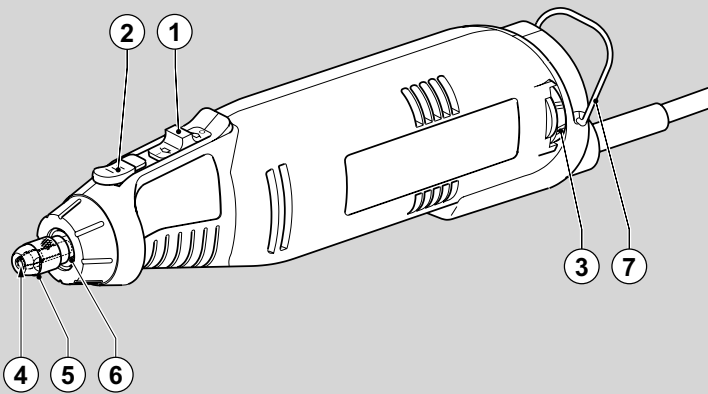




BLACK & DECKER®

www.blackanddecker.co.uk

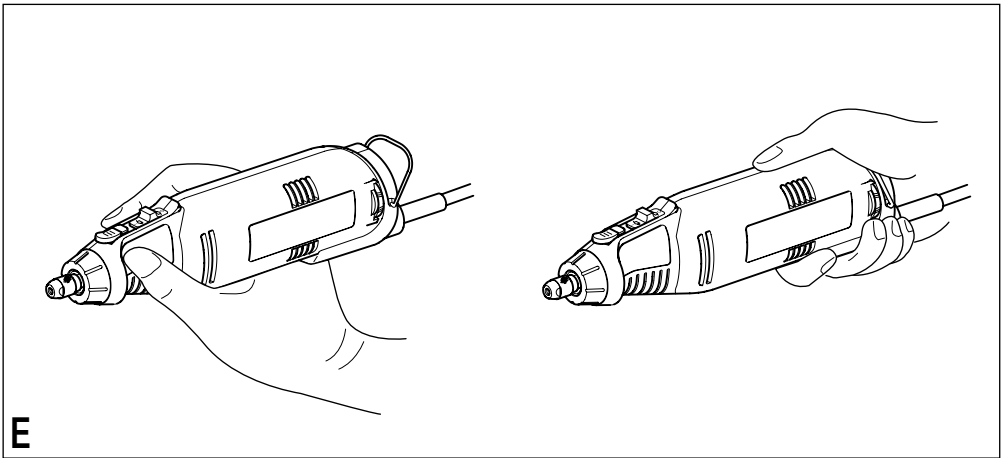
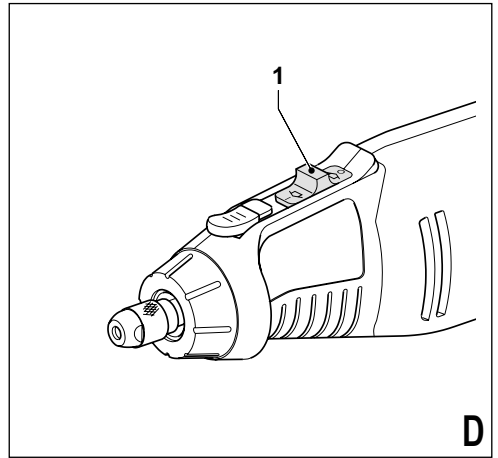
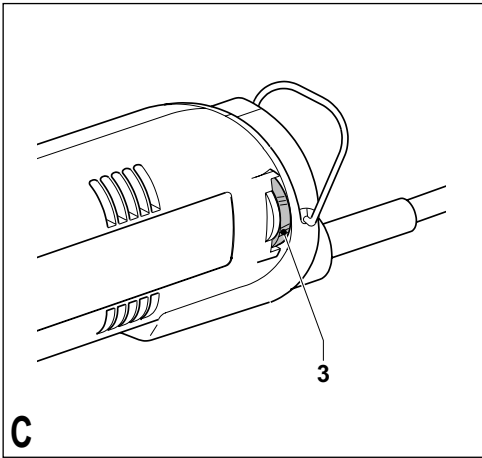
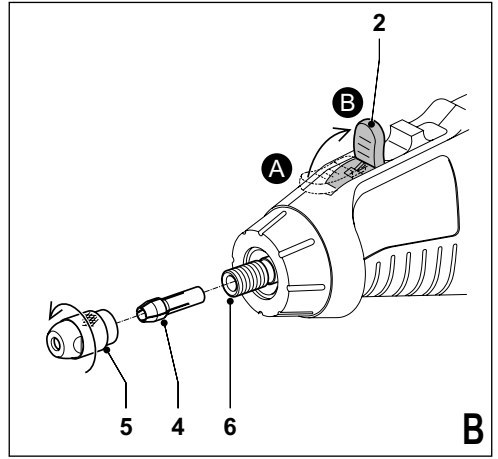
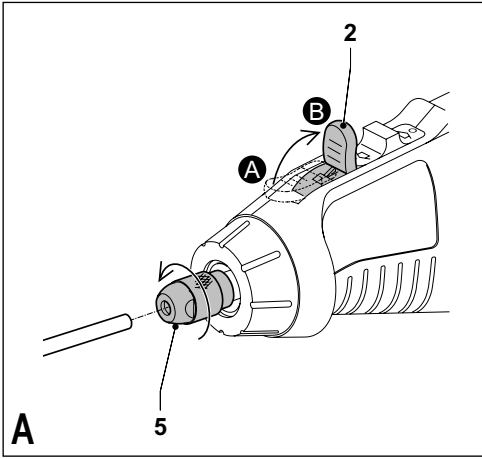


UK

Ireland

Australia

New Zealand



Intended use

Your Black & Decker rotary tool has been designed for the following applications using the appropriate accessories:

- ◆ Drilling in wood, metal and plastics
- ◆ Cutting wood, metal and plastics
- ◆ Engraving and shaping wood, metal, plastics and fibreglass
- ◆ Polishing metal, glass and stone
- ◆ Grinding metal, glass and ceramics
- ◆ Sharpening metal
- ◆ Sanding wood and fibreglass
- ◆ Removing rust and corrosion from metal

This tool is intended for consumer use only.

Safety instructions

General power tool safety warnings



Warning! Read all safety warnings and all instructions. Failure to follow the warnings and 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 all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

1. **Work area safety**
 - a. **Keep work area clean and well lit.** Cluttered or 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**
 - a. **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.
 - f. **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.
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 personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, 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.
 - 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 dust collection 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 and/or the battery pack 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.
- 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, 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.

Additional safety instructions for rotary tools



Wear safety glasses or goggles when operating this tool.

- ◆ Only use Black & Decker accessories recommended for this tool.
- ◆ Never use any worn, cracked or damaged accessories.
- ◆ Hold the tool away from your face when switching on.
- ◆ Keep your fingers away from rotating accessories.
- ◆ Be careful not to accidentally hit any foreign objects in the workpiece.
- ◆ Be aware that accessories may be hot shortly after use.
- ◆ If an accessory jams, switch the tool off and unplug it before attempting to free the accessory.
- ◆ Clamp the workpiece whenever possible, especially when using cutting discs.
- ◆ Wear a dust mask whenever sanding.
- ◆ Thoroughly remove all dust after sanding.

- ◆ Take special care when sanding paint which is possibly lead based or when sanding some woods (e.g. MDF) and metal which may produce toxic dust:
 - Wear a dust mask specifically designed for protection against lead paint dust and fumes and ensure that persons within or entering the work area are also protected.
 - Do not let children or pregnant women enter the work area.
 - Do not eat, drink or smoke in the work area.
 - Dispose of dust particles and any other debris safely.

Vibration

The declared vibration emission values stated in the technical data and the declaration of conformity have been measured in accordance with a standard test method provided by EN 60745 and may be used for comparing one tool with another. The declared vibration emission value may also be used in a preliminary assessment of exposure.

Warning! The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used. The vibration level may increase above the level stated.

When assessing vibration exposure to determine safety measures required by 2002/44/EC to protect persons regularly using power tools in employment, an estimation of vibration exposure should consider, the actual conditions of use and the way the tool is used, including taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time.

Labels on tool

The following pictograms are shown on the tool:



Warning! To reduce the risk of injury, the user must read the instruction manual.

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.

- ◆ 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.

Overview

1. On/off switch
2. Spindle lock
3. Speed control knob
4. Collet
5. Collet nut
6. Spindle
7. Suspension hook

Assembly

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

Fitting and removing accessories (fig. A)

- ◆ Make sure that the tool is switched off and unplugged.
- ◆ Activate the spindle lock (2) by setting it to position B as shown.
- ◆ Slacken the collet nut (5) by turning counterclockwise.
- ◆ Insert the shaft of the accessory into the collet as far as it will go.
- ◆ Securely tighten the collet nut.
- ◆ Release the spindle lock (2) by setting it to position A as shown.

Warning!

- ◆ Make sure that the collet size matches the shaft diameter.
- ◆ Never tighten the collet nut without an accessory in the collet.
- ◆ Tighten and loosen the collet by hand if possible. If necessary, use the supplied wrench to loosen the collet. Do not use any tools that could mark the finish or break the collet.

Replacing collets (fig. B)

This tool is supplied with a 3.2 mm collet. Different sizes are available as an accessory to accommodate a wide range of accessories. To fit the correct collet for the accessory to be used:

- ◆ Make sure that the tool is switched off and unplugged.
- ◆ Activate the spindle lock (2) by setting it to position B as shown.
- ◆ Remove the collet nut (5) by turning counterclockwise.
- ◆ Pull the collet off the spindle (6).
- ◆ Place the new collet into the spindle.
- ◆ Loosely screw the collet nut onto the spindle.
- ◆ Release the spindle lock (2) by setting it to position A as shown.

Use

Warning!

- ◆ Let the tool work at its own pace. Do not overload.
- ◆ If you are not sure about the correct speed setting, start with a low speed setting and gradually increase it until you find the optimum setting.
- ◆ Where indicated, never exceed the speed rating of an accessory. The wire brush accessory must not be used above speed setting 3 (15,000 min⁻¹).

Variable speed control (fig. C)

The variable speed control allows you to adapt the speed of the tool to the application.

- ◆ Set the control knob (3) to the desired setting. At setting 1 the tool will operate at low speed, 8,000 min⁻¹. At setting 6 the tool will operate at the maximum speed, 27,000 min⁻¹.

The table below suggests settings for different applications.

Application	Setting
Drilling holes	4-5
Cutting metal	5-6
Engraving metal	4-5
Removing rust	1-2
Sharpening	3-5
Polishing	1-2
Sanding wood	5-6
Removing paint	3-5

Switching on and off (fig. D)

- ◆ To switch the tool on, slide the on/off switch (1) forward (position I).
- ◆ To switch the tool off, slide the on/off switch to the rear (position O).

Hints for optimum use (fig. E)

- ◆ Always hold the tool securely. For precision work, hold the tool near the front.
- ◆ Do not exert too much pressure on the tool.
- ◆ Consult your retailer for more information on available accessories.

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.

Warning! Before performing any maintenance, switch off and unplug the tool.

- ◆ Regularly clean the ventilation slots in your tool using a soft brush or dry cloth.
- ◆ Regularly clean the motor housing using a damp cloth. Do not use any abrasive or solvent-based cleaner.

Protecting the environment



Separate collection. This product must not be disposed of with normal household waste.

Should you find one day that your Black & Decker product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.



Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

Black & Decker provides a facility for the collection and recycling of Black & Decker products once they have reached the end of their working life. 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

		RT650
Input voltage	V _{AC}	230
Power input	W	90
No-load speed	min ⁻¹	8,000 - 27,000
Weight	kg	0.43

EC declaration of conformity

RT650

Black & Decker declares that these products conform to:
2006/95/EC, EN 60745

Level of sound pressure according to EN 60745:

Sound pressure (L_{PA}) 73.5 dB(A), uncertainty (K) 3 dB(A)

Acoustic power (L_{WA}) 84.5 dB(A), uncertainty (K) 3 dB(A)

Vibration total values (triax vector sum) according to EN 60745:
Vibration emission value (a_v) 1.4 m/s², uncertainty (K) 1.5 m/s²

The undersigned is responsible for compilation of the technical file and makes this declaration on behalf of Black & Decker.

Kevin Hewitt

Director of Consumer Engineering
Spennymoor, County Durham DL16 6JG,
United Kingdom
1-9-2008

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.

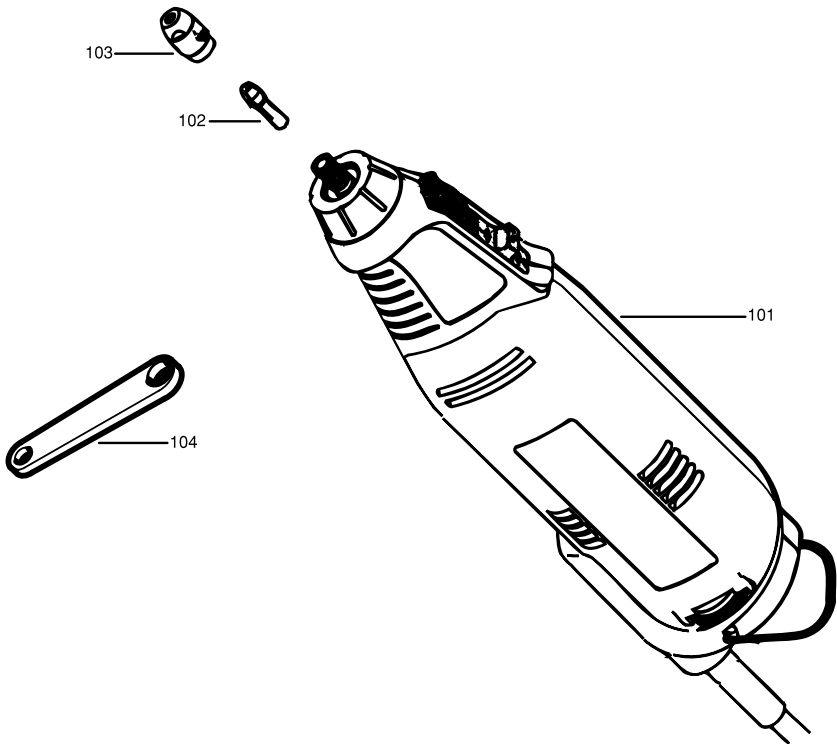
If a Black & Decker product becomes defective due to faulty materials, workmanship or lack of conformity, within 24 months from the date of purchase, Black & Decker guarantees to replace defective parts, repair products subjected to fair wear and tear or replace such products to ensure minimum inconvenience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