

# W2428

Impact Wrench

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Valid from Serial No. A1750001  
Valid to Serial No. A2409999

## Product Instructions

W2428

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### WARNING

#### **Read all safety warnings and instructions**

Failure to follow the safety warnings and instructions may result in electric shock, fire and/or serious injury.

**Save all warnings and instructions for future reference**

***Atlas Copco***

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## Product Information

### General Information

#### **WARNING Risk of Property Damage or Severe Injury**

Ensure that you read, understand and follow all instructions before operating the tool. Failure to follow all the instructions may result in electric shock, fire, property damage and/or severe bodily injury.

- ▶ Read all Safety Information delivered together with the different parts of the system.
- ▶ Read all Product Instructions for installation, operation and maintenance of the different parts of the system.
- ▶ Read all locally legislated safety regulations regarding the system and parts thereof.
- ▶ Save all Safety Information and instructions for future reference.

### Safety signal words

The safety signal words **Danger**, **Warning**, **Caution**, and **Notice** have the following meanings:

DANGER	DANGER indicates a hazardous situation which, if not avoided, <b>will</b> result in death or serious injury.
WARNING	WARNING indicates a hazardous situation which, if not avoided, <b>could</b> result in death or serious injury.
CAUTION	CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	NOTICE is used to address practices not related to personal injury.

### Warranty

- Product warranty will expire 12 months after the product is first taken into use, but will in any case expire at the latest 13 months after delivery.
- Normal wear and tear on parts is not included within the warranty.
  - Normal wear and tear is that which requires a part change or other adjustment/overhaul during standard tools maintenance typical for that period (expressed in time, operation hours or otherwise).
- The product warranty relies on the correct use, maintenance, and repair of the tool and its component parts.
- Damage to parts that occurs as a result of inadequate maintenance or performed by parties other than Atlas Copco or their Certified Service Partners during the warranty period is not covered by the warranty.
- To avoid damage or destruction of tool parts, service the tool according to the recommended maintenance schedules and follow the correct instructions.
- Warranty repairs are only performed in Atlas Copco workshops or by Certified Service Partners.

Atlas Copco offers extended warranty and state of the art preventive maintenance through its ToolCover contracts. For further information contact your local Service representative.

#### **For electrical motors:**

- Warranty will only apply when the electric motor has not been opened.

### Website

Information concerning our Products, Accessories, Spare Parts and Published Matters can be found on the Atlas Copco website.

Please visit: [www.atlascopco.com](http://www.atlascopco.com).

## ServAid

**ServAid is a portal that is continuously updated and contains Technical Information, such as:**

- Regulatory and Safety Information
- Technical Data
- Installation, Operation and Service Instructions
- Spare Parts Lists
- Accessories
- Dimensional Drawings

Please visit: <https://servaid.atlascopco.com>.

For further Technical Information, please contact your local Atlas Copco representative.

## Safety Data Sheets MSDS/SDS

The Safety Data Sheets describe the chemical products sold by Atlas Copco.

Please consult the Atlas Copco website for more information [www.atlascopco.com/sds](http://www.atlascopco.com/sds).

## Installation of Vibrating Tools

We recommend using a minimum length of 300 mm (12") of flexible hose for compressed air between a vibrating tool and the quick-action coupling.

## Country of Origin

For the Country of Origin, please refer to the information on the product label.

## Dimensional Drawings

Dimensional Drawings can be found either in the Dimensional Drawings Archive, or on ServAid.

Please visit: <http://webbox.atlascopco.com/webbox/dimdrw> or <https://servaid.atlascopco.com>.

## Overview

### Technical Product Data

Technical Product Data can be found on either ServAid, or the Atlas Copco website.

Please visit: <https://servaid.atlascopco.com> or [www.atlascopco.com](http://www.atlascopco.com).

## Service Overview

### Overhaul and preventive maintenance

An overhaul should be done once per year or after a maximum of 100.000 tightening. More frequent preventive maintenance and overhaul are needed if the tool is used in heavy-duty operations. If the tool is not working correctly take it out of service immediately for inspection.

#### At overhaul and maintenance:

- clean all parts thoroughly
- replace worn or defective parts
- lubricate the threads and o-rings with grease before assembly
- make sure that the threaded connections on the tool are tightened in accordance with the specifications on the exploded views



## Overview

The table below shows the recommended service interval.

The service must only be done by an authorized workshop or qualified service technician.

<b>Daily</b>	Free speed check
	Air lubrication
<b>Weekly</b>	Silencer inspection
	Strainer inspection
<b>Half yearly</b>	Rating and markings inspection
<b>Yearly or after 100000 tightenings</b>	Overhaul
	Threaded connections lubrication and tightening

## Service Recommendations

Preventive maintenance is recommended at regular intervals. See the detailed information on preventive maintenance. If the product is not working properly, take it out of service and inspect it.




**If no detailed information about preventive maintenance is included, follow these general guidelines:**

- Clean appropriate parts accurately
- Replace any defective or worn parts

## Installation

### Installation Requirements

#### Air Quality

- For optimum performance and maximum product life we recommend the use of compressed air with a maximum dew point of +10°C (50°F). We also recommend to install an Atlas Copco refrigeration type air dryer.
- Use a separate air filter which removes solid particles larger than 30 microns and more than 90% of liquid water. Install the filter as close as possible to the product and prior to any other air preparation units to avoid pressure drop.
-  For impulse/impact tools make sure to use lubricators adjusted for these tools. Regular lubricators will add too much oil and therefore decrease the tool performance due to too much oil in the motor.
-  Make sure that the hose and couplings are clean and free from dust before connecting to the tool.
-  Both lubricated and lubrication free products will benefit from a small quantity of oil supplied from a lubricator.

#### Air Lubrication Guide

Brand	Air lubrication
Atlas Copco	Optimizer (1 liter) 9090 0000 04
Q8	Chopin 46
Shell	Shell Air Tool Oil S2 A 320

#### Compressed Air Connection

##### **WARNING Risk of severe injury**

Air under pressure can cause injury.

- ▶ Always shut off the air supply when not in use or before any adjustments.
- ▶ Drain the hose of air pressure and disconnect the tool from air supply when not in use or before any adjustments.
- ▶ Always use the correct hose size and air pressure for the tool.

##### **WARNING Compressed Air**

High air pressure can cause severe damage and bodily injury.

- ▶ Do not exceed maximum air pressure.
- ▶ Make sure that there are no damaged or loose hoses or fittings.

For correct air pressure and hose size, see the Technical Product Data on - <https://servaid.atlascopco.com> or [www.atlascopco.com](http://www.atlascopco.com).

-  Make sure that the hose and couplings are clean and free from dust before connecting to the tool.

## Operation

### ***Ergonomic guidelines***

Consider your workstation as you read through this list of general ergonomic guidelines and see if you can identify areas for improvement in posture, component placement, or work environment.

- Take frequent breaks and change work positions frequently.
- Adapt the workstation area to your needs and the work task.
  - Adjust for convenient reach range by determining where parts or tools should be located to avoid static load.
  - Use workstation equipment such as tables and chairs appropriate for the work task.
- Avoid work positions above shoulder level or with static holding during assembly operations.
  - When working above shoulder level, reduce the load on the static muscles by reducing the weight of the tool, using for example torque arms, hose reels or weight balancers. You can also reduce the load on the static muscles by holding the tool close to the body.
  - Make sure to take frequent breaks.
  - Avoid extreme arm or wrist postures, particularly for operations requiring a degree of force.
- Adjust for convenient field of vision by minimizing movement of the eyes and head during the work task.
- Use the appropriate lighting for the work task.
- Select the appropriate tool for the work task.
- Use ear protection equipment in noisy environments.
- Use high-quality inserted tools or consumables to minimize exposure to excessive levels of vibration.
- Minimize exposure to reaction forces.
  - When cutting:

A cut-off wheel can get stuck if the wheel is either bent or if it is not guided properly. Make sure to use the correct flanges for cut-off wheels and avoid bending the wheel during cut-off operation.
  - When drilling:

The drill might stall when the drill bit breaks through. Make sure you use support handles if the stall torque is too high. The safety standard ISO11148 part 3 recommends using something to absorb the reaction torque above 10 Nm for pistol grip tools and 4 Nm for straight tools.
  - When using direct-driven screw or nutrunners:

Reaction forces depend on tool setting and joint characteristics. The ability to bear reaction forces depends on the operator's strength and posture. Adapt the torque setting to the operator's strength and posture and use a torque arm or reaction bar if the torque is too high.
- Use dust extraction system or mouth protection mask in dusty environments.

### ***Operating Instructions***

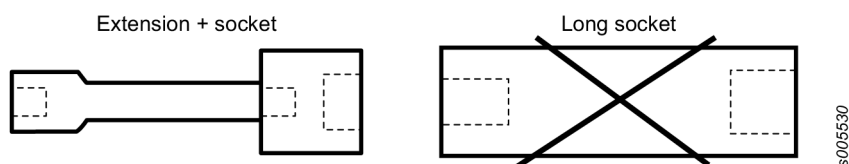
#### **Tightening time**

Use a tightening time of 1-5 seconds. Longer tightening or loosening times will increase wear, cause malfunction and risk of breakage.

#### **Long sockets and extensions**

Use extensions and standard sockets instead of long or extra long sockets as the lower inertia/mass of the extension will give less stress on the impact mechanism.

However an extension will reduce the applied torque to some degree.



## Tightening torque

The tightening torque force depend on:

- the air pressure
- the tightening time
- the bolted joint

The tightening torque force is reduced by extension pieces and worn sockets. Oversized power sockets (diameter or length) will overload the impact mechanism and reduce the life of vital parts.

Use the impact wrench within the specified torque range.

 Never override the recommended maximum tightening torque.

## Service

### ***Maintenance Instructions***

#### **Overhaul and preventive maintenance**

An overhaul should be done once per year or after a maximum of 100.000 tightening. More frequent preventive maintenance and overhaul are needed if the tool is used in heavy-duty operations. If the tool is not working correctly take it out of service immediately for inspection.

##### **At overhaul and maintenance:**

- clean all parts thoroughly
- replace worn or defective parts
- lubricate the threads and o-rings with grease before assembly
- make sure that the threaded connections on the tool are tightened in accordance with the specifications on the exploded views

#### **Overview**

The table below shows the recommended service interval.

The service must only be done by an authorized workshop or qualified service technician.

<b>Daily</b>	Free speed check
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	Strainer inspection
<b>Half yearly</b>	Rating and markings inspection
<b>Yearly or after 100000 tightenings</b>	Overhaul
	Threaded connections lubrication and tightening

#### **Service Recommendations**

Preventive maintenance is recommended at regular intervals. See the detailed information on preventive maintenance. If the product is not working properly, take it out of service and inspect it.

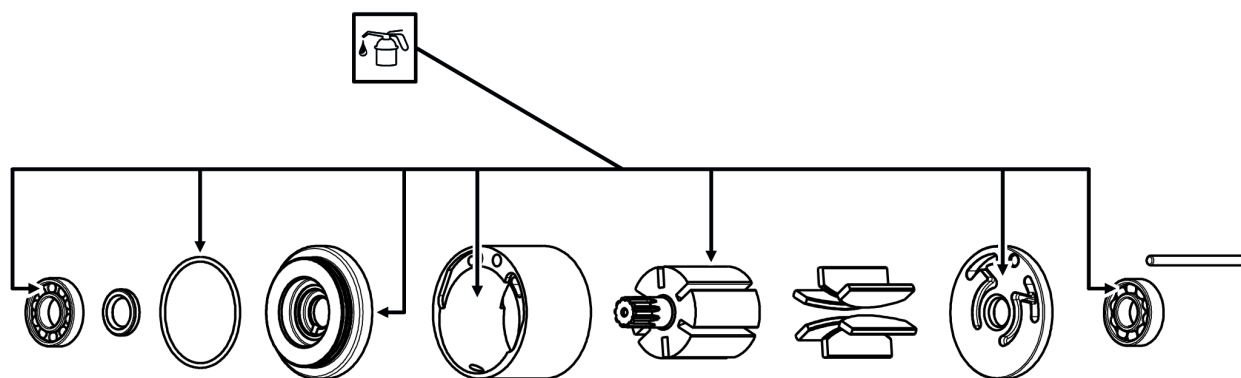
**If no detailed information about preventive maintenance is included, follow these general guidelines:**

- Clean appropriate parts accurately
- Replace any defective or worn parts

#### **Inspection of strainer**

Clean the strainer at the air inlet frequently to prevent clogging which decreases the capacity of the tool. Replace a defective or worn strainer.

## Inspection of motor parts



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<b>All parts</b>	Clean all parts before inspection.
<b>Bearings</b>	Make sure that the bearings are free from damages and runs smoothly.
<b>End plates</b>	<ul style="list-style-type: none"> <li>Make sure that the end plates surfaces are not scratched or damaged.</li> <li>Do a flatness test of the end plates surfaces. If they are visibly worn or deformed, polish with fine grinding paste against a surface plate and then clean thoroughly.</li> </ul>
<b>Rotor</b>	Make sure: <ul style="list-style-type: none"> <li>that the end faces have no marks or burrs</li> <li>that the splines are not worn or cracked</li> <li>that the plug holes have no cracks.</li> </ul>
<b>Cylinder</b>	<ul style="list-style-type: none"> <li>Make sure that the bore is not scratched or damaged.</li> <li>If the end surfaces are rough, polish with fine grinding paste against a surface plate and then clean thoroughly.</li> </ul>

## Inspection of silencer

Change or clean the filters regularly. Clogged filters will reduce power output.

## Lubrication Instructions

### Rust Protection and Cleaning

Water in the compressed air can cause rust. To prevent rust we strongly recommend to install an air dryer.

Water and particles can cause sticking of vanes and valves. This can be prevented by installing an air filter close to the product to avoid pressure drop.

Before longer stand stills always protect your tool by adding a few drops of oil into the air inlet. Run the tool for 5–10 seconds and absorb any access oil at the air outlet in a cloth.

### Lubricating guide

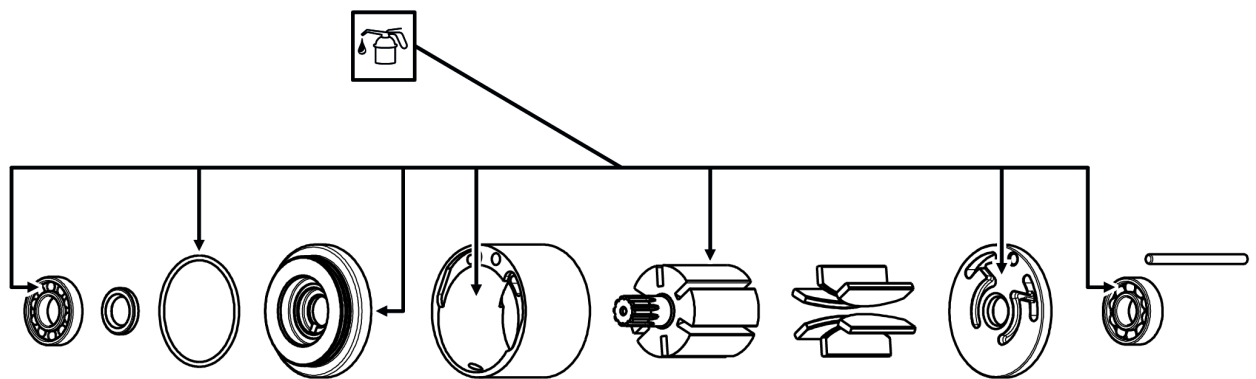
Use lubricants of good quality. The oils and greases listed in the lubrication table are examples of lubricants that can be recommended.

Brand	General purpose	Impact mechanism
	Bearings	
BP	Energrease LS-EP2	
Castrol	Spheerol EP L2	

Brand	General purpose	
	Bearings	Impact mechanism
Esso	Beacon EP2	
Q8	Rembrandt EP2	
Mobil	Mobilegrease XHP 222	
Shell	Alvania EP2	Alvania Grease RL2
Texaco	Multifak EP2	
Molycote	BR2 Plus	

## Lubrication of motor parts

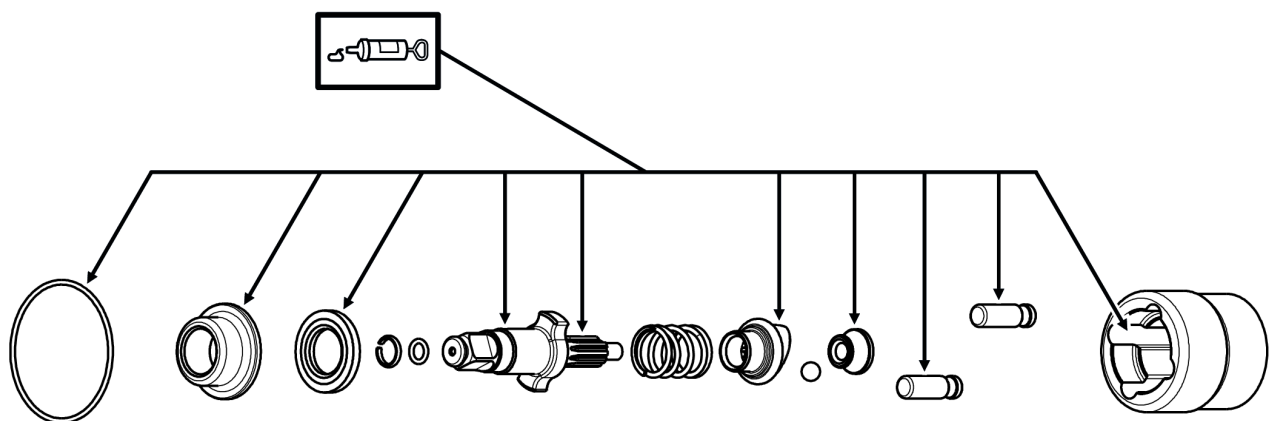
Apply a layer of oil where indicated.



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## Lubrication of impact mechanism

Spread a thin layer of grease on all sliding and impact surfaces, inside the cavity of the hammer and on the driver flange.



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## Recycling

### ***Environmental Regulations***

When a product has served its purpose it has to be recycled properly. Dismantle the product and recycle the components in accordance with local legislation.

Batteries shall be taken care of by your national battery recovery organization.









Original instructions



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