



# 10-TON LOG SPLITTER

## OWNER'S MANUAL



**⚠ WARNING:**  
Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

**Item#s 46429**

## 10-TON LOG SPLITTER OWNER'S MANUAL

Thank you very much for choosing an Ironton™ product. For future reference, please complete the owner's record below:

Model: \_\_\_\_\_ Purchase Date: \_\_\_\_\_

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This item is designed for certain applications only. The distributor cannot be responsible for issues arising from modification. We strongly recommend this item not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use this product until you have first contacted the distributor to determine if it can or should be performed on the product.

For technical questions please call 1-800-222-5381.

**⚠ WARNING:** Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury. Save these instructions in a safe place and on hand so that they can be read when required. Keep these instructions to assist in future servicing.

### INTRODUCTION

This Ironton™ Horizontal Manual Hydraulic Log Splitter features a 2-speed pump that quickly builds up to 10 tons of log-splitting pressure. Pump operates using 2 steel handles to split logs up to 18in. long. 200mm ram stroke. Includes 2 wheels for easy maneuverability

### TECHNICAL SPECIFICATIONS

Ram Force (Tons)	10 Ton
Maximum Log Length	18in. L
Minimum Log Length	13 1/2in. L
Ram Stroke	200mm
Product Type	Horizontal splitter

### GENERAL SAFETY RULES

**⚠ WARNING:** Read and understand all instructions.


**⚠ WARNING:** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.


1. **Keep the work area clean and dry.** Damp or wet work areas can result in injury.
2. **Keep children away from work area.** Do not allow children to handle this product.
3. **Store idle equipment.** When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment, and keep out of reach of children.
4. **Use the right tool for the job.** Do not attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which it was intended. Do not modify this equipment, and do not use this equipment for a purpose for which it was not intended.
5. **Check for damaged parts.** Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace damaged or worn parts immediately.


6. Do not overreach. Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.
7. **DO NOT** use the equipment when tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating this equipment may result in serious personal injury.
8. Industrial applications must follow OSHA requirements.


### SPECIFIC OPERATION WARNINGS


IN THIS MANUAL, ON THE LABELING AND ALL OTHER INFORMATION PROVIDED WITH THIS PRODUCT, PAY ATTENTION TO THESE SYMBOLS.

 This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.


 **WARNING:** Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

 **CAUTION:** Used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

 **WARNING:** Read all instructions. Failure to follow all instructions listed below may result in fire, serious injury and/or death.

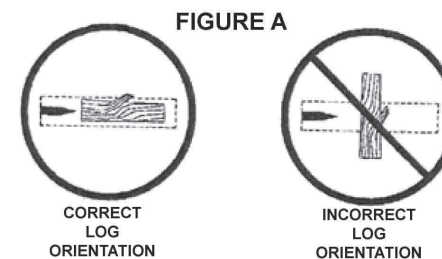
 **WARNING:** The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors, which cannot be built into this product, but must be supplied by the operator.

### IMPORTANT SAFETY PRECAUTIONS

 **WARNING:** When using hydraulic equipment, basic safety precautions should always be followed to reduce the risk of personal injury and hazards due to over-pressurization. READ ALL INSTRUCTIONS BEFORE USING THIS TOOL

1. Set up and use on a flat, level, solid surface outdoors.
2. Wear ANSI-approved safety glasses with a full face shield, a NIOSH-approved dust mask/respirator, heavy-duty work gloves, a hard hat, and steel toe work boots during set up and use.
3. Keep children away from the equipment, especially while it is operating.
4. Do not leave the equipment unattended unless it is properly stored.
5. Only use accessories that are recommended by the distributor for your model. Accessories that may be suitable for one piece of equipment may become hazardous when used on another piece of equipment.
6. Stay alert, watch what you are doing and use common sense when operating this piece of equipment.
7. Do not use this piece of equipment while tired or under the influence of drugs, alcohol or medication.
8. Do not overreach. Keep proper footing and balance at all times for better control of the equipment in unexpected situations. Do not reach over or across the equipment while operating.
9. Dress properly. Do not wear loose clothing or jewelry. Keep hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
10. Keep the equipment and surrounding area clean at all times.
11. Use the equipment, accessories, etc., in accordance with these instructions and in the manner intended for the particular type of equipment. Take into account the working conditions and the work to be performed. Use of the equipment for operations different from those intended could result in a hazardous situation.

12. Moving parts can crush and cut, so keep hands and other body parts clear of the Ram Plate, Wedge, and logs while splitting.
13. Be thoroughly familiar with all controls and with the proper use of the Log Splitter. Know how to stop the Log Splitter and relieve the system pressure quickly if needed.
14. Make sure all fittings are tight before applying pressure.
15. Be aware of the added length of the Log Splitter when transporting.
16. If a log becomes jammed in the Wedge, back off the pressure and remove the log with a pry bar.
17. Always operate the Log Splitter with all safety equipment in place and in proper working order, and all controls properly adjusted for safe operation.
18. Always relieve the system pressure before inspecting, cleaning, adjusting or repairing the Log Splitter
19. This Log Splitter is designed to split logs up to 18in. long with a 6 1/2in. diameter, length-wise with the grain only (See Figure A).



20. This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm (California Health & Safety Code §25249.5, et seq.).
21. If an oil spill occurs, it must be cleaned up immediately. Dispose of fluids and cleaning materials as per any local, state or federal codes and regulations. Store oil rags in a bottom-ventilated, covered, metal container
22. Before use, check for poor alignment or binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have the equipment serviced before using. Many accidents are caused by poorly maintained equipment.
23. Use the right equipment for the application. Do not modify the equipment or use it for a purpose for which it is not intended.
24. Keep all safety guards in place and in proper working order.
25. Never add attachments to the Log Splitter, except for authorized accessories supplied by the manufacturer with instructions for safe installation and use.
26. Use the Log Splitter only in daylight so you can see what you are doing.
27. Never attempt to change the height or speed of the splitting Wedge.
28. Maintain labels and nameplates on the Log Splitter. These carry important information. If unreadable or missing, contact the distributor for a replacement.
29. Have the Log Splitter serviced by a qualified professional using only original replacement parts. This will ensure that the safety of the equipment is maintained. Do not attempt any service or maintenance procedures not explained in this manual or any procedures when you are uncertain about your ability to perform them safely or correctly.
30. Do not allow anyone to operate the Log Splitter who has not read this manual or has not been instructed on the safe use of the Splitter. The Log Splitter owner should instruct all operators in safe Log Splitter operation.
31. Store equipment out of the reach of children and other unauthorized persons.

## 10-TON LOG SPLITTER OWNER'S MANUAL

### UNPACKING

When unpacking, check and make sure the following parts are included. All sizes listed below are approximate.

Item#	Description
A	Log Splitter Assembly
B	Operation Handles

### INSTALLATION

To complete assembly, insert one OPERATION HANDLE (B) into each of the SOCKET (C) on the Ram. See Fig. 1. Your Hydraulic Log Splitter is ready for use.

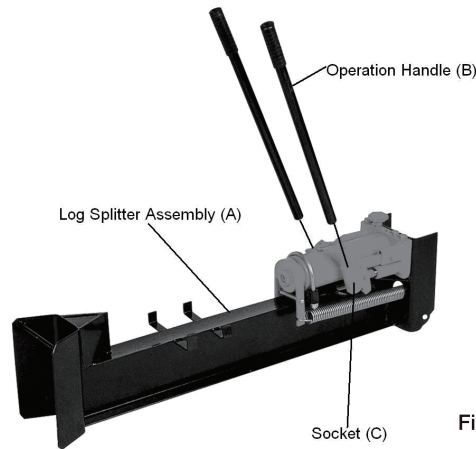


Fig. 1

### OPERATION INSTRUCTIONS

**WARNING:** Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual before using this product.

#### SPLITTING OPERATION/ADDITIONAL SAFETY INSTRUCTIONS

1. Hold the bark side of logs when loading or positioning, never the ends. Never place your hands or any body parts between a log and any part of the Log Splitter.
2. Never load or unload logs while the Ram is moving.
3. Do not pile logs to be split in a place that will make you reach across the Log Splitter in order to load them.
4. Log ends that are not cut square can slide out while splitting and cause a safety hazard or excessive force to the Log Splitter components. Use a chain saw (not included) to cut logs square on each end before attempting to split them.
5. Never attempt to split more than one log at a time. A piece of a log can unexpectedly be thrown from the machine, causing personal injury.
6. Do not use the Log Splitter to split logs across the grain. Doing so will damage the Log Splitter and could also cause pieces of the log to be thrown, injuring the operator or bystanders.
7. Do not use if there is any indication of damage to the Hydraulic Cylinder.

Note: Accidents occur when there is more than one person involved in loading and operating the Log Splitter. Only one person should operate it. If a second person is assisting in loading logs, NEVER allow an assistant to hold the log in place while the operator is using the Operation Handles.

## 10-TON LOG SPLITTER OWNER'S MANUAL

### TO OPERATE

1. Grip one Handle in each hand and pump the Handles in a back-and-forth stroke motion. See Fig. 2.

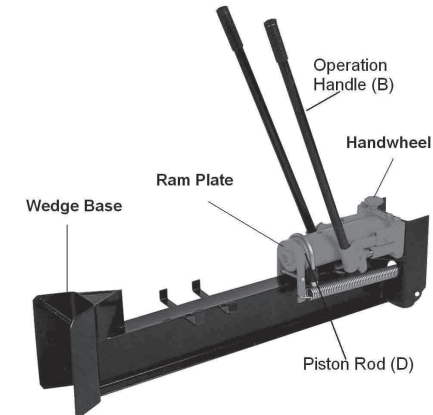


Fig. 2

2. This action will force the log against the Wedge Base and split the log.
3. Remove the split pieces.
4. Turn the Handle (B) counterclockwise no more than one full turn to retrieve the Ram (see Figure 2).
5. Turn the Handle wheel clockwise until it is snug.
6. When finished, store the Log Splitter with the Hand Wheel turned counterclockwise one turn to relieve the hydraulic pressure.

**WARNING:** Personal injury or damage to the Splitter could result from a log or metal piece flying out at a high speed toward the operator or bystanders.

**WARNING:** Remove Split Logs: Move each split log away from the Log Splitter. Split logs left near the Log Splitter are a tripping hazard.

**WARNING:** ALWAYS keep hands and feet away from the endplate, wedge, and partially split logs while loading, operating and unloading the log splitter.

Important safety instructions:

- Hold bark side. Hold the bark side of logs when loading or positioning, never the ends. Never place your hands or any part of your body between a log and any part of the log splitter.
- Unsplit log pile. Do not pile logs to be split in a place that will make you reach across the log splitter in order to load them.
- Square log ends. Logs that are not cut square can slide out while splitting and become a safety hazard or cause excessive force to log splitter components. Use a chainsaw to cut logs square on each end before attempting to split them.
- Single log. Never attempt to split more than one log at a time. Pieces of log can unexpectedly be thrown from the machine causing serious injury.
- Split along grain. Do not use the log splitter to split logs across the grain. Doing so will damage the log splitter and could also cause pieces of log to be thrown, injuring the operator or bystanders.
- Forked logs. Splitting forked logs can cause damage the log splitter. Trim the forked log with a chain saw prior to splitting the log.
- Second person. Many accidents occur when there is more than one person involved in loading and operating the log splitter. If a second person is helping to load, ensure they are clear of the splitter before operating the machine.

**TO REMOVE A STUCK LOG**

**⚠ WARNING:** Never attempt to remove a stuck log by doing the following:

- Using the hydraulic force of the Log Splitter
- Modifying the Log Splitter
- Adding attachments to the Log Splitter

A log can get stuck on the Wedge Base if the Wedge becomes embedded in the log and the log doesn't completely split and separate. This can happen if the log is too stringy or tough to split completely. If this happens, follow the directions below:

1. Fully retract the Ram.
2. Remove the stuck log from the Wedge manually with a pry bar.
3. **IMPORTANT:** Be extremely careful as log pieces may fly off as they separate from the Wedge.
4. Do not attempt to re-split a stuck log once it has been removed from the Wedge. Manually split the log with a maul, or cut it with a chain saw.

**TO BLEED THE LOG SPLITTER**

1. Extend the Ram to its maximum length.
2. Remove the oil Plug and top off the oil (See Fig. 3).

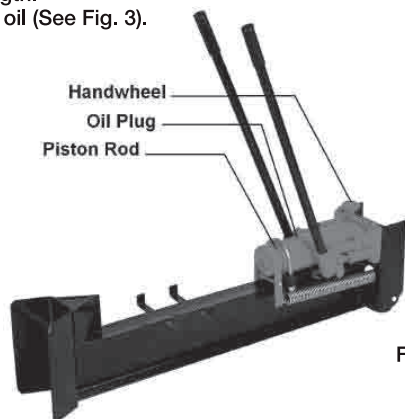


Fig. 3

3. Turn the Hand wheel counterclockwise as fast as possible. The Piston Rod will retract into the Ram and push air out of the Cylinder via the Oil Plug Hole. Top off the oil as needed.
4. Re-place the Oil Plug and repeat steps 1-3 as needed.
5. To add oil, remove the Oil Plug and add oil to just below the Fill Plug. Then re-place the Oil Plug.

**MAINTENANCE**

**⚠ WARNING:** To prevent serious injury from equipment failure, do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

**⚠ WARNING:** Many maintenance procedures, including those not detailed in this manual, should be performed by a qualified professional for your safety.

**BEFORE EACH USE:** Inspect the Log Splitter and verify whether there are loose or damaged parts.

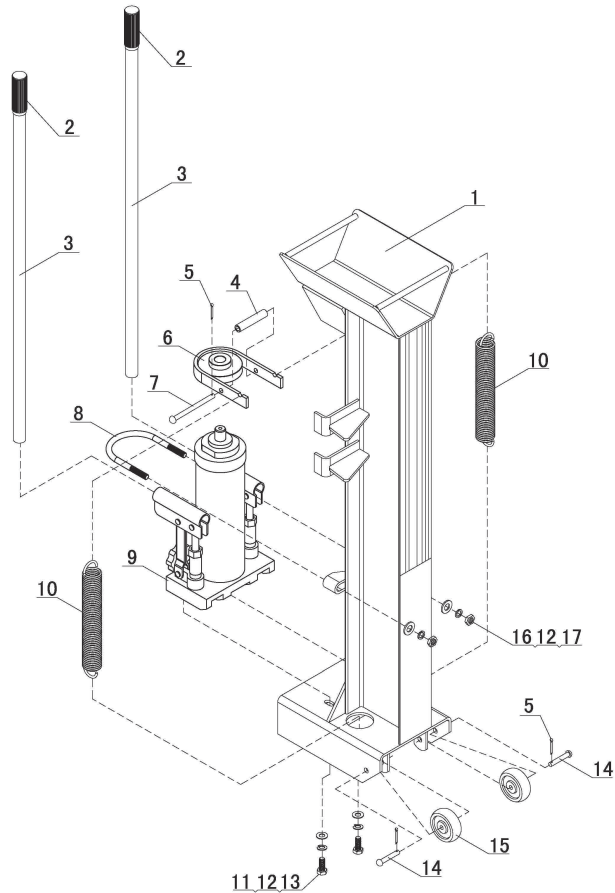
**AFTER EACH USE:** Wipe down the Log Splitter with a clean, soft cloth, making sure to clean up any excess or spilled hydraulic oil.

**STORAGE:** Retract the Ram and turn the Hand wheel counterclockwise by one turn to keep the Hydraulic Cylinder Rod protected from corrosion. Store the Log Splitter in a clean, dry and safe location away from children and other unauthorized persons.

**TROUBLESHOOTING**

Problem	Possible Causes	Likely Solutions
Ram will not move	<ol style="list-style-type: none"> <li>1. Hand wheel is open.</li> <li>2. Wood wedged under ram.</li> <li>3. Blocked hydraulic lines.</li> <li>4. Blocked control valve.</li> <li>5. Damaged control valve.</li> <li>6. Damaged cylinder piston.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn the Hand wheel clockwise until snug.</li> <li>2. Remove all foreign objects from below the ram.</li> <li>3. Flush and clean the splitter's hydraulic system.</li> <li>4. Flush and clean the splitter's hydraulic system.</li> <li>5. Have a qualified service person to repair/replace control valve.</li> <li>6. Have a qualified person to repair/replace cylinder piston.</li> </ol>
Slow Ram speed when extending or retractin	<ol style="list-style-type: none"> <li>1. Slow pumping of jack handles.</li> <li>2. Air in oil.</li> <li>3. Damaged control valve.</li> <li>4. Internal control valve leak.</li> <li>5. Internally damaged cylinder.</li> </ol>	<ol style="list-style-type: none"> <li>1. Move the jack handles at a faster Pace.</li> <li>2. Purge air from splitter's hydraulic system.</li> <li>3. Have a qualified service person to repair/replace control valve.</li> <li>4. Have a qualified service person to repair/replace control valve.</li> <li>5. Have a qualified service person to repair/replace cylinder.</li> </ol>
Wood will not split, or splits extremely slowly.	<ol style="list-style-type: none"> <li>1. Air in oil.</li> <li>2. Excessive control valve inlet vacuum.</li> <li>3. Low control valve setting.</li> <li>4. Internal control valve leak.</li> <li>5. Internally damaged cylinder.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check for excessive air in hydraulic reservoir.</li> <li>2. Check control valve inlet hose for blockage or kinks.</li> <li>3. Have a qualified service person to adjust control valve with a pressure gauge.</li> <li>4. Have a qualified service person to repair/replace control valve.</li> <li>5. Have a qualified service person to repair/replace cylinder.</li> </ol>
<p><b>⚠ WARNING:</b> Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.</p>		

DIAGRAMS AND PARTS LIST



Part No.	Description	Q'ty	Part No.	Description	Q'ty
1	Wedge Base	1	10	Ram Return Spring	2
2	Handle Grip	2	11	Hex Bolt M10x25	2
3	Operation Handle	2	12	Lock Washer Ø10	4
4	Spacer	1	13	Flat Washer Ø10	2
5	Cotter Pin Ø3x25	3	14	Wheel Axle	2
6	Ram Plate	1	15	Wheel	2
7	Pin	1	16	Big Flat Washer Ø10	2
8	U-Bolt	1	17	Hex Nut M10	2
9	Ram Assembly	1			

For replacement parts and technical questions, please call 1-800-222-5381.

WARRANTY

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the Ironton product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of one year from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

Obligations of Purchaser

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-800-222-5381, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

Remedy Limits

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your trailer incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product; or any indirect, incidental or consequential damages of any kind for any reason.

Assumption of Risk

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction for any disputes relating to this warranty.

## 10-TON LOG SPLITTER OWNER'S MANUAL

---



Distributed by:  
Northern Tool + Equipment Co., Inc.  
Burnsville, Minnesota 55306-6936  
Made in China