

# Charlbe®

## CONTRACTOR®



### 1600W/110V PADDLE MIXER

MODEL NO: PM1600 /1

PART NO: 6479567

## OPERATING & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC03/24

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## INTRODUCTION

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Thank you for purchasing this CLARKE 110V Paddle Mixer.

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.

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## SPECIFICATIONS

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<b>Model</b>	<b>PM1600/1</b>
Product Dimensions (L x W x H)	880 x 330 x 195mm
Weight	5.3 kg
Chuck connection	M14 female thread
Paddle length	590mm (fitted)
IP Rating	IPX0
Rated Voltage / Frequency	110 V / 50 Hz
Input Wattage	1600 W
Input Ampere (typical load)	15.2 A
Rated No Load Spindle Speed	0-600/ 0-900 rpm
Duty Cycle Classification	S1 (continuous)
Sound pressure	92 dB (A)
Sound Power Measured (Lwa dB)	100 dB (A)
Guaranteed sound power level	103 dB (A)
Uncertainty factor	3.0 dB
Vibration (handle)	3.157 m/s <sup>2</sup>
Uncertainty factor	1.5 m/s <sup>2</sup>

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# GENERAL SAFETY PROCEDURES

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CAUTION: FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN PERSONAL INJURY, AND/OR DAMAGE TO PROPERTY.

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## WORK ENVIRONMENT

1. Keep the work area clean, tidy 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.

## 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. Avoid accidental starting. Ensure the switch is in the off position before plugging in. Plugging in power tools that have the switch on invites accidents.
3. DO NOT overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
4. 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.
5. Gloves, manufactured to the current UK & European safety standards should be worn.
6. Eye protection manufactured to the current UK & European safety standards should be worn when operating rotating equipment. Eye protection must provide protection from flying particles from the front and the side.

## GENERAL USE AND CARE OF POWER TOOLS

1. ALWAYS check for any damage or condition that could affect the machine's operation. Any damaged part should be properly repaired.
2. NEVER use the mixer if it is defective or operating abnormally.

3. NEVER abuse the mains power cable. NEVER yank the cable to disconnect it from the socket. Keep the cable away from sharp edges/hot surfaces.
4. NEVER carry out any alterations or modifications to this product.
5. NEVER wipe the machine clean with solvents. Wipe plastic parts with a soft cloth, slightly dampened with soapy water.
6. NEVER attempt any repairs yourself. If you have a problem with this product contact your local CLARKE dealer.
7. DO NOT use the mixer for any purpose than that described in this manual.
8. ALWAYS maintain the machine with care. Keep it clean for the best and safest performance.
9. DO NOT force a 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.
10. DO NOT use the mixer 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.
11. 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.
12. 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.
13. Use the power tool and accessories in accordance with these instructions and as intended, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

## **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. Correct plugs and matching outlets will reduce the risk of electric shock.
2. DO NOT abuse the cable. NEVER use it for carrying, pulling or unplugging the power tool. Keep the cable away from heat, oil, sharp edges or moving parts. Damaged or entangled cables increase the risk of electric shock.
3. DO NOT expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock. If operating the power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.

- When operating a power tool outdoors, use an extension cable suitable for outdoor use in order to reduce the risk of electric shock.

## ADDITIONAL PRECAUTIONS FOR PAINT MIXERS

- NEVER use third party mixing attachments. Replacement parts can be obtained from you CLARKE dealer.







**Please keep these instructions in a safe place for future reference.**

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## SAFETY SYMBOLS

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The meanings of the markings and symbols on the product are shown below

	Read this manual before use and keep in a safe place for future reference		Wear eye protection when using this product
	Wear ear protection when using this product		Wear protective clothing
	Wear face protection		Wear hand protection

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## ENVIRONMENTAL PROTECTION

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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.



Through the 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.

## ELECTRICAL CONNECTION



**WARNING! READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO A POWER SUPPLY. THE INSTALLATION OF THIS APPLIANCE SHOULD BE CARRIED OUT BY A COMPETENT ELECTRICIAN AND BE IN ACCORDANCE WITH CURRENT IEE WIRING REGULATIONS (BS4343).**

This product **MUST** be connected to a 110 Volt, 1 phase 50Hz supply through a suitably rated isolator switch. Before switching on, make sure that the voltage of your electricity supply is correct. Connecting it to any other power source may cause damage.

If the plug has to be changed due to damage a replacement should be fitted following the wiring instructions shown below.



**WARNING: THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:  
BLUE = NEUTRAL    BROWN = LIVE    YELLOW = EARTH**

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 **Blue** wire must be connected to the terminal which is marked **N** or **Neutral**.
- The **Brown** wire must be connected to the terminal which is marked **L** or **Live**.

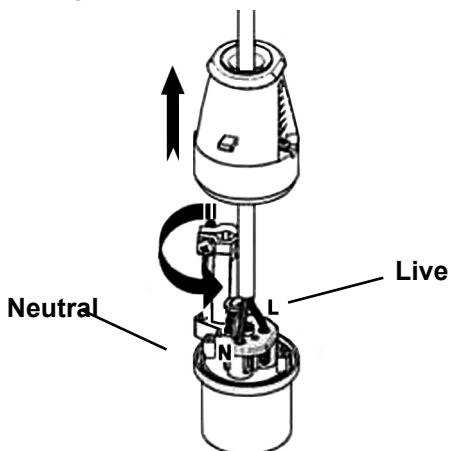
If in any doubt, consult a qualified electrician. **DO NOT** attempt any repairs yourself.

We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD). If you are not sure, consult a qualified electrician.

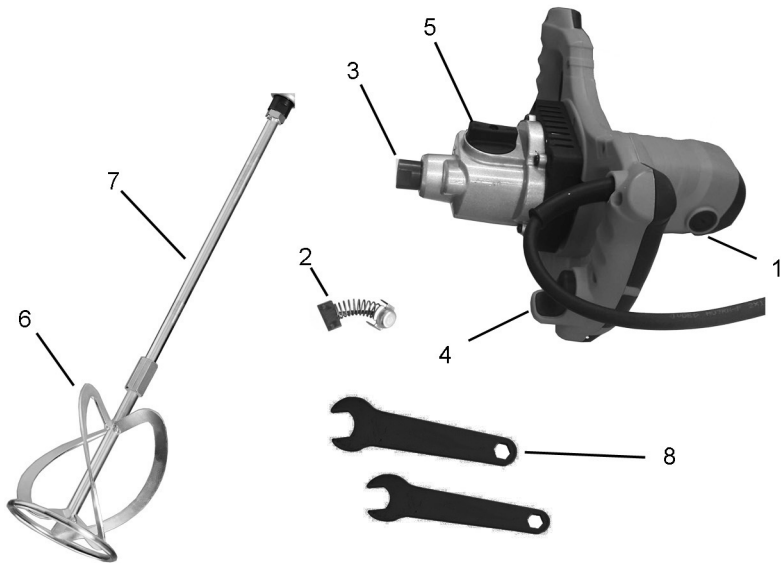
**DO NOT** try to carry out any repairs yourself.

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

**Plug must be BS60309 approved.**



## OVERVIEW



No	Description
1	Carbon brush cover
2	Replacement carbon brushes
3	Tool holder
4	Safety trigger

No	Description
5	Dual Speed control
6	Mixing paddle
7	Drive shaft
8	Spanners

The items above are supplied loose in the carton. If any are missing or damaged please contact the CLARKE dealer where you purchased the product.

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## BEFORE USE

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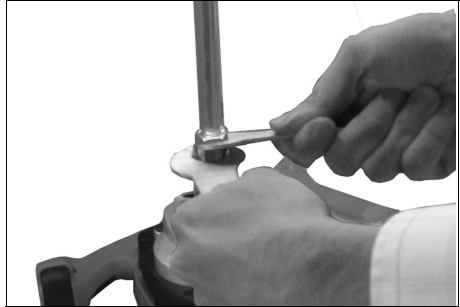


**WARNING: BEFORE REMOVING, OR INSTALLING THE MIXING BLADE, MAKE SURE THAT THE PLUG HAS BEEN REMOVED FROM THE POWER SUPPLY.**

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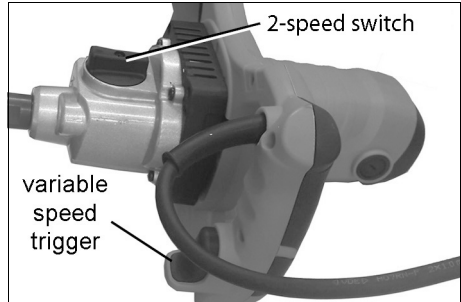
### FITTING THE MIXING BLADE

1. Screw the mixing blade shaft into the tool holder.
2. Use the two spanners supplied to tighten the mixing blade locking nut as shown.
3. Screw the mixing paddle to the other end of the drive shaft and tighten with the spanners.



### VARIABLE SPEEDS

The PM1600-1 has two speed settings in addition to the variable speed trigger and possesses a soft-start feature.





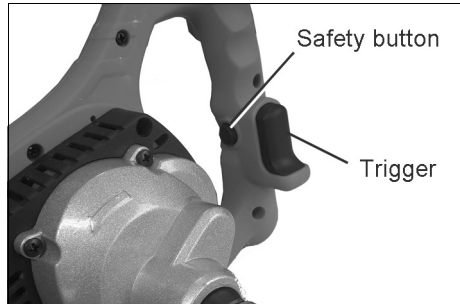
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# OPERATION

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## SWITCHING ON AND OFF

1. Ensure the mixing container is securely positioned on the floor.
2. Immerse the mixing paddle into the material to be mixed.
3. Set the speed control to low speed
4. Always hold the mixer with both hands.
5. Press and hold the safety trigger interlock button, then squeeze the trigger switch.
6. Select the mixing speed (so that the material will not splash around and the motor will not be overloaded.
7. To stop, release the trigger switch before removing from the material.
8. Disconnect the power supply and clean off the mixing paddle.



**WARNING: THE MIXING BLADE WILL CONTINUE TO RUN FOR A SHORT PERIOD AFTER THE TRIGGER SWITCH HAS BEEN RELEASED. WAIT FOR IT TO STOP BEFORE REMOVING THE MIXING BLADE FROM THE MATERIAL BEING MIXED.**

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# CARE & MAINTENANCE

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## GENERAL MAINTENANCE

1. After use, clean the mixing blades and allow to dry.
2. Keep the unit clean and free from build up of any residual media material.

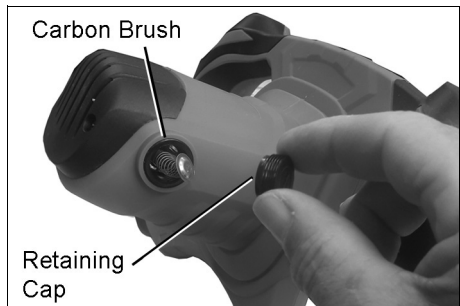
The drive motor and bearings are sealed units and require no regular maintenance. Should you require assistance, contact your local CLARKE service agent.

With the exception of changing the carbon brushes, there are no other user serviceable parts on this mixer.

Always have any damaged or worn parts repaired or replaced by qualified service personnel.

## CHANGING THE CARBON BRUSHES

1. Remove the dust caps from the top and bottom of the mixer.
2. Remove the brush caps using a flat bladed screwdriver.
3. Remove the old carbon brushes and replace it with new ones (a spare pair of brushes is supplied).



## CLEANING & STORAGE

Clean the exterior the machine if required using a mild detergent. NEVER immerse the machine in water.

To reduce overheating, keep the cooling vents free of debris.

Store the machine in a clean, dry location, out of reach of children.

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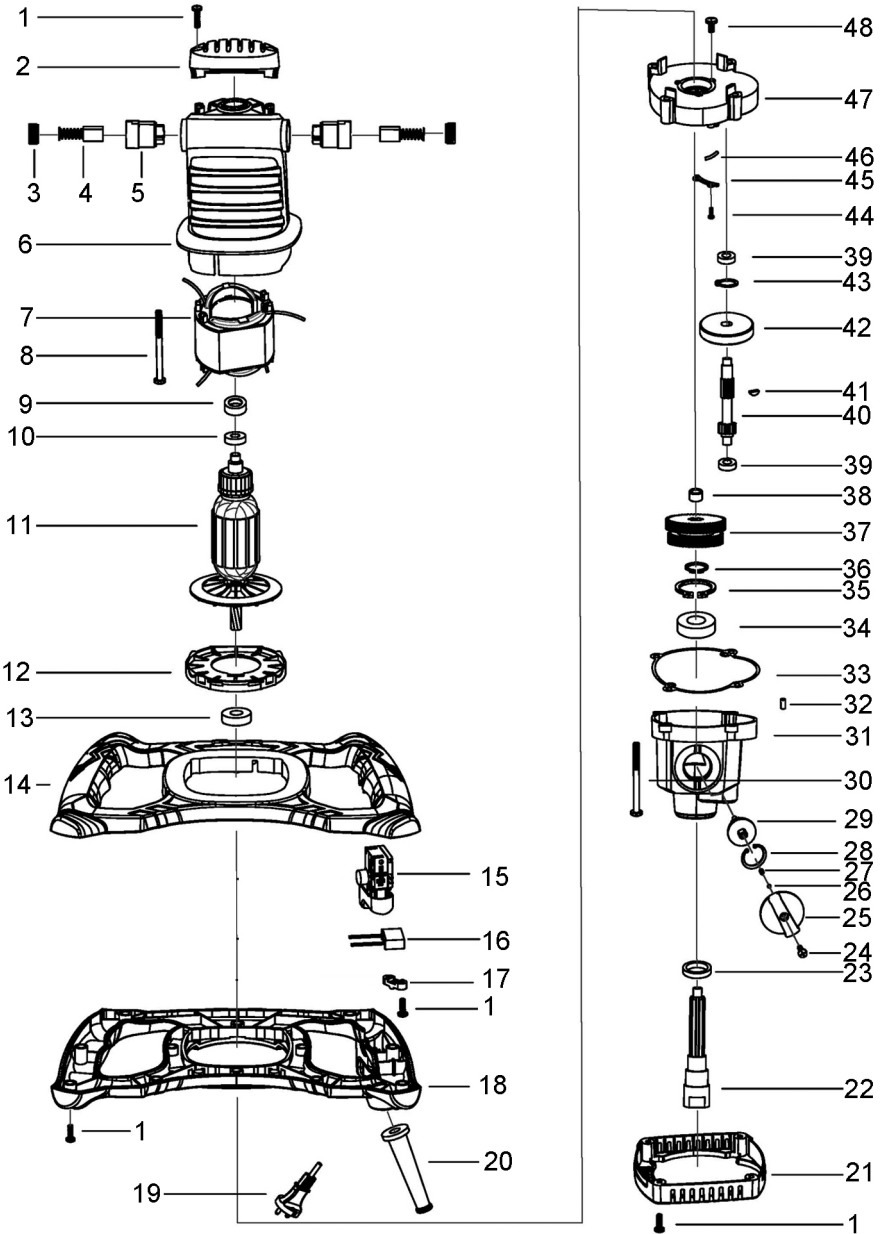
## GUARANTEE

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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.

# COMPONENT PARTS-PM1600/1



## COMPONENT PARTS - PM1600/1

No	Description
1	Screw ST3.9x13
2	Rear cover
3	Carbon brush cover
4	Carbon brush
5	Brush holder
6	Housing
7	Stator
8	Screw ST4.8x60
9	Bearing holder 22
10	Bearing 608
11	Rotor
12	Fibre sealing ring
13	Bearing 6001
14	Upper handle
15	Switch
16	Capacitor
17	Cable clamp
18	Lower handle
19	Plug
20	Cable Sheath
21	Fan cover
22	Spindle
23	Oil port cover
24	Screw M4x14

No	Description
25	Speed shift knob
26	Steel ball
27	Spring
28	Circlip 28
29	Bush
30	Screw st4.8x50x25
31	Gearbox
32	Pin
33	Oil seal gasket
34	Bearing 6003
35	Circlip 35
36	Circlip 17
37	Second driven gear
38	Bearing 607
39	Second connecting spindle
40	Key 3x10
41	Helical gear
42	Circlip 10
43	Bearing 698
44	Screw M3x8
45	Connector
46	Oil seal
47	Middle cover
48	Screw M4x6

# DECLARATION OF CONFORMITY-UK



**Clarke**<sup>®</sup>  
**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 legislation:**

*The Electromagnetic Compatibility Regulations 2016*

*The 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):**

*IEC 62321-4:2013+AMD1:2017, EN 62841-1:2015/A11:2022, IEC 62321-8:2017, IEC 62321-5:2013,*

*EN IEC 55014-1:2021, EN IEC 55014-2:2021, EN 62841-2-10:2017, IEC 62321-3-1:2013,*

*IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-6:2015*

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

**The UKCA mark was first applied in: 2024**

**Product Description:** Paddle Mixer  
**Model Number(s):** PM1600/1  
**Serial/Batch Number:** Refer to product/packageing label  
**Date of Issue:** 04/03/2024

**Signed:**

**J.A Clarke**

**Director**

# DECLARATION OF CONFORMITY-CE



**Clarke**<sup>®</sup>  
**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 legislation:**

2014/30/EU	<i>Electromagnetic Compatibility Directive</i>
2006/42/EC	<i>Machinery Directive</i>
2011/65/EU	<i>Restriction of Hazardous Substances (RoHS) Directive</i>

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

*IEC 62321-4:2013+AMD1:2017, EN 62841-1:2015/A11:2022, IEC 62321-8:2017, IEC 62321-5:2013,  
EN IEC 55014-1:2021, EN IEC 55014-2:2021, EN 62841-2-10:2017, IEC 62321-3-1:2013,  
IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-6:2015*

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

**The CE mark was first applied in: 2024**

<b>Product Description:</b>	Paddle Mixer
<b>Model Number(s):</b>	PM1600/1
<b>Serial/Batch Number:</b>	Refer to product/packaging label
<b>Date of Issue:</b>	04/03/2024

**Signed:**

**J.A Clarke**

**Director**

## A SELECTION OF ITEMS FROM THE CLARKE RANGE

C14EC 110v Extension Cable



14 Metre 110v Extension Cable -  
Complete with 16A BS EN60309  
plug and trailing socket.  
Part No. 3220825

110V Plugs



110V/16A. Part Number 6160715  
110V/32A. Part Number 6160720

Devil371PC Heater (110V)



2.8kw Portable Unit  
Part No 6926003

110V Power Transformers



CTR750/1 (750VA) - Part No 3220750  
CTR1000/1 (1000VA) - Part No 3220755  
CTR1500/2 (1500VA) - Part No 3220760  
CTR2250/2 (2250VA) - Part No 3220765  
CTR3300/2 (3300VA) - Part No 3220770  
CTR3300/1 (3300VA) - Part No 3220955

# A SELECTION FROM THE VAST RANGE OF

# Clarke®

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From DIY to industrial, Plus air tools, spray guns and accessories.

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Angle grinders, cordless drill sets, saws and sanders.

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All sizes for car and commercial use.



## PARTS & SERVICE: 0208 988 7400

**Parts Enquiries**  
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**Servicing & Technical Enquiries**  
[Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)

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

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