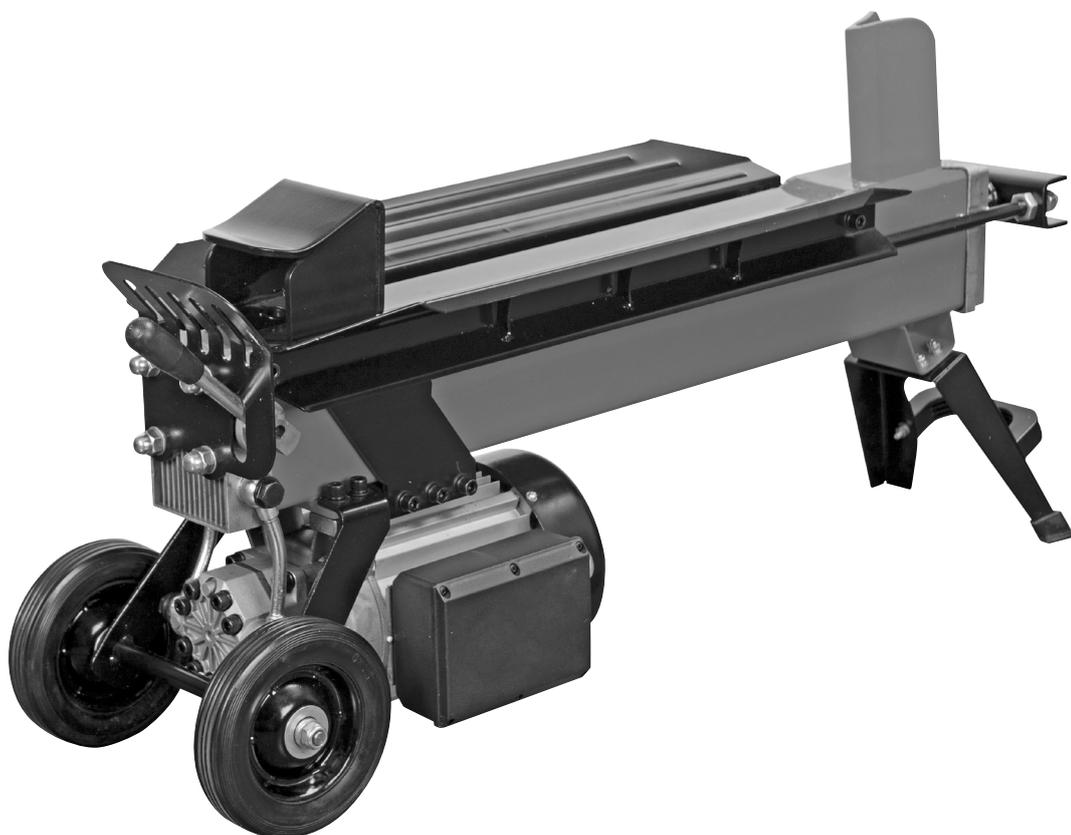


# Owner's Manual & Safety Instructions

**Save This Manual** Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.



## 5 Ton LOG SPLITTER



REV 14e

Visit our website at: <http://www.harborfreight.com>  
Email our technical support at: [productsupport@harborfreight.com](mailto:productsupport@harborfreight.com) **ITEM 61373**

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein.  
Tools required for assembly and service may not be included.

### **⚠ WARNING**

**Read this material before using this product.  
Failure to do so can result in serious injury.  
SAVE THIS MANUAL.**

# Table of Contents

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SAFETY

## Specifications

Electrical Rating	120VAC / 60Hz / 12A
Motor No Load Speed	3400 RPM
Log Capacity	20.5" L x 10" Diameter
Hydraulic Fluid Capacity	3.4 Quarts (3.2 Liters)

SETUP

## WARNING SYMBOLS AND DEFINITIONS

	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.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

OPERATION

## IMPORTANT SAFETY INFORMATION

### General Tool Safety Warnings

#### WARNING

**Read all safety warnings and instructions.**

*Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

**Save all warnings and instructions for future reference.**

1. KEEP GUARDS IN PLACE and in working order.
2. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
3. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lit.
4. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
5. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
6. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
7. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

MAINTENANCE

8. **WEAR PROPER APPAREL.** Do not wear loose clothing, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
9. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses. **DON'T OVERREACH.** Keep proper footing and balance at all times.
10. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
11. **DISCONNECT TOOLS** before servicing; when changing accessories, such as blades, bits, cutters, and the like.
12. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
13. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
14. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
15. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
16. **NEVER LEAVE TOOL RUNNING UNATTENDED.** TURN POWER OFF.

## Log Splitter Safety Warnings

### For Your Own Safety Read Instruction Manual Before Operating Log Splitter.

1. **DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED. Keep guards in place and in good working order.**
2. Wear ANSI-approved safety goggles under full face shield, heavy-duty work gloves and steel-toe work boots during use.
3. Crushing hazard. Never place hands or feet between the log and splitter wedge, or between the log and the ram during the forward or reverse stroke.
4. Never place hands or body near a hydraulic fluid leak or check for a leak with hands or other body parts. High-pressure fluid can be forced under the skin resulting in serious injury.
5. Never split a log that contains any foreign materials (nails, for example).
6. Do not use Splitter on logs longer than 20.5" or with a diameter greater than 10".
7. Hold the rounded, bark side of logs when loading or positioning, never the ends. Never place hands or any body parts between a log and any part of the Log Splitter.
8. Never load or unload logs while the Ram is moving.
9. Do not attempt to split logs across the grain. Doing so will damage the Log Splitter and could cause pieces of log to be thrown, injuring the operator or bystanders.
10. Never attempt to split more than one log at a time. A piece of log can unexpectedly be thrown from the machine, causing severe personal injury.
11. Remove split logs away from the Log Splitter immediately. Split logs left near the Log Splitter are a tripping hazard.
12. The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
13. Set up and operate only on a flat, level, dry and solid surface with wheels chocked.
14. When servicing use only identical replacement parts.
15. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
16. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury. Industrial applications must follow OSHA guidelines.

# Log Splitter Safety Warnings (continued)

SAFETY

17. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
18. Avoid unintentional starting. Prepare to begin work before turning on the tool.
19. This product is not a toy. Keep it out of reach of children.
20. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.

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. (California Health & Safety Code § 25249.5, *et seq.*)

SETUP

21. **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 or other masonry products
  - Arsenic and chromium from chemically treated lumber

22. **WARNING:** Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)

23. The warnings, precautions, and instructions discussed in this instruction 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.**

OPERATION

## Grounding Instructions



### **WARNING**

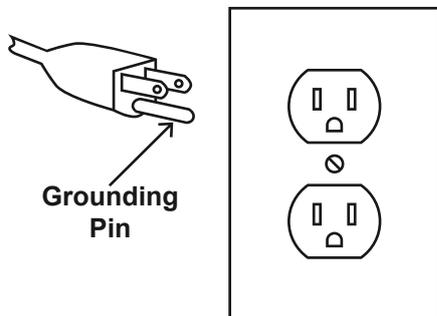
**TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION READ AND FOLLOW THESE INSTRUCTIONS:**

MAINTENANCE

## 110-120 VAC Grounded Tools: Tools with Three Prong Plugs

1. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.
2. Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
3. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.
- Repair or replace damaged or worn cord immediately.



**125 VAC 3-Prong Plug and Outlet**  
(for up to 125 VAC and up to 15 A)

- This tool is intended for use on a circuit that has an outlet that looks like the one illustrated above in **125 VAC 3-Prong Plug and Outlet**. The tool has a grounding plug that looks like the plug illustrated above in **125 VAC 3-Prong Plug and Outlet**.
- The outlet must be properly installed and grounded in accordance with all codes and ordinances.
- Do not use an adapter to connect this tool to a different outlet.

## Extension Cords

- Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
- As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. (See Table A.)
- The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Table A.)
- When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. (See Table A.)
- If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. (See Table A.)
- If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.

- Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
- Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

**TABLE A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS\* (120/240 VOLT)**

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25'	50'	75'	100'	150'
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

\* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

# Symbology

SAFETY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
<b>V</b>	Volts
~	Alternating Current
<b>A</b>	Amperes
n <sub>0</sub> xxxx/min.	No Load Revolutions per Minute (RPM)
	Read the manual before set-up and/or use.

	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.
	WARNING marking concerning Risk of Facial Injury from flying debris. Wear ANSI-approved full face shield.
	WARNING marking concerning Risk of Foot Injury. Wear steel-toe work boots.
	WARNING marking concerning Risk of Hand Injury. Wear heavy-duty work gloves.
	WARNING marking concerning Risk of Electric Shock. Properly connect power cord to appropriate outlet.
	WARNING marking concerning Crushing Hazard. Keep hands and feet away from moving parts.



**SAVE THESE INSTRUCTIONS.**

SETUP

## Setup - Before Use:



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

### **WARNING**

**TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:**  
Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

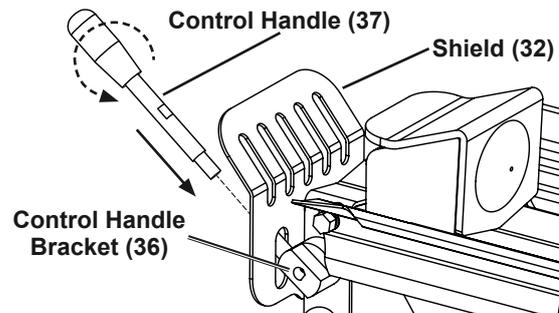
**Note:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

OPERATION

## Assembly

MAINTENANCE

1. Insert the Control Handle (37) through the slot in the Shield (32) and into the shaft on the Control Handle Bracket (36).
2. Turn the Control Handle to tighten in place.



**Figure A: Control Handle Assembly**

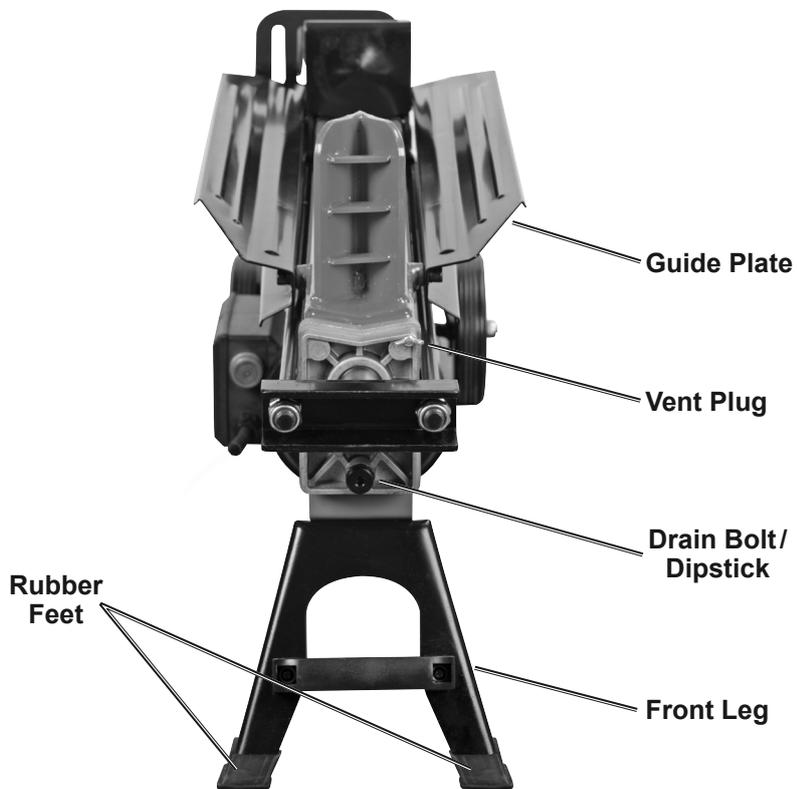
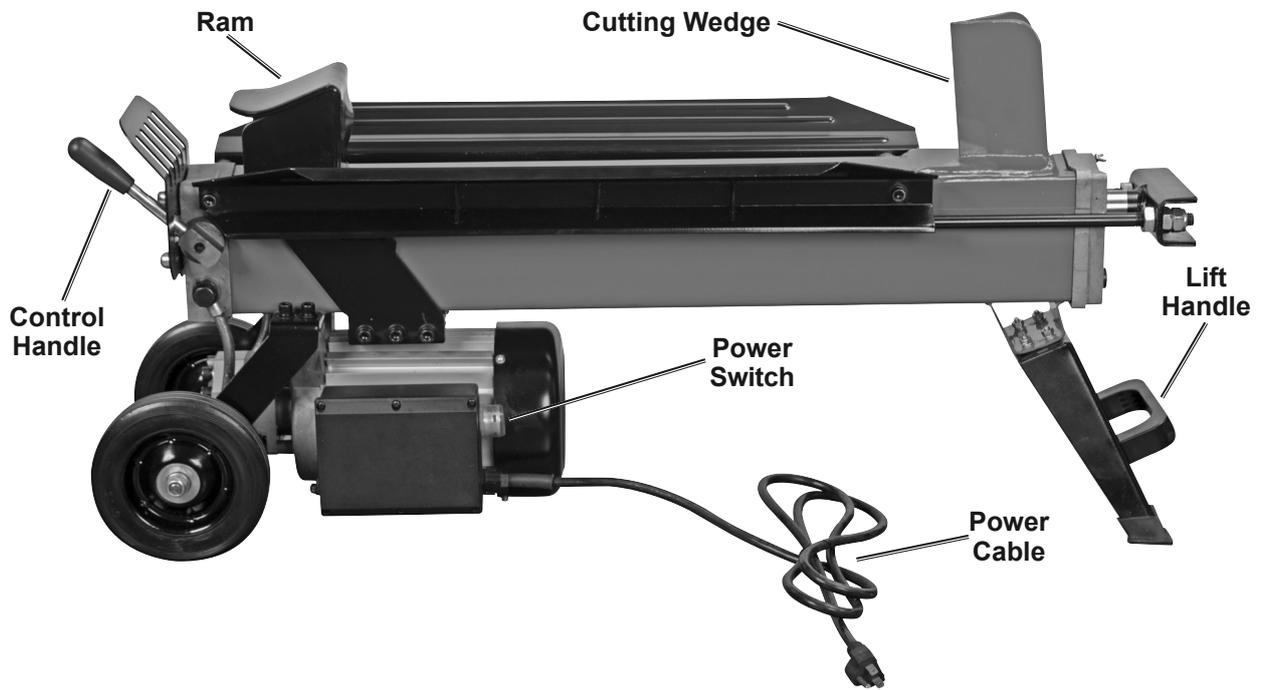
# Functions

SAFETY

SETUP

OPERATION

MAINTENANCE



## Operating Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

## Tool Set Up

### **WARNING**

**TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:**

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

**TO PREVENT SERIOUS INJURY:**

**DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED.** Keep guards in place and in good working order.

### Checking Hydraulic Fluid Level

**IMPORTANT!** Before first use and before each use thereafter, check the hydraulic fluid level of the Log Splitter when fluid is cold. Operating without sufficient fluid in the reservoir can badly damage the pump.

1. Unplug the Power Cable.
2. Remove the Control Handle before standing the tool upright. Use the Lift Handle located on the Front Leg to raise the Log Splitter to a standing position on the wheel end of the unit.
3. Remove the Drain Bolt/Dipstick from the fluid reservoir with a hex key.
4. Wipe off the Drain Bolt/Dipstick and thread it back into the fluid reservoir. Remove and check to make sure the fluid level is within the acceptable range between the two marks on the Dipstick. Refer to Figure B.

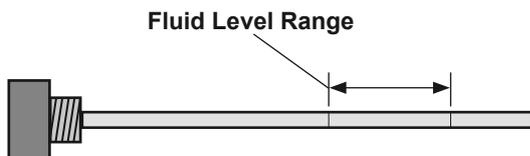


Figure B: Dipstick

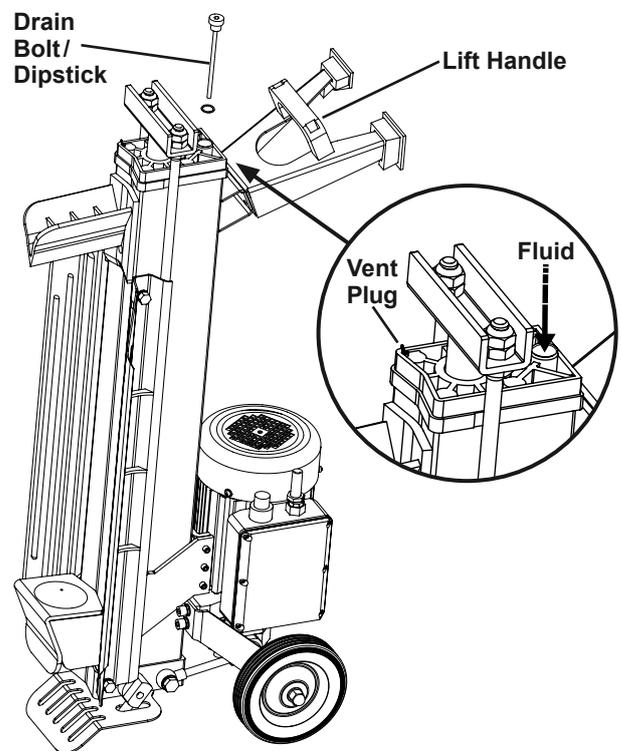


Figure C: Checking/Adding Fluid

5. If the fluid level is low, add sufficient AW32 hydraulic fluid (not included) to bring the level up to the acceptable range.
6. If the fluid level is within the acceptable range, wipe the Drain Bolt/Dipstick clean and replace it in the fluid reservoir and tighten securely.
7. Use the Lift Handle to return the unit to its normal, horizontal operating position.
8. Replace Control Handle.
9. Open the Vent Plug by turning it counterclockwise 4–5 turns.
10. Start the motor and use the Control Handle to cycle the Ram forward and back several times to remove excess air from the fluid reservoir.

# Workpiece and Work Area Set Up

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
3. There must not be objects, such as utility lines, nearby that will present a hazard while working.
4. Maximum log size for this Log Splitter is 20.5" long and 10" in diameter. Attempting to cut logs that exceed those measurements is dangerous and may damage the Log Splitter.
5. Use a chainsaw (not included) to cut logs square on each end before splitting. Log ends that are not cut square can slide out while splitting and cause a safety hazard or cause excessive force to Log Splitter components.
6. Never split a log that contains any foreign materials (nails, for example). Do not use odd-shaped, uneven logs or logs that are knotted or curved.

## General Operating Instructions

1. **Check the hydraulic fluid level; fill as necessary.**
2. Place wheel chocks (not included) on each side of the wheels to keep the Log Splitter from moving.
3. Make sure that the Power Switch is in the off-position, then plug in the Log Splitter.
4. Press the Power Switch to turn on the tool.
5. Open the Vent Plug by turning it counterclockwise 4–5 turns.  
**Note:** Operating the Log Splitter without the Vent Plug open will cause pressure to build up in the hydraulic reservoir which could damage seals and affect normal operation.
6. Position log lengthwise in the direction of the grain on the Machine Body of the Splitter between the Guide Plates. Place one end of log against the Cutting Wedge. The log must be stable so that it will split properly.
7. Push the Control Handle down to move the Ram forward into the log, driving it onto the Cutting Wedge, splitting the log.
8. Release the Control Handle to retract the Ram automatically, remove split log pieces, and begin loading the next log.  
**Note:** If difficulty is experienced splitting harder wood, do not keep pressure on the log by trying to force the Log Splitter. Release the Control Handle after five seconds to retract the ram and avoid damage to the tool. If the motor stops, turn off the motor and then turn it back on again to continue operation.
9. To retract the Ram at any time, release the Control Handle.
10. Close the Vent Plug whenever moving the Log Splitter.
11. To prevent accidents, turn off the Log Splitter, unplug from its electrical outlet, and close the Vent Plug after use. Clean, then store the tool indoors out of children's reach.

## Removing a Stuck Log

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

1. Fully retract the Ram.
2. Turn off the Power Switch and unplug the Power Cable.
3. Remove the stuck log from the Cutting Wedge manually with a pry bar.
4. **WARNING!** Be extremely careful when removing the log as pieces may fly off as they separate from the Wedge. Never attempt to remove a stuck log by using the hydraulic force of the Log Splitter, modifying the Log Splitter, or adding attachments to the Log Splitter. Personal injury could result from log or metal pieces flying out at high speed, or the Log Splitter could become damaged.
4. Do not attempt to re-split a stuck log once it has been removed from the Wedge. Manually split with a maul, or cut with a chainsaw.

## Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

### **WARNING**

**TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:**

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

**TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:**

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

## Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE**, inspect the general condition of the Log Splitter. Check for:
  - loose hardware
  - misalignment or binding of moving parts
  - cracked or broken parts
  - damaged electrical wiring
  - leaking hydraulic fluid  
(Do not check for leaks during operation.)
  - any other condition that may affect its safe operation.
2. **AFTER USE**, wipe external surfaces of the tool with clean cloth to remove any tree sap, dirt or hydraulic fluid.
3. Periodically as needed, use a fine-toothed file to smooth out any burrs, nicks or crushed areas and sharpen the cutting edge of the Wedge.
4. **WARNING!** If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

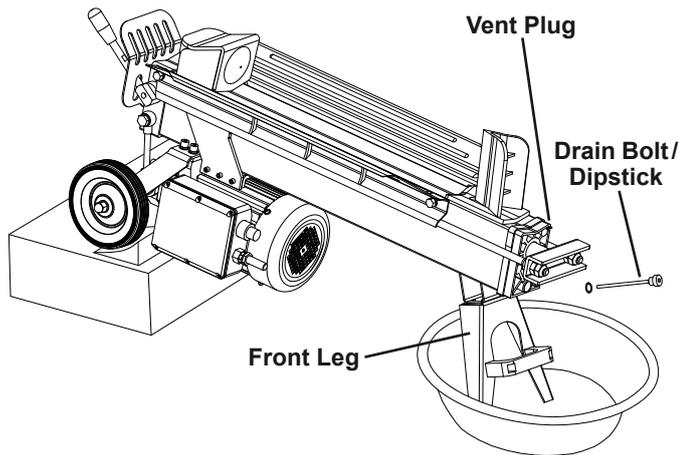


# Hydraulic Fluid Maintenance / Bleeding

Change the hydraulic fluid in the Log Splitter after every 100 hours of use.

## Replacing Hydraulic Fluid

1. Remove the Rubber Feet from the ends of the Front Leg.
2. Place the Front Leg of the tool in a five quart or greater capacity container. Raise the wheeled end of the Log Splitter using blocks and wheel chocks (not included), tilting the unit to an angle of approximately 30 degrees.



**Figure D: Draining the Fluid Reservoir**

3. Remove the Drain Bolt/Dipstick with a hex key, disconnect the Vent Plug and drain the fluid reservoir. Dispose of the old hydraulic fluid in accordance with local regulations.
4. After the fluid has drained from the fluid reservoir, remove the control handle. Use the Lift Handle located on the Front Leg to raise the Log Splitter to a standing position on the wheel end of the unit. Refer to Figure C: Checking/Adding Fluid on page 8.

## Bleeding the Hydraulic System

Trapped air may accumulate in the fluid reservoir causing the Ram to move erratically or not at all, making it necessary to bleed the hydraulic system of excess air. To bleed the hydraulic system:

1. Unplug the Power Cable.
2. Remove the Control Handle before standing the tool upright. Use the Lift Handle located on the Front Leg to raise the Log Splitter to a standing position on the wheel end of the unit. Refer to Figure C: Checking/Adding Fluid on page 8.
3. Remove the Drain Bolt/Dipstick with a hex key.

5. Refill the fluid reservoir with 3.4 quarts (3.2 liters) of fresh AW32 hydraulic fluid (not included).

**Note:** If AW32 hydraulic fluid is not available, Dextron II automatic transmission fluid may be used as a substitute. DO NOT mix Dextron II with AW32 hydraulic fluid—drain reservoir completely if substituting Dextron II.

6. Wipe off the Drain Bolt/Dipstick and thread it into the fluid reservoir. Remove and check to make sure the fluid level is within the acceptable range between the two marks on the Dipstick. Refer to Figure B: Dipstick on page 8.
7. Replace the Vent Plug and Drain Bolt/Dipstick. Tighten securely.
8. Replace the Rubber Feet on the ends of the Front Leg.
9. Use the Lift Handle to return the unit to its normal, horizontal operating position.
10. Replace Control Handle.
11. Open the Vent Plug by turning it counterclockwise 4–5 turns.
12. Plug in the tool, start the motor and use the Control Handle to cycle the Ram forward and back several times to remove excess air from the fluid reservoir.

4. Wipe off the Drain Bolt/Dipstick and thread it back into the fluid reservoir. Remove and check the fluid level; add fluid as needed to bring within the acceptable range. Refer to Figure B: Dipstick on page 8.

5. Replace the Drain Bolt/Dipstick and tighten securely.
6. Use the Lift Handle to return the unit to its normal, horizontal operating position.
7. Replace Control Handle.
8. Open the Vent Plug by turning it counterclockwise 4–5 turns.
9. Plug in the tool, start the motor and use the Control Handle to cycle the Ram forward and back several times to remove excess air from the fluid reservoir.

# Troubleshooting

SAFETY

SETUP

OPERATION

MAINTENANCE

Problem	Possible Causes	Likely Solutions
Tool will not start.	<ol style="list-style-type: none"> <li>1. Power Cable not connected.</li> <li>2. No power at outlet.</li> <li>3. Tool's overload protection device has tripped to protect tool from damage.</li> <li>4. Internal damage or wear. (Carbon brushes or switch, for example.)</li> </ol>	<ol style="list-style-type: none"> <li>1. Check that Power Cable is plugged in.</li> <li>2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads.</li> <li>3. Turn off and unplug tool and allow to cool for 1/2 hour, then restart. If problem is not solved, have qualified technician service tool.</li> <li>4. Have qualified technician service tool.</li> </ol>
Wood will not split, or splits extremely slowly.	<ol style="list-style-type: none"> <li>1. Log not positioned properly.</li> <li>2. The size or hardness of the log exceeds the machine's capacity.</li> <li>3. Cutting Wedge is dull.</li> <li>4. Hydraulic fluid level is low.</li> <li>5. Low maximum pressure rating adjustment was made on the Maximum Pressure Limiting Screw.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reposition log. Refer to General Operating Instructions on page 9.</li> <li>2. Only split logs within the Log Capacity range shown in Specifications on page 2. Capacity will be limited on hardwood logs and green lumber.</li> <li>3. Sharpen the Cutting Wedge. Refer to Maintenance and Servicing on page 10.</li> <li>4. Check fluid level and add fluid as needed.</li> <li>5. Have qualified technician adjust maximum pressure rating.</li> </ol>
Ram vibrates, moves erratically, or does not move.	<ol style="list-style-type: none"> <li>1. Log Splitter not on level ground.</li> <li>2. Hydraulic fluid level is low.</li> <li>3. Excessive air trapped in the hydraulic system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reposition tool so it is level with both ends at same height.</li> <li>2. Check fluid level and add fluid as needed.</li> <li>3. Bleed hydraulic system. Refer to Bleeding the Hydraulic System on page 11. Be sure Vent Plug is loose when operating tool.</li> </ol>
Fluid leaking from hydraulic system.	<ol style="list-style-type: none"> <li>1. Accumulated air is trapped in hydraulic system while operating.</li> <li>2. Tool moved with Vent Plug loosened.</li> <li>3. Drain Bolt not tightened securely.</li> <li>4. Hydraulic fittings and/or seals are worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Loosen Vent Plug before operating tool.</li> <li>2. Tighten Vent Plug before moving tool.</li> <li>3. Tighten the Drain Bolt.</li> <li>4. Have qualified technician service tool.</li> </ol>
 <p><b>Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.</b></p>		



## PLEASE READ THE FOLLOWING CAREFULLY

---

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

SAFETY

SETUP

OPERATION

MAINTENANCE

**Record Product's Serial Number Here:** \_\_\_\_\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Parts List

SAFETY

SETUP

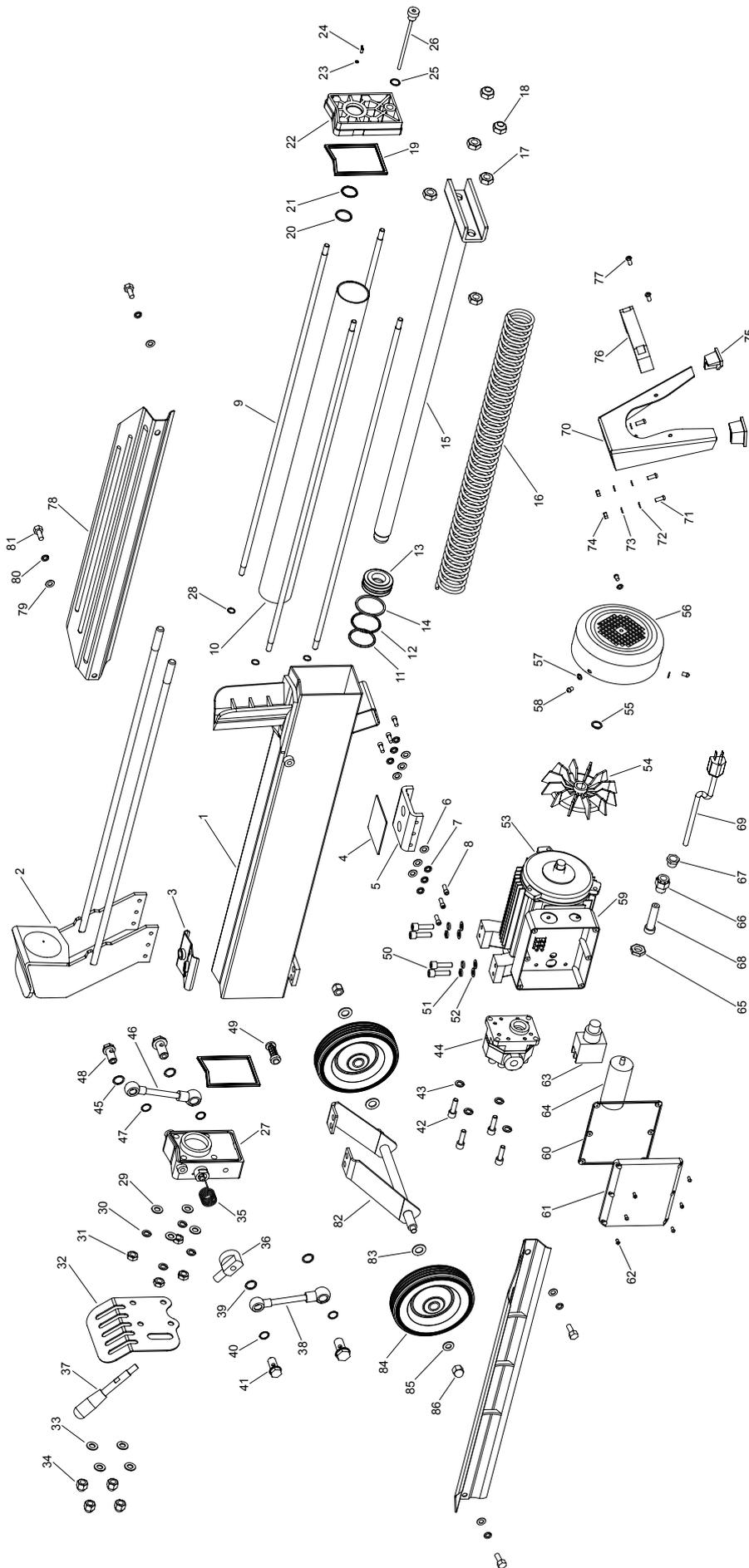
OPERATION

MAINTENANCE

Part	Description	Qty
1	Machine Body/Cutting Wedge	1
2	Ram Cap and Shaft	1
3	Upper Nylon Cushion	1
4	Lower Nylon Cushion	1
5	Ram Base Plate	1
6	Flat Washer M8X1	6
7	Spring Washer M8X2.3	6
8	Inner Hex Bolt M8X15	6
9	Double-Screw Bolt M10X813	4
10	Cylinder Tube Ø55 X743	1
11	Seal Ø55x3.1	1
12	Seal Cover	1
13	Piston Head	1
14	O-Ring Ø50x3.5	1
15	Piston Shaft	1
16	Retracting Spring	1
17	Nut M14	4
18	Lock Nut M14	2
19	Paper Seal Ring	2
20	O-Ring Ø30x2.65	1
21	Dust Seal	1
22	Reservoir Cover	1
23	O-Ring Ø6x1	1
24	Vent Plug M4x10	1
25	Copper Seal Washer M14x1	1
26	Drain Bolt/Dipstick	1
27	Hydraulic Valve	1
28	O-Ring Ø14x2.4	4
29	Flat Washer M10x1	4
30	Spring Washer M10x2	4
31	Nut M10	4
32	Shield	1
33	Flat Washer M10x2	4
34	Snap Head Nut M10	4
35	Torsion Spring	1
36	Control Handle Bracket	1
37	Control Handle Lever Ø12.5X134	1
38	Fluid Tube Ø14/Ø10x100x1	1
39	O-Ring Ø18x1.9	2
40	Copper Seal Washer M14x1	2
41	Fluid Tube Screw M14x30	2
42	Inner Hex Bolt M8x20	4
43	Spring Washer M8x2.3	4

Part	Description	Qty
44	Hydraulic Pump	1
45	O-Ring Ø18x1.9	1
46	Fluid Suction Tube Ø14/Ø10x100x1	1
47	Copper Seal Washer M14X1	3
48	Fluid Tube Screw M14X30	2
49	Fluid Filter	1
50	Inner Hex Bolt M8x35	4
51	Spring Washer M8x2.3	4
52	Flat Washer M8x1	4
53	Electric Motor	1
54	Fan	1
55	Shaft Circlip Ø16	1
56	Fan Cover Ø162	1
57	Flat Washer M4x1	3
58	Phillips Head Screw M4x10	3
59	Outlet Box	1
60	Rubber Gasket	1
61	Outlet Box Cover	1
62	Phillips Head Screw M4x10	6
63	Power Switch	1
64	Capacitor 60uf	1
65	Cable Fastener Nut	1
66	Cable Fastener	1
67	Cable Fastener Bolt	1
68	Power Cable Sleeve	1
69	Power Cable	1
70	Front Leg	1
71	Phillips Head Screw M6x15	4
72	Flat Washer M6x1	8
73	Spring Washer M6x2	4
74	Nut M6	4
75	Rubber Foot	2
76	Lift Handle	1
77	Phillips Head Screw M6x15	2
78	Guide Plate	2
79	Flat Washer M8X1	4
80	Spring Washer M8X2	4
81	Inner Hex Bolt M8X12	4
82	Wheel Frame	1
83	Flat Washer M17x2	2
84	Rubber Wheel	2
85	Flat Washer M10x1	2
86	Lock Nut M10	2

# Assembly Diagram



SAFETY

SETUP

OPERATION

MAINTENANCE

## Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. 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 product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

