BANDSAW BS600-B

Instruction Manual

IMPORTANT

For your safety, read instructions carefully before assembling or using this product. Save this manual for future reference.



HEALTH AND SAFETY GUIDELINES

Always follow the instructions provided with the manual. Always wear safety glasses when using woodworking equipment. Always disconnect the power before adjusting any equipment. Failure to observe proper safety procedures and guidelines can result in serious injury.

WARNING: Do not allow familiarity (gained from frequent use of your machine and accessories) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

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GENERAL INFORMATION

1.1 **FOREWORD**

Some information and illustrations in this manual may difer from the machine in your possession, since all the configurations inherent in the machine complete with all the optionals are described and illustrated. Therefore, refer only to that information strictly connected with the machine configuration you have purchased.

With this manual we would like to provide the necessary information for maintenance and proper use of the machine. The distribution network is at your service for any technical problem, spare parts or any new requirement you may have for the development of your activity.

This manual must be read and understood before operating the machine. This will provde a better working knowledge of the machine, for increased safety and to obtain the best results.

To facilitate its reading, the manual has been divided into sections pointing out the most important operations. For a quick research of the topics, it is recommended to consult the index. To better stress the importance of some basic passages, they have been marked by some preceding symbols:



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



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

21 SAFETY REGULATIONS



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

The manufacturer disclaims all responsibilities for damages to persons or things, which might be caused by any failure to comply with the safety regulations.

- The machine operator shall have all necessary prerequisites in oder to operate a complex machinery.
- It is prohibited to use the machine when under the influence of alcohol, drugs or medication.
- All the operators must be suitably trained for use, adjustment and operation of the machine.
- The operators must carefully read the manual paying particular attention to the warning and safety notes. Furthermore, they must be informed on the dangers associated with use of the machine and the precautions to be taken, and must be instructed to periodically inspect the guards and safety devices.
- Before carrying out adjustment, repair or cleaning work, disconnect the machine from the electric power by setting the main switch to stop.
- After an initial bedding-in period or many hours of operation, the driving belts may slacken; this causes an increase in the tool stopping time (the stopping time must be less than 10 seconds). Immediately tighten them.
- The working area around the machine must be kept always clean and clear, in order to have an immediate and easy access to the switchboard.
- Never insert materials which are different from those which are prescribed for the machine utilization. The material to be machined must not contain any metal parts.
- Never machine pieces which may be too small or too wide ithrespect to the machine capacity.
- Do not work wood which has evident defects (cracks, knots, metal parts, etc.)
- Never place hands among the moving parts and/or materials.
- Keep hands clear from the tool; feed the piece with the aid of a pusher.
- Keep the tools tidy and far away from those not authorized persons.
- Never employ cracked nor uckled, neither not correctly reground tools.
- Never use the tools beyond the speed limit recommended bythe producers.
- Carefully clean the rest surfaces of tools and make surethat they find perfectly horizontally positioned, and with no
- Always wear gauntlets when handling the tools.
- Mount the tools in the right machining direction.
- Never start the machine before having correctly installed all the protections.
- Connect the dust suction hoods to an adequate suction system; suction must always be activated when the machine is switched on.
- Never open doors or protections when the machine or the system is operating.
- Many unpleasant experiences have shown that anybody may wear objects which could cause serious accidents. Therefore, before starting working, take any bracelet, watch or ring off.
- Button the working garment sleeve well around the wrists.
- Take any garment off which, by hanging out, may get tangled in the MOVING UNITS.
- Always wear strong working footwear, as prescribed by the accident-prevention regulations of all countries.
- Use protection glasses. Use appropriate hearing protection systems (headsets, earplugs, etc.) and dust protection masks.

- Never let unauthorized people repair, service or operate the machine.
- The manufacturer is not responsible for any damage deriving from arbitrary modifications made to the machine.
- Any transport, assembly and dismantling is to be made only by trained staff, who shall have specific skill for the specified operation.
- The operator must never leave the machine unattended during operation.
- During any working cycle break, switch the machine off.
- In case of long working cycle breaks, disconnect the general power supply.

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:

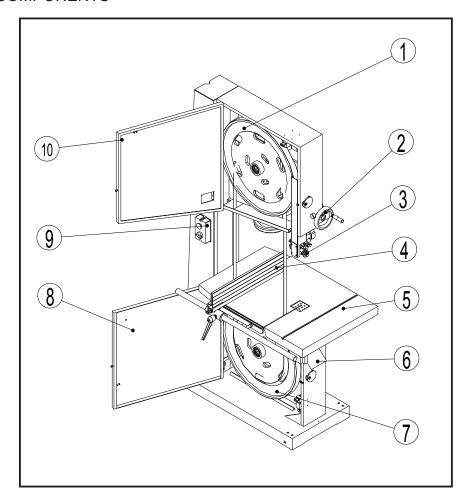
Indicate the technical characteristics, direction of rotation and inclination, block and release, etc.

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 Upper wheel
- 2 Upper guide lifting handwheel
- 3 Upper guide
- 4 Rip fence assembly
- 5 Table

- 6 Dust port
- 7 Lower wheel
- 8 Lower door
- 9 Switch with electric brake
- 10 Upper door

3.2 TECHNICAL SPECIFICATION

Motor Voltage
Current
Motor power output
Blade length
Blade width
Max. cut depth
Throat width
Blade speed
Table size
Table tilt
Dust port diameter

400 V ±5%/50HZ 8.2A 4kW 4470mm 10-35mm 370mm 580mm 1500m/min 700x608mm 0 - 20° 100mm

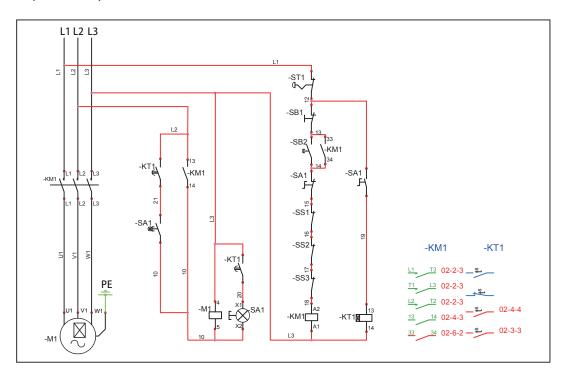
3.3 ELECTRICAL CONNECTION

- 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.



3.4 NOISE LEVEL

	No load	Load
Sound Pressure Level	< 80dB(A)	< 90dB(A)
Sound Power Level	< 90dB(A)	< 100dB(A)

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,...)



Please use the hearing protection systems if the above mentioned noise levels exceed 95dB(A).

3.5 DUST EXTRACTION

If this band saw is operated indoors it is recommended to have it connected to a dust collector. The suction connector, supplied with the machine, has to be fitted to the dust ejection port of the saw for this purpose. The diameter of the suction connector is 100mm (4").

- Workmen working in operations processing oak or beech timber where found to develop more often cancer of the mucous membrane of the nose (adenocarciome of the inner nose) then other workers.
- Experience shows that skin contact with oak or beech dust does not cause cancer



Wood dust and chips, together with an ignition source and the oxygen in the ambient air, can cause fires and explosions, injuries and allergies.

4. INSTALLATION AND OPERATION

4.1 INSTALLATION ZONE CHARACTERISTICS



WARNING

It is prohibited to install the machine in explosive environments.

The installation zone must be selected evaluating the work space required depending on the dimension of the pieces to be machined, and taking into account that a free space of at least 800 mm must be left around the machine. It is also necessary to check The floor capacity and its surface, so that the machine base is evenly resting on its four supports. A power outlet and a chip-suction system connection shall be close to the selected machine setting and it must be conveniently lighted.

4.2 LIFTING

The machine can be lifted using a fork-lift truck, placing the forks under the feet or by using a "SLING", as shown, with a lifting capability of 2000 Kg.

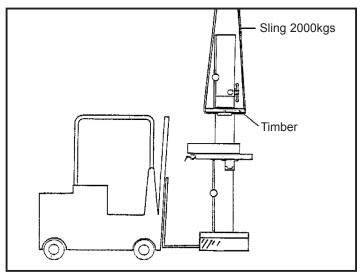


Fig.4.2

4.3 POSITIONING THE MACHINE

For a correct and rational organisation of the work area:

- Install the machine in an area that will not amplify vibration or noise
- Verify that the work area is adequately illuminated.
- When placed between other machinery there should be a space of at least 80 cm. It is necessary to anticipate sufficient space for cutting long work pieces traversly and for the fitting of rollers or other types of support, in front and at the rear of the table.

There are four holes for fixing the machine to the floor. When fixing to the floor it is recommended not to over tighten the fixtures to avoid increasing vibration. It is also advisable to place anti-vibration materials between the floor and the feet of the machine.

4.4 BLADE MOUNTING AND ADJUSTMENT

- To mount blade first remove the table insert (A of FIG.4.4.1) Place the blade onto the bandwheel checking the teeth are in a correct position, and then tighten the tension using the handwheel (A of FIG.4.4.2). The correct tension value is indicated on the tension scale inside the upper door, the indicated value corresponds to the width of the blade.
- Turn the bandwheels manually, checking that the blade does not interfere with any fixed parts and that the blade is placed correctly on the bandwheels. The points of the teeth should slightly protrude over the edge of the bandwheels. To adjust the blade position on the bandwheels slacken the locking lever(B of FIG.4.4.2), and then turn the knob(C of FIG.4.4.2): the blade will move inwards when turn the knob clockwise and the blade will move further out when turn the knob anticlockwise; A quarter of one circle is sufficient to make a noticeable displacement. Tighten the locking lever after the blade is positioned correctly.
- Then reinstall the table insert, close the band wheels accessing doors.



CAUTION

After use we recommend slackening the blade tension, and to display a visible sign on the machine advising of this procedure. Remeber to check and re-tension before use. This operation prevents damage to the bandwheel tyres.

4.5 SETTING BLADE GUARD & GUIDE

ADJUSTING THE BLADE GUIDES

Upper Guides:To adjust the upper blade guides, first position the roller guides relative to the blade by loosening the Allen cap head screw(A-Fig.4.5.1) and sliding the guide assembly until the side roller guides are approximately 1/16" behind the gullet of the blade, then re-tighten the Allen cap head screw(A-Fig.4.5.1).

Next,set the roller guides to within 1/32" of the blade by releasing the lock knob(B-Fig.4.5.1) and turning the microadjusting knob (C-Fig.4.5.1). Do not set the guides too close, as this will adversely affect the life of the blade. When the correct adjustment is reached, lock the guides in position by tightening the lock knob(B-Fig.4.5.1). Finally, follow the same steps above to position rear thrust guide.

Lower Guides:To adjust the lower blade guides, first loosen the hex nut(A-Fig.4.5.2) by placing a wrench through acess hole in side of frame. Move the lower guide support assembly to allow the side roller guides to be approximately 1/16" behind the gullets of the blade, and re-tighten the hex nut. Next set the roller guides to within 1/32" of the blade by releasing the lock knob(A-Fig.4.5.3) and turning the micro-adjusting knob (B-Fig.4.5.3).Do not set the guides too close, as this will adversely affect the life of the blade.

When the correct adjustment is reached, lock the guides in position by re-tightening the lock knob(B-Fig.4.5.3). Adjust the thrust guide to be just clear of the back of the blade by unlocking the wing nut(C-Fig.4.5.3), and turning adjusting knob on rear of the trunnion. Finally, re-tighten the wing nut(C-Fig.4.5.3).

Make sure the doors are closed, turn the bandsaw on and inspect that the upper, lower and thrust guides are not turning. All guides should not turn unless pressure from workpiece is applied to the blade .If guides are turning under no pressure, repeat the steps above to Correctly adjust the blade guides.

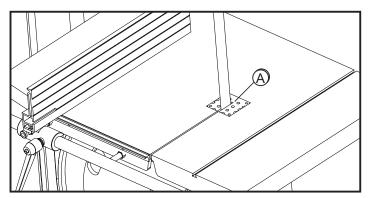


Fig.4.4.1

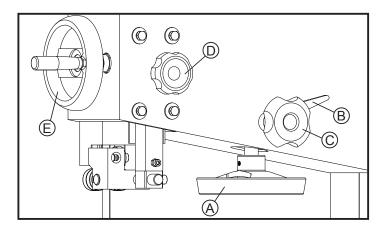


Fig.4.4.2

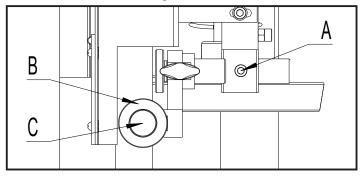


Fig.4.5.1

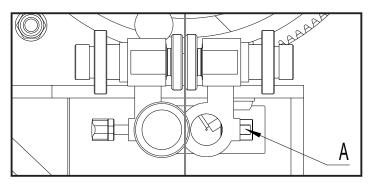


Fig.4.5.2

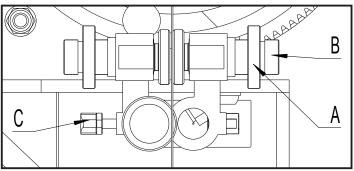


Fig.4.5.3

4.6 TILTING THE WORK TABLE

- The table may be set at 90degree to the blade by adjusting the table stop screw under the table. The table stop screw rests on the top of the lower wheel bandwheel housing. By first slackening the locking nut A and then adjusting the screw B, the table can be set correctly. Retighten the locking nut A making sure that the setting is maintained.
- To make adjustments of table tilting, slackening the bolt C . When adjustment is correctly finished, tighten the handle D to lock it.

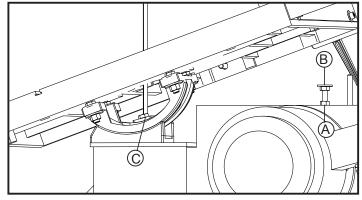


Fig.4.6

4.7 FACE CUTTING

Use a square for safe guiding of the work during face cutting. (FIG.4.7)

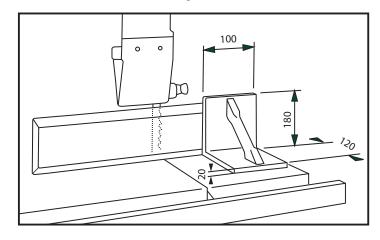


Fig.4.7

4.8 CUTTING SHORT PIECES

Use pushing devices for cutting of short pieces. The pushing device type A is recommended for narrow pieces.

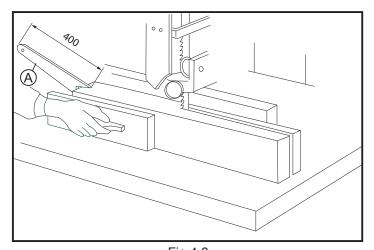


Fig.4.8

4.9 CUTTING OF ROUND PIECES

Use a wedge rest to prevent rotation of round parts during cutting.

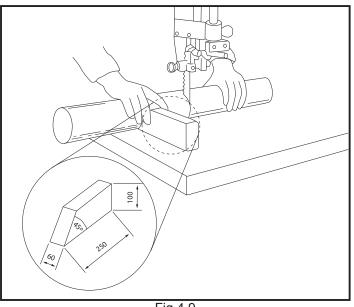


Fig.4.9

5. MAINTENANCE



BEFORE ANY INTERVENTION ALWAYS DISCONNECT THE ELECTRICAL SUPPLY BY PLUG OUT! Periodically check that all screws are tightly fastened and the condition of the various guards

- V BELTS

After the first few hours of operation it is necessary to check that the tension of the belts is correct, as they tend to stretch. To control the tension of the belts push the mid-point of the belt applying 3-4 Kg of pressure, the displacement should not exceed 5-6 mm. It is recommended that the correct blade tension is maintained as loose belts reduce the motor power and can increase the braking time. Belts that are too tight can cause the belts to become hot.

- TO CHANGE THE BELTS

Slacken the blade tension, remove the screw at the center of lower bandwheel, pull-out the bandwheel from the shaft, repeat the operations in reverse to re-assemble.

- DISMANTLING THE UPPER BANDWHEEL

Remove the upper bandwheel is same as the operations of lower bandwheel.

- REPLACEMENT OF RUBBER COVERING OF THE FLY-WHEELS

It is recommended that this be carried out by a competent specialist or the manufacturer, this is because the rubber covering is not only glued onto the bandwheel, but also ground in a crown form. It is strongly advised not to grind and shape the rubber directly on the machine using gouges, files or abrasives.

- CLEANING AND LUBRICATING

Periodically clean the inside of the machine with the aid of a dust extractor for any saw-dust deposits, remove any resinous deposits from the bandwheels surface. The bandwheel bearings do not require any greasing. It is not necessary to lubricate any part or component of the machine as the sawdust circulating within will adhere to any oiled or greased surface jeopardizing the sliding of moving parts such as the shaft of the blade guide adjustment and the slide of the tensioning group.

Frequently control the cleanliness of the rubber surfaces on the bandwheels, particularly in cases of cutting resinous materials or chip-board. Clean the surfaces, while machine is not in motion, of any resinous deposits taking care do not damage the surface.

6. TROUBLE SHOOTING

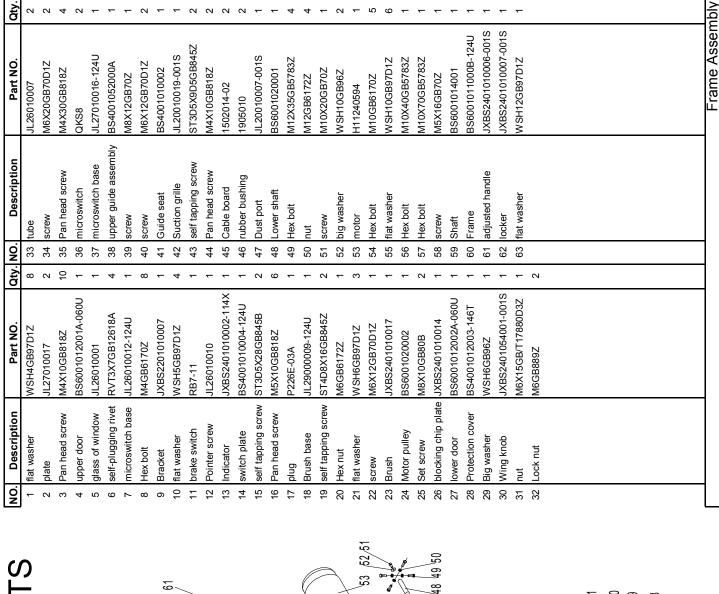
WARNING

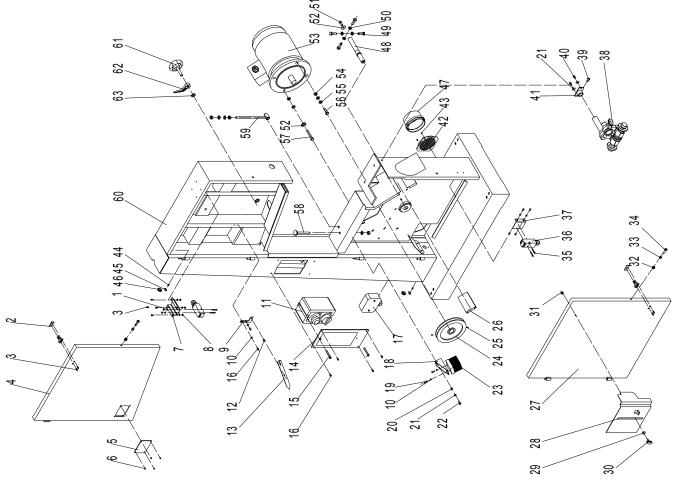
- For any information or problem contact your area dealer or our technical service center. The necessary interventions must be carried out by specialised technical personel.
- Before carrying out any fault service or maintenance work, please always TRUN OFF THE SWITCH, UNPLUG POWER CABLE, WAIT FOR SAW BLADE TO COME TO STANDSTILL.

Trouble	Possible Cause	Solution
	Saw unplugged	Check plug connections
Saw stops or will not start	Fuse blown or circuit breaker tripped	Replace fuse or reset circuit breaker
	3. Cord damaged	3. Replace cord
	Stop not adjusted correctly	Check blade with square and adjust stop
Does not make accurate 45° or 90° cuts	Angle pointer not set accurately	Check blade with square and adjust pointer
	Miter gauge out of adjustment	Adjust miter gauge
	Fence not aligned with blade	Check and adjust fence
	2. Warped wood	2. Select another piece of wood
	3. Excessive feed rate	3. Reduce feed rate
Blade wanders during cut	4. Incorrect blade for cut	4. Change blade to correct type
	Blade tension not set properly	Set blade tension according to blade size
	Guide bearings not set properly	6. Review guide bearing adjustment on pages 8 & 9
	1. Dull blade	Replace blade
	2. Blade mounted wrong	2. Teeth should point down
Saw makes unsatisfactory cuts	3. Gum or pitch on blade	3. Remove blade and clean
	4. Incorrect blade for cut	4. Change blade to correct type
	5. Gum or pitch on table	5. Clean table
Blade does not come up to	Extension cord too light or to long	Replace with adequate size and length cord
speed	2. Low shop voltage	Contact your local electric company
	Base on uneven floor	Reposition on flat, level surface
Saw vibrates avenue in the	2. Bad V-belt	2. Replace V-belt
Saw vibrates excessively	3. Motor mount is loose	Tighten motor mount hardware
	Loose hardware	4. Tighten hardware

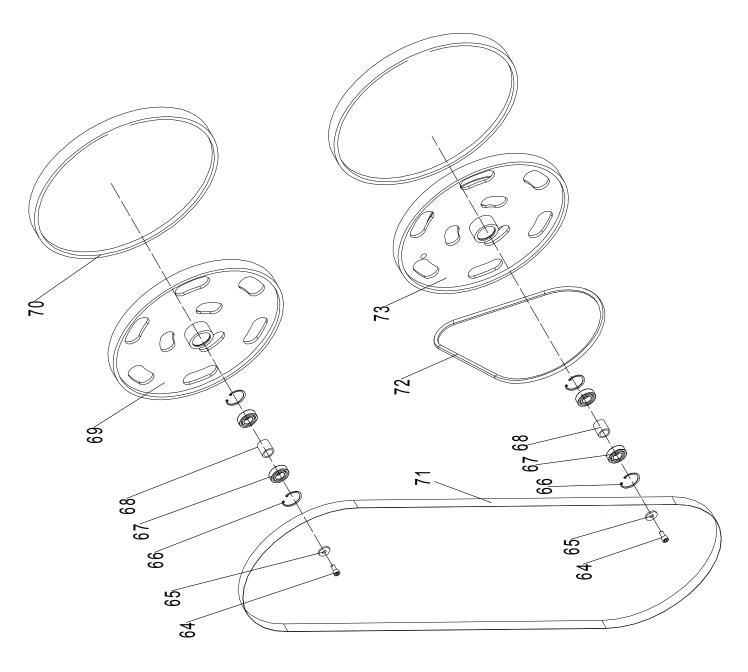
7. DIAGRAMS & COMPONENTS

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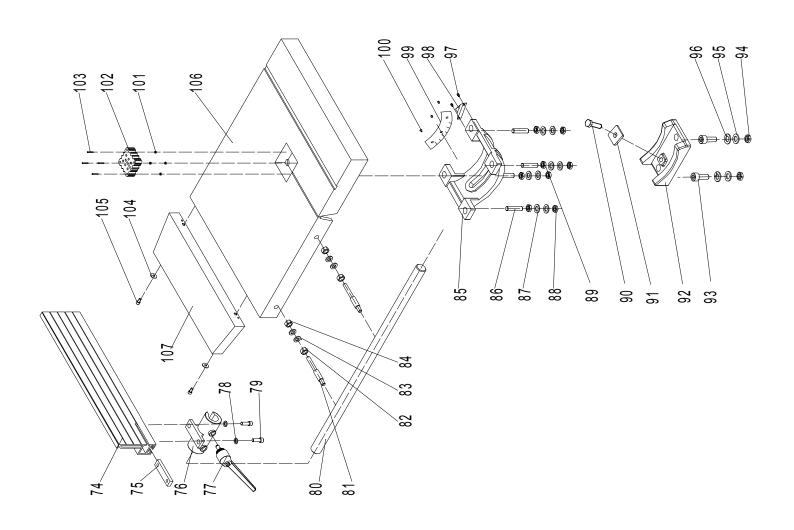




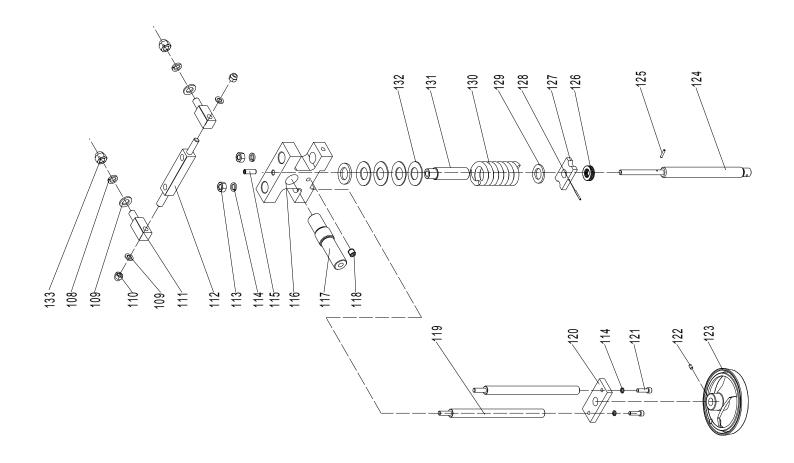
$\overline{\cdot}$:
Qty	2	7	4	4	7	_	7	_	_	_	h
Part NO.	M10X20GB70Z	JXBS2201020004	CLP62GB893D1B	BRG6206GB276LLU	BS6001022002	BS6001021001-001G	BS6001021002	BS6001020003	BS6001020004	BS6001022001A-001G	Driving Systom Assombly
Description	screw	Washer	Retaining ring	Bearing	Tube	Upper wheel	Tire	Blade	Belt	Lower wheel	
NO.	64	65	99	29	89	69	70	71	72	73	



NO.	Description	Part NO.	Qty.
74	Rip fence	JXBS1803060001	_
75	Lock plate	JXBS2001060001	_
9/	Fence bracket	JXBS2001060002-001G	_
77	Handle	JXBS2201061000-001S	_
28	Screw	M8X25GB70Z	7
79	Washer	WSH8GB97D1Z	7
80	Fence guide	BS6001060001	_
8	Rod	JXBS2001060003	7
82	Hex nut	JXBS2001060004	7
83	Washer	WSH10GB97D1Z	4
84	Hex nut	M10GB6170Z	7
82	Slider	JXBS2402031002-124L	_
98	Nut	M12X60GB77B	4
87	Big washer	WSH12GB96Z	œ
88	Hex nut	M12GB6170Z	4
83	Support	JXBS2402031001-124L	_
90	Hex Bolt	M12X45GB30Z	_
91	Large pad	JXBS2401031007	_
95	Support	JXBS2402031001-124L	_
93	Hex Bolt	M10X45GB5783Z	7
94	Hex nut	M10GB6170Z	7
92	Big washer	WSH10GB96Z	7
96	Spring washer	WSH10GB93Z	7
26	Nut	M3X5GB818Z	7
86	Angle pointer	JXBS2402031004	_
66	Angle Signs	JXBS2402031005	_
100	Rivet	RVT2D5X5GB827C	က
101	Lock nut	M5GB889Z	4
102	Table insert	BS5001030001-001S	_
103	Nut	M5X30GB77B	4
104	Big washer	WSH8GB96Z	7
105	Nut	M8X16GB70Z	7
106	Table	BS6001030001-001G	_
107	Extension table	JXBS2402030002-001U	_
		Table Asse	Assembly
			•



NO.	Description	Part NO.	Qty.
108	Spring washer	WSH12GB93Z	7
109	Flat washer	WSH12GB97D1Z	4
110	Lock nut	M12GB889Z	7
111	Bolt	JXBS2201030001	7
112	Thread rod	JXBS2201030002	_
113	Hex nut	M10GB6170Z	7
114	Spring washer	WSH10GB93Z	4
115	Set screw	M8X20GB80B	—
116	Bracket	JXBS2201030003-001G	—
117	Upper shaft	BS6001040001	_
118	Set screw	M8X8GB80B	_
119	Sliding rod	JXBS2201030004	7
120	Upper shaft	JXBS2201030008	_
121	Set screw	M10X30GB70Z	7
122	Set screw	M6X12GB80B	_
123	Handwheel	JXBS2001040005-001S	_
124	Thread rod	JXBS2401040002	_
125	Roll pin	PIN3X18GB879B	_
126	Bearing	JXBS2201030011	_
127	Flat washer	JXBS2201030007	_
128	Roll pin	PIN3X30GB879D1B	_
129	Flat washer	WSH24GB97D1Z	7
130	Sliding rod	JXBS2201030010	_
131	Tube	JXBS2201030011	_
132	Spring washer	WSH50GB1972B	4
133	Hex nut	M12GB923Z	7
		Blade Tension Assembly	yldr



134 big washer WSH8GB96Z 4 135 lock handle JL26040008 1 136 lock handle JL26040008 1 137 Set screw M6X10GB77B 4 138 Gear 1501006 1 140 screw JL26040007 1 141 cover JL26040007 1 143 cover M8X10GB70B 1 144 Pan head screw M8X16GB000 1 145 screw M8X10GB000 1 148 screw M8X10GB000 1 150 screw M8X10GB000 1 151 big washer WSHGB96Z 2 152 composite bolt M8X10GB10Z 1 154 screw MSX10GB10Z 1 155 screw MSX10GB10Z 2 158 big washer MSX10GB10Z 1 159 big washer MSX10GB70Z 2	ŏ.	Description	Part NO.	Qty.
lock handle JL26040005 Bracket JL26040008 Set screw M6X10GB77B Gear JL26040007 Plate JL26040007 screw JL26040007 screw JL26040007 cover BS5001050001 Pan head screw M8X16GB70Z cover BS50010500001 screw M4X4GB823B Rack BS60010500001 screw M4X10GB813Z big washer WSH6GB902 composite bolt JL20061003A-0015 nut M4X10GB70Z big washer JL20041050002 screw M6X16GB70Z big washer JL20040002 screw M6X16GB70Z big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z big washer BS60010500003 screw M6X16GB70Z	34	big washer	WSH8GB96Z	4
Bracket JL26040008 Set screw M6X10GB77B Gear 1501006 Plate JL26040007 screw JL26040006 cover BS5001050001 screw M8X16GB70Z cover BS5001050001 Pan head screw M4X4GB823B Rack BS6001050001 screw M4X10GB819Z upper guide assembly BS4001050003 screw M6X10GB70Z big washer JL29043001 Blade guard BS6001051100A-12 screw M6X16GB70Z big washer JL29043001 Blade guard BS60010510002 screw M6X16GB70Z big washer M5X10GB818B handle JL26040004 Pan head screw M6X16GB70Z Guide post BS6001050002 Screw M6X16GB70Z bandle J26040003 worm JL26040003 worm JL26040004 hex bolt M8X20GB5783Z	35	lock handle	JL26040015-001S	_
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screw JL26040006 cover BS5001050001 screw M8X16GB70Z cover BS5001050002 Pan head screw M4X4GB823B Rack BS6001050001 screw M4X10GB819Z screw M4X10GB819Z big washer M8X20GB70Z big washer M6X10GB70Z nut M6X10GB70Z big washer JL29043001 Blade guard BS6001051100A-12 screw M5X10GB70Z big washer M5X10GB70Z big washer M5X10GB70Z big washer BS6001051100A-12 screw M5X10GB818B handle post BS6001050002A Pan head screw M5X10GB884 Screw M5X10GB818B handle J126040003 worm J126040003 worm J126040003 worm J126040003 worm J126040003 worm J126040003 worm J126040003 <tr< td=""><td>139</td><td>Plate</td><td>JL26040007</td><td>_</td></tr<>	139	Plate	JL26040007	_
cover BS5001050001 screw M8X16GB70Z cover BS5001050002 Pan head screw M4X4GB823B Rack BS6001050001 screw M4X10GB819Z screw M4X10GB819Z screw M8X20GB70Z upper guide assembly BS4001052000A screw M6X16GB70Z big washer JL20041003A-001S nut MAX10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M5X10GB70Z big washer WSH5GB96Z Leaf spring BS4001050002A Pan head screw M5X10GB18B handle JL26030012-001S Handwheel JL26030012-001S ring M5X20GB5783Z worm JL26040003 worm M8X20GB5783Z hex bolt M8X20GB5783Z	40	screw	JL26040006	_
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Pan head screw M4X4GB823B Rack Screw M4X10GB819Z screw M8X20GB70Z upper guide assembly BS4001052000A screw M6X10GB70Z big washer WSH6GB96Z composite bolt M6X10GB70Z nut M4X10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M5X10GB70Z big washer M5X10GB70Z big washer M5X10GB70Z Screw M6X10GB70Z Screw M5X10GB70Z Screw M5X10GB70Z big washer M5X10GB70Z Screw M5X10GB18B handle 1501009-20001S Handwheel 1501009-20001S ring M5X8GB78B tube JL26030012-001S ring M5X8GB78B tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z	143	cover	BS5001050002	_
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screw M4X10GB819Z supporting rod seat screw upper guide assembly screw big washer composite bolt nut mut M6X10GB70Z JL20061003A-001S nut M6X15GB/T17880E nut Blade guard Blade	45	Rack	BS6001050001	_
supporting rod seat BS4001050003 screw upper guide assembly BS4001052000A screw big washer nut mut MAX10GB70Z big washer JL20061003A-0015 nut MAX10GB818Z Glass window Blade guard Blade guard Blade guard BS6001051100A-12 screw MSX10GB70Z big washer WSH5GB96Z Leaf spring Screw M6X16GB70Z Screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle JL26030012-0015 ring screw M5X8GB78B tube JL26040003 worm M8X20GB5783Z hex bolt M8X20GB5783Z	46	screw	M4X10GB819Z	က
screw M8X20GB70Z upper guide assembly BS4001052000A screw M6X10GB70Z big washer WSH6GB96Z composite bolt JL20061003A-001S nut M6X15GB/T17880C nut M4X10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M4GB6170Z screw M5X10GB70Z big washer W5X10GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle JL26030012-001S ring CLP12GB84 Set screw M5X8GB78B tube JL26040003 worm JL26040003 worm JL26040003 worm M8X20GB5783Z hex bolt M8X20GB5783Z	47	supporting rod seat	BS4001050003	_
upper guide assembly BS4001052000A screw M6X10GB70Z big washer JL20061003A-001S nut M4X10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M5X10GB70Z big washer M5X10GB70Z big washer M5X10GB70Z big washer M5X10GB70Z Screw M6X10GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle JL26030012-001S ring CLP12GB84 Set screw M5X8GB78B tube JL26040003 worm JL26040003 worm JL26040003 hex bolt M8X20GB5783Z hex bolt W8X20GB5783Z	48	screw	M8X20GB70Z	_
screw M6X10GB70Z big washer WSH6GB96Z composite bolt JL20061003A-001S nut M6X15GB/T17880D nut M4X10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M5X10GB70Z big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel 1501009-20001S ring M5X8GB78B worm JL26030012-001S rube JL26040003 worm JL26040003 worm JL26040003 worm M8X20GB5783Z hex bolt M8X20GB5783Z	49	upper guide assembly	BS4001052000A	_
big washer Composite bolt JL20061003A-001S nut M6X15GB/T17880D nut M4X10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M6X10GB70Z screw M6X10GB70Z big washer Leaf spring Screw M6X10GB70Z Screw M6X10GB70Z Guide post Pan head screw M6X10GB818B handle JL26030012-001S ring M6X8GB78B Handwheel JL26030012-001S ring W5X8GB78B tube JL26040003 worm Upper guide	20	screw	M6X10GB70Z	_
composite bolt JL20061003A-0015 nut M6X15GB/T17880C nut M4X10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M5X10GB70Z big washer WSH5GB96Z Leaf spring M6X16GB70Z screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel 126030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm M8X20GB5783Z hex bolt M8X20GB5783Z	21	big washer	WSH6GB96Z	7
nut M6X15GB/T17880D nut M4X10GB818Z Glass window JL29043001 Blade guard BS6001051100A-12 screw M5X10GB70Z big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z Guide post BS4001050002 Screw M5X10GB818B handle JL26030012-0015 ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040003 worm JL26040004 hex bolt M8X20GB5783Z	25	composite bolt	JL20061003A-001S	_
nut M4X10GB818Z Glass window	23	nut	M6X15GB/T17880D3Z	-
Glass window JL29043001 Blade guard BS6001051100A-12 screw M4GB6170Z screw M5X10GB70Z big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle JL26030012-001S ring L26030012-001S worm JL26040003 worm JL26040003 worm JL26040003 hex bolt M8X20GB5783Z	25	nut	M4X10GB818Z	4
Blade guard BS6001051100A-12 screw M4GB6170Z screw M5X10GB70Z big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel 126030012-001S ring M5X8GB78B worm JL26040003 worm JL26040003 hex bolt M8X20GB5783Z M8X20GB5783Z	22	Glass window	JL29043001	_
screw M4GB6170Z screw M5X10GB70Z big washer WSH5GB96Z Leaf spring WSH5GB96Z screw M6X16GB70Z Guide post M6X16GB70Z Pan head screw M5X10GB818B handle 1501009-20001S Handwheel JL26030012-001S ring M5X8GB78B worm JL26040003 worm JL26040003 hex bolt M8X20GB5783Z Upper guide	26	Blade guard	BS6001051100A-126T	-
screw M5X10GB70Z big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel JL26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040003 hex bolt M8X20GB5783Z M8X20GB5783Z	22	screw	M4GB6170Z	4
big washer WSH5GB96Z Leaf spring BS4001050002 screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel 1L26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040003 hex bolt M8X20GB5783Z	28	screw	M5X10GB70Z	7
Leaf spring BS4001050002 screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel JL26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040003 hex bolt M8X20GB5783Z	29	big washer	WSH5GB96Z	7
screw M6X16GB70Z Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel JL26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040003 hex bolt M8X20GB5783Z	09	Leaf spring	BS4001050002	_
Guide post BS6001050002A Pan head screw M5X10GB818B handle 1501009-20001S Handwheel JL26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z Upper guide	61	screw	M6X16GB70Z	7
Pan head screw M5X10GB818B handle 1501009-20001S Handwheel JL26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z hex bolt W8X20gB5783Z	62	Guide post	BS6001050002A	_
handle 1501009-20001S Handwheel JL26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z	63	Pan head screw	M5X10GB818B	ဗ
Handwheel JL26030012-001S ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z	49	handle	1501009-20001S	_
ring CLP12GB884 Set screw M5X8GB78B tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z	92	Handwheel	JL26030012-001S	_
Set screw M5X8GB78B tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z Upper guide	99	ring	CLP12GB884	_
tube JL26040003 worm JL26040004 hex bolt M8X20GB5783Z	29	Set screw	M5X8GB78B	_
worm JL26040004 hex bolt M8X20GB5783Z Upper guide	89	tube	JL26040003	_
hex bolt M8X20GB5783Z Upper guide	69	worm	JL26040004	_
	20	hex bolt	M8X20GB5783Z	4
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