

Owner's Manual

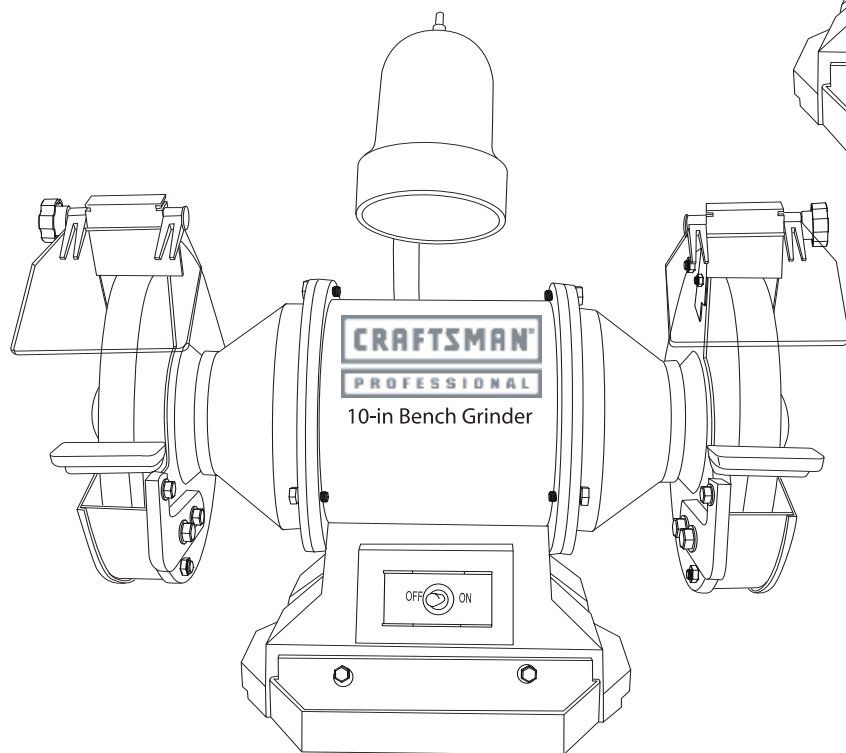
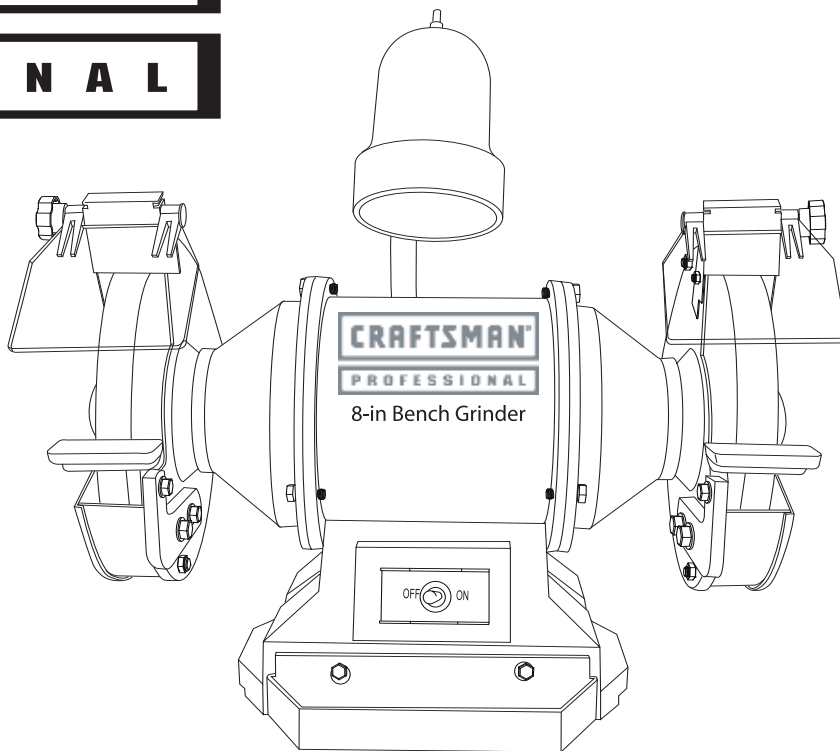
CRAFTSMAN®

P R O F E S S I O N A L

8-in. Wheel
3/4 Horsepower (continuous duty)
3450 R.P.M. (no load speed)

8-in. BENCH GRINDER

Model No.
152.220180



10-in. Wheel
1 Horsepower (continuous duty)
1725 R.P.M. (no load speed)

10-in. BENCH GRINDER

Model No.
152.220600



CAUTION:

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

Customer Helpline
1-800-897-7709
Please have your Model No.
and Serial No. available.

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	6
Carton Contents.....	7
Know Your Bench Grinder.....	8
Assembly Instructions	9
Operating the Bench Grinder	11
Maintenance	13
Troubleshooting Guide	13
Parts List	14
Español.....	19

WARRANTY

FULL ONE YEAR WARRANTY

If this product fails due to a defect in material or workmanship within one year from the date of purchase, return it to the nearest Sears Service Center for repair, free of charge.

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

Sears, Roebuck and Co., Dept. 817 WA, Hoffman Estates, IL 60179

PRODUCT SPECIFICATIONS

8-in. Bench Grinder

Motor	
Continuous duty HP	3/4
Volts	120
Hertz	60
RPM	3450 R.P.M. (no load speed)
Grinding Wheel Size	8" diameter x 1" face x 1" bore
Grinding Wheel Grit	60, 120
Shaft diameter	5/8" diameter
Arbor Bushing	1" diameter x 1" face by 5/8" bore
Lamp	120V, 40 watt Type A or smaller bulb-Medium Base (bulb not included)
Tool Rests	Left and Right
Drill bit sharpening plate	Right only
Eye Shield Assemblies	Clear Lexan Left and Right
Spark Arrestors	Left and Right
Quench tray	Yes
Wheel Dresser	Yes

10-in. Bench Grinder

Motor	
Continuous duty HP	1
Volts	120
Hertz	60
RPM	1725 R.P.M. (no load speed)
Grinding Wheel Size	10" diameter x 1" face x 1-1/4" bore
Grinding Wheel Grit	60, 120
Shaft diameter	3/4" diameter
Arbor Bushing	1-1/4" diameter x 1" face by 3/4" bore
Lamp	120V, 40 watt Type A or smaller bulb-Medium Base (bulb not included)
Tool Rests	Left and Right
Drill bit sharpening plate	Right only
Eye Shield Assemblies	Clear Lexan Left and Right
Spark Arrestors	Left and Right
Quench tray	Yes
Wheel dresser	Yes

⚠ 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.

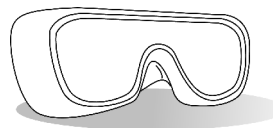
BEFORE USING THE BENCH GRINDER

⚠ 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.

1. **READ** the entire Owner's Manual. **LEARN** how to use the tool for its intended applications.
2. **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 5.
3. **AVOID A DANGEROUS WORKING ENVIRONMENT.** **DO NOT** use electrical tools in a damp environment or expose them to rain.
4. **DO NOT** use electrical tools in the presence of flammable liquids or gasses.
5. **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.
6. **KEEP VISITORS AND CHILDREN AWAY.** **DO NOT** permit people to be in the immediate work area, especially when the electrical tool is operating.
7. **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.

8. **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.
9. **ALWAYS WEAR EYE PROTECTION.** Any power tool can throw debris into the eyes during operations, which could cause severe and permanent eye damage. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools. Safety Goggles are available at Sears Retail Stores.



10. **WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR PARTICLES.**
11. **ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.
12. **KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.**
13. **AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.
14. **REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning "ON" the Bench Grinder.
15. **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.
16. **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.

SAFETY INSTRUCTIONS (cont.)

17. **DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over or you accidentally contact the tool.
18. **DO NOT** store anything above or near the tool where anyone might try to stand on the tool to reach it.
19. **MAINTAIN YOUR BALANCE. DO NOT** extend yourself over the tool. Wear oil resistant rubbersoled shoes. Keep floor clear of debris, grease, and wax.
20. **MAINTAIN TOOLS WITH CARE.** Always keep tools clean and in good working order. Keep all blades and tool bits sharp.
21. **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.
22. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.
23. **DO NOT OPERATE TOOL IF UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.**
24. **SECURE ALL WORK.** When it is possible, use clamps or jigs to secure the workpiece. This is safer than attempting to hold the workpiece with your hands.
25. **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.**

26. CALIFORNIA PROPOSITION 65

SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING AND OTHER CONSTRUCTION ACTIVITIES contains chemicals known to cause cancer, birth defects or other reproductive harm.

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

GROUNDING INSTRUCTIONS

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.

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.

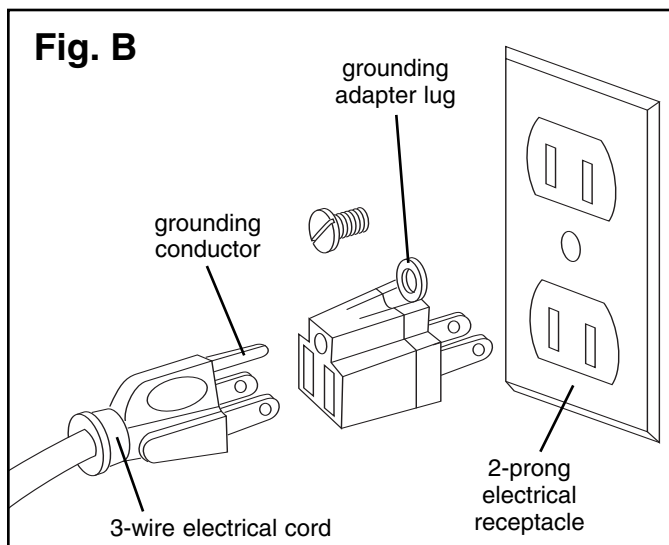
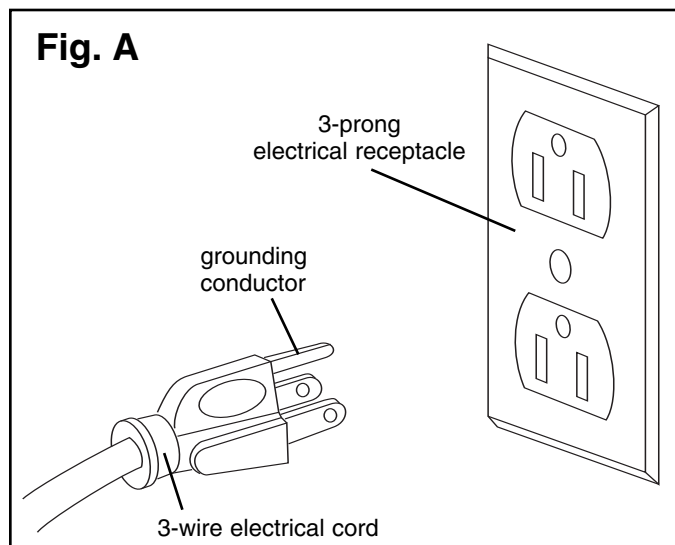
REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.

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.

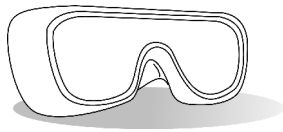
⚠ WARNING

This Bench Grinder is for indoor use only. Do not expose to rain or use in damp locations.



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 Safety Goggles (that comply with ANSI standard Z87.1) when operating the grinder. Safety Goggles are available at Sears Retail Stores. Keep your thumbs and fingers away from the grinding wheels.



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.**

ACCESSORIES AND ATTACHMENTS

AVAILABLE ACCESSORIES

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

<u>ITEM</u>	<u>STOCK NUMBER</u>
Replacement grinding wheels	See catalog or store
Wire and Buffing wheels	See catalog or store
Spacers	See catalog or store
Wheel dressers	See catalog or store
Stand	See catalog or store

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

UNPACKING AND CHECKING CONTENTS (Fig. C)

This Bench Grinder will require a minimal amount of assembly. A 10mm and 13mm open end wrench is provided for mounting the Tool Rest Assemblies and the Spark Arrestor Assemblies.

Remove all of the parts from the shipping box and lay them on a clean work surface. Compare the items to Fig. C, verify that all items are accounted for before discarding the shipping box.

⚠ WARNING

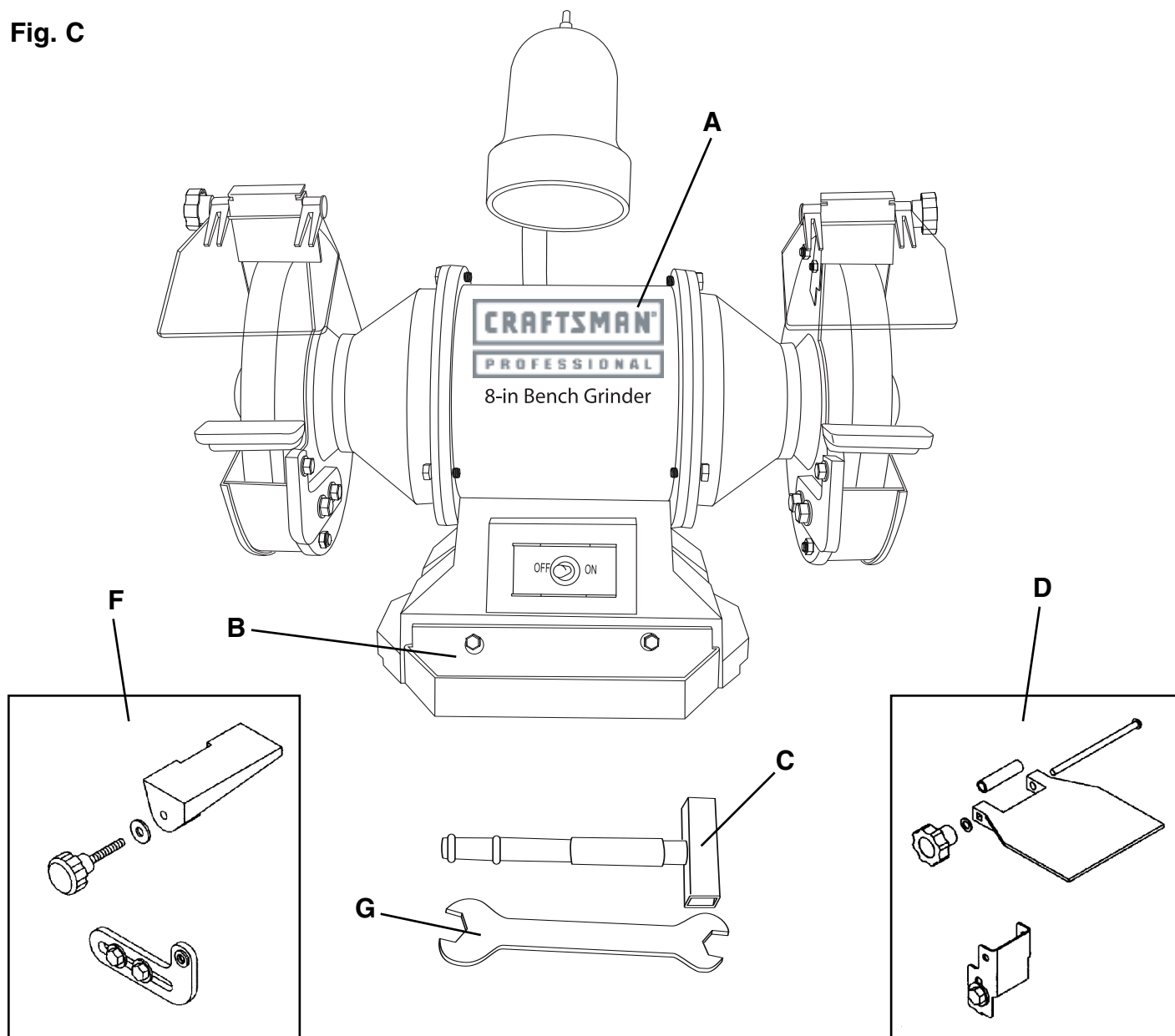
If any parts are missing, do not attempt to plug in the power cord and turn "ON" the Bench Grinder. The

Bench Grinder can only be turned "ON" after all the parts have been obtained and installed correctly.

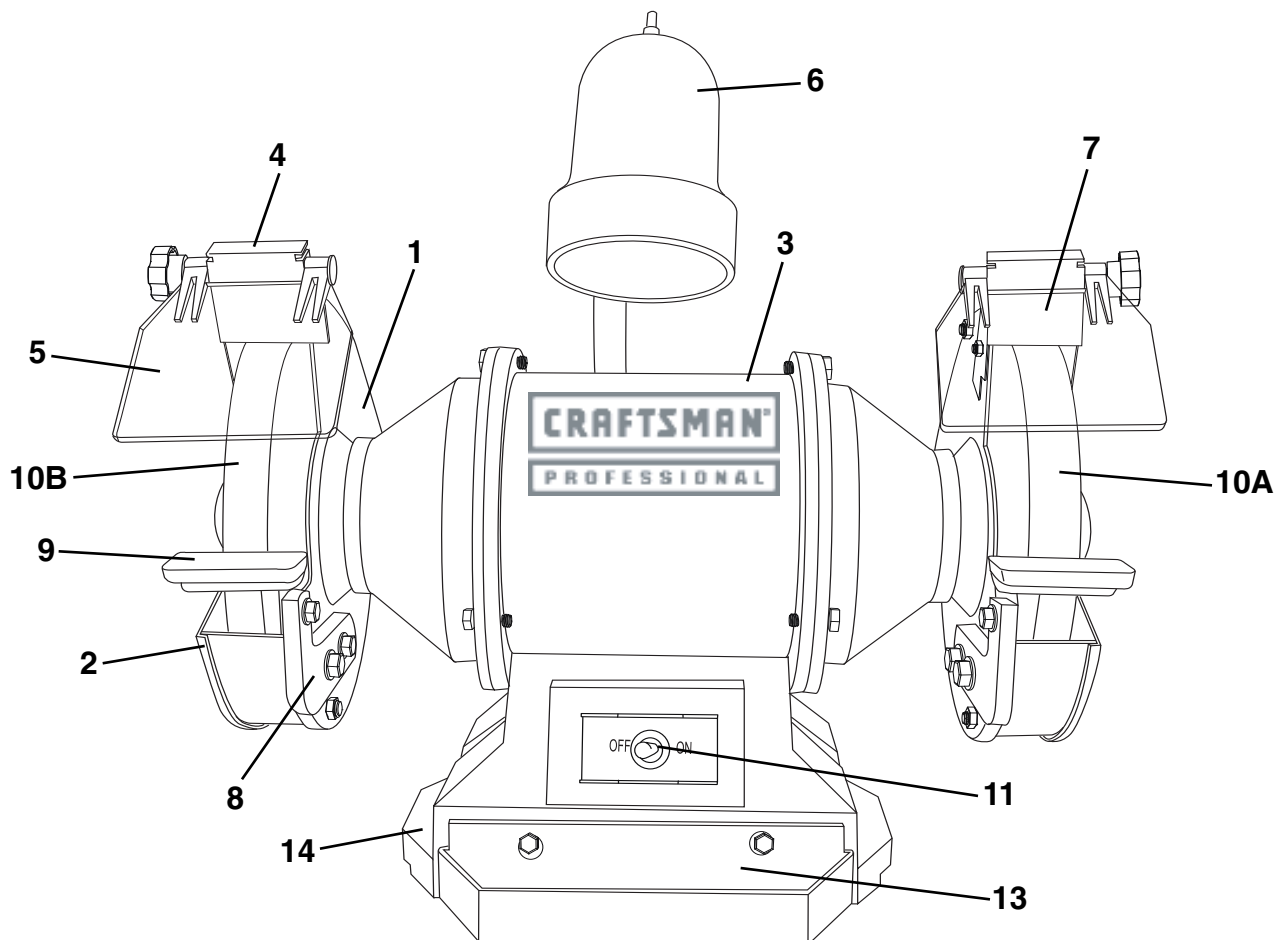
The following items are to be provided in the shipping box:

- A. Grinder
- B. Quench tray
- C. Wheel dresser
- D. Eyeshield assembly
- E. Left tool rest assembly (not shown)
- F. Right tool rest assembly
- G. Special Wrench

Fig. C



KNOW YOUR BENCH GRINDER



1. **WHEEL GUARD** - Covers the grinding wheels and protects against accidental contact.
2. **WHEEL COVER** - Covers the grinding wheels and provides access for routine maintenance.
3. **MOTOR HOUSING** - Contains the electrical motor.
4. **EYESHIELD MOUNTS** - Supports the eyeshields.
5. **EYESHIELDS** - Protective Lexan see-thru shields to prevent any loose debris from contacting the operator.
6. **FLEXIBLE WORK LIGHT** - Provides assistance to the operator for grinding operations.
7. **SPARK ARRESTORS** - Prevents hot sparks and debris from contacting the operator.
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. **A) GRINDING WHEEL 120 GRIT** - Used to remove light material from workpiece.
10. **B) GRINDING WHEEL 60 GRIT** - Used to remove heavy material from workpiece.
11. **ON / OFF SWITCH** - Used to turn "ON" and turn "OFF" the grinder.
12. **WHEEL DRESSER** - Used to clean and smooth surface of the 8" Grinding Wheel (not shown).
13. **QUENCH TRAY** - Used to cool workpiece after grinding.
14. **MOUNTING PAD** - Used to secure the grinder to a workbench or suitable work surface.
15. **GRINDING WHEEL IDENTIFICATION LABEL** - Provides information on wheel size, grit and maximum RPM. Must be left on to distribute the load of tightening the Lock Nuts (not shown).
16. **ARBOR BUSHING** - Used when wheels have an oversized wheel bore (not shown).
17. **FLANGES** - Used to secure the grinding wheels to the grinder and distribute the load of the Lock Nuts (not shown).
18. **LOCK NUT** - Used to secure the grinding wheels to the grinder (not shown).

ASSEMBLY INSTRUCTIONS

A 10mm and 13mm open-end wrench (included) is required for assembly of the Tool Rest Assemblies and the Spark Arrestor Assemblies.

⚠ WARNING

- **DO NOT** assemble the Bench Grinder until you are sure the tool **IS NOT** plugged in.
- **DO NOT** assemble the Bench Grinder until you are sure the power switch is in the "OFF" position.
- **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 different Tool Rest assemblies. The Left Side Tool Rest is entirely flat. The Right Side Tool Rest is also flat, but has an accessory plate for sharpening drill bits.

1. Remove both Tool Rest Assemblies from the plastic bags and check to see that you have the following:
Left Side Tool Rest
Left Side Tool Rest Support
Right Side Tool Rest
Right Side Tool Rest Support Drill Bit Sharpening Plate
M8 Flat Washer (qty. 6)
M8 x 12mm Hex head screw (qty. 4)
Adjustment Knob (qty. 2)
2. 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 Fig. D.
3. Assemble the Tool Rests (E) to the Supports (F) with the flat washers (G) and Adjustment Knobs (H) as shown. See Fig. E.

Fig. D

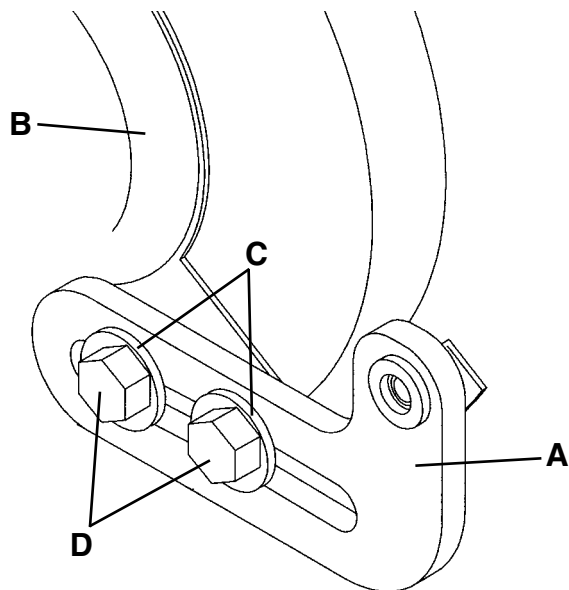
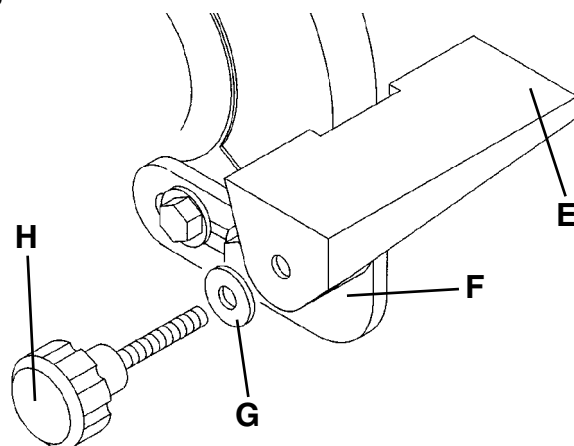


Fig. E

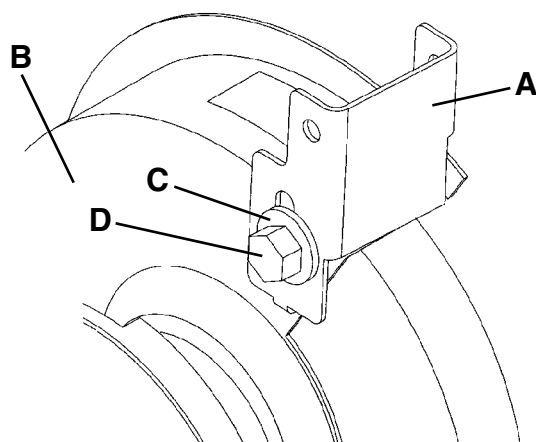


4. Adjust the Tool Rests until they are 1/16" from the grinding wheels. Firmly tighten the hex head screws holding the supports.

SPARK ARRESTORS (Fig. F)

1. Remove both Spark Arrestor Assemblies from the plastic bags and check to see that you have the following:
Left Side Spark Arrestor
Right Side Spark Arrestor
M6 Flat Washer (2)
M6 X 6mm Hex head screw (2)
2. Assemble the Spark Arrestors (A) to the inside surface of the Wheel Covers (B) with the flat washers (C) and hex head screws (D) as shown. See Fig. F.
3. Adjust the Spark Arrestors until they are 1/16" from the grinding wheels. Firmly tighten the hex head screws.

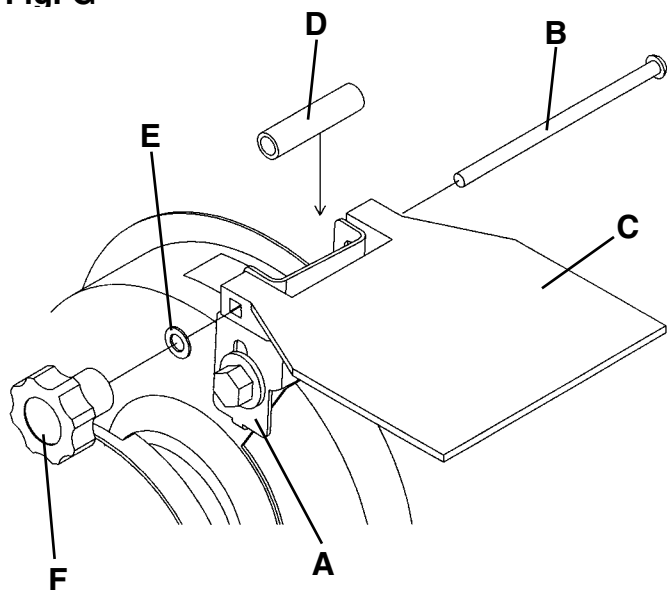
Fig. F



EYE SHIELDS (Fig. G)

1. Remove both Eye Shield Assemblies from the plastic bags and check to see that you have the following. Eyeshield (qty. 2) Lock Knob (qty. 2) Spacer (qty. 2) M6 Flat washer (qty. 2) M6 x 80mm carriage head screw (qty. 2)
2. Assemble the Eyeshield (C) to the Spark Arrestor (A) by inserting the carriage head screw (B) through Eyeshield (C), Spark Arrestor (A), and the spacer (D) as shown.
3. Assemble the flat washer (E) and Lock Knob (F) to the carriage head screw and tighten until the Eyeshield remains in the desired position.

Fig. G



QUENCH TRAY

1. The Quench Tray is provided to cool the workpiece during and after grinding operations.
2. Attach the Quench Tray to base of the Bench Grinder as shown.
3. Tighten the two screws.
4. Partially fill the Quench Tray with water. **DO NOT** overfill! **DO NOT** use any other liquid in the Quench Tray other than water.
5. Place the workpiece into the water after performing the grinding operation to cool it.
6. **DO NOT** put any water directly onto the grinding wheels.

WORK LIGHT (Fig. H)

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

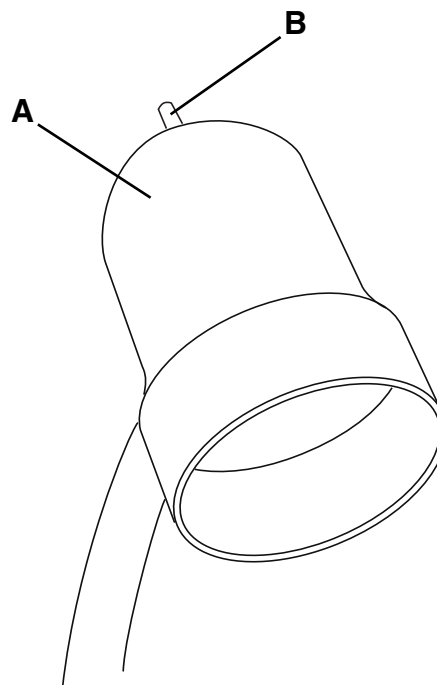
To reduce the risk of fire, use a 120V, 40 watt Type A or smaller bulb, medium base. **DO NOT** use a light bulb that extends past the end of the light housing.

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

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. H



PERMANENT MOUNTING

You should firmly attach the Bench Grinder to a solid work surface or heavy-duty stand (hardware not included).

⚠ WARNING

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

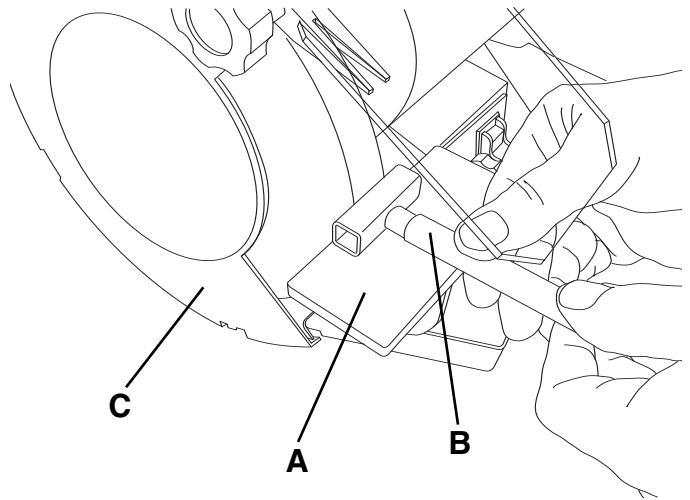
The Bench Grinder is designed for hand held grinding, sharpening, and cleaning operations.

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 the correct 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.
DO NOT EVER GRIND ON THE SIDES OF THE GRINDING WHEELS.
8. The operator may place the hot end of the workpiece into the water in the quench tray to cool it.
9. 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.
10. Turn "OFF" the Flexible Work Light. **CAUTION:** The Flexible Work Light housing will remain hot for a few minutes after turning it "OFF".
11. Avoid contact with housing until it is cool. Unplug the Bench Grinder from the power source.

USING THE WHEEL DRESSER (Fig. J)

Fig. J

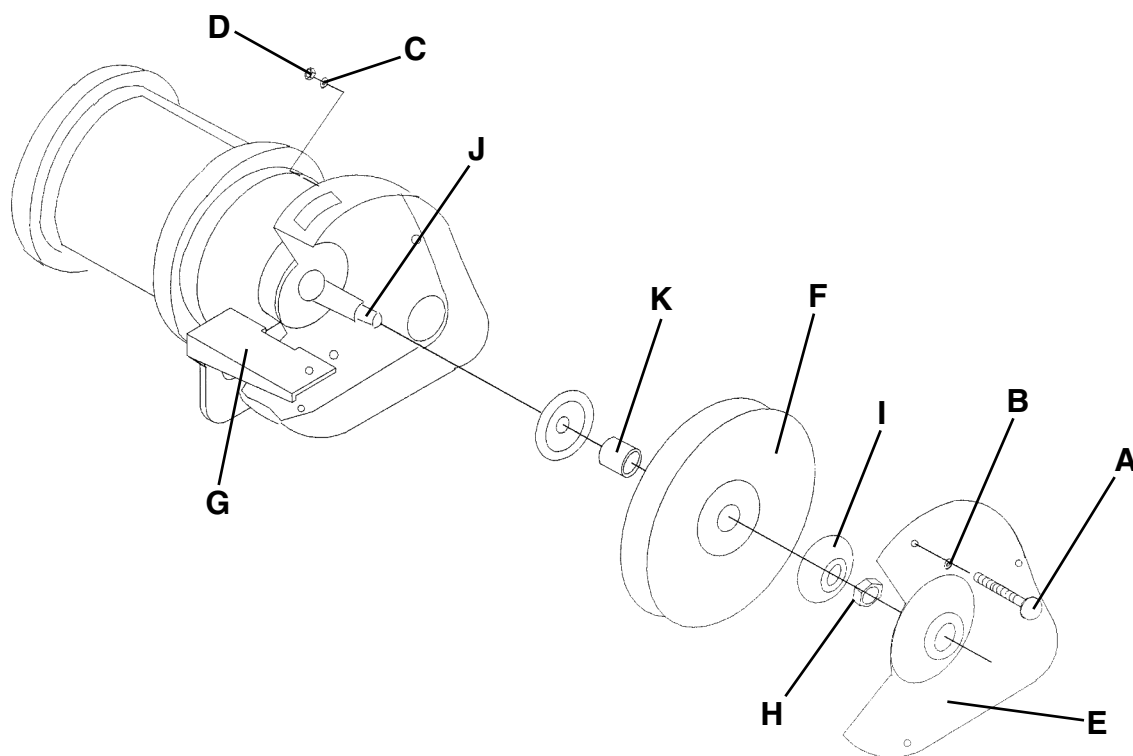


The Wheel Dresser is to be used on the grinding wheels. It will remove buildup of material on the grinding wheel, remove imperfections and make the corners of the grinding wheel square. See Fig. J.

1. Loosen the correct side tool rest (A) and adjust it until it is in the flat horizontal position as shown and 1/16" away from the grinding wheel.
2. Turn "ON" the Bench Grinder. Let the grinding wheel come up to a steady speed for one minute.
3. After the grinding wheel has gotten to a steady speed, place the Wheel Dresser (B) flat on the Tool Rest with the serrated wheels facing the grinding wheel.
4. Firmly hold on to the handle of the Wheel Dresser.
5. Move the Wheel Dresser forward until the serrated wheels make light contact with the grinding wheel (C). After contact has been made, slide the Wheel Dresser side to side across the Tool Rest to dress the grinding wheel until the edge of the grinding wheel is square and the surface is clean.
6. After the operator has completed dressing the grinding wheel, turn "OFF" the Bench Grinder and let the grinding wheel come to a complete stop.
7. Inspect the grinding wheel for any damage!
8. The grinding wheel may now be slightly smaller in diameter after dressing. Readjust the tool rests and spark arrestors to maintain a 1/16" clearance to the grinding wheel.

CHANGING THE GRINDING WHEEL (Fig. K)

Fig. K



Due to normal wear, both wheels will need to be replaced occasionally. See Fig. K.

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 three screws (A), flat washers (B), external tooth lock washers (C) and nuts (D) holding the Outer Wheel Covers (E) to the Bench Grinder.
4. Remove the Outer Wheel Covers.
5. Place a small wooden wedge between the Abrasive Wheel (F) and Tool Rest (G) to prevent the wheels from rotating.
6. Remove the right side grinding wheel by turning the lock-nut (H) in the counterclockwise direction with an open-end wrench (not included). The left side wheel can be removed by turning the lock-nut in the clockwise direction with an open-end wrench.
7. Remove the Outer Wheel Flange (I) and then remove the abrasive wheel from the arbor shaft (J). The Arbor Bushing (K) should be saved, for future use, if the replacement wheel does not use this bushing.
8. **CAUTION:** The new abrasive wheel to be put on the Bench Grinder must have a higher R.P.M rating than the Bench Grinder. 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 lock-nut in reverse order from removal.

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

DUST PORT (Fig. N)

There is a dust port located on the inner side of each Inner Wheel Guard. These dust ports allows the grinding dust to exit the wheel cavity.

If you choose to attach the dust ports to a dust collection system, make sure the dust collector is rated and configured for your grinding operation.

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
Motor does not run	1. Machine not plugged in 2. Power switch in “OFF” position 3. Power cord is faulty 4. Fuse or circuit breaker are open 5. Damaged motor	1. Plug power cord into electrical receptacle 2. Lift switch to “ON” position 3. Return to Sears Service Center 4. Overloaded electrical circuit 5. Return to Sears Service Center
Motor does not have full power	1. Incorrect line voltage 2. Damaged motor	1. Have a qualified electrician check line for proper voltage 2. Return to Sears Service Center
Motor runs hot	1. Motor is overloaded 2. Poor air circulation around motor	1. Reduce pressure on workpiece 2. Remove any blockage around motor
Motor stalls or runs slow	1. Motor is overloaded 2. Incorrect line voltage 3. Capacitor has failed	1. Reduce pressure on workpiece 2. Have a qualified electrician check line for proper voltage 3. Return to Sears Service Center
Fuse blows or circuit breaker trips	1. Motor overloaded 2. Overloaded electrical circuit 3. Wrong fuse or circuit breaker 4. Undersized or excessive length of extension cord, see manual 5. Grinding wheels are blocked	1. Reduce pressure on workpiece 2. Reduce the amount of items on circuit 3. Replace with correct fuse or circuit breaker 4. Use correct size 5. Unplug machine and remove obstruction

PARTS

8-IN. PROFESSIONAL BENCH GRINDER PARTS LIST

MODEL NO. 152.220180

WARNING

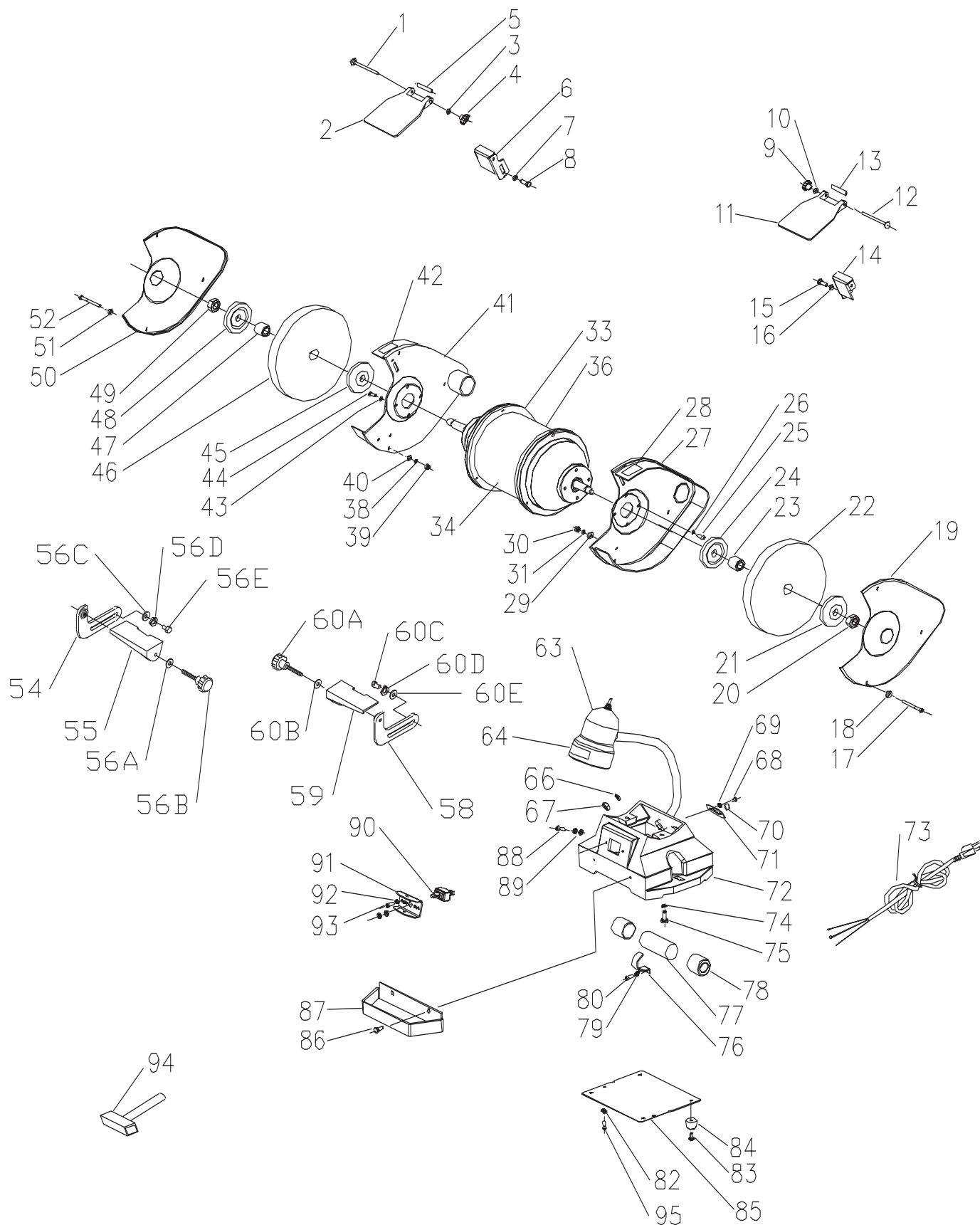
When servicing, use only CRAFTSMAN replacement parts. Use of any other parts may create a **HAZARD** or cause product damage.

WARNING

Any attempt to repair or replace electrical parts on this Bench 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.	KEY NO.	PART NO.	DESCRIPTION	QTY.
1	OR90055	M6x80mm CARRIAGE HD SCREW	1	53	OR94747	LEFT TOOL REST ASSY, CONST OF:	
2	OR90152	EYESHIELD	1			REF 54 TO REF 56E	1
3	OR90059	M6mm FLAT WASHER	1	54	OR90203	LEFT TOOL REST SUPPORT	1
4	OR90001	M6mm KNOB	1	55	OR90204	LEFT TOOL REST	1
5	OR90002	SPACER	1	56A	OR90625	5/16 FLAT WASHER	1
6	OR90488	SPARK ARRESTOR-L.H	1	56B	OR90155	KNOB 5/16 - 18	1
7	OR90059	M6mm FLAT WASHER	1	56C	OR90311	M8 FLAT WASHER	2
8	OR90530	M6x10mm HEX HD SCREW	1	56D	OR90248	M8 LOCK WASHER	2
9	OR90001	M6mm KNOB	1	56E	OR93917	M8 x 20mm HEX HEAD SCREW	2
10	OR90059	M6mm FLAT WASHER	1	57	OR94748	RIGHT TOOL REST ASSY, CONST OF :	
11	OR90152	EYESHIELD	1			REF 58 TO REF 60E	1
12	OR90055	M6x80mm CARRIAGE HD SCREW	1	58	OR90191	RIGHT TOOL REST SUPPORT	1
13	OR90002	SPACER	1	59	OR90192	RIGHT TOOL REST	1
14	OR90488	SPARK ARRESTOR-R.H	1	60A	OR90155	KNOB 5/16 - 18	1
15	OR90530	M6x10mm HEX HD SCREW	1	60B	OR90625	5/16 FLAT WASHER	1
16	OR90059	M6mm FLAT WASHER	1	60C	OR93917	M8 x 20mm HEX HEAD SCREW	2
17	OR90567	PAN HD SCREW M6x60mm	3	60D	OR90248	M8 LOCK WASHER	2
18	OR90059	M6mm FLAT WASHER	3	60E	OR90311	M8 FLAT WASHER	2
19	OR94751	OUTER WHEEL GUARD-RH	1	63	OR71428	LIGHT ASSY, INCL:	1
20	OR94170	HEX NUT M14	1	64	OR90544	LIGHT WARNING LABEL	1
21	OR90519	WHEEL FLANGE	1	66	OR90227	M10mm LOCK WASHER	1
22	OR71420	GRINDING WHEEL,120 GRIT- 8" DIA x 1" WIDE x 1" BORE	1	67	OR90228	M10x1mm HEX NUT	1
23	OR90525	WHEEL BUSHING	1	68	OR90507	PAN HD SCREW M5x8mm	2
24	OR90519	WHEEL FLANGE	1	69	OR90362	M5 EXT TOOTH WASHER	2
25	OR90501	PAN HD SCREW M6x16mm	4	70	OR71429	CORD CLAMP	1
26	OR90502	M6mm LOCK WASHER	4	71	OR71430	CLAMP PLATE	1
27	OR94752	INNER WHEEL GUARD ASSEMBLY-RIGHT, INCL:	1	72	OR94758	BASE	1
28	OR90526	ROTATION LABEL	1	73	OR71432	CORDSET	1
29	OR90059	M6mm FLAT WASHER	3	74	OR90248	M8mm LOCK WASHER	2
30	OR90235	HEX NUT M6	3	75	OR90504	HEX HD SCREW M8x18mm	2
31	OR90502	M6mm LOCK WASHER	3	76	OR71433	CLAMP	1
33	OR94753	MOTOR ASSEMBLY, INCL: REF 34 & REF 36	1	77	OR71434	CAPACITOR(150°F)	1
34	OR94754	NAME PLATE LABEL	1	78	OR71435	END CAP	2
36	OR94755	SPEC LABEL	1	79	OR90362	M5 EXT TOOTH WASHER	1
38	OR90502	M6mm LOCK WASHER	3	80	OR90507	PAN HD SCREW M5x6mm	1
39	OR90235	HEX NUT M6	3	82	OR90362	M5 EXT TOOTH WASHER	2
40	OR90059	M6mm FLAT WASHER	3	83	OR90863	PAN HD SCREW M5x12mm	4
41	OR94756	INNER WHEEL GUARD ASSEMBLY-LEFT, INCL:	1	84	OR71436	PAD	4
42	OR90526	ROTATION LABEL	1	85	OR71437	BASE PLATE	1
43	OR90502	M6mm LOCK WASHER	4	86	OR90333	M6x10mm HEX HD SCREW	2
44	OR91826	PAN HD SCREW M6x16mm	4	87	OR71438	WATER TRAY	1
45	OR90519	WHEEL FLANGE	1	88	OR90505	PAN HD SCREW M5x12mm	2
46	OR90551	GRINDING WHEEL, 60 GRIT - 8" DIA x 1" WIDE x 1" BORE	1	89	OR90362	M5 EXT TOOTH WASHER	4
47	OR90525	WHEEL BUSHING	1	90	OR71439	SWITCH	1
48	OR90519	WHEEL FLANGE	1	91	OR71424	SWITCH PLATE	1
49	OR90498	HEX NUT M14-LEFT HAND	1	92	OR90362	M5 EXT TOOTH WASHER	2
50	OR94757	OUTER WHEEL GUARD-LH	1	93	OR90507	PAN HD SCREW M5x8mm	2
51	OR90059	M6mm FLAT WASHER	3	94	OR71440	DIAMOND WHEEL DRESSER	1
52	OR90567	PAN HD SCREW M6x60mm	3	95	OR90507	PAN HD SCREW M5x8mm	2
				96	OR90050	10mm x 12mm OPEN END WRENCH (NOT SHOWN)	1
				97	OR90510	BEARING (NOT SHOWN)	2
				98	OR94750	OWNERS MANUAL (NOT SHOWN)	1



PARTS

10-IN. PROFESSIONAL BENCH GRINDER PARTS LIST

MODEL NO. 152.220600

WARNING

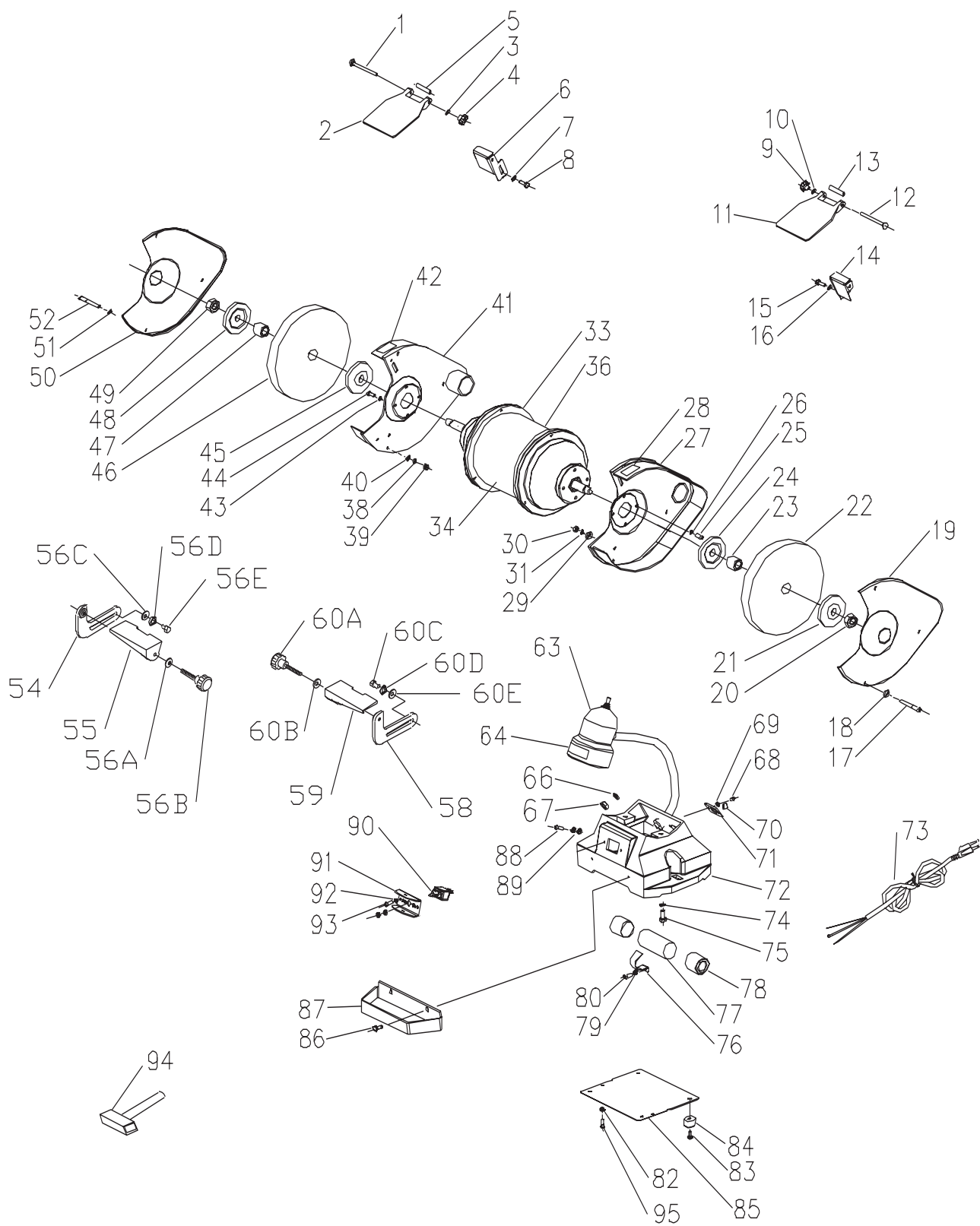
When servicing, use only CRAFTSMAN replacement parts. Use of any other parts may create a **HAZARD** or cause product damage.

WARNING

Any attempt to repair or replace electrical parts on this Bench 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.	KEY NO.	PART NO.	DESCRIPTION	QTY.
1	OR90055	M6x80mm CARRIAGE HD SCREW	1	53	OR94747	LEFT TOOL REST ASSY, CONST OF:	
2	OR90152	EYESHIELD	1			REF 54 TO REF 56E	1
3	OR90059	M6mm FLAT WASHER	1	54	OR90203	LEFT TOOL REST SUPPORT	1
4	OR90001	M6mm KNOB	1	55	OR90204	LEFT TOOL REST	1
5	OR90002	SPACER	1	56A	OR90625	5/16 FLAT WASHER	1
6	OR90488	SPARK ARRESTOR-L.H	1	56B	OR90155	KNOB 5/16 - 18	1
7	OR90059	M6mm FLAT WASHER	1	56C	OR90311	M8 FLAT WASHER	2
8	OR90333	M6x12mm HEX HD SCREW	1	56D	OR90248	M8 LOCK WASHER	2
9	OR90001	M6mm KNOB	1	56E	OR93917	M8 x 20mm HEX HEAD SCREW	2
10	OR90059	M6mm FLAT WASHER	1	57	OR94748	RIGHT TOOL REST ASSY, CONST OF :	
11	OR90152	EYESHIELD	1			REF 58 TO REF 60E	1
12	OR90055	M6x80mm CARRIAGE HD SCREW	1	58	OR90191	RIGHT TOOL REST SUPPORT	1
13	OR90002	SPACER	1	59	OR90192	RIGHT TOOL REST	1
14	OR90488	SPARK ARRESTOR-R.H	1	60A	OR90155	KNOB 5/16 - 18	1
15	OR90333	M6x12mm HEX HD SCREW	1	60B	OR90625	5/16 FLAT WASHER	1
16	OR90059	M6mm FLAT WASHER	1	60C	OR93917	M8 x 20mm HEX HEAD SCREW	2
17	OR90567	PAN HD SCREW M6x60mm	3	60D	OR90248	M8 LOCK WASHER	2
18	OR90059	M6mm FLAT WASHER	3	60E	OR90311	M8 FLAT WASHER	2
19	OR94740	OUTER WHEEL GUARD-RH	1	63	OR71428	LIGHT ASSY, INCL:	1
20	OR90499	HEX NUT M16	1	64	OR90544	LIGHT WARNING LABEL	1
21	OR71446	WHEEL FLANGE	1	66	OR90227	M10mm LOCK WASHER	1
22	OR71447	GRINDING WHEEL, 120 GRIT- 10" DIA x 1" WIDE x 1-1/4" BORE	1	67	OR90228	M10x1mm HEX NUT	1
23	OR71448	WHEEL BUSHING	1	68	OR90507	PAN HD SCREW M5x8mm	2
24	OR71446	WHEEL FLANGE	1	69	OR90362	M5 EXT TOOTH WASHER	2
25	OR90501	PAN HD SCREW M6x16mm	4	70	OR71429	CORD CLAMP	1
26	OR90502	M6mm LOCK WASHER	4	71	OR71430	CLAMP PLATE	1
27	OR94741	INNER WHEEL GUARD ASSEMBLY-RIGHT, INCL: REF 28	1	72	OR94749	BASE	1
28	OR90526	ROTATION LABEL	1	73	OR71454	POWER CORD	1
29	OR90059	M6mm FLAT WASHER	3	74	OR90248	M8mm LOCK WASHER	2
30	OR90235	HEX NUT M6	3	75	OR90504	HEX HD SCREW M8x18mm	2
31	OR90502	M6mm LOCK WASHER	3	76	OR71455	CLAMP	1
33	OR94742	MOTOR ASSEMBLY, INCL: REF 34 & REF 36	1	77	OR71456	CAPACITOR(100°F)	1
34	OR94743	NAME PLATE LABEL	1	78	OR71450	END CAP	2
36	OR94744	SPEC LABEL	1	79	OR90362	M5 EXT TOOTH WASHER	1
38	OR90502	M6mm LOCK WASHER	3	80	OR90507	PAN HD SCREW M5x6mm	1
39	OR90235	HEX NUT M6	3	82	OR90362	M5 EXT TOOTH WASHER	2
40	OR90059	M6mm FLAT WASHER	3	83	OR90863	PAN HD SCREW M5x12mm	4
41	OR94745	INNER WHEEL GUARD ASSEMBLY-LEFT, INCL: REF 42	1	84	OR71436	PAD	4
42	OR90526	ROTATION LABEL	1	85	OR71437	BASE PLATE	1
43	OR90502	M6mm LOCK WASHER	4	86	OR90333	M6x10mm HEX HD SCREW	2
44	OR91826	PAN HD SCREW M6x16mm	4	87	OR71438	WATER TRAY	1
45	OR71446	WHEEL FLANGE	1	88	OR90505	PAN HD SCREW M5x12mm	2
46	OR90520	GRINDING WHEEL, 60 GRIT- 10" DIA x 1" WIDE x 1-1/4" BORE	1	89	OR90362	M5 EXT TOOTH WASHER	4
47	OR71448	WHEEL BUSHING	1	90	OR71439	SWITCH	1
48	OR71446	WHEEL FLANGE	1	91	OR71424	SWITCH PLATE	1
49	OR90500	HEX NUT M16-LEFT HAND	1	92	OR90362	M5 EXT TOOTH WASHER	2
50	OR94746	OUTER WHEEL GUARD-LH	1	93	OR90507	PAN HD SCREW M5x8mm	2
51	OR90059	M6mm FLAT WASHER	3	94	OR71440	DIAMOND WHEEL DRESSER	1
52	OR90567	PAN HD SCREW M6x60mm	3	95	OR90507	PAN HD SCREW M5x8mm	2
				96	OR90050	10mm x 12mm OPEN END WRENCH (NOT SHOWN)	1
				97	OR90510	BEARING (NOT SHOWN)	2
				98	OR94750	OWNERS MANUAL (NOT SHOWN)	1



Get it fixed, at your home or ours!

Your Home

For repair—in your home—of all major brand appliances, lawn and garden equipment, or heating and cooling systems, **no matter who made it, no matter who sold it!**

For the replacement parts, accessories and owner's manuals that you need to do-it-yourself.

For Sears professional installation of home appliances and items like garage door openers and water heaters.

1-800-4-MY-HOME® (1-800-469-4663)

Call anytime, day or night (U.S.A. and Canada)

www.sears.com www.sears.ca

Our Home

For repair of carry-in items like vacuums, lawn equipment, and electronics, call or go on-line for the location of your nearest **Sears Parts & Repair Center.**

1-800-488-1222

Call anytime, day or night (U.S.A. only)

www.sears.com

To purchase a protection agreement (U.S.A.) or maintenance agreement (Canada) on a product serviced by Sears:

1-800-827-6655 (U.S.A.)

1-800-361-6665 (Canada)

Para pedir servicio de reparación a domicilio, y para ordenar piezas:

1-888-SU-HOGAR®
(1-888-784-6427)

Au Canada pour service en français:

1-800-LE-FOYER^{MC}
(1-800-533-6937)
www.sears.ca



® Registered Trademark / TM Trademark / SM Service Mark of Sears Brands, LLC

® Marca Registrada / TM Marca de Fábrica / SM Marca de Servicio de Sears Brands, LLC

^{MC} Marque de commerce / ^{MD} Marque déposée de Sears Brands, LLC

© Sears Brands, LLC