

Grizzly **Industrial, Inc.**®

2000 LB. ELECTRIC WINCH

MODEL H7604

INSTRUCTION MANUAL



COPYRIGHT © JUNE, 2005 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.

#EW7266 PRINTED IN CHINA

Table of Contents

INTRODUCTION	2
Foreword.....	2
Machine Data.....	2
Contact Info.....	2
SECTION 1: SAFETY	3
Safety Instructions for Machinery	3
Additional Safety Instructions for Electric Winches	5
SECTION 2: SET UP	6
Inventory	6
Wiring.....	7
Mounting Receiver Hitch.....	8
Mounting Winch	9
SECTION 3: Operations	10
Pulling Capacity	10
Hand Crank.....	10
Receiver Hitch.....	10
Winch	11
Maintenance	11

INTRODUCTION

Foreword

We are proud to offer the Grizzly Model H7604 2000 Lb. Electric Winch. 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 H7604 features convenient, portable power for pulling boats, stuck vehicles, and other heavy items. This 2000 lb. pulling capacity winch is powered by your 12V automotive battery. The winch also has a built in carrying handle, a quick attach mounting plate, and a heavy-duty bumper mount receiver hitch.

It is our pleasure to provide this manual with the Model H7604. 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 H7604 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.

Machine Data

Pulling Capacity..... 2000 lb.
Line Speed Under Load..... 6" per Minute
Cable Size 3/16" x 30'
Crank Handle.....2 Position, Manual
Power Source.....12V Battery

Contact Info

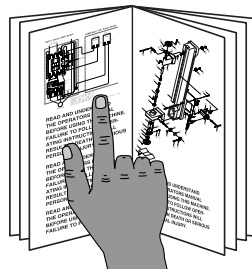
If you have any comments regarding this manual, please write to us at the following address:

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 machine, 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 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 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 AN ANSI 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.

- 7. ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and understood.
- 8. MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
- 9. KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
- 10. MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.
- 11. NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
- 12. DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
- 12. KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
- 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.
- 14. ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
- 15. MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 16. REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
- 17. 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.
- 18. USE SUGGESTED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
- 19. DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
- 20. 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.
- 21. DO NOT OVERREACH.** Keep proper footing and balance at all times.
- 22. MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
- 23. ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
- 24. 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.

WARNING

Additional Safety Instructions for Electric Winches

- 1. READ THIS MANUAL:** This manual contains proper operating instructions for this machine.
- 2. EYE PROTECTION:** Always wear ANSI approved eye protection when operating winch.
- 3. LOOSE CLOTHING:** DO NOT wear loose clothing while operating this machine. Keep hair, jewelry and hands away from operating winch.
- 4. CABLE DAMAGE:** DO NOT use winch if the cable is damaged or frayed. DO NOT replace the cable with one of lesser strength.
- 5. CABLE BREAKAGE:** Do not stand in line with or alongside the cable while the winch is operating. If the cable breaks it can cause serious personal injury.
- 6. WINCH LIMITS:** DO NOT attempt to exceed the pulling limits of the winch.
- 7. SAFETY SPOTTER:** Use a spotter to help ensure safety when using the winch. Be sure the spotter is out of the way of the vehicle and the cable before operating the winch.
- 8. HAND CRANK:** Never use the hand crank to assist the winch while running. This will damage the winch and could cause personal injury.
- 9. AUTOMOTIVE BATTERY:** Be sure the battery is in good condition. Always connect the positive (+/RED) cable to the positive (+/RED) battery post first, then connect the negative (-/BLACK) cable to the vehicle frame.

WARNING

There is danger associated with the use of the Model H7604. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

No list of safety guidelines can be complete. Every 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: SET UP

Inventory



Figure 1. Winch inventory.

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

Save the container and 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.

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

Box 1: (Figure 1)	Qty
A. Winch	1
B. 10' Power Cable.....	1
C. Bumper Mount Receiver Hitch.....	1
D. Mounting Plate	1
E. 10' Remote Control Cable.....	1
F. Manual Crank Handle	1

In the event that any non proprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

Wiring

WARNING

Important Wiring Reminders

1. Always wear ANSI approved safety glasses when operating the winch or working near the 12V battery.
2. Always connect the positive (+/RED) cable to the positive (+/RED) battery post and the negative (-/BLACK) cable to the vehicle frame.
3. Always connect the red alligator clip to the battery FIRST, followed by the black alligator clip to the vehicle frame.
4. Never run the battery dead while using the winch.
5. Never use a battery that is leaking acid or is badly corroded.

Failure to comply with these and other warnings could result in serious personal injury.

To temporarily wire the winch to a 12V battery:

1. Plug the power cable into the corresponding plug socket on the winch. Route the power cable from the winch to your battery, being careful to avoid getting it tangled with the other wires or causing a tripping hazard.
2. Connect the red alligator clip to the positive (+/RED) terminal of your battery. Use only a 12V battery source that is in good working condition. Connect the black alligator clip to the frame of your vehicle to establish a ground connection.
3. Plug the remote control switch into the second plug socket on the side of the winch. This remote switch allows the winch to be operated from a safe distance.
4. Set the remote control aside in a safe place until the winch is ready to operate.

To permanently wire the winch to a 12V battery:

The included power cable can be used for a permanent wiring set-up; however, the alligator clips must be replaced with suitable connectors (not included) to allow the red wire to hook up to a positive 12V power source and the black wire to connect to the vehicle frame. Route the wires through the vehicle in a way that will prevent damage to the wires during operation and maintenance of the vehicle.

NOTICE

If holes are drilled into metal to route the power cable, be sure to use rubber grommets to protect the cable from being cut on the sharp metal.

Mounting Receiver Hitch

NOTICE

This receiver hitch is rated for 2000 lbs. of pulling force. Be sure the bumper is capable of withstanding this amount of force. Reinforcement or modification may be required depending on the mounting location. Failure to comply with this notice could result in damage to your vehicle and/or property.

The receiver hitch is designed to be mounted to a standard truck step bumper. The vehicle and bumper must have a minimum towing capacity of 2000 lbs. The receiver accepts a standard 2" draw bar.

To install the receiver hitch:

1. Temporarily clamp the receiver hitch to the truck bumper with C-clamps.
2. Use the holes in the receiver hitch as a guide for drilling four ½" mounting holes into the bumper.

Note: Avoid drilling into any wiring that may be routed through the inside of the bumper.

WARNING

DO NOT weld or drill additional holes in the hitch. This will weaken the hitch and may cause it to break.

3. Mount the receiver hitch permanently with four ½" carriage bolts, flat washers, lock washers, and hex nuts.

Note: Only use Grade 5 carriage bolts, flat washers, lock washers, and hex nuts. Use a thread locking compound such as Loctite® on the bolts.

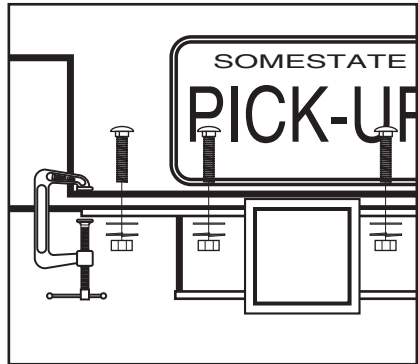


Figure 2. Receiver hitch installation.

4. Insert a draw bar with an attached hitch ball (not included) into the receiver and secure it with a hitch pin in order to attach a trailer or temporarily mount the winch.

Mounting Winch

The Model H7604 is designed to be mounted temporarily to a hitch ball on a vehicle; however, you may also attach the winch mounting plate permanently to a trailer or vehicle.

To mount the winch temporarily:

1. Slide the heads of the mounting plate studs into the keyhole slots on the back of the winch.
2. Attach the mounting plate assembly to a trailer hitch or vehicle by inserting the trailer hitch ball through the shaped hole in the mounting plate as shown in **Figure 3**.

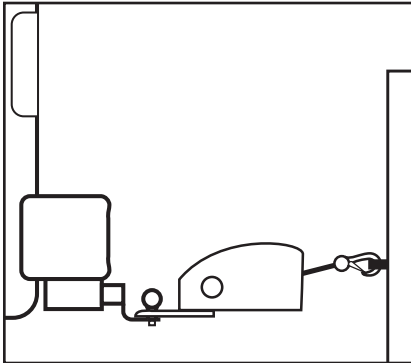


Figure 3. Winch temporary mount.

To mount the winch permanently:

1. Select a mounting location on your bumper, boat trailer, truck bed, or some other suitable location.
2. Place the winch in the desired mounting location and mark the location of the mounting holes with a scribe or some other marking tool.
3. Drill out the holes for mounting the winch.
4. Mount the winch to the vehicle using Grade 5 hex bolts of at least $\frac{3}{8}$ " diameter with lock washers, flat washers and hex nuts.

NOTICE

This winch creates 2000 lbs. of pulling force. Be sure the mounting location is capable of withstanding this amount of force. Reinforcement or modification may be required depending on the mounting location. Failure to comply with this notice could result in damage to your vehicle and/or property.

SECTION 3: Operations

Pulling Capacity

This winch has a pulling capacity of 2,000 lbs. Applying this capability to a practical sense, you can:

- Move a load from a “dead” stop of up to 2,000 lbs. on level ground.
- Move up to a 4,800 lb boat in water.
- Maintain movement of a wheeled vehicle of up to 6,000 lbs.

Pulling capacity is reduced as the incline increases. For example, maintaining vehicle movement capacity is reduced from 6,000 lbs. on flat ground to 1,100 lbs. on a 45° incline. Please refer to **Figure 4** for estimated pulling capacity (maintaining vehicle movement) on various inclines.

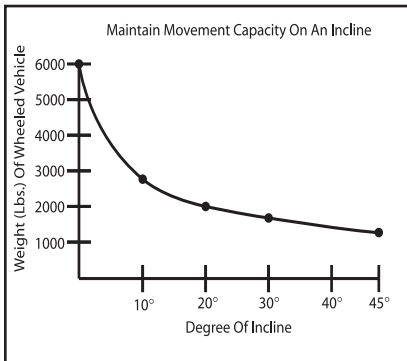


Figure 4. Pulling capacity chart.

Hand Crank

To use the hand crank:

1. Turn the clutch knob clockwise until it is hand tight. Do not force or overtighten.

2. Remove the outer hex nut and place the end of the hand crank over the flattened end of the threaded shaft (see **Figure 5**).

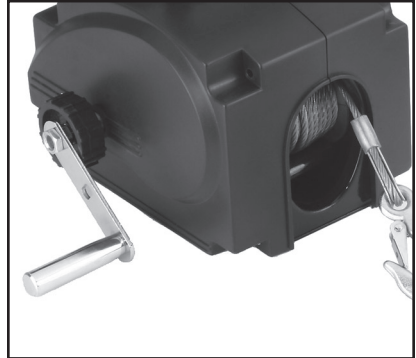


Figure 5. Hand crank.

3. Replace the outer hex nut and tighten it against the hand crank.
4. Rotate the hand crank clockwise to tighten the cable. Turn until the cable has been completely retracted.

Receiver Hitch

To use the receiver hitch:

1. Turn the tow vehicle **OFF** and engage the parking brake.
2. Slide a draw bar with a hitch ball into the receiver and secure it with a hitch pin.
3. Connect the trailer to the hitch ball and attach the safety chains to the receiver hitch.

Winch

!WARNING

Never use the hand crank to assist the operating winch. This will damage the winch and may cause serious personal injury.

To operate the electric winch:

1. Place the vehicle in low gear (manual transmission) or Park (automatic transmission). Put your emergency brake ON and block the wheels with suitable chocks.
2. Attach the power and control cables to the winch.
3. Unlock the cable by turning the clutch knob counterclockwise, then pull out the amount of cable you need. Always leave at least three turns of cable on the winch to prevent it from slipping off under initial tension.
4. Hook onto the pulling object using a pulling point, tow strap, or chain as shown in **Figure 6**.

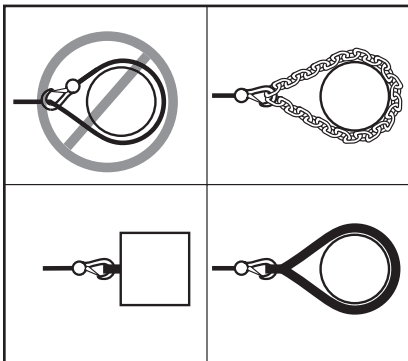
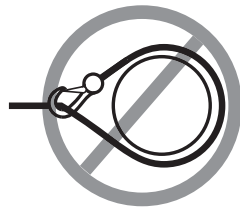


Figure 6. Cable attachment.

!WARNING



Never wrap the cable around an object and attach the hook to the cable. This can damage the object and fray or kink the cable. Should the cable or pulling object break, serious personal injury could occur.

5. Retighten the clutch knob and tighten the inner hex nut.
6. Attach the power cord to the 12V battery.
7. Stand clear of the cable. Use the remote control to turn the winch **ON** and begin retracting the cable.

Maintenance

1. Occasionally lubricate the cable with a light machine oil.
2. Grease the gears every 6 months. Separate the left and right housing to expose the gears. Use a good quality waterproof grease.

!WARNING

Occasionally examine the cable for any fray or other damage. Damage to the cable can significantly reduce the pulling capacity and will increase the likelihood of breaking under load. This could cause serious personal injury.

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?

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 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