



## 5-Ton Horizontal Electric 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 #66717

**READ & SAVE THESE INSTRUCTIONS**

Thank you very much for choosing an Ironton® product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: \_\_\_\_\_

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

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

This electric log splitter is designed for certain applications only. Northern Tool and Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

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

**Table of Contents**

**Intended Use.....4**

**Packaging Contents.....4**

**Technical Specifications .....4**

**Important Safety Information .....4**

**Specific Operation Warnings .....6**

**Main Parts of Log Splitter.....8**

**Before Each Use.....9**

**Operating Instructions.....10**

**After Each Use.....13**

**Maintenance .....14**

**Troubleshooting.....14**

**Parts Diagram.....15**

**Parts List.....16**

**Replacement Parts .....17**

**Limited Warranty.....18**

## Intended Use

The Ironton 5-Ton Horizontal Electric Log Splitter was designed for home use. It's built to operate best at temperatures between 41° F and 104° F. The surrounding humidity should be less than 50% at 104° F. It should be stored or transported at temperatures between -13° F and 131° F.

## Packaging Contents

- Log Splitter
- Owner's Manual
- Extra Hardware Bag

## Technical Specifications

Property	Specification
Force	5 Tons
Operation	Horizontal
Motor	120 Volt / 15 Amp
Oil Capacity	0.6 Gallon
Tire Size	5 3/4in. Diameter
Log Capacity	20 1/2in. L x 10in. Diameter
Cylinder	16 3/4in. L x 2 1/3in.W
Cycle Time	9 seconds forward/ 5 seconds return

## Important Safety Information

### **⚠WARNING**

- Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.
- The warnings, cautions, and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using this tool. Always be aware of the environment and ensure that the tool is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the product until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this product in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- 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. This product will be safer and do a better job at the capacity for which it was intended. DO NOT use this equipment for a purpose for which it was not intended.
- Industrial or commercial applications must follow OSHA requirements.

## **⚠️WARNING**

### **WORK AREA SAFETY**

- Inspect the work area before each use. Keep work area clean, dry, free of clutter, and well-lit. Cluttered, wet, or dark work areas can result in injury. Using the product in confined work areas may put you dangerously close to cutting tools and rotating parts.
- Do not use the product where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The product can create sparks, which may ignite the flammable liquids, gases, or dust.
- Do not allow the product to come into contact with an electrical source. The tool is not insulated and contact will cause electrical shock.
- Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the product.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.

## **⚠️WARNING**

### **PERSONAL SAFETY**

- Stay alert, watch what you are doing, and use common sense when operating the tool. Do not use the tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents on the tool often cover moving parts and should be avoided.
- Wear the proper personal protective equipment when necessary. Use ANSI Z87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- Do not overreach. Keep proper footing and balance at all times.

## **⚠️CAUTION**

### **LOG SPLITTER USE AND CARE**

- Do not force the log splitter. Products are safer and do a better job when used in the manner for which they are designed. Plan your work, and use the correct product for the job.
- Check for damaged parts before each use. Carefully check that the product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.
- Do not use a product with a malfunctioning switch. Any power tool that cannot be controlled with the power switch is dangerous and must be repaired by an authorized service representative

before using.

- Disconnect the power/air supply from the product and place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Store the product when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your product. Accessories that may be suitable for one product may create a risk of injury when used with another tool. Never use an accessory that has a lower operating speed or operating pressure than the tool itself.
- Keep guards in place and in working order. Never operate the product without the guards in place.
- Do not leave the tool running unattended.

## Specific Operation Warnings

### **⚠WARNING**

- Always wear the proper protective equipment including ANSI Z87.1 compliant eye protection, steel toed boots, and snug fitting gloves without drawstrings or loose cuffs.
- Do not wear loose fitting or dangling clothing.
- Crush Hazard. Keep hands away from wedge, endplate/ram, and partly split logs.
- Only one person should operate the log splitter. If an assistant is helping to load logs, the operator should not actuate the controls until the assistant is at least 10 ft away.
- Stay in the designated OPERATOR POSITION while actuating the controls.
- Spit wood in direction of the grain only.
- Hold bark side of logs when loading.
- Operate log splitter on a hard, level surface.
- Never split the logs bigger than the specified log size capacity.
- Never split more than one log at the same time.
- Check logs for and remove nails or other debris before splitting.
- Remove all branches from the log before splitting
- Never put the log vertically onto the log splitter.
- Do not operate the log splitter in rain or wet areas.

# Safety and Product Labels

Reference	Description	Quantity
1	General Warning Decal	1
2	Pinch Point Warning Decal	1
3	Air Bleed Warning Decal	1
4	Electric Shock Hazard	1
5	Spec Decal	1
6	Operation Instructions Decal	1
7	Ironton Decal	1

**⚠ WARNING**

- To prevent serious injury or property damage, read and understand owner's manual before operating.
- Always wear the proper protective equipment including ANSI Z87.1 compliant eye protection, steel toe boots, and snug fitting gloves without drawstrings or loose cuffs.
- Do not wear loose fitting or dangling clothing.
- Crush Hazard. Keep hands away from wedge, endplate/ram, and partly split logs.
- Only one person should operate the log splitter. If an assistant is helping to load logs, the operator should not actuate the controls until the assistant is at least 10ft. away.
- Stay in the designated OPERATOR POSITION while actuating the controls.
- Split wood in direction of the grain only.
- Hold bark side of logs when loading.
- Operate log splitter on a hard, level surface.

1.

Before starting the log splitter, the Bleed Screw should be loosened by a few turns until air can go in and out of the oil tank smoothly. Air flow through the Bleed Screw hole should be detectable while the log splitter is under operation. Before moving the log splitter, make sure the Bleed Screw is tightened to avoid leakage from the hole.

3.

**5-TON HORIZONTAL ELECTRIC LOG SPLITTER**  
 ITEM# 66717  
 MOTOR: 15A, 120V AC, 60Hz, 1 3/4 HP  
 CUTTING CAPACITY:  
 10IN. DIA.; UP TO 20 1/2IN.L  
 SERIAL # \_\_\_\_\_ MADE IN CHINA

5.



7.

**⚠ WARNING**

**Pinch point.  
Keep hands clear during operation.**

2.



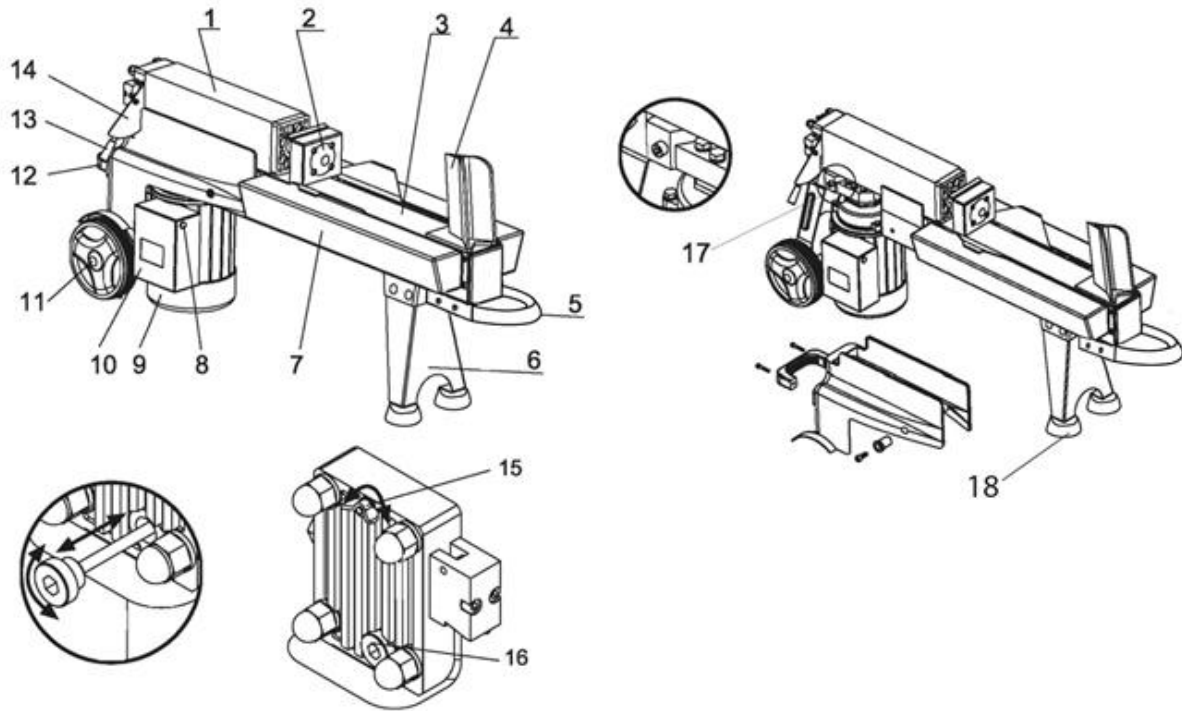
4.

**OPERATING INSTRUCTIONS**

<p><b>GENERAL</b></p> <ul style="list-style-type: none"> <li>Stay in OPERATOR POSITION while actuating controls.</li> <li>Never actuate controls until the helper is 10ft. away from log splitter, including any helpers assisting to load logs.</li> <li>Wear eye protection, hearing protection, snug fitting gloves, and safety shoes or heavy boots. No loose or dangling apparel.</li> </ul>	<p><b>SETTING UP</b></p> <ul style="list-style-type: none"> <li>Place log splitter on dry, level ground.</li> <li>Secure splitter for unintended movement.</li> <li>Place splitter in horizontal position.</li> <li>Plug in the splitter to an electrical source.</li> <li>Move switch to the "ON" position.</li> </ul> <p><b>SPLITTING LOG</b></p> <ul style="list-style-type: none"> <li>Position log on beam, against wedge.</li> <li>Move safety control to the "unlock" position.</li> <li>Move split control to extend ram and split log.</li> <li>Release split control to return ram.</li> <li>Remove split wood from work area.</li> </ul>	<p>Operator Position - Horizontal</p>
---	---	---------------------------------------

6.

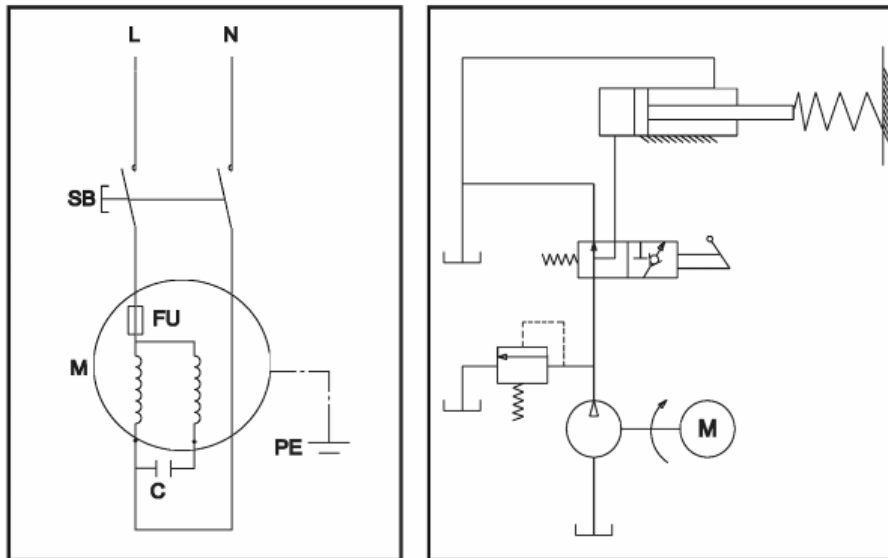
## Main Parts of Log Splitter



Part#	Description	Quantity	Part#	Description	Quantity
1	Oil tank	1	10	Pushbutton box	1
2	Log pusher	1	11	Moving wheel	1
3	Work table	1	12	Lift handle	1
4	Wedge	1	13	Hydraulic control lever	1
5	Lift handle	1	14	Control lever guard	1
6	Support leg	1	15	Bleed screw	1
7	Work table extension with remaining plate	1	16	Oil drain bolt with dipstick	
8	Switch	1	17	Max pressure limiting screw	1
9	Motor	1	18	Rubber foot	1



## Wiring Diagram Plumbing Diagram



## Before Each Use

### ⚠WARNING

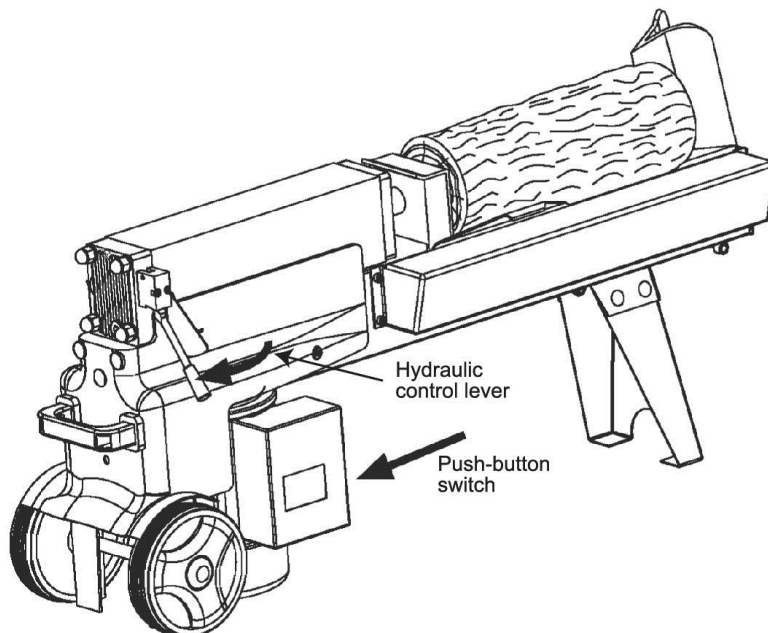
- Always wear the proper protective equipment including ANSI Z87.1 compliant eye protection, steel toed boots, and snug fitting gloves without drawstrings or loose cuffs.
- Do not wear loose fitting or dangling clothing.
- Check logs for and remove nails or other debris before splitting.
- Remove all branches from the log before splitting.
- Check for any damaged parts before use.

1. Before moving the log splitter, make sure the bleed screw is tightened to avoid oil leaks.
  - a. Failure to loosen the bleed screw will keep the air in the hydraulic system compressed after being decompressed. Continuous compression and decompression will blow out seals on the hydraulic system and cause permanent damage to the log splitter.
  - b. Do not adjust the max pressure limiting screw! The maximum pressure limiting screw is sealed with glue to ensure that the log splitter works under no more than 5 tons of pressure. The setting was done by qualified mechanics with professional instruments. Unauthorized resetting will cause the hydraulic pump to fail to output enough splitting pressure and could result in serious injury as well as damage to the machine.

## Operating Instructions

### ⚠WARNING

- Always wear the proper protective equipment including ANSI Z87.1 compliant eye protection, steel toed boots, and snug fitting gloves without drawstrings or loose cuffs.
- Do not wear loose fitting or dangling clothing.
- Crush Hazard. Keep hands away from wedge, endplate/ram, and partly split logs.
- Only one person should operate the log splitter. If an assistant is helping to load logs, the operator should not actuate the controls until the assistant is at least 10 ft away.
- Stay in the designated OPERATOR POSITION while actuating the controls.
- Spit wood in direction of the grain only.
- Hold bark side of logs when loading.
- Operate log splitter on a hard, level surface.
- Never split the logs bigger than the specified log size capacity.
- Never split more than one log at the same time.
- Never put the log vertically onto the log splitter.
- Do not operate the log splitter in rain or wet areas.

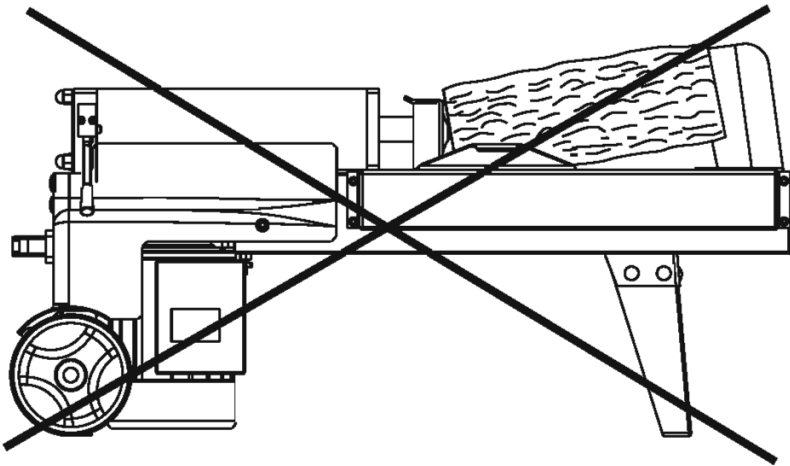


1. This log splitter is equipped with a ZHB Control System, requiring it to be operated with both hands. The left hand controls the hydraulic control lever while the right hand controls the push button switch. The log splitter will freeze when either hand is absent. Only after both hands release the controls, will the log pusher return to the starting position.

2. **After a 5-second interval, the oil under pressure will overheat and the machine could be damaged.** For an extremely hard log, rotate the log 90° to see whether it can be split in a different direction. If you are not able to split the log, its hardness exceeds the capacity of the machine and thus that log should be discarded to protect the log splitter from damage.
3. Always set the log firmly on the retaining plates and work table. Make sure the ends of the log are square, so the log does not twist, rock, or slip while being split. Do not force the blade by splitting the log using only the upper part of the blade. This could break the blade or damage the machine.

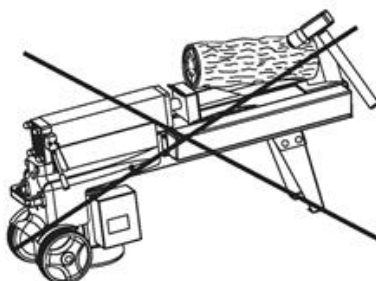
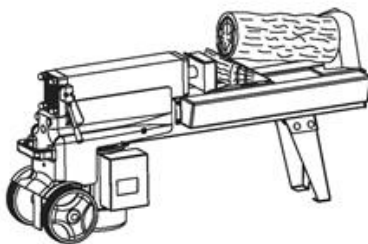
### **⚠WARNING**

- Split wood in direction of the grain only.
- Never split the logs bigger than the specified log size capacity.
- Never split more than one log at the same time.
- Never put the log vertically onto the log splitter.



### **Freeing a Jammed Log**

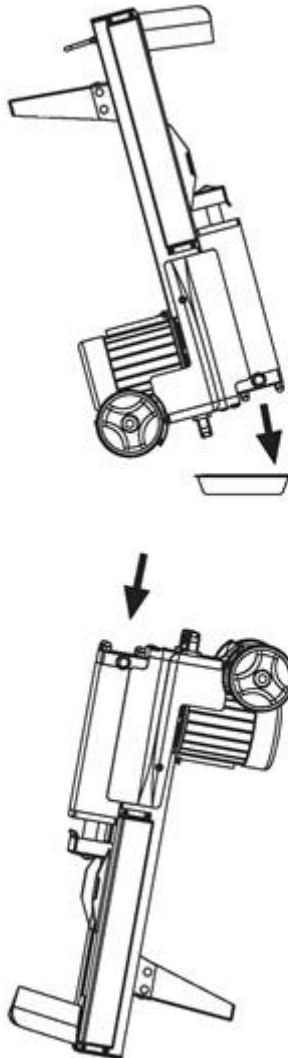
1. Release both controls.
2. After the log pusher moves back and comes to a complete stop at the starting position, insert a wedge of wood under the jammed log.
3. Start the log splitter and push the wedge completely under the jammed log.
4. Repeat the above procedure with a sharper sloped wedge of wood until the log is completely freed.
5. Do not try to knock the jammed log off. This could damage the machine or launch the log.



### Replacing Hydraulic Oil

Replace the hydraulic oil in the log splitter after every 150 hours of use. Follow these steps:

1. Make sure that all the moving parts have stopped and the log splitter is unplugged.
2. Unscrew the oil drain bolt and remove it.
3. Turn the log splitter up on the motor side and refill with fresh hydraulic oil according to the 0.6 gallon capacity.
4. Clean the surface of the dipstick on the oil drain bolt and put it back into the oil tank while keeping the log splitter vertical.
5. Make sure the level of the oil is between the two grooves on the dipstick.
6. Clean the oil drain bolt before rethreading. Make sure it is tightened to avoid leakage before returning the log splitter to a horizontal position.



Check the oil level periodically to ensure it is between the two grooves on the dipstick. Refill when low. The following hydraulic oils are recommended for the transmission:

- Shell Tellus 22
- Mobile DTE 11
- ARAL Vitam GF 22
- BP Energol HLP-HM 22

### After Each Use

#### **⚠WARNING**

- Do not store the log splitter in a wet environment.

1. Pull the plug.
2. Clean up the log splitter after splitting logs. Make sure there won't be any jams for future use.
3. Store the log splitter in a dry area to prevent corrosion.

- After using the log splitter for a while, sharpen the wedge using a fine-toothed file and smooth any burrs or crushed areas along the cutting edge.

## Maintenance

### ⚠WARNING

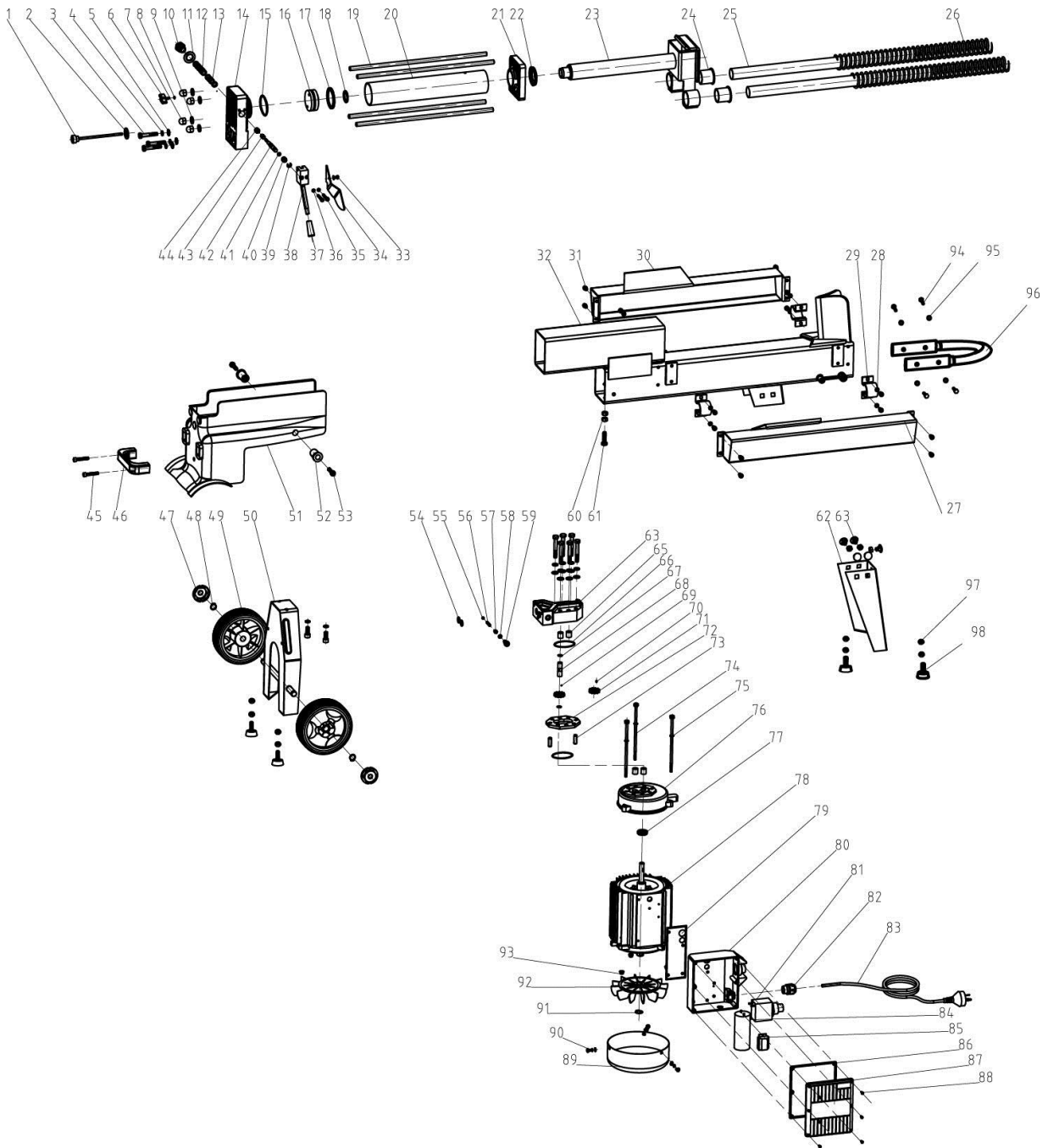
- Unplug power cord before servicing the log splitter.

- Clean the log splitter after each use. Left over debris may affect future operation.
- Sharpen the wedge of the log splitter using a fine-toothed file and smooth any burrs or crushed areas along the cutting edge.
- Frequently check all parts for proper working condition.

## Troubleshooting

Failure	Possible Cause	Corrective Action
Fails to split logs.	Log is not positioned properly.	Refer to log loading section.
	The sizes or hardness of the log exceeds the capacity of the machine.	Reduce the log size before splitting it on the log splitter.
	The wedge cutting edge is blunt.	Sharpen the wedge using a fine-toothed file and smooth any burrs or crushed areas along the cutting edge.
	Oil is leaking.	Locate leak(s) and find a technician to repair.
	Adjustment was made on maximum pressure limiting screw. Lower pressure rating was set.	Contact a technician.
The log pusher moves jerkily, with unfamiliar noises and vibration.	Lack of hydraulic oil and excessive air in the hydraulic system.	Check oil level in case it needs filling. Contact a technician.
Oil leaks around the cylinder ram or other points.	Air sealed in hydraulic system while operating.	Loose the bleed screw 3-4 rotations before operating the log splitter.
	Bleed screw is not tightened before moving the log splitter.	Tighten the bleed screw before moving the log splitter.
	Oil drain bolt with dipstick is not tight.	Tighten the oil drain bolt with dipstick.
	Hydraulic control valve assembly and/or seal is worn.	Contact a technician.

# Parts Diagram



## Parts List

Part #	Description	Qty.	Part #	Description	Qty.
1	Dipstick	1	50	Wheel Shelf	1
2	Washer Groupware	1	51	Skin Cover	1
3	Bolt	9	52	Skin Cover Additional	2
4	Spring Washer	11	53	Screw	4
5	Washer	9	54	Spring	2
6	Bolt	1	55	Steel Ball	1
7	Nut Cap	4	56	Pressure Ltd Valve Spring	1
8	Spring	1	57	Adjusting Screw	1
9	Copper Gasket	4	58	Spring	1
10	Nut Plug	1	59	Screw	1
11	Washer Groupware	1	60	Nut	2
12	Valve Sleeve	1	61	Bolt	1
13	Spring	5	62	Leg	1
14	Aluminum Cover (rear)	1	63	Bolt	5
15	Spring	1	64	Gear Pump Cover	1
16	Piston	1	65	Sliding Sleeve	4
17	Piston Ring	1	66	Spring	2
18	Spring	1	67	Circlip	2
19	Stud	4	68	Gear Shaft	1
20	Hydraulic Cylinder	1	69	Steel Ball	1
21	Aluminum Cover (front)	1	70	Pin	1
22	Piston Rod Seal	1	71	Gear	2
23	Log Pusher	1	72	Gear Housing Plate	1
24	Lead Set	2	73	Pin	2
25	Lead Tube	2	74	Bolt	3
26	Spring	2	75	Washer	1
27	Right Cover	1	76	Motor Cover	1
28	Spring Washer	8	77	Seal	1
29	Hold Firm Clip	4	78	Motor	1
30	Left Cover	1	79	Waterproof Underlay	1
31	Screw	16	80	Switch Box	1
32	Frame Tube	1	81	Switch	1
33	Screw	1	82	Prevent Out	1
34	Guard Plate	1	83	Cable and Plug	1
35	Screw	2	84	Capacitor	1
36	Spring Washer	3	85	Connection Terminal	1
37	Lever Knob	1	86	Airproof Underlay	1
38	Lever	1	87	Switch Box Cover	1
39	Snap Washer – Shaft	1	88	Screw	11
40	Valve Retract Spring	1	89	Shroud	1
41	Spring	1	90	Screw	2
42	Valve Core Rod	1	91	Block Turn	1
43	Sliding Pressure Sensor Sleeve	1	92	Fan	1
44	Sliding Pressure Sensor Sleeve Spring	1	93	Nut	3
45	Screw	2	94	Bolt	4
46	Lift Handle	1	95	Washer 6	4
47	Wheel Cover	2	96	Handle	1
48	Block Turn	2	97	Nut M8	13
49	Wheel	2	98	Bolt	4



## Replacement Parts

- For replacement parts and technical questions, please call Customer Service at **1-800-222-5381**.
- Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part reference number.
- The distributor reserves the rights to make design changes and improvements to product lines and manuals without notice.

## Limited 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 **90 days** 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 or product component 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 property 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 product component; 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.



Distributed by:

Northern Tool & Equipment Company, Inc.

Burnsville, Minnesota 55306

[www.northerntool.com](http://www.northerntool.com)

Made in China