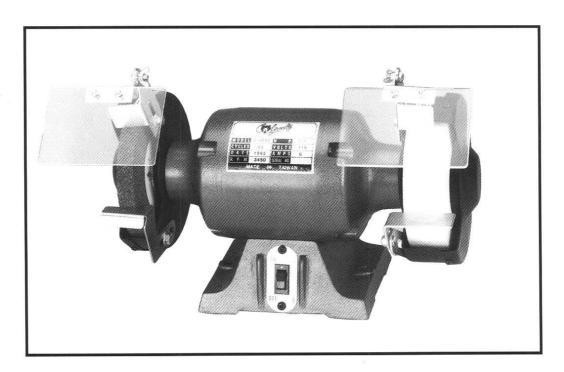


WIDE-WHEEL GRINDER MODEL G1090 INSTRUCTION MANUAL



GRIZZLY IMPORTS, INC.

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I. INTRODUCTION

We are proud to bring you the Model G1090 Wide-Wheel Grinder. The Model G1090 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.

The Model G1090 Wide-Wheel Grinder was specifically designed for use in the home or small professional shop. The $1^{1}/2^{\circ}$ x 6" fine-grain white aluminum oxide wheel, combined with a 6" silicon carbide wheel provide an ideal set of surfaces for grinding and sharpening tools and bits. The heavy-duty 1/2-horsepower motor will provide plenty of power for most grinding or sharpening chores.

We are also pleased to provide this instruction manual with the Model G1090 Wide-Wheel Grinder. This instruction manual was written to guide you through assembly, to review safety considerations and to cover general operating procedures. It represents our latest effort to produce the best documentation possible. If you have any constructive criticisms or comments that you feel we should include in our next printing, please write to us at the address below.

Manager, Technical Documentation Grizzly Imports, Inc. P.O. Box 2069 Bellingham, WA 98227-2069

Finally, we stand behind our machines. We have two excellent regional service departments, should the need ever arise. If you have any service questions or parts requests, please call or write to us at the appropriate location listed below:

If you live West of the Mississippi River, contact: P.O. Box 2069
Bellingham, WA 98227
Phone 1-206-647-0801
FAX: 1-800-225-0021

If you live East of the Mississippi River, contact: 2406 Reach Road Williamsport, PA 17701 Phone 1-717-326-3806 FAX: 1-800-438-5901

II. COMMENTARY

As with any tool or machine, a thorough understanding of how this Wide-Wheel Grinder operates is necessary for safe operation. Please take the time to read this manual thoroughly. If you do not understand something, **DO NOT** operate this machine. Contact us first for assistance or advice. Grizzly cautions that although our Safety Rules are extensive, they aren't necessarily comprehensive. The bottom line on safety is this: Make sure a setup or operation is safe as it applies to your situation.

We would also like to state that the specifications, drawings and photographs in this manual represent the Model G1090 as supplied when this manual was prepared. We are meticulous with our manuals; however, product changes or discrepancies can occur. Whenever possible, we send manual updates to all owners of a particular tool or machine. Should you receive one, please insert the new information with the old and keep it for reference.

We recommend that you keep a copy of our current catalog for complete information regarding Grizzly warranty and return policy. Should you need additional technical information relating to this machine, parts, or general assistance, please contact the appropriate regional service department.

We also believe additional information sources are very important to help you better realize the full potential of this machine. Trade journals, woodworking magazines, fellow woodworkers and your local library are all excellent sources.

Again, thanks for choosing Grizzly.

III. SAFETY RULES FOR ALL TOOLS

There is a certain amount of danger associated with the use of this Wide-Wheel Grinder. Operating it with respect and caution will considerably lessen the possibility of personal injury. If these safety precautions are ignored, consequences could be dire.

The Model G1090 should never be modified or used for any other purpose than that for which it was intended. As well as being dangerous, modifications or improper use of the Model G1090 will void all warranties.

- 1. KNOW YOUR MACHINE. Read the owner's manual carefully. Learn the machine's capabilities and limitations as well as the potential hazards associated with it.
- 2. KEEP ALL GUARDS IN PLACE and in working order.
- 3. GROUND ALL NON-INSULATED TOOLS. If the machine has a three-prong plug, it should be plugged into a grounded three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached to a known ground. Never remove the grounding prong from the plug.
- 4. REMOVE ADJUSTING KEYS AND WRENCHES. Develop the habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- 5. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 6. AVOID DANGEROUS ENVIRONMENTS. Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- 7. MAINTAIN A SHOP "SAFE ZONE". Keep all visitors a safe distance from the work area.
- 8. MAKE WORKSHOP CHILD-PROOF. Use padlocks, lockable master switches, or remove starter keys.
- DO NOT FORCE MATERIAL INTO THE MACHINE. It will do the job better and safer at the rate for which it was designed.

- 10. **USE THE RIGHT TOOL**. Do not use a tool or attachment to do a job that it was not designed to do.
- 11. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties or jewelry that may get caught in moving parts. Non-slip footwear is also recommended. Wear a hat or hair-covering to contain long hair.
- 12. **USE SAFETY GLASSES AND EAR PROTECTION**. Also, use a dust mask or respirator if an operation produces dust.
- 13. **SECURE WORK**. Use clamps or a fixture to hold workpiece. It is safer than using your hand and frees both hands to operate the tool.
- 14. DO NOT OVERREACH. Keep proper footing and balance at all times.
- 15. **MAINTAIN MACHINE IN TOP CONDITION.** Keep cutting surfaces and clean for safest, most accurate performance. Follow instructions for lubricating and changing accessories.
- 16. **DISCONNECT MACHINE** from power source and wait for all moving parts to stop before inspecting or servicing and before changing accessories.
- 17. **USE RECOMMENDED ACCESSORIES**. Refer to the current catalog for recommended accessories. The use of improper accessories may be hazardous.
- 18. **AVOID ACCIDENTAL STARTING.** Make sure switch is in the "OFF" position before plugging in power cord.
- 19. **NEVER STAND OR LEAN ON MACHINE.** Serious injury could occur if the machine is tipped or if the cutting edge is accidentally touched.
- 20. **INSPECT MACHINE BEFORE EACH USE.** Before each use of the machine, any part that is damaged should be repaired or replaced. Check for proper alignment, binding, mounting, and any other conditions that may affect machine operation. Perform maintenance service promptly when called for.
- 21. **DIRECTION OF FEED**. Always feed work into a blade or cutter *against* the direction of rotation of the blade or cutterhead.
- 22. **NEVER LEAVE MACHINE RUNNING UNATTENDED TURN POWER OFF.** Do not leave machine until it comes to a complete stop.
- 23. DO NOT OPERATE MACHINE WHILE UNDER THE INFLUENCE of drugs, alcohol, or any medication that will affect your competence or judgement.
- 24. DO NOT WORK IN HASTE or operate machine if you are mentally or physically fatigued.
- 25. IF THERE IS SOMETHING YOU DO NOT KNOW OR UNDERSTAND, DO NOT OPERATE MACHINE! Ask for help first. Confusion can be dangerous.
- 26. BAD HABITS ARE DANGEROUS. Periodically review all safety procedures.

IV. UNPACKING

Your Wide-Wheel Grinder has arrived in one box. If you find concealed damage after you've signed the delivery receipt and the truck and driver have left, you will need to file a freight claim with the carrier. Save the containers and all packing material for inspection by the carrier or their agent. Without the packing material, filing a freight claim could be difficult. If you need advice for this situation, please call us.

Caution: Your Wide-Wheel Grinder weighs about 30 pounds fully assembled. Use caution while lifting or assembling this machine. Get assistance, if necessary.

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

V. ASSEMBLY

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

- · Wide-Wheel Grinder
- Eye Shields with fasteners (2)
- Tool Rests with fasteners (2)

To complete assembly of your Wide-Wheel Grinder, you need to mount the eye shields and tool rests on the grinding and sharpening wheel housings (See Figure 1).

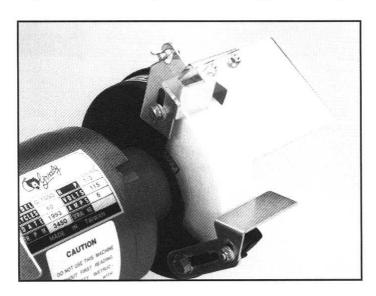


Figure 1

To attach the tool rest and eye shield assemblies:

- 1. Fasten the tool rest bracket to the threaded hole at the lower inside portion of the wheel housing with the hex nut and washer supplied.
- 2. Adjust the bracket so the tool rest sits flat with enough clearance between it and the sharpening wheel to allow free travel. Adjustment may require loosening both bracket fasteners.
- 3. Once adjustment is complete, tighten the fasteners until the tool rest is secure.

- 4. Attach the eye shield assembly to the threaded hole in the upper inside portion of the wheel housing with the appropriate hex nut supplied.
- 5. Adjust the eye shield bracket so the safety tab is just far enough from the wheel to allow free travel. Adjust the eye shield to suit your needs by loosening the wing nut and move your eye shield to the desired position. Re-tighten the wing nut after adjustment.

Attaching the left tool rest and eye shield assemblies require the same procedures as with the right. See Figure 2.

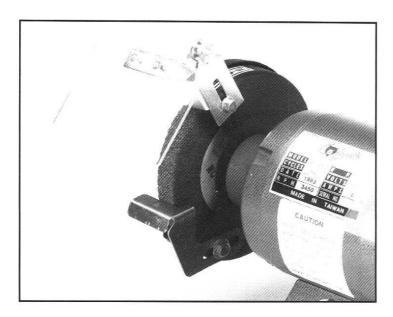


Figure 2

NOTE: The tool rest and eye shield are designed to minimize the possibility of injury or equipment damage. Please DO NOT operate this grinder without installing these pieces. Always wear proper safety devices when operating this, or any, machinery. Grizzly Imports carries a wide assortment of fine protective equipment. See the latest Grizzly catalog for prices and ordering information.

VI. ELECTRICAL SERVICE REQUIREMENTS

A. CIRCUIT LOADING

Your Model 1036 Wide-Wheel Grinder is wired for 110/120V, single phase operation; it cannot be operated at 220/240V. The ½ HP motor will draw 6 amps at 110/120 volts. This is not a large load; however, if you operate this Wide-Wheel Grinder on a circuit that is 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.

B. GROUNDING

This equipment must be grounded. This Wide-Wheel Grinder is equipped with a power cord and plug with a ground wire. Please ensure that the outlet and circuit you select is wired for 110/120V and is properly grounded. If it is not it will be necessary to run a separate 12 AWG copper wire from the outlet to a known ground. If adding a new circuit, please ensure that the circuit is connected to the grounding terminal in your electric service panel. Under no circumstances should the grounding pin be removed from any three pronged plug.

C. GENERAL INFORMATION

Fusing: Fuse at 15 amps for 110/120V service. Fuses rated any higher will not adequately protect this motor.

Extension Cords: If used, extension cords must be rated Hard Service (Grade S) or better. Conductor size must be 14 AWG for cords up to 50 feet long. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

D. A WORD OF CAUTION

In this section we have covered some basic electrical requirements for the safe operation of your Model G1090 Wide-Wheel Grinder. As with the safety rules in the preceding section, these requirements are not necessarily comprehensive. Further, you must be sure that your particular electrical configuration complies with state and local codes. The best way to ensure compliance is to check with your local municipality or a licensed electrician.

VII. OPERATION

Your G1090 Wide-Wheel Grinder is an excellent choice for sharpening and grinding a variety of tools and bits. It's a simple fact that all cutting tools will eventually need to be sharpened. Sharp tools cut cleanly and are easy to control. They also require less effort than a dull tool to accomplish the same task.

The two wheels on the G1090 have two entirely different purposes. The silicon carbide wheel is for general grinding and the white aluminum oxide wheel is for sharpening.

The Model G1090 turns at a rate of 3450 R.P.M. Its wheels are capable of generating enough heat to ruin the temper of metal and make it lose hardness. When grinding the working edges of tools, use a very short, light stroke. Do not leave the tool in contact with the wheel long enough to allow heat to build up. Frequently dip the tool in water to cool it. When sharpening tools, use the silicon carbide wheel to shape the cutting edge. For instance, grind off the nicks and square the edge of a chisel on your silicon carbide wheel before sharpening it on the white aluminum oxide wheel.

VIII. GRINDER SAFETY RULES

We have already covered a number of common-sense safety rules earlier in the instruction manual. Let's take a couple of moments to look at some safety considerations for your Model G1090 Wide-Wheel Grinder.

- 1. NEVER OPERATE THE GRINDER WITH BROKEN WHEELS. The grinding wheels operate at 3,450 RPM. A broken wheel could turn into a missile.
- NEVER STICK AN OBJECT AGAINST A WHEEL TO STOP THE GRINDER. Let it slow on its own.
- ALWAYS USE THE TOOL REST AND SAFETY GUARDS. Supports and guards are essential for safe grinder operation.
- 4. USE ONLY PROPERLY-SIZED WHEELS. The wrong-sized wheel can dangerously increase or decrease operating speed at the grinding surface. A too-large wheel could come in contact with the wheel housing, potentially damaging the machine.
- 5. ALWAYS WEAR EYE PROTECTION. The Wide-Wheel Grinder can throw off sparks and tiny metal shards. Use eye protection to avoid operator injury.
- 6. ADJUST TOOL REST PROPERLY. The Wide-Wheel Grinder has the potential for binding against a workpiece introduced at an improper angle and sending it flying. Avoid grinding your workpiece at angles greater than 90° to the direction of wheel travel.
- 7. ALLOW GRINDER TO REACH SPEED. Let the Wide-Wheel Grinder to reach its full operating speed before introducing a workpiece.
- 8. SECURE GRINDER. Attach the grinder firmly to your benchtop. Secure attachment will ensure your grinder will stay put when operated.
- 9. AVOID OVERHEATING WORKPIECE. Excessive prolonged grinding on a workpiece can heat it to the point where it becomes dangerous to the operator. Excessive grinding can also soften your workpiece and ruin its edge.
- 10. NEVER GRIND SMALL STOCK. Don't attempt to grind or sharpen anything that can't be adequately supported by the tool rest. Use clamping pliers or a similar holder when grinding parts which can't be held easily by hand.
- 11. KEEP A CLEAN WORK AREA. The chances of an accident are far less likely if the area around your grinder is kept free of clutter.
- **12. AVOID LOOSE FITTING CLOTHING OR LONG HAIR.** A grinder's spindle, spinning at greater than 3,000 RPM, can suck in a tremendous amount of material at an alarming rate given the chance. Don't give it the chance.

IX. MAINTENANCE

Your Model G1090 Wide-Wheel Grinder requires very little maintenance. The motor bearings are lubricated and sealed at the factory and require no maintenance during their lifetimes. The grinding wheels, themselves, will eventually be worn to the point where replacement is necessary. Grizzly carries a wide assortment of wheel types and grits designed for this machine. See the latest Grizzly catalog for pricing and ordering information.

To remove and replace a wheel:

- 1. Remove the eye shield and the outside wheel housing cover. See Figure 3.
- 2. Turn the shaft nut counterclockwise on the right, or clockwise on the left, while holding the wheel.
- 3. Remove the nut, washer and the wheel.

4. To install a new wheel, reverse the above procedures.



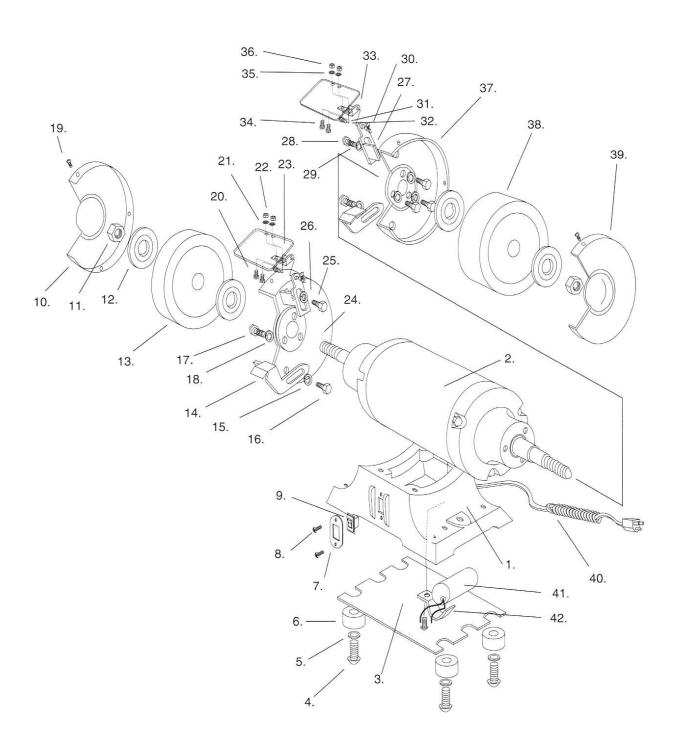


X. CLOSURE

Thank you for your purchase. We sincerely appreciate your business and hope we have the opportunity to serve you again.

You are welcome and encouraged to write or call us if you have questions. Our service staff will be glad to help you if you need parts or service assistance. If you have questions or comments about this manual, please write to our Bellingham, Washington location at the address listed in the manual's introductory chapter.

XI. PARTS DIAGRAM



XII. PARTS LIST

Ref #	Description	Qty.
1.	Base	1
2.	Motor	1
3.	Floor Plate	1
4.	Pan Head Screw	4
5.	Washer	4
6.	Rubber Foot	4
7.	Switch Plate	1
8.	Pan Head Screw	2
9.	Switch	1
10.	Wheel Cover	1
11.	Spindle Nut	2
12.	Wheel Flange	4
13.	Grinding Wheel	1
14.	Tool Rest	2
15.	Washer	2
16.	Hex Bolt	2
17.	Hex Nut	6
18.	Washer	6
19.	Pan Head Screw	6
20.	Pan Head Screw	4
21.	Washer	4

Ref #	Description	Qty.
22.	Hex Nut	4
23.	Eye Shield	2
24.	Wheel Guard Left	1
25.	Hex Bolt	2
26.	Washer	2
27.	Holder Plate	2
28.	Hex Bolt	2
29.	Washer	2
30.	Wing Nut	2
31.	Machine Screw	2
32.	Washer	2
33.	Shield Bracket	2
34.	Machine Screw	4
35.	Washer	4
36.	Hex Nut	4
37.	Wheel Guard Right	1
38.	Sharpening Wheel	1
39.	Wheel Cover Right	1
40.	Cord	1
41.	Capacitor	1
42.	Clamp	1

XIII. WARRANTY AND RETURNS

LIMITED WARRANTY

Grizzly Imports, Inc. (Grizzly) warrants every product it sells for a period of one year on all parts and one year on all electric motors 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, the product or part must be returned to either our Bellingham or Williamsport warehouse, freight prepaid. Proof of purchase must accompany the merchandise. The manufacturers reserve the right to change specifications at any time as 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.

WARRANTY CARD

NAME			PHON	E NUMBER
STREET				
CITY		STATE	ZIP	
MODEL #	PURCH	ASED FROM GRIZZL OR	Y, BELLINGHAM WILLIAMSPORT	
NVOICE #				
The following information is products. Your name will be confidential.	given on a voluntary basis. included in our mailing lis	This information will to only. It will not be	be used for mai sold to other co	rketing purposes to help Grizzly develop be impanies. Of course, all information is stri
. How did you find out about	us?			
	Friend Other Card deck			
2. Do you think your machine	represents good value?	YES	NO	z.
Would you allow us to use y (Note: Your name will be	your name as a reference for used a maximum of three ti		our area?	YES NO
. To which of the following pul	blications do you subscribe?	Check all that apply.		
American Woodworker Woodwork	Fine Homebuilding Workbench Woodsmith	_ FDM _ Wood & Wood Prod _ Old House Journal _ Journal of Light Cor _ Wooden Boat	struction	Practical Homeowner Home Handyman Shop Notes Cabinetmaker Other
. What is your annual housel	nold income?			
\$20,000-\$30,000 \$30,001-\$40,000 \$40,001-\$50,000 \$50,001-\$60,000	\$60,001-\$70,000 \$70,001-\$80,000 \$80,001-\$90,000 + \$90,000			
i. To which age group do you	belong?			
20-30	61-70 +70			
. Which of the following station	onary woodworking machines	s do you own? Check	all that apply.	
Table Saw Band Saw Radial Arm Saw Wide Belt Sander Drum Sander	Jointer Planer Drill Press Shaper Power Feeder	Lathe Panel Sav Air Comp Dust Colle VacuumV	ressor & tools ector	Scroll Saw Mortiser Other
. How many of the machines	you checked in Question 7 a	are Grizzly machines?		
. Which of the following porta	able woodworking machines	or power tools do you	own? Check all th	nat apply.
Circular Saw Drill/Driver R-O Sander	— Saber Saw — Recipro Saw — Router	— Miter Saw — Belt Sand — Planer		Biscuit Joiner Other: Orbital Sander Detail Sander
0. Which of these machines o	r other tools would you like G	irizzly to carry? Check	all that apply.	
— Radial Arm Saw — Panel Saw — Vertical Spindle Sander	Biscuit JoinerPin RouterMortiser	— Combinat — 12" Table — 24" Plane		Other:
1. Of all the mail order woodw	vorking companies you have	purchased from, how	do you rate Grizzl	y in terms of overall customer satisfaction?
	Above average The worst	_ Average		
12. Comments:	70			

Parts and Service Information

Grizzly stands behind its products with a full parts inventory. These parts are available for purchase by Grizzly machine owners regardless of whether you are the original owner or a subsequent owner. If you are the original owner, please fill out the warranty information on the warranty card, remove the card from this manual and send it back to us within 10 days of product delivery. We appreciate any comments or suggestions and use them to better our products and service.

If you are not the original owner, please fill out one of the cards below, remove the card from the manual and send it back to us. By registering with us, you will have the same access to parts and service as the original owner.

If you need service or help with this machine, please call or write to us at the appropriate regional service location listed on page 1 of this manual.

	CHAN	NGE OF OWNERSHIP
Original Owner	Mach	nine name & model no.
Name		Phone Number
Street		
City		
State	ZIP	Date purchased
New Owner		
Name		Phone Number
Street		
City		
State	ZIP	Date purchased
		— — — — — — — — — — — — — — — — — — —
Original Owner	Macl	nine name & model no.
		Phone Number
		Date purchased
New Owner		
Name		Phone Number
Street		

From:		PLACE STAMP HERE
	Gyrizzly	
	GRIZZLY IMPO	ORTS INC
	P O BOX 2069	
	BELLINGHAM	WA 98227-2069
From:		PLACE STAMP HERE
	Gyrizzey	

GRIZZLY IMPORTS INC

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P O BOX 2069