

Clarke®

X-PRO



AIR NIBBLER

MODEL NO: CAT213

PART NO: 3120530

OPERATING & MAINTENANCE INSTRUCTIONS

UK
CA | CE

ORIGINAL INSTRUCTIONS

GC0522 -Rev 1

INTRODUCTION

Thank you for purchasing this CLARKE air tool. The Air Nibbler is ideal for fast, accurate sheet metal cutting of curved or intricate shapes using its 4-way adjustable punch head.

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.

SPECIFICATION

Model Number	CAT213
Min. Hose Size (ID)	9.5 mm (3/8")
Operating Pressure	90 psi (6.2 bar)
Air Consumption	6.5 cfm (average)
Max Cutting thickness	1.2 mm /18 Gauge (mild steel)
Min. cutting radius	25 mm
Maximum speed	3800 strokes/minute
Air Inlet Size	1/4" BSP Female
Sound Pressure Level (LpA dB)	79 dB(A)
Sound Power Level (LwA dB)	90 dB(A)
Vibration Levels	4.2 m/s ²
Vibration Uncertainty K	1.5 m/s ²
Dimensions (L x W x H)	200 x 100 x 43 mm
Weight	0.84 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.

GENERAL SAFETY RULES



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

THE WORK ENVIRONMENT

1. ALWAYS keep the work area clean and tidy.
2. ALWAYS dress appropriately - Do not wear loose clothing or jewellery. Tie long hair out of the way.
3. ALWAYS 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.

USE OF AIR POWERED TOOLS

1. ALWAYS stay alert and use common sense - do not operate the tool when you are tired or under the influence of alcohol, drugs or medication.
2. ALWAYS wear eye protectors when using the nibbler - Eye protection must provide protection from flying particles from the front and the side.
3. ALWAYS wear ear protectors when using the tool.
4. DO NOT overreach - Keep proper footing and balance at all times.
5. DO NOT 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.
7. DO NOT exceed the maximum pressure for the tool of 90 psi / 6.2 bar.
8. ALWAYS check hoses for leaks or worn condition before use and ensure that all connections are secure.
9. ALWAYS keep the air supply hose away from heat, oil and sharp edges.
10. DO NOT use this tool for any other purpose than that described in this manual.
11. DO NOT fit this tool to any stand or clamping device that may damage it.
12. DO NOT carry out any alterations or modifications to this tool.
13. 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.
14. DO NOT use the tool if it is defective or operating abnormally.
 15. DO NOT damage the tool by applying excessive force.
 16. ALWAYS maintain the tool with care for the best and safest performance.
 17. Quick change couplings should not be located at the air tool. They add weight and could fail due to vibration.
 18. DO NOT force or misuse air tools. It will do a better and safer job at the rate for which it was designed.
 19. This tool vibrates with use. Vibration may be harmful to your hands or arms. Stop using the nibbler if discomfort, a tingling feeling or pain occurs. Seek medical advice before resuming use.
 20. DO NOT carry the tool by the air supply hose.
 21. DO NOT carry the tool with your finger on the trigger.

HAZARDS SPECIFIC TO CUTTING TOOLS

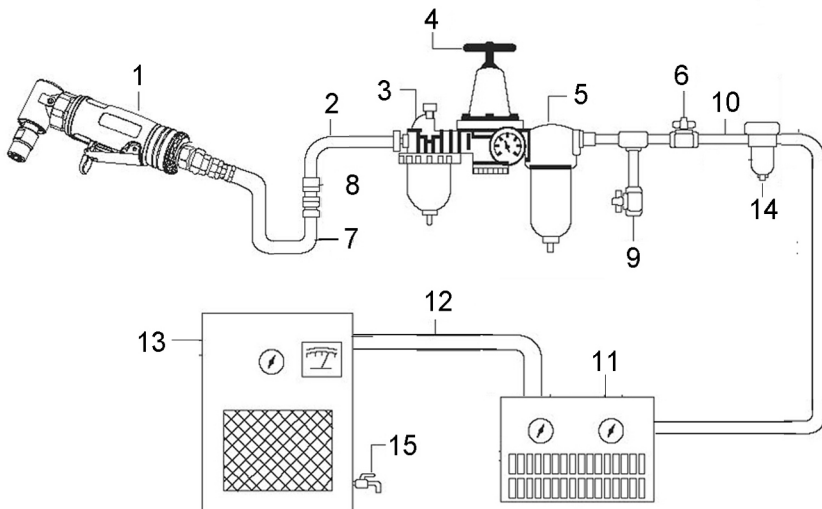
1. ALWAYS be careful around all moving parts and pinch points. Always keep your fingers away from the point of cutting.
2. ALWAYS ensure material is properly supported during cutting. Use supports for long material. Hold the material securely to prevent it tilting during the cut. Use clamps or vices to hold the work piece whenever possible.
3. ALWAYS take care of sharp edges produced by the cutting operation.
4. DO NOT use damaged punches/blades. When replacing cutting tool parts make sure they are correctly and securely mounted.
5. ALWAYS anticipate unexpected tool movement due to a binding punch or blade. Release the trigger immediately if this occurs.

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.

A typical air line layout is shown below. If an automatic in-line filter/regulator is used, it will keep the air 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.



AIR SYSTEM LAYOUT :

- | | |
|-------------------------------|-------------------------------------|
| 1. Air Tool | 9. Drain Valve |
| 2. Air Hose | 10. 1/2" Or Larger Pipe And Fitting |
| 3. Oiler | 11. Air Dryer |
| 4. Pressure Regulator | 12. 1" Or Larger Pipe And Fitting |
| 5. Filter | 13. Air Compressor |
| 6. Shut Off Valve | 14. Auto Drain |
| 7. Whip Hose | 15. Drain Valve |
| 8. Coupler Body And Connector | |

The minimum hose diameter should be 5/16" (8mm) ID and fittings should have the same internal dimensions.

Never exceed the maximum operating pressure for the tool. It is recommended that air pressure to this tool does not exceed 90 psi (6.2 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.

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 air tool.

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 on 01992 565333.

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

BEFORE USE



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.

When opening the carton, check that all the items are present. Any damage or deficiency should be reported to your CLARKE dealer immediately.

The carton should contain:

- Air Nibbler tool
- Male inlet adaptor
- Spare Die and blade

1. Remove the plastic blanking plug from the air inlet connection.
2. Pour 2-3 drops of CLARKE airline oil into the air inlet port. This should be done regardless of whether or not a lubricated air supply is to be used.
3. If required, connect an in-line mini oiler to the tool.
 - A mini oiler helps to prolong the life of any air tool.
4. Connect a suitable hose as shown or use the snap connector supplied to connect directly to the hose.
5. Connect the other end of the hose to the compressor.
 - PTFE tape may be useful for sealing threaded connections.
6. Turn on the air supply and check for air leaks. Rectify any found before proceeding.
7. If using a mini oiler, place a sheet of paper next the exhaust port and squeeze the trigger for approximately 30 seconds. The oil volume is correctly set when a light stain of oil can be seen on the paper. Excessive oil should be avoided.

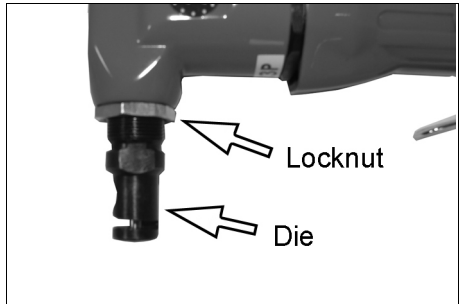


Your air nibbler is now ready for use.

OPERATION

The punch and die can be rotated through 360° to aid access and obtain maximum consumable life.

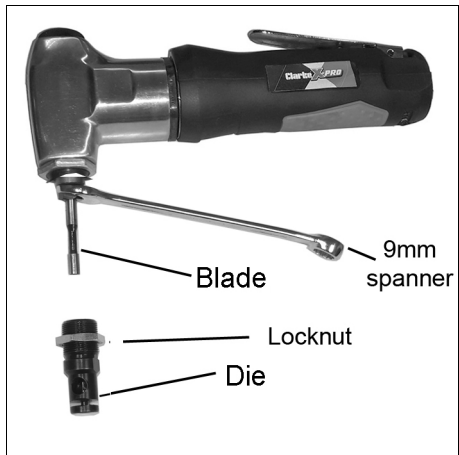
1. To do this, loosen the locknut with a 22 mm spanner and rotate the die on the blade until it is in the right position for the job in hand.
2. Hold the die steady with a 15mm spanner on its flats and retighten the locknut.
3. Ensure your workpiece is properly secured and marked out.
4. Connect the nibbler to the airline.
5. Start the nibbler by squeezing the throttle lever.
6. Introduce the sheet metal into the slot in the end of the die. Apply only light pressure to move the tool in the desired direction through the material.
7. Do not allow the nibbler to run freely for long periods of time as this could harm the bearings.



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.

CHANGING THE BLADE AND DIE

1. Loosen the locknut using a 22mm spanner.
2. Unscrew the die (with the locknut on it) from the body of the tool.
3. Using a 9mm ring spanner, unscrew the blade retainer with the blade.
4. Remove the old blade from the retainer and insert the new one.
5. Screw the retainer back into place and tighten with the ring spanner.
6. Slide the die and locknut over the blade and screw it back into the tool until the tip of the blade is flush with the bottom of the die. Rotate



the die into the best position required by the workpiece. Hold the die steady with a spanner on its flats and re-tighten the locknut.

NOTE: The open side of the die should be straight ahead and in alignment with the metal being cut.

DISCONNECTING THE AIR SUPPLY

1. Do not disconnect the air hose until the supply is isolated at a shut-off valve.
2. Once the pressure has been isolated, disconnect the air supply hose from the air tool.
3. Shut down the compressor at the end of the work session.

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 tool and store in a safe, dry place.

When storing, replace the blanking plug to the air inlet once the airline is disconnected.

MAINTENANCE



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

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

DAILY

1. Before use, drain water from the air-line and compressor.
2. Lubricate the tool daily for optimum performance. Use a high quality airline oil either via a lubricator in the air supply system or by placing a few drops into the tool immediately before use. This should be carried out regardless of whether or not an in-line lubricator is used.
3. Oil can be added via the lubrication cover on top of the nibbler. It is screwed on finger tight.



CLEANING & OVERHAUL

1. Keep the tool clean and free from debris.
2. If the tool becomes sluggish and the air supply is of good quality, it may be necessary to replace worn or damaged parts.
3. Grit or gum deposits in the mechanism may eventually reduce efficiency. This condition can be corrected by cleaning the air inlet filter and flushing out the tool with gum solvent oil or an equal mixture of SAE No10 oil and paraffin.
4. 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.

TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION
Tool runs at normal speed but slows down under any load.	<ol style="list-style-type: none"> 1. Excessive pressure on tool. 2. Motor parts worn. 3. Worn or sticking mechanism due to lack of lubricant. 	<ol style="list-style-type: none"> 1. Reduce the force applied to the tool. 2. Return to CLARKE dealer for repair. 3. 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. Regulator in closed position. 3. General airflow blocked by dirt. 	<ol style="list-style-type: none"> 1. Examine inlet air filter for cleanliness and clean if necessary. 2. Adjust 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. O-rings damaged or ill-fitting in seat. 	<ol style="list-style-type: none"> 1. Return to CLARKE dealer for repair.

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 11148-11:2011

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: 2019

Product Description: Air Nibbler
Model number(s): CAT213
Serial / batch Number: N/A
Date of Issue: 19/05/2022

J.A. Clarke
Director

Signed:

CAT213 CE Clarke DDC 051922

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INTERNATIONAL

Hemmill 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 11148-11:2011

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 Nibbler
Model number(s): CAT213
Serial / batch Number: N/A
Date of Issue: 19/05/2022

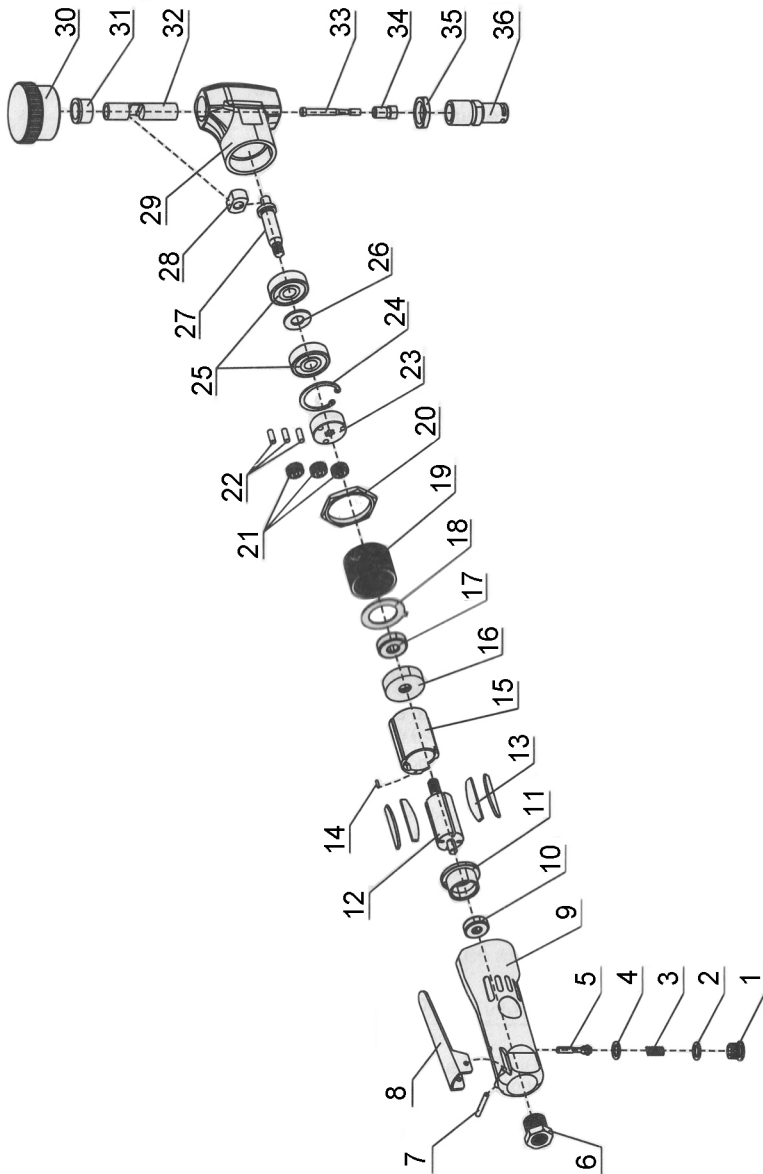
J.A. Clarke
Director

Signed:

CAT213 UKCA Clarke DDC 051922

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PARTS DIAGRAM



PARTS LIST

No	Description
1	Screw nut
2	O-ring
3	Spring
4	O-ring
5	Bolt
6	Air inlet
7	Trigger pin
8	Trigger
9	Main housing
10	Bearing
11	Rear plate
12	Rotor
13	Rotor blade
14	Bolt
15	Cylinder
16	Front plate
17	Bearing
18	Spacer

No	Description
19	Gear sleeve
20	Nut
21	Gear
22	Bolt
23	Gear bracket
24	E-clip
25	Bearing
26	Cushion
27	Camshaft
28	Rotating rod
29	Front housing
30	Lubrication cover
31	Bushing
32	Sliding shaft
33	Blade
34	Blade retainer
35	Fixing nut
36	Die

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