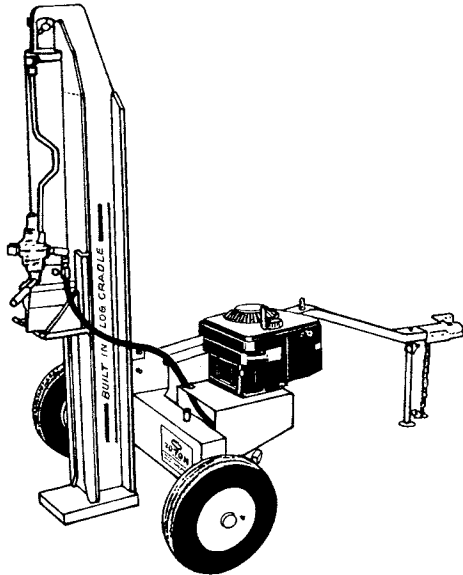
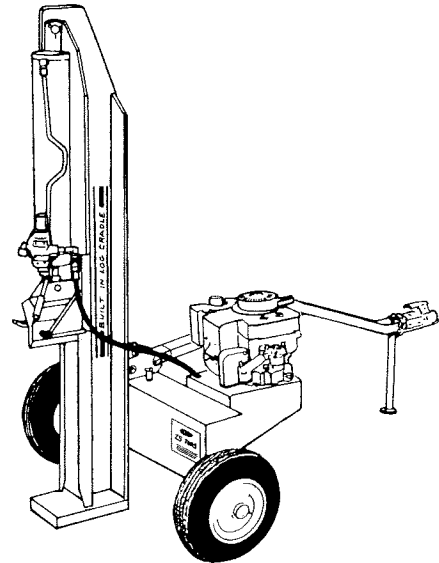




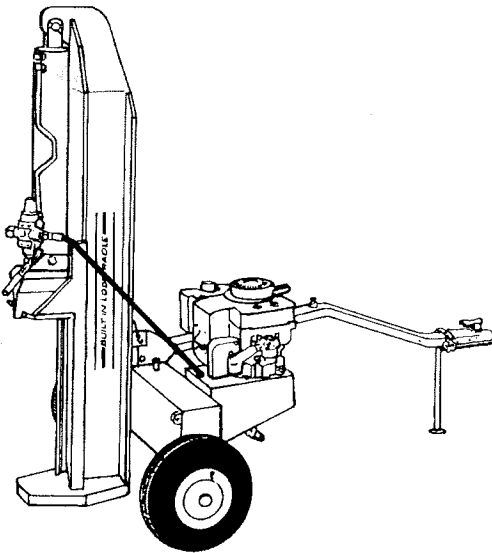
# VERTICAL/HORIZONTAL LOG SPLITTERS



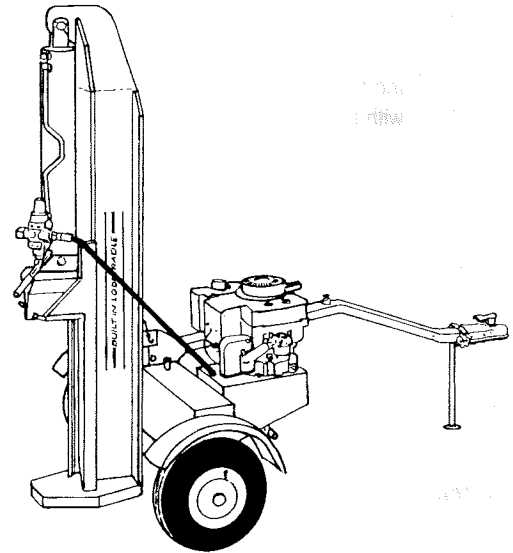
❑ **MODEL NO. LS401221**  
**22 TON**



❑ **MODEL NO. LS401216**  
**25 TON**



❑ **MODEL NO. LS401213**  
**28 TON**



❑ **MODEL NO. LS401224**  
**34 TON**

## ASSEMBLY & OPERATING INSTRUCTIONS



THIS SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY MESSAGES IN THIS MANUAL.



**IMPORTANT:**

**BEFORE OPERATING THIS LOG SPLITTER, READ AND UNDERSTAND THIS MANUAL COMPLETELY. BECOME FAMILIAR WITH IT FOR YOUR OWN SAFETY. TO FAIL TO DO SO MAY CAUSE SERIOUS INJURY. DO NOT ALLOW ANYONE TO OPERATE YOUR LOG SPLITTER WHO HAS NOT READ THIS MANUAL. READ EACH STEP COMPLETELY BEFORE PROCEEDING.**

## **ASSEMBLY INSTRUCTIONS**

**NOTE:** The following instructions pertain to four SpeeCo log splitters, the 22 ton (LS401221), 25 ton (LS401216), 28 ton (LS401213) and the 34 ton (LS401214). The four models share most of the component parts. Any differences are noted in the parts list and assembly instructions.

**NOTE:** This log splitter was partially assembled at the factory. Refer to the drawing and parts list should it become necessary to disassemble the unit for repair or replacement of parts.

**STEP 1:** Remove all the components from the crate. Inspect each piece for shipping damage. If any part is damaged, contact your dealer or delivering carrier.

**STEP 2:** Attach the tongue (3) to the tank/axle (2) as shown in the diagram using the two 1/2 in. NC x 4-1/2 in. hex cap screws (48), 1/2 in. lockwashers (47) and 1/2 in. NC hex nuts (46) from the hardware kit. Tighten.

**STEP 3:** Remove the ground stand (24) from underneath the tongue (3) and attach it to the pin (26) on the end of the tongue (3) using the lock pin (25).

**STEP 4:** Remove the rubber covering from the two spindles on the tank/axle (2). The wheel bearing cups, bearing cones, grease seals and hub caps are already assembled. Bearing cones have been greased at the factory. Remove the hub cap (62) by prying it loose with a common tip screwdriver. Mount the wheels (54) to the spindles on the tank/axle (2) using the 3/4 in. light flatwasher (59) and the 3/4 in. slotted nut (60) from the hardware kit. Tighten the nut until bearing play is removed and the wheel will still rotate freely. Install the cotter pin (61) and hub cap (62). Repeat step 4 for the other wheel.

**STEP 5:** Stand the beam (1) up on end. NOTE: At least two people are required to raise the beam for the 28 ton and 34 ton models to insure safety and prevent injury. Make sure that the beam is stable. Remove the pivot pin (52) and the clip pin (53) from the tank/axle (2). Roll the axle/tongue assembly into position between the two tabs on the beam (1). Slide the pivot pin (52) through the holes and lock in place with the clip pin (53).

**STEP 6:** Connect the end of the 1/2 in. I.D. x 44 in. (28 & 34 ton models) or 1/2 in. I.D. x 42 in. (22 & 25 ton models) hydraulic hose (21) coming from the fitting (20) on the pump (9) to the fitting (75) on the valve (5) port marked "IN."

**STEP 7:** Slide one hose clamp (50) on the end of the 3/4 in. I.D. x 37 in. (28 ton and 34 ton models) or 3/4 in. I.D. x 32-1/2 in. (22 & 25 ton models) hydraulic hose (49) that comes from the fitting on the tank/axle (2). Then connect the hose to the fitting (69) on the valve (5). This is the port marked "OUT" on the valve. Tighten the hose clamp.

**STEP 8:** If the optional fender kit (standard on the 34 ton model) was purchased, attach the fenders (44) to the tank/axle (2) using the 1/4 in. NC x 3/4 in. hex cap screws (43), 1/4 in. flatwashers (42), 1/4 in. lockwashers (41) and 1/4 in. hex nuts (40). Tighten.

## **STORAGE INSTRUCTIONS**

**STEP 1:** Remove the ground stand (24) by removing the locking pin (25). Replace the ground stand (24) on the lower part of the pin (38) located on the plate beside the engine (7). Secure with locking pin (25).

**STEP 2:** To store in the vertical position, remove the two 1/2 in. NC x 4-1/2 in. hex cap screws (48), 1/2 in. lockwashers (47) and 1/2 in. hex nuts (46) that connect the tongue (3) to the tank/axle (2).

## **OPERATING INSTRUCTIONS**

### **STEP 1: STARTING**



**CAUTION:**

**DO NOT START OR RUN THE ENGINE BEFORE READING ALL OPERATING INSTRUCTIONS AND NOTES ON SAFETY THOROUGHLY.**

**IMPORTANT:** The engine and hydraulic tank are shipped without oil. See the engine operating and maintenance instructions manual packed with your log splitter for the type of crankcase oil, fuel, etc. The engine manufacturer recommends lead-free gasoline only.



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

**STEP 2:** The hydraulic reservoir should be filled with an SAE 20 hydraulic oil. If hydraulic oil is difficult to obtain, automatic transmission fluid can be substituted and should be used instead of hydraulic oil when temperatures are below 32 degrees F. Use only clean oil and take care to prevent dirt from entering the hydraulic reservoir.



**CAUTION:** WHEN TIGHTENING THE BREATHER CAP ON THE TANK, POINT THE HOLE AWAY FROM THE ENGINE AND THE OPERATOR ZONE.

### **ENGINE OIL RECOMMENDATIONS**

- 1) 25 Ton, 28 Ton and 34 Ton Models- For temperatures above 40 degrees F use an SAE 30W oil. Using multigrade oil may increase oil consumption. Using SAE 30W oil below 40 degrees F will result in hard starting and possible engine bore damage. For temperatures below 40 degrees F use an SAE 10W-30 or SAE 5W-30 oil. Oil capacity is about 1-1/2 quarts (48 ounces; 1.4 liters).
- 2) 22 Ton Model- For temperatures above 40 degrees F use an SAE 30W oil. Using multigrade oils may increase oil consumption. Using SAE 30W oil below 40 degrees F will result in hard starting and possible engine bore damage. For temperatures below 40 degrees F use an SAE 10W-30 or SAE 5W-30 oil. Oil capacity is approximately 5/8 quart (20 ounces; 0.6 liter).

### **DIRECTIONS FOR FILLING HYDRAULIC SYSTEM**

Fill the hydraulic reservoir with at least five gallons of hydraulic fluid (25 ton, 28 ton & 34 ton models). Use at least four gallons for the 22 ton model. After the hydraulic reservoir and the engine crankcase are filled with oil, start the engine. The hydraulic pump should prime itself. With the engine running, move the hydraulic valve lever toward the wedge. This will cause the cylinder to extend and expel air. When the cylinder is fully extended, retract it. Repeat this procedure several times. An erratic movement of the cylinder indicates that there is still air in the system. More oil should then be added to bring the fluid level up to the "OK" range on the dipstick. Total hydraulic capacities are as follows: 34 ton model - 8-1/2 gallons; 28 ton and 25 ton models- 8 gallons; 22 ton model- 5 gallons. **NOTE:** If the tank is overfilled, it will tend to expel oil from the breather cap when the cylinder is retracted. After adding more oil to the tank, cycle the cylinder again until it has a constant speed indicating that all oil has been expelled. Check the oil level in the reservoir again with the dipstick to make sure it is in the "OK" range.

### **STARTING INSTRUCTIONS**

Refer also to the Engine Operating and Maintenance Instructions manual for your particular log splitter.

- 1) 25 Ton, 28 Ton and 34 Ton Models with 8 h.p. Engine
  - a) Move the throttle lever to "FAST". Always operate the engine with throttle lever in the "FAST" position
  - b) Move choke control lever to "CHOKE" position.
  - c) Grasp rope handle and pull slowly until resistance is felt. Then pull rapidly to start engine and avoid engine kickback.
  - d) Allow the engine to warm up. If operating in warm weather, move the choke control lever toward "RUN" a short distance at a time over several seconds. For cold weather operation do this procedure over several minutes. Operate with choke lever in the "RUN" position.
  - e) To stop engine, move the throttle lever to the "STOP" position.
- 2) 22 Ton Model with 6 h.p. Engine and Primer
  - a) Move control lever to "FAST."
  - b) Push primer bulb three (3) times.

**NOTE: DO NOT USE PRIMER TO RESTART A WARM ENGINE AFTER A SHORT SHUTDOWN.**

- c) Grasp starter handle and pull rope out slowly until resistance is felt. Then pull rope rapidly with full arm stroke. Let rope return to starter slowly.
- d) When engine starts, leave the control lever at "FAST." The throttle must be in the "FAST" position for maximum performance.

**STEP 3:** The engine maximum governed speed is preset at the factory at 3600 RPM no load speed. When splitting wood, the throttle should be set at the maximum setting to develop the horsepower required for the pump.

#### **STEP 4: TOWING**

The log splitter is equipped with road-speed tires, a Class I coupler (2 in. diameter ball required) and a safety chain. Before towing, the safety chain must be secured to the hitch or bumper of the vehicle. Local regulations should be checked regarding licensing, lights, towing, etc. See also Towing Safety in the Safety Information section of this manual.

#### **STEP 5: OPERATION**



**WARNING:** ALWAYS WEAR SAFETY GLASSES DURING OPERATION.

**DANGER:** KEEP HANDS AND FEET CLEAR OF RAM, STRIPPER PLATES AND BASE PLATE AT ALL TIMES.

- 1) Set up the log splitter in a clear, level area and block the wheels. Make sure that the suction port on the tanks is always on the lower side of the log splitter.
- 2) Place a log on the beam against the foot plate. Make sure that the log is securely on the foot plate and up against the beam.
- 3) Depress the valve handle so that the cylinder will drive the wedge into the log. Extend the cylinder until the log splits or 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 valve in the "actuate" position at the end of the stroke may damage the pump. Always use extra care when splitting logs with unsquare ends.

**NOTE:** For operation in wooded areas, obtain a spark arrestor for the exhaust system. See the engine operating and maintenance manual and check with your authorized Briggs & Stratton service center. See also Prevent Fire in the Safety Information section of this manual.

**IMPORTANT:** TO EXTEND THE LIFE OF THE HYDRAULIC CYLINDER, AVOID "BOTTOMING OUT" WEDGE PLATE TO THE FOOT PIECE. TO CONFORM WITH INDUSTRY SAFETY RECOMMENDATIONS, THE WEDGE STOPS 2 INCHES FROM THE END OF THE STROKE.

## **MAINTENANCE**

- 1) Consult the operating and maintenance instructions of the engine manufacturer for engine care and maintenance.
- 2) Always check the oil level of the hydraulic reservoir before operation. Operating the log splitter without an adequate oil supply will cause severe damage to the pump.
- 3) Change the oil filter after the first 25 hours of operation. Thereafter, change the oil filter every 100 hours or seasonally, whichever comes first.
- 4) If the wedge becomes dull or nicked, it can be removed and sharpened. Remove the 1/2 in. diameter bolt that connects the wedge to the cylinder. The hose from the valve may need to be removed. While the log splitter is in the horizontal position, loosen the hose clamp and disconnect the hose from the valve. Carefully lift the cylinder to allow the wedge to slide forward. The wedge can now be lifted off and sharpened.
- 5) Clean the breather cap after 25 hours of operation. Clean it more often when operated in dusty conditions. To clean, remove the breather from the tank and flush with kerosene or liquid detergent to remove the dirt.
- 6) See also Repair and Maintenance Safety in the Safety Information section of this manual.
- 7) All replacement parts must meet manufacturer's specifications.

# PARTS BREAKDOWN FOR LS401221, LS401216, LS401213 AND LS401224 LOG SPLITTERS

REFERENCE NO.	PART NO.	DESCRIPTION	NUMBER REQUIRED
	LS401224	34 Ton Vertical/Horizontal Log Splitter Complete	
	LS401213	28 Ton Vertical/Horizontal Log Splitter Complete	
	LS401216	25 Ton Vertical/Horizontal Log Splitter Complete	
	LS401221	22 Ton Vertical/Horizontal Log Splitter Complete	
1	LS401148	Beam (6-1/2" x 8") for 28 Ton and 34 Ton Models	1
	LS401182	Beam (6" x 6") for 22 Ton and 25 Ton Models	1
2	LS401190	Tank/Axle for 25 Ton, 28 Ton and 34 Ton Models	1
	LS401193	Tank/Axle for 22 Ton Model	1
3	LS401144	Tongue	1
4	HC390117	5" x 24" Hydraulic Cylinder for 34 Ton Model	1
	HC390119	4-1/2" x 24" Hydraulic Cylinder for 25 Ton and 28 Ton Models	1
	HC390118	4" x 24" Hydraulic Cylinder for 22 Ton Model	1
5	HC390406S	Auto-Return Valve for 22 Ton, 28 Ton and 34 Ton Models	1
6	LS401183	Wedge for 28 Ton and 34 Ton Models	1
	LS401136	Wedge for 22 Ton and 25 Ton Models	1
7	HC390524	8 H.P. Industrial/Commercial Engine for 25 Ton, 28 Ton and 34 Ton Models	1
	HC390529	6 H.P. Engine for 22 Ton Model	1
8	HC390601	Filter	1
9	HC390709	16 gpm Pump for 25 Ton, 28 Ton and 34 Ton Models (Barnes)	1
	HC390705B	11 gpm Pump for 22 Ton Model (Barnes)	1
10	LS400824L	Pump-Engine Coupler for 25 Ton, 28 Ton and 34 Ton Models (3 pieces)	1
	LS400825L	1" I.D. Coupler Half for 25 Ton, 28 Ton and 34 Ton Models (engine side)	1
	LS400826L	1/2" I.D. Coupler Half for 25 Ton, 28 Ton and 34 Ton Models (pump side)	1
	LS400827L	Coupler Spider for 25 Ton, 28 Ton and 34 Ton Models	1
	LS400837	Pump-Engine Coupler for 22 Ton Model	1
	LS400833L	1/2" I.D. Coupler Half for 22 Ton Model (pump side)	1
	LS400838L	7/8" I.D. Coupler Half for 22 Ton Model (engine side)	1
	LS400834L	Coupler Spider for 22 Ton Model	1
12	O/L	5/16" NC x 1" Hex Cap Screw	4
14	O/L	5/16" NC Locknut	4
16	LS400343	1/4" Square Engine Key for 25 Ton, 28 Ton and 34 Ton Models	1
	LS400321	3/16" Square Engine Key for 22 Ton Model	1
17	O/L	5/16" NC x 1-1/2" Hex Cap Screw for 25 Ton, 28 Ton and 34 Ton Models	4
	O/L	5/16" NC x 2-1/2" Hex Cap Screw for 22 Ton Model	3
18	HC390316	Hose Clamp # 16	2
19	HC390248	1" x 9" Suction Hose for 25 Ton, 28 Ton and 34 Ton Models	1
	HC390241	3/4" x 8" Suction Hose for 22 Ton Model	1
20	HC390341	1/2" x 90 Degree Street Elbow	1
21	HC390246	1/2" I.D. x 44" Hydraulic Pressure Hose for 25 Ton, 28 Ton and 34 Ton Models	1
	HC390239	1/2" I.D. x 42" Hydraulic Pressure Hose for 22 Ton Model	1
22	HC390320	3/4 NPT x 3/4" 90 Degree Hose Fitting	1
23	HC390349	3/4" x 2-1/2" Nipple	1
24	LS401145	Ground Stand	1
25	P7939	5/16" Locking Pin for Ground Stand	1
26	P785A	5/8" NF Anchor Pin	1
27	O/L	5/8" Lockwasher	2
28	O/L	5/8" NF Hex Nut	2
29	O/L	3/8" NC Hex Nut	2
30	O/L	3/8" Lockwasher	2
31	P781A	7/8" Diameter x 2-5/8" Pin with 5/8" NF Thread	1
32	P794	1/4" Lynch Pin	1
33	LS400346	Hitch Coupler for 2" Ball	1

REFERENCE NO.	PART NO.	DESCRIPTION	NUMBER REQUIRED
34	O/L	3/8" Flatwasher	3
35	O/L	3/8" NC x 1" Grade 5 Hex Cap Screw	1
36	O/L	3/8" NC x 1-1/2" Grade 5 Hex Cap Screw	1
37	LS400323	Safety Chain with "S" Hook	1
	LS400345	3/8" "S" Hook	1
38	P785SPL	Double Pin	1
39	O/L	5/16" NC Locknut for 25 Ton, 28 Ton and 34 Ton Models	4
	O/L	5/16" Locknut for 22 Ton Model	3
40	O/L	1/4" NC Hex Nut for Fender (optional)	4
41	O/L	1/4" Lockwasher for Fender (optional)	4
42	O/L	1/4" Flatwasher for Fender (optional)	4
43	O/L	1/4" NC x 3/4" Hex Cap Screw for Fender (optional)	4
44	LS401151	Fender for 34 Ton Model (optional for all other models)	2
45	LS400430	Breather Cap	1
46	O/L	1/2" NC Hex Nut	2
47	O/L	1/2" Lockwasher	3
48	O/L	1/2" NC x 4-1/2" Hex Cap Screw	2
49	HC390249	3/4" I.D. x 37" Hydraulic Return Hose for 28 Ton and 34 Ton Models	1
	HC390250	3/4" I.D. x 32-1/2" Hydraulic Return Hose for 22 Ton and 25 Ton Models	1
50	HC390316	Hose Clamp # 16	2
52	P71022WC	5/8" x 6-1/4" Pivot Pin	1
53	O/L	1/8" "R" Clip Pin	1
54	LS400312B	Pregreased Wheel Assembly	2
55	BE22176	Grease Seal	2
56	BE22175	Bearing Cone	4
57	BE22174	Bearing Cup	4
58	LS400312	4.80 x 8" Road-Speed Tire	2
59	O/L	3/4" Light Flatwasher	2
60	HN17120	3/4" NF Slotted Nut	2
61	O/L	1/8" x 1-1/2" Cotter Pin	2
62	LS400332	Hub Cap	2
63	O/L	1/2" x 3-1/2" Grade 5 Hex Cap Screw for 28 Ton and 34 Ton Models	1
	O/L	1/2" x 3" Grade 5 Hex Cap Screw for 22 Ton and 25 Ton Models	1
64	P7910	Clip Pin	2
65	P7731A	Cylinder Pin	1
66	FW17316	Flatwasher	1
67	HC390347	Tube Fitting	2
68	HC390346	1/2" Diameter Steel Tube	1
69	HC390320	3/4 NPT x 3/4" 90 Degree Fitting	1
70	HC390343	1/2"-1/2" Hex Nipple	1
71	HC390311	3/4"-1/2" Reducer Bushing	1
72	HC390429A	Handle (valve)	1
	HC390434	Chain Link for Valve Handle	1
	HC390435	Valve Handle Mounting Bracket	1
73	O/L	1/2" NC Hex Nut	1
74	LS401174	1-1/4" I.D. Grommet	1
75	HC390302	Swivel Elbow 90 Degree	1
	LS401156	Hardware Kit for 28 Ton and 34 Ton Models	1
	LS401155	Hardware Kit for 22 Ton and 25 Ton Models	1

O/L- Obtain locally. Common fasteners available through hardware and farm stores.

Replacement filter cartridge HC390601 interchanges with:

FRAM 1653A  
NAPA 1553  
Cross # 1A9023  
Baldwin # BT839  
Wicks # 51553

Repair Kits

HC390120F "O" Ring Kit for 4" x 24" Cylinder HC390118  
HC390171 "O" Ring Kit for 4-1/2" x 24" Cylinder HC390119  
HC390126 "O" Ring Kit for 5" x 24" Cylinder HC390117  
HC390423 "O" Ring Kit for Valves HC390406A and HC390406S  
HC390720B "O" Ring Kit for Pumps HC390705B and HC390709





## **SAFETY INFORMATION**

### **A. TRAINING AND PREPARATION**

Before operating this log splitter, read and understand this manual completely. Become familiar with it for your own safety. To fail to do so may cause serious injury. Do not allow anyone to operate this log splitter who has not read this manual.

### **B. INTENDED USE**

NEVER use your log splitter for any other purposes than splitting wood. It is designed for this use and any other use may cause an injury.

### **C. RESPONSIBLE OPERATORS**

NEVER allow children to operate your log splitter nor adults lacking proper instructions. Keep them away from your work area. Your log splitter is not a toy. Only the operator is to be near your log splitter during use. Keep all others, including pets a minimum of 10 feet away from your work zone. Flying wood can be hazardous. If a helper is assisting in loading logs, NEVER activate the control until the helper is clear of the area. More accidents occur when more than one person operates the log splitter than at any other time.

NEVER operate your log splitter when under the influence of alcohol, drugs or medication. A clear mind is essential for safety.

NEVER allow a person who is tired or otherwise not alert to use your log splitter.

### **D. SAFETY WEAR**

NEVER wear loose clothing or jewelry that can be caught by moving parts of your log splitter and pull you into it. Keep clothing away from all moving parts of your log splitter. Wear proper head gear to keep hair away from moving parts.

ALWAYS wear safety shoes. A dropped log can seriously injure your foot.

ALWAYS wear safety glasses. A piece of splitting log could fly off and hit your eyes.

IF you wear gloves, be sure they are tight fitting without loose cuffs or draw strings.

ALWAYS wear protective hearing devices as needed.

### **E. PREPARE LOGS PROPERLY**

BOTH ends of each log should be cut as square as possible to help prevent the log from riding out of the splitter during operation.

### **F. OPERATING PROCEDURE**

ONLY operate the log splitter from the operator zone.

Know how to stop the unit and disengage the controls.

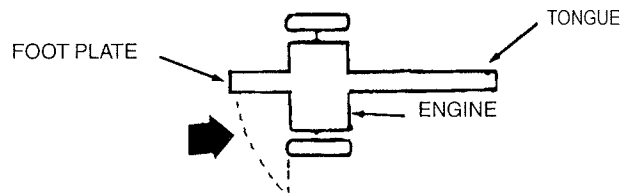
NEVER place hands or feet between log and splitting wedge or between log and ram during forward or reverse stroke. To do so may result in crushed or amputated fingers or worse. You may lose an arm or foot.

DON'T straddle the log splitter when using it. A slip in any position could result in a serious injury.

NEVER try to split two logs on top of each other. One may fly out and injure you.

NEVER allow one person to operate the valve while another is positioning the log as serious injury could result from starting operation with the hands near the ram or wedge.

DON'T step over log splitter when the engine is running. You may trip or accidentally activate the ram if you step over it. If you need to get to the other side, walk around.





NEVER attempt to load your log splitter when the ram is in motion. You may get caught by the ram and injured.

ONLY use your hand to operate the control lever. Never use your foot or a rope or any other extension device. This could result in your inability to stop your log splitter quickly and cause an injury.

NEVER move the log splitter while the engine is running.

NEVER leave your log splitter unattended with the engine running. Shut off the engine if you are leaving your log splitter even for a short period of time. Someone could accidentally activate the ram and be injured.

DON'T run the engine in an enclosed area. Exhaust gases contain carbon monoxide. This odorless gas can be deadly when inhaled.

#### **G. OPERATE IN SAFE ENVIRONMENT AND ON SAFE GROUND**

NEVER operate your log splitter on slippery, wet, muddy or icy surfaces. Safe footing is essential in preventing accidents.

ONLY operate your log splitter on level ground and not on a side hill. It could tip over or rolling logs or poor footing could cause an accident. (This also prevents the spillage of gas from the tank).

NEVER attempt to move the log splitter over hilly or uneven terrain without a tow vehicle or adequate help.

ALWAYS block wheels to prevent movement of log splitter while in operation.

KEEP work area clean. Immediately remove split wood around your log splitter so that you don't stumble over it.

WHEN using your log splitter, use in daylight or under good artificial light.

#### **H. REPAIR AND MAINTENANCE SAFETY**

DON'T operate your log splitter in poor mechanical condition or when in need of repair.

PERIODICALLY check that all nuts, bolts and screws are tightened.

DON'T alter your log splitter in any manner such as attaching a rope or extension to the control lever or adding to the width or height of the wedge unless approved by the manufacturer. Such alterations may cause your log splitter to be unsafe.

PERFORM all recommended maintenance procedures before you use your log splitter.

REPLACE all damaged or worn parts such as hydraulic hoses and fittings immediately.

NEVER tamper with the engine to run it at excessive speeds. This increases the hazard of personal injury. The maximum engine speed is preset by the manufacturer and is within safety limits.

DON'T service or repair your log splitter without removing the spark plug wire.

ALL replacement parts must meet manufacturer's specifications.

#### **I. TOWING SAFETY**

OBEY all state and local regulations when towing on public roads and highways.

BEFORE towing, be certain that the log splitter is correctly and securely attached to the towing vehicle and that a safety chain is in place. Leave slack in chains for turning allowance.

DON'T allow anyone to sit or ride on your log splitter. They can easily fall off and be seriously injured.

BEFORE using your log splitter, disconnect it from the towing vehicle. A log can easily be pushed forward onto the vehicle.

NEVER carry any cargo or wood on your log splitter. It may fall off and endanger vehicles that are following you.

ALLOW for added length of your log splitter when turning, parking, crossing intersection and in all driving situations.

BE careful when backing up. You can easily jack-knife your log splitter.

ADJUST towing speed for terrain and conditions. Do not exceed 45 mph. Be extra cautious and reduce speed when towing over bumpy or rough terrain including railroad crossings.

## **J. PREVENT FIRE**

NEVER operate your log splitter near a flame or spark. Hydraulic oil and gasoline are flammable and can explode.

DON'T fill the gas tank while the engine is hot or running. Allow the engine to cool before refueling.

NEVER smoke while operating or refueling your log splitter. Gas fumes can easily explode.

ONLY refuel your log splitter outdoors in a clear area void of gas fumes or spilled gas. Always use an approved fuel container. Always replace the gas cap securely.

IF gasoline is spilled, move machine away from the area of the spill and avoid creating any source of ignition until the spilled gas has evaporated.

TAKE a Class B fire extinguisher with you when operating your log splitter in dry areas as a precautionary measure against possible flying sparks.

COMPLETELY drain the fuel tank prior to storage. This guards against the accumulation of fuel fumes, which could result in a fire hazard.

ALWAYS store gasoline in an approved, tightly sealed container. Store the container in a cool, dry place. Do not store in the house or near a heating appliance.

### **-NOTE-**

This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the state of California, the above is required by law (Section 442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler (optional by manufacturer) is available as an accessory at your nearest engine dealer. Check legal requirements in your area.

## **L. HYDRAULIC SAFETY**

THE hydraulic system of your log splitter requires careful inspection along with the mechanical parts. Be sure to replace frayed, kinked, cracked or otherwise damaged hydraulic components. Just because it isn't leaking today doesn't mean that it will not fail tomorrow.

FLUID escaping from a very small hole can almost be invisible. Do not check for leaks with your hand. Escaping fluid under pressure can have sufficient force to penetrate skin causing serious personal injury or even death. Leaks can be detected by passing a piece of cardboard or wood over the suspected leak and looking for discoloration.

IF injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

SHOULD it become necessary to loosen or remove any hydraulic fitting or line, be sure to relieve all pressure by shutting off the engine and moving the control handle back and forth several times.

DON'T remove the cap from the hydraulic tank or reservoir while your log splitter is running. Hot oil under pressure could result in serious injury.

THE pressure relief valve on your log splitter is preset at the factory. Do not adjust the valve. Only a qualified service technician should perform this adjustment.

# SAFETY DECALS



**ALWAYS REPLACE MISSING OR DEFACED DECALS**

## **! WARNING**

1. READ AND UNDERSTAND OPERATOR'S MANUAL THOROUGHLY BEFORE OPERATION. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY.
2. KEEP ALL SHIELDS IN PLACE.
3. KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER-DRIVEN PARTS.
4. ALWAYS WEAR SAFETY GLASSES AND SAFETY SHOES DURING OPERATION.
5. ALWAYS OPERATE OUT-OF-DOORS WITH GOOD VENTILATION.
6. ALWAYS STOP ENGINE AND REMOVE SPARK PLUG WIRE BEFORE PERFORMING MAINTENANCE OPERATIONS.
7. ALWAYS SHUT OFF ENGINE WHEN LEAVING LOG SPLITTER UNATTENDED, EVEN FOR A SHORT PERIOD OF TIME.
8. ONLY ONE PERSON SHOULD LOAD AND OPERATE THE LOG SPLITTER. KEEP ALL OTHERS CLEAR DURING OPERATION. NEVER ALLOW ONE PERSON TO OPERATE VALVE WHILE ANOTHER IS POSITIONING THE LOG.
9. ALWAYS POSITION LOG WITH HANDS ON THE SIDES OF LOG. KEEP HANDS CLEAR OF ENDS.
10. KEEP ALL CHILDREN AWAY FROM THE LOG SPLITTER.
11. DO NOT STEP OVER THE LOG SPLITTER.
12. ONLY USE HANDS TO OPERATE THE CONTROL VALVE.
13. DO NOT OPERATE THE LOG SPLITTER WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS OR MEDICATION.
14. ALWAYS OPERATE THE LOG SPLITTER ON LEVEL, DRY, NON-SLIPPERY SURFACES. KEEP OFF SLOPES.
15. KEEP WORK AREA CLEAR OF SPLIT WOOD, DEBRIS OR OTHER OBSTACLES.
16. ALWAYS STAY IN THE OPERATOR ZONE WHEN USING THE LOG SPLITTER.
17. ALWAYS SPLIT WOOD IN THE DIRECTION OF THE GRAIN ONLY.
18. DO NOT ADD GASOLINE WHILE THE ENGINE IS HOT OR RUNNING. ALLOW ALL SPILLED GAS TO EVAPORATE BEFORE USING LOG SPLITTER. <sup>Ⓜ</sup>

PART NUMBER: DL51-1-32  
LOCATION: TOP OF HYDRAULIC CYLINDER



PART NUMBER: DL51-1-57  
LOCATION: TOP, FORWARD SECTION  
OF HYDRAULIC CYLINDER

## **! CAUTION**

**USE EXTREME CARE WHEN TILTING THE BEAM. DUE TO THE HEAVY WEIGHT OF THE BEAM, SOME ASSISTANCE MAY BE NEEDED TO INSURE SAFETY AND PREVENT INJURY.**

PART NUMBER: DL51-1-86  
LOCATION: CLEVIS END OF BEAM  
NEAR TILT LOCKING PIN  
28 TON AND 34 TON MODELS ONLY

# SPECIFICATIONS

	MODEL NO. LS401221	MODEL NO. LS401216	MODEL NO. LS401213	MODEL NO. LS401224
<b>MAXIMUM SPLITTING FORCE</b>	22 Tons	25 Tons	28 Tons	34 Tons
<b>ENGINE</b>	6 H.P. Briggs & Stratton	8 H.P. Briggs & Stratton Industrial/Commercial	8 H.P. Briggs & Stratton Industrial/Commercial	8 H.P. Briggs & Stratton Industrial/Commercial
<b>CYLINDER</b>	4" Diameter X 24" Stroke	4-1/2" Diameter X 24" Stroke	4-1/2" Diameter X 24" Stroke	5" Diameter X 24" Stroke
<b>VALVE</b>	Auto-Return	Auto-Return	Auto-Return	Auto-Return
<b>PUMP</b>	Two-Stage 11 gpm	Two-Stage 16 gpm	Two-Stage 16 gpm	Two-Stage 16 gpm
<b>MAXIMUM LOG LENGTH</b>	26"	26"	26"	26"
<b>CYCLE TIME*</b>	14 Seconds	12 Seconds	12 Seconds	15 Seconds
<b>TIRES</b>	4.80 X 8" Road-Speed	4.80 x 8" Road-Speed	4.80 X 8" Road-Speed	4.80 X 8" Road-Speed
<b>WEDGE</b>	7" High with Spreader Wings	7" High with Spreader Wings	8" High with Spreader Wings	8" High with Spreader Wings
<b>BEAM SIZE</b>	6" X 6"	6" X 6"	6-1/2" X 8"	6-1/2" X 8"
<b>RESERVOIR CAPACITY</b>	17 Quarts	33 Quarts	33 Quarts	33 Quarts
<b>FILTER</b>	Spin-On Replaceable	Spin-On Replaceable	Spin-On Replaceable	Spin-On Replaceable
<b>HEIGHT</b>	72" in Vertical Position 42" in Horizontal Position	72" in Vertical Position 42" in Horizontal Position	72" in Vertical Position 42" in Horizontal Position	72" in Vertical Position 42" in Horizontal Position
<b>LENGTH</b>	78"	78"	78"	78"
<b>WIDTH</b>	49"	49"	49"	49"
<b>SHIPPING WEIGHT</b>	525 lbs.	592 lbs.	655 lbs.	675 lbs.

\* Ideal case cycle times. Actual cycle times will vary depending on temperature, engine speed, pump efficiency, etc.