



RAMSPLITTER LOG SPLITTERS
The Toughest Log Splitters in the Business

Operation and Maintenance
Manual

Ramsplitter Log Splitters, Inc.
P.O. Box 1523
Rockford, Il 61110
(877) 967-1965

Warnings

WARNING!

WARNING to purchasers of internal combustion engine equipped machinery or devices in the State of California:

The equipment you have purchased does not have a spark arrester muffler. If this equipment is to be used on any forest and brush covered land or grass covered un-improved land in the state of California, the law requires that a spark arrester muffler be installed and be in effective working order. The spark arrester muffler must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.

The engine exhaust from this equipment contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING!

This manual contains vital information for the safe use and efficient operation of this equipment. Carefully read this Operation & Maintenance Manual before using this equipment, as failure to adhere to the instructions could result in death, serious bodily injury and/or property damage.

This log splitter is to be used only for splitting firewood logs. Using this machine for any other purpose may cause injury and or property damage. Improper use of this log splitter will void the warranty.

-Table of Contents-

Warnings.....	Page 1
Table of Contents	Page 2
Do Be Careful.....	Page 3 - 5
General Description.....	Page 6
Specifications.....	Page 7
Log Splitter Preparation.....	Page 7
General Safety Information.....	Page 8
Training.....	Page 9 & 10
Preparation.....	Page 9 & 10
Operation	Page 10 & 11
Maintenance	Page 11
Periodic Maintenance Schedule	Page 12
Fueling	Page 13
Transportation	Page 13
Lubrication	Page 14
Oil and Fuel	Page 14
Controls	Page 14 - 15
Identification	Page 16
Storage	Page 16
Warranty.....	Page 17 - 19

CAUTION!

Do not operate this log splitter until you have read and understand the operating and safety instructions. Failure to read and follow operating instructions can result in serious injury or death to yourself and/or others.

DO

- Do make sure that anyone who operates this splitter reads and understands all operating instructions as to its proper use and operation as well as all safety instructions.
- Do keep your work area clean. Don't leave wood lying around that you could stumble over.
- Do keep hands and feet clear of splitter blade and out of splitter area while unit is in operation.
- Do wipe up spilled gasoline right away from the engine and log splitter before starting the engine.
- Do check engine oil level and hydraulic oil level before starting the splitter.
- Do use the splitter only to split firewood logs. Use of the splitter for any other purpose is dangerous and will void the warranty.
- Do wear eye protection and protective clothing including safety shoes at all times while the log splitter is in operation to avoid any hazard from flying wood.
- Do keep children and pets away from the work area while you are operating the log splitter.
- Do shut off the engine if you leave the log splitter, even for a short period of time.
- Do operate the log splitter on a level surface. Block the wheels to prevent unintended Movement.
- Do let go of the control lever after it is pushed forward. The ram will return automatically at the end of the stroke. The ram can also be stopped at any point in its travel and returned.
- Do remove both hands from the log before activating the control lever.
- Do be sure the log splitter is kept in sound mechanical condition. Proper care, maintenance and following all operating and safety instructions will provide you with many years of trouble free and safe operation.

DO NOT

- Do not allow anyone to operate the log splitter until they have read and understand the operating and safety instructions.
- Do not allow anyone under the age of 18 to operate the log splitter.
- Do not operate the log splitter in the vicinity of or near children or pets.
- Do not wear jewelry or loose fitting clothing or clothing with drawstrings when operating the log splitter, as such jewelry or clothing may become entangled in the moving parts of the log splitter.
- Do not operate the ram control any way other than by hand.
- Do not leave the log splitter unattended with the engine running.
- Do not operate the log splitter beyond the capabilities as outlined in the owner's manual and operating instructions.
- Do not step over the log splitter when running. Walk around the log splitter to get to the other side.
- Do not straddle the log splitter with the engine running or during operation.
- Do not allow anyone to stand near the cutting wedge when you are splitting wood, because wood may fly and become hazardous.
- Do not stand on slippery, wet, muddy or icy surfaces when operating the log splitter. Operate only when operator zone is clear for safe, secure footing.
- Do not operate the log splitter inside a building or other closed in area that does not have adequate ventilation.
- Do Not refuel the log splitter with the engine running or if the engine is hot, or if the operator is smoking or while the unit is near any open flame or other ignition source.
- Do not operate the log splitter if it is need of repairs or maintenance services.
- Do not make any modifications, alterations or changes to the original configuration of the log splitter. This may cause death or serious injury and will void the warranty.

Do Not (Continued)

- Do not load a log onto the log splitter by holding the log at both ends of the log. Do not place your hands between the cutting wedge and the log or between two pieces of wood and the frame. See operations manual for proper loading instructions.
- Do not service or repair the log splitter without removing the spark plug wire.
- Do not allow anyone except the operator within 10 feet of the log splitter during operation.
- Do not operate the log splitter with any hydraulic fluid leak. Check hydraulic hoses before operating log splitter and repair or replace as necessary.
- Do not use any chemical cleaners or high pressure wash systems or steam cleaners to clean the log splitter. Use only a mild detergent and warm water for cleaning. Any other method may void your warranty.

-General Description-

Read carefully before attempting to install, operate or service the Ramsplitter log splitter. Retain this information for your future reference.

Your Ramsplitter log splitter is American made and constructed of the best materials available to do the job. Your safety has been considered in every feature and component of your Ramsplitter log splitter.

The gasoline engine or electric motor operates a pump, which supplies high pressure oil to the cylinder by way of the control valve and high pressure hoses. When the control valve is moved to the forward extend position, oil is allowed to flow through the hoses to the rear of the cylinder which, in turn, forces the ram to extend outward toward the wedge. When the control lever is reversed and put in the retract position, the direction of the oil flow is changed and the high pressure oil is forced into the front of the cylinder, thereby retracting the ram. A large reservoir stores and cools the hydraulic oil and incorporates a high density filter to filter out any foreign particles and, therefore greatly extends the life of your Ramsplitter log splitter. A safety relief valve is preset at the factory to protect the hydraulic system from excessive pressures.

The same operation applies to your tractor attachment or Skid Steer attachment. When you hook up to the hoses up to your auxillary outputs, make sure you have the oil flowing in correct direction. Make sure when you activate the handle on the valve that the cylinder moves forward when you push the handle to the forward position. If this does not happen you have the flow of the oil reversed.

-Log Splitter Preparation Procedure-

The following items must be accomplished and checked before machine operation.

1. Log splitter should be in a level position and used only out of doors, not in an enclosed area.
2. Make sure all connections, lines and hoses are tight and not damaged before filling with fluids.
3. When hooking up your Log Splitter Attachment insure all hoses are properly tightened before turning on the Hydraulic power source.
4. Motor oil should be placed in the engine crankcase according to the instructions in the engine manufacturer's instructional manual. Gasoline is then put into the engine fuel tank according to the engine manufacturers operating manual. Standard fueling safety procedures must be followed during refueling. DO NOT start the log splitter engine until hydraulic oil is added to the hydraulic system.
5. When filling the hydraulic system of the log splitter with hydraulic oil, add Dexron II or III or any light hydraulic oil, such as Mobil DTE 13M or equivalent. Fill the hydraulic reservoir within 1 inch from the top of the reservoir. Replace the reservoir cap.
6. Place the engine stop switch to the "OFF" position. Pull the engine cord over 4 or 5 times. Place the engine stop switch to the "ON" position. Pull the engine cord and start the engine. Move the control lever to the forward extend position and let the ram move ½ of its length. Stop the engine. Add hydraulic oil to the hydraulic reservoir to within 1 inch of the top of the reservoir.
7. Start the engine. Move the control lever to the forward extend position and let the ram move to the fully extended position. Reverse the control lever and let the ram move to its full reverse position. Stop the engine. Check the hydraulic oil level and add to within 1 inch from the top of the reservoir as needed. Cycle the ram forward and reverse several times until ram movement is smooth and even. Do a final hydraulic oil check. Inspect all hoses, lines and fittings for leakage. Correct any leakage before continuing usage. Your Ramsplitter log splitter is now ready for service!

-General Safety Information- Training

1. Read & understand the Operation & Maintenance Manual and all safety instructions before attempting to use this log splitter.
2. Do not allow anyone to operate your log splitter who has not read the Operation & Maintenance Manual and safety instructions or has not been instructed on the safe use of the log splitter.
3. Never allow children or untrained adults operate this log splitter.
4. Never allow anyone under the influence of any substance (drugs, alcohol, etc.) to operate this log splitter.
5. Most accidents occur when more than 1 person operates the log splitter at any time. If a second person is assisting in providing logs to the operator to be split, never activate the controls until the assistant is clear of the work area. Only one person must run the log splitter at a time.
6. Never allow anyone to ride on the log splitter at any time.
7. Never transport or store cargo on the log splitter at any time.
8. Extremely high fluid pressures are developed in hydraulic log splitters. Pressurized hydraulic fluid escaping through a pin hole opening can puncture skin and cause severe injury. Therefore, the following instructions should be followed at all times.
 - A. Do not operate the log splitter with frayed, kinked, cracked or damaged hydraulic hoses, fittings or tubing.
 - B. Avoid high pressure fluid leaks. Hydraulic oil escaping from a small hole can be almost invisible but it can penetrate skin, causing serious injury. Use pieces of cardboard or wood to detect leaks, rather than using your hands.
 - C. Stop the engine and relieve hydraulic system pressure before changing or adjusting fittings, hoses, tubing or other system components.
 - D. Do not adjust the pressure settings of the pump or valve.
 - E. Do not check for leaks with your hands. Leaks can be located by passing cardboard or wood over the suspected area of the leak. Look for discoloration. If you are injured by escaping hydraulic oil, seek medical attention immediately. Serious infection can result if proper medical care is not administered immediately.

-General Safety Information (Continued)-

9. Your log splitter is equipped with an internal combustion engine and if it is used near any unimproved forest, brush or grass covered land, the engine exhaust must be equipped with a spark arrestor which meets all applicable local, state and federal codes. These may be purchased from the engine manufacturer. Take appropriate fire fighting equipment with you.
10. The log splitter must be used only for splitting fire wood and should be split only in the direction of the grain (not across the diameter of the log).
11. Keep the operator zone and adjacent area clear to ensure safe, secure footing. The operator zone is the entire area from the operator to ten feet away from the operator. No other assistant should be within this operating area when the machine is in use.

Preparation

Be thoroughly familiar with all of the controls and with the proper use of the log splitter.

1. Always wear safety shoes or heavy boots. (No athletic shoes)
2. Always wear safety glasses or goggles with side shields and hearing protection when operating the log splitter.
3. Wear safety gloves.
4. Never wear jewelry, loose clothing or clothing with strings or cords that may become entangled in moving or rotating parts of the log splitter.
5. Make sure the log splitter is on a level surface. Block the wheels securely before operating the machine to prevent unintended movement. Use chocks or split wood in front and behind each wheel to block the log splitter.
6. Always operate the log splitter from the indicated operator zone. (See above diagrams on this page).
7. Cut all logs to be split as squarely as possible.

-General Safety Information (Continued)-

8. Handle fuel with care, it is highly flammable.
 - A. Use an approved fuel container designed for gasoline storage.
 - B. Never add fuel to a hot or running engine.
 - C. Fill the fuel tank outdoors with extreme care. Never indoors.
 - D. Replace gasoline tank cap securely and clean up all spilled fuel.

Operation

1. Before starting this log splitter, read and understand this entire manual including the Do Be Careful and General Safety Information. Failure to follow these rules may result in serious injury to the operator or bystanders.
2. Never leave the machine unattended with the power source operating.
3. Never operate the machine when you are under the influence of alcohol, drugs or medication.
4. The machine owner must instruct all operators in the safe operation of this log splitter.
5. Always operate the log splitter with all safety equipment in place and all controls properly adjusted for safe operation.
6. Do not run the engine at excessive speeds. Doing so increases the hazard of personal injury. Do not tamper with parts that may increase the speed recommended by the manufacturer.
7. Always keep hands and feet away from moving parts.
8. Always shut off the engine when adjusting or repairing the log splitter except as recommended by the manufacturer.
9. Do not run the engine in an enclosed area. Exhaust gas contains carbon monoxide, an odorless and deadly poisonous gas.
10. When loading the log splitter, place your hands on the sides of the log. Never place your hands or any part of your body between a log and any part of the log splitter.
11. Never attempt to split more than one (1) log at a time.
12. When the logs are not cut square, the longest portion of the log should be rotated down and placed at the cutting wedge end.
13. Use only your hand to operate the log splitter controls.
14. Operate the log splitter using only one operator. Only the operator should be within 10 feet of the machine while the log splitter is operating.
15. Read and follow all safety and warning decals installed on the machine.

-Operation (Continued)-

16. On vertical models, keep hands away from the cutting wedge.
17. On vertical models maintain balance of the beam when raising or lowering the beam.
18. On vertical models make sure the safety pin is installed when the unit is in the vertical or splitting mode or in the horizontal towing mode.
19. Do not refuel the engine until it has cooled for several minutes.

Maintenance and Storage

Note: For proper maintenance, keep a written record of hour use and maintenance. Also see page 11 for further details.

1. Always shut off the engine. While repairing or adjusting the log splitter, except as recommended by the engine manufacturer.
2. Clean debris and chaff from the engine cylinder, cylinder head fins, blower housing, rotating screen and muffler areas. If the engine is equipped with a spark arrestor muffler, clean and inspect it regularly (follow engine manufacturer service instructions). Replace, if damaged.
3. Never store the log splitter with fuel in the tank inside a building where fumes might reach an open flame or spark. Allow the engine to cool and drain all fuel from the fuel tank before storing in any enclosed area.
4. Clear debris from movable parts, but only when the power source is shut off.
5. To prevent accidental starting, remove the spark plug wire from the spark plug and insert the terminal in the V notch in the cylinder head before working on the engine or log splitter.
6. Check to be sure all nuts and bolts are tight to assure the log splitter is in safe working condition.
7. Check engine oil level and hydraulic oil level.
8. Check the brass wear strips on the slide plate under the cutting wedge. All models equipped with wear strips should be inspected and have the wear strips replaced as needed.

-Periodic Maintenance-

Check engine oil	Daily
Check hydraulic oil	Daily
Inspect hydraulic hoses	Daily
Inspect & clean engine cooling fins	Daily
Check log splitter tire pressure	Daily
Check trailer hitch and safety chains	Daily
Clean engine air filter	Weekly
Check brass wear strips	Monthly
Inspect for and repair damaged parts	Daily
Inspect & gap or replace spark plug	Annually
Replace hydraulic oil and clean filter	Annually
Check & service wheel bearings	Monthly
Inspect all bolts & fittings and tighten as needed	Weekly
Change engine oil as indicated in the engine manufacturer's owners manual.	

Fueling

1. Use properly marked and approved safety containers for gasoline storage and for refueling engine.
2. Refuel engine outdoors. Never refill the fuel tank indoors.
3. Shut off the engine and allow it to cool before refueling.
4. While refueling engine, do not smoke or create sparks in the area.
5. Avoid spilling gasoline and clean up all spilled gasoline before starting the engine.

Safe Transportation of the Log Splitter

When transporting the log splitter over the road, fuel coming from the gasoline tank should be shut off by means of the shut off valve located under the gasoline tank. Some engines do not have a gasoline shut off valve. If the engine is not equipped with a gasoline shut off valve, drain all gasoline before towing the log splitter.

Lubrication: Oil & Fuel

1. A written record should be kept to log hours of use.
2. Motor oil in the crankcase of the engine and fuel specifications must be followed from the engine manufacturer's manual supplied with the log splitter.
3. Dexron II or III or equivalent is recommended for the hydraulic system.
4. After every 5 hours of operation, the log splitter should be stopped and, with the ram in a retracted position, the hydraulic oil level should be checked. It should be 1 to 2 inches from the top of the filler cap hole.
5. If a considerable amount of towing or over the road use is necessary, the wheel bearing should be packed with wheel bearing grease every 1000 miles or once a month as needed.
6. After every 50 hours of operation, the motor oil should be changed and the air filter should be checked, and changed as necessary.
7. The Shaft on your electric motor does not need to be lubricated until after 1000 hours of use.
8. Hydraulic oil should be changed at least once a year, but more frequently for heavy duty or commercial use. In extremely dusty or dirty conditions the oil should be changed more frequently to meet these unusual conditions.

To change the hydraulic oil, extend the ram to full extend position. Stop the engine. Drain the oil from the reservoir. When the oil from the reservoir is emptied out, remove the front and rear hoses and place the ends in a drain container. Manually push the ram in toward the cylinder (retract position). This motion will evacuate the remainder of the hydraulic oil from the system. Replace the hoses. Refill the hydraulic tank with hydraulic oil.

Controls

Electric Motor – On/Off Switch

To start your electric log splitter, make sure you plug the unit into the outlet prior to turning the switch to the on position.

Controls – (Continued)

Engine run – stop switch

To shut off the engine, turn the switch to the stop position. Before attempting to start the engine, be sure the switch is in the run position. Not all engines have this control on them.

Engine choke control

If the engine does not start initially, set the choke control to full on position. When the engine starts, set the choke control to the normal operating position.

Engine recoil starter handle

It takes short, steady pulls in rapid succession to start the engine. Do not jerk the starter handle. Do not release the starter handle when fully extended and let it snap back.

Ram control valve

To extend the ram, push the control lever to extend as the decal on the valve indicates. Holding the lever in this position, the ram will continue to travel forward to its fully extended position until either the control lever is released or until the ram reaches its fully extended position.

As a safety precaution, when the control lever is released it will automatically move to the center hold position, and the ram will stop. This control lever feature is referred to as a "dead man" control switch. To move the ram, push the control lever in the same direction as wish the ram to move.

To retract the cylinder reverse the position of the control lever to the retract position. The control lever handle will stay in the retract mode until the ram reaches the fully retracted position and then the control lever will move to the center hold position. However, the cylinder may be stopped at any position during the retract cycle by manually putting the control lever in the center hold position.

-Identification-

Additional or replacement manuals may be obtained from Ramsplitter. When the log splitter has been received, complete the following record:

Model: _____

Date of purchase: _____

Where purchased: _____

Always mention the log splitter model number when ordering or inquiring about parts or service.

For convenience in ordering, parts are listed by part number, description and quantity. If in doubt as to what part is needed, send a full description, sketch or the part itself with the order. Prior arrangements must be made before returning a unit or part for warranty service. Service calls should be directed to customer service at 1-877-967-1965.

-Storage-

For safe storage:

1. Clean dirt and debris from the engine and log splitter.
2. To prevent rusting, coat the areas where paint has been scraped with an oil based rust inhibitor. Do not use heavy oil or grease because this will cause premature wear. Wipe off rust inhibitor before use.
3. Store the log splitter with the ram in fully retracted position.
4. It is required that you drain all of the gasoline from the gasoline tank and run the log splitter until all of the carburetor gasoline is exhausted before storing the log splitter.

-Warranty Information-

Each new product is warranted against manufacturing defects in workmanship and / or materials under normal use and service for a period of 12 months from the date of delivery of the product to the original purchaser. Ramsplitter obligation under this warranty shall be limited to the replacement to the original purchaser of any part, which, as delivered to the original purchaser, and upon Ramsplitter examination, is shown to Ramsplitter satisfaction, to be defective due to faulty workmanship or materials at the factory.

This warranty does not apply to damage in transit, damage caused by user misuse, negligence, accident, normal wear or alterations or repairs done outside the factory and / or authorized service stations as determined by Ramsplitter. This warranty does not apply to any labor charges in connection with the replacement parts claimed to be defective.

All parts claimed to be defective must be returned to Ramsplitter factory for inspection, repair or replacement, with all transportation or mailing charges prepaid. It is the exclusive responsibility of the purchaser to bear the transportation or mailing charges in any warranty claim.

This warranty specifically excludes engines or batteries, which are warranted separately by their respective manufacturers, all claims for defective hydraulic pumps, valves, batteries, engines or engine parts must be made in accordance with the pump, valve, battery, or engine manufacturer's warranty. This warranty also specifically excludes costs of regular maintenance and replacement of service items such as belts, hoses, blades, tires and similar items.

Ramsplitter reserves the right to make changes upon Ramsplitter's products without imposing any obligation upon Ramsplitter, to install the same product manufactured prior to the change.

Ramsplitter makes no other warranties, representations or promises other than those set forth herein. **Ramsplitter specifically disclaims any and all implied warranties of fitness for particular purpose and merchantability.**

The remedies available to a distributor, dealer, and / or purchaser in connection with Ramsplitter's warranty are set forth above. In no event will Ramsplitter be liable for special, incidental or consequential damages.

-Ramsplitter Warranty Procedure-

1. All requests for warranty must have approval from Ramsplitter before Work starts, or the warranty claim will be denied.
2. All requests for warranty service must be made on a Ramsplitter warranty claim form. This form is available from Ramsplitter or one of our authorized distributors or dealers. Forms can be faxed or mailed to you at no charge.
3. It is the responsibility of the distributor, dealer and / or purchaser to complete the warranty claim form and submit it to Ramsplitter
 - A. The form must be filled out completely. It is the sole responsibility of the purchaser to obtain the proper and correct information for the warranty claim. Claims received without serial numbers, model numbers, replacement part numbers, purchase date, purchaser's correct address, signature or other information requested by Ramsplitter shall be returned without service.
 - B. Warranty claims that are illegible will be returned without service. Please carefully type or print in black ink.
 - C. Ramsplitter warranty makes no allowance for the time spent to fill out the warranty claim form or to discuss the warranty claim with Ramsplitter personnel. Any such claim will be denied.
 - D. All returned parts will be retained and tagged for a period of sixty (60) days or until credit is issued.
 - E. The factory may request parts be returned for examination or analysis. These parts shall be sent by prepaid freight to Ramsplitter. Returns sent freight collect, without the express, written permission of Ramsplitter shall not be accepted by Ramsplitter.
 - F. It is the responsibility of the purchaser to review the warranty claim and to comply fully with all of the procedures set forth herein. Failure to do so will result in the denial of the warranty claim.
4. Any warranty payments by Ramsplitter will be paid by credit memo to the distributor, dealer or purchaser.
5. All warranty claims, which are denied, will be returned with a reason for denial.
6. Labor allowance.
 - A. The warranty labor rate is \$40.00 per hour.

Page 18

- B. The actual time is divided into tenths of an hour. The warranty form should show the time to the nearest tenth of an hour.
 - C. Labor credit is based on the actual time required only to make the repair.
7. Items not covered by warranty.
 - A. Mileage and transportation charges of any kind. All warranty is "Bench Work" only. The warranty specifically states that any transportation charges in connection with a warranty repair is the exclusive responsibility of the purchaser.
 - B. Postage, delivery, telephone calls or similar communications.
 - C. Normal maintenance or adjustments. This includes set up and service.
 - D. Battery, engine or engine parts. Warranty on batteries, engines, engine parts or other vendor parts is covered by the component manufacturer's warranty and must be handled by that component manufacturer's representative.
 - E. Failure caused by neglect, normal wear, or abuse.
 - F. Any alteration of the original design of the unit, or the use of unauthorized or Non - Ramsplitter parts. Any claim submitted containing such unauthorized alteration repairs will be rejected.
 - G. Freight or transportation damage. All such damage is the responsibility of the carrier and any claim for damages must be made with the carrier.
 - H. Parts or labor supplied for an unauthorized supplier or repair facility.
 - I. Compound or repeat warranties caused by negligent / improper repair.
 - J. Any claim for warranty where the date of the repair exceeds thirty (30) days from the submission of the warranty claim.
 - K. Any claim for warranty on the entire unit.
 - L. Warranty claims involving oils or fluids of any kind.
 - M. Any warranty claims for leaking, punctured, blown, and flat or otherwise damaged tires on units that have been placed in service.
 - N. Lost time, lost rentals, lost profits, or other economic loss due to warranty work.

Voluntary cooperation with the entire warranty procedure will make the program work better for both the purchaser and Ramsplitter.

Always think SAFETY!

Page 19