

Questions? See us on the World Wide Web at www.dewalt.com

**INSTRUCTION MANUAL
GUIDE D'UTILISATION
MANUAL DE INSTRUCCIONES**

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA
DE GARANTÍA. **ADVERTENCIA:** LEÁSE ESTE INSTRUCTIVO
ANTES DE USAR EL PRODUCTO.

DEWALT®

DW831, DW840

5" (125mm) and 7" (180mm) Heavy Duty Angle Grinder

Rectifieuse coudée de service intensif de 127 mm (5 po) et 175 mm (7 po)

Esmeriladora angular para trabajo pesado de 127 mm (5") y 175 mm (7")

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS
OR ANY DEWALT TOOL, CALL US TOLL FREE AT:
1-800-4-DEWALT (1-800-433-9258)

General Safety Instructions

 **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 resist-ance 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

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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 to Class II (double insu-lated) 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.
- When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and over-heating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Minimum Gage for Cord Sets

Volts	Total Length of Cord in Feet		
120V	0-25	26-50	51-100 101-150
Ampere Rating		AWG	
More Than	Not more Than		
12	16	14	12 Not Recommended

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 clothes, 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 tools 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

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injury. Accessory ratings must always be above tool 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.
- **Do not use Type 11 Flaring Cup wheels on this tool.** Using inappropriate accessories can result in injury.
- **Before using, inspect recommended accessory for cracks or flaws.** If such a crack or flaw is evident, discard the accessory. The accessory should also be inspected whenever you think the tool may have been dropped. Flaws may cause wheel breakage.
- **When starting the tool with a new or replacement wheel, a new or replacement wire brush installed, or if you are unsure of the condition of the wheel, 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 using a sander or grinder. Sparks may cause burns or start fires.
- **Always use side handle. Tighten the handle securely.** The side handle should always be used to maintain control of the tool at all times.
- **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 tool action may be harmful to your hands and arms.

Use gloves to provide extra cushion and limit exposure by taking frequent rest periods.

⚠ **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 grinding into a corner because a sudden, sharp movement of the grinder may be experienced when the wheel or other accessory contacts a secondary surface.

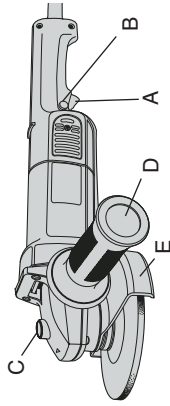
⚠ **CAUTION:** Wear appropriate hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

- The label on your tool may include the following symbols. The symbols and their definitions are as follows:
Vvolts
Aamperes
Wwatts
Hzhertz
minminutes
~alternating current
nono load speed
---direct current
⚡Class II Construction
□Class II Construction
⊕earthing terminal
.../minrevolutions per minute

INTRODUCTION

COMPONENTS

- A. Trigger Switch
- B. Lock-On Button
- C. Spindle Lock Button
- D. Side Handle
- E. Guard (Type 27, open beneath wheel or accessory)

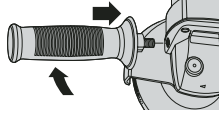


ASSEMBLY

⚠ **CAUTION:** Turn off and unplug the tool before making any adjustments or removing or installing attachments or accessories. Before reconnecting the tool, depress and release the rear part of the switch to ensure that the tool is off.

ATTACHING SIDE HANDLE

The side handle 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.



ACCESSORIES

It is important to choose the correct guards, backing pads and flanges to use with grinder accessories. See pages 5–6 for information on choosing the correct accessories.

⚠ **CAUTION:** Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over their rated speed may fly apart and cause injury. Threaded accessories must have a 5/8" – 11 hub. Every unthreaded accessory must have a 7/8" arbor hole. If it does not, it may have been designed for a circular saw. Use only the accessories shown on pages 5–6 of this manual. Accessory ratings must always be above listed tool speed as shown on tool nameplate.

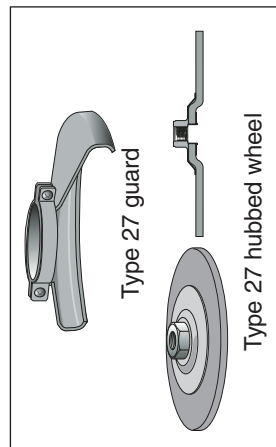
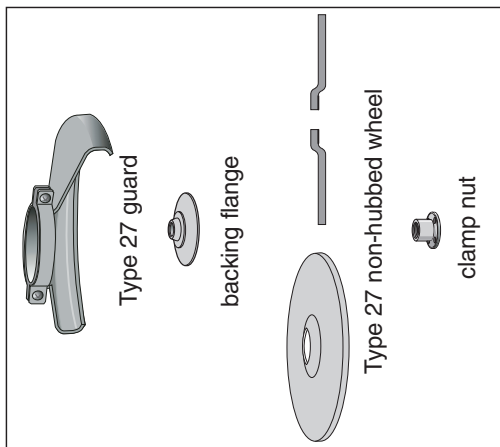
OPERATION

Switch

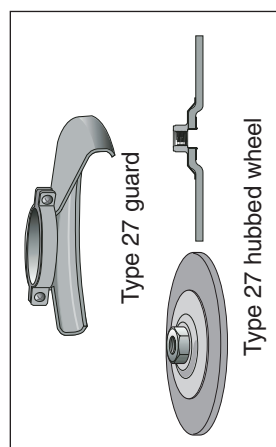
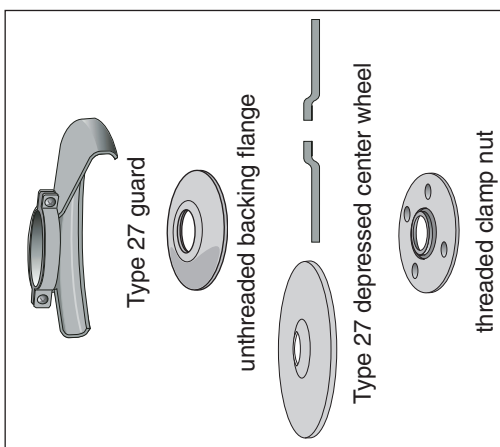
⚠ **CAUTION:** Check that the tool is not locked **ON** before connecting it to a power supply. If the trigger switch is locked **ON** when the tool is connected to the power supply, it will start immediately. Damage to your tool or personal injury may result.

To start the tool, squeeze the trigger switch (A). To turn the tool off, release the switch. The tool can be locked on for continuous use by holding the trigger switch depressed while you depress the switch locking button next to the trigger. Hold the lock-on button (B) in as you gently release the trigger. Release the locking button and the tool will continue to run. To turn the tool off from a locked on condition, squeeze and release the trigger once.

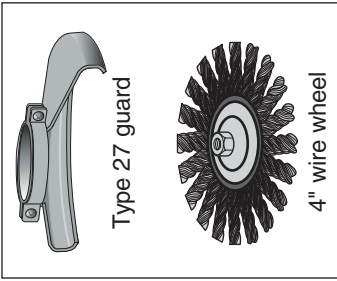
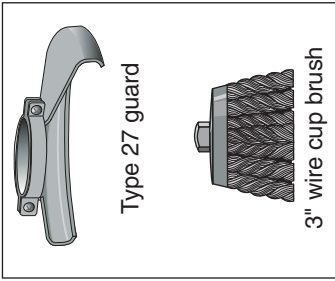
7" Grinding Wheels (DW840)



5" Grinding Wheels (DW831)

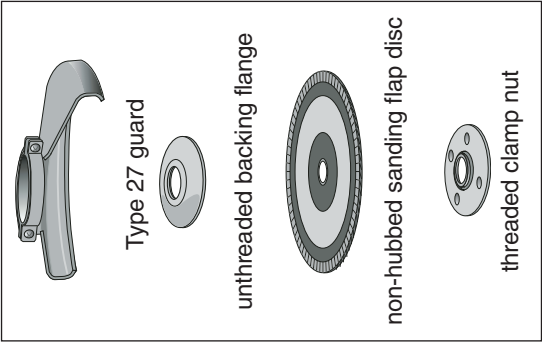
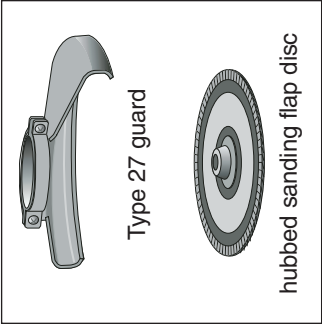


Wire Wheels

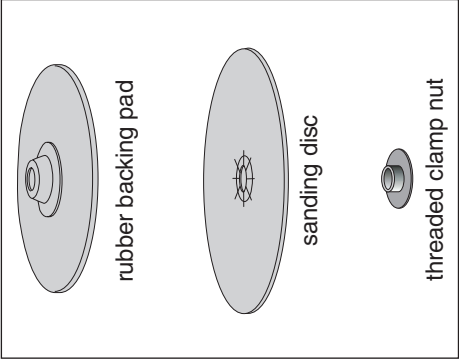


⚠ CAUTION: Use a Type 27 guard with wire brushes and wheels. Operators and others in the area should wear appropriate eye, face and body protection. Strands of wire may break and fly off when wire wheels and brushes are in use.

Sanding Flap Discs



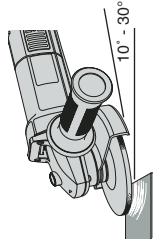
Sanding Discs (DW831)



⚠ WARNING: DW840 cannot be used with conventional sanding discs and backing pads due to mismatched rated speeds.

Grinding

Using a depressed center Type 27 wheel, hold the tool at an angle of approximately 10° - 30° to the work for grinding. Most Type 27 wheels are not designed for cutting operations.

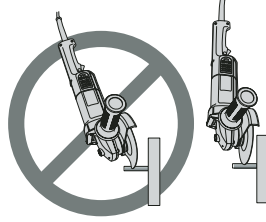


Edge Cutting

⚠ WARNING: Edge grinding and cutting can be performed only with Type 27 wheels that are designed and specified for this purpose. Protect yourself during edge cutting by directing the open side of the guard toward a surface.

⚠ WARNING: Wheels used for cutting and edge grinding may break or kick back 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 1/2" in depth). The open side of the guard must be positioned away from the operator.

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.
4. Once a cut is begun and a notch is established in the workpiece, do not change the angle of the cut. Changing the angle will cause the wheel to bend and may cause wheel breakage.



English

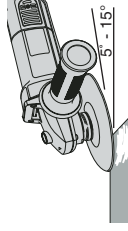
5. Remove the tool from the work surface before turning the tool off. Allow the tool to stop rotating before laying it down.

Edge grinding and cutting wheels should contact the work surface only at the edge of the wheel, not on the top or bottom of the wheel. Side pressure on the wheel could lead to breakage of the wheel.

⚠ 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.

Sanding With Abrasive Discs

When using an abrasive disc and rubber backing pad, hold the tool so that an angle of 10° to 15° exists between the disc and the work, as shown. Using an angle of 5° to 15° will allow you to produce a smooth surface. If only the outer edge of the sanding disc is pressed flat against the work, the sanding action will be irregular and bumpy, and the tool will be difficult to control.



Precautions To Take When Removing Paint

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

3. **NO EATING, DRINKING or SMOKING** should be done in the work area to prevent ingesting contaminated paint particles. Workers should wash and clean up **BEFORE** eating, drinking or smoking. Articles of food, drink, or smoking should not be left in the work area where dust would settle on them.

ENVIRONMENTAL SAFETY

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

CLEANING AND DISPOSAL

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

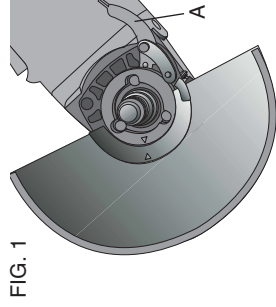


FIG. 1

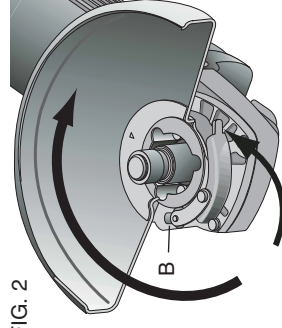


FIG. 2

Fitting and Removing the Guard DW831 (Fig. 1 & 2)

⚠ CAUTION: Unplug the tool before mounting or removing the guard. Guards must be used with all grinding wheels and sanding flap discs, wire brushes and wire wheels. The tool may be used without the guard only when sanding with conventional sanding discs. Before reconnecting the tool, depress and release the rear part of the switch to ensure that the tool is off.

FITTING GUARD

⚠ CAUTION: Do not operate grinder with a loose guard or the guard latch in the open position.

1. Open the guard latch (A) and align the arrow on the guard with the arrow on the gear case.
2. Push the guard down until the guard lugs engage and rotate freely in the groove on the gear case.
3. With the guard latch open, rotate the guard into the working position providing maximum protection to the user (Fig. 2).
4. Close the guard latch to secure guard on gear case (Fig. 2).

NOTE: The guard is pre-adjusted to the diameter of the spindle hub at the factory. If the guard needs further adjustment after a period of

use, perform the following adjustment. With the guard latch in the closed position tighten or loosen the adjustment screw (Fig. 2B).

REMOVING GUARD

1. Open the guard latch (A) and align the arrow on the guard with the arrow on the gear case.
2. Pull the guard up until the guard lugs engage and rotate freely in the groove on the gear case.
3. With the guard latch open, rotate the guard until the arrows are aligned. (Fig. 2).
4. Remove the guard.

⚠ CAUTION: Do not tighten adjusting screw with guard latch in open position. Undetectable damage to the guard or the mounting hub may result.

Fitting and Removing the Guard DW840 (Fig. 3)

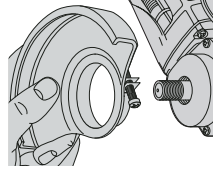
⚠ CAUTION: Unplug the tool before mounting or removing the guard. Guards must be used with all grinding wheels and sanding flap discs, wire brushes and wire wheels. The tool may be used without the guard only when sanding with conventional sanding discs. Before reconnecting the tool, depress and release the rear part of the switch to ensure that the tool is off.

FITTING GUARD

⚠ CAUTION: Do not operate grinder with a loose guard or the guard latch in the open position.

1. Place the angle grinder on a table, spindle up.
2. Press the guard down.
3. Position the guard between your body and the work piece.
4. Tighten the screw holding the cinch collar firmly around the neck of the spindle.

FIG. 3



REMOVING GUARD

1. Loosen the screw holding the cinch collar around the neck of the spindle.
2. Lift up on the guard.

⚠ CAUTION: Do not tighten adjusting screw with guard latch in open position. Undetectable damage to the guard or the mounting hub may result.

Fitting a Backing Pad and Sanding Disc

Backing pads are available as optional accessories. To fit the pad, follow instructions provided with the accessory.

⚠ CAUTION: Proper guard must be re-installed for grinding wheel applications after sanding applications are complete.

⚠ CAUTION: 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 always be above tool speed as shown on tool nameplate.

Mounting Grinding Wheels (Fig. 4-7)

Grinding wheels are available as optional accessories.

1. Place the backing flange on the grinder spindle (Fig. 4).
2. Place the wheel against the flange, centering the grinding wheel on the backing flange pilot.

FIG. 4

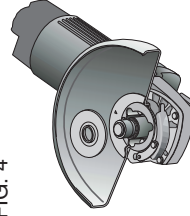


FIG. 5

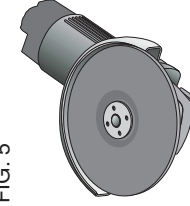
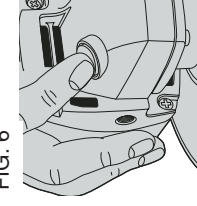


FIG. 6



3. Screw the threaded flange onto the spindle (Fig. 5).
4. Rotate the spindle by hand while pressing the spindle lock button (Fig. 6) until the spindle locks, preventing the spindle from rotating.
5. Securely tighten the threaded flange with the supplied spanner wrench (Fig. 7).

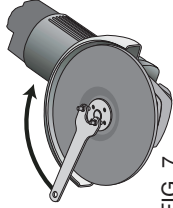


FIG. 7

Fitting Wire Cup Brushes

The wire cup brush screws directly on the spindle of the machine without the use of flanges. A Type 27 guard is required when using wire brushes or wheels.

⚠ CAUTION: Wear work gloves when handling wire cup brushes. Wire brushes can become sharp.

MAINTENANCE

Cleaning

⚠ WARNING: Blow dust and grit out of the motor housing regularly using clean, dry compressed air. Dust and grit containing metal particles often accumulate on interior surfaces and could create an electrical shock hazard if not frequently cleaned out. ALWAYS WEAR SAFETY GLASSES.

⚠ CAUTION: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the plastic materials used in these parts. Use a cloth dampened only with water and mild soap.

Lubrication

DEWALT tools are properly lubricated at the factory and are ready for use. Tools should be relubricated regularly every sixty days to six months, depending on usage. (Tools used constantly on production or heavy-duty jobs and tools exposed to heat may require more

frequent lubrication.) This lubrication should only be attempted by trained power tool repair persons, such as those at DEWALT service centers or by other qualified service personnel.

Motor Brushes

When brushes become worn, the tool will automatically stop and prevent damage to the motor. Brush replacement should be performed by DEWALT authorized service centers.

Accessories

Recommended accessories for use with your tool are available at extra cost from your local dealer or authorized service center. If you need assistance in locating any accessory for your tool, contact: DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286.

⚠ CAUTION: 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 always be above tool speed as shown on tool nameplate.

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

Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by authorized service centers or other qualified service personnel. Always use identical replacement parts.

Three Year Limited Warranty

DEWALT will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. This warranty does not cover part failure due to normal wear or tool

abuse. For further detail of warranty coverage and warranty repair information, visit www.dewalt.com or call 1-800-4-DEWALT (1-800-433-9258). This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

In addition to the warranty, DEWALT tools are covered by our:

1 YEAR FREE SERVICE

DEWALT will maintain the tool and replace worn parts caused by normal use, for free, any time during the first year after purchase.

90 DAY MONEY BACK GUARANTEE

If you are not completely satisfied with the performance of your DEWALT Power Tool, Laser, or Nailer for any reason, you can return it within 90 days from the date of purchase with a receipt for a full refund – no questions asked.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call 1-800-4-DEWALT for a free replacement.