

DEWALT®

English (*original instructions*) 2

简体中文 9



Fig. A
图 A

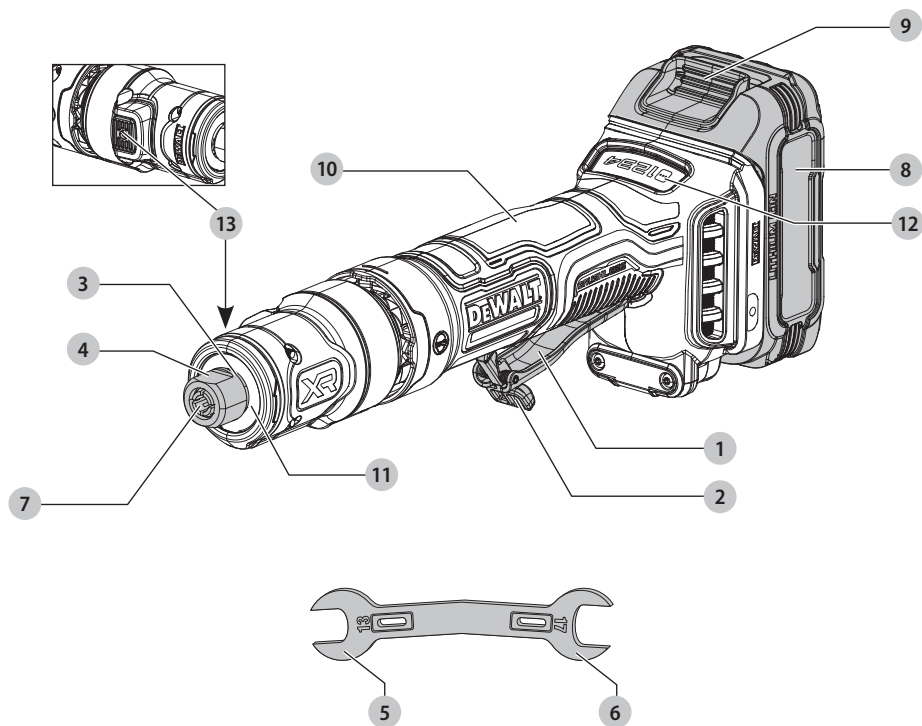


Fig. B
图 B

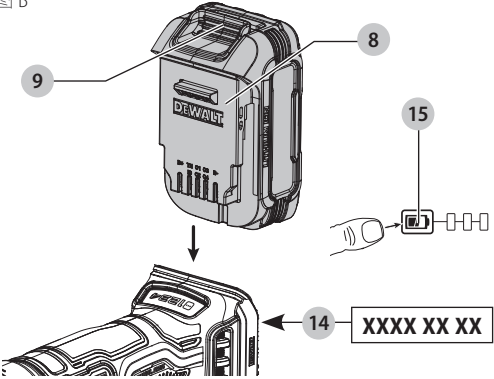


Fig. C
图 C

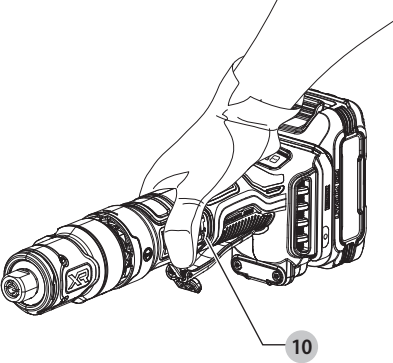


Fig. D
图 D

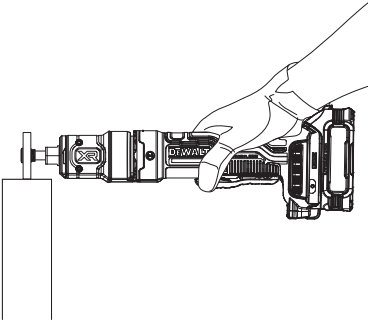
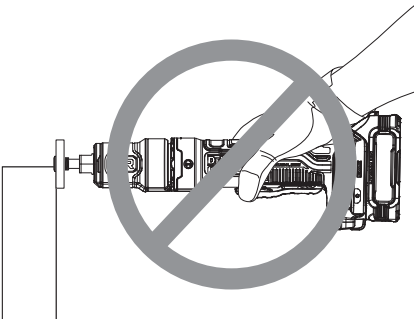


Fig. E
图 E



DIE GRINDER

DCG420



WARNING: Read all safety warnings, instructions, illustrations, and specifications in this manual, including the battery and charger sections provided in an original tool manual or the separate Batteries and Chargers manual. Manuals can be obtained by contacting Customer Service (refer to the back page of this manual).



Technical Data

DCG420		
Voltage	V _{DC}	18
No load speed		
Mode 1	min ⁻¹	0–10000
Mode 2	min ⁻¹	0–15000
Mode 3	min ⁻¹	0–20000
Mode 4	min ⁻¹	0–24500
Maximum wheel diameter	mm	38
Collet size	mm	6
Weight (without battery pack)	kg	1.13



WARNING: To reduce the risk of injury, read the instruction manual.

Definitions: Safety Guidelines

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.

▲ DANGER: Indicates an imminently hazardous situation which, if not avoided, **will** result in **death or serious injury**.

▲ WARNING: Indicates a potentially hazardous situation which, if not avoided, **could** result in **death or serious injury**.

▲ CAUTION: Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.

NOTICE: Indicates a practice **not related to personal injury** which, if not avoided, **may** result in **property damage**.

▲ Denotes risk of electric shock.

▲ Denotes risk of fire.

GENERAL POWER TOOL SAFETY WARNINGS

▲ WARNING: 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.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term “power tool” in the warnings 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 a 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 and clothing 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.

h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

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 remove the battery pack, if detachable, 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 and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's 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.

h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5) Battery Tool Use and Care

a) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

b) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.

c) **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails,**

screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

d) **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

e) **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.

f) **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.

g) **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

6) 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.

b) **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorised service providers.

SAFETY INSTRUCTIONS FOR ALL OPERATIONS

Safety Warnings Common for Grinding, Sanding, Wire Brushing, Polishing, Carving or Abrasive Cutting-Off Operations

a) **This power tool is intended to function as a grinder, sander, wire brush, polisher, carving or cut-off 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) **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.

c) **The rated speed of the accessories 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.

d) **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 controlled.

e) **The arbour size of wheels, sanding drums or any other accessory must properly fit the spindle or collet of the power tool.** 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.

f) **Mandrel mounted wheels, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck.** If the mandrel is insufficiently held and/or the overhang of the wheel is too long, the mounted wheel may become loose and be ejected at high velocity.

g) **Do not use a damaged accessory. Before each use, inspect the accessory such as abrasive wheels for chips and**

cracks, sanding drum 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 workshop 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 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. 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) Always hold the tool firmly in your hand(s) during the start-up. The reaction torque of the motor, as it accelerates to full speed, can cause the tool to twist.

l) Use clamps to support workpiece whenever practical. Never hold a small workpiece in one hand and the tool in the other hand while in use. Clamping a small workpiece allows you to use your hand(s) to control the tool. Round material such as dowel rods, pipes or tubing have a tendency to roll while being cut, and may cause the bit to bind or jump toward you.

m) 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.

n) After changing the bits or making any adjustments, make sure the collet nut, chuck or any other adjustment devices are securely tightened. Loose adjustment devices can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.

o) 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.

p) 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.

q) Do not operate the power tool near flammable materials. Sparks could ignite these materials.

r) Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

FURTHER SAFETY INSTRUCTIONS FOR ALL OPERATIONS

Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel, sanding 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.

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 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. The operator can control kickback forces, if proper precautions are taken.

b) 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.

c) Do not attach a toothed saw blade. Such blades create frequent kickback and loss of control.

d) Always feed the bit into the material in the same direction as the cutting edge is exiting from the material (which is the same direction as the chips are thrown).

Feeding the tool in the wrong direction causes the cutting edge of the bit to climb out of the work and pull the tool in the direction of this feed.

e) When using rotary files, cut-off wheels, high-speed cutters or tungsten carbide cutters, always have the work securely clamped. These wheels will grab if they become slightly canted in the groove, and can kickback. When a cut-off wheel grabs, the wheel itself usually breaks. When a rotary file, high-speed cutter or tungsten carbide cutter grabs, it may jump from the groove and you could lose control of the tool.

Safety Warnings Specific for Grinding and Abrasive Cutting-Off Operations

a) Use only wheel types that are recommended for your power tool and only for recommended applications. For example: do not grind with the side of a cut-off wheel.

Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.

b) For threaded abrasive cones and plugs use only undamaged wheel mandrels with an unrelieved shoulder flange that are of correct size and length. Proper mandrels will reduce the possibility of breakage.

c) Do not "jam" the cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Overstressing the wheel increases the loading and susceptibility to twisting or snagging of the wheel in the cut and the possibility of kickback or wheel breakage.

d) Do not position your hand in line with and behind the rotating wheel. When the wheel, at the point of operation, is moving away from your hand, the possible kickback may propel the spinning wheel and the power tool directly at you.

e) When wheel is pinched, snagged or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the

cut while the wheel is in motion, otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel pinching or snagging.

f) **Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully reenter the cut.** The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

g) **Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback.** Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.

h) **Use extra caution when making a “pocket cut” into existing walls or other blind areas.** The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

Safety Warnings Specific for Wire Brushing Operations

a) **Be aware that wire bristles are thrown by the brush even during ordinary operation. Do not overstress the wires by applying excessive load to the brush.** The wire bristles can easily penetrate light clothing and/or skin.

b) **Allow brushes to run at operating speed for at least one minute before using them. During this time no one is to stand in front or in line with the brush.** Loose bristles or wires will be discharged during the run-in time.

c) **Direct the discharge of the spinning wire brush away from you.** Small particles and tiny wire fragments may be discharged at high velocity during the use of these brushes and may become imbedded in your skin.

d) **Safety goggles or safety glasses with side shields and a full face shield MUST be worn by the operator and others that are within 15.2 m of the use of this product.**

Residual Risks

In spite of the application of the relevant safety regulations and the implementation of safety devices, certain residual risks cannot be avoided. These are:

- Impairment of hearing.
- Risk of personal injury due to flying particles.
- Risk of burns due to accessories becoming hot during operation.
- Risk of personal injury due to prolonged use.

Reducing Dust Exposure

Before starting work, check the hazard class of the dust that will be produced when working.

▲ WARNING: Avoid touching or breathing dust as it can be harmful to health. Dust created when using a power tool and when conducting other construction activities can contain chemicals, minerals, or particles known to cause respiratory infections, allergic reactions, cancer, birth defects, or other reproductive harm of the user or bystanders.

- Such dust can be generated, for example, when working on hardwoods such as beech or oak, lead-based paint, concrete, masonry, or stones containing quartz.
- Material containing asbestos may be handled only by specialists.
- Observe the relevant regulations in your country for the materials to be worked on.
- Use a dust extractor or extraction system with an officially approved protection class in compliance with the locally applicable dust protection regulations and suitable for the material to be worked on.

- Capture the resulting dust particles directly at the source and avoid deposits in the surrounding area. Use suitable extraction accessories for this purpose.

Additional measures:

- ю Make sure that the workplace is well ventilated.
- ю Wear a respirator appropriate for the type of dust generated.

Battery Type

These battery packs may be used:

Battery	(kg)
DCB181	0.35
DCB182/DCB204	0.61
DCB183/DCB203	0.40
DCB184/DCB184G/DCB205	0.62
DCB187	0.54
DCB189/DCB240	0.54
DCBP034	0.32
DCBP520	0.75
DCBP320	0.5
DCB2108	0.95

Refer to the battery/charger section or manual for more information.

Package Contents

The package contains:

- 1 Die grinder
- 1 Wrench
- 1 6 mm collet
- Li-Ion battery pack
- 1 Instruction manual

NOTE: Battery packs, chargers and kitboxes are not included with N models. Battery packs and chargers are not included with NT models. B models include Bluetooth® battery packs.

NOTE: The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth®, SIG, Inc. and any use of such marks by DEWALT is under license. Other trademarks and trade names are those of their respective owners.

- Check for damage to the tool, parts or accessories which may have occurred during transport.
- Take the time to thoroughly read and understand this manual prior to operation.

Markings on Tool

To reduce the risk of injury, user must follow the following instructions shown on the tool:



Read instruction manual before use.



Wear ear protection.



Wear eye protection.



Visible radiation. Do not stare into light

Date Code Position (Fig. B)

The production date code **14** consists of a 4-digit year followed by a 2-digit week and is extended by a 2-digit factory code.

Description (Fig. A)

▲ WARNING: Never modify the power tool or any part of it. Damage or personal injury could result.

- 1 Paddle switch
- 2 Lock-off switch
- 3 Spindle
- 4 Collet nut
- 5 Small spanner (13 mm)
- 6 Large spanner (17 mm)
- 7 Collet 6 mm
- 8 Battery
- 9 Battery release button
- 10 Die Grinder Body
- 11 LED Worklight
- 12 Speed selector button
- 13 Spindle lock button

Intended Use

Your die grinder has been designed for professional grinding, sanding, brushing, polishing, carving, and abrasive cutting off applications. The tool can be used with a range of DeWALT grinding accessories with a maximum diameter of 38 mm and minimum rated speed of 24500/min.

DO NOT use under wet conditions or in the presence of flammable liquids or gases.

This grinder is a professional power tool.

DO NOT let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

- **Young children and the infirm.** This appliance is not intended for use by young children or infirm persons without supervision.
- This product is not intended for use by persons (including children) suffering from diminished physical, sensory or mental abilities; lack of experience, knowledge or skills unless they are supervised by a person responsible for their safety. Children should never be left alone with this product.

Features

E-Switch Protection™

The ON/OFF paddle switch has a no-volt release function. In the event of an unexpected shut down, the paddle switch will need to be released then depressed to restart tool.

DeWALT ANTI-ROTATION System

This feature quickly stops the accessory when a pinch, stall, or bind-up event is sensed, reducing reactionary torque. The switch needs to be cycled (turned on and off) to restart the tool.

Power-OFF™ Overload Protection

The power supply to the motor will be reduced in case of motor overload. With continued motor overload, the tool will shut off. The paddle switch will need to be released then depressed to restart tool. The tool will power off each time the current load reaches the overload current value (motor burn-up point). If continued overload shutdowns occur, apply less force/weight on the tool until the tool will function without the overload engaging.

Electronic Soft Start

This feature limits the initial start-up momentum, allowing the speed to build up gradually over a 1-second period.

ASSEMBLY AND ADJUSTMENTS

▲ WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect battery pack before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

▲ WARNING: Use only batteries and chargers.

Inserting and Removing the Battery Pack from the Tool (Fig. B)

NOTE: Make sure your battery pack **8** is fully charged.

To Install the Battery Pack into the Tool Handle

1. Align the battery pack with the rails inside the tool's handle (Fig. B).
2. Slide it into the handle until the battery pack is firmly seated in the tool and ensure that you hear the lock snap into place.

To Remove the Battery Pack from the Tool

1. Press the battery release button **9** and firmly pull the battery pack out of the tool handle.
2. Insert battery pack into the charger.

Fuel Gauge Battery Packs (Fig. B)

Some DeWALT battery packs include a fuel gauge **15**, which consists of three LED lights that indicate the level of charge remaining in the battery pack.

To actuate the fuel gauge, press and hold the fuel gauge button. A combination of the three LED lights will illuminate, designating the level of charge left. When the level of charge in the battery is below the usable limit, the fuel gauge will not illuminate and the battery will need to be recharged.

NOTE: The fuel gauge is only an indication of the charge left on the battery pack. It does not indicate tool functionality and is subject to variation based on product components, temperature and end-user application.

Mounting an Accessory (Fig. A)

▲ WARNING: Accessories must be rated at least equal to the maximum speed marked on the tool. Accessories running faster than their rated speed can break and fly apart.

▲ WARNING: Accessories must be within the capacity rating marked on the tool. Incorrectly sized accessories cannot be adequately controlled.

▲ WARNING: Do not use accessories with a mandrel length exceeding 2.0" (50 mm). Ensure that the exposed mandrel length is no more than 1.0" (25 mm) after inserting accessory into collet.

▲ WARNING: Projectile hazard. Only use accessories with shanks that match the installed collet. Smaller shanks will not be secure and could become loose during operation.

▲ CAUTION: Never tighten the collet without first installing an accessory in it. Tightening an empty collet, even by hand, can damage the collet.

This tool comes with a 6 mm collet **7**.

1. Depress the spindle lock **13**.
2. Loosen the collet nut **4** by turning it counterclockwise.
3. Insert the shank of the accessory into the 6 mm collet **7**.
4. Securely tighten the collet using the larger spanner **6** provided.

To remove the accessory

1. Depress the spindle lock.
2. Loosen the collet nut **4** by turning it counterclockwise.
3. Remove the shank from the 6 mm collet **7**.

When starting the tool (with a new or replacement wheel installed) hold the tool in a well protected area. If the wheel has an undetected crack or flaw, it should burst in less than one minute. Never start tool with a person in line with the wheel. This includes the operator.

OPERATION

Instructions for Use

▲ WARNING: Always observe the safety instructions and applicable regulations.

▲ WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect battery pack before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

Proper Hand Position (Fig. C)

▲ WARNING: To reduce the risk of serious personal injury, ALWAYS use proper hand position as shown.

▲ WARNING: To reduce the risk of serious personal injury, ALWAYS hold securely in anticipation of a sudden reaction. Proper hand position requires one hand on the tool body **10**.

Paddle Switch (Fig. A)

▲ CAUTION: Hold the body of the tool firmly to maintain control of the tool at start up and during use and until the wheel or accessory stops rotating. Make sure the wheel has come to a complete stop before laying the tool down.

NOTE: To reduce unexpected tool movement, do not switch the tool on or off while under load conditions. Allow the grinder to run up to full speed before touching the work surface. Lift the tool from the surface before turning the tool off. Allow the tool to stop rotating before putting it down.

1. To turn the tool on, push the lock-off lever **2** toward the front (gear case) of the tool, then depress the paddle switch **1**. The tool will run while the switch is depressed.
2. Turn the tool off by releasing the paddle switch.

Four Speed Selector (Fig. A)

▲ WARNING: Regardless of the speed setting, the rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.

The four speed selector feature of your tool allows you to select speed ranges based on the application and accessory used. To select lowest speed setting, turn the tool off and permit it to stop. Press the four speed selector button **12** to cycle through the four speeds, 1 being the slowest and 4 being the fastest.

NOTE: Speed ranges cannot be changed while in use. Release the paddle switch and allow the tool to come to a complete stop before switching to a new speed range selection.

LED Worklight (Fig. A)

▲ CAUTION: Do not stare into worklight. Serious eye injury could result.

The worklight **11** located around the collet is activated when the paddle switch is depressed. When the switch is released, the worklight will stay illuminated for up to 20 seconds.

NOTE: The worklight is for lighting the immediate work surface and is not intended to be used as a flashlight.

Instructions for Use (Fig. D, E)

▲ WARNING:

- Ensure all materials to be ground or cut are secured in place.
- Use clamps or a vise to hold and support the workpiece to a stable platform. It is important to clamp and support the workpiece securely to prevent the movement of the workpiece and loss of control. Movement of the workpiece or loss of control may create a hazard and cause personal injury.
- Secure the workpiece. A workpiece clamped with clamping devices or in a vise is held more secure than by hand.
- Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback. Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.
- Always wear regular working gloves while operating this tool.
- The gear case becomes very hot during use.
- Apply only a gentle pressure to the tool. Do not exert side pressure on the disc.
- Avoid overloading. Should the tool become hot, let it run a few minutes under no load condition.
- The best grinding results are achieved when setting the machine at an angle of 90°. Move the machine back and forth with moderate pressure. In this manner, the workpiece will not become too hot, does not discolour and no grooves are formed.

▲ WARNING: Grasp the tool firmly to maintain control of the tool at start up and during use and until the wheel or accessory stops rotating. Make sure the wheel has come to a complete stop before laying the tool down.

Put the work in a vise or clamp it securely. Use a face mask over the nose and mouth if the operation raises dust. Treat the wheel with respect. Do not jam the wheel into the work or use unnecessary pressure. Grind only on the face of the wheel unless you have a special wheel specifically made to permit grinding on the side of the wheel.

Precautions To Take When Sanding Paint

1. Sanding of lead based paint is NOT RECOMMENDED due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women.
2. Since it is difficult to identify whether or not a paint contains lead without a chemical analysis, we recommend the following precautions when sanding any paint:

Personal Safety

1. No children or pregnant women should enter the work area where the paint sanding is being done until all clean up is completed.
2. A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing.
NOTE: Only those dust masks suitable for working with lead paint dust and fumes should be used. Ordinary painting masks do not offer this protection. See your local hardware dealer for the proper approved mask.
3. NO EATING, DRINKING or SMOKING should be done in the work area to prevent ingesting contaminated paint particles. Workers should wash and clean up BEFORE eating, drinking or smoking. Articles of food, drink, or smoking should not be left in the work area where dust would settle on them.

Environmental Safety

1. Paint should be removed in such a manner as to minimize the amount of dust generated.
2. Areas where paint removal is occurring should be sealed with plastic sheeting of 4 mils thickness.
3. Sanding should be done in a manner to reduce tracking of paint dust outside the work area.

Cleaning And Disposal

1. All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project. Vacuum filter bags should be changed frequently.
2. Plastic drop cloths should be gathered up and disposed of along with any dust chips or other removal debris. They should be placed in sealed refuse receptacles and disposed of through regular trash pick-up procedures. During clean up, children and pregnant women should be kept away from the immediate work area.
3. All toys, washable furniture and utensils used by children should be washed thoroughly before being used again.

MAINTENANCE

Your power 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: *To reduce the risk of serious personal injury, turn tool off and disconnect battery pack before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.*

The charger and battery pack are not serviceable.

Please refer to the back page of this manual for service centre contact information, or visit www.2helpU.com.

Lubrication

Your power tool requires no additional lubrication.

Cleaning

▲ WARNING: *Electrical shock and mechanical hazard.*

Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the product before cleaning.

▲ WARNING: *To ensure safe and efficient operation, always keep the product and the ventilation slots (if applicable) clean. Ventilation slots can be cleaned using a dry, soft non-metallic brush and/or a suitable vacuum cleaner. Do not use water or any cleaning solutions.*

▲ WARNING: *Blow dirt and dust out of the main housing with dry air as often as dirt is seen collecting in and around the ventilation slots. Wear approved eye protection and approved dust mask when performing this procedure.*

▲ WARNING: *Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the product. These chemicals may weaken the materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the product. Never immerse any part of the product into a liquid.*

Optional Accessories

▲ WARNING: *Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT recommended accessories should be used with this product.*

▲ WARNING: *Do not use a bonded abrasive wheel that is past its expiration (EXP) date as marked near center of wheel (if provided). Expired wheels are more likely to burst and cause serious injury. Store bonded abrasive wheels in dry location without temperature or humidity extremes. Destroy expired or damaged wheels so they cannot be used.*

Consult your dealer for further information on the appropriate accessories.

Protecting the Environment



Products/batteries are recyclable, but if marked with the crossed-out bin, they must not be disposed of with normal household waste.

Run the batteries down completely and separate them, and separate any light sources from the product if possible. It is the user's responsibility to delete personal data from the product. Then take the waste to an official waste collection centre or a participating retailer who will often accept it free of charge. Packaging should be discarded based on the marked material code. Operating and safety instructions should only be discarded once the applicable product is no longer in use. Please check with your local community/municipality for waste management guidance. For further information, visit www.2helpU.com.

After Service and Repair

DEWALT service centers are staffed with trained personnel to provide customers with efficient and reliable product service. We do not take any responsibility when you have repaired in unauthorized service center. You can refer to the leaflet of CONTACT CENTER LOCATOR in product package and contact us through hotline, website or social media to find the nearest DEWALT service center around you.

锂电无刷直磨机

DCG420



警告: 请阅读本电动工具随附手册中的所有安全警告、指示、图标和规格, 包括原厂手册中的电池和充电器部分, 或独立的《电池与充电器手册》中的内容。您可联系客服中心, 获得产品手册 (请参阅本手册的背页)。



技术参数

DCG420		
电压	V _{xx}	18
空载转速		
模式1	转/分	0-10000
模式2	转/分	0-15000
模式3	转/分	0-20000
模式4	转/分	0-24500
最大砂轮盘直径	毫米	38
夹头尺寸	毫米	6
重量 (不含电池包)	千克	1.13



警告: 为降低伤害风险, 请阅读使用手册。

定义: 安全准则

下列定义解释了各警示词的严重程度。请仔细阅读本手册并注意这些标志。

▲ 危险: 表示紧急的危险情况, 如不加以避免, **将导致死亡或严重伤害**。

▲ 警告: 指示潜在的危险情况, 如不加以避免, **可能导致死亡或严重伤害**。

▲ 小心: 表示潜在的危险情况, 如不加以避免, **可能导致轻度或中度伤害**。

注意: 表示不涉及人身伤害的情况, **如不加以避免, 可能导致财产损失**。

▲ 指示有触电风险。

▲ 指示存在火灾风险。

电动工具通用安全警告

▲ 警告! 阅读随电动工具提供的所有安全警告、说明、图示和规定。不遵照以下所列说明会导致电击、着火和/或严重伤害。

保存所有警告和说明书以备查阅。

警告中的术语“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。

1) 工作场地的安全

- 保持工作场地清洁和明亮。** 杂乱和黑暗的场地会引发事故。
- 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。
- 操作电动工具时, 远离儿童和旁观者。** 注意力不集中会使你失去对工具的控制。

2) 电气安全

- 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降低电击风险。
- 避免人体接触接地表面, 如管道、散热片和冰箱。** 如果你身体接触接地表面会增加电击风险。
- 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风险。
- 不得滥用软线。绝不能用软线搬运、拉动电动工具或拔出其插头。** 使软线远离热源、油、锐边或运动部件。受损或缠绕的软线会增加电击风险。
- 当在户外使用电动工具时, 使用适合户外使用的延长线。** 适合户外使用的电线将降低电击风险。
- 如果无法避免在潮湿环境中操作电动工具, 应使用带有剩余电流装置(RCD)保护的电源。** RCD的使用可降低电击风险。

3) 人身安全

- 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。
- 使用个人防护装置。始终佩戴护目镜。** 防护装置, 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。
- 防止意外启动。** 在连接电源和/或电池包、拿起或搬运工具前确保开关处于关断位置。手指放在开关上搬运工具或开关处于接通时通电会导致危险。
- 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。
- 手不要过分伸展。时刻注意立足点和身体平衡。** 这样能在意外情况下能更好地控制住电动工具。

- f) **着装适当。不要穿宽松衣服或佩戴饰品。让你的头发和衣服远离运动部件。**宽松衣服、配饰或长发可能会卷入运动部件。
- g) **如果提供了与排屑、集尘设备连接用的装置，要确保其连接完好且使用得当。**使用集尘装置可降低尘屑引起的危险。
- h) **不要因为频繁使用工具而产生的熟悉感而掉以轻心，忽视工具的安全准则。**某个粗心的动作可能在瞬间导致严重的伤害。

4) 电动工具使用和注意事项

- a) **不要勉强使用电动工具，根据用途使用合适的电动工具。**选用合适的按照额定值设计的电动工具会使你工作更有效、更安全。
- b) **如果开关不能接通或关断电源，则不能使用该电动工具。**不能通过开关来控制的电动工具是危险的且必须进行修理。
- c) **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/或卸下电池包（如可拆卸）。**这种防护性的安全措施降低了电动工具意外起动的风险。
- d) **将闲置不用的电动工具贮存在儿童所及范围之外，并且不允许不熟悉电动工具和不了解这些说明的人操作电动工具。**电动工具在未经培训的使用者手中是危险的。
- e) **维护电动工具及其附件。**检查运动部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，应在使用前修理好电动工具。许多事故是由维护不良的电动工具引发的。
- f) **保持切削刀具锋利和清洁。**维护良好地有锋利切削刀的刀具不易卡住而且容易控制。
- g) **按照使用说明书，并考虑作业条件和要进行的作业来选择电动工具、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情况。
- h) **保持手柄和握持表面干燥、清洁，不得沾有油脂。**在意外的情况下，湿滑的手柄不能保证握持的安全和对工具的控制。

5) 电池式工具使用和注意事项：

- a) **仅使用生产者规定的充电器充电。**将适用于某种电池包的充电器用到其他电池包时可能会发生着火危险。
- b) **仅使用配有专用电池包的电动工具。**使用其他电池包可能会产生伤害和着火危险。
- c) **当电池包不用时，将它远离其他金属物体，例如回形针、硬币、钥匙、钉子、螺钉或其他小金属物体，以防电池包一端与另一端连接。**电池组端部短路会引起燃烧或着火。
- d) **在滥用条件下，液体可能会从电池组中溅出，应避免接触。**如果意外碰到液体，用水冲洗。如果液体碰到了眼睛，还应寻求医疗帮助。从电池中溅出的液体可能会发生腐蚀或燃烧。
- e) **不要使用损坏或改装过的电池包或工具。**损坏或改装过的电池组可能呈现无法预测的结果，导致着火、爆炸或伤害。
- f) **不要将电池包暴露于火或高温中。**电池包暴露于火或高于130°C的高温中可能导致爆炸。

6) 维修

- a) **让专业维修人员使用相同的备件维修电动工具。**这将保证所维修的电动工具的安全。
- b) **决不能维修损坏的电池包。**电池包仅能由生产者或其授权的维修服务商进行维修。

对所有操作的安全说明

磨削、砂磨、钢丝刷打磨、抛光、雕刻或磨切操作通用安全警告

- a) **本电动工具旨在作为磨削、砂光机、钢丝刷、抛光机、雕刻工具或切割工具使用。阅读随电动工具提供的所有安全警告、说明、图示和规定。**不遵照以下所列说明会导致电击、着火和/或严重伤害。
- b) **请勿使用非工具厂商专门设计并指定的配件。**配件能被安装到电动工具上并不能确保操作安全。
- c) **配件的额定速度必须至少与电动工具上标注的最大速度相当。**若配件转速高于额定速度，可能会被碎并向四周飞溅。
- d) **配件的外径和厚度不得超过电动工具的额定值。**若配件尺寸不当，便无法被充分掌控。
- e) **砂轮、砂鼓或任何其他配件的轴径尺寸，必须与电动工具的主轴或夹头正确配合。**与电动工具安装硬件不匹配的配件会在运行过程中失衡，剧烈震动，还会导致工具失控。
- f) **带心轴的砂轮、砂鼓、切割刀或其他配件，必须完全插入夹头或卡盘中。**如果心轴夹持不牢固和/或砂轮的外露长度过长，已装配的砂轮可能会松脱，并高速甩出。
- g) **请勿使用已经损坏的配件。**每次使用前，请检查配件：例如检查砂轮是否有碎屑或裂痕，检查砂磨鼓是否有裂痕、撕裂或过度磨损，检查钢丝刷的钢丝是否松动或断裂。若电动工具或配件掉落，请检查是否出现损坏，或安装一个完好无损的配件。完成对配件的检查和安装后，请让自己和围观人员远离转动配件所形成的平面，之后让工具以最大空载转速运行1分钟。在测试时间内，损坏配件一般会破裂。
- h) **请使用个人防护装置。**根据使用情况，请佩戴面罩、护目镜或安全眼镜。在适当情况下，佩戴防尘面罩、听力保护装置、手套和车间围裙，能够预防细小碎屑或工件碎片溅到身上。护眼装置必须要能够防止操作中产生的飞溅碎屑。防尘面罩或呼吸器必须能够过滤作业过程中产生的颗粒物。长期暴露在高强度的噪音环境中可能会导致听力丧失。
- i) **请让围观人员与操作现场保持安全距离。**任何进入操作区域的人员必须穿戴个人防护设备。工件碎片或破碎的配件会飞溅到操作区域以外的范围，导致人员受伤。
- j) **若在操作中，切削配件会触及隐藏在墙内的电线，请握住电动工具的绝缘握持面。**切削配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人员触电。
- k) **启动工具时，务必以一手或双手牢牢握持工具。**电机加速至全速运转时产生的反应扭矩，可能会使工具突然扭动。
- l) **只要实际可行，就使用夹具支撑工件。**使用中，不得一手握持小工件，一手操作工具。请用夹具固定小工件，让您的手可以专心、安全地控制工具。圆棒、管材等圆形工件在切削或研磨时容易滚动，可能导致磨头卡住，甚至朝您的方向跳动。
- m) **不得在配件尚未完全停转的情况下，放下电动工具。**转动的配件可能会切入表面，进而拉动电动工具，使其失控。
- n) **更换刀头或进行任何调整后，务必确认夹头螺帽、夹头及其他各项调整装置已确实锁紧。**松动的调整装置可能会意外移动，导致工具失控；松动的旋转部件可能会被猛烈抛出。
- o) **当您随身携带电动工具时，请勿运行工具。**意外触碰到转动的配件可能会将衣物卷入，使得配件造成人身伤害。

p) 请定期清洁电动工具的排气口。电机风扇会将粉尘吸入外壳,而金属粉末过度堆积会导致电气危害。

q) 请勿在易燃材料附近操作电动工具。操作过程中产生的火花可能会引燃这些材料。

r) 请勿使用需要液态冷却剂的配件。使用水或其他液态冷却剂可能导致电击致死或触电。

对所有操作的进一步安全说明 回弹和相关警告

回弹是指砂轮、砂光垫、刷子或任何其他配件被夹住或卡住时产生的突然反应。配件若被挤压或卡住,就会迅速堵转,进而使失控的动力工具被迫沿配件旋转方向的相反方向运动。

例如,若砂轮被工件卡住或夹住,进入卡顿点的砂轮边缘就会切入材料表面,使得砂轮会出现爬出或弹出的现象。砂轮可能弹向操作人员,也可能反方向弹出,具体取决于砂轮的卡顿点的转动情况。此种情况下,砂轮可能会破裂。

回弹是由于电锯使用不当或操作流程或条件有误造成的。如能按照以下说明采取适当的防护措施,就能避免回弹:

a) 双手紧握电动工具,让身体和双臂处于正确位置,抵抗回弹力。若采取适当的预防措施,操作人员就能够控制回弹力。

b) 在处理拐角、锐边等部位时,需多加小心。避免出现回弹和配件被夹住的情况。拐角、锐边或弹起都容易卡住转动的配件,导致电动工具失控或回弹。

c) 请勿安装带有锯齿的锯片。此种锯片会频繁产生回弹和失控的情况。

d) 操作时,刀头送入工件的方向,必须与切削刀自工件退出的方向相同(即与切削排出的方向相同)。若以错误方向进给,会导致刀头的切削刀爬升,离开工件,并朝该进给方向猛然拉动工具。

e) 使用旋转锉刀、切割砂轮、高速切割刀或钨钢切割刀时,必须将工件牢固夹持固定。这些砂轮在沟槽内只要稍微倾斜,就可能被卡住并产生回弹。当切割砂轮被卡住,砂轮本身通常会破裂。当旋转锉刀、高速切割刀或钨钢切割刀被卡住,可能会从沟槽中跳出,导致工具失控。

磨削和砂轮切割操作的专用安全警告:

a) 仅使用适用于本工具且经推荐的砂轮类型,并且只用于所建议的应用场合。例如:请勿用切割砂轮的侧面进行磨削操作。磨料切割砂轮适用于周边磨削;若施加侧面应力可能会致其破碎。

b) 对于螺旋式砂轮锥形磨头和塞形磨头,只能使用规格(尺寸和长度)正确、肩部法兰未削弱且完好无损的砂轮心轴。使用合适的心轴可降低断裂的可能性。

c) 请勿“卡住”切割砂轮或施加过大压力。请勿试图进行过于深度的切削。对砂轮过度施压会增大其负荷,增加砂轮在切割时扭曲或卡住的敏感性,并可能导致回弹或砂轮破裂。

d) 请勿将手置于旋转砂轮运行轨迹的正后方。在操作点上,若砂轮远离您的手时,可能出现的回弹可能会将正在转动的砂轮以及电动工具直接朝你推来。

e) 当砂轮被卡住、受阻或因任何原因需要中断切割时,请关闭电动工具并保持工具不动,直至砂轮完全停止。当切割砂轮仍

在转动时,不得尝试将其从工件中移开,否则可能会出现回弹。应检查并采取纠正措施,消除导致砂轮卡滞或受阻的原因。

f) 请勿在砂轮仍未退出工件时重新启动工具。先让砂轮全速转动,再小心地重新进行切割。如在砂轮仍未退出工件时重新启动工具,砂轮可能会被夹住,爬坡或回弹。

g) 请为面板或任何大型工件提供支撑,将砂轮卡顿和回弹的风险降到最低。大型工件会因为自身重量而下垂。必须在工件下方靠近切割线和工件边缘处提供支撑且支撑要位于砂轮两侧。

h) 当在现有墙面或其他盲区进行挖空切割时,请务必多加小心。凸轮可以切割气体管道或水管、电线或能够引发回弹的物体。

钢丝刷操作的专用安全警告

a) 请注意,即使在正常操作过程中,钢丝刷也会掉落钢丝。请勿向钢丝刷施加过多压力,以免让钢丝刷承担过大负载。金属刷毛能够轻易穿透轻薄的衣物和/或皮肤。

b) 使用刷具前,请先让刷具以工作转速空转至少一分钟。在此期间,不得有人站在刷具正前方或与刷具旋转方向同一直线的位置。在磨合空转期间,松脱的刷毛或钢丝可能会被甩出。

c) 请将旋转钢丝刷的甩出方向朝向远离自身的一侧。使用这些刷具时,细小颗粒与钢丝碎片可能会高速飞散,并可能刺入皮肤。

d) 操作人员以及在本产品使用范围 15.2 公尺内的所有人,必须佩戴护目镜或带有侧护片的安全眼镜,同时还要佩戴全脸式防护面罩。

剩余风险

即使执行了相关安全规定并采用安全设备,仍有一些无法避免的剩余风险。这些风险包括:

- 听力损伤。
- 飞溅颗粒造成的人身伤害风险。
- 配件在使用时发热而导致的灼伤风险。
- 长时间使用工具而引起的人身伤害风险。

减少粉尘暴露

开始工作前,请先检查操作过程中可能会产生的粉尘的危害等级。

▲ 警告:避免接触或吸入粉尘,因为它可能会有害健康。在使用电动工具和开展其他施工活动时产生的粉尘可能会含有化学物质、矿物质或颗粒。已知这些成分会导致用户或围观人员出现呼吸道感染、过敏反应、癌症、出生缺陷,或其他生殖系统伤害。

- 例如,在处理硬木,例如山毛榉或橡木、含铅油漆、混凝土、砖石或含石英的石块时,可能会产生这种粉尘。
- 含有石棉的物料必须由专业人员处理。
- 请遵守您所在国家针对即将加工物料的相关法规。
- 选用的粉尘吸取器或抽风系统需达到经官方认证的保护等级,同时符合当地的粉尘保护规定,还要适合有待加工的材料。
- 在粉尘源头直接捕集粉尘粒子,同时避免周围区域出现沉积。为此目的,请使用适宜的吸取配件。

附加安全措施：

- 请确保工作场所通风良好。

附加安全措施：

- 请确保工作场所通风良好。

- 请佩戴适合加工时产生的粉尘类型的呼吸面罩。

电池类型

这些电池包可用于：

电池	(千克)
DCB181	0.35
DCB182/DCB204	0.61
DCB183/DCB203	0.40
DCB184/DCB184G/ DCB205	0.62
DCB187	0.54
DCB189/DCB240	0.54
DCBP034	0.32
DCBP520	0.75
DCBP320	0.5
DCB2108	0.95

请参阅电池/充电器部分或说明书，了解更多信息。

包装内的物品

包装内的物品包括：

1 锂电无刷直磨机

1 扳手

1 6 毫米夹头

锂电池包

1 说明手册

注意：电池包、充电器和工具箱没有随N型号附送。电池包和充电器没有随NT型号附送。B型号包括Bluetooth® 电池包。

注意：Bluetooth®标志和徽标是注册商标，归Bluetooth®, SIG, Inc.所有，而且DeWALT对该标志的任何使用均获得许可。其他商标和商标名均归各自所有者所有。

- 检查工具、部件或配件是否在运输过程中损坏。
- 操作前，请抽空仔细阅读本说明书并理解其中的内容。

工具上的标记

为降低受伤风险，使用者必须遵守本工具上标示的下列安全指示。



使用前请阅读使用手册。



请戴好耳罩。



请佩戴护目装备。



可见光源。请勿直视发光部位

日期码的位置 (图B)

产品日期码 **14** 包含一个4位数年码，之后是一个2位数周码，再加上一个2位数出厂码。

说明 (图A)

▲ 警告：不得改装本电动工具或其任何部件。否则，可能造成人身伤害或工具损坏。

- 1 桨式开关
- 2 锁定开关
- 3 主轴
- 4 夹头螺帽
- 5 小扳手 (13 毫米)
- 6 大扳手 (17 毫米)
- 7 6 毫米夹头
- 8 电池
- 9 电池释放按钮
- 10 机身
- 11 LED工作灯
- 12 调档开关按钮
- 13 主轴锁定按钮

设计用途

本直磨机专为专业之研磨、打磨、刷磨、抛光、雕刻及砂轮切断等作业所设计。本工具可搭配多种 DeWALT 研磨配件使用，其砂轮最大直径为 38 毫米，且所使用配件的最低额定转速须不低于 24500 次/分钟。

请勿在潮湿环境中，或在存在易燃液体或气体的环境中使用本工具。

本直磨机是专业电动工具。

请勿让儿童接触本工具。缺乏经验的操作员需要在监督下使用本工具。

- **儿童和体弱者。**在没有他人监督的情况下，儿童或体弱者不适宜使用本产品。
- 本产品不适合体力、感官或智力不足以及缺乏经验、知识或技能的人员 (包括儿童) 使用，除非一旁有能为他们的安全负责的监督人员。不得在无人监管的情况下让儿童接触本产品。

功能部件

E-Switch Protection™

“开/关”桨式开关具备无电压释放功能。若工具意外停机，必须先完全松开桨式开关，再重新按压，才可重新启动。

DeWALT 抗旋转系统

当侦测到配件被卡住，出现堵转或被卡死，此功能会迅速停止配件运转，以降低反应扭矩。若要重启工具，必须对桨式开关进行一次循环操作 (先关再开)，才可重新启动。

Power-OFF™ 过载保护

当电机过载，电源供应将自动降低。若电机持续过载，直磨机将自动关闭。此时，先松开开关，然后再次按下，才能重启工具。每当电流负载达到过载电流值 (电机烧毁点) 时，直磨机即会断电。若持续发生过载关机，请减轻对直磨机施加的力度，直至其可在不过载的情况下正常工作。

电子软启动

本功能会限制工具在启动瞬间的冲击力，使转速在约 1 秒的时间内逐步提升。

组装和调整

▲ 警告:为降低造成严重人身伤害的风险,在进行任何调整、拆卸/安装配件或配件前,切记关闭工具并断开电池包。意外启动可能会造成伤害。

▲ 警告:仅使用电池和充电器。

在工具上安装和拆除电池包(图B)

注意:确保电池包 **8** 电量充满。

将电池包安装到工具手柄中

1. 将电池包与工具手柄内的轨道对齐(图B)。
2. 将电池包划入手柄中,直到电池包被牢固地安装在工具中,同时确保听见锁定到位的咔哒声。

从工具中取出电池包

1. 按下释放按钮 **9**, 将电池包从工具握柄中慢慢拉出。
2. 将电池包插入充电器。

电池包电量计(图B)

一些DEWALT电池包带有一个包含三个绿色LED指示灯的电量计 **15**, 用于指示电池包内的剩余电量。

按下电量计按钮不松开,即可启动电量计。三个LED指示灯将以组合方式亮起,以指示剩余电量。当电池内的电量低于可用限制时,电量计将不会亮起,电池将需要重新充电。

注意:电量计仅指示电池包的剩余电量。它并不表示该工具的功能,且将根据产品组件、温度和最终用户的使用情况而有所不同。

安装配件(图A)

▲ 警告:所用配件的额定转速必须至少等于本机标示的最高转速。若配件转速高于额定速度,可能会破碎并向四周飞溅。

▲ 警告:所用配件必须符合本工具上标示的适用能力范围。若配件尺寸不当,便无法被充分掌控。

▲ 警告:请勿使用心轴长度超过2.0英寸(50毫米)的附件。将配件装入夹头后,必须确认外露的心轴长度不超过1.0英寸(25毫米)。

▲ 警告:飞射危险。仅使用柄径与已安装夹头规格相符的配件。柄径较小的配件无法被夹紧,可能在操作过程中松脱。

▲ 小心:不得在未先于夹头内安装配件的情况下旋紧夹头。即使只是徒手旋紧空夹头,也可能造成夹头损坏。

本工具随附一个6毫米的夹头 **7**。

1. 按压主轴锁定按钮 **13**。
2. 逆时针旋转松开夹头螺帽 **4**。
3. 将配件的柄部插入6毫米夹头 **7** 中。
4. 使用随附大扳手 **6** 旋紧夹头。

拆除配件

1. 按压主轴锁。
2. 逆时针旋转松开夹头螺帽 **4**。
3. 从6毫米夹头 **7** 中取出柄部。

启动工具时(装上新的或更换后的砂轮),应在安全防护良好的区域内握持本工具。若砂轮存在未被发现的裂纹或瑕疵,一般会在1分钟内破裂。在砂轮正对方向有人时,不得启动本工具。包括操作者本人。

操作使用说明

▲ 警告:请始终遵守安全法规以及适用规章的要求。

▲ 警告:为降低造成严重人身伤害的风险,在进行任何调整、拆卸/安装配件或配件前,切记关闭工具并断开电池组。意外启动可能会造成伤害。

正确的双手放置位置(图C)

▲ 警告:为减低严重人身伤害的风险,请务必如图示那样正确放置双手。

▲ 警告:为降低严重人身伤害的风险,预期有突然的反作用力时,请务必握紧工具。

正确的双手放置位置要求您一手握住机身 **10**。

桨式开关(图A)

▲ 小心:在启动、使用过程中以及砂轮或配件完全停转前,务必紧握机身以保持对工具的控制。在放下工具前,务必确认砂轮已完全停转。

注意:为减少工具意外移动,请勿在工具承受负载时开启或关闭开关。待直磨机全速运转后,再让其接触工件表面。先让工具离开工件表面,再关闭工具。先等待工具完全停止运转,再将工具放下。

1. 要启动工具,请先将锁定杆 **2** 推向工具前端,然后按压桨式开关 **1**。只要按住开关,工具就会持续运行。
2. 如需关闭工具,请松开桨式开关。

四档调档开关(图A)

▲ 警告:无论速度如何设置,附件的额定速度必须至少等于工具上标注的最大速度。

本工具具备四档调速功能,可让您依据不同作业要求以及所用配件,选择适当的转速范围。如需选择最低速度,请关闭工具,等待其完全停止。按压调档开关按钮 **12**,即可在四个档位间循环切换,其中1档为最低速,4档为最高速。

注意:在使用过程中,不得改变速度档位。在切换至新档位前,请先松开桨式开关,并让工具完全停转,然后选择新档位。

LED工作灯(图A)

▲ 小心:请勿直视工作灯。可能会让眼部严重受伤。

位于夹头周围的LED工作灯 **11** 会在按压桨式开关时自动点亮。松开开关,工作灯持续亮起20秒后熄灭。

注意:工作灯能够照亮近距离的工作台面,但不可将其用作电筒。

使用说明(图D, E)

▲ 警告:

- 确保所有待打磨或切割的材料都已被牢固固定。
- 应使用夹钳或台虎钳将工件固定并支撑在稳定的平台上。牢固地夹紧和支撑工件至关重要,这可防止工件移动和失控。工件移动或失控可能产生危险,导致人身伤害。
- 固定工件被夹在夹具或虎钳里的工件,比手持更为牢固。

- 请为面板或任何大型工件提供支撑，将砂轮卡顿和回弹的风险降到最低。大型工件会因为自身重量而下垂。必须在工件下方靠近切割线和工件边缘处提供支撑且支撑要位于砂轮两侧。
- 操作时，请务必佩戴普通工作手套。
- 在使用过程中，传动轴会发烫。
- 仅需对工具施加轻柔的压力。请勿对砂轮施加侧向压力。
- 避免工具过载。若工具过热，请使其在空载状态下运行数分钟。
- 将工具角度设置为90°时，可获得最佳研磨效果。操作时，以适中的压力来回移动机器。这样可避免工件过热变色，也能防止工件出现不应有的磨痕。

▲ 警告：紧握工具，在启动、使用过程中以及砂轮或配件完全停转前，始终保持对工具的控制。在放下工具前，务必确认砂轮已完全停转。

请将工件放入虎钳，或用夹具将其夹紧。若作业过程中产生粉尘，应佩戴覆盖口鼻的防尘口罩。使用砂轮时，应小心谨慎。请勿将砂轮强行压入工件，或施加不必要的过大压力。除非使用专门设计、允许在侧面进行研磨的砂轮，否则仅可在砂轮的工作面研磨。

涂刷涂料时需采取的防护措施

1. 不建议涂刷含铅涂料，因为难以控制污染粉尘。铅中毒对儿童和孕妇危害最大。
2. 由于难以通过化学分析以外的方式识别油漆中是否含铅，我们建议在打磨任何油漆时采取以下防护措施：

人身安全

1. 在进行油漆打磨作业及现场清理完成前，儿童或孕妇不得进入工作区域。
 2. 所有进入工作区的人员均应佩戴防尘面具或呼吸面罩。应每日或在佩戴者感到呼吸困难时更换过滤器。
- 注意：**仅可佩戴能够过滤含铅油漆粉尘和烟雾的防尘面罩。普通喷漆面罩无法提供相应防护。请咨询您所在当地的五金经销商，购买合适的面罩。
3. 不得在工作区域进食、饮水或抽烟，以防摄入被污染的油漆颗粒。工作人员在进食、饮水或抽烟前，应该清洗干净。不得将食物、饮品或香烟留在工作区域，因为粉尘会落在它们之上。

环境安全

1. 应妥善去除油漆，尽量减少由此产生的粉尘。
2. 应使用厚度为4毫米的塑料板将正在打磨除漆的区域围住。
3. 打磨作业应以减少油漆粉尘扩散至工作区域外的方式进行。

清洁和处理

1. 在打磨项目期间，应每日对工作区域内所有表面进行吸尘和彻底清洁。应频繁更换真空清洁过滤器。
2. 布应与粉尘或其他碎屑一同收集处理。应将塑料布放在密封的垃圾容器中，并通过正常的垃圾回收程序进行处理。在清洁过程中，儿童和孕妇应远离工作区域。
3. 应先彻底清洗所有儿童使用的玩具、可清洗的家居和用具，然后再使用。

维护

您的电动工具只需简单保养，即可长期使用。若要持续获得满意的操作效果，需进行正确的工具维护和定期的清洁。

▲ 警告：为降低造成严重人身伤害的风险，在进行任何调整、拆卸/安装配件或配件前，切记关闭工具并断开电池包。意外启动可能会造成伤害。

充电器和电池包无法维修。

请参见本手册背面内容，获取维修中心的联系信息，或访问 www.2helpU.com。

润滑

本电动工具无需另行润滑。

清洁

▲ 警告：触电和机械危害。在进行清洁工具前，必须断开电源插头和/或取下电池包（如可拆卸）。

▲ 警告：为确保操作安全、高效，请务必保持本产品及通风槽（如有）的清洁。请使用干燥、柔软的非金属刷和/或恰当的吸尘器清洁器来清洁通风槽。请勿使用水或任何清洁剂。

▲ 警告：请经常用干燥的空气吹扫机箱中的污垢和粉尘，因为粉尘会积聚在通风口内和周围。在进行该操作时，请佩戴经过批准的护眼装置和防尘面罩。

▲ 警告：不得使用溶剂或其他刺激性化学品来清洁工具的非金属部件。这些化学品会侵蚀这些部件所用的材料。仅使用蘸有温和肥皂水的湿布进行擦拭。不得让液体侵入工具内部。不得将产品的任何部位浸入液体中。

可选配件

▲ 警告：除了DeWALT提供的配件之外，其他配件都未接受过此产品兼容性测试。若将此类配件与本产品一起使用，将存在安全隐患。为降低人身伤害风险，本产品只可使用DeWALT推荐的配件。

▲ 警告：请勿使用过期的固结磨具砂轮。过期日期（EXP）通常标注在砂轮中心附近（如有标注）。已过期的砂轮很可能破碎，导致严重的人身伤害。请将黏结式砂轮存放在温度和湿度适中的干燥处。请销毁已过期或损坏的砂轮，使其无法使用。请咨询您的经销商，了解更多关于合适配件的信息。

保护环境



产品/电池可回收利用，但若标有打叉垃圾桶的图标，则禁止将其随普通生活垃圾一起丢弃。

请将电池电量耗尽后拆卸下来，同时尽可能将任何可拆卸的光源部件与产品主体分离。用户需自行清除产品内的个人数据。随后，请将废弃物送往指定回收点或合作零售点，通常可免费处理。包装材料应根据材质代码分类弃置。只可在产品报废后，才可丢弃操作指南和安全说明书。

废弃物处理细则请查阅当地社区/城市管理规定。如需获得更多信息，请访问www.2helpU.com。

售后服务和维修

DeWALT 授权服务中心配备了训练有素的工作人员，旨在为您提供高效、可靠的产品服务。

若您在非授权服务中心进行维修，本公司将不承担任何责任。您可参考产品包装内附的“服务中心查询指南”单页，并通过客服热线、官方网站或社交媒体联系我们，以查询离您最近的 DeWALT 服务中心。

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