

PS07214

4 1/2 Inch Angle Grinder Assembly & Operating Instructions



READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,
DO NOT OPERATE THIS PRODUCT!

DO NOT RETURN THIS PRODUCT TO THE RETAILER - CONTACT CUSTOMER SERVICE.

If you experience a problem, have questions or need parts for this product, call Customer Service at **1-888-287-6981, Monday-Friday, 8 AM - 4 PM Central Time**. A copy of the sales receipt is required.

FOR CONSUMER USE ONLY – NOT FOR PROFESSIONAL USE.

KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE.

GENERAL SAFETY RULES FOR ALL ELECTRIC POWER TOOLS

WARNING

READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

What You Need to Know About Safety Instructions

Warning and Important Safety Instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when operating or cleaning tools and equipment.

Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



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.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



NOTE provides additional information that is useful for proper use and maintenance for this tool. If a NOTE is indicated make sure it is fully understood.

IMPORTANT SAFETY INSTRUCTIONS

WORK AREA

WARNING

Keep your work area clean and well lit. Cluttered work benches and dark work areas may cause accidents or injury.

Do not operate power tools in explosive areas, 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

WARNING

Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.

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.

Do not abuse the cord. Never use the cord to carry the tool or pull the plug from an outlet. Keep the cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating the tool outside, use an outdoor extension cord marked "WA" or "W." These cords are rated for outdoor use and reduce the risk of electric shock. Make sure the extension cord being used is in good condition. If there are any cuts or nicks (no matter how deep) in the insulation, DO NOT use that cord. Also, make sure the extension cord is heavy enough to carry the current needed. DO NOT use small "around-the-house" lamp extension cords. These cords can easily overheat and/or catch fire when used with power tools.

TOOL USE & CARE

CAUTION

Use clamps or other practical ways 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 the tool if the power 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 power cord plug from the power source before making any adjustments, changing accessories or storing the tool. Such preventive 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.

DANGER

People with pacemakers or other electronic devices should consult with a physician before operating this product. Interruption or failure of the pacemaker could occur when electrical equipment is operated within close proximity of electrical devices.

⚠ WARNING

Inhaling dust created as a result of construction projects could be hazardous to your health. Construction dust may contain chemicals, which are known to cause cancer, birth defects and other reproductive harm in the State of California.

These chemicals could be, but are not limited to: lead from lead based paints, crystalline silica from bricks or cement, arsenic, and chromium from chemically treated-lumber.

To reduce your risk of exposure to harmful materials: always wear a dust mask that is designed to filter out hazardous microscopic contaminants, always work in a well ventilated area, and wear other approved safety equipment.

⚠ WARNING

Wash hands after handling the power cord. Touching the power cord could expose you to lead, which is known in the State of California to cause cancer, birth defects and other reproductive harm.

⚠ WARNING

All work areas should be clean and well lit. Accidents are more likely to occur in poorly lit and cluttered areas.

⚠ WARNING

Do not operate power tools in the presence of flammable liquids, gas, or dust. Sparks created from the power tool could ignite flammable materials.

⚠ WARNING

Keep children, and other distractions at a distance while operating power tools.

⚠ WARNING

This power tool is equipped with a polarized plug, meaning one blade is wider than the other and is designed to fit into a standard polarized outlet. The plug will fit into polarized outlets only one way. **DO NOT FORCE THE PLUG INTO THE OUTLET!** If the plug does not fit, a polarized outlet may need to be installed by a qualified electrician.

⚠ WARNING

Keep the power cord in good condition, and replace damaged cords immediately. Do not use the cord to pull the plug from the outlet. Keep the cord away from materials and surfaces that could damage cords. The risk of electric shock increases when the power cord is damaged.

⚠ WARNING

Always use the appropriate extension cord, making sure it is rated for use with power tools. Always be sure the extension cords are in good condition, free of cuts or nicks in the insulation. If using the power tool in an outside area with an extension cord, make sure the cord is rated for outdoor use.

⚠ WARNING

Do not make contact with a grounded surface while using this power tool. Contact with surfaces like pipes, radiators or major appliances increases your risk of electric shock.

⚠ WARNING

Use common sense while operating this power tool.

Do not use this tool if you are:

- Feeling tired or are under the influence of alcohol or drugs.
- Wearing loose clothing or jewelry. Keep long hair pulled back and away from moving parts.
- Overreaching or have improper footing. Handling the tool in this way could cause serious injury.

When using this power tool always:

- Wear the proper safety equipment, such as safety goggles, dust masks, non-skid shoes, etc.
- Check to be sure all adjusting keys or wrenches have been removed before starting the power tool.
- Check to be sure the power switch is in the "OFF" position before plugging the power tool into an electrical outlet.

⚠ CAUTION

Follow these steps to maintain safe working conditions and good working condition of power tools. Improper care can result in electric shock or serious injury.

- Secure and support the work piece using clamps. **Do not use your hands to hold the piece in place.**
- **Use the correct tool for the job.** Using the correct tool is safer and faster.
- **Make sure the power switch is in good working order.** If the power switch no longer turns the tool "ON" or "OFF", discontinue use, and have the tool replaced or repaired.
- **Remove the power cord from the power source before storage, changing accessories, or moving the tool.**
- **Keep out of reach of children, or any untrained person.** Store tools in a safe and dry place.
- **Keep tools clean, and cutting tools sharp.** Maintaining tools with proper care will increase the life of the power tool, and reduce the risk of injury.
- **Check to be sure all moving parts are free from binding and are properly aligned.**
- Use only accessories that are recommended by the manufacturer for your tool model.
- **Hold the tool by the insulated grip when using in an area where contact with a "live" wire is a possibility.**

NOTE

Only qualified repair personnel must perform tool service. Service or maintenance performed by unqualified personnel could result in a risk of injury.

⚠ WARNING

Safety glasses and ear protection must be worn during operation.

⚠ WARNING

You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.

SERVICE

Tool service must be performed only by qualified repair personnel. Service or maintenance 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 shock or injury.

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING

Before using the angle grinder, you need to become familiar with the operation of the tool. If you are unsure about the operation of the grinder, or have any questions about the proper use of the tool, call Customer Service at 1-888-287-6981.

Follow these instructions for safe handling of the tool:

- Always secure and support the work piece using clamps. **Do not use your hands to hold the piece in place.**
- **Do not use solvents containing carbon tetrachloride, ammonia or acetone to clean the grinder.** Never use gasoline, paint thinner, or other caustic chemicals that can damage the plastic parts of the tool.
- **Always use the appropriate safety gear when operating this grinder.** Including but not limited to, goggles, dust mask or respirator. Always work in a well-ventilated area to reduce your exposure to harmful chemicals and dust particles.

FEATURES

- 4.0 AMP / 500 Watt
- Speed 11,000 RPM (No Load)
- 7/8 Inch Arbor

SPECIFICATIONS

- Rated Voltage 120V / 60 Hz
- Wheel Size 4 1/2"

PACKAGE CONTENTS

- Angle Grinder
- One Grinding Wheel
- Wrench
- Handle
- Carbon Brushes

COMPONENTS

Observe the locations and functions of the various components and controls of this tool.

- 1) Motor Housing
- 2) Spindle Lock Button
- 3) Trigger (not shown)
- 4) Handle
- 5) Guard
- 6) Grinding Wheel
- 7) Carbon Brush Housing
- 8) Power Button



ASSEMBLY

⚠ WARNING

Always use the side handle when operating the grinder. Using the grinder without the handle could result in lose of control, and result in serious injury.

⚠ WARNING

Always use the grinder with the wheel guard securely and properly installed. The wheel guard should always be placed between the user and the grinding wheel. An improperly installed wheel guard could result in serious injury.



Figure 1
Top view shows handle on left side for right handed users



Figure 2
Bottom view show proper positioning of wheel guard

Check to be sure the grinder is unplugged.

Both left-handed or right-handed users may use the grinder. Attach the adjustable handle by screwing it tightly into the opposite side of the grinder. Right handed users attach handle to left side (Figure 1). Left handed users attach handle to right side.

Be sure the wheel guard is positioned between the user and the grinding wheel (Figure 2).

INSTALLING THE GRINDING WHEEL

⚠ WARNING

Improper installation of the grinding wheel and clamp nut can cause damage to the grinding wheel and grinder.

Check to be sure the grinder is unplugged.

Install grinding wheels by turning the grinder upside-down so the spindle faces up. Loosen the clamp nut with the wrench by turning counterclockwise. Remove the clamp nut from the spindle revealing the disc flange, **DO NOT REMOVE THE DISC FLANGE**. Place the grinding wheel on the spindle with the depressed center facing up so the clamp nut will rest inside the depressed center, and replace the clamp nut. The clamp nut must be placed with the raised ridge facing out toward the grinding wheel. Tighten the clamp nut with the wrench by turning clockwise. **DO NOT OVERTIGHTEN**.

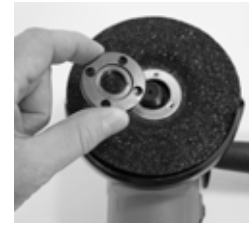


Figure 3
Grinder with spindle facing up

All grinding wheels and accessories used with this grinder must be rated for 11,000 RPM or greater. Select grinding wheels and brushes that are appropriate for the material for which they will be used. The grinding wheel that is included with the grinder is designed for grinding welds, preparing surface to be weld, grinding structural steel and stainless steel. Use brushes for removing paint or rust from metal surfaces, and use abrasive mop disks for sanding flat metal or wood surfaces.

GRINDER OPERATION

NOTE

Lift the grinder off the work surface before starting and stopping the motor.

NOTE

Applying too much pressure on the work surface while grinding can damage the grinder.

⚠ WARNING

Always secure the work piece using clamps. Never use your hands to hold the work piece in place. An unsecured work piece could cause serious injury.

When using the grinder, always grind flat surfaces by keeping the grinder at an angle of 5° -15°, so only the front of the grinding wheel touches the surface. Grip the grinder firmly with one hand on the side handle and another hand on the motor housing. The arrow on the front of the spindle housing indicates the direction the grinder wheel will spin.

Always select the appropriate grinding wheel for the job. The wheel provided with the grinder is suitable for grinding welds, stainless steel, structural steel, or preparing surfaces to be welded. All grinding wheels purchased for use with this grinder should be rated for an operating speed of at least 11,000 RPM. For best results, keep the grinder moving and apply just enough pressure to keep the grinder from bouncing.

MAINTENANCE

⚠ WARNING

Disconnect the power supply before cleaning. Wear safety eyewear before cleaning. Use compressed dry air to blow off dust and debris. Use a soft bristle brush if compressed air is not available.

CAUTION

Applying excessive force to the tool can overload the motor, decrease the life and increase the wear on the tool.

CAUTION

Some chemicals can damage the product. Do not use harsh chemicals such as gasoline, carbon tetrachloride, paint thinner, etc.

CAUTION

A qualified repair technician must perform any tool service or repair. Service or maintenance performed by unqualified personnel could result in injury. Use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

⚠ WARNING

Do not make contact with a grounded surface while using this power tool. Contact with surfaces like pipes, radiators or major appliances increases your risk of electric shock.

Keep construction debris out of grinder vents and triggers by blowing with compressed air.

Use only mild soap and a slightly damp cloth to clean the grinder.

This motor uses carbon brushes, which may require replacing. Carbon brushes wear out over time, and could create motor trouble. Keep carbon brushes free and clear of debris, and replace worn parts when necessary.

ACCESSORIES

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.

Always attach grounded (3-prong) extension cords to grounded (3-prong) outlets.

If you must use an extension cord, be sure that the gauge is large enough to carry the amount of current necessary for your power tool. If not, your tool may experience a loss of power, excessive voltage drop or overheating. The smaller the gauge number, the heavier the cord.

PS072140909