

**VERTICAL/HORIZONTAL
LOG SPLITTER**
XL-S-001 & XL-S-002
XL-S-005 & XL-S-006



ASSEMBLY & OPERATING INSTRUCTIONS

THIS SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY MESSAGES IN THIS MANUAL



WARNING

1. Do understand the manual before operation, or it's possible to get severely damaged or hurt.
2. Keep all the original positions of protections.
3. Keep hands, feet and overalls far away from power-driving parts.
4. Wear safety glasses and safety shoes during operation.
5. Keep an excellent ventilation condition.
6. Stop the engine and move sparking plug wires away before maintenance.
7. Stop the engine before leaving.
8. Only one person operates the machine and any other one should not touch it. When splitting wood, no one is allowed to adjust the valve.
9. When beginning splitting wood, you can hold the wood on one side but your hand mustn't touch blades.
10. Keep children far away from the machine.
11. Don't tread on the machine.
12. Control valve only can be adjusted with hands.
13. Don't operate the machine after being drunk or when taking medicine.
14. Keep the mechanical operation surface level, dry and not slippery.
15. Keep working area clean.
16. Don't leave the machine during operation.
17. Split the wood along the wood grain.
18. When engine is hot or running, don't oil it. Open it again after the overflowed petrol is evaporated completely.



CAUTION

Take special care when putting the girder horizontal or upright. You need helpers for this operation due to the heavy girder for security.

Girder locking position: Middle part of the girder.

MAIN SPECIFICATION

	Type XL-S-001	Type XL-S-002	Type XL-S-005	Type XL-S-002
Biggest splitting strength	16/22 Tons	22Tons	16/22 Tons	22Tons
Engine	4.0/4.8 Kw		4.0/4.8 Kw	
Cylinder	4" diameter × 26" stroke length	4" diameter × 26" stroke length	4" diameter × 26" stroke length	4" Diameter × 24" stroke length
Valve	Auto reciprocating type	Auto reciprocating type	Auto reciprocating type	Auto reciprocating type
Pump	Grade2 11Gallons/min.	Grade2 11Gallons/min.	Grade2 11Gallons/min.	Grade2 11Gallons/min.
Max. wood length	26"	26"	26"	26"
Cycle (Circulatory period)	20-25 Seconds	20-25 Seconds	20-25 Seconds	20-25 Seconds
Wheel	4.80 × 8"		4.80 × 8"	
Wedge	11"	11"	11"	11"
Specification of girder	8" × 8"	8" × 8"	8" × 8"	8" × 8"
Capacity of fuel tank	17quarts		17quarts	
Filter	Disposable		Disposable	
Height	Vertical type72" Horizontal type42"	Vertical type72" Horizontal type42"	Vertical type72" Horizontal type42"	Vertical type72" Horizontal type42"
Length	78"	72"	78"	72"
Width	45"	17"	45"	17"
Load	525 Pounds	380 Pounds	525 Pounds	380 Pounds
The best circulatory period: The real cycle depends on the temperature, speed of engine and power of the pump.				

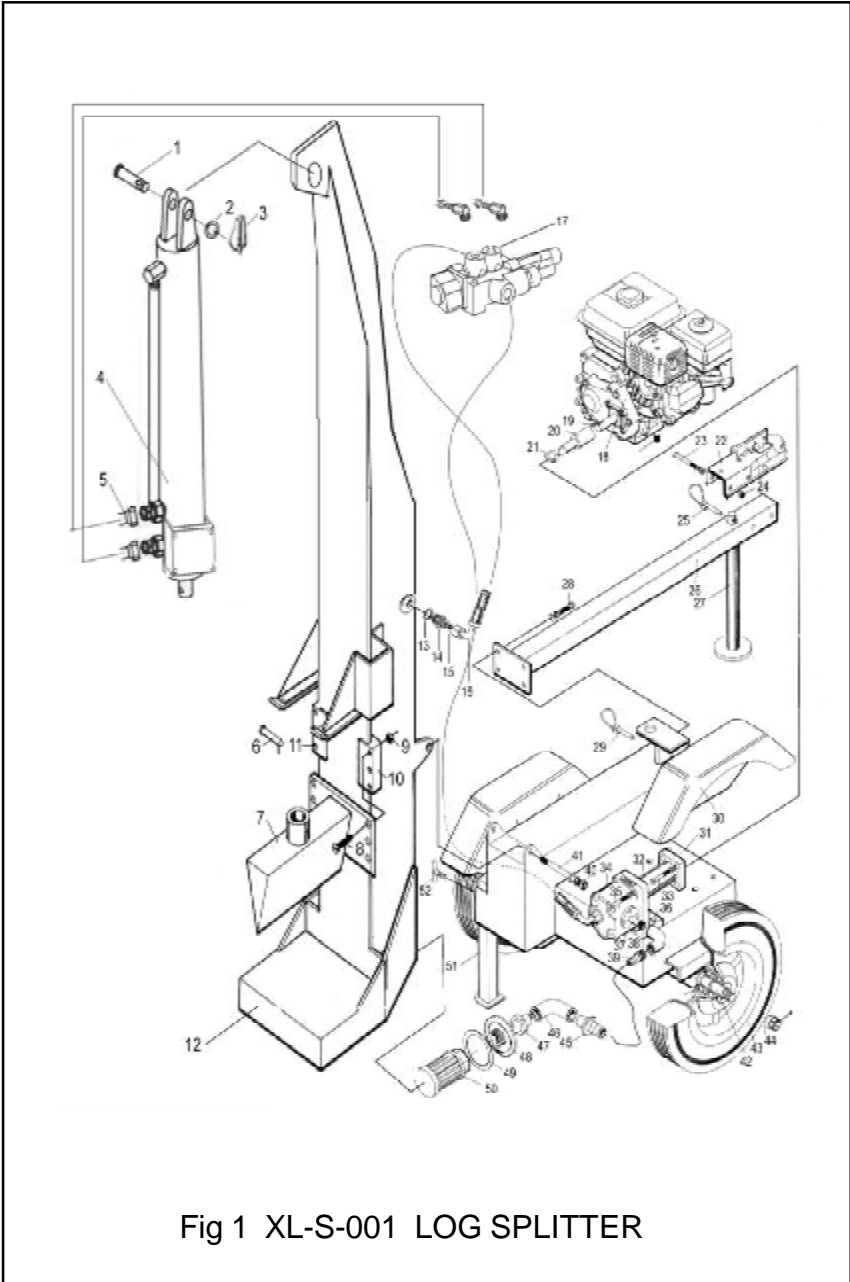


Fig 1 XL-S-001 LOG SPLITTER

XL-S-001 LOG SPLITTER								
FIG NO.	SER NO.	FIGSER NO.	PART NO.	PART NAME	QTTY ORDD	RATE	TOTAL	QTY
1	1	FIS1	S-001-1	AXLE PIN				1
1	2	FIS2	S-001-2	FLAT WASHER				1
1	3	FIS3	S-001-3	LOCK SPRING PIN				1
1	4	FIS4	S-001-4	CYLINDER				1
1	5	FIS5	S-001-5	IN LET PIPE FOR CYLINDER				2
1	6	FIS6	S-001-6	CONNECTING PIN				1
1	7	FIS7	S-001-7	WEDGE				1
1	8	FIS8	S-001-8	LINER BOLT				6
1	9	FIS9	S-001-9	NUT				6
1	10	FIS10	S-001-10	RIGHT WEDGE LINER				1
1	11	FIS11	S-001-11	LEFT WEDGE LINER				1
1	12	FIS12	S-001-12	MAIN BEAM				1
1	13	FIS13	S-001-13	WASHER				1
1	14	FIS14	S-001-14	CONNECTER				1
1	15	FIS15	S-001-15	O-RING				1
1	16	FIS16	S-001-16	OIL RETURN PIPE				1
1	17	FIS17	S-001-17	VALVE				2
1	18	FIS18	S-001-18	ENGWE				1
1	19	FIS19	S-001-19	FLAT PIN				1
1	20	FIS20	S-001-20	SHAFT				1
1	21	FIS21	S-001-21	CONNECTING SHAFT				1
1	22	FIS22	S-001-22	COUPLE				1
1	23	FIS23	S-001-23	BOLT				1
1	24	FIS24	S-001-24	NUT				1
1	25	FIS25	S-001-25	LOCK SPRING PIN				2
1	26	FIS26	S-001-26	PULL FRAME				1
1	27	FIS27	S-001-27	SOPPORT				1
1	28	FIS28	S-001-28	BOLT				4
1	29	FIS29	S-001-29	LOCK SPRING PIN				1
1	30	FIS30	S-001-30	MUD SHIELD				2
1	31	FIS31	S-001-31	OIL TANK				1
1	32	FIS32	S-001-32	CONNECTING SUPPORT				1
1	33	FIS33	S-001-33	BOLT				4
1	34	FIS34	S-001-34	PUMP				1
1	35	FIS35	S-001-35	BOLT				4
1	36	FIS36	S-001-36	BOLT				4
1	37	FIS37	S-001-37	CONNECTOR				2
1	38	FIS38	S-001-38	ANGLE PIPE				1
1	39	FIS39	S-001-39	CONNECTOR				1
1	40	FIS40	S-001-40	NUT				1
1	41	FIS41	S-001-41	BOLT				1
1	42	FIS42	S-001-42	SHAFT				2
1	43	FIS43	S-001-43	TIRE				2
1	44	FIS44	S-001-44	LOCK NUT				2
1	45	FIS45	S-001-45	CONNECTOR				1
1	46	FIS46	S-001-46	ANGLE PIPE				1
1	47	FIS47	S-001-47	CONNECTOR				1
1	48	FIS48	S-001-48	FILTER COVER				1
1	49	FIS49	S-001-49	WASHER				1
1	50	FIS50	S-001-50	FILTER				1
1	51	FIS51	S-001-51	ADJUST SUPPORT				1
1	52	FIS52	S-001-52	ADJUST BOLT				1
1	53	FIS53	S-001-51	OPERATE HANDER				1
1	54	FIS54	S-001-52	OIL INSERT				1

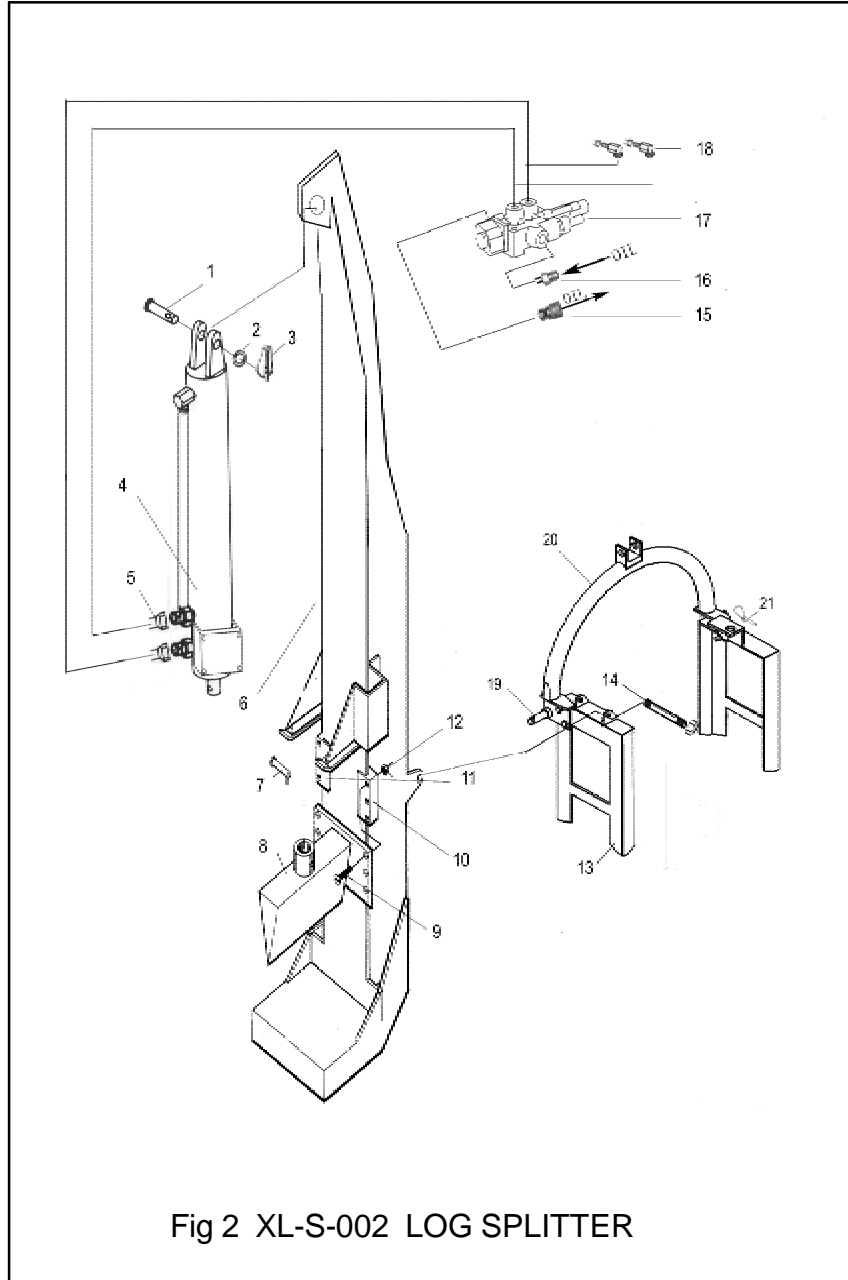


Fig 2 XL-S-002 LOG SPLITTER

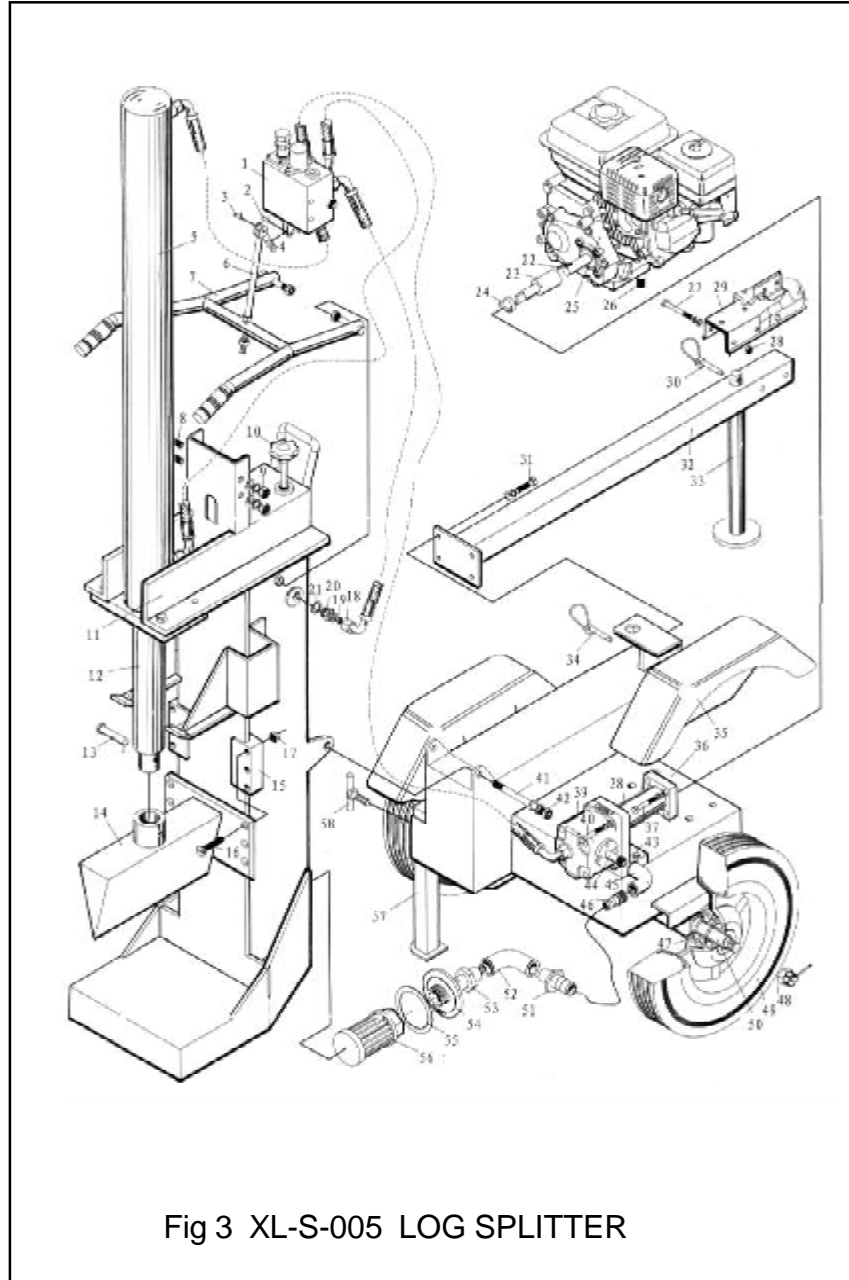


Fig 3 XL-S-005 LOG SPLITTER

XL-S-005 LOG SPLITTER								
FIG NO.	SER NO.	FIG/SER NO.	PART NO.	PART NAME	QTTY ORDD	RATE	TOTAL	QTY
3	1	F3S1	S-005-1	VALVE				1
3	2	F3S2	S-005-2	PIN				1
3	3	F3S3	S-005-3	PIN				1
3	4	F3S4	S-005-4	BRAW BAR				1
3	5	F3S5	S-005-5	CYLINDER				1
3	6	F3S6	S-005-6	CONNECTING BAR				1
3	7	F3S7	S-005-7	OPERATE HANDER				1
3	8	F3S8	S-005-8	BOLT				2
3	9	F3S9	S-005-9	NUT				2
3	10	F3S10	S-005-10	DIP STICKER				1
3	11	F3S11	S-005-11	MAIN BEAM				1
3	12	F3S12	S-005-12	LEFT WEDGE LINER				1
3	13	F3S13	S-005-13	CONNECTING PIN				1
3	14	F3S14	S-005-14	WEDGE				1
3	15	F3S15	S-005-15	RIGHT WEDGE LINER				1
3	16	F3S16	S-005-16	LIER BOLT				6
3	17	F3S17	S-005-17	NUT				6
3	18	F3S18	S-005-18	OIL RETURN PIPE				1
3	19	F3S19	S-005-19	O-RING				1
3	20	F3S20	S-005-20	CONNECTOR				1
3	21	F3S21	S-005-21	WASHER				1
3	22	F3S22	S-005-22	FLAT PIN				1
3	23	F3S23	S-005-23	SHAFT				1
3	24	F3S24	S-005-24	CONNECTING SHAFT				1
3	25	F3S25	S-005-25	ENGINE				1
3	26	F3S26	S-005-26	STUD				4
3	27	F3S27	S-005-27	BOLT				1
3	28	F3S28	S-005-28	NUT				1
3	29	F3S29	S-005-29	COUPLE				1
3	30	F3S30	S-005-30	LOCK SPRING PIN				1
3	31	F3S31	S-005-31	BOLT				4
3	32	F3S32	S-005-32	PULL FRAME				1
3	33	F3S33	S-005-33	SUPPORT				1
3	34	F3S34	S-005-34	LOCK SPRING PIN				1
3	35	F3S35	S-005-35	MUD SHIELD				2
3	36	F3S36	S-005-36	OIL TANK				1
3	37	F3S37	S-005-37	BOLT				4
3	38	F3S38	S-005-38	CONNECTING SUPPORT				1
3	39	F3S39	S-005-39	PUMP				1
3	40	F3S40	S-005-40	BOLT				4
3	41	F3S41	S-005-41	BOLT				1
3	42	F3S42	S-005-42	NUT				1
3	43	F3S43	S-005-43	BOLT				4
3	44	F3S44	S-005-44	CONNECTOR				1
3	45	F3S45	S-005-45	ANGLE PIPE				1
3	46	F3S46	S-005-46	CONNECTOR				1
3	47	F3S47	S-005-47	BEARING				4
3	48	F3S48	S-005-48	LOCK NUT				2
3	49	F3S49	S-005-49	TIRE				2
3	50	F3S50	S-005-50	SHAFT				2
3	51	F3S51	S-005-51	INLET PIPE				1
3	52	F3S52	S-005-52	ANGLE PIPE				1
3	53	F3S43	S-005-53	CONNECTOR				1
3	54	F3S44	S-005-54	FILTER COVER				1
3	55	F3S45	S-005-55	WASHER				1
3	56	F3S56	S-005-56	FILTER				1
3	57	F3S57	S-005-57	ADJUST SUPPORT				1
3	58	F3S58	S-005-58	ADJUST BOLT				1

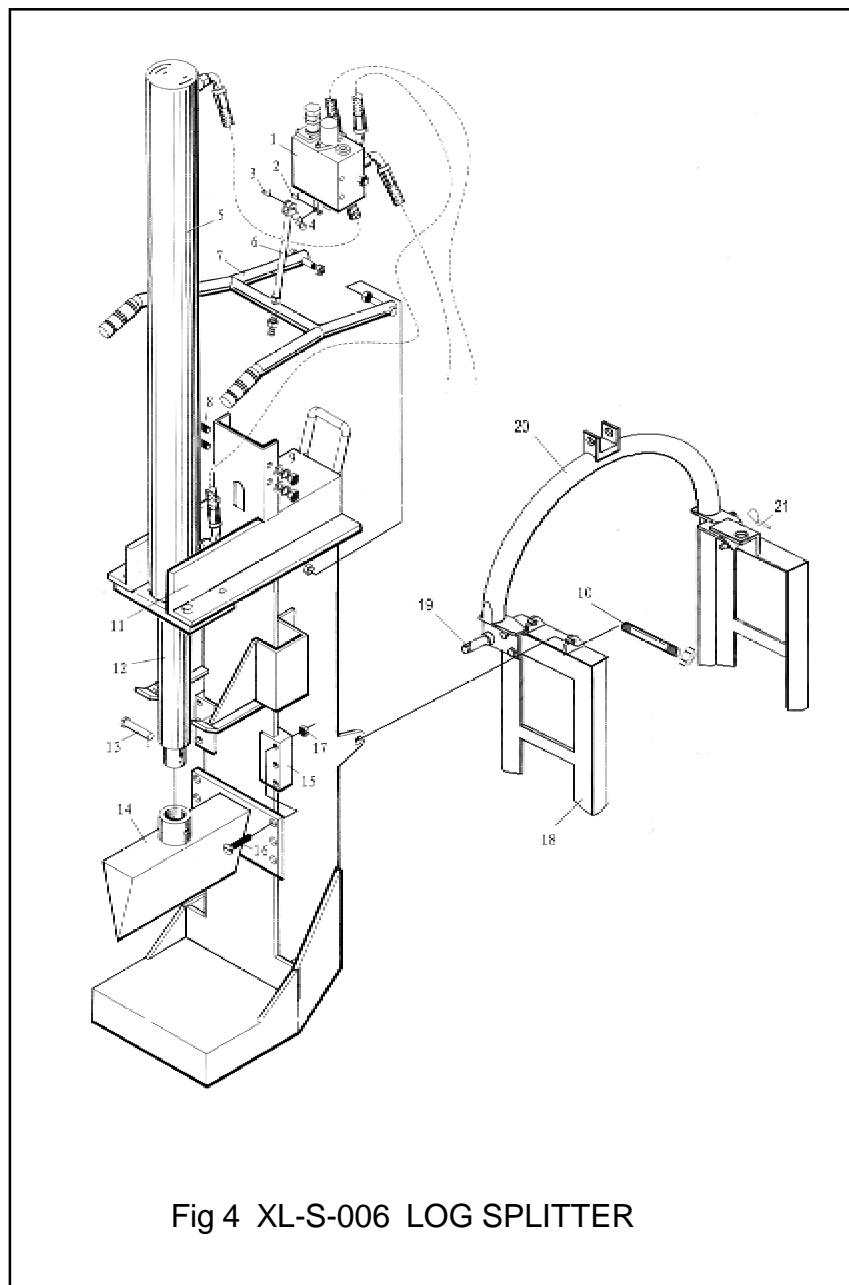


Fig 4 XL-S-006 LOG SPLITTER

SAFETY INFORMATION



- 1) Training and preparation
- 2) Range of use
- 3) Operation according to stipulations

Begin operation after helpers send woods to the operation area and leave there. Danger can be caused by the multi-person operation.

- 4) Protecting overalls

Before operation, do wear and tighten all the protective overall, glasses, gloves and ear-protection;

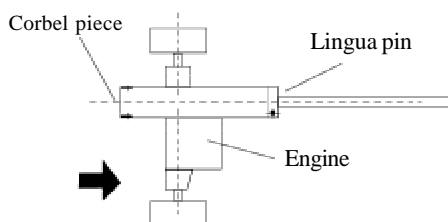
- 5) Input woods

Both ends of the woods should be cut as equal as possible at first.

- 6) Operation steps

Don't operate outside safe area.

Don't put hands or feet between voussoirs or between indenters. Or there 's extreme danger.



- 7) Assure safe operation ground and environment.
- 8) Safety of repair and maintenance
Regularly check up and promptly maintain it.
- 9) Take special care during safe transfer (traction) or backing it.
- 10) Fire prevention

The type XL-S-001 is equipped with explosive mixture, (except that additional spark arrester is fixed on the air sluice of the engine). Don't operate it on grass or around grass.

- 11) Hydraulic safety

The hydraulic system and mechanical parts of the wood splitting machine should get carefully checked and maintained, and make sure they are in good situation every .time before the operation. Don't open the cover of the hydraulic oil tank during splitting to avoid any damage caused by hot spurted oil.

Caution: Before operation, you should read and completely understand the manual,

which can ensure your own security, or it's possible to cause severe hurting. Anyone who doesn't read the operation manual is not allowed to operate it.



INSTALLATION DIRECTIONS

Caution: The following directions are for type XL-S-001 and XL-S-002 with 16 tons and 22tons. The two types have almost the same girder specification and cylinder specification. What's their difference is their traveling ways.

1. XL-S-001 is wheeled traction(Fig 1)
2. XL-S-002 is three-point hitch.(Fig 2)



CAUTION

When installing wood splitting machine, you should read the enclosed picture, component list and installation direction.

First: Take out all the parts from the package, check the number scales and assure their fine conditions.

If damaged, please contact their agents or shippers.

Then: Stand the girder. There're at least two operators now for safety. Assure the stability of the girder. Take down the pin lock and pin clip from the shaft of the oil tank and penetrate the pin-shaft hole in the middle of the girder.

Operation guide

Step1: Starting

Importance: During transportation, there's no oil in engine or oil tank. Read the maintenance manual of the engine for reference to know the applicable types engine oil for bent shaft and fuel oil.



CAUTION

Don't operate the machine without oil in hydraulic oil trough.

Step2: Hydraulic oil trough should be filled with SAE20 hydraulic oil. If no hydraulic oil, oil for automatic catch gearbox is applicable, but when the temperature is below 32° F, the oil should be changed. The oil used should be clean, because there mustn't be any dust in hydraulic oil trough.



CAUTION

Engine oil is recommended.

When it's over 40°, use SAE 30W hydraulic oil. Using other multi-grade common oil will increase the consumption. When it's 40°, SAE30W hydraulic oil can lead to hard starting and engine damaged, so SAE10W-30 or SAE5W-30 hydraulic oil is recommendable. The oil storage is about 5/8 quart (20 ounces/0.6l).

Starting steps

Read operation and maintenance manual of engine for reference to guide your operating wood splitting machine.

(1) Move the control pole to the "FAST" position.

(2) Push the starting fueling charger bulb three times.

Caution: Don't use the starting fueling charger after short-time stop to start the hot machine again.

(3) If fail in starting three times, you should repeat step (1) and (2).

(4) When engine is running, put the control pole in the "FAST" position and accelerator in the "FAST" position to get the biggest power.

(5) If you want to stop the machine, move the accelerator pole to "SLOW" position first and then to "STOP" position.



CAUTION

During starting, the valve in the oil way of the engine should be in "OFF" position.

Step3: The limited highest speed now is 1800r/min (without load) when the engine is new from the factory. When splitting wood, the accelerator should be in the max, defined position to get enough horsepower for the pump.

Step4: Traction

XL-S-001 wood splitting machine is equipped with tyre, connection of hauling truck (2inch-diameter ball) and a safety chain. Only when the safety chain is tied up in the position of fender guard or joint, can the hauling be done.

Step5: Operation



WARNING

When starting the machine, do wear safety glasses.

Danger: Keep hands and feet far away from the indenter, guide board and bottom board.

- 1) Put the wood splitting machine in a clean and level operation area, fix the wheel, check and make sure that the inlet port of the oil tank is on the bottom end of the machine all along.
- 2) Make sure that wood is stably put on the footboard at the direction of the girder.
- 3) Press the valve handle so that the cylinder can bring the voussoir to input the wood and split it. If only one force moment operation can't split the wood completely, draw back the cylinder.



CAUTION

when operating in woods, the exhaust system should be fixed with spark arrester. Read the booklet or consult local authored service center for the details. Please carefully read the “Safety Information” in this manual.



IMPORTANCE

Don't place the valve in the position of “actuate” on end of stroke length or the pump can be damaged. Take special care when splitting wood on the uneven end.

Importance:

Don't drop the voussoir to the heelpiece to lengthen the lives of hydraulic parts. The voussoir must stop in the position 2 inches away from one stroke length end to follow elementary knowledge of industrial safe operation.

Maintenance

- (1) Consult the manufacturing factory for the maintenance of the engine.
- (2) Do check the fuel level in the hydraulic trough every time before starting the machine. Operation without enough fuel is very harmful to the machine.
- (3) Change the cleaner after the first 25-hour operation. Change it every 100 hours since then.
- (4) When the voussoir is inactivated or broken, snag or change it.
- (5) Clean the cover of scavenging port every 25 working hours. In dirty environment, increase the times of cleaning. Wash the dusts off with kerosene or liquid detergent.
- (6) Read the sections of repair and maintenance in “Safety information” of this manual.
- (7) All parts for change should meet the specifications required by manufacturing factory.