

Charlton®

air



PUNCH & FLANGE TOOL

MODEL NO: CAT62

PART NO: 3110462

OPERATING & MAINTENANCE
INSTRUCTIONS

UK
CA | CE

DL1222 Rev1

INTRODUCTION

Thank you for purchasing this CLARKE Air Tool.

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.

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.

GENERAL SAFETY RULES



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

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.

USE

1. Stay alert and use common sense - do not operate this tool when you are tired or under the influence of alcohol, drugs or medication.
2. Always wear eye protectors when using air tools. Eye protectors must provide protection from flying particles from the front and the side.
3. Do not overreach - Keep proper footing and balance at all times.
4. Never use oxygen, CO₂, combustible gasses, or any bottled gas, as a source of power for the grease gun. This product should only be used with a suitably rated compressed air supply.
5. Do not connect the air supply hose with your finger on the trigger of the gun.
6. Do not fit the tool to any stand or clamping device that may damage it.
7. Do not exceed the maximum pressure for the tool of 90 psi / 6.2 bar.
8. Keep the air supply hose away from heat, oil and sharp edges.
9. Check hoses for leaks or excessive wear before use, and ensure that all connections are secure.
10. Do not use the tool for any other purpose than described in this manual.
11. Do not carry out any alterations or modifications to the tool.
12. 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.
 - Never use the tool if it is defective or operating abnormally.
13. This tool should be serviced at regular intervals by qualified service personnel.
 14. Avoid damaging the tool for example by applying excessive force.
 15. Always maintain the tool with care. Keep it clean for the best and safest performance.
 16. Do not force or misuse the tool. It will do a better and safer job at the rate for which it was designed.

HAZARDS SPECIFIC TO CUTTING/PUNCHING TOOLS

1. Be careful around all moving parts and pinch points. Always keep your fingers away from the point of cutting.
2. Ensure material is properly supported during cutting. Use supports for long material. Hold the material securely to prevent it tilting during the cut. Use clamps or vices to hold the work piece whenever possible.
3. Take care of sharp edges produced by the work.
4. Do not use damaged punches. When replacing cutting tool parts, make sure they are correctly and securely fitted.
5. Anticipate the unexpected tool movement due to a binding punch. Release the trigger immediately if this occurs.

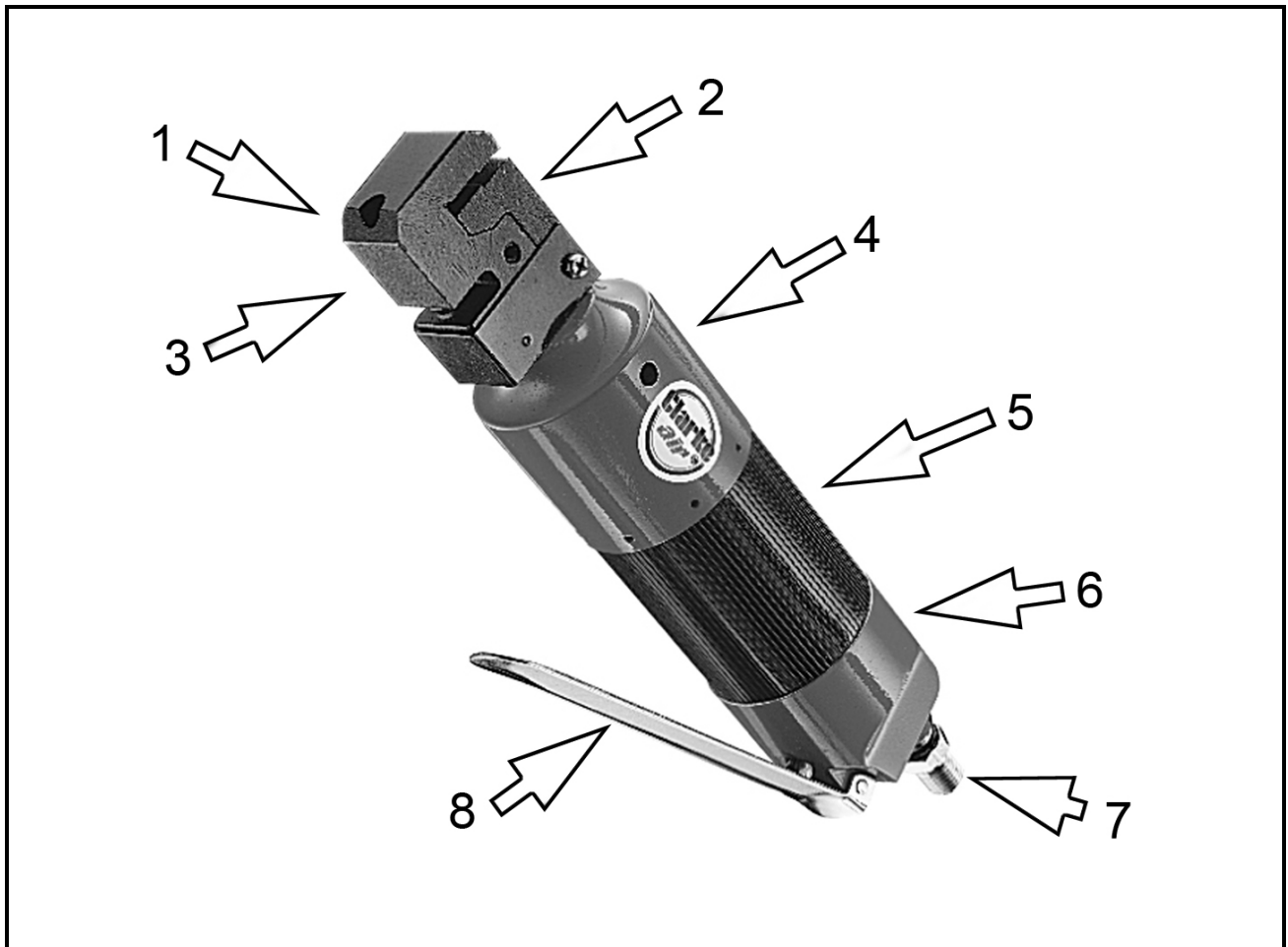
TRANSPORTATION

1. Never carry an air tool by the air supply hose.
2. Never carry an air 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 storing in cold environments.

OVERVIEW



NO	DESCRIPTION	NO	DESCRIPTION
1	Punch opening	5	Air Cylinder
2	Clamp	6	Valve Body
3	Anvil	7	Air Inlet
4	Hydraulic Cylinder	8	Trigger

The CAT62 Punch and Flange tool is suitable for heavy bodyshop use.

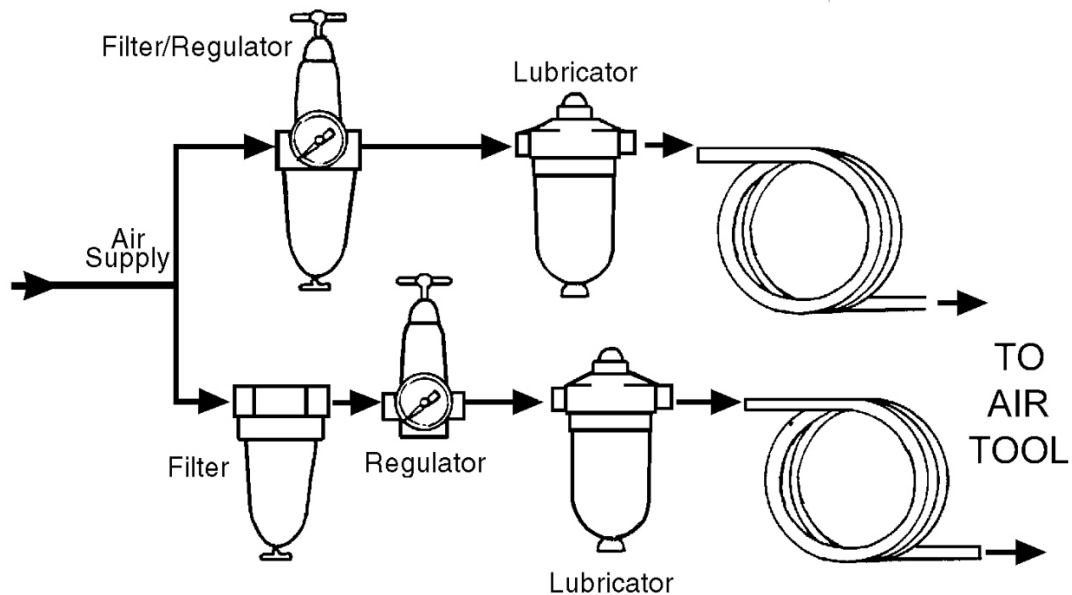
It has an aluminium alloy body with steel punch and die and puts a 10mm flange onto car panel thickness sheet for lap jointing and puts 5mm holes in panels for MIG spot-welding.

COMPRESSED AIR REQUIREMENTS



WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF COMPRESSORS AND A 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 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 & topped up with oil. Clarke air-line 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.

BEFORE USE

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 inlet connector or via the hose at the nearest connection to the air supply.
3. Connect a suitable hose as shown.
4. Connect the other end of the hose to the compressor.
5. Turn on the air supply and check for air leaks. Rectify any found before proceeding.
 - PTFE tape may be helpful for sealing threaded connections.
6. 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).

OPERATION

1. Connect the tool to the air supply.
2. To start the tool, hold firmly and squeeze the throttle lever.
 - The clamp will move down, punching a hole or forming a flange, as required.
3. Release the lever and the clamp will rise allowing the tool to be positioned for the next operation.
4. After use, disconnect the tool from the air supply, clean and store in a safe, dry, childproof location.

NOTE: It is recommended that a whip hose with a swivel (not included) be used to prevent twisting, kinking and resultant wear to the air hose.

DISCONNECTING THE AIR SUPPLY

Do not disconnect the air supply hose until the compressor has been shut down and the compressed air released.

1. Refer to the compressor instruction manual for the procedure to shut down and release the compressed air.
2. Once the pressure has been released, disconnect the air supply hose from the air tool.
3. Store the tool safely in its box in a dry, secure environment.

MAINTENANCE



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

DAILY

1. Before use, drain water from the air-line and compressor.
2. This air tool should be lubricated before use. Turn the tool upside down and pour 1-2 drops of Clarke air-line 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 hours of constant use.
3. Keep the tool clean.

SERVICING

For a full service contact your local Clarke Service Department.

To remove and replace the punch (6) and/or die (3) proceed as follows:. Numbers refer to the parts list and diagram on pages 12/13.

1. Remove screws (7) and slide off cover plate (8).
2. Slacken set screw (2) and strike rear edge of clamp (1) with a soft-headed hammer in order to unscrew it from the shaft of the hydraulic piston (31). If necessary the shaft may be locked by removing the oil plug (13) and inserting a suitable rod into a hole in the shaft.
3. Fully unscrew the clamp (1) and anvil (9) assembly from the shaft.
4. Separate the anvil (9) and the clamp (1) to replace the punch (6) and/or die. The die (3) is a push fit in the clamp (1) and can be tapped out via the waste bore (A). Push/tap in the replacement.
5. Reassemble the anvil (9), clamp (1) and the replacement punch (6) and screw onto the shaft. Tap with a soft-headed hammer to ensure tightness and lock with the set screw (2).
6. Refit the cover plate (8) and retain with screws (7).

Deposits in the tool may also reduce efficiency. This can be corrected by cleaning the air inlet and flushing out the tool with gum solvent oil, or failing this, the tool should be disassembled, thoroughly cleaned, dried and reassembled.

If the tool becomes inefficient and the air supply is of good quality, it may be necessary to replace worn or damaged parts. You may prefer to take the tool to your Clarke dealer if internal maintenance is required.

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.

Your Clarke air tool 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.

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 depress the trigger in order to lubricate the internal parts.

When not in use, disconnect from air supply, clean and store in a safe, dry place.

ACCESSORIES

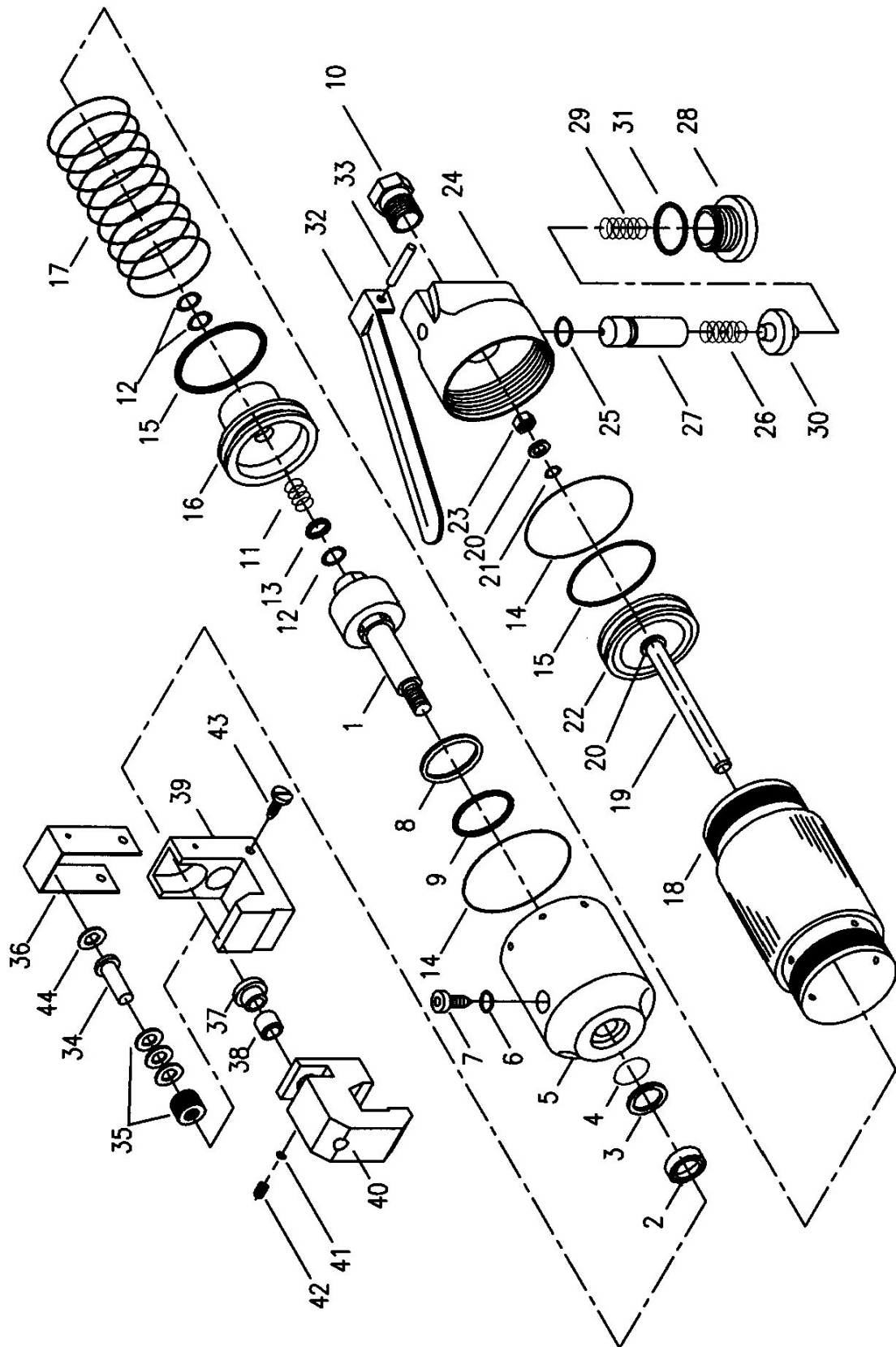
A wide range of airline accessories is available including filter/regulators, lubricators, high-pressure hoses (5 to 50 metres) etc.

Contact your Clarke dealer or Clarke International Service Department for further information.

TROUBLESHOOTING

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

PARTS DIAGRAM



PARTS LIST

No	Description
1	Piston
2	Packing
3	Back-up Ring
4	O-Ring
5	Cylinder
6	O-Ring
7	Oil Plug
8	Back-up Ring
9	O-Ring
10	Air Inlet
11	Spring
12	O-Ring
13	Back-up Ring
14	O-Ring
15	O-Ring
16	Piston
17	Spring
18	Cylinder
19	Piston Rod
20	Washer
21	O-Ring
22	Piston

No	Description
23	Lock-Nut
24	Air Valve Body
25	O-Ring
26	Spring
27	Air Valve
28	Plug
29	Spring
30	Valve Cover
31	O-Ring
32	Trigger
33	Pin
34	Punch
35	Spring Washer
36	Cover
37	Guide Sleeve
38	Punching Die
39	Anvil Bed
40	Punching Die Bed
41	Packing
42	Screw
43	Screw
44	Washer

SPECIFICATION

Model Numbers	CAT62
Part Numbers	3110462
Max crimping thickness	1.2 mm (mild steel) / 2mm aluminium)
Hole size	3/16" (4.8mm)
Maximum Operating Pressure	90 psi (6.2 bar)
Air Consumption	0.3 cfm (nominal)
Air Inlet Size	1/4" BSP thread
Vibration Levels	<0.8m/s ²
Sound Power level	85 dB LWA
Sound Pressure Level	74 dBA
Weight	1.3 kg

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.

DECLARATION OF CONFORMITY

UK
CA

Clarke
INTERNATIONAL

Hemnal 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 statutory requirement(s):

Supply of Machinery (Safety) Regulations 2008

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

EN ISO 15744:2008, EN ISO 20643:2008 + A1:2012, EN ISO 11148-10:2011

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: 2022

Product Description:

Air Punch and Flange Tool

Model number(s):

CAT62

Serial / batch Number:

N/A

Date of Issue:

29/11/2022

Signed:



J.A. Clarke
Director

CE

Clarke
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 directive(s):

2006/42/EC Machinery Directive

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

EN ISO 15744:2008, EN ISO 20643:2008 + A1:2012, EN ISO 11148-10:2011

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: 2015

Product Description:

Air Punch and Flange Tool

Model number(s):

CAT62

Serial / batch Number:

N/A

Date of Issue:

29/11/2022

Signed:



J.A. Clarke
Director

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS



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

GENERATORS
Prime duty or emergency standby
for business, home and leisure.

POWER WASHERS
Hot and cold, electric and engine
driven - we have what you need

WELDERS
Mig, Arc, Tig and Spot.
From DIY to auto/industrial.

METALWORKING
Drills, grinders and saws for DIY
and professional use.

WOODWORKING
Saws, sanders, lathes, mortisers
and dust extraction.

HYDRAULICS
Cranes, body repair kits,
transmission jacks for all types of
workshop use.

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

POWERTOOLS
Angle grinders, cordless drill sets,
saws and sanders.

STARTERS/CHARGERS
All sizes for car and commercial use.

PARTS & SERVICE:

0208 988 7400

Parts Enquiries

Parts@clarkeinternational.com

Servicing & Technical Enquiries

Service@clarkeinternational.com

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

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