DEWALT®

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DCG420

Fig. A

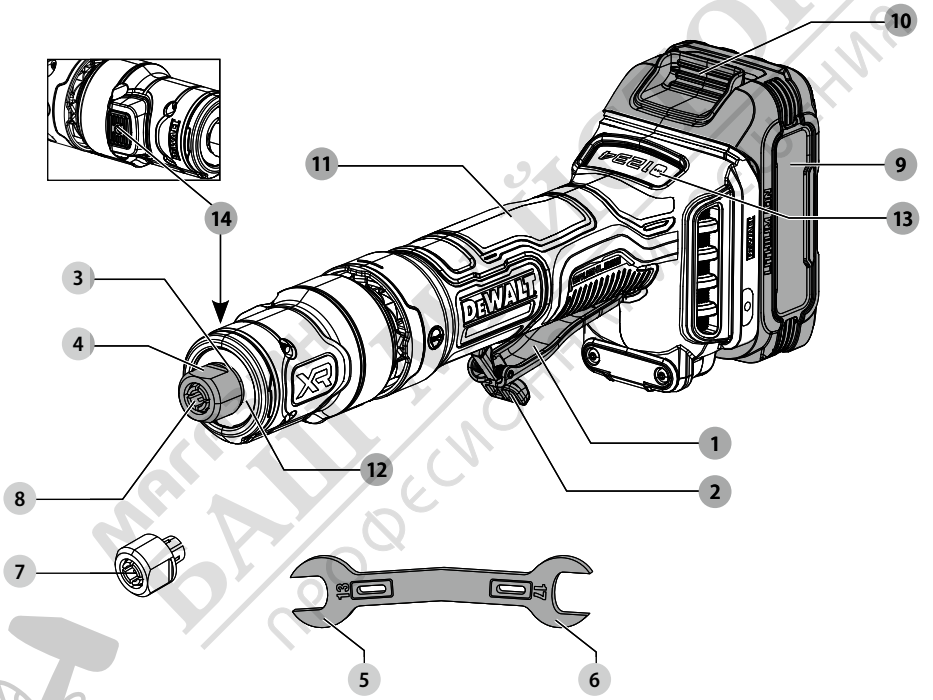


Fig. B

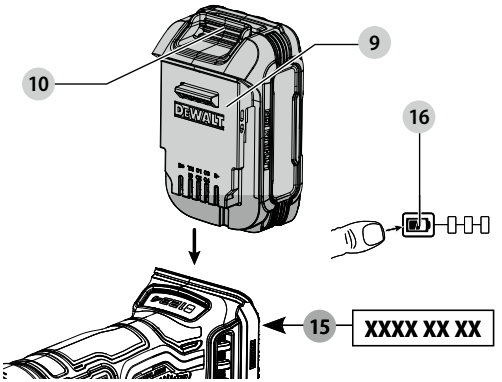


Fig. C

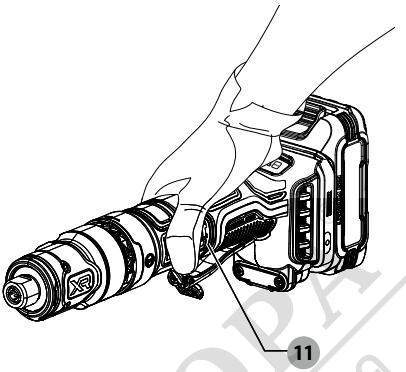


Fig. D

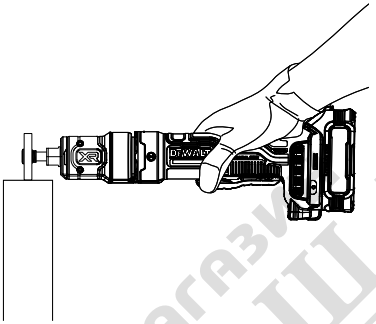
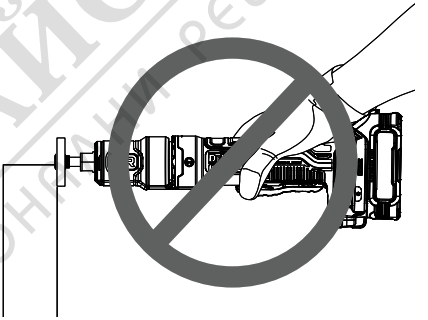


Fig. E



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
Type		1
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	50
Collet size		6 mm and/or 1/4"
Weight (without battery pack)	kg	1.13
Noise values and vibration values (triax vector sum) according to EN60745-2-23:		
L_{PA} (emission sound pressure level)	dB(A)	68
L_{WA} (sound power level)	dB(A)	79
K (uncertainty for the given sound level)	dB(A)	4
Vibration emission value a_h =	m/s^2	3.4
Uncertainty K =	m/s^2	1.5

The vibration and/or noise emission level given in this information sheet has been measured in accordance with a standardised test given in EN60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

⚠ ***WARNING:*** *The declared vibration and/or noise emission level represents the main applications of the tool. However, if the tool is used for different applications, with different accessories or is poorly maintained, the vibration and/or noise emission may differ. This may significantly increase the exposure level over the total working period.*

An estimation of the level of exposure to vibration and/or noise should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration and/or noise such as: maintain the tool and the accessories, keep the hands warm (relevant for vibration), organisation of work patterns.

EC-Declaration of Conformity

Machinery Directive

CE

Die Grinder
DCG420 Type 1

We, the manufacturer as stated below, declare that these products described under Technical Data are in compliance with: 2006/42/EC, EN60745-1:2009+A11:2010, EN60745-2-23:2013.

These products also comply with Directive 2014/30/EU and 2011/65/EU. For more information, please contact us at the following address or refer to the back of the manual.

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

Markus Rompel
Vice President of Engineering Europe
Stanley Black & Decker Deutschland GmbH
DEWALT, Richard-Klinger-Straße 11,
65510 Idstein, Germany
28.07.2025

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 grinding accessories must be at least equal to the maximum speed marked on the power tool.*** *Grinding 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 filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.*

i) ***Keep bystanders a safe distance away from work area. Anyone entering the work area must wear 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 band, 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 power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

a) ***Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces.*** *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 re-enter 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:

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

Battery Type

These battery packs may be used:

Battery	(kg)	Battery	(kg)
DCB181	0.35	**DCB188**	0.95
DCB182	0.61	**DCB189**	0.54
DCB183/B/G	0.40	**DCBP034/G**	0.32
DCB184/B/G	0.62	**DCBP518/G**	0.75
DCB185	0.35	**DCB1880**	0.98
DCB187	0.54	**DCBP318**	0.50

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

Package Contents

The package contains:

1 Die grinder
1 Wrench
1 1/4" collet
1 6 mm collet (attached to the tool)
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

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 **15** 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 1/4"
8 Collet 6 mm
9 Battery
10 Battery release button
11 Grinder body
12 LED Worklight
13 Speed selector button
14 Spindle lock button

Intended Use

Your die grinder has been designed for professional grinding, sanding, wire 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 50 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 DEWALT batteries 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 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 **10** 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 **16**, 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 1/4"collet **7** and a 6 mm collet **8**.

1. Depress the spindle lock **14**.
2. Loosen the collet nut **4** by turning it counterclockwise.
3. Insert the shank of the accessory into the 1/4"collet **7** or 6 mm collet **8**.
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 1/4"collet **7** or 6 mm collet **8**.

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 **11**.

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 **13** 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 **12** 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** and scan the above QR code.