

G720R

English

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FIG. A

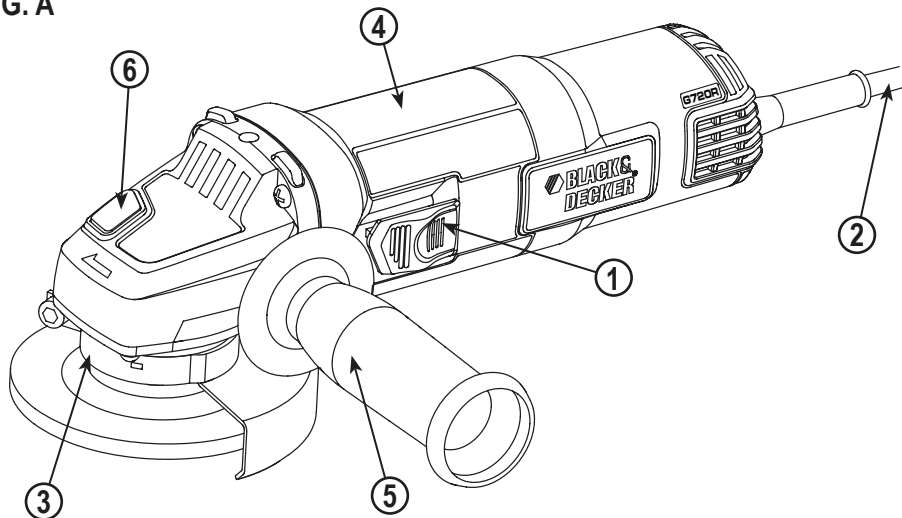


FIG. B

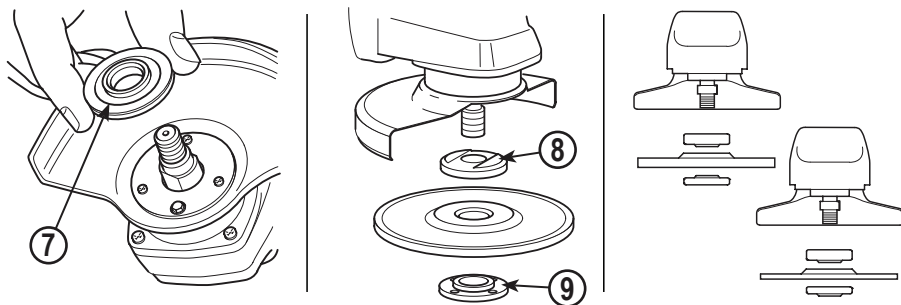


FIG. 2B

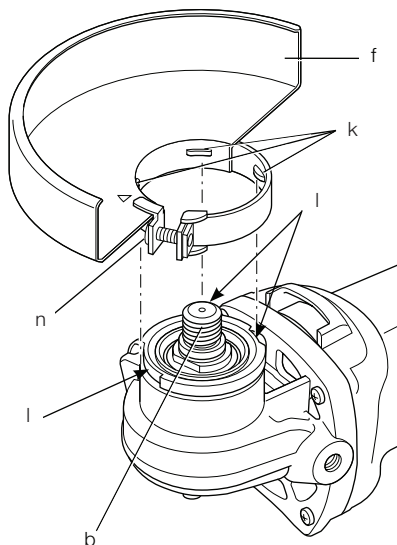


FIG. C

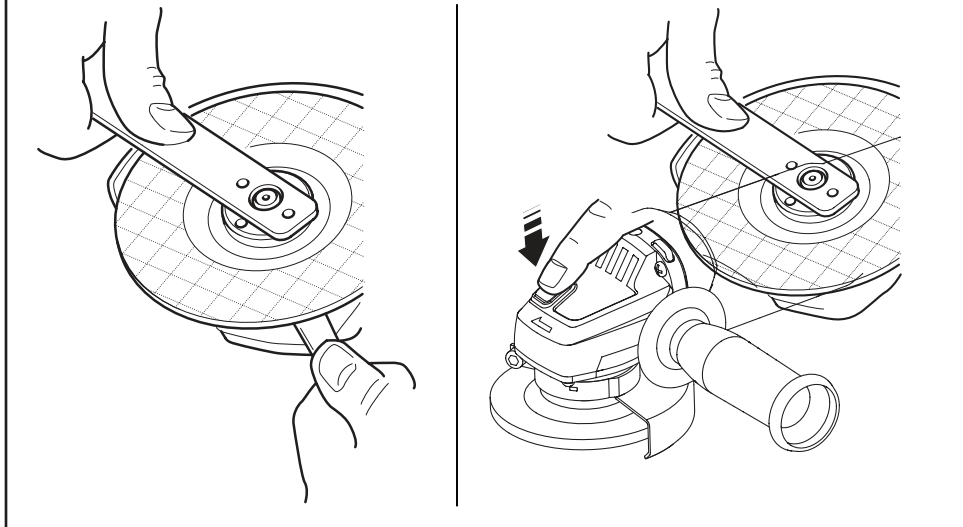
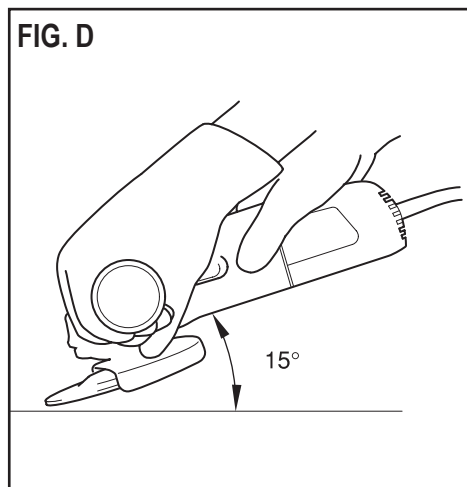


FIG. D



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SMALL ANGLE GRINDER G720R

Technical Data

Specifications:	G720R
Power	820W
Disc diameter	4" (100mm)
Voltage	220V ~ 50Hz
Rated speed	12000/min
Spindle size	M10
Cable length	2m
Grinding wheels thickness	6mm
Type of wheel	27

DO NOT RETURN THIS PRODUCT TO THE STORE, first contact your local Black & Decker office or nearest authorized service center.

GENERAL SAFETY RULES

⚠ **Warning!** Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS



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

- Keep work area clean and well lit.** Cluttered and 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.

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.

- 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. **Note:** The term "Residual Current Device (RCD)" can be replaced by "Ground Fault Circuit Interrupter (GFCI)" or by "Earth Leakage Circuit Breaker (ELCB)".

3. 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 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 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.
- 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.

- 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 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. 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.

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.

Safety Instructions for All Operations

Safety Warnings Common for Grinding

- a.** This power tool is intended to function as a grinder tool. 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.

- b.** Operations such as sanding, wire brushing, polishing or cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.
- c.** Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
- d.** The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- e.** The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- f. Threaded mounting of accessories must match the grinder spindle thread. For accessories mounted by flanges, the arbour hole of the accessory must fit the locating diameter of the flange.** Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- g.** Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
- h.** Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- i.** Keep bystanders a safe distance away from work area. Anyone entering the work area must wear

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personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.

- j. **Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** Cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- k. Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
- l. Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
- m. Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- n. Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- o. Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- p. Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding. For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and

can be avoided by taking proper precautions as given below.

- a. Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.
- b. Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- c. Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- d. Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- e. Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.

Safety Warnings Specific for Grinding:

- a. Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.
- b. **The grinding surface of centre depressed wheels must be mounted below the plane of the guard lip.** An improperly mounted wheel that projects through the plane of the guard lip cannot be adequately protected.
- c. The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect operator from broken wheel fragments and accidental contact with wheel and sparks that could ignite clothing.
- d. Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
- e. Always use undamaged wheel flanges that are of

correct size and shape for your selected wheel.
Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.

- f. Do not use worn down wheels from larger power tools. Wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.

6. Electrical safety



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



Warning! If the power cord is damaged, it must be replaced by the manufacturer, authorized Black & Decker Service Center or an equally qualified person in order to avoid damage or injury. If the power cord is replaced by an equally qualified person, but not authorized by Black & Decker, the warranty will not be valid.

7. Labels on tool

The label on your tool may include the following symbols:

	Read Instructions Manual	Hz Hertz	W Watts	min minutes	~ Alternating Current	== Direct Current	V Volts	A Amperes		Class II Construction		Earthing Terminal		Safety Alert Symbol		Revolutions or Reciprocation per minute
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FEATURES (Fig. A)

1. Slider switch
2. Cable
3. Keyed guard
4. Body grip
5. Side handle (3 positions)
6. Spindle lock button

GUARD WITH FIXING SCREW (FIG. 2B)

1. Place the angle grinder on a table, spindle (b) up.
2. Align the lugs (k) with the notches (l).
3. Press the guard (f) down and rotate it to the required position.
4. Securely tighten the screw (n).
5. To remove the guard, slacken the screw.



CAUTION: If the guard cannot be tightened by the adjusting screw, do not use the tool.

To reduce the risk of personal injury, take the tool and guard to a service centre to repair or replace the guard.

ADDITIONAL SAFETY INSTRUCTIONS FOR SMALL ANGLE GRINDERS

- ▶ Use the guard and ensure it is fitted correctly.
- ▶ Check mounting flanges and the disc are correctly fitted and are undamaged.
- ▶ Ensure you are using the correct size and type of disc for the task.
- ▶ Ensure the disc are rated in excess of the spindle rpm of your angle grinder. Allow a newly assembled wheel to idle off-load for 30 seconds before starting any operation.

OPERATION

Operating your angle grinder (Fig. A)

To switch on, push the slider switch forward (1). To switch off, press the rear of the slider switch.

Fitting the discs (Fig. B and C)

Proceed as follows:

- ▶ Disconnect the plug from the electricity supply.
- ▶ Ensure the guard is fitted. Place the inner flange (7) on the spindle. Ensure it is located on the two flats.
- ▶ Place the abrasive disc on the spindle and inner flange (8). Ensure it is correctly located.
- ▶ Fit the threaded outer flange (9), making sure it is facing in the correct direction for the type of disc fitted. For grinding discs, the flange (9) is fitted with the raised portion facing towards the disc. For cutting discs, the flange (9) is fitted with the inner portion facing away from the disc.
- ▶ Hold the spanner on the flats of the spindle to prevent rotation of the disc and tighten the outer flange with the spanner provided.
- ▶ Press in the spindle lock button and rotate the spindle until it locks (Fig. C). Keeping the lock button pressed in, tighten the outer flange with the spanner provided.

Handy hints (Fig. D)

Hold your angle grinder firmly with one hand around the side handle and the other around the body of your angle grinder.

- ▶ Always position the guard so that as much of the exposed disc as possible is pointing away from you.
- ▶ Be prepared for a stream of sparks when the disc touches the metal.

When grinding, always maintain the correct angle between the disc and the work surface (15°)(Fig. D). This increases

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the removal capacity of the disc and avoids unnecessary overloading.

Overload

Overloading will cause damage to the motor of your angle grinder. This can happen if your angle grinder is subjected to heavy duty use for prolonged periods of use. Do not in any circumstances, attempt to exert too much pressure on your angle grinder to speed up your work. The abrasive discs operate more efficiently when a light pressure is exerted, thus avoiding a drop in the speed of your angle grinder.

MAINTENANCE

Keep guards, air vents and the motor housing as clear as possible of dust and dirt. Wipe with a clean cloth and blow through with a low-pressure air supply. Excessive build-up of metal dust can cause tracking of electrical current from the internal parts to exposed metal parts. Do not overload your angle grinder. Overloading causes a reduction in speed and efficiency, causing your angle grinder to become too hot. If this happens, operate your angle grinder under no load for one or two minutes until it has cooled to normal operating temperature. Switching your angle grinder off under load will reduce the life of the switch.

CLEANING

Use only mild soap and a slightly damp cloth to clean your angle grinder. Many household cleaners contain chemicals which could seriously damage the plastic. Also, do not use petrol, turpentine, lacquer or paint thinners or similar products. Never let any liquid get inside the tool and never immerse any part of the tool into liquid.

△ **Important!** To assure product **SAFETY** and **RELIABILITY**, repairs, maintenance and adjustment (other than those listed in this manual) should be performed by authorized service centers or other qualified service personnel, always using identical replacement parts.

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.

SERVICE INFORMATION

Black & Decker offers a full network of company-owned and authorized service locations. All Black & Decker Service Centers are staffed with trained personnel to provide customers with efficient and reliable power tool service. For more information about our authorized service centers and if you need technical advice, repair, or genuine factory replacement parts, contact the Black & Decker location nearest you.

NOTES

- ▶ Black & Decker's policy is one of continuous improvement to our products and, as such, we reserve the right to change product specifications without prior notice.
- ▶ Standard equipment and accessories may vary by country.
- ▶ Product specifications may differ by country.
- ▶ Complete product range may not be available in all countries.

