

# Utility Sharpener (Model GR050)



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ESPAÑOL: PÁGINA 11

# GENERAL SAFETY RULES

Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. **REMEMBER:** Your personal safety is your responsibility.

This machine was designed for certain applications only. Delta Machinery strongly recommends that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, **DO NOT** use the machine until you have first contacted Delta to determine if it can or should be performed on the product.

**Technical Service Manager  
Delta Machinery  
4825 Highway 45 North  
Jackson, TN 38305**

(IN CANADA: 505 SOUTHGATE DRIVE, GUELPH, ONTARIO N1H 6M7)



## **WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY**

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.** Learn the tool's application and limitations as well as the specific hazards peculiar to it.

2. **KEEP GUARDS IN PLACE** and in working order.

3. **ALWAYS WEAR EYE PROTECTION.** Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty. These safety glasses must conform to ANSI Z87.1 requirements. **NOTE:** Approved glasses have Z87 printed or stamped on them.

4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "on".

5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.

6. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.

7. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.

8. **MAKE WORKSHOP CHILDPROOF** – with padlocks, master switches, or by removing starter keys.

9. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.

10. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

11. **WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

12. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

13. **DON'T OVERREACH.** Keep proper footing and balance at all times.

14. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

15. **DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters, etc.

16. **USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause hazards or risk of injury to persons.

17. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in "OFF" position before plugging in power cord. In the event of a power failure, move switch to the "OFF" position.

18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.


20. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

21. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

22. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL. DO NOT USE 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.

23. **MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY** while motor is being mounted, connected or reconnected.

24. **THE DUST GENERATED** by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

25.  **WARNING: 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. Some examples of these chemicals are:

- lead from lead-based paints,
  - crystalline silica from bricks and cement and other masonry products, and
  - 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.

**SAVE THESE INSTRUCTIONS.**

**Refer to them often and use them to instruct others.**

# ADDITIONAL SAFETY RULES FOR UTILITY SHARPENERS



**WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY.**

1. **DO NOT OPERATE THIS MACHINE** until it is **assembled** and **installed** according to the instructions.
2. **OBTAIN ADVICE FROM YOUR SUPERVISOR, instructor, or another qualified person** if you are not familiar with the operation of this machine.
3. **FOLLOW ALL WIRING CODES** and recommended electrical connections.
4. **TO AVOID THE POSSIBILITY OF THE APPLIANCE PLUG OR RECEPTACLE GETTING WET, POSITION MACHINE TO ONE SIDE OF A WALL MOUNTED RECEPTACLE TO PREVENT WATER FROM DRIPPING ONTO THE RECEPTACLE OR PLUG.** The user should arrange a “drip loop” in the cord connecting the machine to a receptacle. The “drip loop” is that part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle.
5. **IF THE PLUG OR RECEPTACLE DOES GET WET, DON'T UNPLUG THE CORD.** Disconnect the fuse or circuit breaker that supplies power to the machine. Then unplug and examine for presence of water in the receptacle.
6. **GROUND FAULT CIRCUIT INTERRUPTER (GFCI) PROTECTION SHOULD BE PROVIDED ON THE CIRCUIT(S) OR OUTLET(S) TO BE USED WITH THE MACHINE.**
7. **INSPECT GRINDING WHEELS** for chips or cracks before starting the machine. **DO NOT USE THE UTILITY SHARPENER IF THE WHEEL IS DAMAGED IN ANY WAY.**
8. **ADJUST TOOL RESTS** close to the grinding wheel (1/8" (3.8mm) separation or less). Tighten the tool rest securely to prevent shifting positions.
9. **STAND TO ONE SIDE** before turning the machine “ON”.
10. **NEVER GRIND ON A COLD GRINDING WHEEL.** Run the grinder at idle speed for one full minute before applying the workpiece.
11. **NEVER START THE MACHINE** with the workpiece against the grinding wheel.
12. **NEVER GRIND NEAR FLAMMABLE GAS OR LIQUIDS.** Sparks can create a fire or an explosion.
13. **AVOID AWKWARD OPERATIONS AND HAND POSITIONS** where a sudden slip could cause a hand to move into the grinding wheel.
14. **KEEP ARMS, HANDS, AND FINGERS** away from the grinding wheel.
15. **HOLD WORK FIRMLY** against the tool rests.
16. **DRESS THE GRINDING WHEEL** on the face only. Dressing the side of the grinding wheel could cause it to become too thin for safe use.
17. **GRIND A WORKPIECE** using the face of the grinding wheel only.
18. **DO NOT TOUCH** the ground portion of a workpiece until it has cooled sufficiently. Grinding creates heat.
19. **TURN THE MACHINE “OFF” AND DISCONNECT THE MACHINE** from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
20. **TURN THE MACHINE “OFF”,** disconnect the machine from the power source, and clean the table/work area before leaving the machine. If your machine has a switch lock-out feature, **LOCK THE SWITCH IN THE “OFF” POSITION** to prevent unauthorized use.
21. **ADDITIONAL INFORMATION** regarding the safe and proper operation of this tool is available from the Power Tool Institute, 1300 Summer Avenue, Cleveland, OH 44115-2851. Information is also available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201. Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

**SAVE THESE INSTRUCTIONS.  
Refer to them often  
and use them to instruct others.**

# POWER CONNECTIONS

**GROUND FAULT CIRCUIT INTERRUPTER (GFCI) PROTECTION SHOULD BE PROVIDED ON THE CIRCUIT(S) OR OUTLET(S) TO BE USED FOR THE UTILITY SHARPENER.** A separate electrical circuit should be used for your machines. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and matching receptacle which will accept the machine's plug. Before connecting the machine to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine. All line connections should make good contact. Running on low voltage will damage the motor.

 **WARNING: DO NOT EXPOSE THE MACHINE TO RAIN OR OPERATE THE MACHINE IN DAMP LOCATIONS.**

## MOTOR SPECIFICATIONS

Your machine is wired for 120 volt, 60 HZ alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position.

## GROUNDING INSTRUCTIONS

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

1. All grounded, cord-connected machines:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green 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 personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded.


Use only 3-wire extension cords that have 3-prong grounding type plugs and matching 3-conductor receptacles that accept the machine's plug, as shown in Fig. A.

Repair or replace damaged or worn cord immediately.

2. Grounded, cord-connected machines intended for use on a supply circuit having a nominal rating less than 150 volts:

If the machine is intended for use on a circuit that has an outlet that looks like the one illustrated in Fig. A, the machine will have a grounding plug that looks like the plug illustrated in Fig. A. A temporary adapter, which looks like the adapter illustrated in Fig. B, may be used to connect this plug to a matching 2-conductor receptacle as shown in Fig. B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. Whenever the adapter is used, it must be held in place with a metal screw.

**NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electric Code.**

 **WARNING: IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE.**

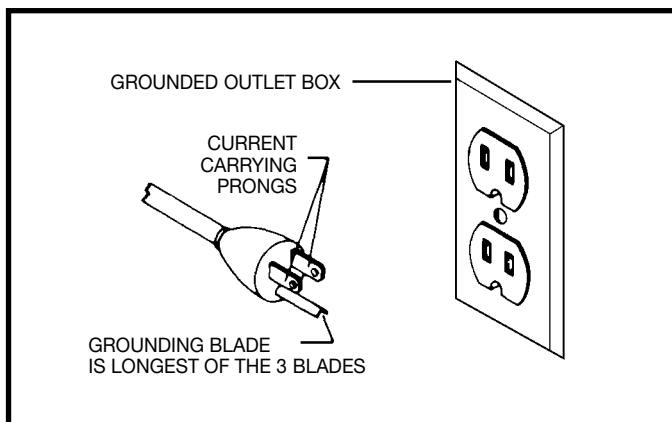


Fig. A

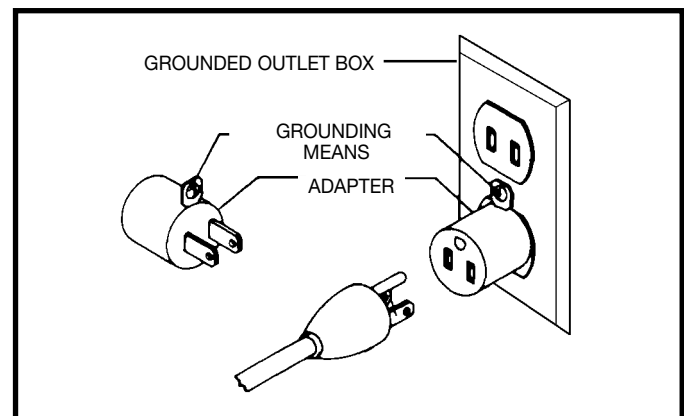


Fig. B

# EXTENSION CORDS

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and matching receptacle which will accept the machine's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the machine. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Fig. D, shows the correct gauge to use depending on the cord length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

<b>MINIMUM GAUGE EXTENSION CORD</b>			
RECOMMENDED SIZES FOR USE WITH STATIONARY ELECTRIC MACHINES			
Ampere Rating	Volts	Total Length of Cord in Feet	Gauge of Extension Cord
0-6	120	up to 25	18 AWG
0-6	120	25-50	16 AWG
0-6	120	50-100	16 AWG
0-6	120	100-150	14 AWG
6-10	120	up to 25	18 AWG
6-10	120	25-50	16 AWG
6-10	120	50-100	14 AWG
6-10	120	100-150	12 AWG
10-12	120	up to 25	16 AWG
10-12	120	25-50	16 AWG
10-12	120	50-100	14 AWG
10-12	120	100-150	12 AWG
12-16	120	up to 25	14 AWG
12-16	120	25-50	12 AWG
12-16	120	GREATER THAN 50 FEET NOT RECOMMENDED	

Fig. D

# OPERATING INSTRUCTIONS

## FOREWORD

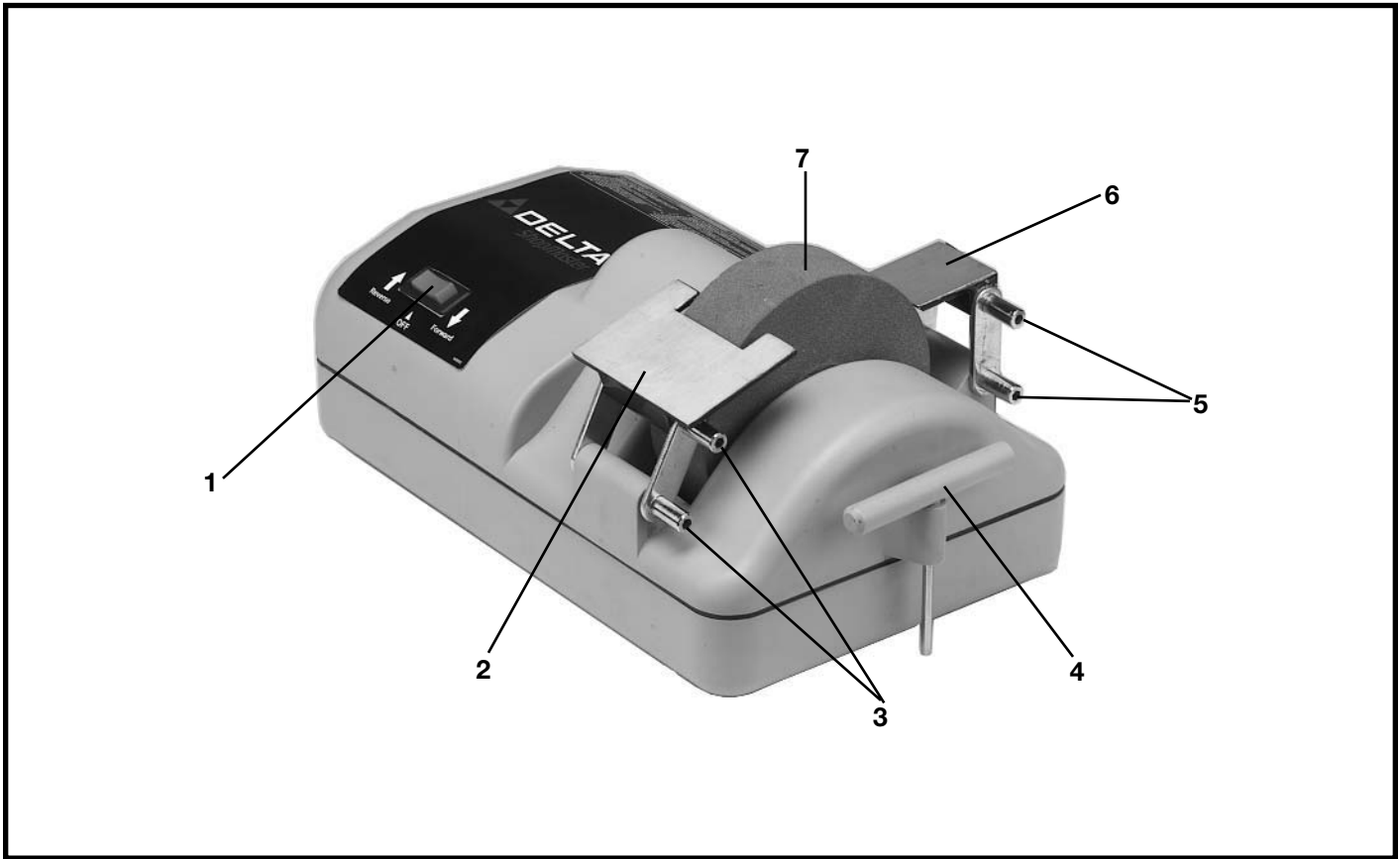
Delta ShopMaster Model GR050 Utility Sharpener is a valuable addition to any shop. The Utility Sharpener can be used to sharpen most flat cutting tools.

## UNPACKING AND CLEANING

Carefully unpack the machine and all loose items from the shipping container(s). Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the unpainted surfaces with a good quality household floor paste wax.

**NOTICE: THE MANUAL COVER PHOTO ILLUSTRATES THE CURRENT PRODUCTION MODEL. ALL OTHER ILLUSTRATIONS ARE REPRESENTATIVE ONLY AND MAY NOT DEPICT THE ACTUAL COLOR, LABELING OR ACCESSORIES AND MAY BE INTENDED TO ILLUSTRATE TECHNIQUE ONLY.**

# UTILITY SHARPENER COMPONENTS



**Fig. 2**

1. Forward / Off / Reverse Control Switch
2. Front Tool Rest
3. Front Tool Rest Adjusting Screws
4. Hex Wrench
5. Rear Tool Rest Adjusting Screws
6. Rear Tool Rest
7. Grinding Wheel



# FILLING UTILITY SHARPENER WITH WATER

1. ⚠️ **WARNING: DISCONNECT MACHINE FROM POWER SOURCE.**

2. Place the utility sharpener on a flat surface.

3. Loosen the the front tool rest adjusting screw (A) Fig. 3, and move the front tool rest away from the grinding wheel.

4. Pour approximately 3 ounces of water into the front of water trough (B) Fig. 3. **CAUTION: NEVER POUR WATER INTO THE UTILITY SHARPENER WHILE IT IS RUNNING.**

5. ⚠️ **WARNING:** Before connecting the machine to the power circuit, make sure power switch is OFF and the power circuit voltage is the same as that shown on the specification plate. Connect machine to power circuit. To avoid the possibility of the appliance plug or receptacle getting wet, position the machine to one side of a wall mounted receptacle to prevent water from dripping onto the receptacle or plug. The user should arrange a “drip loop” Fig. 4, in the cord connecting the machine to a receptacle. The “drip loop” is that part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle.

6. Turn the power switch “ON”, and let the machine run for one minute. The grinding wheel will absorb some of the water.

7. Turn the power switch “OFF” and disconnect machine from power source.

8. Fill the water trough until the water is almost reaching the level of the drainage opening (A) Fig. 5, in the rear of the machine. The water trough should be checked and refilled periodically during use.

9. Reposition front tool rest, and tighten tool rest adjusting screw. ⚠️ **WARNING:** Always maintain a distance of 1/8" or less between the grinding wheel and the inside edge of the tool rest.

10. Connect machine to power source. ⚠️ **WARNING:** The user should arrange a “drip loop” Fig. 4, in the cord connecting the machine to a receptacle. The “drip loop” is that part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle.

11. When finished grinding with the utility sharpener, disconnect machine from power source and tilt the machine to the rear to drain the water through the opening (A) Fig. 5.

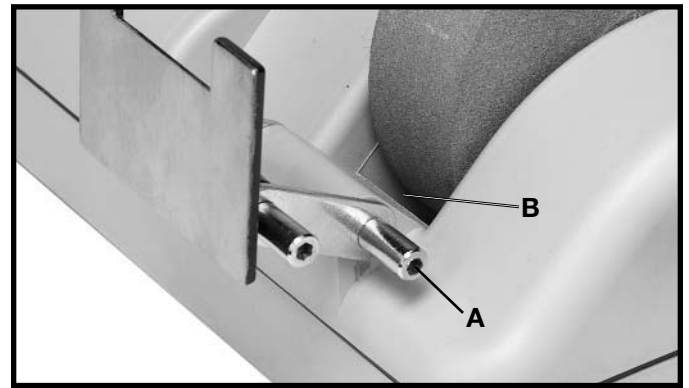


Fig. 3

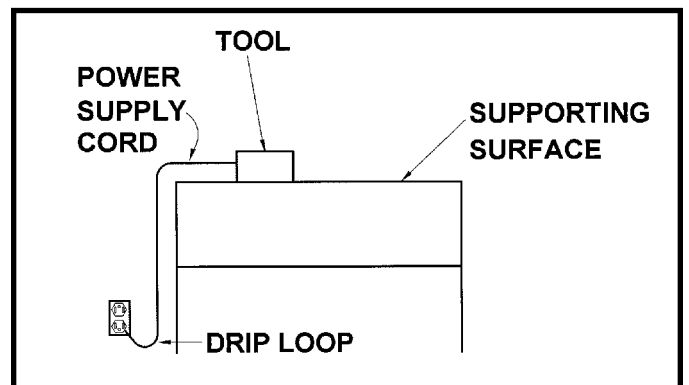


Fig. 4

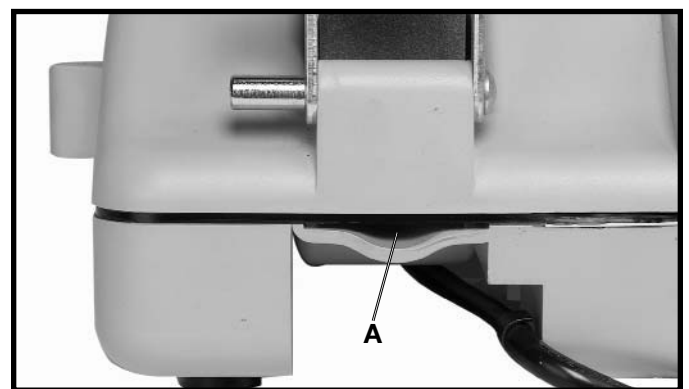


Fig. 5

# OPERATING CONTROLS AND ADJUSTMENTS

## STARTING AND STOPPING UTILITY SHARPENER

The “Forward / Off / Reverse” switch (A) Fig. 6, is located toward the front of the machine. To turn the machine “ON”, move the switch to the “Forward” or “Reverse” position. The wheel will turn in the direction indicated by the arrows. In the “Forward” position, the wheel will rotate toward the front of the machine. In the “Reverse” position, the wheel will rotate toward the rear of the machine. To turn the machine “OFF”, move the switch to the center “OFF” position.



Fig. 6

## TOOL RESTS

Each tool rest assembly (D) Fig. 7, is adjustable so it can be positioned as close to the grinding wheel as possible, giving maximum support to the piece that is being ground. Always maintain a distance of 1/8" or less between the grinding wheel and the inside edge of the tool rest. **⚠️ WARNING:** As the wheels wear down, the tool rest should be adjusted accordingly. When the tool rests are positioned correctly, tighten screws (C) and (F) with hex wrench (G).

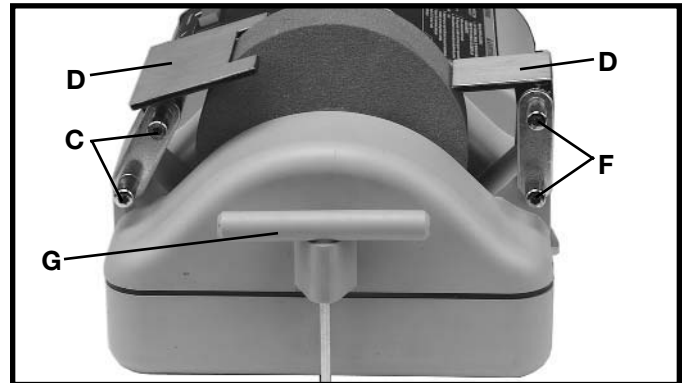


Fig. 7

## SHARPENING HINTS

1. Before sharpening an item, make sure the item is clean, and free of any loose particles.
2. When sharpening an item, use light pressure, and pass the item across the wheel until a fine edge is produced. Heavy pressure will cause the edge to be ragged.
3. Do not sharpen tools, blades, bits, etc, that are bent or cracked. These items should be discarded.
4. The Utility Sharpener should not be used to remove large amounts of material. The Utility Sharpener uses a much finer grit wheel, and rotates at a slower pace than a bench grinder.

## MAINTENANCE


1. **DISCONNECT MACHINE FROM POWER SOURCE.**
2. Clean the machine with a clean dry rag. **⚠️ WARNING: DO NOT USE FLAMMABLE MATERIALS TO CLEAN THE UTILITY SHARPENER.**
3. Inspect the wheel for any chips or cracks.  
**⚠️ WARNING: DO NOT USE THE UTILITY SHARPENER IF THE WHEEL IS DAMAGED IN ANY WAY.**



# NOTES

# ACCESSORIES

A complete line of accessories is available from your Delta Supplier, Porter-Cable • Delta Factory Service Centers, and Delta Authorized Service Stations. Please visit our Web Site [www.deltamachinery.com](http://www.deltamachinery.com) for a catalog or for the name of your nearest supplier.

 **WARNING:** Since accessories other than those offered by Delta have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Delta recommended accessories should be used with this product.



## PARTS, SERVICE OR WARRANTY ASSISTANCE

All Delta Machines and accessories are manufactured to high quality standards and are serviced by a network of Porter-Cable • Delta Factory Service Centers and Delta Authorized Service Stations. To obtain additional information regarding your Delta quality product or to obtain parts, service, warranty assistance, or the location of the nearest service outlet, please call 1-800-223-7278 (In Canada call 1-800-463-3582).



### Two Year Limited Warranty

Delta will repair or replace, at its expense and at its option, any Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to a Delta factory service center or authorized service station with proof of purchase of the product within two years and provides Delta with reasonable opportunity to verify the alleged defect by inspection. Delta may require that electric motors be returned prepaid to a motor manufacturer's authorized station for inspection and repair or replacement. Delta will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta service facility or representative. Under no circumstances will Delta be liable for incidental or consequential damages resulting from defective products. This warranty is Delta's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.