	Screw M5×8	8
24	MP250QM. 4-16	Non-return device shaft	1	B24	GB77-85	Screw M5×4	1
25	MP250QM. 4-17	Non-return claw	20	B25	GB5783-86	Bolt M6×16	4
26	MP250QM. 4.1	Discharge roller	1	B26	GB879-86	Round pin 3×10	2
27	MP250QM. 4.2	Bearing limit board	1	B27	GB1096-79	Flat key 6×25	1
28	MP250QM. 4-13	Sprocket base	2	B28	GB1096-79	Flat key5×16	2
29	MP250QM. 4-14	Feeding sprocket	2	B29	GB879-86	Round pin 5×22	1

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
30	MP250QM. 4-1	Pulley	1	B30	GB818-85	Screw M5×6	2
31	ML392F.3-24	Fixed board	2	B31	GB5783-86	Bolt $M8 \times 10$	12
32	ML392F.3-25	Square guiding rail	2				
33	MP250QM. 4-12	Adjusting pad	1				
34	MP250QM. 4-22	Enhance shaft	1				
35	MP250QM. 4-21	baffle	1				
36	MP250QM. 4-20	Pressing tool	3				
37	MP250QM. 4-19	Knife	3				
38	ML392F.3-2	Spring	6				
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No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
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No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
1	ML392F1.TG10.1-1	Support arm	1	B1		Knob M6 $\times$ 50 $\times$ 70	1
2	ML392F1.TG10.1-2	Parallel rod	1	B2	GB5782-86	Bolt $M6 \times 60$	2
3	ML393C. TG3. 11-6	Fixing block	1	B3	GB889-86	Fixed nut M6	2
4	ML393C. TG3. 11-10	Screw	1	B4	GB119-86	Round pin A6 $ imes$ 16	1
5	ML393C. TG3. 11-3	Nut plate	1	B5	GB5783-86	Bolt $M5 \times 20$	2
6	ML260G. TG19. 3-3	Fender board base	1	B6	GB93-87	Spring spacer 5	2
7	ML392F1.TG10.1-3	Fender board	1	B7		Four star knob M8 ×50×15	1
8	ML393C. TG3. 11-4	Press board	1	B8	GB6170-86	Nut M8	1
9	ML260G. TG19. 3-1	End cap	2	B9	GB97.1-85	Flat washer 8-140HV	1
10	MP410.6-11	spring	1	B10	沪	Knob M12 $\times$ 95	1
11	ML393C. TG3. 11-1	Supporting Arm base	1				
12	ML393C. TG3. 11-9	Small spindle	1				
13	MP250QM. 9-1	spindle	1				
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No.	Fig.No.	Name	Qty
1	MP250QM.7-10	Lock pole	1
2	MP250QM.7.1	Lock screw	1
3	MP250QM. 7-2	Up track	2
4	MP250QM. 7-9	Locking support arm	1
5	MP250QM.7-11	Press pan	1
6	MP250QM. 7-1	Drill table	1
7	MP250QM. 7-14	Operation lever	1
8	MP250QM. 7-8	Chuck hood	1
9	MP250QM. 7-7	Down sliding base	1
10	MP250QM. 7-10	wedge	1
11	MP250QM. 7-13	universal <b>s</b> ocket	1
12	MP250QM. 7-5	Dear room	1
13	MP250QM. 7-16	Spiral gear	1
14	MP250QM. 7-17	sleeve	1
15	MP250QM. 7-15	Lifting	1
16	MP250QM. 7-6	Sliding base	1
17	MP250QM.7-4	Gear shaft	1
18	MP250QM. 7-19	Down sliding base	2
19	MP250QM. 7-3	board	1
20	MP250QM. 7-18	Slide board	1
21	MP250QM. 7-21	Fixed axis	2
22	MP250QM. 7-12	Push rod	2
23			

No.	standard	Name and specification	Qty
B1	GB5783-86	Bolt $M8 \times 20$	6
B2	GB93-87	Spring washer 8	6
B3	GB97.1-85	Flat washer 8-140HV	6
B4		Knob M8 $ imes$ 10	1
B5	GB93-87	Spring washer 12	1
B6	GB6172-86	Nut M12	1
B7	GB4141.14-84	Long knob case BM12×60	1
B8	GB6170-86	Nut M8	2
B9	GB6172-86	Thin nut M14	2
B10		Ball head gimbal M14× 40	2
B11	GB819-85	Screw M6×16	2
B12	Chuck M20 $ imes$ 1.	5L/0-16	1
B13	GB70-85	Screw M8×20	2
B14	GB5782-86	Bolt $M6 \times 60$	2
B15	GB93-87	Spring washer 6	4
B16	GB97.1-85	Flat washer 6-140HV	4
B17	GB70-85	Screw M6×20	2
B18	GB889-86	Lock nut M10	1
B19	GB97.1-85	Flat washer 10-140HV	1
B20	GB894.1-86	Retainer 10	1
B21	GB879-86	Round pin $4 \times 22$	1
B22	GB/T301-1995	thrust ball bearing51102	1
B23	GB77-85	Screw $M8 \times 8$	2

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
24				B24	GB96-85	Big spacer 8-140HV	2
25				B25	GB5783-86	Bolt $M8 \times 25$	2
26				B26	GB77-85	Screw M8×20	1
27				B27	GB894.1-86	Retainer 18	1
28				B28	Handle B14×60×70		1
29				B29	GB78-85	Screw M6×12	1

N 0.	Fig.No.	Name	Qt y	No.	standard	Name and specification	Qt y
30				B30	GB819-85	Screw M6×16	2
31				B31	GB78-85	Screw M6 $\times$ 30	2
32				B32	沪 Q/JB3717.4-85	Handle BM10 $ imes$ 80 $ imes$	1
33				B33	GB77-85	Screw M8×8	2
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No.	Fig.No.	Name	Qty
1	MP250QM. 8-1	Push rod	1
2	MP250QM. 8-2	Push rod	1
3	MP250QM. 8-3	Spring	2
4	MP250QM. 8-7	Limit switch cover	1
5	MP250QM. 8-5	The thread sheath	1
6	MP250QM. 8-4	Button cover	1
7	MP250QM. 8-6	Electrical box cover	1
8	MP250QM. 8-9	Support plate	2
9	MP250QM.8-8	Electrical box	2
10	MP250QM. 8-11	Electrical box cover	2
11	MP250QM. 8-10	Electrical box pad	1
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No.	standard	Name and specification	Qty
B1	GB896-86	Split washer 6	2
B2	GB6170-86	Bolt M6	2
B3	GB5783-86	Bolt $M6 \times 20$	2
B4	GB/T17880.1-1999	Insert nut M5×11	4
B5		Emergency switch Y090	1
B6	GB97.1-85	Flat washer 5-140HV	4
B7	GB818-85	Screw M5×8	2
B8	GB65-85	Screw $M5 \times 10$	1
B9	GB97.1-85	Copper flat washer 5-140HV	2
B10	GB6170-86	Nut M5	5
B11	GB845-85	Tapping screw ST4.2 ×10	2
B12	Single phase three p	oole plug 250V10A	1
B13	GB97.1-85	Flat spacer6-140HV	6
B14	GB/T17880.1-1999	Insert nut M6×13.5	2
B15	GB818-85	Screw $M6 \times 12$	2
B16	GB845-85	Tapping screwST3.5 ×16	8
B17	GB818-85	Screw $M5 \times 12$	4
B18	DKLD-DZ-6-2 swit	ch	1
B19	GB845-85	Tapping screw ST3.5 ×10	2
B20	GB818-85	Screw M5×8	4
B21		Cable fixed head PG9	7

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
22				B22		Limit switch	2
23				B23		Cable fixed head PG7	2
24				B24	GB819-85	Screw $M5 \times 10$	4
25				B25	GB818-85	Screw M5 $ imes$ 25	2
26				B26			
27				B27			
28				B28			
29				B29			

No.	Fig.No.	Name	Qty		No.	standard	Name and specification	Qty
1	MP250QM. 3-5	Board	4		B1	GB819-85	Screw M5×10	12
2	MP250QM. 3-6	Press planer worktable	1		B2	GB70-85	Screw M8×25	4
3	MP250QM. 3-8	Assistant pole	2		B3	GB97.1-85	Flat spacer 5-140HV	1
4	MP250QM. 3-10	Fixed disc	2		B4	GB818-85	Screw $M5 \times 8$	1
5	MP250QM.3-9	Assistant guiding sleeve	2		B5	GB894.1-86	Retainer 10	1
6	MP250QM. 3-12	Hand wheel base	1		B6	GB97.1-85	Flat spacer 10-140HV	2
7	MP250QM. 3-11	Gear shaft	1		B7	GB889-86	Fixing nut M10	1
8	MP250QM. 3.1	Guiding pole	1		B8	GB879-86	Round pin5×24	1
9	MP250QM. 3-4	Pressure plane cursor	1		B9	GB70-85	Screw M6×12	2
10	ML393C. 4-24	Guiding sleeve	1		B10	GB77-85	Screw M8×12	1
11	ML393C. 4-25	Gear room	1	1	B11	GB6170-86	Nut M8	3
12	ML393C.4-4	Spiral gear	1		B12	GB96-85	Big spacer 8-140HV	2

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
13	MP250QM. 3-2	Locking sleeve	1	B13	GB5783-86	Bolt $M8 \times 45$	1
14	MP250QM. 3-1	Elevating screw	1	B14	GB5783-86	boltM8 $ imes$ 40	2
15	MP250QM. 3-7	Guiding pole base	1	B15	GB6172-86	Thin nutM10	1
16	ML393C.3-10	Nut plate	1	B16	沪	handleM10×80	1
17	MP250QM. 3-3	Press planer Staff	1	B17	GB77-85	Screw M6×10	4
18	MP250QM. 3-14	Pole locking sleeve	1	B18	GB70-85	Screw M8×16	4
19	MP250QM. 3-13	Lock screw	1	B19	GB97.1-85	Flat spacer 4-140HV	2
20				B20	GB818-85	Screw zinc M4 $ imes$	2
21				B21	GB96-85	Big spacer 6-140HV	1
22				B22	Hu	Hand Wheel 12 $ imes$	1
23				B23	GB1096-79	Flat key C4 $ imes$ 10	1
24				B24	GB5783-86	Bolt $M6 \times 20$	6
25				B25	GB97.1-85	spacer 6-140HV	12
26				B26	GB6170-86	Nut M6	6
27				B27	GB894.1-86	Retainer 18	1
28				B28	GB97.1-85	Flat pad	4
29				B29	GB5783-86	Screw M8×20	2

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
1	ML393C.3-38	Spring	2	B1	GB5783-86	boltM6 $ imes$ 12	1
2	MP250QM. 6-2	Tension plate	1	B2	GB6170-86	Nut M10	1
3	MP250QM. 6-3	Support shaft	1	B3	GB97.1-85	Flat pad 6-140HV	1
4	MP250QM.6-1	The friction end sprockets	1	B4	GB96-85	Big spacer 10-140HV	1
5	MP250QM.6-4	Big sprocket	1	B5	GB/T276-94	Bearing 6303-2RS	1

No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
6	MP250QM. 6.1	Feed lever	1	B6	GB2673-86	Screw M10×35	1
7	MP250QM.6-6	Handle	1	B7	GB/T276-94	Bearing61901-RZ	4
8	MP250QM. 6-8	The friction end sprockets	1	B8	GB893.1-86	Retainer24	4
9	MP250QM. 6.2	Friction wheel	1	B9	GB894.1-86	Retainer 12	1
10	MP250QM. 6-7	Friction wheel	1	B10	GB818-85	Screw $M5 \times 8$	4
11				B11	GB5783-86	Bolt $M6 \times 20$	1
12				B12	GB6170-86	Nut M6	1
13				B13	GB70-85	Screw $M6 \times 12$	3
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No.	Fig.No.	Name	Qty	No.	standard	Name and specification	Qty
1	MP250QM.1.1	The Base side plate	2	B1	GB5783-86	Bolt M6×12	8
2	MP250QM.1-1	The Base panel	2	B2	GB96-85	Big spacer 8-140HV	8
3				B3	GB6170-86	Nut M6	8
4							
5							
6							