20 TON DUAL ACTION LOG SPLITTER

Instruction & Assembly

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE
# Table of Contents

General Warnings and Rules .................................................................3
Controls and Features Identification ..................................................5
Component Parts ..............................................................................6, 7
Assembly Instructions ......................................................................8, 9, 10, 11
Operation Instructions ..................................................................11, 12, 13, 14
Maintenance ...................................................................................15
Storage ............................................................................................16
Troubleshooting ............................................................................17
Specification ..................................................................................18
Parts Drawing & Parts List ...............................................................19, 20, 21
Limited Warranty ...........................................................................22
READ and UNDERSTAND this manual completely before using 20 Ton Log Splitter. Operator must read and understand all safety and warning information, operating instructions, maintenance and storage instructions before operating this equipment. Failure to properly operate and maintain the log splitter could result in serious injury to the operator or bystanders.

Operation Warnings
- Do not at any time carry passengers, sit or stand on the log splitter.
- Do not allow children to play on, stand upon or climb on the log splitter.
- Always inspect the log splitter before using to assure it is in good working condition.
- Replace or repair damaged or worn parts immediately.
- Always check and tighten hardware and assembled parts before operation.
- Do not exceed equipment maximum load capacity of 20 tons.
- Avoid large holes and ditches when towing the equipment.
- Always operate the log splitter on clear and level ground.
- Do not operate the log splitter at night, only during daylight hours.
- Always tow at reduce speed in rough terrain, along creeks, ditches and on hillsides.
- To avoid personal injury and/or equipment damage DO NOT EXCEED 45 MPH.
- Driving under 45 MPH on public roads, it is recommended using a “Slow Moving Vehicle” (SMV) emblem or a “Speed Identification Symbol” (SIS). Signs are available at farm equipment dealers.
- Always refer to the vehicle owner’s manual for proper towing.
- Only tow with recommended vehicles.
- Always secure and lock the log splitter to the vehicle hitch before towing.

Crush and Cut Hazards
- Always keep hands and feet clear from moving parts while operating the equipment.
- Always clear and keep work area clean and free of debris when operating.
- Always wear safety gear, ear and eye protection, gloves and work boots when operating the log splitter.

High Pressure Hydraulic Fluid Hazards
High fluid pressures and temperatures are developed in hydraulic log splitters. Hydraulic fluid escaping through a pin-size hold opening can puncture skin and cause severe blood poisoning. Inspect hydraulic system regularly for possible leaks. NEVER use your hand to check for leaks while the system is pressurized. Seek medical attention immediately if injured by escaping fluid.

The warnings, cautions, and instructions outlined in this instruction manual cannot cover all possible conditions or 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 and must be supplied by the operator.

Assembly Is Required
This product requires assembly before use. See “Assembly” section for instructions. Because of the weight and/or size of the log splitter, it is recommended that another adult be present to assist with the assembly. INSPECT ALL COMPONENTS closely upon receipt to make sure no components are missing or damaged.
ABOUT YOUR 20 TON DUAL ACTION LOG SPLITTER

This dual action log splitter has a heavy-duty steel construction and 20 tons of ram force. When there's work to be done, you need outdoor power equipment you can rely on. This unit tackles the tough jobs in half of the time, with its innovative dual action time saving design. It splits logs in both directions when the wedge is extended and retracted allowing you to split twice as fast as traditional log splitters. This unit includes the optional cross wedges that maybe attached to the main wedge allowing you to split a log into four pieces in just one pass increasing your productivity. It is easy to tow, easy to use and maintain. Never exceed the rated capacity of 20 tons when operating the log splitter.

Technical specifications on the log splitter are provided in the “Specifications” section of this manual.
Controls and Features Identification

Read this owner’s manual before operating the equipment. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

1) 2” Coupler – Attaches the log splitter to the tow vehicle.
2) Beam/Cylinder - Hydraulic cylinder has a 4” bore and 22” stroke.
3) Log Cradle – Keeps the log from falling off the beam or onto the ground after splitting.
4) Wedge – Splits logs in both directions and in 2 pieces in one pass.
5) Control Lever – Moves the splitting wedge forward and backward.
6) Gasoline Engine – 212cc (7HP)
7) Hydraulic 2-Stage Gear Pump – Pumps hydraulic oil through the system.
8) Wheels/Tires – Never exceed 45 MPH.
9) Hydraulic Tank Size – Stores hydraulic oil approximately 2.51 Gallons (9.5L).
10) Support Leg - Supports the log splitter during operation. Raise leg when towing or moving.
CAUTION

Read and follow all instructions for assembly and operation. Failure to properly assemble this equipment could result in serious injury to the user or bystanders, or cause equipment damage.

Engine Shipped Without Oil.
Before starting engine, fill with SAE 10W-30 motor oil. See engine manual for engine oil capacity.

Hydraulic Oil Tank is Shipped Without Oil.
When adding oil verify the oil level reads 1 from the top of hydraulic oil tank if marking is not shown fill to the neck.

Inspect all Log Splitter Components.
If you have damaged components: Contact the freight company that delivered the log splitter and file a claim.

20 TON DUAL ACTION LOG SPLITTER ASSEMBLY

Set the shipping crate on a solid flat surface and carefully remove the lid. Use two people and take all parts out of the shipping crate and inspect the components to ensure there are no missing pieces before starting to assemble the log splitter follow steps 1 through 6.

TOOLS REQUIRED
- Rubber or Wooden Hammer
- 1/2", 9/16", 3/4" and 11/16" Wrenches
- Large Adjustable Wrench
- Phillips Screw Driver
- Pliers

Engine Shipped Without Oil.
Before starting engine, fill with SAE 10W-30 motor oil. See engine manual for engine oil capacity.

Hydraulic Oil Tank is Shipped Without Oil.
When adding oil verify the oil level reads 1 from the top of hydraulic oil tank if marking is not shown fill to the neck.

Inspect all Log Splitter Components.
If you have damaged components: Contact the freight company that delivered the log splitter and file a claim.

20 TON DUAL ACTION LOG SPLITTER ASSEMBLY

Set the shipping crate on a solid flat surface and carefully remove the lid. Use two people and take all parts out of the shipping crate and inspect the components to ensure there are no missing pieces before starting to assemble the log splitter follow steps 1 through 6.

TOOLS REQUIRED
- Rubber or Wooden Hammer
- 1/2", 9/16", 3/4" and 11/16" Wrenches
- Large Adjustable Wrench
- Phillips Screw Driver
- Pliers

Component Parts

Hex Bolt M10x130 2 pcs
Hex Bolt M10x75 1 pc
Hex Bolt M10x30 10 pcs
Hex Bolt M8x30 4 pcs
Conical Hex Bolt 8 pcs

Lock Pin 1 pc
Lock Washer Ø12 8 pcs
O Ring Ø16x2.4 2 pcs
Flat Washer Ø10 7 pcs
Seal Belt 1 pc
Rubber Washer 6 pcs

Big Flat Washer Ø10 2 pcs
Lock Washer Ø10 12 pcs
Lock Washer Ø8 4 pcs
Hex Nut M12 8 pcs
Nylon Lock Nut M10 13 pcs
Nylon Lock Nut M8 4 pcs
Component Parts

Beam Assembly 1 pc

Oil Tank Assembly 1 pc

Wheel Assembly 2 pcs

Left & Right Fender 2 pcs

Tow Bar 1 pc

Support Leg 1 pc

Engine 1 pc
Assembly Instructions

STEP 1: Wheel Assembly

1. Attach both wheels (#48) to the oil tank (#51) using conical hex bolt S18x42 (#17), lock washer Ø12 (#81) and hex nut M12x1.25 (#80).

STEP 2: Attach Main Frame to Oil Tank

1. Assemble the tow bar (#9) and support leg (#14) together using hex bolt M10x75 (#15), flat washer Ø10 (#8) and nylon lock nut M10 (#5).
2. Insert the lock pin (#16) into the tow bar (#9) and support leg (#14).
3. Attach the beam assembly (#21) to the oil tank (#51) using hex bolt M10x30 (#50), lock washer Ø10 (#13) and nylon lock nut M10 (#5).
4. Connect the tow bar (#9) to the beam assembly (#21) using hex bolt M10x130 (#11), big flat washer Ø10 (#12), lock washer Ø10 (#13) and nylon lock nut M10 (#5).
5. Insert the O ring Ø16x2.4 (#34) into the bottom of hydraulic hose (#35) and attach to the top the oil tank (#51).
**STEP 3: Attach Engine and Fenders**

1. Attach the engine (#60) to the oil tank (#51) using hex bolt M8x30 (#66), lock washer Ø8 (#28) and nylon lock nut M8 (#61).
2. Attach the oil pipe (#56) and clamp (#57) to the gear pump (#59). Tighten the clamp (#57).
3. Attach the hydraulic hose (valve-gear pump) (#38) and O ring Ø16x2.4 (#34) to the connector NPT1/2”-7/8” (#36).
4. Attach both fenders (#49 & #67) to the oil tank (#51) using hex bolt M10x30 (#50), rubber washer (#41), Ø10 flat washer (#8) lock washer Ø10 (#13), and nylon hex lock nut M10 (#5).

**STEP 4: Add Engine Oil**

1. Make sure the log splitter is on a level surface.
2. Remove oil fill cap/dipstick to add oil.
3. Refer to the separate owner’s engine manual for the amount needed of SAE10W-30 engine oil; replace oil fill cap/dipstick.
4. Check engine oil level daily and add as needed.

*NOTE: During the break-in period check the engine oil level often.*

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the log splitter as a result of failure to follow these instructions will void your warranty.</td>
</tr>
</tbody>
</table>

**STEP 5: Add Gasoline to the Engine**

1. Use only clean, fresh, regular unleaded fuel with a minimum 86 octane rating.
2. DO NOT mix oil with fuel.
3. Remove the fuel cap and slowly add fuel to the tank. DO NOT overfill allow approximately ¼ inch of space for fuel expansion.
4. Screw on the fuel cap and wipe away any spilled fuel.
### DANGER

Log splitter engine exhaust contains carbon monoxide, a colorless, odorless, poison gas. Breathing carbon monoxide will cause nausea, dizziness, fainting or death. If you start to feel dizzy or weak, get to fresh air immediately.
Operate log splitter outdoors only in a well ventilated area.
DO NOT operate the log splitter inside any building, enclosure or compartment.
DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings.
**DANGER CARBON MONOXIDE**, using a log splitter indoors **CAN KILL YOU IN MINUTES**.

### CAUTION

Fuel and fuel vapors are highly flammable and extremely explosive.
Fire or explosion can cause severe burns or death.
Unintentional startup can result in entanglement, traumatic amputation or laceration.
Only use regular unleaded gasoline with a minimum 85 octane rating.
Always stay away from sources of heat, flame, or sparks while adding fuel.
DO NOT mix oil and gasoline together.
Fill tank approximately ¼” below the top of the tank to allow for fuel expansion.
DO NOT fill fuel tank indoors or when the engine is running or hot.
DO NOT light cigarettes or smoke when filling the fuel tank.

### STEP 6: Add Hydraulic Oil

1. The log splitter needs to be on a flat, level surface before adding the hydraulic oil.
2. Remove the oil cap from the hydraulic oil tank.
3. Add approximately 2.51 gallons (9.5L) of hydraulic oil 10W AW32, ASLE H-150, ISO 32 are all acceptable types of fluid.
4. Check the hydraulic oil level.
5. Start engine and use the control lever to extend and retract wedge several times to remove air from the lines.
6. With the wedge retracted, check hydraulic oil level again and fill if necessary.

*Note: For extended use with outdoor temperatures above 70°F it is recommend DEXTRON III.*
WARNING

DO NOT remove the hydraulic oil fill cap when the engine is running or hot. Hot oil can escape causing severe burns. Always allow the log splitter to cool completely before removing the hydraulic oil cap.

Always stop the engine, disconnect the spark plug, and move the split control lever back and forth to relieve pressure before changing or adjusting hydraulic system components; hoses, fittings or other components.

High fluid pressure and temperatures are created in the hydraulic log splitters. Hydraulic fluid will escape through a pin-size hole opening and can puncture skin and cause severe blood poisoning. Inspect hydraulic system regularly for possible leaks. Never check for leaks with your hand while the system is pressurized. Seek medical attention immediately if injured by escaping fluid.

Always see a doctor immediately if injured by escaping fluid, no matter how small. An injection injury may be a small puncture wound that does not look serious but severe infection or reaction can result if proper medical treatment is not administered immediately by a doctor who is familiar with injection injuries.

Never adjust the pressure setting of the pump or valve. Make sure all fittings are tight and secure before applying pressure. Relieve system pressure before servicing.

Make sure the hydraulic hoses do not touch any hot surfaces or cutting areas. Hoses need to be positioned where they are clear from the engine and cutting wedge. To avoid serious bodily injury always inspect the hoses before operating the log splitter.

Operation Instructions

WARNING

Before operating or using the log splitter, review the instructions below and all safety information. Failure to follow these instructions may result in property damage or injury to the operator or bystanders.

WARNING

ALWAYS use the log splitter for its intended use.
ONLY use the log splitter to split wood logs, length wise with the grain.
NEVER modify, alter or change the log splitter in any way, modifications will void the warranty.
NEVER attach a rope, cable or other device to the control lever on the log splitter.
ONLY operate the log splitter in daylight.
NEVER leave the log splitter unattended while the engine is running.
ENSURE the log splitter engine is off. Never move the log splitter with its engine running.
ALWAYS TURN THE FUEL VALVE TO THE OFF POSITION to prevent carburetor flooding and reduce the chance of fuel leakage.
ALWAYS RAISE THE SUPPORT LEG UP before moving or towing the log splitter.
DO NOT move the log splitter up or down hills by hand – use a towing vehicle.
ONLY use approved vehicles for towing.
DO NOT exceeds the maximum towing speed of 45 MPH.
NEVER operate log splitter while it is attached to the vehicle.
NEVER operate or let anyone else operate, the log splitter while under the influence of alcohol, drugs, or medication.
USING YOUR LOG SPLITTER

1. DO NOT at any time carry passengers, sit or stand on the log splitter.

2. Check the hydraulic oil level and visually inspect all hoses and attachments for problems.

3. Inspect the engine and make sure the engine oil level is correct and there is a full tank of fuel.

4. Extend the wedge slide, lubricate the surface with grease. This helps prevent wear between the wedge slide and beam.

5. Before towing the log splitter the tires need to be fully inflated.

<table>
<thead>
<tr>
<th>TIRE WARNING</th>
</tr>
</thead>
</table>
| DO NOT over inflate tires. Serious injury can result if tires explode.  
DO NOT tow the log splitter if the tires are worn or will not hold air.  
DO NOT exceed the maximum 45 MPH towing speed. |

6. Refer to the vehicle owner’s manual for proper safety and towing instructions.

<table>
<thead>
<tr>
<th>TOWING WARNING</th>
</tr>
</thead>
</table>
| Serious injury or death can occur if towing safety rules are not followed.  
Always use safety chains, secure and lock the log splitter to the vehicle hitch before moving.  
**ALWAYS RAISE THE SUPPORT LEG UP** before moving or towing the log splitter.  
Drive safely. Be aware of the added length of the log splitter.  
Never exceed the maximum travel speed of 45 mph.  
Never ride or transport cargo on the log splitter.  
Turn off the vehicle before leaving the log splitter unattended.  
Block the log splitter wheels to prevent unintended movement. |

7. The log splitter must have at least seven feet of clearance from combustible material. It needs to be on a dry and level surface with good footing. Do not work on mud, ice, brush or snow. When using the log splitter the work zone must be maintained at all times.
WARNING

It is important to select an appropriate work site and properly set up the log splitter in order to minimize the risk of slips and falls, equipment rolling or tipping over, carbon monoxide poisoning, and accidental fires.

NOTE: Serious accidents can happen when other people are allowed inside the work area. Keep everyone else outside the work area while operating the control lever.

8. Always wear safety gear, ear and eye protection, gloves and work boots when operating the log splitter.

9. Start the engine and make sure the log splitter is on level ground before operating.

NOTE: The hydraulic oil needs to be above 10°F (-12°C) before starting the engine. Cold hydraulic oil can damage the hydraulic pump. If outdoor air temperature is below 32°F (0°C) allow the log splitter to warm up by extending and returning the wedge several times before splitting wood.

10. Always put the support leg in the down position to prevent the log splitter from moving during operation and block both tires.

11. Load a log onto the beam against the endplate (Max Log Length-24").

Correct

Wrong
**WARNING**

**ALWAYS** hold the bark side of logs when loading or positioning, never the ends.

**NEVER** place your hands or any parts of your body between a log and the log splitter.

**NEVER** load or unload logs while the wedge is moving.

**KEEP** fingers away from cracks or partially split logs they can close quickly and pinch fingers.

**NEVER** straddle, reach across, or step over the beam while the engine is running.

**ALWAYS** cut ends square before attempting to split them. Logs that are not square can slide out while splitting and become a safety hazard or cause excessive force to log splitter components.

**NEVER** attempt to try and split more than one log at a time it can causing serious injury.

**DO NOT** split logs across the grain this will cause damage the log splitter and may cause pieces of the log to be thrown, injuring the operator or bystanders.

**DO NOT** attempt to re-split a stuck log once it has been removed from the wedge. Manually split with an axe or cut with a chainsaw.

12. Make sure hands are clear from the wedge and crush hazard areas.

**CRUSH WARNING**

Wedge can cut through skin and break bones. Keep both hands away from wedge and beam slide. Serious accidents can happen when other people are allowed inside the work zone. Keep everyone else out of the work zone while operating control lever.

**DO NOT** wear loose clothing. It can get tangled in moving parts of log splitter. Only use the log splitter in daylight so you can see what you are doing.

13. Push control lever FORWARD by one hand to extend the wedge to split the log.

14. Place another log on the opposite end plate and push the control lever BACKWARDS with one hand to return the wedge to split the log.

**SPLIT CONTROL**

1. Split Log
2. Split Log

**CAUTION**

If a log gets stuck, embedded or will not split completely, push the control lever in the reverse direction and allow the splitter to strip the log from the wedge.

If the log still remains stuck, embedded or will not split, turn the machine off and use a sledge hammer and crow bar to remove the log.

**ALWAYS** keep hands clear of the log and wedge while it is retracting.
15. Always keep work area clean and free of split wood and debris.

16. After use turn engine off and remove engine debris. Debris left on a hot engine can be a fire hazard. Remove debris and chaff from engine cylinder head, cylinder head fins, blower housing rotating screen, and muffler areas.

**Maintenance**

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoses</td>
<td>Each Use</td>
<td>Inspect hoses for exposed wire mesh and leaks. Replace all worn or damaged hoses before starting the engine.</td>
</tr>
<tr>
<td>Hydraulic Fittings</td>
<td>Each Use</td>
<td>Inspect fittings for cracks and leaks. Replace all damaged fittings before starting the engine.</td>
</tr>
<tr>
<td>Nuts and Bolts</td>
<td>Each Use</td>
<td>Check for loose bolts, tighten before operating.</td>
</tr>
<tr>
<td>Beam</td>
<td>Each Use</td>
<td>Apply grease to beam surface.</td>
</tr>
<tr>
<td>Moving Parts</td>
<td>Each Use</td>
<td>Clear debris from log splitter.</td>
</tr>
</tbody>
</table>

**WARNING**

Improper maintenance of the log splitter may void your warranty. ALWAYS turn off the engine, disconnect the spark plug, and relieve system pressure before cleaning, adjusting, or repairing the splitter. Relieve system pressure by moving Split Control Lever back and forth several times.

**MAINTENANCE**

- Before performing maintenance, the log splitter must be placed in maintenance mode. Turn off the engine, disconnect spark plug and move the control lever forward and backwards to relieve the hydraulic pressure.
- After performing any maintenance, make sure all guards, shields and safety features are put back in place before operating the log splitter.
- Before operating make sure the tires have the RECOMMENDED TIRE PRESSURE.
- Regularly grease axle and wheel bearing area or when needed.
- Change hydraulic oil annually or every 100 hours.
- Periodically check all fasteners and hoses for tightness and leaks.
- Annually clean and lightly lubricate all moving parts or when needed.
- Use a glossy enamel spray paint to touch up scratched or worn painted metal surfaces.
- Never exceed load capacity rating of 20 tons it will damage the log splitter.

Refer to the Engine Owner’s Manual for engine maintenance.

**Hydraulic Oil Change (Annually or 100hrs)**

1. Remove the suction hose from the hydraulic tank to drain the hydraulic oil.
2. Drain hydraulic oil and fill with correct type of hydraulic oil approximately 2.51 Gallons (9.5L).
3. Replace the dipstick and check the oil level reads full (recheck oil level before operating).
4. Properly dispose of used oil at an oil-recycling center. Used hydraulic oil is hazardous waste.
<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispose of the used oil and other toxic material properly. Take all used oil and waste to a designated waste facility or collection site for proper handling or recycling. <strong>DO NOT</strong> dump the used oil or waste on the ground.</td>
</tr>
</tbody>
</table>

**IMPORTANT:**

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 operations.

---

### Storage

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improper storage of the log splitter may void your warranty.</td>
</tr>
</tbody>
</table>

### STORAGE

- Retract the wedge completely (hitch end) to keep the rod protected from corrosion.
- Allow the machine to cool for at least five minutes before storing. **WARNING:** A hot engine can be a fire hazard.
- Before storing make sure the log splitter is clean and dry for years of trouble free service.
- Lightly lubricate all log splitter surfaces and moving parts to prevent rust.
- Store indoors or protected area during severe weather and winter months away from corrosive material, sources of heat, open flames, sparks or pilot lights.
- Refer to the engine manual for proper engine storage.

### Short-Term Engine Storage:

- Consider adding a fuel stabilizer to extend fuel storage life.
- Turn the fuel valve lever to the OFF position.

### Long-Term Engine Storage:

- Add a fuel stabilizer to extend fuel storage life.
- Turn the fuel valve lever to the OFF position.
- For longer periods of storage drain the fuel tank and carburetor as instructed in the engine owner's manual.

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline will oxidize and deteriorate in storage. Old gasoline in the engine will cause hard starting and leave gum deposits that can clog the fuel system. Deterioration problems may occur within a few months or less.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always drain fuel from tank in outdoors in a well ventilated area. Always stay away from sources of heat, flame, or sparks while handling fuel. Clean up fuel spills/splashes immediately.</td>
</tr>
</tbody>
</table>
## Troubleshooting

### WARNING

Before troubleshooting or attempting to service, read and follow all safety instructions to avoid serious injury to the operator or bystanders from moving parts that can crush or cut, burns, fire or explosion, or escaping high pressure hydraulic fluid.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder rod will not move</td>
<td>A, D, E, H, J</td>
</tr>
<tr>
<td>Slow cylinder shaft speed when extending or retraction</td>
<td>A, B, C, H, I, K, L</td>
</tr>
<tr>
<td>Wood will not split or splits extremely slowly</td>
<td>A, B, C, F, I, K</td>
</tr>
<tr>
<td>Engine bogs down during splitting</td>
<td>G</td>
</tr>
<tr>
<td>Engine stalls under low load condition</td>
<td>D, E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- Insufficient oil to pump</td>
<td>Check oil level in reservoir</td>
</tr>
<tr>
<td>B- Air in oil</td>
<td>Check oil level in reservoir</td>
</tr>
<tr>
<td>C- Excessive pump inlet vacuum</td>
<td>Check pump inlet hose for blockage or kinks</td>
</tr>
<tr>
<td>D- Blocked hydraulic lines</td>
<td>Flush and clean the splitter hydraulic system</td>
</tr>
<tr>
<td>E- Blocked control valve</td>
<td>Flush and clean the splitter hydraulic system</td>
</tr>
<tr>
<td>F- Low control valve setting</td>
<td>Adjust control valve with a pressure gauge</td>
</tr>
<tr>
<td>G- High control valve setting</td>
<td>Adjust control valve with a pressure gauge</td>
</tr>
<tr>
<td>H- Damaged control valve</td>
<td>Return control valve for authorized repair</td>
</tr>
<tr>
<td>I- Internal control valve leak</td>
<td>Return control valve for authorized repair</td>
</tr>
<tr>
<td>J- Damaged cylinder piston</td>
<td>Return cylinder for authorized repair</td>
</tr>
<tr>
<td>K- Internally damaged cylinder</td>
<td>Return cylinder for authorized repair</td>
</tr>
<tr>
<td>L- Drawing air through suction line</td>
<td>Check and tighten hose clamps on suction hose</td>
</tr>
</tbody>
</table>
Specifications

Ram Force ........................................................................................................ 20 US Ton
Cycle Time ........................................................................................................ 14 Sec
Wedge Size ........................................................................................................ 8” Harden Steel
Hydraulic Cylinder (Bore & Stroke) ................................................................. 4” x 22”
Gear Pump ......................................................................................................... 2-Stage
Hydraulic Oil ................................................................. 10W AW32, ASLE H-150 or ISO32
Amount of Hydraulic Fluid ........................................................................... 2.51 Gallon (9.5L)
Max. Pressure ................................................................................................... 3500 PSI
Max. Flow ....................................................................................................... 11 GPM (39.2 L)
Max. Log Length .............................................................................................. 24”
Wheel Size ........................................................................................................ 16” x 6.5”
Max. Towing Speed ........................................................................................... 45 MPH
Overall Dimensions (L x W x H) ............................................. 87.8”x40.55”x37.4” (223x103x95cm)
Manual Start Engine ....................................................................................... 7Hp

NOTE: For Engine Details Refer to the Engine Owner’s Manual.
<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>QTY</th>
<th>Part #</th>
<th>Description</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2&quot; Coupler</td>
<td>1</td>
<td>31</td>
<td>Valve Plate</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hex Bolt M12x80</td>
<td>2</td>
<td>32</td>
<td>Control Valve</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Flat Washer Ø12</td>
<td>4</td>
<td>33</td>
<td>Connector NPT3/4&quot;-7/8&quot;</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Nylon Lock Nut M12</td>
<td>3</td>
<td>34</td>
<td>O Ring Ø16x2.4</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Nylon Lock Nut M10</td>
<td>13</td>
<td>35</td>
<td>Hydraulic Hose (Valve-Oil Tank)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Big Flat Washer Ø12</td>
<td>2</td>
<td>36</td>
<td>Connector NPT1/2&quot;-7/8&quot;</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Hook Chain</td>
<td>2</td>
<td>37</td>
<td>Connector NPT3/4&quot;-7/8&quot;</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Flat Washer Ø10</td>
<td>7</td>
<td>38</td>
<td>Hydraulic Hose (Valve-Gear Pump)</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Tow Bar</td>
<td>1</td>
<td>39</td>
<td>Cylinder</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Hex Bolt M12x90</td>
<td>1</td>
<td>40</td>
<td>Connector NPT1/2&quot;-7/8&quot;</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Hex Bolt M10x130</td>
<td>2</td>
<td>41</td>
<td>Rubber Washer</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>Big Flat Washer Ø10</td>
<td>6</td>
<td>42</td>
<td>Tapered Roller Bearing</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>Lock Washer Ø10</td>
<td>12</td>
<td>43</td>
<td>Hex Nut M12x1.25</td>
<td>8</td>
</tr>
<tr>
<td>14</td>
<td>Support Leg</td>
<td>1</td>
<td>44</td>
<td>Axle Cap</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>Hex Bolt M10x75</td>
<td>1</td>
<td>45</td>
<td>Cotter Pin 4x25</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Lock Pin</td>
<td>1</td>
<td>46</td>
<td>Slotted Nut M20x1.5</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>Cone Hex Bolt S18x42</td>
<td>8</td>
<td>47</td>
<td>Flat Washer Ø20</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>Flat Key</td>
<td>1</td>
<td>48</td>
<td>Wheel</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>Flange</td>
<td>2</td>
<td>49</td>
<td>Left Fender</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>Cylinder Guide Bushing</td>
<td>1</td>
<td>50</td>
<td>Hex Bolt M10x30</td>
<td>10</td>
</tr>
<tr>
<td>21</td>
<td>Beam Assembly</td>
<td>1</td>
<td>51</td>
<td>Oil Tank</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>Lengthening Connector NPT1/2&quot;-7/8&quot;</td>
<td>1</td>
<td>52</td>
<td>Hex Bolt M6x20</td>
<td>6</td>
</tr>
<tr>
<td>23</td>
<td>Lock Washer Ø12</td>
<td>8</td>
<td>53</td>
<td>Lock Washer Ø6</td>
<td>6</td>
</tr>
<tr>
<td>24</td>
<td>Connection Pin</td>
<td>2</td>
<td>54</td>
<td>Flat Washer Ø6</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>Nylon Lock Nut M24</td>
<td>2</td>
<td>55</td>
<td>Filter Fix Plate</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>Engine Bushing</td>
<td>1</td>
<td>56</td>
<td>Oil Pipe</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>Screw M8x12</td>
<td>4</td>
<td>57</td>
<td>Clamp</td>
<td>2</td>
</tr>
<tr>
<td>28</td>
<td>Lock Washer Ø8</td>
<td>23</td>
<td>58</td>
<td>Engine Mounting Plate A</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>Flat Washer Ø8</td>
<td>19</td>
<td>59</td>
<td>Gear Pump</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>Hex Bolt M8x16</td>
<td>3</td>
<td>60</td>
<td>Engine</td>
<td>1</td>
</tr>
<tr>
<td>Part #</td>
<td>Description</td>
<td>QTY</td>
<td>Part #</td>
<td>Description</td>
<td>QTY</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------</td>
<td>-----</td>
<td>--------------</td>
<td>------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>61</td>
<td>Nylon Hex Nut M8</td>
<td>12</td>
<td>70</td>
<td>Semicircular Key</td>
<td>1</td>
</tr>
<tr>
<td>62</td>
<td>Hex Bolt M8x75</td>
<td>4</td>
<td>71</td>
<td>Hex Bolt 5/16&quot;-24UNFx1&quot;</td>
<td>4</td>
</tr>
<tr>
<td>63</td>
<td>Polyurethane Block</td>
<td>4</td>
<td>72</td>
<td>Gear Pump Stand</td>
<td>1</td>
</tr>
<tr>
<td>64</td>
<td>Rubber Washer</td>
<td>1</td>
<td>73</td>
<td>Connector Cover</td>
<td>1</td>
</tr>
<tr>
<td>65</td>
<td>Filter</td>
<td>1</td>
<td>74</td>
<td>Hex Bolt M5x10</td>
<td>4</td>
</tr>
<tr>
<td>66</td>
<td>Hex Bolt M8x30</td>
<td>8</td>
<td>75</td>
<td>Gear Pump Connector</td>
<td>1</td>
</tr>
<tr>
<td>67</td>
<td>Right Fender</td>
<td>1</td>
<td>76</td>
<td>Screw M6x10</td>
<td>1</td>
</tr>
<tr>
<td>68</td>
<td>Air Filter</td>
<td>1</td>
<td>77</td>
<td>Engine Connector</td>
<td>1</td>
</tr>
<tr>
<td>69</td>
<td>Hydraulic Hose(Valve-Cylinder End Cap)</td>
<td>1</td>
<td>78</td>
<td>Oil Seal</td>
<td>2</td>
</tr>
</tbody>
</table>
Limited Warranty

Warranty
For one year from the date of purchase YTL International will replace for the original purchaser, or repair the log splitter. The warranty will not apply to any unit which was not assembled correctly, misused, overloaded or which has been used or operated contrary to our instructions, or which has been repaired or altered by anyone other than an authorized representative.

Warranty Exclusions
This warranty does not cover cosmetic defects such as paint, decals or wear items such as tires. This warranty will not cover failures or problems due to acts of God, or events or forces beyond the control of the manufacturer.

Normal Wear Exclusion
The spreader needs periodic service to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.

Installation, Use and Maintenance Exclusion
This warranty will not apply to parts and/or labor if the push spreader has been misused, neglected, involved in an accident, abused, loaded beyond its limits, modified or assembled incorrectly. Normal maintenance is not covered under this warranty.

Limits of Implied Warranty and Consequential Damage Exclusion
YTL International disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this push spreader. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR.

An exchange unit will be subject to the original warranty. The length of the warranty governing the exchanged unit will have the date as the purchase date of the original unit. This warranty gives you certain legal rights which may change from state to state. Your state may also have other rights you may be entitled to that are not listed within this warranty.

Contact Information
YTL International
17517 Fabrica Way, Suite J
Cerritos, CA  90703
Phone: (888) 723-6534
Phone: (562) 404-8016
Fax: (562) 404-8013