

# CLAMPKE®

## air



## 7" ANGLE POLISHER

MODEL NO: CAT54

PART NO: 3110650

## OPERATING & MAINTENANCE INSTRUCTIONS



GC0814

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## **INTRODUCTION**

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Thank you for purchasing this CLARKE Air 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 tool kit 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.

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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.

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## GENERAL SAFETY RULES

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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.
4. Do not operate the tool where there are flammable liquids or gases.

### PERSONAL SAFETY

1. Stay alert and use common sense - do not operate the air tool when you are tired or under the influence of alcohol, drugs or medication.
2. Always wear eye protectors when using the tool - Eye protectors must provide protection from flying particles from the front and the side.
3. Always wear ear protectors when using the air tool.
4. Always wear a dust mask when operating this type of tool.
5. Do not overreach - Keep proper footing and balance at all times.
6. **Remove any wrench before turning the power tool on.** A wrench left attached to a rotating part of the power tool may result in personal injury.

### USE OF AIR POWERED TOOLS

1. Never use oxygen, CO<sub>2</sub>, combustible gases or any type of bottled gas as a source of power for the tool.
2. Do not connect the air supply hose with your finger on the trigger.
3. Do not exceed the maximum pressure for the tool of 90 psi / 6.2 bar.
4. Check hoses for leaks or worn condition before use, and ensure that all connections are secure.
5. Do not use the tool for any other purpose than that described in this manual.
6. Keep the air supply hose away from heat, oil and sharp edges.
7. Do not fit the tool to any stand or clamping device that may damage it.

8. Do not carry out any alterations or modifications to the tool.
9. 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.
  - Passing the tool to another person.
10. Never use the tool if it is defective or operating abnormally.
11. The tool should be serviced at regular intervals by qualified service personnel.
12. Avoid damaging the tool by applying excessive force of any kind.
13. Always maintain the tool with care. Keep it clean for the best and safest performance.
14. Quick change couplings should not be located at the tool. They add weight and could fail due to vibration.
15. Do not force or misuse the tool. It will do a better and safer job at the rate for which it was designed.
16. Do not remove any labels. Damaged labels should be replaced.
17. This tool vibrates with use. Vibration may be harmful to your hands or arms. Stop using the tool if discomfort, a tingling feeling or pain occurs. Seek medical advice before resuming use.

## **USE OF THE POLISHING TOOL**

1. Try to hold the tool with both hands. Ensure that the workpiece is kept at waist height where possible. Never use the tool between the legs whilst sitting on the floor.
2. Always allow the tool to run up to full operating speed before applying it to the job.
3. Use clamps, or vices to hold a loose workpiece. Failure to secure the workpiece could result in personal injury.
4. Inspect the pad/mop before use. Do not use if split or torn.
5. Always wear a face mask when using the sander as protection from airborne particles. Avoid disturbing existing dust and minimise the scattering of dust in the workplace environment. Take steps to control the dust at the point of emission.

## TRANSPORTATION AND STORAGE

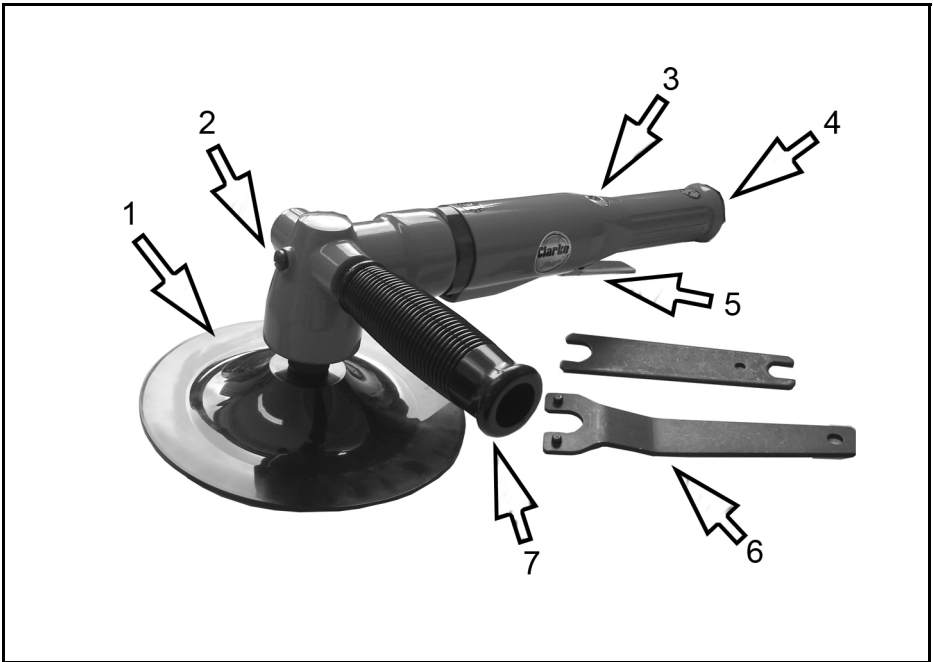
1. Never carry the tool by the air supply hose.
2. Never carry the tool with your finger on the trigger.
3. When not in use the tool should be disconnected from the air supply and stored in a dry place out of the reach of children.
4. Avoid storing the tool in environments where the temperature is below 0°C.

## SPECIFICATIONS

Model Number	CAT54
Dimensions (L x W x H)	330 x 60 x 105 mm
Weight	2.1 kg
Air Inlet Size	1/4" BSP (female)
Operating Pressure	90 psi (6.2 bar)
Air Consumption	5.3 cfm average
No Load Speed	2500 rpm @ 90psi
Sound Pressure Level (LpA dB)	93.3 dB(A)
Sound Power Level (LwA dB)	92.9 dB(A)
Vibration Levels	2.7 m/s <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. Always consult the machine's data plate.

# OVERVIEW



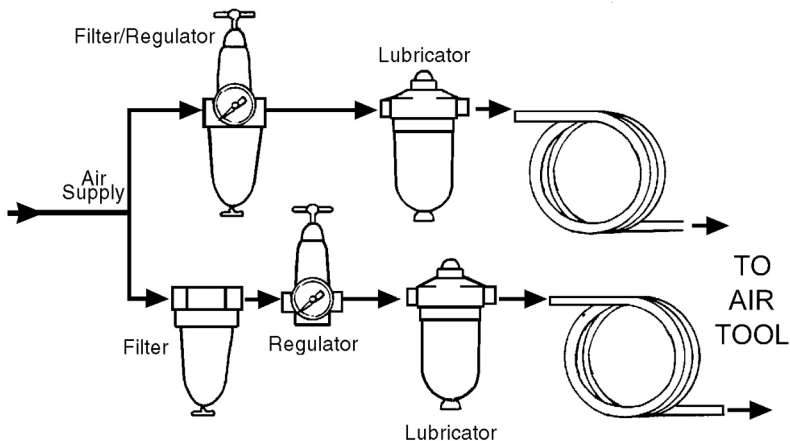
NO	DESCRIPTION	NO	DESCRIPTION
1	Polishing disc	5	Trigger
2	Lubrication point	6	2 x Wrenches
3	Regulator	7	Side Handle
4	Air Inlet		

# COMPRESSED AIR REQUIREMENTS



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

- 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 or oil in the air compressor will accelerate wear and corrosion in the tool. 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), the line pressure or the hose inside diameter may need to be increased.
- The air hose must be rated at least 150% of the maximum operating pressure of the tool.



- A typical air line layout is shown above. If an automatic in-line filter/regulator is used, it will keep the tool in good condition, but should be regularly checked and topped up with oil. SAE 10 oil should be used, and the lubricator adjusted to approx 2 drops per minute.
- Never exceed the maximum operating pressure for the tool. It is recommended that air pressure to this tool does not exceed 90 psi at the tool when running. Higher pressures and unclean air will shorten the life of the tool due to faster wear and is a possible safety hazard.

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## BEFORE USE

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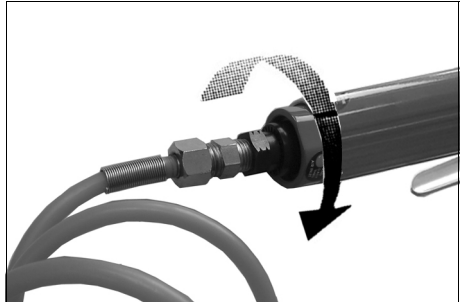


**WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF AIR COMPRESSORS AND COMPRESSED AIR SUPPLIES.**

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

1. If required, connect an in-line mini oiler to the tool.
  - A mini oiler helps to prolong the life of the air tool.
2. If a mini-oiler is not being used, run a few drops of oil through the tool before use. It can be entered through the air inlet or via the hose at the nearest connection to the air supply.
3. Connect a suitable hose to the air inlet as shown.
4. Connect the other end of the hose to the compressor.



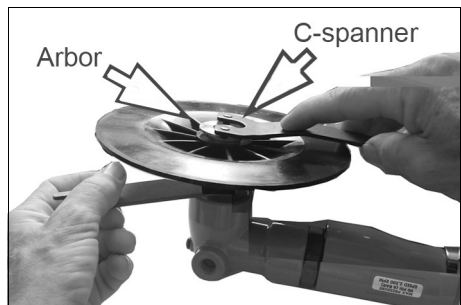
Your air tool is now ready for use.

You can fit a whip hose with a quick fit coupling if required (available from your Clarke dealer).

### FITTING THE POLISHING DISC

Thread the polishing disc onto the drive spindle, followed by the arbor as shown.

Tighten the arbor using the wrench with pins (C-spanner) provided while using the other wrench to prevent the drive shaft from rotating.



### ATTACHING THE BONNET

1. Place the bonnet over the pad so the pad is completely covered.
2. Pull the draw string tight to ensure the bonnet will not slip.



3. Tie the string and tuck the excess back under the edge of the bonnet to avoid it becoming entangled.

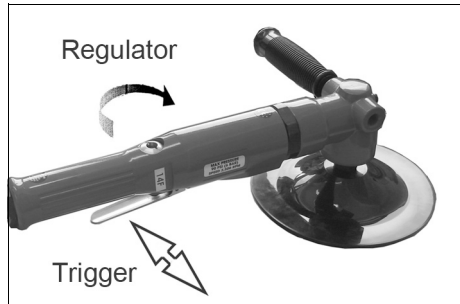
## **FITTING THE SIDE HANDLE**

1. Screw the side handle into either left or right side of the tool body as required.

## **OPERATING THE TOOL**

The tool should run at a suitable speed but the speed can be regulated if required by turning the regulator on the body of the tool using suitable screwdrivers.

1. Squeeze the trigger against the body of the tool.
2. Do not use excess pressure on the pad as this will shorten its life.
3. Release the trigger to stop the tool.
  - The tool will continue to rotate very briefly after the trigger has been released.
4. Always ensure the tool has stopped before putting it down.



## **POLISHING TIPS**

- Do not force the polishing pad against the surface.
- Allow the pad to reach working speed before polishing
- Avoid overloading the polisher. If it becomes hot during use, rest for a few minutes while it cools down.

## **DISCONNECTING THE AIR SUPPLY**

1. Do not disconnect the air supply hose until the compressor has been shut down and the compressed air released.
2. Refer to the compressor instruction manual for the procedure to shut down and release the compressed air.
3. Once the pressure has been released, disconnect the air supply hose from the tool.

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# MAINTENANCE

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

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## DAILY

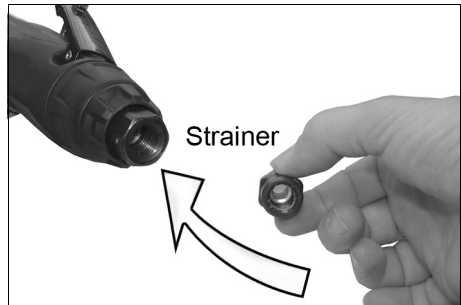
1. Before use, drain water from the air tank, air line and compressor.
2. Pour a few drops of CLARKE airline oil, into the air inlet. This should be carried out regardless of whether or not an in-line mini oiler is used. If an in-line mini oiler is not used, this procedure should be repeated after every two to three hours of use.

## WEEKLY

1. Wash the bonnets after each use by hand and use mild soap with water. Hang them up to dry.
  - Store them flat and allow them to regain shape.
2. Check the air inlet strainer for blockage and clean if necessary.

## CLEANING

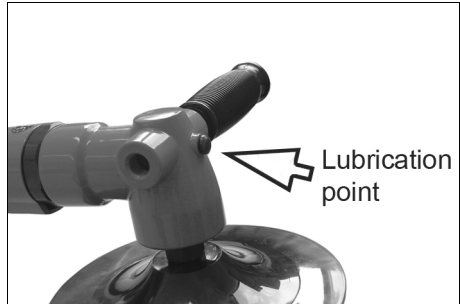
1. Keep the body of the tool clean and free from debris.
2. Grit or gum deposits inside the tool may also reduce its efficiency. This condition can be corrected by cleaning out the air strainer and flushing out the tool with gum solvent or oil, or failing this, the motor may require dismantling. This is better left to your Clarke dealer.



## GREASING

The right angle drive is fitted with a point to provide a facility for lubrication of the drive gears.

1. After extensive use, apply a shot of general purpose grease using a suitable grease gun.



## SERVICE AND REPAIR

If the tool runs erratically or becomes inefficient although the air supply is in good order, it may be necessary to dismantle the air motor and replace any worn or damaged parts. Such servicing and repair work should be carried out by 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 air-line, or the use of connectors of improper size or poor condition which will reduce air supply.

\*\*Clarke Air Line Oil (part no. 3050825) is available from your CLARKE dealer.

## STORAGE

If the tool is to be stored, or is idle for longer than 24 hours, run a few drops of Clarke air line oil into the air inlet, and run the tool for 5 seconds in order to lubricate the internal parts.

When not in use, disconnect from air supply, clean tools and store in the moulded case provided. When storing, ensure the blanking plug is replaced on the airline connector once the airline is disconnected.

## ACCESSORIES

A wide range of accessories is available including filter/regulators, lubricators, high-pressure hoses (5 to 50 metres) etc. Contact your CLARKE dealer for further information or CLARKE International Service Department.

## TROUBLESHOOTING

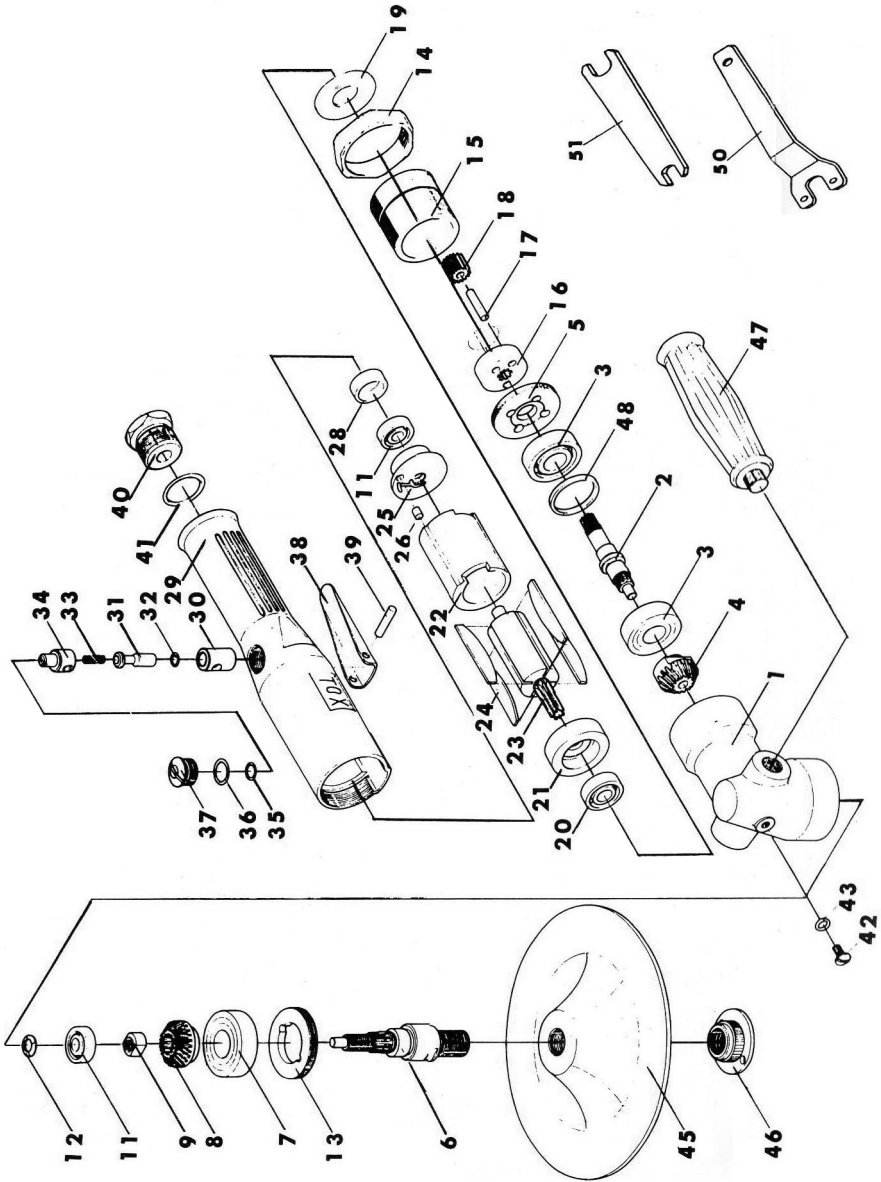
SYMPTOM	PROBLEM	SOLUTION
Tool runs at normal speed but slows down under any load.	<ol style="list-style-type: none"> <li>1. Excessive pressure on tool.</li> <li>2. Motor parts worn.</li> <li>3. Worn or sticking mechanism due to lack of lubricant.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce the force applied to the tool.</li> <li>2. Return to Clarke dealer for repair.</li> <li>3. Drip air tool lubricating oil into air inlet. Allow oil to soak moving parts before using.</li> </ol>
Tool runs slowly. Air flows weakly from exhaust.	<ol style="list-style-type: none"> <li>1. Motor parts jammed with gum/dirt.</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.</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 and rotate tool assembly manually.</li> <li>2. Try operating tool in short bursts.</li> <li>3. Drip a few drops of air tool lubricating oil into 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 ill-fitting in seat.</li> </ol>	<ol style="list-style-type: none"> <li>1. Return to Clarke dealer for repair.</li> </ol>

## PARTS LIST

No	Part No	Description
1	AP-70001	Main Shaft Casing
2	AP-70002	Main Shaft
3	BB-62011	Ball Bearing
4	AP-70004	Bevel Pinion
5	AP-70005	Bearing Support
6	AP-70006	Arbor
7	BB-62032	Ball Bearing
8	AP70008	Bevel Gear
9	AP-70009	Set Nut
10	//////////	n/a
11	BB-06082	Ball Bearing
12	BWW-0608	Wave Washer
13	AP-70013	Arbor Bearing Cap
14	AP-70014	Distance Nut
15	AP-70015	Internal Gear
16	AP-70016	Idler Spindle
17	NR-50220	Needle Roller
18	AP-70018	Idler Gear
19	HD-12022	Washer
20	BB-60002	Ball Bearing
21	HD-12019	Front End Plate
22	HD-12018	Cylinder
23	AP-70023	Rotor
24	HD-12016	Rotor Blade
25	HD-12014	Rear End Plate
26	SP-30060	Spring Pin
27	//////////	N/A
28	VP-70011	Bearing Cap

No	Part No	Description
29	HD-12001	Motor Housing
30	AP-70030	Bushing
31	VP-70035	Valve Stem
32	DG-40058	O-Ring
33	VP-70037	Valve Spring
34	AP-70034	Air Regulator
35	ORP-0080	O-Ring
36	ORP-0120	O-Ring
37	VP-70C41	Valve Screw
38	AR-38005	Throttle Lever
39	SP-25220	Spring Pin
40	HD-12002	Inlet Bushing
41	ORP-0180	O-Ring
42	PG-38043	Plug
43	ORP-0040	O-Ring
44	//////////	N/A
45	VP-70042	Pad
46	VP-70I43	Pad Nut
47	AP-70C47	Handle
48	AP-70048	Spacer Collar
49	//////////	N/A
50	AG-70057	Wrench (B)
51	DG-14043	Wrench (A)
K01	HD-12K01	Motor Housing Kit
K02	HD-12K02	O-Ring Kit
K03	AP-70K03	Bevel Gear Kit
K04	AP-70K04	Idler Gear Kit

# PARTS DIAGRAM



# DECLARATION OF CONFORMITY

**Clarke**<sup>TM</sup>  
**INTERNATIONAL**

**This is an important document and should be retained**

## DECLARATION OF CONFORMITY



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

- **89/392/EEC**
- **EN 292-2**
- **EN 60 335 - 1**
- **EN 292-2**

Description: **Air tool range**

Model No: **CAT54**

Serial (Batch) No: **See Product Data Label**

Signed: 

**Clarke**<sup>®</sup> **INTERNATIONAL**  
Hemnal Street, Epping, Essex CM16 4LG

# A SELECTION FROM THE VAST RANGE OF

# Clarke®

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Submersible, electric and engine driven for DIY, agriculture and industry.

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Angle grinders, cordless drill sets, saws and sanders.

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