



## **10-TON HYDRAULIC LOG SPLITTER**

### **Owner's Manual**



**⚠ WARNING:** Read carefully and understand the RULES FOR SAFE OPERATION and instructions before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

**Item # 1188**

Thank you very much for choosing a NORTHERN TOOL + EQUIPMENT CO., INC. 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 machine is designed for certain applications only. Northern Tool + Equipment cannot be responsible for issues arising from modification. We strongly recommend this machine is not 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 the machine until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product.

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

### **INTENDED USE**


This 10-ton Log Splitter is designed to manually split logs up to 18in. in length.


### **SPECIFICATIONS**


Maximum Log Length	18in. L
Minimum Log Length	13 1/2in. L
Ram Stroke	8 1/16 in.


### **IMPORTANT SAFETY INFORMATION**


**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.

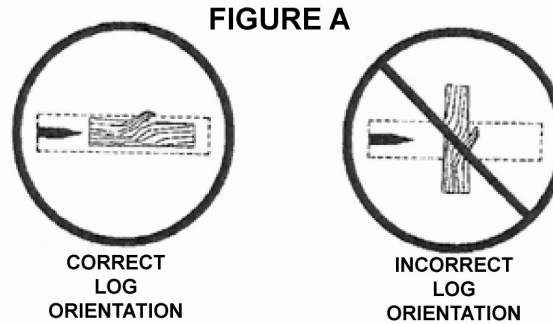
### **SAVE THESE INSTRUCTIONS**

## **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!**

- Set up and use on a flat, level, solid surface outdoors.
- 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.
- Keep children away from the equipment, especially while it is operating.
- Do not leave the equipment unattended unless it is properly stored.
- Only use accessories that are recommended by Northern Tool + Equipment for your model. Accessories that may be suitable for one piece of equipment may become hazardous when used on another piece of equipment.
- Stay alert, watch what you are doing and use common sense when operating this piece of equipment. Do not use this piece of equipment while tired or under the influence of drugs, alcohol or medication.
- 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.
- 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.
- Keep the equipment and surrounding area clean at all times.
- 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.
- Moving parts can crush and cut, so keep hands and other body parts clear of the Ram Plate, Wedge, and logs while splitting.
- 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.
- Make sure all fittings are tight before applying pressure.
- Be aware of the added length of the Log Splitter when transporting.
- If a log becomes jammed in the Wedge, back off the pressure and remove the log with a pry bar.
- Always operate the Log Splitter with all safety equipment in place and in proper working order, and all controls properly adjusted for safe operation.
- Always relieve the system pressure before inspecting, cleaning, adjusting or repairing the Log Splitter.

- This Log Splitter is designed to split logs up to 18in. long with a 6 1/2in. diameter, lengthwise with the grain only (See Figure A).



- 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.).
- 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.
- 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.
- Use the right equipment for the application. Do not modify the equipment or use it for a purpose for which it is not intended.
- Keep all safety guards in place and in proper working order.
- Never add attachments to the Log Splitter, except for authorized accessories supplied by the manufacturer with instructions for safe installation and use.
- Use the Log Splitter only in daylight so you can see what you are doing.
- Never attempt to change the height or speed of the splitting Wedge.
- Maintain labels and nameplates on the Log Splitter. These carry important information. If unreadable or missing, contact Northern Tool + Equipment for a replacement.
- 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.
- 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.
- Store equipment out of the reach of children and other unauthorized persons.

## UNPACKING

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

Item#	Description
A	Log Splitter Assembly

Item#	Description
B	Operation Handle

## ASSEMBLY

To complete assembly, insert one OPERATION HANDLE (B) into each of the SOCKET (C) on the Ram. See Figure 1.

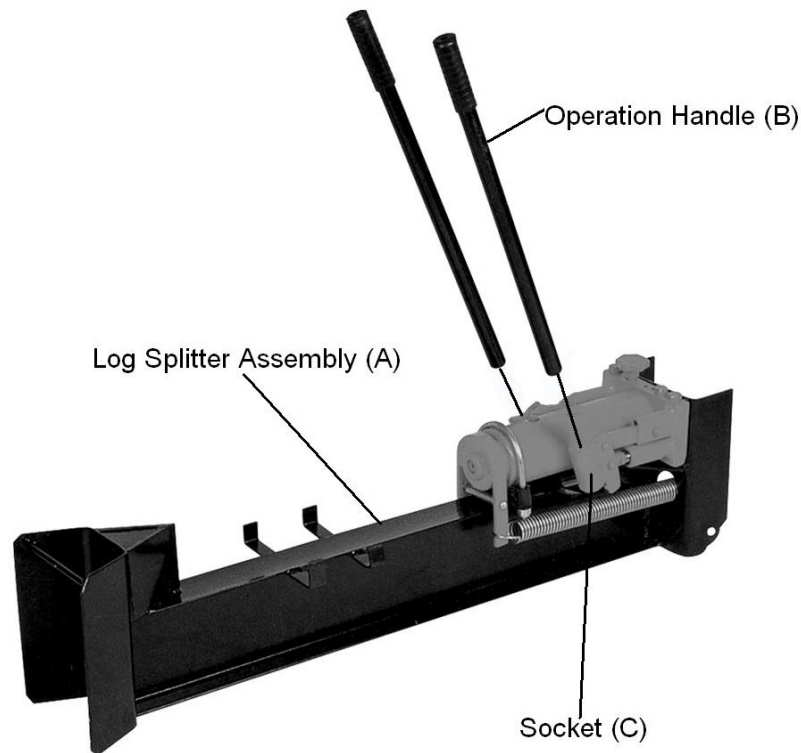


Figure 1

Your Hydraulic Log Splitter is ready for use.

## OPERATION INSTRUCTIONS

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

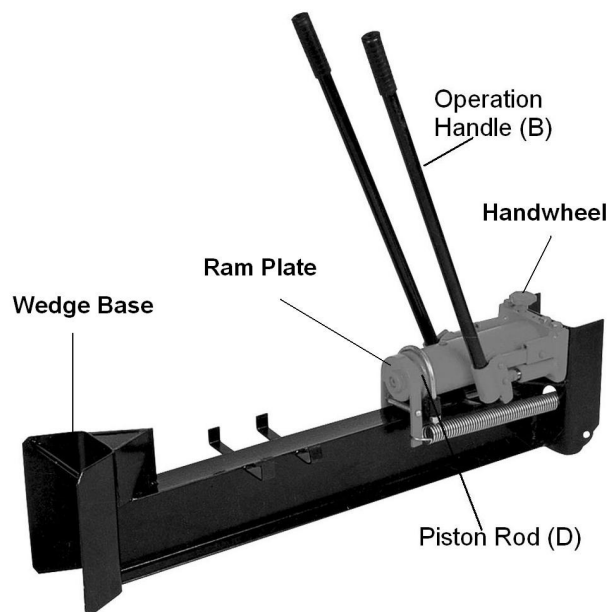
## **SPLITTING OPERATION/ADDITIONAL SAFETY INSTRUCTIONS**

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 chainsaw (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.

## **TO OPERATE**

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



**Figure 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.

### **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 chainsaw.

### **TO BLEED THE LOG SPLITTER**

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

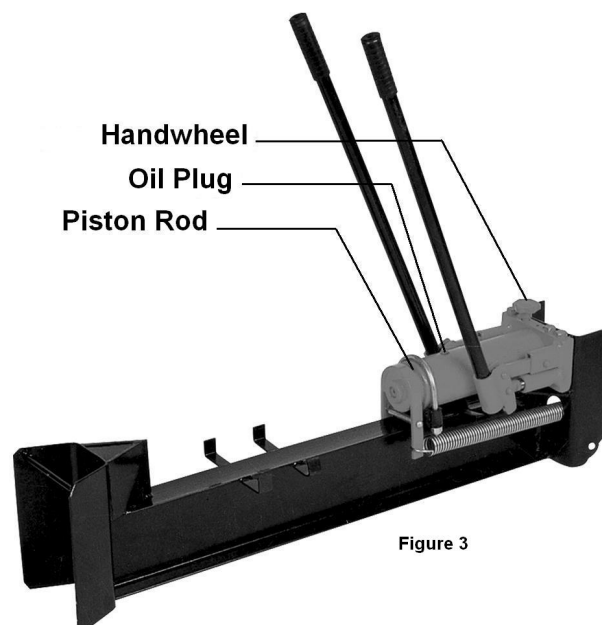




Figure 3

3. Turn the Handwheel 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. Replace 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 replace 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.

If you have any doubts about your ability to safely service the Log Splitter, have a qualified professional service the equipment instead.

**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.

**WHEN STORING:** Retract the Ram and turn the Handwheel counterclockwise by one turn to keep the Hydraulic Cylinder Rod protected from corrosion.

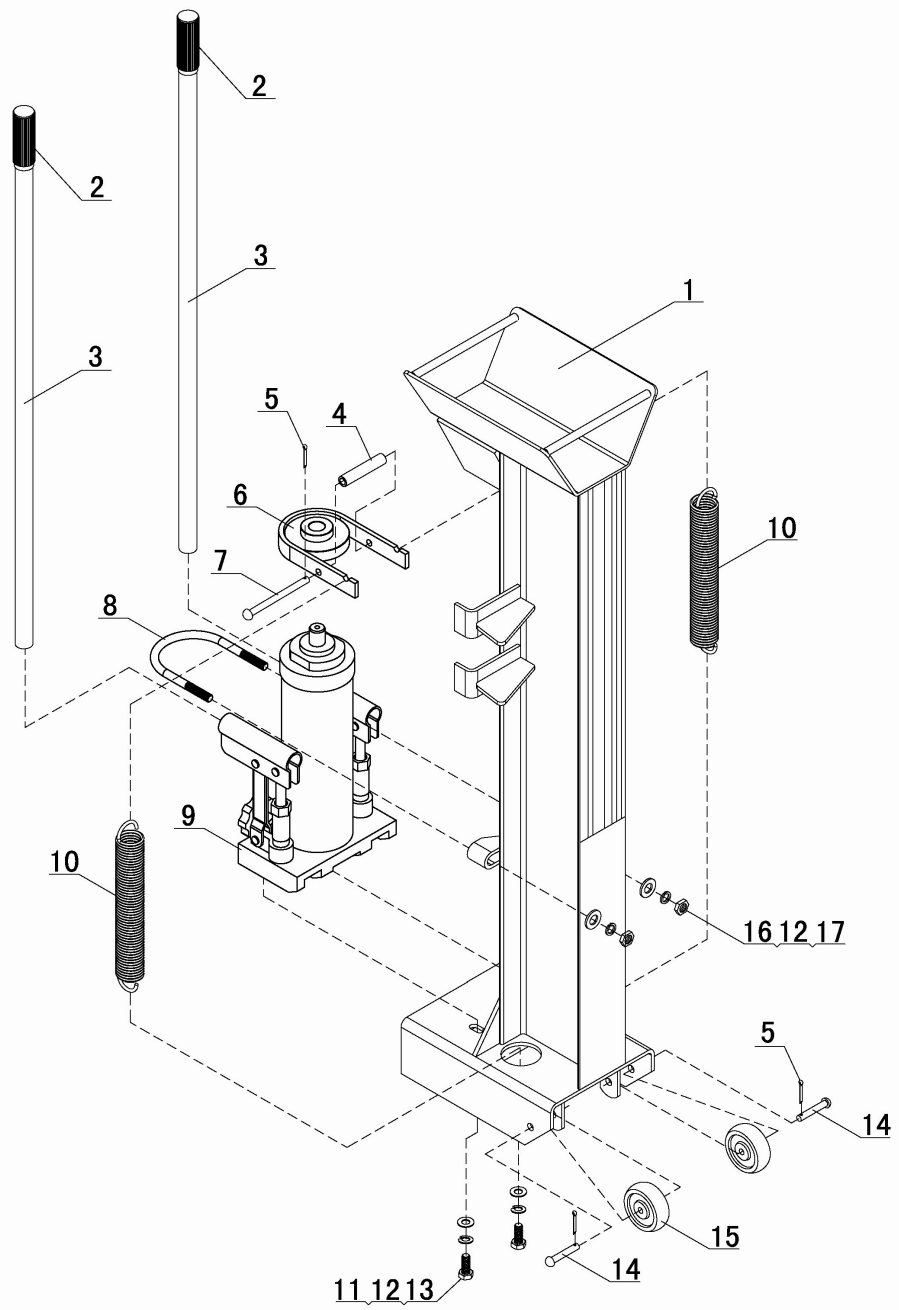
Store the Log Splitter in a clean, dry and safe location away from children and other unauthorized persons.

## **TROUBLESHOOTING**

Problem	Possible Cause	Possible Solution
Ram will not move	<ol style="list-style-type: none"> <li>1. Handwheel 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 Handwheel 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 professional repair/replace control valve.</li> <li>6. Have a qualified service professional repair/replace cylinder piston.</li> </ol>

<p>Slow Ram speed when extending or retracting</p>	<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 professional repair/replace control valve.</li> <li>4. Have a qualified service professional repair/replace control valve.</li> <li>5. Have a qualified service professional repair/replace cylinder.</li> </ol>
<p>Wood will not split, or splits extremely slowly.</p>	<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 professional adjust control valve with a pressure gauge.</li> <li>4. Have a qualified service professional repair/replace control valve.</li> <li>5. Have a qualified service professional repair/replace cylinder.</li> </ol>
<p><b>Follow all of the safety precautions whenever diagnosing or servicing the equipment.</b></p>		

## DIAGRAM & PARTS LIST



Part #	Description	QTY	Part #	Description	QTY
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**

**One-year limited warranty**



## **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 and 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.



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