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BELT SANDER

MODEL NO: CBS2

PART NO: 64620<u>80</u>

OPERATION & MAINTENANCE INSTRUCTIONS





ORIGINAL INSTRUCTIONS

DL1021 -Rev 6

INTRODUCTION

Thank you for purchasing this CLARKE Belt Sander.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

SPECIFICATIONS

Model Number	CBS2
Rated Voltage	230V~50Hz
Power Input	1200 W
No Load Speed	480m/min
Dimensions	352 x 166 x 193 mm
Weight	6.5 kg
Vibration	2.53 m/s ² Uncertainty Factor (K) =1.28
Belt size	610mm x 100mm
Dust outlet diameter	24mm inner/30.6mm outer

POWER TOOL SAFETY WARNINGS

WORK AREA

- Keep the work area clean and well lit. Cluttered and dark areas invite accidents.
- 2. **DO NOT** operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- 3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

- Power tool plugs must match the outlet. NEVER modify the plug in any way.
 DO NOT use adaptor plugs with earthed (grounded) power tools.
 Unmodified plugs and matching outlets will reduce the risk of electric shock.
- 2. **DO NOT** expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- DO NOT abuse the cable. Never use it for carrying, pulling or unplugging the power tool. Keep the cable away from heat, oil, sharp edges or moving parts. Damaged or entangled cables increase the risk of electric shock.
- 4. When operating a power tool outdoors, use an extension cable suitable for outdoor use. Use of a cable suitable for outdoor use reduces the risk of electric shock
- 5. If operating the power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.

PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating a power tool. **DO NOT** use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in personal injury.
- 2. Use safety equipment. **ALWAYS** wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 3. Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

- 4. Remove any wrench before turning the power tool on. A wrench left attached to a rotating part may result in personal injury.
- 5. **DO NOT** overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 6. Dress properly. **DO NOT** wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

POWER TOOL USE AND CARE

- DO NOT force the power tool. Use the correct accessories for your application. The correct power tool will do the job better and safer at the rate which it was designed for.
- DO NOT use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source before changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 4. Store idle tools out of the reach of children and **DO NOT** allow persons unfamiliar with the power tool or these instructions to operate it. Power tools are dangerous in the hands of untrained users.
- 5. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- 6. Use the power tool and accessories in accordance with these instructions and in the manner intended, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.
- 7. The performance of this tool may vary, depending upon variations in line voltage. Extension cable usage may also affect performance.

SERVICE

 Have your power tool serviced by qualified service personnel using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

ADDITIONAL SAFETY WARNINGS FOR SANDERS

- 1. Secure the workpiece to a stable platform. Holding the workpiece by hand or against your body may lead to loss of control.
- 2. Dust arising from sanding may endanger the health of the operator and possible bystanders. Wear a dust mask and ensure that persons entering the work area are also protected.
- 3. Remove all dust after sanding.
- 4. Take care when sanding lead based paint or when sanding wood or metal which may produce toxic dust, **DO NOT** let children or pregnant women enter the work area.

VIBRATION

The declared vibration emission values stated in the specifications have been measured in accordance with a standard test method provided by EN 60745 and may be used for comparing one tool with another. The declared vibration emission value may also be used in a preliminary assessment of exposure.



WARNING: THE VIBRATION EMISSION VALUE DURING ACTUAL USE OF THE POWER TOOL CAN DIFFER FROM THE DECLARED VALUE DEPENDING ON THE WAYS IN WHICH THE TOOL IS USED. THE VIBRATION LEVEL MAY INCREASE ABOVE THE LEVEL STATED.

ELECTRICAL CONNECTIONS



WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230VAC 50Hz. Connecting it to any other power source may cause damage.

This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.

If the plug has to be changed because it is not suitable for your socket, or due to damage, it should be cut off and a replacement fitted, following the wiring instructions shown below. The old plug must be disposed of safely, as insertion into a mains socket could cause an electrical hazard.

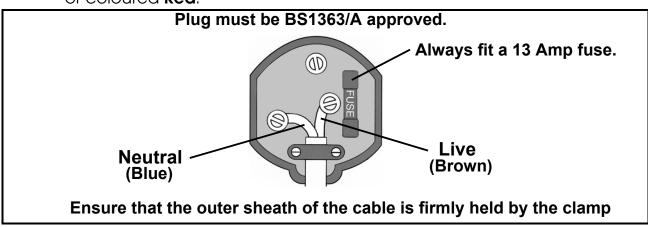


WARNING: THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

BLUE = NEUTRAL BROWN = LIVE

If the colours of the wires in the power cable of this product do not correspond with the markings on the terminals of your plug, proceed as follows.

- The Blue wire must be connected to the terminal marked N or coloured Black.
- The Brown wire must be connected to the terminal which is marked L or coloured Red.



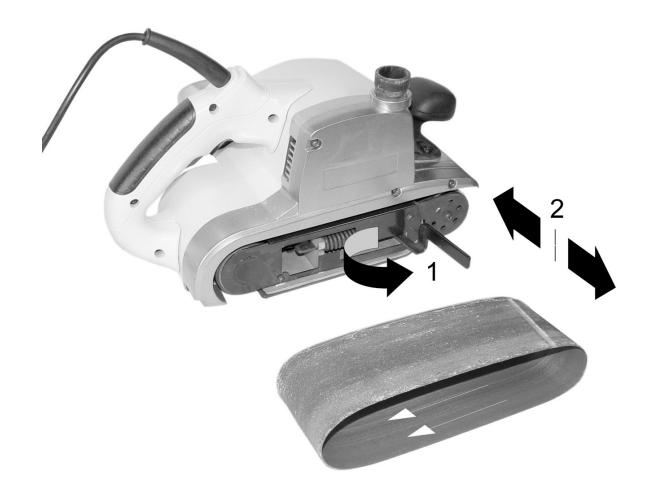
We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)

This symbol indicates that this is a Class II product, and does not require an earth connection.
an earth connection.

PREPARATION



CAUTION: DISCONNECT THE PLUG FROM THE POWER SUPPLY BEFORE CHANGING THE BELT.



CHANGING THE SANDING BELT

- 1. Pull out the belt tension lever.
- 2. Slide the old belt away from the rollers.
- 3. Slide the new sanding belt into position over the front and rear rollers, ensuring that the arrows on the sanding belt and on the tool are pointing in the same direction.
- 4. Push the sanding belt tension lever back into the recess to apply the tension.

ADJUSTING THE BELT TRACKING

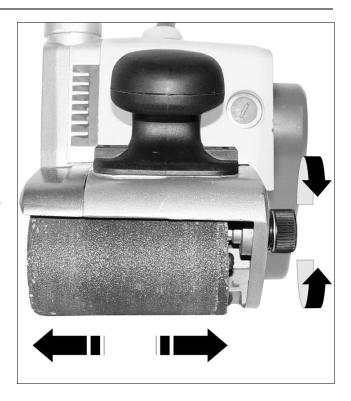


WARNING: ALWAYS WEAR EYE PROTECTION WHEN ADJSUTING OR OPERATING THE SANDER.

Having changed the belt, it is important to make sure that the belt runs square on the rollers. This is achieved by adjusting the tracking.

To adjust the tracking, proceed as follows:

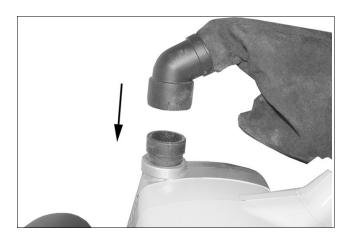
- 1. Switch on the belt sander.
- 2. Adjust the tracking screw until the sanding belt is running in line with the flat side of the tool.
- 3. Turn the screw anti-clockwise to run the belt into the tool. Turn the screw clockwise to run the belt away from the tool.



FITTING THE DUST COLLECTION BAG

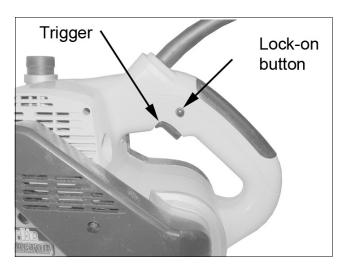
When using the belt sander, certain materials will generate harmful or toxic dusts and grit. For this reason it is important to fit the dust collection bag. Do not allow the dustbag to get too full. Empty the bag before it becomes overloaded.

- Put the plastic nozzle of the dust collection bag over the dust extraction outlet.
- 2. Push firmly home.
- To empty the dust bag, grasp the bag by the plastic nozzle and pull away from the dust extraction outlet.



OPERATION

- 1. Connect the plug to the mains socket and switch on.
- 2. Hold the sander firmly with both hands
- Squeeze the trigger, the sander will start.
- 4. Release the trigger to stop the sander.
- 5. If continuous operation is required, squeeze the trigger, and depress the lock-on button and release the trigger.
- 6. To stop the belt sander, squeeze the trigger to release the lock-on button, then release the trigger.



USING THE SANDER

- 1. Make sure that there are no nails or other objects in the area to be sanded.
- 2. Let the sander reach full speed before applying it to the work surface.
- Do not apply pressure to the sander during use. The weight of the sander alone is sufficient for normal use.
- 4. Move the sander evenly over the work area. Do not allow the sander to stay in one place for too long, this will give an uneven finish.
- 5. Replace worn sanding belts. The performance of your sander is dependent on the quality of the sanding belts being used.
- 6. Remove the sander from the work area before releasing the trigger, (wait until the belt has stopped moving before putting the sander down.

SANDING HINTS

- 1. Always use both hands to hold the sander and clamp the workpiece for added stability and safety.
- 2. When sanding wood, always sand in the direction of the grain,
 - Do not exert pressure on the sander.
 - Regularly check the condition of the abrasive accessory and replace when necessary.
 - On very uneven surfaces or when removing layers of paint, start with a coarse grit. On other surfaces, start with a medium grit. In both cases, gradually change to a fine grit for a smooth finish.

MAINTENANCE



WARNING: MAKE SURE THAT THE BELT SANDER IS SWITCHED OFF AND DISCONNECTED FROM THE MAINS SUPPLY BEFORE STARTING ANY CLEANING OR MAINTENANCE PROCEDURES.

After use clean out any accumulated dust etc. Keep the cooling vents clear. If the sander should become too hot, run it for 2 minutes without load.

Clean the housing with a soft cloth. Any worn or damaged parts should be replaced by qualified personnel. Keep the handles clean and free from oil and grease. Refer to qualified service personnel if internal maintenance is required.

Always store the belt sander in the carrying case.

CHANGING THE CARBON BRUSHES



- 1. With a suitable screwdriver, remove the carbon brush caps on either side of the belt sander.
- 2. Remove the carbon brush/spring assembly.
- 3. If the carbon brushes are worn down to 4mm, or less, replace them with the new brushes (1 spare set supplied).
- 4. Replace the carbon brush caps and tighten them.

NOTE: Both brushes must be replaced at the same time.

GENERAL CARE

Your sander has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper care.

• Regularly clean the ventilation slots using a soft dry brush or dry cloth.

- Only clean the motor housing using a clean damp cloth. Do not use any abrasive or solvent-based cleaner.
- A damaged power cable should be replaced by your Clarke dealer or a qualified electrician.
- The bearings in this sander are sealed for life and require no maintenance.

TROUBLE SHOOTING

SANDER IS OVERHEATING

This indicates the machine is dirty. Clean the ventilation holes, and blow out with compressed air or clean with a dry cloth.

Overloading the machine will also cause overheating. Do not apply excessive pressure.

EXCESSIVE SPARKING OCCURS

This indicates worn brushes. This problem is quickly remedied but you should consult your CLARKE dealer for parts and advice.

SANDER DOES NOT OPERATE WHEN SWITCHED ON

Check to ensure the fuse is sound and replace if necessary. If the fuse is sound or blows repeatedly, consult your CLARKE dealer.

THE DUST IS NOT EXTRACTED

Dust bag is full (empty waste bag), dust extractor flue is blocked, this is usually caused by allowing bag to become too full, (remove and empty bag, also clear blockage).

ACCESSORIES

A wide range of accessories is available from your nearest CLARKE dealer, for further information, contact your nearest dealer, or telephone CLARKE International Sales department on 01992 565300.

DECLARATION OF CONFORMITY



Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

Electromagnetic Compatibility Directive 2014/30/EU

Machinery Directive. 2006/42/EC

Restriction of Hazardous Substances (amended by (EU) 2015/863). 2011/65/EU

The following standards have been applied to the product(s):

EN 55014-1:2017, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013,

EN 62841-1:2015+AC:15, EN 62841-2-4:2014+AC:15, IEC 62321-5:2013, IEC 62321-4:2013,

EN 62321-7-2:2017, IEC 62321-7-1:2015, IEC 62321-6:2015, IEC 62321-8:2017.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2006

Belt Sander

CBS2 Product Description: Model number(s):

12/10/2021 ٨ Serial / batch Number: Date of Issue:

J.A. Clarke

Director

Page 1 of 1

CBS2 UKCA Clarke DOC 101221



Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following statuary requirement(s):

Electromagnetic Compatibility Regulations 2016 Supply of Machinery (Safety) Regulations 2008 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

Regulations 2012

The following standards have been applied to the product(s):

EN 55014-1:2017, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013,

EN 62841-1:2015+AC:15, EN 62841-2-4:2014+AC:15, IEC 62321-5:2013, IEC 62321-4:2013,

EN 62321-7-2:2017, IEC 62321-7-1:2015, IEC 62321-6:2015, IEC 62321-8:2017.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2021

Product Description: Model number(s):

Belt Sander CBS2 N/A

Serial / batch Number:

Date of Issue:

Signed:

J.A. Clarke Director Page 1

1 of 1

CBS2 CE Clarke DOC 101221

PARTS DIAGRAM 60 61-62 63 9/ 13 -

PARTS LIST

1	Screw st 4.2 x 16
2	Soft grip
3	Hand stem cover
4	Capacitor
5	Inductor
6	Switch
7	Cable clamp
8	Screw st 3.8 x 16
9	Cable cover
10	Power cable
11	Housing
12	Small belt wheel
13	Belt cover
14	Screw M4 x 12
15	Carbon brush
16	Carbon brush holder
17	Brush holder cover
18	Stator
19	Screw st4.8 x 45
20	Bearing 6000
21	Insulating washer
22	Fan guard
23	Rotor
24	Bearing 6000
25	Middle cover
26	Screw st4.2 x 18
27	Fan
28	Screw M5 x 12
29	Dust cover
30	Dust outlet
31	Dust outlet O-ring

	32	Side cover
	33	Screw st4.2 x 45
	34	Label
	35	Sanding belt
	36	Screw M4 x 12
	37	Front cover
•	38	Front axle
	39	Pressure spring
•	40	Front axle frame
	41	Nut M12
	42	Rear roller
	43	Bearing 6200
	44	Motor support frame
	45	Screw M4 x 16
	46	Bronze sleeve
	47	Rear axle
	48	Main gear
•	49	Gearbox cover
•	50	Screw M4 x 12
	51	Belt drive gear
	52	Nut M8
	53	Belt
	54	Bearing 6001
	55	Shaft gear
	56	Needle bearing
	57	Label
	58	Screw M5 x 8
	59	Adjusting knob
	60	Plain washer 16
	61	Front handle cover
	62	Front handle
14		

6	3	Screw M4x12
6	4	Adjusting spring
6	5	Screw st4.2 x 14
6	6	Screw M4 x 10
6	7	Bottom plate
6	8	Rubber cushion
6	9	Fixing pin

70	Screw st4.2 x 16
71	Baffle
72	Retaining washer 12mm
73	Front roller
74	Needle bearing
75	Ring washer 18mm

ENVIRONMENTAL RECYCLING POLICY

X

By purchasing this product, the customer is taking on the obligation to deal with its safe disposal in accordance with the Waste Electrical and Electronic Equipment (WEEE).

This product must not be disposed of with general household waste but be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

This product contains valuable raw materials. Metal products should be taken to your local civic amenity site for recycling.

A SELECTION FROM THE VAST RANGE OF





AIR COMPRESSORS

From DIY to industrial, Plus air tools, spray guns and accessories.

GENERATORS

Prime duty or emergency standby for business, home and leisure.

POWER WASHERS

Hot and cold, electric and engine driven - we have what you need

WELDERS

Mig, Arc, Tig and Spot. From DIY to auto/industrial.

METALWORKING

Drills, grinders and saws for DIY and professional use.

WOODWORKING

Saws, sanders, lathes, mortisers and dust extraction.

HYDRAULICS

Cranes, body repair kits, transmission jacks for all types of workshop use.

WATER PUMPS

Submersible, electric and engine driven for DIY, agriculture and industry.

POWER TOOLS

Angle grinders, cordless drill sets, saws and sanders.

STARTERS/CHARGERS

All sizes for car and commercial use.



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Parts Enquiries
Parts@clarkeinternational.com

Servicing & Technical Enquiries
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