

CLARKE®

X-PRO



3/8" AIR DRILL

MODEL NO: CAT207

PART NO: 3120524

OPERATING & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC1019 -ISS 1

INTRODUCTION

Thank you for purchasing this CLARKE Air Drill.

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.

SPECIFICATION

Model Numbers	CAT207
Min. Hose Size (ID)	9.5 mm (3/8")
Chuck Size	1.5 - 10 mm
Operating Pressure	90 psi (6.2 bar)
Air Consumption	4.5 cfm (average)
Max No Load Speed	20000 rpm @ 90psi
Speed settings	Setting 1 - 11,000 rpm Setting 2 - 15,000 rpm Setting 3 - 18,000 rpm Setting 4 - 20,000 rpm
Air Inlet Size	1/4" BSP Female
Sound Pressure Level (LpA dB)	76 dB(A)
Sound Power Level (LwA dB)	87 dB(A)
Vibration Levels	1.87 m/s ²
Vibration Uncertainty K	1.5
Dimensions (L x W x H)	216 x 71 x 43 mm
Weight	0.7 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 drill.
4. DO NOT operate the drill where there are flammable liquids or gases.

USE OF AIR POWERED TOOLS

1. ALWAYS stay alert and use common sense - do not operate the drill when you are tired or under the influence of alcohol, drugs or medication.
2. ALWAYS wear eye protectors when using the drill - Eye protection must provide protection from flying particles from the front and the side.
3. ALWAYS wear ear protectors when using the drill.
4. DO NOT overreach - Keep proper footing and balance at all times.
5. NEVER use any type of bottled gas as a source of power for the drill.
6. DO NOT connect the air supply hose with your finger on the trigger.
7. DO NOT exceed the maximum pressure for the drill 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 drill for any other purpose than that described in this manual.
11. DO NOT fit this drill to any stand or clamping device that may damage it.
12. DO NOT carry out any alterations or modifications to this drill.
13. ALWAYS disconnect from the air supply when:
 - Performing any maintenance
 - The drill is not in use.

- The drill will be left unattended.
- Moving to another work area.

14. DO NOT use the drill if it is defective or operating abnormally.

15. ALWAYS avoid damaging the drill by applying excessive force.

16. ALWAYS maintain the drill 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 the drill. It will do a better and safer job at the rate for which it was designed.

19. This drill vibrates with use. Vibration may be harmful to your hands or arms. Stop using the drill if discomfort, a tingling feeling or pain occurs. Seek medical advice before resuming use.

20. DO NOT carry the drill by the air supply hose.

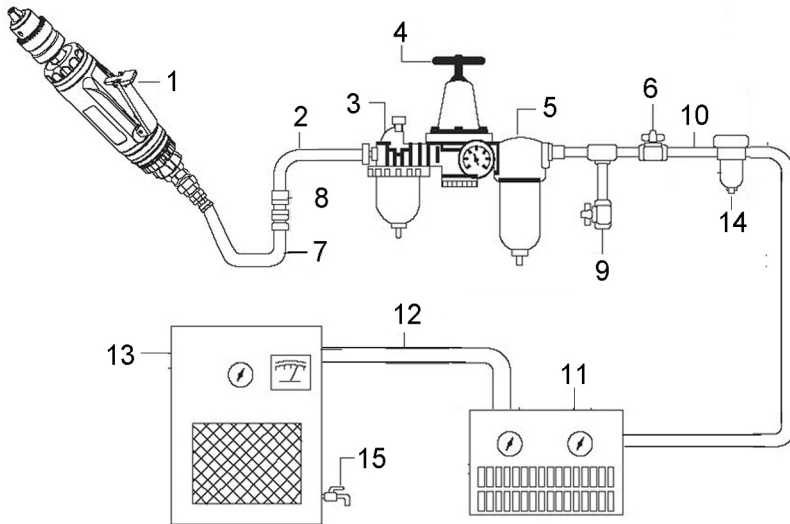
21. DO NOT carry the drill with your finger on the trigger.

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 3/8" (I.D.) | 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 does not exceed 90 psi at the tool when running. Higher pressures and unclean air will shorten the life of any air 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 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 air tools used. 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 drill.

OVERVIEW



1	Chuck	5	Air Exhaust Deflector
2	Trigger	6	Male inlet connector
3	1/4" BSP female air inlet	7	Chuck Key
4	Speed Selector Switch		

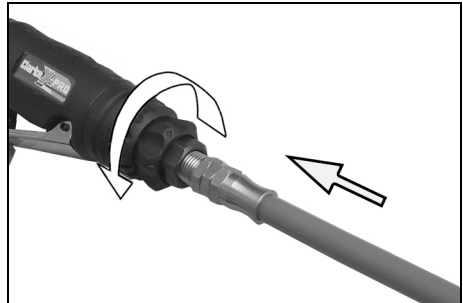
BEFORE USE



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.

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.



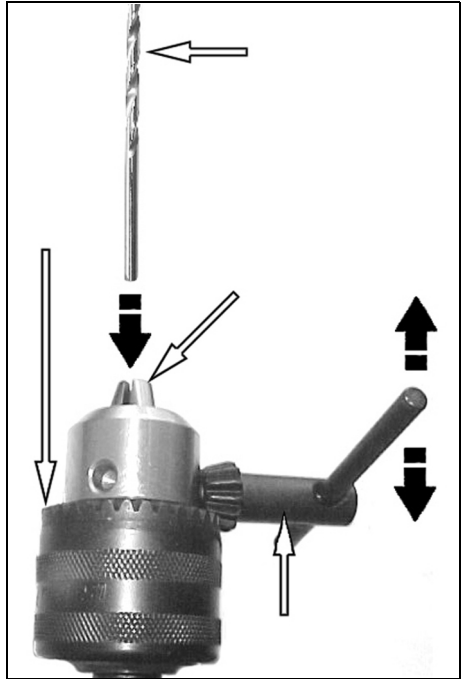
4. Connect a suitable hose as shown or use the inlet connector supplied to connect directly to the hose.
5. Connect the other end of the hose to the compressor.
 - PTFE tape may be useful for sealing threaded connections.
6. Turn on the air supply and check for air leaks. Rectify any found before proceeding.
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 drill is now ready for use.

INSERTING/REMOVING THE DRILL BIT

1. Open the chuck jaws by gripping the chuck key in one of the holes in the chuck and turning it as shown.
2. Make sure that the head of the chuck key is located on the barrel of the chuck.
3. Turn the chuck key until the chuck jaws are open sufficiently to accept the drill bit.
4. Insert the drill bit in the jaws of the chuck as far as it will go without gripping the cutting part of the bit.
5. Close the chuck jaws and tighten to grip the drill bit by turning the chuck key as shown.
6. Make sure that the chuck jaws are fully closed and that the drill bit is held firmly.

Your drill is now ready for use.

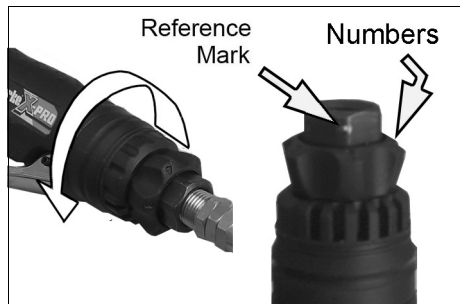


OPERATION

SETTING THE SPEED

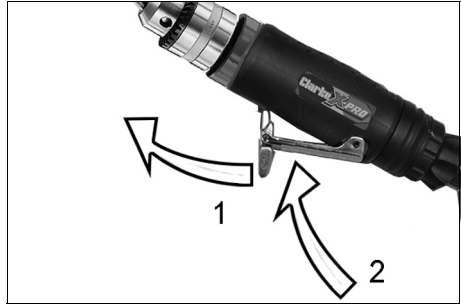
1. Set the tool speed by rotating the control to one of the four settings.
 - The numbers on the speed control knob indicate the speed setting when aligned with the reference mark on the air inlet. Speeds available are (+/-10%):

1	11,000 rpm
2	15,000 rpm
3	18,000 rpm
4	20,000 rpm



OPERATING THE DRILL

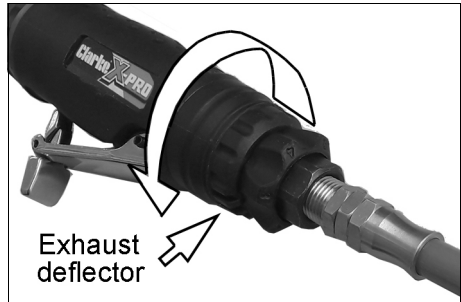
1. Slide the throttle locking lever forward while squeezing the trigger against the body of the tool.
2. Do not use excess pressure on the drill bit as this will shorten its life.
3. Release the trigger to stop the drill.
 - The drill will continue to rotate briefly after the trigger has been released.
4. Always ensure the drill has stopped before putting it down.



SETTING THE EXHAUST DEFLECTOR

The direction of the exhaust air leaving the tool can be adjusted by rotating the exhaust deflector.

Twist the exhaust deflector sleeve to direct the air as required to deflect air away from the workpiece or operator.



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 DRILL IS DISCONNECTED FROM THE AIR SUPPLY BEFORE PERFORMING ANY CLEANING OR MAINTENANCE.

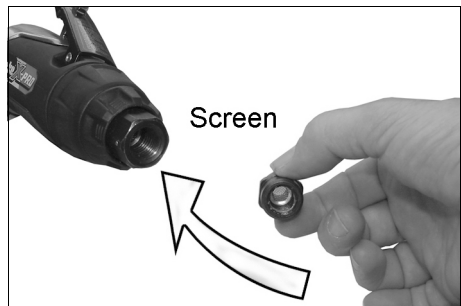
Please note that factors other than the drills condition may effect its operation and efficiency, such as reduced compressor output, excessive drain on the airline, moisture or restrictions in the air-line, or the use of connectors of improper size or poor condition which will reduce air supply.

DAILY

1. Before use, drain water from the air-line and compressor.
2. Lubricate the drill daily for optimum performance. Use CLARKE 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 drill clean and free from debris.
2. If the drill 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 drill with gum solvent oil or an equal mixture of SAE No10 oil and paraffin.
4. Failing this, the drill should be disassembled, thoroughly cleaned, dried and reassembled. You may prefer to take the drill to your CLARKE dealer if internal maintenance is required.



TROUBLESHOOTING

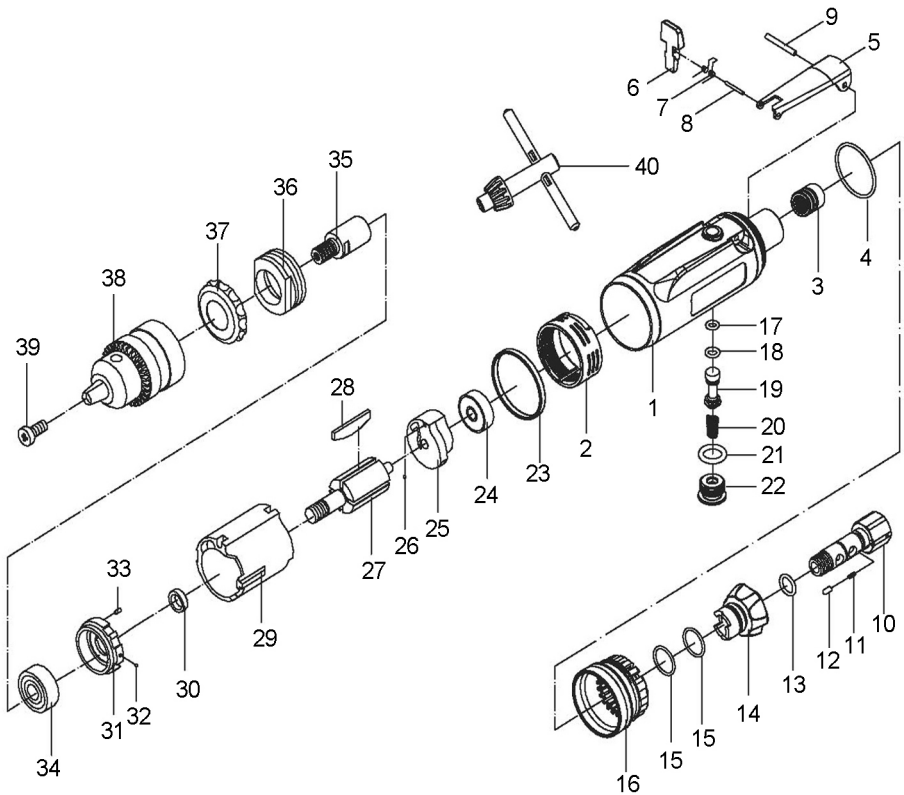
SYMPTOM	PROBLEM	SOLUTION
Tool runs at normal speed but slows down under any load.	<ol style="list-style-type: none"> 1. Excessive pressure on drill. 2. Motor parts worn. 3. Worn or sticking mechanism due to lack of lubricant. 	<ol style="list-style-type: none"> 1. Reduce the force applied to the drill. 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.

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 along with a wide range of drill bits. The toughest and most durable of these are the cobalt steel sets, ideal for stainless steel and hard alloys.

PARTS DIAGRAM



PARTS LIST

No	Description
1	Main housing
2	Housing liner
3	Bushing
4	O-ring
5	Trigger
6	Trigger lever
7	Spring
8	Pin
9	Trigger Pin
10	Air inlet
11	Spring
12	Pin
13	O-ring
14	Air regulator
15	O-ring
16	Exhaust deflector
17	O-ring
18	O-ring
19	Valve stem
20	Spring

No	Description
21	O-ring
22	Screw
23	Decorative ring
24	Bearing
25	Rear plate
26	Steel ball
27	Rotor
28	Rotor blade
29	Cylinder
30	Bushing
31	Front plate
32	Steel ball
33	Pin
34	Bearing
35	Collet seat
36	Lock ring
37	Front protective cover
38	Chuck
39	Screw
40	Chuck key

DECLARATION OF CONFORMITY



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 directive(s):

2006/42/EC Machinery Directive.

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

EN ISO 11148-3:2012.

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: 2019

Product Description: 3/8" Composite Air Drill
Model number(s): CAT207
Serial / batch Number: N/A
Date of Issue: 25/07/2019

Signed:

J.A. Clarke
Director

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 affect your statutory rights.

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