

# Clarke®

## air



## 6" DUAL-ACTION SANDER

MODEL NO: CAT80

Part No: 3110800

## OPERATION & MAINTENANCE INSTRUCTIONS



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## INTRODUCTION

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Thank you for purchasing this CLARKE product.

Before attempting to use the product, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the product giving you long and satisfactory service.

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## GUARANTEE

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This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt 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 its intended purpose.

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.

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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 re-cycling centre and disposed of appropriately.

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# SAFETY PRECAUTIONS

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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 and tidy.
2. Dress appropriately - Do not wear loose clothing or jewellery. Tie long hair out of the way.
3. Keep children and visitors away - Do not let children handle the tool. Make sure that any other persons in the work area are dressed suitably and are wearing eye and ear protectors.
4. Do not operate an abrasive tool where there are flammable vapours.
5. Keep the air supply hose away from heat, oil and sharp edges.
6. Do not fit the tool to any stand or clamping device that may damage the tool.

## GENERAL USE

1. Stay alert and use common sense - do not use the tool when you are tired or under the influence of alcohol, drugs or medication.
2. Always wear eye protection when using the tool - eye protection must provide protection from the front and the side.
3. Always wear ear protectors when using the tool.
4. Do not over-reach - keep proper footing and balance at all times.
5. Never use any type of bottled gas as a source of power for the tool.
6. Do not connect the air supply hose with your finger on the trigger of the tool.
7. Do not exceed the maximum pressure for the tool: 90 psi / 6.2 bar.
8. Check hoses for leaks or worn condition before use and ensure that all connections are secure.
9. Do not use the tool for any other purpose than that described in this booklet.
10. Do not carry out any alterations or modifications to the tool.
11. Always disconnect from the air supply when:
  - Performing any maintenance.
  - The tool is not in use.

- The tool will be left unattended.
  - Moving to another work area.
- 12 Never use the tool if it is defective or operating abnormally.
  13. The tool should be serviced as required by your CLARKE dealer.
  14. Avoid damaging the tool for example by applying excessive force.
  15. ALWAYS maintain the tool with care. Keep it clean for best and safest performance.
  16. ALWAYS ensure the workpiece is firmly secured leaving both hands free to control the tool.
  17. ALWAYS ensure the tool has stopped before putting it down after use.
  18. ALWAYS ensure that any attachments are correctly fastened before connecting the tool to the power supply.
  19. Quick change air-line couplings should not be located at the tool. They add weight and could fail due to vibration.
  20. DO NOT force or misuse the tool. It will do a better and safer job operating at the rate for which it was designed.
  21. Do not remove any labels. damaged labels should be replaced.
  22. This tool vibrates during use. Vibration may be harmful to your hands or arms. Stop using the tool if discomfort, a tingling feeling or pain occurs and seek medical advice before resuming use.

## **TRANSPORTATION**

1. Never carry the tool by the air supply hose.
2. Never carry the tool with your finger on the trigger.

## **STORAGE**

1. When not in use the tool must be disconnected from the air supply and stored in a dry place out of the reach of children (preferably in a locked cabinet).
2. Avoid storage in environments where the temperature is below 0°C.

## OVERVIEW



The CAT80 Sander is ideal for use in garages and workshops. Random orbit sanders give a virtually scratch - free finish on various surfaces prior to painting or varnishing the finished surface.

Unpack your sander should include the following items. Any damage or deficiency should be reported to your CLARKE dealer immediately.

- Heavy Duty Dual Action Sander
- 6" Sanding Pad
- Operating Instructions (this document)

Your dual -acting sander 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.

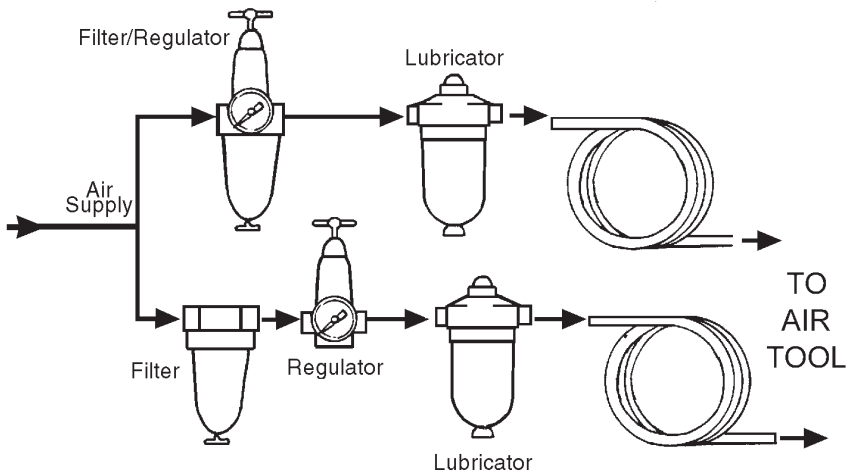
# AIR SUPPLY REQUIREMENTS



**WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE THOROUGHLY FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF COMPRESSORS AND COMPRESSED AIR SUPPLY.**

- Use only clean, dry, regulated compressed air as a power source.
- Air compressors used with the tool must comply with the appropriate European Community safety directives.
- A build up of moisture in the air compressor will accelerate wear and corrosion in the moving parts. Ensure any moisture is drained from the compressor daily and the inlet filter is kept clean.
- If an unusually long air hose is required, (over 8 metres), line pressure may need to be increased.
- Never exceed the maximum operating pressure for the tool.
- The air hose must be rated at least 150% of the maximum operating pressure of the tool.
- A pressure of 90psi with a flow of 6 cfm is required. Too high an air pressure will shorten the life of the tool due to excessive wear.

A typical airline layout is shown. If an automatic in-line filter/regulator/lubricator unit is used it will keep the tool in good condition, but should be regularly checked and topped up with oil.



**IMPORTANT:** If a filter/lubricator unit is not used, the air tool should be lubricated with 2 to 6 drops of oil, at least once a day or after 2 hours work, depending upon the working environment. The oil can be inserted through the airline connection fitting.

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## BEFORE USE

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### INSTALLING THE DISC

1. To assemble the pad to the tool, turn the locking nut (A) until the knurled portion contacts the flat surface on the output spindle (B).
2. Thread the pad into the spindle by gripping the orbital hub (C) with one hand and the pad with the other.
3. Turn the locking nut until the spindle turns freely. Do Not operate the tool with the spindle in the locked mode as performance would be severely affected and a hazardous situation could result.



### CONNECTING THE AIR SUPPLY



**WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF COMPRESSORS AND COMPRESSED AIR SUPPLIES.**

**Note: Ensure the compressor is turned off.**

1. Remove the plastic blanking plug from the connection port of the tool as shown.
2. Pour 2-3 drops of CLARKE airline oil into the air inlet. This should be done regardless of whether or not a lubricated air supply is to be used.
3. Connect a suitable hose to the tool as shown.
4. Connect the other end of the hose to the compressor. (A whip hose with a quick fit coupling is available from your CLARKE dealer).
5. Turn on the air supply and check for air leaks. Rectify any found before proceeding. The tool is now ready for use.





## OPERATION

**IMPORTANT: Only use abrasive sanding pads designed for use with this type of 150mm dia sanding pad.**

1. Squeeze the trigger against the body of the tool to start and evaluate its speed.

The regulator valve can be used for setting positive speed control.

2. Rest the sander on the workpiece and start the machine. Let the sander do the work.
  - The actual weight of the machine is normally sufficient for efficient sanding. Do not put additional pressure on the machine, which would only slow down the speed of the pad, reducing efficiency and placing an additional burden on the motor.
4. Pass the sander back and forth in wide, overlapping areas, taking care to keep the sander moving around at all times. Avoid dwelling in one place for more than a moment.
5. Release the trigger to stop the tool.
6. Always ensure the tool has stopped before putting it down.



## DISCONNECTING THE AIR SUPPLY

1. Do not disconnect the air supply hose until the compressor has been shut down and the compressed air pressure released.
2. Once the pressure has been released, disconnect the air supply hose from the tool.

## STORAGE

1. Store the tool safely in its box in a dry, secure environment.
2. If the tool is not to be used for longer than 24 hours, run a few drops of CLARKE airline oil into the air inlet and run the tool for a few seconds to ensure that the oil has been well distributed throughout the tool.
3. When storing, ensure the blanking plug is replaced on the airline connector once the airline has been disconnected.

## TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION
Tool runs at normal speed but slows down under load.	<ol style="list-style-type: none"> <li>1. Motor parts worn.</li> <li>2. Worn or sticking mechanism due to lack of lubricant.</li> </ol>	<ol style="list-style-type: none"> <li>1. Return to dealer for overhaul</li> <li>2. Drip air tool lubricating oil into air inlet and soak moving parts.</li> </ol>
Tool runs slowly. Air flows lightly from exhaust.	<ol style="list-style-type: none"> <li>1. Motor parts jammed with gum &amp;/or dirt particles.</li> <li>2. Regulator in closed position.</li> <li>3. General airflow blocked by dirt.</li> </ol>	<ol style="list-style-type: none"> <li>1. Examine inlet air filter for cleanliness.</li> <li>2. Adjust regulator to open position.</li> <li>3. Operate tool in short bursts of forward/reverse rotation.</li> </ol>
Tool will not run. Air flows freely from exhaust.	<ol style="list-style-type: none"> <li>1. Motor vanes stuck due to buildup of foreign material.</li> </ol>	<ol style="list-style-type: none"> <li>1. Disconnect air supply &amp; rotate tool assembly manually.</li> <li>2. Try operating tool in short bursts of forward/reverse rotation.</li> <li>3. Tap motor housing gently with rubber mallet.</li> <li>4. Drip a few drops of air tool lubricating oil into the air inlet to soak moving parts.</li> </ol>
Tool will not shut off.	<ol style="list-style-type: none"> <li>1. Throttle O-rings damaged or not seated correctly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace O-ring or return to Clarke dealer for repair.</li> </ol>

## ACCESSORIES

A wide range of accessories are available including filter/regulators, lubricators, high pressure hoses, etc. Contact your CLARKE dealer for further information, or call CLARKE International on 01992 565333.

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# MAINTENANCE

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**WARNING! MAKE SURE THAT THE TOOL IS DISCONNECTED FROM THE AIR SUPPLY BEFORE STARTING ANY CLEANING OR MAINTENANCE PROCEDURES.**

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## DAILY

- Drain water from the compressor air tank and air-line.
- Pour a few drops of CLARKE air line oil\*\* into the air inlet. This should be carried out regardless of whether or not an air line lubricator is used. If a lubricator is not used, this procedure should be repeated after every two to three hours of use.



## WEEKLY

- Check the air inlet screen filter shown in Fig 4 and clean if necessary.

## CLEANING

- Keep the body of the tool clean and free from debris. Grit or gum deposits in the tool may reduce efficiency.
- After extensive use, remove the inlet screen filter and flush out the mechanism with gum solvent oil or an equal mixture of SAE No10 oil and paraffin. Allow to dry before use.

## SERVICE AND REPAIR

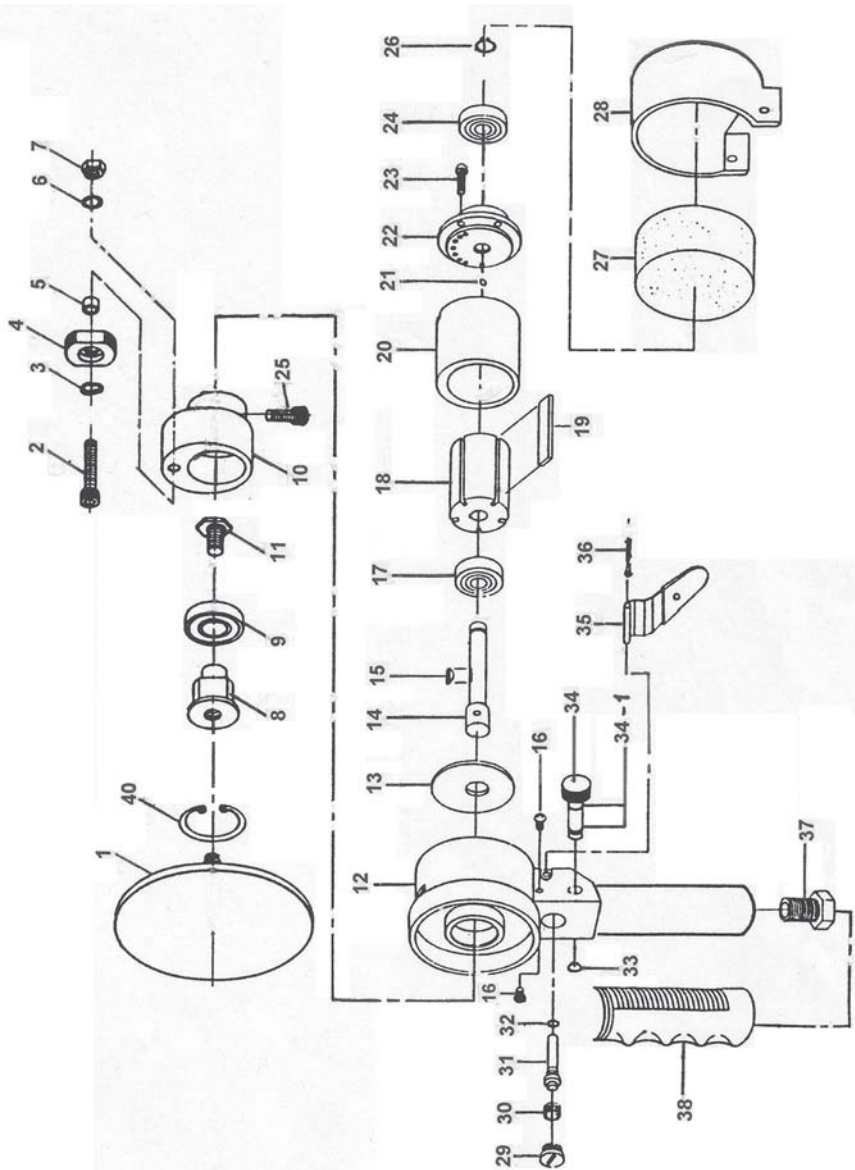
- Any major servicing and repairs should be carried out by your local CLARKE dealer or a qualified service technician.

## PERFORMANCE

Please note that factors other than the tool may effect its operation and efficiency such as reduced compressor output, excessive drain on the airline, moisture, or restrictions in the line, or the use of connectors of improper size or poor condition which will reduce air supply.

\*\*Clarke Airline Oil is available from your CLARKE dealer: part no. 3050825.

# PARTS LIST AND PARTS DIAGRAM



# PARTS LIST AND PARTS DIAGRAM

No	Description
1	Sanding Pad
2	Screw Balance Nut
3	Washer Balance Nut
4	Balance Nut
5	Counterweight Spacer
6	Wave Washer
7	Hex Nut
8	Eccentric Shaft
9	Ball Bearing
10	Eccentric Body
11	Lock Screw
12	Motor Handle
13	End Plate
14	Motor Shaft
15	Woodruff Key
16	Cap Screw
17	Ball Bearing
18	Rotor
19	Rotor Blade
20	Cylinder

No	Description
21	Steel Ball
22	End Plate
23	Cap Screw
24	Ball Bearing
25	Screw
26	Circlip
27	Muffler
28	Motor Cover
29	Valve Cap
30	Spring
31	Valve Stem
32	"O" Ring
33	Circlip
34	Air Regulator with O-Rings
35	Trottle Lever
36	Throttle Lever Pin
37	Hose Connector
38	Handle Grip
39	n/a
40	Circlip

## ABRASIVE DISCS

Replacement abrasive discs (self adhesive - 6" (150mm) dia) are available from your CLARKE dealer:

Fine	Part no. 6502097
Medium	Part no. 6500809
Coarse	Part no. 6502102

# SPECIFICATIONS

Feature	Specification
Model Number	CAT80
Nominal Air Consumption	6 cfm
Operating Air Pressure	90 psi (6.2 bar)
Air Inlet Size	1/4" BSP
Maximum Speed	10,000 rpm
Minimum Hose Size	5/16" (8 mm)
Sound Pressure Level ( $L_{PA}$ dB)	80
Sound Power Level (Lwa Db)	93
Vibration Levels	8.1 m/s <sup>2</sup>
Pad Size	150 mm dia
Weight	1.6 kg

# DECLARATION OF CONFORMITY

**Clarke**<sup>®</sup>  
INTERNATIONAL



## CERTIFICATE OF CONFORMITY

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

■ 89/329/EEC

■ EN 292-2

Product Description: 6" DUAL ACTION SANDER

Model Number: CAT 80

Serial (Batch) No: **11R**

Signed

A handwritten signature in black ink, written over a horizontal line.

**Clarke** INTERNATIONAL  
Epping, Essex, CM16 4LG, England

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**Clarke** INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG  
[www.clarkeinternational.com](http://www.clarkeinternational.com)