

Instruction Manual

DEWALT®

D28000

Heavy Duty Small Angle Grinder

Congratulation!


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

		D28000
Rated voltage	V	220-240~
Rated frequency	Hz	50/60
Power input	W	720
No Load Speed	/min	12000
Max. Disc Diameter	mm	100
Side handle		No
Carbon Brush		Pop off
Spindle Thread		M10
Weight	kg	1.4

Pop-off carbon brush protect motor away from pre-mature failure.

General Safety Rules – For All Tools

 **WARNING! Read and understand all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.

- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adaptor plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrical-ly malfunction or break down, grounding provides a low resistance path to carry electricity away from the user. **Applicable only to Class I (grounded) tools.**
- **Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system. **Applicable only to Class II (double insulated) tools.**
- **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
- **Don't 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 to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.

Using an extension cable

If an extension cable is required, use an approved extension cable suitable for the power input of this tool (See technical data).

The minimum conductor size is 1.5 mm².

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

Also refer to the table below.

Conductor size (mm²) Cable rating (Amperes)

0.75	6
1.00	10
1.50	15
2.50	20
4.00	25

Voltage	Amperes	Cable rating (Amperes)	Cable length (m)						
			7.5	15	25	30	45	60	
115	0	-	2.0	6	6	6	6	6	10
	2.1	-	3.4	6	6	6	6	15	15
	3.5	-	5.0	6	6	10	15	20	20
	5.1	-	7.0	10	10	15	20	20	25
	7.1	-	12.0	15	15	20	25	25	-
	12.1	-	20.0	20	20	25	-	-	-
230	0	-	2.0	6	6	6	6	6	6
	2.1	-	3.4	6	6	6	6	6	6
	3.5	-	5.0	6	6	6	6	10	15
	5.1	-	7.0	10	10	10	10	15	15
	7.1	-	12.0	15	15	15	15	20	20
	12.1	-	20.0	20	20	20	20	25	-

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothing, jewelry, or long hair can be caught in moving parts. Air vents often cover moving parts and should also be avoided.
- **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.**

TOOL USE AND CARE

- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.

- **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventative safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.

SERVICE

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

Additional Specific Safety Instructions for Grinders

- **Always use proper guard with grinding wheel.** A guard protects operator from broken wheel fragments and wheel contact.
- **Accessories must be rated for at least the speed recommended on the tool warning label.** Wheels and other accessories running over rated speed can fly apart and cause injury. Accessory ratings must be above listed minimum wheel speed as shown on tool nameplate.
- **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- **ALWAYS WEAR EYE PROTECTION WHEN USING THIS TOOL.**
- **Use of accessories not specified in this manual is not recommended and may be hazardous.** Use of power boosters that would cause the tool to be driven at speeds greater than its rated speed constitutes misuse.
- **Do not use circular saw blades or any other toothed blades with this tool.** Serious injury may result.
- **When starting the tool with a new or replacement wheel, or a new or replacement wire brush installed, hold the tool in a well protected area and let it run for one minute.** If the wheel has an undetected crack or flaw, it should burst in less than one minute. If the wire brush has loose wires, they will be detected. Never start the tool with a person in line with the wheel. This includes the operator.
- **Avoid bouncing the wheel or giving it rough treatment.** If this occurs, stop the tool and inspect the wheel for cracks or flaws.

- **Direct sparks away from operator, bystanders or flammable materials.** Sparks may be produced while cutting and/or grinding. Sparks may cause burns or start fires.
- **Never cut into area that may contain electrical wiring or piping.** Serious injury may result.
- **Clean out your tool often, especially after heavy use.** Dust and grit containing metal particles often accumulate on interior surfaces and could create an electric shock hazard.
- **Do not operate this tool for long periods of time.** Vibration caused by the operating action of this tool may cause permanent injury to fingers, hands, and arms. Use gloves to provide extra cushion, take frequent rest periods, and limit daily time of use.
- The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V.....volts	A.....amperes
Hz.....hertz	W.....watts
minminutes	~alternating current
====direct current	n ₀no load speed
☐.....Class II Construction	⚠safety alert symbol
⊕.....earthing terminal	.../minrevolutions per minute
- When the wheel is pinched or bound tightly by the workpiece, the wheel stalls and the motor reaction drives the unit rapidly back toward or away from the operator.
- 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:
 - **Maintain a firm grip with both hands on the unit and position your body and arm to allow you to resist kickback forces.** Kickback forces can be controlled by the operator, if proper precautions are taken.
 - **When wheel is binding, or when interrupting a cut for any reason, release the trigger and hold the unit motionless in the material until the wheel comes to a complete stop. Never attempt to remove the unit from the work or pull the unit backward while the wheel is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of wheel binding.
 - **When restarting a cut-off tool in the workpiece, check that the wheel is not engaged into the material.** If wheel is binding, it may walk up or kickback from the workpiece as the tool is restarted.
 - **Support large panels to minimize the risk of wheel pinching and kickback.** Large panels tend to sag under their own weight. Support must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

Causes and Operator Prevention of Kickback

- Kickback is a sudden reaction to a pinched, bound or misaligned wheel, wire brush or flap disc causing an uncontrolled cut-off tool to lift up and out of the workpiece toward the operator.
- **⚠WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:**
 - lead from lead-based paints,
 - crystalline silica from bricks and cement and other masonry products, and
 - arsenic and chromium from chemically-treated lumber (CCA).

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

- **Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water.** Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

▲ WARNING: Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

▲ CAUTION: Use extra care when working into a corner because a sudden, sharp movement of the grinder may be experienced when the wheel or other accessory contacts a secondary surface or a surface edge.

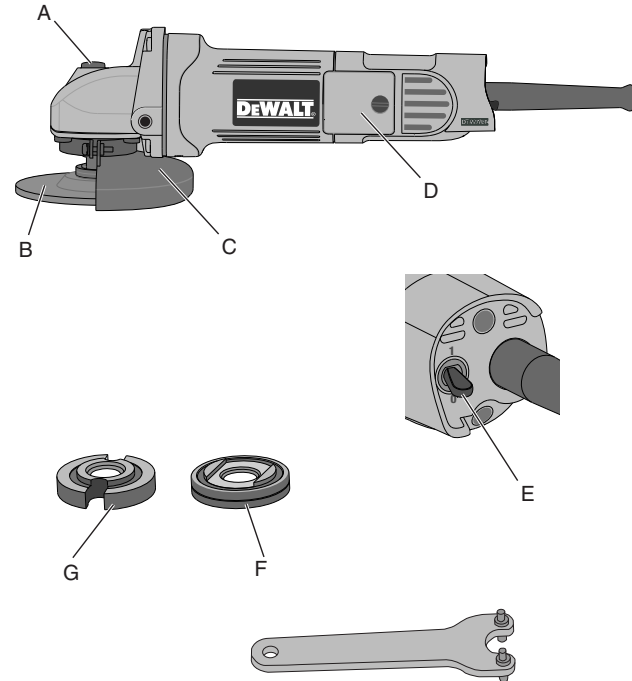
▲ CAUTION: Wear appropriate personal hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

▲ WARNING: Don't forget to fix all screws on the enclosure.

COMPONENTS (Fig. 1)

- A. Spindle Lock Button
- B. Wheel
- C. Guard
- D. Carbon Brush Door
- E. Switch

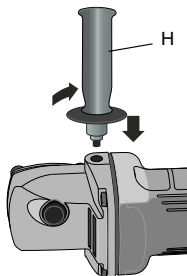
FIG. 1



ASSEMBLY AND ADJUSTMENTS

ATTACHING SIDE HANDLE (Optional)

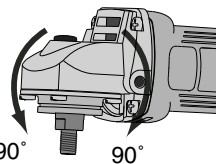
The side handle (H) can be fitted to either side of the gear case in the threaded holes, as shown. Before using the tool, check that the handle is tightened securely. Use a wrench to firmly tighten the side handle. (not standard accessory)



Rotating the Gear Case

▲ CAUTION: Turn off and unplug the tool before making any adjustments or removing or installing attachments or accessories.

1. Remove guard and flanges from tool.
2. Remove the four corner screws attaching the gear case to motor housing.
3. Separating the gear case from motor housing not more than 6.4mm, rotate 90° the gear case head to desired position.



NOTE: If the gear case and motor housing become separated by more than 6.4mm, the tool must be serviced and re-assembled by a DEWALT service center. Failure to have the tool serviced may cause brush, motor and bearing failure.

3. Re-install screws to attach the gear case to the motor housing. Tighten screws to 18 in./lbs. torque. Overtightening could cause screws to strip.

Accessories

It is important to choose the correct guards, backing pads and flanges to use with grinder accessories.

▲ WARNING: 100mm abrasive wheels with rated max. speed lower than 13500RPM can't be used on this grinder. Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over rated accessory speed may burst and cause injury. Threaded accessories must have a

M10 hub. Every unthreaded accessory must have a 16mm arbor hole. If it does not, it may have been designed for a circular saw and should not be used. Use only the accessories shown on pages 9–10 of this manual. Accessory ratings must be above listed minimum wheel speed as shown on tool nameplate.

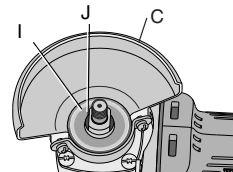
Mounting Guard

MOUNTING AND REMOVING GUARD

▲ CAUTION: Turn off and unplug the tool before making any adjustments or removing or installing attachments or accessories.

▲ CAUTION: Always make sure the guard is correctly fitted before and during using the tool.

1. Loosen screw, until the guard lug (I) can rotate freely in the groove (J) on the gear case hub.
2. Rotate guard (C) 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 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.



OPERATION

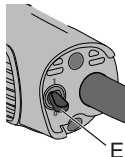
Switch

▲ CAUTION: Hold 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.

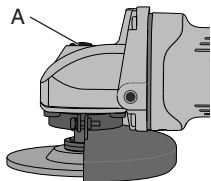
TURN ON & TURN OFF

To turn on the tool, lift up the button(E) to "1" position, to turn off the tool, push the toggle switch Button(E) to "0" position.



SPINDLE LOCK

The spindle lock (A) 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. Do not engage the spindle lock while the tool is operating because damage to the tool will result. To engage the lock, depress the spindle lock button and rotate the spindle until you are unable to rotate the spindle further.



Guards and Flanges

It is important to choose the correct guards and flanges to use with the grinder accessories. See page 6 and this page for the correct accessories.

NOTE: Edge grinding and cutting can be performed with Type 27 wheels designed and specified for this purpose.

⚠ WARNING: *100mm abrasive wheels with rated max. speed lower than 13500RPM can't be used on this grinder. Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over rated accessory speed may burst and cause injury. Threaded accessories must have a M10 hub. Every unthreaded accessory must have a 16mm arbor hole. If it does not, it may have been designed for a circular saw and should not be used. Use only the accessories shown on manual. Accessory ratings must be above listed minimum wheel speed as shown on tool nameplate.*

100mm Grinding Wheels



Type 27 guard



backing flange



Type 27 depressed center wheel



clamp nut

Wire Wheels



Type 27 guard



75mm wire cup brush

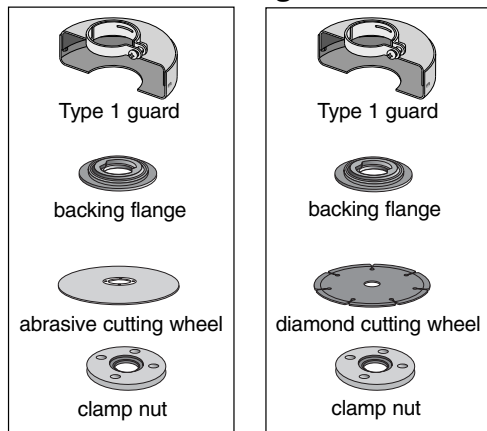


Type 27 guard

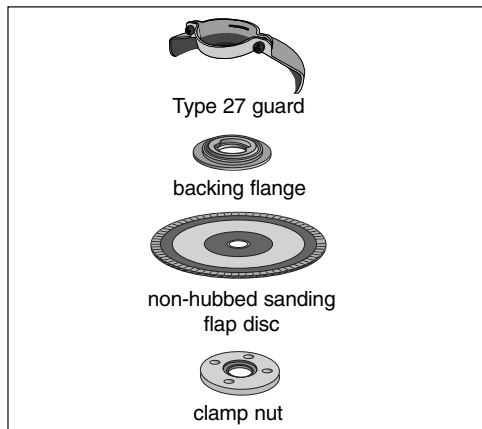


100mm wire wheel

100mm Cutting Wheels



100mm Sanding Flap Discs



Please use the correct size of accessories according the rated size in nameplate.

Do not use accessories designed for 125mm grinder on a 100mm grinder!

Mounting and Using Depressed Center Grinding Wheels and Sanding Flap Discs

MOUNTING AND REMOVING HUBBED WHEELS

⚠ 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 threaded spindle. Thread of accessory must match thread of spindle.

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

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

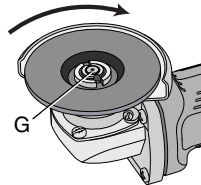
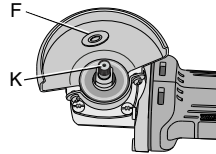
MOUNTING NON-HUBBED WHEELS

⚠ 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.

Depressed center Type 27 grinding wheels must be used with included flanges. See page 9 of this manual for more information.

1. Install the unthreaded backing flange (F) on spindle (K) with the raised section (pilot) against the wheel. Be sure the backing flange recess is seated onto the flats of the spindle by pushing and twisting the flange before placing wheel.
2. Place wheel against the backing flange, centering the wheel on the raised section (pilot) of the backing flange.
3. While depressing the spindle lock button, thread the clamp nut (G) on spindle. If the wheel you are installing is more than 3.18 mm thick, place the threaded clamp nut on the spindle so that the raised section (pilot) fits into the center of the wheel. If the wheel you are installing is 3.18 mm thick or less, place the threaded clamp nut on the spindle so that the raised section (pilot) is not against the wheel.
4. While depressing the spindle lock button, tighten the clamp nut with a wrench.
5. To remove the wheel, depress the spindle lock button and loosen the threaded clamp nut with a wrench.

NOTE: If the wheel spins after the clamp nut is tightened, check the orientation of the threaded clamp nut. If a thin wheel is installed with the pilot on the clamp nut against the wheel, it will spin because the height of the pilot prevents the clamp nut from holding the wheel.



1/4" WHEELS
(6.35mm)



Clamp Nut



Backing Flange

1/8" WHEELS
(3.18mm)



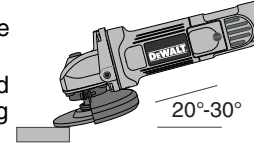
Clamp Nut



Backing Flange

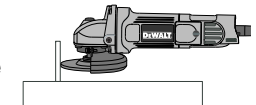
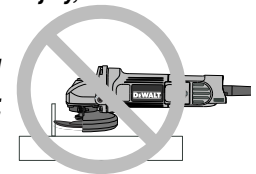
SURFACE GRINDING WITH GRINDING WHEELS

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.



EDGE GRINDING WITH GRINDING WHEELS

⚠ CAUTION: *Wheels used for cutting and edge grinding may break if they bend or twist while the tool is being used to do cut-off work or deep grinding. To reduce the risk of serious injury, limit the use of these wheels with a standard Type 27 guard to shallow cutting and notching (less than 13mm in depth). The open side of the guard must be positioned away from the operator. For deeper cutting with a Type 1 cut-off wheel, use a closed, Type 1 guard. Type 1 guards are available at extra cost from your local dealer or authorized service center.*



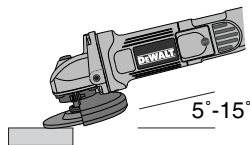
1. Allow the tool to reach full speed before touching the tool to the work surface.
2. Apply minimum pressure to the work surface, allowing the tool to operate at high speed. Grinding rate is greatest when the tool operates at high speed.
3. Position yourself so that the open-underside of the wheel is facing away from you.

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

⚠ 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.

SURFACE FINISHING WITH SANDING FLAP DISCS

- Allow the tool to reach full speed before touching the tool to the work surface.
- Apply minimum pressure to work surface, allowing the tool to operate at high speed. Sanding rate is greatest when the tool operates at high speed.
- Maintain a 5° to 10° angle between the tool and work surface.
- Continuously move the tool in a forward and back motion to avoid creating gouges in the work surface.
- Remove the tool from work surface before turning tool off. Allow the tool to stop rotating before laying it down.



Mounting and Using Wire Brushes and Wire Wheels

Wire cup brushes or wire wheels screw directly on the grinder spindle without the use of flanges. Use only wire brushes or

wheels provided with a M10 threaded hub. A Type 27 guard is required when using wire brushes and wheels.

⚠ CAUTION: Wear work gloves when handling wire brushes and wheels. They can become sharp.

⚠ CAUTION: 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.

MOUNTING WIRE CUP BRUSHES AND WIRE WHEELS

⚠ 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.

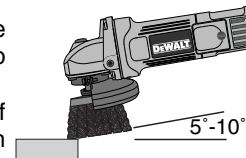
- Thread the wheel on the spindle by hand.
- Depress spindle lock button and use a wrench on the hub of the wire wheel or brush to tighten the wheel.
- To remove the wheel, reverse the above procedure.

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

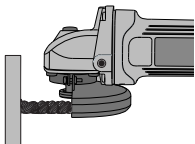
USING WIRE CUP BRUSHES AND WIRE WHEELS

Wire wheels and brushes can be used for removing rust, scale and paint, and for smoothing irregular surfaces.

- Allow the tool to reach full speed before touching the tool to the work surface.
- Apply minimum pressure to work surface, allowing the tool to operate at high speed. Material removal rate is greatest when the tool operates at high speed.
- Maintain a 5° to 10° angle between the tool and work surface for wire cup brushes.
- Maintain contact between the edge of the wheel and the work surface with wire wheels.



5. Continuously move the tool in a forward and back motion to avoid creating gouges in the work surface. Allowing the tool to rest on the work surface without moving, or moving the tool in a circular motion causes burning and swirling marks on the work surface.



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

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

Mounting and Using Cutting Wheels

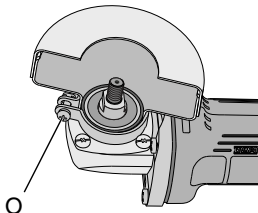
Cutting wheels include diamond wheels and abrasive discs. Abrasive cutting wheels for metal and concrete use are available. Diamond blades for concrete cutting can also be used.

▲ WARNING: A closed, 2-sided cutting wheel guard is not included with this tool but is required when using cutting wheels. Failure to use proper flange and guard can result in injury resulting from wheel breakage and wheel contact..

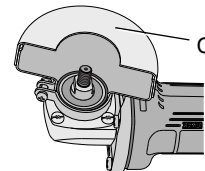
MOUNTING CLOSED GUARD

▲ 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 as previously described to ensure that the tool is off.

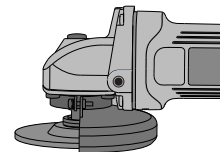
1. Loosen the screw(O).
2. Rotate guard (C) into desired working position. The guard body should be positioned between the spindle and the operator to provide maximum operator protection.



3. Fasten the screw to secure the guard on the gear case cover. You should be unable to rotate the guard by hand when the screw is fastened. Do not operate grinder with a loose guard.
4. To remove the guard, loose the screw till you can pull up the guard.



▲ CAUTION: Do not tighten the screw when the rib of the guard is not in the groove the gear case cover. Or you can't fasten the guard and it may break down in the operation.



MOUNTING CUTTING WHEELS

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

▲ CAUTION: Matching diameter backing flange and clamp nut must be used for cutting wheels.

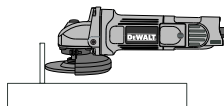
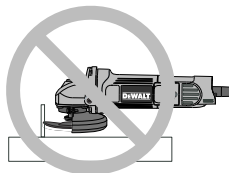
1. Place the unthreaded backing flange on spindle with the raised section (pilot) facing up. The raised section (pilot) on the backing flange will be against the wheel when the wheel is installed.
2. Place the wheel on the backing flange, centering the wheel on the raised section (pilot).
3. Install the threaded clamp nut with the raised section (pilot) facing away from the wheel.

4. Depress the spindle lock button and tighten clamp nut with a wrench.
5. To remove the wheel, grasp and turn while depressing the spindle lock button.

USING CUTTING WHEELS

⚠ 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.

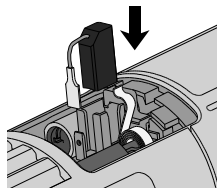
1. Allow tool to reach full speed before touching tool to work surface.
2. Apply minimum pressure to work surface, allowing tool to operate at high speed. Cutting rate is greatest when the tool operates at high speed.
3. Once a cut is begun and a notch is established in the workpiece, do not change the angle of the cut. Changing the angle will cause the wheel to bend and may cause wheel breakage.
4. Remove the tool from work surface before turning tool off. Allow the tool to stop rotating before setting it down.



CARBON BRUSH REPLACEMENT

⚠ 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.

⚠ CAUTION: Only use the DEWALT qualified carbon brush designed for this tool, consult your local dealer or authorized service



center for correct carbon brush. Use of carbon brush not designed for this tool or not qualified by DEWALT may damage the tool and may result serious injury!

1. Loose the screws on brush doors and take out the brush doors.
2. Disconnect the brush terminal from connector by pull the terminal out.
3. Pull the torsion springs which to hold the brush holder back your brush arms are free now.
4. Replace the old carbon brushes by new carbon brush. Reverse above procedures to finish brush change.

⚠ CAUTION: Make sure all screws are correctly fitted and tightened before re-connect the tool to power supply.

MAINTENANCE

Cleaning

⚠ WARNING: Blowing dust and grit out of motor and switch actuator using clean, dry compressed air is a necessary regular maintenance procedure. Dust and grit containing metal particles often accumulate on interior surfaces and could create an electrical shock or electrocution if not frequently cleaned out. It is recommended that a ground fault circuit interrupter (GFCI) is utilized to further protect the user from electric shock resulting from the accumulation of conductive particles. If the tool is deactivated by the GFCI, unplug the tool and check and clean the tool before resetting the GFCI. **ALWAYS WEAR SAFETY GLASSES** when cleaning or using this tool.

⚠ CAUTION: *Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. Use a clean, dry cloth only.*

Lubrication

DEWALT tools are properly lubricated at the factory and are ready for use.

Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments should be performed by a DEWALT factory service center, a DEWALT authorized service center or other qualified service personnel. Always use identical replacement parts.

Accessories

Not all the accessories recommended in this manual are standard accessories come with tool for selling. You can get them at extra cost from your local dealer or authorized service center. If you need assistance in locating any accessory, please contact local DEWalt Sales.

⚠ CAUTION: *The use of any other accessory not recommended for use with this tool could be hazardous.*

**SERVICE CENTER
LOCATOR**



<p>China 中华人民共和国 Beijing:</p>	<p>Room 103, Unit 2, Building 2, Yard 3, FangQunYuan YIQiu, Fenghuang, FengTai District, Beijing, P.R. Code: 100078 北京市丰台区方庄芳群园三区9号院2号楼2单元103号, 邮编: 100078</p>	<p>☎ (86-10) 6552 2788 ☎ (86-10) 6552 2789 ☎ (86-10) 6552 2425</p>
<p>Shanghai:</p>	<p>419 North Zhong Shan Road, Shanghai 200070 上海市中山北路419号。邮编: 200070</p>	<p>☎ (86-21) 5308 9566 ☎ (86-21) 5308 9566 ☎ (86-20) 8190 3148 ☎ (86-20) 8190 3150 ☎ (86-20) 8190 3143</p>
<p>Guangzhou:</p>	<p>Unit 14, No. 1, Humei Street, Guangzhou, Dadaonan Road, Haizhu District, Guangzhou, China (510310) 广州市海珠区广州大道南路汇美街1号之14号铺。邮编: 510310</p>	<p>☎ (85) 2342 8129 ☎ (85) 2342 8449</p>
<p>Hong Kong</p>	<p>Fiat C, 5/F, Meyer Industrial Building, 2 Chong Yip Street, Kwun Tong Kowloon, Hong Kong. 香港九龍觀塘彌敦道2號美亞工業大廈5樓C。</p>	<p>☎ (80-82) 366113 ☎ (80-82) 366113 ☎ (80-82) 366559 ☎ (80-09) 7880 1913 ☎ (80-09) 7880 5191</p>
<p>中國香港</p>	<p></p>	<p>☎ (63) 533 9894/95 ☎ (63) 533 9786 ☎ (63) 533 7746</p>
<p>Korea</p>	<p>1st Fl, Chongam Bldg, 834-46, Yeoksam-dong, Gangnam-gu Seoul, Korea 서울시 강남구 역삼동 834-46 영암빌딩 1층</p>	<p>☎ (90-515-0909 ☎ (92-2) 3016.9206 ☎ (92-2) 3016.9203</p>
<p>Malaysia East:</p>	<p>Lot 1149, Muara Tabuan Light Industrial Park, Off Jalan Seia Raja, 93748 Kuching, Sarawak, Malaysia. No. 15-1 & 15-2, Jalan SS 23/15, Taman SEA, 47400 Petaling Jaya, Selangor Darul Ehsan, Malaysia.</p>	<p>☎ (60-82) 366113 ☎ (60-82) 366113 ☎ (60-82) 366559 ☎ (60-09) 7880 1913 ☎ (60-09) 7880 5191</p>
<p>Philippines</p>	<p>Unit 1B, Ground Floor, VSK Corporate Circle Building, No.2, Acacia Lane Corner, Shaw Boulevard, Mandaluyong City, 1552 Philippines.</p>	<p>☎ (63) 533 9894/95 ☎ (63) 533 9786 ☎ (63) 533 7746</p>
<p>Singapore</p>	<p>No. 20 Toh Guan Road, #05-00, CU GLS Building, Singapore 608839.</p>	<p>☎ (65) 6747 1711 ☎ (65) 6565 0363</p>
<p>Vietnam Ho Chi Minh:</p>	<p>3B Ton Duc Thang District 1, Ho Chi Minh City, Vietnam. 37/42 De La Thiem Dong Da District, Ha Noi City, Vietnam.</p>	<p>☎ (84) 910.3275/ 5711 ☎ (84) 910.5702 ☎ (84) 293.5139 ☎ (84) 577.2175</p>
<p>Sri Lanka</p>	<p>No. 51 Stork Place, Colombo, Sri Lanka.</p>	<p>☎ (94-11) 268 8462 ☎ (94-11) 269 3361-7 ☎ (94-11) 268 8463</p>
<p>Bangladesh</p>	<p>Al Bushra Market, 35-37 Nawabpur Road Dhaka 1100, Dhaka, Bangladesh.</p>	<p>☎ (880-2) 712 0199 ☎ (880-2) 956 6307 ☎ (880-2) 956 3473</p>
<p>Nepal</p>	<p>P.O.Box 1947 Tripureshwar, Kathmandu, Nepal.</p>	<p>☎ (977-1) 426 2192 ☎ (977-1) 425 5563</p>
<p>Indonesia</p>	<p>Jl. Batu Ceper 34 Jakarta 10120, Jakarta, Indonesia.</p>	<p>☎ (82-21) 380 6888 ☎ (82-21) 380 7857</p>
<p>Taiwan DEWALT:</p>	<p>No 11, Lane 10, Sect4, Cheng De Rd Taipei, Taiwan 111. 台北市士林區承德路4段10巷11號。 BLACK&DECKER: 11, Lu, 34 Lun-Te Rd, Ku-Shan Dist. Kaosung, Taiwan R.O.C 804. 高雄市鳳山區橋南路34巷11號。</p>	<p>☎ (886-2) 28856123 ☎ (886-2) 28856100 ☎ (886-7) 5553030 ☎ (886-7) 555264</p>
<p>Thailand</p>	<p>488/14 Moo 1 Poochoasamingprai Road, Samrong-Tai, Muang Samutprakarn, Samutprakarn 10270, Thailand 488/14 หมู่ 1 ถนนปอจ้อสมิงไพร ตำบลสำโรงใต้ อำเภอสามโรง จังหวัดสมุทรปราการ 10270</p>	<p>☎ (66) 2755-0800 ☎ (66) 2755-0455</p>
<p>India</p>	<p>39/3686 ravipuram Road, Ernakulam, cochin-682016. 13,old Mahabaliapuram Road,kandanchavadi, Chennai-600096. Tip-top Bldg.shop No.687, 550b, Nana Peth,near Chachia Halwai Chowk, Laxmi Road, pune-411002.</p>	<p>☎ (91-484) 2336924/596 ☎ (91-44) 64534203 ☎ (91-20) 2613788/663</p>

DeWALT 1-YEAR WARRANTY

DeWALT warrants this product for one year from date of purchase. We will repair, without charge, any defects due to faulty material and/or workmanship.

Please return the complete unit, transportation prepaid, to any local DeWALT Service Center with valid DeWALT warranty card AND invoice/receipt copy.

This warranty card MUST be completed with the following information:

- customer name, telephone no.;
- dealer name and chop;
- date of purchase;
- tool model and serial no.

This warranty DOES NOT apply to:

- normal wear and tear parts: e.g. carbon brush, cord, plug, chuck and battery;
- attachments and accessories;
- unauthorized repair, alteration/modification;
- damage caused by foreign objects, substances, accidents, obvious misuse, abuse, neglect and improper applications.

These terms only cover the general warranty policy in the Asia region. Details may vary from country to country.

Please consult the local DeWALT Service Center for more details.

DeWALT บัตรรับประกัน 1 ปี

DeWALT รับประกันผลิตภัณฑ์เป็นเวลา 1 ปีนับจากวันที่ซื้อขาย บริษัทจะซ่อมโดยไม่คิดค่าใช้จ่าย ต่อด้านบกพร่องใด ๆ ที่เกิดจากข้อบกพร่องของวัสดุและ/หรือ ฝีมือในการผลิต

โปรดส่งอุปกรณ์รวมชุดส่งคืนโดยจ่ายเงินล่วงหน้า ไปยังศูนย์บริการของ DeWALT พร้อมกับบัตรรับประกันตัวจริง และดำเนินการแจ้งเรื่องเงินจากผู้ขาย

ใบรับประกันต้องประกอบด้วยข้อมูลดังต่อไปนี้อย่างสมบูรณ์ :

- ชื่อลูกค้า เบอร์โทรศัพท์
- ชื่อผู้ขาย และร้านค้า
- วันที่ซื้อของ
- รุ่นของเครื่องมือ และหมายเลขเครื่อง

การรับประกันนี้ใช้ไม่ได้กับ :

- การสึกหรอด้านปกติ และชิ้นส่วนที่ชำรุด เช่น แปรงถ่าน สายไฟ ปลั๊ก หัวรับดอกสว่าน และแบตเตอรี่
- อุปกรณ์เสริม และอุปกรณ์ประกอบ
- การซ่อม การเปลี่ยน / การแก้ไขโดยช่างที่ไม่ผ่านการรับรองจากศูนย์บริการของ DeWALT
- ความเสียหายเนื่องจากรัดคอแปลกปลอม อุบัติเหตุ การใช้งานผิดประเภท การใช้งานในทางที่ผิด การละเลย และการดัดแปลงใช้งานที่ไม่เหมาะสม

เงื่อนไขที่ครอบคลุมนโยบายการรับประกันทั่วไปในภูมิภาคเอเชีย รายละเอียดอาจแตกต่างกันในแต่ละประเทศ กรุณาปรึกษาศูนย์บริการของ DeWALT เพื่อขอข้อมูลเพิ่มเติม

디왈트 1 년 품질보증

본 제품은 제품 구입일로부터 1 년간 품질을 보증하며 보증기간내에 제품의 제조상 하자로 제조상 하자로 발생한 결함에 대해서는 무상으로 수리해 드립니다.

본 보증카드를 완전히 작성하시어 가까운 디왈트 / 블랙앤드데커 서비스 지정점에 제출하여 주십시오. (제품 구입 영수증 또는 거래명세서를 반드시 첨부해 주셔야 합니다) 이 카드는 모든 서비스의 기초자료로 활용되오니 꼭 보내 주시기 바랍니다.

단, 아래 사항은 품질보증에 해당되지 않으므로 보증기간내이라도 무상수리를 받으실수 없습니다.

- 카본브러쉬, 코드, 플러그, 척, 배터리 등의 소모품이 자연적으로 소모되었을 경우
- 악세서리가 파손되었을 경우
- 임의로 형상 및 구조를 변경하여 사용한 경우
- 외부의 충격, 사고, 천재지변, 정규전압으로 사용하지 아니한 경우, 소비자의 과실 및 취급 부주의로 고장 또는 손상된 경우

본 품질보증내용은 디왈트 / 블랙앤드데커 한국지점에 한정되며, 각 나라별로 세부 내용은 다를수 있습니다. 더욱 자세한 내용을 알고 싶으시면 디왈트 / 블랙앤드데커 서비스센터로 문의해 주시기 바랍니다.

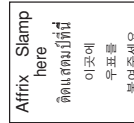
- 카본브러쉬, 코드, 플러그, 척, 배터리 등의 소모품이 자연적으로 소모되었을 경우


- 악세서리가 파손되었을 경우

- 임의로 형상 및 구조를 변경하여 사용한 경우


- 외부의 충격, 사고, 천재지변, 정규전압으로 사용하지 아니한 경우, 소비자의 과실 및 취급 부주의로 고장 또는 손상된 경우

본 품질보증내용은 블랙앤드데커 한국지점에 한정되며, 각 나라별로 세부 내용은 다를수 있습니다. 더욱 자세한 내용을 알고 싶으시면 블랙앤드데커 서비스센터로 문의해주시기 바랍니다.



		Company Copy สำหรับบริษัท 공급사 보관용	
Customer Name:	Mr. นาย <input type="checkbox"/>		
ชื่อลูกค้า:	Miss นางสาว <input type="checkbox"/>		
고객이름:	Mrs. นาง <input type="checkbox"/>		
Address:			
ที่อยู่:			
주소:	Tel. No.:		
	หมายเลขโทรศัพท์:		
	전화번호:		
Tool Model:	Serial No. or Date Code:		
รุ่น:	หมายเลขเครื่อง:		
제품모델명:	제품일련번호 또는 제작일 코드번호:		
Charger Model:	Serial No. or Date Code:		
รุ่นเครื่องชาร์จ:	หมายเลขเครื่อง:		
충전기 모델명:	충전기 일련번호 또는 제작일 코드번호:		
Date Of Purchase:	* Invoice / Receipt No.:		
วันที่ซื้อ:	* หมายเลขใบเสร็จ:		
제품구입일자:	* 영수증 / 거래명세서:		
Dealer's name:	Tel. No.:		
ร้านที่ซื้อ:	หมายเลขโทรศัพท์:		
제품구입 대리점명:	전화번호:		
Dealer Chop:			
ประทับตราร้านค้า:			
대리점 확인란:			



		Customer Copy สำหรับลูกค้า 고객 보관용	
Customer Name:	Mr. นาย <input type="checkbox"/>		
ชื่อลูกค้า:	Miss นางสาว <input type="checkbox"/>		
고객이름:	Mrs. นาง <input type="checkbox"/>		
Address:			
ที่อยู่:			
주소:	Tel. No.:		
	หมายเลขโทรศัพท์:		
	전화번호:		
Tool Model:	Serial No. or Date Code:		
รุ่น:	หมายเลขเครื่อง:		
제품모델명:	제품일련번호 또는 제작일 코드번호:		
Charger Model:	Serial No. or Date Code:		
รุ่นเครื่องชาร์จ:	หมายเลขเครื่อง:		
충전기 모델명:	충전기 일련번호 또는 제작일 코드번호:		
Date Of Purchase:	* Invoice / Receipt No.:		
วันที่ซื้อ:	* หมายเลขใบเสร็จ:		
제품구입일자:	* 영수증 / 거래명세서:		
Dealer's name:	Tel. No.:		
ร้านที่ซื้อ:	หมายเลขโทรศัพท์:		
제품구입 대리점명:	전화번호:		
Dealer Chop:			
ประทับตราร้านค้า:			
대리점 확인란:			

* Please return this warranty card together with copy of invoice or receipt to the local DeWALT Service centre within 14 days from purchase of your tool.

* กรุณาส่งคืนใบรับประกัน สำเนาใบเสร็จ ที่ ศูนย์บริการของ DeWALT ใกล้เคียงบ้านท่านภายใน 14 วัน นับจากวันที่ซื้อ

* 본 보증카드를 제품구입 영수증 또는 거래명세서와 함께 딜리트 서비스 지정점에 제출하시거나, 우편으로 제품 구입후 14 일 이내에 발송해 주십시오.

NDW_2

N038447