

DRAPER

EN

Original Instructions
Version 4
January 2026

230V 5 SPEED

BENCH DRILL

38255



**UK
CA** **CE**

1. Preface

These are the original product instructions. Read the instruction manual in full and retain for future reference.

Please visit drapertools.com/manuals for the latest version of this manual and the associated parts list, if applicable.

1.1 Product Reference

User Manual for: 230V 5 Speed Bench Drill

Stock No: 38255

Part No: D13/5DA

1.2 Revisions

Version 1: March 2014
First release

Version 2: February 2020

Version 3: September 2022

Version 4: April 2025

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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3. Product Introduction

3.1 Intended Use

This five speed bench drill is designed with a 13mm chuck to drill into plastic, ceramics and many types of metals.

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


3.2 Specification

Stock No.:	38255
Part No	D13/5DA
Rated voltage:	230V/50Hz
Rated input:	350W
Number of speeds:	5
Speed (no load):	580 – 2650rpm
Chuck size:	1.5 – 13mm
Spindle travel:	50mm
Throat:	104mm
Column diameter:	46mm
Chuck to table:	0 – 165mm
Chuck to base:	0 – 255mm
Table tilt:	45°
Head rotation:	360°
Table rotation:	360°
Dimensions:	
Table:	162 × 162mm
Base:	200 × 320mm
Height:	580mm
Noise emissions:	
Sound pressure level (LpA):	73dB(A)
Sound power level:	86dB(A)
Uncertainty:	3dB(A)
Vibration Level:	<2.5m/s²
Net weight:	15kg

Important: The declared vibration level 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.

This product is intended for domestic and infrequent light-duty trade use.

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

**WARNING!** The vibration level 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.

4.1 General Power Tool Safety Warnings



WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work Area Safety

- **Keep work area clean and well lit.**
 - Cluttered or dark areas invite accidents.
- **DO NOT operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
 - Power tools create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.**
 - Distractions can cause you to lose control.

Electrical Safety

- **Power tool plugs must match the outlet. NEVER modify the plug in any way. DO NOT use any adapter plugs with earthed (grounded) power tools.**
 - Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**
 - There is an increased risk of electric shock if your body is earthed or grounded.
- **DO NOT expose power tools to rain or wet conditions.**
 - Water entering a power tool will increase the risk of electric shock.
- **DO NOT abuse the cord. NEVER use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.**
 - Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.**

- Use of a cord suitable for outdoor use reduces the risk of electric shock.

- **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**

- Use of an RCD reduces the risk of electric shock.

Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. DO NOT use a power tool while you are tired or under the influence of drugs, alcohol or medication.**
 - A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. ALWAYS wear eye protection.**
 - Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the 'OFF' position before connecting to power source, picking up or carrying the tool.**
 - Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.**
 - A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **DO NOT overreach. Keep proper footing and balance at all times.**
 - This enables better control of the power tool in unexpected situations.
- **Dress properly. DO NOT wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.**
 - Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.**
 - Use of dust collection can reduce dust-related hazards.

4. Health and Safety Information

- **DO NOT let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.**

- A careless action can cause severe injury within a fraction of a second.

Power Tool Use and Care

- **DO NOT force the power tool. Use the correct power tool for your application.**

- The correct power tool will do the job better and safer at the rate for which it was designed.

- **DO NOT use the power tool if the switch does not turn it on and off.**

- Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool, before making any adjustments, changing accessories or storing power tools.**

- Such preventive safety measures reduce the risk of starting the power tool accidentally.

- **Store idle power tools out of the reach of children and DO NOT allow persons unfamiliar with the power tool or these instructions to operate the power tool.**

- Power tools are dangerous in the hands of untrained users.

- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.**

- Many accidents are caused by poorly maintained power tools.

- **Keep cutting tools sharp and clean.**

- Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**

- Use of the power tool for operations different from those intended could result in a hazardous situation.

- **Keep handles and grasping surfaces dry, clean and free from oil and grease.**

- Slippery handles and grasping surfaces **DO NOT** allow for safe handling and control of the tool in unexpected situations.

Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.**

- This will ensure that the safety of the power tool is maintained.

4.2 Safety Instructions for Transportable Drills

Drill Safety Warnings

- **The drill must be secured.**

- A drill that is not properly secured may move or tip over and may result in personal injury.

- **The workpiece must be clamped or secured to the workpiece support. DO NOT drill pieces that are too small to be clamped securely.**

- Holding the workpiece by hand during operation may result in personal injury.

- **DO NOT wear gloves.**

- Gloves may be entangled by the rotating parts or chips leading to personal injury.

- **Keep your hands out of the drilling area while the tool is running.**

- Contact with rotating parts or chips may result in personal injury.


- **Ensure the accessory is rotating before feeding into the workpiece.**

- Otherwise the accessory may become jammed in the workpiece causing unexpected movement of the workpiece and personal injury.

- **When the accessory is jammed, stop applying downward pressure and switch off the tool. Investigate and take corrective actions to eliminate the cause of the jam.**

- Jamming can cause unexpected movement of the workpiece and personal injury.

- **Avoid generating long chips by regularly interrupting downward pressure.**
 - Sharp metal chips may cause entanglement and personal injuries.
- **NEVER remove chips from the drilling area while the tool is running. To remove chips, move the accessory away from the workpiece, switch off the tool and wait for the accessory to stop moving. Use tools such as a brush or hook to remove chips.**
 - Contact with rotating parts or chips may result in personal injury.
- **Accessories with speed ratings must be rated at least equal to the maximum speed marked on the power tool.**
 - Accessories running faster than their rated speed can break and fly apart.

† Earthed : This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of failure of the basic insulation.

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.

4.3 Connection to the Power Supply



**CAUTION! Risk of electric shock.
DO NOT OPEN**

This appliance is supplied with an approved plug and cord for your safety.

If the power supply cord is damaged, it must be replaced by Draper Tools, an authorised service agent or similarly qualified personnel in order to avoid a hazard.

The damaged or incomplete plug, when cut from the cord, shall be disabled to prevent connection to a live electrical outlet.

This appliance is Class I† and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted. The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, use a small plain-slot screwdriver to remove the fuse cover. Ensure the substitute is of the correct rating, approved to BS

1362 and ASTA or BS Kite marked. This should only be performed by suitably qualified personnel.

ASTA 

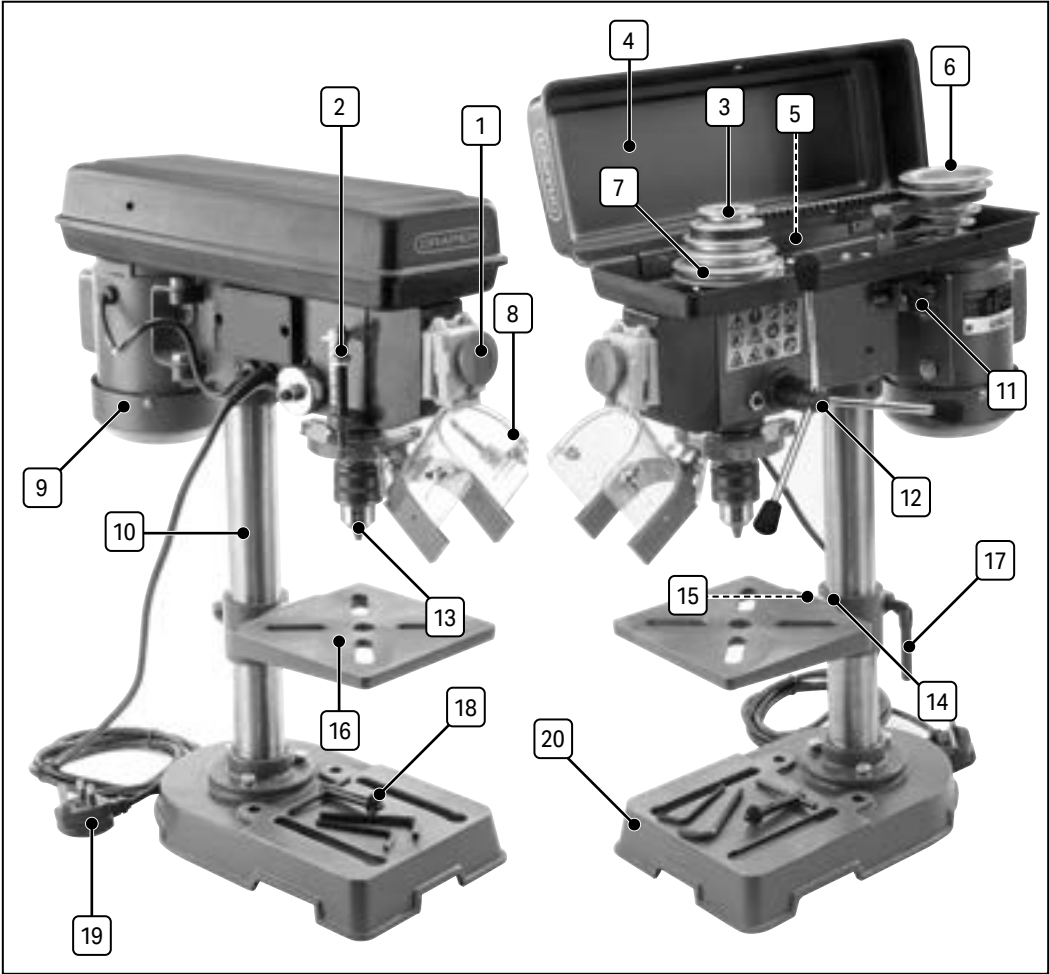
BSI 

Important: If an extension lead is required, use an approved and compatible lead rated for this appliance.

Unwind the entire cable and follow all the instructions supplied with the extension lead.

5. Identification and Unpacking

5.1 Product Overview.

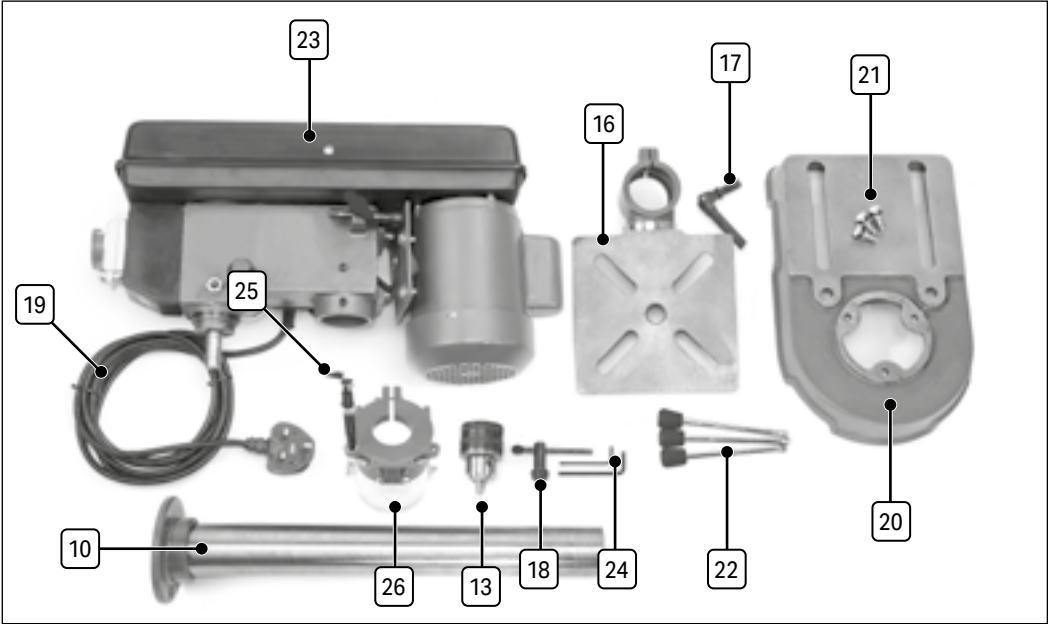


- | | | | | | |
|---|--------------------------|----|------------------------------|----|---|
| 1 | No Volt/ON/OFF switch | 8 | Guard | 15 | Worktable tilt locking bolt. |
| 2 | Depth stop | 9 | Motor | 16 | Worktable |
| 3 | Spindle | 10 | Column | 17 | Worktable height/rotation locking lever |
| 4 | Pulley cover | 11 | Motor /belt tension adjuster | 18 | Chuck key |
| 5 | Motor cutout microswitch | 12 | Plunge handle assembly | 19 | Power plug and cord |
| 6 | Motor pulley | 13 | Geared chuck | 20 | Base |
| 7 | Spindle pulley | 14 | Worktable tilt scale | | |

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.

Before assembling the product, lay the contents out and check them against the parts shown below. 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.



- | | | | |
|----|---|----|----------------------------|
| 10 | Column | 21 | 3 × 12mm Bolts and washers |
| 13 | Geared chuck | 22 | Plunger handles |
| 16 | Worktable/bracket | 23 | Head |
| 17 | Worktable height/rotation locking lever | 24 | Hex. keys |
| 18 | Chuck key | 25 | Depth scale |
| 19 | Power plug and cord | 26 | Guard assembly |
| 20 | Base | | |

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. Assembling Instructions

Important: Before preparing or adjusting this product, read and understand all the safety instructions listed in this manual. Always unplug from the power socket before carrying out any adjustments, servicing or maintenance.

6.1 Fitting Base to Column (Fig.1)

- Align the column **10** with the base **20** and secure with the bolts and washers **21** supplied.

Note: DO NOT overtighten the bolts as this could crack the flange.

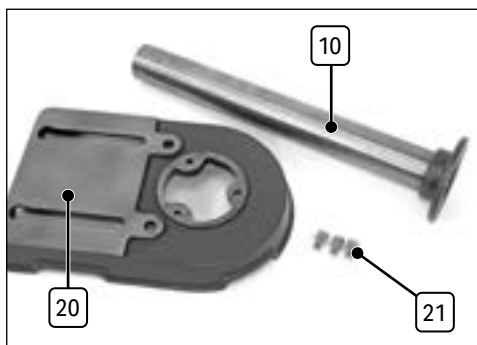


Fig. 1

6.2 Fitting the Table (Fig.2)

- Place the table bracket **16.1** over the column and secure with the locking lever **17**.
- Adjust the height as required and position the table centrally over the base.

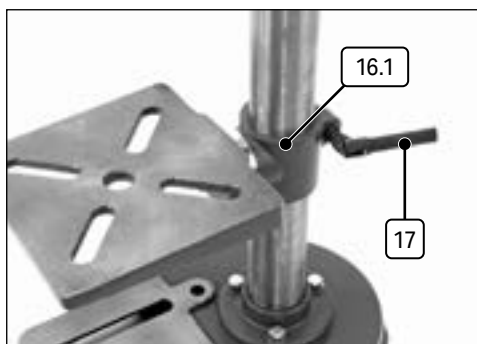


Fig. 2

6.3 Fitting the Head (Fig.3)

- Lift the head **23** onto the top of the column **10**.
- When aligned and located fully, tighten the grub screw with the hex. key supplied.
- Adjust the drill head over the table and base before securing.

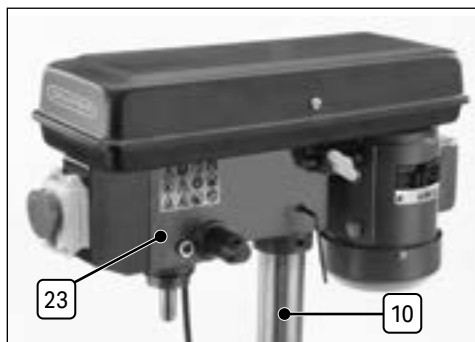


Fig. 3

6.4 Fitting Plunge Handles (Fig.4)

- Screw the three plunge handles **22** into the handle assembly **12** shaft.

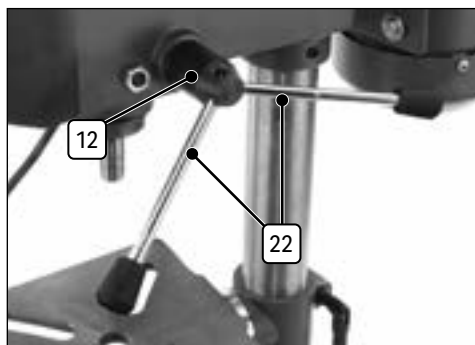


Fig. 4

6.5 Fitting the Chuck (Fig.5)

- Ensure both mating surfaces of the spindle (13.1) and chuck (13) are clean before pushing the chuck onto the taper. Use a sharp tap with a soft blow mallet to secure the chuck in place.

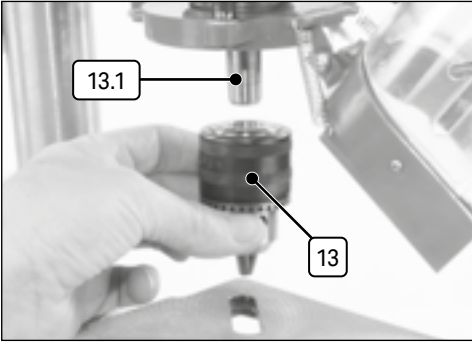


Fig. 5

6.6 Fitting the Chuck Guard (Fig.6)

- Loosen the cross slot machine screw and nut.
- Pass the chuck guard assembly (26) over the chuck onto the collar (13.2).
- When located fully and aligned on the collar, tighten the screw and nut to secure the guard in place. Secure the fixings but **DO NOT** overtighten.

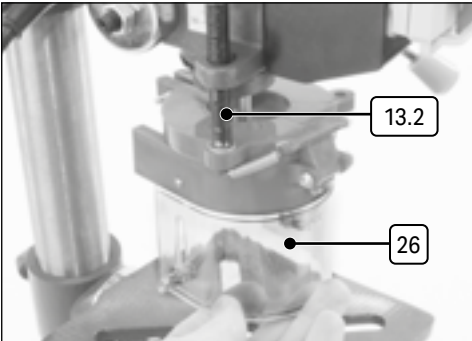


Fig. 6

Note:

- Inspect the chuck guard before each use to check the effectiveness and correct functionality.
- For all processes adjust and position the guard between the chuck and operator.
- Replace a damaged or missing chuck guard before using the machine.

6.7 Bench Mounting

- Secure the drilling machine to a suitable work surface or bench using the various points in the base (fixings are not supplied).
- Ensure there is enough clear space around the drilling machine to accommodate larger items which may be drilled.

7. Setting up the Bench Drill

Important: Before operating this product, read and understand all the safety instructions listed in this manual. Ensure that the product is fully assembled and correctly prepared for use.

7.1 Spindle Speed Adjustment (Fig.7 – Fig.8)

- 1. Remove the pulley cover screws **4.1**.
- 2. Then select the speed most suitable for the intended application.

Notes:

- Material with a softer composition can be drilled faster and cut more easily.
- Use a slower speed for harder materials.
- Drilling wood too slowly can cause splintering.

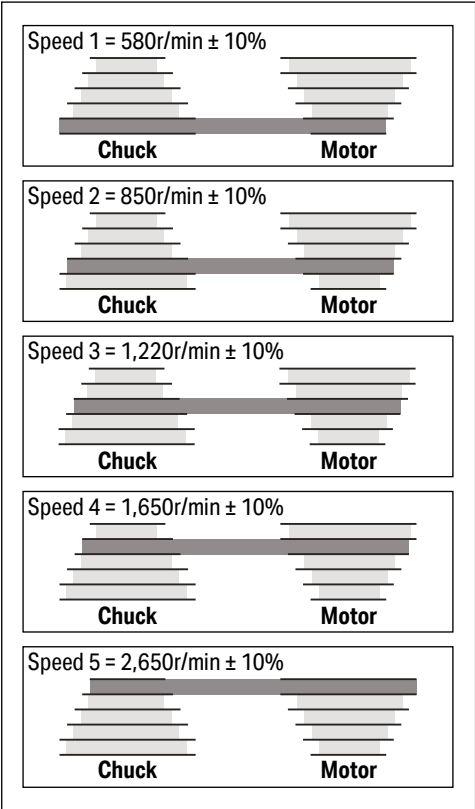


Fig. 7

- 3. Loosen the motor/belt tension adjuster **11** to release the tension across the drive belt.

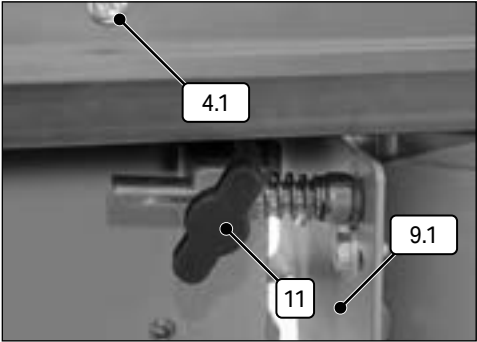


Fig. 8

- 4. Move the belt to the corresponding sections of the motor and spindle pulleys. Ensure the belt remains horizontal.
- 5. Apply pressure to the motor mounting plate **9.1** to tension the drive belt. Once the correct tension is achieved lock in position with the tension adjuster **11**.
- 6. Gently lower the pulley cover before tightening the screw **4.1**.
- **NEVER** operate the drilling machine with the pulley cover open or not fully secured.



CAUTION! Over tensioning the drive belt will accelerate belt wear and increase the load on the drive bearings and may lead to the motor failing. Under tensioning the belt will cause the drive belt to slip and increase the noise level.

WARNING! Always switch off the machine and unplug from the power socket before carrying out any adjustments, cleaning or maintenance.

8.1 General Maintenance

- Regular inspection and cleaning will keep your machine in good working condition.
- Avoid blocking the air vents in the machine and vacuum the ventilation slots regularly.

8.2 Lubrication (Fig.9)

- To prolong the life of the drill bits, lubricate with a suitable oil when drilling.

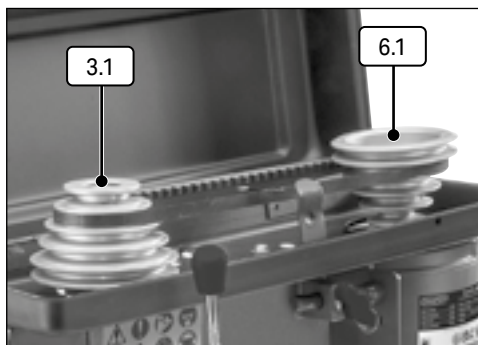


Fig. 9

- Remove any swarf or dust after each operation.
- Spread oil onto non plated surface especially if the machine is not used for prolonged periods.
- Lubricate the spindle (3.1) and motor pulley drives (6.1) with oil every six months.
- Periodically check the spindle guide screw is finger tight.

8. Maintenance and Troubleshooting

8.3 Troubleshooting

Problem	Possible cause	Remedy
Machine will not start	Fuse blown	Check and replace the plug fuse or circuit breaker
	Other issues	Contact Draper Tools for advice
Noisy operation	Incorrect belt tension	Adjust tension
	Dry spindle	Lubricate spindle with grease
	Loose spindle pulley or motor pulley	Tighten pulley's set screws
Bit burning or smoking	Incorrect speed used	Adjust speed
	Swarf not coming out of hole	Retract bit frequently to clear swarf
	Bit blunt	Sharpen or replace
	Not lubricated	Lubricate bit
Excessive drill run out or wobble	Bit bent	Replace bit
	Worn spindle bearings	Contact Draper Tools for advice
	Bit not properly installed in chuck	Install bit centrally
	Chuck not properly installed	Refit chuck correctly
Drill binds in workpiece	Workpiece pinching bit	Support or re-clamp workpiece
	Excessive feed pressure	
	Incorrect belt tension	Adjust tension

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.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.



10. Warranty

12 months from date of purchase – Visit [drapertools.com/warranty](https://www.drapertools.com/warranty) for more information. However, if the tools are hired out, the warranty period is 90 days from the date of purchase.



General Mandatory action required



Read the instruction manual



Wear ear defenders



Wear face mask and safety glasses



Remove plug from power supply before carrying out any maintenance tasks



Keep essential machine parts regularly lubricated



Keep long hair tied back



Regular attention required



Warning!



Warning!
Risk of electric shock



Warning!
Keep out of the reach of children



Warning!
Risk of entanglement



DO NOT
Wear protective gloves



WEEE –
Waste Electrical & Electronic Equipment
Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish



Class 1/Earthed product



European conformity



UK Conformity Assessed

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