Clarke®

ABRASIVE CUT-OFF SAW

MODEL NO: CON14

PART NO: 6470168

OPERATION & MAINTENANCE INSTRUCTIONS

UK CA CE

ORIGINAL INSTRUCTIONS

DL0922 -ISS 2

INTRODUCTION

Thank you for purchasing this CLARKE Abrasive Cut-Off Saw which is suitable for cutting ferrous metals compatible with the type of abrasive wheel fitted.

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.

Save all warnings and instructions for future reference.

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.

SAFETY SYMBOLS

Please read all of the safety and operating instructions carefully before using this product. The following safety symbols are to be found on the machine or its accessories.

	Read this instruction booklet carefully before use.		Not permitted for wet grinding
	Wear eye protection		Wear Safety Gloves
	Wear Face Mask		

GENERAL POWER TOOL SAFETY WARNINGS

WARNING: READ ALL INSTRUCTIONS. FAILURE TO FOLLOW ALL INSTRUCTIONS LISTED BELOW MAY RESULT IN ELECTRIC SHOCK, FIRE AND/ OR SERIOUS INJURY. THE TERM "POWER TOOL" IN THE WARNINGS REFERS TO YOUR SAW.

1) WORK AREA SAFETY

a. **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*

b. **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.*

c. **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2) ELECTRICAL SAFETY

a. **Power tool plugs must match the outlet. Never 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.*

b. **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.*

c. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*

d. **Do not abuse the cable. Never use the cable for carrying, pulling or unplugging the power tool. Keep cable away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cables increase the risk of electric shock.*

e. **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.*

f. **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.*

3) PERSONAL SAFETY

a. **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 serious personal injury.*

b. **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, gloves, non-skid safety shoes, hard hat, protective apron and hearing protection used for appropriate conditions will reduce personal injuries.*

c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, 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.*

d. **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 may result in personal injury.*

e. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*

f. **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.*

g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*

4) POWER TOOL USE AND CARE

a. **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.*

b. **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.*

c. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

d. **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.*

e. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the tool.** *Power tools are dangerous in the hands of untrained users.*

f. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

g. **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.*

5) SERVICING

a. **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.*

ADDITIONAL WARNINGS FOR CUT-OFF SAWS

1. **IMPORTANT**: You should not operate this machine unless you are thoroughly familiar with metal cutting saws. If there is any doubt whatsoever, you should consult a qualified person.
2. Ensure the cutting disc is securely mounted in accordance with these instructions before connecting to a power supply.
3. DO NOT over tighten the cutting disc. This can cause stress and could lead to the cutting disc shattering when under load.
4. Always check the cutting disc for cracks before use. Never use discs that are chipped, cracked or otherwise defective.
5. Before switching the machine on, always ensure the work is properly secured, always use the vice, never present a workpiece by hand.
6. Make all adjustments with the power off.
7. When starting a cut, always ease the tool into the work. A harsh or sudden impact could shatter the abrasive disc.
8. Ensure the cutting disc reaches maximum speed before beginning a cut.
9. Never use the machine with the guards removed or not in their correct position.
10. Ensure you use the correct type of cutting disc for the type of material being cut. Never use a toothed saw blade in a machine designed to use a cutting disc. Metal cutting & masonry cutting discs are available from your Clarke dealer. NEVER cut magnesium, wood, or non-ferrous metals.
11. Do not perform cutting in explosive atmospheres and environments where sparks could cause fire or explosion.

ELECTRICAL CONNECTIONS

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

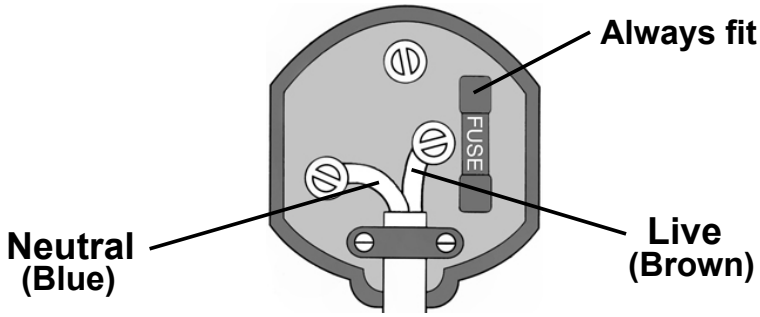
This product is provided with a standard 13 amp, 230 volt (50Hz), BS 1363 plug, for connection to a standard, domestic electrical supply. Should the plug need changing at any time, ensure that a plug of identical specification is used.

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

Plug must be BS1363/A approved.



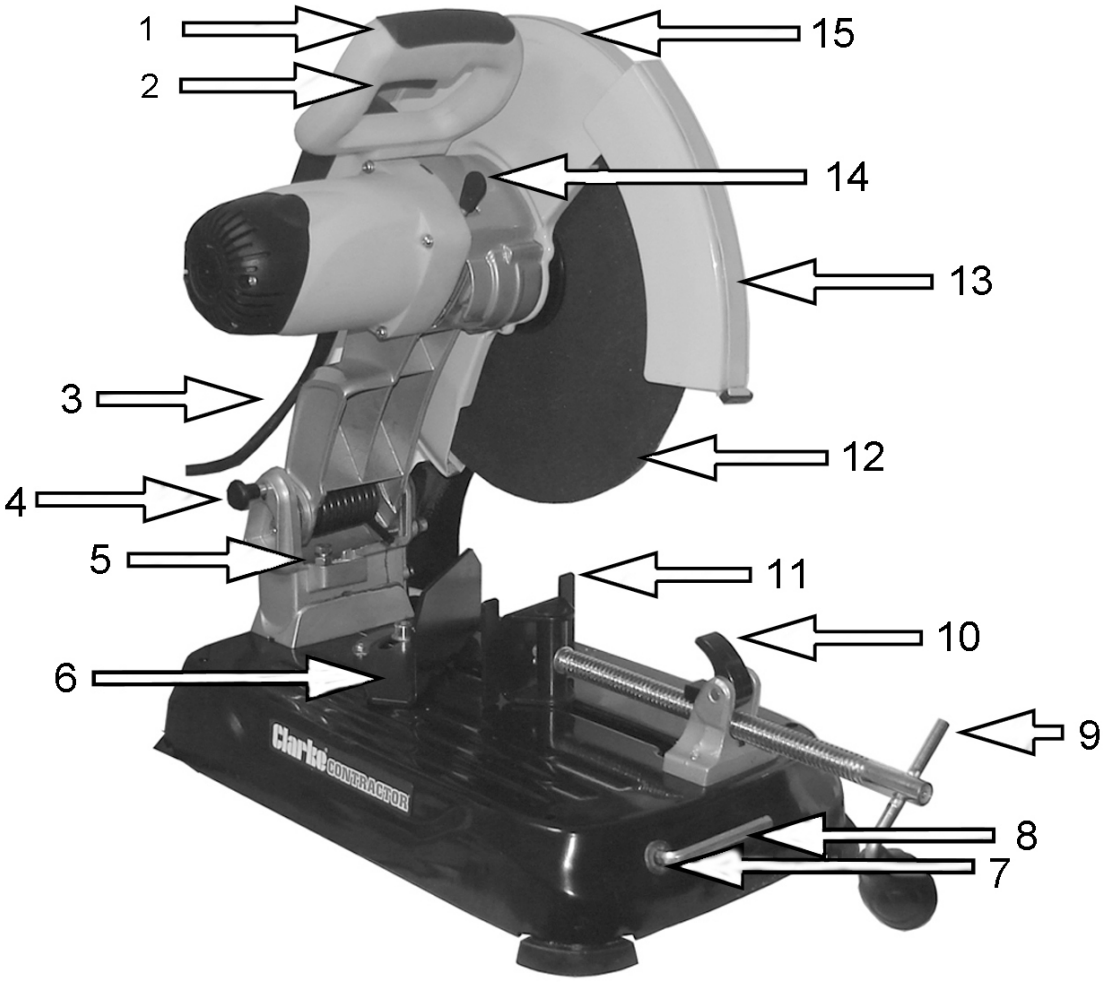
Ensure that the outer sheath of the cable is firmly held by the clamp

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

If in any 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.

UNPACKING AND ASSEMBLY



1	Handle
2	Trigger Switch
3	Power Cable/Plug
4	Cutting Head Locking Pin
5	Depth Stop Adjustment Bolt
6	Adjustable Vice Backplate
7	Wrench Storage
8	Hex Wrench 8 mm

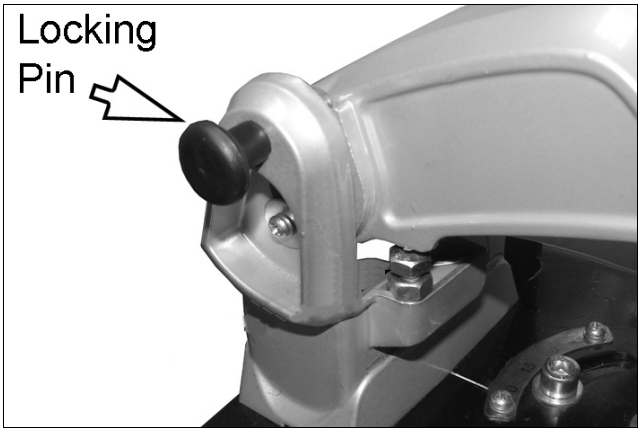
9	Clamping Spindle Crank
10	Vice Quick Release Lever
11	Vice Clamping Plate
12	Cutting Disc
13	Hinged Guard
14	Spindle Lock
15	Fixed Guard

Unpack the machine carefully and ensure that all items are accounted for according to the above list. In the event of any deficiencies contact your Clarke dealer immediately.

BEFORE CUTTING

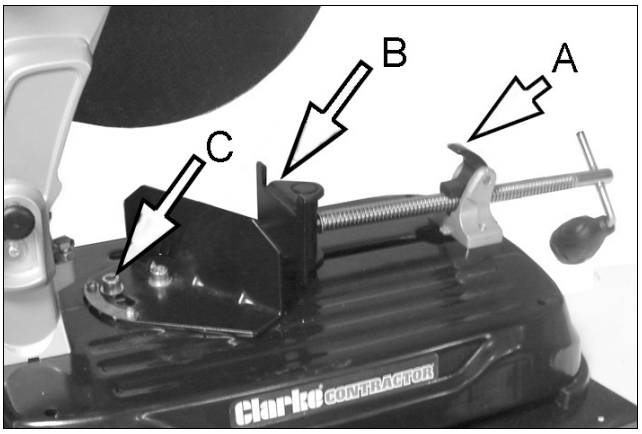
LOCKING THE ARM

To unlock the saw and raise the motor arm.



1. Push down on the handle.
2. Pull the locking pin out slightly to unlock the motor arm.
3. Release the pressure on the handle.
    - The motor arm will then raise into position.
    - When locking the motor arm down for storage push down on the handle, push the locking pin in and release pressure on the handle.

ADJUSTING THE VICE



1. The vice is provided with a quick release lever (A).
2. Lift the quick release lever to release the screw so that the vice clamping plate (B) may be quickly moved into contact with the work.
3. Flip the quick release lever back into position and tighten the vice to hold the workpiece.

The adjustable backplate can be adjusted backwards/forwards and to a chosen angle to accommodate different size of workpiece.

1. Use the wrench provided to loosen and remove the two bolts (C).
2. Adjust the angle stop to the desired position.
3. Tighten the bolts securely before use.

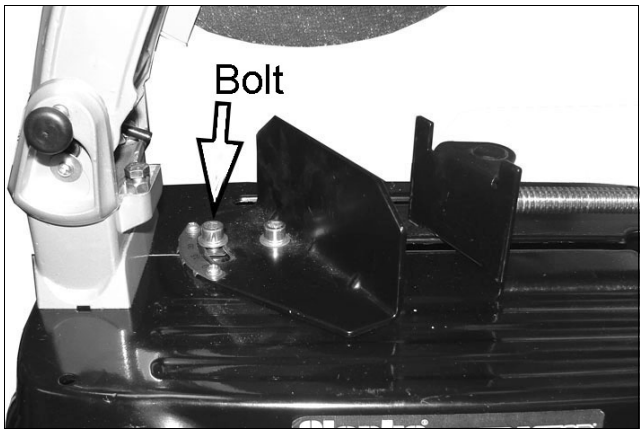
MATERIAL CLAMPING AND SUPPORT

- Angle iron should be clamped and cut with both legs resting against the base of the saw.
- A spacer block slightly narrower than the workpiece can be used to raise the workpiece if required.

4. A long workpiece must be supported by a block that is level with the top of the base. The cut-off end should be free to fall downward to avoid binding against the cutting disc.

BEVEL CUTTING

The vice fence may be adjusted up to 45° for bevel cutting.



1. To set the required angle, use the hex wrench provided to slacken off (but not remove) the two bolts securing the fixed fence.
2. Swivel the fence to the required angle as shown on the scale and re-tighten the bolts.
3. Use a set square or angle gauge set against the abrasive cutting disc if absolute accuracy is required. Tighten the two securing bolts when satisfied.

- When making a mitre cut, the vice may not clamp securely, depending on the thickness of the workpiece and the mitre angle.
- Other aids (such as spring, bar or C-clamps) will be necessary to secure the workpiece to the fence when making these cuts.

OPERATION

WARNING: THE DISC WILL CONTINUE TO ROTATE FOR A SHORT WHILE AFTER SWITCHING OFF. DO NOT PERFORM CUTTING IN EXPLOSIVE ATMOSPHERES AND ENVIRONMENTS WHERE SPARKS COULD CAUSE FIRE OR EXPLOSION.

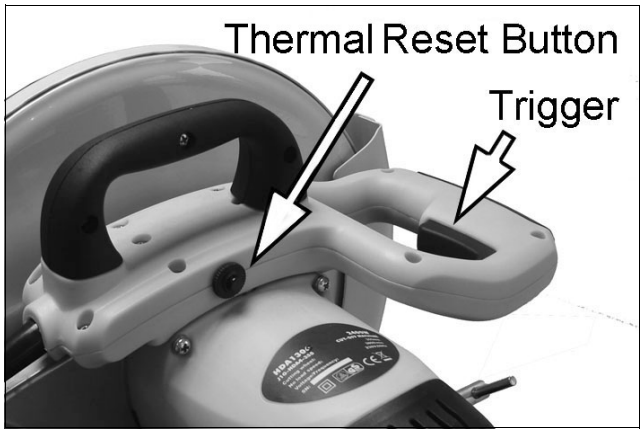
Before use, always:

- Check the condition of the abrasive disc to ensure there are no cracks or badly pitted edges. If in doubt, renew the disc.
- Ensure that the abrasive cutting off disc is correctly fitted and tightened before use. If using a new disc or if using the machine for the first time, run the machine for approximately 30 seconds without load to check that the disc is running without undue vibration. If considerable vibration is noticed, stop and replace the cutting disc.
- Ensure the workpiece is properly clamped,
- Switch on by pulling the trigger switch upwards.

- Allow the disc to reach full speed, then gently lower it on to the work. DO NOT try to cut too harshly.

Release the trigger to stop the motor.

- The disc will continue to rotate briefly after switching off.



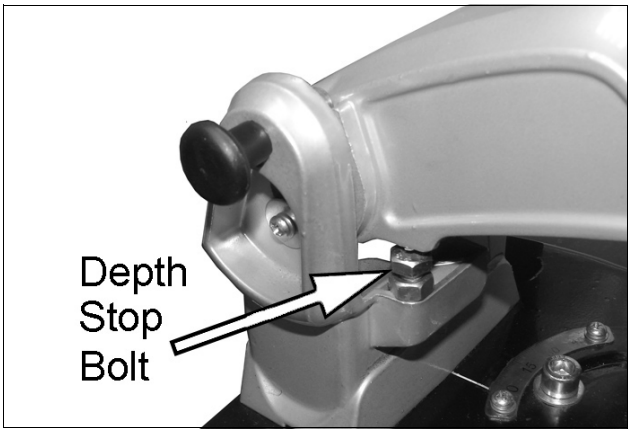
The machine is fitted with a thermal overload device which is designed to cut the power in the event of overheating. If the machine should stop after a period of sustained work, allow it to cool down for a few minutes before pressing the Thermal Reset button shown.

NOTE: Take particular care when cutting with a new disc. Do not press too heavily, particularly at the end of a cut.

The depth stop is factory set for a new 14" (355 mm) cutting disc. This can be adjusted as the disc wears away.

1. Loosen the locking nut.
2. Loosen the depth stop bolt.
3. Adjust the depth stop bolt to desired height.

Then turn the locking nut until seated firmly against the casting.



NOTE: Securely tighten the depth stop bolt before use.

TIPS FOR MORE ACCURATE CUTS

- Allow the cutting disc to do the cutting. Excessive force will cause the cutting disc to glaze reducing cutting efficiency and/or to deflect causing inaccurate cuts.
- Adjust the fence angle.
- Make sure the workpiece is laying flat across the base.
- Clamp the workpiece securely to avoid movement and vibration.

GENERAL CARE OF THE MACHINE

Take care to keep the ventilation openings clear when working in dusty conditions. Always disconnect the machine from the power supply before cleaning the openings using a soft brush if necessary. Refer to your CLARKE dealer if internal maintenance is required.

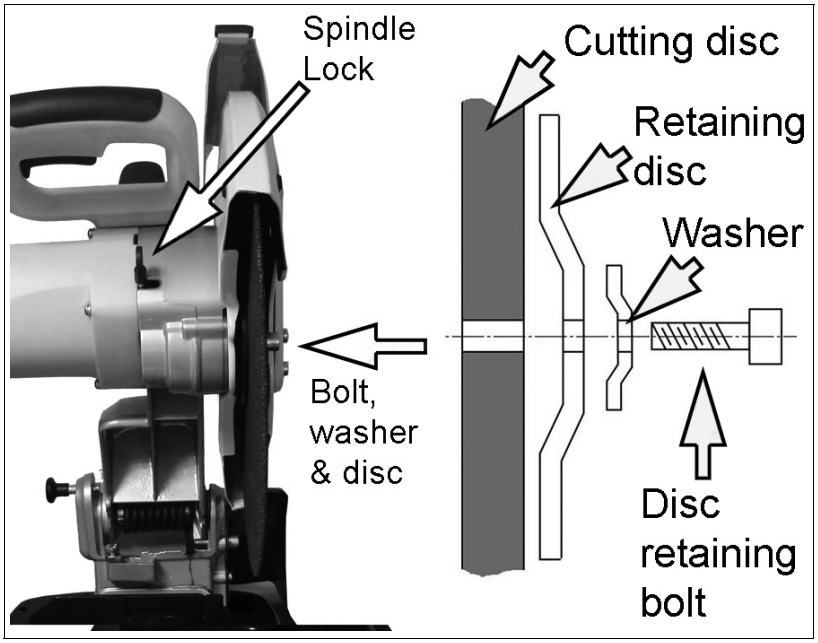
CHANGING AND CARE OF CUTTING DISCS

WARNING: BEFORE PERFORMING ANY MAINTENANCE, ENSURE THE PLUG HAS BEEN REMOVED FROM THE MAINS SUPPLY.

CHANGING THE CUTTING DISC

Replacement 355 mm cutting discs part no: 6470800 (for metal) are available from your Clarke dealer. Discs for cutting stone are part no: 6470760.

IMPORTANT: Ensure the disc is rated above the rated speed of the machine.



1. Disconnect the power supply and with the arm fully raised, move the hinged guard fully back.
   - This will leave the disc retaining bolt exposed.
2. Turn the cutting disc by hand until the spindle engages the spindle lock and holds it in position.
3. Using the 8mm hex. wrench, undo and remove the abrasive disc retaining bolt, followed by the washer and retaining disc. Finally, carefully remove the cutting disc.
4. Reassemble in reverse order, ensuring the cutting disc and retaining disc are correctly mounted on the flats of the shaft with the retaining disc and washer oriented as shown. Take care not to over tighten the centre bolt.
5. Always run the machine for 30 seconds and check for vibration when a new disc is fitted.

HANDLING AND STORING CUTTING DISCS

Handle cutting discs carefully. Avoid dropping or bumping. Do not roll a disc on its edge. Do not pile other items such as tools on top of cutting discs. Store discs in racks or bins with dividers for different types of discs and ensure easy access and less handling. Never store cutting discs near excessive heat or cold, in contact with water, oil or moisture, nor in drawers with loose tools.

Store in a dry area. When selecting racks, bins, boxes or drawers for storage consider the size and type of cutting discs to be stored: for example, lay thin bonded cutting discs flat and support larger cutting discs in racks. Always follow the manufacturer's instructions.

Sort and store cutting discs in such away that older discs can be selected first. Follow the manufacturer's instructions for length of time a cutting disc should be stored.

SPECIFICATIONS

Voltage	230V AC @ 50Hz		
Input power	2400 W		
Current Rating	10.3 A		
No-load speed	3800 rpm (single speed with soft start)		
Weight	17.8 kg		
Dimensions (L x W x H)	545 (head lowered) x 308 x 423 mm		
Max cutting dimensions (mm)	Round:	@90^{O} 125 dia	@45^{O} 115 dia
	Square:	@90^{O} 120 sq	@45^{O} 95 sq
	Rectangle:	@90^{O} 80x220	@45^{O} 70x100
	Angle:	@90^{O} 140x140	@45^{O} 90x90
Sound Pressure Level (LPA)	98.9 dB(A)		
Sound Power Level (LWA)	101.1 dB(A)		
Sound Uncertainty Value (K)	3 dB(A)		
Vibration	2.393 m/s^2		
Vibration Uncertainty Value (K)	1.5 m/s^2		
Ambient Operating Temperature	-10^{O} / +50^{O}C		

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.

DECLARATION OF CONFORMITY

UK CA

Clarke® INTERNATIONAL

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 directive(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 + A11, EN 55014-2:2015, EN IEC 61000-3-2:2019, EN 61000-3-11:2019,

EN 62841-1:2015, EN 62841-3-10:2015 + A11, EN 61029-1:2009 + A11, EN 61029-2-10:2010 + A11.

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: 2022

Product Description:	14" (355mm) Abrasive Cut Off Saw
Model number(s):	CON14
Serial / batch Number:	N/A
Date of Issue:	24/08/2022

Signed:

J.A. Clarke

Director

CE

Clarke® INTERNATIONAL

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):

2004/108/EC Electromagnetic Compatibility Directive.

2006/42EC Machinery Directive

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

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

EN 55014-1:2017 + A11, EN 55014-2:2015, EN IEC 61000-3-2:2019, EN 61000-3-11:2019,

EN 62841-1:2015, EN 62841-3-10:2015 + A11, EN 61029-1:2009 + A11, EN 61029-2-10:2010 + A11.

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: 2017

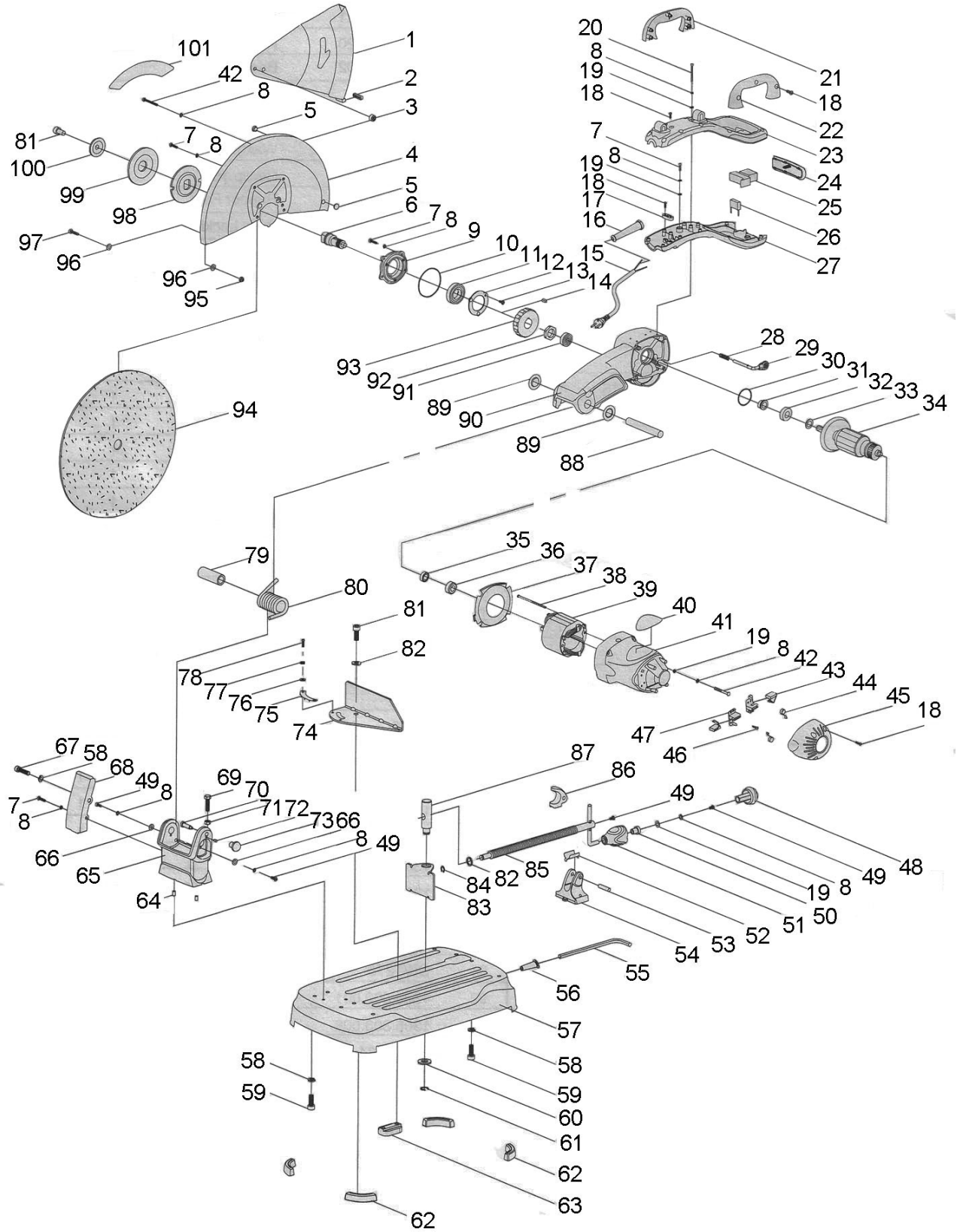
Product Description:	14" (355mm) Abrasive Cut Off Saw
Model number(s):	CON14
Serial / batch Number:	N/A
Date of Issue:	24/08/2022

Signed:

J.A. Clarke

Director

PARTS LIST & DIAGRAM



Parts & Service: 020 8988 7400 / E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

No	Description	No	Description	No	Description
1	Moving Cover	35	Bearing 609-2Z/C4	69	Bolt M8x25
2	Plastic Bush	36	Rubber Bush	70	Lockpin
3	Sleeve	37	Fan Guide	71	Nut M8
4	Safety Guard	38	ST Screw	72	Rubber Pin
5	Rubber Sheath	39	Stator	73	Lockpin Knob
6	Output Spindle	40	Rating Plate	74	Back Plate (Fence)
7	Bolt M5x16	41	Housing	75	Scale Plate
8	Washer 5	42	Bolt M5 x 50	76	Washer 4
9	Bearing Holder	43	Carbon Brush	77	Washer 4
10	O-Ring	44	Spring Roll	78	Bolt M4x6
11	Bearing 6005-3RZ	45	Back Cover	79	Sleeve
12	Bearing Washer	46	ST Screw	80	Spring
13	Bolt M4x12	47	Brush Holder Assembly	81	Bolt M10 x 25
14	Pin 6 x 14	48	Rotating Knob 2	82	Washer 10
15	Power Cable with Plug	49	Bolt M5 x 8	83	Moving Vice Plate
16	Cable Gland	50	Rotating Sleeve	84	Circlip 10
17	Cable Clamp	51	Rotating Knob 3	85	Vice Studding
18	St Screw	52	Vice Traction Piece	86	Vice Locking Pawl
19	Washer 5	53	Pin 8m6x35	87	Vertical Pin
20	Bolt M5 x 30	54	Pin Holder	88	Rotating Spindle
21	Right Handle	55	Hex Wrench	89	Plastic Washer
22	Left Handle	56	Cable Gland	90	Gear Housing
23	Upside Grip	57	Machine Base	91	Bearing 6200-2Z
24	Soft Grip Cover	58	Washer 8mm	92	Nut
25	On/Off Switch	59	Bolt M8 x 20	93	Driven Gear
26	Capacitor	60	Washer	94	Cutting Disc
27	Downside Grip	61	Circlip 15mm	95	Nut M6
28	Compression Spring	62	Rubber Foot	96	Washer 6
29	Spindle Lock Assembly	63	Retaining Block	97	Bolt M6 x 20
30	O-ring 34.5 x 2.65	64	Pin 6m6x20	98	Inner Disc
31	Oil-seal Sheath	65	Support Holder	99	Outer Disc
32	Bearing 6202-2Z/C4	66	Washer 2	100	Retaining Washer
33	Washer 1	67	Bolt M8x35	101	Nameplate
34	Rotor	68	Rear Guard		

Replacement 350mm cutting discs part No: 6470800 (for metal) are available from your Clarke dealer. Discs for cutting stone are part No: 6470760.

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS

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Angle grinders, cordless drill sets, saws and sanders.

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PARTS & SERVICE: 0208 988 7400

Parts Enquiries
Parts@clarkeinternational.com

Servicing & Technical Enquiries
Service@clarkeinternational.com

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

Clarke® INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG
www.clarkeinternational.com