



GENERAL 15-660 Variable Speed Bench Grinder Instruction Manual

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GENERAL 15-660 Variable Speed Bench Grinder



Product Information

Specifications

- Sealed double bearing design
- Adjustable aluminum tool rests
- Heavy-duty wheel guards with dust chute
- Equipped with eye-shield protectors
- 4 rubber base mounts to reduce vibration
- 2 Flexible work lights for clear view of grinding wheels and workpiece
- Variable speed for grinding or sharpening
- Powerful 2.5 amp. induction motor for longlasting, smooth performance
- Convenient water tray to cool sharpened items
- Wheel dresser included

Usage Instructions

Assembly

Before using the bench grinder, it is important to properly assemble the unit. Follow the instructions provided in the user manual to ensure correct assembly.

Installation

Place the bench grinder on a stable and level surface in a well-ventilated area. Ensure that there is enough space around the grinder for easy operation and access to the power source.

Operation

To operate the bench grinder, follow these steps:

1. Ensure that the power switch is in the "Off" position.
2. Plug the grinder into a suitable power outlet.
3. Turn on the power switch.
4. Select the desired grinding wheel speed using the variable speed control.
5. Hold the workpiece firmly and position it against the grinding wheel.
6. Move the workpiece back and forth against the grinding wheel, applying light pressure.
7. Continue grinding until the desired result is achieved.

Maintenance

To ensure the longevity and optimal performance of the bench grinder, regular maintenance is required. Follow these guidelines:

- Periodically clean the grinding wheels and wheel guards to remove debris and buildup.
- Inspect the tool rests and adjust them as needed for proper support and stability.
- Check the condition of the eye-shield protectors and replace if damaged or worn out.
- Keep the water tray filled with clean water to cool sharpened items during use.
- Regularly inspect the power cord for any signs of damage and replace if necessary.
- Refer to the user manual for any additional maintenance procedures specific to your model.

FAQ

- **Q: Can I use this bench grinder with loose clothing or jewelry?**

A: No, it is important to avoid wearing loose clothing, gloves, bracelets, necklaces, or other jewelry while operating the bench grinder. This can prevent accidents and injuries caused by entanglement with moving parts.

- **Q: Is eye protection necessary when using the bench grinder?**

A: Yes, it is highly recommended to wear eye protection, such as safety glasses or goggles, while operating the bench grinder. This protects your eyes from sparks, debris, and any potential hazards that may occur during grinding.

- **Q: Can I use this bench grinder in a poorly ventilated area?**

A: It is not recommended to use the bench grinder in a poorly ventilated area. Fine particulate dust generated during grinding can be hazardous to health. It is important to work in a well-ventilated area and, whenever possible, use a dust collector to minimize health hazards.

- **Q: What should I do if I have an earlier or later version of the bench grinder?**

A: If you have any doubts or questions regarding your specific version of the bench grinder, contact your retailer or the support line provided with the model and serial number of your unit for clarification. They will be able to assist you with any concerns or differences in the manual.

FEATURES & SPECIFICATIONS

- Sealed double bearing design.
- Adjustable aluminum tool rests.
- Heavy-duty wheel guards with dust chute
- Equipped with eye-shield protectors.
- 4 rubber base mounts to reduce vibration
- 2 Flexible work lights for clear view of grinding wheels and workpiece.
- Variable speed for grinding or sharpening.
- Powerful 2.5 amp. induction motor for longlasting, smooth performance.
- Convenient water tray to cool sharpened items.
- Wheel dresser included.
- **WHEEL SIZE**

- 6" x 3/4" (52 x 19 mm)
- **ARBOR SPEED**
 - 2000 – 3450 RPM (VARIABLE)
- **ARBOR SIZE**
 - 1/2" (1 mm)
- **MOTOR**
 - 110 V, 2.5 A
- **WEIGHT**
 - 28.5 LBS (13 kg)

GENERAL® INTERNATIONAL

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- Telephone (514) 326-1161
- Fax (514) 326-5555
- www.general.ca
- THANK YOU for choosing this General International model 15-660 Bench
- Grinder. This bench grinder has been carefully tested and inspected before shipment and if properly used and maintained, will provide you with years of reliable service. To ensure optimum performance and trouble-free operation, and to get the most from your investment, please take the time to read this manual before assembling, installing and operating the unit.
- The manual's purpose is to familiarize you with the safe operation, basic function, and features of this bench grinder as well as the set-up, maintenance and identification of its parts and components. This manual is not intended as a substitute for formal woodworking instruction, nor to offer the user instruction in the craft of woodworking. If you are not sure about the safe-ty of performing a certain operation or procedure, do not proceed until you can confirm, from knowledgeable and qualified sources, that it is safe to do so.
- Once you've read through these instructions, keep this manual handy for future reference.

GENERAL ® INTERNATIONAL WARRANTY

- All component parts of General® International machinery are carefully tested and inspected during all stages of production, and each machine is thoroughly inspected upon completion of assembly. Because of our commitment to quality and customer satisfaction, General® International agrees to repair or replace, within a period of 24 months from date of purchase, any genuine part or parts which, upon examination, prove to be defective in work-manship or material. In order to obtain this warranty, all defective parts must be returned freight pre-paid to General® International Mfg. Co., Ltd. Repairs attempted without our written authorization will void this warranty.
- **Disclaimer:** The information and specifications in this manual pertain to the unit as it was supplied from the factory at the time of printing. Because we are committed to making constant improvements, General International reserves the right to make changes to components, parts or features of this unit as deemed necessary, without prior notice and without obligation to install any such changes on previously delivered units. Reasonable care is taken at the factory to ensure that the specifications and information in this manual corresponds with that of the unit with which it was supplied. However, special orders and "after factory" modifications may render some or all information in this manual inapplicable to your machine. Further, as

several generations of this bench grinder and several versions of this manual may be in circulation, if you own an earlier or later version of this unit, this manual may not depict your machine exactly. If you have any doubts or questions contact your retailer or our support line with the model and serial number of your unit for clarification.

Rules for Safe Operation

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. General International disclaims any real or implied warranty and hold itself harmless for any injury that may result from the improper use of it's equipment.

1. Make sure that the operator has been properly trained and has read, and understands, the owners' manual before operating any machinery.
2. Do not operate this bench grinder when tired, distracted or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
3. Keep the work area well lit, clean and free of debris or clutter.
4. Keep children and visitors at a safe distance; do not permit them to operate the unit.
5. Childproof and tamper proof your shop and all machinery with locks, master electrical switches and switch keys, to prevent unauthorized or unsupervised use.
6. Stay alert! Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
7. Do not wear loose clothing, gloves, bracelets, neck-laces or other jewelry while operating machinery. Wear protective hair covering to contain long hair and wear non-slip footwear.
8. Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well ventilated area and wear eye, ear and respiratory protection devices.
9. Whenever possible use a dust collector to minimize health hazards.
10. Keep hands and other body parts well away from grinding wheels and all moving parts or other cutting tools. Do not clear chips and grinding dust away with hands, use a brush.
11. Make sure the grinding wheels are running at full operating speed before grinding.
12. Do not force the grinding wheels or push too hard. The unit will perform better, safer and more effectively at the speed or rate for which it was designed.
13. Never leave the power on or the machine running while it is unattended.
14. Use recommended speed grinding wheels, accessories, and work piece material.
15. Never stand or lean on the bench grinder. Serious injury could occur if the unit is tipped or if unintentional contact is made with its' moving parts.
16. Before starting the unit, make sure the grinding wheels are securely installed and tight to the arbor shaft.
17. Keep all guards and safety devices in place and in good working order. If a guard must be removed for maintenance or cleaning make sure it is properly re-installed before using the machine again.
18. Before performing any maintenance, repairs or adjustments including wheel changes, make sure the power is off and the unit is unplugged.
19. Before plugging in and turning on the power, make sure that any adjustment tools, keys or wrenches have been removed and safely stored.
20. Always, make sure that switch is in "OFF" position before plugging in the power cord.
21. Only use accessories that are made or designed for this machine. The use of parts or accessories that are not recommended by General International will void any warranty claims and may result in injury.
22. Make sure the machine is properly grounded. This unit is supplied with a three-prong electric plug; it should be

plugged into a three-pole electrical receptacle. Never remove the third prong.

23. Do not use this bench grinder for any purpose other than it's intended use. If used for other purposes, General International disclaims any real or implied warranty and holds itself harmless for any injury which may result from such use.

Additional Safety Instructions for Bench Grinders

- Because each shop situation is unique, no list of safety guidelines can ever be complete.
- The most important safety feature in any shop is the knowledge and good judgement of the user.
- Use common sense and always keep safety considerations, as they apply to your individual shop situation first and foremost in mind. If you have any doubts about the safety of an operation you are about to perform: STOP! Do not perform the operation until you have validated from qualified individuals if the operation is safe to perform and what is the safest method to perform it.

1. LIMIT EXPOSURE TO DUST

Some dust created by power sanding, sawing, grinding, drilling and similar operations contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples include:

- Lead from lead-based paint.
- 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 types of work. To reduce your exposure to these chemicals, work in a well ventilated area and work with approved safety equipment such as dust masks that are specially designed to filter out microscopic particles.

2. ALWAYS USE EYESHIELDS, WHEEL GUARDS AND SPARK GUARDS

The supplied eye shields, wheel guards and spark guards should be maintained, properly installed on the unit and used at all times.

3. REPLACE DAMAGED PARTS OR COMPONENT IMMEDIATELY

Damaged parts or components may lead to a hazardous situation that could cause serious injury. Replace any damaged parts or components before operating the unit.

4. INSPECT GRINDING WHEELS BEFORE EACH USE

Handle grinding wheels carefully. A damaged or chipped grinding wheel can discharge debris towards the operator at high speeds. Before installing or replacing a grinding wheel as well as before each use, take a moment to inspect the grinding wheel(s) for cracks, chips or other visible signs of damage. Do not use a damaged wheel. Tighten the spindle nut enough to hold the grinding wheel firmly but do not over tighten as excessive clamping force can damage the wheel. Use only the wheel flanges provided with the grinder and do not remove the blotter or label on either side of the grinding wheel. When replacing a grinding wheel select only wheels that are rated to a higher maximum R.P.M. than the maximum of the Bench Grinder.

5. ADJUST TOOL RESTS AND SPARK GUARDS AS NEEDED

The diameter of the grinding wheels will decrease with use. Adjust the tools rests and sparks guards accordingly to maintain a distance of 1/16" from the wheel.

6. DO NOT STAND IN FRONT OF THE BENCH GRINDER DURING START-UP

To avoid potential injury caused by debris ejected from a damaged wheel, stand to one side of the Bench

Grinder when starting the unit. While standing to the side, turn the unit on, wait one minute until the unit comes up to full speed before grinding.

7. DO NOT OPERATE IN THE VICINITY OF FLAMMABLE MATERIALS

Bench grinders will produce sparks and debris during grinding. Be sure to keep flammable materials from the immediate vicinity. Be sure to clean the grinding dust from the back of the Bench Grinder frequently.

8. DO NOT FORCE THE WORKPIECE AGAINST THE GRINDING WHEEL

9. Excessive force especially to a cold grinding wheel may damage the wheel and create a dangerous situation.

Apply the workpiece against the wheel slowly and use firm, steady even pressure. Do not grind against the sides of the grinding wheel and do not apply coolant direct to the grinding wheel.

10. KEEP ALL WHEEL GUARDS IN PLACE

Do not use the bench grinder with the wheel guards removed.

11. KEEP THE TOOL RESTS FIRMLY TIGHTENED

Inspect and re-tighten tools rests before each use.

12. USE THE SUPPLIED WHEEL DRESSER

Always use the supplied wheel dresser to resurface the face of the grinding wheel.

ELECTRICAL REQUIREMENTS

GROUNDING INSTRUCTIONS

- **IN THE EVENT OF A MALFUNCTION OR BREAKDOWN**, grounding provides a 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 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 receptacle, have the proper receptacle installed by a qualified electrician.

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

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

- **USE ONLY 3-WIRE EXTENSION CORDS THAT HAVE 3-PRONG GROUNDING PLUGS AND 3-POLE RECEPTACLES THAT ACCEPT THE TOOL'S PLUG. REPAIR OR REPLACE DAMAGED OR WORN CORD IMMEDIATELY.**

GUIDELINES FOR EXTENSION CORDS

- **USE PROPER EXTENSION CORD.**

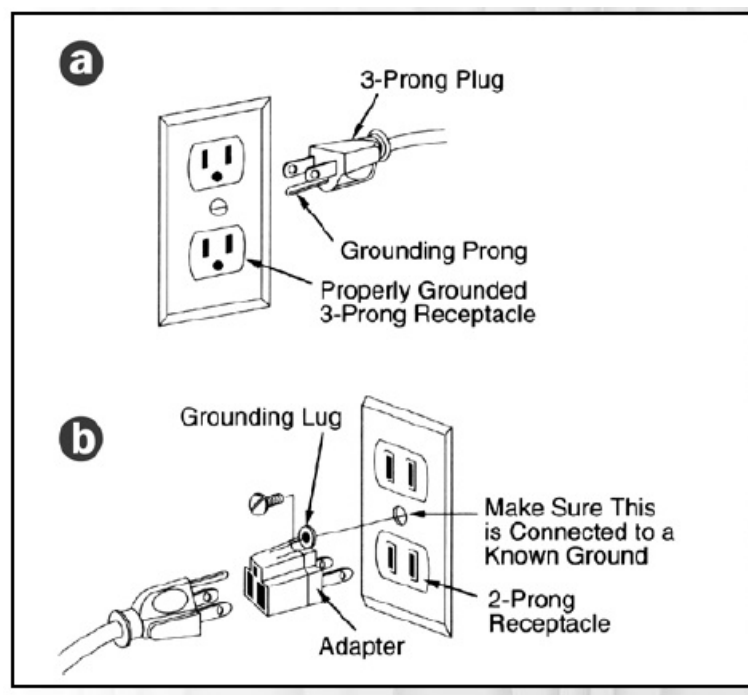
Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and cause overheating. The table below shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

- **BE SURE YOUR EXTENSION CORD IS PROPERLY WIRED** and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than # 12 wire and should be protected with a 15 Amp time delay fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

This tool is intended for use on a circuit that has a receptacle like the one illustrated in Figure . Figure shows a 3-prong electrical plug and receptacle that has a grounding conductor. If a properly grounded receptacle is not available, an adapter (Figure) can be used to temporarily connect this plug to a 2-contact grounded receptacle. The temporary adapter should be used only until a properly grounded receptacle can be installed by a qualified technician. The adapter (Figure) has a rigid lug extending from it that **MUST** be connected to a permanent earth ground, such as a properly grounded receptacle box. The Canadian Electrical Code prohibits the use of the adapters.

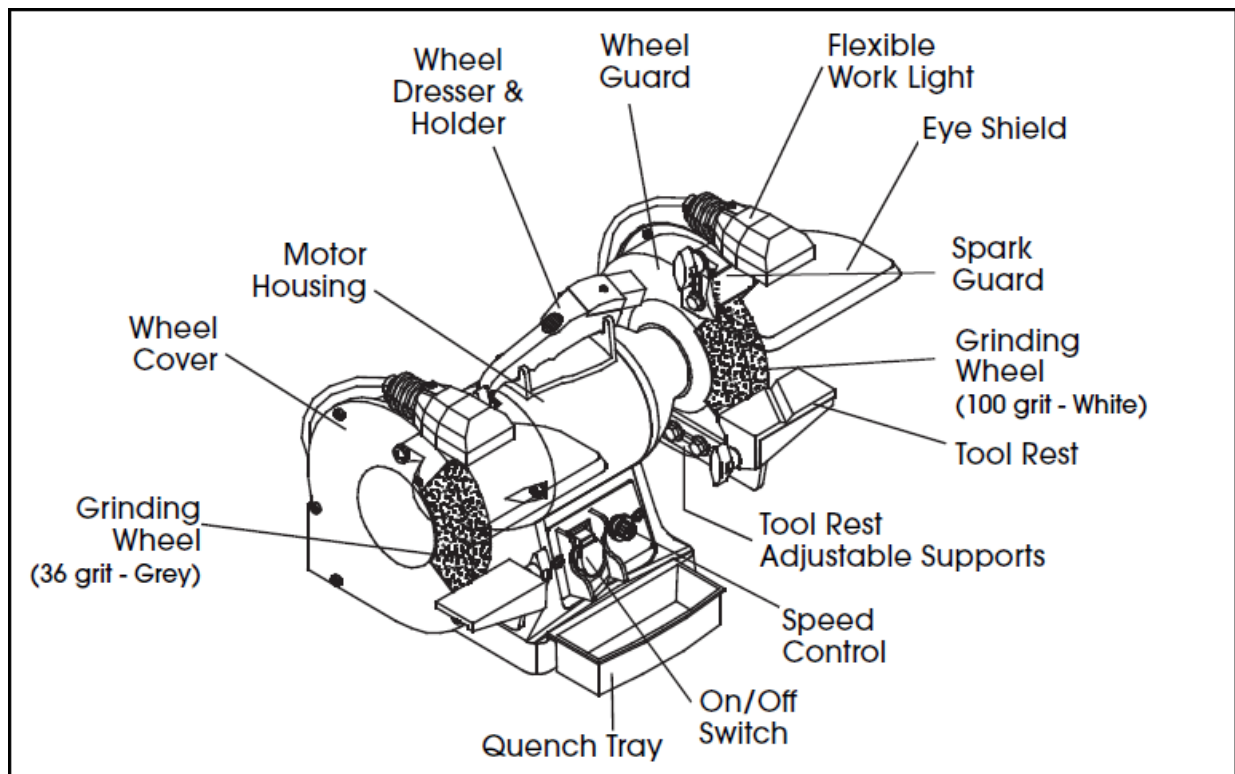
- In all cases, make certain the receptacle is properly grounded. If you are not sure, have a qualified electrician check the receptacle.
- This tool is for indoor use only. Do not expose to rain or use in damp locations.



his tool must be grounded while in use to protect the operator from electrical shock.

MINIMUM GAUGE FOR EXTENSION CORDS (AWG)					
(When using 120 volts only)					
AMPERE	RATING	TOTAL LENGTH OF CORD IN FEET			
More than	not more than	25'	50'	100'	150'
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	not recommended	

IDENTIFICATION OF PARTS & COMPONENTS



- **WHEEL GUARD** – Covers the grinding wheels and protects against accidental contact.
- **WHEEL COVER** – Covers the grinding wheels and provides access for routine maintenance.
- **MOTOR HOUSING** – Contains the electric motor.
- **EYE SHIELD** – Protective see-thru Lexan shields to prevent any loose debris from coming into contact with the operator.
- **FLEXIBLE WORK LIGHT** – Illuminates the tool rest/work-piece area in front of the grinding wheel
- **SPARK GUARDS** – Prevents hot sparks and debris from coming into contact with the operator.
- **TOOL REST ADJUSTABLE SUPPORTS** – Allows the operator to position the tool rest closer to the wheel as needed as the wheel decreases in diameter due to wear.
- **TOOL RESTS** – Used to support the workpiece that is being ground. Adjustable for grinding angled surfaces.
- **GRINDING WHEEL 100 GRIT** – Used to remove light material from workpiece.
- **GRINDING WHEEL 36 GRIT** – Used to remove rough material from workpiece.
- **ON/OFF SWITCH** – Used to turn “ON” and turn “OFF” the grinder and the worklights.
- **WHEEL DRESSER & HOLDER** – Used to clean, smooth and resurface the Grinding Wheels.
- **QUENCH TRAY** – Used to cool the workpiece after grinding.
- **VARIABLE SPEED CONTROL** – Controls grinding wheel speed.

ASSEMBLY INSTRUCTIONS

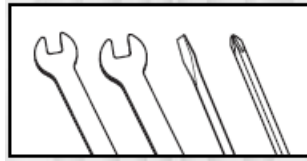
For your own safety, never connect the plug to power source outlet until all assembly and adjustment steps are completed, and you have read and understood the safety and operating instructions.

TOOLS NEEDED

- A 10 mm and 12 mm open-end wrench (not included) will be required to install the Tool Rest Assemblies and

the spark guards. A Phillips or flat-head screwdriver to remove the wheel covers. A large flat head screwdriver for removing or changing grinding wheels.

- **NOTE:** All images show right hand side installation. Repeat these procedures to install left hand side components.



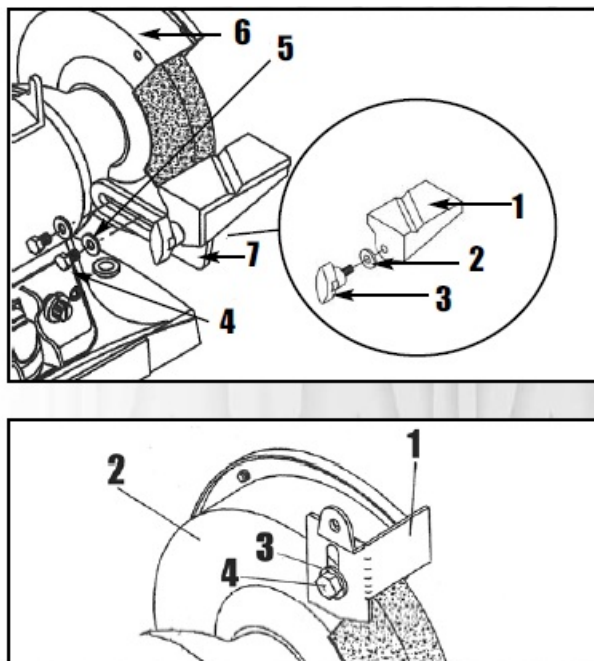
INSTALLING THE TOOL RESTS

The Bench Grinder is supplied with two different Tool Rest assemblies. The Left Side Tool Rest is entirely flat. The Right Side Tool Rest is also flat, but has a "V" groove for sharpening drill bits.

1. Attach the tool rest (1) to the support (7) using the flat washer (2) and adjustment knob (3).
2. Thread two bolts (4) through two big washers (5) and the tool rest support (1) and into the wheel housing (6).
3. Adjust the tool rests until they are 1/16" from the grinding wheel. Firmly tighten the hex head bolts holding the support.

INSTALLING THE SPARK GUARDS

1. Install the spark guard (1) to the inside surface of the wheel cover (2) using a flat washer (3) and hex head bolt (4).
2. Adjust the spark guards until they are 1/16" from the grinding wheels. Firmly tighten the hex head bolt.

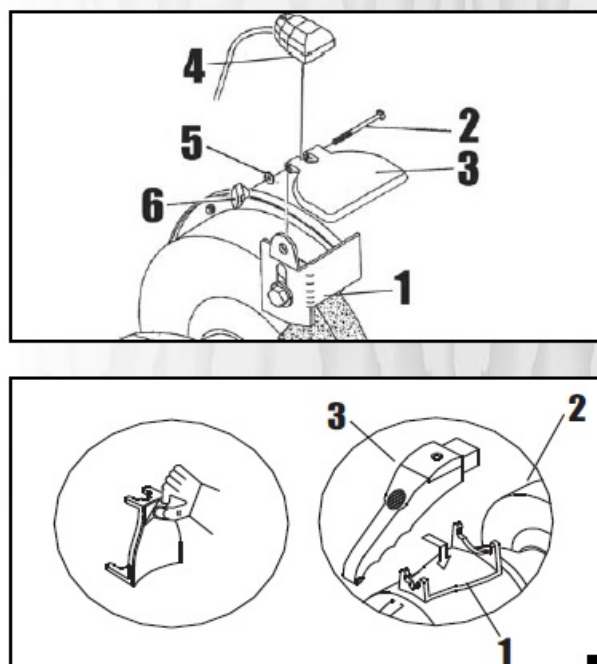


INSTALLING THE EYE SHIELDS

1. Attach the eye shield to the spark guard (1) by inserting the carriage bolt (2) through eye shield (3), work light(4) and spark guard (1) as shown.
2. Secure the assembly to the spark guard using a flat washer (5) and lock knob (6) and tighten until the eye shield remains in the desired position.

INSTALLING THE WHEEL DRESSER

1. Peel off the adhesive backing from the wheel dresser holder (1).
2. Stick the holder on the top of the bench grinder (2).
3. Insert the wheel dress (3) on the holder.



QUENCH TRAY

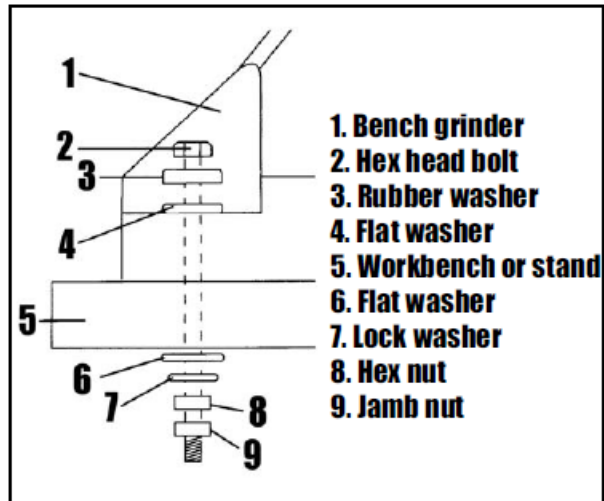
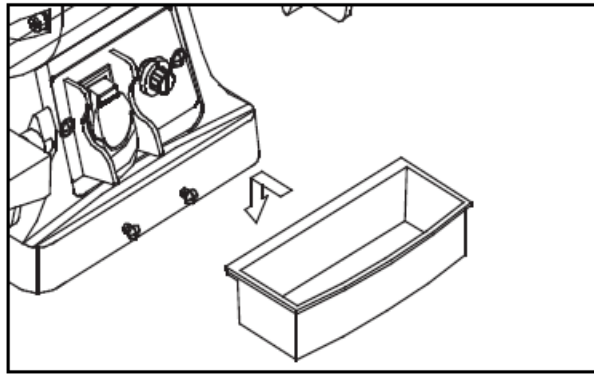
The quench tray is provided to cool the workpiece during and after grinding.

1. Slide the quench tray onto the base of the bench grinder as shown.
2. Partially fill the quench tray with water. Do not over fill. Do not use any liquid in the quench tray other than water.
3. Dip the workpiece into the water after grinding to cool it.
4. Do not apply water directly onto the grinding wheels.

SECURING THE GRINDER TO A WORK SURFACE

Note: To avoid tipping over or sliding during operations, the grinder should be secured to the work surface.

1. The base of the grinder has 2 mounting holes allowing the user to permanently mount the grinder to a workbench or stand.
2. Place the grinder on the work surface, mark the holes on the work surface and drill 3/8" holes. Use appropriate length bolts, washers and nuts to secure to secure the grinder to the bench.
3. If the workbench moves or shakes during operation, the workbench must be fastened to the floor.
4. The grinder is designed for use on horizontal surfaces only. Motor damage may result when mounted on a non-horizontal surface.

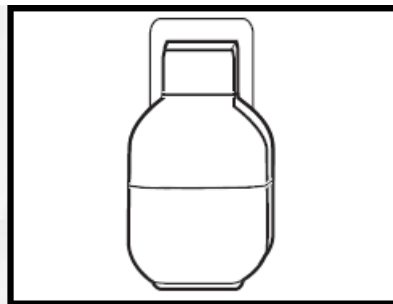


OPERATIONS

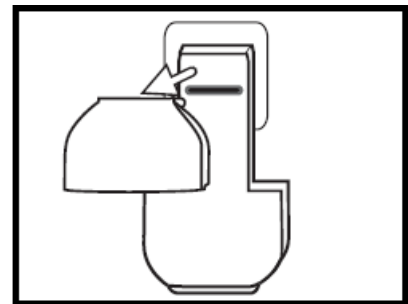
ADJUSTMENTS AND CONTROLS POWER “ON/OFF” SWITCH



POWER ON



POWER OFF

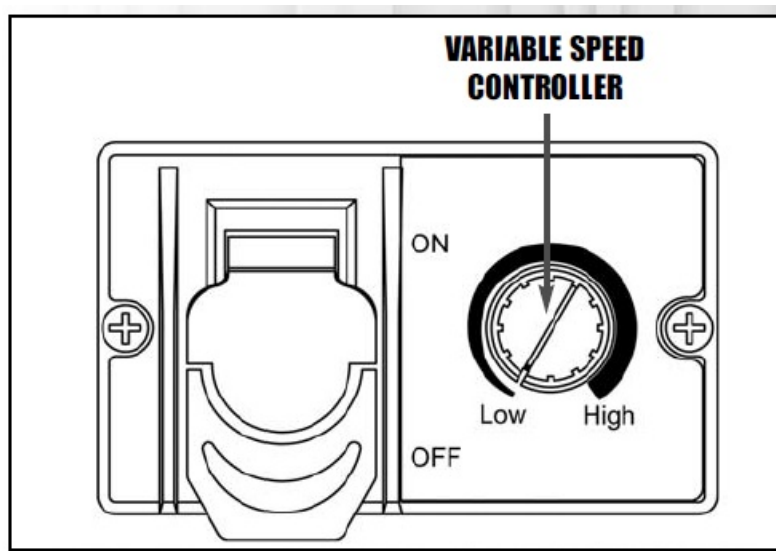


SAFETY KEY
(PREVENTS START-UP WHEN REMOVED)

Make sure the switch is in the “OFF” position before plugging in the power cord.
Remove the switch key whenever the grinder is not in use. Place it in a safe place and out of the reach of children.

VARIABLE SPEED CONTROL

The grinder is equipped with a variable speed control. When the speed control knob is turned completely counter-clockwise (low) the RPM is at 2000. Wheel speed increases as the knob is turned clockwise. When the speed control knob is turned completely clockwise (high) the RPM is 3450.



FLEXIBLE WORK LIGHT

The work light functions of the same switch as the grinder. To turn the grinder switch on and off. To reduce the risk of fire, use a 110V 10 Watt (or less) medium base, track light bulb. Do not use a bulb that extends past the end of the light housing.

GRINDER OPERATION

The bench grinder is designed for hand held grinding, sharpening, and cleaning operations. **ALWAYS WEAR EYE PROTECTION!** Hot sparks are produced during grinding operations.

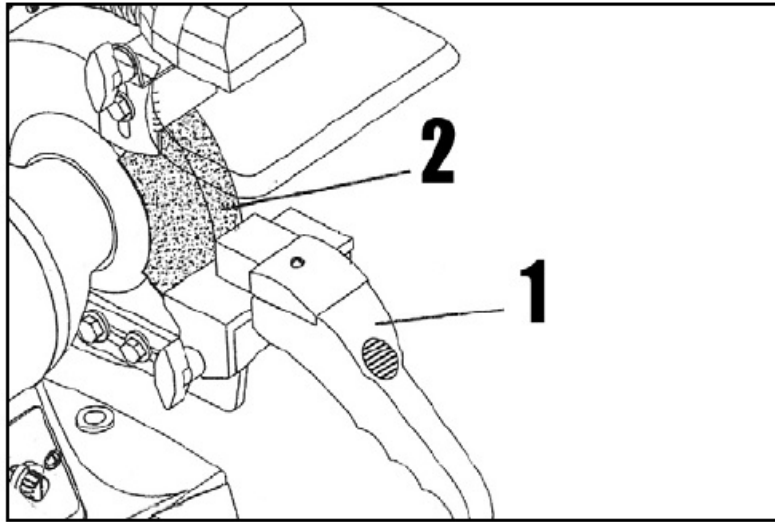
1. The power switch must be in the "OFF" position.
2. Make sure the spark guards and tool rests are set 1/16" from the grinding wheels. Before starting the machine, turn the grinding wheel by hand one full turn to make certain the wheels do not come into contact with the spark guards or tool rests.
3. Stand to the side of the bench grinder and plug in the power cord to the correct power source.
4. Remain to the side of the bench grinder and turn it "ON".
5. Allow the grinding wheels to come up to a steady speed for at least one minute.
6. Adjust the eye shields as needed and place the workpiece on the appropriate tool rest for the desired operation.
7. Slowly 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. **NEVER GRIND ON THE SIDES OF THE GRINDING WHEELS.**
8. For drill bits, lay the drill bit flat in the "V" groove. Firmly hold on to the drill bit shank. Slide the drill bit toward the grinding wheel until it lightly touches. Keep the drill bit flat to the plate and rotate the drill bit.
9. Dip the hot end of the workpiece into the water in the quench tray to cool it as needed.
10. When finished grinding turn "OFF" the machine by pushing down on the Power Switch. **CAUTION:** It will take a few minutes for the grinding wheels to come a complete stop.
11. Avoid contact with the housing until it is cool. Unplug the Bench Grinder and to prevent unauthorized use, remove the switch key and store it in a safe place.

USING THE WHEEL DRESSER

The Wheel Dresser is used on the grinding wheels to remove imperfections or built-up material as well as to square up or re-surface the grinding edge of the wheels.

1. Turn "ON" the Bench Grinder. Let the grinding wheel come up to a steady speed for one minute.

2. Place the Wheel Dresser (1) flat on the Tool Rest with the flat face of the dressing stone facing the grinding wheel.
3. Firmly hold the handle of the Wheel Dresser and slowly move the Wheel Dresser forward making light contact with the grinding wheel (2). Move the Wheel Dresser from side to side across the Tool Rest until the edge of the wheel is square and the surface is clean.
4. When finished turn "OFF" the machine and let the grinding wheel come to a complete stop.
5. Inspect the grinding wheel for any damage.
6. The grinding wheel may now be slightly smaller in diameter after dressing. Readjust the tool rests and spark guards as needed to maintain a 1/16" clearance to the grinding wheel.



CHANGING GRINDING WHEELS

To avoid injury from accidental starting, always turn the switch off and unplug the machine from the power source before changing the wheels.

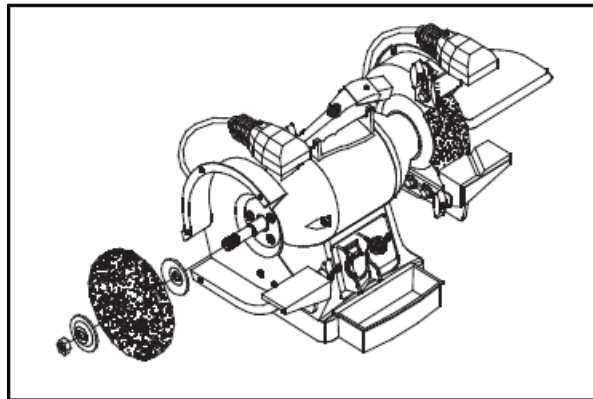
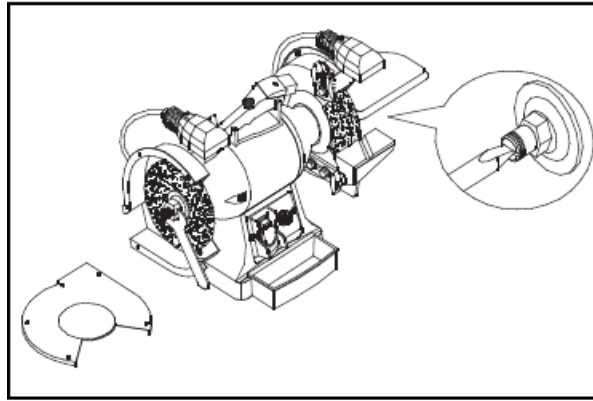
NOTE: Do not remove the cardboard discs (blotters) from the sides of a new wheel because they work with the flanges to hold and secure the wheel on the arbor. Inspect the new wheel for cracks or other visible signs of damage. Discard the wheel if any such damage is found.

Two end plates will need to be removed for wheel changes.

1. Loosen the lock knobs and remove the tool rests.
2. Remove the screws and take off the end-plate.
3. Hold the drive shaft on the left hand side by inserting the tip of a large-size plain flat head screwdriver into the slotted end of the arbor shaft, and remove the locking nut with an open end wrench.
4. Remove the outer flange, slide off the old wheel and put a new one on.
5. Re-install the flange and the nut.
6. Position a screwdriver in the slot in the arbor shaft, and re-tighten the nut on the arbor.

Note: Over tightening can crack the wheel.

7. Re-install the end-plate.
8. Re-install and adjust the tool rests as described in the "Set-Up and Assembly".



MAINTENANCE

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.

- **CAUTION:** Remove and replace grinding 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.

Repairs to the Bench Grinder should be performed by qualified and trained personnel only. Contact your nearest General International dealer for authorized service. Unauthorized repairs or replacement with non-factory parts could cause serious injury to the operator, damage to the Bench Grinder and void the warranty.

RECOMMENDED OPTIONAL ACCESSORIES FOR YOUR GRINDER

We offer a large variety of products to help you increase productivity, accuracy and safety when using your grinder. Here's is but a small sampling of the accessories that are available form your local General International dealer.



- **Stand #15-700**

- 34" (863 mm). high stand for 6" or 8" bench grinder. Heavy duty cast iron table & base, tubular steel column.

- **Electronic Earmuffs #99-200**

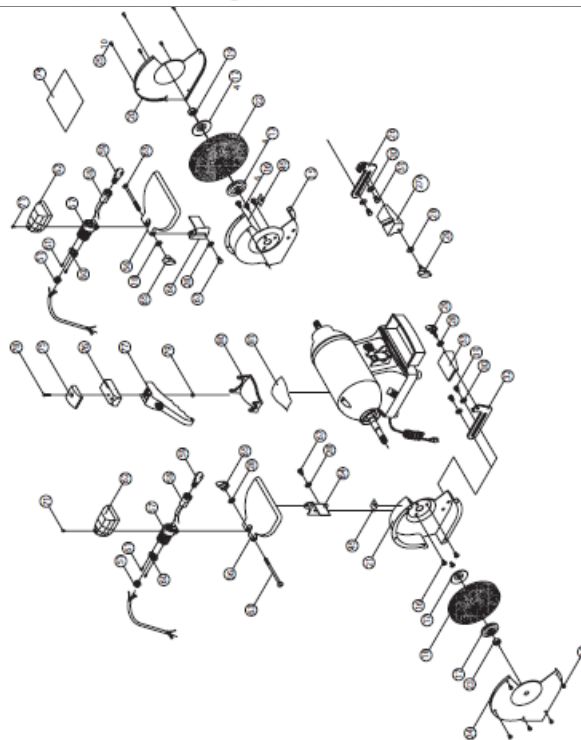
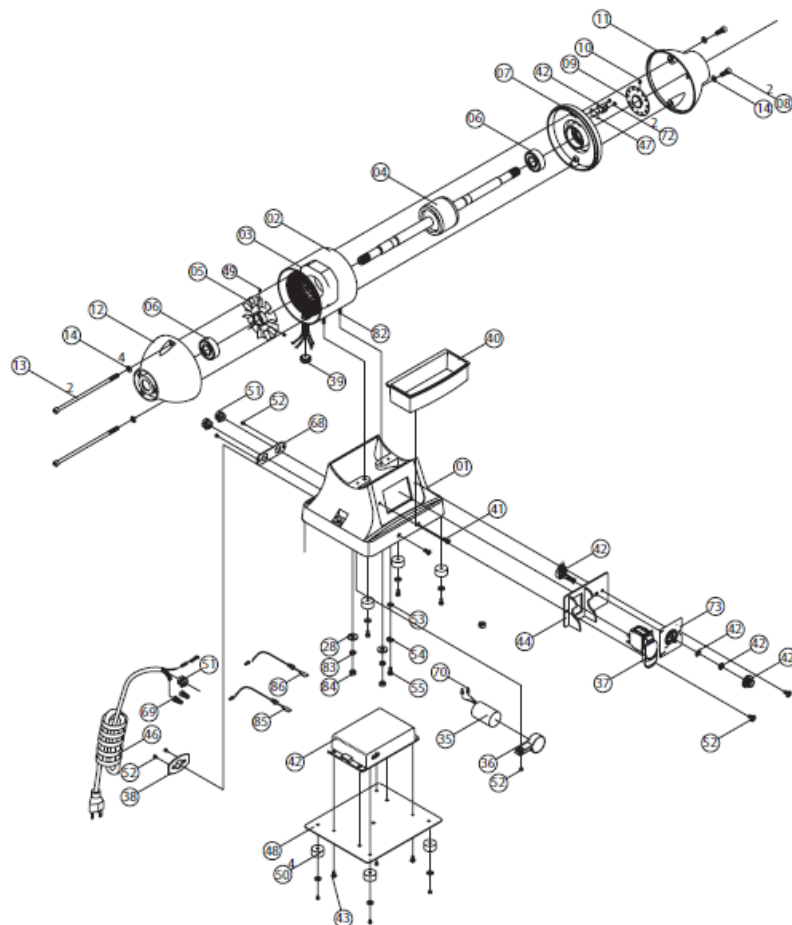
- Highly efficient noise reduction to help protect your hearing when operating power tools.

- **Stand #15-710**

- 34" (863 mm) high stand for 6", 8" or 10" bench grinders. Heavy duty cast iron table & base, tubular steel column. Water tray Included.



OVERVIEW



PARTS LIST 15-660

PART NO.	DESCRIPTION	SPECIFICATION	QTY	
15660-01	BASE		1	

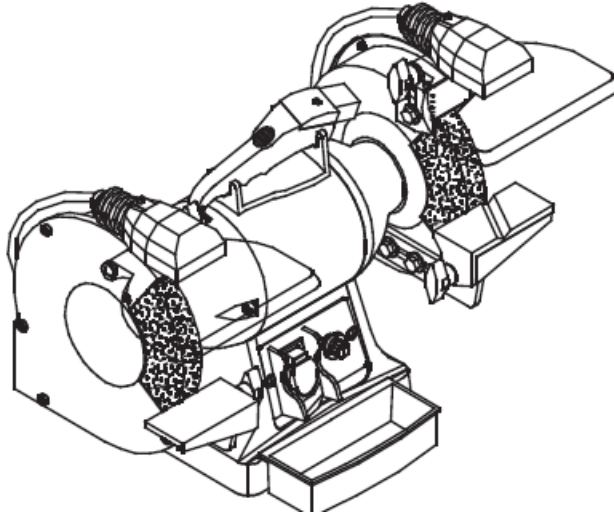
	15660-02	SLEEVE		1
	15660-03	STATOR		1
	15660-04	ROTOR		1
	15660-05	MOTOR FAN		1
	15660-06	BEARING	6202ZZ	2
	15660-07	INNER MOTOR GUARD (R)		1
	15660-08	SLEEVE SCREW	M5X12L	2
	15660-09	SCREEN PLATE		1
	15660-10	SET SCREW	M4X4L	1
	15660-11	OUTER MOTOR GUARD (R)		1
	15660-12	OUTER MOTOR GUARD (L)		1
	15660-13	SLEEVE SCREW	M5X125L	2
	15660-14	SPRING WASHER	M5	4
	15660-15	INNER WHEEL GUARD (R)		1
	15660-16	PHILLIPS HEAD SCREW	1/4"X3/8"	6
	15660-17	WHEEL FLANGE		4
	15660-18	GRINDING WHEEL	GREY – 36 GRIT	1
	15660-19	HEX NUT	1/2"	1
	15660-20	OUTER WHEEL GUARD (R)		1
	15660-21	INNER WHEEL GUARD (L)		1
	15660-22	GRINDING WHEEL	WHITE – 100 GRIT	1
	15660-23	HEX NUT	1/2"	1
	15660-24	OUTER WHEEL GUARD (L)		1
	15660-25	PHILLIPS HEAD SCREW	3/16"X1/4"	10
	15660-26	TOOL REST SUPPORT(R)		1
	15660-27A	TOOL REST (R)		1
	15660-28	FLAT WASHER	1/4"X16	8
	15660-29	KNOB		2
	15660-30	FLAT WASHER	5/16"X18	4
	15660-31	HEX SCREW	5/16"X1/2"	4
	15660-32	TOOL REST SUPPORT (L)		1
	15660-33	TOOL REST (L)		1
	15660-35	CONDENSER		1

	15660-36	FIXTURE CLIP		1
	15660-37	SWITCH		1
	15660-38	PLATE		1
	15660-39	STRAIN RELIEF		1
	15660-40	QUENCH TRAY		1
	15660-41	PHILLIPS HEAD SCREW	3/16"X3/8"	2
	15660-42	I.C. BOX ASSEMBLY	5 COMPONENTS	1
	15660-43	SET SCREW	M3X8L	2
	15660-44	SWITCH PLATE		1
	15660-45	DIRECTION INDICATOR LABEL		2

PARTS LIST 15-660

	PART NO.	DESCRIPTION	SPECIFICATION	QTY	
15660-46		POWER CORD W/PLUG		1	
15660-47		FIBER WASHER		1	
15660-48		BASE PLATE		1	
15660-49		PHILLIPS HEAD SCREW W/ WASH ER	3/16" X 3/8"	2	
15660-50		PAD W/WASHER & SCREW		4	
15660-51		STRAIN RELIEF BUSHING		5	
15660-52		PHILLIPS HEAD SCREW W/ WASH ER	3/16"X1/4"	7	
15660-53		SPROCKET WASHER	M5	1	
15660-54		COPPER WASHER		1	
15660-55		PHILLIPS HEAD SCREW W/ WASH ER	3/16"X1/4"	1	
15660-56		EYE SHIELD		2	
15660-57		BAYONET CAP		2	
15660-58		LIGHT HOLDER		2	
15660-59		BULB		2	
15660-60		WIRE PLATE		2	
15660-61		SELF-TAP. SCREW	M3X5L	4	
15660-62		LIGHT COVER		2	

15660-63	CARRIAGE BOLT		2	
15660-64	SPARK GUARD		1	
15660-65	KNOB		2	
15660-66	SPARK GUARD		1	
15660-67	HEX BOLT		2	
15660-68	LIGHT WIRE PLATE		1	
15660-69	TERMINAL		2	
15660-70	TERMINAL		4	
15660-71	SELF-TAP. SCREW	M3X8L	2	
15660-72	PHILLIPS HEAD SCREW	M3X10L	2	
15660-73	SPEED CONTROLLER LABEL		1	
15660-74	NAME PLATE		1	
15660-75	WHEEL DRESSER COVER		1	
15660-76	DRESSING STONE		1	
15660-77	DRESSER HANDLE		1	
15660-78	PHILLIPS HEAD SCREW	3/16"X1-1/4"	1	
15660-79	HEX NUT	3/8"	1	
15660-80	DRESSER HOLDER		1	
15660-81	ADHESIVE TAPE		1	
15660-82	HEADLESS SCREW	1/4"X20L	2	
15660-83	SPRING WASHER	1/4"	2	
15660-84	NUT	1/4"	2	
15660-85	WIRE (BLACK)		1	
15660-86	WIRE (WHITE)		1	



- 8360, Champ-d'Eau, Montreal (Quebec) Canada H1P 1Y3
- **Tel.:** (514) 326-1161
- **Fax :** (514) 326-5565 Parts & Service
- **Fax :** (514) 326-5555 Order Desk
- orderdesk@general.ca
- www.general.ca

IMPORTANT: When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.

Documents / Resources



[GENERAL 15-660 Variable Speed Bench Grinder](#) [pdf] Instruction Manual
15-660 Variable Speed Bench Grinder, 15-660, Variable Speed Bench Grinder, Speed Bench G
rinder, Bench Grinder, Grinder

References

- [HJM Index of /](#)
- [Manual-Hub.com - Free PDF manuals!](#)
- [User Manual](#)