

ElanPro®

CONTRACTOR®



DEMOLITION HAMMER

MODEL No. CON2100 / CON2300
Part No. 6462076 / 6462078

OPERATING & MAINTENANCE INSTRUCTIONS



Thank you for purchasing this CLARKE demolition hammer.

Before attempting to use the demolition hammer 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 the demolition hammer 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.

DECLARATION OF CONFORMITY

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Clarke international declare that this product complies to the following standards/directives:

- 98/37/EC
- 89/336/EEC
- 73/23/EEC

Product Description: Demolition Hammer

Model No: CON2100, CON2300

Signed:



Engineering Manager

SPECIFICATIONS

Model	CON2100	CON2300
Part Number	6462076	6462078
Voltage	110V @ 50 Hz	230V @ 50 Hz
Power	2100 W	2100 W
Impact rate (strokes per min)	750-1950	750-1950
Impact energy	7-27 Joules	7-27 Joules
Tool Holder	21 Hex	21 Hex
Maximum Capacity in concrete	50 mm	50 mm
Dimensions (L x W x H)	745 x 130 x 250	745 x 130 x 250
Weight	17 kg	17 kg
Sound Power Measured	107.5 dB (A) L_{wA}	107.5 dB (A) L_{wA}
Vibration (RMS)	9.97 m/s ²	9.97 m/s ²

PACK CONTENTS

- Demolition hammer
- Side handle
- 1 x Chisel
- 1 x Drill bit

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.

SAFETY PRECAUTIONS



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. **ALWAYS** Learn the machines applications, limitations and the specific potential hazards peculiar to it. Read and become familiar with the entire operating manual.
2. **ALWAYS** use a face or dust mask if the operation is particularly dusty.
3. **ALWAYS** check for damage. before using the machine, any damaged part, should be checked 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.
4. **ALWAYS** disconnect the tool/machine from the power supply before servicing and when changing accessories.
5. **ALWAYS** wear safety goggles, manufactured to the latest European Safety Standards. Everyday eyeglasses do not have impact resistant lenses, they are not safety glasses.
6. **ALWAYS** keep work area clean. Cluttered areas and benches invite accidents.
7. **ALWAYS** ensure that adequate lighting is available. A minimum intensity of 300 lux should be provided. Ensure that lighting is positioned so that you will not be working in your own shadow.
8. **ALWAYS** keep children away. All visitors should be kept a safe distance from the work area, especially whilst operating the machine.
9. **ALWAYS** maintain machine in top condition. Keep tools/machines clean for the best and safest performance, follow maintenance instructions.
10. **ALWAYS** handle with extreme care do not carry the tool/machine by its' electric cable, or yank the cable to disconnect it from the power supply .
11. **ALWAYS** ensure the switch is off before plugging in to mains. Avoid accidental starting.
12. **ALWAYS** concentrate on the job in hand, no matter how trivial it may seem. Be aware that accidents are often caused by carelessness due to familiarity.

13. **ALWAYS** keep your proper footing and balance at all times - don't overreach. For best footing, wear rubber soled footwear. Keep floor clear of oil, scrap wood, etc.
14. **ALWAYS** wear proper apparel. Loose clothing or jewellery may get caught in moving parts. Wear protective hair covering to contain long hair.
15. **ALWAYS** use recommended accessories. The use of improper accessories could be hazardous.
16. **ALWAYS** remove plug from electrical outlet when adjusting, changing parts, or working on the machine.
17. **NEVER** operate machine while under the influence of drugs, alcohol or medication.
18. **NEVER** leave machine running unattended. Turn power off. Do not leave the machine until it comes to a complete stop.
19. **NEVER** force the machine. It will do a better and safer job at the rate for which it was designed.
20. **NEVER** use power tools in damp or wet locations or expose them to rain. Keep your work area well illuminated. Do not use in explosive atmosphere (around paint fumes, flammable liquids etc.). Avoid dangerous environment.

ADDITIONAL PRECAUTIONS FOR DEMOLITION HAMMER

1. Always wear ear protectors/defenders, as the noise level of this machine can exceed 85dB (A).
2. In cold-weather conditions or when the tool has not been used for a longer period of time, let the tool run with no load for several minutes before use.
3. Always hold the tool firmly with both hands and ensure a secure stance.
4. Always operate the tool with the side handle properly mounted.
5. When working above ground level ensure the area below is clear.
6. To prevent electric shock, check the working area for live wires before operation.
7. Do not touch the bit/chisel or the parts close to the bit/chisel immediately after operation, as they may be extremely hot and cause burns to the skin.
8. Always direct the power cable to the rear, away from the tool.
9. Do not attempt any electrical repair yourself. Consult a qualified electrician, or our Service Department on **020 8988 7400**

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

ELECTRICAL CONNECTIONS



230 VOLT MODELS


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 MUST BE EARTHED

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, or your mains supply, proceed as follows:

- No connection should be made to the plug terminal marked with a letter "E" or Earth symbol  or coloured GREEN or GREEN & YELLOW.
- 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.

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.

110 VOLT MODELS

These models **must** be connected to a protected 110V supply, through a suitably approved connector. On no account must a 230V, 13amp (BS1363) plug be used.

NOTE: If a portable 110V transformer is used, make sure it has a rated capacity sufficient to take the load of the machine.

CABLE EXTENSION

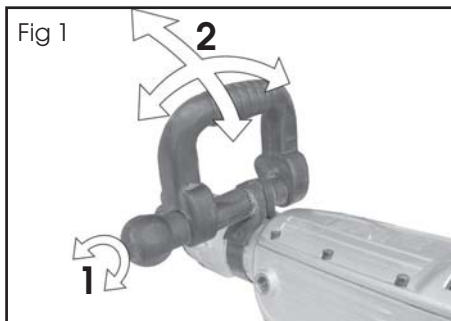
Always use an approved cable extension suitable for the power rating of this tool (see specifications), the conductor size should also be at least the same size as that on the machine, or larger. When using a cable reel, always unwind the cable completely.

WARNING!
IF YOU ARE IN ANY DOUBT ABOUT ELECTRICAL CONNECTIONS, CONSULT A QUALIFIED ELECTRICIAN.
NEVER ATTEMPT ELECTRICAL REPAIRS YOURSELF.

PREPARATION

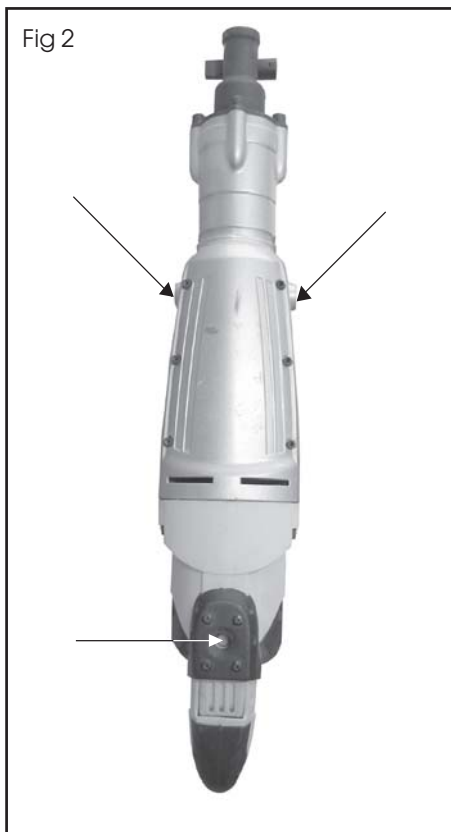
ADJUSTING D SHAPED HANDLE

1. Turn the clamp knob anticlockwise to loosen the D shaped handle.
2. Adjust the D shaped handle to the required angle and position.
3. Rotate the clamp knob clockwise to lock the D shaped handle into position.



FITTING THE SIDE HANDLES

1. The side handle can be fitted to one of 3 points on the demolition hammer shown on figure 2.

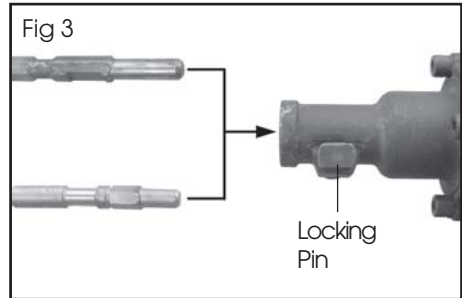


PREPARATION

FITTING THE CHISEL/BIT

To fit the chisel/bit, proceed as follows:

1. Clean and grease the chisel shank Do NOT lubricate the machine.
2. Pull out and rotate the locking pin.
3. Insert the chisel shank into the tool holder. Pull out and rotate the locking pin again to secure the chisel.



If the chisel bit you are using has a flat area on the shank, this should be facing downwards.

4. Pull on the chisel to ensure it is locked into the tool holder, be aware that the hammer action requires the chisel to be able to move axially by 2-3 cm.



WARNING!

Chisels/bits may be hot after use, take care when removing them from the machine.

INSTRUCTIONS FOR USE



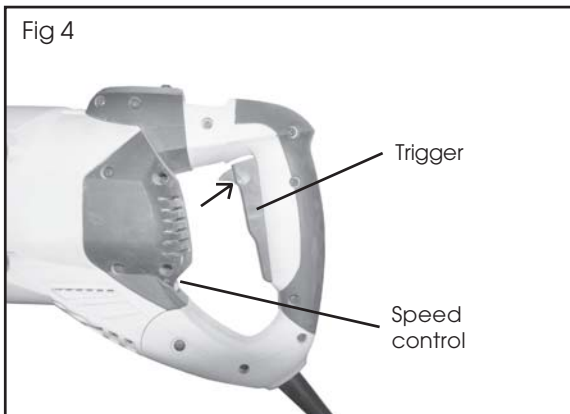
WARNING!

Always check the location of pipes and wiring before starting the machine.

Do not apply excessive pressure to the machine.

THE TRIGGER SWITCH

1. Pull the trigger switch up and back to start the machine.
2. Release the trigger to stop the machine.



ADJUSTING THE SPEED

1. Adjust the speed control to the required setting.

MAINTENANCE

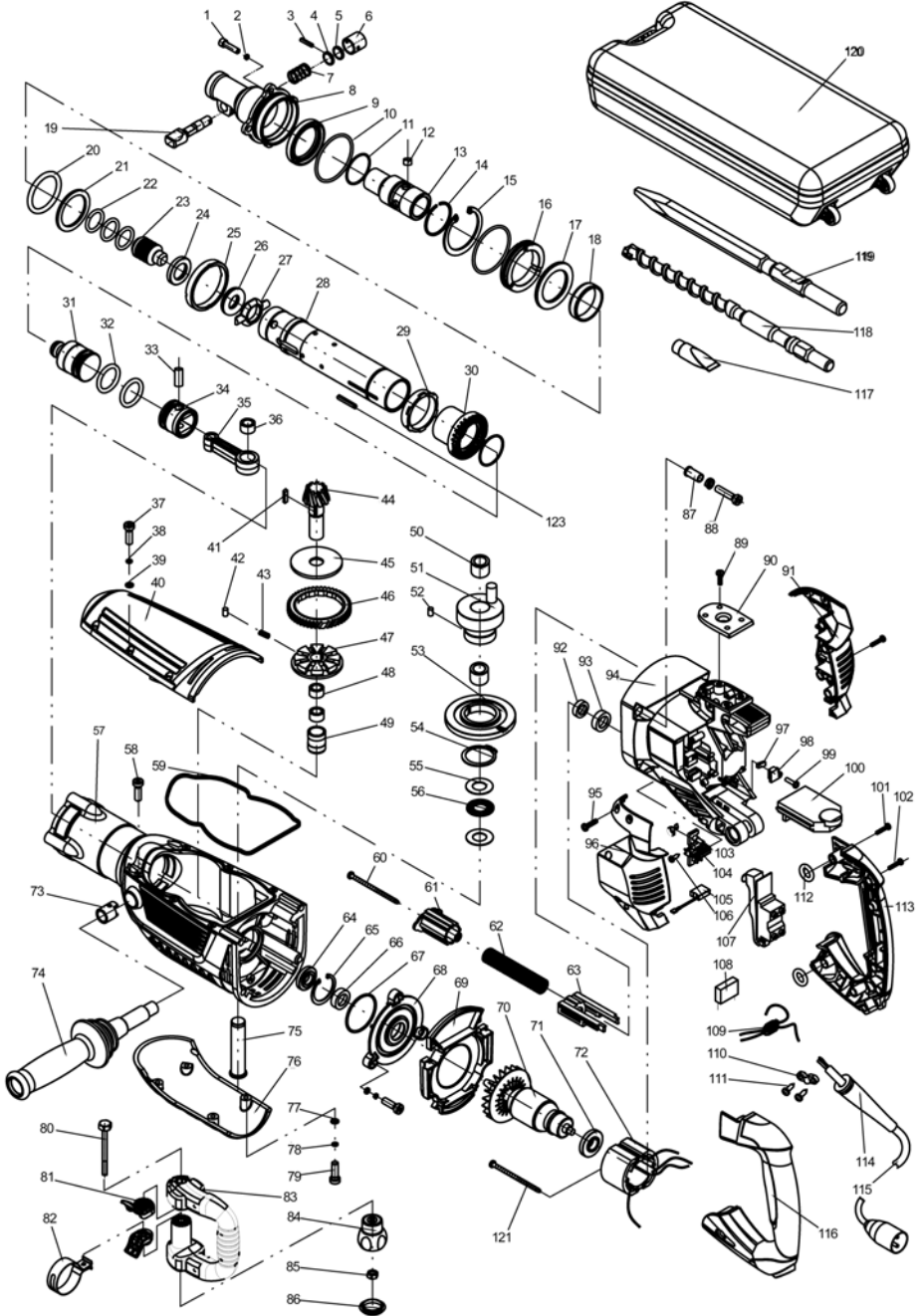


WARNING!

Make sure that the demolition hammer is switched off and disconnected from the power supply before starting any cleaning or maintenance procedures.

- Keep the cooling vents clear.
- Regularly clean the housing with a soft cloth.
- Any worn or damaged parts should be replaced by qualified personnel.
- Keep the handles clean and free from oil and grease.

PARTS DIAGRAM



PARTS LIST

Item	Part Number	Description	Qty	Item	Part Number	Description	Qty
1	KPCON2100001	Screw M8X35	4	41	KPCON2100041	Feather Key	1
2	KPCON2100002	Spring Washer 8	4	42	KPCON2100042	Clutch Plate	8
3	KPCON2100003	Pin 4X17	1	43	KPCON2100043	Spring	8
4	KPCON2100004	Washer 18X12X1	2	44	KPCON2100044	Fifth Gear	1
5	KPCON2100005	Spring Seat	1	45	KPCON2100045	Plastic Sheet	1
6	KPCON2100006	Ring A	1	46	KPCON2100046	Fourth Gear	1
7	KPCON2100007	Spring	1	47	KPCON2100047	Slip Plate	1
8	KPCON2100008	Couet	1	48	KPCON2100048	Needle Plate	2
9	KPCON2100009	Oil Seal	1	49	KPCON2100049	Needle Cover	1
10	KPCON2100010	O Ring	2	50	KPCON2100050	Needle Bearing HK1816	2
11	KPCON2100011	O Ring	2	51	KPCON2100051	Third Crank Shaft	1
12	KPCON2100012	Stell Pole	4	52	KPCON2100052	Pin B4X8	1
13	KPCON2100013	Retainer Sleeve	1	53	KPCON2100053	Second Fourth Gear	1
14	KPCON2100014	Clip Ring	1	54	KPCON2100054	Clip Ring 40	1
15	KPCON2100015	Clip Ring 68	1	55	KPCON2100055	Washer 35X18X1	2
16	KPCON2100016	Oil Bearing	1	56	KPCON2100056	Needle Plate	1
17	KPCON2100017	Oil Bearing Baffle	1	57	KPCON2100057	Crank Case	1
18	KPCON2100018	Steel Ring	1	58	KPCON2100058	Screw M5X35	2
19	KPCON2100019	Rod	1	59	KPCON2100059	M1 Ring	1
20	KPCON2100020	O Ring	1	60	KPCON2100060	Screw ST4X35	2
21	KPCON2100021	Washer	1	61	KPCON2100061	Damping Seat	1
22	KPCON2100022	O Ring	3	62	KPCON2100062	Damping Spring	1
23	KPCON2100023	Ram	1	63	KPCON2100063	Damping Closure Rail	1
24	KPCON2100024	Ram Baffle	1	64	KPCON2100064	Washer	1
25	KPCON2100025	Front Oil Baffle	1	65	KPCON2100065	Clip Ring	1
26	KPCON2100026	Dead Block	1	66	KPCON2100066	Ball Bearing 6002	1
27	KPCON2100027	Profiled Block	1	67	KPCON2100067	O Ring	1
28	KPCON2100028	Cylinder	1	68	KPCON2100068	Gear Cover	1
29	KPCON2100029	Black Oil Bearing	1	69	KPCON2100069	Fan Guide	1
30	KPCON2100030	Six Gear	1	70	KPCON2100070	Rotor	1
31	KPCON2100031	Ram	1	71	KPCON2100071	Washer	1
32	KPCON2100032	O Ring 40X5	2	72	KPCON2100072	Stator	1
33	KPCON2100033	Piston Pin	1	73	KPCON2100073	Nut	2
34	KPCON2100034	Piston	1	74	KPCON2100074	Side Handle	1
35	KPCON2100035	Connecting Rod	1	75	KPCON2100075	Adjust Stalk	1
36	KPCON2100036	Needle Bearing	1	76	KPCON2100076	Tail Cover	1
37	KPCON2100037	Screw M5x25	4	77	KPCON2100077	Washer 5	7
38	KPCON2100038	Spring washer 5	6	78	KPCON2100078	Spring Washer 5	7
39	KPCON2100039	Washer 5	6	79	KPCON2100079	Screw M5X16	7
40	KPCON2100040	Crank Case Cover	1	80	KPCON2100080	Screw M8X170	1

PARTS LIST

Item	Part Number	Description	Qty	Item	Part Number	Description	Qty
81	KPCON2100080	Side Handle Holder	2	102	KPCON2100102	Screw ST4X18	7
82	KPCON2100081	Clamp	1	103	KPCON2100103	Spring	2
83	KPCON2100082	D Side Handle	1	104	KPCON2100104	Brush House	2
84	KPCON2100084	Nut	1	105	KPCON2100105	Carbon Brush	2
85	KPCON2100085	6 Nut M8	1	106	KPCON2100106	Screw ST4X10	2
86	KPCON2100086	Nut Cover	1	107	KPCON2100107	Switch	1
87	KPCON2100087	Adjust Nut	1	108	KPCON2100108	Capacitor 0.22UF	1
88	KPCON2100088	Screw M8X40	4	109	KPCON2100109	Inductance	1
89	KPCON2100089	Screw ST6X16-F	4	110	KPCON2100110	Cord Clip	1
90	KPCON2100090	Nut Plank	1	111	KPCON2100111	Screw ST4X16	2
91	KPCON2100091	Lift Right Bolt	1	112	KPCON2100112	O Ring 24X5	4
92	KPCON2100092	Ball Bearing 6000	1	113	KPCON2100113	Right Handle	1
93	KPCON2100093	Ball Bearing Set	1	114	KPCON2100114	Cord Jacket	1
94	KPCON2100094	Housing	1	115	KPCON2100115	Cord	1
95	KPCON2100095	Screw ST4X14	8	116	KPCON2100116	Lift handle	1
96	KPCON2100096	Lift Tail Cover	1	117	KPCON2100117	Grease + Oil Box	1
97	KPCON2100097	Stretch Forward	1	118	KPCON2100118	Auger	1
98	KPCON2100098	Stretch Forward Clip	1	119	KPCON2100119	Chisle	1
99	KPCON2100099	Screw ST4X10	1	120	KPCON2100120	Case	1
100	KPCON2100100	Electronics	1	121	KPCON2100121	Screw ST4.8X70	2
101	KPCON2100101	Screw ST4.8X30	1	122	KPCON2100122	Feather Key	2

PARTS & SERVICE

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

or e-mail as follows:

PARTS: parts@clarkeinternational.com

SERVICE: service@clarkeinternational.com



When disposing of this product, ensure it is disposed of according to all local ordinances. It must not be disposed of with general household waste.

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.

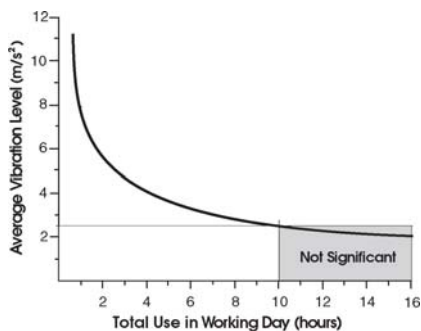
Tools are tested using specialised equipment, to approximate the vibration level generated under normal, acceptable operating conditions for the tool in question. For example, a grinder used at 45° on mild steel plate, or a sander on softwood in a horizontal plane etc.

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.

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 ½ hour per day only.

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



VIBRATION EMISSIONS

The uncertainty factor should also be taken into account when assessing a risk. The two figures ' α ' 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.

Declared vibration emission value in accordance with EN12096

Measured vibration emission value - α : 9.97 m/s²

Values determined according to EN28622-1

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Clarke INTERNATIONAL

For spare parts and servicing, please contact your nearest dealer, or Clarke International on

020 - 8988 - 7400

e-mail: Parts@clarkeinternational.com e-mail: Service@clarkeinternational.com

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