



# SANDER/POLISHER

MODEL NO: CON180

PART NO: 6462107

OPERATING & MAINTENANCE INSTRUCTIONS



GC0216

### INTRODUCTION

Thank you for purchasing this CLARKE Sander/Polisher.

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.

Your Sander/Polisher has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems, take the unit to your local CLARKE dealer.

### **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 RECYCLING POLICY**



Through 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.

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# **GENERAL SAFETY RULES**



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

#### WORK ENVIRONMENT

- Keep the work area clean and well lit. Cluttered and dark areas invite accidents.
- 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.
- Keep children and bystanders away while operating a power tool.
  Distractions can cause you to lose control.

#### **ELECTRICAL SAFETY**

- 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.
- 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). If working at floor level, always wear knee pads.

- 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 locking 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.
- 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.
- 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 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.
- 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 machine's operation. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use the machine. Consult your local dealer

### **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. Connecting it to any other power source may cause damage.

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 markings on the terminals of your plug, proceed as follows.

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



Ensure that the outer sheath of the cable is firmly held by the clamp

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.

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

### **OVERVIEW & CONTENTS**

When unpacking, check for damage or shortages etc. Any found should be reported to your CLARKE dealer where the product was originally purchased. This CON180 sander/polisher is supplied with the following components:

- 1 x Handle
- 2 x Handle Fixing Bolts
- 2 x Washers
- 1 x 8 mm Hexagon Key
- 1 x 180 mm 'Hook & Loop' Backing Pad
- 1 x 'Hook & Loop' Wool Polishing Bonnet
- 1 x spare carbon brush



NO	DESCRIPTION	NO	DESCRIPTION
1	Handle	5	Air Vent
2	Spindle Lock Button	6	Trigger
3	Backing Pad	7	Trigger Lock Button
4	Brush Holder Cover	8	Speed Controller

# **BEFORE USE**



WARNING: MAKE SURE THAT THE TOOL IS SWITCHED OFF AND UNPLUGGED FROM THE MAINS SUPPLY BEFORE FITTING OR REMOVING THE HANDLE OR BACKING PAD.

#### FITTING THE HANDLE

The handle is recessed to fit onto the machine is not adjustable, but can be fitted for left or right handled use.

- Slot the handle onto the body of the machine, locating the lugs into the recesses in the machine body.
- 2. When the handle is in position, secure in position with the two hex screws supplied. Tighten using the hex key supplied. DO NOT overtighten.



### FITTING THE BACKING PAD

- 1. Screw the backing disc onto the spindle.
- Press and hold the spindle lock button and tighten the pad hand tight in a clockwise direction.
  - Either the polishing bonnet or a sanding disc can be fitted. See below.



IMPORTANT: Never press the spindle lock button while the motor is

running. Failure to observe this instruction can cause internal damage or lead to personal injury.

#### ATTACHING BONNETS AND SANDING DISCS

Align the bonnet or sanding disc carefully with the appropriate backing pad, pressing down to ensure a good grip.

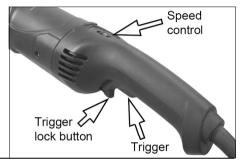
Always ensure that the backing pad is clean as a build up of dust & debris can result in damage to the hooks and loops.

# **OPERATION**

Whether polishing or sanding, always ensure a loose workpiece is securely fixed, i.e. clamped to a workbench or secured in a vice.

When working on car bodywork, the vibration may cause any items left on the car bonnet, boot or roof, to fall onto the rotating disc and be thrown, leading to injury to yourself or others in the work vicinity. Always keep the work area tidy.

- 1. Hold the sander/polisher firmly with both hands and switch on. The motor will then run.
- 2. Push the trigger lock button forward and squeeze the trigger.
- 3. Adjust the speed control to the desired working speed.
- Slowly apply the sander/polisher to the workpiece and proceed to sand or polish. Move the disc across the work applying a light even pressure.





WARNING: ENSURE THAT THE WORKING POSITION ADOPTED DOES NOT CAUSE OPERATOR FATIGUE WHICH MAY LEAD TO LOSS OF CONTROL.

5. On completion, lift the sander/polisher from the work surface and release the trigger.



WARNING: THE DISC WILL CONTINUE TO ROTATE FOR A FEW SECONDS AFTER THE TRIGGER HAS BEEN RELEASED.

6. Ensure the motor has come to a complete stop before setting the machine down on the workbench etc. Failure to do so can cause the machine to be thrown, resulting in damage to the machine or personal injury.

# **MAINTENANCE**



WARNING: BEFORE COMMENCING ANY MAINTENANCE PROCEDURES, ALWAYS ENSURE THE SANDER/POLISHER IS ISOLATED FROM THE ELECTRICAL SUPPLY BY SWITCHING OFF AND REMOVING THE PLUG FROM THE POWER SOCKET.

#### **BEFORE USE**

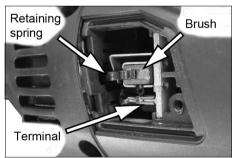
- 1. Always inspect the machine before use for any damage.
- Ensure all fixing screws remain tight to ensure the tool is in safe working condition.
- 3. Inspect the power cable to ensure it is free from cracks or bare wires etc.

#### **CLEANING**

- Ensure all air ventilation slots are clear, (Use compressed air to clean the tool if possible. Always wear protective goggles and a mask when cleaning with compressed air).
- Clean the exterior of the machine with a soft cleaning cloth. Never use any chemicals or abrasives. Avoid using solvents when cleaning plastic parts, which may be susceptible to damage from commercial solvents.

#### **GENERAL MAINTENANCE**

- Occasionally inspect the motor brushes and replace if necessary after unscrewing the cover plate.
  - When removing brushes, note which way round they are. The brushes must be returned exactly as they are removed, DO NOT swap over positions etc.



- A pair of long nosed electricians
  pliers will be required to remove and replace the brushes. Pull the
  connecting wire off the terminal. Lift up the retaining spring and carefully
  rest the spring on one side of the brush holder while changing brushes.
  - All bearings etc, in this tool are lubricated with sufficient high grade lubricant for the machine lifetime under normal operating conditions, therefore no further lubrication is necessary.
  - Refer to your CLARKE dealer if internal maintenance is required.

# **FAULTFINDING**

Problem	Possible Cause	Remedy
Tool will not operate	No power supply.	Check supply and rectify as necessary.
	Faulty switch.	Consult your Clarke dealer
	Fuse blown.	Consult your Clarke dealer if necessary.
	Faulty motor.	Consult your Clarke dealer
Motor runs but pad does not rotate	Pad fastening not engaged.	Press drive lock button and tighten pad.
	Drive gear broken.	Consult your Clarke dealer
Heavy internal sparking	Faulty motor.	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	Disc not mounted correctly.	Check and rectify.
	Machine bearings worn.	Consult your Clarke dealer

# **SPECIFICATIONS**

Item	Specification
Dimensions (L x W x H)	515 x 95 x 126 mm
Weight	3.7 kg
Backing pad type	Polymer with 'hook & loop' system
Disc Diameter	180 mm
Operating voltage & Frequency	230 V 50 Hz
Fuse Rating	13 A
Motor Power	1300 W
No Load Speed	600-3300 rpm
Sound Pressure Level (LpA dB)	LpA 86.0 dB(A)
Sound Power Level (LwA dB)	LWA 97 db (A)
Vibration (front handle)	Less than 5.2 m <sup>2</sup>

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.

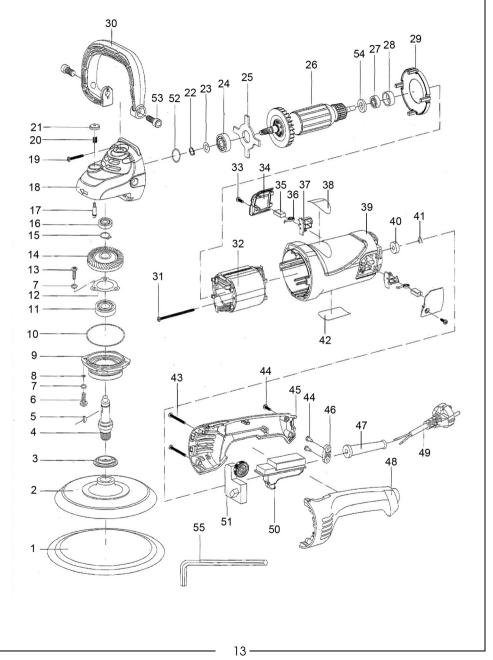
# **CONSUMABLE SPARE PARTS**

Replacement bonnets and abrasive discs are available from your CLARKE dealer.

The Sander/Polisher Accessory Kit - CPK180 (Part No 3051995) includes:

- 1 x Foam Polishing Sponge
- 1 x Foam Rubber Backing Pad
- 1 x Rubber Backing Pad
- 1 x Synthetic Fleece Polishing Bonnet
- 1 x Wool Fleece Polishing Bonnet
- 3 x Sanding Discs (Grit 40, 60, 80)

# **PARTS LIST & DIAGRAM**



# **PARTS LIST & DIAGRAM**

No	Description
1	Lambswool Pad
2	180mm Backing Disc
3	Dustproof Sealing Ring
4	Output Spindle
5	Woodruff Key 4 x 16
6	Screw M4 x 16
7	Washer
8	Washer
9	Front Cover
10	O-Ring
11	Bearing 6202-2RS
12	Bearing Plate
13	Screw M4 x 8
14	Drive Gear
15	Circlip14
16	Bearing 608-2Z
17	Self-Locking Pin
18	Front Housing
19	ST Screw 4.2x32
20	Coil Spring
21	Drive Locking Button
22	Circlip 12
23	Oil Sealing Plate
24	Sealed Bearing 6200DU
25	Pad
26	Armature
27	Sealed Bearing 608DU
28	Bearing Sleeve

No	Description
29	Fan Shield
30	Loop Handle
31	ST Screw 4.2x75
32	Stator
33	ST Screw 4.2x13
34	Brush Cover Panel
35	Carbon Brush
36	Open Brush Spring
37	Brush Holder
38	Makers Label
39	Main Housing
40	Magnetic Ring
41	Circlip 5mm
42	Rating Label
43	ST Screw 4.2x45
44	ST Screw 4.2x16
45	Right Handle/Casing
46	Cable Clamp
47	Cable Entry Protector
48	Left handle/Casing
49	Power Cable & Plug
50	On/Off Switch
51	Speed Control Switch
52	O-Ring 32x2.2
53	Inner Hex Screw
54	Dustproof Ring
55	Hex Key 8mm

# **DECLARATION OF CONFORMITY**





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.

2011/65/EU

Restriction of Hazardous substances.

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

EN 60745-1:2009+A11:2010, EN 60745-2-3:2011, EN 55014-1:2006+A1:2009 + A2:2011,

EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013.

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: 2008

**Product Description:** 

1300W Sander / Polisher.

Model number(s):

CON180

Serial / batch Number:

N/A

Date of Issue:

21/08/2015

Signed:

J.A. Clarke Director

CON180 1300W Sander - Polisher D O C

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E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

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

CIAPE INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG www.clarkeinternational.com