

Grizzly *Industrial, Inc.*®

MODEL H7859

RIGHT ANGLE DRILL INSTRUCTION MANUAL



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#CR7857 PRINTED IN CHINA

 **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

 **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 chemicals 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.

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.

DANGER

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

WARNING

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

CAUTION

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 Hand Drills

- 1. DRILL INSPECTIONS:** Perform drill inspections and maintenance service promptly as required.
- 2. DO NOT FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
- 3. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 4. SHARP SURFACES:** DO NOT place hands near, or in contact with, cutting surfaces during operation.
- 5. DO NOT USE IN DANGEROUS ENVIRONMENT.** Do not use pneumatic tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.
- 6. KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept at a safe distance from work area.
- 7. REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before operation.

WARNING

Safety Instructions for Hand Drills

8. **USE THE RIGHT TOOL.** Do not force tool or attachment to do a job for which it was not designed.
9. **DO NOT USE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.**
10. **USE PROPER EXTENSION CORD** for the tool. Make sure your extension cord is in good condition and is long enough to reach your work without stretching.
11. **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 a protective hair covering to contain long hair.
12. **ALWAYS USE SAFETY GLASSES.** Also use a face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
13. **SECURE WORK.** Use clamps or a vise to hold work when practical. It is safer than using your hand and frees both hands to operate tool.
14. **TEST RUN.** Always test run the drill before starting any work.
15. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Do not carry tool with hand on trigger and always disconnect from power when not in use.
16. **DISCONNECT TOOLS** before servicing, changing accessories, or moving to another location.
17. **DO NOT OVERREACH.** Keep proper footing/balance at all times.
18. **USE THE RECOMMENDED ACCESSORIES.** Consult owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
19. **DRILLING.** Always apply a steady and slow pressure on the drill when drilling. Always expect a drill bit or hole saw to grab, and be prepared to let go of the drill trigger before the drill stalls or the bit breaks.
20. **NEVER LEAVE UNATTENDED TOOL CONNECTED TO POWER.** Disconnect the tool from the power source before leaving the area.
21. **NEVER ALLOW UNTRAINED USERS TO USE THIS TOOL WHILE UNSUPERVISED.**
22. **IF YOU ARE UNSURE OF THE INTENDED OPERATION, STOP USING TOOL.** Seek formal instruction.
23. **KEEP DRILL BITS SHARP.** Replace or sharpen blade as needed.

WARNING

Safety Instructions for Drills

- 1. READ THROUGH THE ENTIRE MANUAL BEFORE STARTING DRILL.** Drill presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING DRILL.** Everyday eye-glasses are NOT safety glasses.
- 3. MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove switch keys.
- 4. KEEP CHILDREN AWAY.** Keep all children a safe distance from the work area.
- 5. WEAR PROPER APPAREL.** DO NOT wear loose clothing, neckties, rings, or jewelry which may get caught in the drill chuck. Wear protective hair covering to contain long hair.
- 6. DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use drill in damp, wet locations, or where any flammable or noxious fumes may exist.
- 7. KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
- 8. USE A GROUNDED EXTENSION CORD RATED FOR THE DRILL AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged.
- 9. DO NOT OVERREACH.** Keep proper footing and balance at all times.
- 10. ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING DRILL.** Make sure switch is in OFF position before reconnecting.
- 11. MAINTAIN DRILL WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 12. REMOVE THE CHUCK KEY.** Make a habit of checking for the chuck key before turning drill *ON*.
- 13. DO NOT FORCE DRILL.** Work at the speed for which the drill or accessory was designed.
- 14. SECURE THE 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 drill.
- 15. 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 when working under these conditions.

SECTION 2: INTRODUCTION

Foreword

We are proud to offer the Grizzly Model H7859 Right Angle Drill. 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.

The Model H7859 is designed to be used with a 14 gauge 110V extension cord.

It is our pleasure to provide this manual with the Model H7859. 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 H7859 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.

Drill Data

Drill Motor 110V, 3.2A, 60 Hz,
Max. Drilling Speed 1500 RPM
Net Weight.....3.75 lbs

Contact Information

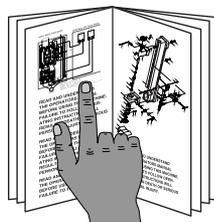
If you have any comments regarding this manual, please write to us at the following address:

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 drill, 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 drill left our warehouse carefully packed. If you discover the drill 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 H7859 Inventory (Figure 1)

- A. Right Angle Drill 1
- B. Chuck Key 1

Parts

If you need to order parts, refer to this list when calling the Grizzly Parts Department:

Model H7859 Parts (Figure 1)

Item	Description	Part Number
1.	Chuck Key	P7859001
2.	Gearbox, shaft, and coupler	P7859002
3.	Chuck 1.5-10mm, 3/8"-24	P7859003
4.	Motor and Switch Assembly	P7859004
5.	Brush and Cap Set	P7859005
6.	Power Cord	P7859006

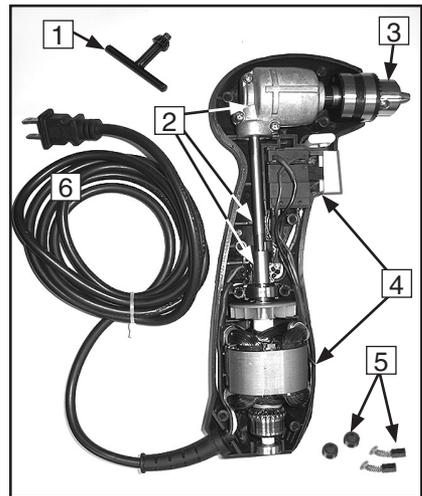


Figure 1. Parts.

SECTION 4: OPERATIONS



Changing Bits

1. DISCONNECT THE DRILL FROM POWER!
2. Insert the chuck key into one of the holes located on the side of the chuck.
3. Turn the chuck key counter-clockwise. This will cause the three chuck jaws to open. When the chuck jaws are at the approximate diameter of the bit or driver, insert the shank end of the bit or driver into the jaw opening.
5. Turn the chuck key clockwise until the jaws close tightly around the bit or driver. Never "power tighten" which is holding the chuck while running the drill. This can cause serious injury to the operator's hands. Check for tightness periodically while using the tool.
6. To release the bit or driver, insert the chuck key and turn counter-clockwise.

! WARNING

Always wear safety glasses or goggles when operating tools. 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).

Drilling Guidelines and Tips

- **Avoid overloading the drill.** Always use sharpened drill bits and frequently clear chips and shavings from the hole drilled. Do not apply excessive pressure to the drill. If the speed drops abnormally, decrease pressure immediately. If the bit stops abruptly or becomes blocked, release the trigger at once.
- **Ensure the safety of the workplace.** Clear the work area of all parts and debris that may cause injury by flying objects. Securely fix the object to be drilled or fastened in a vise or clamp to avoid injury.
- **Inspect the drill before use.** Run the drill before using to ensure that the drill bit is centered in the chuck.
- **Know your worksite.** Only drill as deep as necessary. Check behind walls for wires, other electrical hazards, or plumbing.
- **Use drill in a safe environment.** Never use the drill where paper, flammable gasses/liquids exist, or where any ignition hazard exists.

SECTION 5: MAINTENANCE



Basic Maintenance

Continuous use of a worn or damaged bit will overload the motor, so often inspect and sharpen drill bits as required.

Regularly clean your drill and make sure that no dust or grime builds up in the motor ventilation holes. If these holes become blocked, the motor will wear down faster than necessary. A good way to clean ventilation holes is to blow them out with compressed air. Just be sure to wear safety glasses when you do this.

Store tool in a dry place when not in use. Moisture in the internal parts of the drill may cause electrical corrosion or a short circuit.



Brush Replacement

Under extreme use, the Model H7859 may require brush replacement, as the motor may lose power or growl during operation. The following steps will guide you through brush replacement.

1. Unplug the drill.
2. Remove two brush caps.
3. Replace two brushes.
4. Reinstall two brush caps.
5. Test drill operation.



Figure 2. Brush replacement.

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 drill 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?

Cabinet Maker Popular Mechanics Today's Homeowner
 Family Handyman Popular Science Wood
 Hand Loader Popular Woodworking Wooden Boat
 Handy Practical Homeowner Woodshop News
 Home Shop Machinist Precision Shooter Woodsmith
 Journal of Light Cont. Projects in Metal Woodwork
 Live Steam RC Modeler Woodworker West
 Model Airplane News Rifle Woodworker's Journal
 Modeltec Shop Notes Other:
 Old House Journal 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 drills or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your drill 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