

**KA230** 

# **Congratulations!**

# On the purchase of your Black & Decker multi sander.

To ensure the best results from your multi sander please read these safety and usage instructions carefully.

If you have any questions or queries after reading this user manual please do not hesitate to call our Service and Information Centre, whose number you will find towards the back of this user manual, or one of our Authorised Repair Agents. A list of these Agents and further information is available on the Internet at www.2helpU.com.

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# Multi sander user manual

# SAFETY INSTRUCTIONS

Warning! When using electric tools, the following basic safety precautions should always be taken to reduce the risk of fire, electric shock and personal injury. Read all these instructions before attempting to operate the product and save this booklet.

### FOR SAFE OPERATION:

- Keep the work area clean. Cluttered areas and benches invite injuries.
- Consider the work area environment. Do not expose
  the power tool to rain and do not use in damp or wet
  locations. Keep the work area well lit. Do not use
  the power tool where there is a risk to cause fire
  or explosion.
- Guard against electric shock. Avoid body contact, where possible, with earthed or grounded surfaces (e.g. pipes, radiators, ranges and refrigerators).
- Keep children away. Do not let visitors touch the tool or extension cord. All visitors should be kept away from the work area.
- Store idle tools. When not in use, tools should be stored in a dry, high or locked place, out of reach of children.
- Do not force the tool. It will do the job better and more safely at the rate for which it was intended.
- Use the right tool. Do not force small tools or attachments to do the job of a heavy duty tool. Do not use the tool for purposes not intended; for example, do not use a circular saw to cut tree limbs or logs.
- Dress properly. Do not wear loose clothing or jewellery as they can be caught in moving parts.
   Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- Use safety glasses. Use a face or dust mask as well, if the operation is dusty or if the tool is being used in enclosed spaces.
- Connecting dust extraction equipment. If devices are provided for the connection of dust extraction and collection ensure these are connected and properly used, especially in confined areas.
- Do not abuse the cord. Never carry the tool by its cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.
- Secure the work. Use clamps or a vice to hold the work. It is safer than using a hand and it frees both hands to operate the tool.
- Do not overreach. Keep proper footing and balance at all times.

- Maintain the tool with care. Keep a cutting tool sharp and clean for better and safer performance.
   Follow the instructions for lubricating and changing accessories. Inspect the tools cord periodically and, if damaged, have repaired by an authorised service agent. Inspect the extension cord periodically and replace if damaged. Keep the handles dry, clean and free from oil and grease.
- Disconnect the tool when not in use, before servicing and when changing accessories such as blades, bits and cutters.
- Remove adjusting keys and wrenches. Form the habit of checking to see that keys and adjusting wrenches are removed from the tool and replaced in the storage area before switching on.
- Avoid unintentional starting. Do not carry a plugged-in tool with a finger on the switch.
   Ensure the switch is off when plugging in.
- Use an outdoor extension cord. When a tool is used outdoors, only use an extension cord intended for outdoor use and so marked.
- Stay alert. Watch what you are doing, use common sense and do not operate the tool when tired.
- Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine whether it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.

  A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in the product booklet. Have defective switches replaced by an authorised service agent. Do not use the tool if the switch does not turn it on and off.
- Warning! The use of any accessory or attachment, other than recommended in the product booklet, may present a risk of personal injury.
- Have the tool repaired by a qualified person. The electrical tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise, this may result in considerable danger to the user.

# ADDITIONAL PRECAUTIONS TO TAKE WHEN SANDING PAINT AND MEDIUM DENSITY FIBREBOARD (MDF)

Sanding of lead based paint is **not recommended** due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women.

Any pre-1960 building may have been painted in the past with paint containing lead, and covered by additional layers of paint. It is important to determine whether the paint that is being sanded contains lead before beginning work. This can be done with lead test kits or by a professional decorator.

If in doubt, we recommend the following precautions when sanding any paint or MDF.

### PERSONAL SAFETY

No children or pregnant women should enter the work area where the paint sanding is being done until all cleaning up has been completed.

A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing.

Note: Only those dust masks suitable for working with lead paint dust and fumes should be used. Ordinary paint masks do not offer this protection.

No eating, drinking or smoking should be done in the work area to prevent ingesting paint particles. Workers should wash and clean up **before** eating, drinking or smoking. Articles of food ,drink etc., should not be left in the work area where dust could settle on them.

# **ENVIRONMENTAL SAFETY**

Paint should be removed in such a manner as to minimise the amount of dust generated Areas where paint removal is occurring should be sealed with plastic sheeting.

Sanding should be done in a manner to reduce tracking

### **CLEANING AND DISPOSAL**

of paint dust outside the work area.

All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project. Vacuum filter bags should be changed frequently. Items of clothing, dust sheets, toys, washable furniture and utensils should be washed thoroughly before being used again.

### SAVE THESE INSTRUCTIONS!

### **DOUBLE INSULATION**

The tool is double insulated. This means that all the external metal parts are electrically insulated from the mains power supply. This is done by placing insulation barriers between the electrical and mechanical components making it unnecessary for the tool to be earthed.

Note: Double insulation does not take the place

**Note:** Double insulation does not take the place of normal safety precautions when operating the tool. The insulation system is for added protection

against injury resulting from a possible electrical insulation failure within the tool.

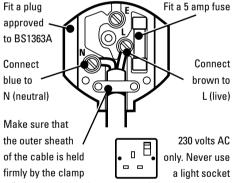
# **ELECTRICAL SAFETY**

Be sure the supply is the same as the voltage given on the rating plate. The tool is fitted with a two-core cable and plug.

### MAINS PLUG REPLACEMENT (UK ONLY)

Should the mains plug need replacing and you are competent to do this, proceed as instructed below. If you are in doubt, contact a Black & Decker service agent or a qualified electrician.

- Disconnect the plug from the power supply.
- Cut off the plug and dispose of safely. A plug with bared copper conductors is very dangerous if engaged in a live socket outlet.
- Only fit BS1363A approved plugs fitted with the correctly rated fuse. Note: Fuses do not give personal protection against electric shock.
- The cable wire colours, or a letter, will be marked at the connection point of most good quality plugs.
   Attach the wires to their respective points in the plug (see diagram). Brown is L (live) and blue is N (neutral).



 Before replacing the top cover of the plug ensure that the cable restraint is holding the outer sheath of the cable firmly and that the two leads are correctly fixed at the terminal screws. If the fuse cover is missing or damaged do not use the plug.
 For replacement or detachable fuse covers, contact a Black & Decker service agent.

**Warning!** Never connect live or neutral wires to the earth pin marked E or  $\frac{1}{2}$ .

# MAINS PLUG REPLACEMENT (AUSTRALIA AND NEW ZEALAND ONLY)

Should the mains plug or cordset of the product be damaged, it must only be replaced by an authorised

Black & Decker service agent because special purpose tools are required.

# **EXTENSION CABLES**

Up to 30m (100ft) of 3-core extension cable can be used without undue loss of power. **Note:** An extension cable should not be used unless absolutely necessary. Use of an improper extension cable could result in a risk of fire and electric shock. If an extension cable must be used, make sure it is properly wired, contains the correct rated fuse as recommended in its literature and is in good electrical condition.

### **LINWANTED TOOLS AND THE ENVIRONMENT**

Should you find one day that the tool needs replacement or is of no further use, think of the protection of the environment. Black & Decker service agents will accept old tools and will dispose of them in an environmentally safe way.

# THE BLACK & DECKER GUARANTEE (UK, AUSTRALIA AND NEW ZEALAND ONLY)

If the Black & Decker product becomes defective due to faulty materials and workmanship, within 24 months from the date of purchase, we guarantee to either replace all defective parts or at our discretion, replace the unit free of charge provided that:

- The product is returned to us or our authorised repairers with evidence of date of purchase.
- The product has not been used for trade, professional or hire purposes.
- The product has not been subjected to misuse or neglect.
- The product has not sustained any damage through foreign objects, substances or accidents.
- Repairs have not been attempted by anyone other than our authorised repair agents.

This guarantee is offered as an extra benefit and is additional to the customers statutory rights.

# AFTER SALES SERVICE FOR YOUR BLACK & DECKER PRODUCT (UK, AUSTRALIA AND NEW ZEALAND ONLY)

Black & Decker offers a nationwide network of authorised service agents. The use of other than genuine Black & Decker accessories and parts may damage or reduce the performance of your Black & Decker product and may also endanger the user. The terms and conditions of the warranty may also be effected.

# OUR AFTER SALES SERVICE POLICY (UK, AUSTRALIA AND NEW ZEALAND ONLY)

It is our aim that all Black & Decker customers should be totally satisfied with their Black & Decker product and after sales service, but if help or advice is needed please contact your local Black & Decker authorised repair agent who will be happy to help. Full details of our after sales service and a list of these agents can be found on the Internet at www.2helpU.com. Alternatively, call our Service and Information Centre whose number you will find towards the back of this manual.

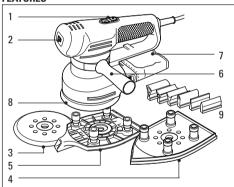
### **ACCESSORIES**

The performance of any power tool is dependant upon the accessory used. Black & Decker accessories are engineered to high quality standards and are designed to enhance the performance of your tool. Buying a Black & Decker accessory will ensure that you get the very best from your Black & Decker tool.

### TECHNICAL DATA

The level of sound pressure of the tool is in accordance with EEC legislation. It is recommended that you take appropriate measures for the protection of your hearing if the sound level seems uncomfortable. This normally equates to a sound pressure in excess of 85dB (A).

## **FEATURES**



- 1. On/off switch
- 2. Variable speed control
- 3. Round base
- 4. Pointed base
- 5. Profile base
- 6. Side handle
- 7. Dust bag
- 8. Automatic brake system
- 9. Sanding profiles

**Note:** This user manual also covers more than one catalogue number within this product group. Refer to your carton for details of your product.

### **OPERATING YOUR MULTI SANDER**

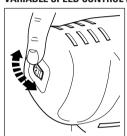


To switch your multi sander on, press the on/off switch on the side marked "I".

To switch your multi sander off, press the on/off switch on the side marked "O".

Before plugging your multi-sander in, make sure it is switched off.

# VARIABLE SPEED CONTROL (KA210E/KA220E/KA230E)



The variable speed control gives the best operating performance for each material. As a general rule, use low speed for polishing and for sanding acrylic/ synthetic materials, and high speed for wood and metal

### Material Variable speed setting Hardwood (beech) 4-5 4-5 Softwood (pine) Veneer wood 3-5 Synthetic materials 3-4 Acrylic sheet 1-3 Non-ferrous metals 4-5 Steel 4-5 4-5 Lacquer and paint removal 1-3 Polishina

# USING YOUR MULTI SANDER AS A RANDOM ORBITAL SANDER (KA200/KA220/KA220E/KA230E)

4-5



Rust removal

reduced risk of swirl marks.

With the round base fitted, you can use your multi sander as a random orbital sander. This gives a circular/ orbital movement, combined with a rotational movement; thus giving improved stock removal and

### FITTING THE ROUND BASE

Disconnect the plug from the electricity supply.



Position the round base on the spindle.
Position the washer on the spindle and fit the screw. Hold the base and tighten the screw with the allen key provided. The base will wear after some time.
Replacements are

available as an accessory.

# FITTING THE SANDPAPER (ROUND BASE)

Disconnect the plug from the electricity supply.



Hold your multi sander with the base upwards. Press the sandpaper disc onto the base, making sure the base is completely covered. It is not necessary to align the holes in the paper and the base. Never use your multi

sander without a sandpaper disc.

# USING YOUR MULTI SANDER IN THE ORBITAL MODE (KA210/KA210E/KA220/KA220E/KA230E)

# **Detail sanding**

Use your multisander with the point of the base pointing forwards. This position permits you to sand into difficult or confined areas.

### Orbital sanding

Use your multi-sander with the point of the base to the rear. This permits you to sand large areas with areas and corners that have easy access.

### FITTING THE POINTED BASE

Proceed as follows:

Disconnect the plug from the electricity supply.



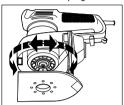
Position the pointed base on the spindle, making sure the legs of the base fit into their housings. The base will wear after some time. Replacements are available as an accessory. Place the

washer in position on the base and fit the screw using the allen key provided. Press the base on firmly when tightening the screw.

# REVERSING THE POINTED BASE (KA210/KA210E/KA220/KA220E/KA230E)

Proceed as follows:

Disconnect the plug from the electricity supply.



Turn the screw
anticlockwise using the
allen key provided in
the handle. Remove the
screw and the washer
from the spindle. Hold
the base in position
with the point facing

rearwards. Fit the washer and the screw. Tighten the screw using the allen key provided. Press the base on firmly when tightening the screw.

### FITTING THE SANDPAPER (POINTED BASE)

Proceed as follows:

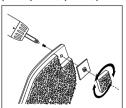
Disconnect the plug from the electricity supply.



Detach the two diamond-shaped tips from the main sheet. Place the sandpaper on the pointed base, making sure the holes of the paper and the base are aligned. Never use your multi

sander without sandpaper and always use a full sheet of sandpaper.

# TIP COMPONENTS (POINTED BASE) (KA210/KA210E/KA220 /KA220E/KA230E)



Each sheet of sandpaper has a removable tip, with two spare tips attached. To obtain maximum use from each sheet, detach and turn the tip when the front part is worn.

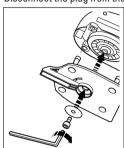
When the whole tip is worn, replace it with one of the spare tips provided. The tip of the backing pad is removable. When the front part is worn, turn the tip. When the tip is completely worn, replace the tip. Spare tips are available as accessories. When the tip of the hard plastic tip holder is worn, remove the screw and

turn the holder. Spare holders are available as accessories.

### FITTING THE PROFILE BASE (KA230E)

Proceed as follows:

Disconnect the plug from the electricity supply.



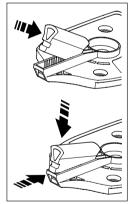
Position the profile base on the spindle, with the long section pointing towards the front of your sander. Make sure the legs fit into their housings. Place the washer in position on the base and fit the screw using the allen key provided.

Press the base on firmly when tightening the screw.

# FITTING THE SANDING PROFILE (KA230E)

Proceed as follows:

Disconnect the plug from the electricity supply.



There are six sanding profiles supplied, each being different in size and shape. Select the sanding profile most suitable for the task and push into the slot in the front of the base. To do this, first locate one end of the sanding profile into the recess at the back of the profile base slot, then push the other end so that it locates in the

recess in the front of the profile base. The sanding profile will now be positively located. The sanding profile can be removed by depressing the small black square section which is visible at the front of the profile base, whilst pulling the profile away from its locating slot.

# FITTING THE SANDING PAPER (PROFILE BASE) (KA230E)

Proceed as follows:

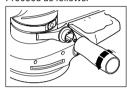
Disconnect the plug from the electricity supply. With the profile fitted in the base, fit the paper by applying light pressure making sure that the paper



follows the shape. Never use your sander without sandpaper. A click is heard when the dustbag is correctly fitted. The plastic baffle is removable. However, it is not necessary to remove the baffle when emptying the dustbag. Do not wash the dustbag. Empty the dustbag every 10 minutes.

# REMOVING THE SIDE HANDLE

Proceed as follows:



Turn the handle anticlockwise and unscrew completely. Remove the connecting shoulder. Unclip the metal clip.

### ADJUSTING THE SIDE HANDLE

Proceed as follows:



Loosen the handle slightly. Move the metal clip around the body of the sander until the side handle is in the desired position.
Tighten the handle.

# **DUST EXTRACTION SYSTEM**

Most of the dust from the work surface is collected in the dustbag. The extraction fan of your multi sander draws the dust from the surface through the holes in the base. The dust then passes through the fan shroud to the dustbag. You can also use your multi sander with a vacuum cleaner. A special adaptor is available from Black & Decker as an accessory.

# **EMPTYING THE DUSTBAG**

Disconnect the plug from the electricity supply.

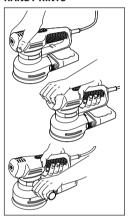


Hold your multi sander vertically with the dustbag facing downwards. Squeeze the sides of the dustbag together, adjacent to the finger grips and pull the bag gently. Empty the dustbag and replace on the sander.

# AUTOMATIC BRAKE SYSTEM (ABS) (KA200/KA220/KA220E/KA230E)

Your multi sander has an automatic brake system (ABS). This feature gives you optimal control as it keeps the speed of the disc below that of the motor when your sander is not on the work surface. When your sander is switched off, the disc stops very quickly.

### HANDY HINTS



You can hold your multi sander in various positions for maximum comfort but make sure you do not block the air intake slots.

- Do not apply excessive pressure when you use your multi sander, especially in the random orbit mode.
- Replace the sandpaper when it is worn.
- Use high grit sandpaper for a fine finish. As a general rule, start with coarse grits and gradually change to the finer grits for the final finish.
- When using your multi sander to sand profiles be sure to keep the profile square to the workpiece.
- Smaller radii sanding profiles work better with finer grit sandpaper.
- Ensure that the platen is flat on the work surface whilst sanding.

### EC DECLARATION OF CONFORMITY

We declare that units:

**KA200, KA210, KA210E, KA220, KA220E, KA230E** conform to 89/392/EEC, 89/336/EEC, EN55014, 73/23/EEC, EN55104, EN50144

A weighted sound pressure 77.1dB (A)

A weighted sound power 90.1dB (A) Hand/arm weighted vibration <2.5m/s<sup>2</sup>



Brian Cooke - Director of Engineering Black & Decker Ltd, Spennymoor, County Durham DL16 6JG United Kingdom

The Black & Decker policy is one of continuous improvement to our product and as such we reserve the right to change the product specification without prior notice.

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	7 Clarice Road, Box Hill, Victoria 3128		
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	Penrose, Auckland		
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	Suite no 107, PostNet X65	Fax:	011 314 4435
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United Kingdom	Black & Decker	Tel:	01753 574277
	210 Bath Road, Slough	Tlx:	848317 BAND MH
	Berkshire SL1 3YD	Fax:	01753 551155

Part no: 375614 2/99.4

Address of the dealer where your multi sander was purchased:	Date of your purchase:
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Name:House number or name and street:	Was your multi sander a gift?  Was vour multi sander vour first purchase?
Town:	Was your multi sander bought as a replacement?
County or state:	What was the price of your multi sander?
Postcode:	Address of the dealer where your multi sander was purchased:
Product catalogue number: KA2/	
Data protection act: Tick this box if you prefer not to receive information from Black & Decker or other companies.	

# **GUARANTEE CARD FOR THE UK, IRELAND AND SOUTH AFRICA**

South Africa: Black & Decker South Africa (Pty) Ltd, Suite no 107, PostNet X65, Halfway House 1685 United Kingdom & Ireland: PO Box 821, Slough, Berkshire, SL1 3AR

Please complete this section immediately after the purchase of your multi-sander and post it to the Black & Decker address in your country (above).

