

# Clarke®



## **355mm (14") ABRASIVE CUT-OFF SAW**

Model No. CCO14

Part No. 6470167

### **OPERATING & MAINTENANCE INSTRUCTIONS**



Thank you for purchasing your CLARKE 14" Abrasive Cut-off Saw.

Before attempting to operate this machine, please read this instruction manual thoroughly, and follow all directions carefully. By doing so you will ensure the safety of both yourself and others around you, and at the same time, you should look forward to the saw giving you long and trouble free service.

## GUARANTEE

This product is guaranteed against faults in manufacture for 12 months from date of purchase. Keep your receipt as proof of purchase.

This guarantee is invalid if the product has been found to have been abused or tampered with in any way, or not used for the purpose for which it was intended. The reason for return must be clearly stated.

This guarantee does not affect your statutory rights.

## DECLARATION OF CONFORMITY

**We declare that this product conforms to the following standards/directives**

- 98/37/EC
- 73/23/EEC
- 93/68/EEC

Description: ..... Abrasive Cut-Off Saw

Model No: ..... CCO14

Serial/Batch No: ..... See product Data Plate

signed:  \_\_\_\_\_

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# GENERAL SAFETY PRECAUTIONS FOR OPERATING POWER TOOLS

## WARNING

*As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked, or ignored, personal injury to the operator, or damage to property may result.*

1. **KNOW YOUR MACHINE.** Read the manual carefully. Learn the machines' applications and limitations, as well as the specific potential hazards peculiar to it.
2. **KEEP GUARDS IN PLACE** and in working order.
3. **EARTH ALL MACHINES.** If the machine is equipped with three-pin plug, it should be plugged into a three-pin electrical socket. Never remove earth pin.
4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form a habit of checking to ensure that keys, wrenches and tools are removed from the machine.
5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
6. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use machinery in damp or wet locations, or expose them to rain. Keep work area well lit.
7. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.
8. **MAKE WORKSHOP CHILDPROOF** - with padlocks, master switches or by removing starter keys.
9. **DON'T FORCE THE MACHINE.** It will do the job better and safer, at the rate for which it was designed.
10. **USE THE RIGHT TOOL.** Don't force a tool or attachment to do a job for which it was not designed.
11. **WEAR PROPER APPAREL.** Loose clothing, gloves, neckties, rings, bracelets or other jewellery may get caught in moving parts. Nonslip footwear is recommended. Long hair should be contained.
12. **USE SAFETY GLASSES.** Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
13. **USE EAR DEFENDERS.**
14. **DON'T OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **ALWAYS DISCONNECT THE MACHINE** before servicing or changing accessories.
17. **AVOID ACCIDENTAL STARTING.** Ensure the machine is switched OFF before plugging in.
18. **CHECK FOR DAMAGE.** If part of the machine (eg. A cover or guard), is damaged, it should be carefully inspected to ensure that it can perform its'

intended function correctly. If in doubt, the part should be renewed. Damage to moving parts or major components should be inspected by a qualified technician before operating the machine. Contact your local dealer for advice.

19. **DO NOT STAND ON THE MACHINE.** Serious injury could occur if the machine is tipped over. Do not store materials above or near the machine such that it is necessary to stand on the machine to get to them.
20. **NEVER** operate a machine when under the influence of alcohol, drugs or medication.
21. **ALWAYS ENSURE THAT ADEQUATE LIGHTING** is available. A minimum intensity of 300 lux should be provided. Ensure that lighting is placed so that you will not be working in your own shadow.

## ADDITIONAL SAFETY RULES FOR METAL CUT-OFF SAWS

### **WARNING!**

***THIS MACHINE MUST NOT BE MODIFIED, OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS DESIGNED.***

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. Do not operate the machine until it is completely assembled, and this entire manual, has been read and understood.
3. Ensure the proper electrical regulations are followed.
4. Ensure the abrasive disk is securely mounted in accordance with these instructions, before connecting to a power supply.
5. **DO NOT** over tighten the abrasive disk. This can cause stress, and could lead to the wheel shattering when under load.
6. Always check the abrasive disk for cracks before use.
7. Before switching the machine on, **ALWAYS** ensure the work is properly secured, **ALWAYS** use the vice, **NEVER** hand hold a workpiece.
8. Make all adjustments with the power OFF.
9. When starting a cut, always ease the tool into the work. A harsh or sudden impact could shatter the abrasive disk.
10. Ensure the Abrasive Disk reaches maximum speed before beginning a cut.
11. Never use the machine with the guards removed.
12. Ensure you use the correct type of Abrasive Disk for the type of material being cut. Metal cutting & masonry Abrasive Disks are available from your Clarke dealer. **NEVER** cut magnesium, wood, or non-ferrous metals.

# ELECTRICAL CONNECTIONS

Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.



**WARNING! THIS APPLIANCE IS DOUBLE INSULATED**

**IMPORTANT:** The wires in the mains lead are coloured in accordance with the following code:

Blue - Neutral  
Brown - Live

As the colours of the flexible lead of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

- Connect BROWN cord to plug terminal marked with letter "L" or coloured RED.
- Connect BLUE cord to plug terminal marked with a letter "N" or coloured BLACK.

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-rewirable) please note:

1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. Should you wish to replace a detachable fuse carrier, ensure that the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.
5. **The fuse in the plug must be replaced with one of the same rating (13 amps) and this replacement must be ASTA approved to BS1362.**

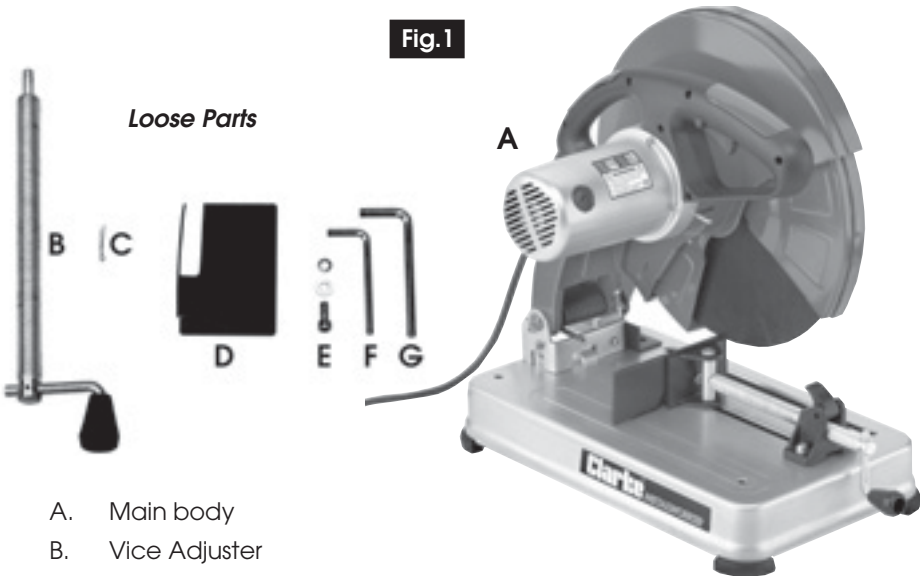
If an extension cable is necessary, you MUST comply with the following standard for 230V 10Amp equipment:

<b>Extension Length</b>	<b>Cable Section</b>
Up to 20 m .....	1.5mm <sup>2</sup>
20m to 50m .....	2.5mm <sup>2</sup>

# UNPACKING and ASSEMBLY

Unpack the saw carefully, and ensure that all items are accounted for, according to the following list.

**Fig.1**



- A. Main body
- B. Vice Adjuster
- C. Split Pin
- D. Spark Deflector
- E. M5 Hex. Socket head screw with flat & spring washer
- F. Hex wrench 5mm
- G. Hex. Wrench 8mm

Should there be any deficiencies, you should contact your Clarke dealer immediately.

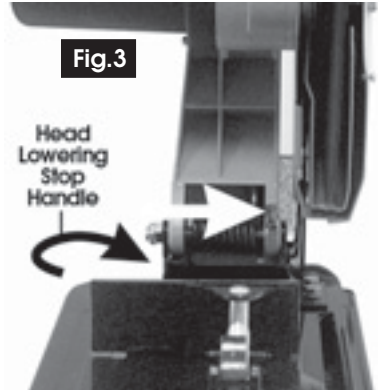
**Fig.2**



Fit the Spark Deflector as shown in fig.2, securing with the M5 Hex. head screw with flat and spring washer.

# FEATURES

1. A stop is provided to restrict the height to which the arm may be lowered. The stop is in the form of a bolt, arrowed in fig. 3 which should not require adjusting.
2. The vice is provided with a quick adjust device (shown at A, fig.4). The block, through which the screw passes, pivots, and may be lifted off the screw thread. This releases the screw, and hence the vice jaw which may then be quickly moved into contact with the work. The block is then flipped back into position, and the work clamped in the normal way by using the handle.



3. A latch, to prevent the head from being lowered, is provided. Turn the plastic handle at the rear of the unit, indicated in fig.3, to engage the latch

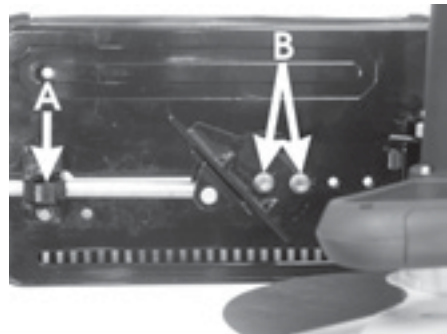
**Before carrying out any adjustments or maintenance, ensure the saw is disconnected from the power supply.**

## Adjusting The Vice

### a. Bevel Cutting

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

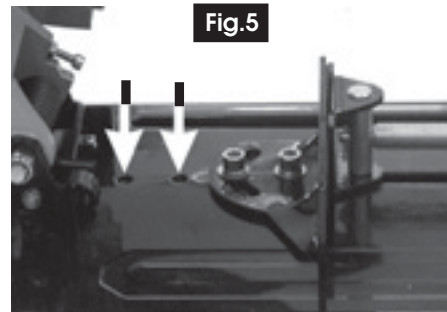
To set the required angle, slacken off the two bolts securing the fixed vice jaw (Shown at B), and swivel the jaw to the appropriate angle according to the scale provided. Use a set square or angle gauge set against the Abrasive Disk, if absolute accuracy is required. Tighten the two securing bolts when satisfied.



### b. Positioning the Fixed Vice Jaw

The fixed jaw may be fixed in one of three positions to accommodate larger workpieces.

Undo and remove the two screws securing the jaw, and reposition as desired, using the bolt holes arrowed in Fig.5 to secure the jaw.



## OPERATION (Ref. Fig. 1)

Ensuring the workpiece is properly clamped, and observing all precautions previously mentioned, switch ON by pressing the safety lock button before pulling the ON/OFF trigger switch upwards. Allow the wheel to reach full speed then gently lower it on to the work. **DO NOT** try to cut too harshly.

The switch is a 'dead man' type and the motor will stop therefore, when it is released.

### NOTE:

**Take great care when cutting with a new wheel. DO NOT press too heavily particularly at the end of a cut.**

## MAINTENANCE

Before use, always check the condition of the Abrasive Disk to ensure there are no cracks or badly pitted edges. If in doubt, you must renew the wheel.

Always keep the machine clean and dry. Brush away dust and metal chippings.

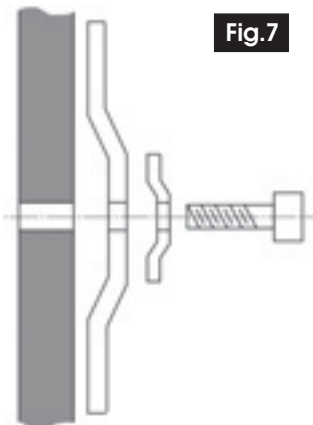
### Changing the Abrasive Disk

#### IMPORTANT!

**Ensure the replacement disk is rated above the rated speed of the machine.**

Having disconnected the power supply, Raise the Upper Blade Guard, by hand, as high as possible, then slide the bar, arrowed in fig.6, across, so that it retains the Blade Guard in place, as shown.

Slacken off the two screws which secure the Abrasive Disk Centre Bolt access plate, shown in fig 6, and remove the plate.



Using the 8mm Hex. wrench, undo and remove the Abrasive Disk Centre Bolt, then remove the washer, and flange. Finally, carefully remove the Abrasive Disk.

Reassemble in reverse order, ensuring the Disk, and flange are correctly mounted on the flats on the shaft with the flange and washer oriented as shown in fig.7, Take great care **not to over tighten** the centre bolt.

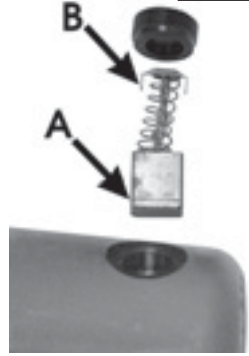
## The Motor

Fig.8

Maintenance to the Motor is limited to changing the carbon brushes.

These will naturally wear with use and require replacing. They should be checked periodically as follows:

1. Unscrew and remove the plastic covers on the end of the motor with a screwdriver
2. Pull out the brushes complete with springs and retainers.
3. Check the brush length, if the 'wear line' cannot be seen ('A' fig.8), the pair must be renewed.
4. Replace the brushes, taking care to ensure that the tabs, on the end of the spring retainer ('B' fig.8), correctly enter the elongated chamber as you push it in and screw on the cap.



## SPECIFICATIONS

Motor Voltage .....	230V 50Hz 1Phase
Current Rating .....	10Amps
Power Rating .....	2,200Watts
Speed .....	3,750RPM
Disk Diameter .....	14" (355mm)
Thickness .....	0.125"
Bore .....	1"
Weight .....	18kg
Dimensions (overall) .....	535x310x440mm

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice. Always consult the machine's data plate

## PARTS & SERVICE CONTACTS

For Spare Parts and Service, please contact your nearest dealer,  
or CLARKE International, on one of the following numbers.

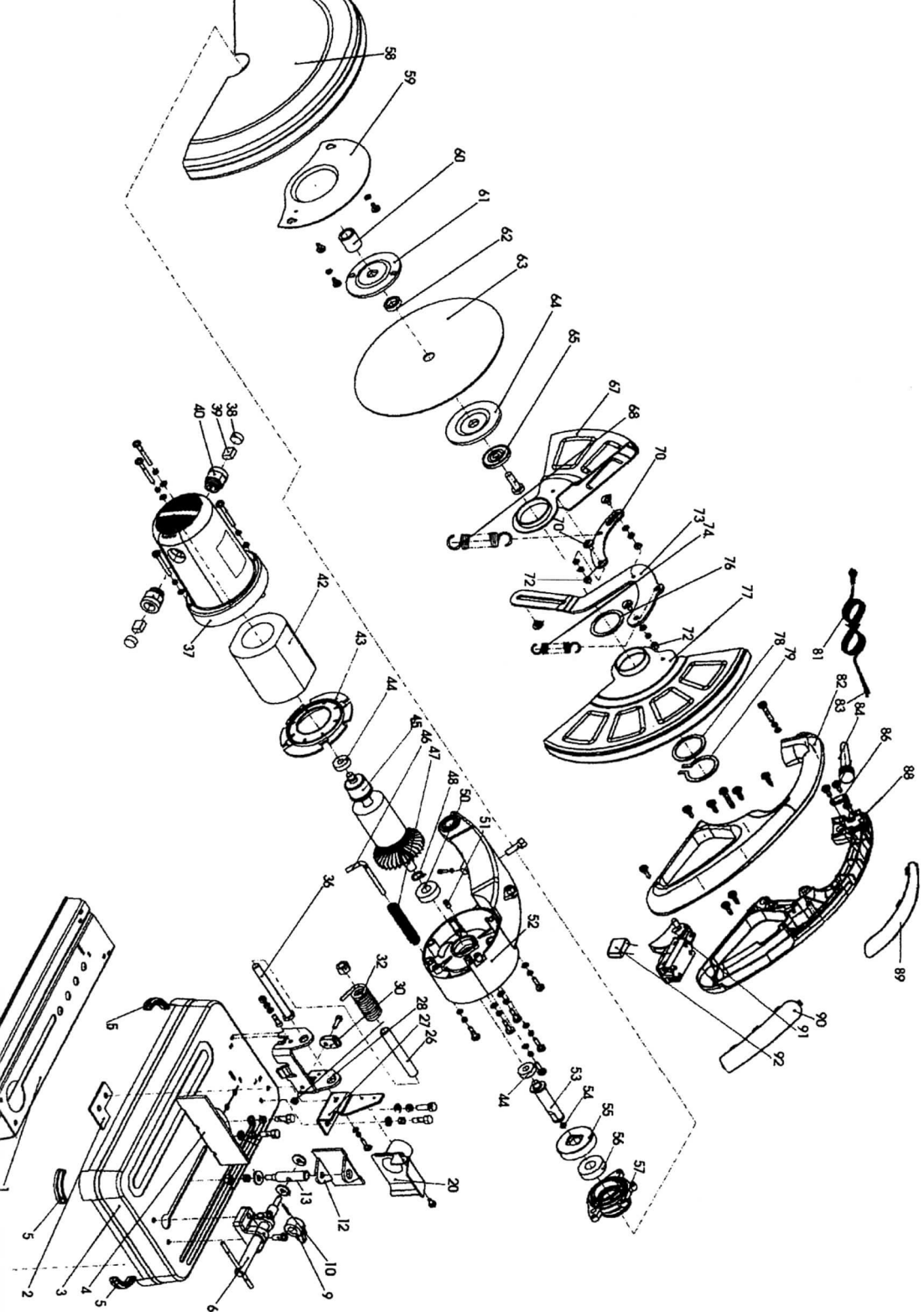
**PARTS & SERVICE TEL: 020 8988 7400**

**PARTS & SERVICE FAX: 020 8558 3622**

**or e-mail as follows:**

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**



# SPARE PARTS LIST

No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
1	Base Reinforcer	1	TMCCCO1401	54	O-Ring	1	TMCCCO1454
2	Plate	1	TMCCCO1402	55	Large Gear	1	TMCCCO1455
3	Base	1	TMCCCO1403	56	Bearing	1	TMCCCO1456
4	Fixed Clamp	1	TMCCCO1404	57	Bearing Holder	1	TMCCCO1457
5	Rubber Foot	4	TMCCCO1405	58	Fixed Guard	1	TMCCCO1458
6	Clamping Screw	1	TMCCCO1406	59	Guard Cover	1	TMCCCO1459
9	Quick Clamping Nut	1	TMCCCO1409	60	Location Gasket	1	TMCCCO1460
10	Split Pin	1	TMCCCO1410	61	Outer Flange	1	TMCCCO1461
12	Action Clamp	1	TMCCCO1412	62	Gasket	1	TMCCCO1462
13	Pin	1	TMCCCO1413	63	Abrasive Disk	1	See CLARKE dealer
20	Dust Extractor	1	TMCCCO1420	64	Wheel Flange	1	TMCCCO1464
26	Hollow Shaft	1	TMCCCO1426	65	Flange Washer	1	TMCCCO1465
27	Link Bracket	1	TMCCCO1427	67	Small Action Guard	1	TMCCCO1467
28	Bracket	2	TMCCCO1428	68	Back Spring	1	TMCCCO1468
30	Limit Stop	2	TMCCCO1430	70	Small Link	1	TMCCCO1470
32	Torsion Spring	1	TMCCCO1432	72	Nut Special	2	TMCCCO1472
36	Pin	1	TMCCCO1436	73	Big Link	1	TMCCCO1473
37	Housing	1	TMCCCO1437	74	Front Spring	1	TMCCCO1474
38	Carbon Brush Cap	2	TMCCCO1438	76	Separation Plate	1	TMCCCO1476
39	Carbon Brush	2	TMCCCO1439	77	Large Action Guard	1	TMCCCO1477
40	Brush Holder	2	TMCCCO1440	78	Location Plate	1	TMCCCO1478
42	Stator	1	TMCCCO1442	79	Circlip	1	TMCCCO1479
43	Fan Guide	1	TMCCCO1443	81	Power Cable	1	TMCCCO1481
44	Bearing	2	TMCCCO1444	82	Handle Left	1	TMCCCO1482
45	Armature	1	TMCCCO1445	83	Terminal	4	TMCCCO1483
46	Lock Pin	1	TMCCCO1446	84	Rubber Sleeve	1	TMCCCO1484
47	Spring	1	TMCCCO1447	86	Cable Clamp	1	TMCCCO1486
48	Circlip	1	TMCCCO1448	88	Handle Right	1	TMCCCO1486
50	Bearing	1	TMCCCO1450	89	Hand Grip Upper	1	TMCCCO1489
51	Rubber Buffer	1	TMCCCO1451	90	Hand Grip Lower	1	TMCCCO1490
52	Bearing Carrier	1	TMCCCO1452	91	Switch	1	TMCCCO1491
53	Shaft	1	TMCCCO1453	92	Capacitor	1	TMCCCO1492