INSTRUCTIONS FOR

Compact Dual Action Air Sander Kit

Stock No.47617 Part No.5229PRO

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

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.

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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 Sales Desk: (023) 8049 4333 or Product Helpline (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.	47617
Part no.	5229PRO
Backing pad diameter:	
Small	50mm
Large	75mm
Orbit diameter	5mm
Revolutions per minute (no load)	15,000r/min
Max. operating air pressure	90psi(6.2bar)
Average air consumption	4cfm (113L/min)
Min. air line size (innerØ)	⅜" (10mm)
Air inlet	¼" BSP
Sound pressure level†	87.0dB(A)
Sound power level††	94.0dB(A)
Vibration level	<2.5m/s²
Weight	0.6kg

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.

AIR SUPPLY

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 it's 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 todays 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.

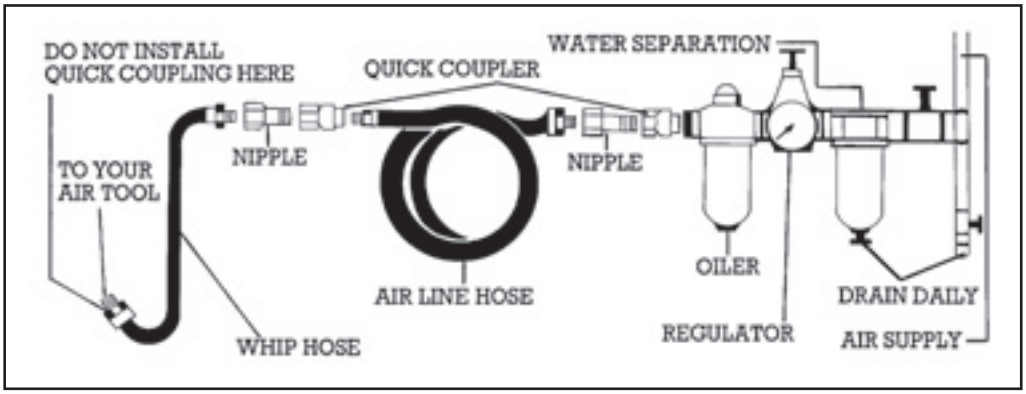
The fluid must be constantly supplied to the equipment during use to ensure complete lubrication and optimum performance is achieved. It also acts as a rust inhibitor when the equipment is not in use. Most of the major brand petroleum companies produce a suitable lubricant to the above specifications.

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 ie. ¼" increases ⅜". 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.

GENERAL SAFETY INSTRUCTIONS

IMPORTANT:
Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

- Power tools shall not be used in potentially explosive atmospheres unless specifically designed for that purpose.
- Power tools shall be isolated from the energy source before changing or adjusting the inserted tool.

- **WARNING:**
  - There is a risk of loose clothing, hair, etc. being caught in the rotating spindle of the power assembly tool.
  - There is a risk of being injured by whipping air hoses.
- Unexpected direction of inserted tool movement can cause a hazardous situation.
- Release the start and stop device in the case of an interruption of the energy supply;
- Only lubricants recommended by the manufacturer shall be used;
- Release pressure when not in use. Disconnect from air line;
- Do not modify this air tool in any way.
- Do not carry or move the tool by the air line.
- In the event of hydraulic fluid/monograde oil contact or spillage refer to the manufacturer's datasheet. As a general guide refer below.

HYDRAULIC FLUID DATA SHEET:

Always wear gloves and goggles when dealing with hydraulic fluid.

Hydraulic fluid composition is achieved when highly refining mineral oil by means of a solvent.

As a substance is not considered to be hazardous to health under normal conditions of use.

First Aid recommendations

- In case of ingestion:
  Wash out mouth with clean water and seek medical advice.
  Do not induce vomiting.
- In case of contact with eyes:
  Thoroughly flush eyes with clean water for 5 to 10 minutes and seek medical advice.
- In case of contact with skin:
  Wash area with soap and water. Remove effected clothing and wash. If irritation persists, seek medical advice.
- Other:
  Seek medical advice immediately.

Hydraulic fluid is a combustible and in the event of fire should be extinguished using a foam or dry powder fire extinguisher. Do not use water.

In the event of accidental release into the environment measures to prevent spread must be adhered. Do not contaminate rivers, water ways or drains. Spillage should be contained with sand, grit or other appropriate barriers.

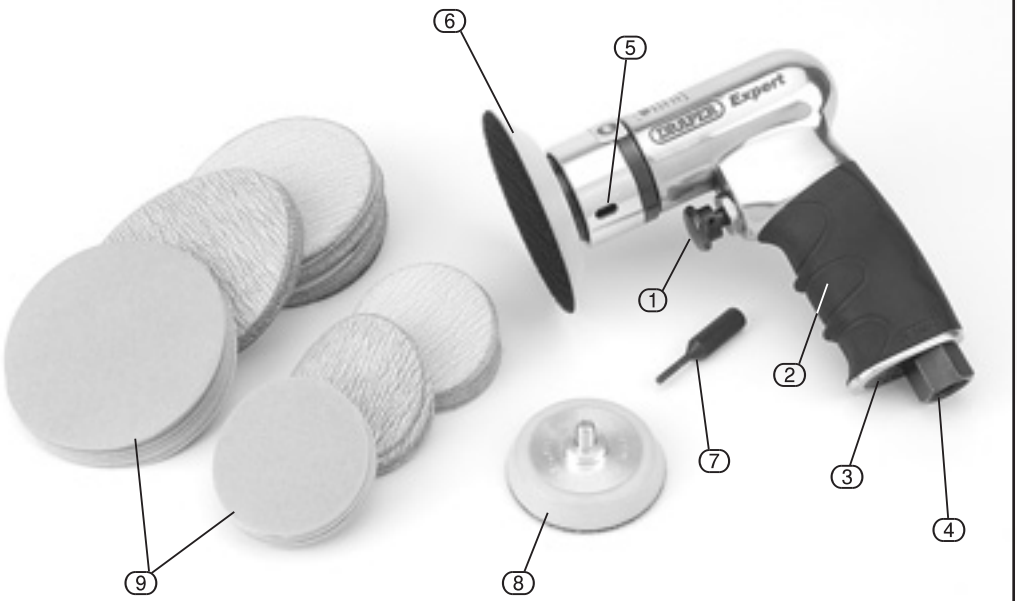
Warn bystanders as spillage may present a slip hazard.

Hydraulic fluid is not considered biodegradable and may in fact bioaccumulate.

- Power tools are not generally insulated for coming into contact with electric power sources.
- Polishers and sanders shall not be used in potentially explosive atmospheres unless specifically designed for that purpose.
- There is a risk of fire or explosion when processing certain materials.
- WARNING: Wear gloves to prevent cutting or abrasion injuries.
- Only use inserted tools, intended for polishing and sanding, recommended by the manufacturer.
- Grinding wheels and cutting-off wheels shall not be used.
- Ensure the maximum operating speed of the inserted tool is higher than the rated speed of the power tool.
- Self-fixing sanding pads shall be placed concentrically on the supporting pad.
- Personal protective safety glasses shall be used, gloves and protective clothing are recommended.
- Personal protection and dust collection shall be chosen with regard to the material being worked upon.
- In the event of an energy supply failure, release the start stop device.
- Only lubricants recommended by the manufacturer shall be used.

IMPORTANT NOTE:
Residual Risk. Although the safety instructions and operating manuals for our tools contain extensive instructions on safe working with power tools, every power tool involves a certain residual risk which can not be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution!

GETTING TO KNOW YOUR RANDOM ORBIT SANDER



1. Trigger.
2. Soft grip handle.
3. Exhaust outlet.
4. ¼" BSP (female) air inlet.
5. Spindle lock aperture.
6. 75mm backing pad.
7. Spindle lock pin.
8. 50mm backing pad.
9. Abrasives:

50mm:	75mm:
10 x 320grit	10 x 320grit
10 x 400grit	10 x 400grit
10 x 600grit	10 x 600grit

- **SCOPE:** This random orbit sander is designed for localised sanding, and is equipped with a flexible pad to be fitted with a coated abrasive product, such as a fibre disc or abrasive paper. 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 sander to an air line a 1/4" 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 firm for an air tight union.
  † Draper Stock No.54438
  †† Draper Stock No.63389

FIG.1

OPERATION AND USE

- **NOTE:** Disconnect from the air supply before carrying out adjustment, servicing or maintenance.

- **BACKING PAD (Fig.2&3):**
- **NOTE:**
  The backing pad is considered a consumable item.

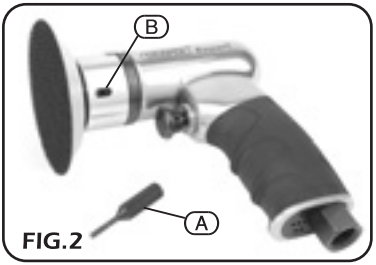


FIG.2

- This machine comes supplied with a 50mm & a 75mm backing pad. To alternate between the backing pads or for replacement purposes it will be necessary to lock the spindle with locking pin (A). This pin locates through slot (B) in the outer casing, passes through the outer spindle (C) and into the inner spindle (D).

- **NOTE:**
  The inner spindle (D) has a geometric centre axis, however the outer spindle (C) creates an eccentric orbit for the inner spindle, resulting in the orbit action of the pad.

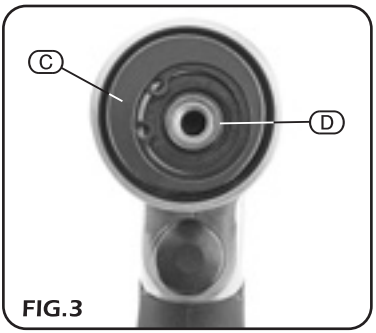


FIG.3

- To align the locking pin apertures, maneuver the backing pad to rotate the outer spindle around its eccentric axis. Monitor the position through the casing and stop when aligned. Then turn the backing pad to rotate the inner spindle on its central axis and complete the alignment. Insert the locking pin and unscrew the backing pad anti-clockwise.
- While the locking pin remains located, insert the substitute backing pad and tighten securely.

- **WARNING**
  Contact with or inhalation of harmful toxic dusts arising from sanding lead paint surfaces, wood, etc., can endanger the health of operators and bystanders. An approved dust mask shall be worn.
- **TRIGGER (Fig.4.):**
  Ensure the sander is raised off the workpiece. Depress the trigger (E) to operate the sander. This machine is intended for fine detail/light duty localised sanding only.
  Apply equal pressure on the workpiece with the backing pad remaining fl at. Attempting to sand areas using only the edge will lead to damage to the backing pad.

FIG.4

- **NOTE:**
  Excess pressure when sanding reduces the effectiveness of the tool.
  Replace abrasive discs when clogged with material or when surface/edge has rips, cracks or worn areas.
  Inhalation of dust particles can be detrimental to health. Always wear a dust mask suitable for the material being sanded.
- **NOTE:**
  All wood dust (including dust from composites like chipboards and fibre boards etc) is hazardous to health: it can affect the nose, the respiratory system and the skin. For example MDF (medium density fibreboard) which contains formaldehyde is a known carcinogen. A correctly fitted dust mask, suitable for the activity and in accordance to the relevant standard, must be worn.
  For work activities involving exposure to fine wood dust a mask rated to at least FFP2 should be used.
- **ABRASIVE DISC INSTALLATION/REPLACEMENT (Fig.5.)**
  The backing pad and the abrasive disc are considered consumable items. The abrasive discs (F) simply push on to the backing pad (G) and are held in place with a hook and loop fastening.
  To remove the worn abrasive disc, simply pull away from the hook and loop and re-apply a new disc.

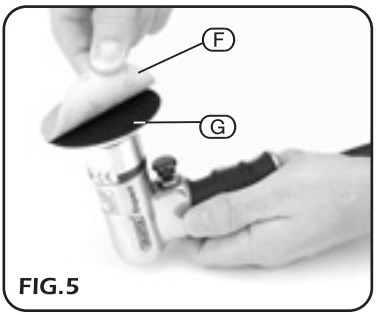


FIG.5

- **GENERAL SANDING INFORMATION:**
  Select the correct grit to obtain the desired finish. The higher the grit number the finer the finish. When removing paint from a surface the grit will have a tendency to clog.
  Replace abrasive disc when clogged with material or when surface/edge has rips, cracks or worn areas.
- **NOTE:**
  Abrasive disc and the sander backing pad are consumable items.

MAINTENANCE

- **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.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REQUIRED ACTION
▪ Tool will not operate. Air flows slightly from exhaust. Spindle turns freely.	▪ Motor or throttle seized with dirt.	▪ Check for dirt in air inlet. ▪ Pour air tool lubricating oil into air inlet. ▪ Operate trigger in short bursts. ▪ Disconnect air line supply, then turn spindle by hand. Reconnect air supply. ▪ If motor fails to turn return to service agent.
▪ Tool runs slowly. Air flows freely from exhaust.	▪ Rotor vane seized.	▪ Pour air tool lubricating oil into air inlet. ▪ Operate tool in short bursts. ▪ Tap motor housing gently with plastic mallet. ▪ If still not functional, return to service agent.
▪ Spindle seized.	▪ Motor vane broken.	▪ Return to service agent.
▪ Tool will not shut off.	▪ 'O' rings throttle valve dislodged from seat inlet valve.	▪ Replace 'O' ring or return to service agent.

DISPOSAL

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.

EXPLANATION OF SYMBOLS/PICTOGRAMS

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

Direction of rotation.

Wear safety glasses.

Wear ear defenders.

NOTES

CONTACTS

- **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

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