
DEWALT®

XR LI-ION

English	3
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Fig. A

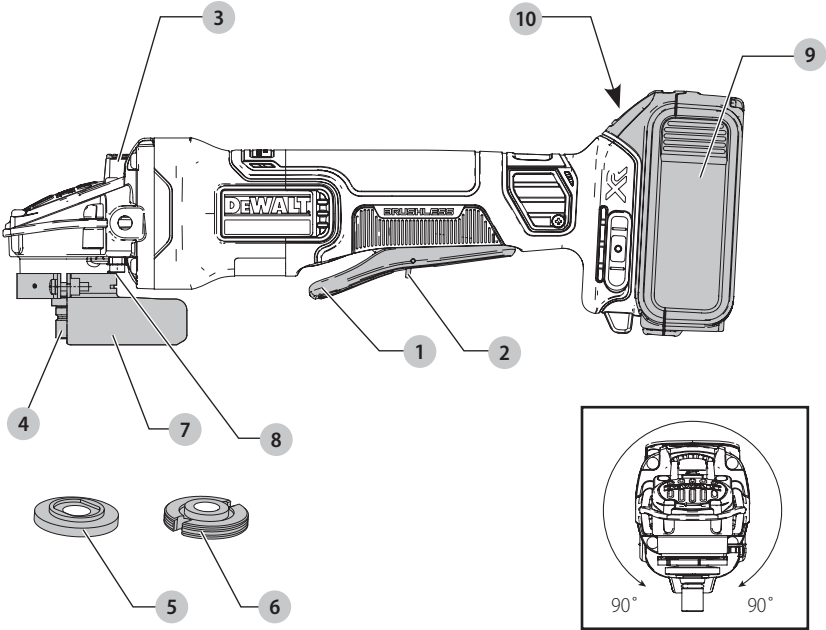


Fig. B

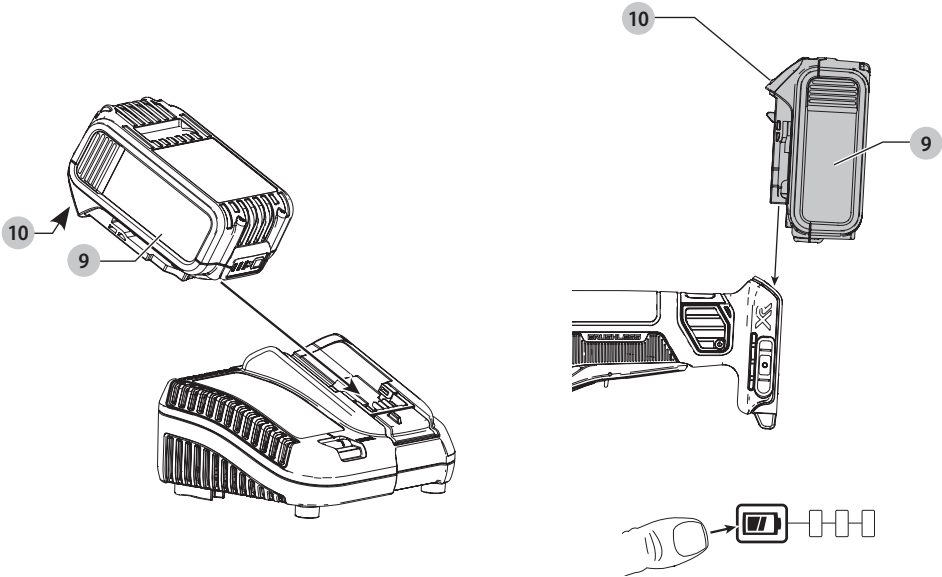


Fig. C

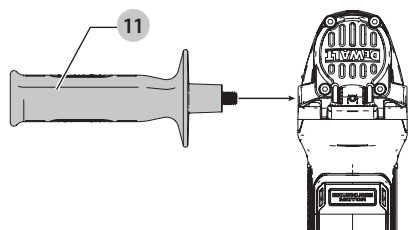


Fig. D

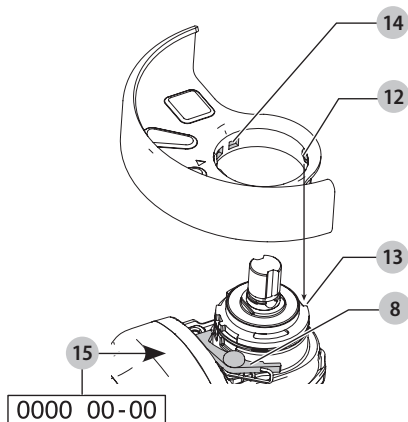
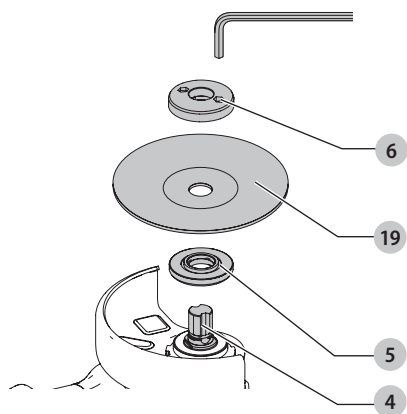


Fig. E



TW only

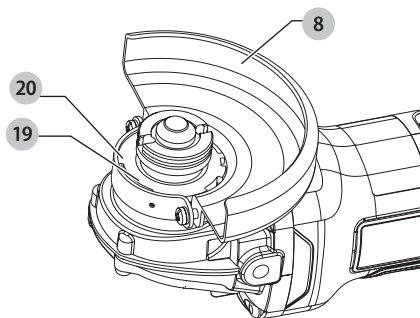


Fig. F

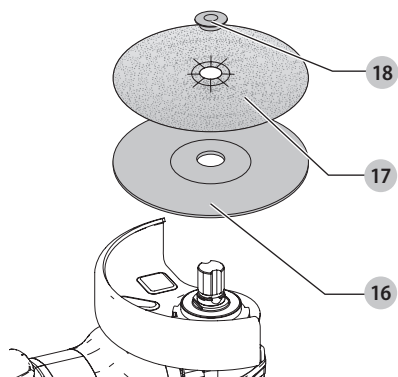
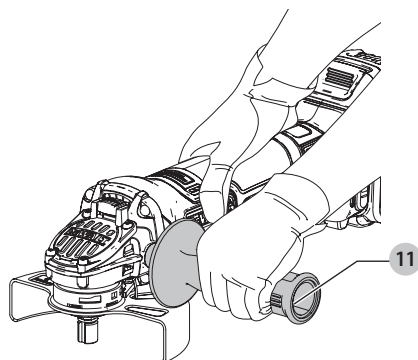


Fig. G



CORDLESS SMALL ANGLE GRINDER

DCG406

Congratulations!

You have chosen a DEWALT tool. Years of experience, thorough product development and innovation make DEWALT one of the most reliable partners for professional power tool users.

Technical Data

DCG406		
Voltage	V _{DC}	18 (20 Max)
Battery type		Li-Ion
Power output	W	800
No-load/rated speed	min ⁻¹	9000
Wheel diameter	mm	100
Wheel thickness (max)	mm	4
Spindle diameter		M10
Spindle length	mm	16
Weight (without battery pack)*	kg	1.74

* weight includes side handle and guard

Batteries				Chargers / Charge Times (Minutes)							
Cat#	V _{DC}	Ah	Weight(kg)	DCB104	DCB107	DCB112	DCB113	DCB115	DCB118	DCB132	DCB119
DCB546/DCB606	18/54 (20/60 Max)	6.0/2.0	1.05	60	270	170	140	90	60	90	X
DCB547/DCB609	18/54 (20/60 Max)	9.0/3.0	1.46	75*	420	270	220	135*	75*	135*	X
DCB548/DCB612	18/54 (20/60 Max)	12.0/4.0	1.44	120	540	350	300	180	120	180	X
DCB181	18 (20 Max)	1.5	0.35	22	70	45	35	22	22	22	45
DCB182/DCB204	18 (20 Max)	4.0	0.61	60/40**	185	120	100	60	60/40**	60	120
DCB183/DCB203	18 (20 Max)	2.0	0.40	30	90	60	50	30	30	30	60
DCB184/DCB205	18 (20 Max)	5.0	0.62	75/50**	240	150	120	75	75/50**	75	150
DCB185	18 (20 Max)	1.3	0.35	22	60	40	30	22	22	22	X
DCB187	18 (20 Max)	3.0	0.54	45	140	90	70	45	45	45	90
DCB189	18 (20 Max)	4.0	0.54	60	185	120	100	60	60	60	120



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 and all instructions. Failure to follow the warnings and instructions 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

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

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.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

4) Power tool use and care

- 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.
- 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 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.
- b) **Operations such as polishing 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 can not 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 wheel 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.

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.
- 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 tool may contact hidden wiring.** Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.

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.

ADDITIONAL SPECIFIC SAFETY RULES

Safety Instructions for All Operations

- a) **This power tool is intended to function as a grinder, sander, wire brush 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.

- k) **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.
- l) **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.
- m) **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.
- n) **Do not operate the power tool near flammable materials.** Sparks could ignite these materials.
- o) **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

Causes and Operator Prevention of Kickback

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 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 reaction 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 and Abrasive Cutting-Off Operations

- 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 the operator from broken wheel fragments, 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.

Additional Safety Warnings Specific for Abrasive Cutting-Off Operations

- a) **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 binding of the wheel in the cut and the possibility of kickback or wheel breakage.
- b) **Do not position your body in line with and behind the rotating wheel.** When the wheel, at the point of operations, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.
- c) **When wheel is binding 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 binding.

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

- a) **Do not use excessively oversized sanding disc paper. Follow manufacturer's recommendations, when selecting sanding paper.** Larger sanding paper extending beyond the sanding pad presents a laceration hazard and may cause snagging, tearing of the disc or 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) **If the use of a guard is recommended for wire brushing, do not allow any interference of the wire wheel or brush with the guard.** Wire wheel or brush may expand in diameter due to work and centrifugal forces.

Additional Safety Rules for Grinders

- a) **Do not use Type 11 (flaring cup) wheels on this tool.** Using inappropriate accessories can result in injury.
- b) **Always use side handle. Tighten the handle securely.** The side handle should always be used to maintain control of the tool at all times.

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.

- Risk of dust from hazardous substances.

Electrical Safety

The electric motor has been designed for one voltage only. Always check that the battery pack voltage corresponds to the voltage on the rating plate. Also make sure that the voltage of your charger corresponds to that of your mains.



Your DEWALT charger is double insulated in accordance with IEC60335; therefore no earth wire is required.

If the supply cord is damaged, it must be replaced by a specially prepared cord available through the DEWALT service organisation.

Using an Extension Cable

An extension cord should not be used unless absolutely necessary. Use an approved extension cable suitable for the power input of your charger (see **Technical Data**). The minimum conductor size is 1 mm²; the maximum length is 30 m.

When using a cable reel, always unwind the cable completely.

SAVE THESE INSTRUCTIONS

Chargers

DEWALT chargers require no adjustment and are designed to be as easy as possible to operate.

Important Safety Instructions for All Battery Chargers

SAVE THESE INSTRUCTIONS: This manual contains important safety and operating instructions for compatible battery chargers (refer to **Technical Data**).

- Before using charger, read all instructions and cautionary markings on charger, battery pack, and product using battery pack.



WARNING: Shock hazard. Do not allow any liquid to get inside charger. Electric shock may result.



WARNING: We recommend the use of a residual current device with a residual current rating of 30mA or less.



CAUTION: Burn hazard. To reduce the risk of injury, charge only DEWALT rechargeable batteries. Other types of batteries may burst causing personal injury and damage.



CAUTION: Children should be supervised to ensure that they do not play with the appliance.

NOTICE: Under certain conditions, with the charger plugged into the power supply, the exposed charging contacts inside the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean

- **DO NOT attempt to charge the battery pack with any chargers other than the ones in this manual.** The charger and battery pack are specifically designed to work together.

- **These chargers are not intended for any uses other than charging DEWALT rechargeable batteries.** Any other uses may result in risk of fire, electric shock or electrocution.
- **Do not expose charger to rain or snow.**
- **Pull by plug rather than cord when disconnecting charger.** This will reduce risk of damage to electric plug and cord.
- **Make sure that cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.**
- **Do not use an extension cord unless it is absolutely necessary.** Use of improper extension cord could result in risk of fire, electric shock, or electrocution.
- **Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat.** Place the charger in a position away from any heat source. The charger is ventilated through slots in the top and the bottom of the housing.
- **Do not operate charger with damaged cord or plug—** have them replaced immediately.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way.** Take it to an authorised service centre.
- **Do not disassemble charger; take it to an authorised service centre when service or repair is required.** Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- **In case of damaged power supply cord the supply cord must be replaced immediately by the manufacturer, its service agent or similar qualified person to prevent any hazard.**
- **Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock.** Removing the battery pack will not reduce this risk.
- **NEVER attempt to connect two chargers together.**
- **The charger is designed to operate on standard 230V household electrical power. Do not attempt to use it on any other voltage.** This does not apply to the vehicular charger.

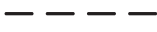
Charging a Battery (Fig. B)

1. Plug the charger into an appropriate outlet before inserting battery pack.
2. Insert the battery pack 9 into the charger, making sure the battery pack is fully seated in the charger. The red (charging) light will blink repeatedly indicating that the charging process has started.
3. The completion of charge will be indicated by the red light remaining ON continuously. The battery pack is fully charged and may be used at this time or left in the charger. To remove the battery pack from the charger, push the battery release button 10 on the battery pack.

NOTE: To ensure maximum performance and life of lithium-ion battery packs, charge the battery pack fully before first use.

Charger Operation

Refer to the indicators below for the charge status of the battery pack.

Charge Indicators	
	Charging 
	Fully Charged 
	Hot/Cold Pack Delay* 

*The red light will continue to blink, but a yellow indicator light will be illuminated during this operation. Once the battery pack has reached an appropriate temperature, the yellow light will turn off and the charger will resume the charging procedure. The compatible charger(s) will not charge a faulty battery pack. The charger will indicate faulty battery by refusing to light or by displaying problem pack or charger blink pattern.

NOTE: This could also mean a problem with a charger.

If the charger indicates a problem, take the charger and battery pack to be tested at an authorised service centre.

Hot/Cold Pack Delay

When the charger detects a battery pack that is too hot or too cold, it automatically starts a Hot/Cold Pack Delay, suspending charging until the battery pack has reached an appropriate temperature. The charger then automatically switches to the pack charging mode. This feature ensures maximum battery pack life.

A cold battery pack will charge at a slower rate than a warm battery pack. The battery pack will charge at that slower rate throughout the entire charging cycle and will not return to maximum charge rate even if the battery pack warms.

The DCB118 charger is equipped with an internal fan designed to cool the battery pack. The fan will turn on automatically when the battery pack needs to be cooled. Never operate the charger if the fan does not operate properly or if ventilation slots are blocked. Do not permit foreign objects to enter the interior of the charger.

Electronic Protection System

XR Li-Ion tools are designed with an Electronic Protection System that will protect the battery pack against overloading, overheating or deep discharge.

The tool will automatically turn off if the Electronic Protection System engages. If this occurs, place the lithium-ion battery pack on the charger until it is fully charged.

Wall Mounting

These chargers are designed to be wall mountable or to sit upright on a table or work surface. If wall mounting, locate the charger within reach of an electrical outlet, and away from a corner or other obstructions which may impede air flow. Use the back of the charger as a template for the location of the mounting screws on the wall. Mount the charger securely using drywall screws (purchased separately) at least 25.4 mm long with a screw head diameter of 7–9 mm, screwed into wood to an optimal depth leaving approximately 5.5 mm of the screw

exposed. Align the slots on the back of the charger with the exposed screws and fully engage them in the slots.

Charger Cleaning Instructions



WARNING: Shock hazard. Disconnect the charger from the AC outlet before cleaning. Dirt and grease may be removed from the exterior of the charger using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

Battery Packs

Important Safety Instructions for All Battery Packs

When ordering replacement battery packs, be sure to include catalogue number and voltage.

The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below. Then follow charging procedures outlined.

READ ALL INSTRUCTIONS

- **Do not charge or use battery in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Inserting or removing the battery from the charger may ignite the dust or fumes.
- **Never force battery pack into charger. Do not modify battery pack in any way to fit into a non-compatible charger as battery pack may rupture causing serious personal injury.**
- *Charge the battery packs only in DEWALT chargers.*
- **DO NOT** splash or immerse in water or other liquids.
- **Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 40 °C (104 °F) (such as outside sheds or metal buildings in summer).**
- **Do not incinerate the battery pack even if it is severely damaged or is completely worn out.** The battery pack can explode in a fire. Toxic fumes and materials are created when lithium-ion battery packs are burned.
- **If battery contents come into contact with the skin, immediately wash area with mild soap and water.** If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.
- **Contents of opened battery cells may cause respiratory irritation.** Provide fresh air. If symptoms persists, seek medical attention.



WARNING: Burn hazard. Battery liquid may be flammable if exposed to spark or flame.



WARNING: Never attempt to open the battery pack for any reason. If battery pack case is cracked or damaged, do not insert into charger. Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (i.e., pierced with a nail, hit with

a hammer, stepped on). Electric shock or electrocution may result. Damaged battery packs should be returned to service centre for recycling.



WARNING: Fire hazard. Do not store or carry the battery pack so that metal objects can contact exposed battery terminals. For example, do not place the battery pack in aprons, pockets, tool boxes, product kit boxes, drawers, etc., with loose nails, screws, keys, etc.



CAUTION: When not in use, place tool on its side on a stable surface where it will not cause a tripping or falling hazard. Some tools with large battery packs will stand upright on the battery pack but may be easily knocked over.

Transportation



WARNING: Fire hazard. Transporting batteries can possibly cause fire if the battery terminals inadvertently come in contact with conductive materials. When transporting batteries, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit.

DEWALT batteries comply with all applicable shipping regulations as prescribed by industry and legal standards which include UN Recommendations on the Transport of Dangerous Goods; International Air Transport Association (IATA) Dangerous Goods Regulations, International Maritime Dangerous Goods (IMDG) Regulations, and the European Agreement Concerning The International Carriage of Dangerous Goods by Road (ADR). Lithium-ion cells and batteries have been tested to section 38.3 of the UN Recommendations on the Transport of Dangerous Goods Manual of Tests and Criteria.

In most instances, shipping a DEWALT battery pack will be excepted from being classified as a fully regulated Class 9 Hazardous Material. In general, only shipments containing a lithium-ion battery with an energy rating greater than 100 Watt Hours (Wh) will require being shipped as fully regulated Class 9. All lithium-ion batteries have the Watt Hour rating marked on the pack. Furthermore, due to regulation complexities, DEWALT does not recommend air shipping lithium-ion battery packs alone regardless of Watt Hour rating. Shipments of tools with batteries (combo kits) can be air shipped as excepted if the Watt Hour rating of the battery pack is no greater than 100 Whr. Regardless of whether a shipment is considered excepted or fully regulated, it is the shipper's responsibility to consult the latest regulations for packaging, labeling/marketing and documentation requirements.

The information provided in this section of the manual is provided in good faith and believed to be accurate at the time the document was created. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with the applicable regulations.

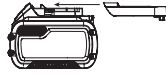
Transporting the FLEXVOLT™ Battery

The DEWALT FLEXVOLT™ battery has two modes: **Use** and **Transport**.

Use Mode: When the FLEXVOLT™ battery stands alone or is in a DEWALT 18 (20V Max) product, it will operate as an 18 (20V

Max) battery. When the FLEXVOLT™ battery is in a 54 (60V Max) or a 108 (120V Max) (two 54 (60V Max) batteries) product, it will operate as a 54 (60V Max) battery.

Transport Mode: When the cap is attached to the FLEXVOLT™ battery, the battery is in Transport mode. Keep the cap for shipping.



When in Transport mode, strings of cells are electrically disconnected within the pack resulting in 3 batteries with a lower Watt hour (Wh) rating as compared to 1 battery with a higher Watt hour rating. This increased quantity of 3 batteries with the lower Watt hour rating can exempt the pack from certain shipping regulations that are imposed upon the higher Watt hour batteries.

For example, the Transport Wh rating might indicate 3 x 40 Wh, meaning 3 batteries of 40 Wh each. The Use Wh rating might indicate 120 Wh (1 battery implied).

Example of Use and Transport Label Marking



Storage Recommendations

1. The best storage place is one that is cool and dry away from direct sunlight and excess heat or cold. For optimum battery performance and life, store battery packs at room temperature when not in use.
2. For long storage, it is recommended to store a fully charged battery pack in a cool, dry place out of the charger for optimal results.

NOTE: Battery packs should not be stored completely depleted of charge. The battery pack will need to be recharged before use.

Labels on Charger and Battery Pack

In addition to the pictographs used in this manual, the labels on the charger and the battery pack may show the following pictographs:



Read instruction manual before use.



See **Technical Data** for charging time.



Do not probe with conductive objects.



Do not charge damaged battery packs.



Do not expose to water.



Have defective cords replaced immediately.



Charge only between 4 °C and 40 °C.



Only for indoor use.



Discard the battery pack with due care for the environment.



Charge DEWALT battery packs only with designated DEWALT chargers. Charging battery packs other than the designated DEWALT batteries with a DEWALT charger may make them burst or lead to other dangerous situations.



Do not incinerate the battery pack.



USE (without transport cap). Example: Wh rating indicates 108 Wh (1 battery with 108 Wh).



TRANSPORT (with built-in transport cap). Example: Wh rating indicates 3 x 36 Wh (3 batteries of 36 Wh).

Battery Type

The DCG406 operates on a 18V (20V MAX) battery pack.

These battery packs may be used: DCB181, DCB182, DCB183, DCB184 DCB185, DCB187, DCB189, DCB203, DCB204, DCB205, DCB606, DCB609, DCB612, DCB546, DCB547, DCB548. Refer to **Technical Data** for more information.

Package Contents

The package contains:

- 1 Angle grinder
 - 1 Guard
 - 1 Side handle
 - 1 Backing flange
 - 1 Locking flange
 - 1 Wrench
 - 1 Li-Ion battery pack (C1, D1, L1, M1, P1, S1, T1, X1 models)
 - 2 Li-Ion battery packs (C2, D2, L2, M2, P2, S2, T2, X2 models)
 - 3 Li-Ion battery packs (C3, D3, L3, M3, P3, S3, T3, X3 models)
 - 1 Instruction manual
- 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

The following pictographs are shown on the tool:



Read instruction manual before use.



Wear ear protection.



Wear eye protection.

Date Code Position (Fig. D)

The date code **15** which also includes the year of manufacture, is printed into the housing.

Example:

2020 XX XX
Year of Manufacture

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 lever
- 3 Spindle lock button
- 4 Spindle
- 5 Backing flange
- 6 Locking flange
- 7 Guard
- 8 Guard release lever
- 9 Battery pack
- 10 Battery release button

Intended Use

Your cordless angle grinder has been designed for professional cutting, grinding, sanding and wire brush applications.

DO NOT use grinding wheels other than centre depressed wheels and flap discs.

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

Your cordless angle 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

Kickback Brake™

When a pinch, stall, or bind-up event is sensed, the electronic brake engages with maximum force to quickly stop the wheel, reduce the movement of the grinder, and shut the grinder off. The switch will need to be released then depressed to restart 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 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.

Anti-vibration Side Handle

The anti-vibration side handle offers added comfort by absorbing the vibrations caused by the tool.

Soft Start Feature

The soft start feature allows a slow speed build-up to avoid an initial jerk when starting. This feature is particularly useful when working in confined spaces.

No-Volt

The No-volt function stops the grinder restarting without the switch being cycled if there is a break in the power supply.

Electronic Clutch

The electronic torque limiting clutch reduces the maximum torque reaction transmitted to the operator in case of jamming of a disc. This feature also prevents the gearing and electric motor from stalling. The torque limiting clutch has been factory-set and cannot be adjusted.

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 DEWALT battery packs and chargers.*

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

NOTE: Make sure your battery pack **9** is fully charged.

To Install the Battery Pack into the Tool Handle

1. Align the battery pack **9** 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 release button **10** and firmly pull the battery pack out of the tool handle.
2. Insert battery pack into the charger as described in the charger section of this manual.

Fuel Gauge Battery Packs (Fig. B)

Some DEWALT battery packs include a fuel gauge which consists of three green 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 green 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.

Attaching Side Handle (Fig. C)



WARNING: Before using the tool, check that the handle is tightened securely.

Screw the side handle **11** tightly into one of the holes on either side of the gear case. The side handle should always be used to maintain control of the tool at all times.

Rotating the Gear Case (Fig. A)

To improve user comfort, the gear case will rotate 90° for cutting operations.

1. Remove the four corner screws attaching the gear case to motor housing.
2. Without separating the gear case from motor housing, rotate the gear case head to desired position.

NOTE: If the gear case and motor housing become separated by more than 3.17 mm, the tool must be serviced and re-assembled by a DEWALT service center. Failure to have the tool serviced may motor and bearing failure.

3. Reinstall screws to attach the gear case to the motor housing. Tighten screws to 12.5 in.-lbs. torque. Overtightening could cause screws to strip.

Guards



CAUTION: Guards must be used with all grinding wheels, cutting wheels, sanding flap discs, wire brushes, and wire wheels. The tool may be used without a guard only when sanding with conventional sanding discs. Refer to Figure A to see guards provided with the unit. Some applications may require purchasing the correct guard from your local dealer or authorized service centre.

NOTE: Edge grinding and cutting can be performed with Type 27 wheels designed and specified for this purpose; 6.35 mm thick wheels are designed for surface grinding while thinner Type 27 wheels need to be examined for the manufacturer's label to see if they can be used for surface grinding or only edge grinding/cutting. A Type 1 guard must be used for any wheel where surface grinding is forbidden. Cutting can also be performed by using a Type 41 wheel and a Type 1 guard.

NOTE: See the **Accessory Chart** to select the proper guard / accessory combination.

Mounting Guards (Fig. D)



WARNING: to reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/installing attachments or accessories. Before reconnecting the tool, depress and release the trigger switch to ensure that the tool is off.



CAUTION: Guards must be used with this grinder.

When using the DCG406 grinder for cutting metal or masonry a Type 1 guard must be used. Type 1 guards are available at extra cost from DEWALT distributors.

NOTE: Please refer to the **grinding and cutting accessory chart** at the end of this section to see other accessories that can be used with these grinders.

Mounting Closed (Type 1) Or Standard (Type 27) guard



CAUTION: Turn off and unplug the tool before making any adjustments or removing or installing attachments or accessories. Before reconnecting the tool, turn the switch on and off to ensure that the tool is off.

Hubbed wheels install directly on the M10 spindle. Thread of accessory must match thread of spindle.

1. Loosen screw, until the guard lug **19** can rotate freely in the groove **20** on the gear case hub.
2. Rotate guard **8** into desired working position. The guard body should be positioned between the spindle and the operator to provide maximum operator protection.
3. Tighten the screw to secure the guard on the gear case cover. (Fasten torque no less than 2.5 N-M). You should be unable to rotate the guard by hand. Do not operate grinder with a loose guard.
4. To remove the guard, loosen screw and pull up on the guard.



CAUTION: Failure to properly seat the wheel before turning the tool on may result in damage to the tool or the wheel.

Flanges and Wheels

Mounting Non-Hubbed Wheels (Fig. E)



WARNING: Failure to properly seat the flange/ clamp nut/ wheel could result in serious injury (or damage to the tool or wheel).



CAUTION: Included flanges must be used with depressed centre Type 27 and Type 42 grinding wheels and Type 41 cutting wheels. See the **Accessory Chart** for more information.



WARNING: A closed, two-sided cutting wheel guard is required when using cutting wheels.



WARNING: Use of a damaged flange or guard or failure to use proper flange and guard can result in injury due to wheel breakage and wheel contact. See the **Accessory Chart** for more information.

1. Place the tool on a table, guard up.
2. Install the backing flange **5** on spindle **4** with the raised centre (pilot) facing the wheel. Press the backing flange into place.
3. Place wheel **19** against the backing flange, centring the wheel on the raised centre (pilot) of the backing flange.
4. While depressing the spindle lock button and with the hex depressions facing away from the wheel, thread the locking flange **6** on spindle so that the lugs engage the two slots in the spindle.

5. While depressing the spindle lock button, tighten the locking flange **6** by hand or using the wrench supplied. (Only use a locking flange if it is in perfect condition.) Refer to **Accessory Chart** to see flange details.
6. To remove the wheel, reverse the above procedure.

Mounting Sanding Backing Pads (Fig. F)

NOTE: Use of a guard with sanding discs that use backing pads, often called fiber resin discs, is not required. Since a guard is not required for these accessories, the guard may or may not fit correctly if used.



WARNING: Failure to properly seat the flange/ clamp nut/ wheel could result in serious injury (or damage to the tool or wheel).



WARNING: Proper guard must be reinstalled for grinding wheel, cutting wheel, sanding flap disc, wire brush or wire wheel applications after sanding applications are complete.

1. Place or appropriately thread backing pad **16** on the spindle.
2. Place the sanding disc **17** on the backing pad **16**.
3. While depressing spindle lock **3**, thread clamp nut **18** on spindle, piloting the raised hub on the clamp nut into the centre of sanding disc and backing pad.
4. Tighten the clamp nut by hand. Then depress the spindle lock button while turning the sanding disc until the sanding disc and clamp nut are snug.
5. To remove the wheel, grasp and turn the backing pad and sanding pad while depressing the spindle lock button.

Mounting and Removing Hubbed Wheels (Fig. A)

Hubbed wheels install directly on the threaded spindle. Thread of accessory must match thread of spindle.

1. Remove backing flange by pulling away from tool.
2. Thread the wheel on the spindle **4** by hand.
3. Depress the spindle lock button **3** and use a wrench to tighten the hub of the wheel.
4. Reverse the above procedure to remove the wheel.

NOTICE: Failure to properly seat the wheel before turning the tool on may result in damage to the tool or the wheel.

Mounting Wire Cup Brushes and Wire Wheels (Fig. A)



WARNING: Failure to properly seat the flange/ clamp nut/ wheel could result in serious injury (or damage to the tool or wheel).



CAUTION: To reduce the risk of personal injury, wear work gloves when handling wire brushes and wheels. They can become sharp.



CAUTION: To reduce the risk of damage to the tool, wheel or brush must not touch guard when mounted or while in use. Undetectable damage could occur to the accessory, causing wires to fragment from accessory wheel or cup.

Wire cup brushes or wire wheels install directly on the threaded spindle without the use of flanges. Use only wire brushes or wheels provided with a threaded hub. These accessories are available at extra cost from your local dealer or authorised service centre.

1. Place the tool on a table, guard up.
2. Thread the wheel on the spindle by hand.
3. Depress spindle lock button **3** and use a wrench on the hub of the wire wheel or brush to tighten the wheel.
4. To remove the wheel, reverse the above procedure.

NOTICE: To reduce the risk of damage to the tool, properly seat the wheel hub before turning the tool on.

Prior to Operation

- Install the guard and appropriate disc or wheel. Do not use excessively worn discs or wheels.
- Be sure the backing and locking flange are mounted correctly. Follow the instructions given in the **Accessory Chart**.
- Make sure the disc or wheel rotates in the direction of the arrows on the accessory and the tool.
- 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.

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.



WARNING:

- Ensure all materials to be ground or cut are secured in place.
- Secure and support the workpiece. Use clamps or a vice to hold and support the workpiece to a stable platform. It is important to clamp and support the workpiece securely to prevent movement of the workpiece and loss of control. Movement of the workpiece or loss of control may create a hazard and cause personal injury.
- Always wear regular working gloves while operating this tool.
- The gear becomes very hot during use.

- Apply only a gentle pressure to the tool. Do not exert side pressure on the disc.
- Always install the guard and appropriate disc or wheel. Do not use excessively worn disc or wheel.
- Avoid overloading. Should the tool become hot, let it run a few minutes under no load condition to cool the accessory. Do not touch accessories before they have cooled. The discs become very hot during use.
- Never work with the grinding cup without a suitable protection guard in place.
- Do not use the power tool with a cut-off stand.
- Never use blotters together with bonded abrasive products.
- Be aware, the wheel continues to rotate after the tools is switched off.

Proper Hand Position (Fig. G)

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 side handle **11**, with the other hand on the body of the tool, as shown in Figure G.

Paddle Switch (Fig. A)

CAUTION: Hold the side handle and 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 back 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.

Spindle Lock (Fig. A)

The spindle lock **3** is provided to prevent the spindle from rotating when installing or removing wheels. Operate the spindle lock only when the tool is turned off, unplugged from the power supply, and has come to a complete stop.

NOTICE: To reduce the risk of damage to the tool, do not engage the spindle lock while the tool is operating. Damage to the tool will result and attached accessory may spin off possibly resulting in injury.

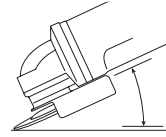
To engage the lock, depress the spindle lock button and rotate the spindle until you are unable to rotate the spindle further.

Surface Grinding, Sanding and Wire Brushing

CAUTION: Always use the correct guard per the instructions in this manual.

To perform work on a the surface of a workpiece:

1. Allow the tool to reach full speed before touching the tool to the work surface.
2. Apply minimum pressure to the work surface, allowing the tool to operate at high speed. Material removal rate is greatest when the tool operates at high speed.
3. Maintain an appropriate angle between the tool and work surface. Refer to the chart according to particular function.



Function	Angle
Grinding	20°-30°
Sanding with Flap Disc	5°-10°
Sanding with Backing Pad	5°-15°
Wire Brushing	5°-10°

4. Maintain contact between the edge of the wheel and the work surface.
 - If grinding, sanding with flap discs or wire brushing move the tool continuously in a forward and back motion to avoid creating gouges in the work surface.
 - If sanding with a backing pad, move the tool constantly in a straight line to prevent burning and swirling of work surface.

NOTE: Allowing the tool to rest on the work surface without moving will damage the work piece.

5. Remove the tool from work surface before turning tool off. Allow the tool to stop rotating before laying it down.

CAUTION: Use extra care when working over an edge, as a sudden sharp movement of grinder may be experienced.

Precautions To Take When Working on a Painted Workpiece

1. Sanding or wire brushing 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 or wire brushing 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 N.I.O.S.H. 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.

Edge Grinding and Cutting

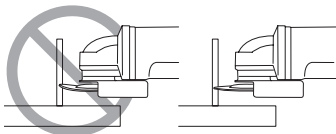


WARNING: Do not use edge grinding/cutting wheels for surface grinding applications because these wheels are not designed for side pressures encountered with surface grinding. Wheel breakage and injury may result.



CAUTION: Wheels used for edge grinding and cutting may break or kick back if they bend or twist while the tool is being used. In all edge grinding/cutting operations, the open side of the guard must be positioned away from the operator.

NOTICE: Edge grinding/cutting with a Type 27 wheel must be limited to shallow cutting and notching—less than 13 mm in depth when the wheel is new. Reduce the depth of cutting/notching equal to the reduction of the wheel radius as it wears down. Refer to the **Accessory Chart** for more information. Edge grinding/cutting with a Type 41 wheel requires usage of a Type 1 guard.



1. Allow the tool to reach full speed before touching the tool to the work surface.

2. Apply minimum pressure to the work surface, allowing the tool to operate at high speed. Grinding/cutting rate is greatest when the tool operates at high speed.
3. Position yourself so that the open-underside of the wheel is facing away from you.
4. Once a cut is begun and a notch is established in the workpiece, do not change the angle of the cut. Changing the angle will cause the wheel to bend and may cause wheel breakage. Edge grinding wheels are not designed to withstand side pressures caused by bending.
5. Remove the tool from the work surface before turning the tool off. Allow the tool to stop rotating before laying it down.

Cutting Metal

For cutting with bonded abrasives, always use the guard type 1.

When cutting, work with moderate feed, adapted to the material being cut. Do not exert pressure onto the cutting disc, tilt or oscillate the machine.

Do not reduce the speed of running down cutting discs by applying sideward pressure.

The machine must always work in an upgrinding motion. Otherwise, the danger exists of it being pushed uncontrolled out of the cut.

When cutting profiles and square bar, it is best to start at the smallest cross section.

Rough Grinding

Never use a cutting disc for roughing.

Always use the guard type 27.

The best roughing results are achieved when setting the machine at an angle of 30° to 40°. 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.

Cutting Stone

The machine shall be used only for dry cutting.

For cutting stone, it is best to use a diamond cutting disc. Operate the machine only with additional dust protection mask.

Working Advice

Exercise caution when cutting slots in structural walls.

Slots in structural walls are subject to the country-specific regulations. These regulations are to be observed under all circumstances. Before beginning work, consult the responsible structural engineer, architect or the construction supervisor.

MAINTENANCE

Your DEWALT 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.



Lubrication

Your power tool requires no additional lubrication.



Cleaning



WARNING: Blow dirt and dust out of the main housing with dry air as often as dirt is seen collecting in and around the air vents. 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 tool. 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 tool; never immerse any part of the tool 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.

Consult your dealer for further information on the appropriate accessories.

Protecting the Environment



Separate collection. Products and batteries marked with this symbol must not be disposed of with normal household waste.

Products and batteries contain materials that can be recovered or recycled reducing the demand for raw materials. Please recycle electrical products and batteries according to local provisions. Further information is available at www.2helpU.com.

Rechargeable Battery Pack

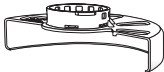
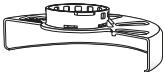
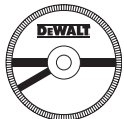
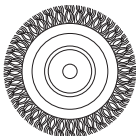
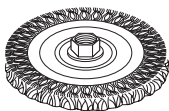
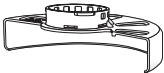
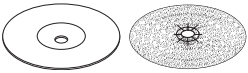
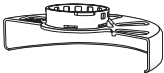
This long life battery pack must be replaced when it fails to produce sufficient power on jobs which were easily done before. At the end of its technical life, discard it with due care for our environment:

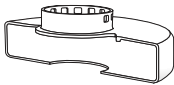
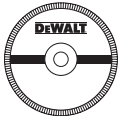
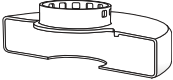
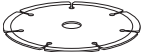
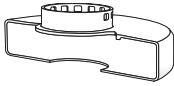
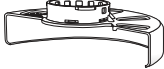
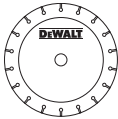
- Run the battery pack down completely, then remove it from the tool.
- Li-Ion cells are recyclable. Take them to your dealer or a local recycling station. The collected battery packs will be recycled or disposed of properly.

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.

Accessory Chart

Guard Type	Accessory	Description	How to Fit Grinder
 Type 27 Guard  Type 27 Guard		Depressed centre grinding disc	 Type 27 guard  Backing flange  Type 27 depressed centre wheel  Locking flange
		Flap wheel	
		Wire wheels	
		Wire wheels with threaded nut	 Type 27 guard  Wire wheel
		Wire cup with threaded nut	 Type 27 guard  Wire brush
		Backing pad/sanding sheet	 Type 27 guard  Rubber backing pad  Sanding disc  Clamp nut

Accessory Chart (cont.)			
Guard Type	Accessory	Description	How to Fit Grinder
 Type 1 Guard  Type 27 Guard		Masonry cutting disc, bonded	 Type 1 guard  Backing flange  Cutting wheel  Locking flange
		Metal cutting disc, bonded	
 Type 1 Guard OR  Type 27 Guard  Type 27 Guard		Diamond cutting wheels	

無碳刷砂輪機

DCG406

恭喜！

感謝您選購 DEWALT 工具。憑藉多年的經驗、完善的產品開發與創新，DEWALT 已成為專業電動工具使用者最可靠的合作夥伴之一。

請注意！各地區上市產品/配件不盡相同，請依台灣繁體中文說明書的內容為主。

注意：20V Max 為最大初始電池電壓 (無負載測量)，標稱電壓為 18V。60V Max 為最大初始電池電壓 (無負載測量)，標稱電壓為 54V。

技術資料

		DCG406
電壓	伏特 _{直流}	18 (最大20)
電池類型		鋰離子
功率輸出	瓦特	800
空載/額定速度	轉/分	9000
砂輪直徑	公釐	100
砂輪厚度 (最大)	公釐	4
軸心直徑		M10
軸心長度	公釐	16.0
重量 (不包括電池組)*	千克	1.74
* 重量含側手柄和防護罩		

電池				充電器/充電時間 (分鐘)							
目錄號	伏特	安時	重量 (千克)	DCB104	DCB107	DCB112	DCB113	DCB115	DCB118	DCB132	DCB119
	直流										
DCB546/DCB606	18/54 (最大20/60)	6.0/2.0	1.05	60	270	170	140	90	60	90	X
DCB547/DCB609	18/54 (最大20/60)	9.0/3.0	1.46	75*	420	270	220	135*	75*	135*	X
DCB548/DCB612	18/54 (最大20/60)	12.0/4.0	1.44	120	540	350	300	180	120	180	X
DCB181	18 (最大20)	1.5	0.35	22	70	45	35	22	22	22	45
DCB182/DCB204	18 (最大20)	4.0	0.61	60/40**	185	120	100	60	60/40**	60	120
DCB183/DCB203	18 (最大20)	2.0	0.40	30	90	60	50	30	30	30	60
DCB184/DCB205	18 (最大20)	5.0	0.62	75/50**	240	150	120	75	75/50**	75	150
DCB185	18 (最大20)	1.3	0.35	22	60	40	30	22	22	22	X
DCB187	18 (最大20)	3.0	0.54	45	140	90	70	45	45	45	90
DCB189	18 (最大20)	4.0	0.54	60	185	120	100	60	60	60	120



警告：為了降低受傷的風險，必須仔細閱讀使用手冊。

定義：安全指南

以下定義描述了每一個詞彙的嚴重程度。請閱讀本手冊並注意這些符號。



危險：表示緊急危險狀況，若未能避免，**將導致死亡或嚴重傷害。**



警告：表示潛在危險情況，若未能避免，**可能導致死亡或嚴重傷害。**



小心：表示潛在危險情況，若未能避免，**可能導致輕微或中度傷害。**

注意：表示一種非人身傷害的行為，若未能避免，**可能導致財產損失。**



表示觸電危險。



表示火災危險。

電動工具一般安全警告



警告：請閱讀所有安全警告及使用指示。不遵循這些警告及指示可能會導致觸電、火災及/或嚴重傷害。

請妥善保存所有警告及指示以備將來查閱

警告中的名詞「電動工具」是指電源驅動(插電)電動工具，或者電池驅動(充電)電動工具。

1) 工作場地安全

- 請保持工作場地清潔明亮。混亂或黑暗的場地會引發事故。
- 請勿在易爆環境，如有易燃液體、氣體或粉塵的環境中操作電動工具。電動工具產生的火花會點燃粉塵或氣體。
- 請等待兒童和旁觀者離開之後才操縱電動工具。分心會導致您疏於控制。

2) 電氣安全

- 電動工具插頭必須與插座相符。切勿以任何方式改裝插頭。需接地的電動工具不能使用任何配接器插頭。未經改裝的插頭和相符的插座可以減少觸電危險。
- 避免人體接觸接地表面，如管道、散熱片、爐灶和冰箱。若您的身體接地，會增加觸電危險。
- 不得將電動工具暴露在雨中或潮濕環境中。水進入電動工具會增加觸電危險。
- 請勿濫用電線。請勿使用電線來搬運、拉動電動工具或拔出插頭。讓電線遠離熱、油、銳邊和活動部件。受損或纏繞的電線會增加觸電危險。
- 若要在戶外使用電動工具，請使用適合戶外使用的延長電線。使用適合戶外使用的電線可減少觸電危險。
- 若必須在潮濕場合使用電動工具，請使用漏電保護器(RCD)。使用 RCD 可降低觸電危險。

3) 人身安全

- 保持警覺；在操作電動工具時，請留意所執行的操作並按照一般的程式執行。請勿在疲倦或在受到毒品、酒精或藥品的影響時使用電動工具。操作電動工具期間注意力分散會導致嚴重人身傷害。
- 使用個人防護裝置。始終佩戴護目裝置。防護裝置，例如在適當條件下使用的防塵面具、防滑安全鞋、安全帽或聽力保護等裝置可減少人身傷害。
- 避免意外啟動。連接電源及/或電池組、舉抬或搬運電動工具之前，請確定開關處於關閉位置。若搬運電動工具時將手指放在開關上，或者在電動工具開關開啟時將插頭插入電源插座，這兩種行為都會引發事故。
- 啟動電動工具之前，請卸下所有的調整鑰匙或扳手。遺留在電動工具旋轉部件上的扳手或鑰匙會導致人身傷害。
- 不要過度伸張雙手。時刻注意腳下與身體的平衡。如此即可在發生意外的情況下更好地控制電動工具。
- 適當穿著。請勿穿寬鬆衣服或佩戴飾品。讓頭髮、衣服和手套遠離活動部件。寬鬆衣服、佩飾和長髮可能會捲入活動部件。
- 若配備用於連接排屑裝置和集塵設備的裝置，請確定正確連接和使用這些裝置。使用集塵設備可減少與粉塵有關的危險。

4) 電動工具的使用與注意事項

- 請勿超負荷使用電動工具。請根據您的應用使用正確的電動工具。若使用的電動工具正確無誤，該工具能以設計額定值更有效、更安全地執行工作。
- 若開關不能開啟或關閉電源，請勿使用該電動工具。若開關無法控制電動工具，則電動工具存在危險，必須予以維修。
- 在執行任何調整、更換配件或儲存工具之前，必須從電源上拔掉插頭及/或卸下電池組。這類防護性措施可降低電動工具意外啟動的風險。
- 將閒置的電動工具儲存在兒童無法接觸的地方，並且不要讓不熟悉電動工具或對這些使用指示不瞭解的人員操作電動工具。電動工具在未經培訓的使用者手中會發生危險。
- 維護電動工具。檢查活動部件是否對準或卡住、破損情況以及是否存在影響電動工具運行的其他情況。若有損毀，必須在使用之前修理電動工具。許多事故都是由於電動工具欠缺維護所導致。
- 保持刀具鋒利和清潔。妥善維護的帶利刃的切削工具不會輕易卡住並可更輕鬆控制。
- 使用電動工具、配件和工具刀頭等時，請遵循這些指示使用，且指示須包含工作環境和所要執行工作的注意事項。不按照設計目的使用電動工具會導致危險。

5) 電池工具的使用與注意事項

- 只能使用製造商指定的充電器為電池充電。使用僅適合一種電池組的充電器為其他類型的電池組充電會導致火災風險。
- 請使用原廠的電動工具電池組。使用其他非原廠的電池組會導致人身傷害和火災危險。
- 不使用電池組時，請將其遠離如迴紋針、硬幣、鑰匙、釘子、螺絲以及其他可連通電池兩極的金屬物品。將電池兩極短路會導致灼傷或火災。
- 濫用電池的情況下，液體會從電池中噴出；避免與液體接觸。若不小心接觸液體，請用清水沖洗。若液體噴濺到眼睛上，沖洗之後還要進行治療。從電池噴出的液體會刺激皮膚或造成灼傷。

6) 檢修

- 維修本電動工具時，必須由合格的維修人員執行，而且只能使用完全一致的更換件。這樣將確保電動工具的安全。

電鑽的其他特殊安全

所有操作之安全指示

- 本電動工具設計用作打磨機、砂光機、鋼絲刷或切割工具。請閱讀本電動工具隨附的所有安全警告、指示、圖示和規格。不遵循下列的所有指示可能會導致觸電、火災及/或嚴重傷害。
- 不建議使用本電動工具執行拋光等操作。將電動工具用於非專用的操作會引發危險並導致人身傷害。
- 請勿使用非工具製造廠商專門設計及推薦的配件。就算配件可裝到電動工具上，這並不代表它能確保安全操作。
- 配件的額定速度必須至少等於電動工具上所標的最大速度。配件以比其額定速度大的速度運行可能會引發爆裂和飛濺。
- 配件的外徑與厚度必須在電動工具的額定範圍內。錯誤尺寸的配件將無法得到充分保護或控制。
- 配件的螺紋安裝必須與砂輪機軸心螺紋相配。對於透過凸緣安裝的配件，配件的軸孔必須適合凸緣的定位直徑。與電動工具安裝件不相配的配件將會失衡、過度震動並會引起失控。
- 請勿使用受損配件。每次使用前，請檢查配件，例如檢查砂輪是否有碎裂和裂縫，檢查支撐墊是否有裂縫、撕裂或過度磨損，檢查鋼絲刷是否鬆動或鋼絲是否斷裂。若電動工具或配件跌落，請檢查是否損毀，或立即安裝未破損的配件。檢查並安裝配件後，讓自己和旁觀者遠離配件的旋轉範圍，並讓電動工具以最大的空載速度運行一分鐘。受損配件一般會在此測試過程中碎裂。
- 佩戴個人防護裝置。根據適用情況，使用面罩、安全護目鏡或防護眼鏡。若適用，請佩戴防塵面具、聽力保護器、手套及能阻擋細小磨料或工件碎片的工作圍裙。護目裝備必須能夠擋住各種操作所產生的飛屑。防塵面具或口罩必須能夠

過濾各種操作所產生的顆粒。長期暴露於高強度噪音中可能會使聽力受損。

- 讓旁觀者與工作場地保持一定安全距離。任何進入工作場地的人員都必須佩戴個人防護裝置。工件或受損配件的碎片可能會飛出並導致緊靠著操作區域的旁觀者受到傷害。
- 若在執行操作時鋸切工具可能會接觸隱藏的電線，請僅從絕緣手柄表面握住電動工具。若接觸到「帶電」導線，工具金屬部件表面就會「帶電」，從而導致操作人員觸電。
- 直到配件完全停止運動才放下電動工具。旋轉的配件可能會抓住表面並拉動電動工具，讓您失去對工具的控制。
- 攜帶電動工具時不要啟動它。意外接觸旋轉配件可能會纏繞您的衣服，使配件傷害您的身體。
- 定期清理電動工具的通風口。電動機風扇會將灰塵吸進機殼，過多的金屬粉塵沉積可能會導致電氣危險。
- 請勿在易燃材料附近操作電動工具。火星可能會點燃這些材料。
- 請勿使用需要冷卻液的配件。用水或其他冷卻液可能會導致觸電或觸電致死。

所有操作之進一步安全指示

反衝的原因及操作人員可採用的預防措施

反衝是因卡住或纏繞住的旋轉砂輪、支撐墊、鋼絲刷或任何其他配件而產生的突然反作用力。卡住或纏繞會引起旋轉配件迅速失速，隨之使失控的電動工具在卡住點產生與配件旋轉方向相反的運動。

例如，若除漆盤被工件纏繞或卡住，伸入卡住點的除漆盤邊緣可能會進入材料表面，從而引起除漆盤爬出或反衝。除漆盤可能會飛向或飛離操作人員，這取決於除漆盤在卡住點的運動方向。在此條件下，砂輪也可能會碎裂。

反衝是由於電動工具使用不當及/或不正確的操作程序或條件而導致。可透過採取下列適當的預防措施而避免：

- 保持緊握電動工具，調整身體和手臂位置，以應對反衝。如有輔助手柄，則要一直使用，以最大限度地控制啟動時的反衝力或反扭矩。若採取合適的預防措施，操作人員即可以控制反扭矩或反衝力。
- 切勿將手靠近旋轉配件。配件可能會反衝碰到手。
- 請勿站在發生反衝時電動工具可能移動到的位置。反衝將在纏繞點促使工具逆砂輪運動方向運動。
- 處理尖角、銳邊等時請格外小心。避免附件跳彈和被纏繞住。尖角、銳邊或彈跳可能會纏繞旋轉配件並引起失控或反衝。
- 請勿附裝上鋸鏈、木雕鋸片或帶齒鋸片。此類鋸片會產生頻繁的反衝和失控。

針對打磨和砂輪切割操作的安全警告

- 只使用為電動工具所推薦的砂輪型號及為所選砂輪專門設計的防護罩。不是專為電動工具設計的砂輪無法得到充分保護，而且不安全。
- 中心凹陷的砂輪的打磨表面必須安裝在防護罩邊緣平面的下方。安裝不當且穿過防護罩邊緣平面的砂輪無法得到充分保護。
- 防護罩必須牢固地裝在電動工具上，且放置在最安全的地方，以便讓最小的砂輪部分暴露在操作人員面前。防護罩有助於保護操作人員免於受到爆裂砂輪碎片，意外觸及砂輪與可點燃衣物之火花之危險。
- 砂輪只可用於推薦的用途。例如，不要使用切割砂輪的側面進行打磨。切割砂輪設計用於圓周打磨，施加到砂輪側面的力可能會使其碎裂。
- 始終為所選砂輪選用未損毀、尺寸及形狀正確的砂輪凸緣。合適的砂輪凸緣可支撐砂輪，從而可以減小砂輪破裂的可能性。切割砂輪的凸緣可能與打磨砂輪的凸緣不同。
- 請勿使用大規格電動工具上用剩的磨損砂輪。用於大規格電動工具的砂輪不適於較小規格工具的高速工況並可能會爆裂。

針對砂輪切割操作的附加安全警告

- 切勿「夾」住切割砂輪或施加過大的壓力。請勿試圖進行過深的切割。給砂輪施加過高的應力將增加砂輪在切削時的負載，容易纏繞或卡住，而且將增加反衝或砂輪爆裂的可能性。
- 身體不要與旋轉砂輪呈一條直線，也不要站在其後。將在操作點的砂輪從操作人員身邊移開時，可能的反衝可能會使旋轉砂輪和電動工具朝向您推動。
- 砂輪被卡住或無論因任何原因而中斷切削時，關掉電動工具並握住工具不動，直到砂輪完全停止。切勿試圖在砂輪仍然運行時使切割砂輪脫離切削，否則可能會發生反衝。檢查並採取矯正措施，以消除砂輪卡住的原因。
- 請勿在工件上重新啟動切削操作。讓砂輪達到全速後再小心地重新進入切削。若電動工具在工件中重新啟動，砂輪可能會卡住、爬出或反衝。
- 支撐住板材或任何超大工件以最大限度地降低砂輪卡住和反衝的風險。大型工件由於自身重量而有下陷的傾向。必須在工件靠近切線處及砂輪兩側近工件邊緣處放置支撐物。
- 對現有牆體或其他盲區進行「盲切削」時應格外小心。伸出的砂輪可能會割到氣管、水管、電線或由此引起反衝的物體。

針對砂光操作的安全警告

- 切勿使用尺寸過大的砂盤紙。請遵循製造廠商的建議選用砂紙。伸出砂盤的大規格砂紙會構成割傷危害並可能會導致切盤纏繞、撕裂或反衝。

針對刷光操作的安全警告

- 請注意，即使在正常操作期間，鋼絲刷也會掉落鋼絲。請勿對鋼絲刷施加過量負載，以免對鋼絲施加過應力。鋼絲刷可輕鬆地刺穿單薄的衣服及/或皮膚。
- 若建議使用防護罩進行刷光，則不允許鋼絲輪或鋼絲刷對防護罩進行干擾。鋼絲輪或鋼絲刷的直徑可能會因為工作和地心引力而擴展。

砂輪機之附加安全規定

- 請勿在本工具上使用 11 號（杯形）砂輪。使用不合適的配件可能會導致傷害。
- 請始終使用側手柄握持。請緊握手柄。應始終使用側手柄，以時刻保持對工具的控制。

剩餘風險

即使應用有關的安全規定並採用安全設備，仍然還有一些無法避免的剩餘風險。危險包括：

- 聽力受損。
- 飛散的顆粒引起的人身傷害風險。
- 操作過程中配件變熱引起的灼傷風險。
- 長時間使用引起的人身傷害風險。
- 危害物質粉塵引起的風險。

電氣安全

電動機只適用一種電壓。請務必檢查電池組電壓是否與銘牌一致，並且確保充電器的電壓與電源電壓一致。



DEWALT 充電器根據 IEC60335 進行雙重絕緣，因此不需要使用接地線。

若電源線損壞，必須使用 DEWALT 維修機構提供的專用電線進行更換。

使用延長電纜

如非絕對必要，否則不要使用延長電線。請使用與充電器的輸入功率相匹配的認可延長電纜（請參閱技術資料）。導體的最小橫截面尺寸為 1 平方公釐，最長為 30 米。

使用電纜捲筒時，每次必須把電纜完全展開。

妥善保存這些安全指示

充電器

DEWALT 充電器無需調節，專為盡可能輕鬆使用而設計。

所有電池充電器之重要安全指示

妥善保存這些安全指示：本手冊包含有關相容電池充電器的重要安全及操作指示（請參閱技術資料）。

- 在使用充電器之前，請先閱讀所有指示以及充電器、電池組和使用電池組的產品上的警告標記。



警告：觸電危險。切勿讓任何液體進入充電器，否則可能會導致觸電。



警告：建議使用漏電流額定值不超過 30 毫安的漏電流保護裝置。

小心：燒傷危險。為了減低受傷風險，只可以使用 DEWALT 可充電電池。其他非原廠電池可能會爆裂，導致人身傷害和損害。

小心：必須監督小孩，確保他們沒有耍玩器具。
注意：在某些情況下，充電器連接到電源後，充電器內暴露的充電觸頭會被異物導致短路。導電的異物，包括但不限於鋼絲絨、鋁箔紙或任何由金屬粒子組成的物件，必須要遠離充電器範圍。充電器裡沒有電池組時，一定要拔掉充電器的電源。請先拔掉電源插頭後再清潔充電器

- 切勿嘗試使用本手冊未提到的充電器替電池組充電。充電器與電池組專為搭配使用而特別設計。
- 除了為 DEWALT 可充電電池充電之外，這些充電器不可以用於其他用途。否則可能會導致火災、觸電或觸電致死。
- 請勿將充電器暴露在雨、雪之中。
- 中斷充電器的電源時，請拔除插頭而非拉扯電線。這樣會降低電源插頭及電線損壞的風險。
- 請確保電線的位置不會遭踐踏、令人絆倒，或引起其他方式的損壞或受壓。
- 除非絕對需要，否則請勿使用延長電線。使用不適當的延長電線會引起火災、觸電或觸電致死。
- 請勿將任何物件放在充電器上面，或是把充電器放在可能會堵住通風槽的柔軟表面，導致充電器的內部過熱。請將充電器放到遠離熱源的位置。充電器透過外殼頂部及底部的槽散熱。
- 切勿操作電線或插頭損壞的充電器，請立即予以更換。
- 如果充電器受到重擊、墜落或出現其他損壞情況，請勿使用充電器，並拿到授權維修中心修理。
- 切勿自行拆卸充電器。需要維護或修理時，請拿到授權維修中心。重新組裝不當可能會導致觸電、觸電致死或火災。
- 若電源線損毀，必須由製造商、服務代理或類似合格人員立即更換以避免發生危險。
- 在清潔之前，請將充電器的插頭從電源插座上拔掉，這樣可以減低觸電風險。取出電池組並不能降低該風險。
- 切勿試圖將兩個充電器連接在一起。
- 充電器是為標準 110V 家用電源而設計。切勿試圖使用其他電壓。本規定不適用於車載充電器。

為電池充電（圖 B）

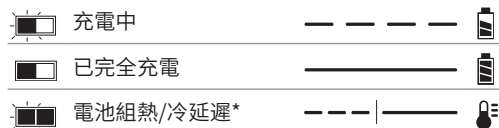
- 放進電池組前，先將充電器的插頭插到適當的插座。
- 將電池組 9 放進充電器，確保電池組已完全放入。紅燈（充電中）會重複閃爍，這表示充電程序已經開始。
- 當紅燈會持續亮起時，代表充電完成。此時，電池組的電力全滿，可以立即使用或是留在充電器裡。若要從充電器中取出電池組，請按下電池組上的電池釋放按鈕 10。

注意：為了確保鋰離子電池組的效能及使用壽命最大化，在第一次使用電池組之前必須完全充電。

充電器操作

如需瞭解電池組的充電狀態，請參閱以下指示燈。

充電指示燈



*紅燈會繼續閃爍，但在執行此操作期間黃色指示燈將亮起。電池組達到適當溫度後，黃色指示燈將熄滅，充電器將恢復充電程序。

相容的充電器不會為有故障的電池組充電。充電器會透過不亮燈或顯示電池組故障或充電器閃爍模式來表示電池組故障。

注意：亦有可能是充電器發生故障。

如果充電器指出故障，請將充電器和電池組拿到授權維修中心進行測試。

電池組熱/冷延遲

當充電器偵測到電池組過熱或過冷，就會自動啟動電池組熱/冷延遲，在電池組達到適合的溫度之前暫停充電。然後，充電器會自動轉換到電池組充電模式。此功能可確保電池組的使用壽命最大化。

冷電池組的充電速度大約是暖電池組的一半。在整個充電週期，電池組會以較慢的充電速度進行充電，即使電池組變暖，充電速度亦不會回復至最大充電速度。

DCB118 充電器具有專為冷卻電池組而設計的內部風扇。在需要冷卻電池組時，風扇會自動開啟。若風扇運作不正確或通風槽堵塞，切勿操作充電器。請勿讓異物進入充電器內部。

電子保護系統

XR 鋰離子工具的設計具有電子保護系統，可保護電池組，避免過載、過熱或深度放電。

如果電子保護系統啟動，本工具會自動關閉。如果出現此情況，請將鋰離子電池組放進充電器直到電力全滿。

牆面安裝

這些充電器經過精心設計，可以安裝在牆面上或立在桌面或工作表面上。若採用牆面安裝，請將充電器安裝在電源插座連接範圍內的位置，並遠離角落或可能阻礙空氣流動的障礙。將充電器的背面用作在牆面上確定安裝螺絲位置的型板。使用長度至少 25.4 公釐、螺頭直徑為 7-9 公釐的牆用螺絲（另售）牢固安裝充電器，旋進木料的最佳深度為螺絲大約有 5.5 公釐長度露在木料外。將露出的螺絲與充電器背面的槽對齊，並完全接合到槽中。

充電器清潔指示



警告：觸電危險。在清潔之前，請將充電器的插頭從 AC 電源插座上拔掉。使用軟布或非金屬軟刷，去除充電器外部的污垢和油脂。請勿使用水或任何清潔劑。不要讓任何液體進入工具；不要讓工具的任何部分浸入液體中。

電池組

所有電池組之重要安全指示

購買更換電池組時，務必附上目錄號和電壓資料。

包裝內的電池組並未完全充電。在使用電池組和充電器之前，請先閱讀以下安全指示，並遵循所列的充電程序。

請閱讀所有指示

- **不要在易爆環境，如有易燃液體、氣體或粉塵的環境中進行充電或使用電池。**將電池組放進充電器或拆除電池可能會點燃粉塵或氣體。
- **切勿強行將電池放進充電器。切勿以任何方式改裝電池組以在不相容的充電器中使用，否則電池組可能會破裂，導致嚴重人身傷害。**
- 只可使用 DEWALT 充電器為電池充電。
- **切勿將水分或其他液體飛濺到電池組或將電池組浸沒。**
- **請勿在溫度可能達到或超過 40°C (104°F) 的地方（例如夏季的室外貨棚或金屬建築物）儲存或使用本工具及電池組。**
- **即使電池組已嚴重損毀或磨損，請勿焚燒電池組。**電池組可能會在火中爆炸。灼燒鋰離子電池組時會產生有毒氣體和物料。
- **如果電池液體接觸到皮膚，請立即以中性肥皂和清水沖洗接觸範圍。**若電池液體進入眼睛，請睜開眼睛，用清水沖洗 15 分鐘或直到不適感消失為止。如果需要接受治療，電池的電解質由液化有機碳酸鹽和鋰鹽構成。
- **開啟的電池中的物質可能會導致刺激呼吸道。請轉移至空氣流通處。如果症狀持續，請尋求醫療協助。**



警告：燒傷危險。電池液如遇到火花或火焰可能會引起燃燒。



警告：不論是因為任何理由，都不要嘗試打開電池。如果電池組的外殼破裂或損毀，請勿放進充電器。切勿撞擊、摔落或損毀電池組。切勿使用受到重擊、墜落或出現其他損壞情況的電池組或充電器（例如釘子刺穿、以鎚子敲打或踩踏）。否則可能會引起觸電或觸電致死。損毀的電池組應該送回維修中心進行回收。



警告：火災危險。切勿在儲存或搬運電池組時讓金屬物件接觸暴露的電池兩極。例如，請勿將電池組放在帶有鬆動的釘子、螺絲、鑰匙等的地方（如圍裙、口袋、工具箱、產品包裝箱、抽屜等）。



小心：不使用工具時，請將工具放在穩定的表面上，以免導致絆倒或墜落等危險。一些具有大型電池組的工具可以直立但可能會輕易被撞到。

運輸



警告：火災危險。電池運輸途中，若兩極意外接觸導電材料，可能會引發火災。運輸電池時，確保電池兩級受到保護並與可能接觸兩級並導致短路的材料隔絕。

DEWALT 電池符合行業和法律標準（包括聯合國危險貨物運輸建議書、國際航空運輸協會 (IATA) 危險物品處理規則、國際海運危險物品 (IMDG) 處理規則以及國際公路運送危險物品歐洲協議 (ADR) 規定的所有適用運

輸規章。鋰離子電池和電池組均已根據《聯合國危險貨物運輸建議書測試與標準手冊》第 38.3 節的規定進行測試。

大多數情況下，不會將運輸 DEWALT 電池組分歸為完全管制的第 9 類危險品。一般只有在運輸中包含額定能量大於 100 瓦時 (Wh) 的鋰離子電池時，才會將其分歸為完全管制的第 9 類危險品。所有鋰離子電池外殼上均標註有瓦時等級。此外，由於規章的複雜性，DEWALT 不建議對鋰離子電池組單獨採用空運，不論其額定能量是多少瓦時，都是如此。若電池組的額定能量不超過 100 瓦時，可以同時空運工具與電池組（組合套件）。

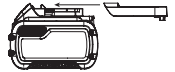
無論運輸是否納入完全管制範圍內，運輸方均有責任諮詢瞭解針對包裝、標籤/標記及單據要求的最新規定。手冊本節資訊基於良好商譽原則提供，在編製文件時被視為準確無誤，但不提供任何明示或暗示的保證。買方負有確保其行為遵守適用法規的責任。

運輸 FLEXVOLT™ 電池

DEWALT FLEXVOLT™ 電池有兩種模式：**使用與運輸。**

使用模式：若 FLEXVOLT™ 電池單獨使用或在 DEWALT 18 伏特（最大 20 伏特）產品中使用時，將作為 18 伏（最大 20 伏特）特電池運作。若 FLEXVOLT™ 電池在 54 伏特（最大 60 伏特）或 108 伏特（最大 120 伏特）（兩個 54 伏特（最大 60 伏特）電池）產品中使用，將作為 54 伏特（最大 60 伏特）電池運作。

運輸模式：將護蓋連接至 FLEXVOLT™ 電池時，電池將處於運輸模式。在運輸時，請將護蓋保留在電池上。



在運輸模式下，若將電池組內的一連串電池中斷電氣連接，會導致 3 個電池各自的瓦時 (Wh) 額定值低於 1 個電池組的瓦時額定值。這樣電池數量雖然增加到 3 個，但瓦時額定值更低，因此能避開針對較高瓦時電池的運輸規章。

例如，若運輸瓦時額定值為 3 x 40 瓦時，表示運輸 3 個電池，每個電池的額定值為 40 瓦時。使用瓦時額定值可能為 120 瓦時（表示 1 個電池）。

使用與運輸標籤標記的示例



儲存建議

1. 乾燥、涼爽、太陽不會直接照射、不會過熱或過冷的地方，就是電池組的最佳存放地點。為達到最大效能和使用壽命，不使用電池時請以室溫儲存電池組。
2. 欲長期儲存，建議將電力全滿的電池組從充電器卸下，儲存於涼爽、乾燥處，使電池組效能達到最佳。

注意：電池組不應在電力耗盡的情況下儲存。在使用之前，電池組必須再次充電。

充電器和電池組上的標籤

除了本手冊的圖示之外，充電器和電池組上的標籤包含以下圖示：



使用前請閱讀使用手冊。



充電時間請見**技術資料**。



切勿插入導電體。



切勿為損毀的電池組充電。



切勿暴露在水中。



立即更換損壞的電線。



只在溫度介於 4°C 至 40°C 之間充電。



僅供室內使用。



棄置電池組時要顧及環保。



只使用指定的 DEWALT 充電器為 DEWALT 電池組充電。使用 DEWALT 充電器對指定的 DEWALT 電池以外的電池組充電會爆裂或導致其他危險情形。



切勿焚化電池組。



使用(無運輸電池蓋)。範例：瓦時額定值為 108 瓦時(具有 108 瓦時的 1 個電池)。



運輸(有內建運輸電池蓋)。範例：瓦時額定值為 3 x 36 瓦時(具有 36 瓦時的 3 個電池)。

電池類型

DCG406 採用 18V (最大 20V) 電池組運作。

可以使用以下電池組：DCB181, DCB182, DCB183, DCB184, DCB185, DCB187, DCB189, DCB203, DCB204, DCB205, DCB606, DCB609, DCB612, DCB546, DCB547, DCB548。如需詳細資訊，請參閱**技術資料**。

套裝內的物件

本套裝包括：

- 1 個砂輪機
- 1 個防護罩
- 1 個側手柄
- 1 個支撐凸緣
- 1 個鎖定凸緣
- 1 個扳手
- 1 個鋰離子電池組 (C1、D1、L1、M1、P1、S1、T1、X1 型號)
- 2 個鋰離子電池組 (C2、D2、L2、M2、P2、S2、T2、X2 型號)
- 3 個鋰離子電池組 (C3、D3、L3、M3、P3、S3、T3、X3 型號)

1 本使用手冊

- 檢查工具、部件或配件有否在運送途中損壞。
- 操作前，請抽空徹底地閱讀和掌握本手冊的內容。

工具上的標誌

工具上會附帶下列圖示：



使用前請閱讀使用手冊。



請佩戴聽力保護器。



請佩戴護目鏡。

日期代碼位置 (圖 D)

日期代碼 **15**，包括製造年份，已經印刷在工具外殼上。

範例：

2020 XX XX

製造年份

說明 (圖 A)



警告：切勿改動本電動工具或其任何部件。否則可能導致損壞或人身傷害。

- 1 槳式開關
- 2 鎖定桿
- 3 軸心鎖按鈕
- 4 軸心
- 5 支撐凸緣
- 6 鎖定凸緣
- 7 防護罩
- 8 防護罩釋放桿
- 9 電池組
- 10 電池釋放按鈕

設計用途

本充電式砂輪機設計用於專業切削、打磨、砂光及刷光應用。

請勿使用中心凹陷砂輪以外的砂輪和砂紙盤。

請勿在潮濕有水或存有易燃液體或氣體的環境下使用本工具。

本充電式砂輪機是專業電動工具。

不要讓兒童接觸本工具。缺乏經驗的操作人員需要在監督下使用本工具。

- **兒童和體弱者。**兒童或體弱者在沒有他人監督的情況下不適宜使用本工具。
- 體力、感覺或智力不足，以及缺乏經驗、知識或技能的人員(包括兒童)不適合使用本產品，除非一旁有能為他們安全負責的監督人員。請勿讓兒童單獨接觸本工具。

功能部件

反衝制動器™

在感應到發生卡住、失速或纏繞時，電子制動器會透過嚙合產生最大力量以快速停止砂輪，減緩砂輪機的運動，並將砂輪機關閉。需要先鬆開然後按下開關才能重新啟動工具。

斷電™ 過載保護

在電動機過載時，將減少對電動機的電力供應。若電動機持續過載，本工具將關閉。需要先鬆開然後按下開關才能重新啟動工具。每次電流負載達到過載電流值（電動機燃耗點）時，工具都會斷電。若持續過載導致關閉，請對工具施加較小的力度/較輕的重量，直到工具在無過載嚙合的狀況下正常運作為止。

防震側手柄

防震側手柄可以吸收工具造成的震動，從而提供更高的舒適度。

軟啟動功能

藉由軟啟動功能，可以緩慢提高速度，以避免在啟動時出現最初的顫動。此功能對於在有限空間內工作時尤其有用。

無電壓

無電壓功能會在電力供應出現短暫中斷時，先停止砂輪機，然後在開關沒有鬆開再按下的狀況下重新啟動。

電子離合器

電子扭矩限制離合器可減少切盤卡住時傳導至操作員的最大扭矩反作用力。此功能還可防止傳動裝置和電機失速。扭矩限制離合器採用出廠設定，無法調節。

裝配與調整



警告：為了減低造成嚴重人身傷害的風險，在進行任何調整或卸下或安裝附件或配件之前，切記關掉工具的電源並取出電池組。意外啟動工具可能會造成傷害。



警告：請僅使用 DEWALT 電池組與充電器。

安裝及卸下電池組（圖 B）

注意：請確保電池組 9 電力已完全充滿。

將電池組安裝到工具手柄中

1. 將電池組 9 與工具手柄內的軌道對齊（圖 B）。
2. 將電池組滑入手柄，直到電池組在工具內緊緊固定並確保聽到鎖定到位的聲音。

卸下工具內的電池組

1. 按下釋放按鈕 10，將電池組從工具手柄中穩妥地拉出。
2. 按照本手冊有關充電器的章節所述，將電池組放進充電器。

電量計電池組（圖 B）

一些 DEWALT 電池組帶有包含三個綠色 LED 燈的電量計，可以指示電池組的剩餘電量。

若要啟用電量計，請按下並按住電量計按鈕。三個綠色 LED 燈將以組合方式亮起，以指示剩餘電量。電池電

量低於可用限時，電量計不會亮起，此時需要對電池充電。

注意：電量計只指示電池組的剩餘電量。它並不指示工具功能，且根據工具組件、溫度和最終使用者的應用而有所不同。

安裝側手柄（圖 C）



警告：使用工具之前，請檢查手柄是否牢固擰緊。

將側手柄 11 牢固地旋入齒輪箱任一側的其中一個孔中。應始終使用側手柄，以時刻保持對工具的控制。

旋轉齒輪箱（圖 A）

為了提高使用舒適度，齒輪箱將為切削操作旋轉 90°。

1. 移除用於安裝齒輪箱到電動機外殼上的四個角螺絲。
2. 無需將齒輪箱與電動機外殼分開，將齒輪箱頭端旋轉到所需位置。

注意：如果齒輪箱與電動機外殼分開距離超出 3.17 公釐，則必須將本工具交由授權的 DEWALT 維修中心維修和重新組裝。若不維修本工具，可能導致電動機與軸承發生故障。

3. 重新安裝螺絲以將齒輪箱安裝到電動機外殼。將螺絲以 12.5 英吋-磅的扭矩扭緊。過分扭緊會導致螺絲損壞。

防護罩



小心：防護罩必須與所有打磨砂輪、切削砂輪、砂紙盤、鋼絲刷及鋼絲輪一同使用。本工具僅在使用常規砂盤砂光時可以不使用防護罩。請參閱圖 A，瞭解裝置隨附的防護罩。某些應用可能需要從本地經銷商或經過授權的服務中心購買適當的防護罩。

注意：邊緣打磨與切削可採用專為此用途設計並指定的 27 號砂輪進行；6.35 公釐厚的砂輪用於表面打磨，而更薄的 27 號砂輪需要檢查製造商的標籤，以查看該砂輪是可以用於表面打磨，還是只能用於邊緣打磨/切削。禁止表面打磨時，所有砂輪必須搭配使用 1 號防護罩。切削也可以採用 41 號砂輪和 1 號防護罩進行。

注意：請參閱配件表以選取適當的防護罩/配件組合。

安裝防護罩（圖 D）



警告：為了降低造成嚴重人身傷害的風險，在進行任何調整、卸下或安裝附件或配件之前，切記關閉工具並斷開工具電源。重新連接工具之前，請按下並鬆開觸發開關以確保工具已關閉。



小心：防護罩必須與本砂輪機一同使用。

將 DCG406 砂輪機用於切削金屬或磚石時，必須使用 1 號防護罩。1 號防護罩可從 DEWALT 經銷商處另行購買。

注意：請參閱本節結束處的打磨和切削配件表，查看可與本砂輪機配合使用的其他配件。

安裝封閉式（1 號）或標準（27 號）防護罩



小心：關閉工具的電源並拔下插頭，然後調整、卸下或安裝附件或配件。重新連接工具之前，請打開開關，然後將其關閉以確保工具已關閉。

帶輪轂的砂輪直接安裝在 M10 (TW, KR), M14(A9) 軸心上。配件的螺紋必須與軸心的螺紋相配。

1. 旋鬆螺釘，直到防護罩接片 **19** 可以在齒輪箱輪轂上的凹槽 **20** 中自由旋轉。
2. 將防護罩 **8** 旋轉入所需的工作位置。防護罩主體應位於軸心與操作人員之間，為操作人員提供最大的保護。
3. 擰緊螺釘，將防護罩固定在齒輪箱蓋上。(緊固扭矩不小於 2.5 N·M)。無法用手旋轉防護罩。切勿在防護罩鬆動的情況下操作砂輪機。
4. 若要移除防護罩，請旋鬆螺釘並將其從防護罩中拔出。

小心：若開啟工具前未能正確放置砂輪，可能會對工具或砂輪造成損壞。

凸緣和砂輪

安裝不帶輪轂的砂輪 (圖 E)

- 警告：**未能正確放置凸緣/緊固螺母/砂輪，可能會導致嚴重人身傷害(或者損壞工具或砂輪)。
- 小心：**隨附的凸緣必須與 27 號和 42 號中心凹陷的砂輪以及 41 號切削砂輪搭配使用。如需詳細資訊，請參閱**配件表**。
- 警告：**在使用切削砂輪時，需要使用封閉式雙面切削砂輪防護罩。
- 警告：**使用受損的凸緣或防護罩，或者未使用適當的凸緣或防護罩可能會由於砂輪破損或砂輪接觸而導致人身傷害。如需詳細資訊，請參閱**配件表**。

1. 將工具放置在工作台上，防護罩朝上。
2. 將支撐凸緣 **5** 安裝到軸心 **4** 上，讓凸起的中心(導杆)面向砂輪。按下支撐凸緣使其就位。
3. 將砂輪 **19** 緊靠支撐凸緣，讓砂輪在支撐凸緣上凸起的中心(導杆)居中。
4. 按下軸心鎖按鈕並使六角凹陷背向砂輪，將鎖定凸緣 **6** 擰上軸心，使接片與軸心上的兩個插槽啮合。
5. 在按下軸心鎖按鈕時，手動或使用提供的扳手擰緊鎖定凸緣 **6**。(若狀況很好，請僅使用鎖定凸緣。)若要查看凸緣詳細資料，請參閱**配件表**。
6. 若要卸下鋼絲輪，請按上述相反的步驟操作。

安裝砂光支撐墊 (圖 F)

注意：使用支撐墊的砂盤(通常稱為纖維樹脂砂盤)不需要防護罩。由於這些配件不需要防護罩，因此防護罩在使用時可能適合也可能不適合這些配件。

- 警告：**未能正確放置凸緣/緊固螺母/砂輪，可能會導致嚴重人身傷害(或者損壞工具或砂輪)。
- 警告：**完成砂光應用後，必須重新安裝合適的防護罩來執行打磨砂輪、切削砂輪、砂紙盤、鋼絲刷和鋼絲輪應用。

1. 將支撐墊 **16** 置於或適當固定於軸心上。
2. 將砂盤 **17** 置於支撐墊 **16** 上。
3. 在按下軸心鎖 **3** 的同時，將緊固螺母 **18** 上凸出的輪轂導入砂盤和支撐墊的中心，從而將緊固螺母安裝到軸心。

4. 用手擰緊緊固螺母。然後，按下軸心鎖按鈕並旋轉砂盤，直至砂盤和緊固螺母貼緊。
5. 若要拆下砂輪，請抓住並轉動支撐墊和砂墊，同時按下軸心鎖按鈕。

安裝及卸下帶輪轂的砂輪 (圖 A)

帶輪轂的砂輪直接安裝在螺紋軸心上。配件的螺紋必須與軸心的螺紋相配。

1. 透過將支撐凸緣拉離工具將其拆下。
2. 用手將砂輪輪裝到軸心 **4** 上。
3. 按下軸心鎖按鈕 **3** 並使用扳手擰緊鋼絲輪的輪轂。
4. 請按上述相反的步驟操作，卸下鋼絲輪。

注意：若開啟工具前未能正確放置砂輪，可能會對工具或砂輪造成損壞。

安裝鋼絲杯刷和鋼絲輪 (圖 A)

- 警告：**未能正確放置凸緣/緊固螺母/砂輪，可能會導致嚴重人身傷害(或者損壞工具或砂輪)。
- 小心：**為了降低造成人身傷害的風險，請在搬運鋼絲刷和鋼絲輪時佩戴工作手套。鋼絲刷或鋼絲輪可能會變得很鋒利。
- 小心：**為了降低工具損壞的風險，鋼絲輪或鋼絲刷在安裝或使用時不得接觸防護罩。配件可能會出現不易發現的損壞，導致鋼絲從鋼絲輪或鋼絲杯配件上脫落。

將鋼絲杯刷或鋼絲輪直接安裝在螺紋軸心上，而無需使用凸緣。只使用螺紋輪轂隨附的鋼絲刷或鋼絲輪。只需支付額外費用，您就可以透過當地經銷商或授權維修中心獲取這些配件。

1. 將工具放置在工作台上，防護罩朝上。
2. 用手將鋼絲輪裝到軸心上。
3. 按下軸心鎖按鈕 **3** 並使用鋼絲輪或鋼絲刷輪轂上的扳手擰緊鋼絲輪。
4. 若要卸下鋼絲輪，請按上述相反的步驟操作。

注意：為了降低工具損壞的風險，請在開啟工具前正確放置輪轂。

操作之前

- 安裝防護罩及合適的圓盤或砂輪。請勿使用過度磨損的圓盤或砂輪。
- 確保支撐凸緣與鎖定凸緣已正確安裝。遵循**配件表**中提供的指示。
- 確保圓盤或砂輪以配件和工具上的箭頭方向旋轉。
- 切勿使用已損壞的配件。每次使用前，請檢查配件，例如檢查砂輪是否有碎裂和裂縫，檢查支撐墊是否有裂縫、撕裂或過度磨損，檢查鋼絲刷是否鬆動或鋼絲是否斷裂。若電動工具或配件跌落，請檢查是否損毀，或立即安裝未破損的配件。檢查並安裝配件後，讓自己和旁觀者遠離配件的旋轉範圍，並讓電動工具以最大的空載速度運行一分鐘。受損配件一般會在此測試過程中碎裂。

操作

使用說明



警告：務必遵守安全指示和適用的規則。



警告：為了減低造成嚴重人身傷害的風險，在進行任何調整或卸下或安裝附件或配件之前，切記關掉工具的電源並取出電池組。意外啟動工具可能會造成傷害。



警告：

- 確保所有要打磨或切削的材料已固定到位。
- 固定並支撐工件。使用夾具或老虎鉗，將工件固定、支撐到穩定的平台上。務必牢固地夾住和撐住工件以防止工件移動和失控。工件移動或失控可能會引發危險並導致人身傷害。
- 操作該工具時務必戴上常規工作手套。
- 齒輪在使用期間溫度可能會非常高。
- 輕輕地對工具施加壓力。切勿對圓盤施加側壓力。
- 務必安裝防護罩及合適的圓盤或砂輪。請勿使用過度磨損的圓盤或砂輪。
- 避免過載。若工具變熱，需讓其在空載狀況下運行幾分鐘，使配件冷卻。請勿觸摸尚未冷卻的配件。圓盤在使用期間溫度很高。
- 切勿使用無合適防護罩的打磨盤。
- 請勿將電動工具與切割台搭配使用。
- 切勿將緩衝墊與粘合的研磨產品結合使用。
- 請注意工具關機後砂輪會繼續轉動。

正確的雙手放置位置（圖 G）



警告：為了減低嚴重人身傷害的風險，請務必如圖示那樣正確放置雙手。



警告：為了減低造成嚴重人身傷害的風險，預期有突然反作用力時務必握緊。

正確的雙手放置位置是一隻手放在側手柄 11 上，另一隻手握住工具主體，如圖 G 所示。

槳式開關（圖 A）



小心：緊握工具側手柄和主體以在啟動時和使用過程中保持對工具的控制，直到砂輪或配件停止旋轉。確保砂輪完全停止後才放下工具。

注意：若要減少工具意外移動，切勿在負載情況下開啟或關閉工具。允許砂輪機運行達到全速後再接觸工作表面。從工作表面提起工具，然後再關閉工具。允許工具停止旋轉後再將其放下。

1. 若要開啟工具，請朝工具背部推動鎖定桿 2，然後按下槳式開關 1。按下開關時，工具將運行。
2. 若要關閉工具，請鬆開槳式開關。

軸心鎖（圖 A）

軸心鎖 3 可在安裝或卸下砂輪時防止軸心旋轉。只能在工具關閉、拔出電源插頭且完全停止時使用軸心鎖。

注意：為了降低工具損壞的風險，切勿在工具運行時使用軸心鎖。否則將損壞工具，附著的配件可能會甩脫，從而導致傷害。

若要使用軸心鎖，請按下軸心鎖按鈕並旋轉軸心，直到無法再旋轉為止。

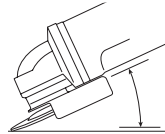
表面打磨、砂光和鋼絲刷



小心：務必依據本手冊中的說明使用正確的防護罩。

若要在工件表面執行工作：

1. 讓工具達到全速然後再將工具移至工作表面。
2. 施加最小壓力到工作表面上，讓工具在高速下工作。當工具在高速下工作時，材料去除率最大。
3. 讓工具與工作表面之間保持適當的角度。請依照特定功能參閱圖表。



功能	角度
打磨	20°-30°
使用砂紙盤砂光	5°-10°
使用支撐墊砂光	5°-15°
鋼絲刷	5°-10°

4. 讓砂輪邊緣與工作表面之間保持接觸。
 - 若要打磨、使用砂紙盤砂光或鋼絲刷，請前後持續移動工具，以避免在工作表面上產生溝槽。
 - 若要使用支撐墊磨削，請沿直線持續移動工具，以防止工作表面上留下發熱或旋轉標記。

注意：讓工具靠在工作表面上不移動會使工件受損。

5. 從工作表面移除工具，然後再關閉工具。讓工具停止旋轉後再將其放下。



小心：在處理邊緣時需格外小心，因為此時砂輪機可能出現突然的大幅運動。

處理漆面工件需採取的預防措施

1. 不建議對含鉛油漆進行刷光或鋼絲刷操作，因為控制污染塵埃比較困難。鉛中毒對兒童及孕婦的危害最大。
2. 由於在沒有化學分析的情況下難以確定油漆是否含鉛，因此我們建議在對任何漆面進行打磨時採取下列預防措施。

人身安全

1. 在完成所有清理工作前，兒童或孕婦不應進入正在執行漆面打磨或刷光的工作區域。
2. 進入工作區域的所有人應佩帶防塵面罩或口罩。過濾器應每天或在佩帶者難以呼吸時更換。

注意：應僅使用對含鉛油漆塵埃及氣體提供防護的防塵面罩。普通油漆面罩不提供此防護功能。請諮詢當地的五金經銷商，了解經美國職業安全及衛生研究院 (NIOSH) 批准的合適口罩。
3. 不應在工作區域進食、飲水或吸煙，以防吸入油漆污染顆粒。工作人員應在進食、飲水或吸煙前洗手。

和清理。食品、飲料或煙草不應留下工作區域，塵埃會沉積在它們上面。

環境安全

1. 移除油漆時應將產生的塵埃量減到最少。
2. 移除油漆的區域應使用 4 公釐厚的塑料片密封。
3. 打磨時應儘量減少工作區域外油漆粉塵的痕跡。

清潔和處理

1. 在執行打磨作業期間，應每天對工作區域中所有表面進行真空清掃和徹底清潔。應經常更換真空過濾袋。
2. 滴塑布應該與塵埃或其他碎片收集在一起並處理。應該將它們放入密封的垃圾容器內，並透過常規垃圾收集程序進行處理。清理期間，兒童和孕婦應該遠離工作區域。
3. 所有玩具、可清洗之家具及兒童用具應徹底清洗，然後再使用。

邊緣打磨和切削

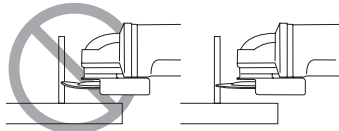


警告：請勿將邊緣打磨/切削砂輪用於表面打磨，因為這些砂輪的設計無法承受表面打磨所遇到的側壓力。可能導致砂輪斷裂和人身傷害。



小心：若在使用工具時用來邊緣打磨和切削的砂輪出現彎曲或扭曲，則可能發生碎裂或反衝。在所有邊緣打磨/切削操作中，防護罩開口側不得朝向操作人員。

注意：使用 27 號砂輪的邊緣打磨/切削範圍必須限制為淺挖和開槽 - 新砂輪的深度小於 13 公釐。隨著砂輪磨損，砂輪半徑會縮短，切割/開槽深度也會減小。如需詳細資訊，請參閱**配件表**。使用 41 號砂輪進行邊緣打磨/切削需要使用 1 號防護罩。



1. 讓工具達到全速然後再將工具移至工作表面。
2. 施加最小壓力到工作表面上，讓工具在高速下工作。當工具在高速下工作時，打磨/切削率最大。
3. 不要面向砂輪開口的下側。
4. 一旦開始切削並在工件留下缺口，請勿改變切削角度。改變角度會造成砂輪彎曲並可能導致砂輪斷裂。邊緣打磨砂輪的設計無法承受彎曲造成的側壓力。
5. 從工作表面移除工具，然後再關閉工具。讓工具停止旋轉後再將其放下。

金屬切割

若要切割粘合的研磨產品，務必使用 1 號防護罩。

切割時，使用適量的進料，並根據被切割材料相應調整。請勿在切盤上施壓，使機器傾斜或擺動。

請勿透過施加側向壓力來降低切盤的運轉速度。

機器必須始終以逆磨運動工作。否則，會存在被推出切割位置發生失控的危險。

切割型材和方棒時，最好從最小的橫截面開始切割。

粗打磨

切勿使用切盤來進行粗打磨。

請始終使用 27 號防護罩。

當將機器角度設為 30° 至 40° 時，可達到最佳的粗打磨效果。以適中壓力來回移動機器。如此，工件溫度會變得太高，不會變色並且不會出現凹槽。

切割石材

機器應該僅用於乾切割。

如要切割石材，最好使用金剛石切盤。僅在使用額外防塵面罩時操作機器。

工作建議

在結構牆上開槽時，請謹慎操作。

結構牆上開槽必須遵守特定於國家/地區的規定。所有情況下都必須遵守這些規定。開始工作前，請諮詢負責的結構工程師、建築師或施工主管。

維護

DEWALT 電動工具採用卓越的設計，能夠長時間使用，並且只需最少的維護。若要持續獲得滿意的操作效果，需進行正確的工具維護和定期的清潔。



警告：為了減低造成嚴重人身傷害的風險，在進行任何調整或卸下或安裝附件或配件之前，切記關掉工具的電源並取出電池組。意外啟動工具可能會造成傷害。

充電器和電池組是不可檢修的裝置。



潤滑

本電動工具毋需額外潤滑。



清潔



警告：一旦通風口及其周圍積聚可見的粉塵，請立即使用乾燥的壓縮空氣吹掉主機殼內的粉塵和灰塵。執行此步驟時，請佩戴經認可的護目裝備和防塵面罩。



警告：切勿使用溶劑或其他刺激性化學品來清潔工具的非金屬部件。這些化學品可能會削弱部件中使用的材料。只能使用抹布蘸中性肥皂水進行清潔。不要讓任何液體進入工具；不要讓工具的任何部分浸入液體中。

選購配件



警告：由於非 DEWALT 所提供的配件未在本產品上進行過使用測試，在本產品上使用這些附件可能發生危險。為降低傷害危險，在本產品上只應使用 DEWALT 所推薦的配件。

如需進一步瞭解適用配件的相關資訊，請洽詢當地代理商。

保護環境



分類回收。帶有此標誌的產品和電池必須與一般家庭廢物分開處置。

產品和電池包含可重複使用或回收的材料，可降低對原材料的需求。請根據當地法規回收電氣產品和電池。更多資訊，請造訪 www.2helpU.com。

可充電電池組

本電池組使用壽命長，若無法為以前輕鬆完成的工作提供充足電力，必須更換電池組。在使用壽命結束時，請妥善處置以保護我們的環境：

- 使電池完全放電，然後將它從工具中卸下。
- 鋰離子電池是可回收的。請將它們送往您的代理商或當地的回收站。所收集的電池組將會再循環利用或妥善處置。

進口商：新加坡商百得電動工具 (股) 公司台灣分公司

地址：台北市士林區德行西路 33 號 2 樓

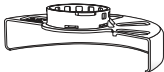
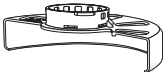
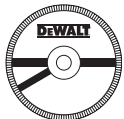
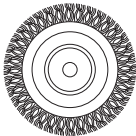
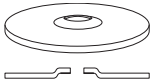
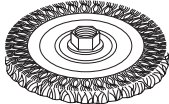
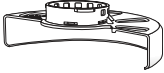
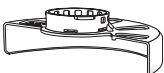
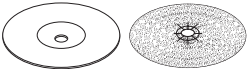
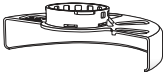
電話：02 - 28341741

總經銷商：永安實業股份有限公司

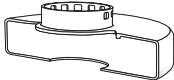
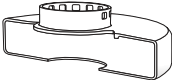
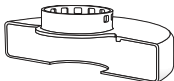
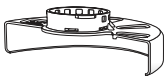
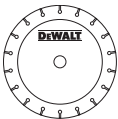
地址：新北市三重區新北大道二段 137 號

電話：02 - 29994633

配件表

防護罩類別	配件	說明	如何安裝砂輪機
 27 號防護罩		中心凹陷打磨圓盤	 27 號防護罩
 27 號防護罩		砂布輪	 支撐凸緣
		鋼絲輪	 27 號中心凹陷砂輪  鎖定凸緣
		帶螺紋螺母的鋼絲輪	 27 號防護罩  鋼絲輪
		帶螺紋螺母的鋼絲杯	 27 號防護罩  鋼絲刷
		支撐墊/砂光板	 27 號防護罩  橡膠支撐墊  砂盤  緊固螺母

配件表 (續)

防護罩類別	配件	說明	如何安裝砂輪機
 1 號防護罩		粘合的磚石切 削圓盤	 1 號防護罩
 27 號防護罩		粘合的金屬 切盤	 支撐凸緣
 1 號防護罩 或  27 號防護罩  27 號防護罩		金剛石切削 砂輪	 切削砂輪  鎖定凸緣

