LST12 15 TON LOG SPLITTER INSTRUCTION MANUAL



READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

CALIFORNIA PROPOSITION 65

WARNING: This product, or the exhaust from this generator, may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,
DO NOT OPERATE THIS PRODUCT!

DO NOT RETURN THIS PRODUCT TO THE RETAILER - CONTACT CUSTOMER SERVICE.

If you experience a problem, have questions or need parts for this product, call Customer Service at **1-888-287-6981, Monday-Friday, 8 AM - 4 PM Central Time**. A copy of the sales receipt is required. Visit online http://www.sportsmanseriesbrand.com

FOR CONSUMER USE ONLY - NOT FOR PROFESSIONAL USE.

KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR REFERENCE.



WARNING: Your Responsibility - Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

SAVE THESE INSTRUCTIONS!

SPECIFICATIONS

Engine Displacement 196cc

Fuel Tank Capacity

Gas Type

Max. Output

0.95 Gallon (3.6 Liters)

Unleaded Gasoline

6.5 HP / 3,600 rpm

Engine Oil Capacity 20.25 ounces (0.6 Liter) SAE 10W-30 oil

Spark Plug Gap 0.8mm

Max. Splitting Force 15 Ton

Max. Splitting Length 21 inches

Wedge Height 5 inches

Hydraulic Oil Capacity 3.38 Quarts (3.2 Liter) AW All Weather ISO 32

Hitch Pin Style

Tandem Hitch Pin or ball style (ball hitch not included)

Weight 205 lbs

Spark Plug LD: F7RTC NGK: BPR6ES DENSO: W20EPR-U

Comfort Lever allows Log Splitter to be raised or lowered. You can choose to lay your logs at either a height of 26.5" or 20.5"





LOOSE PARTS

Unpacking



WARNING! Use extreme caution when unpacking this machine. Some components are very heavy and will require additional people or mechanical handling equipment.

Note: If any parts are damaged or missing, do not attempt to operate this machine until the damaged or missing parts are obtained and are installed correctly

Loose Parts

Check all loose parts from the box with the list below. Assemble according to the instructions.

IMPORTANT SAFE OPERATION PRACTICES



WARNING! This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in injury. When you see this symbol. **HEED ITS WARNING!**



CALIFORNIA PROPOSTION 65

WARNING: Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to State of California to cause cancer and birth defects or other reproductive harm.



DANGER! This machine was built to be operated according to the safe operation practices in this manual. As with any type of power equipment, carelessness or error can result in serious ir machine is capable of amputating hands and feet and throwing debris. Failure to observe the safety instructions could result in serious injury or death.

Training

- Read, understand, and follow all instructions on the machine and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- 2. Be familiar with all controls and their proper operation. Know how to stop the machine and disengage.
- 3. Never allow children under 16 years of age to operate this machine. Children 16 and over should read and understand the instructions and safe operation practices in this manual and on the machine and be trained and supervised by an adult.
- 4. Never allow adults to operate this machine without proper instruction. Do not use if under the influence of alcohol or drugs.
- 5. Many accidents occur when more than one person operates the machine. If a helper is assisting in stacking logs, never activate the control until the helper is a minimum of 10 feet from the machine.
- 6. Keep bystanders, pets, and children at least 20 feet from the machine while it is in operation.
- 7. Never allow any one to ride on this machine.
- 8. Never transport cargo on this machine.
- 9. Hydraulic fluids are made up of chemicals and additives. They can be extremely irritating to the skin. Protect exposed skin from the liquid. Immediately use soap and water to wash any areas that came into contact with the fluid.
 - a. Do not operate machine with frayed, kinked, cracked, or damaged hoses, fittings, or tubing.
 - b. Stop the engine and relieve hydraulic system pressure before changing or adjusting fittings, hoses, tubing, or other system components.
 - c. Do not adjust the pressure settings of the pump or valve.

IMPORTANT SAFE OPERATION PRACTICES

- 10. Leaks can be detected by passing cardboard or wood, while wearing protective gloves and safety glasses, over the suspected area. Look for discoloration of cardboard or wood.
- 11. If injured by escaping fluid, see a doctor immediately. Serious infection or reaction can develop if proper medical treatment is not administered immediately.
- 12. Keep the operator zone and adjacent area clear for safe, secure footing.
- 13. If your machine is equipped with an internal combustion engine and is intended for use near any unimproved forest, brush, or grass covered land, the engine exhaust should be equipped with a spark arrester. Make sure you comply with applicable local, state, and federal codes. Take appropriate firefighting equipment with you.
- 14. This machine should be used for splitting wood only, do not use it for any other purpose.
- 15. Following the instructions in the manual(s) provided with any attachment(s) for this machine.

Preparation

- 1. Always wear safety shoes or heavy boots.
- 2. Always wear safety glasses or safety goggles when operating this machine.
- 3. Never wear jewelry or loose clothing that might become entangled in moving or rotating parts of the machine.
- 4. Make sure machine is on a level surface before operating.
- 5. Always block wheels to prevent unintended movement, and lock beam in either the horizontal or vertical position.
- 6. Always operate this machine from the operator zone(s) specified in the manual.
- 7. Logs should be cut with square ends prior to splitting.
- 8. Use log splitter in daylight or under good artificial light.

Safe Handling of Gasoline

To avoid personal injury or property damage use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on yourself or your clothes which can ignite. Wash your skin and change clothes immediately.

- a. Use only an approved gasoline container.
- b. Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- c. Never fuel machine in doors.
- d. Never remove gas cap or add fuel while the engine is hot or running.
- e. Allow engine to cool at latest two minutes before refueling.
- f. Never overfill the fuel tank. Fill tank to no more than 1/2 inch below bottom of filler neck to provide space for fuel expansion.
- g. Replace gasoline cap and tighten securely.
- h. If gasoline is spilled, wipe it off the engine and equipment and move machine to another area. Wait five (5) minutes before starting the engine.
- i. Never store the machine of fuel container inside where there is an open flame, spark or pilot light as on a water heater, space heater, furnace, clothes dryer or other gas appliances.
- j. Allow machine to cool at least five (5) minutes before storing.

IMPORTANT SAFE OPERATION PRACTICES

Operation

- 1. Before starting this machine, review the "Safety Instructions". Failure to follow these rules may result in serious injury to the operator or bystanders.
- 2. Never leave this machine unattended with the engine running.
- 3. Do not operate machine while under the influence of alcohol, drugs, or medication.
- 4. Never allow anyone to operate this machine without proper instruction.
- 5. Always operate this machine with all safety equipment in place and working. Make sure all controls are properly adjusted for safe operation.
- 6. When loading a log, always place your hands on the sides of the log, not on the ends, and never sue your foot to help stabilize a log. Failure to do so, ma result in crushed or amputated fingers, toes, hand, or foot.
- 7. Use only your hand to operate the controls.
- 8. Never attempt to split more than one log at a time unless the ram has fully extended and a second log is needed to complete the separation of the first log.
- 9. For logs which are not cut square, the least square end and the longest portion of the log should be placed toward the beam and wedge, and the square end placed toward the end plate.
- 10. Always keep fingers away from any cracks that open in the log while splitting. They can quickly close and pinch or amputate your fingers.
- 11. Keep your work area clean. Immediately remove split wood around the machine so you do not trip over it.
- 12. Do not change the engine governor settings or overspeed the engine. The governor controls the maximum safe operating speed of the engine.
- 13. This machine should not be towed on any street, highway or public road without checking the existing federal, state, or local vehicle requirements. Any licensing or modifications such as taillights, etc., needed to comply, is the sole responsibility of the purchaser. If a "Statement of Origin" is required in your state, see your local dealer.
- 14. Do not tow machine over 15 mph and do not move this machine while the engine is running.
- 15. See "Towing The Log Splitter" section in this manual for proper towing instructions once all federal, local, or state requirements are met.

Maintenance and Storage

- 1. Stop the engine, disconnect the spark plug and ground it against the engine before cleaning or inspecting.
- 2. Stop the engine and relieve hydraulic system pressure before repairing or adjusting fittings, hoses, tubing, or other system components.
- To prevent fires, clean debris and chaff from the engine and muffler areas. If the engine is equipped with a spark arrester muffler, clean and inspect it regularly according to manufacturers' instructions. Replace if damaged.
- 4. Periodically check that all nuts and bolts, hose clamps, and hydraulic fittings are tight to be sure equipment is in safe working condition.
- 5. Check all safety guards and shields to be sure they are in the proper position. Never operate with safety guards, shields, or other protective features removed.
- 6. The pressure relief valve is preset at the factory. Do not adjust the valve.

- 7. Never attempt to move this machine over hilly or uneven terrain without a tow vehicle or adequate help.
- 8. For your safety, replace all damaged or worn parts immediately with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
- 9. Do not alter this machine in any manner, alterations such as attaching a rope or extension to the control handle, or adding to the width or height of the wedge many result in personal injury.

Safety Symbols

Read, understand, and follow all instructions & safety symbols before attempting to assemble and operate.

Symbol	Description
	READ THE OPERATOR'S MANUAL(S) Read, understand, and follow all instruction in the manual(s) before attempting to assemble and operate.
	WARNINGCRUSHING HAZARD Keep hands away from wedge, end plate, partly split wood and moving parts
	BYSTANDERS Keep bystanders, helpers and children at least 10 feet away.
	SINGLE OPERATOR Only one person should operate the machine at a time. The adult who loads and holds log must be the one who operates control handle.
	WARNINGPRESSURIZED FLUID Never check for hose leaks with your hands. High pressure fluid can escape through a pin hole leak and cause serious injury by puncturing the skin and causing blood poisoning.
	EYE PROTECTION Always wear safety glasses or safety goggles when operating this machine.
	WARNINGMOVING WEDGE Keep hands away from wedge and moving parts.

STOP!

Before using this log splitter, if you have any questions regarding the hazard and safety notices listed in this manual, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

A DANGER

Carbon Monoxide Gas: When in operation, the exhaust from this log splitter contains poisonous carbon monoxide gas. Carbon monoxide gas is both odorless and colorless AND may be present even if you do not see or smell gas. Breathing this poison gas can lead to headaches, dizziness, drowsiness, loss of consciousness and eventually death.

- USE THIS LOG SPLITTER ONLY OUTDOORS IN NON-CONFINED AREAS. DO NOT SECURE THE LOG SPLITTER WITH A CHAIN OR ROPE, AS THIS WILL MAKE IT DIFFICULT TO MOVE IN AN EMERGENCY.
- Keep at least several feet of clearance on all sides to allow proper ventilation.

▲ WARNING

Chemicals: According to the State of California, the exhaust from this log splitter contains chemicals known to cause cancer, birth defects, or other reproductive harm.

▲ WARNING

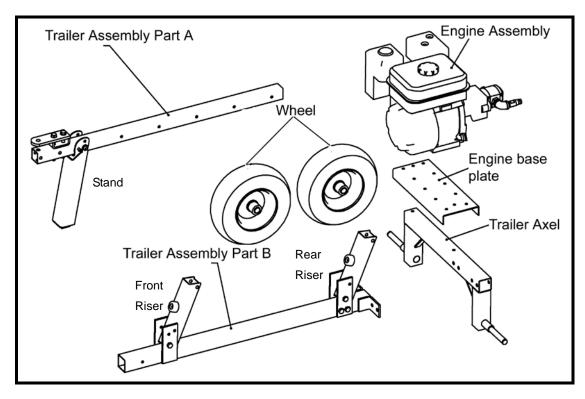
Flammable Gasoline: This log splitter may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death. A nearby open flame can lead to an explosion even if not directly in contact with gasoline.

- Do not operate this log splitter near open flame.
- Do not smoke near this log splitter.
- · Always operate this log splitter on a firm, level surface.

Gasoline is highly flammable and explosive. Handling fuel can result in serious injury or burns.

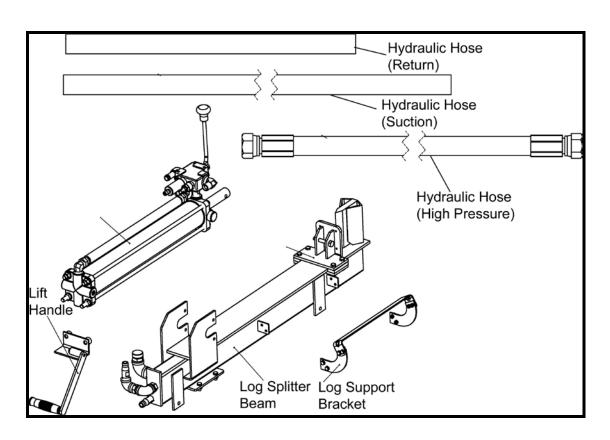
- Always shut down this log splitter before refueling. Refuel in a well-ventilated area. Keep heat, sparks and flame away while refueling and away from the location where gasoline is stored. Never refuel indoors where gasoline fumes may reach flames and/or sparks.
- Allow this log splitter to cool for at least 2 minutes before removing the fuel tank cap. Loosen the cap slowly to relieve pressure in the fuel tank. Avoid spilling fuel.
- Do not fill the fuel tank above the upper limit line. Gasoline may expand during operation. Do not fill to the top of the tank.
- Always check for spilled gasoline and immediately wipe it up before starting this log splitter.
- Empty the fuel tank before storing or transporting this log splitter.
- · Always handle fuel outdoors.
- Before transporting, turn the fuel valve to the "OFF" position and disconnect the spark plug.

PARTS BREAKDOWN



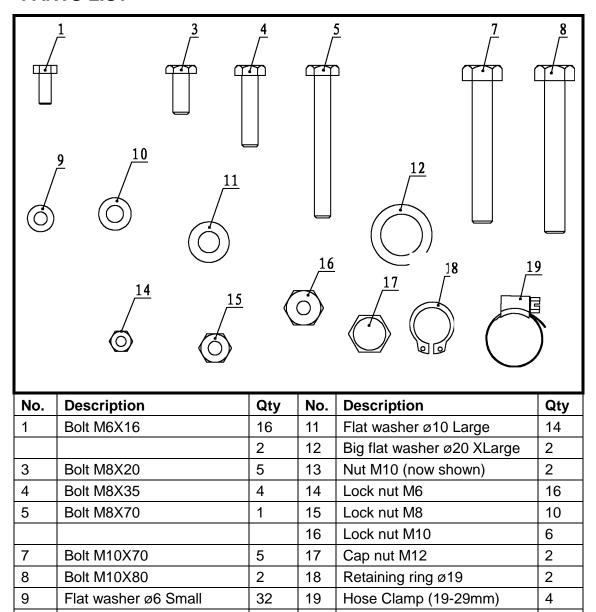
ATTENTION!





When installing the trailer axel, make sure to position it correctly. The engine assembly and engine base plate are located on the LEFT SIDE of the trailer assembly. This places the recoil cord on the outside left and it is easier to start. At this angle, the trailer hitch is on the right and the engine assembly is on the left.

PARTS LIST



20

20

TOOLS REQUIRED FOR ASSEMBLY

Locking Pins (not shown)

3

Two 17mm combination wrenches, two 14mm combination wrenches, one Flathead screwdriver, one pair of lock ring pliers, two combination 10mm wrenches, and one 12" adjustable wrench.



10

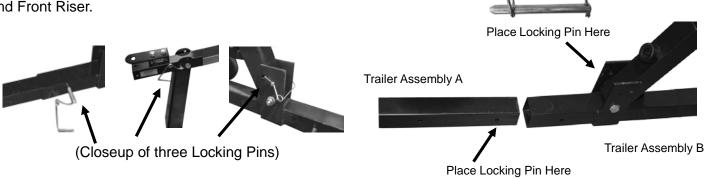
Flat washer ø8 Med

ASSEMBLY

1. Locate the Trailer Assembly part A, the Trailer Assembly part B and the Trailer Axel.



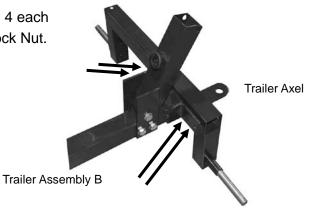
2. Use Locking Pins to connect Trailer Assembly parts A and B, the Stand And Front Riser.



3. Connect Trailer Axel to Trailer Assembly B using 4 each No. 7 Bolt M10x70 and Flat Washers Large and Lock Nut.



(Closeup of placement of flat washers)

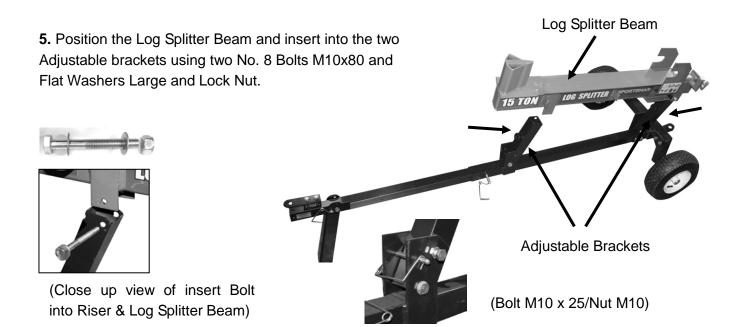


4. Attach both wheels using No. 12 Flat Washer and No. 18 Retaining Ring



(Closeup of retaining ring and flat washer)

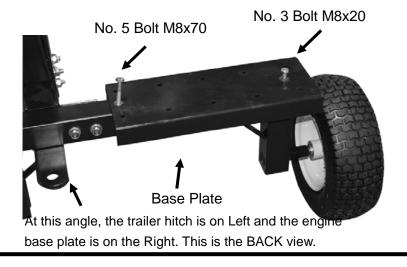


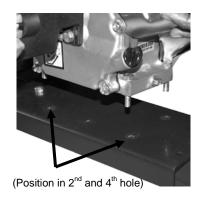


6. Attach Base Plate using No. 5 Bolt M8x70 and No. 3 Bolt M8x20 and Flat Washers Large and Lock Nut.

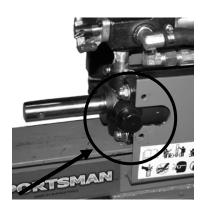
Attention!

Please note illustration on page 8 for correct placement of trailer axel and engine base plate and engine assembly!





7. Attach Engine Assembly to Base Plate using BoltNo. 4 M8x35 and Flat WashersMedium and Lock Nut.



8. Slide the Hydraulic Cylinder knob into Log Splitter Beam Slot.



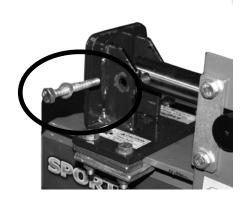
Retainer Plate



9. Position the Retainer Plate in place using Bolt No. 3M8x20 and Flat WashersMedium and Lock Nut.



10. Make sure both sides have been secured.



11. Connect the cylinder with the Push Block with the Bolt No. 7 M10x70 and Flat Washers Large and Lock Nut.



12. Attach Log Support Brackets A & B with 4 each Bolt No. 1 M6x16 and 2 Flat Washers Small and Lock Nut on both sides of the Beam.

WARNING

READ AND UNDERSTAND ASSEMBLY, SAFETY, & MAINTENANCE INSTRUCTIONS PROVIDED BEFORE USE.

BECOME FAMILIAR WITH YOUR LOG SPLITTER FOR YOUR OWN SAFETY. FAILURE TO DO SO MAY CAUSE SERIOUS INJURY AND/OR DEATH.

DO NOT ALLOW ANYONE TO OPERATE YOUR LOG SPLITTER WHO HAS NOT READ THIS MANUAL. READ EACH STEP COMPLETELY BEFORE PROCEEDING.

WEAR SAFETY GLASSES DURING OPERATION. WEAR STEEL TOE BOOTS DURING ASSEMBLY.

DO NOT START OR RUN THE ENGINE WITHOUT OIL IN THE HYDRAULIC RESERVOIR AND ENGINE.

- 13. Install hydraulic valve Control Lever. Secure with pin and cotter key. **SEE FIGURE 7.**
- 14. Install high pressure hydraulic hose to pump/engine assembly and hydraulic valve assembly. Swivel end of hose goes on pump. **SEE FIGURE 8.**



Pump Engine Assembly

Notice the approximate 12 o'clock

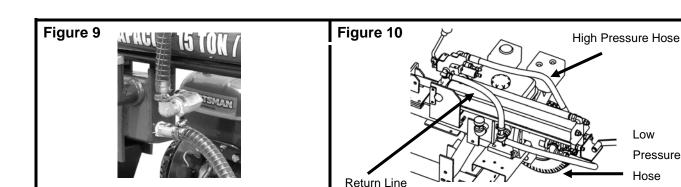
TIP: Jiggle the fitting while tightening to ensure proper seating of the fitting.

position of hydraulic fitting.

Black High Pressure Line Clear Low Pressure Line

Figure 8

LST12 15 Ton Log Splitter



- 15. Install hydraulic Return Line on pump and tank assembly. Slide hose onto hose barb until snug, and tighten with Hose Clamp. SEE FIGURE 9, & 10.
- 16. Install hydraulic high pressure hose to pump/engine assembly and hydraulic valve assembly. The swivel end of hose goes on pump. TIP: Jiggle the fitting while tightening to ensure that the fitting seats properly.
- 17. Install hydraulic return line. Tighten with hose clamps.

18. Install Lift Handle using two Cap Nuts M12 (FIGURE 10B).

Cap Nut M12 Figure 10B

Low Pressure Hose

HYDRAULIC FILLING INSTRUCTIONS



CAUTION

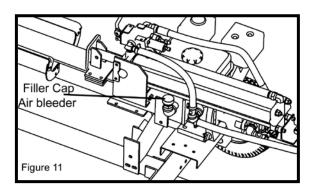
ALWAYS WEAR SAFETY GLASSES DURING OPERATION. DO NOT START OR RUN THE ENGINE WITHOUT OIL IN THE HYDRAULIC RESERVOIR AND ENGINE.



WARNING

YOUR LOG SPLITTER IS DESIGNED THAT THE AIR BLEEDER AND THE FILLER CAP ARE THE SAME PART. SEE FIGURE 11. DURING TRANSPORTATION, THIS PART SHOULD BE FASTENED TO AVOID OIL LEAKAGE.

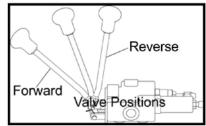
- 1. Open the air bleeder by turning counter clockwise approximately four turns. Failure to open vent will cause "air locking", making filling of the hydraulic tank reservoir difficult.
- 2. Remover filler cap.
- **3.** Use a funnel in the fill spout to pour 3 quarts
- 4. AW-ISO 32 hydraulic oil.
- 5. Start Engine (see instructions in manual).





WARNING PLEASE FOLLOW INSTRUCTIONS TO FILL YOUR LOG SPLITTER. FAILURE TO DO SO MAY RESULT IN UNSATISFACTORY OPERATION. AN IMPROPERLY FILLED HYDRAULIC SYSTEM MAY CREATE PROBLEMS WITH THE HYDRAULIC CYLINDER AND OVERALL POOR PERFORMANCE OR MAY CAUSE DAMAGE TO YOUR LOG SPLITTER.

- 6. Move control lever forward to extend the hydraulic cylinder all the way. (It is normal for the cylinder to not move smoothly as it purges the air from the system).
- 7. Move control lever to the return position until ram is retracted.
- 8. Turn off engine.
- 9. With cylinder in the return position and the air bleeder valve still in the open position, open the filler cap very slowly to allow any air to escape that may have been trapped in the reservoir during the initial filling procedure.



- 10. Top off reservoir by adding up to 3 more quarts of hydraulic fluid.
 - NOTE: Some units may not take the complete 3 quarts as they were filled and tested at the factory prior to shipment and some residual fluid still remains in the hydraulic system. Your log splitter is now properly filled and ready for use. You have the correct amount of fluid in the reservoir when you can see the fluid at least halfway up the fill spout.

TIP: If your ram still does not travel smoothly, there may still be air in the hydraulic system or your fluid level is too low. If this is the case, with the engine turned off and the filler cap on, open your air bleeder valve and move the hydraulic control valve from the forward to return position a few times to purge any air that may be trapped in the hydraulic system.

NOTE: Doing this procedure with the filler cap removed will cause any air that is in the system to expel through the filler spout. Check for proper fluid level.

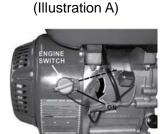
TOWING

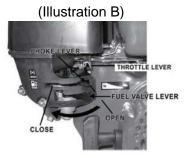
- 1. This log splitter is designed for OFF ROAD USE ONLY. It is designed to be pulled behind a lawn tractor, garden tractor or ATV only. DO NOT exceed 15 mph when towing this log splitter.
- 2. The log splitter is equipped with a telescopic tongue which is designed to extend to accommodate ATV racks, extensions, or anything currently protruding from back of an ATV. **DO NOT over extend the telescopic tongue as personal injury may result.**
- 3. Your log splitter is equipped with a tandem hitch which allows you to tow an off road ATV/garden type trailer etc. at the same time. **DO NOT exceed 100 lbs. tongue weight.**
- 4. Make sure the beam is in the lowest position (Transport Position) and the locking pin is securely attached before towing your log splitter.
- 5. Your log splitter can be used on or off the telescopic tongue assembly depending on which assembly configuration you choose to use.

STARTING









IMPORTANT: THE ENGINE AND HYDRAULIC RESERVOIR ARE SHIPPED WITHOUT OIL. SEE THE ENGINE OPERATOR'S FOR THE TYPE OF CRANKCASE OIL, FUEL, ETC. THE ENGINE MANUFACTURER RECOMMENDS UNLEADED GASOLINE ONLY.

HYDRAULIC OIL RECOMMENDATIONS: 3.38 Qt (3.2 Liter) All Weather AW-ISO 32

ENGINE OIL RECOMMENDATIONS: 20.25 ounces (0.6 Liter) SAE 10W-30 oil

STARTING INSTRUCTIONS:

- 1. Turn engine switch to "ON" position. (See Illustration A)
- 2. Turn fuel valve to "ON" position. (See Illustration B)
- 3. Move the throttle lever to "FAST". Always operate the engine with throttle lever in the "FAST" position.
- **4.** Move choke control lever to "CHOKE" position.
- **5.** Grasp rope handle and pull slowly until resistance is felt. Then pull rapidly to start engine and avoid engine kickback.
- **6.** Allow the engine to warm up. If operating in warm weather, move the choke control lever toward "RUN" in small increments over several seconds. For cold weather operation do this procedure over several minutes. Operate with choke lever in the "RUN" position.
- 7. To stop engine, move the throttle lever to the "SLOW" position.
 - NOTE: The maximum governed speed on the engine is preset at the factory to 3,600 RPM no load speed. When splitting wood, the throttle should be set at the maximum setting to develop the horsepower required for the pump.
- 8. Turn switch to "OFF" position. NOTE: The switch is located on the side of the engine.



WARNING

ALWAYS WEAR SAFETY GLASSES DURING OPERATION AND KEEP HANDS AND FEET CLEAR OF RAM, STRIPPER CHANNELS AND FOOT PLATE AT ALL TIMES.

DO NOT OPERATE LOG SPLITTER IF THE OIL LEVEL IS MORE THAN TWO INCHES FROM TOP OF TANK WHEN THE WEDGE IS IN THE RETURNED POSITON.

9. For your convenience the ram/beam assembly can be elevated, providing more comfort in certain situations. To raise the beam/ram assembly, pull lock pin first then replace when up. Place one foot on the axle and pull with an upward and back motion. Once the ram/beam is elevated be sure to lock the beam into position with locking pin.

OPERATION

- 1. Set up the log splitter on a clear, level area and block the wheels.
- 2. Place a log on the beam against the foot plate. Make sure that the log is placed securely on the foot plate and against the beam.
- 3. Depress the Control Lever so that the cylinder will drive the log into the wedge. Extend the cylinder until the log splits or travels to the end of its stroke. If the log has not completely split after the cylinder has reached the end of its extension, retract the cylinder.

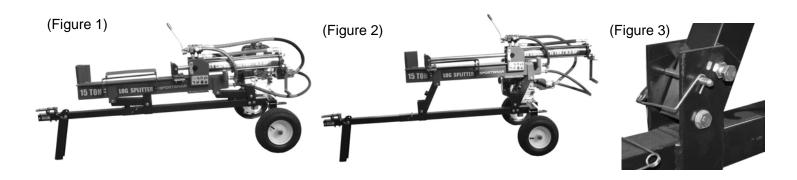
IMPORTANT: LEAVING THE CONTROL LEVER IN THE "FORWARD" POSITION AT THE END OF THE STROKE MAY DAMAGE THE PUMP. ALWAYS USE EXTRA CARE WHEN SPLITTING LOGS WITH ENDS NOT SQUARE.

NOTE: For operation in wooded areas, this unit includes a spark arrestor for the exhaust system.

4. STUCK LOG PROCEDURE

If a log does not split completely and becomes stuck on the wedge, follow the instructions below to remove the log. 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. A stuck log will move back with the wedge on the initial attempt to retract the wedge. If this happens, retract the wedge completely to allow the splitter to strip the log from the wedge. Keep hands clear of log and wedge while wedge is retracting.

RAISING / LOWERING



1. The Log Splitter can be raised / lowered to make it easier to use for people of different heights. Figure 1 shows the Log Splitter in the lower position and Figure 2 shows the Log Splitter in the upper position. Figure 3 Shows the Bolt and Locking Nut installed.

MAINTENANCE

- 1. Consult operating & maintenance for engine care and maintenance.
- 2. Always check the fluid level of the hydraulic reservoir before operation. Fluid must be no more than two inches from the top of tank when the wedge is in the return position. Operating the log splitter without an adequate fluid supply will cause severe damage to the hydraulic pump.
- 3. All replacement parts must meet manufacturer's specifications.
- 4. Check air pressure of tires before each use. Maintain pressure of 30 psi.

AIR FILTER MAINTENANCE

A dirty air filter will restrict air flow to the carburetor, reducing engine performance. If you operate the engine in very dusty areas, clean the air filter more often than specified in the MAINTENANCE SCHEDULE.

NOTICE: Operating the engine without an air filter, or with a damaged air filter, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by the warranty.

- 1. Remove the wing nut, and remove the air cleaner cover.
- 2. Carefully remove plastic grid from the bottom of the cover.
- 3. Carefully remove the foam air filter from the cover. Wash the filter in warm, soapy water, rinse, and allow to dry thoroughly.
- 4. Wipe dirt from the inside of the air cleaner base and cover, using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.
- 5. Insert the cleaned, dry or new foam air filter in the cover and replace plastic grid.
- 6. Reinstall the air cleaner assembly. Be sure the gasket is in place beneath the air filter.
- 7. Tighten the air filter wing nut securely.

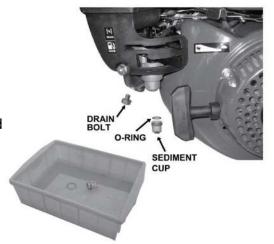


SEDIMENT CUP CLEANING

- 1. Move the fuel valve to the OFF position, then remove the fuel sediment cup and 0-ring.
- 2 Stop the engine and keep heat, sparks, and flame away.
- 3 Handle fuel only outdoors.

WARNING! Wipe up spills immediately.

- 4. Wash the sediment cup and 0-ring In nonflammable solvent, and dry them thoroughly.
- 5. Place the 0-ring In the fuel valve, and install the sediment LST12 15 Ton Log Splitter 17



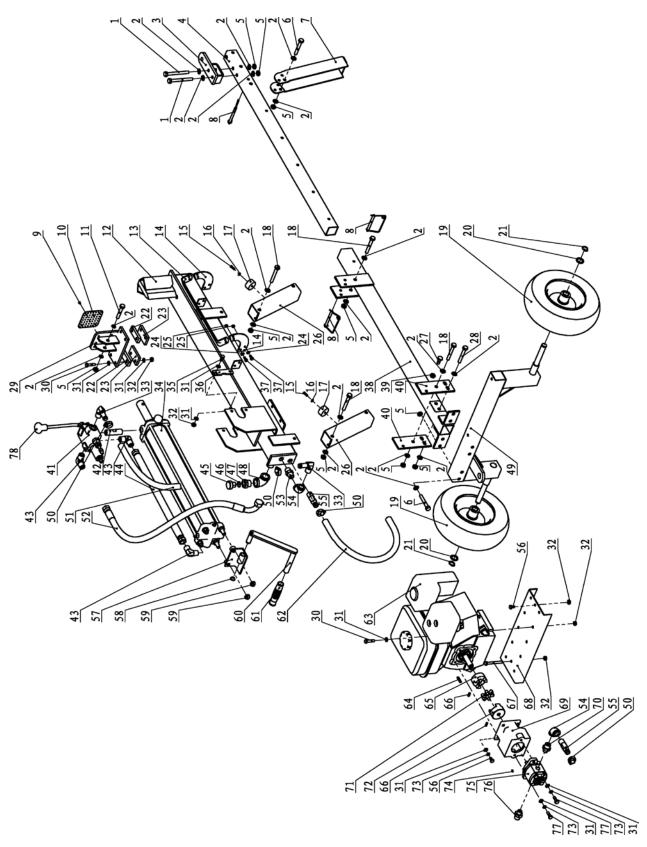
- cup. Tighten the sediment cup securely.
- 6. Move the fuel valve to the ON position, and check for leaks.

Replace the 0-ring if there is any leakage.

TROUBLESHOOTING (ENGINE)

PROBLEM	POSSIBLE CAUSE	REMEDY/ACTION		
Engine will not start	1. Power switch off	1. Flip switch to ON position		
	2. Spark plug wire disconnected	2. Connect spark plug wire to spark plug		
	3. Out of fuel	3. Refuel		
	4. Spark plug wet, faulty or improperly	4. Clean, replace or gap spark plug		
	gapped			
	5. Throttle control not held open	5. Hold throttle control open when pulling recoil		
		handle		
	6. Fuel line hose not positioned in	6. Push fuel line down into fuel in gas tank		
	bottom of gas tank			
Engine runs rough,	1. Dirty air filter	Clean or replace air filter		
floods during operation	2. Choke partially engaged	2. Turn off choke		
	3. Carburetor out of adjustment	3. Call customer service		
Engine is hard to start	1. Stale fuel	Drain old fuel and replace with fresh. Use		
		gas stabilizer at end of season		
	2. Spark plug wire loose	2. Make sure spark wire is securely attached to		
		spark plug		
	3. Dirty carburetor	3. Clean carburetor, use gas stabilizer, new gas		
		can		
	4. Throttle control not held open	Prime unit 3 more times, then hold throttle open		
		when pulling recoil handle		
Engine misses or lacks	1. Clogged gas tank	Remove and clean gas tank		
power	2. Clogged air filter	2. Clean or replace air filter		
	3. Carburetor out of adjustment or bad	3. Call customer service		
	4. Spark plug wet, faulty or improperly	4. Clean, replace or gap spark plug		
	gapped			
Engine runs, then quits	1. Gas cap not venting	Clean or replace gas cap, check vent		
	2. Plugged fuel filter	2. Clean or replace fuel filter		
	3. Carburetor out of adjustment or bad	3. Call customer service		
Engine revs too high	carburetor out of adjustment	1. Call customer service		

PARTS DIAGRAM



PARTS LIST

No.	Description	Qty	No.	Description	Qty
1	Bolt	2	40	Plate riser	2
2	Flat washer	16	41	Valve assembly	1
3	Trailer hitch bracket	1	42	Pipe, Nipple 1/2" NPT valve spacer log splitter	1
4	Trailer Extension	1	43	Fitting, Elbow 1/2" NPT	3
5	Locking nut	14	44	Hose	1
6	Bolt	5	45	Bleed screw	1
7	Kickstand	1	46	O- ring	1
8	Pin	3	47	Adaptor	1
9	Countersunk screw	4	48	3/4" tube	1
10	Steel plate	1	49	Axel	1
11	Bolt	1	50	Locking ring	4
12	Post	1	51	Hose, Hydraulic low pressure return	1
13	Log support bracket (A)	2	52	Hydraulic hose	1
14	Log support bracket (R)		53	Coupling 1/2" male to male	1
15	Screw		54	Elbow tube	2
16	Flat washer	2	55	Fitting 1/2" NPT to Hose	2
17	Rubber pad	2	56	Bolt	5
18	Bolt	4	57	Lift handle Mount	1
19	Wheel	2	58	E-ring	1
20	Big flat washer	2	59	Cap nut	2
21	Retaining ring	2	60	Carrying handle	1
22	Spacer, push block	2	61	Rubber sleeve	1
23	Plate, retainer push block	2	62	Hose, Hydraulic suction pump supply log splitter	1
24	Flat washer	16	63	6.5 HP Engine	1
25	Nut	16	64	Flat key	1
26	Riser Tube	2	65	Connecting adaptor (A)	1
27	Bolt	4	66	Screw	2
28	Bolt	2	67	Screw	1
29	Push block	1	68	Engine supporting plate	1
30	Bolt	8	69	Hydraulic pump spacer	1
31	Flat washer	12	70	Fitting, Hydraulic	1
32	Locking nut	18	71	Spider	1
33	Fitting, Elbow 1/2" to Hose	2	72	Coupling	1
34	Cylinder	1	73	Elastic washer	6
35	Bolt	4	74	Flat key	1
36	Plate, Retainer trunnion hydraulic cylinder	2	75	Hydraulic pump	1
37	Bolt	16	76	Fitting, Hydraulic	1
38	Frame	1	77	Bolt	2
39	Nut	4	78	Control Lever	1

LST12 PARTS LIST

ITEM	DESCRIPTION	QTY	П	ITEM	DESCRIPTION	QTY
1	FLANGE BOLT (M6×12)	4		44	OIL LEVEL SWITCH ASSY.	1
2	HEAD COVER COMP.			45	DRAIN PLUG WASHER (10.2mm)	2
3	HEAD COVER PACKING			46	DRAIN PLUG BOLT	2
4	BREATHER TUBE			47	CRANK CASE	1
5				48	FLYWHEEL COMP.	1
6	ADJUSTING NUT	2		49	SEMICIRCLE KEY	1
7	ROCKER ARM	2		50	COOLING FAN	1
8	ROCKER BOLT (M8)	2		51	STARTER PULLEY	1
9	EX. VALVE HELMET	1		52	FLYWHEEL SIDE PLATE	1
10	EX. VALVE SPRING RETAINER	1		53	FLANGE BOLT (M6×16)	1
11	IN. VALVE SPRING RETAINER	1		54	ENGINE STOP SWITCH ASSY.	1
12				55	FLANGE BOLT (M6×12)	2
13	FLANGE BOLT (M8×58)	4		66	RECOIL STARTER SPACER	1
14	` '			57	SHROUD	1
-	SPARK PLUG(LD NGK)	1		58	FLYWHEEL NUT	1
16	PUSH ROD GUIDE PLATE	1		59	FAN COVER COMP.	1
17	CYLINDER HEAD COMP.	1		60	FLANGE BOLT (M6×12)	4
18	MUFFLER COMP.	1		61	RECOIL STARTER ASSY.	1
19	MUFFLER GASKET	1		62	ROCKER	1
20	CARBURETOR STUD BOLT	2		63	LOCK PIN (8mm)	1
21	CYLINDER HEAD GASKET	1		64	GOVERNOR GEAR (6mm)	1
22	DOWEL PIN (10×16)	2		65	TUBE CLIP	2
23	EX. VALVE	1		66	FUEL TUBE	1
24	IN. VALVE	1		67	FLANGE BOLT (M6×25)	1
25	PISTON RING SET	1		68	FUEL TANK COMP.	1
26	PUSH ROD	2		69	FLANGE NUT (M6)	3
27	VALVE LIFTER	2		70	FLANGE BOLT (M6×12)	2
28	PISTON PIN CLIP (18mm)	2		71	CONTROL ASSY.	1
29	PISTON PIN	1		72	GOVERNOR SPRING	1
30	PISTON	1		73	QUADRATE BOLT (M6)	1
31	CONNECTING ROD ASSY.	1		74	THROTTLE RETURN SPRING	1
32	OIL SCALE	2		75	GOVERNOR ROD	1
33	OIL SCALE SEAL RING	2		76	CONTROL ARM	1
34	FLANGE BOLT (M8×28)	6		77	INTAKE PIPE GASKET	1
	OIL SEAL (φ25×φ41.25×6)				CARBURETOR INSULATING	
35		2		78	PLATE	1
36	CRANKCASE COVER ASSY.	1		79	CARBURETOR PAPER GASKET	1
37	BALL BEARING (6205)	2		80	CARBURETOR	1
38	DOWEL PIN (8×14)	2		81	CARBURETOR SPACER COMP.	1
39	CASE COVER PACKING	1		82	FLANGE NUT (M6)	2
40	CAMSHAFT ASSY.	1		83	FLANGE BOLT (M6×20)	1
41	CRANKSHAFT COMP.	1		84	AIR CLEANER	1
42	GOVERNOR GEAR ASSY.	1		85	IGNITION COIL ASSY.	1
43	FLANGE BOLT (M6×20)	2	Ш	86	FLANGE BOLT (M6×25)	2

