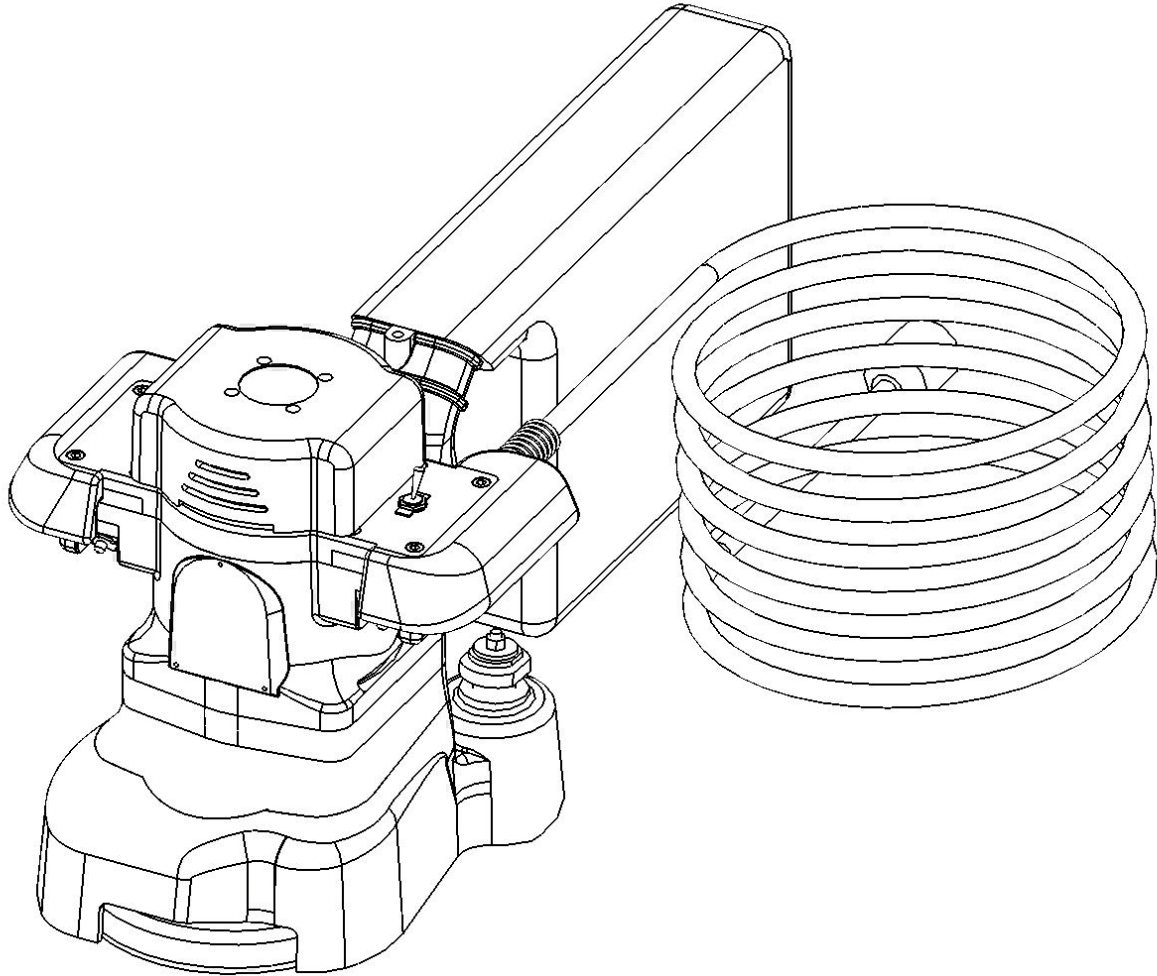
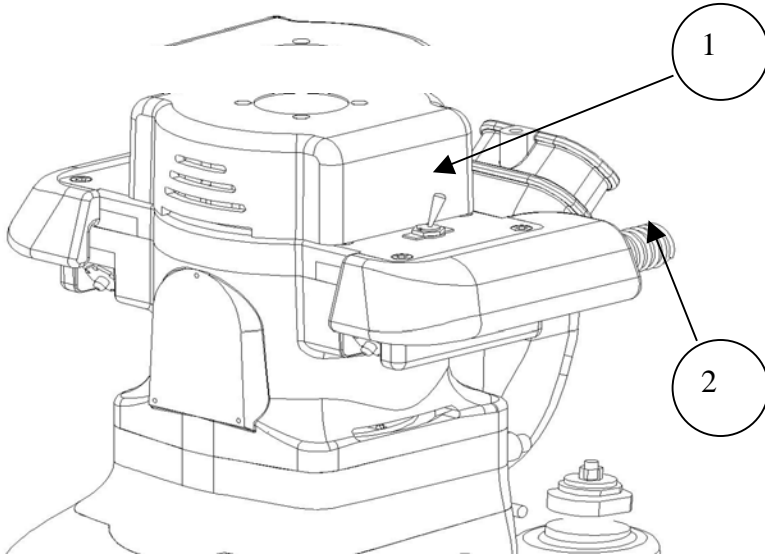


# USER HANDBOOK

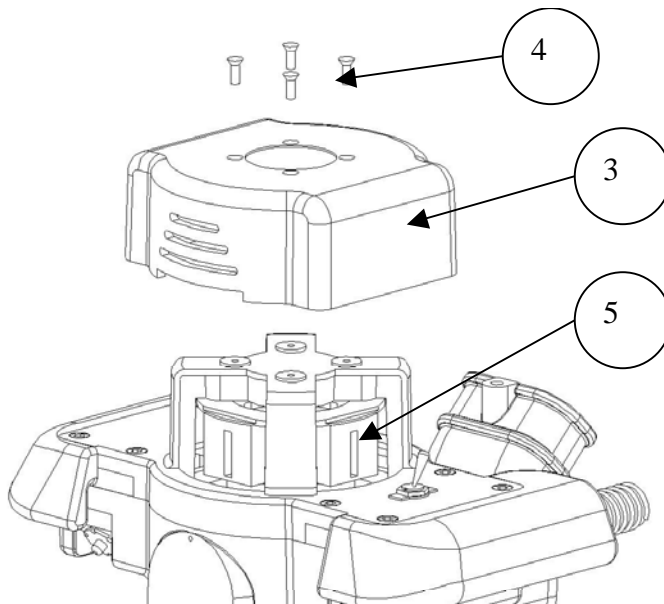
**ENGLISH**



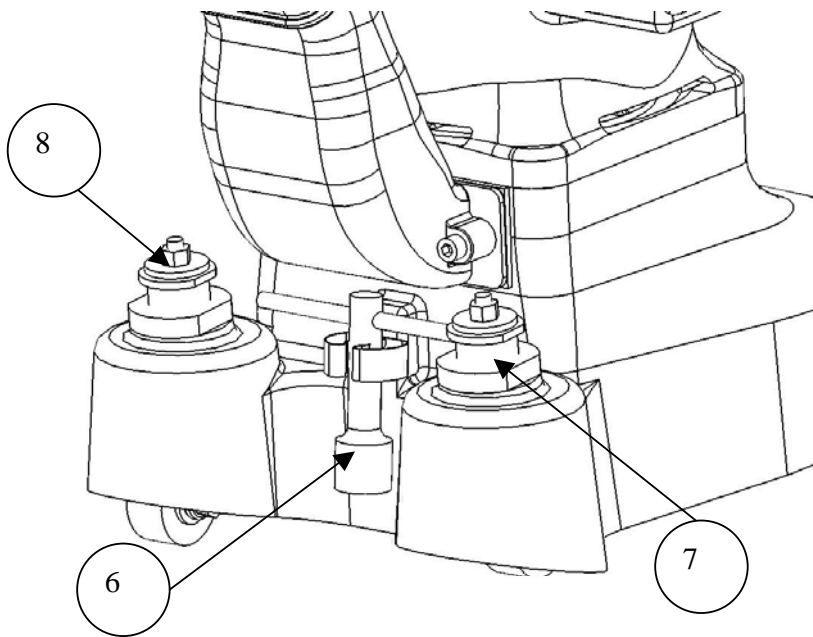
## **BLIZZARD EDGE SANDER**



**Figure 1**  
1. START SWITCH  
2. MAINS LEAD

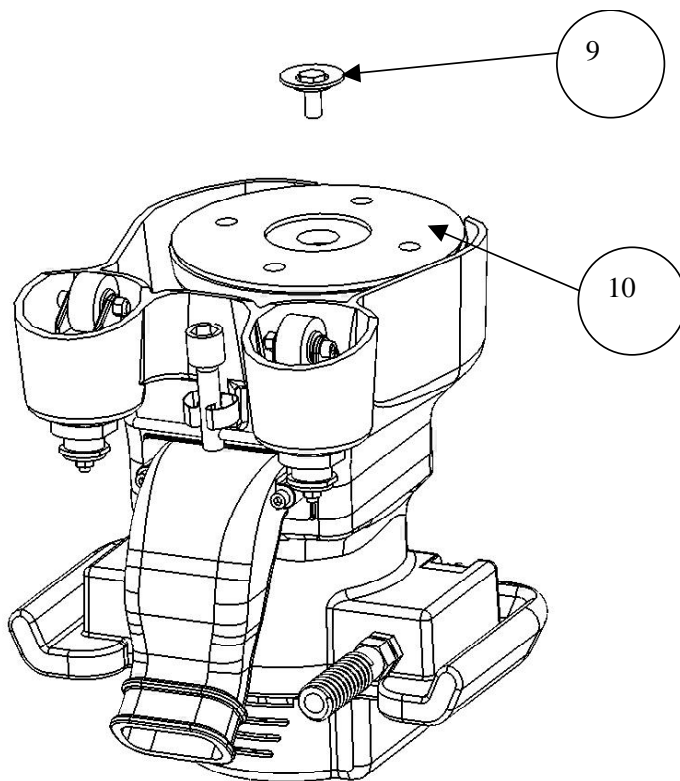


**Figure 2**  
3. HEAD  
4. SCREWS  
5. BRUSHES



**Figure 3**

- 6. KEY
- 7. LOCK NUT
- 8. WHEEL SUPPORT



**Figure 4**

- 9. COUNTERSUNK SCREW AND WASHER
- 10. PLATE

## CONTENTS

<b>MACHINE USE AND MAINTENANCE HANDBOOK</b>	<b>6</b>
<b>LISTED SYMBOLS</b>	<b>7</b>
<b>STORAGE</b>	<b>8</b>
<b>MACHINE TRANSPORT AND HANDLING</b>	<b>8</b>
Handling by one person	8
Transport in box	8
<b>COMMISSIONING</b>	<b>9</b>
Electrical connection instructions	9
Cables, extension leads and sockets	9
<b>REMOVING SAWDUST</b>	<b>9</b>
<b>PREVENTIVE SAFETY RECOMMENDATIONS</b>	<b>10</b>
Personal protection	10
Respect of safety devices and danger signs	10
<b>OPERATING INSTRUCTIONS</b>	<b>11</b>
<b>MACHINE SPECIFICATIONS</b>	<b>12</b>
<b>MACHINE USE</b>	<b>12</b>
Improper use	
<b>STARTING AND STOPPING THE MACHINE</b>	<b>12</b>
<b>MACHINE ADJUSTMENT</b>	<b>13</b>
Fitting the abrasive	13
Abrasive disk centring procedure	13
Sanding surface adjustment on floor	13
<b>PERIODIC MAINTENANCE</b>	<b>14</b>
<b>REPLACEMENT PARTS</b>	<b>15</b>
<b>EMERGENCIES</b>	<b>15</b>
<b>CONFORMITY DECLARATION</b>	<b>16</b>

## MACHINE USE AND MAINTENANCE HANDBOOK

This handbook contains important information for the safe use and operation of this machine. Failure to read the handbook prior to using, adjusting or carrying out maintenance on the machine could lead to personal injury and/or damage.

Before using the machine the operator must be familiar with all operating instructions.

Keep this manual for future reference.

For replacements, write to:

**Kunzle & Tasin S.p.A.**

Sales office and plant: Via Cajkovskij, 14 20092 Cinisello Balsamo-Milan-Italy

<http://www.kunzletasin.com> , [ktinfo@kunzletasin.com](mailto:ktinfo@kunzletasin.com)

**DANGER:** means: Serious injury or death to operators or others if **DANGER** signs on the machine or in the handbook are ignored or not respected. Read and follow all **DANGER** warnings on the machine or in the handbook.

**WARNING:** means: Injury to the operator or others if **WARNING** signs on the machine or in the handbook are ignored or not respected. Read and follow all **WARNINGS** on the machine or in the handbook.

**CAUTION:** means: Injury to the operator or others if **CAUTION** signs on the machine or in the handbook are ignored or not respected. Read and follow all **CAUTION** warnings on the machine or in the handbook.

**DANGER:**

Failure to read the handbook prior to using, adjusting or carrying out maintenance on the machine could lead to personal injury and/or damage. Operators must be familiar with all instructions before using the machine.

**LISTED SYMBOLS**



READ USE AND MAINTENANCE INSTRUCTIONS BEFORE USING THE MACHINE.



NOISE HAZARD. USE EAR PROTECTION.



DUST HAZARD. USE FACE MASK.



DANGER. VOLTAGE PRESENT.



DANGER. MOVING PARTS.

## STORAGE

Store the machine without removing its original packaging. Do not stack more than three high. If the machine is removed from its original packaging and not used for a long period, the wheels and sanding plate must not remain in contact with the ground. Place the machine on two 50 mm spacers in contact with the machine base.

Store the machine in a dry place to prevent damage.

Storage temperature -20 °C to 50 °C.

## MACHINE TRANSPORT AND HANDLING

### HANDLING BY ONE PERSON

- 1 Check that the mains lead (Pos. 2 – Fig. 1) is disconnected from both mains supply and machine
- 2 Always move the sander by means of the two grips with the bag support turned upwards.
- 3 Protect the sanding disk with an abrasive disk and check that the abrasive disk fastening screws are tight.
- 4 For vehicle transport, always make sure the sander is well anchored and cannot move.
- 5 The machine is heavy. Use caution when lifting or transporting it.

### TRANSPORT IN CASE

A practical case with wheels is available to make it easier for one person to transport the machine:

1. Place the machine in the case on the mounts provided, along with all removed accessories (bag and sanding disks).
2. Close the case and fasten the cover with the clips.
3. Grip the outer handle and lift the case while allowing it to rest on its wheels
4. Pull the case to the working area

## COMMISSIONING

### ELECTRICAL CONNECTIONS

- Caution:** The machine is designed to operate at the voltage and frequency indicated on the specifications plate. Before plugging it in, check that mains voltage and frequency correspond to machine specifications.
- Danger:** Exposing the machine to water or rain could lead to fatal electric shock. Keep and use the machine in a dry place.
- Danger:** Incorrect electrical system connections could lead to fatal electric shock. To prevent electric shock, always use mains supplies with a third earth wire. For greater protection, the mains supply should be fitted with a life-saving differential cut-out switch.
- Danger:** Tampering with the earth plug could lead to fatal electric shock. Never cut, remove or split the earth plug. Never attempt to insert a three pin plug into any other kind of socket or connector. If the socket does not fit the plug, call a qualified electrician
- Danger:** Using the machine with a damaged plug or cable could lead to fatal electric shock. If cables or plugs are worn or damaged, have them replaced by the manufacturer or by the K&T technical assistance service or by a qualified electrician.

### CABLES, EXTENSION LEADS AND PLUGS

Use only 3-ply approved cables with live, neutral and earth.  
Recommended maximum cable length 10 m.

- Danger:** Personal injury and/or damage may result if the machine is used with excessively long or insufficiently thick cable.

#### ***SINGLE PHASE 230-240V $\cong$ 50 Hz MOTOR MACHINE***

For the European market the mains lead must HAR approved type **HO5VV-3x1.5 mm<sup>2</sup>** with plug type SCHUKO 2P+T 16A 200÷250V

**For other versions consult an authorised K&T dealer**

## REMOVING SAWDUST

- Danger:** Sawdust is susceptible to spontaneous combustion and may cause injury or damage if ignited. It must be disposed of correctly. Always empty sawdust into metal containers and store outdoors.
- Danger:** Sawdust is susceptible to spontaneous combustion and may cause injury or damage if ignited. Empty the suction bin when it is 1/3 full. Always empty the bin once finished with the machine. Never leave the machine untended when it contains sawdust. Never empty the contents of the bin onto a fire.

## PREVENTIVE SAFETY RECOMMENDATIONS

### PERSONAL PROTECTION

- Warning:** Sawdust may remain suspended in air and be breathed in while using the sander. Always wear a face mask when using sanding tools.
- Warning:** Failure to use protective clothing and personal protection (masks/goggles) when working with the sander may lead to injury to the eyes and/or body. When sanding, always wear protective clothing, goggles and dust mask.
- Warning:** Prolonged exposure to the noise generated during sanding operations may lead to permanent ear damage. When sanding, always use ear protection.

### RESPECT OF SAFETY DEVICES AND WARNINGS

- Danger:** Using the machine when not correctly assembled could result in personal injury and/or damage. Never use the machine if not fully assembled. Check all fastenings for tightness. Keep the machine adjusted to the given specifications.
- Danger:** Using the machine with covers or guards removed may lead to personal injury or damage. Always check that all guards and covers are in place and correctly secured.
- Danger:** Floor sanding can create an explosive atmosphere. Cigarettes, cigars, pipes, lighters, pilot lights and any other source of heat may cause an explosion if used when sanding. Never use naked lights in the working area.
- Danger:** Poor ventilation in working areas may create an explosive atmosphere especially in the presence of flammable materials such as solvents, thinners, fuel, certain paints, sawdust and similar. Floor sanders may cause materials and flammable vapours to ignite. Always read the manufacturer's instructions on all chemical products used to ascertain their flammability. Keep the working area well ventilated.
- Danger:** Contact with nails while sanding may create sparks and cause an explosion or fire. Fully sink all nails before beginning to sand floor surfaces.
- Danger:** Repeated power supply cuts-out or undersized power supplies may cause fatal electric shock. Have the fuses, protection circuit or mains lead checked by a qualified electrician.
- Danger:** Maintenance and/or repairs made to a machine connected to the mains supply may lead to fatal electric shock. Always disconnect the power supply before carrying out any maintenance and/or repair.
- Danger:** Using the machine without an adequate earth may lead to fatal electric shock. Never disconnect or disable the mains earth. If the earth wire is missing, or if in doubt as to whether the circuit is adequately earthed, consult a qualified electrician.
- Danger:** Using the machine with a damaged mains lead may cause electric shock. Do not use the machine if the mains lead is damaged. Never pull the machine by the mains lead.
- Danger:** Passing the sander over its mains lead may lead to injury or fatal electric shock. Keep the lead away from the lower part of the machine to avoid contact with the abrasive. Always keep the mains lead raised above the machine.
- Danger:** The machine's moving parts can cause serious injury and/or damage. Keep hands, feet and loose clothing away from all moving parts.
- Danger:** Carrying out maintenance or replacing the dust sack may cause injury to the operator and/or others in the vicinity if the machine is still connected to the mains supply.

- Warning:** Failure to read and follow all the instructions on the machine and in this handbook may lead to serious injury and/or damage. Read and follow all safety instructions. Check that all plates, stickers, warnings, precautions and instructions are in place on the machine. For replacements, contact your authorised **K&T** dealer.
- Caution :** Maintenance and repairs carried out by unauthorised personnel may lead to injury or damage.
- Caution :** Failure to store the machine in a dry place will cause damage. Always store the machine in a dry place.

## OPERATING INSTRUCTIONS

The machine is designed for commercial use, for example in hotels, schools, hospitals, offices, factories and shops.

The information below highlights potentially dangerous conditions for the operator and/or for the machine. Read this handbook carefully and become familiar with the machine. Learn to foresee when these conditions may arise. Use all the available safety systems on the machine. Take all steps necessary to train personnel in the use of the machine. Report any machine damage or malfunction immediately.

1. Keep hands and clothing away from rotating parts.
2. Keep hands on grips when motor is running.
3. Never leave the machine unattended with the motor running.
4. Never start the machine with the motor base upturned.
5. Never use the machine without the dust bag in its correct position.
6. Never remove the dust bag with the motor running.
7. Always disconnect the mains lead before beginning maintenance.
8. Exercise caution when moving the machine.
9. Always use the machine in well-ventilated areas.
10. Dispose of sawdust correctly.
11. Use the abrasive disks provided with the machine, or of the type specified in the instruction handbook.
12. Only start the sander with the abrasive disk correctly fitted. Stop the machine immediately if it is not in perfect working order.

## MACHINE SPECIFICATIONS

ABRASIVE DISK SIZE	DIA 175 mm
DISK DIAMETER	DIA 175 mm
DISK SPEED	2900 RPM
MOTOR SPEED	13000 RPM
MOTOR EUROPE USA	230-240V / 50 Hz 1250W 115V / 60 Hz 1250W
GRIPS	FIXED
DISK TILT CONTROL	BY SCREWS ON WHEEL SUPPORTS
MOTOR SAFETY (EUROPE ONLY)	IN CASE OF POWER FAILURE THE MOTOR WILL NOT RESTART WITHOUT MANUAL RESET BY OPERATOR
BEARINGS	PERMANENT LUBE RADIAL
MACHINE DIMENSIONS	275 X 370 X 370 WITHOUT BAG
NET WEIGHT	15 KG
NOISE (continuous weighted A sound pressure at 0.4 m from grips and 1.5 m from floor)	87.5 dB(A)
PACKED DIMENSIONS	440 x 800 x 380 mm
GROSS WEIGHT	17.5 KG
STANDARD EQUIPMENT	DUST BAG, MAINS LEAD WITH PLUG, 7 m EXTENSION CABLE, SPANNERS, USE AND MAINTENANCE HANDBOOK

## MACHINE USE

### IMPROPER USE

**Caution:** Using the machine to move other objects or on a slope may lead to injury and/or damage. Never sit on the machine when running. The machine must be used exclusively for sanding dry wooden floors, either flat or with maximum slope 2%. Do not use the machine for sanding furniture.  
Never sit on the machine when it is running.

**Caution:** Serious damage to the floor will result if the machine is left running in one spot. To prevent damage to the floor, approach the sanding point delicately. Keep the machine moving at a constant rate.

## STARTING AND STOPPING THE MACHINE

Proceed as follows to start the machine:

1. Become familiar with the machine and read all instructions on danger, warnings and precautions. Make certain all operators have read this handbook.
2. Bring the machine to the workplace.
3. Fit the dust bag on the connector fastening the wire over the connector flange.
4. Fit the abrasive as described in "FITTING THE ABRASIVE"  
**Warning:** Only use the abrasive disks recommended in the handbook.
5. Locate the electricity supply. The socket must be compatible with the plug. To prevent electrical hazard, the socket must be earthed and protected by a 20A fuse.
6. Connect the plug to the socket.
7. Keep the mains lead clear of the machine base.
8. Turn the switch (Pos. 1– Fig. 1) to run ("ON" or "1").
9. Keep the machine moving while the abrasive disk is lowered into contact with the floor surface.
10. To stop the machine, turn the switch (Pos. 1–Fig.1) to stop ("OFF" or "0").

**WARNING:** The European version of the machine is fitted with a safety switch. If a power failure occurs while working with the machine, the switch is automatically disabled to prevent an accidental start when power returns.  
To start the machine, repeat the operations described above.

**Important:** If first starting is difficult, for example when it is cold in winter, remove the abrasive disk holder, start the motor and leave it to run for a few minutes. Then replace the disk and repeat the starting procedures described above.

## MACHINE ADJUSTMENT

### FITTING THE ABRASIVE DISK

- 1 Check that the mains lead is disconnected from the power supply.
- 2 Turn the machine over, resting the head (Pos. 3 – Fig. 2) on the floor.
- 3 Remove the countersunk screw (Pos. 9 - Fig. 4) and washer fastening the plate (Pos. 10 – Fig. 4) using the spanner provided (Pos. 6 – Fig. 3).
- 4 Make certain that the plate surface is clean and select an abrasive disk (175 mm diameter) of a suitable grade and with surface intact.
- 5 Fasten the abrasive disk with the countersunk screw ( Pos. 9 - Fig. 4 ) and washer, holding the plate locked (Pos. 10 – Fig. 4)

### CENTRING THE ABRASIVE DISK

Manually centre the abrasive disk on the plate (Pos. 10 – Fig. 4).

**Warning:** The disk is correctly centred when there is no eccentric oscillation with reference to the base or excessive vibration.

### ADJUSTING SANDING SURFACE ON FLOOR

The abrasive disk holder (Pos. 10 – Fig. 4) is a broad truncated cone.

For the plate to work flat, its axis must be inclined in relation to the floor surface.

This inclination is given by the position of the wheels that are mounted on independent supports (Pos. 8 – Fig. 3) with threads and lock nuts (Pos. 7 – Fig. 3) housed in the machine base

- 1 Turn the nut to release the support.
- 2 Turn the support to adjust wheel position.
- 3 Tighten the nut to lock the support in the desired position.
- 4 Repeat this operation for each wheel

**Warning:** Do not attempt to adjust machine height while the machine is running. This will jeopardise machine stability and cause a hazard to the operator as the machine becomes difficult to control (accidental overturning risk). Decide on the desired wheel position with the motor off and mains lead disconnected.

## PERIODIC MAINTENANCE

To keep the machine in good working condition, the following items should be periodically checked and maintained:

### SANDING CHAMBER (USER MAINTENANCE)

Periodically clean the chamber to prevent hazardous dust accumulation

### PLATE (USER MAINTENANCE)

Periodically check the sanding plate surface. Remove any dirt or grime. Remove any dust not removed by the suction group.

### WHEELS (USER MAINTENANCE)

Periodically remove dirt from the machine body and wheels. Dirt on the wheels may cause undulations in the sanded surface.

### DUST BAG (USER MAINTENANCE)

Remove the bag and shake it vigorously to empty out all sawdust. Turn the bag inside out and machine wash it in cold water to prevent pores from blocking, reducing its capacity to collect dust.

### GRAPHITE BRUSHES (USER MAINTENANCE)

**Danger:** Disconnect the machine from the mains before carrying out this operation. The motor has four graphite brushes that should be checked every six months or 500 working hours. Proceed as follows to check the brushes:

- 1 Remove the machine head (Pos. 3 – Fig. 2) by removing the four Allen screws (Pos. 4 – Fig. 2).
- 2 Disconnect the wire from the terminals of each brush.
- 3 Pull back the bush retaining spring and extract the brush.
- 4 Check the brushes (Pos. 5 – Fig. 2). If any of the brushes is shorter than 12 mm replace them all.
- 5 Repeat the above in reverse order to reassemble the machine

**Warning:** When fitting new brushes, before replacing the cover check that the wires do not interfere with the rotor.

### LUBRICATION (USER MAINTENANCE)

The machine requires no lubrication. All moving parts, including the motor, are mounted on permanent lube ball bearings, maintenance free for 10,000 working hours

**LUBRICATION (SERVICE CENTRE ONLY MAINTENANCE)**

Reduction gearing is lubricated with special long-life grease. However, we recommend periodic inspection of grease condition, as it could degrade due to overheating. Check that it is a healthy brown/light brown colour and fluid in consistency. Tendency to black or lumpy consistency indicates that the grease is degraded. In this case clean the gears and replace the grease (call K&T for grease specifications and recommended brands). To open the gearbox, turn the machine over, remove the abrasive plate and remove the 4 grub screws protruding from the underside of the base. The other 4 screws (sunk into the base itself) serve to remove the upper part (motor)

**IMPORTANT:** Do not over-grease. Keep to K&T instructions, even as regards quantity (100-150g is enough). Too much grease will cause gear overheating and could lead to damage.

**REPLACEMENT PARTS**

Always use original **K&T** replacement parts. The guarantee does not cover non-original **K&T** parts or repairs/adjustments carried out by unauthorised personnel

**TROUBLESHOOTING (FOR USER)**

<b>FAULT</b>	<b>CAUSE</b>	<b>REMEDY</b>
Sanding insufficient	Worn or unsuitable abrasive	Replace abrasive
Insufficient rotor speed	Insufficient voltage due to:	
	Lead too long or insufficient section	Use adequate length and section cables
	poor connections	Make suitable connections
	faulty motor	Call an authorised K& T dealer
Scored surface	Faulty abrasive	Replace abrasive
	Plate surface soiled or scored	Clean or replace plate surface
	Incorrect wheel adjustment	Adjust wheel position, see page 15
Insufficient dust collection	Bag over 1/3 full	Empty bag
	Dust bag soiled or with blocked pores	Clean dirt and wash bag
	Suction / delivery pipe obstructed	Clean air pipes
Motor not starting	Faulty switch	Call an authorised K& T dealer
	Insufficient voltage due to poor connections	Call an authorised K& T dealer
	Faulty motor	Call an authorised K& T dealer
	No power	Check power supply and connections
Burns on sanded surface	Worn abrasive	Replace abrasive
	Abrasive grade too fine	Use coarser abrasive

**CE CONFORMITY DECLARATION**

**73/23EEC , 98/37EEC  
89/336/EEC , 92/31/EEC**

**We**

**KÜNZLE & TASIN S.p.A.  
Registered office: Via C. Freguglia, 4  
20122 Milan – Italy**

**declare under our own responsibility that the product**

**BLIZZARD EDGE SANDER**

**to which this declaration refers, conforms to the following standards and legislation:**

- Machine safety – Base concepts, general design principles, basic terminology, EN 292 method Part 1 (1991)
- Machine safety – Base concepts, general design principles, EN 292 Part 2 technical principles and specifications ( 1991)
- Machine safety – Machine electrical equipment Part 1 : EN 60204-1 General regulations (1997)
- Domestic appliance safety (1994) + A12,A13,A14 EN 60 335-1 General regulations
- Special standards for floor and paving treatment equipment for industrial or public use – EN 60 335-2-67 (1998)
- Electromagnetic compatibility (EMC)
- Radio-interference limits and measuring methods for electric or internal combustion domestic appliances, electric tools and similar electrical equipment – EN 55014-1 (1993)+A1,A2
- Part 3: Limits. – Section 2: Harmonic current emissions limits (equipment with current input  $\leq 16$  A per phase) – EN 61000-3-2 (1995) + A12,A1,a2,A14
- Part 3: Limits – Section 11: low voltage power supply voltage fluctuation and flicker limits for appliances with current rating  $\geq 16$  A. EN 61000-3-11 (2000)

**In compliance with Directives:**

**73/23EEC , 98/37EEC, 89/336/EEC , 92/31/EEC.**

---

**(Place and date of issue)**

---

**(Signature)**