

DEWALT®



Instruction Manual

DW756

6" (152 mm) Heavy-Duty Bench Grinder

DW758

8" (200 mm) Heavy-Duty Bench Grinder

Definitions: Safety Alert Symbols and Words

This instruction manual uses the following safety alert symbols and words to alert you to hazardous situations and your risk of personal injury or property damage.



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**.



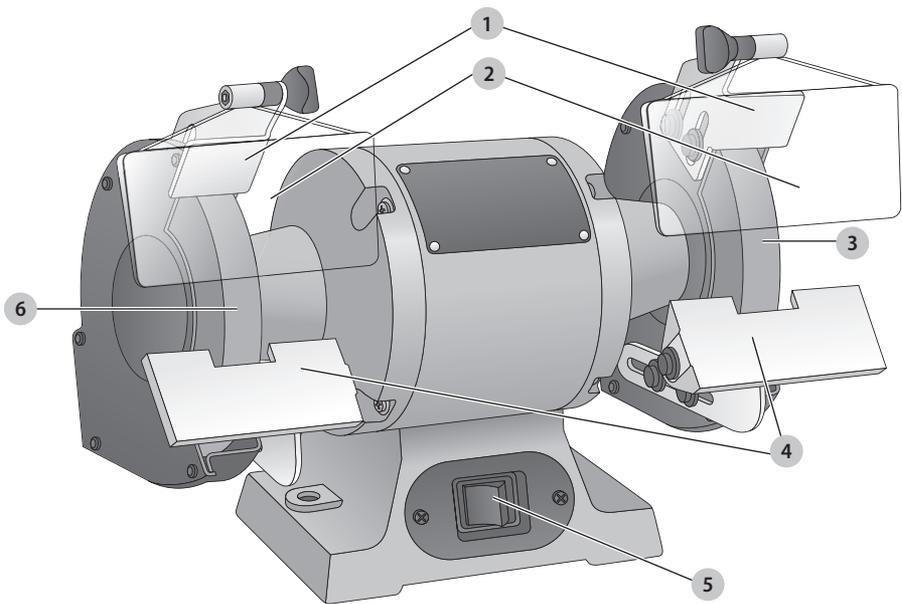
CAUTION: Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.



(Used without word) Indicates a safety related message.

NOTICE: Indicates a practice **not related to personal injury** which, if not avoided, **may** result in **property damage**.

Fig. A



- 1 Spark guards
- 2 Eye shields
- 3 Coarse grinding wheel (36 Grit)
- 4 Tool rests
- 5 Switch (On/Off)
- 6 Medium grinding wheel (60 Grit)



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.



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

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical Safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI 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 energizing 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 jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry 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

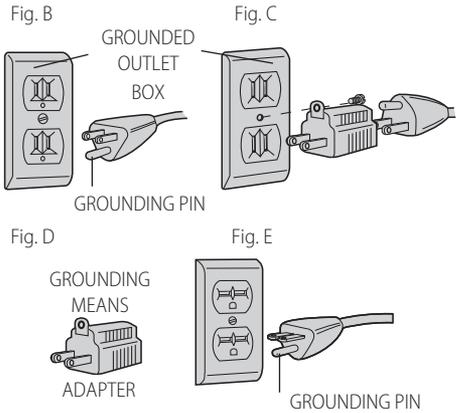
- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

Additional Safety Instructions for Grinders

- **ALWAYS USE GUARDS AND EYE SHIELDS. WHEN GRINDING, ALWAYS KEEP GUARDS IN PLACE.**
- Use only grinding wheels having a maximum operating speed at least as high as the "No Load RPM" marked on the tool's nameplate. Use only grinding wheels suitable for the speed of the grinder.
- Use only flanges furnished with the grinder.
- Adjust distance between wheel and work rest to maintain 1/8" (3.18 mm) or less separation as the diameter of the wheel decreases with use.
- Before using, inspect recommended accessory for cracks or flaws. If such a crack or flaw is evident, discard the accessory. **DO NOT USE A GRINDING WHEEL THAT IS CRACKED OR FLAWED IN ANY WAY.**
- When starting the tool, let it run for one minute. Never start the tool with a person in line with the wheel. This includes the operator.
- Do not grind on the sides of grinding wheels unless they are specifically designed for that purpose.
- Do not overtighten the hex nut. This may crack the grinding wheel.
- Clean the cavity around the grinding wheel periodically.

Grounding Instructions

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a 3-conductor cord and 3-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is intended for use on less than 150 V, it has a plug that looks like that shown in Figure B. If it is for use on 150 to 250 V, it has a plug that looks like that shown in Figure E. An adapter, Figure C and D, is available for connecting Figure B type plugs to 2-prong receptacles. The green-colored rigid ear, lug, or the like, extending from the adapter must be connected to a permanent ground, such as a properly grounded outlet box. No adapter is available for a plug as shown in Figure E. ADAPTER SHOWN IN FIGURES C AND D IS NOT FOR USE IN CANADA.



Additional Safety Information

WARNING: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3),
- ANSI S12.6 (S3.19) hearing protection,
- NIOSH/OSHA/MSHA respiratory protection.

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California 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.

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 disperse 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.

WARNING: Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

- **Air vents often cover moving parts and should be avoided.** Loose clothes, jewelry or long hair can be caught in moving parts.
- **An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety.** The smaller the gauge number of the wire, the greater the capacity of the cable, that is, 16 gauge has more capacity than 18 gauge. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The lower the gauge number, the heavier the cord.

Minimum Gauge for Cord Sets

Volts	Total Length of Cord in Feet (meters)				
	120 V	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.7)
240 V	50 (15.2)	100 (30.5)	200 (61.0)	300 (91.4)	
Ampere Rating More Than		Not More Than		American Wire Gauge	
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V.....volts		or AC/DC...alternating or direct current
Hz.....hertz		
min.....minutes		Class II Construction (double insulated)
 or DC.....direct current		
Class I Construction (grounded)	n_0	no load speed
.../min.....per minute	n	rated speed
BPM.....beats per minute		earthing terminal
IPM.....impacts per minute		safety alert symbol
RPM.....revolutions per minute		visible radiation
sfpn.....surface feet per minute		wear respiratory protection
SPM.....strokes per minute		wear eye protection
A.....amperes		wear hearing protection
W.....watts		read all documentation
 or AC.....alternating current		

SAVE THESE INSTRUCTIONS FOR FUTURE USE

Motor

Be sure your power supply agrees with the nameplate marking. Voltage decrease of more than 10% will cause loss of power and overheating. DEWALT tools are factory tested; if this tool does not operate, check power supply.

SPECIFICATIONS

	DW756	DW758
Bench Grinder	6" (152 mm)	8" (200 mm)
Arbor	1/2" (13 mm)	5/8" (16 mm)
RPM	3450	3600

COMPONENTS (FIG. A)

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

Refer to Figure A at the beginning of this manual for a complete list of components.

Intended Use

This bench grinder is designed for professional applications.

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

This bench grinder is a professional power tool. **DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

ASSEMBLY AND ADJUSTMENTS

 **WARNING:** To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

Bench Mounting

1. The grinder should be unplugged.
2. Remove the drilling template from this manual (page 26) and place it in position of the bench. Check for the availability of power for the grinder. Tape the template to the bench.
3. Using a center punch, transfer the hole centers for drilling.
4. Drill appropriate sized holes.
5. Insert M8 hex head bolts through washers and the holes. You may want to use washers on the underside of the bench as well.
6. Tighten the nuts. Do not overtighten. Allow the rubber feet to absorb the vibration when the grinder is running.

Installing Tool Rests (Fig. F)

There is a left and right tool rest. First secure the tool rest **4** to the bracket **7** using the hex bolt **8**, spring washer **9**, flat washer **10**, external tooth washer **11** and nut **13**.

For the DW756, an additional spacer **12** and external tooth washer **11** are required, as shown in Figure F.

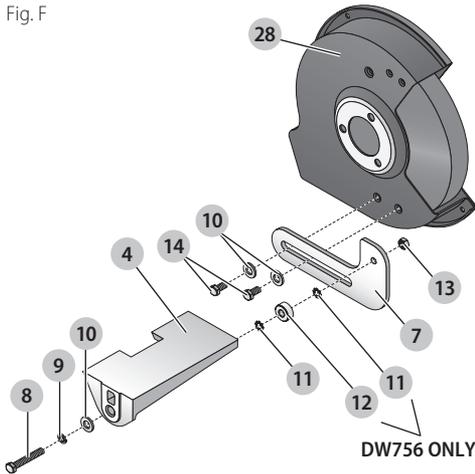
Next, for the DW756 and the DW758, secure the bracket/tool rest assembly to the wheel guard **28** using the two 1/4"-20 UNC bolts **14**, and two flat washers **10**.

Proceed to install the other tool rest using the same description.

 **CAUTION:** Longer bolts may interfere with the movement of the grinding wheel.

NOTE: When in use, the tool rests should be adjusted to within 1/8" (3.18 mm) of the grinding wheel or other accessory being used.

Fig. F

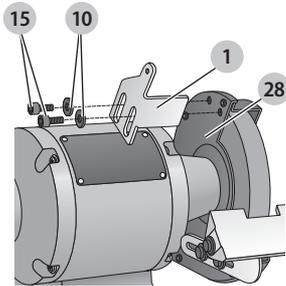


Installing Spark Guards (Fig. G)

The spark guards **1** are identified L for left and R for right. Refer to Figure G to install the spark guard to the wheel guard **28** using the two bolts **15** and flat washers **10**. Adjust the edge of the spark guard to within 1/16" (1.6 mm) of the grinding wheel or other accessory. Tighten the two bolts **15** securely.

Proceed to install the other spark guard using the same description.

Fig. G



Installing Eye Shields (Fig. H)

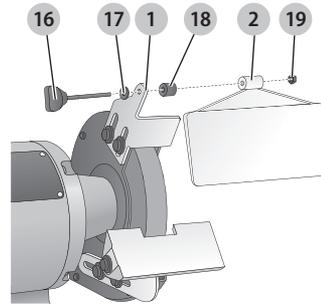
! WARNING: Eye shields are not designed to replace safety glasses.

Install the eye shields **2** (they will fit either side) to the brackets, as shown in Figure H. Screw the plastic knob **16** through the washer **17**, the spark guard **1**, the spacer **18**, the eye shield **2** and finally into the nut **19**. Adjust eye shields so they are between the wheels and your eyes.

Proceed to install the other eye shield using the same description.

Tighten the shields in place by tightening the plastic knob **16** in the bracket assembly. Remove protective film.

Fig. H



OPERATION

! WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

! CAUTION: Prolonged grinding will cause most materials to become hot. Handle them with pliers or thick gloves.

! CAUTION: Never attempt to use your bench grinder unless it is firmly bolted to a workbench or rigid frame that is also firmly attached to the floor.

- Before turning the grinder on, put on safety glasses.
- Turn on the grinder and allow it to reach full speed (3450 RPM - DW756, 3600 RPM - DW758).
- Hold the workpiece firmly and against the tool rest.
- Hold very small pieces with pliers or other suitable clamps.
- Feed the work smoothly and evenly into the grinding wheel.
- Move the work slowly and avoid jamming the work against the wheel. As the wheel tends to slow down you should occasionally release the pressure to let the wheel return to full speed.
- Grind only on the face of the grinding wheel and never on the side. (Some wheels are designed for side grinding and will say so on their instruction sheets).

Switch (Fig. A)

The switch **5** is located on the front of the grinder, on the base.

To turn the tool on depress the side of the rocker switch on the left side, marked "ON".

To turn off the grinder, depress the right side of the rocker switch, marked "OFF".

MAINTENANCE

- WARNING:** To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

Cleaning

- WARNING:** Blow dirt and dust out of all air vents with clean, dry air at least once a week. To minimize the risk of eye injury, always wear ANSI Z87.1 approved eye protection when performing this.
- WARNING:** 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. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

Accessories

- WARNING:** Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT recommended accessories should be used with this product.
- WARNING:** To reduce the risk of injury, always use proper guards when grinding and wear eye protection.
- CAUTION:** Strands of wire cup brushes may break and fly off while in use. Users and others in the area should wear adequate eye, face and body protection. Use only wire cup brushes that are rated at or greater than the RPM shown on the tool's nameplate.
- CAUTION:** The use of any non-recommended accessory may be hazardous.

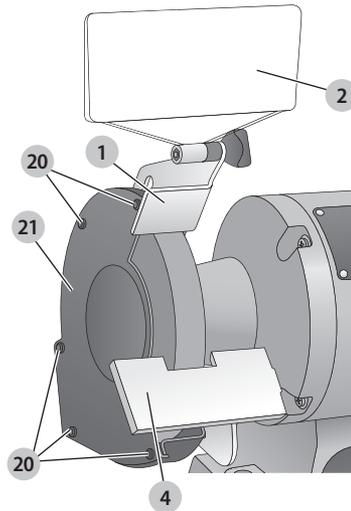
Changing Accessories (Fig. F, G, I, J, K)

Change accessories when the spark guard can no longer be adjusted to 1/16" (1.6 mm) from the wheel.

DW756 - use only wheels that measure 6" (152 mm) in diameter. This tool has 1/2" (13 mm) arbors on each side.

DW758 - use only wheels that measure 8" (200 mm) in diameter. This tool has 5/8" (16 mm) arbors on each side.

Fig. I



Follow the steps below to remove and replace an accessory.

1. Raise the eye shield **2**.
2. Loosen, but do not remove, the tool rest bolts **8** and pull the tool rest **4** out as far as possible. Do not remove it.
3. Loosen, but do not remove, the spark guard bolts **15** and pull the spark guard **1** out as far as possible. Do not remove it.
4. Remove the screws **20** from both side covers **21** and remove the covers.
5. Using hex wrenches, grasp the two hex nuts **22** holding the wheels to the arbor shaft **23** at each end of the tool (Refer to Fig. J, K). To remove the wheel from the left side, turn the hex nut **22** clockwise while holding the other stationary. To remove the wheel from the right side, turn the hex nut **22** counter clockwise while holding the other stationary.
6. Remove the wheel flanges **24** and the wheel **25**.
7. Inspect the wheel for cracks, chips or any other visible damage (other than normal wear) and discard if such damage is found. Inspect the blotter **26** for damage. If the blotter is missing or severely damaged, replace it with a piece of thin cardboard or blotter paper cut to the same size. NEVER USE A WHEEL WITHOUT A BLOTTER.

Fig. J

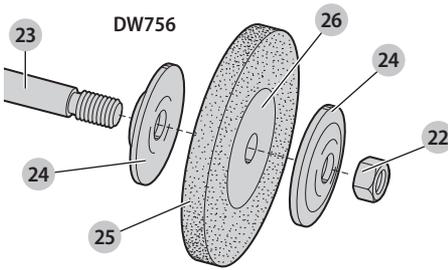
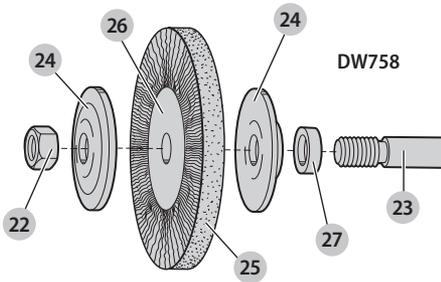


Fig. K



8. Install the new wheel or other accessory **25**.
For the DW756 (Fig. J), be sure that the wheel flanges **24** are in place (concave side toward the wheel).
For the DW758 (Fig. K), be sure the spacers **27** and the wheel flanges **24** are both in place (concave side toward the wheel).
9. Hold both hex nuts **22** as before and tighten them but do not overtighten. Overtightening can crack a grinding wheel.
10. Replace the wheel covers and their screws.
11. Adjust the spark guard **1** to 1/16" (1.6 mm) from the wheel and tighten securely.
12. Adjust the tool rest **4** to 1/8" (3.18 mm) from the wheel and tighten securely.
13. Adjust the eye shield **2** to a point between your eyes and the wheel. The bench grinder is now ready for use.
14. Follow the above steps to install buffing wheels and wire wheel brushes as well as grinding wheels.

DW756

GRINDING WHEELS	MAX. SAFE SPEED
5/8" (16 mm) Face, 6" (152 mm) dia. 60 grit medium grinding wheel	4136 RPM
3/4" (19 mm) Face, 6" (152 mm) dia. 60 grit medium grinding wheel	4136 RPM
5/8" (16 mm) Face, 6" (152 mm) dia. 36 grit coarse grinding wheel	4136 RPM
1/2" (13 mm) Face, 6" (152 mm) dia. 60 grit medium grinding wheel	3825 RPM
BUFFING WHEELS	
5/8" (16 mm) Face, 6" (152 mm) dia. cotton buffing wheel	3600 RPM
WIRE WHEEL BRUSHES	
1/2" (13 mm) arbor, 5/8" (16 mm) Face, 6" (152 mm) dia.	3600 RPM

DW758

GRINDING WHEELS	MAX. SAFE SPEED
7/8" (22 mm) & 1" (25 mm) Face, 8" (200 mm) dia. 60 grit medium grinding wheel	3600 RPM
7/8" (22 mm) & 1" (25 mm) Face, 8" (200 mm) dia. 36 grit coarse grinding wheel	3600 RPM
BUFFING WHEEL	
5/8" (16 mm) arbor, 8" dia. cotton buffing wheel	3600 RPM
WIRE WHEEL BRUSHES	
5/8" (16 mm) arbor, 5/8" (16 mm)–1–1/4" (32 mm) Face, 8" (200 mm) dia.	3600 RPM

Repairs



WARNING: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement, when applicable) should be performed by a DeWALT factory service center or a DeWALT authorized service center. Always use identical replacement parts.