

# MINI SHAPER MODEL G8693 INSTRUCTION MANUAL



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Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemical are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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# **SECTION 1: SAFETY**

### **AWARNING**

# For Your Own Safety Read Instruction Manual **Before Operating This Equipment**

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



**DANGER** Indicates an imminently hazardous situation which, if not avoided, <u>WILL</u> result in death or serious injury.

**AWARNING** Indicates a potentially hazardous situation which, if not avoided, <u>COULD</u> result in death or serious injury.

Indicates a potentially hazardous situation which, if not avoid-A CAUTION ed, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment.

# **AWARNING** Safety Instructions For Power Tools

- 1. KEEP GUARDS IN PLACE and in working order.
- 2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.
- 3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 4. DON'T USE IN DANGEROUS ENVIRON-**MENT.** Don't use power tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.

- 5. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
- 6. MAKE WORK SHOP CHILD PROOF with padlocks, master switches, or by removing starter keys.
- 7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

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### **AWARNING**

# Safety Instructions For Power Tools

9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. Conductor size should be in accordance with the chart below. The amperage rating should be listed on the motor or tool nameplate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

Minimum Gauge for Extension Cords

	LENGTH		
AMP RATING	25ft	50ft	100ft
0-6	18	16	16
7-10	18	16	14
11-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No

- 10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 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 WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **15. DISCONNECT TOOLS** before servicing and changing accessories, such as blades, bits, cutters, and the like.
- **16. REDUCE THE RISK OF UNINTENTION- AL STARTING.** Make sure switch is in off position before plugging in.
- 17. USE RECOMMENDED ACCESSORIES.

  Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- 18. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine 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.
- 19. NEVER LEAVE TOOL RUNNING UNAT-TENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

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### **AWARNING**

# Safety Instructions For Shapers

- 1. Wear eye protection.
- 2. Wear ear protection.
- **3.** Be sure keyed washer is directly under spindle nut and that spindle nut is tight.
- **4.** Feed workpiece against rotation of cutter.
- 5. Do not use awkward hand positions.

- **6.** Keep fingers away from revolving cutter use fixture when necessary.
- 7. Use overhead guard when adjustable fence is not in place.
- **8.** Mini Shaper should be fastened securely to a firm supporting surface.

### WARNING

Like all power tools, there is danger associated with the Model G8693 Mini Shaper. Use the tool with respect and caution to lessen the possibility of mechanical damage or operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

# **AWARNING**

Operation of this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

### **A**CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment or poor work results.

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# **SECTION 2: CIRCUIT REQUIREMENTS**

# 110V Operation

Your G8693 Mini Shaper is prewired for 110 volt, single phase operation. The ¾" H.P. motor draws approximately 2.2 amps. We strongly recommend fusing your Mini Shaper at 15 amps. Fusing higher will not adequately protect the motor.

Although the G8693 Mini Shaper does not draw a large load, if you're using a circuit that is already close to capacity, it might blow a fuse or trip a circuit breaker. If an unusual load does not exist and power failure still occurs, have the circuit inspected by a qualified electrician.



# Grounding

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 tool 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.

# **AWARNING**

If you are unsure about the quality or condition of the circuit you plan on using for this machine, have a qualified electrician inspect and repair the circuit. Always make sure that your machine is properly grounded. Failure to do so could result in serious electrical shock hazard and/or mechanical damage.

Improper connections of the electrical-grounding conductor can result in risk of electric shock. The conductor with green or green and yellow striped insulation is the electrical-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.

Under no circumstances should the grounding pin from any three-pronged plug be removed. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Check with a qualified electrician or one of our service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Use only 3-wire extension cords that have 3-prong grounding type plugs and 3-hole receptacles that accept the tool's plug. See **Figure 1.** 

Repair or replace damaged or worn cord immediately.

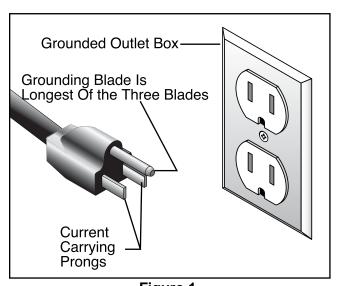


Figure 1.



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# **SECTION 3: GENERAL INFORMATION**

# Commentary

We are proud to offer the G8693 Mini Shaper. The Model G8693 is part of a growing Grizzly family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

We are also pleased to provide this manual with the Model G8693. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible. If you have any comments regarding this manual, please write to us at the address below:

> Grizzly Industrial, Inc. C/O Technical Documentation P.O. Box 2069 Bellingham, WA 98227-2069

Most importantly, we stand behind our machines. If you have any service questions or parts requests, please call or write us at the following location:

Grizzly Industrial, Inc. 1203 Lycoming Mall Circle Muncy, PA 17756 Phone: (570) 546-9663 Fax: (800) 438-5901

E-Mail: techsupport@grizzly.com Web Site:www.grizzly.com

The specifications, drawings, and photographs illustrated in this manual represent the Model G8693 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, we urge you to insert the new information with the old and keep it for reference.

### **A**CAUTION

To operate this, or any power tool, safely and efficiently, it is essential to become as familiar with its characteristics as possible. The time you invest before you begin to use your Model G8693 will be time well spent. DO NOT operate this machine until you are completely familiar with the contents of this manual. Make sure you read and understand all of the safety procedures. If you do not understand something, **DO NOT** operate the machine.



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### Unpacking

Model G8693 Mini Shaper is Shipped complete in one carton. If you discover the machine is damaged after you've signed for delivery, and the truck and driver are gone, you will need to file a freight claim with the carrier. Save the containers and all packing materials for possible inspection by the carrier or its agent. Without the packing materials, filing a freight claim can be difficult. If you need assistance determining whether you need to file a freight claim, or with the procedure to file one, please contact our Customer Service.

When you are completely satisfied with the condition of your shipment, you should inventory its parts.



# **Parts Inventory**

After all parts have been removed from the box, you should have:

- 1 Mini Shaper Unit
- 3 Knobs
- 1 Fence Assembly
- 1 Miter Gauge
- 2 Spindle Wretches
- 1 Router Bit Collet
- 1 Guide Pin
- 1 Dust Port
- 1 Hose Adapter
- 1 Stub Shaft
- 1 Plastic Guard
- 2 Extra Motor Brushes
- 1 Extra Motor Belt

In the event that any parts are missing, we will be happy to replace them. Contact our Customer Service number for assistance. If any non-proprietary parts such as nuts, bolts or washers are missing, we will be happy to replace these too, but for the sake of expediency, these items can be obtained at your local hardware store.



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### Clean Up

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based Degreaser such as Grizzly's G7895 Degreaser. Avoid chlorine-based solvents as they may damage painted surfaces should they come in contact. Always follow the usage instructions on the product you choose for clean up.

# **A**CAUTION

Many of the solvents commonly used to clean machinery can be highly flammable, and toxic when inhaled or ingested. Always work in well-ventilated areas far from potential ignition sources when dealing with solvents. Use care when disposing of waste rags and towels to be sure they do not create fire or environmental hazards. Keep children and animals safely away when cleaning and assembling this machine.

### **AWARNING**

Do not use gasoline or other petroleumbased solvents to remove this protective coating. These products generally have low flash points which makes them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur.

### **A**CAUTION

All die-cut metal parts have a sharp edge (called "flashing") on them after they are formed. This is generally removed at the factory. Sometimes a bit of flashing might escape inspection, and the sharp edge may cause cuts or lacerations when handled. Please examine the edges of all die-cut metal parts and file or sand the edge to remove the flashing before handling.



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# **SECTION 4: ASSEMBLY**

# Spindle Shaft

For Your Own Safety, Never Connect To Power Source Until All Assembly Steps Are Complete, And You Have Read And Understand The Safety And Operational Instructions.

Typically, the Spindle Shaft is already installed from the factory. To remove the Spindle, reverse the following steps.

- 1. Place the Shaper Nut (REF 36) onto the Spindle Shaft (REF 35) and insert the Shaft into the Spindle Bore. See **Figure 2**.
- 2. Shaper Nut must be screwed onto the threaded portion of the Spindle Bore.

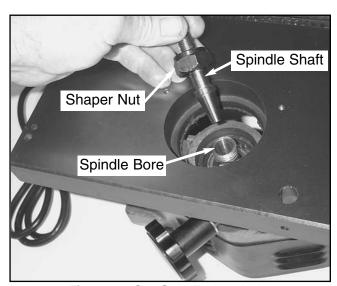


Figure 2. Set Spindle into hole.

**3.** Lock the assembly in place by tightening the Shaper Nut with the wrenches provided. See **Figure 3.** 

**NOTE:** If you would like to use Router bits instead of Shaper cutters, see section on "Using Router Bits" for instructions.

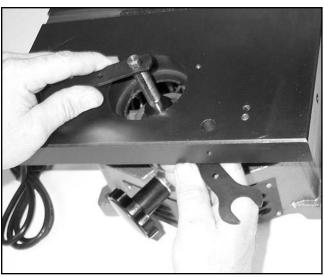


Figure 3. Tightening Spindle.



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### **Fence**

- 1. Find three Knobs (REF 14) and three rubber faced Washers (REF 13) from the parts bag.
- 2. Mount the Fence Body (REF 12) on the Table (REF 10) using two knobs and washers. Screw the knobs through the slots of the fence body and into the threaded holes near the rear of the table. See Figure 4.
- Place the Fence Segment (REF 15) in the V groove on the Fence Body and screw the third knob and washer into the threaded hole in the Fence Body.
- **4.** If you plan to use a dust collection system with your mini Shaper, attach the Dust Port to the back of the Fence using the four M5-0.8 x 10mm screws supplied.

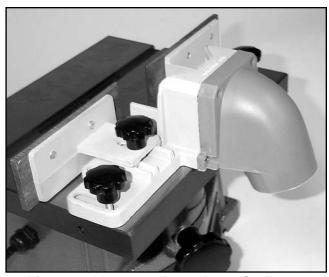


Figure 4. Mounting Fence Body On Table.



# **Ring Guard**

- 1. Attach the Ring Guard (REF 19) to the Post (REF 21) using one #10-24 x ½" Pan Head Screw (REF 18).
- 2. Slide the assembly into the unthreaded hole near the rear of the table.
- 3. Use knob (REF 14) from the parts bag to set the height of the Ring Guard. See Figure 5.

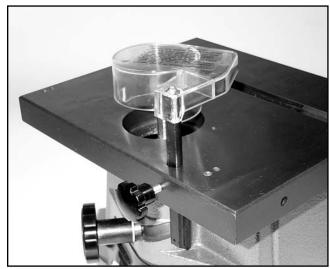


Figure 5. Guard installed.



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### **Site Consideration**

If the Mini Shaper is to be used in a permanent location, it should be fastened securely to a firm supporting surface such as a workbench. Holes should be drilled through supporting surface of the workbench as illustrated. Each foot of the Mini Shaper should be bolted securely using 1/4" bolts, hex nuts and lock washers. Bolts should be of sufficient length to accommodate foot of Mini Shaper, washer, hex nut and thickness of supporting surface. Tighten all four bolts securely. If the Mini Shaper is to be used in a portable application, it is recommended that it be fastened to a mounting board. The board should be of sufficient size to avoid tipping of the Mini Shaper while in use. Any good grade of plywood or chipboard with a 3/4" minimum thickness is recommended. Mount Mini Shaper to board using hole pattern as shown. Before each use, clamp board securely to workbench or supporting surface.

Supporting surface where Mini Shaper is mounted should be examined carefully after mounting to insure that no movement during use can result. If any "tipping" or "walking" is noted, secure workbench or supporting surface before operating.

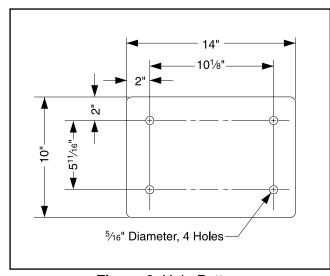


Figure 6. Hole Pattern

Bench Load: Your G8693 Mini Shaper represents a small weight load in a small footprint. Most commercial or home shop benches should be sufficient to carry the weight of the G8693. If you question the strength of your workbench, you can opt to reinforce it, or consider securing the Mini Shaper on a freestanding bench like Grizzly's Shop Fox® tool table.

Working Clearances: Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and space for auxiliary stands and/or work tables. Also consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely run your machines in any foreseeable operation.

Lighting and Outlets: Lighting should be bright enough to eliminate shadow and prevent eye strain. Electrical circuits should be dedicated or large enough to handle combined motor amp loads. Outlets should be located near each machine so power or extension cords are not obstructing high-traffic areas. Be sure to observe local electrical codes for proper installation of new lighting, outlets, or circuits.

### **A**CAUTION

Make your shop "child safe". Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. Never allow visitors in your shop when assembling, adjusting or operating equipment.



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# **SECTION 4: OPERATIONS**

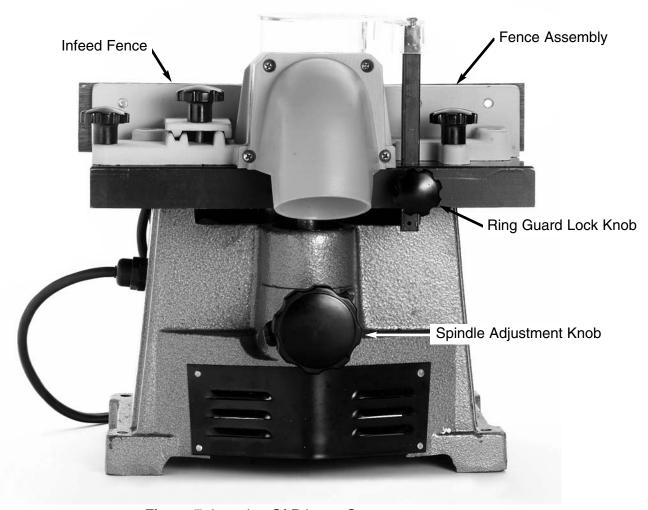


Figure 7. Location Of Primary Components.

### **AWARNING**

Operating this equipment has the potential for hearing damage to occur, especially if operated for a long period of time. Always wear hearing protection when operating equipment. Cotton balls or tissue paper in the ear canal does not provide adequate noise reduction. Use an ANSI (American National Standards Institute) approved ear muff or ear plug when using this equipment.

### AWARNING

Operating this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

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### **On-Off Switch**

The "On-Off" switch is located on the front of your Mini Shaper and has the operating positions clearly marked. Push the switch up to turn your tool "On" and down to turn it "off" The switch has a switch key which, when removed, allows the switch to be locked in the "off" position. To activate the locking feature, push switch to "off" position and pull the switch key. See **Figure 8.** 

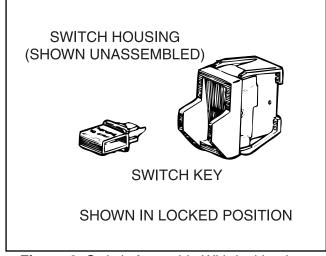


Figure 8. Switch Assembly With locking key.



### **Fence**

The entire Fence Assembly (REF 64) can be moved by loosening the two outer knobs and sliding the Fence in the slots until the desired position is reached. Lock the Fence in place by tightening the knobs. The fence does not need to be straight with the table unless a miter gauge is being used to align the workpiece.

The Fence Segment (REF 15) can be adjusted independent of the Fence Body (REF 12).



# **Depth Of Cut**

Depth of cut can be changed three different ways; moving the fence, adjusting the spindle height and by using collars.

Be sure switch is locked in "off position after removing switch key. Before removing switch key, unplug your Mini Shaper. Failure to unplug Mini Shaper could result in accidental starting causing serious injury.

To turn Mini Shaper "On" after it has been locked in the "off" position, the switch key must be replaced in the switch. Be sure switch is in the "off" position before plugging Mini Shaper in.



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### **Table Insert**

The Table Insert (REF 16) should be used at all times to provide support for the workpiece.

When the cutter or bit is completely above the table surface, the Table Insert should be used with the smaller (1%") hole facing up. See **Figure 9.** 

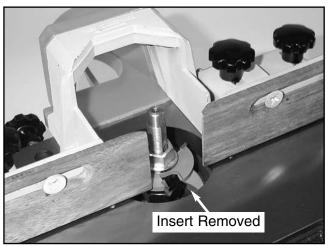


Figure 9. Guard Removed For Clarity.

When the cutter or router bit is below the surface of the table, the Table Insert should be used with the 2-5%" opening facing up. See **Figure 10.** 

Always make sure the cutter will not hit the Insert before turning on the Mini Shaper.

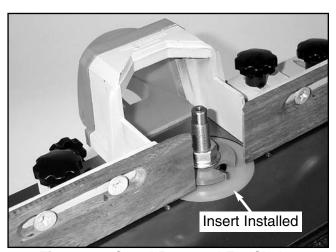


Figure 10. Guard Removed For Clarity.



# Spindle Height

The Spindle has a maximum vertical adjustment of ¾". The large knob on the rear of the Shaper/Router is used to set the height. Loosen the knob by turning it counterclockwise. The Spindle assembly can now be raised or lowered by moving the knob right or left in the inclined slot. When the desired height is obtained, turn the knob clockwise to lock it in place. See **Figure 11.** 

Spindle cutters can be raised by using the collar (REF 59) provided.



Figure 11. Spindle height locking knobs.



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# **Ring Guard**

The Ring Guard (REF 19) is an important safety feature and should always be used when shaping. Before the Mini Shaper is turned on, the ring guard should be positioned approximately 1/4" above the workpiece and locked in place.

When making adjustments or setting the cutter, the Ring Guard can be loosened and rotated out of the way.

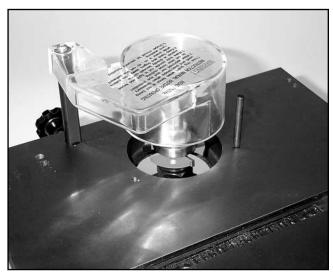


Figure 12.



# **Keyed Washers**

The keyed Washer must be directly under the JAM NUT; otherwise, the nut may loosen and serious injury may result. Always lock the spindle knob after adjusting it. See **Figure 13.** 

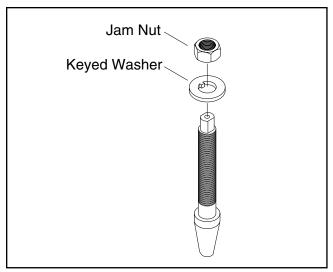


Figure 13.



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# **Installing A Cutter**

Before making any adjustments or conversions to the Mini Shaper, make sure the switch is in the 'OFF' position and the power cord is UNPLUGGED.

Be sure the Table Insert (REF 16) is installed and not in contact with the cutter prior to operation.

The cutter rotates in a counterclockwise direction. Be careful to mount the cutter with the cutting face toward the infeed as it rotates. See **Figure 15.** If mounted upside-down, the cutter can kick the wood back and injure the operator. Install the keyed washer (REF 34) directly under the jam nut (REF 33) and hold the spindle shaft (REF 39) with wrench provided. Be sure to tighten the nut before turning on the Mini Shaper. For best leverage, hold wrench against the table support boss or squeeze them together using one hand.

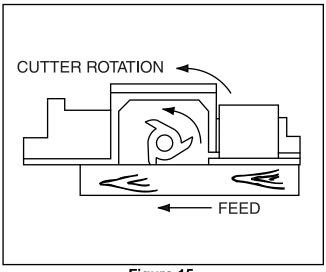


Figure 15.



# **Using Router Bits**

The G8693 Mini Shaper is equipped with a removable  $\frac{1}{2}$ " Stub Shaft and a  $\frac{1}{4}$ " router bit collet. See **Figure 16.** 

Before making any adjustments or conversions to the Mini Shaper, make sure the switch is in the 'OFF' position and the power cord is UNPLUGGED.

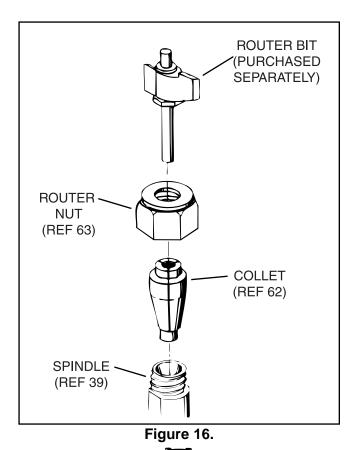
Remove any dirt or wood chips found in the top of the spindle. Place the Collet (REF 62) into the Spindle (REF 39) and thread the Router Nut (REF 63) down over the Collet, leaving it loose enough to insert the shank of a Router Bit. Insert a Router Bit into the Collet at least 5%" and tighten the Router Nut only until you cannot turn the bit by hand while holding the Spindle (REF 39) with the 5%" Wrench (REF 57).

Some height adjustment can be made by raising or lowering the Router Bit in the Collet. For further height adjustment, refer to instructions on **Spindle Height** on page 15.

To change Router Bits or to remove the Collet assembly, hold the Spindle in place with the 5%" Wrench while loosening the Router nut with the 1" Wrench. The Router bit should 'pop' loose from the Collet and pull out. Be careful that wood chips and dirt do not get inside the Spindle as they may damage the tapered faces.

Be sure to follow the instructions in the ASSEM-BLY chapter when returning the tool to the Shaper configuration using the Stub Shaft.

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# **Workpiece Prep**

Do not use the Mini Shaper to reduce workpiece size. The workpiece should be cut as close to final size before shaping. For best results, run all sides to be shaped through a jointer.

Whenever a cutter is required to make a heavy cut, the spindle speed (RPM) may be reduced. This results in a rough or splintered cut. Excessive depth-of-cut can also cause kickback!

Always make a test cut on a piece of scrap before using the finished workpiece.



### **Wood Grain**

The Shaper cutter runs at high RPM, so with most woods it makes little difference if the cut is with or against the grain. However, with some very open grained woods such as redwood or fir, cutting against the grain may result in a rough, splintered surface. In this situation and when a heavy cut must be made, it is advisable to make a series of light cuts. Make the final cut by removing ½6" or less material.



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# **Straight Edge Shaping**

After installing the cutter but before plugging in, (be sure to check for proper rotation) position the fence faces parallel to each other and lock them in place. Rotate the cutter until one of the cutting face's is 90 degrees from the fence faces. Place the workpiece against the infeed fence and slide it against the face of the cutter to get an idea of the cut profile. Now adjust the Spindle height and the Fence location to give the approximate cut profile. A drawn outline of the desired cut profile on the end of the workpiece will help in making adjustments. Try out the setting on a piece of scrap and then make final adjustments.

If the entire face of the workpiece is to be shaped, make a test cut with scrap.

When about 2" of the test piece is adjacent to-the outfeed side of the Fence, *stop the Shaper and unplug it!* Clamp the test piece to the table so it will not move from that position. Loosen all three knobs holding the Fence and Fence Segment. Slide both Fence faces until they support the workpiece completely. Lock all of the knobs securely before resuming the test cut.



### **Across The Grain**

Always install the keyed washer *directly under* the jam nut; otherwise, the nut may loosen and serious injury may result.

A cross-grain cut will result in splintering of the back edge. Two common methods to reduce this problem are:

- 1. Cut the workpiece about 1/4" oversize and trim after shaping.
- 2. Clamp a piece of scrap to the trailing edge of the workpiece while shaping. See **Figure 17.**

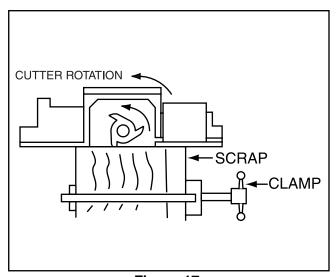


Figure 17.



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### Large Workpiece

When shaping long, wide or cumbersome workpieces, the table may be too small to provide full support. An extension for the table can be added to the sides and front. Use only smooth, flat wood and be sure the extension is on the same level as the Mini Shaper table.

The Fence faces are drilled to allow the addition of fence extensions or wooden faces to provide more support.

Many good books on woodworking provide detailed instructions on shaper operation, patterns, fixtures and jigs.

Keep hands in the clear. Never jeopardize your hands; keep them at least six inches from the cutter at all times. If workpiece is small, use a holding jig of some type to guide it past the cutter.

Ring Guard (REF 19) should be used and properly adjusted when fence is removed.



# **Curved Workpiece**

When the edge to be shaped is not straight, remove Fence assembly and replace it with Radius Pin (REF 11) and a collar. Collar can be solid or ball bearing and is mounted above or below cutter on stub shaft to set the depth of cut (see accessories section). See **Figure 18.** 

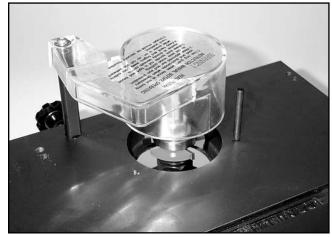


Figure 18.

Two methods are used for shaping curved or irregular edges:

- 1. Collar-This method can be used when at least ½" of edge will remain uncut. Workpiece is cut and sanded to exact shape desired. Rest workpiece against radius pin and feed straight into cutter until finished edge is against collar. Keep edge being shaped at 90 degrees to collar. Hold part firmly against collar and slowly feed around shape until complete.
- 2. Pattern-A pattern or template can be cut from ½" hardboard or scrap wood. This method is the best way to make several pieces of the same shape. Allow for diameter of collar, contour shape and depth of cut when cutting pattern.

Workpiece should be cut to a shape close to pattern. Fasten the pattern to workpiece using clamps, screws, brads or rubber cement. Feed workpiece into cutter until collar contacts pattern. Slowly feed workpiece around pattern holding pattern tight against collar. Remember to do any cross grain cut first to prevent splintering on finished workpiece.



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### **Dust Collection**

Your Mini Shaper has a rear chip discharge which fits any standard dust collection with a  $2\frac{1}{2}$ " hose. A  $2\frac{1}{2}$ " to  $1\frac{1}{4}$ " hose adapter is supplied with the Mini Shaper. Attaching a dust collection system will keep your work area cleaner.

If Chip Discharge clogs with chips, turn switch OFF and UNPLUG unit to avoid accidental starting. Dislodge chips and debris with a pencil or wood dowel, minimum 6 inches in length.

# Do not use finger since stationary blades are sharp.

When resuming operation, feed at a slower rate to avoid re-clogging. Use of a Wet-Dry Vac will virtually eliminate the chance of clogging.

Never leave hose connected to the machine during operation if a vac is not turned on. The hose and machine will clog with chips.

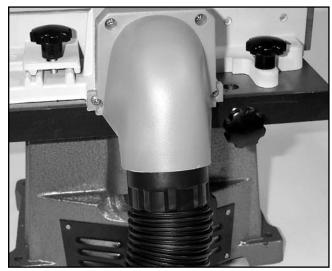


Figure 19.



-22- G8693 Mini Shaper

# **SECTION 5: MAINTENANCE**

Keep your Mini Shaper clean and adjusted properly for maximum performance and machine longevity. Do not allow pitch to accumulate on the table, fences or cutters. Clean frequently with Gum and Pitch Remover.

The table and other non-painted surfaces on the Model G8693 should be protected against rust and pitting. Wiping the Shaper clean after every use ensures that moisture from wood dust isn't allowed to trap moisture against bare metal surfaces.

Some woodworkers recommend using automotive paste wax on exposed steel and cast iron surfaces. The wax provides a layer of protection, as well as reducing friction between lumber and the table, making cuts faster and smoother. Avoid waxes that contain silicone or other synthetic ingredients. These materials can find their way into lumber that's being worked, and can make staining and finishing difficult. If you use paste wax, make sure that it's 100% Carnauba wax.

# **AWARNING**

For your safety, turn the Mini Shaper off, remove the switch key and disconnect the machine from power source before attempting any repairs or maintenance on the shaper. Failure to observe this will result in serious personal injury.

# **Belt Replacement**

Replacement belts are available from Grizzly Parts Department.

**1.** Turn the Mini Shaper off, remove the switch key and unplug!

Failure to unplug your Mini Shaper could result in accidental starting and serious injury and that would be bad.

- 2. Turn Mini Shaper upside down on a firm work surface. Be careful to remove or protect the Stub Shaft from damage.
- **3.** Remove Belt Guard (REF 47) by loosening the mount screw (REF 49).
- **4.** Remove old Timing Belt (REF 46) by turning belt and applying outward pressure.
- 5. Install new belt by starting it on pulleys and maintain inward pressure until full width of belt is on both pulleys.
- 6. Should the belt tension need adjustment, loosen four hex head bolts (REF 61) on Motor Mount (REF 54). Slide Motor Mount in or out until sides of timing belt are straight between pulleys. NOTE: Do not over-tension this belt, it only needs to be straight. Excessive tension may shorten the life of the motor bearings. Tighten bolts and make sure the belt runs straight and true.
- 7. Replace the belt guard before operating.

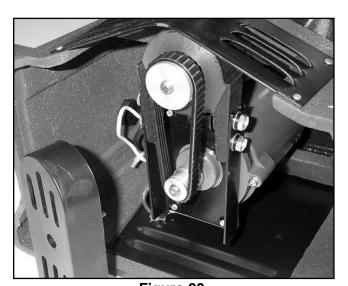


Figure 20.



G8693 Mini Shaper -23-

# **SECTION 6: CLOSURE**

The following pages contain general machine data, parts diagrams/lists, troubleshooting guide and Warranty/Return information for your Model G8693 Mini Shaper.

If you need parts or help in assembling your machine, or if you need operational information, we encourage you to call our Service Department. Our trained service technicians will be glad to help you.

If you have comments dealing specifically with this manual, please write to our Bellingham, Washington location using the address in Section 3: GENERAL INFORMATION. The specifications, drawings, and photographs illustrated in this manual represent the Model G8693 as supplied when the manual was prepared. However, due to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, add the new information to this manual and keep it for reference.

We have included some important safety measures that are essential to this machine's operation. While most safety measures are generally universal, Grizzly reminds you that each workshop is different and safety rules should be considered as they apply to your specific situation.

### **AWARNING**

Operating this equipment has the potential for flying debris to cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

We recommend you keep a copy of our current catalog for complete information regarding Grizzly's warranty and return policy. If you need additional technical information relating to this machine, or if you need general assistance or replacement parts, please contact the Service Department listed in Section 3: General Information.

Additional information sources are necessary to realize the full potential of this machine. Trade journals, woodworking magazines, and your local library are good places to start.

### **AWARNING**

The Model G8693 was specifically designed for <u>Shaping</u>. DO NOT MODIFY AND/OR USE THIS MACHINE FOR ANY OTHER PURPOSE. Modifications or improper use of this tool will void the warranty. If you are confused about any aspect of this machine, DO NOT use it until you have answered all your questions. Serious personal injury may occur.

### **AWARNING**

Like all power tools, there is danger associated with the Model G8693 Mini Shaper. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this tool with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.



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# MACHINE DATA SHEET

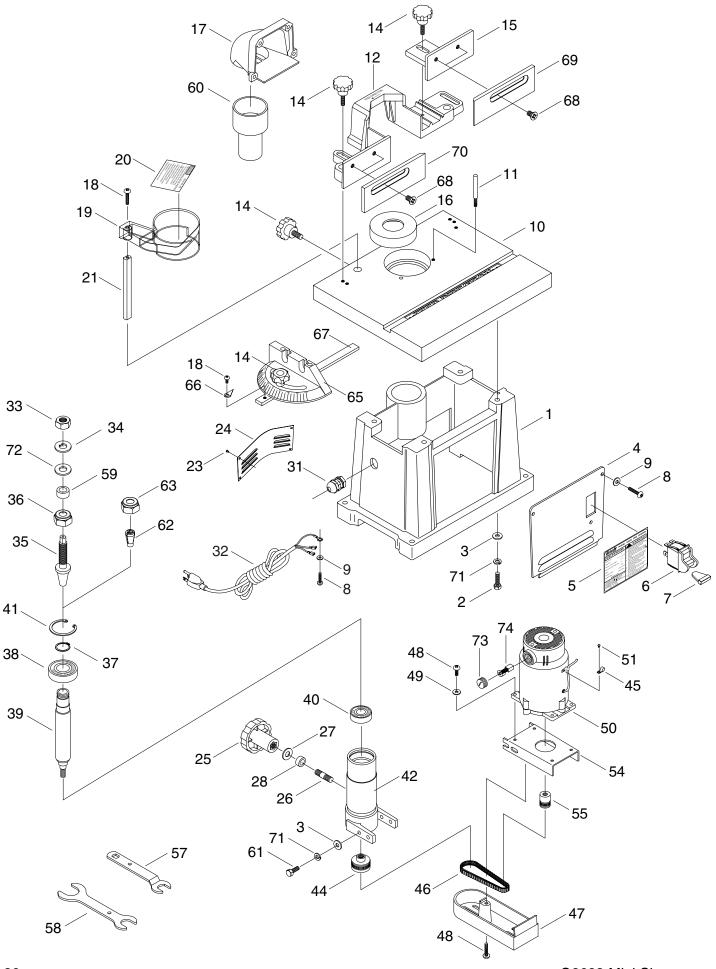
Customer Service #: (570) 326-3806 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

### **GRIZZLY MODEL G8693 MINI SHAPER**

Design Type	Bench Model
Overall Dimensions:	
Table	11 <sup>13</sup> / <sub>16</sub> " x 9 <sup>13</sup> / <sub>16</sub> "
Height (Includes Fence)	
Length	
Width	
Fence Boards	2" x 5½" ea.
Weight (Shipping)	42 lbs.
Weight (in place)	
Carton Size	12½" W x 14" L x 15" H
Footprint	6 <sup>3</sup> / <sub>4</sub> " x 11 <sup>1</sup> / <sub>4</sub> "
Capacities:	
Spindle Sizes	
Spindle Lengths	
Spindle Travel	
Spindle Capacity Under Nut	
Collet Size	
Table Counterbore	
Max. Cutter Diameter	
Max. Cutter Height	
Spindle Speed	
Spindle Bearings	Shielded, Permanently Lubricated Ball
Construction:	
Table	
Fence Assembly	
Body Assembly	Cast Iron
Motor:	
Type	
Horsepower	
Phase / Voltage	
Switch	, 55
Amps	
Cycle / RPM Bearings	
Feature:	Shielded & Permanently Lubricated
redure.	Independent Adjustable Split Fence
	Standard Mitar Cauge
	vortical opiliale Lock

Specifications, while deemed accurate, are not guaranteed.

G8693 Mini Shaper -25-



Ref	Part No	Description
1	P8693001	BASE
2 3	P8693002	HEX CAP SCREW
3	P8693003	WASHER 6MM
4	P8693004	FRONT COVER
5	P8693005	NAME PLATE
5 6 7	P8693006	SWITCH
7	P8693007	SWITCH KEY
8	PS09M	PHLP HD SCREW M5-0.8 x 10
9	PW02M	FLAT WASHER 5MM
10	P8693010	TABLE
11	P8693011	STARTING PIN
12	P8693012	FENCE BODY
14	P8693014	LOCK KNOB
15	P8693015	FENCE SEGMENT
16	P8693016	TABLE INSERT
17	P8693017	DUST HOOD
18	PS09M	PHLP HD SCREW M5-0.8 x 10
19	P8693019	RING GUARD
20	P8693020	SAFETY LABEL
21	P8693021	POST
23	P8693023	RIVET
24	P8693024	LOUVER PLATE
25	P8693025	KNOB
26	P8693026	STUD
27	PW03	FLAT WASHER #10
28	P8693028	SPACER
30	P8693030	HEX BOLT M6-1.0 x 35
31	P8693031	STRAIN RELIEF
32	P8693032	CORD
33	P8693033	½-20 JAM NUT
34	P8693034	½ KEY WASHER
35	P8693035	½-20 SPINDLE

Ref	Part No	Description
36	P8693036	SHAPER NUT
37	PR09M	EXTERNAL SNAP RING 20MM
38	P6004	6004-2RS BALL BEARING
39	P8693039	SPINDLE CARTRIDGE
40	P6202	6202-2RS BALL BEARING
41	PR24M	INTERNAL SNAP RING 42MM
42	P8693042	SPINDLE HOUSING
44	P8693044	MACHINE PULLEY
45	P8693045	CABLE CLAMP
46	P8693046	T5 x 45 x 10 BELT
47	P8693047	BELT GUARD
48	PS09M	PHLP HD SCREW M5-0.8 x 10
51	PS05M	PHLP HD SCREW M5-0.8 X 8
55	P8693055	MOTOR PULLEY
56	P8693056	MOTOR ASSEMBLY
57	P8693057	WRENCH 5/8", 3/8"
58	P8693058	WRENCH 1", 3/4"
59	P8693059	COLLAR
60	P8693060	2½ VACUUM ADAPTER
61	PB39M	HEX BOLT M6-1.0 X 12
62	P8693062	COLLET
63	P8693063	ROUTER NUT
65	P8693065	MITER GAUGE
66	P8693066	INDICATOR
67	P8693067	MITER BAR
68	P8693068	FLT HD SCREW M8-1.25 x 10
69	P8693069	WOODEN FENCE (RIGHT)
70	P8693070	WOODEN FENCE (LEFT)
71	PLW03M	LOCK WASHER 6MM
72	PW01M	FLAT WASHER ½"
73	P8693073	PLASTIC SCREW
74	P8693074	BRUSH

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# WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number", which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

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# CUT ALONG DOTTED LINE

### **WARRANTY CARD**

City				State	Zip
		E-Mail			
MOD	EL#	Order #_			
	lowing information is given on a value of a value of the confidence of the confidenc	voluntary basis. It will be used for mential.	arketing	purposes to help us develop better	r products and services. Of
١.	How did you learn about us?				
	Advertisement Catalog	Friend Card Deck	10.	Which benchtop tools do you own?	Check all that apply.
	World Wide Web			1" x 42" Belt Sander	6" - 8" Grinder
	Other			5" - 8" Drill Press 8" Table Saw	Mini Lathe 10" - 12" Thickness Planer
	Otriei			8" - 10" Bandsaw	Scroll Saw
2.	Which of the following magazines d	•		Disc/Belt Sander Mini Jointer	Spindle/Belt Sander
	American Woodworker Cabinetmaker	Practical Homeowner Shop Notes		Other	
	Family Handyman	Today's Homeowner	11.	How many of the machines checked	d above are Grizzly?
	Fine HomebuildingFine Woodworking	WOOD Wooden Boat	11.	riow many of the machines checked	above are drizzly:
	Home Handyman	Woodshop News	12.	Which portable/hand held power too	ols do you own? Check all that appl
	Journal of Light Construction	Woodsmith			
	Old House Journal	Woodwork		Belt Sander	Orbital Sander Palm Sander
	Popular Mechanics	Woodworker		Biscuit Joiner Circular Saw	Portable Planer
	Popular Science	Woodworker's Journal		Detail Saw	Saber Saw
	Popular Woodworking	Workbench		Drill/Driver	Reciprocating Saw
	Other			Miter Saw	Router
3.	Which of the following woodworking	/remodeling shows do you watch?		Other	
	Backyard America	The New Yankee Workshop	13.	What machines/supplies would you	like Grizzly Industrial to carry?
	Home Time The American Woodworker	This Old House		1011 7 11 0	D. 11.1.4
	The American Woodworker	Woodwright's Shop		12" Table Saw 12" Jointer	Radial Arm Saw
	Other			12 JointelCombination Planer/Jointer	Panel Saw Brass Hardware
•	What is your annual household income?			Paint & Finishing Supplies Contractor's Supplies	blass Hardware Lumber
	\$20,000-\$29,999	\$60,000-\$69,999		0.11	
	\$30,000-\$39,999	\$70,000-\$79,999		Other	
	\$40,000-\$49,999	\$80,000-\$89,999	14.	What new accessories would you like	ce Grizzly Industrial to carry?
	\$50,000-\$59,999	\$90,000 +		•	to differ industrial to dairy.
5.	What is your age group?			Builders Hardware Fasteners	Hand Tools Wood Components
	20-29	50-59		Other	
	30-39	60-69			
	40-49	70 +	15.	What other companies do you purch	nase your tools and supplies from?
6.	How long have you been a woodwo	orker?			
	0 - 2 Years	8 - 20 Years			
	2 - 8 Years	20+ Years	16.	Do you think your purchase represe	ents good value?
<b>'</b> .	How would you rank your woodworl	king skills?		Yes	No
	Simple Intermediate	Advanced Master Craftsman	17.	Would you recommend Grizzly Impo	orts to a friend?
3.				Yes	No
).	What stationary woodworking tools	do you own? Check all that apply.			
	Air Compressor	Panel Saw	18.	Would you allow us to use your name	-
	Band Saw	Planer		in your area? Note: We never use	names more than three times.
	Drill Press	Power Feeder		Yes	No
	Drum Sander	Radial Arm Saw			
	Dust Collector	Shaper	19.	Comments:	
	Horizontal Boring Machine	Spindle Sander			
	Jointer Lathe	Table Saw			
	raine	Vacuum Veneer Press			
		Wide Belt Cander			
	Mortiser	Wide Belt Sander			
		Wide Belt Sander			

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	Place Stamp Here



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