



EN

Original Instructions
Version 4 – August 2025

15 PIECE AIR
**DIE
GRINDER
KIT**

83736



1. Preface

These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate or maintain this product.

This Draper Tools manual describes the purpose of the product and contains all the necessary information to ensure its correct and safe use. Following all the instructions and guidance in this manual will ensure the safety of both the product and the operator and increase the lifespan of the product.

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

Every effort has been made to ensure the information contained in this manual is accurate. However, Draper Tools reserves the right to amend this document without prior warning. Always use the latest version of the product manual.

1.1 Product Reference

User Manual for: 15 Piece Air Die Grinder Kit

Stock No: 83736

Part No: DAT-AGK

1.2 Revisions

Version 1: October 2017

First release

Version 2: July 2021

Version 3: May 2023

Version 4: August 2025

As our manuals are continually updated, always ensure that the latest version is used.

Please visit [drapertools.com/manuals](https://www.drapertools.com/manuals) for the latest version of this manual and the associated parts list, if applicable.

1.3 Understanding the Safety Content of This Manual



WARNING! – Situations or actions that may result in personal injury or death.



CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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In all cases, this copyright notice must remain intact.

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3. Product Introduction

3.1 Intended Use

This compact air straight die grinder is designed for grinding and polishing metal components using a range of abrasive grinding stones.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Read this manual in full before attempting to assemble, operate or maintain the product, and retain it for later use.

3.2 Specification

Stock No.	83736
Part No.	DAT-AGK
Collet size	3mm (1/8") and 6mm (1/4")
Speed (No load)	25,000rpm
Maximum operating air pressure	90psi (6.2bar)
Average air consumption	113L/Min (4cfm)
Maximum air line size	3/8" (10mm)
Air Inlet	1/4" BSP
Noise emissions	
Sound pressure level	88dB (A)
Sound power level	99dB (A)
Vibration level	2.9M/S ²
Net weight	0.39kg

Important: The declared vibration total values and noise emissions values have been measured in accordance with a standard test method and may be used for comparing one tool with another. These values may also be used in a preliminary assessment of exposure.

 **WARNING!** The vibration and noise emissions during actual use of the product can differ from the declared values depending on the type of work and the area upon which it is used. Before each use, estimate the likely exposure resulting from the actual conditions of use. Take into account all parts of the operation cycle in order to identify any safety measures required to protect the operator.

Important: Read all the Health and Safety instructions before attempting to operate, change accessories, maintain or repair this product. Failure to follow these instructions may result in injury or damage to the user, the product or the workpiece.

4.1 General Health and Safety Precautions for Air Tools

- Only qualified and trained operators should use or adjust the air tool.
- **DO NOT** modify this tool. Modifications can reduce the effectiveness of safety measures and increase the risks to the operator.
- Retain the safety instructions for future reference and use by the operator.
- **DO NOT** use the tool if it has been damaged.
- Inspect the tool periodically to verify that the ratings and markings required are attached and legible.
- Keep bystanders away during operation.
- Disconnect the tool from the energy supply before changing the inserted tool or accessory.
- Direct the exhaust port away from yourself and to minimise disturbance of dust in the work area.
- **ALWAYS** wear appropriate personal protective equipment (PPE). Personal protective safety glasses and dust mask shall be used; suitable gloves and protective clothing are recommended.
- For overhead work, wear a safety helmet.
- Keep loose clothing, hands, hair etc. away from the rotating parts of the tool and accessories.
- Have your tool serviced by a qualified repair person using only identical replacement parts.
- Release the start and stop device in the case of an interruption of the energy supply.
- Only use lubricants recommended by the manufacturer.
- Use only sizes and types of accessories and consumables that are recommended by the tool manufacturer.
- Unexpected direction of inserted tool movement can cause a hazardous situation.
- Adopt a suitable posture to counteract normal or unexpected movement due to reaction forces from the tool.
- The tool is not intended for use in potentially explosive atmospheres and is not insulated against coming into contact with electric power.

- Ensure there are no electrical cables, gas pipes, etc., that can cause a hazard if damaged by use of the tool.

• Noise Hazards

- Exposure to high noise levels can cause permanent hearing loss and other problems. Perform a risk assessment and implement any appropriate controls for identified hazards before performing any operation.
- Use appropriate hearing protection in accordance with local occupational health and safety regulations.
- Operate and maintain the tool appropriately to prevent unnecessary increase in noise emissions.

• Vibration Hazards

- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
- Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool and consult a qualified health professional.
- Operate and maintain the tool appropriately to prevent unnecessary increase in vibration emissions.
- The risks from vibration hazards are increased when grip force on the tool is higher. – Hold the tool with a light but safe grip, keeping in mind that your grip may need to be altered to react to unexpected forces.

4.2 Additional Safety Instructions for Compressed Air



WARNING!

Compressed air can cause severe injury.

- **ALWAYS** turn off and disconnect the air supply before changing accessories, making any adjustments to the product or leaving it unattended.
- **NEVER** direct this product towards yourself or others.
- Ensure that compressed air is not blocked by or in contact with any part of your body.
- **ONLY** use clean, dry and regulated compressed air.



WARNING! NEVER use oxygen, combustible gases or other bottled gases as a supply for this product. Use of these substances may cause the product to explode.

4. Health and Safety Information

- Draper Tools recommends the use of a whip hose between the tool and the air supply to reduce vibration.



WARNING! Whipping hoses can cause severe injury. Always check for and replace damaged or loose hoses and fittings.

- Ensure that the product is compatible with the air supply before use.
- Ensure all connections are securely tightened.
- Where universal twist couplings (claw couplings) are used, lock pins must be installed and whip check safety cables must be used to safeguard against possible hose-to-tool or hose-to-hose failure.
- **DO NOT** exceed the maximum stated air pressure.
- The use of an inline water separator, lubricator and pressure regulator should be used to control the pressure of the air being supplied to the tool.
- **DO NOT** obstruct the ability of the trigger to release once depressed.
- **NEVER** carry the tool by the air line.

4.3 Additional Safety Instructions for Air Die Grinders

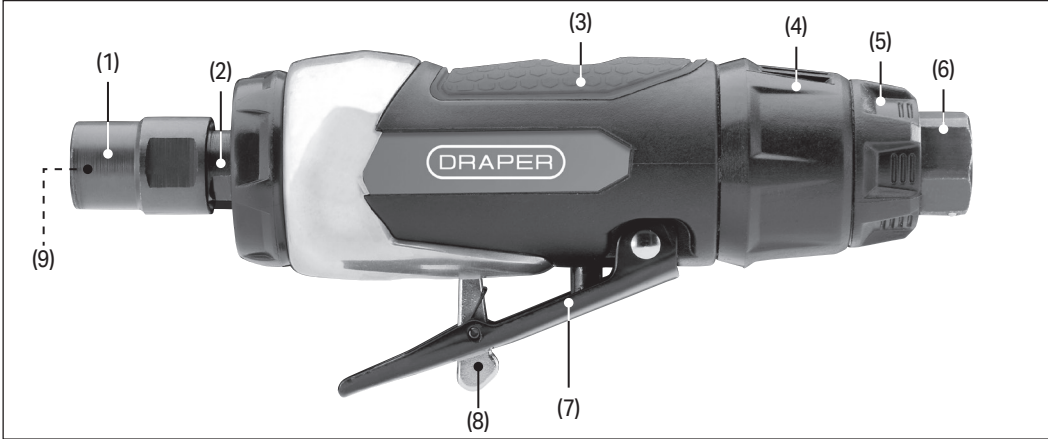
- Be aware that failure of the workpiece or accessories, or even of the inserted tool itself can generate high-velocity projectiles.
- Always wear impact-resistant eye protection during operation of the die grinder or when changing accessories on the tool. The grade of protection required should be assessed for each use.
- Ensure that the workpiece is securely fixed.
- Check regularly that the speed of the die grinder is not higher than that marked on it. These speed checks shall be carried out without the abrasive product mounted and in accordance with the instructions given by the manufacturer.
- Ensure that sparks and debris resulting from use do not create a hazard.
- Disconnect the grinder from the energy supply before changing abrasive product and servicing.
- Avoid contact with the rotating spindle and inserted tool to prevent cutting of hands and other body parts.
- Working with certain materials creates dust and fumes, causing a fire or potential explosive environment.

- Hold the tool correctly; be ready to counteract normal or sudden movements and have both hands available. Maintain a balanced body position and secure footing.
- Be aware that there is a running-on of the rotary inserted tool after the start-and-stop device has been released.
- While using a die grinder, the operator should adopt a comfortable posture whilst maintaining a secure footing and avoiding awkward or off-balance postures. The operator should change posture during extended tasks; this can help avoid discomfort and fatigue.
- Use only sizes and types of accessories and consumables that are recommended; **DO NOT** use other types or sizes of accessories or consumables.
- Avoid direct contact with the inserted tool during and after use as it can be hot or sharp.
- The maximum operating speed of the inserted tool shall equal or exceed the rated speed marked on the tool.
- **NEVER** mount a grinding wheel, cut-off wheel or router cutter on a die grinder. A grinding wheel that bursts can cause very serious injury or death.
- **DO NOT** use mounted wheels which are chipped or cracked, or which could have been dropped.
- Use only permitted inserted tools of the correct shaft diameter.
- Pay attention to the fact that the permitted speed of the mounted point must be lowered due to the increase of the length of the shaft between the end of the collet and the mounted point (overhang). Make sure that the minimum gripping length of 10 mm is observed.
- Be aware of the risk of mismatching the diameter of the shaft of the mounted point and that of the collet.

4.4 Residual Risk

The safety instructions in this manual cannot account for all possible conditions and situations that may occur. Exercise common sense and caution when using this product and protect against any additional conceivable risks.

5.1 Product Overview

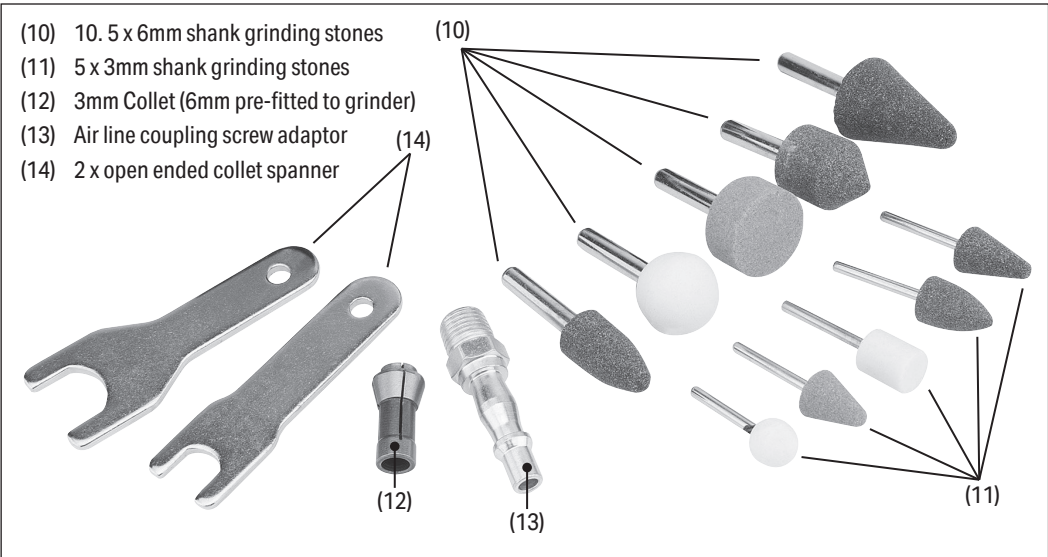


- | | | |
|-----------------------------|---------------------------------------|--------------------------|
| (1) Collet nut | (4) 360° adjustable exhaust deflector | (7) Trigger |
| (2) Output shaft | (5) Speed control | (8) Trigger safety lever |
| (3) Low vibration soft grip | (6) ¼" BSP (female) air inlet | (9) Collet |

5.2 What's in the Box?

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment. If any part is damaged or

missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



5. Identification and Unpacking

5.3 Packaging

Keep the product packaging for the duration of the warranty period for reference should the product need to be returned for repair.

WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

6. Preparation Instructions

Important: Before preparing or adjusting this product, read and understand all the safety instructions listed in this manual.

6.1 Preparing the Air Supply for Use

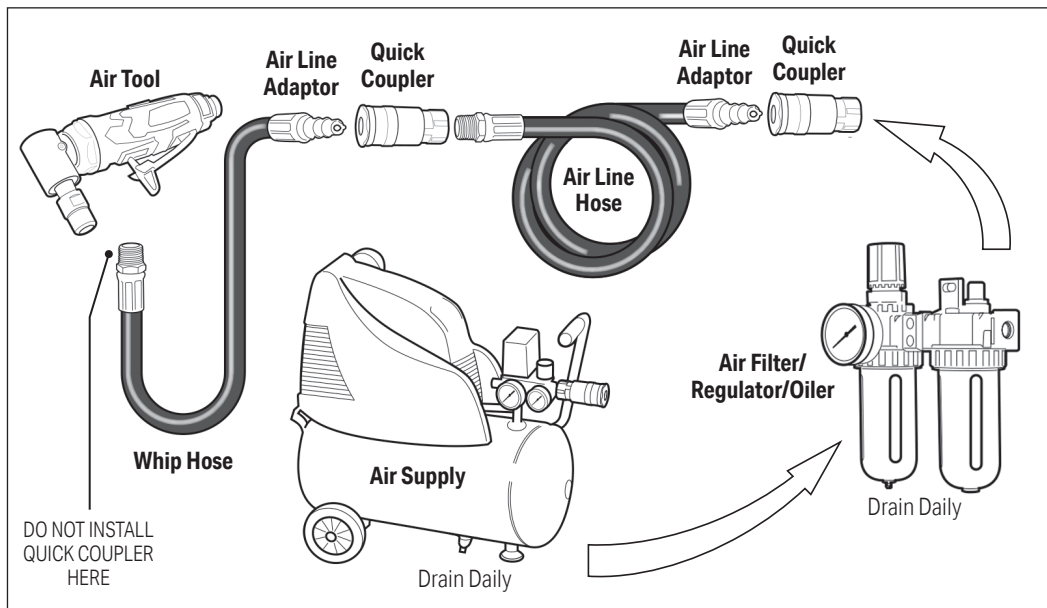


Fig. 1

- This air tool operates at a max. pressure of 6.2bar (90psi).
- ISO grade 22–32 (SAE grade 5W–15W) monograde oil should be used in this air tool.
- During use, the oil must be constantly supplied to the equipment to ensure complete lubrication and optimum performance.
- The compressed air system must be controlled by a combination pressure regulator, in-line lubricator and moisture filter. This will ensure a constant supply of dry air at all times, provided it is properly maintained.

Important: Always check the machine operating pressure before use.

- Water in the compressor tank may cause considerable corrosion to air tools; the compressor should be drained daily to avoid excessive water in the air supply. Dirty or wet air can significantly shorten the lifespan of the product.
- When using an air tool with a hose over 25ft long, Draper Tools recommends increasing the bore of the hose to the next largest available size (i.e. increase 3/8" to 1/2"). This will ensure adequate pressure and volume of air to power the tool.

6.2 Connection to the Air Supply

Important: Always disconnect from the air supply before assembling, carrying out adjustments, servicing or maintenance.

To connect the air wrench to an air line, a 1/4" BSP male thread whip hose (A) will be required.

- Wind a length of PTFE tape around the thread of the whip hose.
- Remove the bung from the air inlet (6), then attach the hose to the air inlet (6). The connection must be tight for an airtight union.

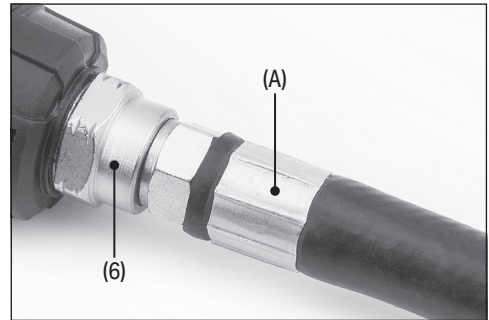


Fig. 2

7. Operating Instructions

Important: Before operating this product, read and understand all the safety instructions listed in this manual and the air line is connected correctly.

Note:

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



WARNING!

- Select the grinding point appropriate for the application, speed rated to the die grinder and with the correct shaft diameter for the collet.
- Inspect the grinding point before use. **DO NOT** use chipped, cracked or damaged items.
- **NEVER attempt to install cutting off wheels or router bits.**
- **NEVER** tighten the collet nut without a tool inserted as damage will occur. Before storage remove inserted tool to prevent distortion of the collet.

7.1 Tool Insertion

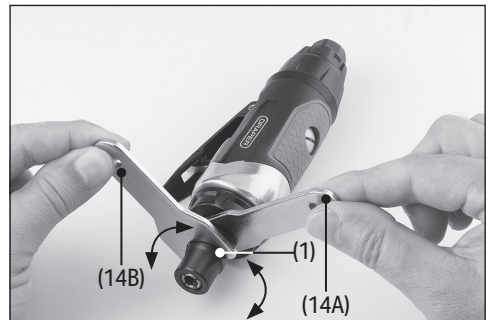


Fig. 3

1. Hold the output shaft (2) with the smaller spanner (14A) and loosen the collet nut (1) with the larger spanner (14B).
2. Insert the grinding point shaft observing the minimum gripping length of 10mm.
3. Secure the grinding point by tightening the collect nut fully.

7. Operating Instructions

7.2 Trigger Operation

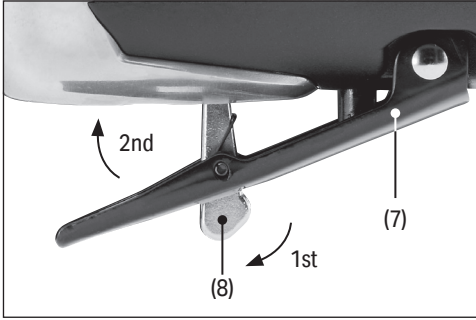


Fig. 4

1. To prevent unintentional starting, the die grinder requires two separate actions to operate the tool.
2. Push the trigger safety lever (8) forward to release. This then allows the trigger (7) to be pushed towards the body of the grinder.

7.3 Speed Control

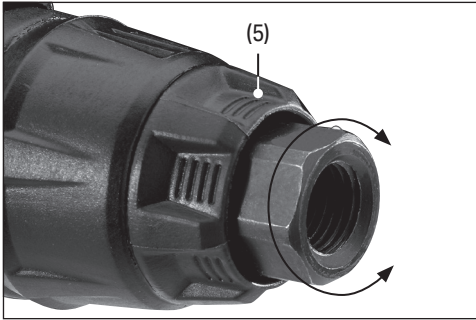


Fig. 5

1. Rotate the speed control (5) to adjust the speed to the most appropriate for the application.
2. Rotate between speed 1 and speed 4.

7.4 Exhaust Deflector

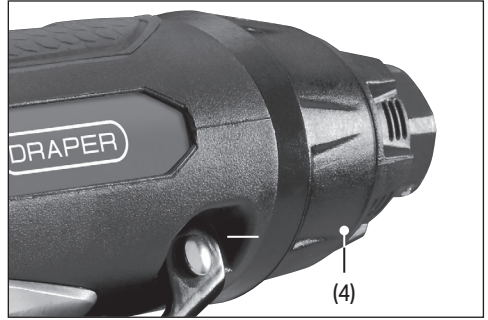


Fig. 6

- Adjust the exhaust deflector (4) away from yourself and ensure it does not disturb any dust in close proximity.

 WARNING!

- Disconnect from the air supply before carrying out any adjustments, servicing or maintenance.

8.1 Every-Day Maintenance Checks

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.

8.2 After Use Maintenance Checks

- Repeat the above procedures.
- Lubricate the tool with approximately 1.5ml of oil directly down the air inlet.
- When not in use store in a dry clean place out of the reach of children.

8.3 Troubleshooting

Problem	Possible Cause	Remedy
Tool will not operate.	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 rotating drive by hand. Reconnect air supply. If motor fails to turn, contact Draper Tools for advice.
Spindle seized.	Motor vane broken.	Contact Draper Tools for advice.
Tool will not shut off.	Throttle valve 'O' ring broken or unseated. Throttle valve bent or jammed with dirt.	Replace 'O' ring. Lubricate trigger with air tool oil. If problem remains contact Draper Tools for advice.

9. Spares, Returns and Disposal

For spare parts, servicing, and repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent.

Draper Tools will endeavour to hold any spare parts, if applicable, for seven years from the date that it sells the final matching stock item.

Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

10. Warranty

6 months from date of purchase – Visit drapertools.com/warranty for more information.

However, if the tools are hired out, the warranty period is 90 days from the date of purchase.

Draper Tools Limited

11. Explanation of Symbols

	Read the instruction manual		Direction of rotation		Average air consumption
	Wear safety glasses		Collet size		Average air consumption
	Wear ear defenders		Speed (no load)		Air Inlet
	Wear protective gloves		Maximum air line size		Net weight
	Warning!		Maximum operating air pressure	 European conformity	
	Warning! Risk of crushing		Maximum operating air pressure	 UK Conformity Assessed	

Contact Details

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Please contact the Draper Tools Product Helpline for repair and servicing enquiries.