

Grizzly Industrial, Inc.®

MODEL G5970

ELECTRIC PALM SANDER INSTRUCTION MANUAL



COPYRIGHT © APRIL, 2006 BY GRIZZLY INDUSTRIAL, INC.
**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
#BL8153 PRINTED IN CHINA



WARNING!

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.

Table of Contents

SECTION 1: SAFETY	2
SECTION 2: INTRODUCTION	5
Foreword.....	5
Tool Data	5
Contact Information	5
SECTION 3: SET UP	6
Unpacking.....	6
Inventory	6
SECTION 4: OPERATIONS	7
Getting Started	7
Selecting Abrasives	7
Attaching Abrasives.....	7
Attaching Dust Bag.....	8
Using the Sander.....	8
SECTION 5: MAINTENANCE	9
General	9
Keeping Tool Clean	9
SECTION 6: SERVICE	10
Troubleshooting	10
Repair	10
Parts Breakdown	11
Parts List.....	11

SECTION 1: SAFETY

WARNING

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.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **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.

WARNING

Safety Instructions for Machinery

- 1. READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 3. ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
- 5. WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

- | | |
|--|--|
| <p>7. ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY. Make sure operation instructions are safe and clearly understood.</p> <p>8. KEEP CHILDREN AND VISITORS AWAY. Keep all children and visitors a safe distance from the work area.</p> <p>9. MAKE WORKSHOP CHILD PROOF. Use padlocks, master switches, and remove switch keys.</p> <p>10. NEVER LEAVE WHEN MACHINE IS RUNNING. Turn power OFF and allow all moving parts to come to a complete stop before leaving machine unattended.</p> <p>11. DO NOT USE IN DANGEROUS ENVIRONMENTS. DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.</p> <p>12. KEEP WORK AREA CLEAN AND WELL LIT. Clutter and dark shadows may cause accidents.</p> <p>13. USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE. Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.</p> <p>14. ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY. Make sure switch is in OFF position before reconnecting.</p> <p>15. MAINTAIN MACHINERY WITH CARE. Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.</p> <p>16. MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.</p> | <p>17. REMOVE ADJUSTING KEYS AND WRENCHES. Make a habit of checking for keys and adjusting wrenches before turning machinery ON.</p> <p>18. CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY. Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.</p> <p>19. USE RECOMMENDED ACCESSORIES. Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.</p> <p>20. DO NOT FORCE MACHINERY. Work at the speed for which the machine or accessory was designed.</p> <p>21. SECURE WORKPIECE. Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.</p> <p>22. DO NOT OVERREACH. Keep proper footing and balance at all times.</p> <p>23. MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR. Know and avoid conditions that cause the workpiece to "kickback."</p> <p>24. ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.</p> <p>25. BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC REACTION in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and always wear an approved respirator.</p> |
|--|--|

WARNING

Additional Safety Instructions for Electric Palm Sander

- 1. HAND PROTECTION.** DO NOT place hands near, or in contact with, sanding base during operation. Sandpaper has the capability of removing skin.
- 2. INSPECTING WORKPIECES.** Always inspect workpiece for nails, staples, knots, and other imperfections that could be dislodged and thrown from the sander during sanding operations.
- 3. DRY SANDING:** Only use this sander for dry sanding. Serious personal injury or death could result from electrical shock if sander is used for wet sanding!
- 4. TRANSPORTING:** DO NOT carry a plugged-in sander with your finger on the ON/OFF switch. Do not carry the sander by the power cord.
- 5. VIBRATION GENERATED INJURIES:** Limit prolonged exposure to this tool and take regular breaks. Vibrations from hand-held sanders may result in a variety of neurological and vascular disorders.

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.

SECTION 2: INTRODUCTION

Foreword

We are proud to offer the Grizzly Model G5970 Electric Palm Sander. This model is part of a growing Grizzly family of fine power tools. 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.

It is our pleasure to provide this manual with the Model G5970. It was written to encourage safety considerations and guide you through general operating procedures and maintenance.

The specifications, details, and photographs in this manual represent the Model G5970 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.

Tool Data

Voltage 110V
Amps 1.3A
Vibrations Per Minute 10,000
Sandpaper Size 4¹/₂" x 5¹/₂" (1/4 Sheet)

Contact Information

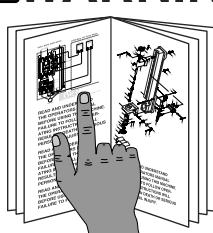
If you have any comments regarding this manual, please write to us at the following address:

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

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

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: <http://www.grizzly.com>

⚠ WARNING



Read the manual before operation. Become familiar with this tool, its safety instructions, and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.

SECTION 3: SET UP

Unpacking

Your palm sander left our warehouse in a carefully packed box. If you discover the palm sander is damaged after you have signed for delivery, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of the shipment, you should inventory the equipment.

Inventory

After you have unpacked the box you should find the following:

Model G5970 Inventory (Figure 1)

- A. Palm Sander 1
- B. Dust Bag 1
- C. 100 Grit Sandpaper 1

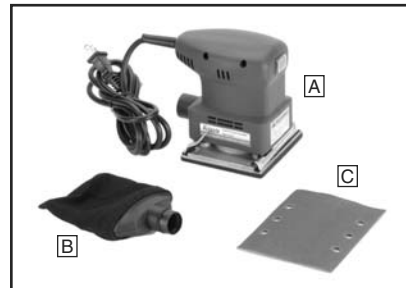


Figure 1. Model G5970 inventory.

SECTION 4: OPERATIONS

Getting Started

To test the sander:

1. Plug the cord into a 110V outlet.
2. Move the black switch (located at the front of the sander) to the “_” position to turn the sander **ON**, and move the switch to the “O” position to turn the sander **OFF**.

The sander should run smoothly. Strange or unusual noises should be investigated and corrected before operating further.

If you cannot easily locate the source of an unusual noise or vibration, contact our Service Department for help.

Selecting Abrasives

The best results from your G5970 Palm Sander will be accomplished using the proper grit of coated abrasive.

As a general rule, start with a coarse grit size and move through finer grit sizes until you achieve your desired finish.

Use the list below to define paper grit sizes:

- Extra Coarse.....12-20
- Very Coarse.....24-36
- Coarse40-50
- Medium.....60-100
- Fine.....120-180
- Very Fine220-280
- Extra Fine320-400

Model G5970 Electric Palm Sander

Any time you are unsure about which grit to begin with, experiment on a hidden area on your project. Ideally, you want to achieve the balance of removing defects without damaging your work.

Aluminum oxide and silicon carbide abrasives are an excellent choice because they last longer and are sharper than natural abrasives.

Attaching Abrasives

This palm sander is designed to use ¼ sheets of sandpaper measuring 4½" x 5½". You may purchase 4½" x 5½" sandpaper, or cut standard 9" x 11" sanding sheets into 4 pieces each measuring 4½" x 5½", or cut sheets out of a 4½" wide sanding roll.

To attach the sandpaper:

1. UNPLUG THE SANDER FROM THE POWER SOURCE!
2. Place the sander upside down with its top against a flat, stable surface.
3. Place the sandpaper over the base, align the holes in the paper with holes in the base (**Figure 2**), and bend the sandpaper down.



Figure 2. Sandpaper and base holes aligned. -7-

4. Press one of the clamps open, insert the paper between the clamp and the base (**Figure 3**), and release pressure on the clamp to secure the paper.



Figure 3. Attaching sandpaper on one side.

Note: After inserting sandpaper under a clamp, check to make sure the paper is centered.

5. Fold the sandpaper over the sander, and secure the paper in the opposite clamp as shown in **Figure 4**, making sure the sandpaper and base holes stay aligned and that the paper fits snugly. Poor sanding quality could result if the sandpaper is not tight enough.



Figure 4. Attaching sandpaper on the opposite side

Tip: Try using the sandpaper that came with your sander as a template for cutting holes in new $\frac{1}{4}$ sheets to match those on the bottom of the sander—so the dust bag can collect dust particles. Use a paper punch to cut the holes, or, mark the holes, score them with a sharp knife, and cut them out.

Attaching Dust Bag

Using the dust bag will help keep your work area clean and reduce dust particle emission.

To install the dust bag:

1. Insert the dust bag spout into the dust port and make sure it fits snugly.
2. When the dust bag is half full, remove the dust bag from the sander and empty it into a trash receptacle by gently tapping on the side of the bag.

Always wear a respirator or dust mask and safety glasses when emptying the dust bag.

Using the Sander

Determine the appropriate grit size for your project and sand the work evenly in the same direction as the grain of the wood. Always keep the sander moving so the finish of your work stays consistent. If you stay in one place too long, then the sander may produce a depression in the wood that will compromise your finish. Sanding across the grain of the wood may be necessary in some cases to remove rough defects. This should be done with caution, however, because it can produce cross-grain scratching that will require further sanding to remove.

⚠️ WARNING

Electrical shock hazard! Only use sander for dry sanding. Never use sander for wet sanding!

Change sheets as soon as the grit becomes dull. And, never apply excessive force while sanding. Your sander and paper will last longer if you let them do the work.

Model G5970 Electric Palm Sander

SECTION 5: MAINTENANCE

General

Regular periodic maintenance on your Model G5970 Palm Sander will ensure its optimum performance. Make a habit of inspecting your sander each time you use it. Check for the following conditions and repair or replace when necessary:

1. Loose fasteners.
2. Worn switch.
3. Worn or damaged cords and plugs.
4. Worn or damaged sanding pad.
5. Any other condition that could hamper the safe operation of this tool.

Keeping Tool Clean

Your Model G5970 Palm Sander will give you years of trouble free service if you keep it clean and free of built-up dust or grime. Ensure that no air passages get blocked. If they do, blow them out with compressed air.

CAUTION: Unprotected eyes can be injured by dust particles propelled by compressed air. ALWAYS wear safety glasses and a dust mask when cleaning the sander with compressed air.

Plastic parts can easily be cleaned with a damp cloth, but never use water to clean any electrical parts. Solvents should also be avoided on plastic because of the possibility of damage.

If possible, use a scraper to remove glue or sap from your work; these elements may hinder the effectiveness of the abrasive sheets and cause unnecessary build-up of grime on the sander.

SECTION 6: SERVICE

Troubleshooting

Symptom	Possible Cause	Solution
Amount of material removed by sander, quality of finish decreases, or sander slides easily across workpiece.	<ol style="list-style-type: none"> 1. Sandpaper clogged with paint or glue. 2. Sandpaper tension is low. 3. Sandpaper grit dull. 	<ol style="list-style-type: none"> 1. Replace sandpaper. 2. Adjust sandpaper in clamps and remove slack. 3. Replace sandpaper
Sander generates excessive dust particles.	<ol style="list-style-type: none"> 1. Dust bag full. 2. Holes on sandpaper not aligned with holes in sander base. 3. Sandpaper lacks holes. 4. Holes in sander base clogged. 	<ol style="list-style-type: none"> 1. Empty dust bag. 2. Use abrasive paper with pre-punched holes that match holes on base. 3. Cut or punch holes in sandpaper to match holes on sander base. 4. Clean dust collection holes in base with dry compressed air.
Sander runs slowly, becomes hot, or sanding efficiency decreased.	<ol style="list-style-type: none"> 1. Excessive pressure placed on sander. 	<ol style="list-style-type: none"> 1. Apply less pressure on sander.
Sander fails to start .	<ol style="list-style-type: none"> 1. Sander plug prongs loose in wall outlet. 2. Switch clogged with dust. 	<ol style="list-style-type: none"> 1. Plug sander back into outlet so they fit snugly. 2. Clean switch.

Repair

All quality tools will eventually wear from normal use. Since this sander is encased in an insulated plastic cover, leave repair and service issues to a qualified service technician. This includes brush replacement, lubrication or any other internal operation.

See the **Parts Breakdown** on **Page 11** for replacement parts.

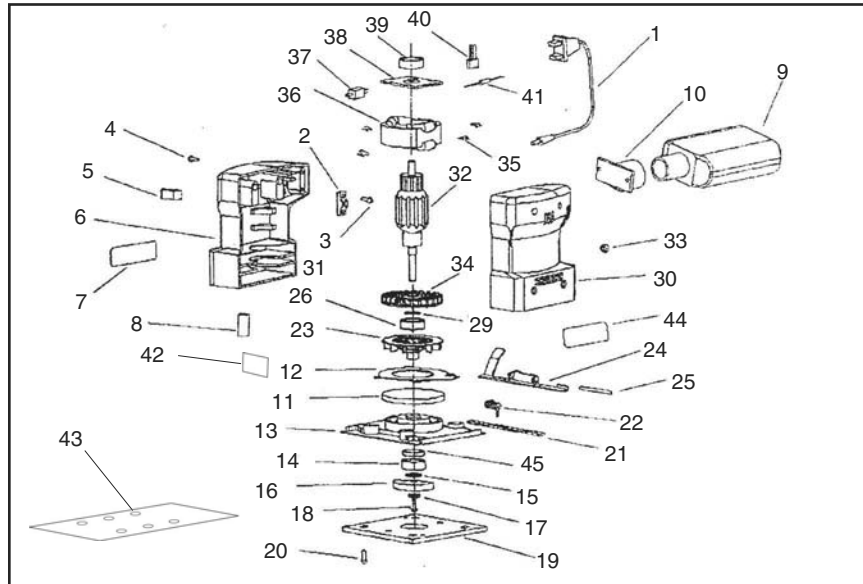
You can replace the rubber backing pad that holds the abrasive sheets if it becomes worn. Remove the four screws that hold

WARNING

Disassembly and improper reassembly of this device can result in electrical shock danger. Always have this device serviced by a qualified electrical repair technician. Serious injury will result.

the backing plate to the body of the sander and replace with a new rubber backing piece, installing the reverse of removal. Make sure you tighten the rubber backing screws sufficiently, so you don't have problems when you resume operations.

Parts Breakdown



Parts List

REF PART #	DESCRIPTION	REF PART #	DESCRIPTION		
1	P5970001	POWER CORD	23	P5970023	ALUMINUM FAN
2	P5970002	CABLE CLAMP	24	P5970024	CLAMP
3	P5970003	TAP SCREW ST 4.2 X 12	25	P5970025	PIN
4	P5970004	TAP SCREW ST 4.2 X 18	26	P5970026	BEARING
5	P5970005	SWITCH	29	P5970029	RUBBER WASHER
6	P5970006	LEFT HOUSING	30	P5970030	RIGHT HOUSING
7	P5970007	GRIZZLY NAMEPLATE	31	P5970031	NUT
8	P5970008	RUBBER PAD	32	P5970032	ROTOR
9	P5970009	DUST BAG	33	P5970033	WIRE TERMINAL
10	P5970010	DUST BAG ADAPTER	34	P5970034	STATOR
11	P5970011	COVER PLATE	35	P5970035	CARBON BRUSH
12	P5970012	DUST SEAL	36	P5970036	BRUSH HOUSING
13	P5970013	WORK BASE PLATE	37	P5970037	WIRE COVER
14	P5970014	BEARING	38	P5970038	DUST SHIELD
15	P5970015	WASHER	39	P5970039	BEARING
16	P5970016	ECCENTRIC	40	P5970040	CARBON BRUSH
17	P5970017	WASHER	41	P5970041	INDUCTANCE
18	P5970018	BOLT	42	P5970042	DUST WARNING LABEL
19	P5970019	FOAM PAD	43	P5970043	100 GRIT SANDPAPER 4-1/2 x 5-1/2
20	PS38M	PHLP HD SCR M4-.7 X 10	44	P5970044	FACTORY LABEL
21	P5970021	DUST-PROOF PACKING	45	P5970045	SPACER
22	P5970022	SPRING			

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 Authorization 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.

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: <http://www.grizzly.com>

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



WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____ Invoice # _____
 Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **All information is strictly confidential.**

1. How did you learn about us?
 Advertisement Friend Catalog
 Card Deck Website Other: _____

2. Which of the following magazines do you subscribe to?

<input type="checkbox"/> Cabinet Maker	<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Today's Homeowner
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wood
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Handy	<input type="checkbox"/> Practical Homeowner	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Modeltec	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Shotgun News	

3. What is your annual household income?
 \$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?
 20-29 30-39 40-49
 50-59 60-69 70+

5. How long have you been a woodworker/metalworker?
 0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?
 0-2 3-5 6-9 10+

7. Do you think your machine represents a good value? Yes No

8. Would you recommend Grizzly Industrial to a friend? Yes No

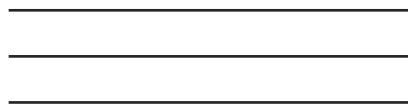
9. Would you allow us to use your name as a reference for our customers in your area?
 Note: We never use names more than 3 times. Yes No

10. Comments: _____

Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

FOLD ALONG DOTTED LINE



Place
Stamp
Here



GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069



TAPE ALONG EDGES--PLEASE DO NOT STAPLE

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>