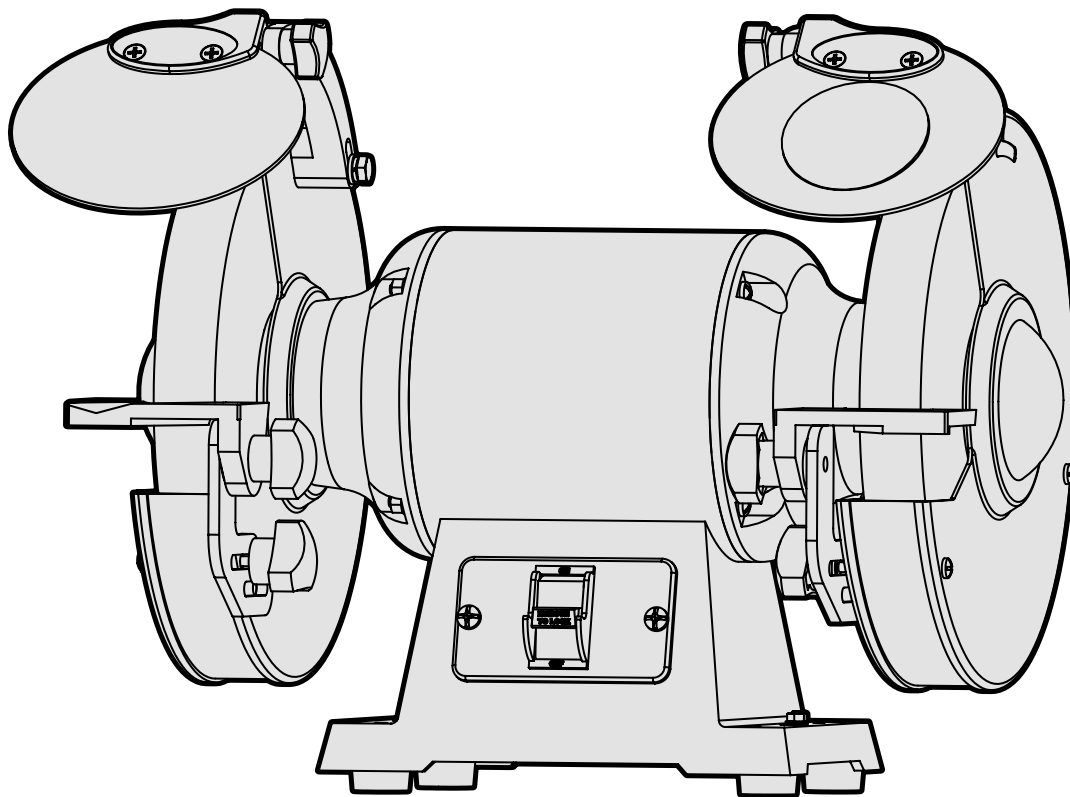




MODEL BG4286

8-INCH SLOW SPEED BENCH GRINDER

Instruction Manual



NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:



1-847-429-9263 (M-F 8AM-5PM CST)



TECHSUPPORT@WENPRODUCTS.COM

IMPORTANT: Your new tool has been engineered and manufactured to WEN's highest standards for dependability, ease of operation, and operator safety. When properly cared for, this product will supply you years of rugged, trouble-free performance. Pay close attention to the rules for safe operation, warnings, and cautions. If you use your tool properly and for its intended purpose, you will enjoy years of safe, reliable service.

For replacement parts and the most up-to-date instruction manuals, visit ***WENPRODUCTS.COM***

CONTENTS

WELCOME	3
Introduction	3
Specifications.....	3
 SAFETY	 4
General Safety Rules	4
Bench Grinder Safety Warnings	6
Electrical Information	8
 BEFORE OPERATING	 9
Unpacking & Packing List	9
Know Your Bench Grinder	10
Assembly & Adjustments	11
 OPERATION & MAINTENANCE	 12
Operation	12
Maintenance.....	13
Exploded View & Parts List.....	16
Warranty Statement	18

To purchase accessories and replacement parts for your tool, visit ***WENPRODUCTS.COM***

Cast Iron Bench Grinder Stand (Model 4288T)
8-Inch Crimped Benchtop Steel Wire Wheel (Model WW8058)
Diamond Grinding Wheel Dresser (Model WA0003)

INTRODUCTION

Thanks for purchasing the WEN Bench Grinder. We know you are excited to put your tool to work, but first, please take a moment to read through the manual. Safe operation of this tool requires that you read and understand this operator's manual and all the labels affixed to the tool. This manual provides information regarding potential safety concerns, as well as helpful assembly and operating instructions for your tool.

 Indicates danger, warning, or caution. The safety symbols and the explanations with them deserve your careful attention and understanding. Always follow the safety precautions to reduce the risk of fire, electric shock or personal injury. However, please note that these instructions and warnings are not substitutes for proper accident prevention measures.

NOTE: The following safety information is not meant to cover all possible conditions and situations that may occur. WEN reserves the right to change this product and specifications at any time without prior notice.

At WEN, we are continuously improving our products. If you find that your tool does not exactly match this manual, please visit **wenproducts.com** for the most up-to-date manual or contact our customer service at **1-847-429-9263**.

Keep this manual available to all users during the entire life of the tool and review it frequently to maximize safety for both yourself and others.

SPECIFICATIONS

Model Number	BG4286
Motor	120V, 60 Hz, 3A
Wheel Speed	1750 RPM (No Load)
Grinding Wheel Size	8 in. x 1 in.
Arbor Size	5/8 in.
Wheel Grits	#120 (Fine) / #60 (Medium)
Product Weight	34.83 lbs.
Product Dimensions	14.5 in. L x 7.75 in. W x 8 in. H

GENERAL SAFETY RULES

 **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.

Safety is a combination of common sense, staying alert and knowing how your item works. The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE SAFETY INSTRUCTIONS.

WORK AREA SAFETY

- 1. Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- 2. 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.
- 3. Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- 1. 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.
- 2. 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.
- 3. Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- 4. 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.
- 5. 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.

- 6. 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.

PERSONAL SAFETY

- 1. 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.
- 2. Use personal protective equipment. Always wear eye protection.** Protective equipment such as a respiratory mask, non-skid safety shoes and hearing protection used for appropriate conditions will reduce the risk of personal injury.
- 3. 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.
- 4. 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.
- 5. Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- 6. Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.

GENERAL SAFETY RULES

 **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.

Safety is a combination of common sense, staying alert and knowing how your item works. The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE SAFETY INSTRUCTIONS.

7. 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.

POWER TOOL USE AND CARE

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

7. 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.

8. Use clamps to secure your workpiece to a stable surface. Holding a workpiece by hand or using your body to support it may lead to loss of control.

9. KEEP GUARDS IN PLACE and in working order.

SERVICE

1. 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.

CALIFORNIA PROPOSITION 65 WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities may contain chemicals, including lead, known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement, and other masonry products.
- 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 with approved safety equipment such as dust masks specially designed to filter out microscopic particles.

BENCH GRINDER SAFETY WARNINGS

 **WARNING!** Do not operate the power tool until you have read and understood the following instructions and the warning labels.

BENCH GRINDER SAFETY

1. This bench grinder is designed for sharpening and honing cutting tools, using the appropriate accessories. Using the machine for any other purpose for which it is not designed may result in serious injuries, machine damage and voiding of the warranty.

2. Grinding wheel safety:

- Only use grinding wheels rated for a speed higher than 1750 RPM (maximum RPM of the tool).
- The wheel complies with ANSI b7.1. The size of the wheel is 8 inches in diameter and 1 inch thick with a 5/8-inch arbor. Do not use wheels with an incorrect arbor size.
- Inspect wheels for cracks or fragments before starting the machine. Replace damaged wheels immediately. Never use a questionable grinding wheel, as the RPM of the machine can send broken wheel fragments flying at high speeds.
- Do not use a wheel that vibrates. If a wheel vibrates, it may be that the bearings of the shaft need replacing.
- Check that the grinding stone can rotate smoothly before starting the machine.
- The grinding wheel is for grinding. Never attempt to cut anything with the grinding wheel.

3. The use of accessories or attachments not recommended by the manufacturer may result in a risk of personal injury.

4. **DANGER! Fire Hazard.** Do not grind or polish magnesium or magnesium alloys.

5. Preventing accidental starting. Make sure the power switch is in the OFF position prior to plugging in the machine. Always make sure the power switch is in the OFF position and the machine is unplugged when doing any cleaning, adjustments, assembly, setup operations, or when not in use.

PERSONAL SAFETY

1. Operate in a well ventilated area. Keep the floor area around the bench grinder level and free of slippery substances or other tripping hazards.

2. Wear ANSI-approved safety goggles to protect your eyes from sparks and chips. Use hearing protection to protect yourself from hearing loss.

3. DO NOT wear loose clothing or jewelry as they might get drawn in by the tool. Tie back long hair.

4. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to pacemakers could cause pacemaker interference or pacemaker failure.

5. Chips are harmful to your health. Use NIOSH-approved dust masks or other respiratory protection during operation and cleaning.

6. Always turn off and unplug the bench grinder before making any adjustments or repair tasks. Never adjust the bench grinder or the workpiece while the tool is running.

PREPARING THE BENCH GRINDER

When transporting the bench grinder, carry it by the base. Never carry the device by its guards or its accessories.

1. Examine the bench grinder for any damaged or missing parts. Replace or repair damaged parts before operation. Periodically check that all nuts, bolts and other fasteners are properly tightened.

2. Do not operate this tool until it is completely assembled and installed according to the instructions. Make sure all adjustments are correct and all connections are tight. Keep all guards in place.

BENCH GRINDER SAFETY WARNINGS

 **WARNING!** Do not operate the power tool until you have read and understood the following instructions and the warning labels.

DURING OPERATION

1. Never start the machine with any load already applied to either grinding wheel. Stand to the side of the bench grinder during start-up. Switch it ON and let the bench grinder reach full speed for roughly one minute to warm up the wheel and to ensure proper operation.
2. Never grind on a cold wheel. Run the bench grinder for one full minute before applying the workpiece. Cold wheels have an increased likelihood of chipping during operation.
3. Only grind on the face of the grinding wheel. Do not grind on the side of the wheel.
4. Keep clear of moving parts. Keep arms, hands and other vital appendages away from the grinding and honing wheel. Do not reach behind or beneath the rotating wheel. Avoid awkward operation and hand positions. An accident could easily send the operator's hand into the wheel.
5. If you are interrupted when operating the bench grinder, complete the process and switch the bench grinder off before looking up.
6. Always hold the workpiece firmly against the tool rest.
7. Never attempt to cut anything with the grinding wheel.
8. Do not use the bench grinder unless all guards are in place. Do not operate with any guard disabled, damaged, or removed. Moving guards must move freely and close instantly.
9. Disconnect the power source and allow the wheels to come to a complete stop before making any adjustments to either the machine or the grinding wheels.
10. Clean the machine thoroughly when changing material types in workpieces. Combining certain materials can increase the chances of an explosion or fire hazard.
11. Should any component of your bench grinder be missing/damaged or fail in any way, shut off the switch and remove the plug from power supply outlet. Have a certified technician replace the missing, damaged, or failed parts using only identical replacement parts before resuming operation.

ELECTRICAL INFORMATION

GROUNDING INSTRUCTIONS

In the event of a malfunction or breakdown, grounding provides the path of least resistance for an electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching outlet that is properly installed and grounded in accordance with ALL local codes and ordinances.

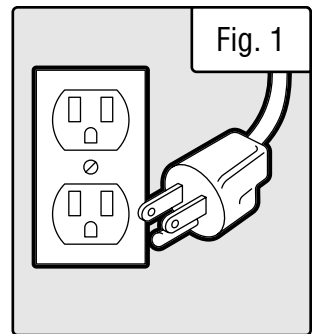
1. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

2. Improper connection of the equipment grounding conductor can result in electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, **DO NOT** connect the equipment grounding conductor to a live terminal.

3. Check with a licensed electrician or service personnel if you do not completely understand the grounding instructions or whether the tool is properly grounded.

4. Use only three-wire extension cords that have three-pronged plugs and outlets that accept the tool's plug. Repair or replace a damaged or worn cord immediately.

CAUTION! In all cases, make certain the outlet in question is properly grounded. If you are not sure, have a licensed electrician check the outlet.



GUIDELINES AND RECOMMENDATIONS FOR EXTENSION CORDS

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 overheating. The table below shows the correct size to be used according to cord length and ampere rating. When in doubt, use a heavier cord. The smaller the gauge number, the heavier the cord.

AMPERAGE	REQUIRED GAUGE FOR EXTENSION CORDS			
	25 ft.	50 ft.	100 ft.	150 ft.
3A	18 gauge	16 gauge	16 gauge	14 gauge

1. Examine extension cord before use. Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

2. Do not abuse extension cord. Do not pull on cord to disconnect from receptacle; always disconnect by pulling on plug. Disconnect the extension cord from the receptacle before disconnecting the product from the extension cord. Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

3. Use a separate electrical circuit for your tool. This circuit must not be less than a 12-gauge wire and should be protected with a 15A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

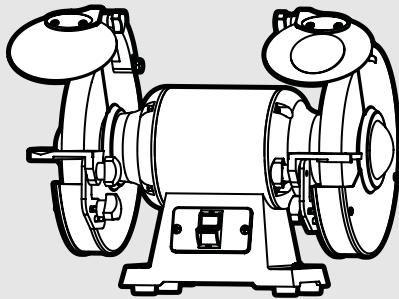
UNPACKING & PACKING LIST

⚠ WARNING! Do not plug in or turn on the tool until it is fully assembled according to the instructions. Failure to follow the safety instructions may result in serious personal injury.

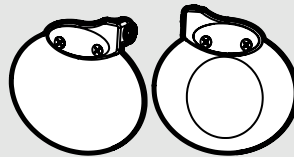
UNPACKING

With the help of a friend or trustworthy foe, carefully remove the Bench Grinder from the packaging. Make sure to take out all contents and accessories. Do not discard the packaging until everything is removed. Check the packing list below to make sure you have all of the parts and accessories. If any part is missing or broken, please contact our customer service at **1-847-429-9263** (M-F 8-5 CST), or email **techsupport@wenproducts.com**.

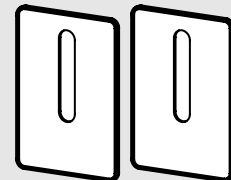
PACKING LIST



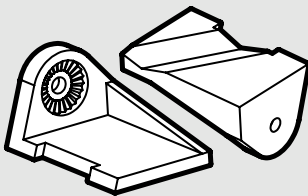
Bench Grinder (1)



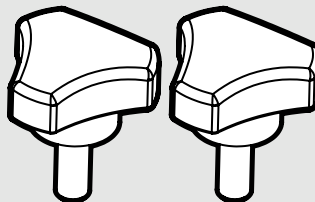
Eye Shields (2)



Spark Deflectors (2)



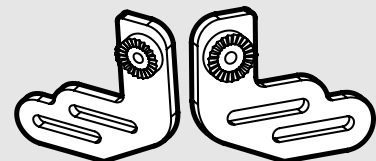
Movable Work Rest (2)



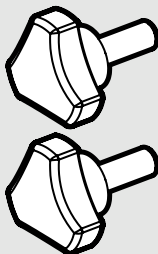
**Eye Shield
Lock Knobs (2)**



**Spark Deflector
Screw Assemblies (2)**



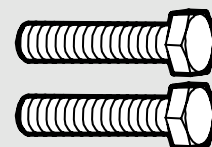
Fixed Work Rest (2)



**Movable Work Rest
Locking Knobs (2)**



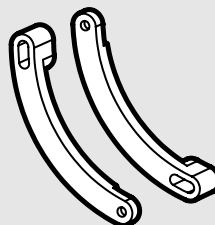
**Eye Shield
Flat Washers, 5mm (2)**



M6x30 Hex Bolt (2)



**Movable Work Rest
Flat Washers, 6mm (2)**



Eye Shield Arms (2)



Lock Washers (2)

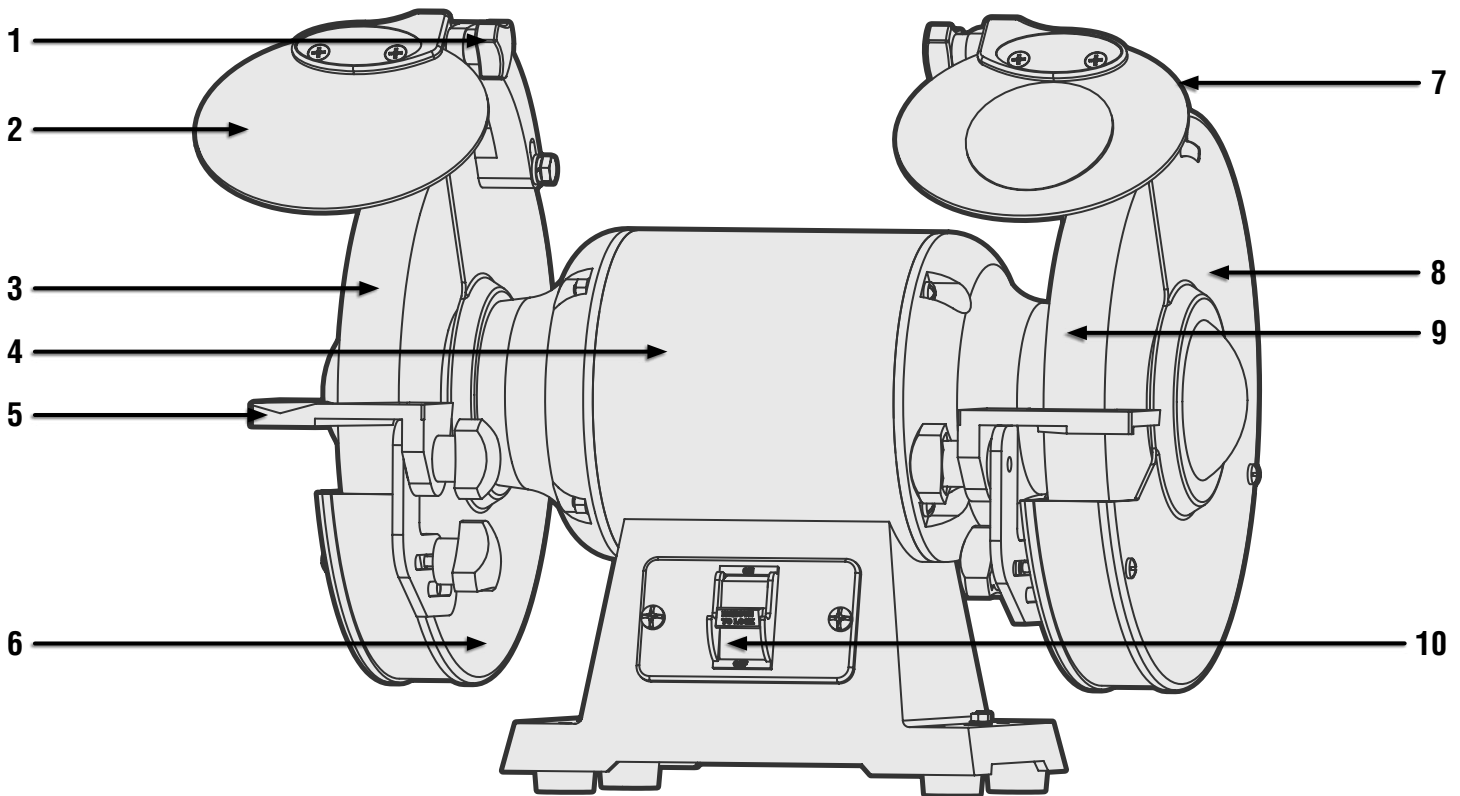


Flat Washers (2)

KNOW YOUR BENCH GRINDER

TOOL PURPOSE

Sharpen bits, drill bits, chisels, gouges, and other cutting tools all with your WEN Bench Grinder. Refer to the following diagrams to become familiarized with all the parts and controls of your bench grinder. The components will be referred to later in the manual for assembly and operation instructions.



1. Locking Knob - Lock the eye shield in position.

2. Eye Shield - Protective see-through shields to prevent any loose debris from contacting the operator.

3. 120-Grit Grinding Wheel - Used to remove light material from workpiece.

4. Motor Housing - Contains the electrical motor.

5. Tool Rest - Used to support the workpiece. Adjustable to provide angled surfaces.

6. Inner Wheel Guard - Covers the grinding wheels and protects against accidental contact.

7. Spark Deflector - Prevents hot sparks and debris from contacting the operator.

8. Wheel Cover - Covers the grinding wheels and provides quick access for routine maintenance.

9. 60-Grit Grinding Wheel - Used to remove light material from workpiece.

10. ON / OFF Switch with Safety Lock

ASSEMBLY & ADJUSTMENTS

⚠ WARNING! To avoid injury from unexpected starting or electrical shock, do not plug the power cord into a source of power during unpacking and assembly. This cord must remain unplugged whenever you are adjusting/ assembling the grinder. If any part is missing or damaged, do not attempt to assemble the grinder or plug in the power cord. All of the parts needed for assembly should be located and accounted for before beginning.

TOOL REST ASSEMBLY (FIG. 2)

1. Place the tool rest (3) over the tool rest support (7) and secure in position with a 6mm flat washer (2) and knob (1).

2. Attach the tool rest support to the bottom of the left wheel guard. Insert a carriage bolt (16) through cover and guard. Place upper slot of support over carriage bolt and lower slot over the raised boss on guard. Secure support using 5mm flat washer (6), 5mm lock washer (5) and knob (4). Tighten knob finger tight.

3. Position tool rest so that distance between tool rest and grinding wheel is 1/16" or less. Reposition angle of tool rest if necessary. Secure all knobs.

4. Mount right tool rest in a similar manner.

SPARK DEFLECTOR AND EYE SHIELD ASSEMBLY (FIG. 2)

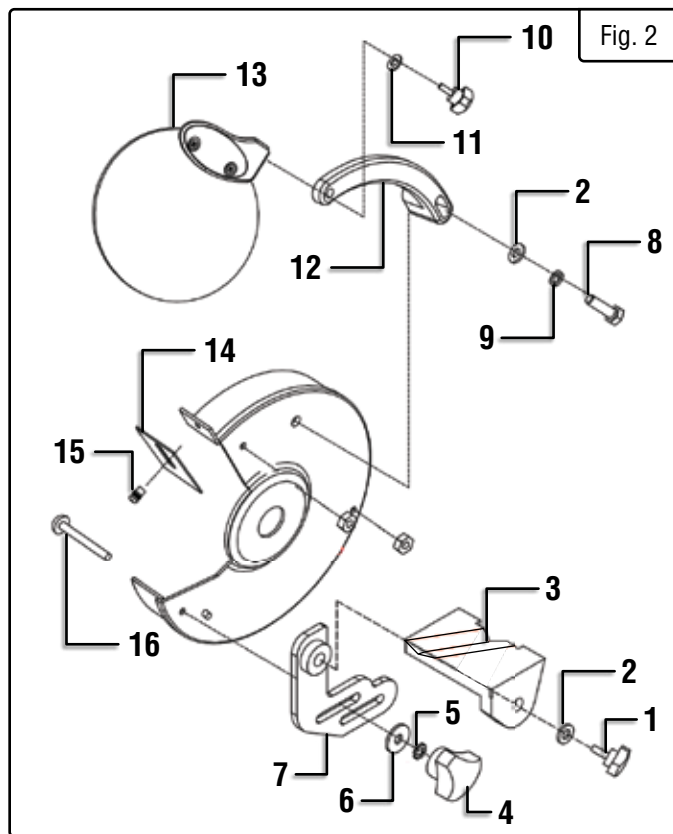
1. Attach spark deflector (14) to left wheel guard using 5mm flat washer, 5mm lock washer and pan head screw (15). Make sure spark deflector is 1/4" or less away from grinding wheel.

2. Attach eye shield support (12) to left wheel guard using 6mm flat washer (2), 6mm lock washer (9) and hex head bolt (8).

3. Attach eye shield (13) to eye shield support using 5mm flat washer (11) and knob (10).

4. Position eye shield as desired and secure all knobs and bolts.

5. Attach spark deflector and eye shield assembly to right wheel guard in a similar manner.



ASSEMBLY & ADJUSTMENTS

MOUNTING THE BENCH GRINDER

The bench grinder should be firmly attached to a reliable work surface using mounting hardware (not included) through the base of the grinder's mounting holes. This will prevent the bench grinder from vibration, walking or tipping during operation.

NOTE: This bench grinder is compatible with the WEN 4288 Cast Iron Bench Grinder Pedestal Stand.

1. Prepare 1/4 in. bolts, flat washers, lock washers and hex nuts (not included). The bolt length should be 1-1/2 in. longer than the thickness of the workbench.
2. Locate and mark the holes where the grinder is to be mounted onto the work surface. NOTE: If mounting to a work bench, drill four 3/8 in. diameter holes through the workbench.
3. Place the bench grinder onto the workbench, aligning holes in base with holes in the workbench.
4. Insert four 1/4 in. diameter bolts and washers and attach with nuts securely.

 **WARNING!** Always make sure your bench grinder is securely mounted to a workbench. Failure to do so could result in an accident resulting in possible serious personal injury.

OPERATION

BASIC OPERATION

1. To operate the bench grinder, always wear safety glasses and stand to the side of the grinder (as opposed to in front) before turning the tool on.
2. Turn the On/Off switch to the ON position. Once the tool is up and running, allow it to reach full speed before grinding. This will take about 15 seconds (Fig. 9).
3. Hold the work piece firmly against the tool rest. Hold very small pieces with pliers or other suitable clamps.
4. Choose the suitable grinding wheel for you operation. The 60 grit wheel is good for small material removal and sharpening. The 120 grit wheel is good for extremely fine removal.
5. Feed the work piece smoothly and evenly into the grinding wheel. Move the workpiece back and forth at an even pace to make for even grinding and prevent burning any one area of the surface.

NOTE: Sparks are normal during grinding operations. Protect yourself and the surrounding environment from flying sparks.

6. Move the work piece slowly and avoid forcing the workpiece against the grinding wheel. If the wheel tends to slow down from excessive force, you should occasionally release the pressure to let the wheel return to full speed.

NOTE: Excessive pressure may damage the tool, cause the motor to overheat, and prematurely wear down the grinding wheel.

7. Grind only on the face of the grinding wheel; never on the side of it.
8. Regularly place the hot end of the workpiece into the coolant tray to cool it off.
9. Turn the ON/OFF switch to "O". The wheels will take about 3 minutes and 20 seconds to come to a full stop. Avoid contact with the bench grinder's housing until it has stopped and cooled down completely. Unplug the tool from the power source.

OPERATION

SHARPENING LAWN MOWER BLADES (FIG. 3)

Lawn mower blades are usually sharpened on only one edge and dressed up slightly on the other. Perform this sharpening process on both cutting ends of the blade.

After sharpening, be sure to balance the blade by removing additional material from the heavy end. Unbalanced blades can cause serious crank shaft damage to your lawn mower. There are a number of inexpensive cone balancers on the market for this purpose. Alternatively, you can balance the blade using a screwdriver that is secured onto a vise as shown.

NOTE: Always remove spark plug wires or battery from the mower before servicing the blades to prevent accidental startups.

SHARPENING CHISELS & FLATHEAD SCREWDRIVERS (FIG. 4)

The end of a properly sharpened chisel or screwdriver will be a perfectly flat rectangle, perpendicular to the center line of the shank. The two sides and two faces will taper outward from the end. Hold each face of the screwdriver against the wheel to true it up, then ease the end straight into the stone to grind it true.

SHARPENING DRILL BITS (FIG. 5)

Use the grooved work rest to provide angled support to drill bits during grinding operation. The angled groove running through the work rest allows for a cradle for drill bits during sharpening operations.

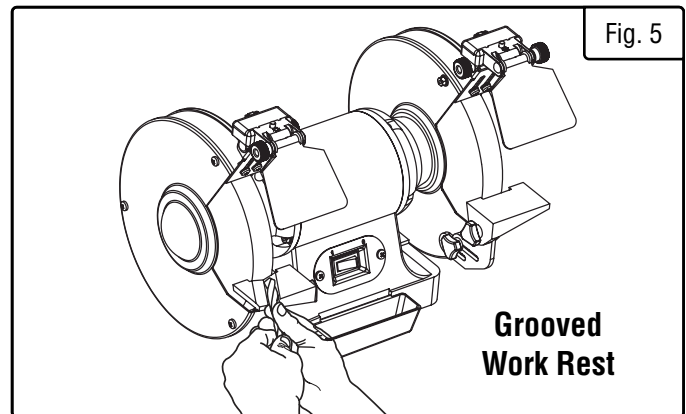
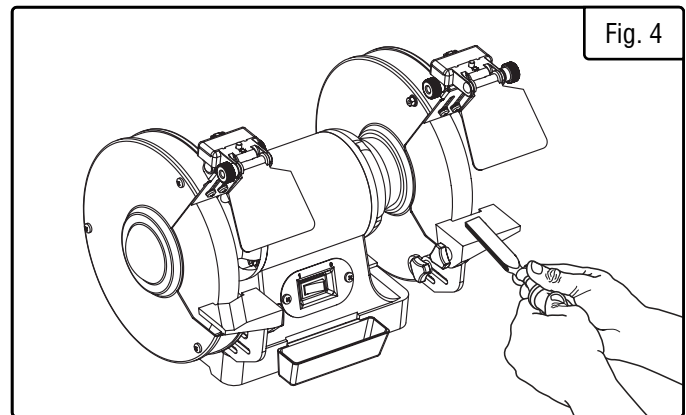
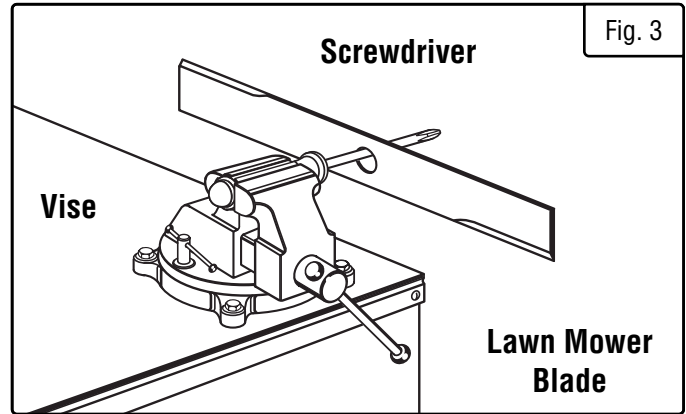
For better sharpening results, you can use a sharpening jig (available at most hardware stores). Begin on one side of the point at the existing angle, then twist the bit while maintaining contact with the grinding surface. Sharpen only the tip of the drill bit.

SHARPENING KNIVES

Working from the heavy end of the blade towards the tip to remove metal from both faces of the knife.

SHARPENING SCISSORS

If possible, take the scissors apart to make the sharpening operation easier and safer. Remove material only from the outside surface and work from the heavy end of the blade toward the tip.



MAINTENANCE

 **WARNING!** For your own safety, turn the switch OFF and remove the plug from the electrical outlet before adjusting or performing maintenance or lubrication work on the grinder.

Before using, check to make sure parts are not damaged, missing, or worn. Check for alignment of moving parts, binding of moving parts, improper mounting, or any other conditions that may affect the grinder's operation. If any of these conditions exist, do not use until parts are replaced or the grinder is properly repaired. Frequently blow or vacuum dust from all surfaces and the motor housing.

 **WARNING!** Any attempt to repair or replace electrical parts on this tool may be hazardous. Repairs should be done by a qualified service technician only.

GENERAL CLEANING AND MAINTENANCE

1. Regularly check the tool and use a soft brush to remove accumulated dust. Wear safety goggles to protect your eyes while cleaning.
2. If the body of the grinder needs cleaning, wipe down with soft damp cloth. A mild detergent can be used. Do not use alcohol, petrol, or other similar cleaning agents. Do not make contact with grinding wheels with any damp cloth.
3. Always make sure the eye shields are transparent and not blocking the view of the grinding wheel.
4. In normal use, grinding wheels may become cracked, grooved, rounded at the edges, chipped, out of alignment or loaded with foreign material. Cracked wheels should be replaced IMMEDIATELY. While any of the other conditions can be remedied, new wheels sometimes require dressing to make them round.
5. If you must replace a wheel be sure to obtain one with a safe rated speed at least as high as the "NO LOAD" RPM marked on your grinder's nameplate. Replacement wheels must have a 6 inch diameter, a matching arbor size and should be a maximum of 3/4 inch wide. Always check new wheels for cracks. Be sure the tool is unplugged before attempting repairs and maintenance.
6. This unit has sealed lubrication within the bearings in the motor housing. No additional lubrication is required.

USING A WIRE OR BUFFING WHEEL

A wire or buffing wheel can be installed onto either side of the grinder as needed. More spacers are required for these types of grinding wheels, depending on the wheel's thickness.

NOTE: The first spacer should always go onto the arbor shaft, between the innermost wheel flange and the body of the grinder. If needed, a second spacer should go between the outermost wheel flange and the arbor hex nut. Always use the included wheel flanges even if using a wire or a buffing wheel.

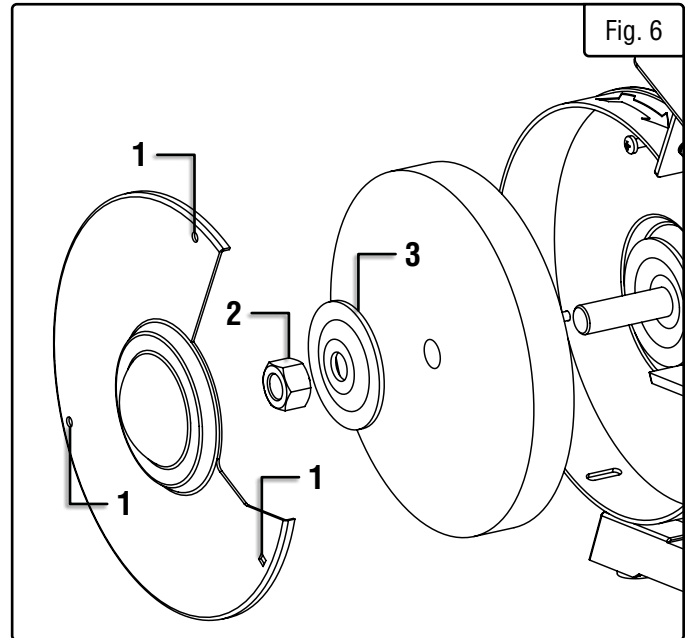
Your bench grinder is compatible with the **WEN 858WW 8-Inch Wire Wheel** available for purchase on wenproducts.com

CHANGING THE GRINDING WHEELS

Grinding wheels should be inspected before each use. Store the grinding wheels to prevent them from the potential hazards of moisture, containments and other damage.

REPLACING THE GRINDING WHEELS

1. Disconnect the grinder from the power supply.
2. Rotate the eye shield out of the way in order to access the tool rest.
3. Loosen the tool rest knob and remove the tool rest from the grinding wheel. (Refer to Tool Rest Assembly on Page 8)
4. Remove the carriage bolt and two screws (Fig. 6 - 1) found around the outside of the wheel guard in order to remove the wheel cover. Repeat for the other side.
5. Using 2 15/16-inch or 24mm wrenches, remove the arbor hex nut (Fig. 6 - 2) found on the outside edge of the grinding wheel. Use a snapping motion to loosen the nut.



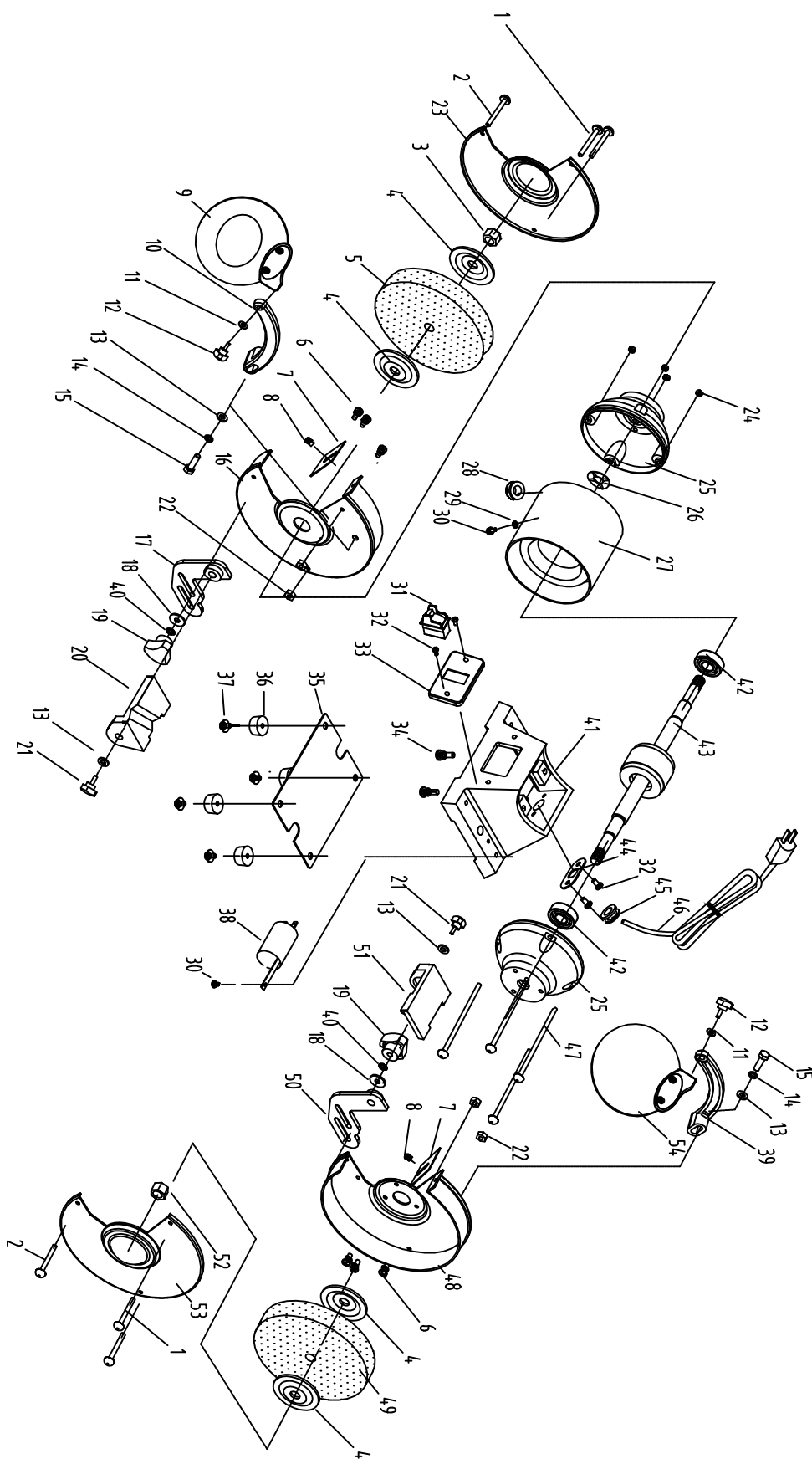
NOTE: The left side hex nut is loosened by using a clockwise wrench rotation while the right side hex nut is loosened with a counterclockwise rotation. If you are having difficulty with the two-wrench method, you may try holding one wheel while loosening the nut. Wear gloves if you decide to use this method to avoid scraping your hand or fingers.

6. Remove the outer wheel flange (Fig. 6 - 3) and set it to the side. Now you can freely remove the old grinding wheel.
7. Replace the abrasive wheel with a new grinding wheel rated to safely operate at a higher RPM than the max speed of the grinder (over 1750 RPM). Make sure both the outer diameter and the arbor size of the replacement wheel adequately meet the standards of this grinder. Do not remove labels from the grinding wheels.

NOTE: Tightening the grinding wheels should not be done with an impact driver or drill, as over-tightening may damage the grinding wheel. It should be done by “snapping” the wrench with a quick motion to bring it to full tightness. This can be done by (with gloved hands) holding the grinding wheel on the same side you’re tightening (so if tightening the left nut, hold the left wheel). If you are having difficulty tightening both nuts, try removing one nut from the arbor entirely, and tightening the other nut as tight as possible while holding the opposite end of the exposed arbor with a pair of locking pliers or a similar tool. Once it is tight, reattach the other nut and bring to proper tightness.

8. Once the wheel has been replaced, reattach the outer flange and the arbor hex nut. Do not overtighten any flanges or nuts, as this can dig into the abrasive wheel, creating a risk of injury. If the nut cannot be tightened any more with the wrench, it is properly tightened.
9. Replace the wheel cover, the knobs, the tool rest and the eye shield. Make sure all guards, shields and tool rests are correctly positioned before operation.

EXPLODED VIEW & PARTS LIST



EXPLODED VIEW & PARTS LIST

No.	Part No.	Description	Qty.
1	4286-001	Screw (M5x48)	4
2	4286-002	Bolt (M5x51)	2
3	4286-004	I Type Hex Nut (M16 Left)	1
4	4286-005	Flange	4
5	4286-006	Grinding Wheel #120 (P200x25x15.88)	1
6	4276-013	Screw (M5x10)	6
7	4286-009	Spark Deflector	2
8	4276-011	Screw (M5x10)	2
9	4286-011	Left Eye Shield Assembly	1
10	4286-012	Left Eye Shield Rod	1
11	4286-010	Flat Washer (D5)	2
12	4276-005	Eye Shield Locking Knob (2)	2
13	4286-014	Flat Washer (D6)	4
14	4276-002	Spring Washer (D6)	2
15	4276-001	Hex Bolt (M6x30)	2
16	4286-017	Left Wheel Guard	1
17	4286-019	Left Toolrest Support	1
18	4286-020	Big Flat Washer (D5)	2
19	4286-021	Work Rest Locking Knob	2
20	4286-022	Left Movable Work Rest	1
21	4286-023	Work Rest Locking Knob	2
22	4276-008	Hex Nut (M5)	4
23	4286-003	Left Wheel Guard Cover	1
24	4286-018	Hex Nut (M5)	4
25	4286-024	End Shield	2
26	4286-025	Wave Washer (D40)	1
27	4286-026	Stator	1

No.	Part No.	Description	Qty.
28	4276-023	Grommet	1
29	4276-024	Lock Washer (D4)	1
30	4276-033	Screw (M4x8)	2
31	4286-032	Switch	1
32	4286-033	Screw (M5x8)	4
33	4286-034	Switch Plate	1
34	4286-036	Screw (M8x20)	2
35	4286-037	Bottom Plate Cover	1
36	4286-038	Rubber Feet	4
37	4286-039	Screw (M5x16)	4
38	4286-040	Capacitor	1
39	4286-049	Right Eye Shield Support	1
40	4286-008	Lock Washer (D5)	2
41	4286-045	Base (1)	1
42	4286-043	Bearing (204)	2
43	4286-044	Rotor	1
44	4286-046	Cord Plate	1
45	4276-041	Strain Relief	1
46	4276-043	Power Cord	1
47	4286-051	Screw (M5x148)	4
48	4286-054	Right Wheel Guard	1
49	4286-055	Grinding Wheel #60 (P200x25x15.88)	1
50	4286-053	Right Fixed Work Rest	1
51	4286-052	Right Movable Work Rest	1
52	4286-056	I Type Hex Nut (M16 Right)	1
53	4286-057	Right Wheel Guard Cover	1
54	4286-050	Right Eye Shield Assembly	1
54	4286-050	Right Eye Shield Assembly	1

WARRANTY STATEMENT

WEN Products is committed to building tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

LIMITED WARRANTY OF WEN PRODUCTS FOR HOME USE

GREAT LAKES TECHNOLOGIES, LLC ("Seller") warrants to the original purchaser only, that all WEN consumer power tools will be free from defects in material or workmanship during personal use for a period of two (2) years from date of purchase or 500 hours of use; whichever comes first. Ninety days for all WEN products if the tool is used for professional or commercial use. Purchaser has 30 days from the date of purchase to report missing or damaged parts.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the replacement of parts, without charge, which are defective in material or workmanship and which have not been subjected to misuse, alteration, careless handling, misrepair, abuse, neglect, normal wear and tear, improper maintenance, or other conditions adversely affecting the Product or the component of the Product, whether by accident or intentionally, by persons other than Seller. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of Purchase must be a direct vendor of Great Lakes Technologies, LLC. Purchasing through third party vendors, including but not limited to garage sales, pawn shops, resale shops, or any other secondhand merchant, voids the warranty included with this product. Contact techsupport@wenproducts.com or 1-847-429-9263 with the following information to make arrangements: your shipping address, phone number, serial number, required part numbers, and proof of purchase. Damaged or defective parts and products may need to be sent to WEN before the replacements can be shipped out.

Upon the confirmation of a WEN representative, your product may qualify for repairs and service work. When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge for addresses within the contiguous United States.

THIS LIMITED WARRANTY DOES NOT APPLY TO ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME, INCLUDING BELTS, BRUSHES, BLADES, BATTERIES, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

THIS LIMITED WARRANTY APPLIES ONLY TO ITEMS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE. FOR WARRANTY PARTS OR PRODUCTS REPAIRED UNDER WARRANTY SHIPPING TO ADDRESSES OUTSIDE OF THE CONTIGUOUS UNITED STATES, ADDITIONAL SHIPPING CHARGES MAY APPLY.

**THANKS FOR
REMEMBERING**

