Clarke®

WOODWORKER

1200W VARIABLE SPEED ROUTER

MODEL NO: CR1C

PART NO: 6462072

OPERATION & MAINTENANCE INSTRUCTIONS

CE

01/11

INTRODUCTION

Thank you for purchasing this CLARKE 1200W Variable Speed Router.

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.

IN THE BOX

- 1 x 1200 Watt Variable Speed Router
- 2 x Collet 8mm and 6.35mm (1/4") (one of which may be supplied fitted in the router).
- 1 x Collet Nut
- 1 x Collet Spring
- 1 x Parallel Fence
- 2 x Parallel Fence Rods; 300mm x 8mm (Supplied with two M4.5mm x 10.0mm screws and washers for mounting the fence See page 9.)
- 1 x 18mm Guide Bush (Template Guide)
- 1 x Trammel Attachment
- 2 x M4.5 Plain Nuts
- 1 Collet Spanner
- 1 Reusable Cable Tie

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GENERAL SAFETY RULES

WORK AREA

1. **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

1. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use adapter 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.
3. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep the cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
4. **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.

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 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 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.
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

1. **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 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 tools out of the reach of children and do not allow 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 may affect the power tools 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.** Poorly maintained cutting tools with 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**. Use of the power tool for operations different from 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.

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.

THIS APPLIANCE IS DOUBLE INSULATED

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:

- No connection should be made to the earth terminal .
- Connect BROWN cord to terminal marked with a letter "L" or coloured RED.
- Connect BLUE cord to 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-rewireable) please note:

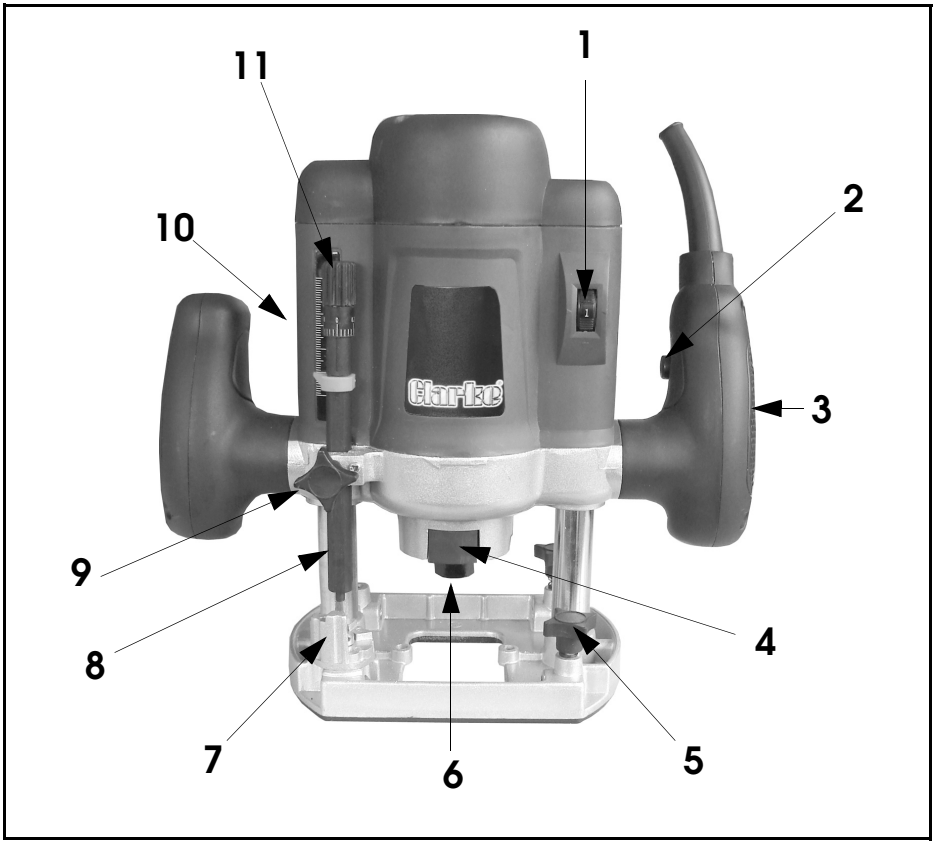
1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. When replacing a detachable fuse carrier, ensure the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.

FUSE RATING

- The fuse in the plug must be replaced with one of the same rating and this replacement must be ASTA approved to BS1362.
- 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.

OVERVIEW



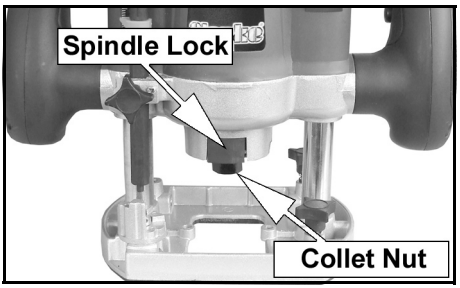
NO.	DESCRIPTION	PART NUMBER	NO.	DESCRIPTION	PART NUMBER
1	Speed Dial	KPCR1C01	7	Multi-stop Turret	KPCR1C07
2	Safety Button	KPCR1C02	8	Depth Stop	KPCR1C08
3	Trigger Switch (Rear)	KPCR1C03	9	Depth Stop Lock	KPCR1C09
4	Spindle Lock	KPCR1C04	10	Plunge Lock Lever (Rear)	KPCR1C10
5	Parallel Guide Locking Screws	KPCR1C05	11	Micro Adjustment Dial	KPCR1C11
6	Collet Nut	KPCR1C06			

BEFORE USE

WARNING: MAKE SURE THAT THE ROUTER IS SWITCHED OFF AND UNPLUGGED FROM THE MAINS SUPPLY BEFORE FITTING OR REMOVING ANY ACCESSORIES.

INSTALLING AND CHANGING ROUTER BITS

1. Rotate spindle whilst pushing the spindle lock inwards until spindle is locked, (hold the spindle lock on).
2. Using the wrench supplied, loosen the collet nut a few turns and remove bit if fitted.
3. Insert new bit and tighten collet nut, release spindle lock.

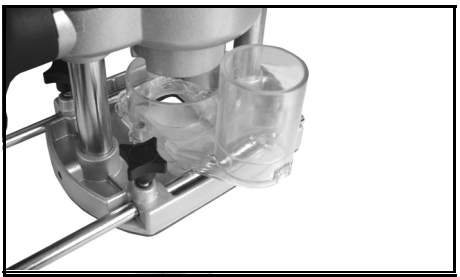


IMPORTANT: At least two thirds of the bit shank should be located inside the collet.

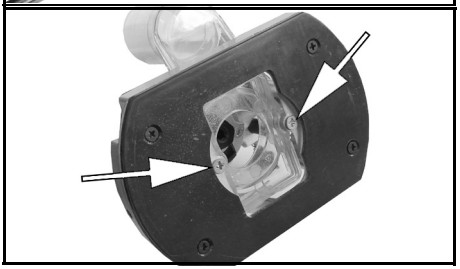
WARNING: NEVER TIGHTEN THE COLLET NUT WITHOUT A ROUTER BIT INSERTED

FITTING THE DUST EXTRACTION COVER

1. Fit the dust extraction cover to the router as shown.



2. Use the screws provided to secure the dust extraction cover.



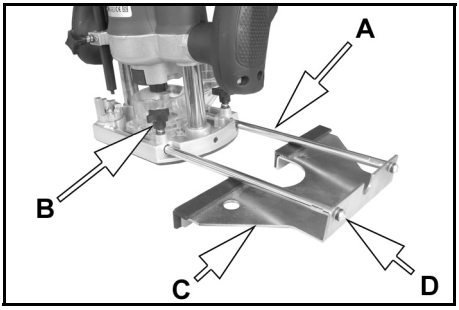
FITTING THE GUIDES

The tool is supplied with three guides,

- **Parallel fence guide:** primarily used for straight cuts, when chamfering or grooving.
- **Template guide:** Fitted when the tool is used in conjunction with templates.
- **Trammel attachment:** Used to move the router in an arc around a selected pivot point.

FITTING THE PARALLEL GUIDE FENCE

1. Connect the rods (A) to the guide body (C), securing with the screws (D) provided.
2. Fit the assembled guide to the router as shown on the right.
3. Secure using the parallel guide locking screws (B).

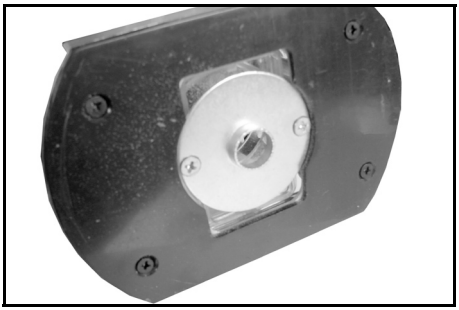


The parallel guide allows the user to follow a straight edge with accuracy. It is always advisable to make a trial cut in a piece similar to that to be worked where possible.

FITTING THE TEMPLATE GUIDE

The template guide allows the user to duplicate a particular shape, that shape being used as a template.

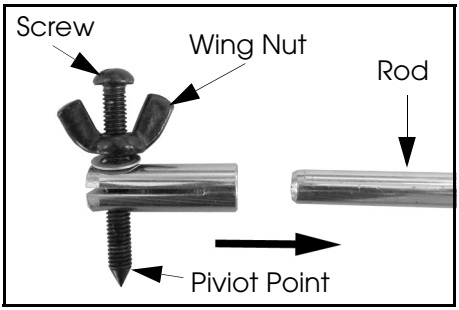
NOTE: The template guide can only be used if the dust extraction cover is fitted.



1. With the tool upside down, remove the two screws securing the dust extraction collar in place.
2. Fit the template guide with the raised boss facing the workpiece.
3. Secure using the two screws.

FITTING THE TRAMMEL ATTACHMENT

1. Remove one of the rods from the parallel guide and insert it into position on the router. Secure in place using the parallel guide locking screws.
2. Loosen the wing nut on the trammel attachment and slide the attachment on to the parallel guide rod as shown.
3. Adjust the height of the pivot point by turning the screw.
4. Tighten the wing nut to lock the pivot point in place and the trammel attachment to the rod.

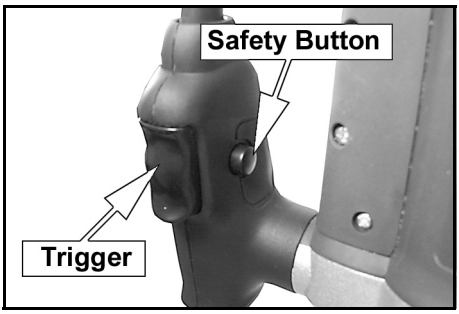


USING YOUR ROUTER

When using the router, there are some points to bear in mind which will ensure that the best results are achieved.

SWITCHING THE ROUTER ON/OFF

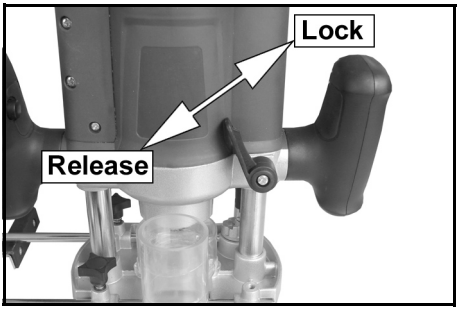
1. Grip the tool with both hands, ensuring the power on/off switch is in the right hand.
2. Push and hold the safety button, and pull the trigger switch.
   - Allow the motor to reach full speed before use.
3. To stop the router, simply release the trigger.



TO PLUNGE THE ROUTER

1. Place router on the workpiece with the cutter in the position to be cut.

2. Press down on both handles to the required depth, pushing the bit into the work piece.
    - The depth stop should be pre-set (See "Setting The Depth Of Cut" on page 11.)
3. Pull the plunge lock lever towards the handle to lock the body in position.
4. To raise the tool, push the plunge lock lever away from the handle and allow the body to rise out of the workpiece.



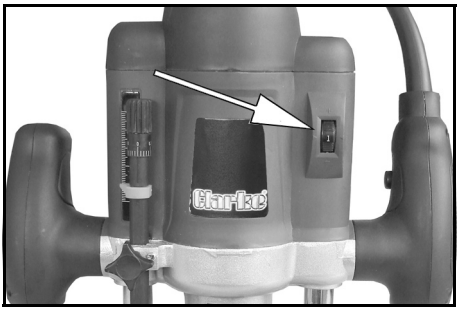
WARNING: ENSURE THAT THE TOOL HAS REACHED OPERATING SPEED BEFORE BEGINNING ANY CUTTING OPERATIONS.

ADJUSTING THE SPEED

The tool speed can be adjusted to suit the bit diameter and the type of material being cut.

Generally, the larger the diameter of the bit, the slower the tool speed should be.

- Rotate the speed selector wheel to adjust the speed setting from 1 to 7.



It is advisableto make practice cuts on a piece of scrap timber to determine the best speed.

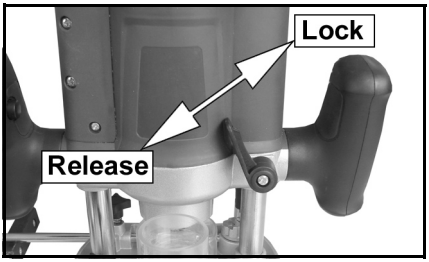
ADJUSTMENTS

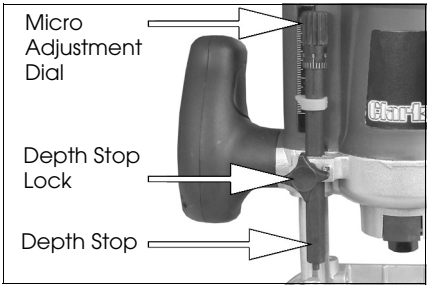
SETTING THE DEPTH OF CUT

With the appropriate bit installed, proceed as follows:

1. Fit a suitable router bit and place the tool on a flat surface.

2. Release the plunge lock lever and lower the tool body until the bit just touches the flat surface, then apply the plunge lock.
3. Slacken the depth stop lock and lower the depth stop rod, until the rod touches the multi-stop turret at its lowest setting.
4. Make a note of the position indicated on the scale.
5. Raise the height of the depth stop rod by the depth you want to cut into the wood. Each mark on the scale is equal to 1mm.
6. Tighten the depth stop lock.
7. Fine adjustment can be made by turning the micro adjustment dial. A full turn is equal to 1mm.



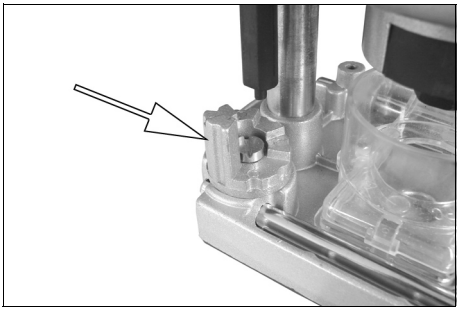


CAUTION: TO PREVENT DAMAGE TO THE MOTOR OR DIFFICULTY CONTROLLING THE TOOL, THE DEPTH OF CUT SHOULD BE LIMITED TO 10MM AT ONE PASS. IF YOU REQUIRE MORE THAN 10MM MAKE SEVERAL PASSES WITH PROGRESSIVELY DEEPER SETTINGS.

USING THE MULTI-STOP TURRET

The multi-stop turret can be used to assist in making multiple passes. Using the turret in this manner removes the necessity for resetting the adjuster rod for each pass. Each stop on the turret is approx. 3mm.

1. With the total depth set and the router raised fully, turn the turret to a higher step to restrict the depth of cut.
2. Make the first pass on the wood.
3. Rotate the turret to a lower setting and make the second pass.
4. Repeat this until the final cut is made.

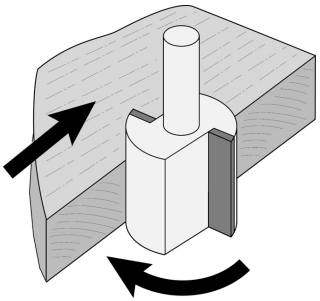


ROUTER TIPS

DIRECTION OF FEED

Remember that the direction the cutter is fed into the wood must always be against the direction of rotation as shown in the diagram on the right.

This ensures a quality finish and also ensures that the cutting action pulls the side fence or guide bearing into the wood.



FEED RATE

The optimum speed at which the bit is fed into the workpiece will come with experience.

- Feeding too fast may cause a poor quality cut or damage the motor.
- Move too slowly and the bit may leave burn marks on the face of the wood.

The proper feed rate to use depends on the bit size, the material being cut, the depth of the cut and the speed selected.

It is advisable to make practice cuts on a piece of scrap timber to determine the best feed rate.

TROUBLESHOOTING

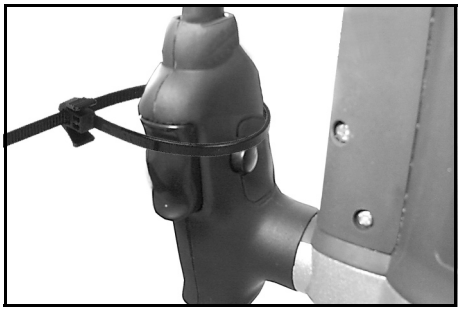
Problem	Reason	Solution
Router is overheating.	Ventilation holes are blocked / Machine is dirty.	Make sure the ventilation holes are clear.
	Router is overloading.	Do not use put excessive pressure on the cutter.
Excessive sparking.	Worn Brushes.	Contact you nearest Clarke dealer for repair.
Router does not operate when switched on.	Fuse has blown.	Replace fuse.

FITTING YOUR ROUTER TO A ROUTER TABLE

A router table allows the work to be passed over the router, rather than passing the router over the work. This makes working with smaller objects easier. A router table may be fitted with a fence, fingerboards and other work-guiding accessories to make the operation safer and more accurate.

- We recommend the Clarke CRT1 available from your local Clarke dealer.

1. With the router unplugged, fit the router to the router table as shown in the router table user guide.
2. Push and hold the safety button, and pull the trigger switch on the router.
3. Lock the trigger switch in the ON postion using the re-useable cable tie supplied.



CAUTION: ONLY USE THE CABLE TIE IF THE ROUTER IS FITTED TO THE ROUTER TABLE.

4. Plug the router into the router table switch and follow the instructions in the router table user guide.

This unit shown fitted to the Clarke CRT1 Router Table

MAINTENANCE

There are no user serviceable parts in this router, all servicing should be carried out by your nearest Clarke dealer.

CLEANING

- To ensure the best performance from the router, it must be kept clean.
- To reduce fire hazard, keep the cooling vents free of debris.

GENERAL MAINTENANCE

- Make sure that all nuts, bolts and screws are tight and secure.
- Always have any damaged or worn parts repaired, or replaced.
- Always have your router inspected and maintained by qualified service personnel. Do not attempt to repair the router unless you are qualified to do so.

STORAGE

- Make sure that the router has been thoroughly cleaned before storing it in a clean, dry place out of the reach of children.

ENVIRONMENTAL PROTECTION

Do not dispose of this product with general household waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of according to the laws governing Waste Electrical and Electronic Equipment.

SPECIFICATIONS

Electric Supply	230V 50Hz
Motor Power Rating	1200W
No Load Speed	13700/30000 RPM
Maximum Plunge Depth	50mm (Without Extraction Spout) 42mm (Extraction Spout Fitted)
Collet Size	2 Supplied (8mm & 6.35mm)
Dust extraction Adaptor Port Size	32 mm
Net Weight	4 kg
Guaranteed Sound Power (L_{wa} dB)	97 dB
Vibration Levels	6.23m/s^2 Uncertanty value K (1.5)

Specifications are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.

PARTS AND SERVICING

There are no user serviceable parts, all servicing and repairs should be carried out by your nearest Clarke dealer.

For Parts & Servicing, 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
SERVICE: Service@clarkeinternational.com

VIBRATION EMMISIONS

Employers are advised to refer to the HSE publication "Guide for Employers".

All hand held power tools vibrate to some extent, and this vibration is transmitted to the operator via the handle, or hand used to steady the tool. Vibration from about 2 to 1500 herz is potentially damaging and is most hazardous in the range from about 5 to 20 hertz.

Operators who are regularly exposed to vibration may suffer from Hand Arm Vibration Syndrome (HAVS), which includes 'dead hand', 'dead finger', and 'white finger'. These are painful conditions and are widespread in industries where vibrating tools are used.

The health risk depends upon the vibration level and the length of time of exposure to it……in effect, a daily vibration dose.

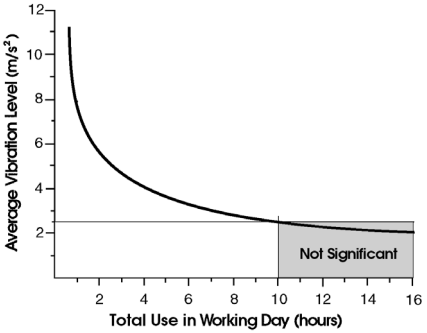
Tools are tested using specialised equipment, to approximate the vibration level generated under normal, acceptable operating conditions for the tool in question. For example, a grinder used at 45° on mild steel plate, or a sander on soft wood in a horizontal plane etc.

These tests produce a value 'a', expressed in metres per second per second, which represents the average vibration level of all tests taken, in three axes where necessary, and a second figure 'K', which represents the uncertainty factor, i.e. a value in excess of 'a', to which the tool could vibrate under normal conditions. These values appear in the specification panel below.

Model Number **CR1C**	
Description **Router**	
Declared vibration emission value in accordance with	EN12096
Measured vibration emission value - *a:*	6.23 m/s^2
Uncertainty Value - k.	1.5
Value determined according to	EN28622-1

'a' values in excess of 2.5 m/s^2 are considered hazardous when used for prolonged periods. A tool with a vibration value of 2.8 m/s^2 may be used for up to 8 hours (cumulative) per day, whereas a tool with a value of 11.2 m/s^2 may be used for ½ hour per day only.

The graph on the right shows the vibration value against the maximum time the respective tool may be used, per day.



The uncertainty factor should also be taken into account when assessing a risk. The two figures 'a' and 'K' may be added together and the resultant value used to assess the risk.

It should be noted that if a tool is used under abnormal, or unusual conditions, then the vibration level could possibly increase significantly. Users must always take this into account and make their own risk assessment, using the graph above as a reference.

Some tools with a high vibration value, such as impact wrenches, are generally used for a few seconds at a time, therefore the cumulative time may only be in the order of a few minutes per day. Nevertheless, the cumulative effect, particularly when added to that of other hand held power tools that may be used, must always be taken into account when the total daily dose rate is determined.

DECLARATION OF CONFORMITY

CE

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):

2004/108/EC Electromagnetic Compatibility Directive.

2006/42/EC Machinery Directive.

2006/95EC Low Voltage Equipment Directive.

2002/95/EC Restriction of Hazardous substances.

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

EN 55014-1:2006, EN 55014:1997+A1:2001, EN 61000-3-3:1995+A1:2001+A2:2005, EN 61000-3-2:2006, EN 607745-1:2006, EN 60745-2-17:2003+A11:2007

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: 2004

Product Description:	1200W Router
Model number(s):	CR1C
Serial / batch Number:	N/A
Date of Issue:	04-01-2011

Signed: .....

J.A. Clarke

Director

CR1C Router(07-0558)rv2

Page 1 of 1

A SELECTION FROM THE VAST RANGE OF

Clarke®

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