

# **Bona<sup>®</sup>**

## Scorpion



## Owner & Operation Manual

This manual contains important information on the safe use and operation of this machine.

Failure to read this manual before operating, adjusting or performing maintenance on this machine could cause injury or damage to persons or objects.

Anybody operating the machine should understand how to use and operate it before starting it up.

Keep this manual for future reference.

This manual is a translation of the original version in Italian.

Contents

<b>Key to machine symbols</b>	<b>4</b>
<b>Operator safety instructions</b>	<b>4</b>
<b>Storage</b>	<b>5</b>
<b>Transporting and handling the machine</b>	<b>5</b>
Transport with one person	5
Transport with two people	6
<b>Introduction</b>	<b>6</b>
Information on safe use of the machine	6
Correct use	6
Machine data plate	7
<b>Placing into service</b>	<b>7</b>
Instructions for assembly following transportation	7
Instructions for electrical connection	8
Cables, extensions and plugs	8
Instructions on removing sawdust generated during use	9
<b>Recommendations on prevention measures for users</b>	<b>9</b>
Personal safety measures	9
Compliance with safety measures and warnings	10
Instructions on correct machine use	11
<b>Machine characteristics</b>	<b>12</b>
<b>Machine warnings</b>	<b>13</b>
Prohibited use	13
<b>Starting the machine</b>	<b>13</b>
<b>Machine adjustment procedures</b>	<b>15</b>
Adjusting sanding pressure	15
Wheel adjustment (on a surface parallel to the axis of the drum)	15
Adjusting handle height	15
Wall edge castor	16
<b>Abrasive assembly procedures</b>	<b>17</b>
Scorpion Expansion (centrifugal drum)	17
Scorpion EasyFit (with bubble surface)	17
Scorpion Classic	18
<b>Routine maintenance to be performed</b>	<b>19</b>
Sawdust chamber (for the user)	19
Drums (for the user)	19
Wheels (for the user)	20
Dust bag (for the user)	20
Belt tension	21
Bearings (only for Technical Support Service)	21
<b>Spare parts</b>	<b>21</b>
<b>Emergency situations (for the user)</b>	<b>22</b>
Faults	22
Causes	22
Solutions	22
<b>Declaration of Conformity</b>	<b>23</b>
<b>Disposal</b>	<b>24</b>
<b>Diagrams</b>	<b>25</b>
<b>Notes</b>	<b>27</b>

Key to machine symbols

	<b>READ THE INSTRUCTIONS CONTAINED IN THIS USER AND MAINTENANCE MANUAL BEFORE USING THE MACHINE</b>
	<b>HEARING PROTECTION DURING USE IS RECOMMENDED</b>
	<b>PROTECTION OF THE AIRWAYS DURING USE IS RECOMMENDED</b>
	<b>HAZARD DUE TO ELECTRICITY</b>
	<b>HAZARD DUE TO MOVING PARTS</b>

Operator safety instructions

<b>HAZARD</b>	means	Failure to comply with <b>HAZARD</b> notices on the machine or in this manual may result in death or serious injury to the operator or other people. Read and comply with all <b>HAZARD</b> notices on the machine or in this manual.
<b>WARNING</b>	means	Failure to comply with <b>WARNING</b> notices on the machine or in this manual may result in injury to the operator or other people. Read and comply with all <b>WARNING</b> notices on the machine or in this manual.
<b>CAUTION</b>	means	Failure to comply with <b>CAUTION</b> notices on the machine or in this manual may result in injury to the operator or other people. Read and comply with all <b>CAUTION</b> notices on the machine or in this manual.

**HAZARD:**

Failure to read the SCORPION machine manual before operating, adjusting or performing maintenance operations on the machine could cause injury or damage to persons or objects. Anyone operating the machine should understand how to use and operate it before starting it up.

## Storage

It is advisable to store the machine in its original packaging. Doing so makes it possible to form a column of two packages maximum, with one on top of the other.

If the machine is removed from the original packaging and is not used for some time ensure the wheels and drum are not in contact with the ground. In this case use two supports at least 50mm in height to rest the machine on, ensuring contact is with the base frame.

### ATTENTION

This equipment is for dry use only and must not be used or kept outside in wet conditions. Store the machine in a dry building, otherwise the machine could be damaged.  
Storage temperature from -20°C to 50°C.

## Transporting and handling the machine

### Transport with one person

### WARNING

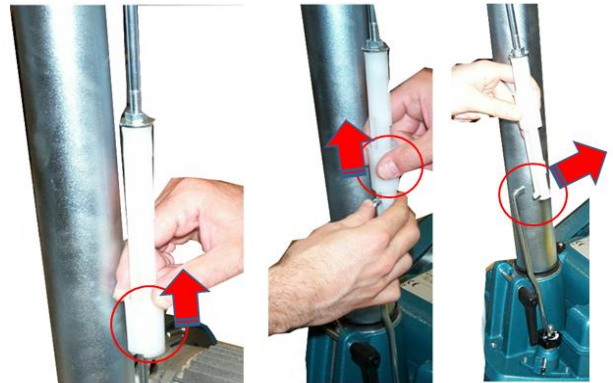
Request assistance to lift the machine due to its heavy weight.

The machine can be dismantled into two parts to facilitate transportation:

- the suction tube and handle unit
- base frame with drum and motor

Proceed as follows:

1. Ensure the power supply cable is disconnected from the mains and the machine.
2. After moving the lever forwards (**pos. 1 fig. A**) lift the tube (**pos. 3**) and release the bar (**pos. 4**) from the cylinder (**pos. 2**).



3. Remove the plug (**pos. 6**) from the socket (**pos. 7**) by turning the plug anti-clockwise.
4. Loosen the handle (**pos. 5 fig. A**) and remove the tube from its housing and bring it to the place of work.



5. Lift the base frame by clasp the hub of the belt guard on the upper part (**pos. 1 fig. B**) and the base frame itself on the lower part.

## Transporting and handling the machine

### 6.

#### Transport with two people

When transporting the machine with two people proceed as follows:

1. One operator should clasp the handle grip.
2. The second, holding the hub of the belt guide (pos. 1 fig. B) should lift the machine.



A special trolley is available as an accessory (P/N 2999940024).



#### **ATTENTION**

This equipment is not to be used by anyone (children included) with physical or mental disabilities, or anyone without the relevant experience and knowledge, unless they have received instructions on using the equipment and are supervised by a responsible person to ensure their safety. Children must be supervised to ensure that they do not play with the machine.

## Introduction

### Information on the safe use of the machine

This instruction manual should be read carefully before using the Scorpion wood flooring sander for the first time. The instruction manual contains important information on safety and preventing improper use of the machine, and will resolve any doubts or questions, making it possible to operate the machine safely and with ease. Removing safety features could cause death or physical injury. Familiarise yourself with the machine before using it for the first time. If a situation arises which has not been described in this manual contact your dealer or Kunzle & Tasin s.r.l.

### Correct use

The Scorpion wood flooring sander is suitable for the dry sanding of wood floors. Any other use without the consent of the manufacturer is prohibited.

Do not use on wet floors.

See also Prohibited Use on page 13.

Keep hands and clothing away from moving mechanical parts.

The work area is protected via the base frame and the mobile cover on the abrasive drum.

Introduction

Machine data plate

The following information can be found on the machine data plate:



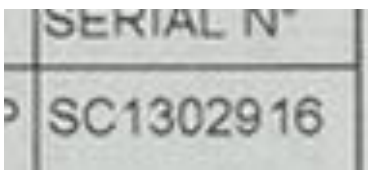
1. Machine model
2. Safety symbols
3. Motor power
4. Frequency
5. Supply voltage
6. Name of manufacturer
7. Country of manufacture
8. Year of manufacture or see serial number

9. Serial number:

The serial number is formed as follows:

- the first two numbers refer to the year of manufacture (13 =2013)
- the second group of three numbers indicates the date the machine was manufactured (029 = 29th January)

The last two numbers indicate the progressive number of machines produced on that day of manufacture (16 = sixteenth machine)

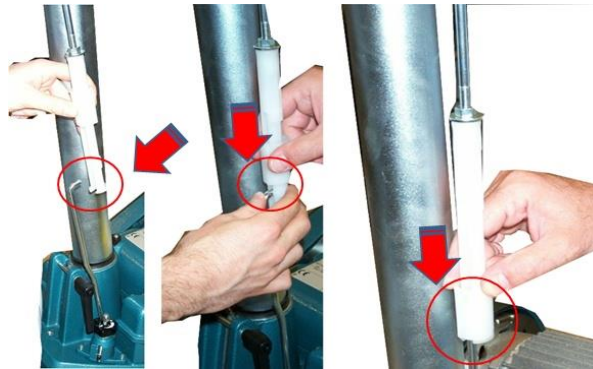


Placing into service

Instructions for assembly following transportation

To re-assemble the machine following transportation proceed as follows:

1. Insert the tube into its housing and tighten the handle (**pos. 5 fig. A**)
2. Insert the bar (**pos. 4**) into the cylinder (**pos. 2**) and lower the tube (**pos. 3 fig. A**)





## Placing into service

### Instructions for assembly following transportation

3. Insert the plug (pos. 6) in the socket (pos. 7)



4. Lift the drum with the lever (pos. 1 fig. A)



#### HAZARD

Using the machine when not fully assembled may cause injury or damage to people or objects. Do not use the machine when it is not fully assembled. Keep all fittings tightly secured. Maintain machine settings in accordance with the specifications.

### Instructions on electrical connection

#### CAUTION

This machine only operates with the voltage and frequency shown on the machine data plate. Before connecting the cable to the power supply ensure the correct voltage and frequency are available.

#### WARNING

Do not expose the machine to rain. This machine is intended for dry use only. Keep the machine in a dry building and do not use it in damp or wet places.

#### WARNING

If the machine is not connected correctly to the electricity network death due to electrocution may occur. To prevent electric shocks always use a three wire electrical system connected to earth. For maximum protection against electric shocks use a circuit protected with a differential cut-out switch.

#### WARNING

Tampering with the earthing plug in any way may result in death from electrocution. Do not cut, remove or break the earthing plug. If the socket does not match the plug consult a qualified electrician.

#### WARNING

Do not use the machine if the switch does not open and close.

#### HAZARD

If the machine is used with a damaged plug or power supply cable death may occur from electrocution. If cables or plugs are worn or damaged in any way, have them replaced by the manufacturer or the K & T technical support service or similarly qualified person, in order to prevent risks to safety.

### Cables, extensions and plugs

Only use approved cables. The maximum recommended cable length is 7m; for greater lengths use cables with a larger cross-section.

#### CAUTION

Using the machine with unsuitable cable cross-sections and/or excessively long cables may cause injury or damage to people or objects.

#### WARNING

The machine must never be moved using its cable and the cable must never be pulled when disconnecting from the socket.

#### WARNING

Keep the cable away from sources of heat, oil and sharp edges.



Placing into service

Cables, extensions and plugs

**ATTENTION**

**MACHINE WITH 230V 50Hz SINGLE PHASE MOTOR**

For machines with a 230-240V~50Hz single phase motor (Europe), a **HO5VV-3x1.5 mm<sup>2</sup>** HAR-approved power supply cable must be used along with an approved **SCHUKO 2P+T16A 200-250V plug**.

**For non-European versions contact an authorised K&T distributor.**

Instructions on removing sawdust generated during use

**HAZARD**

Sawdust can ignite spontaneously and cause injury or damage. It must be disposed of appropriately. Always empty the sawdust into metal containers which are located outside the building.

**HAZARD**

Sawdust can ignite spontaneously and cause injury or damage. Empty the contents of the dust bag when it is 1/3 full. Empty the dust bag at the end of each machine use. Never leave the dust bag unattended when it contains sawdust. Do not empty the contents of the dust bag above a fire.



Recommendations on prevention measures for users

Personal safety measures

**WARNING**

Sawdust can spread through the air and be inhaled when using the sander. Always wear a dust mask when using the sanding equipment.

**WARNING**

The eyes and/or body may suffer injury if personal safety clothing is not used. Always wear safety goggles, protective clothing and a dust mask during sanding operations.

**WARNING**

Lengthy exposure to noise levels during sanding operations may damage the hearing. Always use ear protectors during sanding operations.

**CAUTION**

Never become distracted during sanding operations, check what is happening continually. Use common sense. Do not use the machine when tired.

## Recommendations on prevention measures for users

## Compliance with safety measures and warnings

- HAZARD** Using the machine when not fully assembled may cause injury or damage to people or objects. Do not use the machine when it is not fully assembled. Keep all fittings tightly secured. Maintain machine settings in accordance with the specifications.
- HAZARD** Using the sander without the safety guards and covers in position may cause injury or damage. Always ensure that all safety guards and covers are in position and secured well.
- HAZARD** The wood flooring sander may create an explosive environment. Cigarettes, cigars, pipes, lighters, pilot flames, or any other source of fire may create an explosion if lit during sanding operations. No sources of fire must be kept near the work area.
- HAZARD** Poorly ventilated work areas may create an explosive environment when some combustible materials are present in the atmosphere, such as solvents, thinners, alcohol, fuel, some paints, wood dust or other combustible materials. Floor sanding machines may cause various materials and fumes to ignite. Read the manufacturer's instructions for each chemical product used and establish its combustibility. Always keep the work area well-ventilated.
- HAZARD** Striking nails when sanding may generate an explosion or fire. Always ensure all nails are sunk before sanding surfaces.
- HAZARD** Serious damage may occur if the power supply circuit trips repeatedly or is undersized. Have the fuses, safety circuit and power supply line checked by an authorised electrician.
- HAZARD** Performing maintenance and/or repairing the machine when it is not fully disconnected from the power supply may cause death due to electrocution. Disconnect the power supply before carrying out any maintenance and/or repair work.
- HAZARD** The use of this machine on a circuit which is not earthed may cause death due to electrocution. Never disconnect or disable the earthing conductor. Consult an electrician if the earth conductor is missing or it is suspected that the circuit is not suitably earthed.
- HAZARD** The use of this machine with a damaged power supply cable may cause electric shock. Check the power supply cable regularly for damage such as splitting or wear and tear. Do not use the machine if the power supply cable is damaged. Do not use the electric cable to move the machine.
- HAZARD** Injury or damage may occur if the sander runs over the power supply cable damaging it. Keep the cable away from the lower part of the machine to avoid contact with the abrasive. Always keep the power supply cable raised above the machine.
- HAZARD** The moving parts on this machine may cause serious injury and or damage. Keep hands, feet and loose clothing away from all moving parts of the sander.
- HAZARD** Performing maintenance or replacing the dust bag may cause injury to the operator or people nearby if the machine is connected to the power supply.
- WARNING** Failure to comply with instructions on this machine and in this manual may cause serious injury and/or damage. Read and comply with all safety instructions. Ensure that all plates, labels, warnings and instructions are secured to the machine. New plates can be obtained from an authorised K & T dealer.
- CAUTION** Injury or damage may occur if maintenance operations or repairs are carried out by unauthorised personnel.
- CAUTION** The machine may become damaged if it is not kept in a dry building. Keep the machine in a dry building.

## Recommendations on prevention measures for users

### Instructions on correct machine use

Read this manual carefully and become familiar with the machine.

The equipment is suitable for industrial use e.g. in hotels, schools, hospitals, offices, factories and shops.

The following information highlights particularly hazardous situations for the operator and/or machine.

Understand when these conditions may be present.

Removing safety features could cause death or physical injury.

Take all steps necessary to instruct personnel who may use the machine.

Report any damage on the machine or incorrect operation immediately.

1. Keep hands and clothes away from rotating parts.
2. Keep hands on the handle when the motor is operating.
3. Do not leave the machine unattended when the motor is operating.
4. Always use the machine with the dust bag in the correct position.
5. Do not detach the dust bag with the motor operating.
6. Always disconnect the power supply cable from the machine before performing maintenance.
7. Transport the machine with care due to the heavy weight of the individual parts making up the machine.
8. Always use the machine in well-ventilated areas.
9. Always dispose of the sawdust appropriately.
10. Use the type and amount of abrasive specified in the instruction manual.
11. Always keep the work area well-lit.
12. The use of accessories other than those recommended in this manual may cause injury.
13. The sander is for indoor jobs only.

**Machine characteristics**

<b>Abrasive dimensions per drum:</b>	
Expansion	200 x 480 mm (ring)
EasyFit	200 x 470 mm (sheet)
Classic	200 x 550 mm (sheet)
<b>Drum width:</b>	
Expansion	200 mm
EasyFit	203 mm
Classic	200 mm
<b>Drum diameter:</b>	
Expansion	150.5 mm
EasyFit	147.5 mm
Classic	151.5 mm
<b>Drum speed:</b>	
Expansion	3000 revs/min
EasyFit	2500 revs/min
Classic	2500 revs/min
<b>Motor:</b>	230V ~ 50 Hz 1.5 kW
<b>Handles:</b>	height adjustable
<b>Control lever:</b>	grip control
<b>Level control:</b>	adjustable via base frame screws
<b>Safety motor protection:</b>	via "operator presence" control lever - motor stops when lever is released
<b>Wheels:</b>	Ø 80 mm replaceable
<b>Bearings:</b>	lifetime lubricated ball bearings
<b>Drum pressure adjustment:</b>	infinite adjustment
<b>Noise level (IEC 60704 -1)</b> (continuous weighted sound pressure level A, measured at a distance of 0.4 m from the handle and a height of 1.5 m from the ground)	80 dB(A) max
<b>Vibration (ISO 5349)</b> (weighted value of the mean square deviation of the acceleration)	≤ 1.45 m m/s <sup>2</sup>
<b>Machine dimensions</b>	320 x 810 x 1070 mm
<b>Net weight</b>	45 kg
<b>Gross weight</b> Cardboard packages	2 items machine unit 660 x 370 x 640 mm handle unit 340 x 220 x 880 mm
<b>Gross weight</b> Cardboard packaging	56 kg
<b>Standard equipment</b>	Dust bag Start-up keys User and maintenance manual

Machine warnings

Prohibited use

**WARNING**

This equipment is not to be used by anyone (children included) with physical or mental disabilities, or anyone without the relevant experience and knowledge, unless they have received instructions on using the equipment and are supervised by a responsible person to ensure their safety.

**ATTENTION**

This equipment is not suitable for collecting hazardous dust.

**CAUTION**

Using the machine to move objects or moving on an incline may cause injury or damage. The machine must only be used to sand dry wooden floors which are level or have a maximum incline of 2%. Do not use the machine to sand furniture. Do not sit astride the machine when it is operating.

**CAUTION**

Work surfaces may be seriously damaged if the machine is left turning on one point while the tool is in contact with the surface. To avoid damaging the surface approach the cutting line carefully. Do not stop when lowering and raising the equipment, keep moving at constant speed.

Starting the machine

To start the machine proceed as follows:

1. Become familiar with the machine and read all instructions and safety notices. Ensure that all operators have read this manual.
2. Arrange the dust bag on the curved handle by securing the rope to the bag clip.



3. Locate the power supply. The socket must be compatible with the plug. To avoid electrical hazards the socket must be earth protected with a 20 A fuse.
4. Keep the cable away from the pathway of the machine.
5. Turn the belt cover upwards (**fig. B pos. 2**)
6. Fit the abrasive according to the ABRASIVE ASSEMBLY PROCEDURES (pg. 17) depending on the type of drum installed on the machine.





Starting the machine

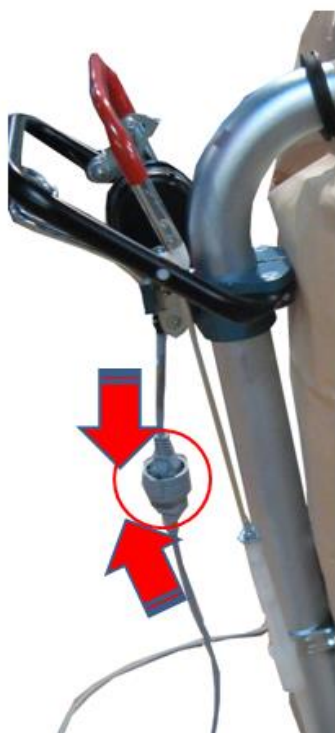
7. Ensure the lever is engaged (**pos. 1 fig. A**) and the drum is raised off the floor.



8. Close the abrasive cover (**pos. 2 fig. B**)



9. Put the plug in the socket.



10. Release the safety lever (**pos. 8 fig. A**) and press the start handle (**pos. 9 fig. A**) until the handle underneath is clasped (the motor will start). Keeping the start handle pressed release the knob (**pos. 10 fig. A**) and push the drum control lever forwards (**pos. 1 fig. A**). Commence sanding operations.



11. To stop the machine engage the drum control lever and release the start handle, which will immediately return to its initial position.



## Machine adjustment procedures

### Adjusting sanding pressure

To vary drum pressure on the floor, use the adjustment knob (pos. 3 fig. B) and proceed as follows:



1. Turn the adjustment knob clockwise to decrease drum pressure on the floor.
2. Turn the adjustment knob anti-clockwise to increase drum pressure on the floor.



### Wheel adjustment (on a surface parallel to the axis of the drum)

To adjust wheel position proceed as follows:



1. Loosen the locking nut (pos. 4 fig. B)
2. By turning the screws (pos. 5 fig. B) clockwise the end of the side drum cover raises off the floor.
3. By turning the screws (pos. 5 fig. B) anti-clockwise the end of the side drum cover lowers towards the floor.
4. Once the desired position has been reached secure the locking nut (pos. 4 fig. B)

### Adjusting handle height

To adjust handle height proceed as follows:

1. Ensure the power supply cable is disconnected from the mains and the machine.
2. Move the lever forwards (**pos. 1 fig. A**), raise the tube (**pos. 3**), and release the bar (**pos.4**) from the cylinder (**pos. 2**).

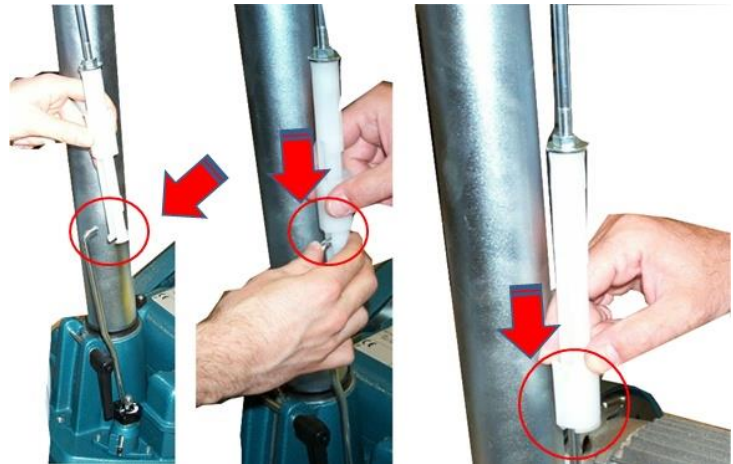




Machine adjustment procedures

Adjusting handle height

3. Loosen the screws (**pos. 11**) until the handle unit is mobile.
4. Raise or lower the handle unit until reaching the upper or lower stop.
5. Tighten the screws (**pos. 11**), insert the bar (**pos. 4**) into the cylinder (**pos. 2**) and lower the tube (**pos. 3 fig. A**). Lift the drum with the lever (**pos. 1 fig. A**)



Wall edge castor



A support with a free castor has been fitted (**pos. 6 fig. B**) to avoid damage to the skirting board or wall when sanding along the wall edge.

Before starting work, position the castor correctly by unscrewing the fastening screws on the support (**pos. 7 fig. B**), move it to the desired position, and lock the screws.

**WARNING**

The wall edge castor is correctly positioned when the machine is approximately 8 mm away from the wall with the castor up against it.

Abrasive assembly procedures

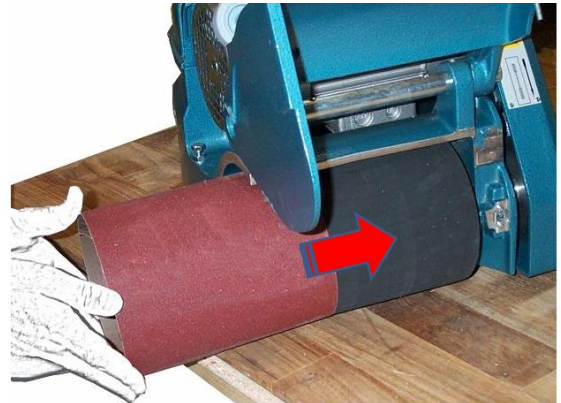
Scorpion Expansion (centrifugal drum)

Fit the abrasive disc (pos. 2 fig. C) to the drum (pos.1) ensuring that the abrasive protrudes approximately 1.5 mm from the drum itself.



**BEWARE**

Do not start the machine without the abrasive inserted, otherwise the drum will be damaged and must be replaced.



**WARNING**

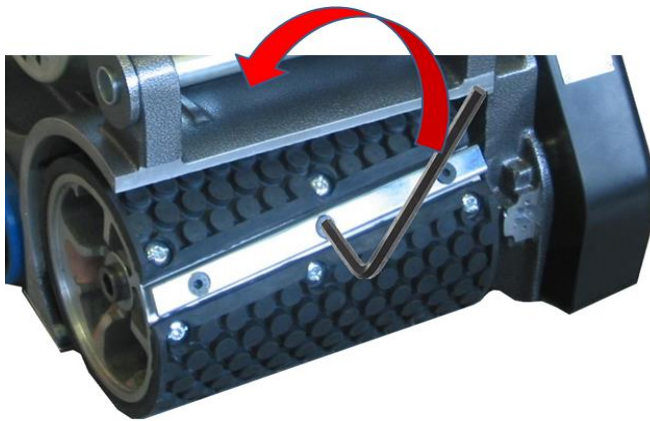
The abrasive is in the correct position when it protrudes approximately 1.5 mm from the sander drum.

**HAZARD**

Using a damaged abrasive which could then tear while sanding may damage the machine or floor.

Scorpion EasyFit (drum with bubble mat surface)

Loosen the fastening screws (pos. 1 fig. D) on the paper press (pos. 2 fig. D) on the drum with the correct screwdriver, being careful not to remove the screws and paper press from the drum.



Insert one end of the abrasive (pos. 3 fig. D) under the paper press. Turn the drum so the abrasive winds around the drum itself. Insert the other end (pos. 4 fig. D) of the abrasive under the paper press. Centre the abrasive on the drum and smooth out any creases. Tighten the paper press screws carefully. If unsure loosen the paper press screws and repeat the procedure.



**HAZARD**

An abrasive which is not stretched correctly or is damaged could tear while sanding and damage the machine or floor.

Abrasive assembly procedures

Scorpion Classic (drum with slot)

The abrasive must be prepared according to the dimensions shown in fig. E, and cut offset as shown in the figure alongside.

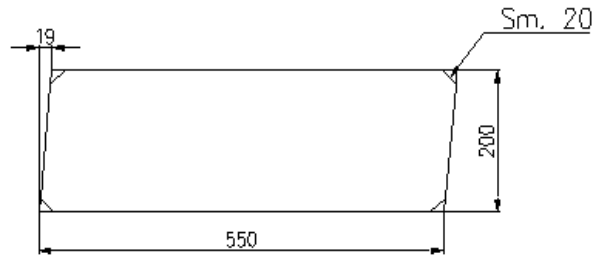
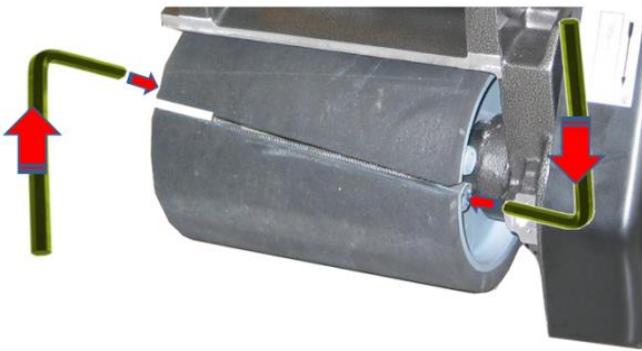
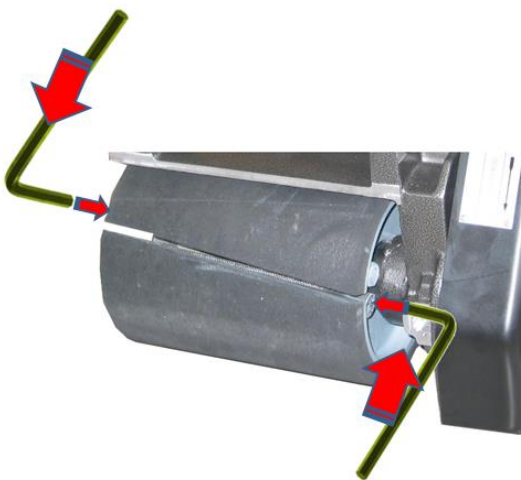


Fig. E

Using the Allen keys turn the two tensioning shafts (**pos. 1 and 2 fig. F**) until the two plates on the shafts are facing. Insert one edge of the abrasive to approximately 2/3 of the depth of the drum slot and turn the drum, ensuring that the abrasive adheres to the rubber. Once the slot is reached insert the other edge until it is stretched evenly. Then extract the two edges of the abrasive evenly for approximately 5 mm, as shown in fig. F.



Turn the shafts in opposite directions until the correct, uniform tension is obtained. Once the operation has been completed the plates P will be situated approximately as shown in **fig. G**.



If the abrasive is not stretched uniformly after performing the above operations, repeat the procedure suitably adjusting the insertion of the abrasive until the correct distribution of tension is obtained.



## Machine adjustment procedures

### Scorpion Classic (drum with slot)

The aforementioned procedure is suited to fitting large grain abrasive (20-24). For medium and fine grain abrasive (36-60-80 etc.) one or more strips of abrasive must be placed between the two edges, which are as wide as the drum and approximately 30 mm in length, to compensate for the difference in thickness between the large grain and medium/fine grain abrasive.

**WARNING**                    **The abrasive is in the correct position when it protrudes approximately 1.5 mm from the sander drum.**

**HAZARD**                    **An abrasive which is not stretched correctly or is damaged could tear while sanding and damage the machine or floor.**

## Routine maintenance to be performed

To keep the machine in good working condition the following items must be checked and serviced regularly:

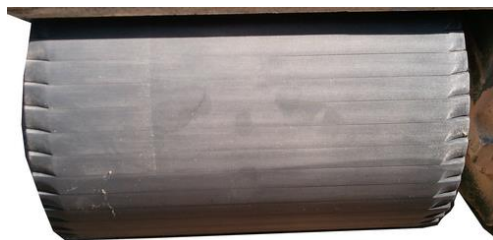
### Sawdust chamber (for the user)

Hoover the sawdust chamber regularly.



### Drums (for the user)

Check the outer surface of the drum regularly.  
Remove any dirt.



Routine maintenance to be performed

Wheels (for the user)



Remove dirt from the machine unit and wheels regularly. Dirt may cause uneven sanding.

Dust bag (for the user)

Remove the bag and shake it well to remove sawdust. Turn the bag inside out and wash it in the machine in cold water to prevent blockage of the pores and a decrease in dust collection ability.



As an alternative to the fabric bag the following may be used:

- a) Disposable paper bags, available in packs of 3 (P/N 2900030142). The limit for use is 1/3 of the total capacity.



- b) Remote control industrial vacuum cleaner with tube with maximum length of 10 metres.



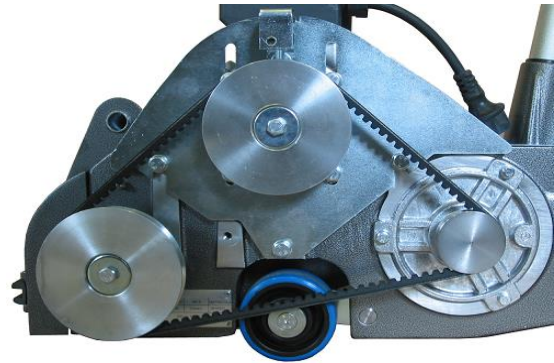
Belt tension (for the user)

Check the belt tension every 500 hours of operation by removing the belt cover (**pos. 8 fig. B**) after removing the two screws and loosening the 4 motor fastening screws (**pos. 1 fig. H**)

Belt tension can be adjusted using the screws (**pos. 2 fig. H**)

After adjustment lock the motor fastening screws (**pos. 1 fig. H**) and replace the belt cover.

If the belt is excessively worn it must be replaced.



**CAUTION**

**Excessive belt tension may cause the premature failure of the ball bearings. The belt must have a 10.5 mm stretch with a centre load of 30 ±3 N.**

Bearings (only for Technical Support Service)

Check bearings regularly for wear or damage according to the following timescales:

WHEELS:	after the first	2500 hours
FAN SHAFT:	after the first	2500 hours
SANDING DRUM:	after the first	5000 hours
MOTOR SHAFT:	after the first	5000 hours

Spare parts

**Always use K & T spare parts.**

Failure to use K&T spare parts, or repairs/adjustments carried out by unauthorised personnel, will invalidate the guarantee and any resulting liability.

**The machine must only be repaired by qualified personnel.** This electric equipment is compliant with the relevant safety legislation.

Repairs must be carried out by qualified personnel using K & T spare parts, otherwise the user may suffer serious injury.

## Emergency situations (for the user)

FAULTS	CAUSES	SOLUTIONS
<b>Insufficient cutting</b>	<i>Unsuitable or worn abrasive</i>	Replace the abrasive
	<i>Insufficient drum pressure</i>	Increase drum pressure
	<i>Insufficient belt tension</i>	Increase belt tension
	<i>Worn belt</i>	Replace the belt
<b>Insufficient motor speed</b>	Insufficient tension due to:	
	<i>Excessive cable length or unsuitable cross section</i>	Use cables of suitable length and cross section
	<i>Unstable connections</i>	Arrange suitable connections
	<i>Faulty capacitor</i>	Contact an authorised K & T dealer
	<i>Faulty motor</i>	Contact an authorised K & T dealer
<b>Scratched work surface</b>	<i>Faulty abrasive</i>	Replace the abrasive
	<i>Drum surface dirty or faulty</i>	Clean/correct/replace the rubber-coated drum.
	<i>Incorrect wheel adjustment</i>	Correct the wheel position
<b>Insufficient dust collection</b>	<i>Dust bag more than 1/3 full</i>	Empty the bag.
	<i>Dust bag dirty or with blocked pores</i>	Shake out the dirt and wash the bag.
	<i>Vacuum ducts and/or obstructed pipes</i>	Clean air ducts
<b>Motor does not start</b>	<i>Faulty switch</i>	Contact an authorised K & T dealer
	<i>Faulty capacitor</i>	Contact an authorised K & T dealer
	<i>Insufficient voltage for unstable connections</i>	Contact an authorised K & T dealer
	<i>Faulty motor</i>	Contact an authorised K & T dealer
	<i>No power supply voltage</i>	Check power supply and connections
<b>Scorching on work surface</b>	<i>Worn abrasive</i>	Replace the abrasive
	<i>Excessive pressure on drum</i>	Decrease sanding pressure
	<i>Abrasive too fine</i>	Use abrasive with larger grain





Disposal



**Smaltimento di apparecchiature da rottamare da parte di privati nell'Unione Europea.** Questo simbolo che appare sul prodotto o sulla confezione indica che il prodotto non deve essere smaltito assieme ad altri rifiuti domestici. Gli utenti devono provvedere allo smaltimento delle apparecchiature da rottamare portandole al luogo di raccolta indicato per il riciclaggio delle apparecchiature elettriche ed elettroniche. La raccolta e il riciclaggio separati dalle apparecchiature da rottamare in fase di smaltimento favoriscono la conservazione delle risorse naturali e garantiscono che tali apparecchiature vengano rottamate nel rispetto dell'ambiente e della tutela della salute. Per ulteriori informazioni sui punti di raccolta delle apparecchiature da rottamare, contattare il proprio comune di residenza, il servizio di smaltimento dei rifiuti locale o il negozio presso il quale è stato acquistato il prodotto. **Per indicare che questo prodotto comporta requisiti speciali di smaltimento, è stata fissata un'etichetta sul retro del gruppo manico, inoltre essendo presente una fonte di alimentazione esterna, ne è stata fissata un'altra l'etichetta sul retro della scocca della macchina.**



**Disposal of Waste Equipment by Users in Private Households in the European Union.** This symbol on the product or packaging indicates that it must not be disposed of with other household waste. It is your responsibility to dispose of your waste by bringing it to a designated collection point that recycles electrical and electronic waste equipment. The separate collection and recycling of waste at the time of disposal helps to conserve natural resources and ensures it is recycled in a manner that safeguards health and the environment. For more information about where to take waste equipment for recycling, please contact your local council office, household waste disposal service or retailer where you purchased the product. **To indicate that this product has special disposal requirements a label is attached to the back of the handle unit. If an external power supply is included, attach the small label to the back of the power supply.**



**Entsorgung von Ausschusselektrogeräten durch Benutzer in privaten Haushalten in der EU.** Dieses Symbol auf dem Produkt oder dessen Verpackung gibt an, dass das Produkt nicht zusammen mit dem Restmüll entsorgt werden darf. Es obliegt daher Ihrer Verantwortung, das zum Verschrotten bestimmte Gerät an einer für die Entsorgung oder Wiederverwertung von Elektrogeräten aller Art entsprechenden Stelle abzugeben. Die separate Sammlung und das Recycling Ihrer zur Entsorgung bestimmten Elektrogeräte trägt zum Schutz der Umwelt bei und gewährleistet, dass sie auf eine Art und Weise recycelt werden, die keine Gefährdung für die Gesundheit des Menschen und der Umwelt darstellt. Für weitere Informationen darüber, wo Sie alte Elektrogeräte zum Recyceln abgeben können, setzen Sie sich mit den örtlichen Behörden, Wertstoffhöfen im Kontakt oder fragen Sie dort, wo Sie das Gerät erworben haben. **Um darauf hinzuweisen, dass für dieses Produkt spezielle Entsorgungsrichtlinien gelten, wurde auf der Rückseite der Griffgruppe ein Aufkleber angebracht. Außerdem, da eine externe Versorgung im Lieferumfang enthalten ist, wurde ein anderes Aufkleber an der Rückseite der Kalotte angebracht.**



**Evacuation des équipements usagés par les utilisateurs dans les foyers privés au sein de l'Union européenne.** La présence de ce symbole sur le produit ou sur son emballage indique que vous ne pouvez pas vous débarrasser de ce produit de la même façon que vos déchets courant. Au contraire, vous êtes responsable de l'évacuation de vos équipements usagés et à cet effet, vous êtes tenu de les remettre à un point de collecte agréé pour le recyclage des équipements électriques et électroniques usagés. Le tri, l'évacuation et le recyclage séparés de vos équipements usagés permettent de préserver les ressources naturelles et de s'assurer que ces équipements sont recyclés dans le respect de la santé humaine et de l'environnement. Pour plus d'informations sur les lieux de collecte des équipements usagés, veuillez contacter votre mairie, votre service de traitement des déchets ménagers ou le magasin où vous avez acheté le produit. **Fixes la grande étiquette à l'arrière du produit pour signaler qu'il doit être évacué selon une procédure particulière. Lorsqu'une alimentation externe est fournie, fixes la petite étiquette à l'arrière de celle-ci.**



Diagrams

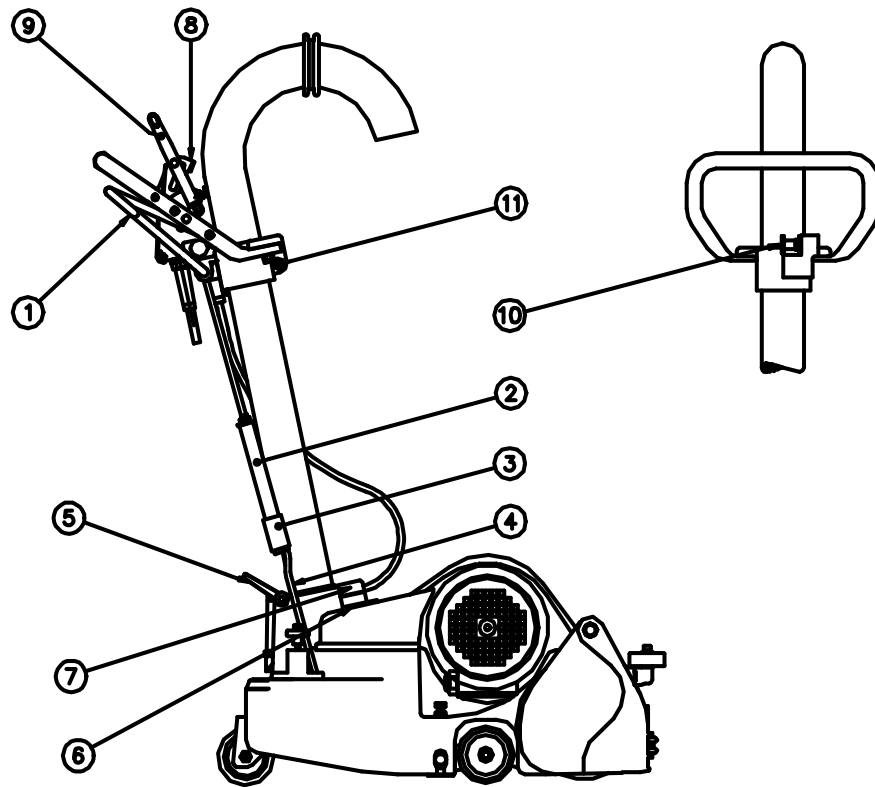


Fig. A

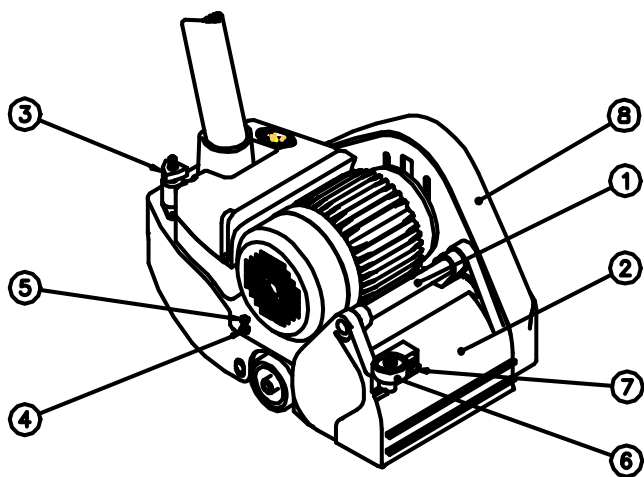


Fig. B

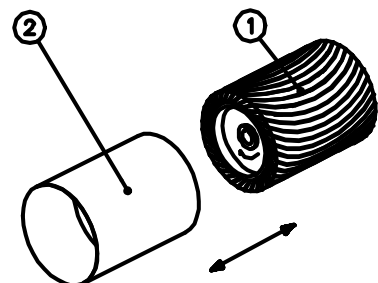


Fig. C

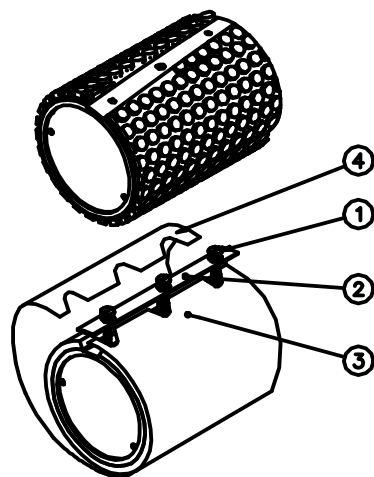


Fig. D

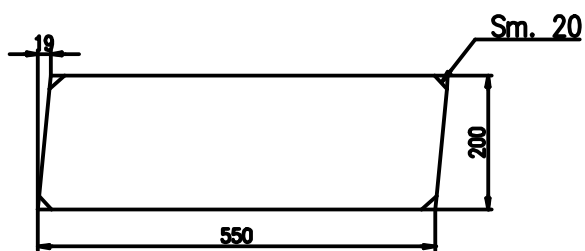


Fig. E

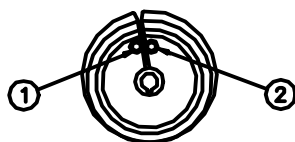


Fig. F



Fig. G

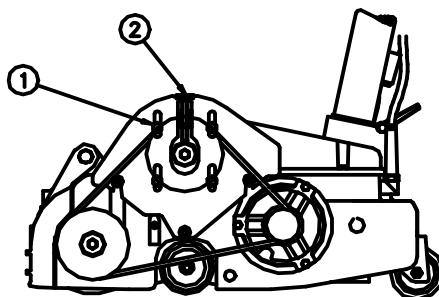


Fig. H



