OPERATION MANUAL

THICKNESSER

WINTER PLANERMAX 630 DELUXE

WARNING!

The operator must thoroughly read this manual before operation.
Keep this manual for future reference.

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1. GENERAL INFORMATION

1.1 FOREWORD

The present manual is designed for those who will operate the machine. You will find in it the necessary data for commissioning, maintenance and safety operation of the machine. The experience of the company manufacturer and its experts in considered in the preparation of this manual.

We recommend you to consider with responsibility our recommendations concerning the safety of work. The operations requiring disassembly of machine and electrical components should be performed by authorized and qualified personnel only. Repairs and settings not described in the present manual should not be performed. This manual is prepared by the manufacturer and is an integral part of the machine's delivery. The information contained herein is intended for specialists and is compulsory.

The manual defines the machine's field of application and contains all the information necessary for its proper and safety operation. The permanent and exact observation of the instructions contained in this manual ensure safety of personnel and machine, profitable work as well as long life of the machine itself. For better clarity this manual is divided in separate parts in which are contained the more important subjects.

The contents will allow you to find fast the specific subjects. The important text is printed in bold and is marked by the following symbols:

WARNING Indicates imminent risks which may cause serious injury to the operator or other persons. Be careful and scrupulously follow the instructions.

CAUTION A statement advising of the need to take care lest serious consequences result in harm to material items such as the asset or the product.

1.2 MACHINE IDENTIFICATION

There is a identification plate fixed to the machine, containing the manufacturer's data, year of construction, serial number and technical specifications.

1.3 CUSTOMER SERVICE RECOMMENDATIONS

Apply the machine to skilled and authorized technical staff to carry out any operation dealing with parts disassembly. Keep to the instructions contained in this manual for the correct use of the machine.

CAUTION Only skilled and authorized staff shall use and service the machine after reading this manual. Respect the accident prevention regulations and the general safety and industrial medicine rules.

2. SAFETY PRECAUTIONS

2.1 SAFETY REGULATIONS

WARNING Read carefully the operation and maintenance manual before starting, using, servicing and carrying out any other operation on the machine.

Before commissioning, use, servicing, repair, cleaning or any other operations on the machine read very carefully this manual.

The manufacturer shall not be liable for any damages on the machine or any injury of personnel occurred as a result of failure to observe the operation, maintenance and safety instructions.

- Only personnel trained and acquainted in detail with the operation of the machine and especially with the dangers during operation of this kind of machines and being safe and controlling completely their mind may operate the machine..
- Do not operate the machine beyond the safety instructions and without the protection devices.
- Follow strictly the Operation and service manual.
- During all preparation activities, removal of failures, maintenance works and other, switch off the machine from the electric mains by pulling the supply coupling from the connector of the starter.
- Follow the maximal and minimal dimensions of the pieces under p. D.1. of the servicing manual.
- Before commissioning check the availability and the condition of all protection devices.
- Do not operate the machine with gloves.
- Clean thoroughly the machine from all dust and chips after work.
- Do not clean the machine by water neither when switched on nor when switched off.
- Always keep the working place of the machine in clean condition.
- Remove from the machine and the operation surface all adjustment tools before operation.
- Before any electrical connection, keep the machine switched off.
- Before commissioning of the machine make sure that the connection to the electric mains is properly effected.
- Use the machine and the tools only for the purpose they are intended for.
- Do not operate the machine in damp premises and do not leave it under the rain or at low tempera-tures.
- Never leave the machine operate without control when you are apart of it.
- Do not work with loose clothing, free hair or long stoles.
- Remove all bracelets, watches, chains and other similar objects.
- Always feed the key-shaped pieces in the machine by the highest part of the section.
- The sleeves of the working clothing must be always buttoned.
- In order to protect yourself from the noise, always work with headphones.
- Always work with protection goggles, mask against the dust and with the other protection devices.
- Keep children apart from the machine and take care to prevent machine!"s operation by children.
- Teenagers under the age of 16 may operate the machine under the supervision of skilled expert "C adult person only.
- Provided the machine operates longer, it should be connected to the chip and dust aspiration device.
- Before commissioning check the pieces for defects, e.g. free knots, fissures, nails, metal objects and other foreign objects.
- Use only perfectly sharpened tools.
- Do not use cracked, damaged, wrong-shaped or incorrectly sharpened tools.
- Keep always the tools with due care and do not allow unauthorized personnel to handle them.
- Do not use the tools under speeds that exceed the maximal ones as specified by the respective tool producer.
- Clean tools!" coupling surfaces and check for presence of swellings and dints.
- Do not clean the tools by means of wire brush; do not use water in any case.
- When handling the tools, use protection gloves whenever possible.
- Do not open in any case the protection covers and doors while the machine is under operation.
- Always operate the machine with protection devices, support rulers etc. in good order.
- Do not pass your hands or other parts of your body to the mobile parts of the machine.
- Process only materials the machine is designed for.
- Ensure proper lighting (500 lux) that would not blind the eyes and avoid the stroboscopic effect.

- The repair or maintenance works on the machine must not be carried out by unauthorized personnel.
- The transportation, installation and assembly of the machine should be assigned to qualified personnel only possessing the required knowledge and equipment for that purpose.
- All interventions to the electrical equipment may be carried out solely and exclusively by qualified
- personnel who possess the required knowledge for that purpose.
- Do not modify in any case the electric equipment of the machine.
- The chip and dust aspiration device must ensure a minimal rate of air delivery of 1800 m /h at a speed of 25-30 m/ sec.
- Replace the knives on the cutting shaft only by sets and do not use knives narrower than 20 mm.
- There must be sufficient space around the machine in order to ensure that the operator can always
- stand outside the areas of potential danger.
- Clean regularly machine!¯s board and the floor from dust and chip.

Training of the servicing personnel

All servicing personnel must be trained to operate and maintain the machine.
The training should include the following special features:
- general principles of machine!¯s driving, the proper operation, adjustent of support rulers, as well as the use of appliances for special kinds of processing.
- The proper handling of the piece during processing.
- The position of the hands towards the cutting disks during processing and afterwards.

The servicing personnel must be informed about the dangers during machine!¯s operation, as well as about the respective protection measures.
The servicing personnel must be trained to carry out periodical checks of the protection devices.
The servicing personnel must be informed about the use of the protection devices.

Additional dangers

Despite all operation and safety rules contained in this Operation and service manual, the following additional dangers may occur:
- Contact with the tool;
- contact with the rotating parts of the driving (pulleys, belts etc.)
- Back hit of the piece or parts thereof;
- Possible danger of dust when operating without aspiration device.

However, the safety depends mainly on yourself.
Bear in mind that you always undertake some risk when operating the machine.

WARNING

The failure to follow the safety instructions or the improper operation of the machine present serious danger for the servicing personnel.

2.2 RESIDUAL RISKS

Despite observance of all the safety regulations, and use according to the rules described in this manual, residual risks may still be present, among which the most recurring are:

- contact with tool
- contact with moving parts (belts, pulleys, etc..)
- recoil of the piece or part of it
- accidents due to wood splinters or fragments
- tool insert ejection
- electrocution from contact with live parts
- danger due to incorrect tool installation
- inverse tool rotation due to incorrect electrical connection
- danger due to dust inhalation in case of working without vacuum cleaner.

Bear in mind that the use of any machine tool carries risks.
Use the appropriate care and concentration for any type of machining (also the most simple).
The highest safety is in your hands.

2.3 SAFETY AND INFORMATION SIGNALS

This signals may be applied on the machine; in some cases they indicate possible danger conditions, in others they serve as indication.
Always take the utmost care.

SAFETY SIGNALS:


Risk of eye injury. Wear eye protection.


Wear hearing protection systems.

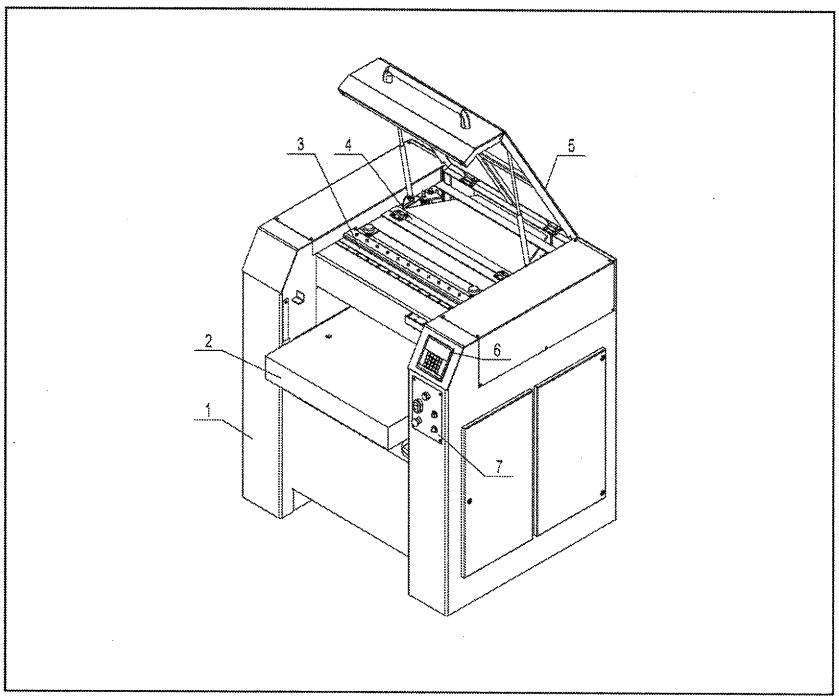

Danger of electric shock. Do not access the area when the machine is powered.


Carefully read and understand the manual before using the machine.

INFORMATION SIGNALS:
Indicate the technical characteristics, direction of rotation and inclination, block and release, etc.
Carefully following the directions to simply the use and adjustment of the machine.
The signals are graphically described and do not require further explanation.

3. SPECIFICATIONS

3.1 MAIN COMPONENTS



1 - Frame
2 - Thicknessing table
3 - Turret assembly
4 - Dust cover
5 - Large shields
6 - Lift Control Panel
7 - Main Control panel

3.2 TECHNICAL SPECIFICATION

Variable Feed Speed	4-20m/min
Cutter Block Speed	5000rpm
Cutter Block Diameter	117mm
Max Width of Cut	630mm
Max Higth of Cut	300mm
Max Depth of Cut	8mm
Quantity of Knives Cutterblock	4
Dust Extraction Outlet	150mm
Cutting Motor Output	S1：5.5KW/S6：7.5KW40%
Feeding Motor Output	0.55KW
Lifting Motor Output	0.25KW
Net/Gross Weight	810/860kgs
Package Size	1120*1150*1310mm

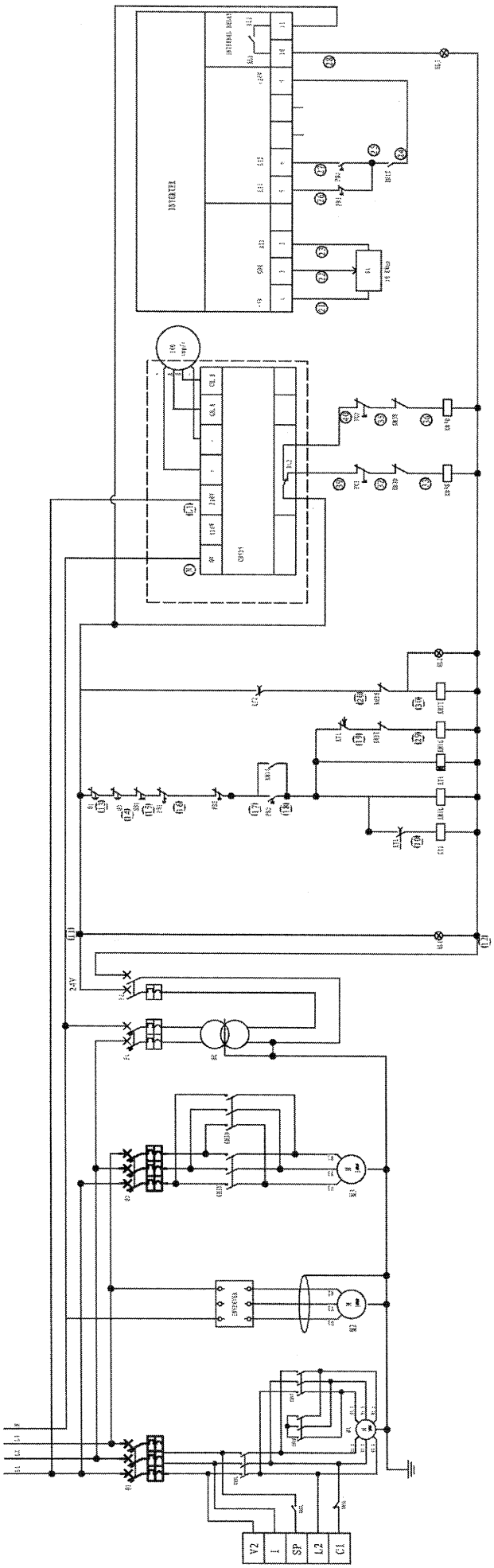
3.3 ELECTRICAL CONNECTION

- Electrical installation should be carried out by competent, qualified personnel.
- The mains connection should be made using the terminal box.
- Replacement of the power supply cable should only be done by a qualified electrician.

WARNING To avoid electrocution or fire, any maintenance or repair to electrical system should be done only by qualified electricians using genuine replacement parts.

WARNING Please check the direction of table movement after power on. The table should move upward when you press the button "-" on the control panel. If not, please adjust the phase position of the three phases power supply.

Code	Name	Model	Qty.	Description
Q1	Protector	DZ108-20/14-205A/3P	1	Main motor protection
Q2	Protector	DZ108-20/1-1.6A/3P	1	Lift motor protection
F1	Protector	RT18-32/6A/2P	1	Transformer primary side protection
F2	Protector	RT18-32/6A/1P	1	Transformer secondary protection
KM1L	Contactor	CJX2-1810/24V	1	The main motor contactor
KM1S	Contactor	CJX2-1801/24V	1	The main motor contactor
KM1T	Contactor	CJX2-1201/24V	1	The main motor contactor
KM3S	Contactor	CJX2-0910/24V	1	Lifting motor contactor
KM3D	Contactor	CJX2-0910/24V	1	Lifting motor contactor
KT1	Time Relay	HY3/24V	1	Start Time Control
KT2	Time Relay	ST3PF	1	Braking time control
BK	Transformer	BK-50/380V/24V	1	The control circuit transformer
CH525	Locator	CH525	1	Lift motor control
ATV	Drive	ATV12H075M2	1	Motor control access to materials
R1	Potentiometer	WX112	1	Speed control access to materials
SS1	Micro Switch	QKS8	1	Guard micro switch
HL1	Power Indicator	AD16	1	Total power indicator
PB1	Emergency stop button	LA42	1	The main motor is stopped
PB2	Spindle button	M22-DDL-GR/K11/LED	2	Start and stop the spindle motor
PB3	Feed Button	M22-WLK3-W/K11/LED	2	Feed motor start and stop


V2
1
SP
L2
C1

3.4 NOISE LEVEL

	No load	Load
Sound Pressure Level	< 80.4dB(A)	< 85.7dB(A)
Sound Power Level	< 98.1dB(A)	< 111dB(A)

Associated uncertainty *K*=4dB
Measurement made in accordance with EN ISO 3746:1995 and EN ISO 11202:1995

The noise levels measured are emission levels and not necessarily the safe working level. Although there is a correlation between the emission levels and the exposure levels, this cannot be used reliably to determine whether or not further precautions are required. The factors which affect the actual level of operator exposure include the duration of exposure, the ambient characteristics and other sources of emission, for example, the number of machines and other adjacent machining. The permitted exposure values may also vary from country to country. Nevertheless, this information allows the user of the machine to better evaluate the dangers and risks.

Other factors which reduce exposure to noise are:
- correct tool choice
- tool and machine maintenance
- use of hearing protection systems (e.g. headsets, earplugs,...)

WARNING Please always use the hearing protection systems.

3.5 DUST EXTRACTION

The chip and dust aspiration device must ensure a minimal rate of air delivery of 1800 m3/h at a speed of 25-30 m/sec.

The machine is equipped with a shavings collector, which has an end sleeve for connection to the aspirator for the saw-dust and the shavings.
Connect the shavings collector with a tubing of Ø 160 mm to the aspirator for saw-dust and shavings.

WARNING

The dust and chips aspiration device must be switched on simultaneously with the motor of the machine.

4. INSTALLATION

CAUTION

Assembly need to be done by an experienced and trained person.

4.1 REQUIREMENTS TO THE WORKING AREA

Choose a suitable place for the machine taking in mind the possibility to mount extension boards for the smoothing thicknesser.

The place chosen for positioning of the machine should provide for convenient connection to the electric mains and the device for aspiration of the dust and ships.

Provide for suitable lighting (500 lux) that would not blind and avoid the stroboscopic effect.

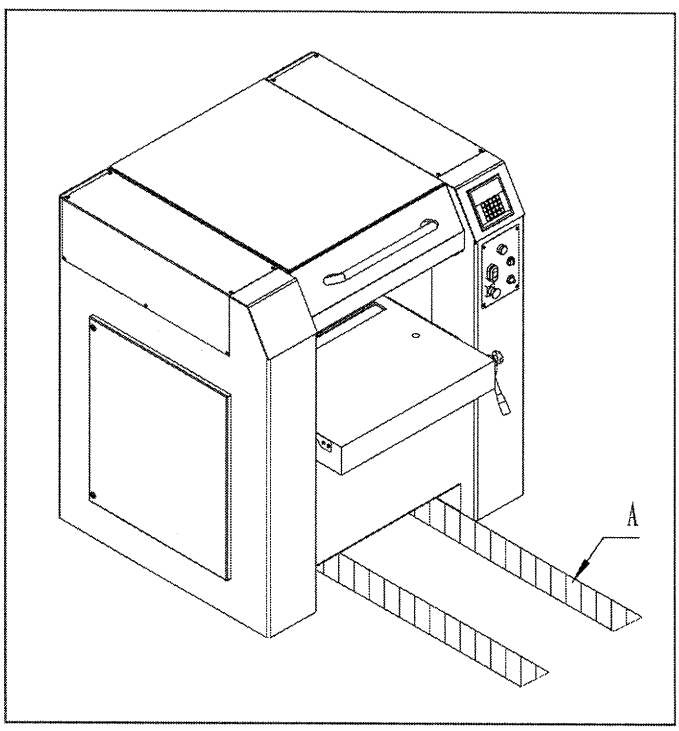
Check the load capacity of the floor and bear in mind that the machine must be leveled simultaneously on its four supporting points.

Provide for a distance of at least 0.8 m around the machine.

You should provide for the space required at the entrance and exit of the machine in order to feed and take up ling pieces.

4.2 UNLOADING OF MACHINE

- provide for a fork lift truck with the respective load capacity, corresponding to machines weight;



5. FITTING AND OPERATING OF MACHINE

5.1 OPERATING OF MACHINE

5.1.1 Dimensions of the pieces

- The maximum size of the elements which can be processed by the thickness machine is 630x 300 mm.
- When processing longer elements use roller supports to keep the element steady and normally fed into the machine.

5.1.2 Disassembly and adjustment of knives to cutterblock

WARNING

Before starting assembly, disassembly or adjusting of the knives make sure that the machine can not be operated.
- Switch off the machine from the electric mains.
- Put the main switch in position "0" and lock it by padlock;

When disassembling and assembling the knives always use, whenever possible, protection gloves.

- Open the shavings collector A
- Thread out the dust cover B
- Loose the bolt on lock bar.
- Knife will be ejected out automaticly
- While assemble knives, use the knife-block C to press knives into cutterblock, and then lock the bolts on lock bar.

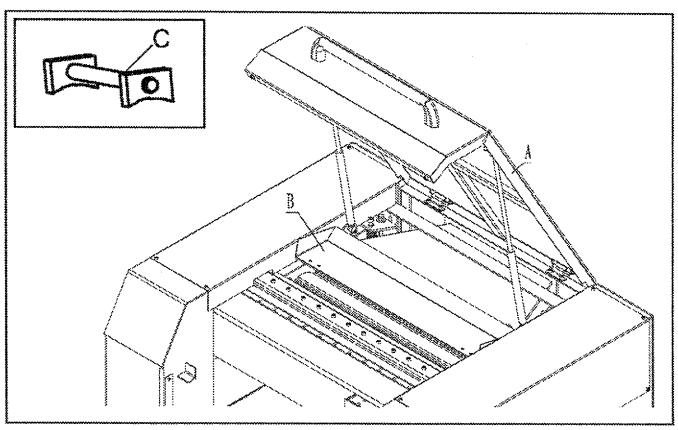


FIG.5.1.2

5.1.3 Working on the thickness machine

The thickness control board consist of the below buttons:
1. Power signal lamp
2. Power on button / signal lamp
3. Cutterblock running switch / signal lamp
4. Feeding speed adjusting knob
5. Feeding running switch / signal lamp
6. Automatic control board
7. Feeding stop switch
8. Cutterblock brake release control knob
9. Cutterblock stop switch
10. Emergency switch
11. Main power on switch

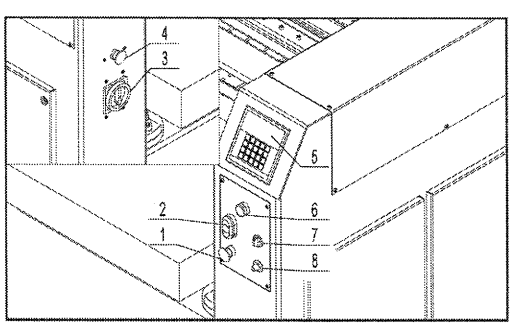


FIG.5.1.3

CAUTION

Before processing on the thickness machine the piece must be smoothed (set straight).

The element is placed on the table with the smoothened side on the desk and is pushed to the feeding roller.

CAUTION

- With workpieces having different thickness at the two ends, the thicker end is fed first to avoid jamming
- If adjustment has been made for a chip bigger than 8 mm, the workpiece cannot be fed to the machine because the limiter 8 does not allow for this.
- The removal of a thicker layer can be made with a few passes
- If the workpiece gets jammed and does not move, then the thickness of the chip should be decreased - the table is lowered at about 1 mm. The last chip has to be about 2 mm to get a well machined surface
- The table of the machine has to be cleaned regularly
- The resin should be cleaned with cloth moistened with turpentine

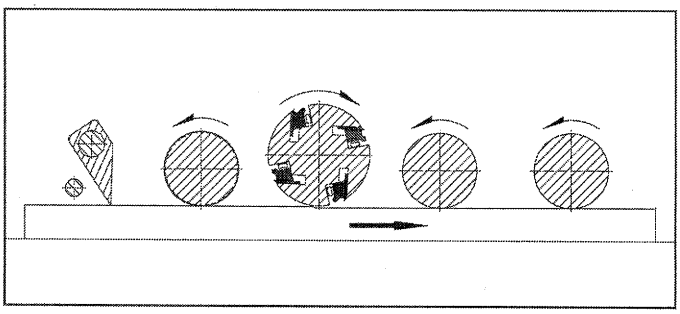


FIG. CAUTION

- Do not coat the table with oil or grease. They soak into the wooden piece and make it unfit for sticking, staining or polishing.
- For workpieces with length bigger than the maximum one, roller supports or table extensions should be used
- Observe the dimensions of the details according to the maintenance manual.
- For working of details with thickness less than 5 mm, a plank worked on the thickness machine can be used. The workpiece is placed on it and it moves together with it thanks to the safety stop as the fig shown.
- The safety stop should not be attached to the plank with nails or other solid fixtures
- Check the workpieces for defects / e.g. nails, free knots, cracks and other objects /
- Avoid working of pieces with a length less than 300 mm, because they cannot be transported well by the machine rollers.

5.2 STARTING

WARNING

Before starting the machine check all the protection systems and gear for functionality.
Closely follow the safety instructions given for operating this machine.

Starting the machine is performed as follows:
1. The main switch **11** is placed in position "1".
2. The green button **2** is pressed and the indicator lamp under it is activated.
3. The switch the feeding the material with green button **5**
4. With the potentiometer choose the speed of the feeding.

5.3 STOPPING

Normal stop

To stop the machine press the red button **9**, which activates the dynamic brake of the motor.

Emergency stop

The emergency stop is executed by pressing one of the emergency stops **11** or the one on the back of shaving collector, near the dust port, which activate the dynamic brake of the motor.

6. MAINTENANCE

6.1 CLEANING OF MACHINE

The general (complete) cleaning will guarantee long life of the machine and is one of safety facto

WARNING

Before starting any cleaning, adjusting or dismounting of parts from the machine it is necessary to stop it, put a warning sign for the outsiders in the enterprise and lock the cap of the starter with a padlock.

- After each working shift clean thoroughly the machine and all the components, aspirate the dust and the chips by means of the aspiration device and remove all other remainders by compressed air.
- At least once every 6 months or every 500 operating hours remove the side covers in order to get full access for cleaning of the internal components.

6.2 LUBRICATION OF MACHINE

- In order to remove the dust and chips, clean once per 500 hours by means of soft brush all belts.
- Clean thoroughly the machine by strong jet of compressed air and lay a thin layer of oil or grease on all machine!"s mobile parts.
- Protect the belts and pulleys in order to avoid possible soiling by oil or grease.

6.3 CHECKING THE CONDITION OF SOME UNITS AFTER OPERATION

- Before starting any maintenance works on the machine disconnect the electric supply, unplugging it from the mains.

WARNING

- Do not pull the belts with too much strength in order to prevent damages on the bearings and overheating.
- At least once per month check the tension of the belts and the chain and if necessary, stretch them additionally.

- At every six months it is necessary to check up stretching of the driving belts again.
- The belts must not be stretched much strongly to not overload bearings.
- **Much strong stretching leads to lengthening of the belts and its fast wearing out.**
- Pollution of the belts with oil, lubricant, solvent, paint etc., must be avoided.
- The driving belts and channels of belt pulleys are clean and dry with soft brush only and woolen or paper towel.
- Never use solvent and water.

7. TROUBLE SHOOTING

WARNING

Before starting any repair works switch off the electric supply of the machine.

The machine has been tested in the production plant and you can freely operate it.
The incorrect and out of function use of the machine may result in damages.

Fault:
The machine does not start.

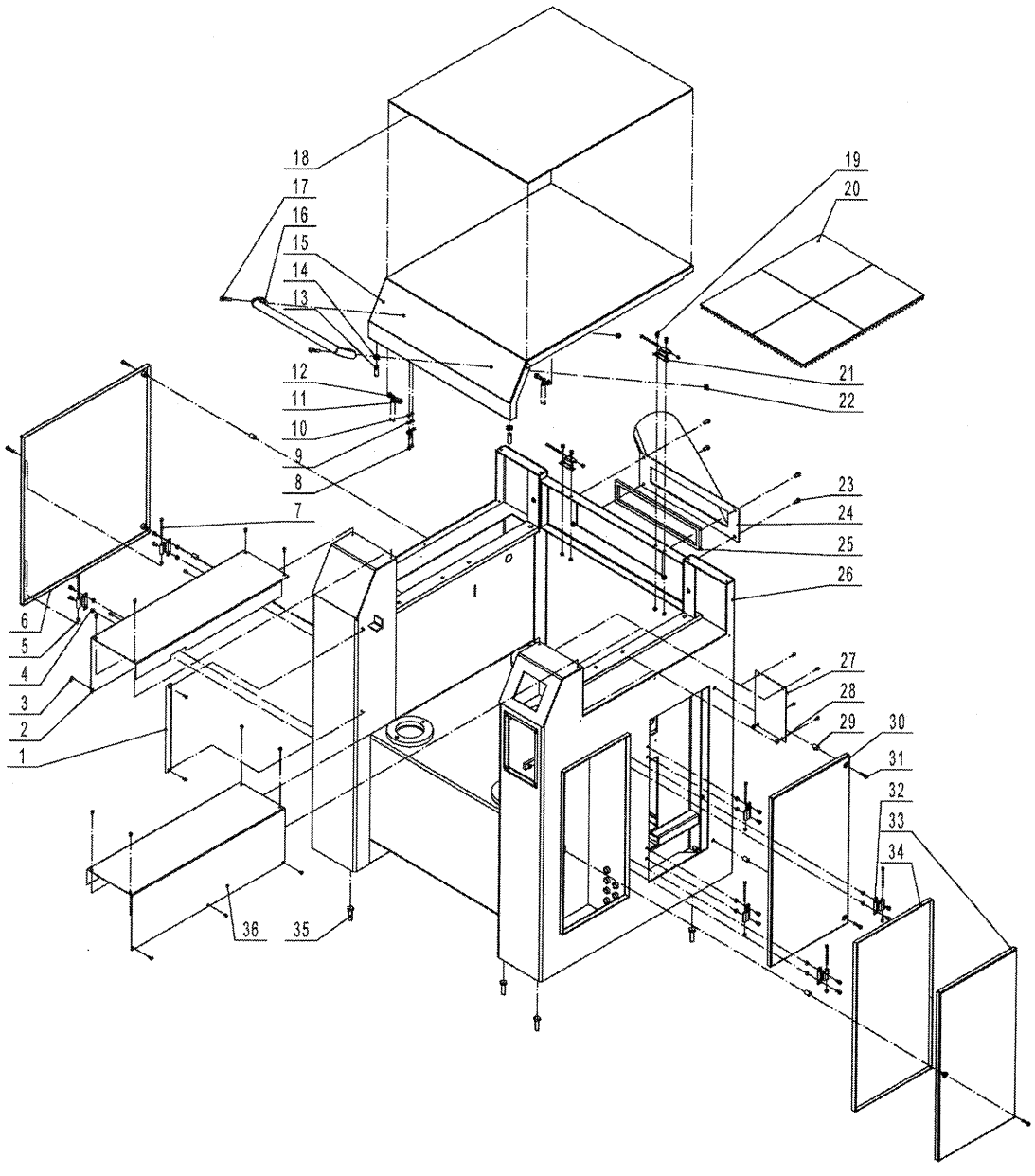
Reason:	**Repair:**
- No voltage in the electric mains.	Check whether the power supply is ok

Fault:

The machine stops during operation.

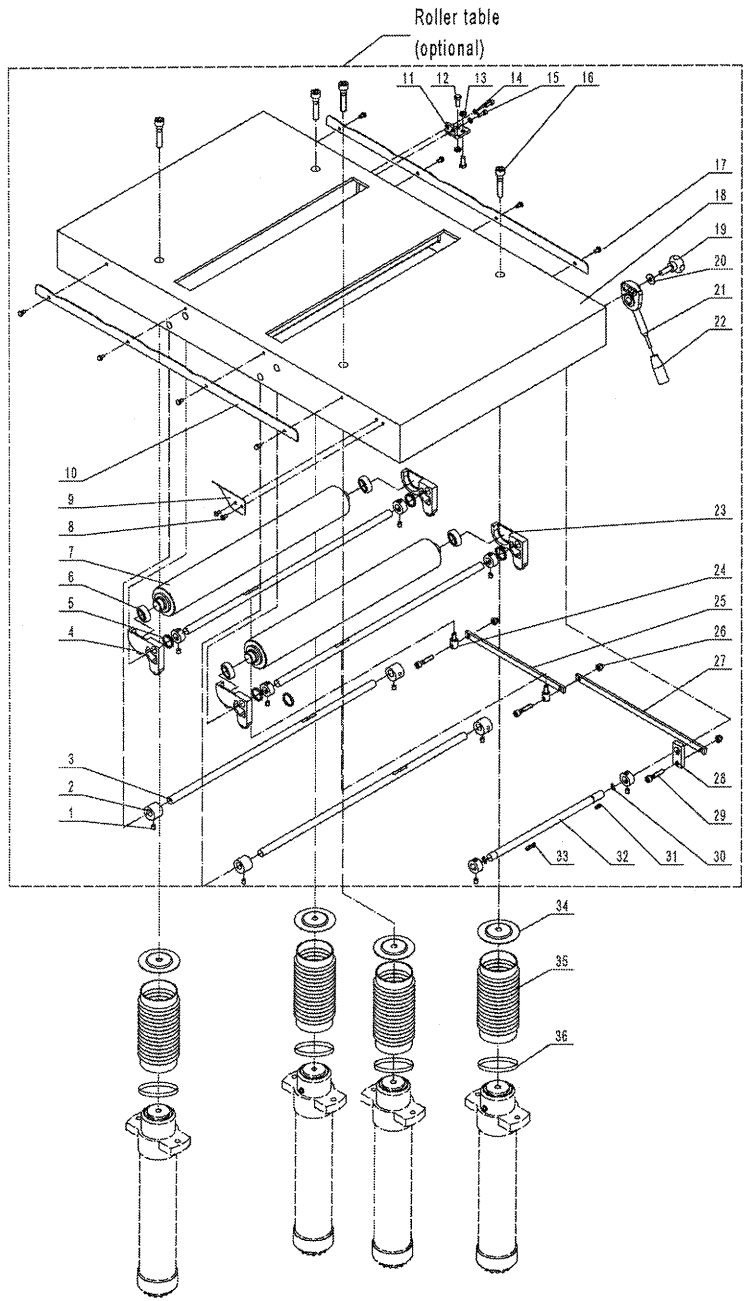
Reason:	**Repair:**
- overheating of the motor, its thermo-switch has disconnected the supply (incorrect use of the machine ¨- overload). - belt tightened insufficiently. - warn belts touching the bottom of the grooves of the belt washers.	- Switch off completely the machine. Wait the motor to cool down. Operate again the machine by pressing the green knob. - Pull additionally the belts. - replace the belts by new ones after you have previously cleaned up the grooves of the belt washers.

8. DIAGRAMS & COMPONENTS



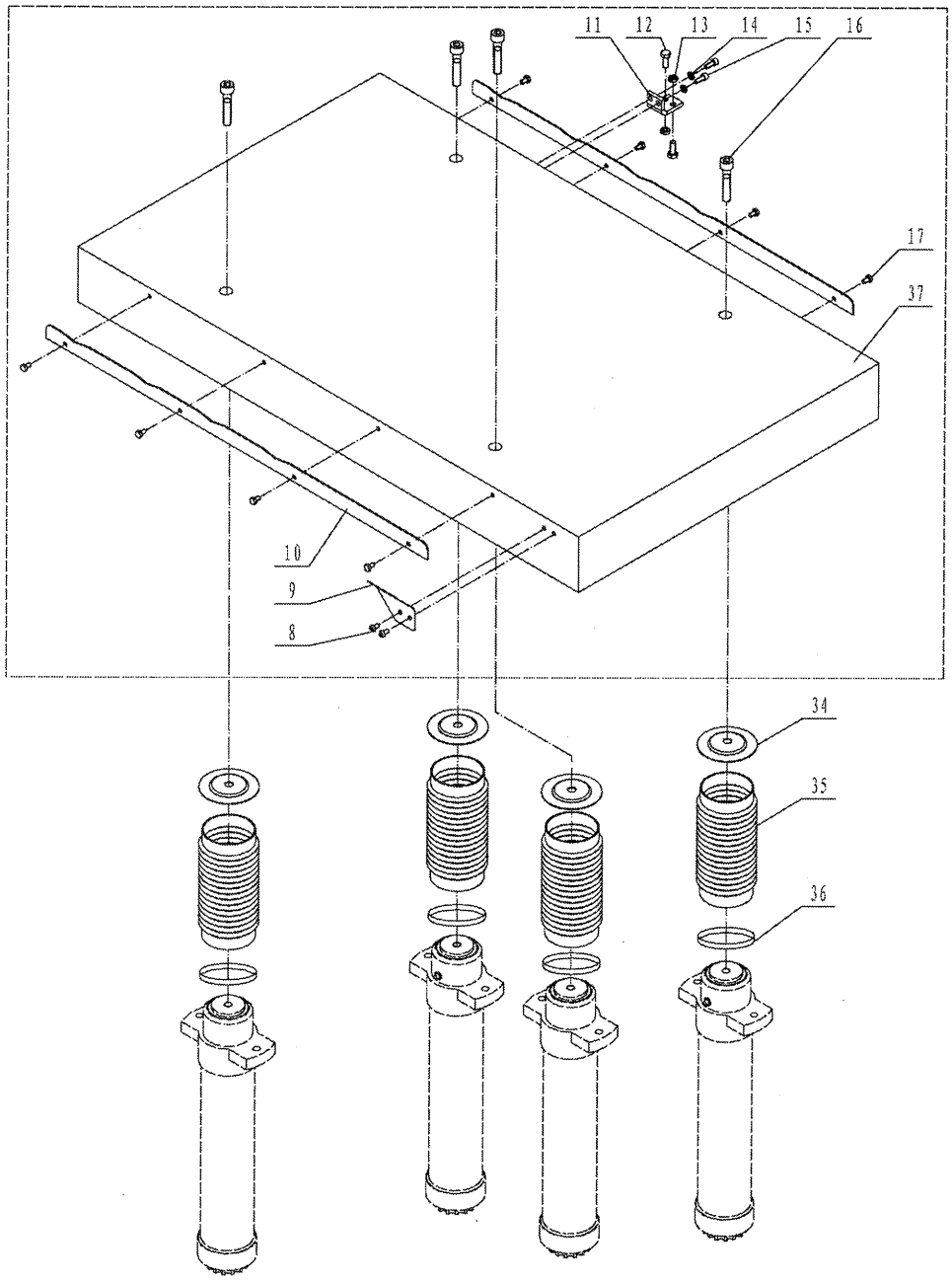
No.	Description	Part No.	QTY.
1	Lifting scale	JKTH2501050008	1
2	Left cover	JXTH2501010004	1
3	Screw	M5X10GB70D2Z	20
4	Bolt	M6GB6170Z	8
5	Locking screw	M5GB889Z	8
6	Left door	JXTH2501012300	1
7	Hex. Screw	M5X70GB70B	8
8	Screw	M4X12GB70Z	2
9	Big washer	WSH4GB96Z	2
10	Bolt	M4GB6170Z	2
11	Hex. Screw	M8X16GB70Z	2
12	Blot	M8GB6170Z	2
13	Nylon screw	0323885600A	2
14	Bolt	M12GB6172Z	2
15	Big cover	JXTH2501013100	1
16	Handle	JE8047-25X400	1
17	Hex. Screw	M8X40GB70Z	2
18	Protect felt	JXTH2501010007	1
19	Hex. Screw	M6X10GB70Z	16
20	Silencing cotton	JXTH2501010008	4
21	Hinge 3	JXTH2501013101A	2
22	Bolt	M8GB6170Z	2
23	Screw	M8X16GB70D2Z	4
24	Dust hose	JXTH2501052300	1
25	Seal plate	JXTH2501050027	0.9
26	Cabinet	JXTH2501011000	1
27	Protect plate	JXTH2501010005	1
28	Screw	M5GB6170Z	2
29	Riveted nut	M6X16D5GB17880D3Z	5
30	Right door	JXTH2501012200	1
31	Hex. Screw	M6X20GB70Z	5
32	Hinge 2	JXTH2501013101	6
33	Cabinet door	JXTH2501012100	1
34	Seal	JXTH2501010006	2.2
35	Hex. Screw	M12X40GB5783Z	4
36	Right cover	JXTH2501010003	1

Frame Assembly



No.	Description	Part No.	QTY.
1	Hex.screw	M8X10GB80B	10
2	Eccentric tube	JKTH2501050017	4
3	Spindle	JKTH2501050010	4
4	Right braket	JKTH2501050021	2
5	Set bolt	M8GB889ZF	3
6	Bearing	BRG6005-2ZGB276	4
7	Roller	JKTH2501050009	2
8	Pan-head screw	M6X10GB70D2Z	2
9	Indicator	JXTH2501040009	1
10	Side panel	JXTH2501040007	2
11	Position plate	JXTH2501040006	1
12	Hex.screw	M8X20GB5781Z	2
13	Bolt	M8GB6172Z	2
14	Flat washer	WSH6GB97D1Z	2
15	Hex.screw	M6X16GB70Z	2
16	Hex.screw	M12X35GB70B	4
17	Hex.bolt	M6X10GB5781Z	8
18	Table	JXTH2501040001A	1
19	Handle	JXSM0401015004	1
20	Big washer	WSH8GB96Z	1
21	Hand shank	JKTH2501050003	1
22	Handle tube	JL45030035A	1
23	Left bracket	JKTH2501050020	2
24	Connect rod	JXTH2501040012	2
25	Plate 1	JXTH2501040013	1
26	Hex.screw	M8X40GB70Z	3
27	Plate 2	JXTH2501040014	1
28	Block	JXTH2501040015	1
29	Flat washer	WSH8GB97D1Z	6
30	Retaining ring	JXPT1201040006	6
31	Pin	PLN5X5X16GB1096D1	1
32	Spindle 3	JKTH2501050012	1
33	Pin	PLN5X5X30GB1096	1
34	Mount plate	JXTH2501040010	4
35	Protect tube	JXTH2501040011	4
36	Clip	JL82040018	4
37	Table	JXTH2501040001	1

Table Assembly



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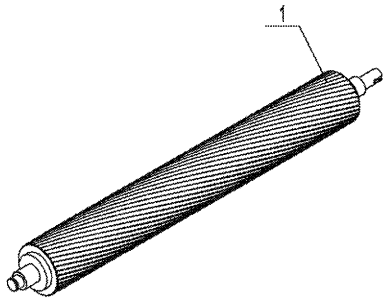
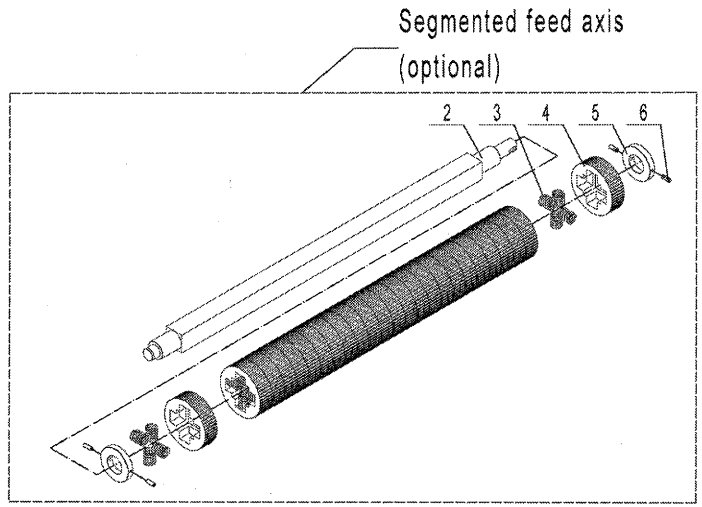
14	Flat washer	WSH6GB97D1Z	2
15	Hex.screw	M6X16GB70Z	2
16	Hex.screw	M12X35GB70B	4
17	Hex.bolt	M6X10GB5781Z	8
18	Table	JXTH2501040001A	1
19	Handle	JXSM0401015004	1
20	Big washer	WSH8GB96Z	1
21	Hand shank	JKTH2501050003	1
22	Handle tube	JL45030035A	1
23	Left bracket	JKTH2501050020	2
24	Connect rod	JXTH2501040012	2
25	Plate 1	JXTH2501040013	1
26	Hex.screw	M8X40GB70Z	3
27	Plate 2	JXTH2501040014	1
28	Block	JXTH2501040015	1
29	Flat washer	WSH8GB97D1Z	6
30	Retaining ring	JXPT1201040006	6
31	Pin	PLN5X5X16GB1096D1	1
32	Spindle 3	JKTH2501050012	1
33	Pin	PLN5X5X30GB1096	1
34	Mount plate	JXTH2501040010	4
35	Protect tube	JXTH2501040011	4
36	Clip	JL82040018	4
37	Table	JXTH2501040001	1

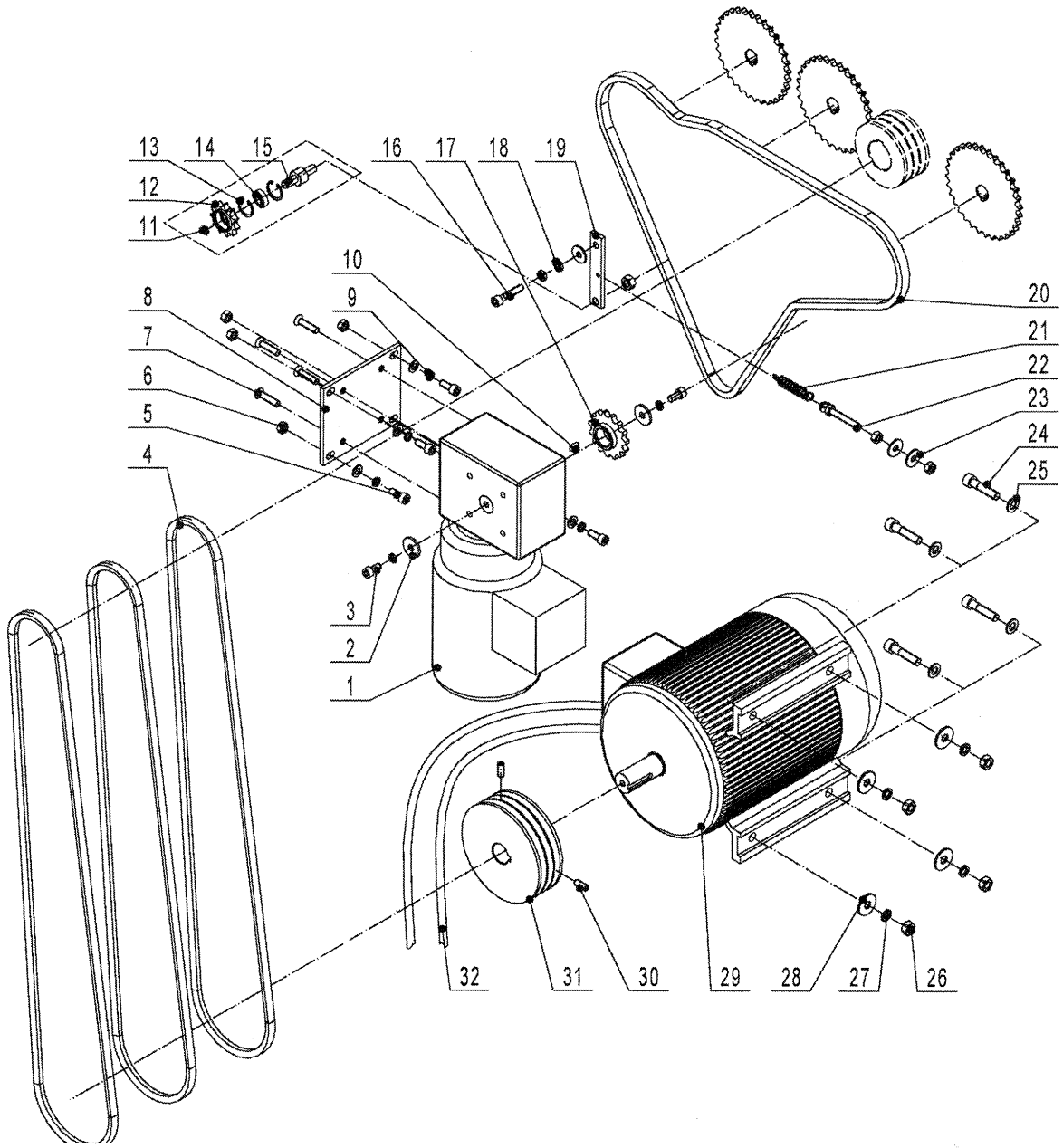
Table Assembly





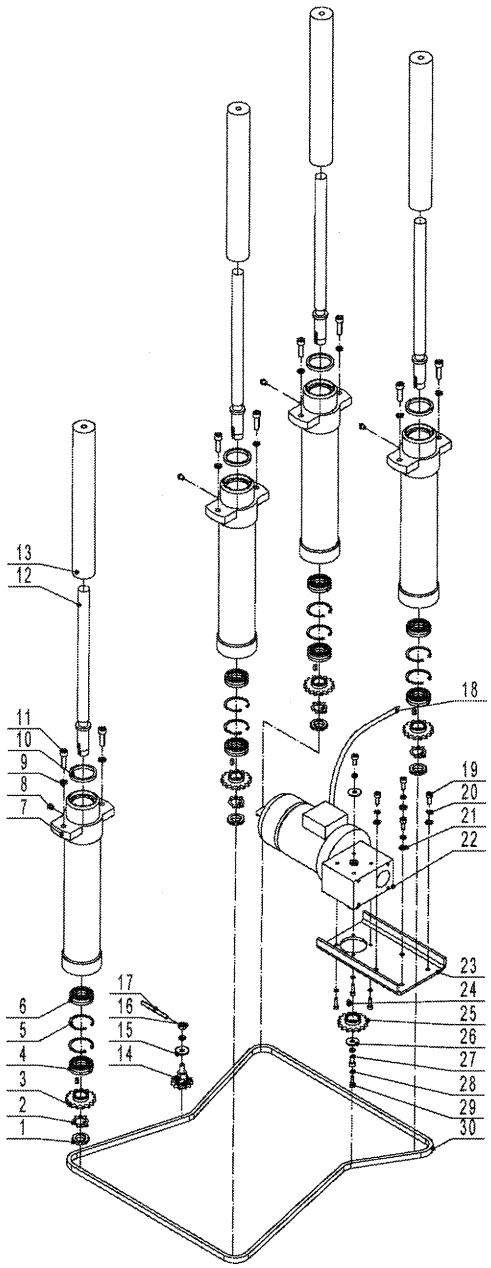
No.	Description	Part No.	QTY.
1	Infeed rod	JXTH2501050007	1
2	Shaft	JXTH2501050007A	1
3	Pressure spring	JKTH2501020018	100
4	Infeed wheel	JKTH2501020002	25
5	Position tube	JXTH2501050028	2
6	Hex.screw	M6X16GB80B	4

Infeed Rod



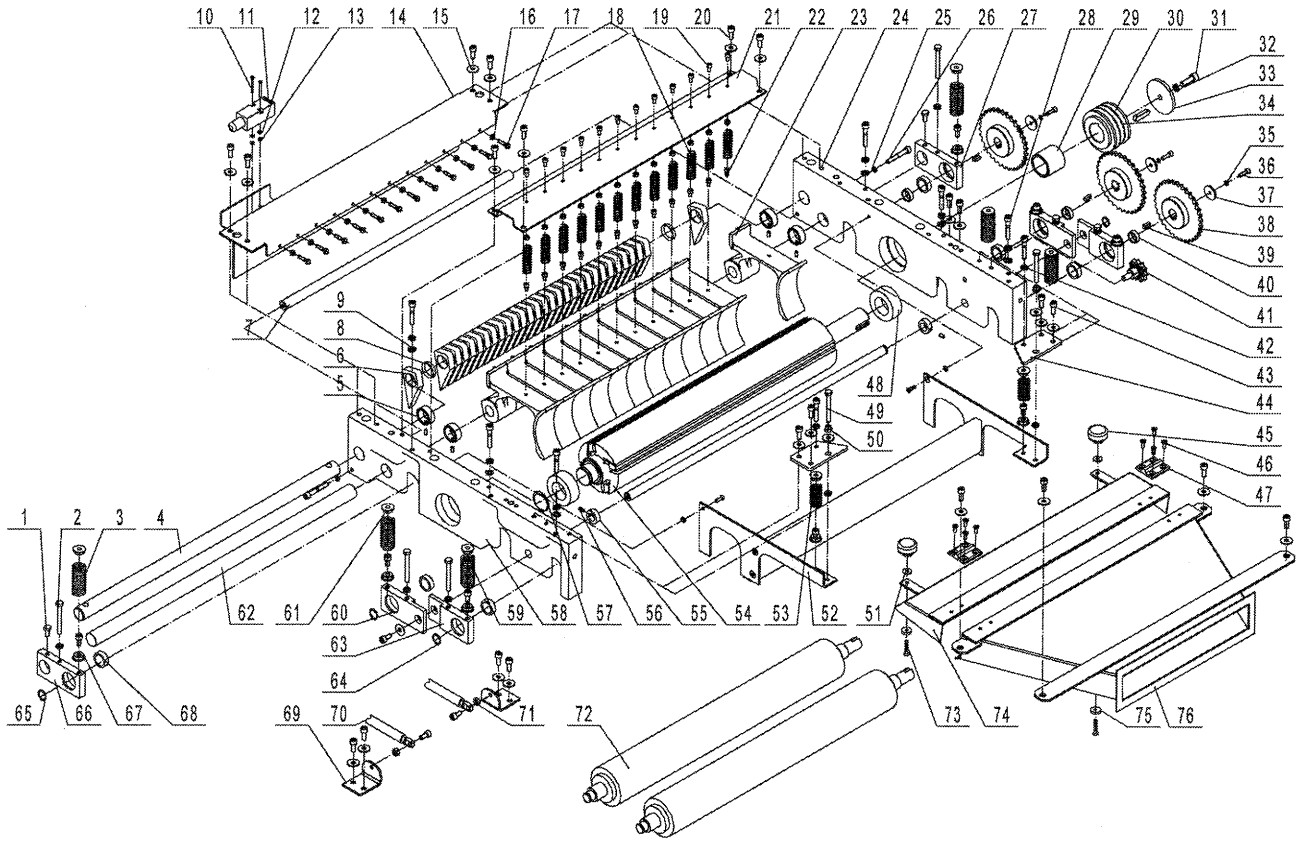
No.	Description	Part No.	QTY.
1	Motor	YS7134RV50-01	1
2	Big washer	WSH8GB5287Z	2
3	Hex.screw	M8X16GB70Z	2
4	V-belt	JXTH2501020005	3
5	Hex.screw	M8X20GB70Z	4
6	Bolt	M8GB6170Z	6
7	Hex.screw	M8X30GB70D3Z	4
8	Braket	JXTH2501020006	1
9	Spring washer	WSH8GB93Z	6
10	Pin	PLN6X6X14GB1096	1
11	Retaining ring	CLP10GB894D1B	1
12	Tension wheel	JKTH2501030008	1
13	Clip	CLP26GB893D1B	2
14	Bearing	BRG6000-2ZGB276	1
15	Tension rod	JXTH2501040005	1
16	Hex.screw	M8X40GB70Z	1
17	Lifting chain	JXTH2501020007	1
18	Bolt	M8GB6172Z	2
19	Tension plate	JXTH2501021001	1
20	Infeed chain	JXTH2501020009	1
21	Spring	JXTH2501020012	1
22	Tension bolt	JXTH2501020010	1
23	Big washer	WSH8GB96Z	3
24	Hex.screw	M10X35GB70Z	2
25	Flat washer	WSH10GB97D1Z	4
26	Hex.bolt	M10GB6170Z	5
27	Spring washer	WSH10GB93Z	8
28	Big washer	WSH10GB96Z	4
29	Motor	YSA115552	1
30	Hex.screw	M8X20GB80B	2
31	Main motor pulley	JXTH2501020001	1
32	Main motor cable	V14251300-4037	2

Infeed Chain Assembly



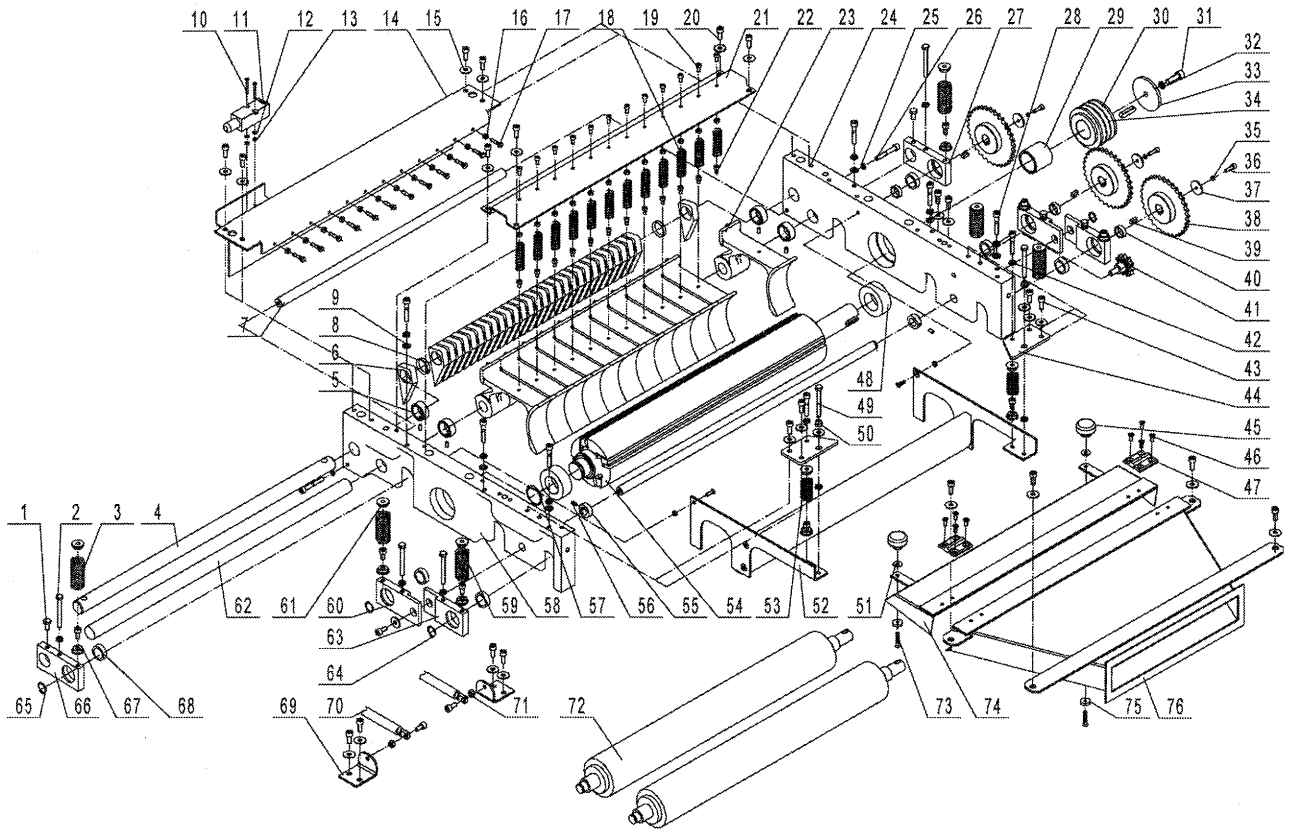
No.	Description	Part No.	QTY.
1	Bolt	M24GB810Z	4
2	Lockwasher	WSH24GB858B	4
3	Chain pulley	JXTH2501020007	4
4	Bearing	BRG6205-2RSGB276	4
5	Retaining ring	CLP52GB893D1B	8
6	Bearing	BRG30205GB297	4
7	Tube	JXTH2501040002	4
8	Oil cup	M8X1JB7940D1	4
9	Spring washer	WSH10GB93Z	9
10	Dust ring	FB50X60X7GB10708	4
11	Hex.screw	M10X35GB70Z	8
12	Threaded rod	JXTH2501040004	4
13	Guide column	JXTH2501040003	4
14	Tension wheel	XTH2501112	1
15	Big washer	WSH1GB5287Z	1
16	Bolt	M10GB6170Z	1
17	Lockwasher	M8X80GB77Z	1
18	Motor cable	V14151200-941	1
19	Hex.screw	M8X20GB70Z	4
20	Spring washer	WSH8GB93Z	6
21	Flat washer	WSH8GB97D1Z	4
22	Lifting motor	YS6334RV40-02	1
23	Motor backet	JXTH2501020002	1
24	Pin	PLN6X6X14GB1096	5
25	Lifting chainwheel	JXTH2501020007	1
26	Big washer	WSH8GB5287Z	2
27	Hex.screw	M8X16GB70Z	2
28	Spring washer	WSH6GB93Z	6
29	Hex.screw	M6X20GB70D1Z	4
30	Lifting chain	JXTH2501040008	1

Lifting Chain Assembly



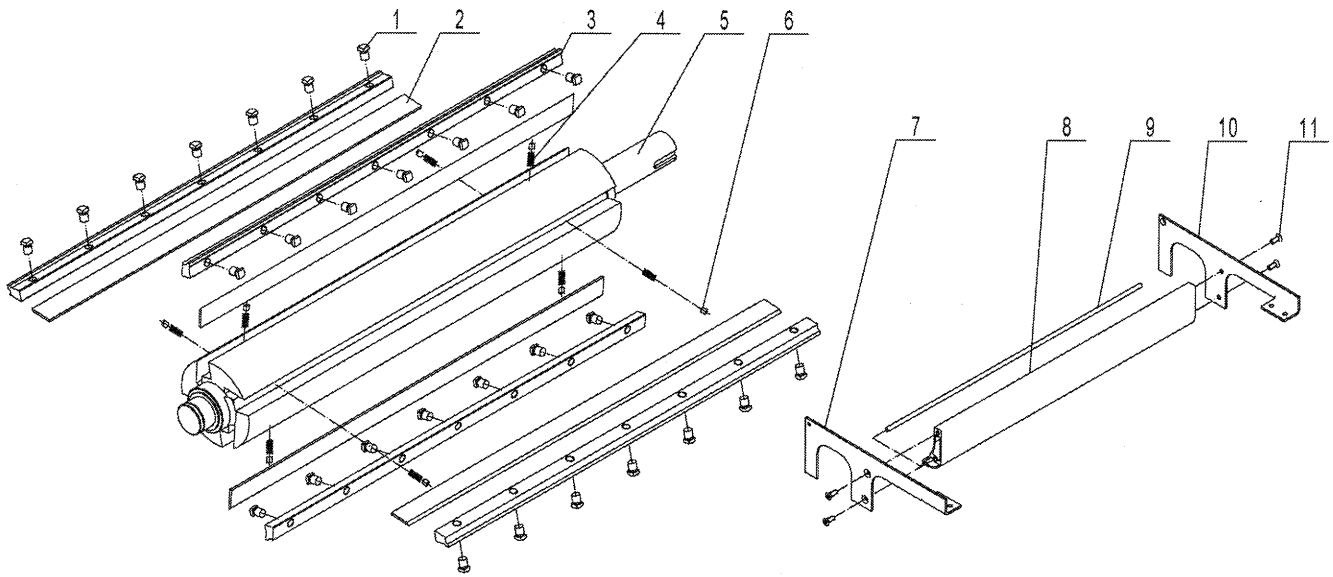
No.	Description	Part No.	QTY.
1	Hex.screw	M8X16GB5781Z	2
2	Hex.screw	M8X70GB5781Z	8
3	Pressure spring	JXTH2501050020	6
4	Kickback shaft	JXTH2501050006	1
5	Location tube	JKTH2501020020	4
6	Bulletproof block	JKTH2501021000	1
7	Shaft	JXTH2501050010	1
8	Collar	JKTH2501020005	29
9	Washer	WSH8GB97D1Z	4
10	Pan screw	M4X35GB818Z	2
11	Safty switch	QKS8	1
12	Washer	WSH4GB97D1Z	2
13	Bolt	M4GB6170Z	2
14	Position plate	JXTH2501050012	1
15	Big washer	WSH8GB96D1Z	16
16	Screw	M6GB6170Z	26
17	Hex.bolt	M6X25GB5781Z	12
18	Pressure spring	JXTH2501050026	12
19	Hex.screw	M6X12GB70D1Z	12
20	Hex.screw	M8X16GB70Z	11
21	Plate	JXTH2501050011	1
22	Hex.screw	M6X8GB70D1B	12
23	Block	JXTH2501020011	12
24	Left tool rest	JXTH2501050004	1
25	Spring washer	WSH8GB93Z	2
26	Hex.screw	M8X55GB70Z	2
27	Infeed block 2	JXTH2501050009	1
28	Screw	M8X45GB70Z	8
29	Tube	JXTH2501050025	1
30	Pulley	JXTH2501020008	1
31	Hex.screw	M10X30GB70Z	1
32	Spring washer	WSH10GB93Z	1
33	Cover	JKTH2501040011	1
34	Pulley	PLN10X8X40GB1096	1
35	Spring washer	WSH6GB93Z	3
36	Hex. Screw	M6X20GB70D1Z	3
37	Washer	JL50000006	3
38	Infeed gear	JXTH2501050015	3
39	Pulley	PLN6X6X18GB1096	3
40	Tube	JMBS2201040006	3
41	Tighten wheel	XTH2501112	1
42	Bolt	M8GB6172Z	10
43	Hex.screw	M8X20GB70Z	12

Tool Rest



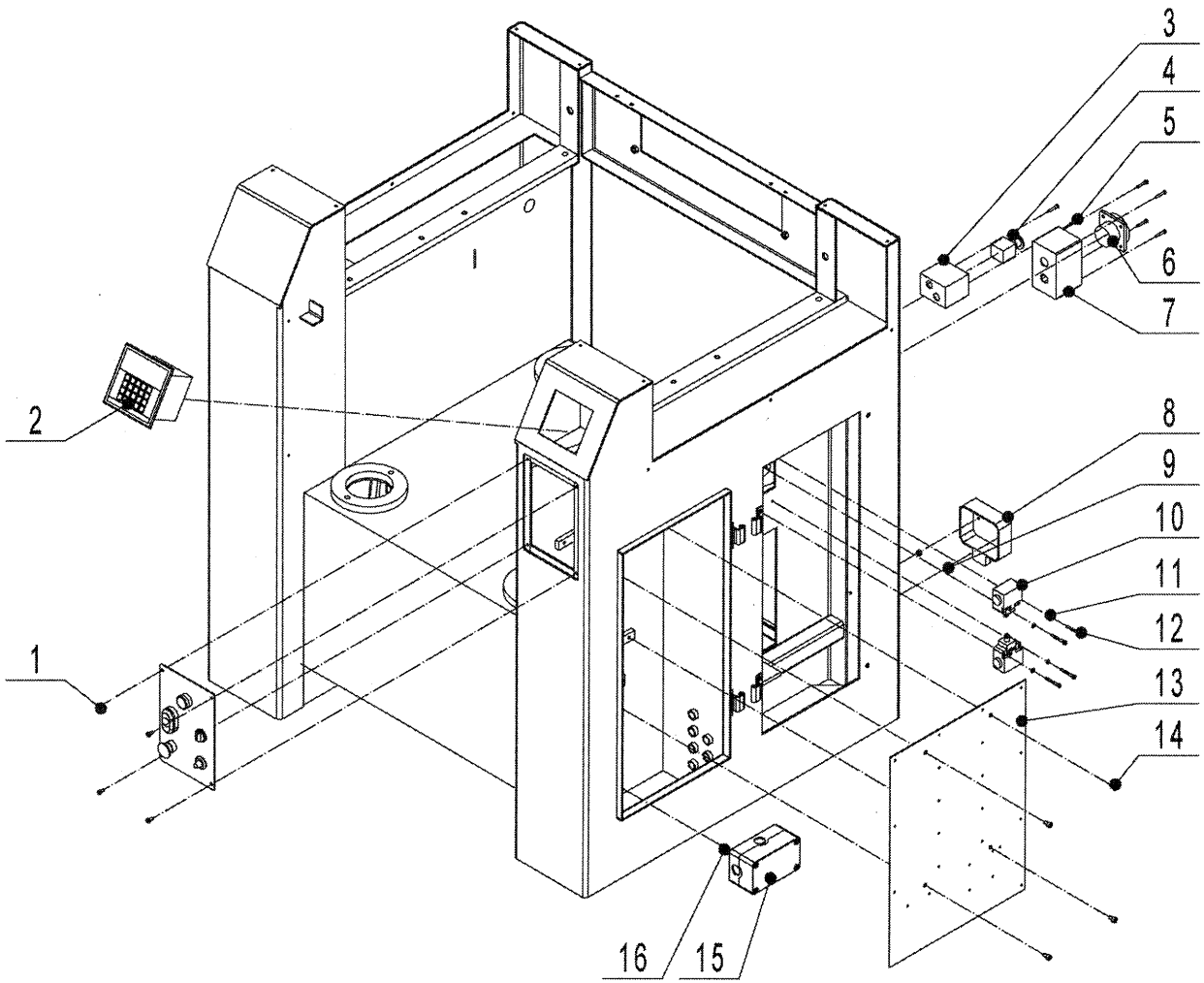
No.	Description	Part No.	QTY.
44	Fixed plate	JXTH2501050019	2
45	Fence knob	JL20061100	2
46	Hex.screw	M6X12GB70D3Z	8
47	Hinge	JKTH2501010005	2
48	Beaing	BRG6208DDU	2
49	Hex.bolt	M8X70GB5781Z	2
50	Lock net	M8GB889Z	2
51	Big washer	WSH6GB96Z	4
52	Back plate	XTH2501106	1
53	Spring	JXTH2501050023	2
54	Cutterblock	JXTH2501051000	1
55	Tighten tube	JXTH1601050001	2
56	Hex.screw	M8X12GB80B	6
57	Retaining ring	CLP40GB894D1B	1
58	Right tool rest	JXTH2501050001	1
59	Spring	JXTH2501050020	6
60	outfeed bracket	JXTH2501050003	2
61	Position block 2	JXTH2501050022	8
62	Infeed spindle	JXTH2501050024	1
63	Outfeed block	JXTH2501050014	2
64	Retaining ring	CLP20GB894D1B	3
65	Retaining ring	CLP20GB894D1B	1
66	Infeed block	JXTH2501050002	1
67	Position block	JXTH2501050021	8
68	Bearing	BRG6004-2RSGB276	6
69	Fix seat	JXTH2501010009	2
70	Spring	JXTH2501010010	2
71	Bolt	M8GB6170Z	2
72	Outfeed rod	JXTH2501050008	2
73	Hex. Screw	M6X30GB70D3Z	2
74	Dust hood cover	JXTH2501052200	1
75	Magnet	JXPS1602020013	2
76	Dust hood	JXTH2501052100	1

Tool Rest



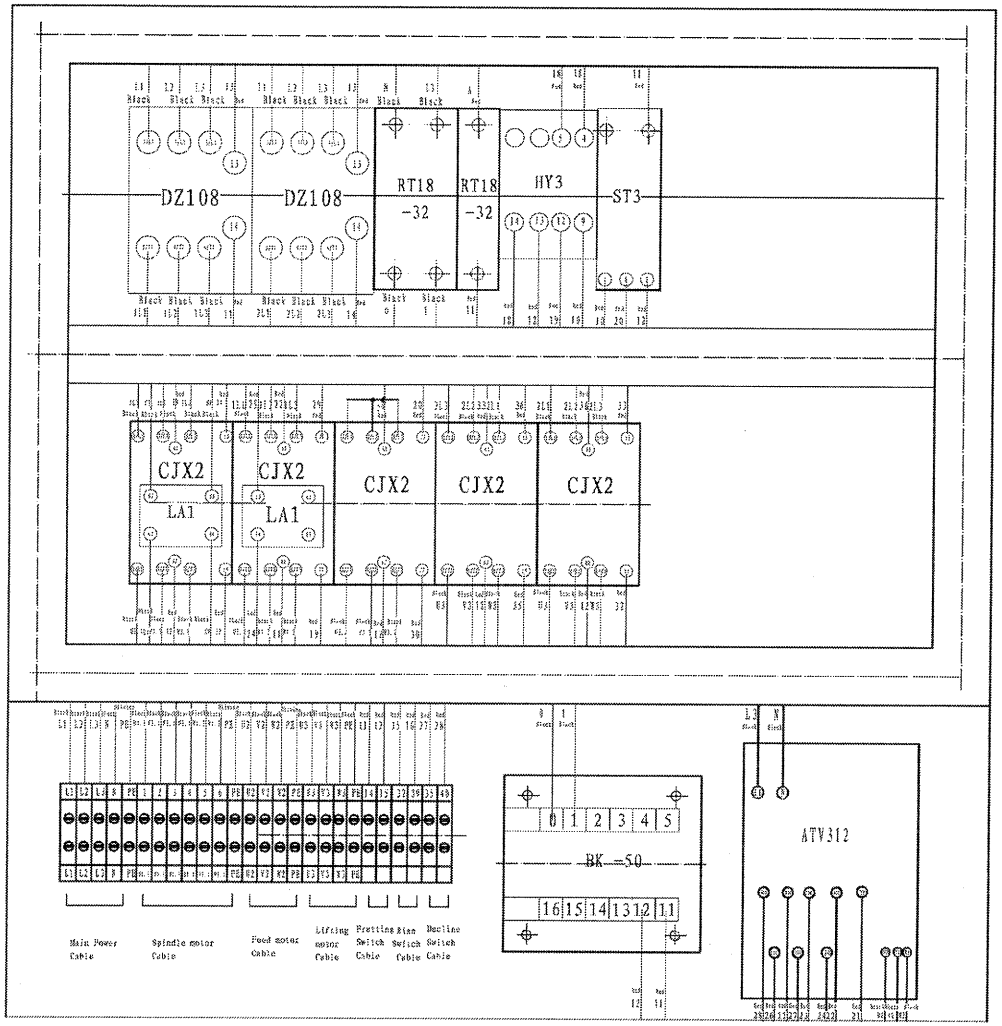
No.	Description	Part No.	QTY.
1	Square-head bolt	JXPT1201051004	28
2	Knife	JXTH2501040005	4
3	Lock bar	JXTH2501040004	4
4	Spring	JXPT1201051006	8
5	Cutterblock	JXTH2501051001	1
6	Pin	JXPT1201051005	8
7	Plate 1	JXTH2501050017	1
8	Rear plate	JXTH2501050013	1
9	Rear plate rod	JXTH2501050016	1
10	Plate 1	JXTH2501050018	1
11	Hex.screw	M8X16GB70D3Z	4

Cutterblock



No.	Description	Part No.	QTY.
1	Screw	M5X10GB70D2Z	4
2	Automatic positioning instrument	CH525	1
3	Switch	JL93040002	1
4	Stop button	XB5AS542C	1
5	Tapping screw	ST3D9X25GB845Z	6
6	Power switch	MW26-32	1
7	Switch box	JL41044001	1
8	Terminal box	BS5001014000	1
9	Bolt	M6GB6170Z	2
10	Safty switch	QKS15	2
11	Flat washer	WSH4GB97D1Z	4
12	Hex. Screw	M4X32GB70D1Z	4
13	Electric unit	JKTH2501090000	1
14	Hex. Screw	M6X10GB70Z	4
15	Brake terminal box	JXPS1602091002	1
16	Pan-hesd screw	M4X12GB818Z	1

Electric unit



Model	Name	Specification	Qty.
XB5AS542C	Emergency stop button	24V/50HZ/60HZ	1
M22-WLK3-W/K11/LED	Feed Button	24V/50HZ/60HZ	1
M22-DDL-GR/K11/LED	Spindle button	24V/50HZ/60HZ	1
AD16	Indicator	24V/50HZ/60HZ	1
ATV12HO55M2	Drive	230V/50HZ/60HZ/550W	1
HY3	Relays	24V/50HZ/60HZ/0-60S	1
ST3PF	Relays	24V/50HZ/60HZ/0-30S	1
LA1	Auxiliary contacts	LA1-DN22 10A	1
DZ108-20/1D6A/3P	Protector	1-1.6A/50HZ/60HZ	1
LA1	Auxiliary contacts	LA1-DN11 10A	1
BK-50/230V/24V	Transformer	230V/24V/50HZ/60HZ	1
RT18-32/6A/1P	Fuse	32A/50HZ/60HZ	1
RT18-32/6A/2P	Fuse	32A/50HZ/60HZ	1
DZ108-20/20A/3P	Protector	14-20A/50HZ/60HZ	1
CJX2-0901/24V	Contactor	24V/50HZ/60HZ/9A	1
CJX2-1201/24V	Contactor	24V/50HZ/60HZ/12A	1
CJX2-1810/24V	Contactor	24V/50HZ/60HZ/9A	1
CJX2-1801/24V	Contactor	24V/50HZ/60HZ/12A	1

Electrical components list