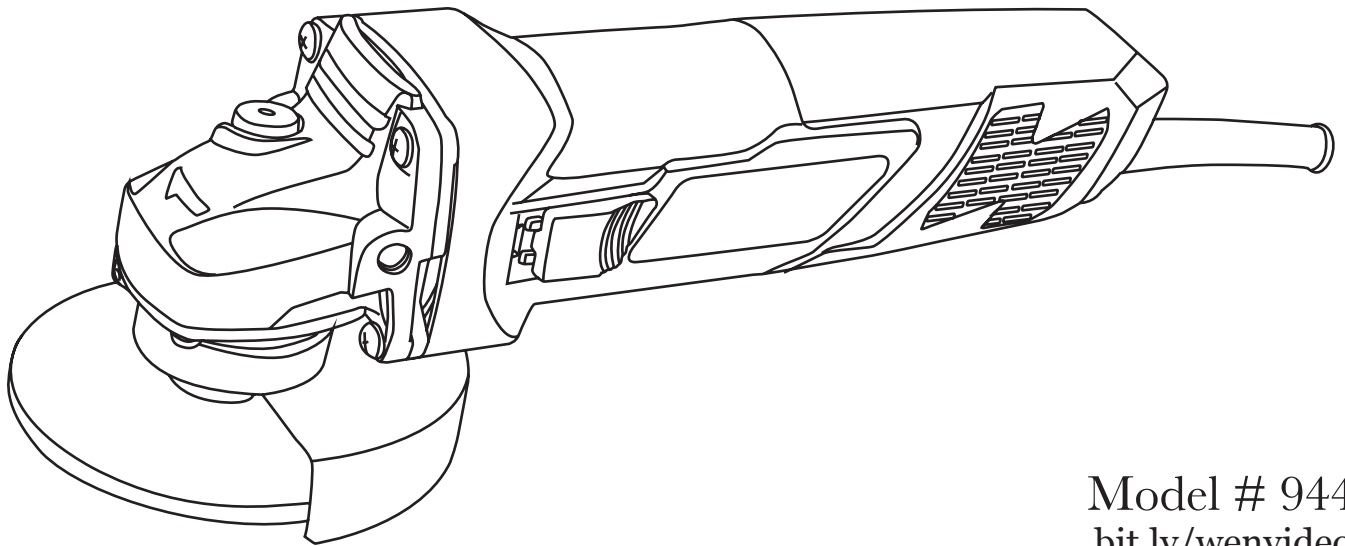




# 4-1/2 INCH ANGLE GRINDER




Model # 944  
[bit.ly/wenvideo](http://bit.ly/wenvideo)

## IMPORTANT:

Your new tool has been engineered and manufactured to WEN's highest standards for easy operation, dependability and maximum user safety. When properly cared for, this product will supply 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.

## NEED HELP? CONTACT US!

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

 **800-232-1195** (M-F 8AM-5PM CST)

 [techsupport@wenproducts.com](mailto:techsupport@wenproducts.com)

 [WENPRODUCTS.COM](http://WENPRODUCTS.COM)



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## TECHNICAL DATA

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Model Number:	944
Motor:	120 V, 60 Hz, 7 A
Speed:	11,000 RPM
Disc Size:	4.5 inch diameter, 7/8 inch arbor size
Tool Arbor Size:	5/8 inch
Inner Flange Adapter Size:	5/8 to 7/8 inch
Cord length:	6 feet
Product Weight:	4.6 pounds
Product Dimensions:	12 x 5 x 4 inches

## GENERAL SAFETY RULES

Safety is a combination of common sense, staying alert and knowing how your item works. **SAVE THESE SAFETY INSTRUCTIONS.**

**WARNING:** To avoid mistakes and serious injury, do not plug in your tool until the following steps have been read and understood.

1. **READ** and become familiar with this entire instruction manual. **LEARN** the tool's applications, limitations, and possible hazards.
2. **AVOID DANGEROUS CONDITIONS.** Do not use power tools in wet or damp areas or expose them to rain. Keep work areas well lit.
3. **DO NOT** use power tools in the presence of flammable liquids or gases.
4. **ALWAYS** keep your work area clean, uncluttered, and well lit. **DO NOT** work on floor surfaces that are slippery with sawdust or wax.
5. **KEEP BYSTANDERS AT A SAFE DISTANCE** from the work area, especially when the tool is operating. **NEVER** allow children or pets near the tool.
6. **DO NOT FORCE THE TOOL** to do a job for which it was not designed.
7. **DRESS FOR SAFETY.** Do not wear loose clothing, gloves, neckties, or jewelry (rings, watches, etc.) when operating the tool. Inappropriate clothing and items can get caught in moving parts and draw you in. **ALWAYS** wear non-slip footwear and tie back long hair.
8. **WEAR A FACE MASK OR DUST MASK** to fight the dust produced by sawing operations.

**WARNING:** Dust generated from certain materials can be hazardous to your health. Always operate the tool in a well-ventilated area and provide for proper dust removal. Use dust collection systems whenever possible.

9. **ALWAYS** remove the power cord plug from the electrical outlet when making adjustments, changing parts, cleaning, or working on the tool.
10. **KEEP GUARDS IN PLACE AND IN WORKING ORDER.**
11. **AVOID ACCIDENTAL START-UPS.** Make sure the power switch is in the **OFF** position before plugging in the power cord.
12. **REMOVE ADJUSTMENT TOOLS.** Always make sure all adjustment tools are removed from the saw before turning it on.
13. **NEVER LEAVE A RUNNING TOOL UNATTENDED.** Turn the power switch to **OFF**. Do not leave the tool until it has come to a complete stop.
14. **NEVER STAND ON A TOOL.** Serious injury could result if the tool tips or is accidentally hit. **DO NOT** store anything above or near the tool.

## GENERAL SAFETY RULES

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15. **DO NOT OVERREACH.** Keep proper footing and balance at all times. Wear oil-resistant rubber-soled footwear. Keep the floor clear of oil, scrap, and other debris.
16. **MAINTAIN TOOLS PROPERLY.** ALWAYS keep tools clean and in good working order. Follow instructions for lubricating and changing accessories.
17. **CHECK FOR DAMAGED PARTS.** Check for alignment of moving parts, jamming, breakage, improper mounting, or any other conditions that may affect the tool's operation. Any part that is damaged should be properly repaired or replaced before use.
18. **MAKE THE WORKSHOP CHILDPROOF.** Use padlocks and master switches and ALWAYS remove starter keys.
19. **DO NOT** operate the tool if you are under the influence of drugs, alcohol, or medication that may affect your ability to properly use the tool.
20. **USE SAFETY GOGGLES AT ALL TIMES** that comply with ANSI Z87.1. Normal safety glasses only have impact resistant lenses and are not designed for safety. Wear a face or dust mask when working in a dusty environment. Use ear protection such as plugs or muffs during extended periods of operation.

## SPECIFIC RULES FOR GRINDING

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**WARNING:** Do not operate this tool until it is completely assembled and installed according to the instructions.

1. Always use a proper guard with the grinding wheel. A guard protects the operator from broken wheel fragments. When using grinding wheel attachments, the guard must always be attached to the tool and positioned for maximum safety to minimize the amount of the exposed wheel.
2. Accessories must be rated for at least the recommended speed on the tool warning label. Wheels and other accessories running over the rated speed can fly apart and cause injury. Grinding wheels or any other accessory must have a maximum safe operating speed greater than the "no load RPM" (11,000 RPM).
3. Hold the tool by the insulated gripping surface when performing any operation where the cutting tools may contact hidden wiring (or, for that matter, its own cord). Contact with a live wire will make the exposed metal parts of the tool "live" and shock the operator.
4. Always use the auxiliary handle for maximum control over torque reaction or kickback. Operation of the grinder without the side handle could cause a loss of control of the grinder, possibly resulting in serious personal injury.
5. Before using a grinder or installing a new wheel, inspect the grinding wheel for chips and cracks. Remove bad wheels immediately. Run the tool at no load for at least one minute, holding the tool in the direction away from any people. Wheels with flaws will normally break apart during this test period. Wear proper safety protection.
6. Carefully handle both the tool and the individual grinding wheels to avoid chipping and cracking. Install a new wheel if the tool is dropped during grinding. Do not use a wheel that may be damaged. Fragments of a wheel that bursts during operation will fly away at a great velocity, possibly striking you or bystanders if not approached carefully.

## SPECIFIC RULES FOR GRINDING

7. Do not use a grinding wheel that is larger than the maximum recommended size for your tool. Avoid using worn down and damaged wheels from larger grinders. Wheels intended for larger angle grinders are not suitable for the high speed of a small angle grinder, making these wheels burst easily.
8. Do not use depressed hub grinding wheels for cut-off operations. Depressed hub wheels are not intended for side loading and may shatter under certain loads.
9. Do not use this tool with a woodcarving blade. Such blades create frequent kickback and a loss of control.
10. Wear proper apparel while using the grinder. Face shields (or at least safety goggles,) dust masks, leather gloves and a shop apron capable of withstanding small wheel or workpiece fragments should be worn at all times.
11. Position the cord away from the spinning grinding wheel or any other sanding accessory. Do not wrap the cord around your arm or wrist. If you lose control and have the cord wrapped around any appendage, it may cause injury. Avoid bouncing and snagging the wheel, especially when working on corners, sharp edges, etc. This can cause a loss of control and create kickback.
12. Regularly clean the tool's air vents with compressed air. Excessive accumulation of powdered metal inside of the motor housing can cause electrical failures. Do not grind or sand near flammable materials. Sparks from the wheel can ignite these materials.

**WARNING:** some dust created by power sanding, sawing, grinding and drilling contains chemicals known to cause cancer, birth defects, or other reproductive harm. To reduce your exposure to these risks, work in a well-ventilated area with approved safety equipment including dust masks that are specially designed to filter out microscopic particles.

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of any vibration-related injury:

First be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.

Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.

Wear suitable gloves to reduce the vibration effects on the user.

Use tools with the lowest vibration when there is a choice.

Take vibration-free breaks during each day of work.

Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.

To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

# ELECTRICAL INFORMATION

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## DOUBLE INSULATION

Double insulation is a concept in safety in electric power tools, which eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. Double insulated tools do not need to be grounded.

**WARNING:** The double insulated system is intended to protect the user from shock resulting from a break in the tool's internal insulation. Observe all normal safety precautions to avoid electrical shock.

**NOTE:** Servicing of a product with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service, we suggest you return the product to your nearest authorized service center for repair. Always use original factory replacement parts when servicing.

## ELECTRICAL CONNECTION

This product has a precision-built electric motor. It should be connected to a power supply that is 120 volts, AC only (normal household current), 60 Hz. Do not operate this product on direct current (DC). A substantial voltage drop will cause a loss of power and the motor will overheat. If the product does not operate when plugged into an outlet, double-check the power supply.

**WARNING:** This tool is for indoor use only. Do not expose to rain or use in damp locations.

## UL RECOMMENDATIONS FOR USING EXTENSION CORDS

Make sure your extension cord is in good condition. 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 nameplate ampere rating. When in doubt, use a heavier cord. The smaller the gauge number, the heavier the cord.

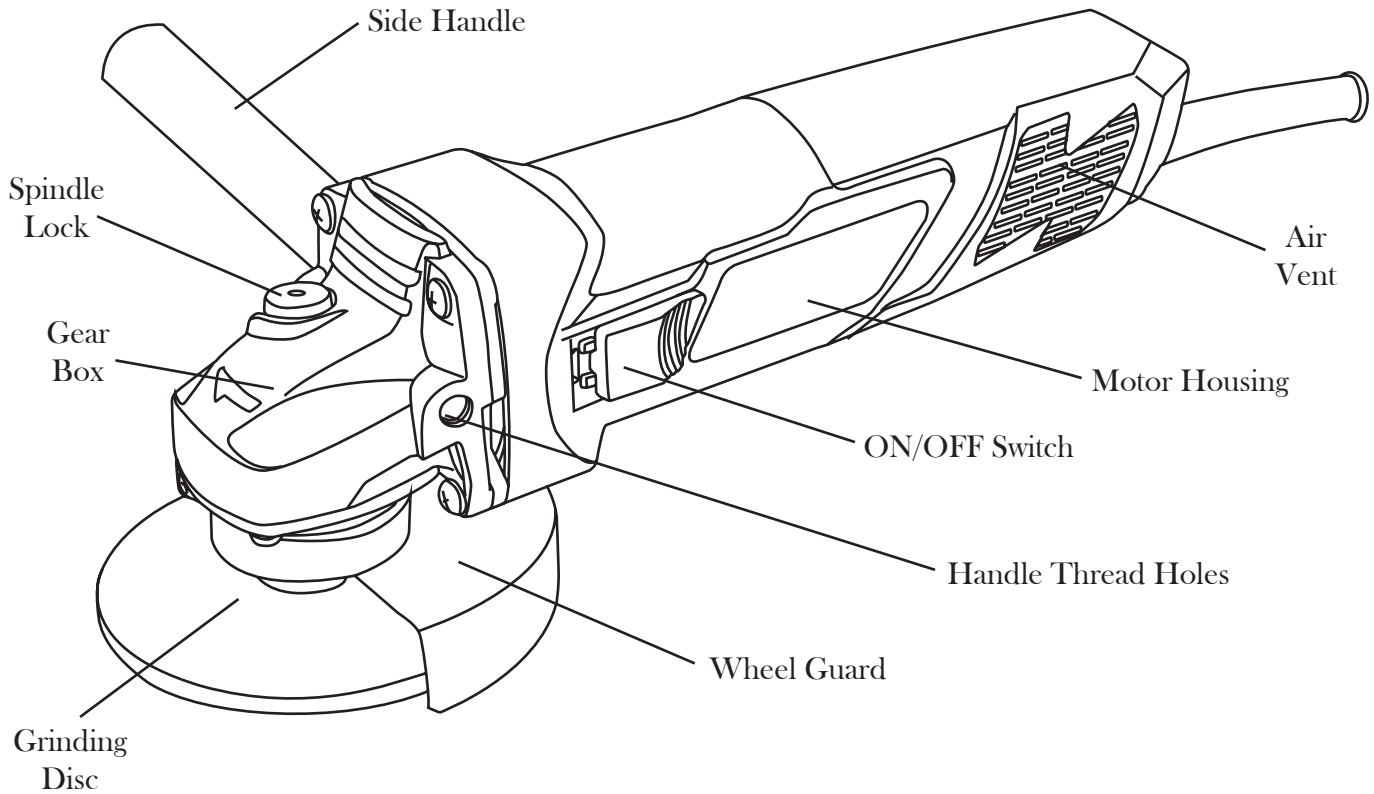
AMPERAGE	REQUIRED GAUGE FOR EXTENSION CORDS			
	25 ft.	50 ft.	100 ft.	150 ft.
7 A	18 gauge	16 gauge	14 gauge	12 gauge

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.

Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than a #12 wire and should be protected with a 15 A 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.

# KNOW YOUR GRINDER



## ASSEMBLY

### WHEEL GUARD INSTALLATION (FIG. A)

**WARNING:** Use the wheel guard with disc grinding wheels. Always close the latch to secure the guard. Keep the guard between you and the wheel. Do not direct guard opening toward your body.

1. The position of the guard can be adjusted to accommodate the operation being performed. To attach the wheel guard, first disconnect the tool from its power supply.
2. Loosen the guard release/lock screw and position the guard on to the spindle neck so that the bump on the guard lines up between the notches on the spindle neck.
3. Rotate the guard in either direction to the desired position. Fasten the screw (Fig A - 1) to secure the guard in place.

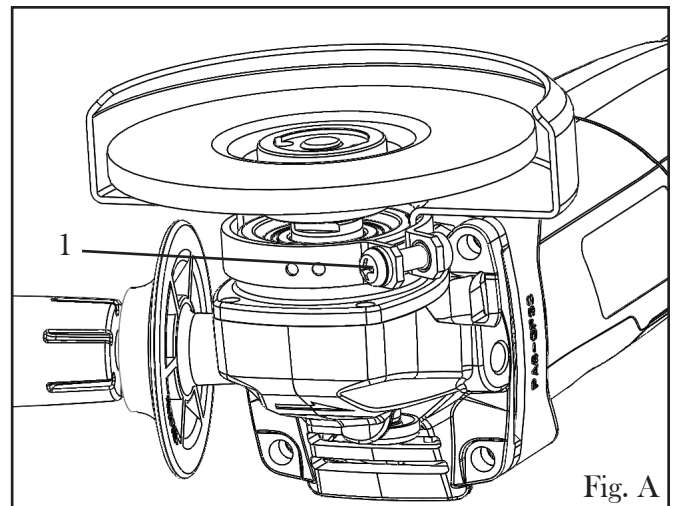


Fig. A

# ASSEMBLY

## GRINDING DISC ASSEMBLY

1. Disconnect the tool from its power supply. Be sure that the wheel guard has been properly installed before assembling the grinding disc.
2. Place the inner flange (Fig. B - 1) onto the spindle first so that the grooves align with the spindle nut.
3. Next, slide the grinding disc (Fig. B - 2) onto the spindle.
4. Screw the outer flange (Fig. B - 3) into place with the protruding lip facing downwards. This lip should fit snugly into the center of the grinding wheel. Tighten the outer flange in place using the supplied lock nut wrench (Fig. C) while pressing down the spindle lock to keep the spindle from rotating.

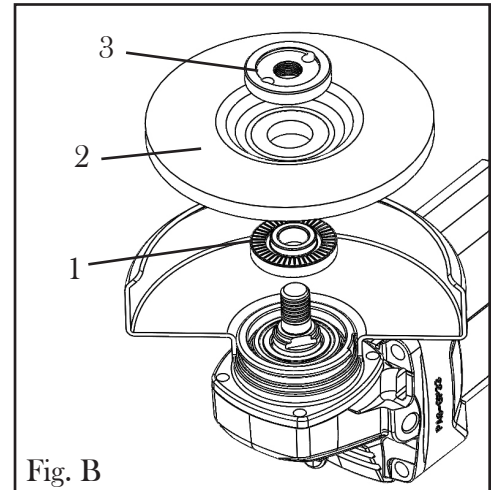


Fig. B

## OUTER FLANGE AND INNER FLANGE

Your tool is equipped with a threaded spindle for mounting accessories. Always use the supplied outer and inner flange that have the same thread size as that of the spindle.

## REVERSIBLE SIDE HANDLE (FIG D)

The side handle used to guide and balance the tool can be threaded into the front housing on either side of the tool. Use the side handle for safe control and easier operation.

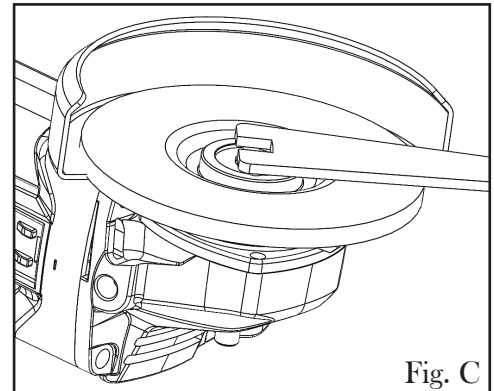


Fig. C

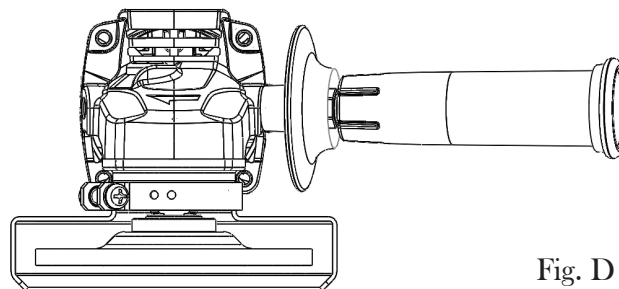


Fig. D

# OPERATION

## ON/OFF SWITCH (FIG. E - NEXT PAGE)

**WARNING: DO NOT TURN THE ANGLE GRINDER ON OR OFF WHILE THE TOOL IS UNDER LOAD;** this will greatly decrease the life of the tool.

The tool is switched ON and OFF by the side switch located on the left-hand side of the switch. The tool features a lock-on start switch which requires you to press the outermost tip of the switch to turn it off (Fig. E - 1).

Hold the tool with both hands since the torque from the motor can cause the grinder to twist. Start the angle grinder before applying it to the workpiece. Let the disc come to full speed before contacting the workpiece. Lift the tool from the workpiece before turning the machine off.



## OPERATION

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### SELECTING THE GRINDING DISC

Before using a grinding wheel, make sure that its maximum safe operating speed is more than 11,000 RPM. Do not exceed the recommended wheel diameter. Make sure it has a 7/8 inch arbor size to fit the supplied inner flange.

Grinding wheels should be carefully selected in order to maximize efficiency. Wheels vary in abrasiveness, bond, harness, grit size and structure. The correct type of wheel to use is determined by the job at hand. Use disc grinding wheels for fast grinding of structural steel, heavy weld beads, steel casting, stainless steel and other ferrous metals.

### GRINDING TIPS

Efficient grinding is achieved by controlling the pressure and keeping the angle between the wheel and the workpiece between 15° to 30°. If the wheel is flat, the tool will be difficult to control. If the angle is too steep, the pressure concentrated on a small area can cause burning to the work surface.

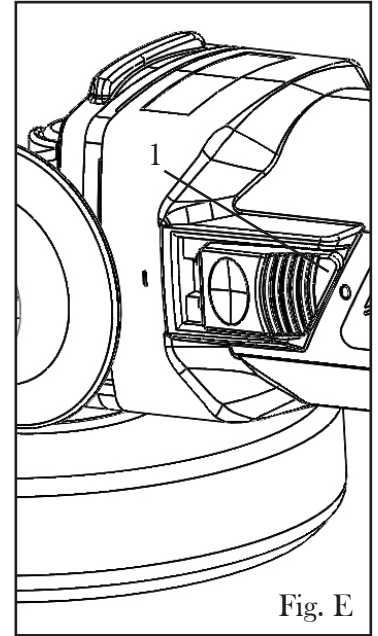


Fig. E

**WARNING** - excessive or sudden pressure on the wheel will slow the grinding action and put dangerous stresses on the wheel.

When grinding with a new wheel, be sure to grind while pulling the tool backwards until the wheel becomes rounded on its edge. New wheels have sharp corners which tend to “bite” or cut into the workpiece when pushing forward.

## MAINTENANCE

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#### TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Make sure that the trigger is in the OFF position and unplug the tool from its electrical outlet before performing any procedure in this section.



#### TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

**BEFORE EACH USE**, inspect the general condition of the tool. Check for:

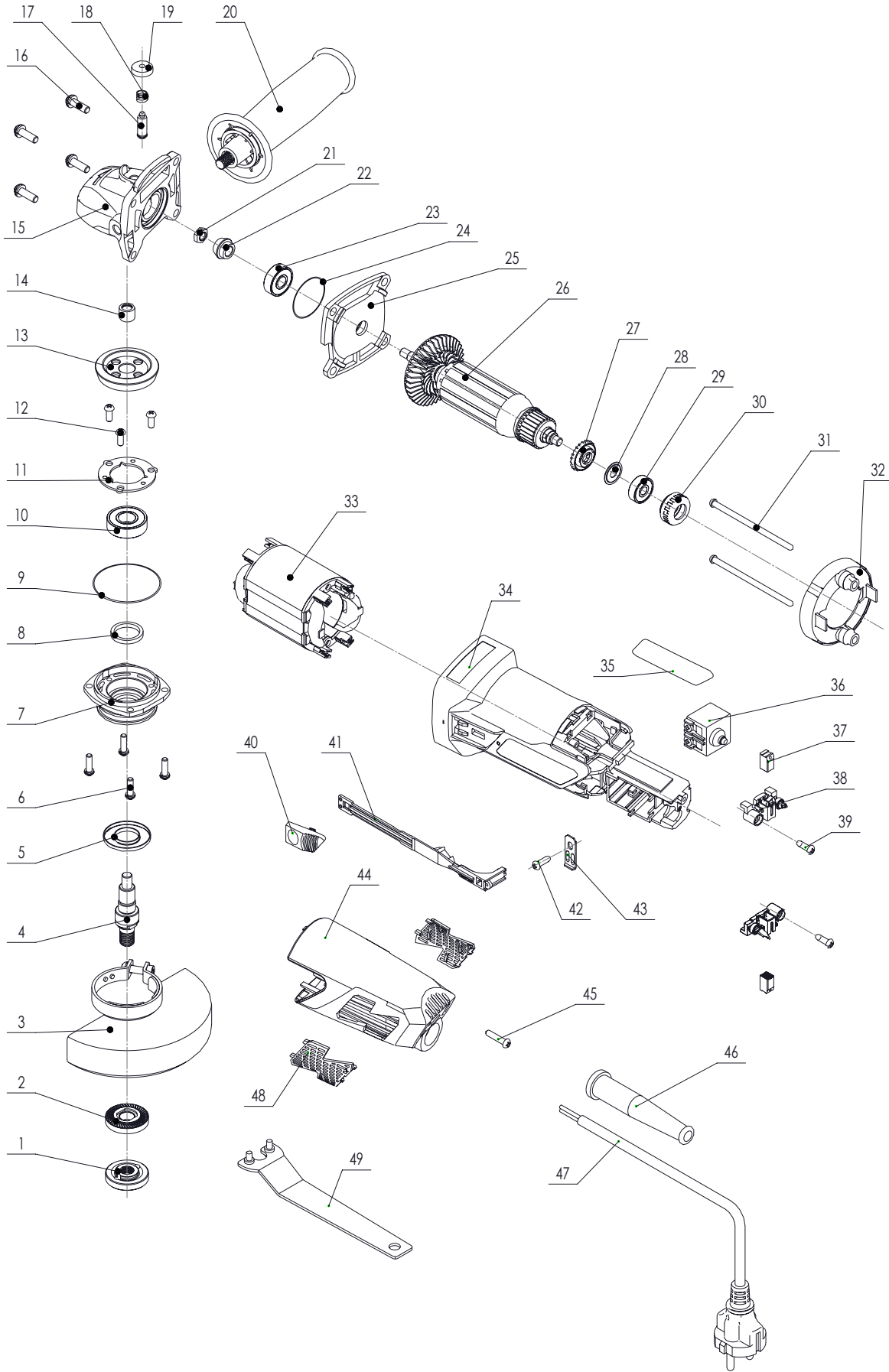
- loose hardware,
- misalignment or binding of moving parts,
- damaged cord/electrical wiring,
- cracked or broken parts, and
- any other condition that may affect its safe operation.

**AFTER USE**, wipe external surfaces of the tool with clean cloth.



**WARNING!** If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

# EXPLODED VIEW AND PARTS LIST



## EXPLODED VIEW AND PARTS LIST

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<b>No</b>	<b>Part</b>	<b>Description</b>	<b>No</b>	<b>Part</b>	<b>Description</b>
1	944-001	Outer Flange	26	944-026	Armature
2	944-002	Inner Flange	27	944-027	Dustproof Ring
3	944-003	Wheel Guard	28	944-028	Spacer
4	944-004	Output Shaft	29	944-029	Bearing 626
5	944-005	Dustproof Cover	30	944-030	Bearing Sleeve
6	944-006	Screw M4X13	31	944-031	Screw St4X80
7	944-007	Front Cover	32	944-032	Windshield
8	944-008	Spacing Ring	33	944-033	Stator
9	944-009	O Ring	34	944-034	Housing
10	944-010	6001 Bearing	35	944-035	Label
11	944-011	Bearing Cover	36	944-036	Switch
12	944-012	Screw M4X10	37	944-037	Carbon Brush
13	944-013	Big Gear	38	944-038	Brush Box
14	944-014	Needle Bearing	39	944-039	Screw St4*12
15	944-015	Gear Box	40	944-040	Pushing Block
16	944-016	Screw St5X25	41	944-041	Pushing Rod
17	944-017	Selflock Pin	42	944-042	Screws 4*14
18	944-018	Spring	43	944-043	Pressing Line Plate
19	944-019	Selflock Pin Cap	44	944-044	Rear Cover
20	944-020	Side Handle	45	944-045	Screw St4*12
21	944-021	Nut	46	944-046	Cable Protector
22	944-022	Pinion	47	944-047	Cable
23	944-023	Bearing 608	48	944-048	Air Vent Cover
24	944-024	O Circle	49	944-049	Spanner
25	944-025	Middle Plate			

## LIMITED TWO YEAR WARRANTY

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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 CONSUMER POWER TOOLS 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 for a period of two (2) years from date of purchase. Ninety days for all WEN products, if the tool is used for professional use.

**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 repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. 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. Third party vendors such as garage sales, pawn shops, resale shops, or any other secondhand merchant void the warranty included with this product. Contact [techsupport@wenproducts.com](mailto:techsupport@wenproducts.com) or 1-800-232-1195 to make arrangements for repairs and transportation.

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 warranty card and/or 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.

**THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME INCLUDING BELTS, BRUSHES, BLADES, ETC.**

**ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S., 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 PORTABLE ELECTRIC TOOLS, BENCH POWER TOOLS, OUTDOOR POWER EQUIPMENT AND PNEUMATIC TOOLS 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.**