

THE TOOL COMPANY

VARIABLE SPEED DIE GRINDER

■ STOCK No. 65025 110V
65026 230V

■ PART No. DG528V

• INSTRUCTIONS •

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



03/2001

GENERAL INFORMATION

This manual has been compiled by Draper Tools and is an integrated part of the power tool equipment, which should be kept with the machine.

This manual describes the purpose for which this tool 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 of the machine, before performing any kind of adjustment to the machine, and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both machine and operator safety, together with longer life of the tool itself.

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

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



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DECLARATION OF CONFORMITY

We
Draper Tools Ltd. Hursley Road, Chandler's Ford, Eastleigh, Hampshire.
SO53 1YF. England.

Declare under our sole responsibility that the product:

Stock Nos:- 65025 & 65026.

Part Nos:- DG528V.

Description:- Die Grinder.

To which this declaration relates is in conformity with the following directive(s)
98/37/EC, 73/23/EEC & 89/336EEC.

With reference to: EN50144, EN55014, EN61000-3-2, EN61000-3-3 & EN55104.

JOHN DRAPER
Managing Director

07/03/2001



SPECIFICATION

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

Part No.	DG528V	DG528V
Stock No.	65025	65026
Input	600W	600W
Collet size6mm6mm
Max. wheel dia.25mm25mm
Speed (no load)	1500-25500rpm	5500-27500rpm
Noise pressure level.....	79.3dbA	79.3dbA
Noise power level	92.3dbA	92.3dbA
Vibration level8M/sec ²8M/sec ²
Weight	1.6kg	1.6kg

ALWAYS WEAR EAR AND EYE PROTECTION



GUARANTEE (Hand held professional electric power tools)

Draper hand held professional electric power tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 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 where warranty applies, arrangements will be made for the tool to be returned free-of-charge to the Service Centre at Draper Tools Limited.

Please contact: **DRAPER 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 the product will be repaired and tested as soon as possible free of charge, normally within five working days. 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 by any personnel other than the Service Centre at Draper Tools Limited or other authorised agent.

Note: If the tool is found not to be within the Terms of Warranty, repair and carriage charges will be quoted and made accordingly.

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

Your Draper guarantee is not effective unless you produce a dated receipt or invoice to verify your proof of purchase within the 12 month period.

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

Draper Tools Limited.

POWER SUPPLY

CONNECTING YOUR MACHINE TO THE POWER SUPPLY: (230V)

To eliminate the possibility of an electric shock your machine has been fitted with a BS approved, non rewirable moulded plug and cable which incorporates a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced an  approved BS1362 fuse must be used of the same rating, marked thus .

The fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug (i.e. red). Fuse covers are available from your Draper Tools stockist.

If the fitted plug is not suitable, it should be cut off and destroyed. *The end of the cable should now be suitably prepared and the correct type of plug fitted. See below.

*WARNING:

A plug with bare flexible wires exposed is hazardous if engaged in a live power socket outlet.

WARNING: THIS APPLIANCE IS DOUBLE INSULATED.

Blue – Neutral, Brown – Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black or blue.

The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red or brown.

CONNECTING YOUR MACHINE TO THE POWER SUPPLY (110V)

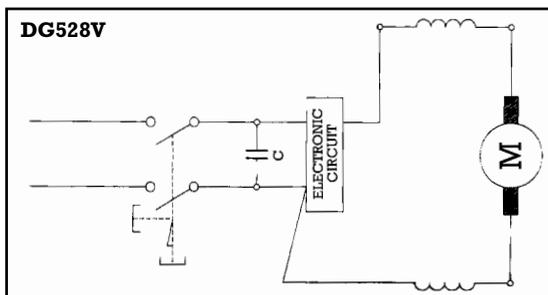
To eliminate the possibility of an electric shock your machine has been fitted with a BS approved, rewirable plug and cable. If the fitted plug is not suitable, it should be removed, the end of the cable should be suitably prepared and the correct type of plug fitted. See below.

WARNING: THIS APPLIANCE IS DOUBLE INSULATED.

Single phase 110 volt machines must be connected using the relevant coding and matching the colour of the flexible cable to that of the plug. The procedure is as follows:

1. Connect brown coloured core to plug terminal marked letter 'L' (live).
2. Connect blue colour core to plug terminal marked letter 'N' (neutral).

WIRING DIAGRAM



GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

WARNING

Please read the following instructions carefully, failure to do so could lead to serious personal injury.

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.

1. **KNOW YOUR POWER TOOL**

Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

2. **KEEP WORK AREA CLEAN**

Cluttered areas and benches invite accidents. Floors must not be slippery due to oil or sawdust.

3. **AVOID DANGEROUS ENVIRONMENTS**

Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.

4. **KEEP CHILDREN AWAY**

All visitors should be kept a safe distance from work area.

5. **STORED TOOLS**

When not being used, all tools should be stored in a dry, locked cupboard or out of the reach of children.

6. **WEAR PROPER CLOTHING**

Do not wear loose clothing, neckties or jewellery (rings, wristwatches) to catch in moving parts. NONSLIP footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

7. **USE SAFETY GOGGLES (Head Protection)**

Wear CE approved safety goggles at all times. Normal spectacles only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if application is dusty and ear protectors (plugs or muffs) during extended periods of operation.

8. **NOISE LEVELS**

Some types of machines may have high noise levels when working. In such cases ear protection must be worn.

9. **VIBRATION LEVELS**

Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health and Safety guide.

10. **DUST EXTRACTION**

If your tool is fitted with a dust extraction fitting, always ensure that it is connected and being used with a dust extractor. Vacuum cleaners can be used if suitable for the material being extracted.

11. **PROTECT YOURSELF FROM ELECTRIC SHOCK**

When working with power tools, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). If you are using a power tool in extreme conditions (e.g. high humidity or generating metal dust), always use an RCD (residual current device) at the power socket.

12. **STAY ALERT**

Always watch what you are doing and use common sense. Do not operate a power tool when you are tired or under the influence of alcohol or drugs.

13. **WHEN WORKING OUT OF DOORS**

Only use extension leads designed for that purpose.

14. **ACCESS TO MAINS SOCKET**

If a stationary machine is fitted with a moulded plug and cable, the machine should not be positioned so that access to the mains socket is restricted.

15. **DISCONNECT POWER TO THE TOOL**

When not in use, before servicing and when changing accessories such as cutters, etc.

16. **AVOID ACCIDENTAL STARTING**

Make sure the switch is in the OFF position before plugging the machine into the power supply.

17. **NEVER LEAVE MACHINE RUNNING UNATTENDED**

Turn power off. Do not leave machine until it comes to a complete stop.

18. **DO NOT ABUSE THE CORD**

Never carry the tool by the power cable or pull it from the socket. Keep the power cable away from heat, oil and sharp edges.

19. **NEVER STAND ON TOOL**

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials above or near the tool, so that it is necessary to stand on the tool to reach them.

20. **CHECK DAMAGED PARTS**

Check for damage to parts, breakage of parts, mountings and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

21. **KEEP GUARDS IN PLACE**

And in working order.

22. **MAINTAIN TOOLS WITH CARE**

Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the hand grips on the tool clean, dry and free of oil and grease.

23. **USE RECOMMENDED ACCESSORIES**

Consult the owners manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

24. **REMOVE ADJUSTING KEYS AND WRENCHES**

Form a habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

25. **SECURE WORK**

Use clamps or a vice to hold work. This frees both hands to operate the tool.

26. **DO NOT OVERREACH**

Keep proper footing and balance at all times.

27. **USE RIGHT TOOL**

Do not force the tool or attachment to do a job for which it was not designed.

28. **DO NOT FORCE TOOL**

It will do the job better and safer at the rate for which it was designed.

29. **DIRECTION OF FEED**

Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

30. **WHEN DRILLING OR SCREWING INTO WALLS**

Always make sure there is no danger of hitting any hidden power cables, water or gas pipes in the wall.

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 DIE GRINDER

Fig.1

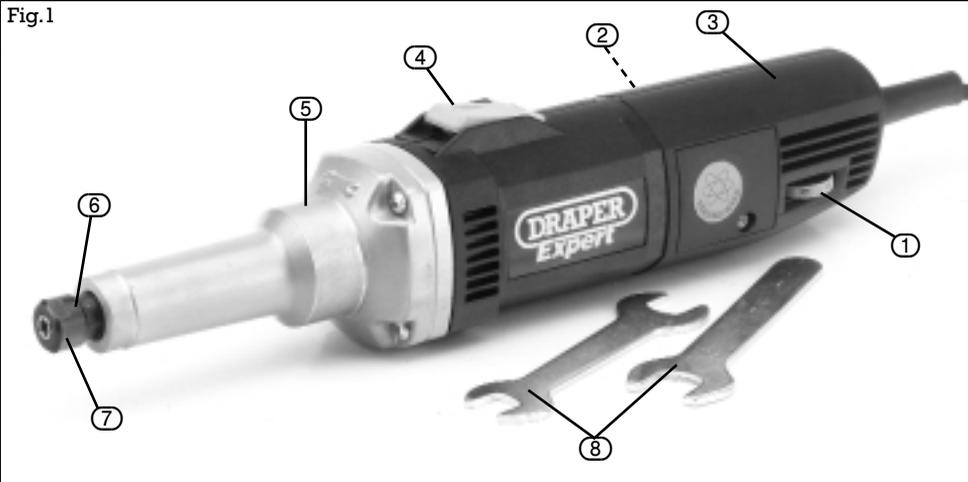


Fig.1

- | | |
|--------------------------|-----------------|
| 1. Variable Speed Switch | 5. Head |
| 2. Rating Plate | 6. Collet Shaft |
| 3. Housing/Handgrip | 7. Collet Nut |
| 4. On/Off Switch | 8. Wrench × 2 |

OPERATION & USE

IMPORTANT

Make sure that mains voltages match the voltage stated on the machine's rating plate.

GUARD

Given the particular type of operation for which the machine will be used, it has not been fitted with a protective guard on the grinding point. Therefore extreme care must be taken when the grinding point is inserted and the motor has been started.

SWITCH

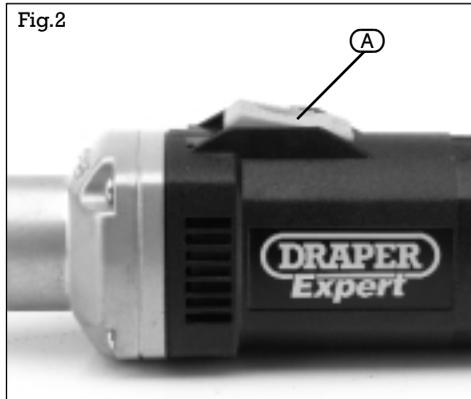
The switch fitted to the die grinder prevents accidental machine starting. However, a locking position has also been provided.

Starting – Push the slide (A) forwards until it locks into position (direction I), in this position the switch is locked "ON". (Fig.2).

WARNING

To unlock the switch, press the slide towards the position "0". (Fig.2).

Fig.2



OPERATION & USE

NOTE:

The switch on this tool is fitted with a locking device, allowing the tool to be operated for long periods of time without interruptions. Before inserting the plug into the socket, check that the switch is in the unlocked position. When the tool is not to be used for long periods remember to leave the switch device in the unlocked position.

GRINDING

The grinding point must be perfectly balanced. After use the grinding point can be dressed with a grinding wheel dresser, or with a similar tool, that is readily available on the market. The grinding wheel dresser can provide the most suitable forms for the work that is to be performed.

WARNING

Excessive pressure on the machine does not necessarily result in higher working speed, on the contrary, it increases the wear on the grinding point and can damage the die grinder.

REPLACEMENT OF THE GRINDING POINT (Fig.3)

In order to fit the grinding point, use the wrenches (B) provided with the machine.

1. Secure the collet shaft (G) with one of the wrenches (B).
2. Using the second wrench (E) loosen the collet nut (D) sufficiently to permit manual insertion of the grinding point.
3. Insert the grinding point (C) and firmly tighten the collet nut (D) with the second wrench.

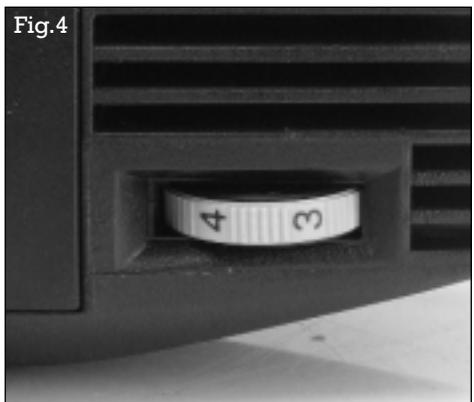
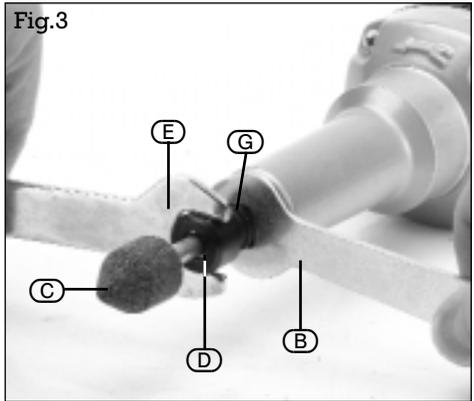
IMPROPER USE

The functions and use of this tool are those exclusively indicated in this manual.

VARIABLE SPEED SWITCH (Fig.4)

The die grinder is fitted with a variable speed switch to enable you to vary the running speed for different grinding points and applications. The dial is numbered 1 - 6, 1 is the slowest and 6 is the fastest.

NOTE: make sure the grinding tip is suitable for use at the desired speed.





MAINTENANCE & PART REPLACEMENT

Regular inspection and cleaning reduces the necessity for maintenance operations and will keep your tool in good working condition. The tool bearings and gears are life-long lubricated, however it is advised to check the condition of the grease in the head every 100 hours, if necessary replace the grease. The motor must be correctly ventilated during tool operation. For this reason avoid blocking the air inlets with hands. After use disconnect the tool from the power supply and clean carefully, use compressed air through ventilation slots.

DISPOSAL

At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to the standard regulations of the country in which it is being used, and that the disposal operation is carried out by specialized personnel following authorized guidelines.

In all circumstances:

- Do not abandon in the environment;
- Do not dispose of together with solid urban waste products;
- Contact the special recycling centres.

WARNING

Disconnect the plug from the power supply socket before replacing any parts.

BRUSHES

The brushes must be replaced after approx. 150-200 working hours, or if they are less than 5-6mm in length.

WARNING

For correct tool operation always change the brushes in pairs, not separately. The use of original Draper spare parts is recommended. After having fitted new brushes allow the motor to run without load for at least five minutes for the brushes to bed.

IMPORTANT:

This operation should only be performed by an authorized person.

REPLACING THE POWER SUPPLY CABLE

Check that the power supply cable is in good condition, if not have it replaced by an authorized person.



OPTIONAL ACCESSORIES

For a full range of optional accessories, please refer to your Draper catalogue.



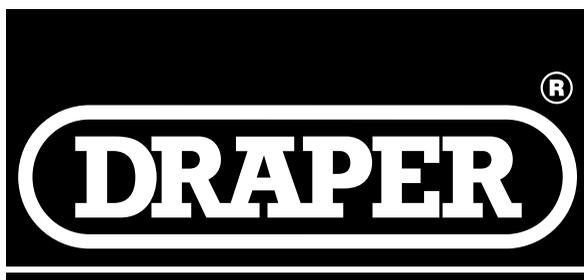
<h1>NOTES</h1>



NOTES



NOTES



THE TOOL COMPANY

DRAPER TOOLS LIMITED,

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Helpline: (023) 8049 4344.

Sales Desk: (023) 8049 4333.

General Enquiries: (023) 8026 6355.

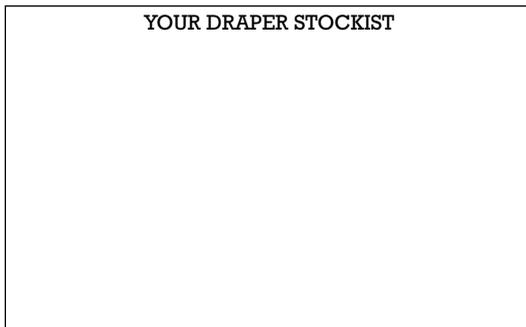
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YOUR DRAPER STOCKIST



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