

35TON LOG SPLITTER



Owner's Manual and Operating Instructions





READ and UNDERSTAND this manual completely before using 35 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 35 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 30 MPH.
- Driving under 30 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.

WARNING

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.

PROP 65 WARNING

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

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.





WARNING

Read this manual.

Serious injury or death can result if safety instructions are not followed.



Engine is shipped without oil.

- -Before starting engine, fill with SAE 10W-30 motor oil.
- -See engine manual for engine oil capacity.

Hydraulic reservoir is shipped without oil.

-When add oil, Verify oil level is 1 from top of hydraulic reservoir (not including fill neck).

Closely inspect all log splitter components.

-If you have damaged components then: Contact the freight company that delivered the unit and file a claim.

Hazard Signal Word Definitions

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
DANGER	DANGER (red) indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
▲ WARNING	WARNING (orange) indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
A CAUTION	CAUTION (yellow) indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
CAUTION	CAUTION (yellow) used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



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IMPORTANT SAFETY RULES













WARNING

1.) Read this manual completely.

Serious injury or death can result if safety instructions are not followed.

Everyone who operates the log splitter must read and completely understand all safety rules, operating instructions, and maintenance instructions.

You must be 16 or older to operate this machine. Keep untrained people away. -Shut engine off before leaving log splitter unattended.

2.) Crush hazard.

Wedge can cut through skin and break bones. Keep both hands away from wedge and endplate.

- -Serious accidents can happen when other people are allowed inside the work zone. Keep everyone else out of the work zone while operating control valve.
- -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.

3.) Flying objects.

Pieces of log may fly out while splitting. Wear safety glasses. Serious eye injury can occur.

4.) Skin injection hazard.

High pressure fluid can inject under skin resulting in serious injury including amputation.

- -Make sure all fittings are tight before applying pressure. Relieve system pressure before servicing.
- -Do not check for leaks with hand. Instead, use a piece of cardboard to check for leaks.
- -If skin injection happens, seek immediate "Surgical Treatment".

5.) Towing hazard.

Serious injury or death can occur if towing safety rules are not followed.

- -Review towing safety warnings in your towing vehicle manual.
- -Drive safely. Be aware of the added length of the log splitter.
- -Never ride or transport cargo on the log splitter.
- -Drive the vehicle with the log splitter securely attached.
- -Turn off the vehicle before leaving the log splitter unattended.
- -Choose a level surface to operate the log splitter.
- -Block the log splitter wheels to prevent unintended movement.
- -Never tow or operate this splitter while under the influence of alcohol, drugs, or medication.

Save These Instructions

▲ IMPORTANT SAFETY RULES



WARNING



6.) Risk of fire and explosion.

Hot exhaust fumes from engine can cause fire. Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- -Position muffler at least 7 feet from combustible objects.
- -Before adding fuel, stop the engine and keep heat, sparks, and flame away. Do not add fuel when engine is running or still hot. No smoking near engine.
- -Do not pump fuel directly into engine at gas station. Static charge can build and ignite fuel. Use a safety approved fuel container to transfer gas to the engine. Wipe up fuel spills immediately.
- -Only store and handle fuel outdoors. Gasoline vapors can ignite if they collect inside an enclosure. Explosion can result.
- -Do not change or add to exhaust system. Fire can result.
- -Do not change or add fuel tanks or fuel lines. Fire can result.
- -Before each use, check fuel tank and fuel lines for leaks. Any fuel leak is a fire hazard. Fix any fuel leaks before starting engine.
- -During transportation take precautions to make sure machine will not tip over and cause a fuel leak fire hazard.



7.) Breathing hazard.

Poisonous fumes from engine can kill you. Do not operate indoors even if Ventilated. For outdoor use only.





CAUTION

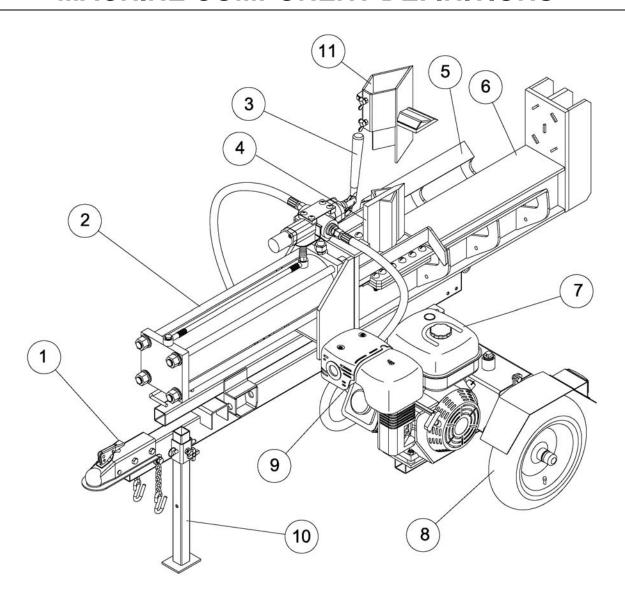


1.) Hot muffler.

You can be burned by muffler. Do not touch.

Save These Instructions

MACHINE COMPONENT DEFINITIONS

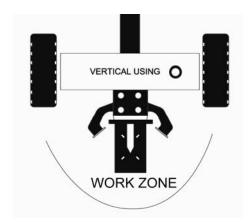


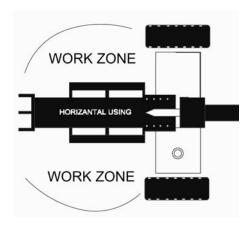
- 1.) **2" Coupler**. Attaches the log splitter to your vehicle. Fits only 2" hitch balls.
- 2.) **Hydraulic Cylinder**. The hydraulic cylinder has a 5" bore and a 23" stroke. It is rated to 3500 psi.
- 3.) **Control Valve Handle.** Use the control valve handle to move the wedge slide forward and backward.
- 4.) **Wedge.** The wedge features wedge wings and a taper that makes splitting easier.
- 5.) **Log Cradle.** Keeps the log on the beam without operator assistance.
- 6.) **Beam.** The beam is made of 6" wide flange beam (also called I-Beam).
- 7.) **Engine.** The air cooled engine powers the hydraulic pump.
- 8.) **Tires.** Maximum rated speed is 30 mile per hour.
- 9.) **Gear Pump.** The gear pump makes the hydraulic oil flow through the system.
- 10.) **Leg.** The leg supports the log splitter while operating. The leg should be raised while towing (see Operation Instructions).
- 11.) Cross Wedge. Fixed on the wedge with 2 Wing Nuts to make two types option splitting.

A OPERATION INSTRUCTIONS

Proper Operation of the Log Splitter

- 1.) Load a log onto the beam and against the endplate.
- 2.) Serious accidents can happen when other people are allowed inside the work zone. Keep everyone else out of the work zone while operating control valve.
- 3.) Make sure hands are clear of crush hazard zones.
- 4.) Push control valve handle FORWARD to split log.
- 5.) Push control valve handle BACKWARD to return wedge to its original position.
- 6.) Clear the split wood from the work zone.







WARNING

Crush hazard.

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 valve.
- -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.



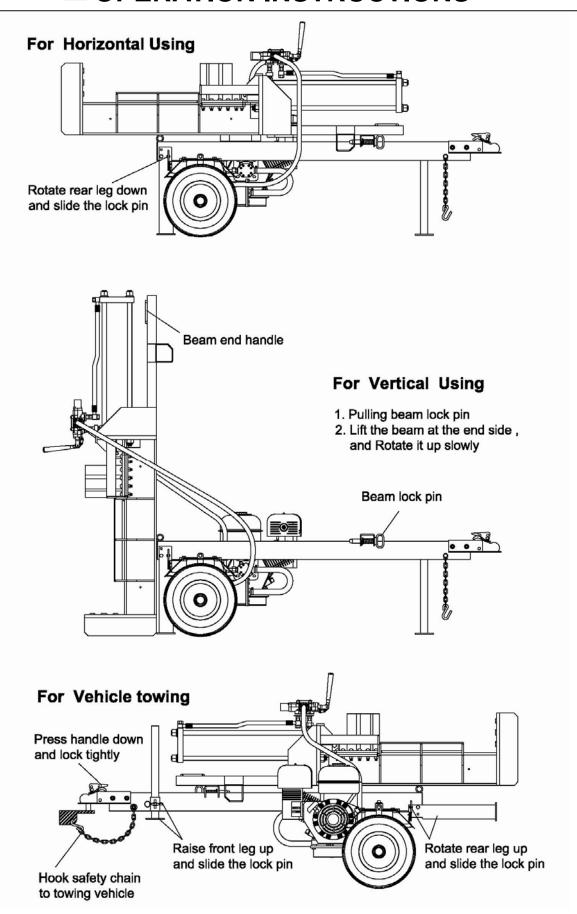
WARNING

Towing hazards.

Serious injury or death can occur if towing safety rules are not followed.

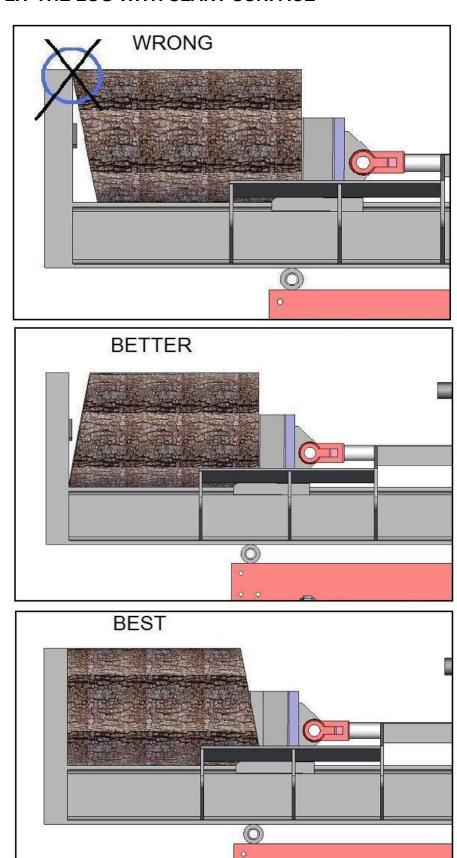
- -Review towing safety warnings in your towing vehicle manual.
- -Drive safely. Be aware of the added length of the log splitter.
- -Never ride or transport cargo on the log splitter.
- -Drive the vehicle with the log splitter securely attached.
- -Turn off the vehicle before leaving the log splitter unattended.
- -Choose a level surface to operate the log splitter.
- -Block the log splitter wheels to prevent unintended movement.
- -Never tow or operate this log splitter while under the influence of alcohol, drugs, or medication.

A OPERATION INSTRUCTIONS



▲ OPERATION INSTRUCTIONS

HOW TO SPLIT THE LOG WITH SLANT SURFACE



MAINTENANCE AND STORAGE



Before performing maintenance, the log splitter must be placed in maintenance mode.

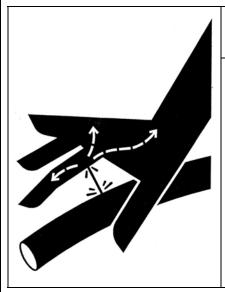
- 1.) Turn off engine.
- 2.) Move the control valve handle forward and backward to relieve hydraulic pressure.



After performing maintenance, make sure all guards, shields, and safety features are put back in place. Failure to follow this warning can result in serious injury.

Refer to the engine owner's manual for engine maintenance.

What	When	How	
Hoses	Each Use	Inspect for exposed wire mesh and leaks. Replace all worn or damaged hoses before starting engine	
Hydraulic Fittings	Each Use	Inspect for cracks and leaks. Replace all damaged fittings before starting engine	
Nuts and Bolts	Each Use	Check for loose bolts	
Beam	Each Use	Apply grease to beam surface	
Moving Parts	Each Use	Clear debris	



WARNING

Skin injection hazard.

High pressure fluid can inject under skin resulting in serious injury including amputation.

- -Make sure all fittings are tight before applying pressure. Relieve system pressure before servicing.
- -Do not check for leaks with hand. Instead, use a piece of cardboard to check for leaks.
- -If skin injection happens, seek immediate
- "Surgical Treatment".

TROUBLESHOOTING

Problem	
Cylinder rod will not move	SOLUTION: A,D,E,H,J
Slow cylinder rod speed when extending or retracting	SOLUTION: A,B,C,H,I,K,L
Wood will not split or splits extremely slowly	SOLUTION: A,B,C,F,I,K
Engine bogs down during splitting	SOLUTION: G,L
Engine stalls under low load condition	SOLUTION: D,E,L,M
Cause	Solution
A-Insufficient oil to pump	Check oil level in reservoir
B -Air in oil	Check oil level in reservoir
C-Excessive pump inlet vacuum	Check pump inlet hose for blockage or kinks
D-Blocked hydraulic lines	Flush and clean the splitter hydraulic system
E-Blocked control valve	Flush and clean the splitter hydraulic system
F-Low control valve setting	Adjust control valve with a pressure gauge
G-High control valve setting	Adjust control valve with a pressure gauge
H-Damaged control valve	Return control valve for authorized repair
I-Internal control valve leak	Return control valve for authorized repair
J-Internal cylinder leak	Return cylinder for authorized repair
K-Internally damaged cylinder	Return cylinder for authorized repair
L-Engine Control out of adjustment	Adjust idle control nuts
M-Engine is loaded during idle down mode	Use shorter log length (24" or less) to allow engine to speed up before contact.

SPECIFICATIONS

3500 psi Maximum Pressure..... 15 gpm Maximum Flow 4.9 gallons or the level Hydraulic Fluid Capacity of the oil in the middle of oil window on oil tank. Hydraulic Fluid Type 10wt AW32, ASLE H-150, or ISO32 2" Ball Coupler Size Maximum Towing Speed..... 30MPH Maximum Log Length 24 in Maximum Log Weight 100 lb Hydraulic Cylinder Bore 5 in Hydraulic Cylinder Stroke 23 in Maximum Log Diameter 12in

The manufacturer reserves the right to make improvements in design and/or changes in specifications at any time without incurring any obligation to install them on units previously sold.

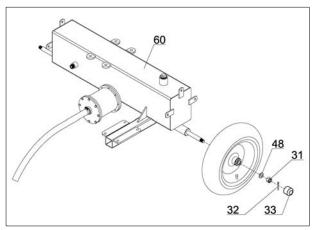
ASSEMBLY

Open Shipping Crate

- 1. Set the shipping Crate on a solid, flat surface.
- 2. Carefully cut the shipping bands and remove lid of shipping crate.
- 3. Using two people to lift, carefully remove the engine, oil tank, wheels, tow bar, support legs, and hardware. (For parts reference see page17-19 in manual)
- 4. Leave the hydraulic cylinder/log cradle in the shipping crate until step 5 in the assembly process.
- 5. Locate all hardware before beginning assembly.

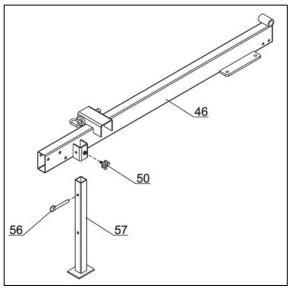
STEP 1: WHEEL ASSEMBLY

Fix the wheel to the oil tank (#60) axle by a flat washer \emptyset 20 (#48), slotted nut M16x1.5 (#31), cotter pin \emptyset 4x36 (#32) and attach the axle cap (#33).



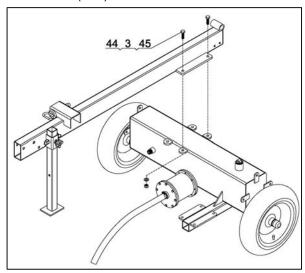
STEP 2: ATTACH TOW BAR AND SUPPORT LEG

Fix the support leg (#57) to the tow bar (#46) by a pin (#56) and hand wheel (#50).



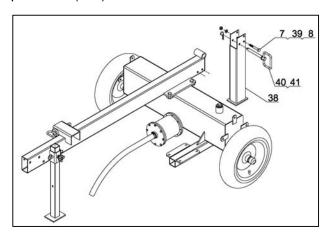
STEP 3: ATTACH TOW BAR TO OIL TANK

Fix the tow bar to the oil tank by using 4 sets of hex bolt M12x40 (#44), flat washer \emptyset 12 (#3) and lock nut M12 (#45).



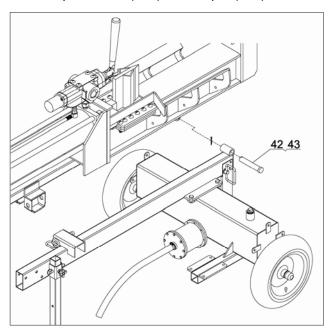
STEP 4: ASSEMBLE REAR SUPPORT LEG

Fix the rear support leg (#38) to the tow bar by using hex bolt M10x75 (#7), lock nut M10 (#8), flat washer \emptyset 10 (#39). Slide in hitch pin (#40) and secure with R pin \emptyset 3x55 (#41).



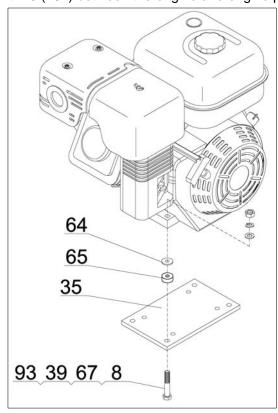
STEP 5: ATTACH BEAM

Assemble the Beam to the tow bar, secure with cotter pin Ø4x40 (#43) & hitch pin (#42).



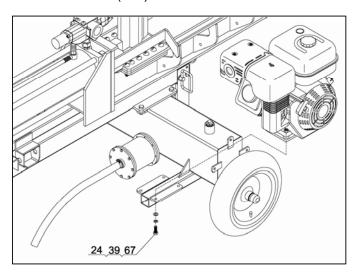
STEP 6: ATTACH ENGINE TO ENGINE PLATE

- 1. Assemble the engine to the engine plate(#35) by using hex bolt M10x75(#93), flat washer Ø10(#39), lock nut M10(#8),and lock washer Ø10(#67).
- 2. Place polyurethane blocks (#65) and big flat washer Ø10 (#64) between the engine and engine plate.



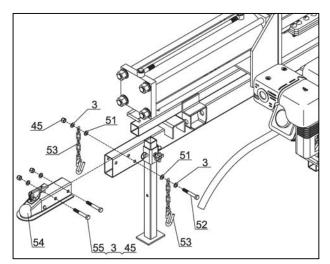
STEP 7: ATTACH ENGINE TO OIL TANK

Assemble the engine to the oil tank by using hex bolt M10x25 (#24), flat washer Ø10 (#39), lock washer Ø10 (#67).



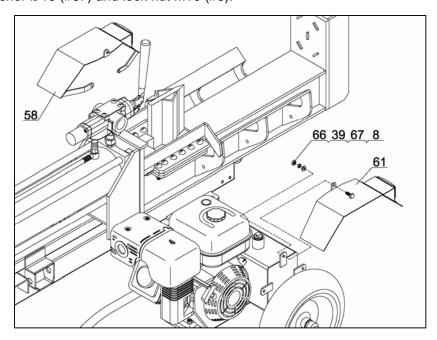
STEP 8: ATTACH BALL COUPLER & CHAIN

- 1. Attach the coupler (#54) to the tow bar by using hex bolt M12x80 (#55), flat washer \emptyset 12 (#3) and lock nut M12 (#45).
- 2. Attach two chains (#53) to the tow bar by using hex bolt M12x90 (#52), flat washer \emptyset 12 (#3), lock nut M12 (#45) and thick flat washer \emptyset 12 (#51).



STEP9: ATTACH WHEEL FENDERS

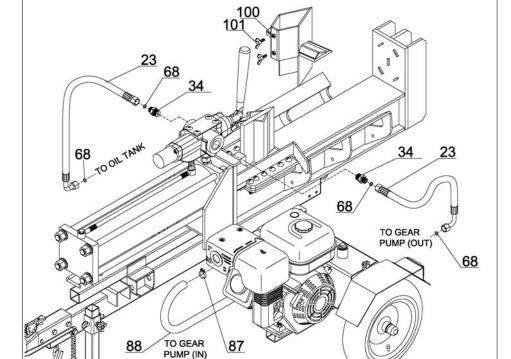
Attach Left fender (#58) and Right Fender (#61) to the oil tank using hex bolt M10x30 (#66), flat washer Ø10 (#39), lock washer Ø10 (#67) and lock nut M10 (#8).



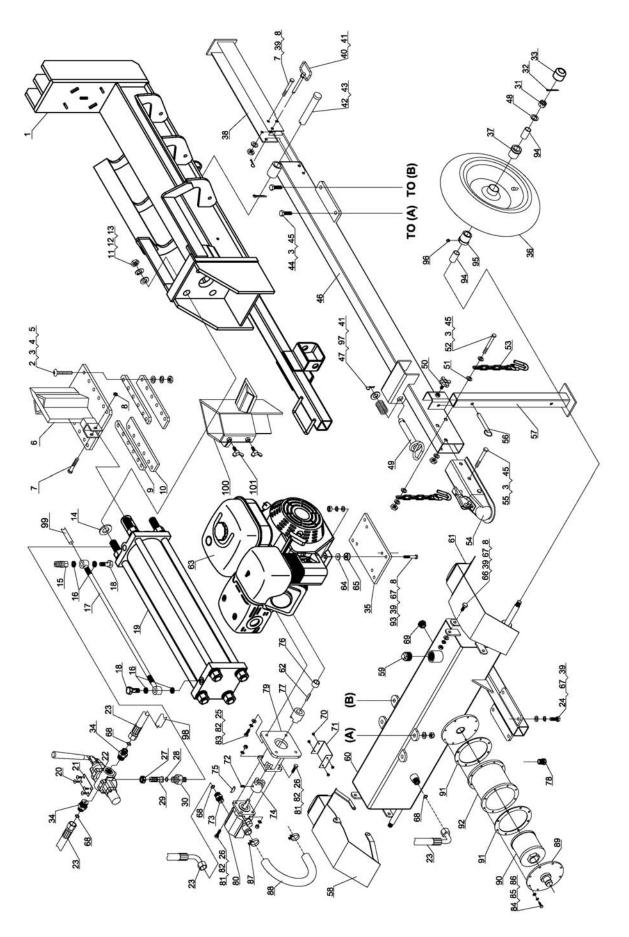
STEP 10: ATTACH HYDRAULIC HOSES

- 1. Attach two connectors(#34) to the both side of the control valve. Then attach one side of the hydraulic hose(valve-oil tank)(#23) and hydraulic hose(valve-gear pump)(#23) to two connectors(#34),Place an O ring 18x2.4(#68) between the hose and connector.
- 2. Attach the other side of hydraulic hose(valve-oil tank)(#23) to the oil tank, and attach the other side of hydraulic hose(valve-gear pump)(#23) to the gear pump connector, Place an O ring 18x2.4(#68) between the hose and connector.
- 3. Attach the oil pipe (#88) to the gear pump by the clamp (#87).

4. Use the Wing Bolt (#101) to fix the cross wedge(#100) on the current wedge, it makes two type option splitting.



PARTS DRAWING



PARTS LIST

TARTOLIST					
No.	DESCRIPTION	QTY	No.	DESCRIPTION	QTY
1	Beam	1	41	R Pin Ø3	2
2	Screw M12x55	12	42	Hinge Pin	1
3	Flat Washer Ø12	20	43	Cotter Pin 4x40	1
4	Lock Washer Ø12	12	44	Hex Bolt M12x40	4
5	Thick Hex Nut M12	12	45	Hex Lock Nut M12	7
6	Wedge	1	46	Tow Bar	1
7	Hex Bolt M10x75	2	47	Spring	1
8	Hex Nut M10	12	48	Flat Washer Ø20	2
9	Wedge Spacer	2	49	Safety Pin	1
10	Wedge Plate	2	50	Handwheel	1
11	Lock Washer Ø24	4	51	Thick Flat Washer Ø12	2
12	Flat Washer Ø24	4	52	Hex Bolt M12x90	1
13	Hex Nut M24	4	53	Safety Chain with Hook	2
14	Adjustable Washer		54	2" Coupler	1
15	Valve A Joint	1	55	Hex Bolt M12x80	2
16	Combination Washer Ø20	4	56	Front Pin	1
17	Hydraulic Hose (Valve-Cylinder)	1	57	Front Support Leg	1
18	Bolt Connector	2	58	Left Fender	1
19	Cylinder	1	59	Oil Bolt	1
20	Screw M8x10	4	60	Oil Tank	1
21	Plate	1	61	Right Fender	1
22	Control Valve	1	62	Flat Key	1
22	Hydraulic Hose	2	C2	Facino	1
23	(Valve-Pump, Valve-Oil Tank)	2	63	Engine	1
24	Hex Bolt M10x25	4	64	Big Flat Washer Ø10	4
25	Flat Washer Ø8	4	65	Block	4
26	Hex Lock Nut M8	4	66	Hex Bolt M10x30	6
27	Nut	1	67	Lock Washer Ø10	14
28	O Ring 20x2.4	1	68	O Ring 18x2.4	4
29	Valve B Joint	1	69	Oil Scale	1
30	Front Cover Connector	1	70	Hex Bolt M5x10	4
31	Hex Slotted Nut M16x1.5	2	71	Connector Cover	1
32	Cotter Pin 4x36	2	72	Inner Hex Screw M6x10	1
33	Axle Cap	2	73	Outer Connector of Pump	1
34	Connector M24-ZG3/4	2	74	Gear Pump Connector	1
35	Engine Plate	1	75	Semicircular Key	1
36	Wheel	2	76	Engine Bushing	1
37	Axle Outer Bushing	2	77	Engine Connector	1
38	Rear Support Leg	1	78	Oil Plug	1
39	Flat Washer Ø10	15	79	Gear Pump Stand	1
40	Hitch Pin	1	80	Gear Pump	1
	1	1	<u> </u>	•	1

81	Hex Bolt M8x30	4	92	Outlet Oil Tube Assembly	1
82	Lock Washer Ø8	8	93	Hex Bolt M10x75	4
83	Hex Bolt M8x25	4	94	Composite Bearing	2
84	Hex Bolt M6x20	16	95	Axle Inside Bushing	2
85	Lock Washer Ø6	16	96	Oil Cup M6	2
86	Flat Washer Ø6	16	97	Flat Washer Ø22	1
87	Clamp	2	98	Hose Sleeve	1
88	Oil Pipe	1	99	Hose Sleeve	1
89	Filter Fix Plate	1	100	Cross Wedge	1
90	Filter	1	101	Wing Nut	2
91	Rubber Washer	2			

BLISTER HARDWARE LIST





Pictures	Assemble Step Using	DESCRIPTION	QTY
	FOR STEP 1	Axle Cap	2
		Cotter Pin 4x36	2
		Hex Slotted Nut M16x1.5	2
		Flat Washer Ø20	2
	FOR STEP 2	Front Pin	1

	Handwheel	1
	Hex Bolt M12x40	4
FOR STEP 3	Flat Washer Ø12	4
	Hex Lock Nut M12	4
	Hitch Pin	1
	R Pin Ø3	1
FOR STEP 4	Hex Bolt M10x75	1
	Flat Washer Ø10	1
	Hex Lock Nut M10	1

		Hex Bolt M10x75	4
		Block	4
	FOR STEP 5	Big Flat Washer Ø10	4
		Flat Washer Ø10	4
0		Lock Washer Ø10	4
		Hex Lock Nut M10	4
		Hex Bolt M10x25	4
0	FOR STEP 7	Flat Washer Ø10	4
		Lock Washer Ø10	4
	FOR STEP 9	Hex Bolt M10x30	6
0		Flat Washer Ø10	6

		Lock Washer Ø10	6
		Hex Lock Nut M10	6
0		O ring	2
	FOR STEP 10	Teflon Tape	1