

Clarke[®]

CONTRACTOR[®]



1200W HAMMER DRILL

Model No. CON1200

PART NO: 6479505

OPERATING & MAINTENANCE INSTRUCTIONS



GC0611

INTRODUCTION

Thank you for purchasing this CLARKE Hammer Drill.

Before attempting to use the machine, 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.

ENVIRONMENTAL PROTECTION



Do not dispose of this product with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment at a recognised disposal facility.

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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, gasses or dust.** Power tools create sparks which may ignite 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 tools must match the power outlet. Never modify the plug in any way. Do not use adaptor plugs with earthed (grounded) power tools.** Correct plugs and outlets will reduce the risk of electric shock.
2. **Do not expose power tools to rain or wet conditions.** Any water entering power tools will increase the risk of electric shock.
3. **Do not abuse the electrical cable. Never use the cord for pulling or unplugging the power tool. Keep the cable away from sources of heat, oil, sharp edges or moving parts.** Damaged or tangled cables increase the risk of electric shock.
4. **When operating a power tool outdoors, use an extension cable suitable for outdoor use.** Using the correct cable reduces the risk of electric shock.

PERSONAL SAFETY

1. **Stay alert, watch what you are doing and use common sense when you are operating a power tool.** Do not operate a power tool when you are tired, ill or under the influence of alcohol, drugs or medication.
2. **Wear personal protective equipment including eye protection.** Safety equipment such as a dust mask, non-skid shoes or hearing protection used for appropriate conditions will reduce personal injuries. Use a face or dust mask if operation is particularly dusty. Wear ear protectors/defenders as the noise level of this machine can exceed 85dB (A).
3. **Do not over-reach.** Keep your proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
4. **Avoid accidental starting of the machine.** Ensure the switch is in the off position and the trigger lock button disengaged before plugging the machine in to the power supply. Carrying power tools around with your finger on the trigger or plugging in power tools that are switched on invites accidents.

5. **Dress properly.** Do not wear loose clothing or jewellery which may get caught in moving parts. Wear protective hair covering to contain long hair. For best footing, wear rubber soled footwear. Keep floor clear of oil, scrap wood, etc.
6. Concentrate on the job in hand, no matter how trivial it may seem. Be aware that accidents are caused by carelessness due to familiarity.
7. Switch the machine OFF immediately after the task is completed.

POWER TOOL USE AND CARE

1. **Do not force the machine.** Use the correct power tool for your application. It will do a better and safer job at the rate for which it was designed.
2. **Do not use the power tool if the trigger 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 power tool from the power supply before making any adjustments, changing accessories, or storing the tool.** These measures will reduce the risk of the power tool starting accidentally.
4. **Store power tools out of the reach of children and do not allow persons unfamiliar with these instructions to operate the power tool.** Power tools are potentially dangerous in the hands of untrained users.
5. **Maintain power tools in top condition.** Keep tools/ machines clean for the best and safest performance. Check for misalignment or binding of moving parts, broken parts, or any condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
6. **Use recommended accessories.** The use of improper accessories could be hazardous.
7. **Machine cleanliness.** Do not allow the ventilation slots in the machine to become blocked with dust.
8. **Check the power tool for damage before using the machine.** Any damaged part should be inspected to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, breakage of parts, mountings, and any other condition that may affect the machines operation. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use the machine. Consult your local dealer.

SERVICE

1. **When necessary, have your power tools serviced or repaired by a qualified person using identical replacement parts.** This will ensure that the safety of the power tool is maintained.

HAMMER DRILL SAFETY INSTRUCTIONS

1. Only use the hammer drill in the manner and for the functions described in these instructions.
2. **Using the correct bit.** Use the appropriate drill bit for the material being drilled. Different bits are available from your Clarke dealer.
3. **Use of the mains cable.** Keep the mains cable well away from the drill and ensure an adequate electrical supply is close at hand so that the operation is not restricted by the length of the cable.
4. **Working on the bench.** Allow sufficient clearance beneath the work to ensure the drill bit does not come into contact with the floor, table etc.
5. **Switching off.** Never place the drill on a table or bench if it has not completely stopped. The drill bit will continue to rotate for a short time after the trigger has been released to stop the drill.
6. **Drilling into walls.** Do not drill into walls or cavities before checking for hidden electrical wires or water pipes etc.
7. **Finishing drilling.** Do not touch the drill bit immediately after use. Allow time for it to cool.
8. **Use outdoor extension leads.** If working outdoors, always use an approved cable extension suitable for the power rating of this tool (see specifications), the conductor size should also be at least the same size as that on the machine, or larger. When using a cable reel, always unwind the cable completely. We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD).
9. **Cooling agents.** When drilling metals, always use a cooling agent i.e. cutting/soluble oil.

Additionally, please keep these instructions in a safe place for future reference.

ELECTRICAL CONNECTIONS



WARNING! Read these electrical safety instructions thoroughly before connecting the product to the mains supply.

Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230VAC 50Hz. Do not connect it to any other power source.

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

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



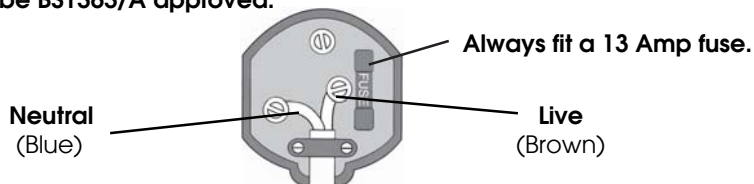
WARNING! The wires in the power cable of this product are coloured in accordance with the following code:

Blue = Neutral Brown = Live

If the colours of the wires in the power cable of this product do not correspond with the terminal markings 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 product is connected to the mains supply via a Residual Current Device (RCD).

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



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

OVERVIEW

The CLARKE CON1200 is a variable-speed drill, equipped with an adjustable speed controller, high and low gear selection and hammer operation and has a lock-on button for continuous operation. The drill is supplied with a depth stop rod and auxiliary handle.

When unpacking, check for damage or shortages etc. Any found should be reported to your CLARKE dealer where the appliance was originally purchased. This CON1200 Drill is supplied with the following components:

- 1 x Chuck Key
- 1 x Depth Stop Rod
- 1 x Auxiliary (Side) Handle
- 1 x Instruction Manual (this document)



OPERATION

IMPORTANT: To avoid accidental starting, ensure the drill is switched OFF before plugging in to the mains. To do this, briefly pull the switch, and release to ensure the trigger lock is not set in the 'lock' position.

INSERTING A DRILL BIT

1. Open the chuck by rotating the chuck sleeve anticlockwise until the jaws are open sufficiently to take the drill bit.
 2. Place the drill bit in the jaws of the chuck as far as it will go.
 3. Insert the chuck key in one of the three holes in the chuck and tighten in a clockwise direction.
- Make sure the head of the chuck key is firmly located on the cog barrel of the chuck when tightening.



REMOVE THE CHUCK KEY BEFORE OPERATING THE DRILL.

- To remove the bit, release by inserting the chuck key in one of the holes and turning in an anticlockwise direction.

SWITCHING ON & CONTINUOUS OPERATION

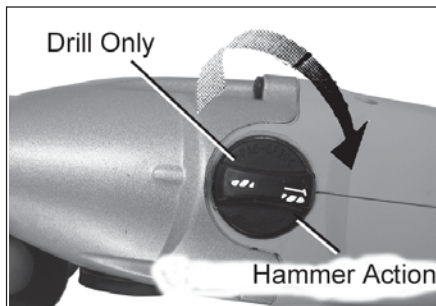
1. Plug into a 13 amp socket and squeeze the trigger to start the drill.
2. During use, press the trigger lock-on button & the drill will run continuously. Squeeze the trigger again briefly to release the trigger lock & stop the drill.

HAMMER DRILL SELECTION

Rotate the 'Drill/Hammer Drill' mode selection switch so that the 'Hammer' symbol is aligned with the raised mark on the drill body.

NORMAL DRILL SELECTION

Rotate the drill/hammer drill mode selection switch so that the 'Drill' symbol is aligned with the raised mark on the drill body.

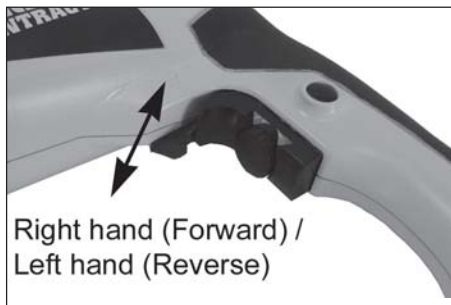


NOTE: Both these operations should only be performed when the drill is at a complete stop.

FORWARD / REVERSE SELECTION

1. Set the forward/reverse selector switch to the position marked 'R' for normal 'Right hand' rotation.
2. Set the forward/reverse selector switch to the right hand position marked 'L' for 'Left hand' rotation.

NOTE: This should only be performed when the drill is at a complete stop.



SPEED SELECTION

1. Set the high or low speed by selecting one of the two gear speeds (1-low or 2-high) with the selector.
- Turn the speed selector knob until the chosen number is aligned with the arrow on the drill body).

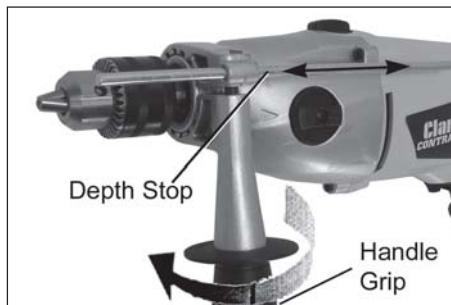
NOTE: This should only be performed when the drill is at a complete stop.

- Variable speeds may be selected by turning the speed control in the centre of the trigger.



AUXILIARY HANDLE & DEPTH STOP

1. Fit the depth stop along with the auxiliary handle.
- This can only be used if the handle is installed.
2. Slide the handle assembly over the chuck and onto the body of the drill. Insert the depth stop rod into the holder in the handle assembly, rotate the handle to the desired position and secure in position by twisting the handle grip clockwise, DO NOT overtighten.
- To set the depth stop, loosen the handle by turning the handle grip anticlockwise and slide the rod or and out to the required position.
- The scale markings on the rod are for reference only.



GENERAL DRILLING TECHNIQUE

- After drilling material to the full depth, maintain chuck rotation to ease drill withdrawal.
- Keep drill bits sharpened for optimum performance.
- Always drill directly in line with the bit. Do not use sideways movement as this may damage the drill or cause the bit to break.
- Always use a cutting lubricant when drilling metals except for brass and cast iron which should be drilled dry.
- If the drill is not cutting the metal then sharpen the drill bits, ensuring the various cutting angles are correct.

MAINTENANCE

Before commencing any maintenance procedures, always ensure the drill is isolated from the electrical supply by switching off and removing the plug from the socket.

BEFORE USE

1. Ensure all fixing screws remain tight to ensure the drill is in safe working condition.
2. Inspect the power cable to ensure it is sound and free from cracks, bare wires etc.

CLEANING

1. Ensure all air ventilation slots are clear of blockages, (use compressed air to clean the machine if possible).
 2. After use, clean all dust and swarf from the drill.
 3. Clean the exterior of the drill with a soft cleaning cloth. Never use any chemicals or harsh abrasives to clean the tool.
- Avoid using solvents when cleaning plastic parts, most plastics are susceptible to damage from the various types of commercial solvents.

GENERAL MAINTENANCE

- All bearings etc, in this tool are lubricated with a sufficient amount of high grade lubricant for the tools lifetime under normal operating conditions, therefore no further lubrication is necessary.
- Refer to your CLARKE dealer if internal maintenance is required.

FAULT FINDING

Problem	Possible Cause	Remedy
Tool will not operate.	No power supply.	Check supply and rectify as necessary.
	Switch is faulty.	Consult your Clarke dealer.
	Fuse blown.	Check and replace if necessary.
	Motor is faulty.	Consult your Clarke dealer.
Motor runs but drill bit does not move.	Drill fastening not tight.	Secure drill bit.
	Drive gear broken.	Consult your Clarke dealer.
Heavy internal sparking.	Faulty motor.	Consult your Clarke dealer.
	Worn Brushes.	Consult your Clarke dealer.
Motor becomes hot.	Unduly heavy use.	Reduce the force applied to the tool. Let the tool do the work.
	Air vents have become blocked.	Clean out the air vents using compressed air or clean with a dry cloth.
	Low supply voltage.	Ensure supply voltage is correct. If an extension cable is used, ensure it is of the correct rating and is fully unwound.
Excessive vibration.	Drill bit bent or not mounted correctly.	Check and rectify.
	Machine bearings worn.	Consult your Clarke dealer.

ACCESSORIES & CONSUMABLE SPARES

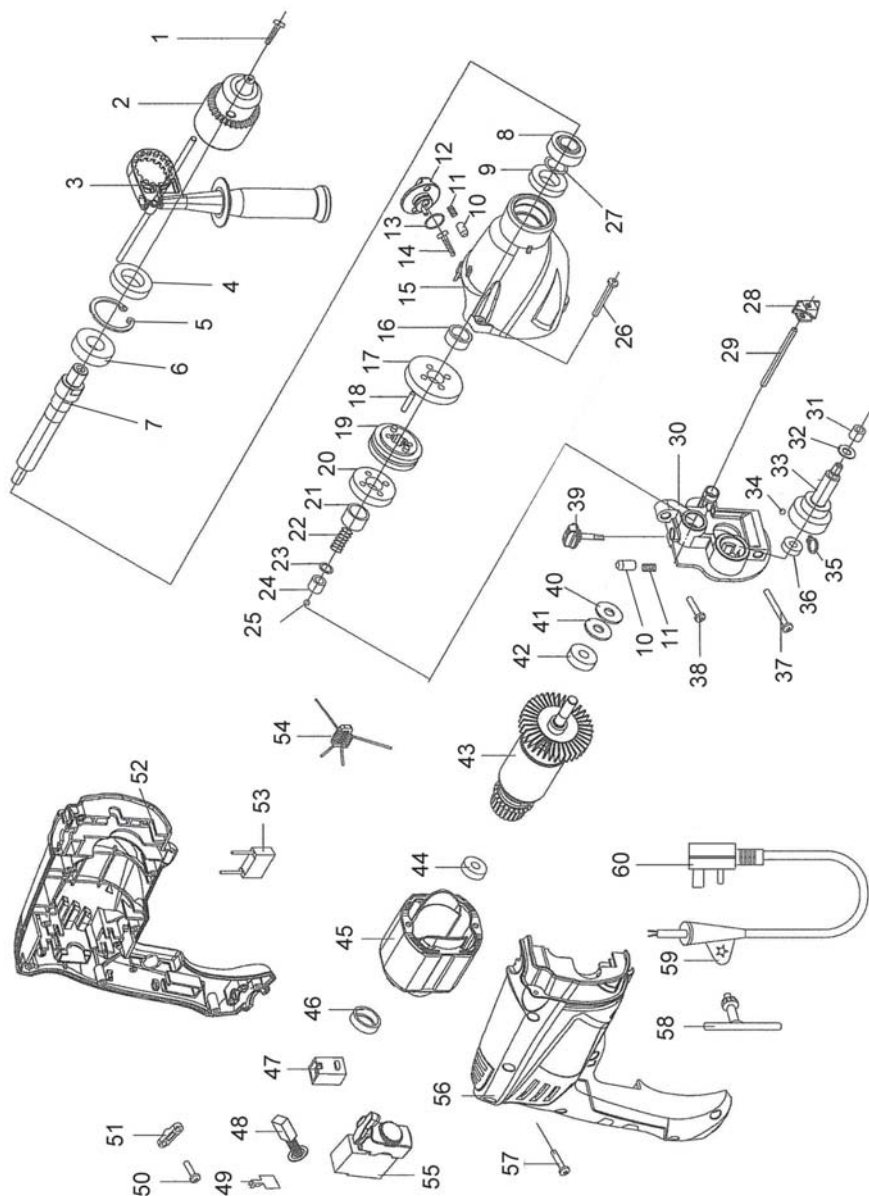
An extensive selection of accessories including Drill Bit Sets, Socket & Bit Sets and Drill Bit Sharpeners are available from your CLARKE dealer. Refer to your Clarke dealer or service department if internal maintenance is required.

SPECIFICATIONS

Item	Specification
Operating Modes	Drill/Drill & Hammer
Chuck Capacity	1.5 - 13 mm
Rated No Load Speeds (Low Gear/High Gear)	0-1000 / 0-2800 rpm
Weight	3.2 kg
Dimensions(LxWxH)	370 x 88 x 235 mm
Operating Voltage & Frequency	230 V/ 50 Hz
Fuse Rating	13 A
Motor Power	1200 W
Vibration (front/rear handle)	8.151 / 16.686 m ²
Sound Pressure level	95.7 dB LWA
Guaranteed Sound Power	106.7 dB LWA

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.

PARTS DIAGRAM



PARTS LIST

No	Part No	Description	No	Part No	Description
1	WGCHD12001	Chuck Retain Screw	25	WGCHD12025	Steel Ball
2	WGCHD12002	Chuck	26	WGCHD12026	Self-tapping Screw
3	WGCHD12003	Side Handle	27	WGCHD12027	Circlip
4	WGCHD12004	Oil Seal	28	WGCHD12028	Gear Change Piece
5	WGCHD12005	Circlip	29	WGCHD12029	Pin
6	WGCHD12006	Bearing 6002	30	WGCHD12030	Impact Housing
7	WGCHD12007	Chuck Spindle	31	WGCHD12031	Needle Brg HK0608
8	WGCHD12008	Upper Impact Block	32	WGCHD12032	Washer
9	WGCHD12009	Lower Impact Block	33	WGCHD12033	Spindle Gear
10	WGCHD12010	Bullet Head	34	WGCHD12034	Steel Ball
11	WGCHD12011	Impact Spring	35	WGCHD12035	Circlip
12	WGCHD12012	Gear Selector	36	WGCHD12036	Bearing 696Z
13	WGCHD12013	O-Ring	37	WGCHD12037	Screw
14	WGCHD12014	Self-tapping Screw	38	WGCHD12038	Screw
15	WGCHD12015	Front Housing	39	WGCHD12039	Impact Selector
16	WGCHD12016	Front Steel Sleeve	40	WGCHD12040	Oil Seal
17	WGCHD12017	Large Gear	41	WGCHD12041	Felt Pad
18	WGCHD12018	Pin	42	WGCHD12042	Bearing 608
19	WGCHD12019	Gear Change Block	43	WGCHD12043	Motor Armature
20	WGCHD12020	Small Gear	44	WGCHD12044	Bearing 607
21	WGCHD12021	Rear Steel Sleeve	45	WGCHD12045	Motor Stator
22	WGCHD12022	Spring	46	WGCHD12046	Bearing Cover
23	WGCHD12023	Washer	47	WGCHD12047	Brush Holder
24	WGCHD12024	Needle Brg HK0709	48	WGCHD12048	Brush

PARTS LIST

No	Part No	Description	No	Part No	Description
49	WGCHD12049	Brush Clip	55	WGCHD12055	Trigger Assembly
50	WGCHD12050	Clamp Screw	56	WGCHD12056	Casing (RH)
51	WGCHD12051	Cable Clamp	57	WGCHD12057	Screw
52	WGCHD12052	Casing (LH)	58	WGCHD12058	Chuck Key
53	WGCHD12053	Capacitor	59	WGCHD12059	Power Lead
54	WGCHD12054	Inductor	60	WGCHD12060	Power Plug

VIBRATION EMISSIONS

HAND-ARM VIBRATION

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 Hertz 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 softwood 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 No:	CON1200
DESCRIPTION:	1200W HAMMER DRILL

Declared vibration emission value in accordance
with EN12096

Measured vibration emission value - a : 16.7m/s²

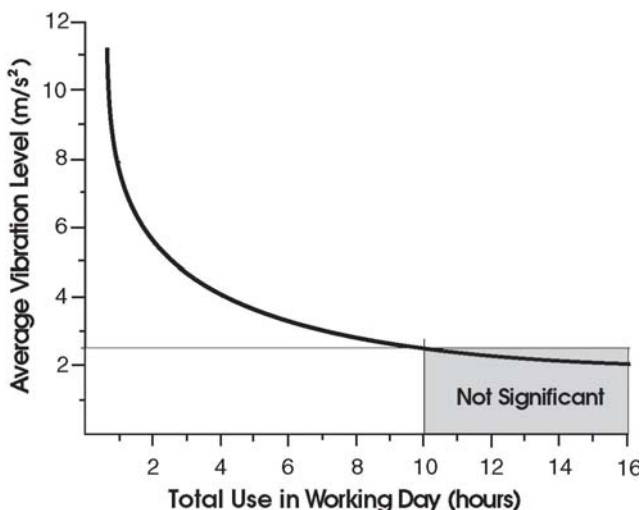
Uncertainty value - K : 1.5m/s²

Values determined according to EN28622-1

You will note that a third value is given in the specification - the highest measured reading in a single plane. This is the maximum level of vibration measured during testing in one of the axes, and this should also be taken into account when making a risk assessment.

'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 $\frac{1}{2}$ hour per day only.

The graph below 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



Clarke[®]
INTERNATIONAL

Hemnoll 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.*

2006/95/EC *Low Voltage Equipment Directive.*

2002/95/EC *Restriction of Hazardous substances.*

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

EN 60745-1:2009, EN 60745-2-1/A12:2009, EN55014-1:2006, EN 55014-2/A1:2001

EN61000-3-2:2006, EN 61000-3-3/A2:2005.

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: 2009

Product Description: 1200W Hammer Drill
Model number(s): CON1200
Serial / batch Number: N/A
Date of Issue: 02/06/2011

Signed:

J.A. Clarke
Director

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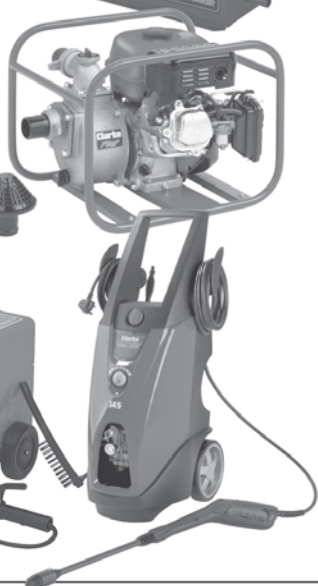
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