

DRAPER®

INSTRUCTIONS FOR $\frac{3}{8}$ " Composite Air Ratchet

Stock No. 47567
47568

Part No. 5223PRO
5224PRO

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS TOOL.



CE

47568 Shown

DRAPER®

GENERAL INFORMATION

Read all these instructions before operating this product and save these instructions.

This manual has been compiled by Draper Tools and is an integrated part of the product with which it is enclosed and should be kept with it for future references.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.



CONTENTS

Contents/Guarantee	1
Specification.....	2
Air supply.....	3
General safety instructions	4
Getting to know your air ratchet	5
Assembly	6
Operation and use.....	6-7
Maintenance/trouble shooting	8
Disposal	9
Explanation of symbols/pictograms	9
Declaration	Enclosed



GUARANTEE

Draper air tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for 6 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should the machine develop any fault, please return the complete tool to your nearest authorised warranty repair agent or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England. Telephone (023) 8049 4344.

A proof of purchase must be provided with the tool.

If, upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any persons other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variation of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.



SPECIFICATION

The Draper Tools policy of continuous improvement determines the right to change specification without notice.

Stock no.	47567	47568
Part no.	5223PRO	5224PRO
Anvil size.....	$\frac{3}{8}$ "	$\frac{3}{8}$ "
Maximum torque	3kgf-m (27Nm/20ft-lbs)	7kgf-m (68Nm/50ft-lbs)
Maximum operating air pressure	90psi (6.2bar).....	90psi (6.2bar)
Average air consumption	4.4cfm (125L/min)	4.0cfm (113L/min)
Revolutions per minute (no load)	200min ⁻¹	150min ⁻¹
Minimum air line size.....	$\frac{3}{8}$ " ID	$\frac{3}{8}$ " ID
Air inlet.....	$\frac{1}{4}$ " BSP.....	$\frac{1}{4}$ " BSP
Sound pressure level†	86dB(A)	86dB(A)
Sound power level††	91 dB(A)	91 dB(A)
Vibration level.....	<2.5m/s ²	2.6m/s ²
Weight	0.5kgs	1.2kgs

WARNING: WEAR APPROVED SAFETY GLASSES AND EAR DEFENDERS

† Continuous A-Weighted Sound Pressure Level at the workstation in accordance to prEN ISO 15744:1999 and declared according to EN ISO 4871.

†† A-Weighted Sound Power Level in accordance to prEN ISO 15744:1999 and declared according to EN ISO 4871.

FAILURE TO FOLLOW THESE INSTRUCTIONS WILL LEAD TO PREMATURE MALFUNCTION OF THE EQUIPMENT WHICH IS NOT COVERED BY THE GUARANTEE.

HYDRAULIC FLUID SPECIFICATION:

Hydraulic fluid viscosity refers to its properties to flow and how it reacts with heat. A low viscosity is thinner than a high viscosity.

Hydraulic fluid becomes thinner as it heats so choosing the right viscosity is essential. If the viscosity is too low it may provide insufficient lubrication when heated. Equally if it is too high the fluid may provide excessive resistance to move through the lines when cold.

The ISO (International Standards Organisation) viscosity grading system measures the kinematic viscosity in centistokes (cSt) at 40° which is today's accepted standard. The SAE (Society of Automotive Engineers) viscosity grade value is based on a scale.

This equipment is suited to an ISO grade 22-32 (SAE grade 5W-15W) hydraulic fluid or monograde oil.

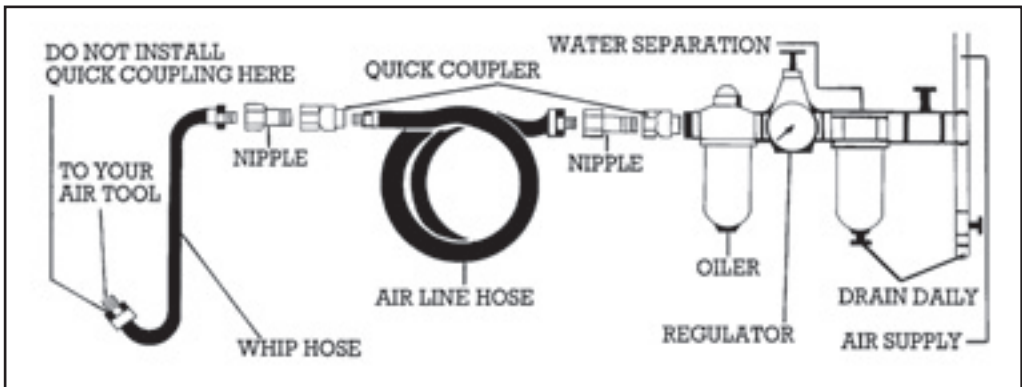
The fluid must be constantly supplied to the equipment during use to ensure complete lubrication and optimum performance is achieved. It also acts as a rust inhibitor when the equipment is not in use. Most of the major brand petroleum companies produce a suitable lubricant to the above specifications.

This air tool operates at a maximum pressure of 90psi and must be controlled via a combination pressure regulator, in-line lubricator and moisture filter such as the Draper range (see your local Draper stockist) which with proper maintenance will ensure a constant supply of dry air and lubricating oil at all times (see illustration below). Always check machine operating pressure before use.

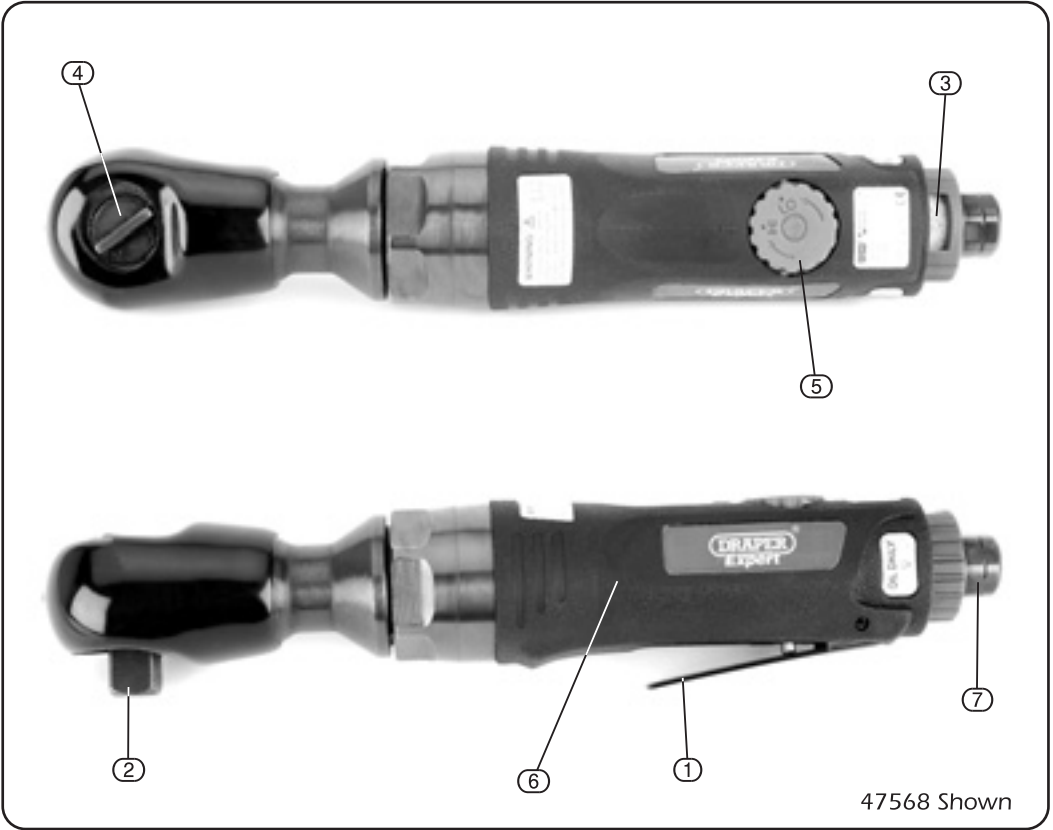
WATER IN THE COMPRESSOR TANK WILL CAUSE SERIOUS CORROSION TO YOUR AIR TOOLS AND SHOULD BE DRAINED DAILY TO AVOID EXCESSIVE WATER IN YOUR AIR SUPPLY. DIRTY WET AIR RAPIDLY SHORTENS THE LIFE OF YOUR AIR TOOL.

If you are using an air tool on a hose over 25ft. long it is advisable to increase the bore of the hose to the next larger size available i.e. 1/4" increases 3/8". This will ensure adequate pressure and volume of air to power the machine.

RECOMMENDED AIR SUPPLY SET UP



After each use and before prolonged storage lubricate the equipment with approximately 1.5ml of oil directly down the air inlet.



47568 Shown

- ① Trigger switch.
- ② 3/8" Anvil.
- ③ 360° adjustable exhaust port.
- ④ Reverse/forward selector.
- ⑤ Speed selector (47568 only).
- ⑥ Composite body.
- ⑦ 1/4" BSP (female) air inlet.

- **SCOPE:** This air ratchet is designed for removal and installation of threaded fasteners. Any other use is forbidden.
- **UNPACKING:** After removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. If in doubt, do not use the product and contact the dealer from whom it was purchased.

The packaging materials (plastic bags, polystyrene, etc.), must be disposed of in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.

ASSEMBLY

- **WHIP HOSE (FIG. 1):**

To connect the air ratchet to an air line a ¼" BSP male thread whip hose[†] will be required. Wind a length of PTFE tape^{††} around the thread before securing the hose in place. The connection must be tight for an airtight union.

[†] Draper Stock No.54438.

^{††} Draper Stock No.63389.

- **NOTE:** Due to the rotating air inlet feature a spanner will be required to hold the inlet while securing the whip hose (47568 only).



FIG. 1

OPERATION & USE

- **NOTE:**

Before connecting the air ratchet to the air supply reduce the line pressure according to the specification.

- **TRIGGER (FIG.2):**

Confirm direction of rotation prior to starting. Pull trigger (A) to operate the impact wrench.

Release the trigger to stop the impact wrench.

- **NOTE:**

Before tool operation and work commences ensure the compressor reservoir is drained of condensate along with all connected air lines. Check and drain the air line regulator's water trap and fill up the lubrication reservoir.



FIG. 2

- **NOTE:**

Disconnect from the air supply before carrying out adjustment, servicing or maintenance.

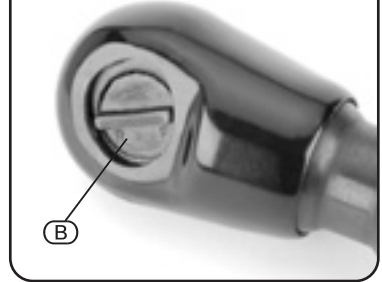
- **FORWARD/REVERSE SELECTION (Fig.3):**

- **NOTE:**

Air ratchets are not torque wrenches and are not designed or capable of installing fasteners to a specified torque. For fasteners requiring a specific torque, use a hand torque wrench.

Rotate the selector (B) anti-clockwise to select forward or clockwise for reverse operations.

FIG.3



- **SPEED REGULATION (Fig.4) (47568 only):**

Rotate selector (C) to regulate the speed most appropriate for the application.

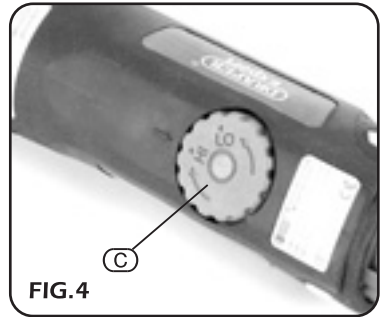


FIG.4

- **ANVIL (Fig.5):**

Ensure the socket correctly locates on the anvil firmly engaging on the locating ball (D).

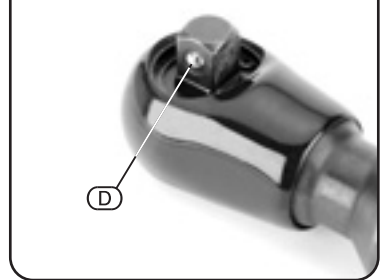
- **WARNING:**

Only use accessories specifically hardened and designed for use with impact tools[†].

Do not use standard chrome type hand tool sockets and accessories as they may shatter and splinter.

[†] Example: Draper 18 pieces 3/8" impact socket set 54714.

FIG.5



- **EXHAUST PORT (Fig.6):**

Adjust the exhaust port (D) away from yourself and ensure it does not agitate dust in close proximity.

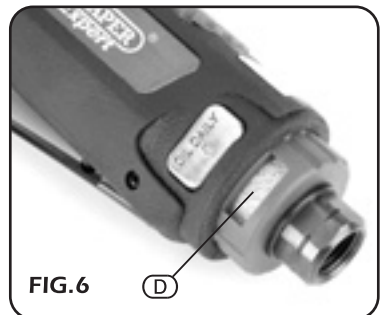


FIG.6

- **Every Day:**

Before connection to the air supply;

- Drain the compressor reservoir of condensate.
- Drain the air lines of condensate.
- Drain the combined separator filter, regulator, water trap.
- Fill up the combined separator filter, regulator, lubricant reservoir.
- Check the line pressure is correct for the tool.

- **After Daily Use:**

- Repeat the above procedures.
- Lubricate the tool with approximately 1.5ml of oil directly down the air inlet.

PROBLEMS	POSSIBLE CAUSE	REQUIRED ACTION
<ul style="list-style-type: none"> ■ Motor turns. Spindle doesn't run or runs erratically. 	<ul style="list-style-type: none"> ■ Worn teeth on ratchet or pawl. ■ Weak or broken pawl pressure spring. ■ Weak drag springs fail to hold spindle while pawl advances for another bite. 	<ul style="list-style-type: none"> ■ Replace worn parts.
<ul style="list-style-type: none"> ■ Motor seized - ratchet head rotates by hand. 	<ul style="list-style-type: none"> ■ Blocked motor. 	<ul style="list-style-type: none"> ■ Pour a liberal amount of air tool lubricating oil into air inlet. ■ Operate throttle in short bursts with socket engaged on the bolt. ■ If motor remains jammed return to service centre.

During decommissioning of the equipment certain hazards should be understood and avoided:

- Dealing with hydraulic fluid - refer to the data sheet section for details.
- Only with the line pressure released shall the equipment be disassembled. Goggles should be worn.



The operator's instruction must be read before work starts.



WARNING: Risk of crushing.



Direction of rotation.



Wear safety glasses.



Wear ear defenders.

- **DRAPER TOOLS LIMITED,**
Hursley Road, Chandler's Ford,
Eastleigh, Hampshire. SO53 1YF. U.K.
- **Helpline:** (023) 8049 4344
- **Sales Desk:** (023) 8049 4333
- **Internet:** www.draper.co.uk
- **E-mail:** sales@drapertools.com
- **Sales Fax:** (023) 8049 4209
- **General Enquiries:** (023) 8026 6355
- **Service/Warranty Repair Agent**
For aftersales servicing or warranty repairs, please
contact the Draper Tools Helpline for details of an
agent in your local area.

YOUR DRAPER STOCKIST

0AMC090708