

# **60MM ELECTRIC PLANER**

MODEL NO: CEP450

PART NO: 6462022

# OPERATION & MAINTENANCE INSTRUCTIONS



**ORIGINAL INSTRUCTIONS** 

DL0422 - ISS 3

# INTRODUCTION

Thank you for selecting this Clarke Electric Planer.

The electric planer is intended for removing surface material with a rotating blade that is parallel to the base plate.

# **GUARANTEE**

The product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Your receipt is required as proof of purchase.

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

Faulty goods must be returned to their place of purchase, do not return it to us without prior permission.

This guarantee does not effect your statutory rights.

# **ENVIRONMENTAL RECYCLING POLICY**



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

# **GENERAL POWER TOOL SAFETY WARNINGS**



WARNING: READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS.
FAILURE TO FOLLOW THE WARNINGS AND INSTRUCTIONS CAN RESULT IN ELECTRIC SHOCK, FIRE AND/OR INJURY.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated electric planer.

# **WORK AREA SAFETY**

- 1. **Keep work area clean and well lit.** Cluttered or 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 can 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. Do not modify the plug in any way.
   Do not use any adapter plugs with earthed (grounded) power tools.
   Unmodified plugs and matching outlets will reduce risk of electric shock.
- 2. Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- 3. **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 cord. Do not use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- 6. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

# PERSONAL SAFETY

- 1. 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 can result in personal injury.
- 2. **Use personal protective equipment. Always wear eye and ear protection.**Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 3. Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- 4. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool can 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 correctly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- 7. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and correctly used. Use of dust collection can reduce dust-related hazards.

# POWER TOOL USE AND CARE

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- 2. **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.
- 3. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 4. Store idle power tools out of the reach of children and do not let persons unfamiliar with the power tool or these instructions to operate the power tool. 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 can affect the power tool's

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- **operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- 6. **Keep cutting tools sharp and clean.** Sharp cutting edges are less likely to bind and are easier to control.
- 7. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

# **SERVICE**

1. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

# PLANER SAFETY WARNINGS

- 1. Wait for the blade to stop before setting the planer down. An exposed rotating blade can strike the worktop, leading to possible loss of control and injury.
- 2. Hold the planer by insulated gripping surfaces, because the blade may contact its own cable. Cutting a "live" wire may make exposed metal parts of the planer "live" and could give the operator an electric shock.
- 3. Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the workpiece by your hand or against the body leaves it unstable and can lead to loss of control.
- 4. Always start the planer before the blade is in contact with the workpiece and let the blade reach full speed. The tool can vibrate or chatter if blade speed is too slow at beginning of the cut and possibly kickback.
- 5. Check the workpiece for nails or screws. If there are nails/screws, either remove or set them well below intended finished surface. Kickback, damage to the blades and personal injury can result If the planer blades strike objects like nails.
- 6. Unplug the planer before changing accessories. Before plugging the planer in, check that the trigger lock is "OFF". Accidental start-ups can occur if the planer is plugged in while changing an accessory.
- 7. After changing blades, rotate the blade drum to make sure the blades are not hitting any part of the housing and that the blade locking screws are tight. Spinning blades could strike the tool housing and damage the tool as well as causing possible injury.
- 8. Always hold the planer firmly with both hands for maximum control.

- 9. **Do not pull the plane backward over the workpiece.** Loss of control can occur.
- 10. Do not put your fingers or any objects into the shavings exhaust port or clean out shavings while the tool is running. Contact with blade will cause injury.
- 11. Remove the plug from the power source if it becomes necessary to remove woodchips. The blades are hidden from view and you may be cut if the blade is touched.
- 12. Do not use dull or damaged blades. Sharp blades must be handled with care. Damaged blades can snap during use. Dull blades require more force to push the tool, possibly causing the blade to break.

# **SAFETY SYMBOLS**



Read instruction manual before use



Wear safety glasses



Wear ear defenders

# **ELECTRICAL CONNECTIONS**



WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS FULLY BEFORE CONNECTING THE TOOL TO THE MAINS SUPPLY.

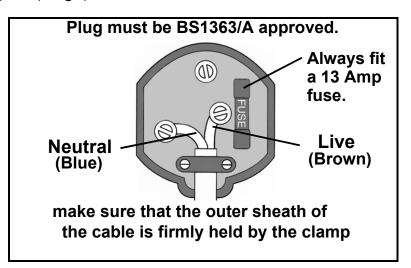
This tool is provided with a standard 13 amp, 230 volt (50Hz), BS 1363 plug, for connection to a standard, domestic electrical supply. If the plug need changing, make sure that a plug of identical specification is used.



WARNING: THE WIRES IN THE CABLE ARE COLOURED AS FOLLOWS: BLUE = NEUTRAL BROWN = LIVE

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

- Connect the **blue** wire to the terminal which is marked **N**.
- Connect the brown wire to the terminal which is marked L.



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

If in doubt, consult a qualified electrician. DO NOT attempt any repairs yourself

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

# **EXTENSION CABLE**

Always use an approved extension cable suitable for the power rating of this tool (see specifications), the conductor size must be at least the same size as that on the machine, or larger. When using a cable reel, always unwind the cable completely.

# **OPERATION**

# **USING THE SAFETY KICKSTAND**

The safety kickstand on the rear of the planer swings down to help keep the blade from touching the workbench when the planer is not being used.

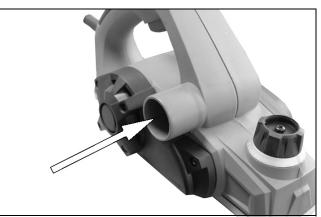
The kickstand is designed to swing up and out of the way when the back of the planer crosses the leading edge of the workpiece.



# **DUST EXTRACTION**

When possible, connect your planer to a dust extraction system or dust bag using the dust extraction port.

- Hose adaptors (not included) may be needed depending on the dimension of your dust hose.
- See your local Clarke dealer for our latest range of dust extractors



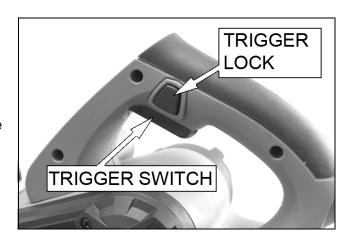


WARNING: SHAVINGS MAY JAM IN THE DUST EXTRACTION PORT WHEN CUTTING DAMP WOOD. DO NOT INSERT YOUR FINGER INTO THE DUST EXTRACTION PORT. CLEAN OUT THE SHAVINGS WITH A STICK, BUT ONLY WHEN THE BLADE HAS STOPPED RUNNING AND THE TOOL HAS BEEN DISCONNECTED FROM THE POWER SOURCE.

# **SWITCHING ON/OFF**

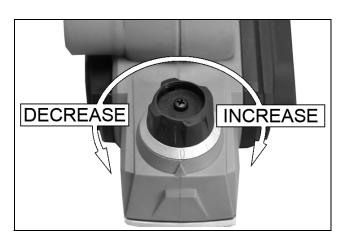
The planer has a trigger lock to prevent accidental start-ups.

- To turn the planer on, push the trigger lock and then squeeze the trigger switch.
- 2. To switch off, release the trigger switch.



# ADJUSTING THE DEPTH OF CUT

- Rotate the depth adjustment knob until the indicator arrow aligns with the desired cutting depth on the depth gauge.
  - The minimum cutting increment is 0.2 mm.
  - The maximum cutting depth of the planer is 1.5 mm.



**NOTE:** For optimum planing performance, the maximum cutting depth is 0.4 mm per pass. Make multiple cuts, removing less than 0.4 mm with each pass to achieve the total cutting depth.



CAUTION: ALWAYS ENSURE THAT THE NUMBER ON THE DEPTH GAUGE IS AT THE "0" POSITION WHEN THE PLANER IS NOT IN USE. HOWEVER, EVEN AT "0", A SLIGHTLY PROTRUSIVE BLADE COULD STILL MAKE CONTACT DEPENDING ON HOW THE BLADE WAS INSTALLED. ENGAGE THE SAFETY KICKSTAND TO PREVENT THE BLADE FROM TOUCHING THE WORKBENCH.

#### **GRAIN DIRECTION**

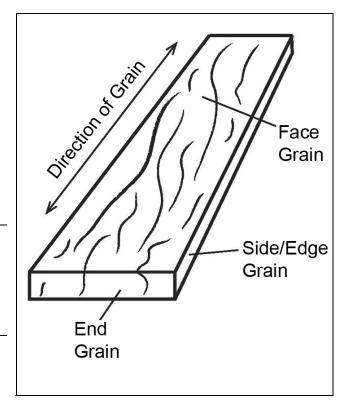
The planer must always cut in the same direction as the grain of the wood.

There are six sides to every board: two face grains, two side/edge grains, and two end grains.

When planing the face and side/ edge grain, always plane in the direction of the grain.



WARNING: DO NOT PLANE ACROSS THE GRAIN OF THE WOOD. DO NOT PLANE END GRAIN AS THE WOOD WILL SPLINTER.



# **USING THE PLANER**

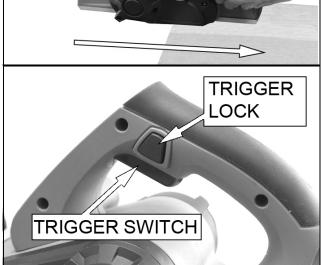


WARNING: WEAR SAFETY GOGGLES AT ALL TIMES. USE EAR PROTECTION SUCH AS PLUGS OR EAR DEFENDERS DURING EXTENDED PERIODS OF OPERATION. WEAR A DUST MASK.

- 1. Secure the workpiece to a stable platform.
- 2. Hold the planer firmly with both hands.
- Rest the front shoe flat on the workpiece surface, ensuring that the blades do not make contact with the workpiece.



5. Move the planer gently forward along the grain of the wood. Apply pressure on the front of the planer at the beginning of the stroke and at the rear of the planer towards the end of the stroke.



NOTE: The feed rate and the depth of cutting determine the quality of the finish. Reduce the depth of the cut to achieve a smoother finish.

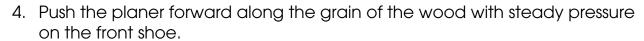
- 6. Push the planer beyond the edge of the workpiece without tilting it downwards.
- 7. Turn off the planer and wait for the blade to stop before setting the planer down.

# **MAKING A CHAMFER**

The V-grooves in the front shoe allow you to create a sloping edge along the corner of your workpiece.

There are two V-grooves, a large groove and a small groove to meet the needs of your particular project.

- 1. Make sure that the workpiece is secured to a stable platform.
- 2. Align the V-groove in the front shoe of the planer with the corner edge of the workpiece.
  - Be sure the blades are not touching the workpiece.
  - Place some weight on the depth adjustment knob so that the V-groove is absolutely flat on the edge to be beveled.
- 3. Switch the tool ON and wait for the blades to reach full speed.



- Push the planer beyond the edge of the workpiece without tilting it downwards.
- 5. Turn off the planer and wait for the blade to stop before setting the tool down.

# MAKING A REBATE CUT

The planer can create rebating cuts up to 8 mm, limited by the protruding housing on the right-hand side of the tool.

- 1. Make sure that the workpiece is secured to a stable platform.
- 2. Follow instructions on page 10 to perform your cut.
- 3. Make multiple progressive cuts to achieve the desired total cutting depth.

REBATING

**DEPTH** 



# REMOVING OR INSTALLING PLANER BLADES



WARNING: PLANER BLADES ARE SHARP AND FRAGILE. WEAR PROTECTIVE GLOVES TO PROTECT YOUR HANDS. HANDLE THE BLADES CAREFULLY TO AVOID PERSONAL INJURY OR DAMAGE TO THE BLADES.



WARNING: DO NOT ATTEMPT TO SHARPEN OR USE RESHARPENED BLADES.

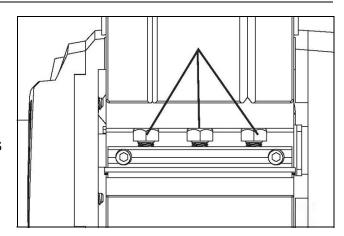
The condition of the blades will affect the precision of the cuts. Dull blades will tear wood fibers and produce fuzzy surfaces.

**NOTE:** Blades on this planer are reversible and must always be reversed or replaced as a matched set. Unbalanced blades can cause vibration and poor planing action while shortening the life of the blade and the planer. Keeping a spare set of blades on hand is recommended.



WARNING: MAKE SURE THAT THE PLANER IS UNPLUGGED FROM THE POWER SUPPLY BEFORE MAKING ADJUSTMENTS OR INSTALLING OR REMOVING BLADES.

- 1. Disconnect the planer from the power source.
- 2. Turn the planer upside down and rotate the blade drum to expose the clamping screws.
- 3. Loosen the three clamping screws using the onboard blade wrench stored in the planer body.

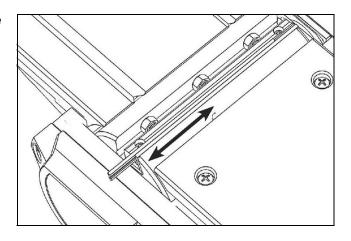


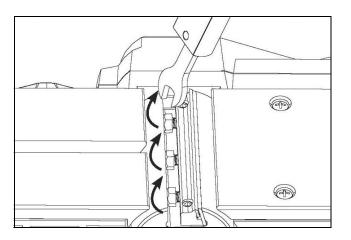


CAUTION: THE BLADE DRUM CAN ROTATE AS YOU'RE DOING THIS SO BE CAREFUL NOT TO CONTACT THE BLADE WITH YOUR HAND. IF THE SCREW IS DIFFICULT TO LOOSEN, TRY TIGHTENING IT A LITTLE AND THEN LOOSEN IT.

- 4. Hold the blade drum in place and carefully slide out the blade.
  - You can also use a wooden block to push the blade out of the blade drum.
- Clean out all foreign matter adhering to the blade drum and the blade using a brush or compressed air.
- Each planer blade has two cutting edges and can be reversed when one of the cutting edges becomes dull or chipped.
  - If one edge is dull, reverse the blade.
  - If both edges are dull, remove the old blade and replace it with a new one. For replacement blades contact the Clarke parts department on 020 8988 7400.
- 7. Slide the blade with the good side into the blade retainer of the blade drum.
  - Make sure the blade is positioned in the center of the blade drum.
  - The flat side of the blade must be facing the front of the planer and the ridged side of the blade must be facing the back of the planer.
- 8. The blades must be mounted so that the cutting edge is absolutely level (parallel to the surface of the rear shoe). Check that both ends of the blade protrude evenly from the blade retainer of the blade drum.

NOTE: The planed surface will end up rough and uneven if blades are not set correctly or securely.





9. Tighten the clamping screws using the blade wrench, ensuring that all three screws are tightened evenly.

10. Repeat steps 2 - 9 for the installing/changing the second blade. It is important to reverse or replace the two blades at the same time so they are balanced with one another. Both blades must be set to the same cutting level and alignment, otherwise the planed surface will be rough and uneven.



CAUTION: TIGHTEN ALL CLAMPING SCREWS CAREFULLY WHEN ATTACHING THE BLADES TO THE PLANER. A LOOSE CLAMPING SCREW CAN BE EXTREMELY DANGEROUS. CHECK REGULARLY TO MAKE SURE THAT ALL SIX CLAMPING SCREWS ARE TIGHTENED SECURELY.

# MAINTENANCE AND SERVICING



WARNING: MAKE SURE THAT THE PLANER IS TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE CLEANING AND MAINTENANCE OPERATIONS.



WARNING: REFER TO YOUR CLARKE DEALER IF INTERNAL MAINTENANCE IS NECESSARY.

# **CLEANING**

- Keep the planer clean of any wood chips, dust, dirt or debris.
- Ventilation openings must be kept clean and free of foreign matter.
- The planer can be cleaned most effectively with compressed dry air.
   Always wear safety goggles when cleaning power tools with compressed air.



WARNING: CERTAIN CLEANING AGENTS AND SOLVENTS DAMAGE PLASTIC PARTS. SOME OF THESE ARE: GASOLINE, CARBON TETRACHLORIDE, CHLORINATED CLEANING SOLVENTS, AMMONIA AND HOUSEHOLD DETERGENTS THAT CONTAIN AMMONIA.

# LUBRICATION

Your tool has been correctly lubricated and is ready to use. It is recommended the gears be re-greased with a gear lubricant at every carbon brush change.

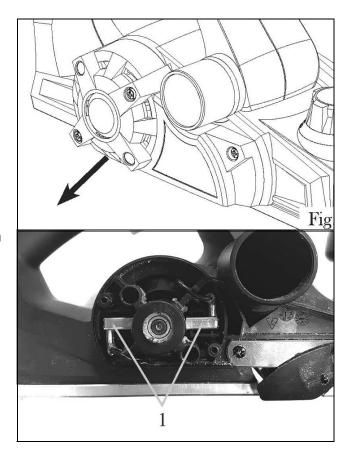
# **CARBON BRUSHES**

To maintain maximum efficiency of the motor, we recommend changing the carbon brushes every 60 hours of operation. Replacement carbon brushes are available from your Clarke Dealer.

To inspect or replace the carbon brushes:

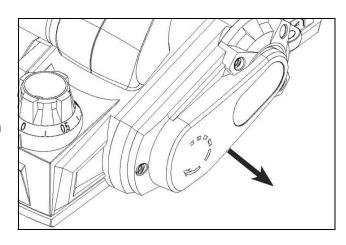
1. Unscrew and open the motor cover on the right (Fig. N).

- 2. Carefully take out the two carbon brushes using pliers and replace with new brushes.
- Replace the motor cover and secure with the screws.



# **DRIVE BELT**

Inspect the drive belt every 60 hours of use. If the drive belt shows signs of drying out, cracking, tearing or improper tracking, it must be replaced. To replace the drive belt, unscrew and open the belt cover on the left. Replace with an identical replacement belt and replace the drive belt cover.



# **BEARINGS**

Bearings that become noisy (due to heavy load or abrasive material damage) must be replaced by a qualified technician as soon as possible to avoid overheating or motor failure.

# **SPECIFICATIONS**

Model	CEP450
Voltage	230V~ @ 50Hz
Rated Input Power	450 W
Maximum Depth of Cut	1.5 mm
Planningwidth(WidthofCut)	60 mm
Rebating Depth	8 mm
Dust Extraction Diameter	Inner - 30 mm / Outer - 34 mm
Duty Cycle	S1 (continuous)
Weight	2.02 kg
Dimensions	250 x 135 x 165 mm
Sound Pressure	83 dB LpA
Guaranteed Sound Power	94 dB LWA
Vibration (Main handle)	2.1 m/s <sup>2</sup>
Vibration (Front handle)	3.0 m/s <sup>2</sup>
Uncertainty Factor (K)	1.5 m/s <sup>2</sup>

# **DECLARATION OF CONFORMITY - UKCA**





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 55014-1:2006/A2:2011, EN 55014-1:2017, EN 55014-2:1997/A2:2008, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 62841-1:2015, EN 62841-2-14:2015, IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321:2008

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: 2022

**Product Description:** 

450W Corded Electric Planer

Model number(s):

CEP450

Serial / batch Number:

N/A

Date of Issue:

25/04/2022

Signed:

J.A. Clarke

Director

CEP450 UKCA Clarke DOC 042522

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# OTHER TOOLS IN THE CLARKE RANGE - CE





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):

2014/30/EU Electromagnetic Compatibility Directive

2006/42/EC Machinery Directive

2011/65/EU Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic

Equipment Directive

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

EN 55014-1:2006/A2:2011, EN 55014-1:2017, EN 55014-2:1997/A2:2008, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 62841-1:2015, EN 62841-2-14:2015, IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321:2008

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: 2019

Product Description: 450W Corded Electric Planer

Model number(s): CEP450
Serial / batch Number: N/A

**Date of Issue:** 25/04/2022

Signed:

J.A. Clarke Director

CEP450 CE Clarke DOC 042522

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# OTHER TOOLS IN THE CLARKE RANGE



# CARS1 Adjustable Roller Stand

- Maximum load 60kg
- Smooth 280mm ball bearing roller



# CARS3IN1 Adjustable 3-In-1 Roller Stand

- Maximum load 60kg
- Working height: 760 - 1000mm



# CMS650 650mm Manual Sweeper

- 14Litre capacity
- 4 brushes 2 rolling mills
   2 side brushes



# CMS850 850mm Manual Sweeper Large

- 30Litre capacity
- 4 brushes 2 rolling mills
   2 side brushes



# CT\$16 10" (250mm) Table Saw Including Stand

- Motor: 1600W
- Maximum cut 90°/45°: 73/53mm



# CBS250B 10" (250mm) Woodworking Bandsaw

- Throat depth: 245mm
- Running speed: 730m/min



# **CSR310 310W**Sanding Roller

- 6 speed settings
- 4 position spark deflecting shield
- 10mm & 60mm width lamella (flapper) roll & 60mm sanding roll



# CS\$400D 16" Scroll Saw

- Variable speed 400 - 1600rpm
- 406mm throat depth with 50mm cutting height



# CB\$1-5B 1"x 5" Belt & Disc Sander

- Belt size: 25 x 762mm
- Disc table diameter: 148mm



# CDJ2 Dowelling Jig

- Designed for drilling
   8 & 10mm dowel holes
- Used for edge, T-shaped, and L-shaped joints



#### CWVE1 Vacuum Dust Extractor

- 50 Litre Capacity
- Flow rate: 183m<sup>3</sup>/h



# CDE35B Portable Dust Extractor & Chip Collector

- 56 Litre Capacity
- Flow rate: 850m³/h

# A SELECTION FROM THE VAST RANGE OF





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#### **GENERATORS**

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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.





Parts Enquiries
Parts@clarkeinternational.com

Servicing & Technical Enquiries
Service@clarkeinternational.com

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

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www.clarkeinternational.com