

DEWALT®

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DWE4119

Figure 1

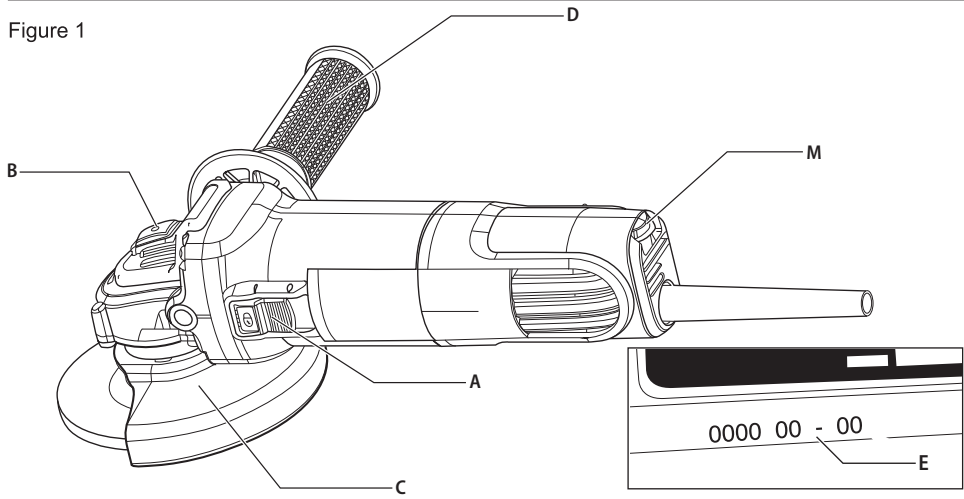


Figure 2

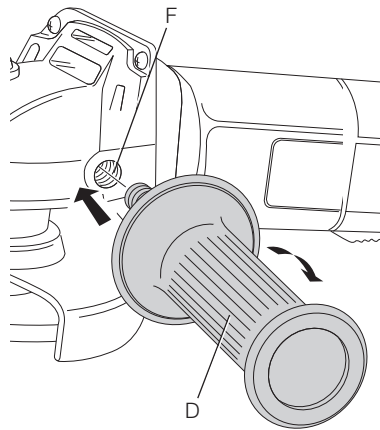


Figure 3a

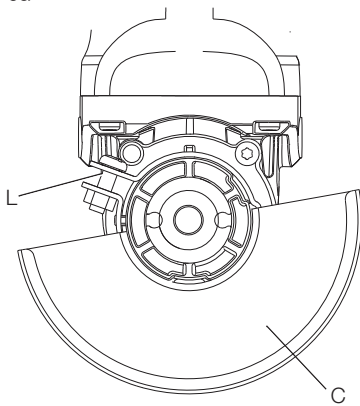


Figure 3b

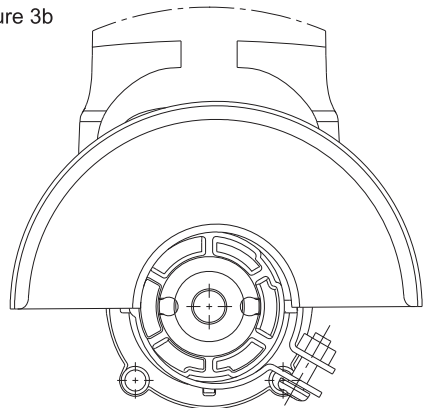


Figure 4

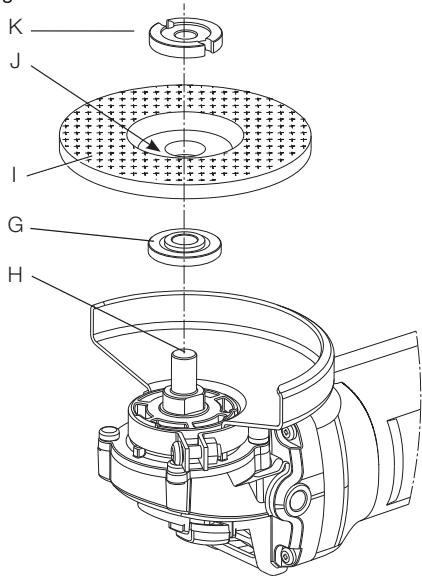


Figure 5

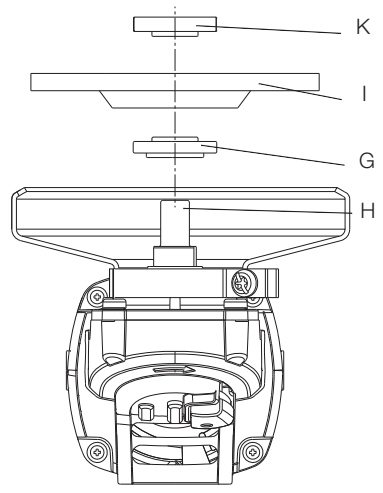
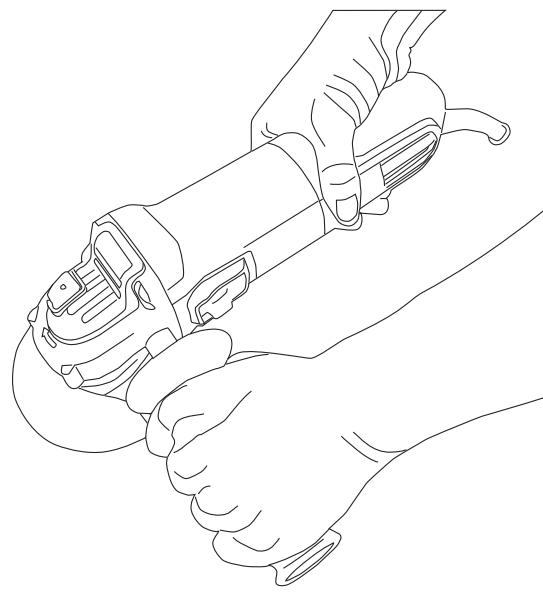


Figure 6



ANGLE GRINDERS

DWE4119

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

		DWE4119
Voltage	V _{AC}	220-240
Type		1
Power input	W	950
No-load/rated speed	min ⁻¹	3000-11 000
Wheel diameter	mm	125
Grinding Wheel thickness	mm	6
Wheel Type		27
Spindle diameter		M14
Weight	kg	1.8

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.



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

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.

- 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 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, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

4) POWER TOOL USE AND CARE

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power 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.

5) SERVICE

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

ADDITIONAL SPECIFIC SAFETY RULES

Safety Instructions for All Operations

- a) *This power tool is intended to function as a grinder. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.*
- b) *Operations such as sanding, wire brushing, polishing and cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.*
- c) *Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.*
- d) *The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.*
- e) *The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories 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.*
- 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 power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electrical shock.*
- k) *Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.*
- l) *Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.*
- m) *Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.*
- n) *Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.*
- o) *Do not operate the power tool near flammable materials. Sparks could ignite these materials.*
- p) *Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.*

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.
- 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.



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

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.

Markings on Tool

The following pictograms are shown on the tool:



Read instruction manual before use.



Wear ear protection.



Wear eye protection.

DATE CODE POSITION (FIG. 1)

The date code (E), which also includes the year of manufacture, is printed into the housing.

Example:

2018 XX XX
Year of Manufacture

Package Contents

The package contains:

- 1 Angle grinder
- 1 Guard
- 1 Side handle
- 1 Flange set
- 1 Spanner
- 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.*

Description (Fig. 1)



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

- A. On/off switch
- B. Spindle lock button
- C. Guard
- D. Side handle
- M. Variable Speed Dial

INTENDED USE

Your DWE4119 angle grinder has been designed for professional grinding applications.

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

These heavy-duty angle grinders are professional power tools.

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.

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.

Electrical Safety

The electric motor has been designed for one voltage only. Always check that the power supply corresponds to the voltage on the rating plate.



Your DEWALT tool is double insulated in accordance with EN60745; therefore no earth wire is required.



WARNING: 115 V units have to be operated via a fail-safe isolating transformer with an earth screen between the primary and secondary winding.

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

If an extension cable is required, use an approved 3-core extension cable suitable for the power input of this tool (see **Technical Data**). The minimum conductor size is 1.5 mm²; the maximum length is 30 m.

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

ASSEMBLY AND ADJUSTMENTS



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. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.

Attaching Side Handle (Fig. 2)



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



WARNING: The side handle should always be used to maintain control of the tool at all times.

Screw the side handle (D) tightly into one of the holes (F) on either side of the gear case.

Mounting and Removing the Guard (Fig. 3)



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.

TO MOUNT THE GUARD

1. Place the angle grinder on a table, spindle up.
2. Press the guard (C) down (Fig. 3A).
3. Position the guard between your body and work piece.
4. Tight the screw (L) holding the cinch collar firmly around the neck of spindle (Fig. 3B)

TO REMOVE THE GUARD

1. Loosen the screw (L) holding the cinch collar around the neck of the spindle and make sure the screw remains attached to the collar. remain attached to the collar.
2. Lift up on the guard.

Fitting and Removing a Grinding Disc (Fig. 1, 4, 5)



WARNING: Do not use a damaged disc.

1. Place the tool on a table, guard up.
2. Fit the backing flange (G) correctly onto the spindle (H) (Fig. 4).
3. Place the disc (I) on the flange (G). When fitting a disc with a raised centre, make sure that the raised centre (J) is facing the flange (G).
4. Screw the outer flange (K) onto the spindle (H) (Fig. 5). The ring on the flange (K) must face towards the disc when fitting a grinding disc.
5. Press the spindle lock button (B) and rotate the spindle (H) until it locks in position.
6. Tighten the flange (K) with the hex key provided or a two pin spanner.
7. Release the spindle lock.
8. To remove the disc, loosen the flange (K) with the hex key provided or a two pin spanner.

Prior to Operation

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

Variable Speed Dial (Fig. 1)

- The variable speed dial (M) offers added tool control and enables the tool to be used at optimum conditions to suit the accessory and material.
- Turn the variable speed dial (M) to the desired level. Turn the dial upward for higher speed and downward for lower speed.

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 tool from power source before making any adjustments or removing/installing attachments or accessories. Be sure the trigger switch is in the OFF position. 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.
- 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.
- 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 to cool the accessory. Do not touch accessories before they have cooled. The discs become very hot during use.

Proper Hand Position (Fig. 1, 6)



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 (D), with the other hand on the body of the tool, as shown in Figure 6.

Switches



WARNING: Do not switch the tool on or off when under load.



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

SLIDER SWITCH (FIG. 1)

To start the tool, slide the on/off slider switch (A) toward the front of the tool. To stop the tool, release the on/off slider switch.

For continuous operation, slide the switch toward the front of the tool and press the forward part of the switch inward.

To stop the tool while operating in continuous mode, press the rear part of the slider switch and release.

Spindle Lock (Fig. 1)

The spindle lock (B) 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.

Using Depressed Centre Grinding Wheels

SURFACE GRINDING WITH GRINDING WHEELS

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 rate is greatest when the tool operates at high speed.
3. Maintain a 20° to 30° angle between the tool and work surface.
4. Continuously move the tool in a forward and back motion to avoid creating gouges in the work surface.
5. Remove the tool from work surface before turning tool off. Allow the tool to stop rotating before laying it down.

Metal Applications

When using the tool in metal applications, make sure that a residual current device (RCD) has been inserted to avoid residual risks caused by metal swarf.

If the power supply is shut off by the RCD, take the tool to an authorised DEWALT repair agent.



WARNING: In extreme working conditions, conductive dust can accumulate inside the machine housing when working with metal. This can result in the protective insulation in the machine becoming degraded with a potential risk of an electrical shock.

To avoid build-up of metal swarf inside the machine, we recommend to clear the ventilation slots on a daily basis. Refer to **Maintenance**.

Using Flap Discs



WARNING: Metal dust build-up. Extensive use of flap discs in metal applications can result in the increased potential for electric shock. To reduce this risk, insert an RCD before use and clean the ventilation slots daily by blowing dry compressed air into the ventilation slots in accordance with the below maintenance instructions.

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 tool from power source before making any adjustments or removing/installing attachments or accessories. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.

Pop-off Brushes

The motor will be automatically shut off indicating that the carbon brushes are nearly worn out and that the tool needs servicing. The carbon brushes are not user-serviceable. Take the tool to an authorised DEWALT repair agent.



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.

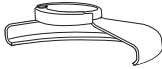

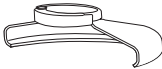




Protecting the Environment



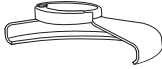

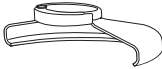



Separate collection. Products and batteries marked with this symbol must not be disposed of with normal household waste.

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.

GRINDING AND CUTTING ACCESSORY CHART

<i>Guard Type</i>	<i>Accessory</i>	<i>Description</i>	<i>How to Fit Grinder</i>
 <p>TYPE 27 GUARD</p>		<p>Depressed centre grinding disc</p>	 <p>Type 27 guard</p>  <p>Backing flange</p>   <p>Type 27 depressed centre wheel</p>  <p>Threaded clamp nut</p>

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