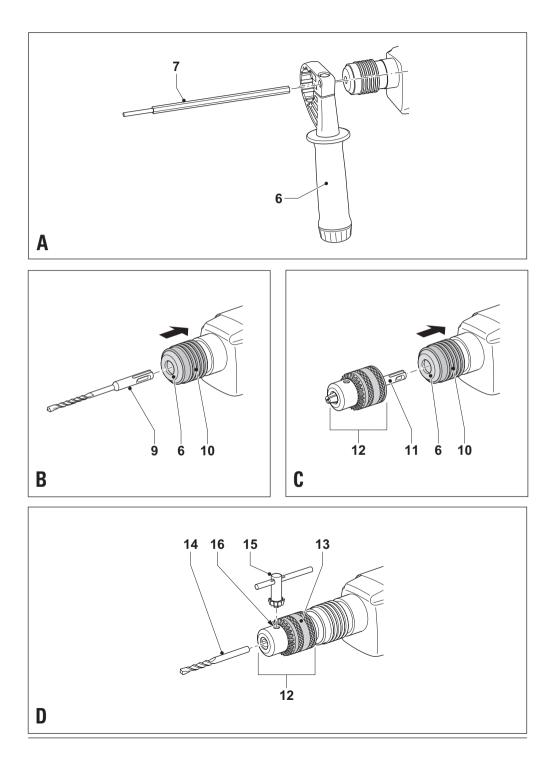


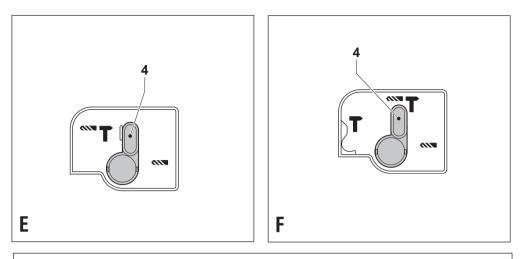
UK

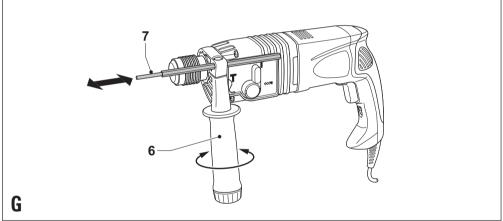
Ireland

Australia

**New Zealand** 







# Intended use

Your Black & Decker rotary hammer drill has been designed for drilling in wood, metal, plastics, and masonry as well as for screwdriving and light chiselling applications.

# **General safety rules**

Warning! Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool. SAVE THESE INSTRUCTIONS.

- 1. Work area
- a. Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b. 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.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- 2. 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.
- b. 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.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. 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.
- e. 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.

- 3. Personal safety
- a. 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.
- b. Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- d. 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.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. 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.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.
- 4. Power tool use and care
- a. 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.
- b. 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.
- c. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. 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.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

- f. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, 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.

## 5. Service

a. 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.

## **Electrical safety**



This tool is double insulated; therefore no earth wire is required. Always check that the power supply corresponds to the voltage on the rating plate.

# Additional safety instructions for Australia and New Zealand

- This appliance is not intended for use by young or infirm persons without supervision. Children must be supervised to ensure they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer or an authorised Black & Decker Service Centre in order to avoid a hazard.

# Features

This tool includes some or all of the following features.

- 1. Variable speed switch
- 2. Lock-on button
- 3. Forward/reverse switch
- 4. Drilling mode selector
- 5. Tool holder
- 6. Side handle
- 7. Depth stop

# Assembly

**Warning!** Before assembly, make sure that the tool is switched off and unplugged.

# Fitting the side handle and depth stop (fig. A)

- Turn the grip counterclockwise until you can slide the side handle (6) onto the front of the tool as shown.
- Rotate the side handle into the desired position.
- Insert the depth stop (7) into the mounting hole as shown.

- Set the depth stop to the desired position. The maximum drilling depth is equal to the distance between the tip of the drill bit and the front end of the depth stop.
- Tighten the side handle by turning the grip clockwise.

## Fitting an SDS-plus® accessory (fig. B)

- Clean and grease the shank (9) of the accessory.
- Pull back the sleeve (10) and insert the shank into the tool holder (6).
- Push the accessory down and turn it slightly until it fits into the slots.
- Pull on the accessory to check if it is properly locked. The hammering function requires the accessory to be able to move axially several centimetres when locked in the tool holder.
- To remove the accessory, pull back the sleeve (10) and pull out the accessory.

## KD970KA/KD980KA - Fitting the keyed chuck (fig. C)

• Fit the SDS-plus<sup>®</sup> shank (11) of the supplied chuck (12) into the tool holder as described above.

Warning! Never use standard chucks in the hammer drilling mode.

## Fitting accessories in the keyed chuck (fig. D)

- Open the chuck by turning the sleeve (13).
- Insert the bit shaft (14) into the chuck.
- Insert the chuck key (15) into each hole (16) in the side of the chuck and turn until tight.

# Use

Warning! Let the tool work at its own pace. Do not overload.

**Warning!** Before drilling into walls, floors or ceilings, check for the location of wiring and pipes.

## KD970 - Selecting the operating mode (fig. E)

The tool can be used in two operating modes. Rotate the drilling mode selector (5) towards the required position, as indicated by the symbols.

## Drilling

- For drilling in steel, wood and plastics, and for screwdriving set the operating mode selector (5) to the 2 position.
- When screwdriving, start at a low speed.

## Hammer drilling

- For hammer drilling in masonry and concrete, set the operating mode selector (5) to the position
- When hammering, the tool should not bounce and run smoothly. If necessary, increase the speed.

#### KD980 - Selecting the operating mode (fig. F)

The tool can be used in three operating modes. Rotate the drilling mode selector (5) towards the required position, as indicated by the symbols.

## Drilling

- For drilling in steel, wood and plastics, and for screwdriving set the operating mode selector (5) to the 2 position.
- When screwdriving, start at a low speed.

#### Hammer drilling

- For hammer drilling in masonry and concrete, set the operating mode selector (5) to the T position
- When hammering, the tool should not bounce and run smoothly. If necessary, increase the speed.

#### Chiselling

- For chiselling with spindle lock and for light chipping, set the operating mode selector (5) to the **T** position.
- Make sure the forward/reverse switch is in the forward position.
- When changing from hammer drilling to chiselling, turn the chisel to the desired position. If resistance is felt during mode change, slightly turn the chisel to engage the spindle lock.

#### Selecting the direction of rotation

For drilling, for tightening screws and for chiselling, use forward (clockwise) rotation. For loosening screws or removing a jammed drill bit, use reverse (counterclockwise) rotation.

- To select forward rotation, push the forward/reverse slider (3) to the left.
- To select reverse rotation, push the forward/reverse slider to the right.

**Warning!** Never change the direction of rotation while the motor is running.

## Setting the drilling depth (fig. G)

- Slacken the side handle (6).
- Set the depth stop (7) to the desired position. The maximum drilling depth is equal to the distance between the tip of the drill bit and the front end of the depth stop.
- Tighten the side handle (6).

#### Switching on and off

- To switch the tool on, press the variable speed switch (1). The tool speed depends on how far you press the switch.
- For continuous operation, press the lock-on button (2) and release the variable speed switch. This option is available only in forward (clockwise) rotation.

 To switch the tool off, release the variable speed switch. To switch the tool off when in continuous operation, press the variable speed switch once more and release it.

# Accessories

The performance of your tool depends on the accessory used. Black & Decker and Piranha accessories are engineered to high quality standards and designed to enhance the performance of your tool. By using these accessories you will get the very best from your tool.

# Maintenance

Your tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

- Regularly clean the ventilation slots with a clean, dry paint brush.
- To clean the tool, use only mild soap and a damp cloth. Never let any liquid get inside the tool and never immerse any part of the tool into liquid.

#### Mains plug replacement (U.K. & Ireland only)

If a new mains plug needs to be fitted:

- Safely dispose of the old plug.
- Connect the brown lead to the live terminal in the new plug.
- Connect the blue lead to the neutral terminal.

**Warning!** No connection is to be made to the earth terminal. Follow the fitting instructions supplied with good quality plugs. Recommended fuse: 5 A.

# Protecting the environment



Black & Decker provides a facility for recycling Black & Decker products once they have reached the end of their working life. This service is provided free of charge. To take advantage of this service please return your product to any authorised repair agent who will collect them on our behalf.

You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com

#### **Technical data**

		KD970	KD980
Voltage	V <sub>AC</sub>	230	230
Power input	W	600	650
No-load speed	min <sup>-1</sup>	0 - 1,000	0 - 1,000
Load speed	min <sup>-1</sup>	0 - 820	0-820
Impact rate	min <sup>-1</sup>	0- 4,000	0-4,000
Impact energy	J	2.0	2.2
Tool holder		SDS-plus®	SDS-plus®
Max. drilling capacity			
Concrete	mm	22	24
Steel	mm	13	13
Wood	mm	30	30
Core drilling capacity in soft brick	mm	-	65
Chiselling		no	yes
Weight	kg	2.3	2.3

# EC declaration of conformity

KD970/KD980

Black & Decker declares that these products conform to: 98/37/EC, 89/336/EEC, EN 60745, EN 55014

 $L_{_{pA}}$  (sound pressure) 97 dB(A),  $L_{_{WA}}$  (acoustic power) 105 dB(A), hand/arm weighted vibration 10 m/s²

 $K_{pA}$  (sound pressure uncertainty): 3 dB(A),  $K_{WA}$  (acoustic power uncertainty) 3 dB(A)

Kevin Hewitt Director of Consumer Engineering Spennymoor, County Durham DL16 6JG, United Kingdom 1-6-2004

# Guarantee

Black & Decker is confident of the quality of its products and offers an outstanding guarantee. This guarantee statement is in addition to and in no way prejudices your statutory rights. The guarantee is valid within the territories of the Member States of the European Union and the European Free Trade Area.

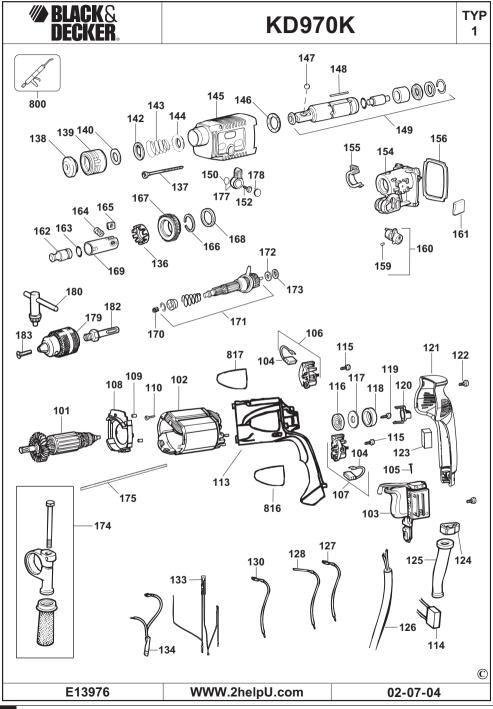
If a Black & Decker product becomes defective due to faulty materials, workmanship or lack of conformity, within 24 months from the date of purchase, Black & Decker guarantees to replace defective parts, repair products subjected to fair wear and tear or replace such products to ensure minimum inconvenience to the customer unless:

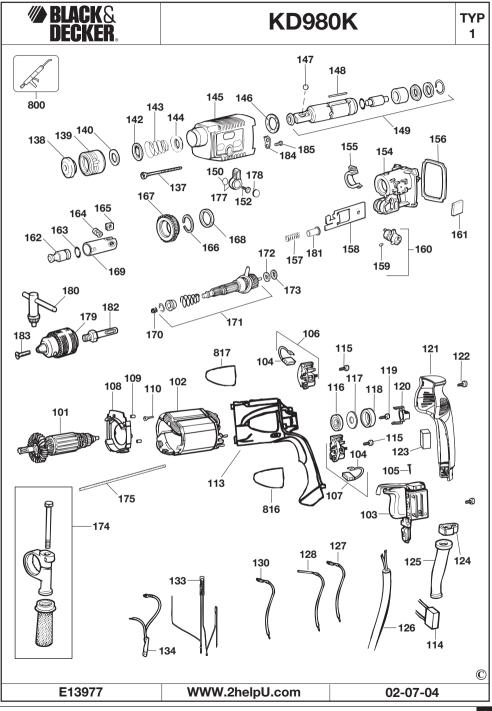
 The product has been used for trade, professional or hire purposes;

- · The product has been subjected to misuse or neglect;
- The product has sustained damage through foreign objects, substances or accidents;
- Repairs have been attempted by persons other than authorised repair agents or Black & Decker service staff.

To claim on the guarantee, you will need to submit proof of purchase to the seller or an authorised repair agent. You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com

Please visit our website **www.blackanddecker.co.uk** to register your new Black & Decker product and to be kept up to date on new products and special offers. Further information on the Black & Decker brand and our range of products is available at **www.blackanddecker.co.uk** 





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