Clarke®

air

AIR HAMMER WITH CHISEL SET

MODEL NO: CAT114

PART NO: 3110870

OPERATION & MAINTENANCE INSTRUCTIONS

CE

LS0810

INTRODUCTION

Thank you for purchasing this CLARKE product.

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.

ENVIRONMENTAL PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment.

ACCESSORIES

A wide range of accessories are available, including Filter/Regulators, Lubricators, High Pressure Hoses (5 to 100 Metres), etc.

Contact your CLARKE dealer for further information, or CLARKE International Sales Department on 01992 565 333.

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 Air Hammer.
4. Do not operate the Air Hammer where there are flammable liquids or gases.
5. Keep the air supply hose away from heat, oil and sharp edges.
6. Do not fit the Air Hammer to any stand or clamping device that may damage the tool.

USE

1. Stay alert and use common sense - Do not operate the Air Hammer when you are tired or under the influence of alcohol, drugs or medication.
2. Always wear eye protectors when using the Air Hammer - Eye protectors must provide protection from flying particles from the front and the side.
3. Always wear ear protectors when using the Air Hammer.
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 Air Hammer.
6. Do not connect the air supply hose with your finger on the trigger of the Air Hammer.
7. Do not exceed the maximum pressure for the Air Hammer: 90 psi / 6.2 bar.
8. Check hoses for leaks or worn condition before use, and ensure that all connections are secure.
9. Do not use the Air Hammer for any other purpose than that described in this book.
10. Do not carry out any alterations or modifications to the Air Hammer.

11. Always disconnect from the air supply when:
    - Performing any maintenance
    - The Air Hammer is not in use.
    - The Air Hammer will be left unattended.
    - Moving to another work area.
    - Passing the Air Hammer to another person.
12. Never use the Air Hammer if it is defective or operating abnormally.
13. The Air Hammer should be serviced at regular intervals by qualified service personnel.
14. Avoid damaging the Air Hammer for example by applying excessive force of any kind.
15. ALWAYS maintain the tool with care. Keep it clean for best and safest performance.
16. Quick change couplings should not be located at the tool. They add weight and could fail due to vibration.
17. DO NOT force or misuse the tool. It will do a better and safer job at the rate for which it was designed.
18. Do not remove any labels. Damaged labels should be replaced.
19. 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.

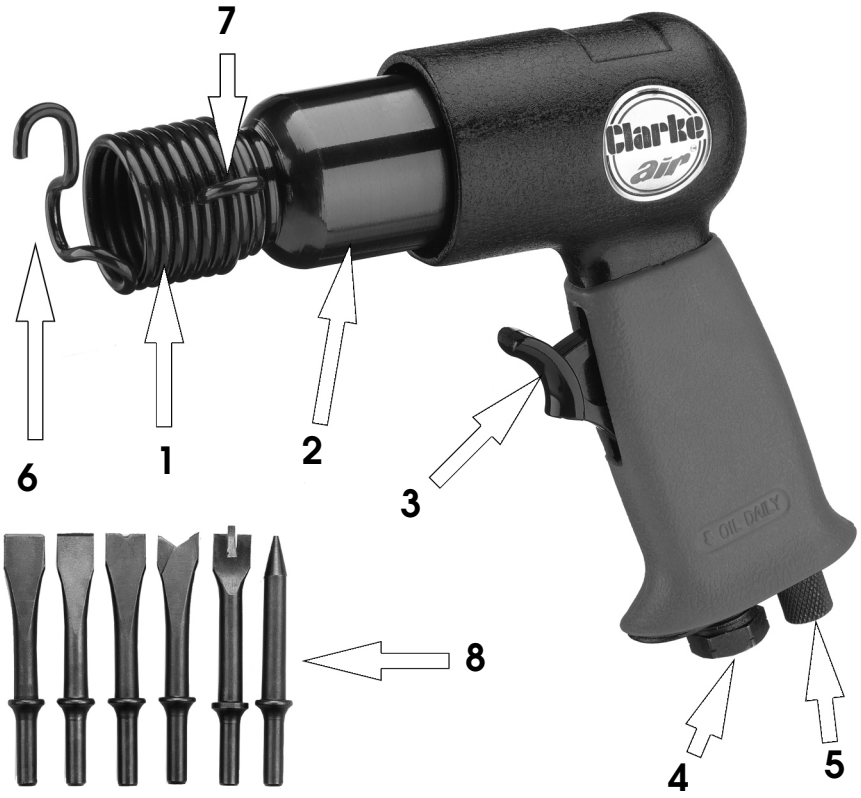
TRANSPORTATION

1. Never carry the Air Hammer by the air supply hose.
2. Never carry the Air Hammer with your finger on the trigger.

STORAGE

1. When not in use the Air Hammer 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 the Air Hammer in environments where the temperature is below 0^{O}C.

OVERVIEW



NO	DESCRIPTION	NO	DESCRIPTION
1	Retaining spring	5	Speed controller / Air regulator
2	Main body	6	Outboard lug
3	Trigger	7	Inboard lug
4	1/4" BSP (Female Air Inlet)	8	Chisel set

AIR SUPPLY

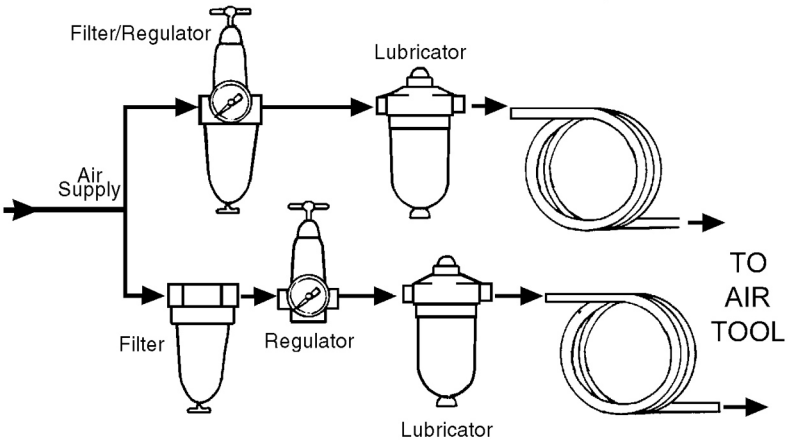
WARNING: COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF COMPRESSORS AND COMPRESSED AIR SUPPLY.

- Use only clean, dry, regulated compressed air as a power source for the Air Hammer.
- Air compressors used with the Air Hammer 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 Hammer.
- Never exceed the maximum operating pressure for the Air Hammer.

AIR HOSE

- The air hose must be rated at least 150% of the maximum operating pressure of the tool.

RECOMMENDED AIR SUPPLY CONNECTION

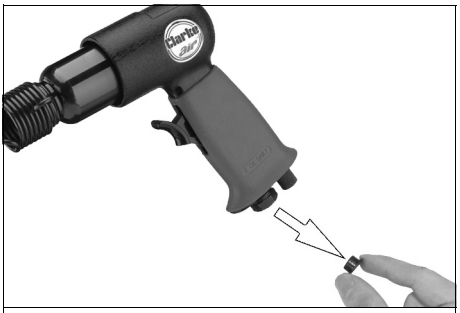


BEFORE USE

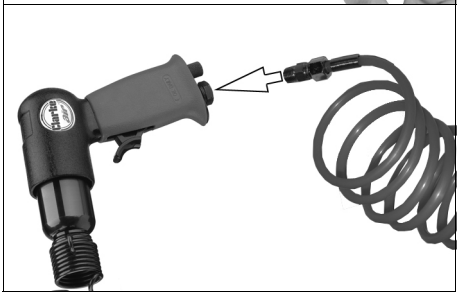
Ensure the compressor is turned off.

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

1. Remove the travel plug from the bottom of the tool as shown.
2. Pour 2-3 drops of CLARKE airline oil into the air inlet. This should be done regardless of whether or not a lubricated air supply is to be used.



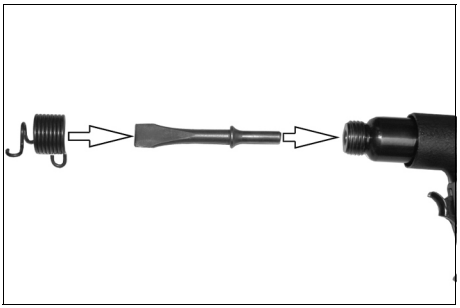
3. Connect a suitable hose to the tool as shown.
   - Use the adapter supplied if required.
4. Connect the other end of the hose to the compressor.



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

FITTING THE CHISEL

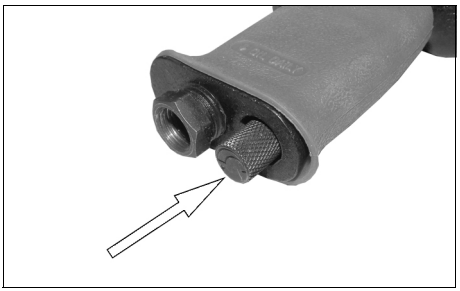
1. First remove the retaining spring from the nose by unscrewing it.
   - Use the inboard lug to gain purchase.
2. Insert the end of the chisel into the air hammer.
3. Replace the retaining spring, as shown.
   - Use the lugs to tighten.



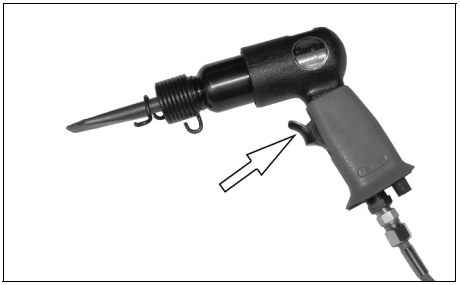
ADJUSTING THE FORCE

Chisel force may be adjusted by turning the speed controler/air regulator knob, located at the base of the handle grip.

- Turn anticlockwise to increase force.
- Turn clockwise to reduce.the force.



USING THE AIR HAMMER



1. Hold the tool with one hand around the handle and one hand around the barrel, 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 and proceed to remove scale, rust or other contaminants, a light force only should be required.
4. Release the trigger to stop operation, whilst maintaining contact with the work, noting that the tool may impact briefly after the trigger is released.

NOTE: The Retaining Spring has a life expectancy, depending upon the intensity of usage. It is strongly recommended that you procure one or two spare springs, for use in the event of failure occurring during the course of a particular job.

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

MAINTENANCE

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

DAILY

- Drain water from air tank, air line and compressor.
- Pour a few drops of CLARKE Air Line Oil, into the air inlet. This should be carried out regardless of whether or not the inline mini oiler is used. If the inline mini oiler is not used, this procedure should be repeated after every two to three hours of use.
- When not in use, disconnect from air supply, clean tool and store in a safe, dry place.

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

WEEKLY

- Remove the grub screw from the oil port on the side of the Air Hammer and insert a few drops of oil.

CLEANING

- Keep the body of the tool clean and free from debris, grit or gum deposits in the tool which may reduce efficiency.

SERVICE AND REPAIR

All servicing and repair must be carried out by qualified service technicians.

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 line, or the use of connectors of improper size or poor condition which will reduce air supply.

SPECIFICATIONS

Model Number	CAT114
Part Number	3110870
Operating Pressure	90 psi (6.2 bar)
Air Consumption	3 - 16 cfm (84 - 452 l/min)
Maximum Speed	4500 Blows per Min.
Air Inlet Size	1/4 inch BSP
Sound Pressure Level (LpA dB)	84 dB(A)
Sound Power Level (LwA dB)	95 dB(A)
Vibration Levels	14.6 m/s^2 at the Main Handle K = 0.99 m/s^2
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. Always consult the machine's data plate

VIBRATION EMISSIONS

Employers are advised to refer to the HSE publication "Guide for Employers".

All hand held power tools vibrate to some extent, and this vibration is transmitted to the operator via the handle, or hand used to steady the tool. Vibration from about 2 to 1500 hertz is potentially damaging and is most hazardous in the range from about 5 to 20 hertz.

Operators who are regularly exposed to vibration may suffer from Hand Arm Vibration Syndrome (HAVS), which includes 'dead hand', 'dead finger', and 'white finger'. These are painful conditions and are widespread in industries where vibrating tools are used.

The health risk depends upon the vibration level and the length of time of exposure to it……in effect, a daily vibration dose.

Tools are tested using specialised equipment, to approximate the vibration level generated under normal, acceptable operating conditions for the tool in question. For example, a grinder used at 45° on mild steel plate, or a sander on soft wood in a horizontal plane etc.

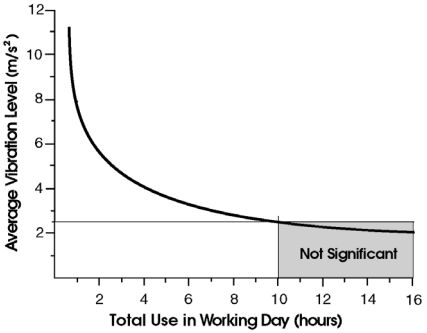
These tests produce a value 'a', expressed in metres per second per second, which represents the average vibration level of all tests taken, in three axes where necessary, and a second figure 'K', which represents the uncertainty factor, i.e. a value in excess of 'a', to which the tool could vibrate under normal conditions. These values appear in the specification panel below.

Model Number	**CAT114**
Description	**Air Hammer**
Declared vibration emission value in accordance with EN12096	
Measured vibration emission value - *a:*	14.6 m/s^2 at the Main Handle K = 0.99 m/s^2
Value determined according to	EN28622-1

You will note that a third value is given in the specification - the highest measured reading in a single plane. This is the maximum level of vibration measured during testing in one of the axes, and this should also be taken into account when making a risk assessment.

'a' values in excess of 2.5 m/s^2 are considered hazardous when used for prolonged periods. A tool with a vibration value of 2.8 m/s^2 may be used for up to 8 hours (cumulative) per day, whereas a tool with a value of 11.2 m/s^2 may be used for ½ hour per day only.

The graph on the right shows the vibration value against the maximum time the respective tool may be used, per day.



The uncertainty factor should also be taken into account when assessing a risk. The two figures 'a' and 'K' may be added together and the resultant value used to assess the risk.

It should be noted that if a tool is used under abnormal, or unusual conditions, then the vibration level could possibly increase significantly. Users must always take this into account and make their own risk assessment, using the graph above as a reference.

Some tools with a high vibration value, such as Air Hammeres, are generally used for a few seconds at a time, therefore the cumulative time may only be in the order of a few minutes per day. Nevertheless, the cumulative effect, particularly when added to that of other hand held power tools that may be used, must always be taken into account when the total daily dose rate is determined.

DECLARATION OF CONFORMITY

CE

Clarke® INTERNATIONAL

Hemnall 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 792-4:2000

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: 2005

Product Description:	Air Hammer with Chisel Set
Model number(s):	CAT114
Serial / batch Number:	N/A
Date of Issue:	05/01/2010

Signed:

.....

J.A. Clarke

Director

CAT114 Air Hammer (rv1)

Page 1 of 1

NOTES

NOTES

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS

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

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
E-mail: Parts@clarkeinternational.com or 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