

Clarke®

X-PRO



NEEDLE SCALER/CHISEL KIT

MODEL NO: CAT164

PART NO: 3120178

OPERATING & MAINTENANCE INSTRUCTIONS

UK
CA | CE

ORIGINAL INSTRUCTIONS

GC02/22 -Rev 1

INTRODUCTION

Thank you for purchasing this CLARKE Needle Scaler.

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.

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

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.
4. Do not operate the tool where there are flammable liquids or gases.
5. Stay alert and use common sense - do not operate this tool when you are tired or under the influence of alcohol, drugs or medication.
6. Always wear eye protection, ear defenders and gloves when using air tools. Safety glasses must provide protection from flying particles from the front and the side.
7. Do not overreach - keep proper footing and balance at all times.

USE

1. Never use oxygen, carbon dioxide, combustible gasses, or any bottled gas, as a source of power for an air tool. This product should only be used with a suitably rated compressed air supply.
2. Do not connect the air hose with your finger on the trigger.
3. Do not fit the air tool to any stand or clamping device that may damage it.
4. Do not exceed the maximum pressure for the tool of 6.2 bar.
5. Keep the air hose away from heat, oil and sharp edges.
6. Check hoses for leaks or excessive wear before use, and ensure that all connections are secure.
7. Do not use the tool for any other purpose than described in this manual.
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.
10. Never use the tool if it is defective or operating abnormally.
 11. This air tool should be serviced at regular intervals by qualified service personnel.
 12. Avoid damaging the air tool by applying excessive force of any kind.
 13. Always maintain the air tool with care. Keep it clean for the best and safest performance.
 14. Do not force or misuse the air tool. It will do a better and safer job at the rate for which it was designed.
 15. Quick change couplings should not be located at the tool. They add weight and could fail due to vibration.
 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.

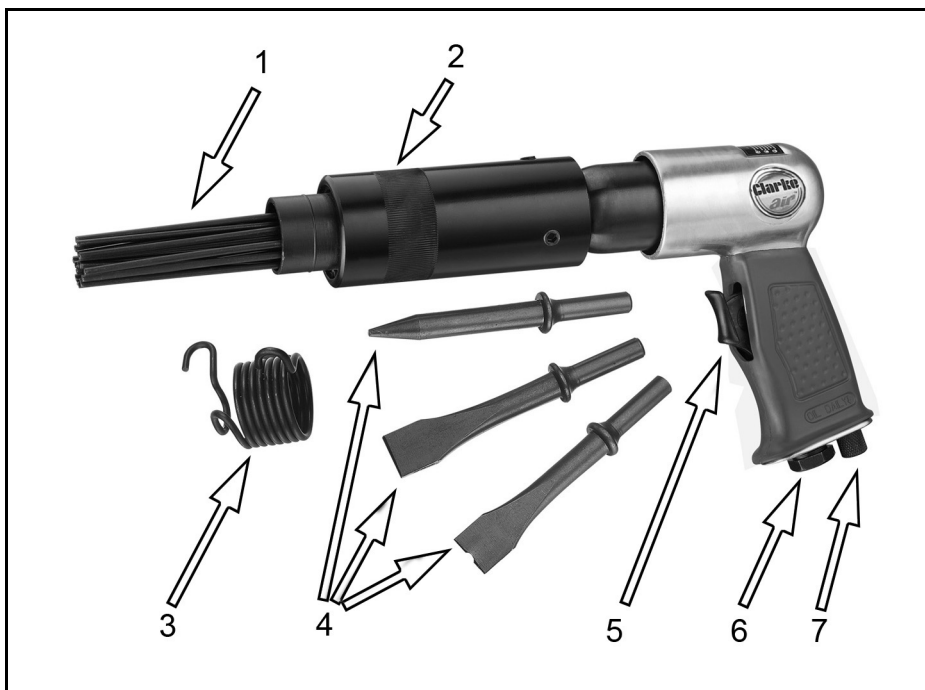
AIR HAMMER SPECIFIC HAZARDS

1. Only use accessories designed for use with this power tool.
2. Never use any of the chisels supplied as hand struck tool.
3. Never use blunt chisels which require excessive pressure and can break from fatigue.
4. Never abuse the tool by prising which can result in a broken tool.
5. Ensure there are no hidden electrical cables, gas pipes etc, which could cause a hazard if damaged by action of the chisels.

TRANSPORTATION

1. Never carry the tool by the air hose or with your finger on the trigger.
2. Always disconnect from the air supply when changing bits or when the tool is not required for immediate use in order to avoid accidental starting.
3. Wherever possible use both hands to control the tool.
4. Always ensure the tool has stopped before putting it down after use
5. 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.

OVERVIEW



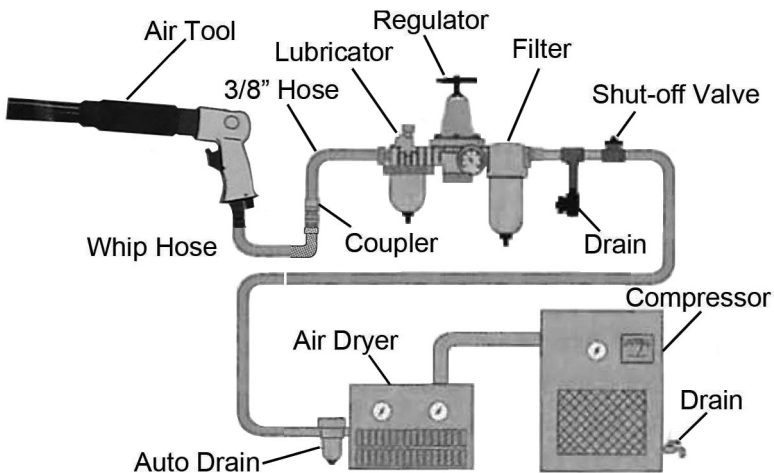
NO	DESCRIPTION	NO	DESCRIPTION
1	Needles	5	Trigger
2	Needle Holder	6	Female Air Inlet Connector
3	Chisel Retaining Spring	7	Speed Control Regulator
4	Chisels		

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 7 bar 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

FITTING THE NEEDLE HOLDER

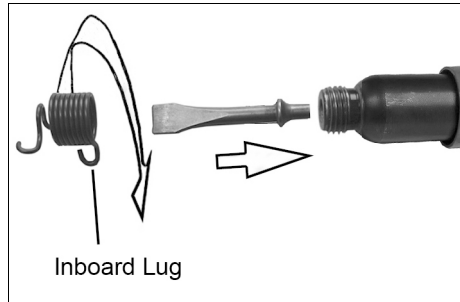
The Needle Scaler is packed in two halves:

- The main body/drive assembly
 - The needle holder with needles
1. Screw the needle holder with needles, firmly onto the nose of the tool.
 - Tighten the three grub screws shown with a hex key to secure the needle tube in place.



FITTING THE CHISELS

1. Insert the chisel into the air hammer as shown.
2. Screw the retaining spring fully onto the main body.
 - Use the lugs to gain purchase and tighten.



CONNECTING THE AIR SUPPLY



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

1. Remove the protective plug from the air inlet port and connect a suitable hose.
2. A gauze filter is fitted within the air inlet adapter. Ensure this filter is always in place and clean. The airline is connected to the adapter, preferably via a quick release coupling (not supplied).
3. Connect the other end of the hose to the compressor.

4. Turn on the air supply and check for air leaks. Rectify any found before proceeding.
 - PTFE tape may be useful for sealing threaded connections.
5. If required, connect an in-line mini oiler to the tool.
 - A mini oiler helps to prolong the life of the air tool.
6. 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 airline connector or via the hose at the nearest connection to the air supply.
7. Ensure the trigger is NOT depressed when connecting the air line.

ACCESSORIES AND CONSUMABLES

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.

Clarke Air-Ine Oil (Part no. 3050825) is available from your Clarke dealer.

Replacement needle set;- CAT172 (Clarke part no; 3120189).

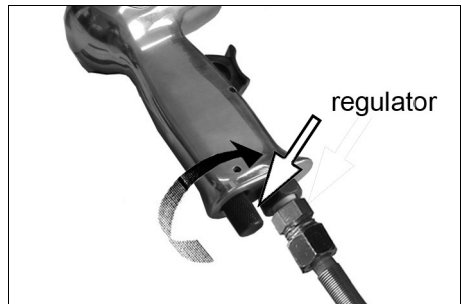
OPERATION



WARNING: ALWAYS WEAR PPE TO PROTECT YOURSELF FROM FLYING PARTICLES WHEN USING THIS PRODUCT.

USING THE TOOL

1. Hold the tool firmly, then bring the tool towards the work at an angle of approximately 60-70 degrees.
2. Pull the trigger with the chisel in light contact with the work.
3. Move slowly across the work surface. To remove scale, rust or other contaminants, only a light force should be required.
4. Release the trigger to stop operation, whilst maintaining contact with the work. Note that the tool may run briefly after the trigger is released.
5. Needle or chisel force can be adjusted by turning the regulator knob located at the base of the hand grip.
6. To increase speed, turn the regulator clockwise or anti-clockwise to reduce.



DISCONNECTING THE AIR SUPPLY

1. Do not disconnect the compressed air supply hose until the air supply has been shut down or isolated at the shut off valve and the compressed air expelled by running the tool until it stops.
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 needle scaler.

MAINTENANCE



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

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.

DAILY

1. Before use, drain water from the air-line and compressor.
2. Lubricate the air tool daily for optimum performance, using a high quality airline oil either via a lubricator in the air supply system or by placing a few drops into the air inlet immediately before use. This should be carried out regardless of whether or not an in-line lubricator is used.

CLEANING & OVERHAUL

1. Keep the tool clean and free from debris.
2. Grit or gum deposits in the mechanism may eventually reduce efficiency. This condition can be corrected by cleaning the air inlet strainer and flushing out the tool with gum solvent oil or an equal mixture of SAE No10 oil and paraffin.
3. Failing this, the tool should be disassembled, thoroughly cleaned, dried and reassembled. You may prefer to take the tool to your CLARKE dealer if internal maintenance is required.
4. If the tool becomes sluggish 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.
5. Replacement needles can be fitted if required as described on page 7.

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, the tool should be disconnected from the air supply and stored in a dry place out of the reach of children. Avoid storing in a damp environment or where the temperature is below 0°C.

TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION
Tool runs at normal speed but slows down under any load.	<ol style="list-style-type: none"> 1. Piston 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. Moving 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. Piston 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.

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 tool to your local Clarke dealer.

SPECIFICATION

Model Number	CAT164
Blows /min	3120178
Number of Needles	19
Needle Diameter	2.95 mm
Max Operating Pressure	90 psi/ 6.2 bar
Rated Average Air Consumption	4 cfm / 1.88 L/sec
Max Air Consumption @ 6.3bar	13 cfm / 6.1 L/sec
Air Inlet Size	1/4" BSP female thread
Vibration Levels	9.4 m/s ²
Speed	Variable using manual adjuster Max 4500 blows/min
Uncertainty Factor (K)	1.5
Sound Power Level	95 dB LWA
Sound Pressure Level	84 dBA
Uncertainty Factor (K)	3.0
Dimensions (L x D x H)	345 x 48 x 146 mm
Weight	2.7 kg
Chisels Supplied	
	Pointed 125 mm long
	Wide 125 mm long
	Notched 123 mm long

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



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 11148-4:2012.

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: X-PRO Pistol Grip Needle Scaler
Model number(s): CAT164
Serial / batch Number: N/A
Date of Issue: 09/02/2022

Signed:

J.A. Clarke
Director



Clarke[®]
INTERNATIONAL
Hemondl 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):
BS EN ISO 11148-4:2012

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: X-PRO Pistol Grip Needle Scaler
Model number(s): CAT164
Serial / batch Number: N/A
Date of Issue: 09/02/2022

Signed:

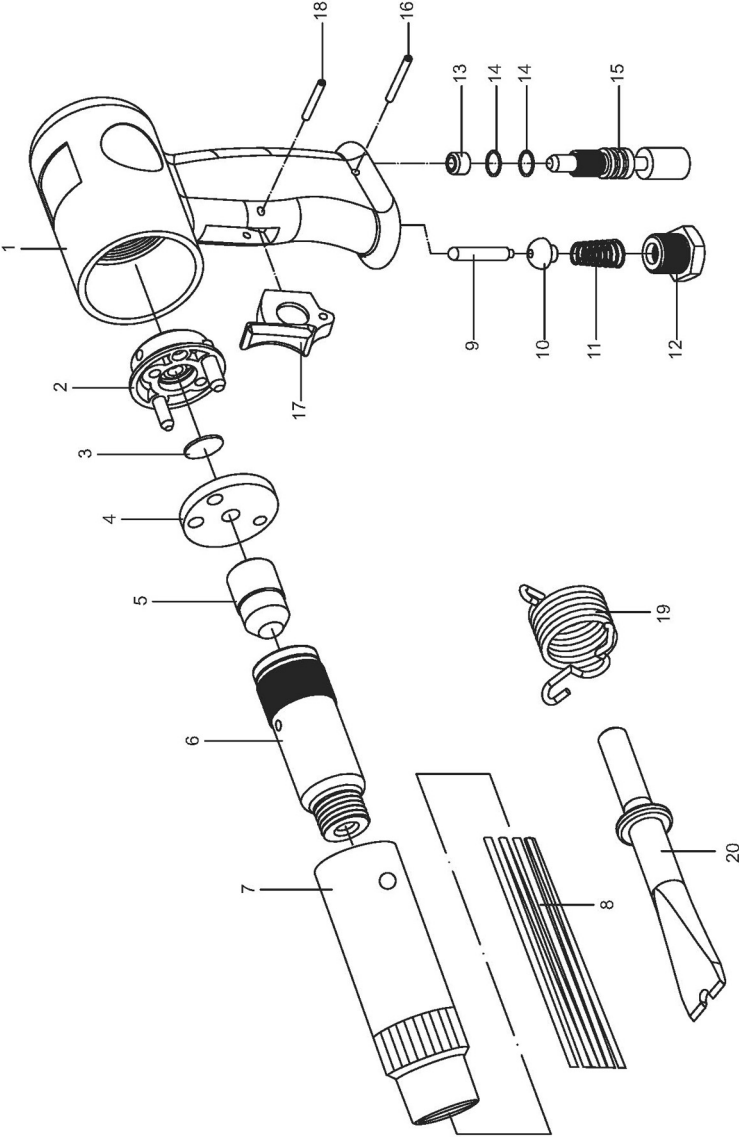
J.A. Clarke
Director

PARTS LIST

No	Description
1	Main Housing
2	Valve Seat
3	Valve Plate
4	End Cap
5	Piston
6	Cylinder
7	Needle Tube
8	Needle
9	Valve Stem
10	Valve

No	Description
11	Valve Spring
12	Air Inlet
13	Bushing
14	O-Ring
15	Air Regulator
16	Bolt
17	Trigger
18	Bolt
19	Spring Retainer
20	Chisel

PARTS DIAGRAM



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.

POWER TOOLS

Angle grinders, cordless drill sets, saws and sanders.

STARTERS/CHARGERS

All sizes for car and commercial use.

PARTS & SERVICE: 0208 988 7400

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