



POWERHORSE[®]

7-Ton Horizontal Double Fly Wheel

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 #66715

READ & SAVE THESE INSTRUCTIONS

Thank you very much for choosing a Powerhorse™ 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
Safety and Product Labels	7
Main Parts of Log Splitter.....	8
Assembly Instructions.....	8
Before Each Use.....	10
Operating Instructions.....	10
After Each Use.....	14
Maintenance	15
Troubleshooting.....	15
Parts Diagram.....	16
Parts List.....	17
Replacement Parts	18
Limited Warranty.....	19

Intended Use

The Powerhorse 7-Ton Horizontal Double Fly Wheel Electric Log Splitter is designed for splitting logs with speed. The unit is small, portable, lightweight, and has built-in-wheels making it easy to deliver this powerful tool to the work site.

Packaging Contents

- Electric Motor
- Control Handle
- Hardware Bag
- Wheels (2)
- Log Pusher
- Owner's Manual
- Support Legs (2)
- Log Cradle
- Safety Handle
- Wedge

Technical Specifications

Property	Specification
Electrical Motor	120V/15 Amps
Cycle Time	2 seconds
Log Size (length)	20.5" x 12"
Log Diameter (capacity)	2" - 12"

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 spit 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/Pinch Point Warning Decal	1
2	Moving Parts Hazard Warning Decal	1
3	Spec Decal	1
4	Motor Spec Decal	1
5	Logo Decal	1
6	Notice Decal	1

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.

WARNING

Pinch point.
Keep hands clear during operation.

2.  **WARNING**

Moving parts can crush and cut.
Do not operate with guard removed.

3. **7-TON HORIZONTAL DOUBLE FLYWHEEL ELECTRIC LOG SPLITTER**
ITEM# 66715
MOTOR: 15A, 120V AC, 2.2 HP
7-TON SPLITTING FORCE
20 1/2IN. L X 12IN. DIA. LOG SIZE

SERIAL # _____ MADE IN CHINA

4. **OPERATING INSTRUCTIONS**

GENERAL POSITION


- Stay in OPERATOR POSITION while actuating controls.
- Never actuate controls until the helper is 10ft. away from log splitter, including any helpers assisting to load logs.
- Wear eye protection, hearing protection, snug fitting gloves, and safety shoes or heavy boots. No loose or dangling apparel.

SETTING UP

- Place log splitter on dry, level ground.
- Secure splitter for unintended movement.
- Place splitter in horizontal position.
- Plug in the splitter to an electrical source.
- Move switch to the "ON" position.

SPLITTING LOG

- Position log on beam, against wedge.
- Move safety control to the "unlock" position.
- Move split control to extend ram and split log.
- Release split control to return ram.
- Remove split wood from work area.



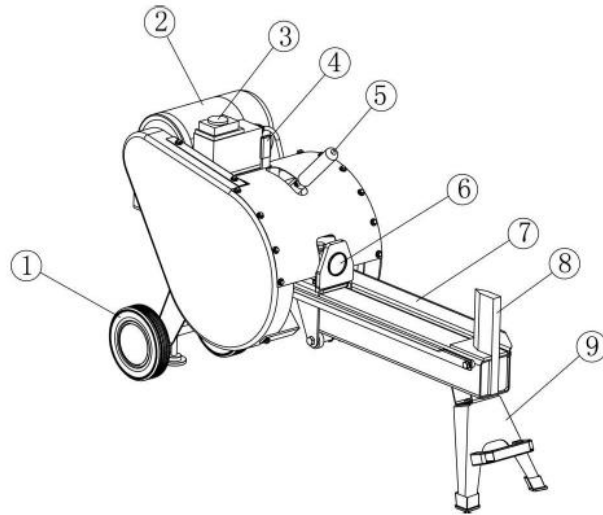
Operator Position - Horizontal

5.  **POWERHORSE**

6. **NOTICE**

Pull the handle quickly and firmly to begin splitting the wood, to avoid a lag in the mechanism.

Main Parts of Log Splitter

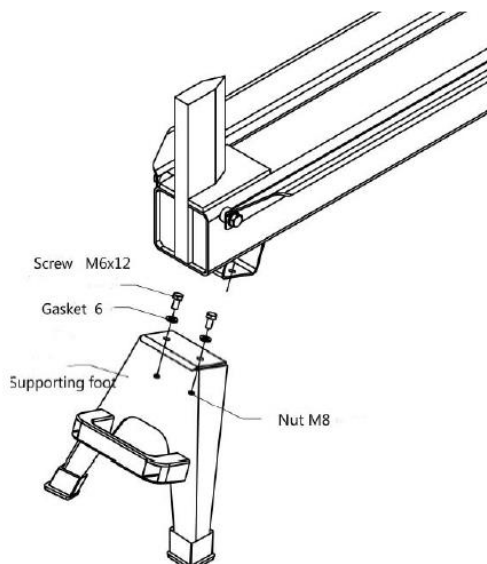


Part Number	Description	Quantity
1	Wheels	1
2	Electric motor	2
3	Switch	1
4	Safety handle	1
5	Control handle	1
6	Log ram	1
7	Log cradle	1
8	Wedge	1
9	Support legs	2

Assembly Instructions

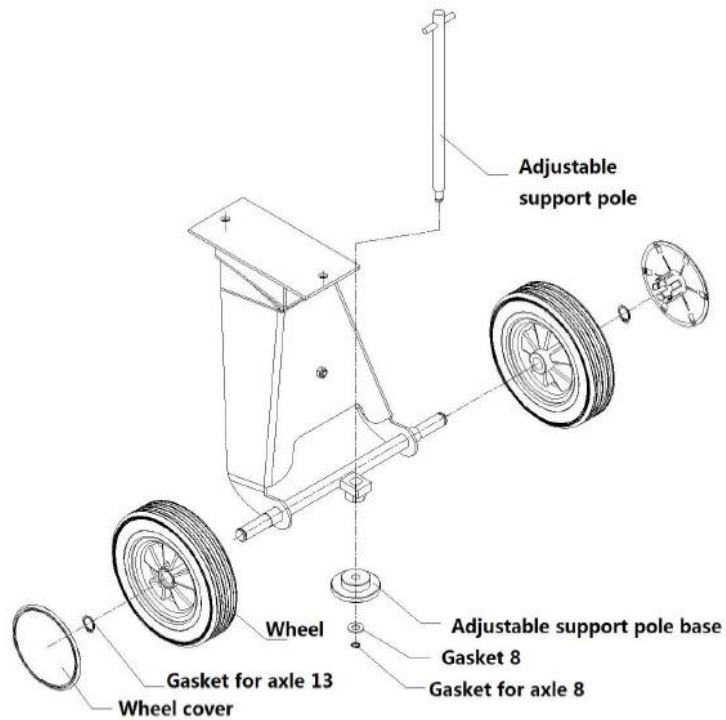
Step 1: Supporting Foot Assembly

Attach the supporting foot to the frame using the M6x12 screw, gasket 6, and the M8 nut.



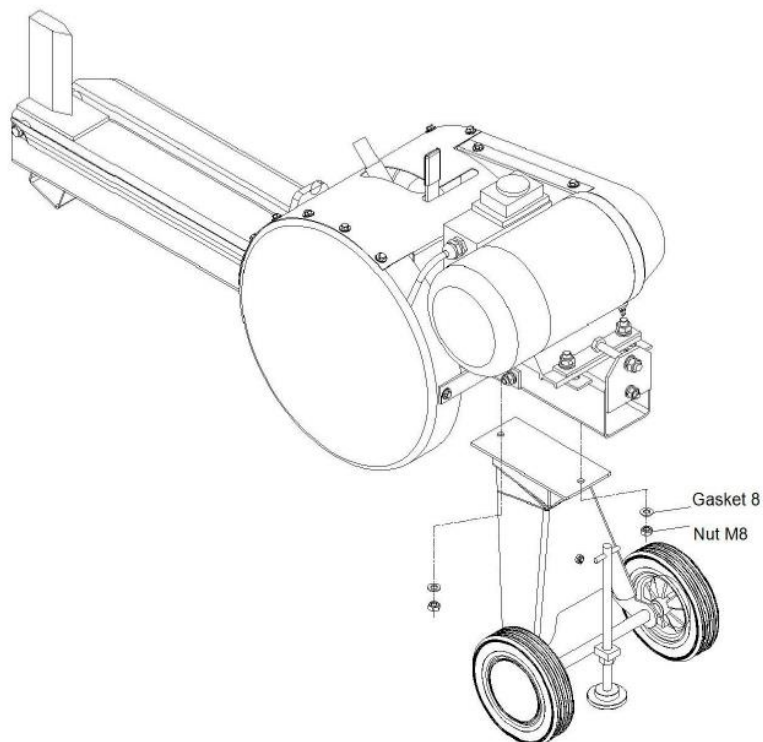
Step 2: Adjustable Support Pole Assembly

Assemble the #10 adjustable support pole using the #9 adjustable brace base, the #7 gasket 8, and the #8 gasket for axle 8. Attach the #3 wheel to the #48 frame using the #3 wheel, the #2 gasket for axle 13, and #41 wheel cover.



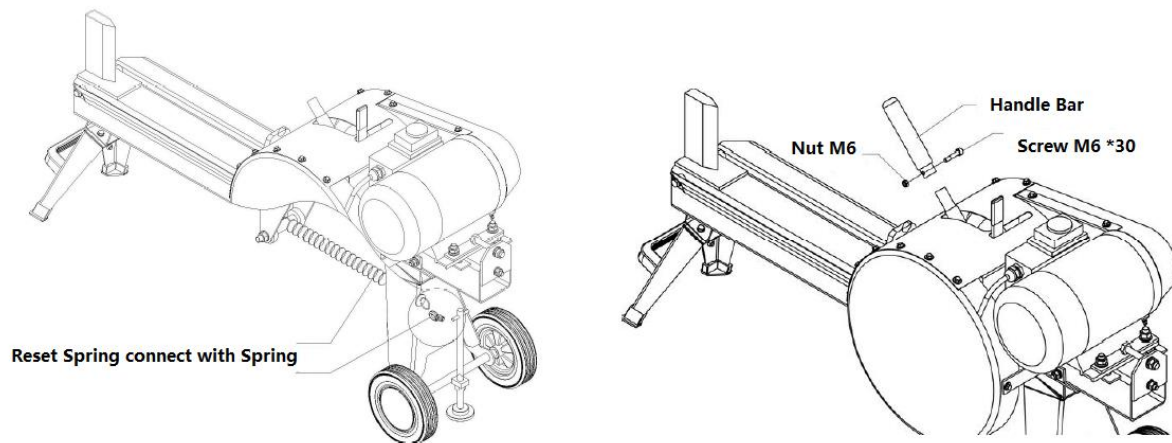
Step 3: Assembling the Wheel Frame

Assemble the wheel frame to the main body using gasket 8 and nut M8.



Step 4: Handle Bar Assembly

Assemble the hand bar using the handle bar, the M6 Nut, and the M6×30 screw.
Reset the spring (#27) and connect it with the ring (#5).



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.

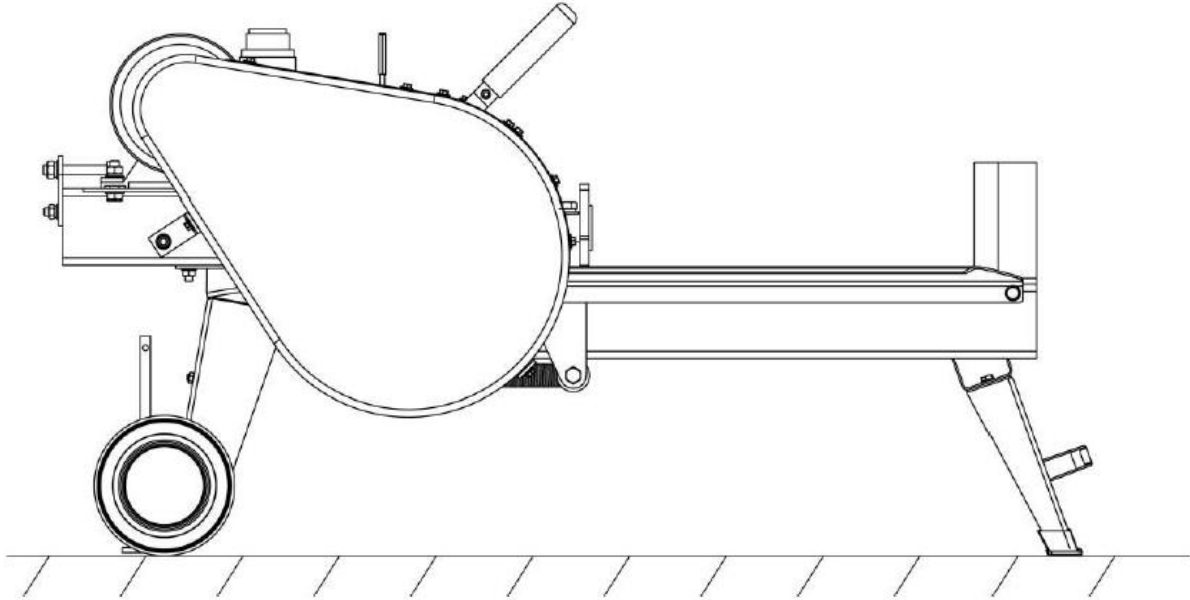
Operating Instructions

⚠WARNING

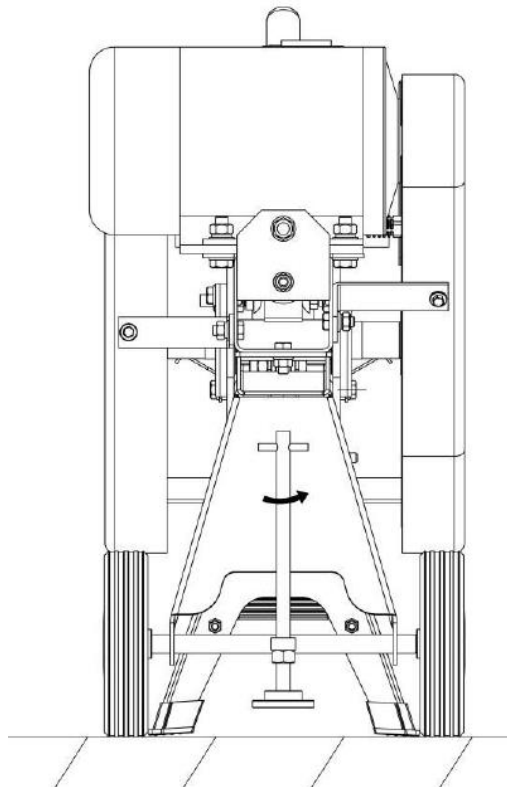
- Always wear the proper protective equipment including ANSI Z87.1 compliant eye protection, steel toed boots, and snug fitting gloves without drawstrings or loose cuffs.
- Do not wear loose fitting or dangling clothing.
- Crush Hazard. Keep hands away from wedge, endplate/ram, and partly spit logs.
- 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 POSITON 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.

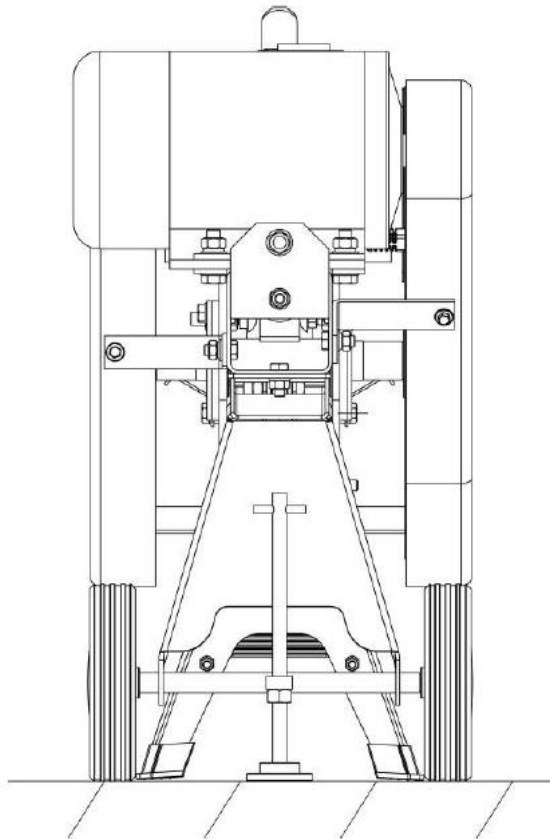
1. The machine should be kept in a horizontal position when operating.



2. The pole should be adjusted while towing.



3. The pole should support the floor while operating.



- Splitting: All logs should be no longer than 20 inches.
- Do not place your hands on the ends of the log when loading the log splitter. See Figure 1.
- Do not reach or step across the rail while the log splitter is running.



Figure 1

- Do not split wood across the grain. The log splitter was not designed for cross-grain splitting. Splitting cross-grain could damage the log splitter and may cause personal injury (Figure 2).

- Make sure both ends of the log you are splitting are cut square. This will prevent the log from sliding out of position while under pressure (Figure 3).



Figure 2



Figure 3

⚠WARNING

- As the log is being split, DO NOT reach forward and attempt to catch the split wood. Let it fall to the ground.

1. Place the log on the log splitter. Grasp the log on the sides near the middle of the block (Figure 4). Center the log (side-to-side) on the rail of the log splitter, making sure that one end is against the splitting wedge.

2. With one hand on the lever and the other hand clear of the machine, pull the control handle fully forward (toward the log) until the log is split (Figure 5).



Figure 4

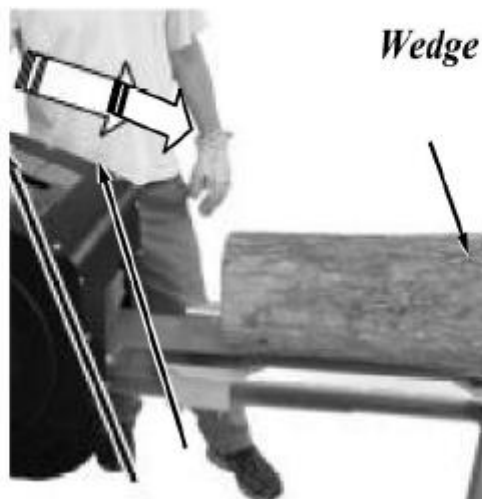


Figure 5

3. Release the lever as soon as the log is split to allow the ram to return. Continuing to hold the lever at the end of the stroke puts unnecessary stress on the rack teeth.

Splitting Tough Logs

If the ram stops before the end of the stroke while splitting a tough log, quickly push the lever back to prevent stress on the belts, letting the ram return and operate the lever again. This should split the log

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 place. This is to prevent the surface from becoming corroded.
4. To avoid injuries, keep the log splitter away from children and bystanders.

Maintenance

⚠WARNING

- Unplug power cord before servicing the log splitter.

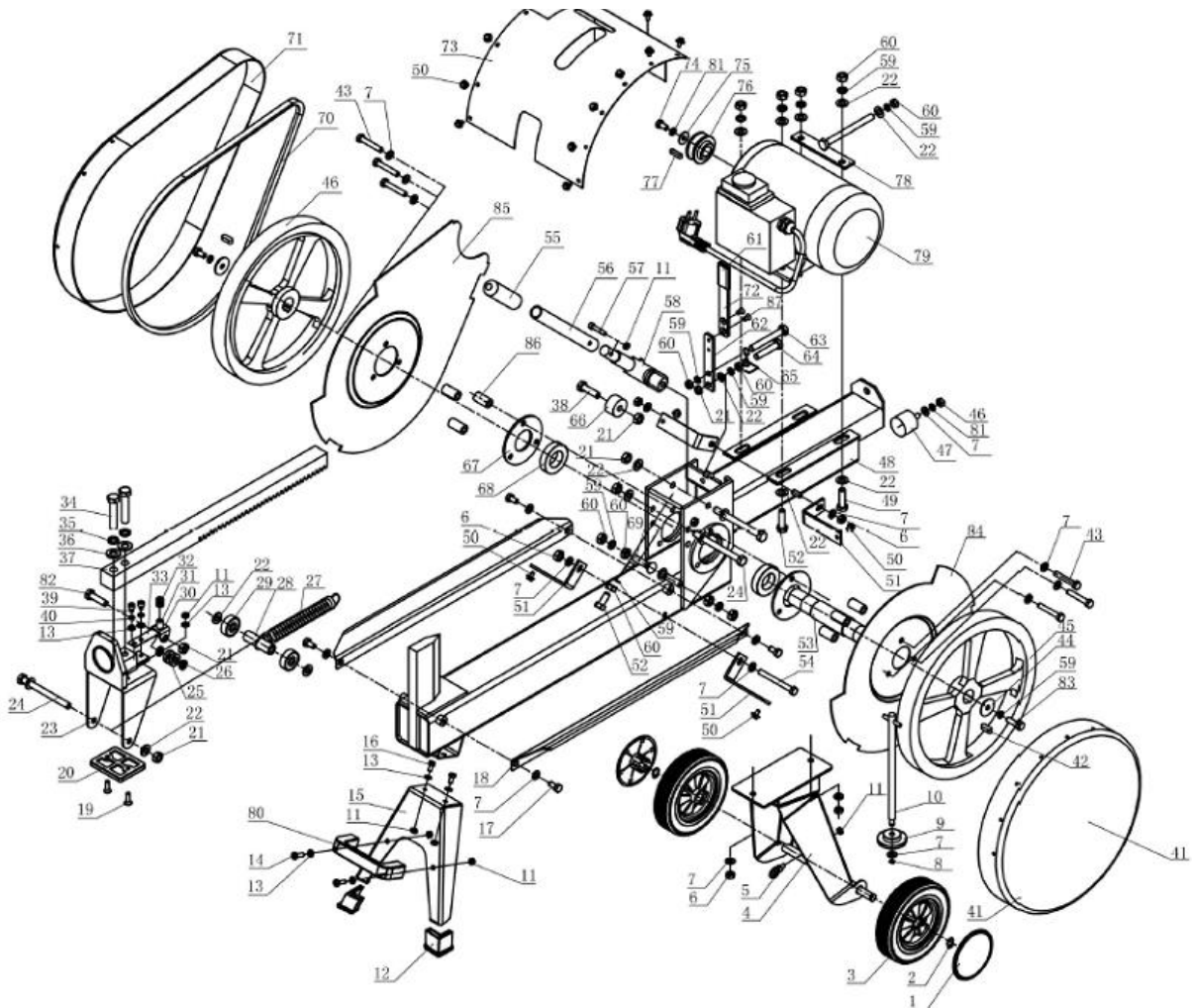
1. Clean the log splitter after each use.
2. Frequently check all parts to be sure they are in good working condition.
3. If using an extension cord, be sure you have the proper gauge cord for longer distances. The voltage will drop over long distances, which can cause the circuit breaker to trip.

Troubleshooting

Failure	Possible Cause	Corrective Action
The motor will not run.	Splitter is unplugged.	Re-plug.
	Splitter cord may be damaged.	Contact manufacture to check details.
	The splitter's motor circuit breaker has tripped.	Push the reset button.
	If the above causes are not the problem, a circuit breaker of the electrical circuit you are plugged into might need to be reset.	Reset circuit breaker.
The motor reset continuously trips.	Does not operate under 120V.	Make sure the voltage at the outlet or extension cord connection to the splitter is 120v.
	Using too long of an extension cord wire.	If you are using an extension cord, make sure that the cord is no more than 40 feet long and is not smaller than a 10 Ah wire.
	The belt is too tight.	Check the belt tension and adjust to allow for slipping.
Log fails to split.	Incorrect positioning of the log.	Re-position the log flat on the splitting beam with the end squarely against the wedge.

Failure	Possible Cause	Corrective Action
	Logs exceeds permitted dimensions or the wood is too hard for the capacity of the machine.	The maximum log length is 20" with a maximum diameter of 12" for the splitter.
Rack returning very slow or not returning properly.	Check for wood chips or debris between ram and rail.	Clean beam of build-up and caked on debris.
	Return spring is unhooked or damaged.	Reconnect or replace as needed.
Machine does not seem to have full splitting power.	The belt may be too loose.	Adjust the belt.

Parts Diagram



Parts List

Part#	Part Description	Qty.	Part#	Part Description	Qty.
1	Axle cover	2	44	Gasket $\Phi 10 \times \Phi 40 \times 4$	2
2	Gasket for axle 13	2	45	Large pulley	2
3	Wheel	2	46	Hexagon nut M8	1
4	Wheel frame	1	47	Damping rubber mat	1
5	Rings M6	1	48	Frame	1
6	Lock Nut M8	11	49	Hex Bolt M10x35	2
7	Gasket 8	17	50	Philips screw M5x8	13
8	Gasket for axle $\Phi 8$	1	51	Wheel cover fixer	4
9	Adjustable support base	1	52	Hex Bolt M10x30	3
10	Adjustable support	1	53	Gear axle	1
11	Lock Nut M6	8	54	Bolt M8x100	1
12	Supporting foot cover	2	55	Handle bar cover (up)	1
13	Gasket 6	8	56	Handle bar (up)	1
14	Philips screw M6x20	2	57	Hexagonal socket nut M6x30	1
15	Supporting foot	1	58	Control handle (down)	1
16	Hex Bolt M6x16	2	59	Spring washer 10	11
17	Hex Bolt M8x12	4	60	Hexagon Nut M10	12
18	Log guiding plate	2	61	Safety handle cover	1
19	Philips screw M6x20	2	62	Safety handle	1
20	Plastic slide	1	63	Hex Bolt M10x75	1
21	Lock Nut M10	6	64	Hex Bolt M10x50	1
22	Gasket 10	18	65	Spring	1
23	Log pusher assembly	1	66	Roller	1
24	Screw M10x110	3	67	Bearing cover	2
25	Bearing 6900	2	68	Bearing 6006RS	2
26	Spacer ring	2	69	Square neck screw M10x40	2
27	Reset spring	1	70	Belt	1
28	Bearing spacer	1	71	Belt cover	1
29	Bearing 6300RS	2	72	Safety handle connect plate	1
30	6900 Bearing fixer	1	73	Protection cover	1
31	Nut M8x18	1	74	Hex Bolt M8x20	1
32	Spring	1	75	Gasket $\Phi 8 \times \Phi 28 \times 3$	1
33	Spring pad	1	76	Small pulley	1
34	Hex Bolt M12x60	2	77	Flat key 6x6x25	1
35	Spring washer 12	2	78	Motor connecting plate	1
36	Gasket 12	2	79	Electric motor	1
37	Rack	1	80	Handle bar	1
38	Bolt M10x45	1	81	Spring washer 8	2
38A	Bolt M10x35	1	82	Hex Bolt M10x35	1
39	hexagonal socket nut M6x12	2	83	Hex Bolt M10x25	2
40	Spring washer 6	2	84	Wheel protection plate	1
41	Wheel cover	1	85	Belt protection plate	1
42	Flat key 8x7x21	2	86	Spacer tube	6
43	Bolt M8x60	6	87	Screw M6x8	2

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 Powerhorse product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of two years 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.



POWERHORSE[®]

Distributed by:

Northern Tool & Equipment Company, Inc.

Burnsville, Minnesota 55306

www.northerntool.com

Made in China