

G720

English (original instructions)

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简体中文

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FIG. A

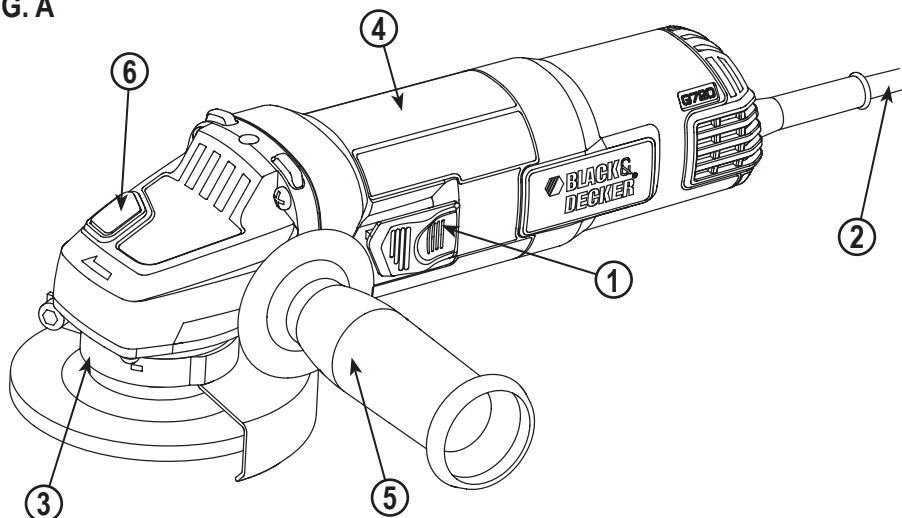


FIG. B

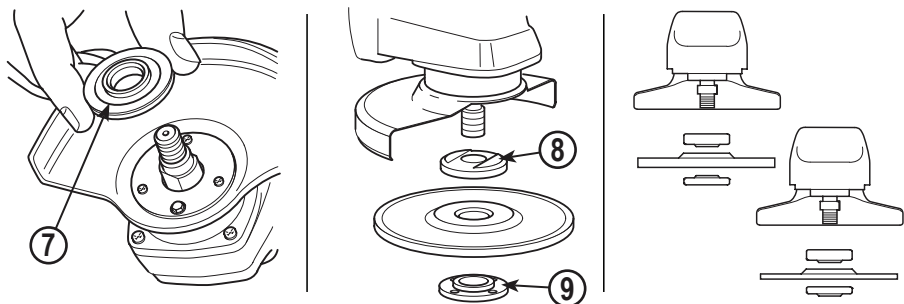


FIG. 2B

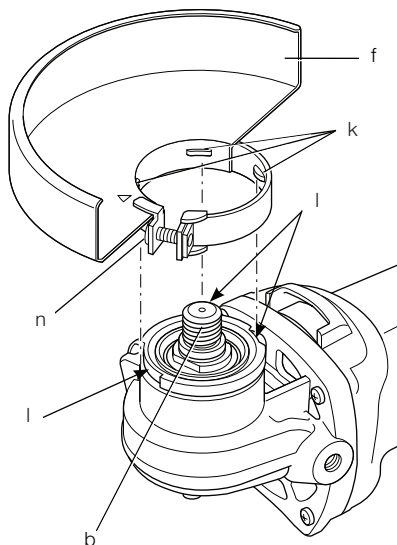


FIG. C

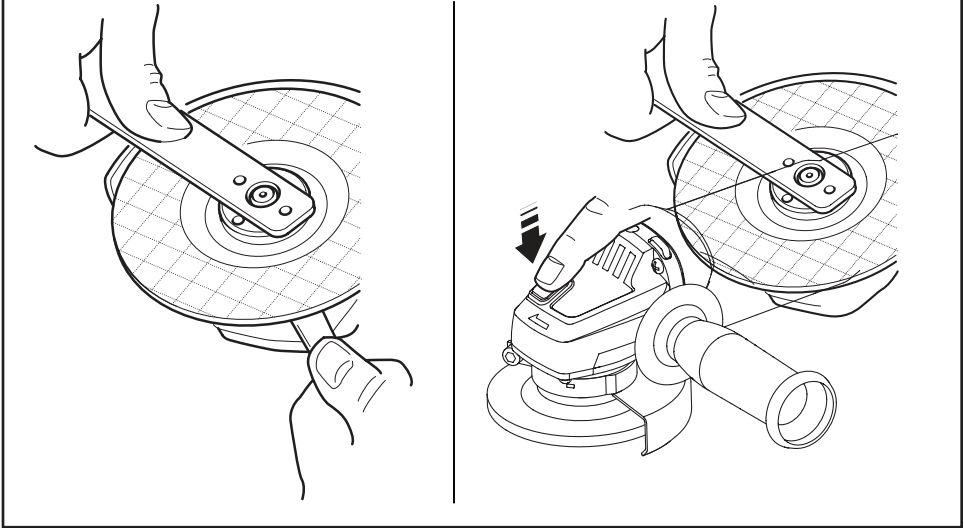
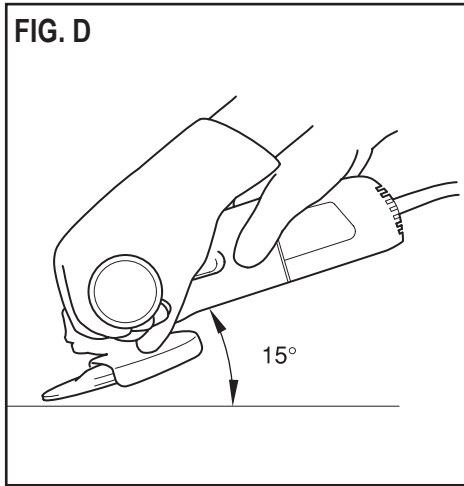


FIG. D



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100mm SMALL ANGLE GRINDER G720

Technical Data

Specifications:	G720
Power	720W
Disc diameter	100mm
Voltage	220V ~ 50Hz
Rated speed	12000r/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 filtrating 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	 /min. Revolutions or Reciprocation per minute
	Use Eye Protection															
	Use Ear Protection															

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.

100mm 小型角磨机

G720

技术参数

规格	G720
功率	800 瓦
圆盘直径	100 毫米
电压	220 伏（交流） 50 赫兹
额定转速	12000 转/分钟
主轴尺寸	M10
电缆长度	2 米
磨削砂轮片厚度	6 毫米
砂轮片型号	27

请不要将本产品送回到商店，应先联络本地 Black & Decker 办事处或最靠近您的授权维修中心。

电动工具通用安全警告

⚠ **警告！** 阅读所有警告和所有说明。不遵照以下警告和说明会导致电击、着火和 / 或严重伤害。

保存所有警告和说明书以备查阅。

在所有下列的警告中术语“电动工具”指市电驱动（有线）电动工具或电池驱动（无线）电动工具。

a) 工作场地的安全

- 1) **保持工作场地清洁和明亮。** 混乱和黑暗的场地会引发事故。
- 2) **不要在易爆环境，如有易燃液体、气体或粉尘的环境下操作电动工具。** 电动工具产生的火花会点燃粉尘或气体。
- 3) **让儿童和旁观者离开后操作电动工具。** 注意力不集中会使你失去对工具的控制。

b) 电气安全

- 1) 电动工具插头必须与插座相配。绝不能以任何方式改装插头。需接地的电动工具不能使用任何转换插头。未经改装的插头和相配的插座将减少电击危险。

- 2) 避免人体接触接地表面，如管道、散热片和冰箱。如果你身体接地会增加电击危险。
- 3) **不得将电动工具暴露在雨中或潮湿环境中。** 水进入电动工具将增加电击危险。
- 4) **不得滥用电线。绝不能用电线搬运、拉动电动工具或拔出其插头。使电线远离热源、油、锐边或运动部件。** 受损或缠绕的软线会增加电击危险。
- 5) **当在户外使用电动工具时，使用适合户外使用的外接软线。** 适合户外使用的软线将减少电击危险。
- 6) **如果在潮湿环境下操作电动工具是不可避免的，应使用剩余电流动作保护器（RCD）。** 使用RCD可减小电击危险。

c) 人身安全

- 1) **保持警觉，当操作电动工具时关注所从事的操作并保持清醒。当你感到疲倦，或在有药物、酒精或治疗反应时，不要操作电动工具。** 在操作电动工具时瞬间的疏忽会导致严重人身伤害。
- 2) **使用个人防护装置。始终佩戴护目镜。** 安全装置，诸如适当条件下使用防尘面具、防滑安全鞋、安全帽、听力防护等装置能减少人身伤害。
- 3) **防止意外起动。确保开关在连接电源和/或电池盒、拿起或搬运工具时处于关断位置。** 手指放在已接通电源的开关上或开关处于接通时插入插头可能会导致危险。
- 4) **在电动工具接通之前，拿掉所有调节钥匙或扳手。** 遗留在电动工具旋转零件上的扳手或钥匙会导致人身伤害。
- 5) **手不要伸展得太长。时刻注意立足点和身体平衡。** 这样在意外情况下能很好地控制电动工具。
- 6) **着装适当。不要穿宽松衣服或佩戴饰品。让你的衣服、手套和头发远离运动部件。** 宽松衣服、佩饰或长发可能会卷入运动部件中。
- 7) **如果提供了与排屑、集尘设备连接用的装置，要确保他们连接完好且使用得当。** 使用这些装置可减少尘屑引起的危险。

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d) 电动工具使用和注意事项

- 1) **不要滥用电动工具，根据用途使用适当的电动工具。**选用适当设计的电动工具会使你工作更有效、更安全。
- 2) **如果开关不能接通或关闭工具电源，则不能使用该电动工具。**不能用开关来控制的电动工具是危险的且必须进行修理。
- 3) **在进行任何调节、更换附件或贮存电动工具之前，必须从电源上拔掉插头和 / 或使电池盒与工具脱开。**这种防护性措施将减少工具意外起动的危险。
- 4) **将闲置不用的电动工具贮存在儿童所及范围之外，并且不要让不熟悉电动工具或对这些说明不了解的人操作电动工具。**电动工具在未经培训的用户手中是危险的。
- 5) **保养电动工具。检查运动件是否调整到位或卡住，检查零件破损情况和影响电动工具运行的其他状况。**如有损坏，电动工具应在使用前修理好。许多事故由维护不良的电动工具引发。
- 6) **保持切削刀具锋利和清洁。**保养良好的有锋利切削刃的刀具不易卡住而且容易控制。
- 7) **按照使用说明书，考虑作业条件和进行的作业来使用电动工具、附件和工具的刀头等。**将电动工具用于那些与其用途不符的操作可能会导致危险。

e) 维修

将你的电动工具送交专业维修人员，使用同样的备件进行修理。这样将确保所维修的电动工具的安全性。

所有操作的安全指示

角磨机一般安全警告

- a) **本电动工具设计用作角磨机。**阅读随该电动工具提供的所有安全警告、指示、图解和规定。不了解以下所列所有指示可能会导致电击、着火和/或严重伤害。
- b) **不建议使用该电动工具来执行砂光、抛光、抛光或切割等操作。**电动工具不按指定的功能去操作，可能会发生危险和引起人身伤害。

- c) **不要使用非工具制造商推荐和专门设计的附件。**该附件即使能安装到工具上但也无法确保安全操作。
- d) **附件的额定转速必须至少达到电动工具上标示的最大转速。**附件比其额定转速大的转速运转会发生爆裂和飞溅。
- e) **附件的外径和厚度必须在电动工具的额定能力范围内。**不正确的附件尺寸不能得到充分防护或控制。
- f) **附件的螺纹安装必须与砂轮机主轴螺纹相配。**对于通过法兰安装的附件，附件的轴孔必须适合法兰的定位直径。与电动工具安装件不相配的附件将失衡、过度震动并会引起失控。
- g) **不要使用破损的附件。**每次使用之前都要检查附件，例如，砂轮是否有碎片和裂痕、靠背垫是否有裂痕、撕裂或过度磨损，钢丝刷是否松动或金属丝是否断裂。如果电动工具或附件跌落，请检查其是否受损，或者安装未受损的附件。检查并安装附件后，让自己和旁观者的位置远离旋转附件的平面，并以电动工具最大空载速度运转 1 分钟。受损附件通常会在此测试期间碎裂。
- h) **佩戴个人防护装备。**根据适用情况，使用面罩、安全护目镜或防护眼镜。适当情况下，戴上防尘面罩、听力保护器、手套和能阻挡细小磨料或工件碎片的工作围裙。护目装备必须能够挡住各种操作产生的飞屑。防尘面具或口罩必须能够过滤操作产生的颗粒。长期暴露在高强度噪声中会引起失聪。
- i) **让旁观者与工作区域保持一定安全距离。**任何进入工作区域的人必须戴上防护用品。工件或破损附件的碎片可能会飞出并导致紧邻操作区域的旁观者受伤。
- j) **在切割附件有可能切割到暗线或自身电线的场所进行操作时，只能通过绝缘握持面来握住电动工具。**切割附件碰到带电导线会使工具外露的金属零件带电从而使操作者受到电击。
- k) **使电线远离旋转的附件。**如果控制不当，电线可能被切断或缠绕，并使得您的手或手臂可能被卷入旋转附件中。

- l) **切勿在附件完全停止之前放下电动工具。** 旋转的附件可能会抓住表面并拉动电动工具而让您失去对工具的控制。
- m) **不要在携带电动工具时开动它。** 意外接触旋转附件可能会缠绕您的衣服而伤害身体。
- n) **经常清理电动工具的通风口。** 电动机风扇会将灰尘吸进机壳，过多的金属粉尘沉积可能会导致电气危险。
- o) **不要在易燃材料附近操作电动工具。** 火星可能会点燃这些材料。
- p) **不要使用需用冷却液的附件。** 用水或其他冷却液可能会导致触电或电击。

反弹和相关警告

反弹是因卡住或缠绕住的旋转砂轮片、靠背垫、钢丝刷或其他附件而产生的突然反作用力。卡住或缠绕会引起转动附件的迅速堵转，随之使失控的电动工具在卡住点产生与附件转动方向相反的运动。例如，如果砂轮被工件缠绕或卡住，伸入卡住点的砂轮边缘可能会进入材料表面而引起砂轮爬出或反弹。砂轮可能会飞向或飞离操作员，这取决于砂轮在卡住点的运动方向。在这些条件下砂轮也可能会碎裂。反冲是由于电动工具使用不当和/或不正确的操作工序或环境造成的。采取以下适当的预防措施可避免反冲现象。

- a) **保持紧握电动工具，使您的身体和手臂处于正确状态以抵抗反冲力。如有辅助手柄，则要一直使用，以便最大限度地控制住启动时的反冲力或反力矩。** 如果采取合适的预防措施，操作人员即可以控制反力矩或反冲力。
- b) **双手切勿靠近转动附件。** 附件可能会反弹碰到手。
- c) **不要站在电动工具发生反弹后可能移动到的区域。** 反冲将在缠绕点驱使工具逆砂轮运动方向运动。
- d) **处理尖角、锐边等时请格外小心。避免附件跳弹和被缠绕住。** 尖角、锐边或弹跳可能会缠绕旋转附件并引起失控或反冲。
- e) **不要安装锯链、木雕锯片或带齿锯片。** 此类锯片会产生频繁的反弹和失控。

专门针对砂磨操作的安全警告

- a) **仅为您的电动工具选用推荐的砂轮型号和所选砂轮专用的护罩。** 不是为电动工具设计的砂轮得不到充分保护，而且不安全。
- b) **中心凹陷的砂轮的磨削表面必须安装在护罩边缘平面的下方。** 安装不当且穿过护罩边缘平面的砂轮得不到充分保护。
- c) **护罩必须牢牢安装在电动工具的适当位置，以最大程度地提高安全性，尽可能减少暴露在操作人员面前的砂轮部分。** 护罩有助于保护操作人员免受爆裂砂轮片碎片和意外触及砂轮片的危险以及可点燃衣服的火花伤害。
- d) **砂轮必须仅用于推荐的用途。例如，不要使用切割砂轮的侧面进行磨削。** 磨切砂轮设计用于圆周磨削，对砂轮侧面施力可能会使其碎裂。
- e) **始终为所选砂轮选用未受损且尺寸和形状适当的砂轮法兰。** 合适的砂轮法兰盘可支撑砂轮，从而减小砂轮破裂的可能性。切割砂轮片的法兰盘可以不同于砂轮片法兰盘。
- f) **不要使用大规格电动工具上用剩的磨损砂轮。** 用于大规格电动工具的砂轮不适用于较小规格工具的高速工况并可能会爆裂。

电气安全



本工具采用双重绝缘，因此无需接地线。请务必检查电源电压是否与铭牌一致。



警告！ 如电源线损坏，必须由制造商、Black & Decker 授权维修中心或具备同等资格的人士进行更换，以避免事故或人身伤亡。如电源线由具备同等资格但未经 Black & Decker 授权的人士更换，则产品质保将无效。

12·简体中文

工具上的标签

您的工具上可能包含下列符号：



参阅说明手册



使用护目设备



使用护耳设备

V 伏特

A 安培

Hz 赫兹

W 瓦特


min 分钟


~ 交流电


— 直流电

n 额定转速

 II级结构

 接地终端

 安全警告标识

 /min 每分钟旋转或往复次数

功能部件 (图A)

1. 滑块开关
2. 电源线
3. 带钥匙护罩
4. 机身手柄
5. 侧手柄 (3 个位置)
6. 主轴锁按钮

带固定螺丝的护罩 (图2B)

1. 将角磨机放置在工作台上，主轴 (b) 朝上。
2. 将接片 (k) 和凹口 (l) 对齐。
3. 按下护罩 (f)，并旋转至所需位置。
4. 拧紧螺钉 (n)。
5. 若要取下护罩，松开螺钉。



警示： 如果调整螺钉仍无法锁紧护罩，请不要使用该工具。为降低人身伤害危险，请将该工具和护罩送交维修中心以维修或替换护罩。

小型角磨机的附加安全说明

- ▶ 使用护罩并确保已正确安装。
- ▶ 检查安装法兰和砂轮正确安装且完好无损。
- ▶ 确保使用尺寸和型号正确的砂轮执行操作。
- ▶ 确保砂轮的额定转速大于角磨机的主轴转速。开始执行任何操作之前，请先让新安装的砂轮空载运转 30 秒。

操作

操作角磨机 (图 A)

要启动工具，请将滑块开关 (1) 往前推。要关闭工具，请按下滑块开关的后部。

安装砂轮 (图 B 和 C)

请按以下步骤操作：

- ▶ 断开插头与电源的连接。
- ▶ 确保护罩已安装。将内法兰 (7) 放置在主轴上。确保内法兰置于两个平台上。
- ▶ 将砂轮放在主轴和内法兰 (8) 上。确保放置的位置正确。
- ▶ 安放带螺纹的外法兰 (9)，确保以正确的方向朝向所安装的砂轮。对于磨削砂轮，安装法兰 (9) 时应将其凸起部分朝向圆盘。对于圆盘刀，安装法兰 (9) 时应将其内侧朝向圆盘。
- ▶ 使用随附的扳手夹持住主轴的平台以防砂轮旋转，并拧紧外法兰。
- ▶ 按下主轴锁按钮并转动主轴，直到其锁定到位 (图C)。持续按下主轴锁按钮，使用随附的扳手拧紧外法兰。

有用提示 (图 D)

请一手紧握侧手柄，一手紧握角磨机机身，牢牢地握持角磨机。

- ▶ 请始终安装护罩，尽量使砂轮暴露部分指向远离您的方向。
- ▶ 请注意，圆盘接触到金属时，会迸发出大量火花。

执行磨削操作时，始终在砂轮与工作表面之间维持正确的角度 (15°) (图 D)。这可增加砂轮的磨除能力，并可避免发生不必要的过载。

过载

过载会导致角磨机的电机损坏。如果角磨机长时间用于重型作业，就可能会出现过载。任何情况下都不要试图向角磨机施加过度的压力来加速作业。施加轻度压力时砂轮运作会更有效率，从而可避免角磨机的速度突然下降。

维护

请尽量避免粉尘和碎屑在护罩、通风口和电机外壳上积聚。使用干净的抹布拭擦，并使用低气压源吹走粉尘和碎屑。过多的金属屑堆积可能会导致电流从内部件传导至暴露的金属部件。不要过载使用角磨机。过载会导致速度和效率下降，引起角磨机温度过高。如果角磨机温度过高，请空载运转角磨机一、两分钟，直至角磨机冷却至正常的操作温度。

在负载运转的情况下关闭角磨机会降低开关的使用寿命。

清洁

仅可使用中性肥皂水和稍稍沾湿的抹布来清洁角磨机。许多家用清洁剂含有可能对塑料有严重腐蚀性的化学物质。此外，不要使用汽油、松节油、油漆或涂料稀释剂或类似产品。切勿让任何液体渗入工具，切勿让工具的任何部件浸在液体中。

△ 重要事项！为了确保产品安全及可靠，所有的维修、保养和调节，除了本手册中列出的以外，均应该由授权的检修中心或合格的维修服务人员执行，并始终使用相同的备件。

保护环境



分类回收。本产品不得与普通家庭垃圾一起处理。如果您发现您的 Black & Decker 产品需要进行替换，或您已经不再需要使用这些产品，请勿将它们与家庭废物一起处理。请将它们单独分类回收。



分类回收使用过的产品和包装能够让材料得以再循环和再利用。再生材料的再利用有助于防止环境污染，并降低对原材料的需求。当地法规可能要求由市政废物处理点或向您出售新产品的零售商提供从家庭中分类回收电气产品的服务。

服务信息

Black & Decker 提供覆盖范围广泛的公司隶属和授权服务地点。所有的 Black & Decker 服务中心都具有训练有素的人员，为客户提供高效和可靠的电动工具服务。有关授权维修中心的详情，或若您需要技术建议、维修或原厂替换部件，请联系最靠近您的 Black & Decker 地点。

备注

► Black & Decker 的政策是持续改进我们的产品，因此，我们保留随时更改产品规格的权利，恕不另行通知。

- 标准设备和附件可能会因国家（地区）而异。
- 不同国家（地区）的产品规格也可能会有所不同。
- 并非所有的国家（地区）都可提供完整的产品系列。

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