

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.



## 6" BENCH GRINDER WITH LAMP

### UNPACKING

After unpacking the Bench Grinder, inspect it carefully for any damage that may have occurred during transit. Check for any loose, missing or damaged parts. If any damage is observed, a shipping damage claim must be filed with the carrier. DO NOT use the OEMTOOLS™ Bench Grinder if broken, bent, cracked or damaged parts (including labels) are noted. Any Bench Grinder that appears damaged in any way, operates abnormally or is missing parts, should be removed from service immediately. If you suspect the Bench Grinder was subjected to shock load (a load that was dropped suddenly, unexpectedly, etc.), immediately discontinue use until it has been checked by a factory authorized service center.



### **⚠** WARNING

The following safety information is provided as a guideline to help you operate your Bench Grinder under the safest possible conditions. Any tool or piece of equipment can be potentially dangerous to use when safety or safe handling instructions are not known or not followed. The following safety instructions are to provide the user with the information necessary for safe use and operation. Please read and retain these instructions for the continued safe use of your tool. Failure to follow instructions listed below may result in serious injury. In addition, make sure that anyone that uses the equipment understands and follows these safety instructions as well.

### EXPLANATION OF SAFETY SIGNAL WORDS

**⚠ 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.

**NOTES:** Provide clarity and helpful information.

**⚠ WARNING:** This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm.



## 6" BENCH GRINDER WITH LAMP

### IMPORTANT INSTRUCTIONS AND SAFETY RULES

1. Know your tool. Read this manual carefully. Learn the tool's applications and limitations, as well as potential hazards specific to it.
2. Ground all tools. If the tool is equipped with a three-pin plug, it should be plugged into a three-pin electrical outlet. Never remove the ground pin. DO NOT modify the plug provided. If it will not fit in the outlet, have the proper outlet installed by a qualified electrician. Failure to properly ground unit could result in severe electrical shock and/or death. Always try to avoid body contact with grounded surfaces, such as radiators, cooking ranges and any other fixed appliance with metal surfaces.
3. DO NOT abuse the electrical cord. Never use the cord to carry tools or pull the plug from an outlet. Keep the cord away from heat, sharp edges or moving parts. Always check the extension cords for damage before use. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
4. Keep work area clean and well lit. Cluttered or dark work areas invite accidents.
5. Keep children away. All children should be kept away from the work area. Never let a child handle a tool without strict adult supervision.
6. DO NOT operate this tool if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to operate.
7. Use safety equipment. Eye protection should be worn at all times when operating this tool. Use ANSI approved safety glasses. Everyday eye-glasses are NOT safety glasses. Dust mask, non-skid safety shoes, hard hat, or hearing protection should be used in appropriate conditions.
8. Wear proper apparel. Loose clothing, gloves, neck-ties, rings, bracelets, or other jewelry may present a potential hazard when operating this tool. Keep all apparel clear of the tool.
9. Don't overreach. Keep proper footing and balance at all times when operating this tool.
10. Always disconnect the tool from the power source before making any adjustments, storing, servicing, or changing accessories. Such preventative safety measures reduces the risk of starting the tool accidentally.
11. DO NOT use the tool if the switch does not turn it on and off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
12. Check for damage. Check your tool regularly. If part of the tool is damaged, it should be carefully inspected to make sure that it can perform its intended function correctly. If in doubt, the part should be repaired. Refer all servicing to a qualified technician. Consult your dealer for advice.
13. Keep away from flammables. DO NOT attempt to operate this tool near flammable materials or combustibles. Failure to comply may cause serious injury or death.
14. Store idle tools out of the reach of children and untrained persons. Tools may be dangerous in the hands of untrained users.
15. Always remain alert when the grinder is in use. Not paying attention to what you are doing may lead to serious injury.
16. Use only accessories or attachments that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used with another tool. Use of non-recommended accessories may result in injury or damage to the tool.

### GENERAL POWER TOOL SAFETY

1. DO NOT expose your power tool to wet or damp conditions and NEVER use in rain. Regularly check the power cord of your tool and any extension cord that you are using for damage.
2. DO NOT carry or pull the machine with the power cord. Ensure the cord is clear from hot surfaces, oil or sharp objects.
3. Before plugging your power tool into the power outlet, make sure the power tool is in the OFF position.
4. Check that wrenches or adjusting keys have been removed. Any wrench or key left attached to a moving part can result in injury.


5. Keep your power tool clean and well serviced at all times.
6. Always use the correct tool for the job and never force the tool to work harder than it is designed.
7. Never use your power tool with broken parts such as switches, guide fences or leg stands.
8. Only have your power tool serviced by a qualified repair agent using the manufacturer's recommended parts.
9. DO NOT force the material being cut.
10. Never stand on a tool.
11. Never leave a tool running unattended.
12. Use the proper extension cord.
13. Avoid prolonged exposure to vibration.

### WARNING

1. Only use qualified repair agents to service this power tool.
2. Only use qualified electrician to repair any damaged wiring.
3. NEVER remove the grounding prong from the power cord or extension cord.

### SPECIFIC SAFETY INSTRUCTIONS FOR GRINDERS


1. Always use guards and eye shields when grinding. Always keep guard in place.
2. 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.
3. Use only flanges furnished with the grinder.
4. Adjust distance between wheel and work rest to maintain to 1/8" or less separation as the diameter of the wheel decreases with use.
5. 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.
6. 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.
7. DO NOT grind on the sides of grinding wheels unless they are specifically designed for that purpose.
8. DO NOT overtighten the hex nut. This may crack the grinding wheel.
9. Clean the cavity around the grinding wheel periodically.

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

ANSI Z887.1 eye protection (CAN/CSA Z94.3)

ANSI S12.6 (S319) 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:

1. Lead from lead-based paints.
2. Crystalline silica from bricks and cement and other masonry products.
3. 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 specifically 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.



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**▲ WARNING:** Always wear proper personal hearing protection that conforms to ANSI S12.6 (S319) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

### GROUND TOOLS (ELECTRICAL POWERED CONNECTIONS)

Only use qualified repair agents to service this power tool. Only use qualified electrician to repair any damaged wiring.

NEVER remove the grounding prong from the power tool or extension cord. This product must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with an electric cord having 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. DO NOT modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded.

Repair or replace a damaged or worn cord immediately. This product is for use on a nominal 120V circuit and has a grounding plug. Only connect the product to an outlet having the same configuration as the plug. DO NOT use an adapter with this product.

### EXTENSION CORDS

When using this tool at a considerable distance from the power source, a conductor, grounding-type extension cord of adequate size must be used for safety and to prevent loss of power and over-heating. For a 120 Volt tool, the minimum size of the wires in any extension cord up to 75' long must be 18 gauge (American Wire Gauge). If the total extension cord length is from 75' to 100', 16 gauge wire is required throughout the tension.

**NOTE:** The 16 gauge wire is heavier than the 18 gauge and will carry current for a longer distance without a voltage drop.

Use only 3 wire extension cords which have 3 prong grounding type plugs and 3 hole receptacles which accept the tool's plug. Replace or repair damaged or worn cord immediately.

### PURPOSE

The OEMTOOLS™ 6" Bench Grinder is used for hand grinding operations such as sharpening chisels or screwdrivers, grinding drills, removing excess metal from work pieces and smoothing metal surfaces. It features ball bearing construction for smooth operation, adjustable and shatterproof eye shields, spark breakers, tool rests and removable wheel guards. It has a goose neck lamp to illuminate the work area.

### SPECIFICATIONS:

<b>Power:</b>	120V
<b>Motor:</b>	1/3 HP
<b>No-Load Speed:</b>	3,400 RPM
<b>Weight:</b>	22 Lbs.
<b>Tool Rests:</b>	Adjust to 45 or 90 Degree Positions
<b>6" Wheels:</b>	Coarse 36 and Medium 60

### ASSEMBLY

#### TOOL RESTS

Attach the left and right tool rests with the (4) 5/8" bolts and large washers. Adjust the rests for a distance of 1/16" from the surface of the grinding wheel.

#### SPARK BREAKERS

Attach the spark breakers with the (2) 5/16" bolts and medium washers. Adjust the spark breaker for a distance of 1/16" from the surface of the grinding wheel. Spark breakers should be installed perpendicular to the grinding wheel. If these are not installed properly, it is an OSHA violation.

#### EYE SHIELDS

Select one of the eye shields. Put its clamp into one of the other spark breaker brackets. Adjust the eye shield to be located in the middle of the wheel to protect the operator from sparks.

#### FINAL ASSEMBLY

Fasten the Grinder to the workbench, stand or cabinet. Two holes are provided in the base of the Bench Grinder to attach the grinder securely and prevent it from moving during operation.

#### OPERATION

A Bench Grinder is designed for hand grinding operations such as sharpening chisels or screwdrivers, grinding drills, removing excess metal from work and smoothing metal surfaces. A medium grain abrasive grinding wheel is suitable for rough grinding where a considerable amount of metal has to be removed or where a smooth finish is not important. For sharpening tools or grinding to close limits of size, a fine grain wheel should be used as it removes metal slower and gives the work a smooth finish.

1. Adjust the eye shield.
2. Check for a 1/16" clearance between the tool rests and the grinding wheels and between the spark breakers and the grinding wheels. Adjust as needed. Always keep the tool rest adjusted so that it just clears the wheel and is at the same level or just below the center line of the wheel to prevent accidental jamming of the work between the tool rest and the wheel.
3. Turn the Bench Grinder on and let it come up to speed.

**▲ CAUTION:** When starting the Bench Grinder, turn it on and stand to one side until it has come up to speed. There is always the possibility that a piece from a damaged grinding wheel may be thrown off when coming to full speed.

1. When grinding, always keep the work moving across the face of the wheel. Grinding against the same spot on the wheel will cause grooves to be worn into the face of the wheel. For grinding large or odd shaped work pieces, the tool rests can be removed if needed.
2. When it is necessary to reshape the grinding wheels, use the proper tools. After re-shaping, adjust the tool rests and spark breakers as needed to maintain the 1/16" clearance from the wheel.

#### CHANGING THE GRINDING WHEEL

1. Unplug the bench grinder.
2. Remove the outer wheel guard cover screws and the wheel guard cover.
3. Hold the opposite wheel firmly. Remove the nut and flange.

**NOTE** Turn the spindle nut on the right hand side counterclockwise to loosen. Turn the spindle nut on the left hand side clockwise to loosen.

4. Remove the old wheel and replace it with the new one.
5. Assemble the flange and nut onto the spindle. Tighten the spindle nut just enough to hold the wheel firmly. If the nut is tightened too much, the wheel may be damaged.
6. Attach the wheel guard cover.
7. Turn the grinder on and let it come up to speed and idle for one minute.

#### BENCH MOUNTING

Mounting the grinder on a bench is strongly recommended in order to prevent movement of the grinder when pressure is applied against a wheel.

1. Slide rubber feet on both sides and in the middle of the grinder base.
2. Drill 2 holes for 1/4" wood screws or bolts in the bench.
3. Use 1/4" wood screws or bolts and tighten down only enough to partially compress the rubber feet (about 1/16"). The rubber feet will not be effective in absorbing vibration if fully compressed.
4. When using 1/4" bolts, a second nut is required to lock against the first nut and keep the grinder from loosening during operation.
5. Never operate the grinder without the rubber feet attached to its base.



# 6" BENCH GRINDER WITH LAMP

## PARTS LIST

Figure	Description	Qty.
1	Grinder Wheel - Coarse	1
1	Grinder Wheel - Fine	1
2	Inside and Out Wheel Guard Assembly	2
3	Eye Shield Assembly for Right and Left Side	1
4	Base	1
5	Switch	1
6	Tool Rest Assembly for Right and Left Side	1
7	Lamp Assembly	1

### NOTE:

Not all components of the Bench Grinder are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence.

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LISTED  
34JK  
MD150E

## PARTS DIAGRAM

