

Clarke[®]

air



1/2" IMPACT WRENCH

MODEL No: CAT110

Part No: 3120120

OPERATION & MAINTENANCE INSTRUCTIONS



LS0309

SPECIFICATIONS

Square Drive	1/2" (13mm)
No load speed	7000rpm
Maximum Torque	230ft/lb (310N.m)
Air consumption	8 cfm
Operating pressure	90 psi (6.2 bar)
Weight	2.1 kg
Air inlet size	1/4" BSP
A weighted sound pressure level	92.6 dB(A)
Sound power level	103.6 dB(A)
Vibration in the handle	2.8m/s ²
Dimensions (L x W x H)	180 x 70 x 195 mm

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

GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt 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



Do not dispose of this product with general household waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of appropriately.

SAFETY PRECAUTIONS

IMPORTANT

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

WORK ENVIRONMENT

- Keep the work area clean and tidy.
- Dress appropriately - Do not wear loose clothing or jewellery. Tie long hair out of the way.
- Keep children and visitors away - Do not let children handle the impact wrench. Make sure that any other persons in the work area are dressed suitably and are wearing eye and ear protectors.
- Do not operate the impact wrench where there are flammable liquids or gases.
- Keep the air supply hose away from heat, oil and sharp edges.
- Do not fit the impact wrench to any stand or clamping device that may damage the tool.

USE

- Stay alert and use common sense - Do not operate the impact wrench when you are tired or under the influence of alcohol, drugs or medication.
- Due to the possible presence of asbestos dust from brake linings, always wear suitable respiratory protection.
- Do not overreach - Keep proper footing and balance at all times.
- Never use any type of bottled gas as a source of power for the impact wrench.
- Do not connect the air supply hose with your finger on the trigger of the impact wrench.
- Do not exceed the maximum pressure for the impact wrench: 90 psi / 6.2 bar.
- Check hoses for leaks or worn condition before use, and ensure that all connections are secure.
- Do not use the impact wrench for any other purpose than that described in this book.
- Do not carry out any alterations or modifications to the impact wrench.

SAFETY PRECAUTIONS

- Always disconnect from the air supply when:
 - a) Performing any maintenance
 - b) The impact wrench is not in use.
 - c) The impact wrench will be left unattended.
 - d) Moving to another work area.
 - e) Passing the impact wrench to another person.
- Never use the impact wrench if it is defective or operating abnormally.
- The impact wrench should be serviced at regular intervals by qualified service personnel.
- Avoid damaging the impact wrench for example by applying excessive force of any kind.
- ALWAYS maintain the tool with care. Keep it clean for best and safest performance.
- Quick change couplings should not be located at the tool. They add weight and could fail due to vibration.
- DO NOT force or misuse the tool. It will do a better and safer job at the rate for which it was designed.
- DO NOT remove any labels. Damaged labels should be replaced.
- 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.
- NEVER use standard sockets. These may shatter with serious consequences. Use ONLY Impact sockets.

TRANSPORTATION

- Never carry the impact wrench by the air supply hose.
- Never carry the impact wrench with your finger on the trigger.

STORAGE

- When not in use the impact wrench must be disconnected from the air supply and stored in a dry place out of the reach of children (preferably in a locked cabinet).
- Avoid storing the impact wrench in environments where the temperature is below 0°C.

PARTS



AIR SUPPLY

WARNING!

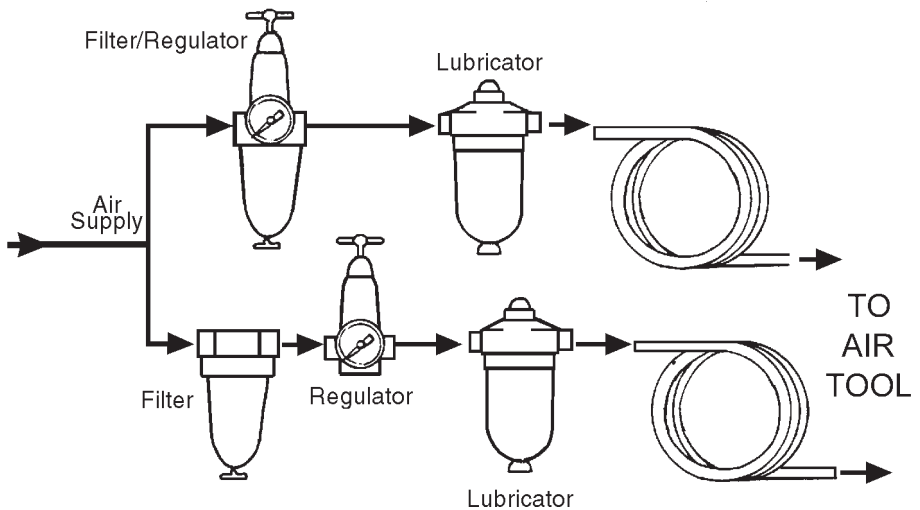
COMPRESSED AIR CAN BE DANGEROUS. ENSURE THAT YOU ARE FAMILIAR WITH ALL PRECAUTIONS RELATING TO THE USE OF COMPRESSORS AND COMPRESSED AIR SUPPLY.

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

AIR HOSE

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

RECOMMENDED AIR SUPPLY CONNECTION



ASSEMBLY

NOTE: ensure the compressor is turned off.

1. Connect a suitable hose to the impact wrench as shown, use the adapter supplied if required..
2. Connect the other end of the hose to the compressor.
3. Your impact wrench is now ready for use.

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



WARNING!

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

OPERATING INSTRUCTIONS

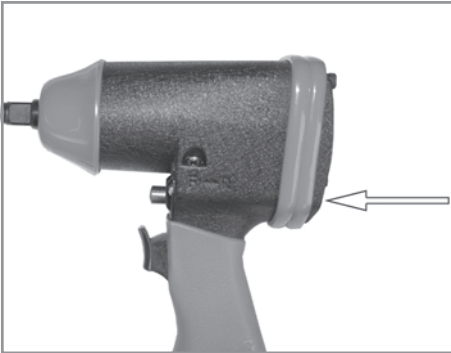
WARNING!

WAIT UNTIL THE ANVIL HAS STOPPED ROTATING BEFORE OPERATING THE DIRECTION CONTROL SWITCH.

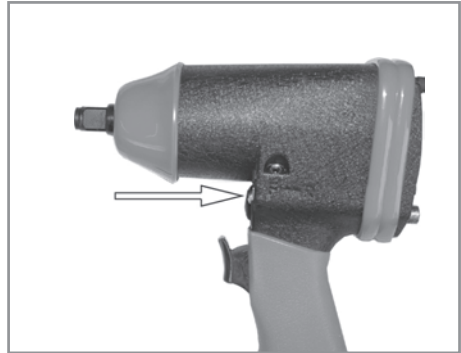
USING THE DIRECTIONAL CONTROL BUTTON

The direction control button should be used as follows.

- 1 For normal tightening, the impact wrench should be operated in the forward (F) direction.
- 2 For loosening, the impact wrench should be operated in the reverse (R) direction.



Direction control button in forward position



Direction control button in reverse position

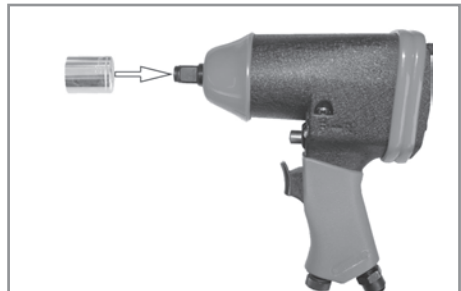
FITTING THE IMPACT SOCKET

- 1 Select the impact socket you require.

WARNING!

NEVER use standard sockets. These may shatter with serious consequences. Use ONLY Impact sockets.

- 2 Push the impact socket onto the anvil as shown.

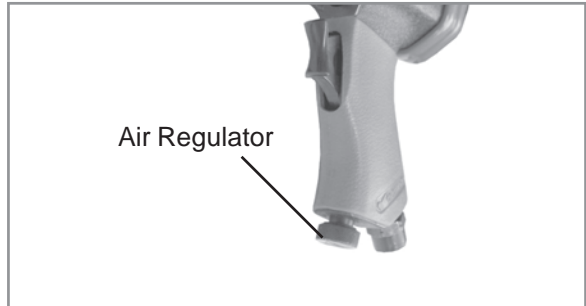


OPERATING INSTRUCTIONS

ADJUSTING THE POWER

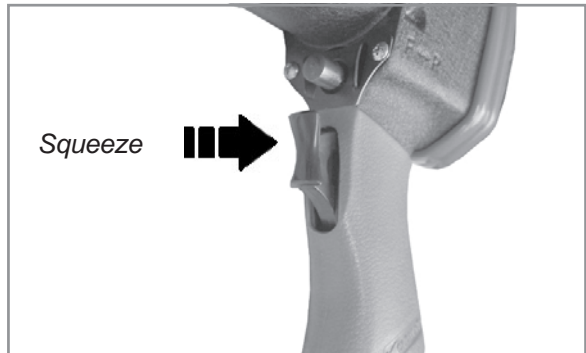
To adjust the power, set the air regulator to one of the 4 settings available.

1 (Low) - 4 (High).



OPERATING THE IMPACT WRENCH

1. Locate the socket over the nut to be tightened or loosened.
2. Squeeze the trigger to start the impact wrench.
3. Release the trigger to stop the impact wrench.



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 impact wrench.
3. Store the impact wrench safely in its box in a dry, secure environment

MAINTENANCE

WARNING! Make sure that the impact wrench 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 an air line lubricator is used. If an Air line lubricator is not used, this procedure should be repeated after every two to three hours of use.

WEEKLY

- Check the air inlet screen filter and clean if necessary.
- Remove the grub screw and insert a few drops of oil into the oil port on the side of the impact wrench.

CLEANING

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



SERVICE AND REPAIR

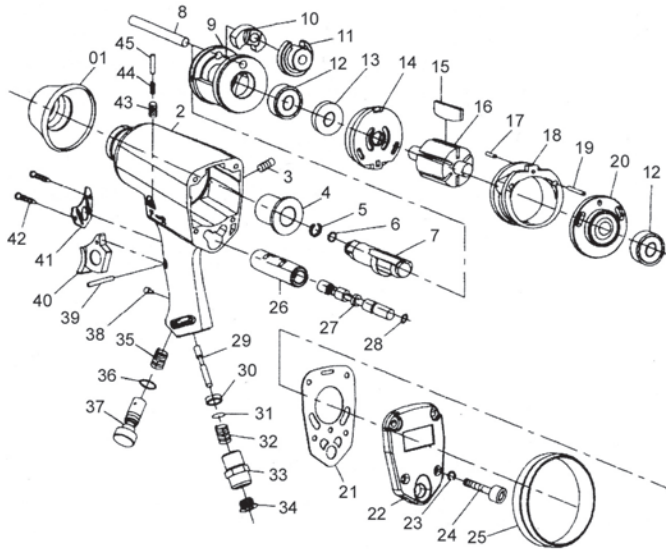
- All servicing and repair must be carried out by qualified service technicians.

NOTES

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.

**Clarke Air Line Oil is available from your CLARKE dealer part no. 3050825.

PARTS LIST AND DIAGRAM



No	Description	Part No	No	Description	Part No
1	Protecting Rubber	RONCAT11001	24	Bolt	RONCAT11024
2	Housing	RONCAT11002	25	Protecting Rubber	RONCAT11025
3	Bolt	RONCAT11003	26	Valve Sleeve	RONCAT11026
4	Anvil Bushing	RONCAT11004	27	Reverse Valve	RONCAT11027
5	Anvil Collar	RONCAT11005	28	O-Ring	RONCAT11028
6	O-Ring	RONCAT11006	29	Valve Stem	RONCAT11029
7	Anvil	RONCAT11007	30	Washer	RONCAT11030
8	Hammer Pin	RONCAT11008	31	Steel Ball	RONCAT11031
9	Hammer Cage	RONCAT11009	32	Inlet Spring	RONCAT11032
10	Hammer Dog	RONCAT11010	33	Air Inlet Plug	RONCAT11033
11	Drive Cam	RONCAT11011	34	Dust Free Cover	RONCAT11034
12	Ball Bearing	RONCAT11012	35	Spring	RONCAT11035
13	Oil seal	RONCAT11013	36	O-Ring	RONCAT11036
14	Front End Plate	RONCAT11014	37	Air Regulator	RONCAT11037
15	Rotor Blade	RONCAT11015	38	Bolt	RONCAT11038
16	Rotor	RONCAT11016	39	Pin	RONCAT11039
17	Pin	RONCAT11017	40	Trigger	RONCAT11040
18	Cylinder	RONCAT11018	41	Exhaust Cover	RONCAT11041
19	Bolt	RONCAT11019	42	Bolt	RONCAT11042
20	Rear End Plate	RONCAT11020	43	Screw	RONCAT11043
21	Gasket	RONCAT11021	44	Spring	RONCAT11044
22	Rear Cover	RONCAT11022	45	Pin	RONCAT11045
23	Washer	RONCAT11023			

DECLARATION OF CONFORMITY



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):

98/37/EC *Machinery Directive.*

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

EN 792-6:2000

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: 2007

Product Description: ½ Air Impact Wrench
Model number(s): CAT 110
Serial / batch Number: N/A
Date of Issue: 17/03/09

Signed:

J.A. Clarke
Managing 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

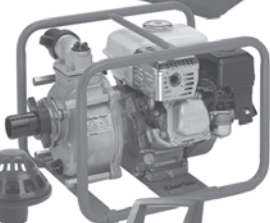
Submersible, electric and engine driven for DIY, agriculture and industry.

POWERTOOLS

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

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All sizes for car and commercial use.



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