

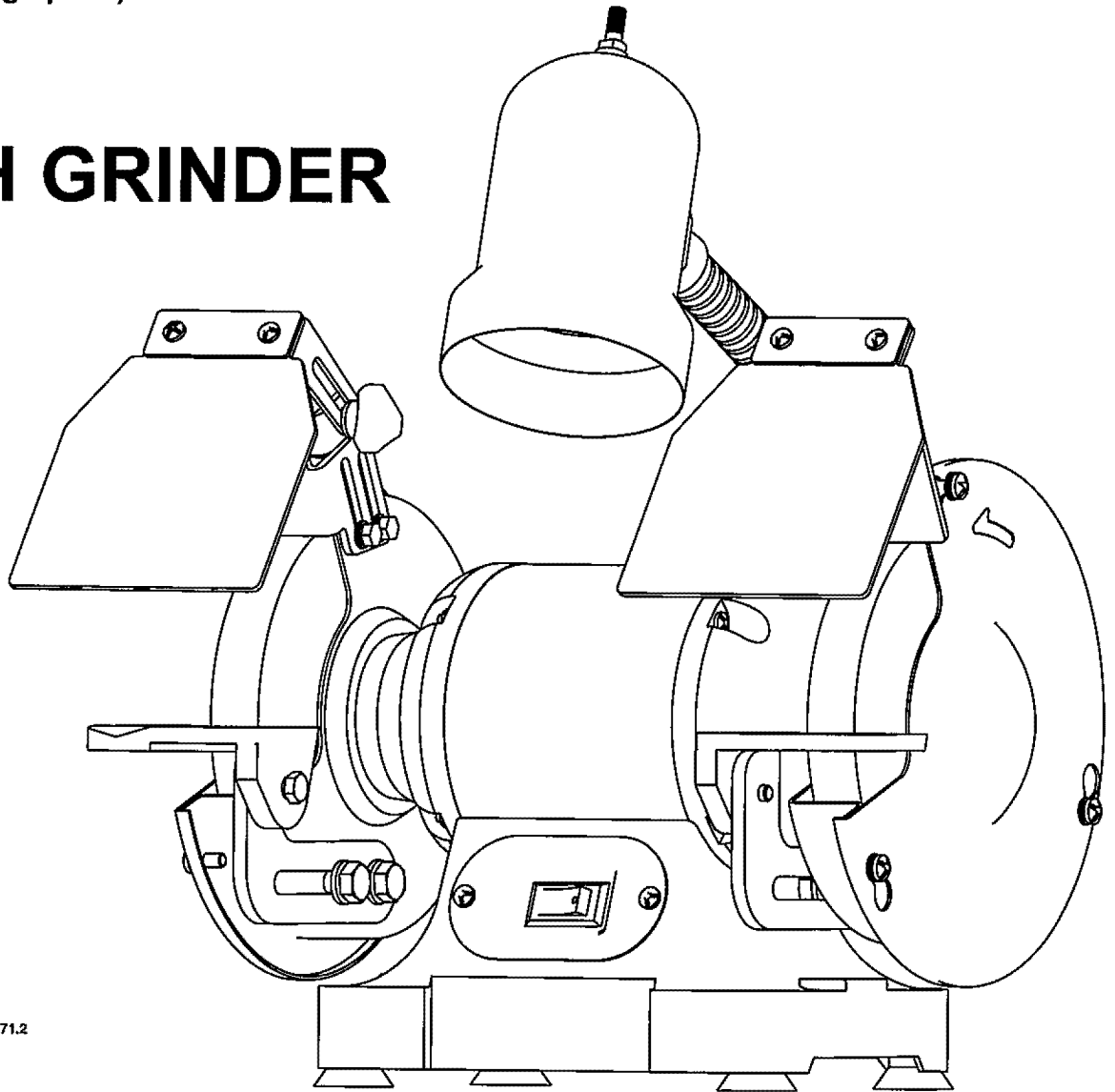
# Owner's Manual

# CRAFTSMAN

6-in Wheel  
1/6 Horsepower (continuous duty)  
3600 R.P.M. (rating speed)

## 6-in BENCH GRINDER

Model No.  
351.211241



3168328

Conforms to UL Std. No. 987  
Certified to CAN/CSA Std. C22.2 No. 71.2

### CAUTION:

FOR YOUR OWN SAFETY; Read and follow all of the Safety and Operating Instructions before Operating this Bench Grinder

Customer Helpline  
**1-800-266-9079**

Please have your Model No. and Serial No. available.

Sears Brands Management Corporation, Hoffman Estates, IL 60179 U.S.A.  
[www.craftsman.com](http://www.craftsman.com)

36276.00 Draft (07/11/12)

Español pg. 19

# TABLE OF CONTENTS

SECTION	PAGE
Warranty .....	2
Product Specifications .....	2
Safety Instructions .....	3
Grounding Instructions .....	5
Specific Safety Instructions for Bench Grinders .....	6
Accessories and Attachments .....	7
Carton Contents .....	8
Know Your Bench Grinder .....	9
Assembly Instructions .....	10
Operating the Bench Grinder .....	13
Maintenance .....	16
Troubleshooting Guide .....	16
Parts List .....	17
Español .....	19
Service Information .....	Back Cover

## WARRANTY

### CRAFTSMAN PROFESSIONAL ONE YEAR FULL WARRANTY

FOR ONE YEAR from the date of purchase, this product is warranted against defects in material or workmanship. A defective product will receive free repair or replacement if repair is unavailable.

For warranty coverage details to obtain free repair or replacement, visit the web site: [www.craftsman.com](http://www.craftsman.com)

This warranty does not cover the wire and grinding wheels, which are expendable parts that can wear out from normal use within the warranty period.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears Brands Management Corporation, Hoffman Estates, IL 60179

## PRODUCT SPECIFICATIONS

### Motor

Continuous Duty HP	1/6
Volts	120
Hertz	60
RPM	3600 R.P.M. (rating speed)
Grinding Wheel Size	6" x 3/4", 1/2" bore
Grinding Wheel Grit	60, 36
Lamp	120V, 40 watt or less Track Light Bulb, Type R20, medium base or equivalent (not included)
Tool Rests	Left and Right
Eye Shield Assemblies	Clear Lexan Left and Right
Spark Arrestors	Left and Right

### **▲ WARNING**

To avoid electrical shock to yourself and damage to the Bench Grinder, use proper circuit protection.

The Bench Grinder is factory wired for 120V, 60 Hz, operation. Connect to a 120V, 15 amp branch circuit and use a 15 amp time delay fuse or circuit breaker. The electrical circuit cannot have any wire size less than #14. To avoid shock or fire, replace power cord immediately if it is damaged in any way.

# SAFETY INSTRUCTIONS

## GENERAL SAFETY INSTRUCTIONS

Operating a Bench Grinder can be dangerous if safety and common sense are ignored. The operator must be familiar with the operation of the tool. Read this manual to understand this Bench Grinder. **DO NOT** operate this Bench Grinder if you do not fully understand the limitations of this tool. **DO NOT** modify this Bench Grinder in any way.

## BEFORE USING THE BENCH GRINDER

### **⚠ WARNING**

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the Bench Grinder.

### **⚠ WARNING**

1. Some dust created by using power tools contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:
  - Lead from lead-based paints.
  - Crystalline silica from bricks, 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, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles
2. **READ** the entire Owner's Manual. **LEARN** how to use the tool for its intended applications.
3. **GROUND ALL TOOLS.** If the tool is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The 3rd prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the 3rd prong. See Grounding Instructions on page 4.
4. **AVOID A DANGEROUS WORKING ENVIRONMENT.** **DO NOT** use electrical tools in a damp environment or expose them to rain.
5. **DO NOT** use electrical tools in the presence of flammable liquids or gasses.
6. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an environment with floor surfaces that are slippery from debris, grease, and wax.
7. **KEEP VISITORS AND CHILDREN AWAY.** **DO NOT** permit people to be in the immediate work area, especially when the electrical tool is operating.
8. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.
9. **WEAR PROPER CLOTHING.** **DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.
10. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.
11. **DO NOT** use electrical tools in the presence of flammable liquids or gasses.
12. **ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.
13. **KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.**
14. **AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.
15. **REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning "ON" the Bench Grinder.
16. **USE ONLY RECOMMENDED ACCESSORIES.** Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.
17. **NEVER LEAVE A RUNNING TOOL UNATTENDED.** Turn the power switch to the "OFF" position. **DO NOT** leave the tool until it has come to a complete stop.
18. **DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over or you accidentally contact the tool.
19. **DO NOT** store anything above or near the tool where anyone might try to stand on the tool to reach it.
20. **MAINTAIN YOUR BALANCE.** **DO NOT** extend yourself over the tool. Wear oil resistant rubbersoled shoes. Keep floor clear of debris, grease, and wax.
21. **MAINTAIN TOOLS WITH CARE.** Always keep tools clean and in good working order. Keep all blades and tool bits sharp.

22. **EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL.** Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.
23. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.
24. **DO NOT OPERATE TOOL IF UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.**
25. **SECURE ALL WORK.** Use clamps or jigs to secure the workpiece. This is safer than attempting to hold the workpiece with your hands.
26. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL. DO NOT USE A TOOL WHILE TIRED OR UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION.** A moment of inattention while operating power tools may result in serious personal injury.
27. **ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES,** including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.
28. **USE A PROPER EXTENSION CORD IN GOOD CONDITION.** When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. The table at right shows the correct size to use depending on cord length and nameplate amperage rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the larger diameter of the extension cord. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating. **USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG.**

## GUIDELINES FOR EXTENSION CORDS

If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.

Be sure your extension cord is properly sized, and in good electrical 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 or wet areas.

MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)				
120 VOLT OPERATION ONLY				
	25' LONG	50' LONG	100' LONG	150' LONG
0 to 6 Amps	18 AWG	16 AWG	16 AWG	14 AWG
6 to 10 Amps	18 AWG	16 AWG	14 AWG	12 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG	12 AWG

**SAVE THESE INSTRUCTIONS.**

# GROUNDING INSTRUCTIONS

## **⚠ WARNING**

**THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.**

**IN THE EVENT OF A MALFUNCTION OR BREAK-DOWN**, grounding provides the path of least resistance for 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 electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

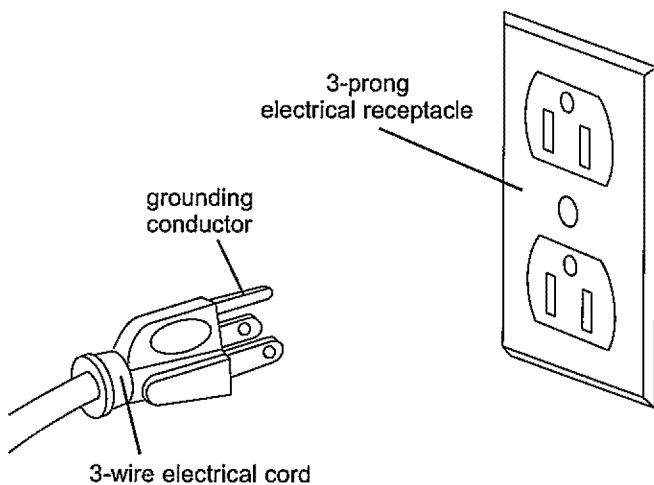
**DO NOT MODIFY THE PLUG PROVIDED.** If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

**IMPROPER ELECTRICAL CONNECTION** of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

**CHECK** with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

## 120 Volt

Fig. A



**USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG.**

**REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.**

This tool is intended for use on a circuit that has an electrical receptacle as shown in **FIGURE A**. **FIGURE A** shows a 3-wire electrical plug and electrical receptacle that has a grounding conductor. If a properly grounded electrical receptacle is not available, an adapter as shown in **FIGURE B** can be used to temporarily connect this plug to a 2-contact ungrounded receptacle. The adapter has a rigid lug extending from it that **MUST** be connected to a permanent earth ground, such as a properly grounded receptacle box. **THIS ADAPTER IS PROHIBITED IN CANADA.**

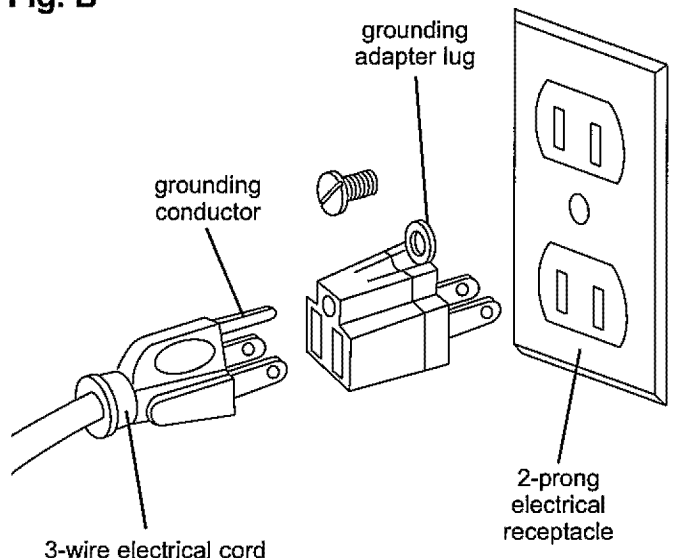
**CAUTION:** In all cases, make certain the electrical receptacle in question is properly grounded. If you are not sure have a certified electrician check the electrical receptacle.

## **⚠ WARNING**

This Bench Grinder is for indoor use only. To avoid serious injury, do not expose to rain or use in damp locations.

## 120 Volt

Fig. B



## SPECIFIC SAFETY INSTRUCTIONS FOR BENCH GRINDERS

The operation of any grinder can result in debris being thrown into your eyes, which can result in severe eye damage. **ALWAYS WEAR EYE PROTECTION.** Any power tool can throw debris during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are **NOT** safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools. Safety Goggles are available at Sears Retail Stores.

Basic precautions should always be followed when using your bench grinder. To reduce the risk of injury, electrical shock, or fire, comply with the safety rules listed below:

1. **ALWAYS USE THE EYE SHIELDS AND WHEEL GUARDS** provided with the grinder.
2. **REPLACE A CRACKED OR DAMAGED GRINDING WHEEL IMMEDIATELY.** A damaged wheel can discharge debris at a high velocity towards the operator. Carefully handle the grinding wheels since they are abrasive. Prior to replacing a grinding wheel, check it for cracks. **DO NOT** remove the blotter or label on both sides of the grinding wheel. Tighten the spindle nut just enough to hold the grinding wheel firmly to the Bench Grinder. Do not over-tighten the nut. Excessive clamping force can damage the grinding wheel. Only use the wheel flanges provided with the grinder. When selecting a replacement grinding wheel, verify that the grinding wheel has a higher R.P.M. rating than the maximum R.P.M. of the Bench Grinder.
3. **THE DIAMETER OF THE GRINDING WHEELS WILL DECREASE WITH USE.** Adjust the tool rests and spark arrestors to maintain a distance of 1/16" from the wheel.
4. **DO NOT STAND IN FRONT OF THE BENCH GRINDER WHEN STARTING IT.** Stand to one side of the Bench Grinder and turn it "ON". Wait at the side for one minute until the grinder comes up to full speed. There is always a possibility that debris from a damaged grinding wheel may be discharged towards the operator.
5. **THE BENCH GRINDER WILL PRODUCE SPARKS AND DEBRIS DURING GRINDING OPERATIONS.** Be sure that there are not any flammable materials in the vicinity. Frequently clean grinding dust from the back of the Bench Grinder.
6. **NEVER FORCE THE WORKPIECE AGAINST A GRINDING WHEEL,** especially if the wheel is cold. Apply the workpiece slowly, allowing the grinding wheel an opportunity to warm up. This will minimize the chance of wheel breakage. **DO NOT** grind using the sides of the grinding wheels. **DO NOT** apply coolant directly to the grinding wheel.
7. **KEEP ALL WHEEL GUARDS IN PLACE. DO NOT USE THE BENCH GRINDER WITH THE WHEEL GUARDS REMOVED.**
8. **KEEP THE TOOL RESTS FIRMLY TIGHTENED.**
9. **ALWAYS USE THE SUPPLIED WHEEL DRESSER TO RESURFACE THE FACE OF THE GRINDING WHEEL.**
10. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
11. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
12. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.
13. **DO NOT** overtighten wheel nut.
14. **ONLY** use flanges furnished with the grinder.
15. **FREQUENTLY** clean grinding dust from beneath grinder.
16. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.
17. **ADDITIONAL INFORMATION** regarding the safe and proper operation of this product is available from:
  - Power Tool Institute  
1300 Summer Avenue  
Cleveland, OH 44115-2851  
[www.powertoolinstitute.org](http://www.powertoolinstitute.org)
  - National Safety Council  
1121 Spring Lake Drive  
Itasca, IL 60143-3201
  - American National Standards Institute  
25 West 43rd Street, 4th Floor  
New York, NY 10036  
[www.ansi.org](http://www.ansi.org)
  - ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor regulations  
[www.osha.gov](http://www.osha.gov)
18. **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use them to instruct others.

# ACCESSORIES AND ATTACHMENTS

## AVAILABLE ACCESSORIES

Visit your Sears Hardware Department or see the Sears Power and Hand Tool Catalog for the following accessories.

### **ITEM**

Replacement grinding wheels  
Wire and Buffing wheels  
Spacers  
Wheel dressers  
Universal stand

Sears may recommend other accessories not listed in this manual.

See your nearest Sears Hardware Department or Sears Power and Hand Tool Catalog for other accessories.

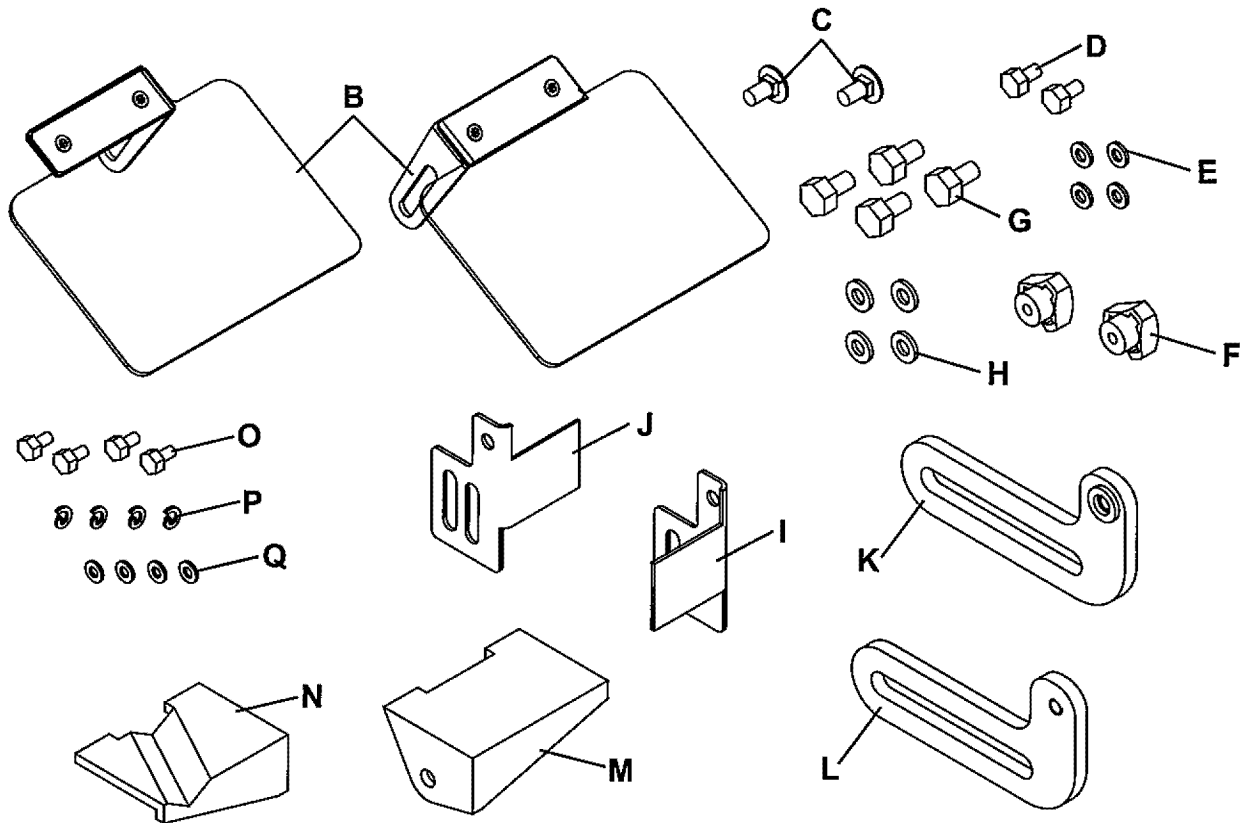
Do not use any accessory unless you have completely read the Owner's Manual for that accessory.

### **▲ WARNING**

Use only accessories recommended for this Bench Grinder. Using other accessories may cause serious injury and cause damage to the Bench Grinder.

# CARTON CONTENTS

Fig. C



## UNPACKING AND CHECKING CONTENTS (Fig. C)

This Bench Grinder will require a minimal amount of assembly.

1. Remove parts from all of the cartons and lay them on a clean work surface.
2. Remove any protective materials and coatings from all of the parts and the bench grinder. The protective coatings can be removed by spraying WD-40 on them and wiping it off with a soft cloth. This may need to be redone several times before all of the protective coatings are removed completely.

**CAUTION: DO NOT** use acetone, gasoline or lacquer thinner to remove any protective coatings.

3. Compare the items to Figure C; verify that all items are accounted for before discarding the shipping box. If there are any missing parts, call Customer Helpline 1-800-266-9079.

### **⚠ WARNING**

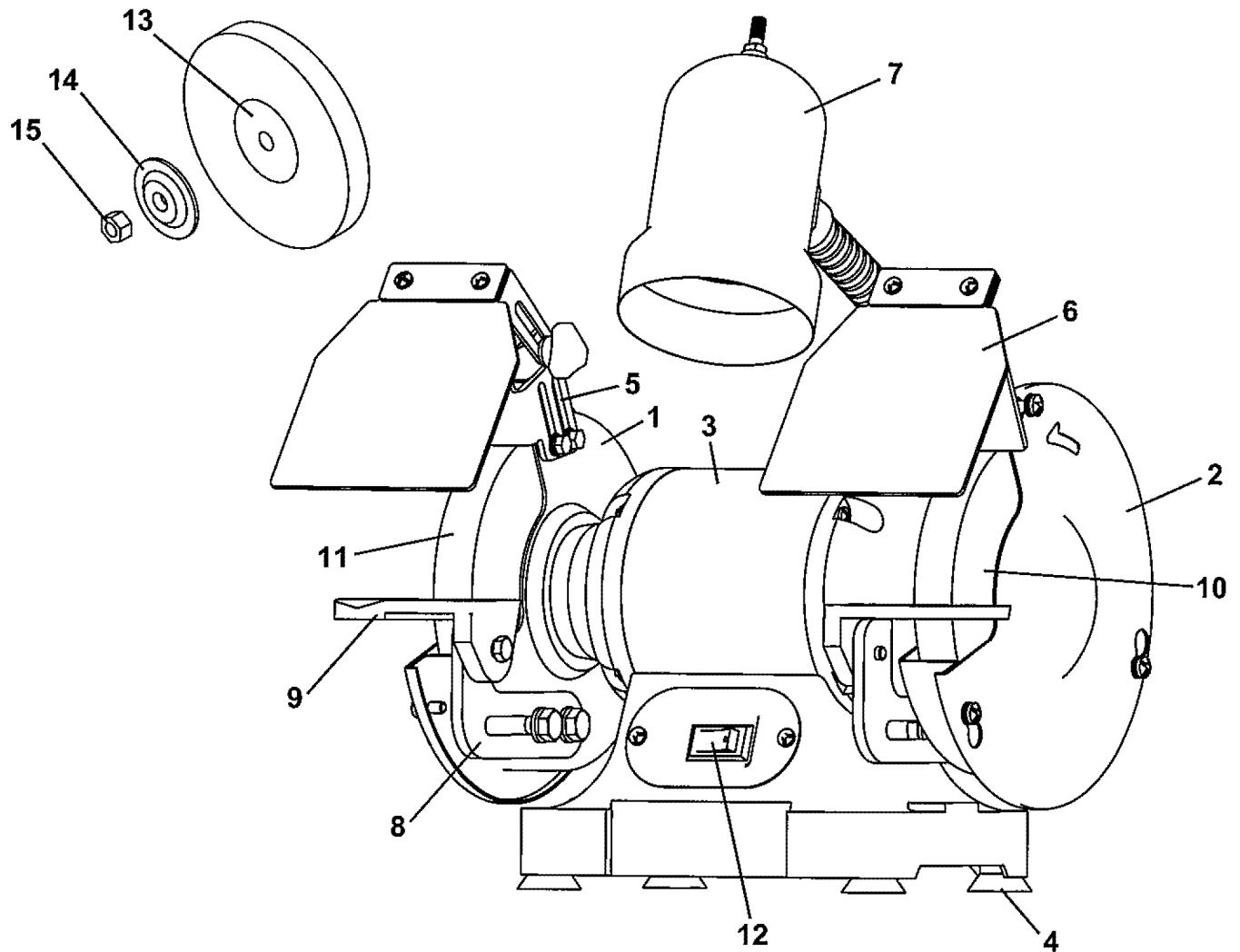
If any parts are missing, do not attempt to plug in the power cord and turn "ON" the Bench Grinder. The Bench Grinder can only be turned "ON" after all the parts have been obtained and installed correctly.

The following items are to be provided in the shipping box:

- A. Grinder (not shown)
- B. Eyeshield assembly (2)
- C. Carriage head screw M6 x 12mm (2)
- D. Hex head screw, M6 x 18 (2)
- E. Flat washer M6 (4)
- F. Eyeshield knob (2)
- G. Hex head screw M8 x 12mm (4)
- H. Flat washer M8 (4)
- I. Spark arrestor, left
- J. Spark arrestor, right
- K. Tool rest support, right
- L. Tool rest support, left
- M. Tool rest, right
- N. Tool rest, left
- O. Hex head screw, M5 x 10 (4)
- P. Lock washer M5 (2)
- Q. Flat washer M5 (4)



# KNOW YOUR BENCH GRINDER



1. **INNER WHEEL GUARD** - Covers the grinding wheels and protects against accidental contact.
2. **WHEEL COVER** - Covers the grinding wheels and provides quick access for routine maintenance.
3. **MOTOR HOUSING** - Contains the electrical motor.
4. **MOUNTING FEET** - Helps to minimize the vibration of the grinder
5. **SPARK ARRESTOR** - Prevents hot sparks and debris from contacting the operator.
6. **EYESHIELD** - Protective Lexan see-thru shields to prevent any loose debris from contacting the operator.
7. **FLEXIBLE WORK LIGHT** - Provides light to the operator during set up or grinding operations.
8. **TOOL REST ADJUSTABLE SUPPORTS** - Lets the operator position the tool rest closer to the wheel as the wheel decreases in diameter due to wear.
9. **TOOL RESTS** - Used to support the workpiece that is being ground. Adjustable to provide angled surfaces.
10. **GRINDING WHEEL 36 GRIT** - Used to remove heavy material from workpiece.
11. **GRINDING WHEEL 60 GRIT** - Used to remove light material from workpiece.
12. **ON/OFF SWITCH** - Used to turn ON and turn OFF the grinder.
13. **GRINDING WHEEL IDENTIFICATION LABEL** - Provides information on wheel size, grit and maximum rpm.
14. **FLANGES** - used to secure the grinding wheels to the grinder and distribute the load of the Lock Nuts.
15. **ARBOR HEX NUT** - Used to secure the grinding wheels to the grinder.

# ASSEMBLY INSTRUCTIONS

## **⚠ WARNING**

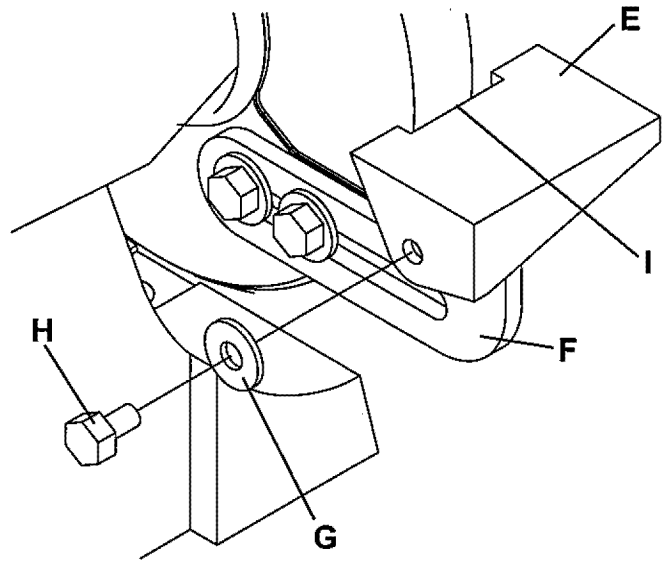
1. **DO NOT** assemble the Bench Grinder until you are sure the tool **IS NOT** plugged in.
2. **DO NOT** assemble the Bench Grinder until you are sure the power switch is in the "OFF" position.
3. **DO NOT** assemble the Bench Grinder until you are sure the grinding wheels are firmly tightened to the Bench Grinder.

## **TOOL RESTS (Figs. D and E)**

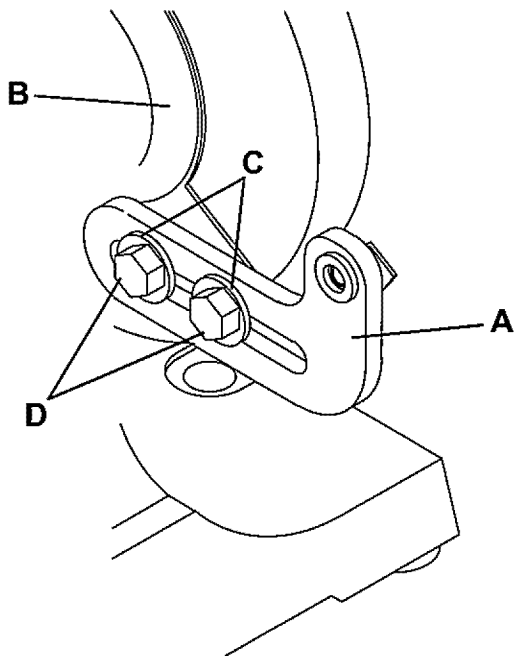
The Bench Grinder is provided with two Tool Rest assemblies.

1. Assemble the Tool Rest Supports (A) to the inside surface of the Wheel Covers (B) with the flat washers (C) and hex head screws (D) as shown. See Figure D.
2. Assemble the Tool Rests (E) to the Supports (F) with the flat washers (G) and hex head screws (H) as shown. See Figure E.
3. Adjust each Tool Rest until its inside edge (I) is 1/16" from the grinding wheel. Firmly tighten the hex head screws holding the supports. See Figure E.

**Fig. E**



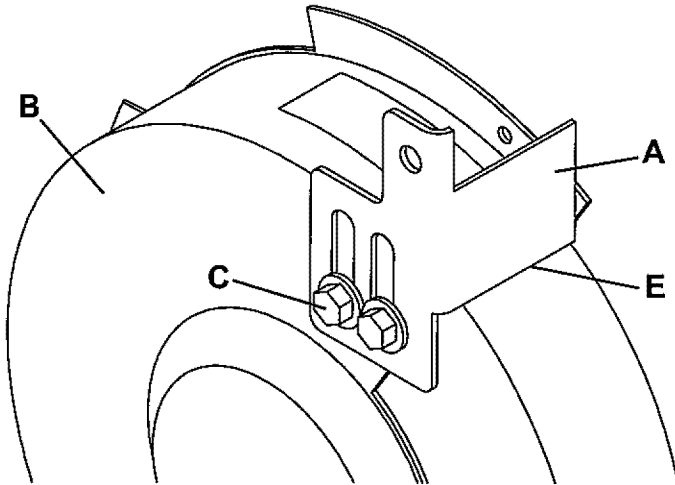
**Fig. D**



## SPARK ARRESTORS (Fig. G)

1. Assemble the Spark Arrestors (A) to the inside surface of the Wheel Covers (B) with the hex head screws with washers (C) as shown. See Figure G.
2. Adjust each Spark Arrestor until the lower edge (E) is 1/16" from the grinding wheel. Firmly tighten the hex head screws. See Figure G.

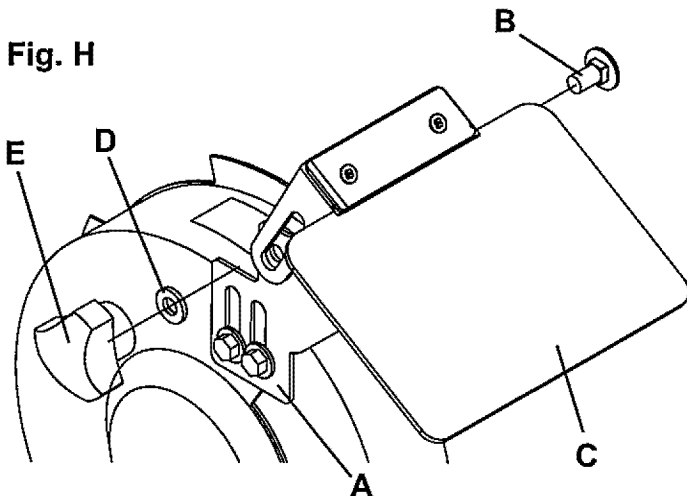
Fig. G



## EYESHIELDS (Fig. H)

1. Assemble the eyeshield (C) to the Spark Arrestor (A) inserting carriage head screw (B) through Eyeshield and the Spark Arrestor as shown. See Figure H.
2. Assemble the flat washer (D) and Lock Knob (E) to the carriage head screw and tighten until the Eyeshield remains in the desired position. See Figure H.

Fig. H



## WORK LIGHT (Fig. J)

The Bench Grinder is provided with a Flexible Work Light to assist in visibility of the workpiece.

The Bench Grinder is **NOT** provided with a light bulb for the Flexible Work Light.

### ▲ WARNING

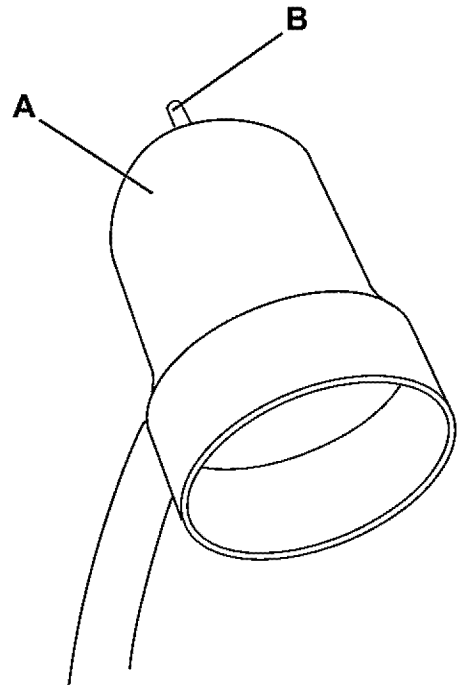
To reduce the risk of fire, use a 120 volt, 40 Watt or less Track Light Bulb, Type R20, medium base or equivalent (not included). **DO NOT** use a light bulb that extends past the end of the light housing.

The Flexible Work Light may be turned "ON" or "OFF" by using the rotary switch (B) on the top surface of the housing (A). The switch can be rotated in the clockwise direction only. See Figure J.

**NOTE:** The Flexible Work Light can be turned "ON" or "OFF" even if the Bench Grinder is turned "OFF".

**CAUTION:** The Flexible Work Light housing will remain hot for a few minutes after turning it "OFF". Avoid contact with housing until it is cool.

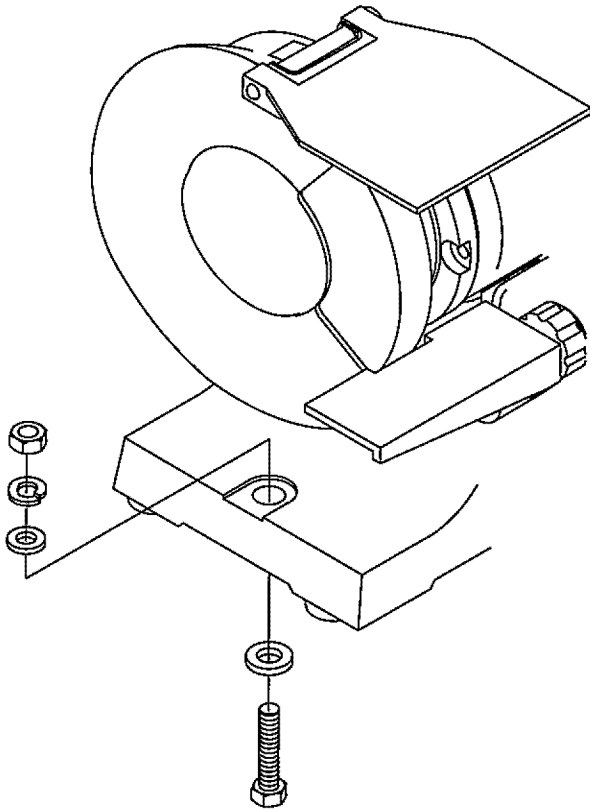
Fig. J



## PERMANENT MOUNTING (Fig. K)

Use the mounting pads on the base of the grinder to firmly attach grinder to a solid work surface (hardware not included). See Figure K.

**Fig. K**



### **⚠ WARNING**

To avoid serious injury, secure the Bench Grinder to a solid work surface. If the Bench Grinder is not securely mounted, it will have the ability to move or tip over during grinding operations and possibly cause the operator's fingers to contact the grinding wheels.

# OPERATING THE BENCH GRINDER

The Bench Grinder is designed for hand held grinding, sharpening, and cleaning operations.

**ALWAYS WEAR EYE PROTECTION!** Hot sparks are produced during grinding operations.

1. The Power Switch must be in the "OFF" position.
2. Stand to the side of the Bench Grinder and plug in the power cord to a suitable power source.
3. Remain to the side of the Bench Grinder and turn it "ON" by moving the power switch to the up position.
4. Allow the grinding wheels to come up to a steady speed for at least one minute.
5. The Flexible Work Light may be turned "ON" if desired.
6. Adjust the eyeshields. Place the workpiece on the appropriate tool rest for the desired operation.
7. Move the workpiece towards the grinding wheel until it lightly touches. Move the workpiece back and forth across the front surface of the grinding wheel removing the amount of material desired.

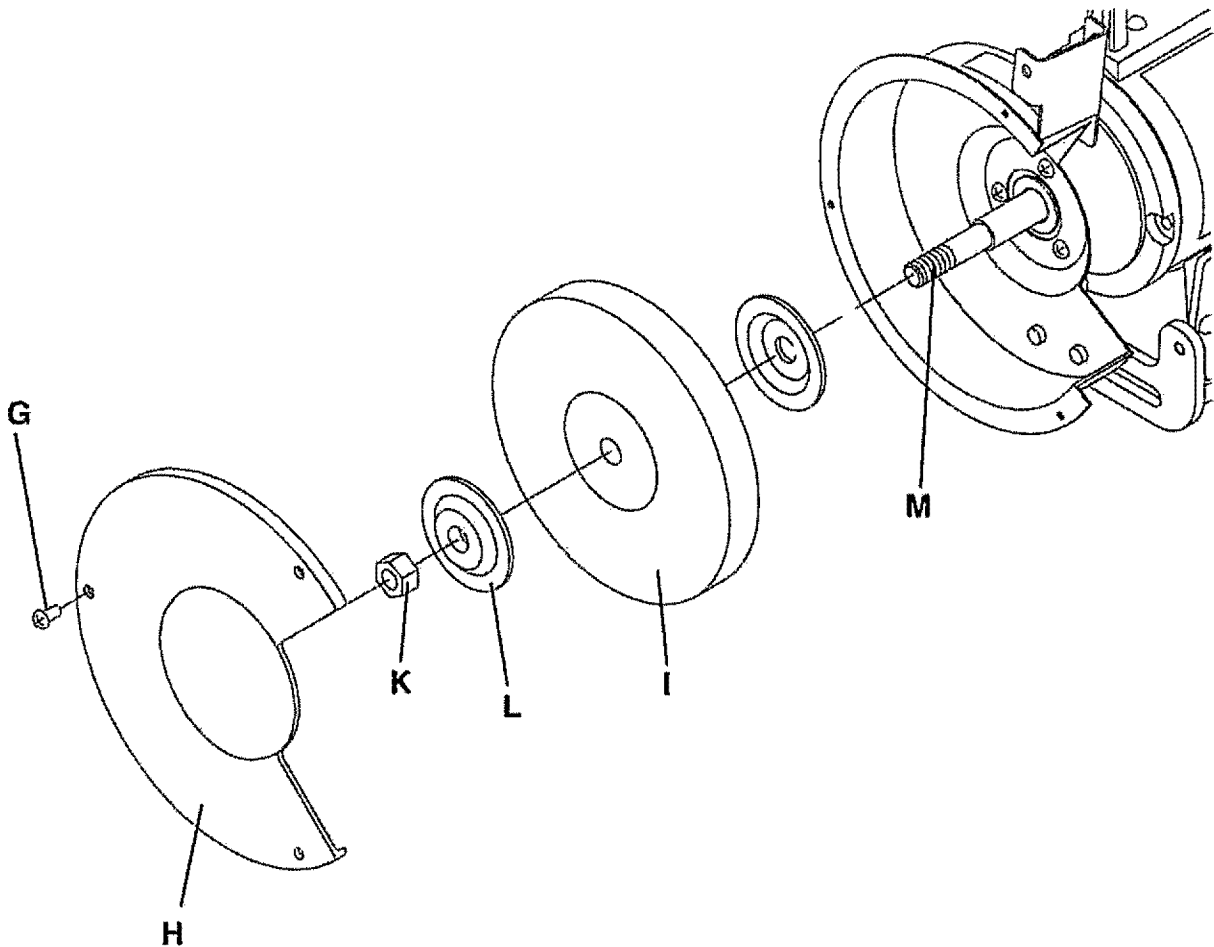
## **⚠ WARNING**

**To avoid serious injury, never grind on the sides of the grinding wheels.**

8. After completing the grinding operations, turn "OFF" the Bench Grinder by pushing down on the Power Switch. **CAUTION:** It will take a few minutes for the grinding wheels to come to a complete stop.
9. Turn "OFF" the Flexible Work Light. **CAUTION:** The Flexible Work Light housing will remain hot for a few minutes after turning it "OFF".
10. Avoid contact with housing until it is cool. Unplug the Bench Grinder from the power source.

## CHANGING THE GRINDING WHEEL (Fig. N)

Fig. N



Due to normal wear, both wheels will need to be replaced occasionally. See Figure N.

1. Turn the power switch "OFF" and unplug the power cord from its power source
2. Rotate the eyeshields to the "UP" position for access to the tool rests.
3. Remove the screws (G) holding the Wheel Covers (H) to the Bench Grinder.
4. Remove the Wheel Covers.
5. Place a small wooden wedge between the Abrasive wheel and Tool Rest to prevent the wheels from rotating.
6. Remove the right side grinding wheel by turning the locknut in the counterclockwise direction with a wrench (not included). The left side wheel can be removed by turning the locknut (K) in the clockwise direction.
7. Remove the Outer Wheel Flange (L) and then remove the abrasive wheel (I) from the arbor shaft (M).
8. **CAUTION:** The new abrasive wheel to be put onto the Bench Grinder must have a higher R.P.M. rating than the Bench Grinder. The abrasive wheel must have a 6" diameter with a 1/2" bore diameter for the arbor shaft. The label on the side of the abrasive wheels must stay on, DO NOT remove this label.
9. Replace the abrasive wheel, outer wheel flange, and the locknut in reverse order from removal.

**CAUTION: DO NOT OVER-TIGHTEN** the lock nut as this may damage the abrasive wheel and cause serious injury to the operator.

# MAINTENANCE OF THE BENCH GRINDER

## ⚠ WARNING

Turn the power switch "OFF" and unplug the power cord from its power source prior to any maintenance.

## LUBRICATION

The Bench Grinder has sealed lubricated bearings in the motor housing that do not require any additional lubrication from the operator.

## CLEANING

With the Bench Grinder unplugged, rotate the abrasive wheels slowly and inspect for any damage or trapped shavings.

**CAUTION: REPLACE** the abrasive wheels if there is any damage at all. **FAILURE** to replace a damaged wheel can cause serious injury to the operator.

**CAUTION: DO NOT USE FLAMMABLE MATERIALS** to clean the Bench Grinder. A clean dry rag or brush is all that is needed to remove dust and debris buildup.

## ⚠ WARNING

Repairs to the Bench Grinder should be performed by trained personnel only. Contact your nearest Sears Service Center for authorized service.

Unauthorized repairs or replacement with non-factory parts could cause serious injury to the operator and damage to the Bench Grinder.

# TROUBLESHOOTING

**TO PREVENT INJURY TO YOURSELF** or damage to the Bench Grinder, turn the switch to the "OFF" position and unplug the power cord from the electrical receptacle before making any adjustments.

PROBLEM	LIKELY CAUSE(S)	SOLUTION
<b>Motor does not run</b>	<ol style="list-style-type: none"> <li>1. Machine not plugged in</li> <li>2. Power switch in "OFF" position</li> <li>3. Power cord is faulty</li> <li>4. Fuse or circuit breaker are open</li> <li>5. Damaged motor</li> </ol>	<ol style="list-style-type: none"> <li>1. Plug power cord into electrical receptacle</li> <li>2. Lift switch to "ON" position</li> <li>3. Return to Sears Service Center</li> <li>4. Overloaded electrical circuit</li> <li>5. Return to Sears Service Center</li> </ol>
<b>Motor does not have full power</b>	<ol style="list-style-type: none"> <li>1. Incorrect line voltage</li> <li>2. Damaged motor</li> </ol>	<ol style="list-style-type: none"> <li>1. Have a qualified electrician check line for proper voltage</li> <li>2. Return to Sears Service Center</li> </ol>
<b>Motor runs hot</b>	<ol style="list-style-type: none"> <li>1. Motor is overloaded</li> <li>2. Poor air circulation around motor</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure on workpiece</li> <li>2. Remove any blockage around motor</li> </ol>
<b>Motor stalls or runs slow</b>	<ol style="list-style-type: none"> <li>1. Motor is overloaded</li> <li>2. Incorrect line voltage</li> <li>3. Capacitor has failed</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure on workpiece</li> <li>2. Have a qualified electrician check line for proper voltage</li> <li>3. Return to Sears Service Center</li> </ol>
<b>Fuse blows or circuit breaker trips</b>	<ol style="list-style-type: none"> <li>1. Motor overloaded</li> <li>2. Overloaded electrical circuit</li> <li>3. Wrong fuse or circuit breaker</li> <li>4. Undersized or excessive length of extension cord, see manual</li> <li>5. Grinding wheels are blocked</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure on workpiece</li> <li>2. Reduce the amount of items on circuit</li> <li>3. Replace with correct fuse or circuit breaker</li> <li>4. Use correct size</li> <li>5. Unplug machine and remove obstruction</li> </ol>

**▲ WARNING**

When servicing, use only CRAFTSMAN replacement parts. Use of any other parts may create a **HAZARD** or cause product damage.

**▲ WARNING**

Any attempt to repair or replace electrical parts on this Grinder may create a **HAZARD** unless repair is done by a qualified service technician. Repair service is available at your nearest Sears Service Center.

Always order by PART NUMBER, not by key number.

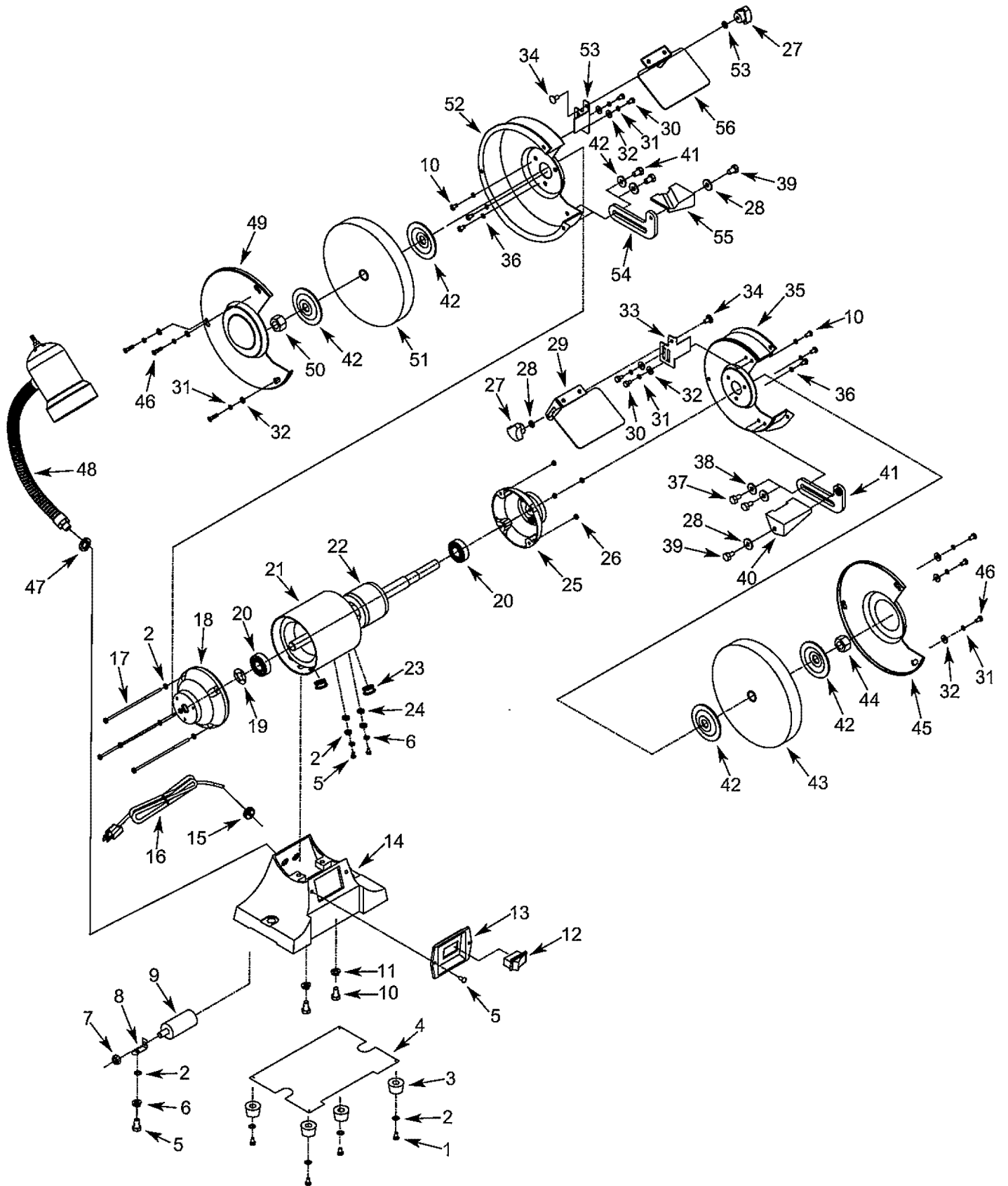
KEY			
NO.	PART NO.	DESCRIPTION	QTY.
1	STD863412	4-0.7 x 12mm Pan Head Screw*	4
2	STD851004	4mm Flat Washer*	11
3	36155.00	Foot	4
4	36277.00	Base Plate	1
5	STD863408	4-0.7 x 8mm Pan Head Screw*	5
6	STD852004	4mm Lock Washer*	3
7	STD840812	8-1.25mm Hex Nut*	1
8	36278.00	Bracket	1
9	36279.00	Capacitor	1
10	36280.00	6-1.0 x 18mm Pan Head Screw	8
11	STD852006	6mm Lock Washer*	2
12	36281.00	Switch	1
13	36282.00	Switch Plate	1
14	N/A	Base	1
15	36283.00	Strain Relief	1
16	36284.00	Line Cord	1
17	36285.00	4-0.7 x 118mm Pan Head Screw	4
18	N/A	Left End Bell	1
19	36286.00	34.5mm Wavy Washer	1
20	STD315221	6202zz Ball Bearing*	2
21	N/A	Stator	1
22	N/A	Armature	1
23	36162.00	Grommet	2
24	05156.00	4mm Serrated Washer	2
25	N/A	Right End Bell	1
26	STD843407	4-0.7mm Hex Nut*	4
27	36174.00	Knob	2
28	STD851006	6mm Flat Washer*	4
29	36173.00	Right Eyeshield Assembly	1

KEY			
NO.	PART NO.	DESCRIPTION	QTY.
30	09720.00	5-0.8 x 10mm Hex Head Bolt	4
31	STD852005	5mm Lock Washer*	10
32	STD851005	5mm Flat Washer* (N)	10
33	36172.00	Right Spark Deflector	1
34	32500.00	6-1.0 x 12mm Carriage Bolt	2
35	36287.00	Right Guard	1
36	STD851006	6mm Lock Washer*	6
37	STD835012	8-1.25 x 12mm Hex Head Bolt*	4
38	STD851008	8mm Flat Washer*	4
39	STD833018	6-1.0 x 18mm Hex Head Bolt*	2
40	36169.00	Right Toolrest	1
41	36168.00	Right Toolrest Support	1
42	36256.00	Flange	4
43	36288.00	Grinding Wheel 36#	1
44	STD841217	12-1.75mm Hex Nut*	1
45	36289.00	Right Guard Cover	1
46	STD863512	5-0.8 x 12mm Pan Head Screw*	6
47	STD851012	12mm Flat Washer*	1
48	36178.00	Work Lamp w/Label	1
49	36290.00	Left Guard Cover	1
50	36260.00	12-1.75mm Hex Nut LH	1
51	36257.00	Grinding Wheel 60#	1
52	36291.00	Left Guard	1
53	36183.00	Left Spark Deflector	1
54	36184.00	Left Toolrest Support	1
55	36292.00	Left Toolrest	1
56	36186.00	Left Eyeshield Assembly	1
Δ	36276.00	Operator's Manual	1

\* Standard hardware item available locally

Δ Not Shown





# ◆ NOTES ◆

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Au Canada pour service en français:

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