# WOODFAST

# Oscilating Sander OS1006

# Instruction Manual

#### **IMPORTANT**

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





# Imported by Jaccra Industries Pty Ltd

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#### **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 complete 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:



Indicates imminent risks which may cause serious injury to the operator or other persons. Be warning 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

#### 2.1 Safety regulations



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 machiery.
- 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 correctlyreground 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 dents at all.
- 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
- injury from workpiece kickback
- 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 Safet y 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:**

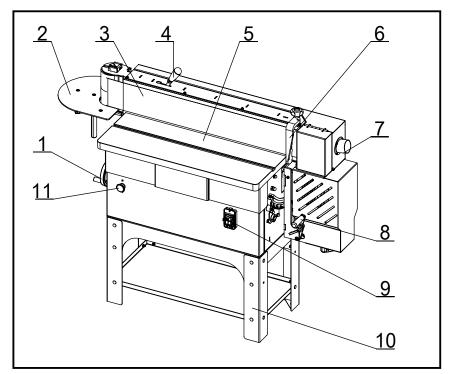
Indicate the technical characteristics, direction of rotation and inclination, block and release, etc.

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



- Lifting handwheel
   Extension table
- 3. Sanding belts
- 4. Tensioning handle
- 5. Table
- 6. Baffle plate
- 7. Suction port
- 8. Sanding belt oscillation
- 9. Switch
- 10. Base frame
- 11. Emergency stop switch

#### 3.2 Technical specification

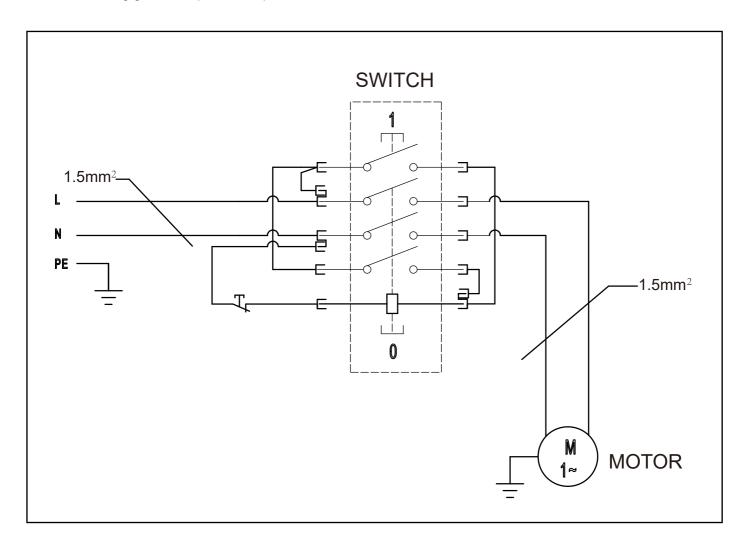
Volts, Hertz	···220-240 V,50 HZ ···12 2 A
Motor Power	. = . =
Sanding roller	
Sanding belt	·· 2515 x 150 mm
Sanding belt tilt	··· 0-90°
Sanding belt speed	17 m/s
Oscillating range	5 mm
Oscillating frequency	··· 75 /min
Dust Port	···63 mm
Table Height	
Overall Size	
Net Weight	172 Kgs

#### 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.

# **MARNING**

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).

# 4. INSTALLATION



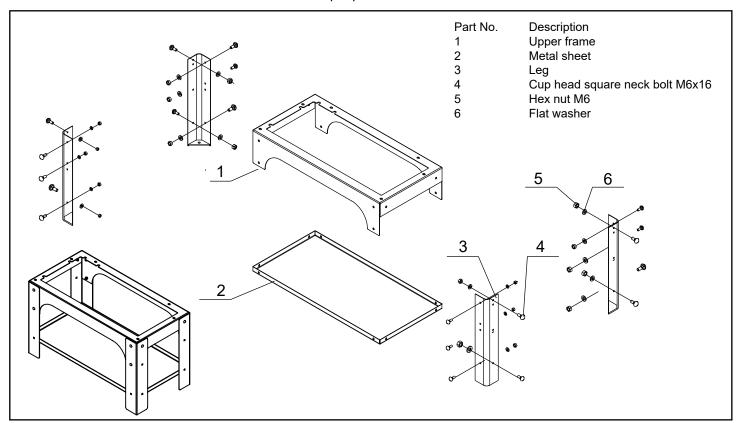
**WARNING** The machine must not be plugged in and the power switch must be in the OFF position untill installation is complete.

Risk of injury!: Improper assembly and installation can lead to serious physical injury or equipment damage. For this reason, this work may only be carried out by authorised, trained personnel who are familiar with how to operate the machine and in strict observance of all safety instructions.

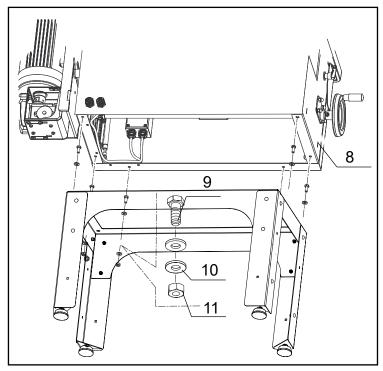
#### Installation of the machine support



The machine is heavy .It is best to assemble the machine near the area where it will eventually **WARNING** reside. Heavy dead weights can easily cause an injury. To facilitate assembly, ensure the presence of a minimum of one additional people.

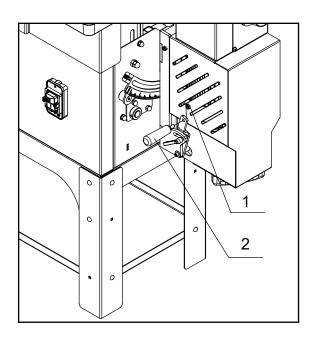


- 1. Check the contents of the Stand against the parts list above, and lay out the parts for quick reference.
- 2. On a protected surface, lie the Upper Frame (#1) upside down so that the legs can be attached.
- 3. Attach the four Legs (#3) to the frame with the Carriage Bolts, Washers and Nuts (#4, 5, 6). Note that the legs are universal and will attach to any corner of the stand. Do not fully tighten the nuts at this time.
- 4. Turn the Shelf (#2) upside down, fit it inside of the four legs and fasten it in place. Hand tighten the nuts only. Attach the four Footing(#7) to the Legs.
- 5. The stand is now assembled and can be turned upright.



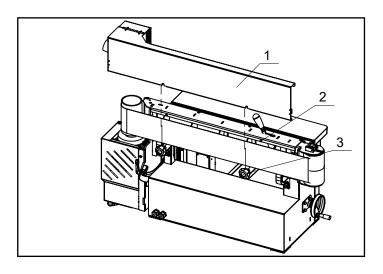
- 6. Place the machine stand on the machine frame(#8). Take measures to prevent the machine from slipping sideways.
- 7. Thread the screws (#9) through the holes of both stands and fasten with washer(#10) and nut(#11).

#### 4.2 Install Adjustment Handle



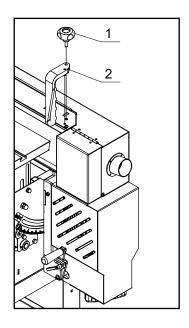
- 1. Thread the adjustment handle (#2) into the hole of the adjustment lever.
- 2. Lock the nut (#1).

### 4.3 Attaching abrasive belt guards



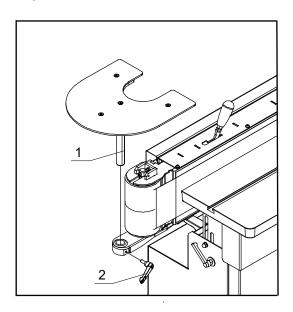
- 1. Hook the recesses of the abrasive belt guards(#1). onto the two guide screws(#2).
- 2. Tighten the locking handle(#3).

### 4.4 Install baffle plate



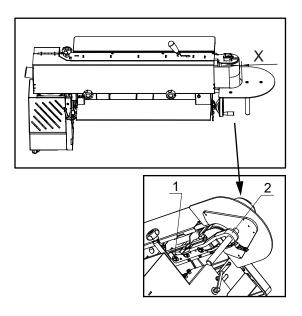
- 1. Thread the baffle plate(#2)with the positioning pin on the hole.
- 2. Tighten the locking handle(#1).

### 4.5 Install extension table



- 1. Insert the guiding shaft of the extension table(#1)into the hole. Place the worktable at the bottom.
- 2. Tighten the adjustable handle(#2).

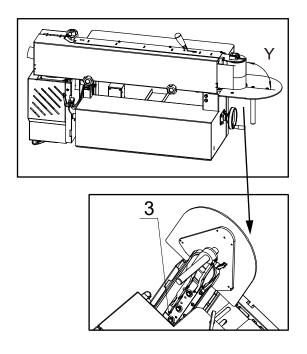
#### 4.6 Setting the extension table





Risk of material damage! Set the extension table with sufficient distance to the sanding belt! There is the risk of collision.

- 1. Setting the distance of the roller to the extension table.
- 1.1 Loosen the hexagonal bolts(#1) with 13mm hexagonal spanner.
- 1.2 Move the bracket(#2) along the slotted holes.
- 1.3 Tighten the hexagonal bolts.



- 2. Setting the angle of the roller to the extension table.
- 1.1 Loosen the hexagonal bolts(#1) with 13mm hexagonal spanner.
- 1.2 Adjusting the set screw(#3) with 4mm Soket head cap spanner.
- 1.3 Tighten the hexagonal bolts.

# 5. ADJUSTMENTS AND OPERATIONS



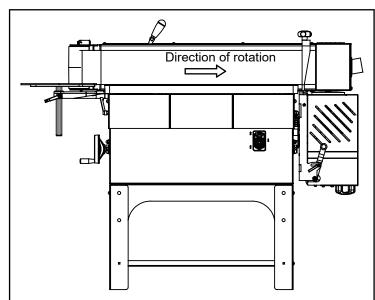
Improper adjustment and setup work can lead to serious physical injury or material damage. For this reason, this work may only be carried out by authorised, trained personnel who are familiar with how to operate the machine and in strict observance of all safety instructions.

#### 5.1 Safety instructions



Make sure that the sanding belt is running in the correct direction.

The direction of rotation is indicated by an arrow on the back of the abrasive belt.



- 1. Connect the plug to the power supply.
- 2. Switch on and let the machine run briefly.
- 3. While the motor is running, check its direction of rotation.
- 4. Should a change in the direction of rotation be necessary, switch the two phases on the power cable.

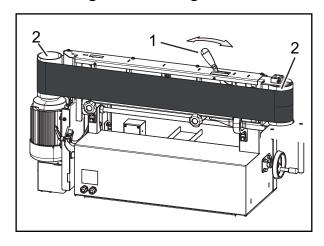
- 5.1.1 Before beginning any maintenance work on the machine, switch it off and secure it against accidentally being switched on again.
- 5.1.2 Before commencing any work with the machine, inspect it to ensure that it is complete and in technically good condition.
- 5.1.3 Ensure that there is sufficient space to work around the machine.
- 5.1.4 Keep the work area orderly and clean. Components and tools that are not put in their correct place or put away may be the cause of accidents!
- 5.1.5 Install the safety equipment according to the instructions and check that it functions properly.

## 5.2 Sanding belts

- 5.2.1 Never use a torn sanding belt.
- 5.2.2 Only use appropriate sanding belts.
- 5.2.3 Ensure that the surfaces of the rollers are clean and free of dust before attaching a sanding belt.

Only use appropriate sanding belts:		
Sanding belts 2515 x 150 mm	#80	
Sanding belts 2515 x 150 mm	#100	
Sanding belts 2515 x 150 mm	#120	
Sanding belts 2515 x 150 mm	#150	

#### 5.3 Fitting the sanding belt



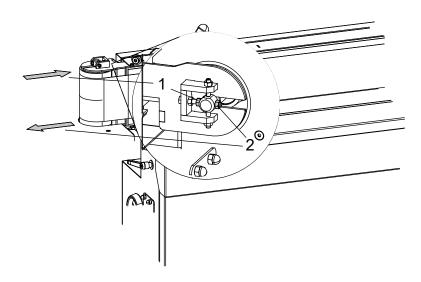
- 1. Remove the workpiece stop.
- 2. Remove the rear abrasive belt cover.
- 3. Tilt the tensioning handle(#1) until it snaps into place.
- 4. Remove the sanding belt by twisting it slightly while pulling it out.
- 5. Hook a new sanding belt around.
- 6. Unlock the tensioning handle(#1) to tension the abrasive belt.
- 7. Ensure that the upp er sanding edge always runs beneath the upp er edge of the belt glidin g surface or the drive r oll ers(#2).
- 8. Reassemble the rear abrasive belt cover and workpiece stop.

#### 5.4 Centering the sanding belt - Height adjustment



Ensure that the upper sanding edge always runs beneath the upper edge of the belt gliding surface or the drive rollers.

The sanding belt is centered during the machine test in the factory. Proceed very cautiously with the settings described here.



Sanding belt - Height adjustment :

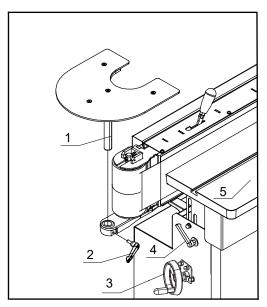
- 1. Start the machine.
- 2. Adjust the angle with adjusting nuts

Depending on the direction of adjustment of the belt roller, loosen the adjusting nut on the corresponding side.

When the belt runs along the center of the belt roller, fix the setting with the locking nut.

- Direction adjusting nut 1: Increase belt run
- Direction adjusting nut 2: Lower belt run

#### 5.5 Height adjustment of the table / extension table



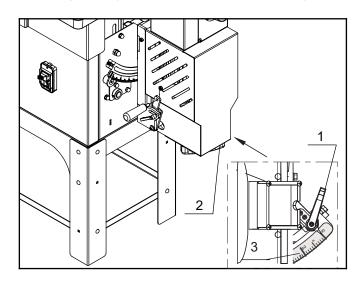
#### Table:

- 1. Release the adjustable handle(#4).
- 2. Table height adjusted using the handwheel(#3).
- · Clockwise: lower
- · Anti-clockwise: higher
- 3. Clamp the adjustable handle.

#### Extension table:

- 1. Release the adjustable handle(#2).
- 2. For height adjustment, move the extension table(#1) to the desired position.
- 3. Clamp the adjustable handle.

## 5.6 Angle adjustment of the sanding unit



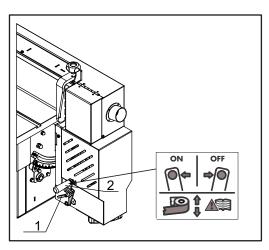
The sanding unit is continuously adjustable between 0 -90°.

- 1. Release the adjustable handle(#1). Use the handgrip (#2) to swivel the unit.
- 2. Set the angle between 0° and 90° on the scale (#3).
- 3. Clamp the adjustable handle.

## 5.7 Sanding belt oscillation on/off

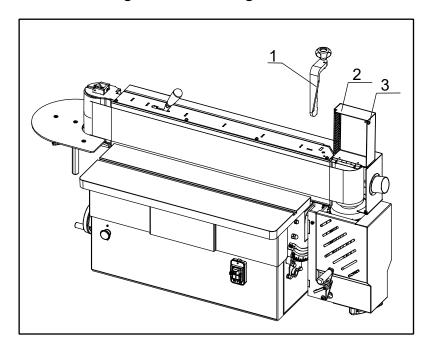


The oscillation of the grinding belt can be switched on or off to change the grinding pattern. To prevent one-sided wear of the abrasive belt, switch on the switched-off oscillation stroke again after use.



- 1. Release the adjustable handle(#1).
- 2. Use the lever (#2) to switch the oscillation of the grinding belt on and off.
- Switching on the machine: Shift the lever to the back.
- Switching off the machine: Shift the lever to the front.
- 3. Clamp the adjustable handle.

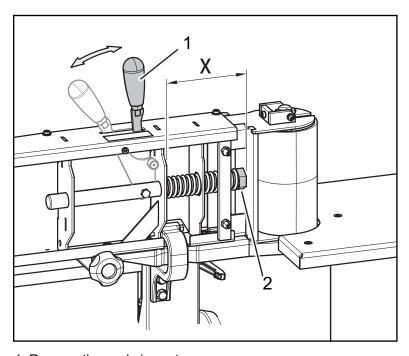
## 5.8 Extending the machining area



For longer workpieces the grinding surface can be enlarged.

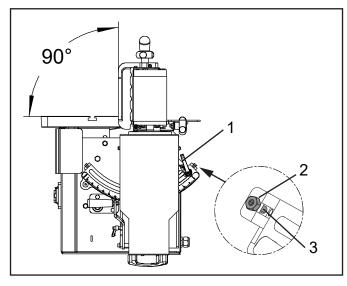
- 1. Remove the baffle plate(#1).
- 2. Release the screw(#3).
- 3. Swing the extraction flap(#2) upwards.
- 4. To reassemble, follow the instructions in the reverse order.

## 5.9 Set the spring tension - belt tension



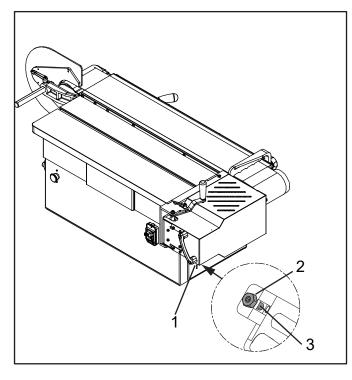
- 1. Remove the workpiece stop.
- 2. Remove the rear abrasive belt cover.
- 3. Tilt the tensioning handle(#1) until it snaps into place
- 4. Remove the sanding belt by twisting it slightly while pulling it out.
- 5. Measure the distance X.
- 6. Adjust the distance: 128 mm
- 7. To adjust the distance, turn the nut(#2).
- 8. To reassemble, follow the instructions in the reverse order.

## 5.10 Adjusting the angle - Sanding module inclination



#### 90° - Angle:

- 1. Before beginning any maintenance work on the machine, switch it off and secure it against accidentally being switched on again.
- 2. Release the adjustable handle(#1).
- 3. Loosen the locking nut(#2).
- 4. Tilt in 90° direction.
- 5. Place the test piece or 90° angle on the working table and the grinding belt support.
- 6. Adjust the fence screws (#3)(set at 90°).
- 7. Tighten the lock nut again.
- 8. Test the adjustment and if required, readjust.



#### 0° - Angle:

- 1. Before beginning any maintenance work on the machine, switch it off and secure it against accidentally being switched on again.
- 2. Release the adjustable handle(#1).
- 3. Loosen the locking nut(#2).
- 4. Tilt in 0° direction.
- 5. Place the test piece or 90° angle on the working table and the grinding belt support.
- 6. Adjust the fence screws(#3) (set at 0°)
- 7. Tighten the lock nut again.
- 8. Test the adjustment and if required, readjust.

# 6. MAINTENANCE



Before cleaning or carrying out maintenance work, disconnect the machine from the power source (wall socket). Never use water or other liquids to clean the machine.Use a brush. Regular maintenance of the machine will prevent unnecessary problem.



Improper maintenance can cause serious injury or damage. For this reason, this work may only be carried out by authorised, trained personnel who are familiar with how to operate the machine and in strict observance of all safety instructions.

## Maintenance schedule

Interval:	Component	Task to accomplish
Daily	Machine	Remove dust and shavings
	Table surfaces	Remove dust and shavings
	Infeed fence	Remove dust and shavings
	Dust extractor	Check for defects
	Sanding belt	Damage and function check; replace if necessary
	Drive wheels	Remove dust and shavings from the bearing tracks.
Every 40 operating hours, At least once a month	Dust extractor	Check efficiency
every 6 months	Height adjustment of the working table	Control and lubrication (if required)
	guiding shaft - side working table	Control and lubrication (if required)
	Tiltable table	Control and lubrication (if required)

# TROUBLE SHOOTING



WARNING For your own safety, always turn off and uppug the machine before carrying out any troubleshooting.



Repairing faults incorrectly can result in personal injury or damage to the machine. For this reason, this work may only be carried out by authorised, trained personnel who are familiar with how to operate the machine and in strict observance of all safety instructions.



Do not make adjustments while the lathe is running, Ensure the switch is off, WARNING power is disconnected and all moving parts have stopped before servicing. Failure to comply may result in serious injury.

#### 7.1 Machine faults

Symptom	Possible cause	Solution
The machine can not be swit	Not enough tension	Check the power supply
ched on	The main fuse in the supply pipe has blown	Replace the main fuse
The sanding motor will not start	The motor has failed thermally	Leave the machine to cool down / Start the machine again
	The fuses have blown	Replace the fuses

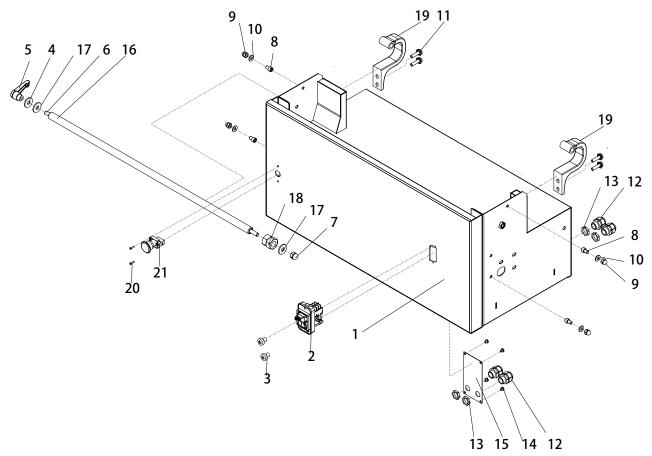
# 7.2 Belt guidance faults

Symptom	Possible cause	Solution
The sanding belt is slipping off the sanding unit	The sanding belt is not running in the centre	Adjusting sanding belt Height
	The sanding belt is tilted	Hang another sanding belt around
	Belt tension too low	Set the spring tension
The sanding belt rattles	The joint (splice) is irregular	Hang another sanding belt around
	The sanding belt is damp	Leave the sanding belt to run for a few minutes to dry out. To ensure that the sanding belt does not rattle, store it in a dry place
	Sanding belt- The guides are dirty	Clean the appropriate part
	Abrasive belt support is not parallel	Contact service technician
The sanding belts rupture	Unfavorable sanding belt storage (too wet)	Hang a new sanding belt around; handle the sanding belts according to the instructions in the Storage "chapter
	Poor welds in the sanding belt or the sanding belt sides are damaged	Hang a new sanding belt around; take note of the correct welds and handle the sanding belts according to the instructions in the "Storage" chapter. Carefully install the sanding belts in the machine
	The sanding belt is overloaded	Use a sanding belt with a coarser grain size or, decrease the depth of cut
The angle on the workpiece deviates from the set angle	Angle setting misadjusted	Adjusting the angle

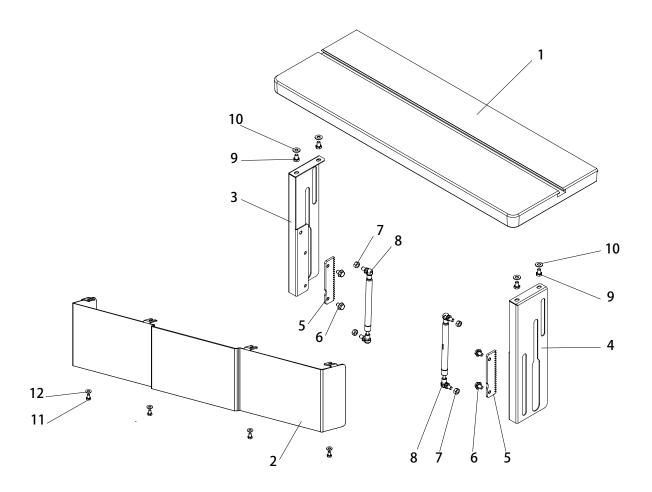
# 7.3 Sanding imperfections

Symptom	Possible cause	Solution
The workpieces are being sanded diagonally	Abrasive belt support is not parallel	Contact service technician
Lines are appearing in the workpiece length during the sanding process	The sanding belt grains are crushed or the sanding belt is damaged as a result of irregularities on the workpieces (e.g. due to protruding nails)	feed the workpieces over the whole
	The sanding belt is covered with glue or dust from previously sanded work pieces	Hook a new sanding belt around. Ensure that the workpieces do not have any protruding nails or contain any undesired impediments
	Sanding belt- The guides are dirty	Clean the appropriate part
Cross lines have appeared in the workpiece width	The weld on the sanding belt has a difference in thickness which shows or the workpiece	Place another sanding belt around; take note of the correct welds
Burn traces have appeared on the workpiece and the sanding belt	The grain size employed is too fine to achieve the desired depth of cut	Use a sanding belt with a coarser grain size or, decrease the depth of cut
during the sanding process	The sanding belt is blunt or covered in a layer of fine dust	Hook a new sanding belt around

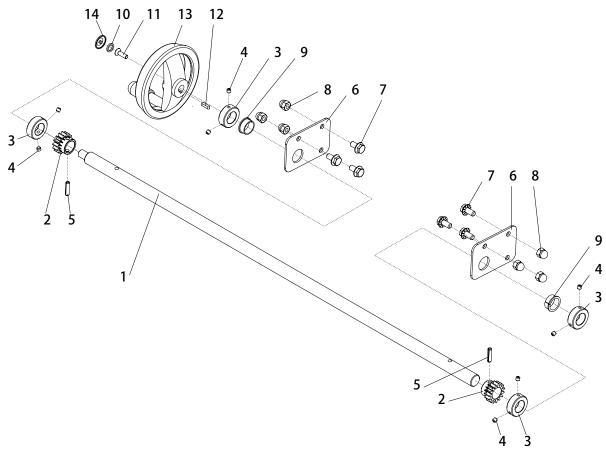
# 8 DIAGRAMS AND COMPONENTS



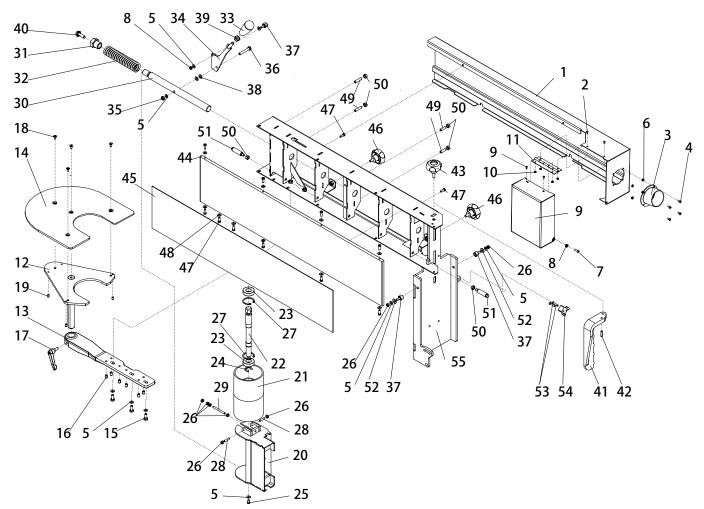
No.	Description
1	Upper box assembly
2	Switch
3	Pan head screw M4X8
4	Washer M10
5	Adjustable handle
6	Locking shaft
7	Cap nut M10
8	Hex socket cap screw M8x12
9	Cap nut M8
10	Washer M8
11	Hex flange bolt M8x30
12	Strain relief M20
13	Nut M20
14	Tapping screw
15	Cap for switchcover
16	Locking tube
17	Plastic washer
18	Hex nut M20
19	Main bracket
20	Screw
21	Emergency stop switch



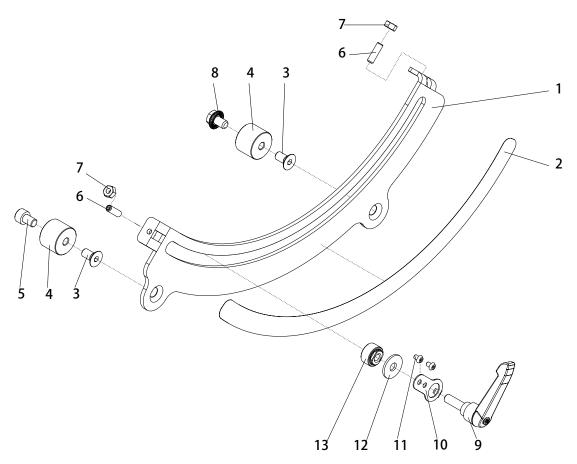
No.	Description		
1	Table		
2	Front cover		
3	Left support plate		
4	Right support plate		
5	Rack and pinion Hex flange bolt M8x12 Hex nut M8 Gas pressure spring Hex bolt M8x12		
6			
7			
8			
9			
10	Washer M8		
11	Hex bolt M6x10		
12	Washer M6		



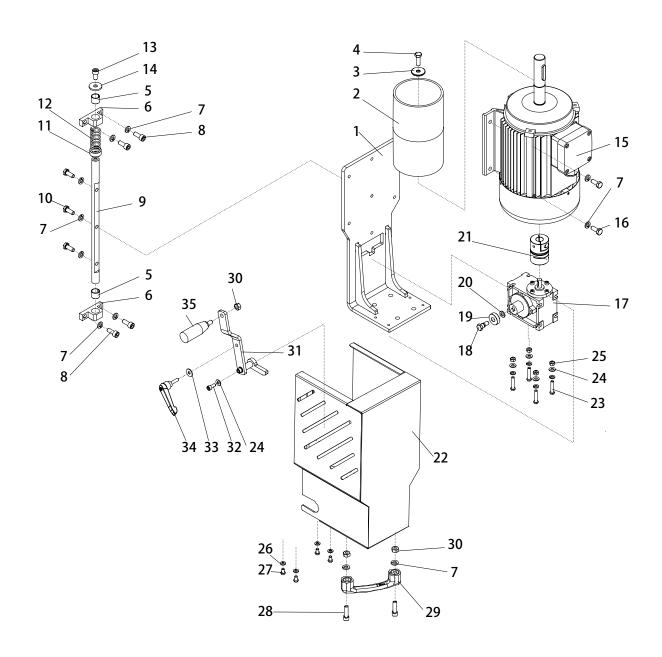
No.	Description
1	Gear long shaft
2	Gear
3	Locking stopper
4	Set screw M6x6
5	Flexible cylindrical pin 6x24
6	Guard plate
7	Hex flange bolt M8x16
8	Cap nut M8
9	Bushing
10	Gasket
11	Hex socket countersunk head screw M6x20
12	key 4 x 4 x 16
13	Handwheel
14	Plastic cover



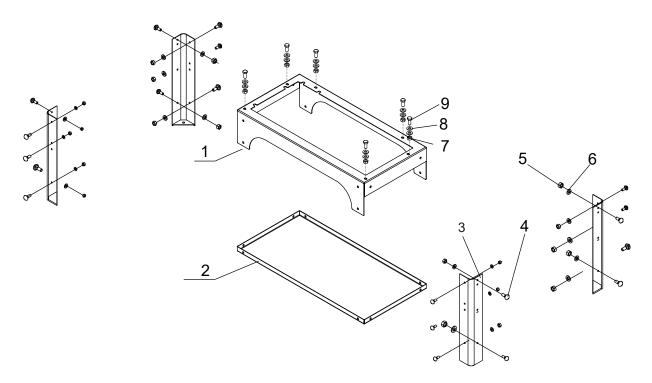
No.	Description	No.	Description
1	Rear baffle assembly	29	Hex bolt M6x65
2	Riveted screw	30	Tension rod
3	Dust port	31	Adjusting nut
4	Pan head screw M4X8	32	Compression spring
5	Washer M6	33	Handlebar
6	Hex nut M4	34	Tensioning frame
7	Hex socket screw M6x25	35	Hex nut M8
8	Self-locking nut M6	36	Hex bolt M8x45
9	Front vacuum hood	37	Cam guide
10	Hex nut M4	38	Butterfly spring
11	Hinge	39	Hex nut M10
12	Support foradditional table	40	Hex bolt M10x30
13	Bracket for extension table	41	Baffle plate
14	Extension table	42	Pin 6x26
15	Hex bolt M8x20	43	Locking handle
16	Set screw M8x12	44	Sanding belt base plate
17	Adjustable handle	45	Sanding belt graphite plate
18	Hex socket countersunk head screw M6x12	46	Locking handle
19	Set screw M6x10	47	Hex socket pan head screw M6x16
20	Tensioning frame	48	Washer M6
21	Slave wheel	49	Set screw M8x25
22	Slave shaft	50	Hex nut M8
23	Bearing 6004	51	Rotation pin
24	Opening retaining ring 15	52	Hex nut M6
25	Hex socket pan head screw M6x16	53	Hex socket pan head screw M5x25
26	Hex nut M6	54	Limit block
27	Retaining ring	55	Bracket welding
28	Screw M6x25	·	



No.	Description
1	Tilt bracket
2	Ruler
3	Hex socket countersunk head screw M8x12
4	Connecting post
5	Hex socket cap screw M8x12
6	Set screw M6x30
7	Hex nut M6
8	Hex socket countersunk head screw M8X12
9	Adjustable handle
10	Pointer
11	Hex socket pan head screw M4x8
12	Plastic washer M8
13	Locking block



No.	Description	No.	Description
1	Bracket welding	19	Bearing 6000
2	Active wheel	20	Washer M8
3	Washer M8	21	
-		= -	Coupling
4	Hex bolt M8x25	22	Protective cover
5	Roll bushing	23	Hex socket pan head screw M6x25
6	Pedestal bearing	24	Washer M6
7	Spring washer M8	25	Hex nut M6
8	Hex socket screw M8x20	26	Spring washer M6
9	Guiding shaft	27	Hex socket pan head screw M6x10
10	Hex bolt M8x20	28	Hex socket screw M8X30
11	Distance ring	29	Handlebar
12	Spring	30	Hex nut M8
13	Hex socket screw M8X16	31	Coupling handle
14	Washer M8	32	Hex socket screw M6x12
15	Motor	33	Washer M6
16	Hex bolt M8x20	34	Adjustable handle
17	Reducer	35	Handlebar
18	Shoulder screw		



No.	Description
1	Upper frame
2	Metal sheet
3	Leg
4	Cup head square neck bolt M6x16
5	Hex nut M6
6	Washer M6
7	Hex nut M8
8	Washer M8
9	Hex bolt M8x20