

POWERHORSE™

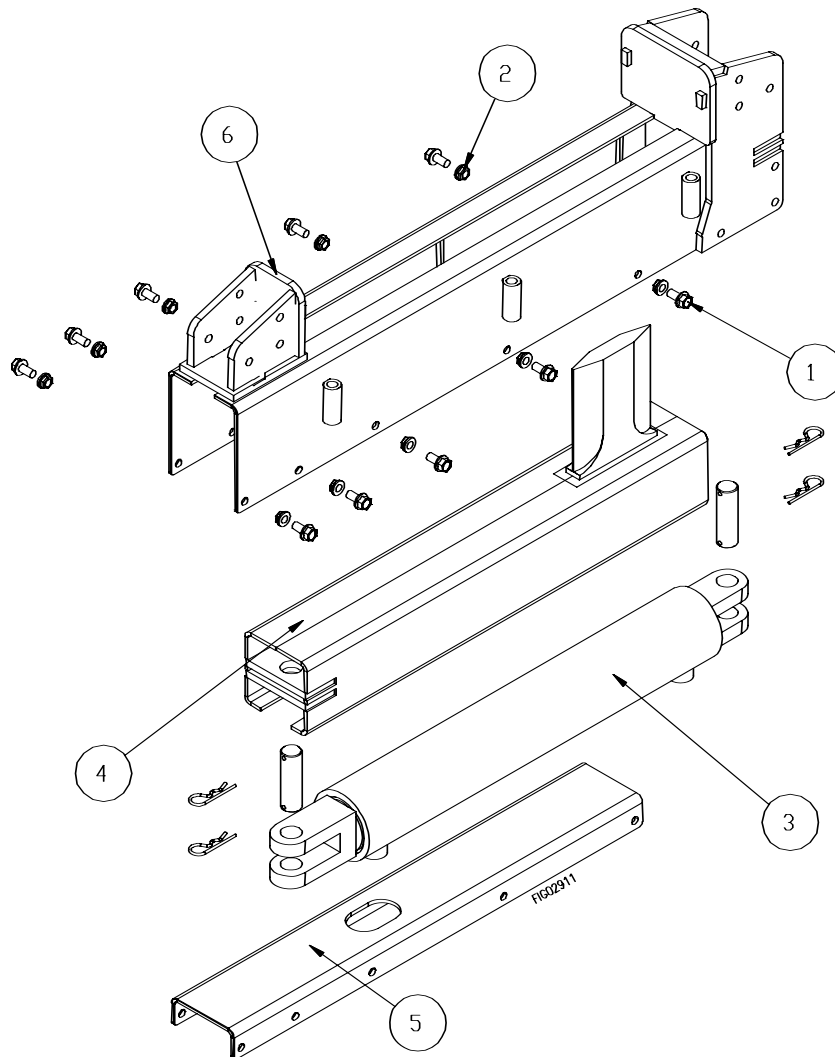
Owner's Manual

M1161D

ITEM NUMBER: 1161

SERIAL NUMBER:

Purpose: Parts for building own dual action log splitter.



Item	Part #	Description	Qty
1	82022	Flange Bolt	10
2	82026	Flange Nut	10
3	782257	Hydraulic Cylinder	1

Item	Part #	Description	Qty
4	779948	Beam Slide	1
5	780276	Beam Bottom Plate	1
6	780278	Open Beam	1

Any Questions, Comments, Problems or Parts Orders
Call Powerhorse Product Support 1-866-443-2576

Safety Label Locations

⚠ WARNING
IF LOG BECOMES STUCK ON WEDGE
 A log can become stuck to the wedge if the wedge becomes embedded in the log and the log doesn't split and separate. This can happen if the log is too stringy or tough to split completely. If this happens **NEVER** attempt to remove a stuck log by:

- Using the hydraulic force of the splitter
- Modifying the splitter
- Adding attachments to the splitter

Personal injury could result from log or metal pieces flying out at high speed toward the operator or bystanders, or the splitter could become damaged.

ALWAYS remove the log MANUALLY using this procedure:

1. Retract ram fully.
2. Turn engine OFF.
3. Remove stuck log from wedge manually with a pry bar or sledgehammer.
 Important: Be extremely careful as log pieces may fly off as they separate from wedge. Wear safety goggles and make sure bystanders are clear.
4. Do not attempt to resplit a stuck log once it has been removed from wedge.

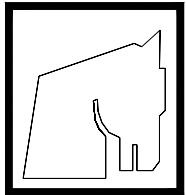
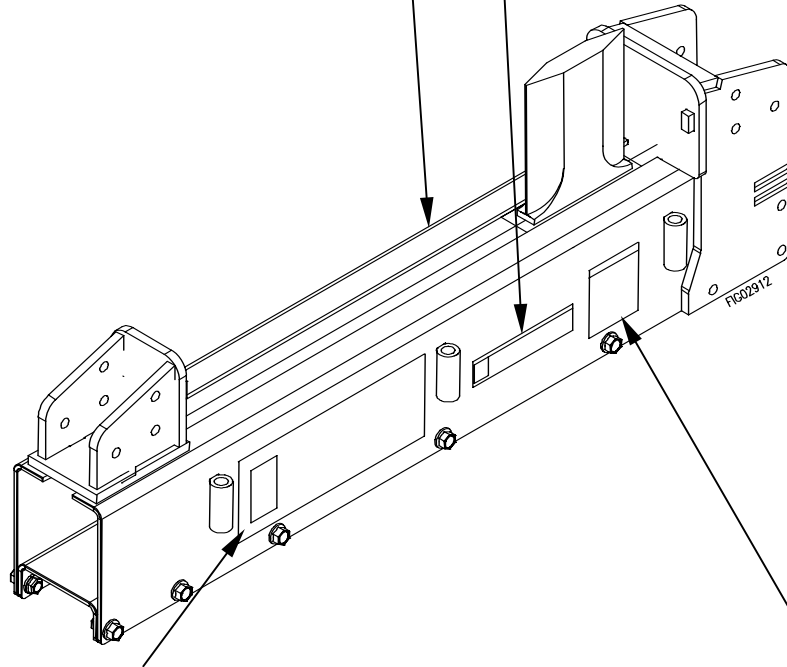
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FIG02915

⚠ WARNING
ESCAPING HIGH PRESSURE HYDRAULIC FLUID HAZARD
 High fluid pressures and temperatures are developed in the hydraulic system. Hydraulic fluid escaping through even a pin-size hole opening can puncture skin and cause blood poisoning.

- Inspect hydraulic system regularly for leaks
- Never check for leaks with your hand while system is pressurized.
- Seek medical attention immediately if injured by escaping fluid.

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FIG02914

⚠ WARNING
 Moving parts can crush and cut. Pieces can fly out while splitting. Follow safety rules for operating the log splitter or serious injury could result.

- READ the Owner's Manual completely before operating.
- Only one person should operate the log splitter. If an assistant is helping to load logs, the operator should not actuate controls until the assistant is at least 10 ft 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.
- Keep hands away from wedge, endplate/ram, and partly split logs.
- Never leave log splitter unattended during operation.
- Stay off slopes and slippery surfaces.

See additional safety rules in the Owner's Manual.

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Part #	Description
777891	Hydraulic Fluid Warning Decal
780610	General Warning Decal
777888	Stuck Log Warning Decal
780307	Powerhorse Decal

Always make sure safety labels are in place and in good condition. If a safety label is missing or not legible, order new labels or unsafe operation could result.

Before Each Use – Inspection / Maintenance

1. Hydraulic system

Check the hydraulic system carefully:

1. Visually inspect all hoses, tubing, clamps/fittings, pump, and cylinder for cracks, fraying, kinks, or other damage.
2. Check all components for oily residue, which may indicate a leak.

Do NOT operate the log splitter if there is any indication of damage or oily residue. Small leaks in hydraulic lines can cause severe injuries and can also be an indication of catastrophic failure in the near future. The life of hydraulic hoses may be from a few months to a few years, depending on use and storage patterns.

⚠ WARNING: High fluid pressures and temperatures are developed in hydraulic log splitters. Hydraulic fluid escaping through a pin hole sized opening can burn or puncture skin, resulting in wounds that could cause blood poisoning, infection, disability, gangrene, amputation, or death. Therefore, the following instructions should be heeded at all times when inspecting or servicing the hydraulic components of the log splitter:

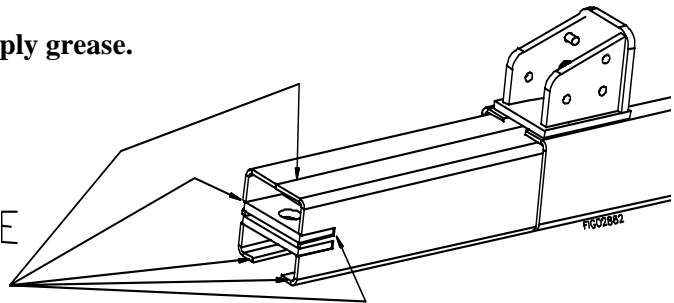
- Stop the hydraulic system and move all hydraulic control valve handles back and forth to relieve pressure before changing or adjusting hydraulic system components such as hoses, tubing, fittings or other components.
- NEVER check for leaks with your hand. Leaks can be located by holding a piece of cardboard or wood (at least two feet long) with your hand at one end and passing the other end over the suspected area (wear eye protection). Look for discoloration of the cardboard or wood.
- NEVER adjust the pressure setting of the pump or valve.
- If injured by escaping fluid, no matter how small the wound is, see a doctor at once. A typical injection injury may be a small puncture wound that does not look serious. However, severe infection or reaction can result if proper medical treatment is not administered immediately by a doctor who is familiar with injection injuries.

2. Mechanical parts

Check to be sure all nuts and bolts are tight to make sure the log splitter is in safe working condition.

Extend wedge slide, and apply grease.

APPLY GREASE
ON ALL BEAM
SLIDE SURFACES



Specification

Maximum Pressure.....	3000 psi
Maximum Flow.....	3gpm
Maximum Log Length.....	18 in
Hydraulic Cylinder Bore...	3 in
Hydraulic Cylinder Stroke..	18 in
Port Size.....	1/2" NPT

The manufacturer reserves the right to make improvements in design and/or changes in specifications at any time without incurring any obligation to install them on units previously sold.

Any Questions, Comments, Problems or Parts Orders
Call Powerhorse Product Support 1-866-443-2576

Summary of Important Safety Information for Operation



WARNING

Carefully read and make sure you understand the following safety information before using the log splitter.

Improper use or maintenance of the log splitter can result in serious injury to the operator or bystanders from moving parts that can crush or cut, flying objects, escaping high pressure hydraulic fluid, or carbon monoxide poisoning.

Introduction

- **Read manual.** Read this Operator's Manual completely before attempting to use the log splitter. Serious injury or death can result if safety instructions are not followed.
- **Instruct operators.** The log splitter owner should instruct all operators in safe log splitter operation.
- **Intended use.** Log splitters should only be used for splitting wood logs, lengthwise with the grain. Do not use for other purposes, as unforeseen hazards may result.

Prohibition Against Modifications

Never modify or alter the log splitter in any way. Modifications can create serious safety hazards and will void the warranty.

- **Attachments.** Never add attachments to the splitter, except for authorized accessories supplied by the manufacturer with instructions for safe installation and use.
- **Remote control.** NEVER attach a rope, cable, or other remote device to the hydraulic control valve handle.
- **Splitting wedge.** NEVER attempt to change the height or speed of the splitting wedge.

Operator Restrictions

- **Untrained operators.** Do not allow anyone to operate the log splitter who has not read the Owner's Manual or been instructed on the safe use of the splitter.
- **Minimum operator age.** Never allow anyone under 16 years old to operate the log splitter. Children 16 years and older must be trained and supervised by a trained adult.

Safety in Connecting Log Splitter to Hydraulic System

- **Check hydraulic connections/fittings.** Make sure all hydraulic line fittings are tight before applying pressure. High fluid pressures and temperatures are developed in the hydraulic system. Hydraulic fluid escaping through even a tiny opening can burn or puncture skin, resulting in wounds that could cause blood poisoning, infection, amputation or death. If injured by escaping hydraulic fluid, no matter how small the wound is, see a doctor at once.

Safety – Before Use

Read/instruct

- **Read manual.** Do not allow anyone to operate the log splitter who has not read the Owner's Manual or has not been instructed on the safe use of the splitter.
- **Review safety rules.** Before starting this log splitter, review the instructions for safe operation. Failure to follow these instructions may result in serious injury to the operator or bystanders.
- **Know how to stop.** Be thoroughly familiar with all controls and with the proper use of the equipment. Know how to stop the log splitter and relieve system pressure quickly if needed.

Summary of Important Safety Information for Operation

Personal protective equipment

- **Eye protection.** Always wear safety glasses or goggles when operating the machine. Pieces of log may fly out and serious eye injury can occur.
- **Boots.** Falling logs can crush feet. Always wear safety shoes or heavy boots when operating or helping to load logs.
- **Loose / dangling.** Loose or dangling apparel can become entangled in moving parts. Never wear jewelry or loose-fitting clothing.
- **Gloves.** Wear snug fitting gloves without drawstrings or loose cuffs.
- **Hearing protection.** The use of earplugs or other hearing protection device is recommended.


Safety During Inspection/Maintenance

Always inspect your log splitter before each use, and repair as needed, to keep it in safe working condition:

- **Hydraulic system off.** Always make sure the hydraulic system is off before cleaning, repairing, or adjusting the splitter, except as recommended by the manufacturer.
- **Other debris.** Debris on moving parts can cause excess wear. With hydraulic system off, clear debris from moving parts.
- **Mechanical parts.** Check to be sure all nuts and bolts are tight to make sure the log splitter is in safe working condition.
- **Hydraulic components.** Check the hydraulic components (hoses, tubing, and clamps/fittings) carefully before each use. Do not operate the log splitter with frayed, kinked, cracked or damaged hydraulic hoses, fittings, or tubing, or if oily residue is observed on any of the components. High fluid pressures and temperatures are developed in hydraulic log splitters. Hydraulic fluid escaping through a pin hole sized opening can burn or puncture skin, resulting in wounds that could cause blood poisoning, infection, disability, gangrene, amputation, or death. Therefore, the following instructions should be heeded at all times when inspecting or servicing the hydraulic components of the log splitter:
 - Do not check for leaks with your hand. Leaks can be located by holding a piece of cardboard or wood (at least two feet long) with your hand at one end and passing the other end over the suspected area (wear eye protection). Look for discoloration of the cardboard or wood.
 - Turn off the hydraulic system, move hydraulic control valve handles back and forth to relieve pressure, and then disconnect the hydraulic lines BEFORE changing or adjusting hydraulic components such as hoses, tubing, fittings or other components.
 - If injured by escaping fluid, no matter how small the wound is, see a doctor at once. A typical injection injury may be a small puncture wound that does not look serious. However, severe infection or reaction can result if proper medical treatment is not administered immediately by a doctor who is familiar with injection injuries.
- **Guards / shields.** Make sure all guards and shields are replaced after servicing the log splitter.
- **Replacement parts.** If a part needs replacement, only use parts that meet the manufacturer's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operation of the log splitter.

Safety – During Use

General Safety During Use

 **WARNING:** Before starting this log splitter, review the following rules for safe operation. Failure to follow these rules may result in serious injury to the operator or bystanders.

- **Safety equipment / controls.** Always operate the log splitter with all safety equipment in place and in good working order, and all controls properly adjusted for safe operation.

Summary of Important Safety Information for Operation

- **Operating speed.** Always operate the log splitter at the manufacturer's recommended speed. Do not operate at flow rates exceeding 3 GPM. Higher flow rates make the beam slide move dangerously fast.
- **Know how to stop.** Be thoroughly familiar with all controls and with the proper use of the equipment. Know how to stop the log splitter and relieve system pressures quickly if needed.
- **Daylight only.** Only use the log splitter in daylight so you can see what you are doing.
- **Smoking / sparks.** Never smoke while operating the log splitter, and never operate near sources of sparks or flames.
- **Unattended.** Never leave the machine unattended while the hydraulic system is running.
- **Under the influence.** Never operate, or let anyone else operate, the log splitter while under the influence of alcohol, drugs, or medication.
- **Adjusting / repairing.** Before changing or adjusting hydraulic system components such as hoses or fittings, first relieve hydraulic line pressure by moving the hydraulic control valve handles back and forth several times, then disconnect hydraulic lines.

Safety in Loading, Operating, and Unloading

- **Square log ends.** Logs that are not cut square can slide out while splitting and become a safety hazard or cause excessive force to log splitter components. Use a chainsaw to cut logs square on each end before attempting to split them.
- **Single log.** Never attempt to split more than one log at a time. Pieces of log can unexpectedly be thrown from the machine causing serious injury.
- **Split along grain.** Do not use the log splitter to split logs across the grain. Doing so will damage the log splitter and could also cause pieces of log to be thrown, injuring the operator or bystanders.
- **Keep hands clear.** ALWAYS keep hands and feet away from the endplates, wedge, and partially split logs while loading, operating and unloading the log splitter.
- **Straddling / reaching across.** Never straddle, reach across, or step over the beam while the hydraulic system is running and the log splitter is in the horizontal position. You could trip, actuate the controls, and get seriously injured.
- **Second person.** Many accidents occur when there is more than one person involved in loading and operating the log splitter. Only one person should operate the controls. *If a second person is assisting in loading logs, the operator must NEVER actuate the Hydraulic Control Valve Handle until the assistant and all bystanders are at least 10 feet away. NEVER allow an assistant to hold the log in place while the operator actuates the Hydraulic Control Valve Handle.*
- **Loading/Unloading**
 - **Unsplit log pile.** Do not pile logs to be split in a place that will make you reach across the log splitter in order to load them.
 - **Hold bark side.** Hold the bark side of logs when loading or positioning, never the ends. Never place your hands or any part of your body between a log and any part of the log splitter.
 - **Wedge moving.** Never load or unload logs while the wedge is moving.
 - **Cracks.** Cracks in logs can close quickly and pinch fingers. Keep fingers away from any cracks that open in partially split logs.
 - **Split log pile.** Move each log away from log splitter after it is split. Split logs left near the log splitter are a trip hazard.
- **Remove hands.** Remove both hands from log before activating Hydraulic Control Valve Handle.
- **Hand activate.** Use only your hand to operate the Hydraulic Control Valve Handle. Never use any other body part, or a rope, cable, or other remote device to actuate the control.
- **Log stuck on wedge.** A log can become stuck to the wedge if the wedge becomes embedded in the log and the log doesn't split and separate. This can happen if the log is too stringy or tough to split completely. If this happens, follow the directions below to manually remove the log:

Summary of Important Safety Information for Operation

IMPORTANT: NEVER attempt to remove a stuck log by using the hydraulic force of the splitter, or by modifying or adding attachments to splitter. Personal injury could result from log or metal pieces flying out at high speed toward the operator or bystanders, or the splitter could become damaged.

1. Remove pressure from log by moving wedge away from the endplate.
2. Turn hydraulic system OFF.
3. Remove stuck log from the wedge **manually** with a pry bar or a sledgehammer.
Important: Be extremely careful as log pieces may fly off as they separate from the wedge. Make sure bystanders are clear and wear safety goggles.
4. Do not attempt to resplit a stuck log once it has been removed from the wedge. Manually split with an axe, or cut with a chainsaw.

Safety – After use

- **Storage location.** Store the log splitter in a dry location away from corrosive material.
- **Periodic maintenance.** Perform periodic maintenance to keep the log splitter in safe working condition.

Limited Warranty

Dear Valued Customer:

The Powerhorse Product you just purchased is built with the finest material and craftsmanship. Use this product properly and enjoy the benefits from its high performance. By purchasing a Powerhorse product, you show a desire for quality and durability. Like all mechanical equipment this unit requires a due amount of care. Treat this unit like the high quality piece of machinery it is. Neglect and improper handling may impair its performance. Please thoroughly read the instructions and understand the operation before using your product.

Limited Warranty

Powerhorse shall warranty any piece of equipment manufactured, or parts of equipment manufactured, to be free from defects in material or workmanship for a period of 90 days for noncommercial/nonrental use and a period of 90 days for commercial/rental use from the date of purchase by user.

Powerhorse shall warranty any wear item, including, but not limited to, valves, seals, pump diaphragms, hoses, and filter elements to be free from defects in material or workmanship for a period of 90 days from the date of purchase by user. This warranty applies to the original purchaser of the equipment and is non transferable. Verification of purchase is the responsibility of the buyer. Parts will be replaced or repaired at no charge, except when the equipment has failed due to lack of proper maintenance. Any misuse, abuse, alteration or improper installation or operations will void warranty. Determining whether a part is to be replaced or repaired is the sole decision of Powerhorse.

NOTE: Some services performed by parties other than Powerhorse may void warranty.

This warranty covers parts only. It will not provide for replacement of complete products due to defective parts.

Components not manufactured by Powerhorse are guaranteed by their manufacturer and can be serviced at factory-authorized locations near you. Any costs incurred due to replacement or repair of items outside of a Powerhorse approved facility is the responsibility of the buyer and not covered under warranty. Powerhorse can supply you with the service center location in your area.

This warranty specifically excludes the following; failure of parts due to damage caused by accident, fire, flood, windstorm, acts of God, applications not approved by Powerhorse in writing, corrosion caused by chemicals, use of replacement parts which do not conform to manufacturer's specifications, and damage caused by vandalism. Additional exclusions: loss of running time, inconvenience, loss of income, or loss of use, including any implied warranty of merchantability of fitness for a specific use.

Warranty does not cover items subject to normal wear such as tires, receptacles or any part subject to direct physical contact by the public. This warranty does not cover any personal injury or damage to surrounding property caused by failure of any part.

This warranty is in lieu of any other warranty expressed or implied and Powerhorse assumes no other responsibility or liability outside that expressed within this warranty.

Please fill in the following information and have it on hand when you call in on a warranty claim.

Customer Number: _____

Date of Purchase: _____

Powerhorse Serial Number: _____

Item Number: _____



POWERHORSE™

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